Interstage

FUJITSU

Interstage List Creator V10.0.0

Application Design

Windows/Windows(64)/Solaris/Linux(64)

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Preface

This manual discusses in detail the form output interface of List Creator, and how to create user applications for this interface.

Contents of this manual are common for all operating systems.

Structure of This Manual

This manual consists of the following chapters:

Part 1 Designing applications

Chapter 1 Form Output Interface Function Table (For [Windows])

This chapter explains the support status of output functions when using [Windows] and information that can be specified for individual form output interfaces for each output method.

Chapter 2 Form Output Interface Function Table (For [UNIX OS])

This chapter explains the support status of output functions when using [UNIX OS] and information that can be specified for individual form output interfaces for each output method.

Chapter 3 Program Development Methods

This chapter explains how to create user applications (program) that uses interfaces provided by List Creator and describes the points regarding the development and execution of these user applications.

Part 2 Form Output Interface

Chapter 4 Commands

This chapter explains the commands used for outputting List Creator forms.

Chapter 5 Java Interface

This chapter explains the Java interface used for outputting List Creator forms from Servlet and typical Java applications.

Chapter 6 .NET Interface

This chapter explains the .NET interface used for outputting List Creator forms from typical .NET applications.

Chapter 7 COBOL Interface

This chapter explains the COBOL interface used for calling the List Creator form output command from an application created in COBOL.

Appendixes

Appendix A Java Application Linkage

This chapter explains how to link with the Web applications created in Java by using Web application link function.

Note

- For details on specifying form output interfaces to implement the following functions, refer to the Japanese Online Manuals.
  - Output methods
    - e-Record
    - Sending FAX
  - Form output
    - Navigator links function
    - XBRL data support function
    - Linking with Print Manager (event notification function, print option)
  - Form output interface
    - Custom control
- In this manual, Windows path separator is shown as "¥" (yen sign). If you operate this software on the English environment, please read it as a backslash.

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Documentation Road Map

Before reading this manual, please refer to the Online Manual "Documentation Road Map".
In the "Documentation Road Map", the product manuals for List Creator, usage of the manuals, manual conventions, target audience, required knowledge, glossary, and trademarks are described.

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Part 1 Designing applications

This part explains the range of support for form output interface functions, and how to develop user applications.

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Chapter 1
Form Output Interface Function Table (For [Windows])

This chapter explains the support status of output functions when using [Windows] and information that can be specified for individual form output interfaces for each output method.

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1.1 Output Function

The support status of each function of List Creator is indicated for each form output interface in the table below.

Table 1.1 Support status of the output function (For [Windows])

Function		Support status of the output function for each form output interface W : [Windows] W64 : [Windows(x64)]									
		Command		Java interface		.NET interface		Custom control		COBOL interface	
		W	W64	W	W64	W	W64	W	W64	W	W64
Output method (Local output function)	Print	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Sending FAX	Y	-	Y	-	Y	-	Y	-	Y	-
	e-Record	Y	-	Y	-	Y	-	Y	-	Y	-
	Saving as a PDF file	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	OWF file creation	Y	Y	Y	Y	Y	Y	-	-	Y	Y
	Excel file output	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Distributed output function	Connector linkage	Y	Y	Y	Y	Y	Y	-	-	Y	Y
	Remote form output function	Y	Y	Y	Y	-	-	-	-	Y	Y
Upper layer tool/ Database link function	Navigator links function	Y	-	Y	-	Y	-	-	-	Y	-
	XBRL data support function	Y	-	Y	-	Y	-	-	-	Y	-
ECM link function		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Multi-form output function		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Combination-form output function		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

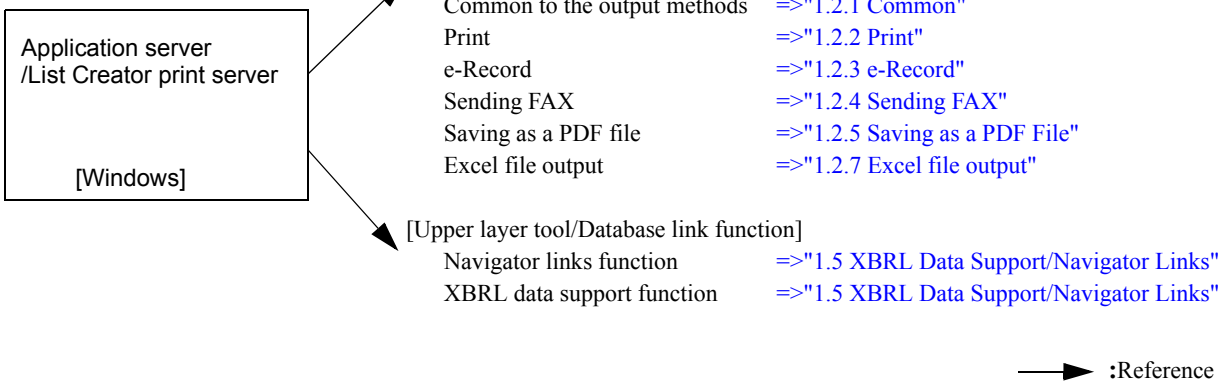
Y: Supported

-: Unsupported

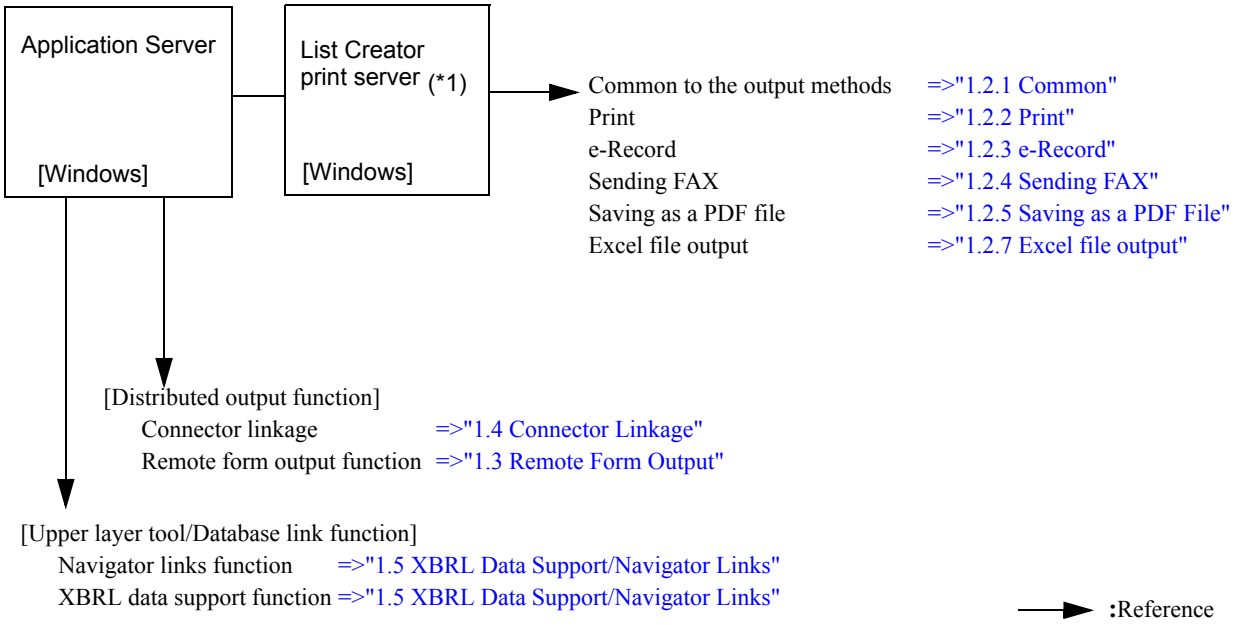
●How to use the "Form Output Interface Function Table"

In this chapter, the support range of functions that can be specified in List Creator for [Windows] is described in the "Form Output Interface Function Table", for each form output interface.
For each operating mode, the following shows how to use the "Form Output Interface Function Table" and where to reference.

Stand-alone mode



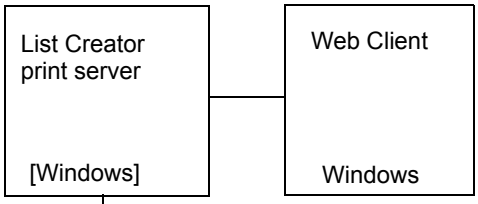
Distributed output mode



*1: When the List Creator print server runs on UNIX OS, refer to the following:
=>"Chapter 2 Form Output Interface Function Table (For [UNIX OS])"
For output functions in different versions of List Creator, refer to the online manual accompanying the List Creator print server.

Web-to-local-print mode

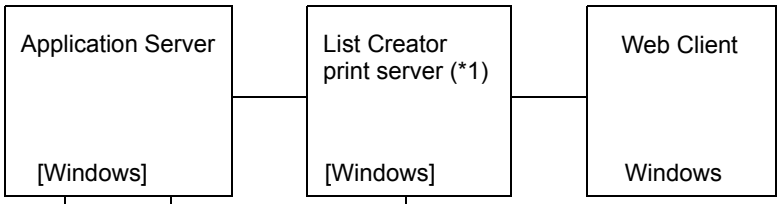
- Web-to-local-print mode



→ :Reference

[Web application linkage]
Common to the output methods =>"1.2.1 Common"
Print =>"1.2.2 Print"
OWF File Creation, Preview =>"1.2.6 OWF File Creation (Web-to-Local-Print)"

- Distributed output mode + Web-to-local-print mode



[Web application linkage]
Common to the output methods =>"1.2.1 Common"
Print =>"1.2.2 Print"
OWF File Creation, Preview =>"1.2.6 OWF File Creation (Web-to-Local-Print)"

[Distributed output function]
Connector linkage =>"1.4 Connector Linkage"
Remote form output function =>"1.3 Remote Form Output"

[Upper layer tool/Database link function]
Navigator links function =>"1.5 XBRL Data Support/Navigator Links"
XBRL data support function =>"1.5 XBRL Data Support/Navigator Links"

→ :Reference

*1: When the List Creator print server runs on UNIX OS, refer to the following:
=>"Chapter 2 Form Output Interface Function Table (For [UNIX OS])"
For output functions in different versions of List Creator, refer to the online manual accompanying the List Creator print server.

1.2 Common/Local Form Output/Web-to-Local-Print

This section indicates the information for each interface that can be specified during form output for local form output or Web-to-local-print.

1.2.1 Common

Information that can be specified at form output for any form output mode is indicated for each interface in the table below.

Table 1.2 Form output interface function table (common) (1 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
User resource information	Form name			-	Y	Y	Y	Y
	Form storage directory (*2)			-(*3)	Y	Y	Y	Y
	Input data character code		Shift-JIS, UNICODE (UTF16 little endian), UNICODE (UTF16 big endian), UNICODE (UTF8)	-(*3)	Y	Y	Y	Y
	Character code of the runtime environment			-	-	Y	-	-
	Input data	Data file name		-	Y	Y	Y	Y
		Record (line) output		-	-	Y	Y	Y
	Data root parent element path			-	Y	Y	Y	Y
	Barcode data BASE64 encoding		BASE64 encoding used, BASE64 encoding not used	-	Y	Y	Y	Y
	Media data storage directory			-	Y (*4)	Y (*4)	Y (*4)	Y
OWF file creation information	Media data file names during creating OWF files			-	Y	Y	Y	-
	Form name when using multi-form/combination-form			-	Y (*5)	Y (*5)	Y (*5)	-
User resource information for multi-form output /combination-form output (*6)	Multi-form output		Yes, No	-	-(*7)	Y	Y	Y
	Form name data separator character for multi-form/ combination-form		Separator character	-	Y	Y	Y	Y
	Form name data field length for multi-form			-	Y	Y	Y	Y
	Form switching			-	-	Y	Y	-
	Combination-form output		Yes, No	-	Y	Y	Y	Y
	Combination-form descriptor file name			-	Y	Y	Y	Y
Identification information	Title			-	Y	Y	Y	Y
	Comment			Y	Y	Y	Y	Y
	Output user ID			-	Y	Y	Y	Y

Table 1.2 Form output interface function table (common) (2 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
Operational information	Start page number			-	Y	Y	Y	Y
	End page number			-	Y	Y	Y	Y
	Output method (which is not specified on the form)		Print, e-Record, Sending FAX, File, OWF file, Excel file output	-	Y	Y	Y	Y (*8)
	Output method (which is specified on the form)		Print, e-Record, Sending FAX, File, Excel file output	Y	Y	Y	Y	Y
	SET operator replacement string			-	Y	Y	Y	Y
	Scale according to paper size specification		A3 paper, A4 paper, A5 paper, A6 paper, B4 paper, B5 paper, Postcard, Letter, Legal, Optional	Y	Y	Y	Y	Y
	Print offset specification	Inch	Horizontal position (0.00 to 22.50), Vertical position (0.00 to 22.50)	Y	Y	Y	Y	Y
		Millimeter	Horizontal position (0.0 to 571.5), Vertical position (0.0 to 571.5)					
	Linefeed code control		Yes (Output one blank line), No (Skip)	-	Y	Y	Y	Y
	New page code control		Yes, No (Skip), No (Read as data)	-	Y	Y	Y	Y
	Operation when there is no input data		Error, Not error (Output)	-	Y	Y	Y	Y
	Specification of data file with the field name label		Treat, Not Treat	-	Y	Y	Y	Y
	Property replace file name			-	Y	Y	Y	Y
	[Print] window display during printing		On, Off	-	-	Y (*5)	Y (*5)	Y
	Substitute font info file name			-	Y	Y	Y	Y
	Barcode correct info file name			Y	Y	Y	Y	Y
	Form output information file name			-	Y	Y	Y	Y
Preview information	Zoom factor		Whole page, Display a page according to its width, Specify in a range from 30 to 200 (%)	-	-	Y (*5)	Y (*5)	Y

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification at the first line of the data file during data monitoring
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:If List Creator Designer is installed, it is also possible to specify in the [Form Descriptor List] window.

*3:It cannot be specified on the form, but can be specified in the [List Creator Settings] window for List Creator.

*4:This is disabled when OWF files are created.

*5:This is enabled only when OWF files are created.

*6:A form name and a combination-form name are specified in the input data.

*7:Specifying "Form name data separator character for multi-form" results in setting "Multi-form output" for "Yes".

*8:OWF files cannot be created.

*9:Excel file output is not supported.

1.2.2 Print

Information that can be specified during form output when outputting the form to the printer is indicated for each form output interface in the table below.
The information is disabled when making e-Record, saving as a PDF file, and outputting to an Excel file.

Table 1.3 Form output interface function table (common: print) (1 / 3)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
Printing information	Device name			Y	Y	Y	Y	Y
	Paper source		Cut sheet feeder, Hopper 1, Hopper 2, Hopper 3, Hopper 4, Manual paper feed, None, Automatic	Y	Y (*2)	Y (*2)	Y (*2)	Y (*2)
			Use the printer settings	Y	-	-	-	-
	Paper feed name			Y	Y (*2)	Y (*2)	Y (*2)	Y (*2)
	Substitute font			Y	-	-	-	-
	Multiple copies	Number of copies	1~999	Y	Y	Y	Y	Y
			Use the printer settings	Y	Y	Y	Y	Y
		Collate output (*3)	Yes, No	Y	Y	Y	Y	Y
	Duplex printing		Yes, No	Y	Y (*2)	Y (*2)	Y (*2)	Y (*2)
			Use the printer settings	Y	Y (*2)	Y (*2)	Y (*2)	Y (*2)
	Multi-form output specification	Feed a new sheet of paper when a new form starts printing	Yes, No	Y	Y (*2)	Y (*2)	Y (*2)	Y (*2)
	Paper	Paper name		Y	Y	Y	Y	Y

Table 1.3 Form output interface function table (common: print) (2 / 3)

Type of settings				Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
						(1) (*1)	(2)	(3)	(4)
Print Options	Separator page output	Separator page output specification		Use the printer settings, No separator pages, Output separator pages	Y(*3)	Y (*3) (*4)	Y (*3) (*4)	Y (*3) (*4)	Y (*3) (*4)
		Separator Type		Fixed format, Blank page	Y(*3)	-	-	-	-
		Paper source specification		Specify the paper source specified in the form	Y(*3)	-	-	-	-
		Paper source		Cut sheet feeder, Hopper 1, Hopper 2, Hopper 3, Hopper 4, Manual paper feed, Automatic	Y(*3)	-	-	-	-
		Paper feed name			Y(*3)	-	-	-	-
	Output Timing		Mode	Output immediately, Hold in server, Hold in client, Use the printer settings	Y(*3)	Y (*3)	Y (*3)	Y (*3)	Y (*3)
			Specify the resume date time	Yes, No	Y(*3)	-(*5)	-(*5)	- (*5)	-(*5)
			Resume Date Time	At 23:59 after 999 days at the longest	Y(*3)	Y (*3)	Y (*3)	Y (*3)	Y (*3)
	Spool File Handling		Save spool files after outputting	Use the printer settings, No, Yes	Y(*3)	-	-	-	-
			Delete held spool files	Use the printer settings, No, Yes	Y(*3)	-	-	-	-
			Specify the deletion period	Yes, No	Y(*3)	-	-	-	-
			Time until deletion	Up to 999 days and 23 hours	Y(*3)	-	-	-	-
	Output Priority			1~99	Y(*3)	Y (*3) (*6)	Y (*3) (*6)	Y (*3) (*6)	Y (*3) (*6)
	Message Notification Destination		Notification message		Y(*3)	Y (*3) (*6)	Y (*3) (*6)	Y (*3) (*6)	Y (*3) (*6)
			Reply message		-	Y (*3)	Y (*3)	Y (*3)	Y (*3)

Table 1.3 Form output interface function table (common: print) (3 / 3)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
Print Options	Output Progress Notification	Output Starting Messages	Don't send, Send	Y(*3)	-	-	-	-
		Change Paper Messages	Use the printer settings, Don't send, Send	Y(*3)	Y (*7)	Y (*7)	Y (*7)	Y (*7)
			Always send change paper messages	Y(*3)	Y	Y	Y	Y
			Paper name	Y(*3)	Y	Y	Y	Y
		Output Completion Messages	Use the printer settings, Don't send, Send	Y(*3)	-	-	-	-
	Output End Wait	Output End Wait	Until spool ends, Until form output ends	-	Y (*3) (*6)	Y (*3) (*6)	Y (*3) (*6)	Y (*3) (*6)
		Output end page number		-	-	-	-	Y (*3) (*8)
	Specification of event notification			-	Y	-	-	-
	Print document owner name (user name) specification			-	Y	Y	Y	Y

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1: Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification at the first line of the data file during data monitoring
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2: During multi-form output, normally the specification on the first output form will become valid, but it is also possible to specify at form output so that specifications on each form are enabled.

*3: It is valid only when using a printer defined in Print Manager.

*4: Only "No separator pages" can be specified.

*5: Specifying the resume date time results in specifying "Resume".

*6: When a form is output with multiple output methods simultaneously, the same value is set to all the output methods.

*7: Only "Send change paper messages" can be specified.

*8: Only reference is available.

1.2.3 e-Record

Information that can be specified during form output when saving a form as an electric form in the storage folder in the List Manager server is indicated per form output interface in the table below.

Table 1.4 Form output interface function table (common: e-Record) (1 / 3)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
				(1) (*1)	(2)	(3)	(4)
e-Record device name			Y	Y	Y	Y	Y
e-Record creator			Y	Y	Y	Y	Y
e-Record creation date		Y	-	Y	Y	Y	Y
e-Record creation time			-	Y	Y	Y	Y
e-Record storage folder path name			Y	Y	Y	Y	Y
e-Record comment 1			Y	Y	Y	Y	Y
e-Record comment 2			Y	Y	Y	Y	Y
e-Record comment 3			Y	Y	Y	Y	Y
e-Record comment 4			Y	Y	Y	Y	Y
Validity period of e-Record	Flag specifying number of days		-	-	-	Y	-
	Number of days (Day)	Use the storage folder settings, 1 - 9999	Y	Y	Y	Y	Y
	Specification of auto-delete following expiry	Yes, No	Y	Y	Y	Y	Y
Indexed searching specification when making e-Record		Use the storage folder settings, Don't create indexes, Create indexes	Y	Y	Y	Y	Y
Mail transmission when making e-Record	Mail Notification	Use the List Management Server settings, None, With the following attachment - Form Entry File/Form File	Y	Y	Y	Y	Y
	Destination		Y	Y	Y	Y	Y
Distribution folder ID during form print distribution			-	Y	Y	Y	Y
Form print distribution specification		Printing/distributing forms, List Creator-compatible printing	-	Y	Y	Y	Y
Electronic form information file name			-	Y	Y	Y	Y

Table 1.4 Form output interface function table (common: e-Record) (2 / 3)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
Print setting information	Paper source		Cut sheet feeder, Hopper 1, Hopper 2, Hopper 3, Hopper 4, Manual paper feed, None, Automatic	Y	Y	Y	Y	Y
	Paper feed name			Y	Y	Y	Y	Y
	Multiple copies	Number of copies	1 - 9999	Y	Y	Y	Y	Y
		Collate output specification	Use the printer settings, Collate output, Output per-page sets	Y	Y	Y	Y	Y
	Duplex printing		Yes, No	Y	Y	Y	Y	Y
Print setting information	Multi-form output specification	Feed a new sheet of paper when a new form starts printing	Yes, No	Y	Y (*2)	Y(*2)	Y (*2)	Y (*2)
Fax Options Info	Sender Details			Y	Y	Y	Y	Y
	Recipient Details			Y	Y	Y	Y	Y
	Recipient Details file name			-	Y	Y	Y	Y
	Specify the attachment of a FAX cover page	Specify the attachment	Yes, No	Y	-(*3)	-(*3)	-(*3)	-(*3)
		Subject		Y	Y	Y	Y	Y
		Comment		Y	Y	Y	Y	Y

Table 1.4 Form output interface function table (common: e-Record) (3 / 3)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
Print Options	Output Timing	Mode	Output immediately, Hold in server, Hold in client	-(*4)	-(*4)	-(*4)	-(*4)	-(*4)
		Specify the resume date time	Yes, No	-	-	-	-	-
		Resume Date Time	At 23:59 after 999 days at the longest	-	-	-	-	-
	Spool File Handling	Save spool files after outputting	Use the printer settings, No, Yes	-(*5)	-(*5)	-(*5)	-(*5)	-(*5)
		Delete held spool files	Use the printer settings, No, Yes	-(*5)	-(*5)	-(*5)	-(*5)	-(*5)
		Specify the deletion period	Yes, No	-(*5)	-(*5)	-(*5)	-(*5)	-(*5)
		Time until deletion	Up to 999 days and 23 hours	-(*5)	-(*5)	-(*5)	-(*5)	-(*5)
	Output Priority		1 - 99	-(*6)	Y (*7)	Y(*7)	Y (*7)	Y (*7)
	Message Notification Destination	Notification message		-(*5)	Y (*7)	Y(*8)	Y (*9)	Y (*7)
		Reply message		-(*5)	Y (*7)	Y(*8)	Y (*9)	Y (*7)
	Output Progress Notification	Output Starting Messages	Don't send, Send	-(*10)	- (*10)	-(*10)	- (*10)	- (*10)
		Change Paper Messages	Use the printer settings, Don't send, Send	-(*5)	-(*5)	-(*5)	-(*5)	-(*5)
		Output Completion Messages	Use the printer settings, Don't send, Send	-(*5)	-(*5)	-(*5)	-(*5)	-(*5)
	Output End Wait	Output End Wait	Until spool ends, Until form output ends	-	Y (*7)	Y(*7)	Y (*7)	Y (*7)
		Output end page number		-	-	-	-	Y (*11)

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification at the first line of the data file during data monitoring
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:During multi-form output, normally the specification on the first output form will become valid, but it is also possible to specify at form output so that specifications on each form are enabled.

*3:If a subject and comment are specified, a FAX cover page will be attached.

*4:Fixed to "Output immediately".

*5:The printer settings are used (the printer settings of the Print Manager).

*6:Fixed to"1".

*7:When a form is output with multiple output methods simultaneously, the same value is set to all the output methods.

*8:Specify with the ID_EXECBUFFER key of the setProperty method of the PrintProperties class.

*9:Specify with the setExecBuffer method of the PrintProperties class.

*10:Fixed to "Don't send".

*11:Only reference is available.

1.2.4 Sending FAX

Information that can be specified during form output when sending a form by FAX is indicated for each form output interface in the table below.

Table 1.5 Form output interface function table (common: sending FAX)(1 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
FAX Device Name				Y	Y	Y	Y	Y
Sender information when sending FAX				Y	Y	Y	Y	Y
Recipient information when sending FAX				Y	Y	Y	Y	Y
Recipient information file name when sending FAX				-	Y	Y	Y	Y
Attached subject when sending FAX	Specify the attachment		Yes, No	Y	-(*2)	-(*2)	-(*2)	-(*2)
	Subject			Y	Y	Y	Y	Y
	Comment			Y	Y	Y	Y	Y
Print Options	Output Timing	Mode	Output immediately, Hold in server, Hold in client, Use the printer settings	Y	Y (*3)	Y (*3)	Y (*3)	Y (*3)
		Specify the resume date time	Yes, No	Y	-(*4)	-(*4)	-(*4)	-(*4)
		Resume Date Time	At 23:59 after 999 days at the longest	Y	Y (*3)	Y (*3)	Y (*3)	Y (*3)
	Spool File Handling	Save spool files after outputting	Use the printer settings, No, Yes	Y	-	-	-	-
		Delete held spool files	Use the printer settings, No, Yes	Y	-	-	-	-
		Specify the deletion period	Yes, No	Y	-	-	-	-
		Time until deletion	Up to 999 days and 23 hours	Y	-	-	-	-
	Output Priority		1 - 99	Y	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)
	Message Notification Destination	Notification message		Y	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)
		Reply message		Y	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)
	Output Progress Notification	Output Starting Messages	Don't send, Send	Y	-	-	-	-
		Change Paper Messages	Use the printer settings, Don't send, Send	-	-	-	-	-
			Always send change paper messages	-	-	-	-	-
		Output Completion Messages	Use the printer settings, Don't send, Send	Y	-	-	-	-

Table 1.5 Form output interface function table (common: sending FAX)(2 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
					(1) (*1)	(2)	(3)	(4)
Print Options	Output End Wait	Output End Wait	Until spool ends, Until form output ends	-	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)	Y (*3) (*5)
		Output end page number		-	-	-	-	Y (*3) (*6)

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification at the first line of the data file during data monitoring
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:If a subject and comment are specified, a FAX cover page will be attached.

*3:It is valid only when using a printer defined in Print Manager.

*4:Specifying the resume date time results in specifying "Resume".

*5:When a form is output with multiple output methods simultaneously, the same value is set to all the output methods.

*6:Only reference is available.

1.2.5 Saving as a PDF File

Information that can be specified during form output when converting the form to a PDF file, and saving in a specified storage destination such as a hard disk is indicated per form output interface in the table below.

Table 1.6 Form output interface function table (common: saving as a PDF file) (1 / 2)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
				(1) (*1)	(2)	(3)	(4)
Storage destination file name when saving as a file			Y	Y	Y	Y	Y
PDF Options	Subtitle of the PDF file		Y	Y	Y	Y	Y
	Author of the PDF file		Y	Y	Y	Y	Y
Security	PDF file print permission specification	Allow, Not Allow	Y	Y	Y	Y	Y
	PDF file change permission specification	Allow, Not Allow	Y	Y	Y	Y	Y
	PDF file text and graphics selection permission specification	Allow, Not Allow	Y	Y	Y	Y	Y
	PDF file comments and form field add and change permission specification	Allow, Not Allow	Y	Y	Y	Y	Y
	Password for opening the PDF file		-	Y	Y	Y	Y
	Password for changing PDF file security		-	Y	Y	Y	Y
Restriction of viewing	Time limit/period for viewing the PDF file		Y	Y	Y	Y	Y
Font embedding	PDF file font embedding	No embedding, User defined characters and JEF extension characters, Embed all characters	Y	Y	Y	Y	Y
	PDF file embedded font searching	Enable searching, Disable searching	-	Y	Y	Y	Y
PDF file JPEG compression quality specification		High, Medium, Low, No deterioration in image quality	Y	Y	Y	Y	Y
PDF file attachments			Y	Y	Y	Y	Y
Adjust barcodes to fit field sizes			Y	-	-	-	-
PDF file viewer settings	Show toolbar	Show, Do not show	Y	Y	Y	Y	Y
	Show menubar	Show, Do not show	Y	Y	Y	Y	Y
	Use full screen mode	Use, Do not use	Y	Y	Y	Y	Y
PDF file automatic printing specification		Display [Print] window, Enable automatic printing, Disable automatic printing	Y	Y	Y	Y	Y
Bookmark	Insert when the form is switched		-	Y	Y	Y	Y
	Insert when input data value is switched		-	Y	Y	Y	Y
PDF document information file name			-	Y	Y	Y	-

Table 1.6 Form output interface function table (common: saving as a PDF file) (2 / 2)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
				(1) (*1)	(2)	(3)	(4)
ECM information file name			-	Y	Y	Y	Y
Mail distribution	Mail distribution information file name		-	Y	Y (*2)	Y	Y
	Destination mail address		-	Y	Y (*2)	Y	Y
	SMTP server name		-	Y	Y (*2)	Y	Y
	Transmission source mail address		-	Y	Y (*2)	Y	Y
	Transmission source name		-	Y	Y (*2)	Y	Y
	PDF file deletion specification	Yes, No	-	Y	Y (*2)	Y	Y

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification at the first line of the data file during data monitoring
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:Specify with the ID_EXECBUFFER key of the setProperty method of the PrintProperties class.

*3:Specify with the EXECBUFFER attribute.

1.2.6 OWF File Creation (Web-to-Local-Print)

Information that can be specified at form output is indicated for each interface in the table below.

Table 1.7 Form output interface function table (OWF file creation)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
				(1) (*1)	(2)	(3)	(4)
OWF file name			-	Y	Y	Y	-
Web-to-local-print (Operational information)	Close the Web browser after print completion	Close after print completion, Do not close after print completion	-	Y	Y	Y	-
	Operational mode during Web plug-in startup	Preview, Print	-	Y	Y	Y	-
	Specification of embedding external fonts in OWF files	Embed, Do not embed	-	Y	Y	Y	-
	External font registration specification		-	Y	Y	Y	-
Web-to-local-print (Preview information)	Printer control	Prevent printing, Prevent double printing, Do not prevent printing	-	Y	Y	Y	-
Web-to-local-print (Work directory information)	Work directory during OWF file creation		-	-	Y (*2)	-	-
Web-to-local-print (Character code conversion information)	EUC code type	EUC (U90), EUC (S90), Solaris standard EUC	-	-	-	-	-
	Substitute character specification	Use, Do not use	-	-	-	-	-
Web-to-local-print (Communication information)	Host name		-	-	-	-	-
	Port number		-	-	-	-	-
	Cache flag	Enable cache, Disable cache	-	-	-	-	-
	Data file compression flag	Compress during download, Do not compress during download	-	-	-	-	-
[Print] window display during printing		On, Off	-	Y	Y	Y	-
Specification of zoom factor during preview		Whole page, Display a page according to its width, Specify in a range from 30 to 200 (%)	-	Y	Y	Y	-

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command

*2:This is disabled for remote form output and connector linkage.

1.2.7 Excel file output

Information that can be specified during form output when converting the form to a Excel file, and saving in a specified storage destination such as a hard disk is indicated per form output interface in the table below.

Table 1.8 Form output interface function table (Excel file output)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
				(1) (*1)	(2)	(3)	(4)
Storage destination file name when outputting to an Excel file			Y	Y	Y	Y	Y
Excel Options	Subtitle of the Excel file		Y	-	-	-	-
	Author of the Excel file		Y	-	-	-	-
Excel document information file name			-	Y	Y	Y	Y
Output method of details when outputting to an Excel file		Change a sheet with the height of a print range and output, Output without changing a sheet with the height of a print range	Y	Y	Y	Y	Y
Sheet name of the Excel file to be output		Form name, Fixed string	Y (*2)	Y	Y	Y	Y
Specification of a data field name whose input data is output as the sheet name of the Excel file		Data field name	-	Y	Y	Y	Y
ECM information file name			-	Y	Y	Y	Y

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification at the first line of the data file during data monitoring
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:Only a fixed string can be specified for the sheet name of the Excel file to be output.

1.3 Remote Form Output

Information that can be specified when performing remote form output is indicated for each interface in the table below.
In addition to this table, refer to the "Form Output Interface Function Table" for each output method.

Table 1.9 Form output interface function table (remote form output)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
				(1) (*1)	(2)	(3)	(4)
Operational information	Target computer name		-	Y	Y	-	-
	Error message output method	Output the error to an event log, Display the error in a message box	-	Y	-	-	-
	Transfer data compression transfer		-	Y	Y	-	-
	Form output with pre-placed form		-	Y	Y	-	-
	Process mode of the transfer destination file	Overwrite, Overwrite only if the form on the application server has been updated	-	Y	Y	-	-
User resource information	Form name		-	Y	Y	-	-
	Transfer form storage directory (*2)		-(*3)	Y	Y	-	-
	Input data character code	Shift-JIS, UNICODE (UTF16 little endian), UNICODE (UTF16 big endian), UNICODE (UTF8)	-	Y	Y	-	-
	Transfer data file name		-	Y	Y	-	-
	Transfer media data file name		-	Y	Y	-	-
	Transfer file name		-	Y	Y	-	-
	Transfer file name during binary transfer		-	Y	Y	-	-
	Form storage directory for form output		-	Y	Y	-	-
User resource information for multi-form output/ combination-form output	Transfer form name for multi-form output/combination-form output		-	Y	Y	-	-
	Form name data separator character for multi-form/combination-form	Separator character	-	Y	Y	-	-
	Form name data field length for multi-form		-	Y	Y	-	-
	Combination-form output		-	Y	Y	-	-
e-Record information	The name of the transferred FAX recipient information file for sending an e-Record of the form by FAX		-	Y	Y	-	-
FAX send information	The name of the transferred FAX recipient information file for sending a form by FAX		-	Y	Y	-	-
Other	Form output option	Specify the option of the prprint command	-	Y	Y	-	-

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prputprt command
- Specification with the -command option of the prdsexec command

*2:If List Creator Designer is installed, it is also possible to specify in the [Form Descriptor List] window.

*3:It cannot be specified on the form, but can be specified in the [List Creator Settings] window for List Creator.

1.4 Connector Linkage

Information that can be specified when outputting the form with connector linkage is indicated for each interface in the table below.
In addition to this table, also refer to the "Form Output Interface Function Table" for each output method.
When outputting from Windows to UNIX OS using connector linkage, refer to the following along with this table.
=>"Chapter 2 Form Output Interface Function Table (For [UNIX OS])"

Table 1.10 Form output interface function table (connector linkage)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
				(1) (*1)	(2)	(3)	(4)
Operational information	Target computer name		-	Y	Y	Y	-
	Transfer data compression transfer		-	Y	Y	Y	-
	Form output with pre-placed form		-	Y	Y	Y	-
User resource information	Form name		-	Y	Y	Y	-
	Transfer form storage directory (*2)		-(*3)	Y	Y	Y	-
	Input data character code	Shift-JIS, UNICODE (UTF16 little endian), UNICODE (UTF16 big endian), UNICODE (UTF8)	-	Y	Y	Y	-
	Transfer data file name		-	Y	Y	Y	-
	Transfer media data file name		-	Y	Y	Y	-
	Transfer file name		-	Y	Y	Y	-
	Transfer file name during binary transfer		-	Y	Y	Y	-
	Form storage directory for form output		-	Y	Y	Y	-
User resource information for multi-form output/ combination-form output	Transfer form name for multi-form output/combination-form output		-	Y	Y	Y	-
	Form name data separator character for multi-form/ combination-form	Separator character	-	Y	Y	Y	-
	Form name data field length for multi-form		-	Y	Y	Y	-
	Combination-form output		-	Y	Y	Y	-
e-Record information	The name of the transferred FAX recipient information file for sending an e-Record of the form by FAX		-	Y	Y	Y	-
FAX send information	The name of the transferred FAX recipient information file for sending a form by FAX		-	Y	Y	Y	-
PDF file name to be created			-	Y	Y	Y	-
OWF file name to be created			-	Y	Y	Y	-
Excel file name to be created			-	Y	Y	Y	-
Other	Form output option	Specify the option of the prprint command	-	Y	Y	Y	-

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prputex command
- Specification with the -command option of the prdsexec command

*2:If List Creator Designer is installed, it is also possible to specify in the [Form Descriptor List] window.

*3:It cannot be specified on the form, but can be specified in the [List Creator Settings] window for List Creator.

1.5 XBRL Data Support/Navigator Links

Information that can be specified when outputting the form with XBRL data support function/Navigator links function is indicated for each interface in the table below.
In addition to this table, also refer to the "Form Output Interface Function Table" for each output method.
When using operating mode of remote form output mode or connector linkage mode, refer to the following along with this table.

=>"1.3 Remote Form Output"
=>"1.4 Connector Linkage"

Table 1.11 Form output interface function table (XBRL data support/Navigator links)

Type of settings	Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface (3) .NET interface (4) Custom control			
			(1) (*1)	(2)	(3)	(4)
Output data file name		-	Y	Y	Y	-
Form name		-	Y	Y	Y	-
Form storage directory		-	Y	Y	Y	-
Information specific to XBRL data support/ Navigator links function		-	Y	Y	Y	-
Name of the information file specific to XBRL data support/Navigator links function		-	Y	-	-	-
Output data character code (*2)	Shift-JIS, UNICODE (UTF16 little endian), UNICODE (UTF16 big endian), UNICODE (UTF8)	-	Y	Y	Y	-
Command line	Specify the options of the prprint command, prputprt command and prputex command	-	Y	-	-	-

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to the prdsexec command.

*2:Not supported when using Navigator links function.

Chapter 2
Form Output Interface Function Table (For [UNIX OS])

This chapter explains the support status of output functions when using [UNIX OS] and information that can be specified for individual form output interfaces for each output method.

2.1 Output Function 39
2.2 Common/Local Form Output/Web-to-Local-Print 42
2.3 Remote Form Output 54
2.4 Connector Linkage 56
2.5 XBRL Data Support/Navigator Links 58

2.1 Output Function

The support status of each function of List Creator is indicated for each form output interface in the table below.

Table 2.1 Support status of the output function (For [UNIX OS])

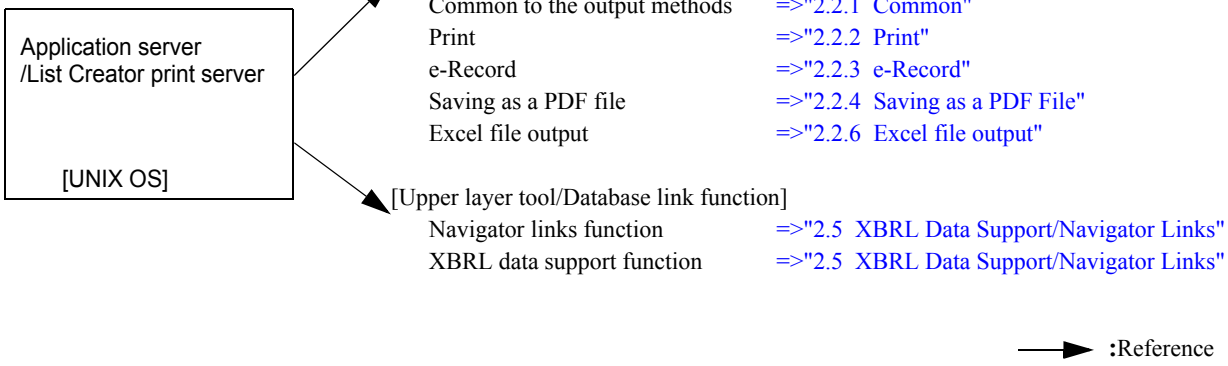
Function		Support status of the output function for each form output interface							
		Command/ COBOL Interface (*1)				Java interface			
		Solaris	Linux for Intel64	Linux for x86	Linux for Itanium	Solaris	Linux for Intel64	Linux for x86	Linux for Itanium
Output method (Local output function)	Print	Y	Y	Y	Y	Y	Y	Y	Y
	Sending FAX	-	-	-	-	-	-	-	-
	e-Record	Y	Y	-	Y	Y	Y	-	Y
	Saving as a PDF file	Y	Y	Y	Y	Y	Y	Y	Y
	OWF file creation	Y	Y	Y	Y	Y	Y	Y	Y
	Excel file output	Y	Y	-	Y	Y	Y	-	Y
Distributed output function	Connector linkage	Y	Y	Y	Y	Y	Y	Y	Y
	Remote form output function	Y	Y	Y	Y	Y	Y	Y	Y
Upper layer tool/ Database link function	Navigator links function	Y	-	-	-	Y	-	-	-
	XBRL data support function	Y	-	-	-	Y	-	-	-
ECM link function		-	-	-	-	-	-	-	-
Multi-form output function		Y	Y	Y	Y	Y	Y	Y	Y
Combination-form output function		Y	Y	-	-	Y	Y	-	-

Y: Supported
-: Unsupported
*1:COBOL interface is not supported by Linux for x86.

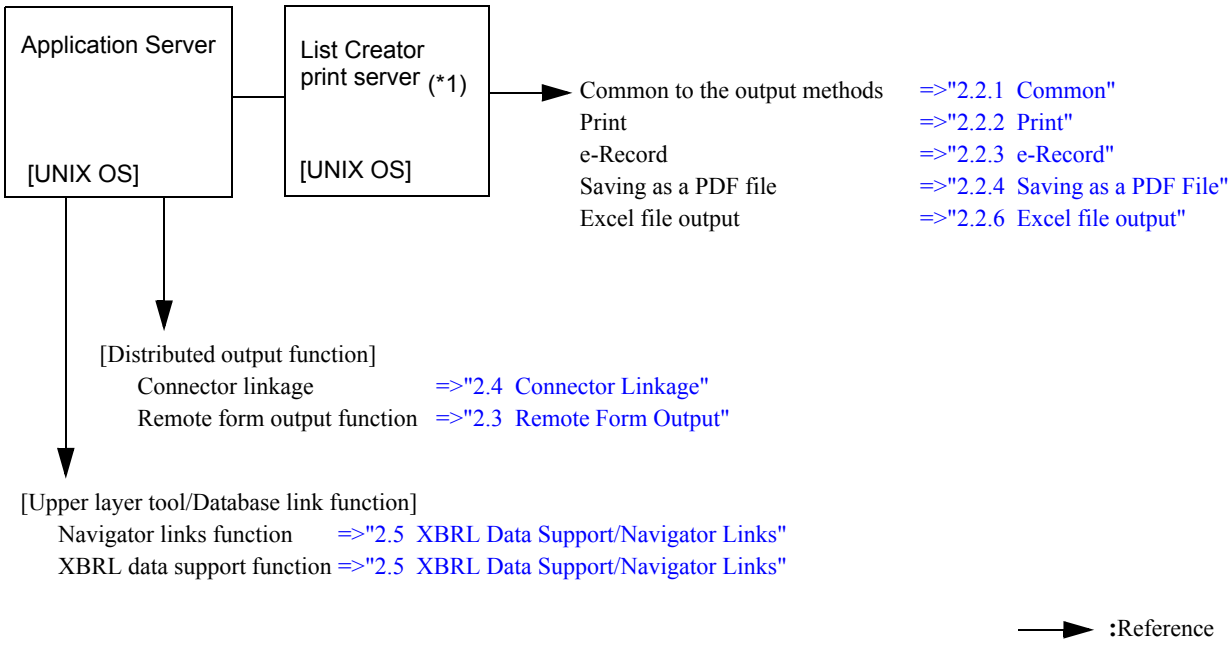
●How to use the "Form Output Interface Function Table"

In this chapter, the support range of functions that can be specified in List Creator for [UNIX OS] is described in the "Form Output Interface Function Table", for each form output interface.
For each operating mode, the following shows how to use the "Form Output Interface Function Table" and where to reference.

Stand-alone mode



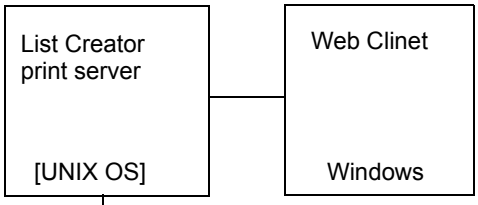
Distributed output mode



*1: When the List Creator print server runs on Windows, refer to the following:
=>"Chapter 1 Form Output Interface Function Table (For [Windows])"
For output functions in different versions of List Creator, refer to the online manual accompanying the List Creator print server.

Web-to-local-print mode

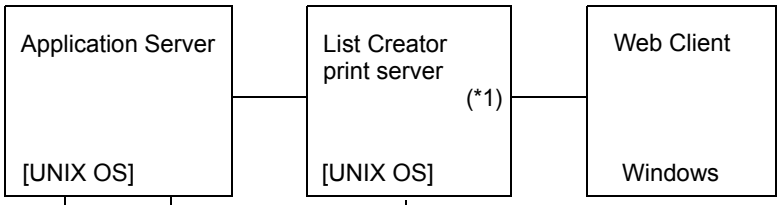
- Web-to-local-print mode



→ :Reference

[Web application linkage]
Common to the output methods =>"2.2.1 Common"
Print =>"2.2.2 Print"
OWF File Creation, Preview =>"2.2.5 OWF File Creation (Web-to-Local-Print)"

- Distributed output mode + Web-to-local-print mode



[Web application linkage]
Common to the output methods =>"2.2.1 Common"
Print =>"2.2.2 Print"
OWF file creation, preview =>"2.2.5 OWF File Creation (Web-to-Local-Print)"

[Distributed output function]
Connector linkage =>"2.4 Connector Linkage"
Remote form output function =>"2.3 Remote Form Output"

[Upper layer tool/Database link function]
Navigator links function =>"2.5 XBRL Data Support/Navigator Links"
XBRL data support function =>"2.5 XBRL Data Support/Navigator Links"

→ :Reference

*1: When the List Creator print server runs on Windows, refer to the following:
=>"Chapter 1 Form Output Interface Function Table (For [Windows])"
For output functions in different versions of List Creator, refer to the online manual accompanying the List Creator print server.

2.2 Common/Local Form Output/Web-to-Local-Print

This section indicates the information for each interface that can be specified during form output for local form output or Web-to-local-print.

2.2.1 Common

Information that can be specified at form output for any form output mode is indicated for each interface in the table below.

Table 2.2 Form output interface function table (common)(1 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
					(1) (*1)	(2)
User resource information	Form name			-	Y	Y
	Form storage directory (*2)			-	Y	Y
	Input data character code		Shift-JIS, UNICODE (UTF16 little endian), UNICODE (UTF16 big endian), UNICODE (UTF8), EUC (U90), EUC (S90)	-	-	Y
	Character code of the runtime environment		Shift-JIS, EUC (U90), EUC (S90), UNICODE (UTF8)	-	-	Y
	Input data	Data file name		-	Y	Y
		Record (line) output		-	-	Y
	Data root parent element path			-	Y	Y
	Barcode data BASE64 encoding		BASE64 encoding used, BASE64 encoding not used	-	Y	Y
	Media data storage directory			-	Y(*3)	Y(*3)
OWF file creation information	Media data file names during creating OWF files			-	Y	Y
	Form name when using multi-form/combination-form			-	Y(*4)	Y(*4)
User resource information for multi-form output/ combination-form output (*5)	Multi-form output		Yes, No	-	-(*6)	Y
	Form name data separator character for multi-form/ combination-form		Separator character	-	Y	Y
	Form name data field length for multi-form			-	Y	Y
	Form switching			-	-	Y
	Combination-form output		Yes, No	-	Y	Y
	Combination-form descriptor file name			-	Y	Y
Identification information	Title			-	Y	Y
	Comment			Y	Y	Y
	Output user ID			-	Y	Y

Table 2.2 Form output interface function table (common)(2 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
					(1) (*1)	(2)
Operational information	Start page number			-	Y	Y
	End page number			-	Y	Y
	Output method (which is not specified on the form)		Print, e-Record, File, OWF file, Excel file output	-	Y	Y
	Output method (which is specified on the form)		Print, e-Record, File, Excel file output	Y	Y	Y
	SET operator replacement string			-	Y	Y
	Scale according to paper size specification		A3 paper, A4 paper, A5 paper, A6 paper, B4 paper, B5 paper, Postcard, Letter, Legal, Optional	Y	Y (*8)	Y (*8)
	Print offset specification	Inch	Horizontal position (0.00 to 22.50), Vertical position (0.00 to 22.50)	Y	Y	Y
		Millimeter	Horizontal position (0.0 to 571.5), Vertical position (0.0 to 571.5)			
	Linefeed code control		Yes (Output one blank line), No (Skip)	-	Y	Y
	New page code control		Yes, No (Skip), No (Read as data)	-	Y	Y
	Operation when there is no input data		Error, Not error (Output)	-	Y	Y
	Specification of data file with the field name label		Treat, Not Treat	-	Y	Y
	Property replace file name			-	Y	Y
	Substitute font info file name			-	Y	Y
	Barcode correct info file name			Y	Y	Y
	Form output information file name			-	Y	Y

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:It can also be specified with the Setup Command for List Creator.

*3:This is disabled when OWF files are created.

*4:This is enabled only when OWF files are created.

*5:A form name and a combination-form name are specified in the input data.

*6:Specifying "Form name data separator character for multi-form" results in setting "Multi-form output" for "Yes".

*7:Excel file output is not supported.

*8:"Optional" can be specified only when OWF files are created.

2.2.2 Print

Information that can be specified during form output when outputting the form to the printer is indicated for each form output interface in the table below.
The information is disabled when making e-Record, saving as a PDF file, and outputting to an Excel file.

Table 2.3 Form output interface function table (common: print) (1 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
					(1) (*1)	(2)
Printing information	Printer model name when performing FM output/ FNP output specification		VSP4610A (*2), VSP4701 (*2), VSP4900 (*2), VSP4950 (*2), VSPSP (*2), FNP	-	Y	Y
	Device name			Y	Y	Y
	Paper source		Cut sheet feeder, Hopper 1, Hopper 2, Hopper 3, Hopper 4, Manual paper feed, None, Automatic	Y	Y (*3)	Y (*3)
	Paper feed name			Y	Y (*3)	Y (*3)
	Multiple copies	Number of copies	1 - 999	Y	Y	Y
		Collate output (*4)	Yes, No	Y	Y	Y
	Duplex printing		Yes, No	Y	Y (*3)	Y (*3)
	Multi-form output specification	Feed a new sheet of paper when a new form starts printing	Yes, No	Y	Y (*3)	Y (*3)
		Change the paper source/paper feed name when a new form starts printing	Yes, No	Y	Y	Y
	Paper	Paper name		Y	-	-
	Substitute font			Y	-	-

Table 2.3 Form output interface function table (common: print) (2 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
					(1) (*1)	(2)
Print Options (*4)	Separator page output			Y	Y (*5)	Y (*5)
	Output Timing	Mode	Output immediately, Hold in server, Hold in client	Y	Y	Y
		Specify the resume date time	Yes, No	Y	- (*6)	- (*6)
		Resume Date Time	At 23:59 after 999 days at the longest	Y	Y	Y
	Spool File Handling	Save spool files after outputting	Use the printer settings, No, Yes	Y	-	-
		Delete held spool files	Use the printer settings, No, Yes	Y	-	-
		Specify the deletion period	Yes, No	Y	-	-
		Time until deletion	Up to 999 days and 23 hours	Y	-	-
	Output Priority		1 - 99	Y	-	Y (*5)
	Message Notification Destination	Notification message		Y	Y	Y
		Reply message		-	Y	Y
	Output Progress Notification	Output Starting Messages	Don't send, Send	-	-	-
		Change Paper Messages	Use the printer settings, Don't send, Send	-	-	-
			Always send change paper messages	-	-	-
		Output Completion Messages	Use the printer settings, Don't send, Send	-	-	-
	Output End Wait	Output End Wait	Until spool ends, Until form output ends	-	-	-
		Output end page number		-	-	-
	Specification of event notification			-	-	-
	Print document owner name (user name) specification			-	-	-

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:It is valid only when the List Creator print server runs on Solaris.

*3:During multi-form output, normally the specification on the first output form will become valid, but it is also possible to specify at form output so that specifications on each form are enabled.

*4:It is valid only when the List Creator print server runs on Solaris and a printer defined in Print Manager is used.

*5:This is enabled only when OWF files are created.

*6:Specifying the resume date time results in specifying "Resume".

2.2.3 e-Record

Information that can be specified during form output when saving a form as an electric form in the storage folder in the List Manager server is indicated per form output interface in the table below.

Table 2.4 Form output interface function table (common: e-Record) (1 / 2)

Type of settings			Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
					(1) (*1)	(2)
e-Record device name				Y	Y	Y
e-Record creator				Y	Y	Y
e-Record creation date				-	Y	Y
e-Record creation time				-	Y	Y
e-Record storage folder path name				Y	Y	Y
e-Record comment 1				Y	Y	Y
e-Record comment 2				Y	Y	Y
e-Record comment 3				Y	Y	Y
e-Record comment 4				Y	Y	Y
Validity period of e-Record	Number of days (Day)		Use the storage folder settings, 1 - 9999	Y	Y	Y
	Specification of auto-delete following expiry		Yes, No	Y	Y	Y
Indexed searching specification when making e-Record			Use the storage folder settings, Don't create indexes, Create indexes	Y	Y	Y
Mail transmission when making e-Record	Mail Notification		Use the List Management Server settings, None, With the following attachment - Form Entry File/Form File	-	-	-
	Destination			-	-	-
Distribution folder ID during form print distribution				-	-	-
Form print distribution specification				-	-	-
Electronic form information file name				-	Y	Y
Print setting information	Paper source		Cut sheet feeder, Hopper 1, Hopper 2, Hopper 3, Hopper 4, Manual paper feed, None, Automatic	Y	Y	Y
	Paper feed name			Y	Y	Y
	Multiple copies	Number of copies	1 - 9999	Y	Y	Y
		Collate output specification	Use the printer settings, Collate output, Output per-page sets	Y	Y	Y
	Duplex printing		Yes, No	Y	Y	Y
	Multi-form output specification	Feed a new sheet of paper when a new form starts printing	Yes, No	Y	Y (*2)	Y (*2)

Table 2.4 Form output interface function table (common: e-Record) (2 / 2)

Type of settings	Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
			(1) (*1)	(2)
Fax Options Info		Y	-	-

Y: Can be specified.
-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- Specification with the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:During multi-form output, normally the specification on the first output form will become valid, but it is also possible to specify at form output so that specifications on each form are enabled.

2.2.4 Saving as a PDF File

Information that can be specified during form output when converting the form to a PDF file, and saving in a specified storage destination such as a hard disk is indicated per form output interface in the table below.

Table 2.5 Form output interface function table (common: saving as a PDF file) (1 / 2)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
				(1) (*1)	(2)
Storage destination file name when saving as a file			Y	Y	Y
PDF Options	Subtitle of the PDF file		Y	Y	Y
	Author of the PDF file		Y	Y	Y
Security	PDF file print permission specification	Allow, Not Allow	Y	Y	Y
	PDF file change permission specification	Allow, Not Allow	Y	Y	Y
	PDF file text and graphics selection permission specification	Allow, Not Allow	Y	Y	Y
	PDF file comments and form field add and change permission specification	Allow, Not Allow	Y	Y	Y
	Password for opening the PDF file		-	Y	Y
	Password for changing PDF file security		-	Y	Y
Restriction of viewing	Time limit/period for viewing the PDF file		Y	Y	Y
Font embedding	PDF file font embedding	No embedding, User defined characters and JEF extension characters, Embed all characters	Y	Y	Y
	PDF file embedded font searching	Enable searching, Disable searching	-	Y	Y
PDF file JPEG compression quality specification		High, Medium, Low, No deterioration in image quality	Y	Y	Y
PDF file attachments			Y	Y	Y
Adjust barcodes to fit field sizes			Y	-	-
PDF file viewer settings	Show toolbar	Show, Do not show	Y	Y	Y
	Show menubar	Show, Do not show	Y	Y	Y
	Use full screen mode	Use, Do not use	Y	Y	Y
PDF file automatic printing specification		Display [Print] window, Enable automatic printing, Disable automatic printing	Y	Y	Y

Table 2.5 Form output interface function table (common: saving as a PDF file) (2 / 2)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
				(1) (*1)	(2)
Mail distribution	Mail distribution information file name		-	Y	Y (*2)
	Destination mail address		-	Y	Y (*2)
	SMTP server name		-	Y	Y (*2)
	Transmission source mail address		-	Y	Y (*2)
	Transmission source name		-	Y	Y (*2)
	PDF file deletion specification	Yes, No	-	Y	Y (*2)
Bookmark	Insert when the form is switched	Insert, Do not insert	-	Y	Y
	Insert when input data value is switched		-	Y	Y
PDF document information file name			-	Y	Y
ECM information file name			-	-	-

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- the -command option of the prdsexec command
- Specification using the COMMAND keyword during SAP R/3 RDI integration

*2:Specify with the ID_EXECBUFFER key of the setProperty method of the PrintProperties class.

*3:Specify with the EXECBUFFER attribute.

2.2.5 OWF File Creation (Web-to-Local-Print)

Information that can be specified at form output is indicated for each interface in the table below.

Table 2.6 Form output interface function table (OWF file creation)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
				(1) (*1)	(2)
OWF file name			-	Y	Y
Web-to-local-print (Operational information)	Close the Web browser after print completion	Close after print completion, Do not close after print completion	-	Y	Y
	Operational mode during Web plug-in startup	Preview, Print	-	Y	Y
	Specification of embedding external fonts in OWF files	Embed, Do not embed	-	Y	Y
	External font registration specification		-	Y	Y
Web-to-local-print (Preview information)	Printer control	Prevent printing, Prevent double printing, Do not prevent printing	-	Y	Y
Web-to-local-print (Work directory information)	Work directory during OWF file creation		-	-	Y
Web-to-local-print (Character code conversion information)	EUC code type	EUC (U90), EUC (S90)	-	Y	Y
		Solaris standard EUC (*2)	-	-	-
	Substitute character specification	Use, Do not use	-	Y	-
[Print] window display during printing		On, Off	-	Y	Y
Specification of zoom factor during preview		Whole page, Display a page according to its width, Specify in a range from 30 to 200 (%)	-	Y	Y

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command
- the -command option of the prdsexec command

*2:Only valid when the application server is Solaris.

2.2.6 Excel file output

Information that can be specified during form output when converting the form to a Excel file, and saving in a specified storage destination such as a hard disk is indicated per form output interface in the table below.

Table 2.7 Form output interface function table (Excel file output)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
				(1) (*1)	(2)
Storage destination file name when outputting to an Excel file			Y	Y	Y
Excel Options	Subtitle of the Excel file		Y	-	-
	Author of the Excel file		Y	-	-
Excel document information file name			-	Y	Y
Output method of details when outputting to an Excel file		Change a sheet with the height of a print range and output, Output without changing a sheet with the height of a print range	Y	Y	Y
Sheet name of the Excel file to be output		Form name, Fixed string	Y (*2)	Y	Y
Specification of a data field name whose input data is output as the sheet name of the Excel file		Data field name	-	Y	Y
ECM information file name			-	-	-

Y: Can be specified.
-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prprint command
- Specification on the first line of the data file specified with prprintx command
- Specification with the -z option of the prputprt command
- Specification with the -z option of the prputex command

*2:Only a fixed string can be specified for the sheet name of the Excel file to be output.

2.3 Remote Form Output

Information that can be specified when performing remote form output is indicated for each interface in the table below. This is applicable when the application server runs on UNIX OS.
In addition to this table, refer to the "Form Output Interface Function Table" for each output method.
When outputting from UNIX OS to Windows using remote form output function, refer to the following along with this table.

=>"Chapter 1 Form Output Interface Function Table (For [Windows])"

Table 2.8 Form output interface function table (remote form output)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
				(1) (*1)	(2)
Operational information	Target computer name		-	Y	Y
	Error message output method	Standard output error, Standard output error and system log	-	Y	-
	Transfer data compression transfer		-	Y	Y
	Form output with pre-placed form		-	Y	Y
	Process mode of the transfer destination file	Overwrite, Overwrite only if the form on the application server has been updated	-	Y	Y
User resource information	Form name		-	Y	Y
	Transfer form storage directory (*2)		-	Y	Y
	Input data character code	Shift-JIS, UNICODE (UTF16 little endian), UNICODE (UTF16 big endian), UNICODE (UTF8)	-	Y	Y
	Transfer data file name		-	Y	Y
	Transfer media data file name		-	Y	Y
	Transfer file name		-	Y	Y
	Transfer file name during binary transfer		-	Y	Y
	Form storage directory for form output		-	Y	Y
User resource information for multi-form output/ combination-form output	Transfer form name for multi-form output/combination-form output		-	Y	Y
	Form name data separator character for multi-form/combination-form	Separator character	-	Y	Y
	Form name data field length for multi-form		-	Y	Y
e-Record information	The name of the transferred FAX recipient information file for sending an e-Record of the form by FAX		-	Y	Y
FAX send information	The name of the transferred FAX recipient information file for sending a form by FAX		-	Y	Y
Other	Form output option	Specify the option of the prprint command	-	Y	Y

Y: Can be specified.
-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prputprt command
- the -command option of the prdsexec command

*2:It can also be specified with the Setup Command for List Creator.

2.4 Connector Linkage

Information that can be specified when outputting the form with connector linkage is indicated for each interface in the table below. This is applicable when the application server runs on UNIX OS.
In addition to this table, refer to the "Form Output Interface Function Table" for each output method.
When outputting from UNIX OS to Windows using connector linkage, refer to the following along with this table.
=>"Chapter 1 Form Output Interface Function Table (For [Windows])"

Table 2.9 Form output interface function table (connector linkage)

Type of settings		Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
				(1) (*1)	(2)
Operational information	Target computer name		-	Y	Y
	Transfer data compression transfer		-	Y	Y
	Form output with pre-placed form		-	Y	Y
User resource information	Form name		-	Y	Y
	Transfer form storage directory (*2)		-	Y	Y
	Input data character code	Shift-JIS, UNICODE (UTF16 little endian), UNICODE (UTF16 big endian), UNICODE (UTF8)	-	Y	Y
	Transfer data file name		-	Y	Y
	Transfer media data file name		-	Y	Y
	Transfer file name		-	Y	Y
	Transfer file name during binary transfer		-	Y	Y
	Form storage directory for form output		-	Y	Y
User resource information for multi-form output/ combination-form output	Transfer form name for multi-form output/combination-form output		-	Y	Y
	Form name data separator character for multi-form/ combination-form	Separator character	-	Y	Y
	Form name data field length for multi-form		-	Y	Y
e-Record information	The name of the transferred FAX recipient information file for sending an e-Record of the form by FAX		-	Y	Y
FAX send information	The name of the transferred FAX recipient information file for sending a form by FAX		-	Y	Y
PDF file name to be created			-	Y	Y
OWF file name to be created			-	Y	Y
Excel file name to be created			-	Y	Y
Other	Form output option	Specify the option of the prprint command	-	Y	Y

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to one of the following.

- prputex command
- the -command option of the prdsexec command

*2:It can also be specified with the Setup Command for List Creator.

2.5 XBRL Data Support/Navigator Links

Information that can be specified when outputting the form with XBRL data support function/Navigator links function is indicated for each interface in the table below. This is applicable when the application server runs on Solaris.
In addition to this table, refer to the "Form Output Interface Function Table" for each output method.
When using operating mode of remote form output mode or connector linkage mode, refer to the following along with this table.

=>"2.3 Remote Form Output"
=>"2.4 Connector Linkage"

Table 2.10 Form output interface function table (XBRL data support/Navigator links)

Type of settings	Values	Specified in the forms	Specified during form output (1) Command/COBOL interface (2) Java interface	
			(1) (*1)	(2)
Output data file name		-	Y	Y
Form name		-	Y	Y
Form storage directory		-	Y	Y
Information specific to XBRL data support/ Navigator links function		-	Y	Y
Name of the information file specific to XBRL data support/Navigator links function		-	Y	-
Command line	Specify the options of the prprint command, prputprt command and prputex command	-	Y	-

Y: Can be specified.

-: Cannot be specified or specification invalid.

*1:Specification with a command refers to the prdsexec command.

Chapter 3
Program Development Methods

This chapter explains how to use the following List Creator interface to make user applications (programs) and the cautions regarding the development and execution of these user applications.

- Command
- Java interface
- .NET interface
- COBOL interface

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3.1 Commands

The List Creator commands may be accessed from the shell or called by an application.

3.1.1 Command List

The following List Creator commands are available.

Table 3.1 Command list

Type	Command name	Product name W : [Windows] W64 : [Windows(x64)] WI : [Windows for Itanium] S : [Solaris] L : [Linux]								
		List Creator				List Creator Connector				
		W	W64	S	L	W	W64	WI	S	L
Form output command	prprint prprintx	Y Y	Y Y	Y Y	Y Y	- -	- -	- -	- -	- -
Remote form output command	prputprt	Y	Y	Y	Y	-	-	-	-	-
Connector linkage command	prputex	Y	Y	Y	Y	Y	Y	Y	Y	Y
XBRL data support/Navigator links command	prdsexec	Y	-	Y	-	Y	-	-	Y	-

Y: Supported
-: Unsupported

The following shows the description examples of the above commands.

3.1.2 prprint Command Description Example

prprint command is specified when outputting the form.
When the prprint command is executed, the form is output on the computer where the prprint command was executed.
The following uses of the prprint command are described separately.

- When the application server runs on Windows
- When the application server runs on UNIX OS
- When creating OWF files
- When outputting Excel files

3.1.2.1 When the application server runs on Windows

The description examples of the prprint command when the application server runs on Windows are described below separately.

- Outputting a single form
- Performing multi-form output with the input data format set to "Variable Length"
- Performing multi-form output with the input data format set to "Fixed Length"
- Performing multi-form output with the input data format set to "XML Format"
- Performing combination-form output with the input data format set to "Variable Length"
- Performing combination-form output with the input data format set to "XML Format"
- When handling input data as "data with the field name label"

●Outputting a single form

[Description example]

A form called "form1" will be output to the printer "FUJITSU XL-6700".
The character code of the input data "form1.dat" is Shift-JIS.

```
prprint "form1"
        -indatacode SJIS
        -atdirect print
        -n "FUJITSU XL-6700"
        -f  "C:¥Data¥form1.dat"
```

In saving as a PDF file, "form1" will be used as the form, and a PDF file "form.pdf" is created under "C:¥Data¥PDF¥".
The character code of the input data "form1.dat" is Shift-JIS.

```
prprint "form1"
        -indatacode SJIS
        -atdirect file
        -assetsdir "C:¥Assets"
        -keeppdf  "C:¥Data¥PDF¥form.pdf"
        -f  "C:¥Data¥form1.dat"
```

●Performing multi-form output with the input data format set to "Variable Length"

[Description example]

Forms called "URIAGE" and "SYUTTAI" will be output to the printer "FUJITSU XL-6700".
The character code of the input data "MULTI.dat" is Shift-JIS.

```
prprint  -f  "C:¥Data¥MULTI.dat"
         -grpdelimit  "|"
         -indatacode SJIS
         -atdirect print
         -n "FUJITSU XL-6700"
```

An example of the "MULTI.dat" description is shown below.

```
URIAGE  | ABC Electronics | 20040521 | 03101 | 005 | 0020 | Color Television | 3 | 120000
URIAGE  | ABC Electronics | 20040521 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
URIAGE  | ABC Electronics | 20040521 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
SYUTTAI | NCS) Development department 2
SYUTTAI | 385945 | Nihon Hanako | 1 | 6 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 7 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 11 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 17 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 25 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 28 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 29 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 30 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 2 | 2 | 930 | 1715 | 7 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 7 | 830 | 1715 | 8 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 10 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 15 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 23 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 28 | 830 | 1715 | 0 | 0 |
```

●Performing multi-form output with the input data format set to "Fixed Length"

[Description example]

Forms called "URIAGE" and "SYUTTAI" will be output to the printer "FUJITSU XL-6700".
The character code of the input data "MULTI.dat" is Shift-JIS.

```
prprint  -f  "C:¥Data¥MULTI.dat"
         -grpdelimit  "FIXED"
         -grpbytes  "10"
         -indatacode SJIS
         -atdirect print
         -n "FUJITSU XL-6700"
```

An example of the "MULTI.dat" description is shown below.

```
URIAGE   ABC Electronics  20040521  03101  005  0020  Color Television  3  120000
URIAGE   ABC Electronics  20040521  03101  005  0022  Karaoke set       1   82000
URIAGE   ABC Electronics  20040521  03101  005  0100  Electric Cleaner  2   23000
SYUTTAI  NCS) Development department 2
SYUTTAI  385945  Nihon Hanako  1  6   830  17158  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  7   830  17158  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  11  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  1  17  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  1  20  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  1  25  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  1  28  830  17158  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  29  830  17158  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  30  830  17158  0  Business Trip
SYUTTAI  385945  Nihon Hanako  2  2   930  17157  0
SYUTTAI  385945  Nihon Hanako  2  7   830  17158  0
SYUTTAI  385945  Nihon Hanako  2  10  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  2  15  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  2  20  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  2  23  830  21308  3.5
SYUTTAI  385945  Nihon Hanako  2  28  830  17150  0
```

●Performing multi-form output with the input data format set to "XML Format"

[Description example]

Forms called "URIAGE" and "SYUTTAI" will be output to the printer "FUJITSU XL-6700".
The character code of the input data "MULTI.xml" is Shift-JIS.

```
prprint -f  "C:¥Data¥MULTI.xml"
        -grpdelimit  "XML"
        -indatacode SJIS
        -atdirect print
        -n "FUJITSU XL-6700"
```

An example of the "MULTI.xml" description is shown below.

```
<?xml version= "1.0" encoding= "Shift-JIS" ?>
<MULTIDATA>
  <FjLCForm name="URIAGE">
    <URIAGE>
      <Customer>ABC Electronics</Customer>
      <SalesDate>20040521</SalesDate>
      <CustomerCode>03101</CustomerCode>
      <SalespersonCode>005</SalespersonCode>
      <Detail>
        <ProductCode>0020</ProductCode>
        <ProductName>Color television</ProductName>
        <SalesQuantity>3</SalesQuantity>
        <UnitPrice>120000</UnitPrice>
      </Detail>
      <Detail>
        <ProductCode>0022</ProductCode>
        <ProductName>Karaoke set</ProductName>
        <SalesQuantity>1</SalesQuantity>
        <UnitPrice>82000</UnitPrice>
      </Detail>
    </URIAGE>
  </FjLCForm>
  <FjLCForm name="SYUTTAI">
    <SYUTTAI>
      <DepartmentName>NCS) Development department 2</DepartmentName>
      <EmployeeNumber>385945</EmployeeNumber>
      <Name>Nihon Hanako</Name>
      <TimesheetDetails>
        <Month>1</Month>
        <Day>6</Day>
        <ClockinTime>0830</ClockinTime>
        <ClockoutTime>1715</ClockoutTime>
        <RegularHours>8</RegularHours>
        <Overtime>0</OvertimeHours>
        <Notes>Business Trip</Notes>
      </TimesheetDetails>
      <TimesheetDetails>
      .......
      </TimesheetDetails>
    </SYUTTAI>
  </FjLCForm>
</MULTIDATA>
```

●Performing combination-form output with the input data format set to "Variable Length"

[Description example]

The following is a description example where the form descriptor information "HeaderA" and "DetailX" are output and printed as a combination-form.
Form storage directory is "C:¥Assets".
"cbform.dat" under "C:¥Data" is used as the data file. The character code is Shift-JIS.
The form name separator character for combination-form is "vertical bar (|)".
The combination-form descriptor file is "Lccbform.ini" under "C:¥Assets".
The form will be output to the printer "FUJITSU XL-6700".

```
prprint     -assetsdir "C:¥Assets"
            -f "C:¥Data¥cbform.dat"
            -indatacode SJIS
            -grpdelimit "|"
            -gcbform yes
            -gcbfile "C:¥Assets¥Lccbform.ini"
            -atdirect print
            -n "FUJITSU XL-6700"
```

An example of the "cbform.dat" description is shown below.
Combination-form name is "Combination1".

```
Combination1:HeaderA | Madison Avenue XXX | Des Moines IA | ABC Electronics | 20110810
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0020 | Television | 3 | 120000
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0022 | Microwave oven | 1 | 82000
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0100 | Vacuum cleaner | 2 | 23000
```

●Performing combination-form output with the input data format set to "XML Format"

[Description example]

The following is a description example where the form descriptor information "HeaderA" and "DetailX" are output and printed as a combination-form.
Form storage directory is "C:¥Assets".
"cbform.xml" under "C:¥Data" is used as the data file.
Specify "XML" for a form name separator character for combination-form.
The combination-form descriptor file is "Lccbform.ini" under "C:¥Assets".
The form will be output to the printer "FUJITSU XL-6700".

```
prprint     -assetsdir "C:¥Assets"
            -f "C:¥Data¥cbform.xml"
            -grpdelimit "XML"
            -gcbform yes
            -gcbfile "C:¥Assets¥Lccbform.ini"
            -atdirect print
            -n "FUJITSU XL-6700"
```

An example of the "cbform.xml" description is shown below.
Combination-form name is "Combination1".

```
<XMLroot>
 <FjLCForm name = "Combination1:HeaderA">
  <HeaderA>
     <Address>Madison Avenue XXX Des Moines IA </Address>
     <BillingAddress>ABC Electronics</BillingAddress>
     <BillingDate>20110810</BillingDate>
  </HeaderA>
 </FjLCForm>
 <FjLCForm name = "Combination1:DetailX">
  <DetailX>
     <BillingAddress>ABC Electronics</BillingAddress>
     <BillingDate>20110810</BillingDate>
     <InvoiceNumber>03101</InvoiceNumber>
     <SalespersonCode>005</SalespersonCode>
     <Detail>
       <ProductCode>0020</ProductCode>
       <ProductName>Television</ProductName>
       <Quantity>3</Quantity>
       <UnitPrice>120000</UnitPrice>
     </Detail>
     <Detail>
       <ProductCode>0022</ProductCode>
       <ProductName>Microwave oven</ProductName>
       <Quantity>1</Quantity>
       <UnitPrice>82000</UnitPrice>
     </Detail>
     <Detail>
       <ProductCode>0100 </ProductCode>
       <ProductName>Vacuum Cleaner</ProductName>
       <Quantity>2</Quantity>
       <UnitPrice>23000</UnitPrice>
     </Detail>
  </DetailX>
 </FjLCForm>
</XMLroot>
```

●When handling input data as "data with the field name label"

[Description example]

- Outputting a single form
  A form called "form1" will be output to the printer "FUJITSU XL-6700".
  The character code of the input data "form1.dat" is Shift-JIS.

```
prprint "form1"
        -indatacode SJIS
        -atdirect print
        -n "FUJITSU XL-6700"
        -f "C:¥Data¥form1.dat"
        -atlabeldata yes
```

  An example of the "form1.dat" description is shown below.

```
IdPhoto | Name | EmployeeNumber | EmploymentStartDate
photo.bmp | Nihon Hanako | 123456 | 19660401
```

- When performing multi-form output
  Forms called "Statement" and "DetailBill" will be output to the printer "FUJITSU XL-6700".
  The character code of the input data "MULTI.dat" is Shift-JIS.

```
prprint  -f  "C:¥Data¥MULTI.dat"
         -grpdelimit  "|"
         -indatacode SJIS
         -atdirect print
         -n "FUJITSU XL-6700"
         -atlabeldata yes
```

  An example of the "MULTI.dat" description is shown below.

```
Statement | CustomerName | SalesDate | InvoiceNumber | SalespersonCode | ProductCode | ProductName | Quantity | UnitPrice
Statement | ABC Electronics | 20040521 | 03101 | 005 | 0020 | Color Television | 3 | 120000
Statement | ABC Electronics | 20040521 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
Statement | ABC Electronics | 20040521 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
DetailBill | CustomerName | SalesDate | InvoiceNumber | SalespersonCode | ProductCode | ProductName | Quantity | UnitPrice
DetailBill | XYZ Electronics | 20040521 | 03102 | 005 | 0110 | Refrigerator | 2 | 125000
DetailBill | XYZ Electronics | 20040521 | 03102 | 005 | 0211 | Electric stove | 3 | 5000
```

3.1.2.2 When the Application Server Runs on UNIX OS

The description examples of the prprint command when the application server runs on UNIX OS are described below separately.

- Outputting a single form
- Performing multi-form output with the input data format set to "Variable Length"
- Performing multi-form output with the input data format set to "Fixed Length"
- Performing multi-form output with the input data format set to "XML Format"
- Performing combination-form output with the input data format set to "Variable Length"
- Performing combination-form output with the input data format set to "XML Format"
- When handling input data as "data with the field name label"

The following shows description examples when using the Bourne shell.

●Outputting a Single Form

[Description example]

- When performing FM output (Only when the application server runs on Solaris)
  A form named "URIAGE" is output to the printer "lp0 (printer model name: VSP4701)" in FM output.
  The form is stored in "/home/user1".

"URIAGE.dat" under "/home/user1/Data" is used as the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  URIAGE
         -atdirect print
         -d VSP4701
         -n  lp0
         -f  /home/user1/Data/URIAGE.dat
         -assetsdir  /home/user1
```

- When performing FNP output

  A form called "URIAGE" is output to the printer "Printer1 (FNP output specification)" in FNP output.
  The form is stored in "/home/user1".
  "URIAGE.dat" under "/home/user1/Data" is used as the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  URIAGE
         -atdirect print
         -d  FNP
         -n  Printer1
         -f  /home/user1/Data/URIAGE.dat
         -assetsdir  /home/user1
```

- When performing PostScript output

  A form named "URIAGE" is output to the printer "lp0" in PostScript output.
  "URIAGE.dat" under "/home/user1/Data" is used as the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.UTF-8
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
OA_ASSETSDIR=/home/user1
export PATH LANG LD_LIBRARY_PATH OA_ASSETSDIR

prprint  URIAGE
         -atdirect print
         -n  lp0
         -f  /home/user1/Data/URIAGE.dat
```

- When saving as PDF files

  In saving as a PDF file, "URIAGE" is used as the form, and a PDF file "URIAGE.pdf" is created under "/home/user1/PDF".
  The form is stored in "/home/user1".
  "URIAGE.dat" under "/home/user1/Data" is used as the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  URIAGE
         -atdirect file
         -keeppdf  /home/user1/PDF/URIAGE.pdf
         -f  /home/user1/Data/URIAGE.dat
         -assetsdir  /home/user1
```

●Performing multi-form output with the input data format set to "Variable Length"

[Description example]

Forms called "URIAGE" and "SYUTTAI" will be output to the printer "prt1".
The separator character in the data file is "vertical bar (|)".

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  -f  "/home/user1/Data/MULTI.dat"
         -grpdelimit  "|"
         -atdirect print
         -n "prt1"
```

An example of the "MULTI.dat" description is shown below.

```
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0020 | Color Television | 3 | 120000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
SYUTTAI | NCS) Development department 2
SYUTTAI | 385945 | Nihon Hanako | 1 | 6 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 7 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 11 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 17 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 25 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 28 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 29 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 30 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 2 | 2 | 930 | 1715 | 7 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 7 | 830 | 1715 | 8 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 10 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 15 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 23 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 28 | 830 | 1715 | 0 | 0 |
```

●Performing multi-form output with the input data format set to "Fixed Length"

[Description example]

Forms called "URIAGE" and "SYUTTAI" will be output to the printer "prt1".
The separator character is "No" and the form name data field length is 10 bytes in the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  -f  "/home/user1/Data/MULTI.dat"
         -grpdelimit  "FIXED"
         -grpbytes  "10"
         -atdirect print
         -n "prt1"
```

An example of the "MULTI.dat" description is shown below.

```
URIAGE   ABC Electronics  20040521  03101  005   0020  Color Television   3120000
URIAGE   ABC Electronics  20040521  03101  005   0022  Karaoke set        182000
URIAGE   ABC Electronics  20040521  03101  005   0100  Electric Cleaner   223000
SYUTTAI  NCS) Development department 2
SYUTTAI  385945  Nihon Hanako  1  6   830  1715  8  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  7   830  1715  8  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  11  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  1  17  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  1  20  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  1  25  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  1  28  830  1715  8  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  29  830  1715  8  0  Business Trip
SYUTTAI  385945  Nihon Hanako  1  30  830  1715  8  0  Business Trip
SYUTTAI  385945  Nihon Hanako  2  2   930  1715  7  0
SYUTTAI  385945  Nihon Hanako  2  7   830  1715  8  0
SYUTTAI  385945  Nihon Hanako  2  10  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  2  15  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  2  20  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  2  23  830  2130  8  3.5
SYUTTAI  385945  Nihon Hanako  2  28  830  1715  0  0
```

● Performing multi-form output with the input data format set to "XML Format"

[Description example]

Forms called "URIAGE" and "SYUTTAI" will be output to the printer "prt1".

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.UTF-8
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export  PATH  LANG  LD_LIBRARY_PATH

prprint  -f  "/home/user1/Dataxml/MULTI.xml"
         -grpdelimit  "XML"
         -atdirect print
         -n "prt1"
```

An example of the "MULTI.xml" description is shown below.

```
<?xml version= "1.0" encoding= "UTF-8" ?>
<MULTIDATA>
   <FjLCForm name="URIAGE">
      <URIAGE>
         <Customer>ABC Electronics</Customer>
         <SalesDate>20040521</SalesDate>
         <CustomerCode>03101</CustomerCode>
         <SalespersonCode>005</SalespersonCode>
         <Detail>
            <ProductCode>0020</ProductCode>
            <ProductName>Color television</ProductName>
            <SalesQuantity>3</SalesQuantity>
            <UnitPrice>120000</UnitPrice>
         </Detail>
         <Detail>
            <ProductCode>0022</ProductCode>
            <ProductName>Karaoke set</ProductName>
            <SalesQuantity>1</SalesQuantity>
            <UnitPrice>82000</UnitPrice>
         </Detail>
      </URIAGE>
   </FjLCForm>
   <FjLCForm name="SYUTTAI">
      <SYUTTAI>
         <DepartmentName>NCS) Development department 2</DepartmentName>
         <EmployeeNumber>385945</EmployeeNumber>
         <Name>Nihon Hanako</Name>
         <TimesheetDetails>
            <Month>1</Month>
            <Day>6</Day>
            <ClockinTime>0830</ClockinTime>
            <ClockoutTime>1715</ClockoutTime>
            <RegularHours>8</RegularHours>
            <Overtime>0</OvertimeHours>
            <Notes>Business Trip</Notes>
         </TimesheetDetails>
         <TimesheetDetails>
         ......
         </TimesheetDetails>
      </SYUTTAI>
   </FjLCForm>
</MULTIDATA>
```

●Performing combination-form output with the input data format set to "Variable Length"

[Description example]

The following is a description example where the form descriptor information "HEADER-A" and "DETAILS-X" are output and printed as a combination-form.
Form storage directory is "/home/user1/Assets".
"cbform.dat" under "/home/user1/Data" is used as the data file. The character code is EUC (U90).
The form name separator character for combination-form is "vertical bar (|)".
The combination-form descriptor file is "Lccbform.ini" under "/home/user1/Assets".
The form will be output to the printer "prt1".

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint     -assetsdir "/home/user1/Assets"
            -f "/home/user1/Data/cbform.dat"
            -grpdelimit "|"
            -gcbform yes
            -gcbfile "/home/user1/Assets/Lccbform.ini"
            -atdirect print
            -n "prt1"
```

An example of the "cbform.dat" description is shown below.
Combination-form name is "Combination1".

```
Combination1: HEADER-A | Madison Avenue XXX | Des Moines IA | ABC Electronics | 20110810
Combination1: DETAILS-X | ABC Electronics | 20110810 | 03101 | 005 | 0020 | Television | 3 | 120000
Combination1: DETAILS-X | ABC Electronics | 20110810 | 03101 | 005 | 0022 | Microwave oven | 1 | 82000
Combination1: DETAILS-X | ABC Electronics | 20110810 | 03101 | 005 | 0100 | Vacuum Cleaner | 2 | 23000
```

●Performing combination-form output with the input data format set to "XML Format"

[Description example]

The following is a description example where the form descriptor information "HEADER-A" and "DETAILS-X" are output and printed as a combination-form.
Form storage directory is "/home/user1/Assets".
"cbform.xml" under "/home/user1/Data" is used as the data file.
Specify "XML" for a form name separator character for combination-form.
The combination-form descriptor file is "Lccbform.ini" under "/home/user1/Assets".
The form will be output to the printer "prt1".

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.UTF-8
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export  PATH  LANG  LD_LIBRARY_PATH

prprint      -assetsdir "/home/user1/Assets"
             -f "/home/user1/Data/cbform.xml"
             -grpdelimit "XML"
             -gcbform yes
             -gcbfile "/home/user1/Assets/Lccbform.ini"
             -atdirect print
             -n "prt1"
```

An example of the "cbform.xml" description is shown below.
Combination-form name is "Combination1".

```
<?xml version= "1.0" encoding= "UTF-8" ?>
<MULTIDATA>
 <FjLCForm name = "Combination1:HEADER-A">
   <HEADER-A>
     <Address>Madison Avenue XXX Des Moines IA </Address>
     <BillingAddress>ABC Electronics</BillingAddress>
     <BillingDate>20110810</BillingDate>
   </HEADER-A>
 </FjLCForm>
 <FjLCForm name = "Combination1:DETAILS-X">
   <DETAILS-X>
     <BillingAddress>ABC Electronics</BillingAddress>
     <BillingDate>20110810</BillingDate>
     <InvoiceNumber>03101</InvoiceNumber>
     <SalespersonCode>005</SalespersonCode>
     <Detail>
       <ProductCode>0020</ProductCode>
       <ProductName>Television</ProductName>
       <Quantity>3</Quantity>
       <UnitPrice>120000</UnitPrice>
     </Detail>
     <Detail>
       <ProductCode>0022</ProductCode>
       <ProductName>Microwave oven</ProductName>
       <Quantity>1</Quantity>
       <UnitPrice>82000</UnitPrice>
     </Detail>
     <Detail>
       <ProductCode>0100 </ProductCode>
       <ProductName>Vacuum Cleaner</ProductName>
       <Quantity>2</Quantity>
       <UnitPrice>23000</UnitPrice>
     </Detail>
   </DETAILS-X>
 </FjLCForm>
</MULTIDATA>
```

●When handling input data as "data with the field name label"

[Description example]

- Outputting a single form
  A form called "URIAGE" is output to the printer "Printer1 (FNP output specification)".
  The form is stored in "/home/user1".
  "URIAGE.dat" under "/home/user1/Data" is used as the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint URIAGE
        -atdirect print
        -d  FNP
        -n  Printer1
        -f  /home/user1/Data/URIAGE.dat
        -assetsdir  /home/user1
        -atlabeldata yes
```

  An example of the "URIAGE.dat" description is shown below.

```
URIAGE | CustomerName | SalesDate | InvoiceNumber | SalespersonCode | ProductCode | ProductName | Quantity | UnitPrice
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0020 | Color Television | 3 | 120000
```

- When performing multi-form output
  Forms called "URIAGE" and "SYUTTAI" will be output to the printer "prt1".
  The input data format of the data file is "Variable Length", and the separator character is "vertical bar (|)".

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  -f  "/home/user1/Data/MULTI.dat"
         -grpdelimit  "|"
         -atdirect print
         -n "prt1"
         -atlabeldata yes
```

  An example of the "MULTI.dat" description is shown below.

```
URIAGE | CustomerName | SalesDate | InvoiceNumber | SalespersonCode | ProductCode | ProductName | Quantity | UnitPrice
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0020 | Color Television | 3 | 120000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
SYUTTAI | EmployeeNumber | Name | Month | Day | In-time | Out-time | WorkHours | Overtime |  Remarks
SYUTTAI | 385945 | Nihon Hanako | 1 | 6 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 7 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 11 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 17 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 25 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 28 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 29 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 30 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 2 | 2 | 930 | 1715 | 7 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 7 | 830 | 1715 | 8 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 10 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 15 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 23 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 28 | 830 | 1715 | 0 | 0 |
```

3.1.2.3 When Creating OWF files

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

"SalesForm" is used as the form, and an OWF file "URIAGE.owf" is created under "C:¥OWF".
The character code of the input data "SalesForm.dat" is Shift-JIS.

```
prprint "SalesForm"
        -indatacode SJIS
        -atdirect  owf
        -gowffile  "C:¥OWF¥URIAGE.owf"
        -f  "C:¥Data¥SalesForm.dat"
        -assetsdir "C:¥Assets"
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

"URIAGE" is used as the form, and an OWF file "URIAGE.owf" is created under "/home/user1/OWF".

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/opt/FJSVoastw/lib:/etc/opt/FSUNiconv/
lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  URIAGE
         -atdirect  owf
         -gowffile  /home/user1/OWF/URIAGE.owf
         -f  /home/user1/Data/URIAGE.dat
         -assetsdir  /home/user1
```

3.1.2.4 When Performing Excel File Output

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

"SalesForm" is used as the form and an Excel file "URIAGE.xlsx" is created under "C:¥Xlsx".
The character code of the input data "SalesForm.dat" is Shift-JIS.

```
prprint "SalesForm"
        -indatacode SJIS
        -atdirect  excel
        -keepxlsx  "C:¥Xlsx¥URIAGE.xlsx"
        -f  "C:¥Data¥SalesForm.dat"
        -assetsdir "C:¥Assets"
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

"URIAGE" is used as the form, and an Excel file "URIAGE.xlsx" is created under "/home/user1/Xlsx".
"URIAGE.dat" under "/home/user1/Data" is used as the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprint  URIAGE
         -atdirect  excel
         -keepxlsx  /home/user1/Xlsx/URIAGE.xlsx
         -f  /home/user1/Data/URIAGE.dat
         -assetsdir  /home/user1
```

3.1.3 prprintx Command Description Example

prprintx command is specified when specifying the prprint command line in a data file to output a form.
When the prprintx command is executed, the prprint command line described in the specified data file is executed and the form is output on the computer where the prprintx command was executed.
The following uses of the prprintx command are described separately.

- When the input data format is "Variable Length"
- When the input data format is "XML Format"

3.1.3.1 When the input data format is "Variable Length"

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Specify "C:¥Data¥Data1.dat" for the data file name and "Shift-JIS" as the character code of the data file, and then execute the prprintx command.

```
prprintx   -indatacode SJIS  "C:¥Data¥Data1.dat"
```

An example of the "Data1.dat" description is shown below.

```
prprint.exe  -assetsdir  "C:¥Assets"  "Form1"
ABC Electronics | 20031221 | 03101 | 005 | 0020 | Color Television | 3 | 120000
ABC Electronics | 20031221 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
ABC Electronics | 20031221 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Specify "/temp/data1.dat" for the data file name, and execute the prprintx command.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prprintx /temp/data1.dat
```

An example of the "data1.dat" description is shown below.

```
prprint  -n  lp0  -assetsdir  /home/user1/Data  URIAGE
ABC Electronics | 20031221 | 03101 | 005 | 0020 | Color Television | 3 | 120000
ABC Electronics | 20031221 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
ABC Electronics | 20031221 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
```

3.1.3.2 When the Input Data Format is "XML Format"

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Specify "C:¥Data¥Data1.xml" for the data file name and "UTF-8" as the character code of the data file, and then execute the prprintx command.

```
prprintx  -indatacode  UTF8  "C:¥Data¥Data1.xml"
```

An example of the "Data1.xml" description is shown below.

```
prprint.exe -assetsdir "C:¥Assets" "XMLForm"
<?xml version="1.0" encoding="UTF-8" ?>
<EmployeeCard>
 <IdPhoto>photo.bmp</IdPhoto>
 <Name>Nihon Taro</Name>
 <EmployeeNumber>123456</EmployeeNumber>
 <EmploymentStartDate>19920401</EmploymentStartDate>
</EmployeeCard>
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Specify "/temp/data1.xml" for the data file name, and execute the prprintx command.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.UTF-8
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG LD_LIBRARY_PATH

prprintx /temp/data1.xml
```

The character code of the input data "data1.xml" is UNICODE (UTF8).
An example of the "data1.xml" description is shown below.

```
prprint -assetsdir /home/user1/Data SYAINS
<?xml version="1.0" encoding="UTF-8" ?>
<EmployeeCard>
 <IdPhoto>photo.bmp</IdPhoto>
 <Name>Nihon Taro</Name>
 <EmployeeNumber>123456</EmployeeNumber>
 <EmploymentStartDate>19920401</EmploymentStartDate>
</EmployeeCard>
```

3.1.4 prputprt Command Description Example

prputprt command is used when performing remote form output.
In the remote form output of List Creator, resources placed (managed) in the application server are transferred to the List Creator print server and the form is output on the List Creator print server.
The following uses of the prputprt command are described separately.

- Outputting a Single Form
- Performing multi-form output using data files with input data in "CSV Format"
- Performing Multi-form Output Using Data Files with Input Data in "Fixed Length" Format
- Performing combination-form output using data files with input data in "CSV Format"
- Performing remote form output by placing form resources in the application server and transferring the necessary resources at the time of form output

3.1.4.1 Outputting a Single Form

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Transfer the form and data file from the application server (Windows) and output two copies of the form on the List Creator print server "hostA" (Windows).
"EmployeeCard" under "List_Creator_installation_directory¥Assets" on the application server is used as the form.
"EmployeeCard.dat" under "List_Creator_installation_directory¥Data" on the application server is used as the data file.

```
prputprt    -h  hostA
            -d  "List_Creator_installation-directory_on_application_server¥Assets"
            -s  "EmployeeCard"
            -n  "List_Creator_installation_directory_on_application_server¥Data¥EmployeeCard.dat"
            -z  -atdirect print
            -c  2
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Transfer the form and data file from the application server (UNIX OS) and output two copies of the form on the List Creator print server "hostA" (UNIX OS).
"SYAINS" under "/home/user1/Assets" on the application server is used as the form.
"SYAINS.dat" under "/home/user1/Data" on the application server is used as the data file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prputprt    -h  hostA
            -d  "on_application_server/home/user1/Assets"
            -s  "SYAINS"
            -n  "on_application_server/home/user1/Data/SYAINS.dat"
            -z  -atdirect print
            -c  2
```

3.1.4.2 Performing Multi-form Output Using Data Files with Input Data in "CSV Format"

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Transfer the form and data file from the application server (Windows), and perform multi-form output for two copies of the form on the List Creator print server "hostA" (Windows).
"SalesFormCover" and "SalesFormStatement" under "List_Creator_installation_directory¥Assets" on the application server are used as the forms. Also, describe the form names in the data file.
"SalesForm.dat" under "List_Creator_installation_directory¥Data" on the application server is used as the data file.
The input data format of the data file is "CSV Format", and the separator character is a "comma (,)".

```
prputprt    -h  hostA
            -d  "List_Creator_installation-directory_on_application_server¥Assets"
            -lcform  "SalesFormCover;SalesFormStatement"
            -n  "List_Creator_installation_directory_on_application_server¥Data¥SalesForm.dat"
            -grpdelimit  ","
            -z  -atdirect print
            -c  2
```

● When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Transfer the form and data file from the application server (UNIX OS), and perform multi-form output for two copies of the form on the List Creator print server "hostA" (UNIX OS).
"DENPYO1" and "DENPYO2" under "/home/user1/Assets" on the application server are used as the forms. Also, describe the form names in the data file.
"DENPYO.dat" under "/home/user1/Data" on the application server is used as the data file. The input data format of the data file is "CSV Format", and the separator character is a "comma (,)".

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prputprt    -h  hostA
            -d  "on_application_server/home/user1/Assets"
            -lcform  "DENPYO1;DENPYO2"
            -n  "on_application_server/home/user1/Data/DENPYO.dat"
            -grpdelimit  ","
            -z  -atdirect print
            -c  2
```

3.1.4.3 Performing Multi-form Output Using Data Files with Input Data in "Fixed Length" Format

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Transfer data files from the application server (Windows), and use forms placed in advance in the List Creator print server (Windows) "hostA" to perform multi-form output for two copies of the form.
"SalesFormCover" and "SalesFormStatement" under "List_Creator_installation_directory¥Assets" on the List Creator print server are used as the forms. Also, describe the form names in the data file.
"SalesForm.dat" under "List_Creator_installation_directory¥Data" on the application server is used as the data file. The input data format of the data file is "Fixed Length", the separator character is "No", and the form name data field length is 20 bytes.

```
prputprt    -h  hostA
            -a  "List_Creator_installation_directory_on_List_Creator_print_server¥Assets"
            -b
            -n  "List_Creator_installation_directory_on_application_server¥Data¥SalesForm.dat"
            -grpdelimit  FIXED
            -grpbytes  20
            -z  -atdirect print
            -c  2
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Transfer data files from the application server (UNIX OS), and use forms placed in advance in the List Creator print server (UNIX OS) "hostA" to perform multi-form output for two copies of the form.
"DENPYO1" and "DENPYO2" under "/home/user1/Assets" on the List Creator print server are used as the forms. Also, describe the form names in the data file.
"DENPYO.dat" under "/home/user1/Data" on the application server is used as the data file. The input data format of the data file is "Fixed Length", the separator character is "No", and the form name data field length is 20 bytes.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.UTF-8
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export  PATH  LANG  LD_LIBRARY_PATH

prputprt    -h  hostA
            -a  "on_List_Creator_print_server/home/user1/Assets"
            -b
            -n  "on_application_server/home/user1/Data/DENPYO.dat"
            -grpdelimit  FIXED
            -grpbytes  20
            -z  -atdirect print
            -c  2
```

3.1.4.4 Performing Combination-form Output Using Data Files with Input Data in "CSV Format"

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Transfer the form resources placed in the application server (Windows) to the List Creator print server (Windows) "hostA" to perform combination-form output and printing.
The following resources are transferred from the application server:

- Form descriptor information
- Data file
- Combination-form descriptor file

"HeaderA" and "DetailX" under "C:¥Assets" on the application server are used as form descriptor information.
"cbform.dat" under "C:¥Data" on the application server is used as the data file. The input data format of the data file is "CSV Format", and the separator character is a "comma (,)".
The combination-form descriptor file is "Lccbform.ini" under "C:¥Assets"on the application server.

```
prputprt    -h  hostA
            -d "C:¥Assets"
            -lcform "HeaderA;DetailX"
            -n "C:¥Data¥bform.dat"
            -grpdelimit  ","
            -gcbform yes
            -lcfile "C:¥Assets¥Lccbform.ini"
            -z -gcbfile "Lccbform.ini"-atdirect print
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Transfer data files from the application server (UNIX OS), and use the form descriptor information and combination-form descriptor file placed in advance in the List Creator print server (UNIX OS) "hostA" to perform combination-form output and printing.
Use the form descriptor information under "/home/user1/Assets" on the List Creator print server. The form name for the form descriptor information to be used is described in the data file.
"cbform.dat" under "/home/user1/Data" on the application server is used as the data file. The input data format of the data file is "CSV Format", and the separator character is a "comma (,)".

"Lccbform.ini" under "/home/user1/Assets" on the List Creator print server is used as the combination-form descriptor file.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.UTF-8
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export  PATH  LANG  LD_LIBRARY_PATH

prputprt    -h  hostA
            -a "/home/user1/Assets"
            -b
            -n "/home/user1/Data/cbform.dat"
            -grpdelimit  ","
            -gcbform yes
            -z -gcbfile "/home/user1/Assets/Lccbform.ini"-atdirect print
```

3.1.4.5 Performing Remote Form Output by Placing Form Resources in the Application Server and Transferring the Necessary Resources at the Time of Form Output

When performing remote form output in List Creator, you can output forms by placing form resources in the application server and transferring the necessary resources at the time of form output to the List Creator print server. The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

The following shows a description example where form resources placed in the application server (Windows) is transferred to the List Creator print server (Windows) to create a PDF file, which is then distributed by mail.
The following resources are transferred from the application server:

- Form
- Data file
- PDF mail distribution information file

[Description example]

"EmployeeCard" under "List_Creator_installation_directory¥Assets" on the application server (Windows) is used as the form.
"EmployeeCard.dat" under "List_Creator_installation_directory¥Data" on the application server is used as the data file.
"mail.txt" under "List_Creator_installation_directory¥Temp" on the application server is used as the PDF mail distribution information file.
Specify "host A" as the List Creator print server (Windows) to which the form resources are transferred.
Using the transferred form resources, a PDF file "EmployeeCard.pdf" is created under "C:¥tmp¥Pdf" on the List Creator print server and the created PDF file is distributed by mail.

```
prputprt    -h  hostA
            -d  "List_Creator_installation-directory_on_application_server¥Assets"
            -s  "EmployeeCard"
            -n  "List_Creator_installation_directory_on_application_server¥Data¥EmployeeCard.dat"
            -lcfile  "List_Creator_installation_directory_on_application_server¥Temp¥mail.txt"
            -z  -atdirect file
            -gpdfmailconffile  mail.txt
            -keeppdf "C:¥tmp¥Pdf¥EmployeeCard.pdf on List Creator print server"
```

Caution

- When transferring a PDF mail distribution information file from the application server, it is also necessary to specify the same file name as the PDF mail distribution information file in -gpdfmailconffile option after -z option.

●When the Application Server Runs on UNIX OS

The following shows a description example where form resources placed in the application server (UNIX OS) is transferred to the List Creator print server (UNIX OS) to create a PDF file, which is then distributed by mail.
The following resources are transferred from the application server:

- Form
- Data file

- PDF mail distribution information file

The following shows description examples when using the Bourne shell.

[Description example]

"SYAINS" under "/home/user1/Assets" on the application server (UNIX OS) is used as the form.
"SYAINS.dat" under "/home/user1/Data" on the application server is used as the data file.
"mail.txt" under "/home/user1/Temp" on the application server is used as the PDF mail distribution information file.
Specify "host A" as the List Creator print server (UNIX OS) to which the form resources are transferred.
Using the transferred form resources, a PDF file "SYAINS.pdf" is created under "/home/user1/PDF" on the List Creator print server and the created PDF file is distributed by mail.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prputprt    -h  hostA
            -d  "on_application_server/home/user1/Assets"
            -s  "SYAINS"
            -n  "on_application_server/home/user1/Data/SYAINS.dat"
            -lcfile "on_application_server/home/user1/Temp/mail.txt"
            -z  -atdirect file
            -gpdfmailconffile  mail.txt
            -keeppdf "on_List_Creator_print_server/home/user1/PDF/SYAINS.pdf"
```

Caution

- When transferring a PDF mail distribution information file from the application server, it is also necessary to specify the same file name as the PDF mail distribution information file in -gpdfmailconffile option after -z option.

3.1.5 prputex Command Description Example

prputex command is used when outputting forms by using connector linkage.
In operations using connector linkage in List Creator, resources placed (managed) in the application server are transferred to the List Creator print server and the form is created on the List Creator print server. The form created on the List Creator print server can be transferred and placed in the application server in addition to being output on the List Creator print server.
The following uses of the prputex command are described separately.

- Placing PDF files on the application server
- Creating OWF files on the List Creator print server
- Placing Excel files on the application server

3.1.5.1 Placing PDF files on the application server

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Transfer the form, data file and media data file from the application server (Windows), and place the PDF file created by the List Creator print server (Windows) "hostA" on the application server.
"EmployeeCard" under "List_Creator_installation_directory¥Assets" on the application server is used as the form.
"EmployeeCard.dat" under "List_Creator_installation_directory¥Data" on the application server is used as the data file.
"Photo.bmp" under "List_Creator_installation_directory¥Data" on the application server is used as the media data file.

The PDF file ("EmployeeCard.pdf") created on the List Creator print server is placed under "C:¥tmp¥Pdf" on the application server.

```
prputex     -h  hostA
            -d  "List_Creator_installation-directory_on_application_server¥Assets"
            -s  "EmployeeCard"
            -n  "List_Creator_installation_directory_on_application_server¥Data¥EmployeeCard.dat"
            -lckeeppdf "C:¥tmp¥Pdf¥EmployeeCard.pdf on application server"
            -lcvisualfile "List_creator_installation_directory_on_application_server¥Data¥Photo.bmp"
            -z  -atdirect file
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Transfer the form, data file and media data file from the application server (UNIX OS), and place the PDF file created by the List Creator print server (UNIX OS) "hostA" on the application server.
"SYAINS" under "/home/user1/Assets" on the application server is used as the form.
"SYAINS.dat" under "/home/user1/Data" on the application server is used as the data file.
"Photo.bmp" under "/home/user1/Data" on the application server is used as the media data file.
The PDF file ("SYAIN.pdf") created on the List Creator print server is placed under "/home/user1/PDF" on the application server.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:/usr/java/j2sdk1.4.2/jre/lib/i386:/usr/java/
j2sdk1.4.2/jre/lib/i386/client:$LD_LIBRARY_PATH                    (*1)
          (*1)
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prputex     -h                  hostA
            -d                  "on_application_server/home/user1/Assets"
            -s                  "SYAINS"
            -n                  "on_application_server/home/user1/Data/SYAINS.dat"
            -lcvisualfile       "on_application_server/home/user1/Data/Photo.bmp"
            -lckeeppdf          "on_application_server/home/user1/Data/SYAIN.pdf"
            -z                  -atdirect file
```

*1:When using List Creator for UNIX OS on the application server, it is not necessary to specify the directory containing the Java runtime environment library files (libjvm.so, libjava.so) in the environment variable LD_LIBRARY_PATH.

3.1.5.2 Creating OWF Files on the List Creator Print Server

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Transfer data files from the application server (Windows), and use forms and media data files placed in advance in the List Creator print server (Windows) "hostA" to create OWF files on the List Creator print server.
"EmployeeCard" under "List_Creator_installation_directory¥Assets" on the List Creator print server is used as the form.
"EmployeeCard.dat" under "List_Creator_installation_directory¥Data" on the application server is used as the data file.
"Photo.bmp" under "List_Creator_installation_directory¥Data" on the List Creator print server is used as the media data file.

The OWF file "EmployeeCard.owf" is created under "C:¥tmp¥Owf" on the List Creator print server.

```
prputex   -h  hostA
          -a  "List_Creator_installation_directory_on_List_Creator_print_server¥Assets"
          -s  "EmployeeCard"
          -n  "List_Creator_installation_directory_on_application_server¥Data¥EmployeeCard.dat"
          -b
          -z
          -atdirect  owf
          -gcmvisualfile  "List_Creator_installation_directory_on_List_Creator_print_server
                           ¥Data¥Photo.bmp"
          -gowffile      "C:¥tmp¥Owf¥EmployeeCard.owf on List Creator print server"
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Transfer data files from the application server (UNIX OS), and use forms and media data files placed in advance in the List Creator print server (UNIX OS) "hostA" to create OWF files on the List Creator print server.
"SYAINS" under "/home/user1/Assets" on the List Creator print server is used as the form.
"SYAINS.dat" under "/home/user1/Data" on the application server is used as the data file.
"Photo.bmp" under "/home/user1/Data" on the List Creator print server is used as the media data file.
The OWF file "SYAIN.owf" is created under "/home/user1/Owf" on the List Creator print server.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:/usr/java/j2sdk1.4.2/jre/lib/i386:/usr/java/
j2sdk1.4.2/jre/lib/i386/client:$LD_LIBRARY_PATH                                    (*1)
          (*1)
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prputex   -h                  hostA
          -a                  "on_List_Creator_print_server/home/user1/Assets"
          -s                  "SYAINS"
          -n                  "on_application_server/home/user1/Data/SYAINS.dat"
          -b
          -z
          -atdirect           owf
          -gcmvisualfile      "on_List_Creator_print_server/home/user1/Data/Photo.bmp"
          -gowffile           "on_List_Creator_print_server/home/user1/Owf/SYAIN.owf"
```

*1:When using List Creator for UNIX OS on the application server, it is not necessary to specify the directory containing the Java runtime environment library files (libjvm.so, libjava.so) in the environment variable LD_LIBRARY_PATH.

3.1.5.3 Placing Excel Files on the Application Server

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

Transfer the form and data file from the application server (Windows), and place the Excel file created by the List Creator print server (Windows) "hostA" on the application server.
"SalesForm" under "List_Creator_installation_directory¥Assets" on the application server is used as the form.
"SalesForm.dat" under "List_Creator_installation_directory¥Data" on the application server is used as the data file.

The Excel file ("SalesForm.xlsx") created on the List Creator print server is placed under "C:¥tmp¥Xlsx" on the application server.

```
prputex    -h  hostA
           -d  "List_Creator_installation-directory_on_application_server¥Assets"
           -s "SalesForm"
           -n  "List_Creator_installation_directory_on_application_server¥Data¥SalesForm.dat"
           -lckeepxlsx   "C:¥tmp¥Xlsx¥SalesForm.xlsx on application server"
           -z  -atdirect excel
```

●When the Application Server Runs on UNIX OS

The following shows description examples when using the Bourne shell.

[Description example]

Transfer the form and data file from the application server (UNIX OS), and place the Excel file created by the List Creator print server (UNIX OS) "hostA" on the application server.
"URIAGE" under "/home/user1/Assets" on the application server is used as the form.
"URIAGE.dat" under "/home/user1/Data" on the application server is used as the data file.
The Excel file ("URIAGE.xlsx") created on the List Creator print server is placed under "/home/user1/Xlsx" on the application server.

```
PATH=/opt/FJSVoast/bin:$PATH
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export PATH LANG OA_EUCTYPE LD_LIBRARY_PATH

prputex    -h                  hostA
           -d                  "on_application_server/home/user1/Assets"
           -s                  "URIAGE"
           -n                  "on_application_server/home/user1/Data/URIAGE.dat
           -lckeepxlsx         "on_application_server/home/user1/Xlsx/URIAGE.xlsx"
           -z                  -atdirect excel
```

3.2 Java Interface

To create a user application using the Java interface, perform the following procedures:

1）Designing applications

2）Compile the application source

3）Deploy and execute the application

The following explains the development environment, how to create programs, and application description examples for when developing applications using the Java interface.

3.2.1 Development Environment

The Java interface of List Creator provides a Java class library as the development environment, which will be the Java language interface for outputting forms created by List Creator Designer.
The Java interface module configuration are described below.

●Module Configuration

The Java class library is provided as the Java language interface for outputting List Creator forms.

When using [Windows]

The Java interface is configured as follows.

Jar file function	Jar file name	Storage directory
Form output (common)	fjoajif.jar	List_Creator_installation_directory¥classes
Form output (OWF file)	fjoaweb.jar	
Connector linkage	ardus.jar ardusobj.jar ArdusRepository.jar jomcli.jar jomrequester.jar	List_Creator_installation_directory¥remoteprint¥requester¥lib

When using [UNIX OS]

The Java interface is configured as follows.

Jar file function	Jar file name	Storage directory
Form output (common)	fjoajif.jar	/opt/FJSVoast/classes
Form output (OWF file)	fjoaweb.jar	/opt/FJSVoastw/classes
Connector linkage	ardus.jar ardusobj.jar ArdusRepository.jar jomcli.jar jomrequester.jar	/opt/FJSVoast/remoteprint/requester/lib

3.2.2 Creating Applications Using the Form Output Function

The following steps to create applications using the form output function are described separately.

- Procedures to create an application
- Application description examples
- Compiling and executing the application source

3.2.2.1 Procedures to Create an Application

To create an application using the Java interface, perform the following procedures:

1）Determine the operating mode.

Determine the operating mode for when using the Java interface (stand-alone mode, remote form output mode, Web-to-local-print mode, or connector linkage mode).

2）Determine the input data specification method.

Through the input data specification method when using a Java interface, determine what class is to be used from the Forms class, FormsFile class, and FormsStream class.

- Forms class
  - When specifying data in units of records (lines)
  - While using XBRL data support/Navigator links function
- FormsFile class
  - When specifying a data file
- FormsStream class
  - When specifying data in units of streams

3）Create an instance object of the Forms class, FormsFile class, or FormsStream class determined in step 2), and specify the form and data.

4）Create an instance object of the PrintProperties class, and configure the property information according to the operating mode.

5）Create an instance object of the PrintForm class, and call the PrintOut method.

3.2.2.2 Application Description Examples

The following examples of describing applications using the Java interface are described separately.

- For stand-alone mode
- When performing multi-form output
- When performing combination-form output
- For applications using connector linkage

●For stand-alone mode

"Stand-alone mode" is one of the operation modes of List Creator. This is a mode where running user applications and outputting forms are performed on the same computer.
The following shows a description example when saving one form to a PDF file in stand-alone mode.

[Description example]

"URIAGE" under the form storage directory is used as the form descriptor information. User the Forms class and specify input data in units of records. The form is output to the directory specified in "storage destination file name while saving the file (full path)", with the specified file name.
The description example for outputting in UNIX OS is given below.

```
import com.fujitsu.systemwalker.outputassist.connector.*;
      :
      :

// Set Forms objects
  Forms  form = new Forms( "URIAGE", "/var/opt/FJSVoast/Assets" );
  form.pushRecord( "0020| Color Television|3|120000|1234567890|1.234" );
  form.pushRecord( "0022| Karaoke Set|1|82000|1234567890|1.234" );

  // Set PrintProperties
  PrintProperties prop = new PrintProperties();
  prop.setProperty( PrintProperties.ID_KEEPPDF, "/home/user1/PDF/URIAGE.pdf" );

  // Output the form
  PrintForm pform = new PrintForm();
  pform.PrintOut( form, prop );
```

● When performing multi-form output

[Description example]

"URIAGE" and "SYUTTAI" are used as the form descriptor information. Use the FormsFile class and specify input data in units of files. The character code of the input data file is EUC (U90). The form is output to the directory specified in "storage destination file name while saving the file (full path)", with the specified file name.
Specify a "vertical bar (|)" as a form name data separator character for multi-form.
The character code of the application execution environment is EUC (U90).
The description example for outputting in UNIX OS is given below.

```
import com.fujitsu.systemwalker.outputassist.connector.*;
 :
 :

// Set FormsFile objects
FormsFile formfile = new FormsFile("/var/opt/FJSVoast/Assets");
formfile.setDataFile("/home/user1/Data/MULTI.dat" ,FormBase.CODE_EUC);
formfile.setFileType(FormBase.CODE_EUC_U90);
formfile.setGrpOut(FormsFile.GRPOUT_GRP);
formfile.setGrpDelimitMode(FormsFile.DELIMIT_ANY);
formfile.setGrpDelimit("|");

// Set PrintProperties
PrintProperties prop = new PrintProperties();
prop.setProperty( PrintProperties.ID_KEEPPDF, "/home/user1/PDF/URIAGE.pdf" );

// Output the form
PrintForm pform = new PrintForm();
pform.PrintOut(formfile, prop);
```

An example of the "MULTI.dat" description is shown below.

```
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0020 | Color Television | 3 | 120000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
SYUTTAI | NCS) Development department 2
SYUTTAI | 385945 | Nihon Hanako | 1 | 6 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 7 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 11 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 17 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 25 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 1 | 28 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 29 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 30 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 2 | 2 | 930 | 1715 | 7 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 7 | 830 | 1715 | 8 | 0 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 10 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 15 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 20 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 23 | 830 | 2130 | 8 | 3.5 |
SYUTTAI | 385945 | Nihon Hanako | 2 | 28 | 830 | 1715 | 0 | 0 |
```

●When performing combination-form output

[Description example]

The following shows a description example when performing combination-form output and creating OWF files in stand-alone mode (Windows).

Use the FormsFile class and specify input data in units of files.

"HeaderA" and "DetailX" under "C:¥Assets" are used as form descriptor information.

"cbform.dat" under "C:¥Data" is used as the data file. The character code is Shift-JIS.

The form name separator character for combination-form is "vertical bar (|)".

The combination-form descriptor file is "Lccbform.ini" under "C:¥Assets".

The OWF file "form1.owf" is created under "C:¥user¥OWF".

```
import com.fujitsu.systemwalker.outputassist.connector.*;
 :
 :
// Set FormsFile objects
FormsFile formfile = new FormsFile("C:¥Assets");
formfile.setLcForm ("HeaderA;Detail:X");
formfile.setDataFile("C:¥Data¥cbform.dat",FormBase.CODE_SJIS);
formfile.setGrpDelimitMode(FormsFile.DELIMIT_ANY);
formfile.setGrpDelimit("|");
formfile.setCbForm(true);
formfile.setCbFile("C:¥Assets¥Lccbform.ini");
// Set PrintProperties
PrintProperties prop = new PrintProperties();
prop.setProperty(PrintProperties.ID_DIRECTMETHOD,"OWF");
prop.setProperty(PrintProperties.ID_KEEPOWF,"C:¥user¥OWF¥form1.owf");
// Output the form
PrintForm pform = new PrintForm();
pform.PrintOut(formfile, prop);
```

An example of the "cbform.dat" description is shown below.

Combination-form name is "Combination1".

```
Combination1:HeaderA | Madison Avenue XXX | Des Moines IA | ABC Electronics | 20110810
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0020 | Television | 3 | 120000
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0022 | Microwave oven | 1 | 82000
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0100 | Vacuum cleaner | 2 | 23000
```

● For applications using connector linkage

[Description example]

Transfer the form and data file from the application server, and place the PDF file created by the List Creator print server on the application server.
"SYAIN" under "/var/opt/FJSVoast/Assets" on the application server is used as the form descriptor information. Use the FormsFile class and specify input data in units of files. The form is output to the directory specified in "created PDF file name (full path)", with the specified file name.
The description example for outputting in UNIX OS is given below.

```
import com.fujitsu.systemwalker.outputassist.connector.*;
      :
      :

 // Set FormsFile objects
 FormsFile  form =new FormsFile( "/var/opt/FJSVoast/Assets" );
  form.setDataFile( "/home/user1/Data/SYAIN.dat" );
  form.setScriptFile( "SYAIN" );

  // Set PrintProperties
  PrintProperties prop = new PrintProperties();
  prop.setProperty(PrintProperties.ID_HOST, "REMOTE" );
  prop.setProperty(PrintProperties.ID_RETURNPDFPATH, "/home/user1/PDF/SYAIN.pdf" );

  // Output the form
  PrintForm pform = new PrintForm();
  pform.PrintOut( form, prop );
```

3.2.2.3 Compiling and Executing the Application Source

When compiling and executing the application source, CLASSPATH must be set for the Jar files of List Creator.
Refer to the following for the storage destinations and the Jar files to be set:
=>"3.2.1 Development Environment"

Note

- The application source can also be complied in List Creator Designer.
  However, List Creator is required to execute the compiled application source.

3.3 .NET Interface

To create a user application using the .NET interface, perform the following procedures:

1）Designing applications

2）Compile the application source

3）Deploy and execute the application

The following explains the development environment, how to create programs, and application description examples for when developing applications using the .NET interface.

3.3.1 Development Environment

.NET interface of List Creator provides C#.NET class as the development environment, which will be the .NET interface for outputting List Creator forms from .NET applications.
The .NET interface module configuration are described below.

●Module Configuration

The .NET interface is configured as follows.

When using [Windows]

Type	Name	Storage directory
DLL file	f3gbdnif.dll	List Creator installation directory

When using [Windows (x64)]

Type	Name	Storage directory
DLL file	f4gbdnif.dll	List Creator installation directory

When using [Windows for Itanium]

Type	Name	Storage directory
DLL file	f6gbdnif.dll	List Creator installation directory

3.3.2 Creating Applications Using the Form Output Function

The following steps to create applications using the form output function are described separately.

- Procedures to create an application
- Application description examples
- Compiling and executing the application source

3.3.2.1 Procedures to Create an Application

To create an application using the .NET interface, perform the following procedures:

1）Determine the operating mode.

Determine the operating mode for when using the .NET interface (stand-alone mode, Web-to-local-print mode, or connector linkage mode).

2）Determine the input data specification method.

Through the input data specification method when using a .NET interface, determine which class is to be used, the Forms class or FormsFile class.

- Forms class
  - When specifying data in units of records (lines)
  - While using XBRL data support/Navigator links function
- FormsFile class
  - When specifying a data file

3）Create an instance object of the Forms class or FormsFile class, determined in step 2), and specify the form and data.

4）Create an instance object of the PrintProperties class, and configure the property information according to the operating mode.

5）Create an instance object of the PrintForm class, and call the PrintOut method.

3.3.2.2 Application Description Examples

The following examples of describing applications using the .NET interface are described separately.

- For stand-alone mode
- When performing multi-form output
- When performing combination-form output
- For applications using connector linkage

●For stand-alone mode

[Description example]

A form called "form1" will be output to the printer "FUJITSU XL-6700".

- For Visual C# .NET

```
using fujitsu.listcreator;
   :
try{
   // Set FormsFile objects
   FormsFile formsFile = new FormsFile("C:¥Assets");
   formsFile.ScriptFile = "Form1";
   formsFile.DataFile = "C:¥¥Data¥¥Form1.dat";

   // Set PrintProperties
   PrintProperties prop = new PrintProperties();
   prop.PrinterName = "FUJITSU XL-6700";

   // Output the form
   PrintForm printForm = new PrintForm();
   printForm.PrintOut(formsFile, prop);
}
catch (PrintException e) {
   :
}
```

- For Visual Basic .NET

```
imports fujitsu.listcreator
   :
Try
   Dim formsFile As New FormsFile("C:¥¥Assets")
   Dim prop As New PrintProperties
   Dim printForm As New PrintForm

   'Set FormsFile objects
   formsFile.ScriptFile = "Form1"
   formsFile.DataFile = "C:¥¥Data¥¥Form1.dat"

   'Set PrintProperties
   prop.PrinterName = "FUJITSU XL-6700"

   'Outputs the form.
   printForm.PrintOut(formsFile, prop)
Catch e As PrintException
   :
End Try
```

- For Visual C++ .NET

```
using namespace fujitsu::listcreator;
    :
try{
    // Set FormsFile objects
    FormsFile* formsFile = new FormsFile("C:¥¥Assets");
    formsFile->ScriptFile = "Form1";
    formsFile->DataFile = "C:¥¥Data¥¥Form1.dat";

    // Set PrintProperties
    PrintProperties* prop = new PrintProperties();
    prop->PrinterName = "FUJITSU XL-6700";

    // Output the form
    PrintForm* printForm = new PrintForm();
    printForm->PrintOut(formsFile, prop);
}
catch (PrintException e) {
    :
}
```

- For Visual J# .NET

```
import fujitsu.listcreator.*;
    :
try{
    // Set FormsFile objects
    FormsFile formsFile = new FormsFile("C:¥¥Assets");
    formsFile.set_ScriptFile ("Form1");
    formsFile.set_DataFile ("C:¥¥Data¥¥Form1.dat");

    // Set PrintProperties
    PrintProperties prop = new PrintProperties();
    prop.set_PrinterName ("FUJITSU XL-6700");

    // Output the form
    PrintForm printForm = new PrintForm();
    printForm.PrintOut(formsFile, prop);
}
catch (PrintException e) {
    :
}
```

●When performing multi-form output

[Description example]

"URIAGE" and "SYUTTAI" are used as the forms, and a PDF file "URIAGE.pdf" is created under "C:¥tmp¥Pdf".
"MULTI.dat" is used as the input data file. The character code of the input data file is UNICODE (UTF8).
Specify a "vertical bar (|)" as a form name data separator character for multi-form.

- For Visual C# .NET

```
using fujitsu.listcreator;
    :
try{
    // Set FormsFile objects
    FormsFile formsFile = new FormsFile("C:¥¥Assets");
    formsFile.DataFile = "C:¥¥Data¥¥MULTI.dat";
    formsFile.DataCode = FormBase.CODE_UTF8;
    formsFile.GrpOut = FormsFile.GRPOUT_GRP;
    formsFile.GrpDelimitMode = FormsFile.DELIMIT_ANY;
    formsFile.GrpDelimit = "|";

    // Set PrintProperties
    PrintProperties prop = new PrintProperties();
    prop.KeepPdf = "C:¥¥tmp¥¥Pdf¥¥URIAGE.pdf";

    // Output the form
    PrintForm printForm = new PrintForm();
    printForm.PrintOut(formsFile, prop);
}
catch (PrintException e) {
    :
}
```

- For Visual Basic .NET

```
imports fujitsu.listcreator
    :
Try
    Dim formsFile As New FormsFile("C:¥¥Assets")
    Dim prop As New PrintProperties
    Dim printForm As New PrintForm

    'Set FormsFile objects
    formsFile.DataFile = "C:¥¥Data¥¥MULTI.dat"
    formsFile.DataCode = FormBase.CODE_UTF8
    formsFile.GrpOut = FormsFile.GRPOUT_GRP
    formsFile.GrpDelimitMode = FormsFile.DELIMIT_ANY
    formsFile.GrpDelimit = "|"

    'Set PrintProperties
    prop.KeepPdf = "C:¥¥tmp¥¥Pdf¥¥URIAGE.pdf"

    'Outputs the form.
    printForm.PrintOut(formsFile, prop)
Catch e As PrintException
    :
End Try
```

- For Visual C++ .NET

```
using namespace fujitsu::listcreator;
   :
try{
   // Set FormsFile objects
   FormsFile* formsFile = new FormsFile("C:¥¥Assets");
   formsFile->DataFile = "C:¥¥Data¥¥MULTI.dat";
   formsFile->DataCode = FormBase::CODE_UTF8;
   formsFile->GrpOut = FormsFile::GRPOUT_GRP;
   formsFile->GrpDelimitMode = FormsFile::DELIMIT_ANY;
   formsFile->GrpDelimit = "|";

   // Set PrintProperties
   PrintProperties* prop = new PrintProperties();
   prop->KeepPdf = "C:¥¥tmp¥¥Pdf¥¥URIAGE.pdf";

   // Output the form
   PrintForm* printForm = new PrintForm();
   printForm->PrintOut(formsFile, prop);
}
catch (PrintException e) {
   :
}
```

- For Visual J# .NET

```
import fujitsu.listcreator.*;
   :
try{
   // Set FormsFile objects
   FormsFile formsFile = new FormsFile("C:¥¥Assets");
   formsFile.set_DataFile ("C:¥¥Data¥¥MULTI.dat");
   formsFile.set_DataCode (FormBase.CODE_UTF8);
   formsFile.set_GrpOut (FormsFile.GRPOUT_GRP);
   formsFile.set_GrpDelimitMode (FormsFile.DELIMIT_ANY);
   formsFile.set_GrpDelimit ("|");

   // Set PrintProperties
   PrintProperties prop = new PrintProperties();
   prop.set_KeepPdf ("C:¥¥tmp¥¥Pdf¥¥URIAGE.pdf");

   // Output the form
   PrintForm printForm = new PrintForm();
   printForm.PrintOut(formsFile, prop);
}
catch (PrintException e) {
   :
}
```

An example of the "MULTI.dat" description is shown below.

```
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0020 | Color Television | 3 | 120000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0022 | Karaoke set | 1 | 82000
URIAGE | ABC Electronics | 20040521 | 03101 | 005 | 0100 | Electric Cleaner | 2 | 23000
SYUTTAI | NCS) Development department 2
SYUTTAI | 385945 | Nihon Hanako | 1 | 6 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 7 | 830 | 1715 | 8 | 0 | Business Trip
SYUTTAI | 385945 | Nihon Hanako | 1 | 11 | 830 | 2130 | 8 | 3.5 |
```

●When performing combination-form output

[Description example]

The following shows a description example when performing combination-form output and creating OWF files in stand-alone mode.
Use the FormsFile class and specify input data in units of files.
"HeaderA" and "DetailX" under "C:¥Assets" are used as form descriptor information.
"cbform.dat" under "C:¥Data" is used as the data file. The character code is Shift-JIS.
The form name separator character for combination-form is "vertical bar (|)".
The combination-form descriptor file is "Lccbform.ini" under "C:¥Assets".
The OWF file "form1.owf" is created under "C:¥user¥OWF".

- For Visual C# .NET

```
using fujitsu.listcreator;
   :
try{
   // Set FormsFile objects
   FormsFile formsFile = new FormsFile("C:¥¥Assets");
   FormsFile LcForm = "HeaderA;DetailX";
   formsFile.DataFile = "C:¥¥Data¥¥cbform.dat";
   formsFile.DataCode = FormBase.CODE_SJIS;
   formsFile.GrpDelimitMode = FormsFile.DELIMIT_ANY;
   formsFile.GrpDelimit = "|";
   formsFile.CbForm = true;
   formsFile.CbFile = "C:¥¥Assets¥¥Lccbform.ini";

   // Set PrintProperties
   PrintProperties prop = new PrintProperties();
   prop.DirectMethod = PrintProperties.OUTPUTMODE_OWF;
   prop.KeepOwf = "C:¥¥user¥¥OWF¥¥form1.owf";

   // Output the form
   PrintForm printForm = new PrintForm();
   printForm.PrintOut(formsFile, prop);
}
catch (PrintException e) {
   :
}
```

An example of the "cbform.dat" description is shown below.
Combination-form name is "Combination1".

```
Combination1:HeaderA | Madison Avenue XXX | Des Moines IA | ABC Electronics | 20110810
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0020 | Television | 3 | 120000
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0022 | Microwave oven | 1 | 82000
Combination1:DetailX | ABC Electronics | 20110810 | 03101 | 005 | 0100 | Vacuum cleaner | 2 | 23000
```

●For applications using connector linkage

[Description example]

Transfer the form, data file and media data file from the application server, and place the PDF file created by the List Creator print server on the application server.
"Employee Card" under "C:¥Assets" on the application server is used as the form.
"EmployeeCard.dat" under "C:¥Data" on the application server is used as the data file.
"Photo.bmp" under "C:¥Data" on the application server is used as the media data file.
The PDF file "EmployeeCard.pdf" is placed under "C:¥tmp¥Pdf" on the application server.

- For Visual C# .NET

```
using fujitsu.listcreator;
   :
try{
   // Set FormsFile objects
   FormsFile formsFile = new FormsFile("C:¥¥Assets");
   formsFile.ScriptFile = "EmployeeCard";
   formsFile.DataFile = "C:¥¥Data¥¥EmployeeCard.dat";

   // Set PrintProperties
   PrintProperties prop = new PrintProperties();
   prop.Host = "LCServer";
   prop.KeepPdf = "C:¥¥tmp¥¥Pdf¥¥EmployeeCard.pdf";
   prop.LcVisualFile = "C:¥¥Data¥¥Photo.bmp";
   prop.DirectMethod = PrintProperties.OUTPUTMODE_PDF;

   // Output the form
   PrintForm printForm = new PrintForm();
   printForm.PrintOut(formsFile, prop);
}
catch (PrintException e) {
   :
}
```

- For Visual Basic .NET

```
imports fujitsu.listcreator
   :
Try
   Dim formsFile As New FormsFile("C:¥¥Assets")
   Dim prop As New PrintProperties
   Dim printForm As New PrintForm

   'Set FormsFile objects
   formsFile.ScriptFile = "EmployeeCard"
   formsFile.DataFile = "C:¥¥Data¥¥EmployeeCard.dat"

   'Set PrintProperties
   prop.Host = "LCServer"
   prop.KeepPdf = "C:¥¥tmp¥¥Pdf¥¥EmployeeCard.pdf"
   prop.LcVisualFile = "C:¥¥Data¥¥Photo.bmp"
   prop.DirectMethod = PrintProperties.OUTPUTMODE_PDF

   'Outputs the form.
   printForm.PrintOut(formsFile, prop)
Catch e As PrintException
   :
End Try
```

- For Visual C++ .NET

```
using namespace fujitsu::listcreator;
   :
try{
   // Set FormsFile objects
   FormsFile* formsFile = new FormsFile("C:¥¥Assets");
   formsFile->ScriptFile =  "EmployeeCard";
   formsFile->DataFile = "C:¥¥Data¥¥EmployeeCard.dat";

   // Set PrintProperties
   PrintProperties* prop = new PrintProperties();
   prop->Host = "LCServer";
   prop->KeepPdf = "C:¥¥tmp¥¥Pdf¥¥EmployeeCard.pdf";
   prop->LcVisualFile = "C:¥¥Data¥¥Photo.bmp";
   prop->DirectMethod = PrintProperties::OUTPUTMODE_PDF;

   // Output the form
   PrintForm* printForm = new PrintForm();
   printForm->PrintOut(formsFile, prop);
}
catch (PrintException e) {
   :
}
```

- For Visual J# .NET

```
import fujitsu.listcreator.*;
   :
try{
   // Set FormsFile objects
   FormsFile formsFile = new FormsFile("C:¥¥Assets");
   formsFile.set_ScriptFile("EmployeeCard");
   formsFile.set_DataFile("C:¥¥Data¥¥EmployeeCard.dat");

   // Set PrintProperties
   PrintProperties prop = new PrintProperties();
   prop.set_Host("LCServer");
   prop.set_KeepPdf("C:¥¥tmp¥¥Pdf¥¥EmployeeCard.pdf");
   prop.set_LcVisualFile("C:¥¥Data¥¥Photo.bmp");
   prop.set_DirectMethod(PrintProperties.OUTPUTMODE_PDF);

   // Output the form
   PrintForm printForm = new PrintForm();
   printForm.PrintOut(formsFile, prop);
}
catch (PrintException e) {
   :
}
```

3.3.2.3 Compiling and Executing the Application Source

Compiling and executing the application source should be done on the computer where List Creator is installed.

3.4 COBOL Interface

To create an application for outputting forms using the COBOL interface of List Creator from an application created in COBOL, perform the following procedures:

1）Designing applications

2）Compile the application source

3）Deploy and execute the application

The following explains the development environment, how to create applications, and application description examples for when using the COBOL interface.

3.4.1 Development Environment

The COBOL interface of List Creator provides a dynamic link library as the development environment, which will be the COBOL language interface for outputting forms created by List Creator.
The COBOL interface module configuration are described below.

●Module Configuration

When using [Windows]

The following files are provided.

File name	Description	Storage directory
f3gbcbl.lib	Import library	List_Creator_installation_directory¥cobol¥lib

If the COBOL application is a dynamic program, specify the following entry information:

DLL name	Subprogram name	Storage directory
f3gbcbl.dll	OAEXECCB	List Creator installation directory

When using [Windows (x64)]

The following files are provided.

File name	Description	Storage directory
f4gbcbl.lib	Import library	List_Creator_installation_directory¥cobol¥lib

If the COBOL application is a dynamic program, specify the following entry information:

DLL name	Subprogram name	Storage directory
f4gbcbl.dll	OAEXECCB	List Creator installation directory

When using [Windows for Itanium]

The following files are provided.

File name	Description	Storage directory
f6gbcbl.lib	Import library	List_Creator_installation_directory¥cobol¥lib

If the COBOL application is a dynamic program, specify the following entry information:

DLL name	Subprogram name	Storage directory
f6gbcbl.dll	OAEXECCB	List Creator installation directory

When using [Solaris]

The following files are provided. Dynamic libraries for multi threading and for single threading are stored in a separate directory. Depending on the intended usage, specify one when linking.

File name	Description	Storage directory
libf3gbcbl.so	Dynamic library for multi threading	List_Creator_installation_directory/lib
	Dynamic library for single threading	List_Creator_installation_directory/libS

When using [Linux for Intel64]

Two types of modules are provided: for 32 bit and for 64 bit. Use one of the modules depending on your environment.

- For 32 bit
  The following files are provided. Dynamic libraries for multi threading and for single threading are stored in a separate directory. Depending on the intended usage, specify one when linking.

File name	Description	Storage directory
libf3gbcbl.so	Dynamic library for multi threading	List_Creator_installation_directory/lib
	Dynamic library for single threading	List_Creator_installation_directory/libS

- For 64 bit
  The following files are provided. Dynamic libraries for multi threading and for single threading are stored in a separate directory. Depending on the intended usage, specify one when linking.

File name	Description	Storage directory
libf4gbcbl.so	Dynamic library for multi threading	List_Creator_installation_directory/lib
	Dynamic library for single threading	List_Creator_installation_directory/libS

When using [Linux for Itanium]

The following files are provided. Dynamic libraries for multi threading and for single threading are stored in a separate directory. Depending on the intended usage, specify one when linking.

File name	Description	Storage directory
libf3gbcbl.so	Dynamic library for multi threading	List_Creator_installation_directory/lib
	Dynamic library for single threading	List_Creator_installation_directory/libS

3.4.2 Procedures to Create an Application

To create an application for outputting forms using the COBOL interface, perform the following procedures:

1）Specify the parameter data definition.

2）Specify the call description.

3.4.3 Application Description Examples

The description examples for Windows and UNIX OS application servers are shown below separately.

●When the Application Server Runs on Windows

[Description example]

The following shows an application description example using the COBOL interface.

```
IDENTIFICATION DIVISION.
PROGRAM-ID. OASAMPLE.

ENVIRONMENT DIVISION.

DATA DIVISION.
WORKING-STORAGE SECTION.
*Specify the parameter data definition.
01  Mode             PIC X(1)    VALUE "W".
01  Command line      PIC X(4096) VALUE SPACES.

PROCEDURE DIVISION.
*Specify the call description.
MOVE     "prprint.exe -assetsdir c:¥ListCREATOR¥samples -f
c:¥ListCREATOR¥data¥BusinessCards.dat BusinessCards" TO Command line
CALL "OAEXECCB" WITH STDCALL LINKAGE
  USING Mode Command line.
DISPLAY "Return values=" PROGRAM-STATUS.
STOP RUN.

END PROGRAM OASAMPLE.
```

●When the Application Server Runs on UNIX OS

[Description example]

The following shows an application description example using the COBOL interface.

```
IDENTIFICATION DIVISION.
 PROGRAM-ID. OASAMPLE.

 ENVIRONMENT DIVISION.

 DATA DIVISION.
 WORKING-STORAGE SECTION.
 01  Mode             PIC X(1)    VALUE "W".
 01  Command line      PIC X(4096) VALUE SPACES.

 PROCEDURE DIVISION.
   MOVE  "/opt/FJSVoast/bin/prprint  -assetsdir  /opt/FJSVoast/samples/euc  -f  /opt/FJSVoast/data/euc/
BusinessCards.dat BusinessCards" TO Command line.
   CALL "OAEXECCB"
     USING Mode Command line.
   DISPLAY "Return values=" PROGRAM-STATUS.
   STOP RUN.

 END PROGRAM OASAMPLE.
```

3.4.4 Compiling and Executing the Application Source

Compiling and executing the application source should be done on the computer where List Creator is installed.

3.5 Cautions regarding Development and Execution of User Applications

●Points to be checked before developing and executing applications

- In List creator, the character code that can be handled, characters that can be output and the range of support for functions vary depending on the conditions such as your environment (OS or printer device etc.) or output method.
  Moreover, there are some points to be considered regarding the setup and operation of List Creator, such as the default printer, the setup of each function, and the preparation and deployment of resources.
  Therefore, please refer to the following manuals to make sure the support range of functions and the cautions before developing and executing applications.
  - Online Manual "About the List Creator"
  - Online Manual "Setup & Operation"

●Cautions regarding specification of files and file storage destinations

- If the application server and the List Creator print server run on UNIX OS, characters other than half-width alphanumeric characters (full-width characters and half-width katakana characters) cannot be used for a file name, such as a form output file name or a storage destination of form resources.
- When specifying a file path to the form resource location, form output destination, file transfer destination, and so on, do not enter a path separator (yen mark (¥) or slash (/)) at the end of the folder or directory name.
- If the operating systems of the application server and the List Creator print server are different in the distributed output mode, a file name or storage directory on the List Creator print server should be specified according to the path style used in the List Creator print server, using either of the following path separators:
  - If the List Creator print server runs on Windows: ¥
  - If the List Creator print server runs on UNIX OS: /
- Note the following points regarding specification of a storage destination of form resources and form output destination.

<table>
<tr><th colspan="2" rowspan="2">Operating mode and function</th><th colspan="2">Storage destination that can be specified (output destination)</th><th colspan="2">Storage destination that cannot be specified (output destination)</th></tr>
<tr><th>Application server</th><th>List Creator print server</th><th>Application server</th><th>List Creator print server</th></tr>
<tr><td colspan="2">Stand-alone mode (*1)</td><td colspan="2">- Local disk
- UNC specification (¥¥computer_name¥shared_name¥directory_name)
- Remotely mounted directory</td><td colspan="2">- Network drive
- Removable disk</td></tr>
<tr><td rowspan="2">Distributed output mode</td><td>Remote form output mode (*1)</td><td>- Local disk
- UNC specification
- Remotely mounted directory</td><td>- Local disk
- Remotely mounted directory</td><td>- Network drive
- Removable disk</td><td>- UNC specification
- Network drive
- Removable disk</td></tr>
<tr><td>Connector linkage mode (*1)(*2)(*3)</td><td colspan="2">- Local disk
- UNC specification
- Remotely mounted directory</td><td colspan="2">- Network drive
- Removable disk</td></tr>
<tr><td colspan="2">Web-to-local-print mode</td><td colspan="4">The same as for the stand alone mode and distributed output mode.
However, if you use UNC to specify the source of form resources and form output destination through a Web server, it is necessary to assign the access privileges of the specified file and directory to the execution user during form output on the Web server.</td></tr>
<tr><td colspan="2">Data monitor function</td><td colspan="2">- Local disk</td><td colspan="2">- UNC specification
- Network drive
- Remotely mounted directory
- Removable disk</td></tr>
</table>

*1: Only local disks can be specified when using the XBRL data support/Navigator links functions.

*2: When outputting forms by placing form resources on the application server, the resources are transferred from the application server to the List Creator print server.If the operating systems of the application server and the List Creator print server are different, pay attention to the path length that can be specified.

For details, refer to the description regarding the points to use connector linkage in the Online Manual "Setup & Operation".

*3: Setup is required when using the UNC specification in the connector linkage mode.
For details, refer to the description regarding the program settings to use connector linkage in the Online Manual "Setup & Operation".

Caution

- The following form output interfaces can use the UNC specification for files and their storage location.
  - Command (prprint command, prputprt command (reference from the application server), prputex command, prview command, prtest command)
  - Java interface
  - .NET interface
  - Custom control
  - COBOL interface

  It cannot be specified when using the prprintx command.

●Cautions for operating in the English environment (English locale)

- Specify form output file names, form resource file names, and directory names in half-width alphanumeric characters and symbols (in the ASCII range).
- Specify string data specified in options or properties of the form output interface in half-width alphanumeric characters and symbols (in the ASCII range).

Note that operations in the English environment (English locale) refer to the following:

- Outputting in the English environment (English locale)
- The application server or the List Creator print server is in the English environment (English locale) when performing distributed output
- The server or the client is in the English environment (English locale) when using the Web application linkage

Part 2 Form Output Interface

This part explains in detail the form output interfaces provided by List Creator.
The form output interfaces provided by List Creator are used to create user applications which output forms created by List Creator Designer.

Chapter 4 Commands 105
Chapter 5 Java Interface 205
Chapter 6 .NET Interface 318
Chapter 7 COBOL Interface 396

Chapter 4
Commands

This chapter explains the commands used for outputting List Creator forms.

4.1 Form Output Command 106
4.2 Remote Form Output Command 162
4.3 Connector Linkage Command 185

4.1 Form Output Command

The commands used when outputting List Creator forms are described below.

- prprint command (output a form)
- prprintx command (specify the prprint command line in a data file and output a form)

4.1.1 Environment Variables Set during Execution of the Form Output Command (When Using [UNIX OS])

When this command is used, set the following environment variable:

- LD_LIBRARY_PATH
- PATH
- LANG
- OA_EUCTYPE
- OA_ASSETSDIR

4.1.1.1 LD_LIBRARY_PATH (required)

This environment variable specifies the library storage directory of List Creator.
Be sure to specify this environment variable.
Add the following library storage directories of List Creator to this environment variable so that they will have the highest priority:

- "/opt/FJSVoast/lib"
- "/opt/FJSVoastw/lib" (only when creating an OWF file)

When using Charset Manager, add the following library storage directories.

- For [Solaris/Linux for x86/Linux for Itanium]
  - "/etc/opt/FSUNiconv/lib"
- For [Linux for Intel64]
  - "/etc/opt/FSUNiconv/lib"
  - "/etc/opt/FSUNiconv/lib64"

The following displays a specification example:

Example: When specifying the LD_LIBRARY_PATH environment variable using the Bourne shell

```
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/opt/FJSVoastw/lib:/etc/opt/FSUNiconv/
lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

4.1.1.2 PATH (When required)

This environment variable specifies the command storage directory of List Creator.
When executing the command with only the command name, add the following List Creator command storage directory to this environment variable:

- "/opt/FJSVoast/bin"

When specifying commands by their full paths, it is not necessary to specify this environment variable.
The following displays a specification example:

Example: When specifying the PATH environment variable using the Bourne shell

```
PATH=/opt/FJSVoast/bin:$PATH
export PATH
```

4.1.1.3 LANG (required)

This environment variable specifies the character code of the command execution environment (character code for when the command handles the command options and forms). This character code is also used for the input data when the input data format is "Variable Length", "Fixed Length", or "CSV Format".
Be sure to specify this environment variable.
The following displays values that can be specified in the environment variable LANG for each operating system of the application server.

When the application server runs on Solaris

Value that can be specified (*1)	Definition
ja (*2) ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.PCK	Indicates a Shift-JIS character code.
ja_JP.UTF-8 en_US.UTF-8	Indicates a UNICODE (UTF8) character code.

*1: If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2: If "ja" or "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE. Operations are same for both "ja" and "ja_JP.eucJP".

When the application server runs on Linux

Value that can be specified (*1)	Definition
ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.UTF-8 en_US.UTF-8 (*3)	Indicates a UNICODE (UTF8) character code.

*1: If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2: If "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE.

*3:"en_US.UTF-8" is not supported for [Linux for x86/Linux for Itanium].

The following displays a specification example:

Example: When specifying the environment variable LANG

(1) When using the Bourne shell to specify UNICODE (UTF8)

```
LANG=ja_JP.UTF-8
export LANG
```

(2) When using the Bourne shell to specify Shift-JIS code (only when the application server runs on Solaris)

```
LANG=ja_JP.PCK
export LANG
```

4.1.1.4 OA_EUCTYPE (when required)

When EUC code is specified as a character code, this environment variable specifies the EUC code type.

When the application server runs on Solaris

If EUC code ("ja" or "ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If Shift-JIS code ("ja_JP.PCK") or UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified.

When the application server runs on Linux

If EUC code ("ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified.

The following displays values that can be specified in the environment variable OA_EUCTYPE:

Value that can be specified	Definition
u90 (*1)	Indicates an EUC (U90) character code.
s90 (*1)	Indicates an EUC (S90) character code.

*1: Be sure to specify it in lowercase.

The following displays a specification example:

Example: When specifying the environment variables LANG and OA_EUCTYPE

(1) When using the Bourne shell to specify EUC (U90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
export LANG OA_EUCTYPE
```

(2) When using the Bourne shell to specify EUC (S90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
export LANG OA_EUCTYPE
```

Caution

- It is necessary to convert the character code of the form and specify the command options according to the input data. For details, refer to the description about deploying and preparing form resources in the Online Manual "Setup & Operation".

4.1.1.5 OA_ASSETSDIR (when required)

This environment variable specifies the form storage directory of List Creator.
The form storage directory can be specified using the following methods. The number is the priority when the form storage directory is specified in multiple methods simultaneously.

1）Form storage directory specified in the command option (-assetsdir).

2）Form storage directory specified by environment variable OA_ASSETSDIR

3）Form storage directory specified by the prsetassetsdir command.

The following displays a specification example:

Example: When specifying the OA_ASSETSDIR environment variable using the Bourne shell

```
OA_ASSETSDIR=/home/user1
export OA_ASSETSDIR
```

4.1.2 prprint Command

4.1.2.1 [Function]

prprint command is specified when outputting the form.
When the prprint command is executed, the form is output on the computer where the prprint command was executed.

4.1.2.2 [Description Format]

The following is the description format.
[ ] indicates that this can be omitted.

```
prprint      [Option 1] [Option 2] [Option 3] ...
```

In Option 1, Option 2, Option 3 ..., prprint command options are described.

●Points to note during command specification

When using [Windows]

- Do not specify a string of 0 length ("" on command line) in the values specified in command options. If a string of 0 length is specified, the command may not operate properly.
- When blanks or characters having special meaning to the executing environment are included in the string specified for the command options, enclose it with double quotation marks (").

When using [UNIX OS]

- Do not specify a string of 0 length ("" on command line) in the values specified in command options. If a string of 0 length is specified, the command may not operate properly.
- When a blank is included in the string specified for the command options, enclose it with double quotation marks (").
- There are characters that have special meaning when the command is executed using shells such as the COBOL interface provided by List Creator, shell programs (Bourne shell, C shell, etc.), and system() functions of C language programs.

  The characters having special meaning are described below. For details on characters which have special meaning per shell, refer to the manual of the shell used.

  """, "'", "|", "¥", "\", ";", "$", "*", "?", etc.

  When specifying a character with special meaning as a command option, the special meaning must be deleted using one of the following methods:

  - Enclose the option in double quotation marks ("). (Not available for """, "¥", "\", and "$").
    Example: When specifying a vertical bar (|) in the comment
    prprint -ttlcomment "|"
  - Enclose the option in single quotation marks ('). (Not available for "'", "¥" and "\").
    Example: When specifying a dollar sign ($) in the comment
    prprint -ttlcomment '$'
  - Specify a backslash (\) before the characters with special meanings.
    Example: When specifying a backslash (\) in the comment
    prprint -ttlcomment \\

  When starting a C language program by a command other than those above, however, no character with special meaning exists. Specify the options and use the command as usual.
- When executing the command from the command line, use the Bourne shell or C shell. Executing on a shell other than these may cause the characters set in the command option to be interpreted incorrectly, and may prevent proper operation.

● Points to note regarding specification of files and file storage destinations

- In the prprint command, only local disk, UNC specification (¥¥computer_name¥shared_name¥directory_name), and remotely mounted directory can be specified as a file storage destination.
  For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

4.1.2.3 [List of Options]

The following is a list of the prprint command options.

Table 4.1 List of the prprint command options (1 / 5)

Option type	Option		[Operating system] W : Windows W64 : Windows (x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
			W	W64	S	L64	L	LI
Options for User Resource Information	"form name"	(*1) (*2)	Y	Y	Y	Y	Y	Y
	-assetsdir	form storage directory (*2)	Y	Y	Y	Y	Y	Y
	-indatacode	input data character code (*2)	Y	Y	-	-	-	-
	-f	data file name (*1) (*2)	Y	Y	Y	Y	Y	Y
	-gxmlroot	data root parent element path	Y	Y	Y	Y	Y	Y
	-gbardata	barcode data BASE64 encoding specification	Y	Y	Y	Y	Y	Y
	-visualdir	media data storage directory (*2)	Y	Y	Y	Y	Y	Y
Options for User Resource Information for Multi-form/ Combination-form Output	-grpdelimit	form name data separator character for multi-form/ combination-form (*1)	Y	Y	Y	Y	Y	Y
	-grpbytes	form name data field length for multi-form	Y	Y	Y	Y	Y	Y
	-gcbform	combination-form output (*1)	Y	Y	Y	Y	-	-
	-gcbfile	combination-form descriptor file name (*2)	Y	Y	Y	Y	-	-
Options for Identification Information	-title	title	Y	Y	Y	Y	Y	Y
	-ttlcomment	comment	Y	Y	Y	Y	Y	Y
	-atuserid	output user ID	Y	Y	Y	Y	-	Y
Options for Operational Information	-r	start page number	Y	Y	Y	Y	Y	Y
	-e	end page number	Y	Y	Y	Y	Y	Y
	-atdirect	output method (*3)	Y	Y	Y	Y	Y	Y
	-atmethod	output method	Y	Y	Y	Y	Y	Y
	-s	SET operator replacement string	Y	Y	Y	Y	Y	Y
	-atoutputscale	scale according to paper size specification	Y	Y	Y	Y	Y	Y
	-atpos	print offset specification	Y	Y	Y	Y	Y	Y
	-atlfcode	linefeed code control specification	Y	Y	Y	Y	Y	Y
	-atffcode	new page code control specification	Y	Y	Y	Y	Y	Y
	-atnodata	operation when there is no input data	Y	Y	Y	Y	Y	Y
	-atlabeldata	specification of data file with the field name label	Y	Y	Y	Y	-	-
	-atpropertyreplace	Property replace file name (*2)	Y	Y	Y	Y	-	-

Table 4.1 List of the prprint command options (2 / 5)

Option type	Option		[Operating system] W : Windows W64 : Windows (x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
			W	W64	S	L64	L	LI
Options for Operational Information	-atmapfontfile	substitute font info file name (*2)	Y	Y	Y	Y	-	Y
	-atbcodadjust	barcode correct info file name (*2)	Y	Y	Y	Y	-	Y
	-p	form output information file name (*2)	Y	Y	Y	Y	-	-
Options for Printing Information	-d	printer model name when performing FM output/FNP output specification (*4)	-	-	Y	Y	Y	Y
	-n	printer name	Y	Y	Y	Y	Y	Y
	-atprintbin	paper source	Y	Y	Y	Y	Y	Y
	-atprintbinname	paper feed name	Y	Y	D	D	D	D
	-itemprintbin	paper source/paper feed name switching specification	Y	Y	Y	Y	Y	Y
	-c	number of copies (*5)	Y	Y	Y	Y	Y	Y
	-atprintside	print side specification	Y	Y	Y	Y	Y	Y
	-itemprintside	print side switch specification	Y	Y	Y	Y	Y	Y
	-atpapercode	print paper name specification	Y	Y	D	D	D	D
Options for e-Record information	-astream	e-Record device name (*3)	Y	-	Y	Y	-	Y
	-lwmaker	e-Record creator	Y	-	Y	Y	-	Y
	-generateday	e-Record creation date	Y	-	Y	Y	-	Y
	-generatetime	e-Record creation time	Y	-	Y	Y	-	Y
	-lwkeepdir	e-Record storage folder path name	Y	-	Y	Y	-	Y
	-lwnote1	e-Record comment 1	Y	-	Y	Y	-	Y
	-lwnote2	e-Record comment 2	Y	-	Y	Y	-	Y
	-lwnote3	e-Record comment 3	Y	-	Y	Y	-	Y
	-lwnote4	e-Record comment 4	Y	-	Y	Y	-	Y
	-lwterm	Validity period of e-Record	Y	-	Y	Y	-	Y
	-lwdeltype	Specification of auto-delete following expiry of e-Record	Y	-	Y	Y	-	Y
	-lwsearch	Indexed searching specification when making e-Record	Y	-	Y	Y	-	Y
	-lwmail	Mail notification when making e-Record	Y	-	-	-	-	-
	-lwmailrcv	Mail destination when making e-Record	Y	-	-	-	-	-
	-lwprintbin	Paper source when printing after making e-Record	Y	-	Y	Y	-	Y
	-lwprintbinname	Paper feed name when printing after making e-Record	Y	-	Y	Y	-	Y
	-lwcopy	Number of copies when printing after making e-Record	Y	-	Y	Y	-	Y
	-lwprintside	Print side specification when printing after making e-Record	Y	-	Y	Y	-	Y
	-lwitemprintside	Print side switch specification when printing after making e-Record	Y	-	Y	Y	-	Y
	-lwfaxsend	FAX sender information when making e-Record	Y	-	-	-	-	-

Table 4.1 List of the prprint command options (3 / 5)

Option type	Option		[Operating system] W : Windows W64 : Windows (x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
			W	W64	S	L64	L	LI
Options for e-Record information	-lwfaxrcv	FAX recipient information when making e-Record	Y	-	-	-	-	-
	-lwfaxrcvfile	FAX recipient information file name when making e-Record (*2)	Y	-	-	-	-	-
	-lwfaxsubject	FAX send attached subject when making e-Record	Y	-	-	-	-	-
	-lwfaxcomment	FAX send attached comment when making e-Record	Y	-	-	-	-	-
	-lwdstfolder	Distribution folder ID during form print distribution	Y	-	-	-	-	-
	-lwdstmethod	Form print distribution specification	Y	-	-	-	-	-
	-in2	Electronic form information file name (*2)	Y	-	Y	Y	-	Y
Options for FAX send information	-afax	Fax device name (*3)	Y	-	-	-	-	-
	-atfaxsend	FAX sender information when sending FAX	Y	-	-	-	-	-
	-atfaxrcv	FAX recipient information when sending FAX	Y	-	-	-	-	-
	-infaxrcvfile	FAX recipient information file name when sending FAX (*2)	Y	-	-	-	-	-
	-atfaxsubject	Attached subject when sending FAX	Y	-	-	-	-	-
	-atfaxcomment	Attached comment when sending Fax	Y	-	-	-	-	-
Options for PDF File Save Information	-keeppdf	storage destination file name when saving as a file (*2) (*3)	Y	Y	Y	Y	Y	Y
	-gpdfsubtitle	Subtitle of the PDF file	Y	Y	Y	Y	Y	Y
	-gpdfauthor	PDF file author	Y	Y	Y	Y	Y	Y
	-gpdfprint	PDF file print permission specification	Y	Y	Y	Y	Y	Y
	-gpdfmodify	PDF file change permission specification	Y	Y	Y	Y	Y	Y
	-gpdfselect	PDF file text and graphics selection permission specification	Y	Y	Y	Y	Y	Y
	-gpdfannotate	allow form fields and comments to be added/changed specification	Y	Y	Y	Y	Y	Y
	-gpdfpwd	password for opening the PDF file	Y	Y	Y	Y	Y	Y
	-gpdfsecupwd	PDF file security option change password (*6)	Y	Y	Y	Y	Y	Y
	-gpdflimit	Time limit/period for viewing the PDF file	Y	Y	Y	Y	-	Y
	-gpdfembed	PDF file font embedding specification	Y	Y	Y	Y	Y	Y
	-gpdfreference	PDF file embedded font search specification	Y	Y	Y	Y	Y	Y
	-gpdfjpegquality	PDF file JPEG compression quality specification	Y	Y	Y	Y	Y	Y
	-gpdfembedfile	PDF attachment file name (*2)	Y	Y	Y	Y	Y	Y
	-gpdfautoprint	PDF file automatic printing specification	Y	Y	Y	Y	Y	Y
	-gpdfhidetoolbar	PDF file viewer toolbar display specification	Y	Y	Y	Y	Y	Y
	-gpdfhidemenubar	PDF file viewer menubar display specification	Y	Y	Y	Y	Y	Y
	-gpdffullscreen	PDF file viewer full screen display specification	Y	Y	Y	Y	Y	Y
	-gpdfbookmark	specification to insert a bookmark in the PDF file when switching forms	Y	Y	Y	Y	Y	Y

Table 4.1 List of the prprint command options (4 / 5)

Option type	Option		[Operating system] W : Windows W64 : Windows (x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
			W	W64	S	L64	L	LI
Options for PDF File Save Information	-gpdfbookmarkitem	specification to insert a bookmark in the PDF file when switching data	Y	Y	Y	Y	Y	Y
	-in5	PDF document information file name (*2)	Y	Y	Y	Y	Y	Y
	-gpdfoutinfofile	ECM information file name (*2)	Y	Y	-	-	-	-
Options for PDF File Save Information (Mail Distribution)	-gpdfmailconffile	PDF mail distribution information file name (*2) (*3)	Y	-	Y	Y	Y	Y
	-gpdfmailtoaddr	destination mail address for PDF mail distribution (*3)	Y	-	Y	Y	Y	Y
	-gpdfmailsmtpsv	SMTP server name for PDF mail distribution	Y	-	Y	Y	Y	Y
	-gpdfmailfromaddr	transmission source mail address for PDF mail distribution	Y	-	Y	Y	Y	Y
	-gpdfmailfromname	transmission source name for PDF mail distribution	Y	-	Y	Y	Y	Y
	-gpdfmaildelfile	PDF file delete specification at the time of PDF mail distribution	Y	-	Y	Y	Y	Y
Options for print option information	-atprtmode	Output Timing	Y	D	Y	D	-	D
	-jobhresume	Resume Date Time	Y	D	Y	D	-	D
	-jobpriority	Output Priority	Y	D	D	D	D	D
	-inform	Message notification destination (notification message)	Y	D	Y	D	-	D
	-jobrmsghost	Message notification destination (reply message)	Y	D	D	D	-	D
	-jobbanner	Separator page output specification	Y	D	D	D	D	D
	-jobwait	Output end wait mode	Y	D	D	D	D	D
	-jobkind	Specification of event notification	Y	-	-	-	-	-
	-jobpapercode	Change Paper Messages	Y	D	D	D	D	D
	-jobusername	Print document owner name (user name) specification	Y	-	-	-	-	-
Options for OWF File Creation Information	-gowffile	OWF file path name (*2) (*3)	Y	Y	Y	Y	Y	Y
	-gowfdestination	operational mode during Web plug-in startup	Y	Y	Y	Y	Y	Y
	-gowfopenprtdlg	specification of [Print] window display during printing	Y	Y	Y	Y	Y	Y
	-gowfprtclose	specification to close the Web browser after print completion	Y	Y	Y	Y	Y	Y
	-gowfpreviewrate	specification of zoom factor during preview	Y	Y	Y	Y	Y	Y
	-gowfprtprevention	specification of printer control during preview	Y	Y	Y	Y	Y	Y
	-gowfembed	specification of embedding external fonts in OWF files	Y	Y	Y	Y	Y	Y
	-gowfregfont	external font registration specification (*2)	Y	Y	Y	Y	Y	Y
	-gowfcodereplace	Substitute character specification	-	-	Y	Y	Y	Y
	-gcmform	form name for multi-form/combination-form when creating OWF files (*2)	Y	Y	Y	Y	Y	Y
	-gcmvisualfile	media data file name when creating OWF files (*2)	Y	Y	Y	Y	Y	Y

Table 4.1 List of the prprint command options (5 / 5)

Option type	Option		[Operating system] W : Windows W64 : Windows (x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
			W	W64	S	L64	L	LI
Options for Excel File Output Information	-keepxlsx	storage destination file name when outputting to an Excel file (*2) (*3)	Y	Y	Y	Y	-	Y
	-inexcelinfofile	Excel document information file name (*2)	Y	Y	Y	Y	-	Y
	-gxlsxoutputform	output method of details when outputting to an Excel file	Y	Y	Y	Y	-	Y
	-gxlsxsheetname	specification of the sheet name of the Excel file to be output	Y	Y	Y	Y	-	-
	-gxlsxsheetnameitem	specification of a data field name whose input data is used as the sheet name of the Excel file to be output	Y	Y	Y	Y	-	-
	-gxlsxoutinfofile	ECM information file name (*2)	Y	Y	-	-	-	-

*1: Required options differ depending on the output method. The differences between the required options for outputting a single form, performing multi-form output, and performing combination-form output are indicated below:

- When outputting a single form
  Form name
- When performing multi-form output
  -f option
  -grpdelimit option
  -gcmform option (only when creating an OWF file)
- When performing combination-form output
  -f option
  -grpdelimit option
  -gcbform option
  -gcmform option (only when creating an OWF file)

*2: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

*3: Required options differ depending on the output method or operation. The differences between the required options are indicated below:

- When making e-Record
  The e-Record device name must be specified with the -astream option or "e-Record Device Name" in the [e-Record] tab in the [Form Output Methods] window.
- When sending FAX
  The FAX device name must be specified with the -afax option or "FAX Device Name" in the [FAX] tab in the [Form Output Methods] window.
- When saving as PDF files
  The storage destination file name must be specified with the -keeppdf option or "File Name" in the [File] tab in the [Form Output Methods] window.
  When distributing a PDF file by mail, it is necessary to specify destination mail addresses by using one of the following:
  - PDF mail distribution information file specified with -gpdfmailconffile option
  - -gpdfmailtoaddr option
- When creating OWF files
  To create OWF files, it is necessary to specify "OWF" for the -atdirect option parameter. Also, the full path name for the OWF file to be created must be specified with the -gowffile option.

When creating an OWF file and performing multi-form/combination-form output, "form name" must be specified with the -gcmform option.

- When performing Excel file output

  The storage destination file name must be specified when performing Excel file output with the -keepxlsx option or "File Name" in the [File (Excel)] tab in the [Form Output Methods] window.

*4: FM output cannot be performed if the List Creator print server runs on Linux.

*5: If the List Creator print server runs on Windows(x64)/Linux, collate printing is enabled only when creating OWF files.

*6: You must specify a password with this option when using following options:

- gpdfprint
- gpdfmodify
- gpdfselect
- gpdfannotate

4.1.2.4 [Explanation]

The following explains the prprint command options.
Function ranges and points to note of the options may vary depending on the operating system. The descriptions that are different depending on the operating system are explained respectively.

4.1.2.4.1 Options for User Resource Information

"form name"

This form name is only valid when a single form is output (when the -grpdelimit option is not specified).
Specify the form name by enclosing it in double quotation marks (").
When performing a single form output (when not specifying the -grpdelimit option), make sure to specify the form name.

Caution

- This form name will be invalid in the following cases:
  - During remote form output (specification with the -z option of the prputprt command)
  - During connector linkage (specification with the -z option of the prputex command)
  - When using XBRL data support/Navigator links function (specification with -command option of the prdsexec command)
  - During SAP R/3 RDI integration (specification with the COMMAND keyword)

Note

- When performing multi-form/combination-form output (when the -grpdelimit option is specified), the form name specification is not required because it is specified with input data. When creating an OWF file and performing multi-form/combination-form output, specify the form name with the -gcmform option.

-assetsdir form storage directory

Specify the form storage directory with its full path. For [UNIX OS], specify it within 512 bytes.
If specification of this option is omitted, specification will be valid in the following order:

For [Windows]

Form storage directory specified in the [General] tab of the [List Creator Settings] window will be valid.

If List Creator Designer is installed, it is also possible to switch the form storage directory from the [Options] window of the [Form Descriptor List] window.

For [UNIX OS]

1) Form storage directory specified by environment variable OA_ASSETSDIR
2) Form storage directory specified by the prsetassetsdir command

Caution

- Refer to the following for cautions when specifying the form storage directory name:
  =>"3.5 Cautions regarding Development and Execution of User Applications"
- This option will be invalid in the following case:
  - During remote form output (specification with the -z option of the prputprt command)
  - During connector linkage (specification with the -z option of the prputex command)
  - When using XBRL data support/Navigator links function (specification with -command option of the prdsexec command)

-indatacode input data character code

Specify the character code for the input data.

SJIS	: Shift-JIS
UCS2LE	: UNICODE (UTF16 little endian)
UCS2BE	: UNICODE (UTF16 big endian)
UTF8	: UNICODE (UTF8)

When this option is omitted, the character code specified in the [General] tab of the [List Creator Settings] window will be valid.

Caution

- This option is only valid when the input data format is "Variable Length", "Fixed Length", or "CSV Format". When the input data format is "XML Format", specify the character code in the XML declaration in the XML file. If the XML declaration in the XML file is omitted, or if the character code is not specified in the XML declaration, it is regarded as UNICODE (UTF8).
- This option will be invalid in the following case:
  - During form output with the prprintx command (specification at the first line of the data file)
  - During remote form output (specification with the -z option of the prputprt command)
  - During connector linkage (specification with the -z option of the prputex command)
  - When using XBRL data support/Navigator links function (specification with -command option of the prdsexec command)
  - During monitoring incoming data (specification at the first line of the data file)

-f data file name

This option is valid only when using a data file (when "Data File" is specified in the database type of the [Database Link] tab of the [Data Definitions] window).
Specify the data file name with its full path. For [Windows], specify it within 259 bytes.
If omitted when outputting a single form (when the -grpdelimit option is not specified), the data file with the same name as the form name under the form storage directory ("form_name.dat") will be used as the specified file.
When performing multi-form/combination-form output (when the -grpdelimit option is specified), make sure to specify this option.

Caution

- This option will be invalid in the following case:
  - During form output with the prprintx command (specification at the first line of the data file)
  - During remote form output (specification with the -z option of the prputprt command)
  - During connector linkage (specification with the -z option of the prputex command)
  - When using XBRL data support/Navigator links function (specification with -command option of the prdsexec command)
  - During monitoring incoming data (specification at the first line of the data file)
  - During SAP R/3 RDI integration (specification with the COMMAND keyword)
- For [Windows], describe the data in data files with the character code specified in the [General] tab of the [List Creator Settings] window, or with the character code of input data specified with the -indatacode option.
- For [UNIX OS], if the input data format is "Variable Length", "Fixed Length", or "CSV Format", describe the data in the data file with characters of the character code specified in the environment variable LANG and environment variable OA_EUCTYPE.
  When the input data format is "XML Format", use the character code specified in the XML declaration in the XML file. If the XML declaration in the XML file is omitted, or if the character code is not specified in the XML declaration, it is regarded as UNICODE (UTF8).
- To use the form descriptor information for which Unicode characters are defined, describe the data in the data file in Unicode.
- When outputting a form in the English environment (English locale), describe the data in the data file in Unicode.

-gxmlroot data root parent element path

When the input data format is "XML Format" and the XML root and the data root are different, specify the data root parent element path in the XML data.
Specify the data root parent element path by separating the element name with a slash (/) beginning from a slash (/) to the end of the data root parent element name. Other formats cannot be specified.
If multiple data roots exist directly under the path in the XML data specified with this option, all the data roots are searched.
If this option is omitted, the data roots are searched from the XML data in the following order of priority:

1) If the XML root and the data root have the same name, the XML root is regarded as the data root.
2) If the XML root and the data root are different, the data root is searched from the child elements directly under the XML root.

The following displays a specification example. This example outputs a form after searching the data roots under the child element (Child) of the XML root (Root).

```
-gxmlroot /Root/Child
```

-gbardata barcode data BASE64 encoding specification

Specify the encoding method for barcode CODE128, EAN-128 input data.

NONE	: Specify data that is not encoded as input data of CODE128, EAN-128.
BASE64	: Specify data that is BASE64 encoded as input data of CODE128, EAN-128.

If this option is omitted, it will operate as if "NONE" was specified.

Caution

- When specifying this option, perform the following settings for the target barcode field (CODE128, EAN-128) during form design:
  - The data length of the [Properties] tab of the target barcode field property
    The barcode data length before performing BASE64 encoding +2
  - The number of bytes in the data field in the [Data Definitions (Report Header)] tab and the [Data Definitions] tab of the [Data Definitions] window (when the input data format is "Fixed Length")
    The number of bytes after performing BASE64 encoding
- In the following conditions, do not set "BASE64" to this option:
  - When specifying an operand for the corresponding data field in the [Data Definitions (Report Header)] tab and [Data Definitions] tab of the [Data Definitions] window
  - When specifying a corresponding data field name for the operands in the [Data Definitions (Report Header)] tab and [Data Definitions] tab of the [Data Definitions] window
  - When specifying a corresponding data field name for the [Extended] tab of the [Data Definitions] window

-visualdir media data storage directory

Specify the media data storage directory with its full path.
If the data of the image field is only a file name, this property searches under the media data storage directory. When specifying multiple media data storage directories, separate them using a semicolon (;) within 512 bytes.
If media data with the same name exist under the specified multiple directories, the media data under the directory specified first will be valid.
If specification of this option is omitted, specification will be valid in the following order:

For [Windows]

1) Form storage directory specified in the -assetsdir option
2) Form storage directory specified in the [General] tab of the [List Creator Settings] window

If List Creator Designer is installed, it is also possible to switch the form storage directory from the [Options] window of the [Form Descriptor List] window.

For [UNIX OS]

1) Form storage directory specified in the -assetsdir option
2) Form storage directory specified by environment variable OA_ASSETSDIR
3) Form storage directory specified by the prsetassetsdir command

Caution

- If the specified multiple media data storage directories exceed 512 bytes, only the directories within 512 bytes will be valid.
- This option will be invalid in the following case:
  - When a media data file is transferred during use of XBRL data support/ Navigator links function
  - When a media data file is transferred during remote form output
  - When a media data file is transferred during connector linkage
  - When creating OWF files
- Refer to the following for cautions when specifying the media data storage directory name:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

4.1.2.4.2 Options for User Resource Information for Multi-form/Combination-form Output

When performing multi-form output, refer to the description regarding the points to note when outputting multi-forms in the Online Manual "Advanced Form Design".
For combination-form output, refer to the description regarding the design of combination-forms in the Online Manual "Advanced Form Design".

-grpdelimit form name data separator character for multi-form/combination-form

Specify this option when performing multi-form output or combination-form output. Separator characters are specified according to the input data format and separator character specified in the [General] tab in the [Data Definitions] window.

Any single-byte character

: In the following cases, specify the separator characters actually used by enclosing them in double quotation marks (").

- When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom"
- When the input data format is "CSV Format" and the separator character is a "Comma (,)"

Caution

- When performing combination-form output, do not specify a "Colon (:)".

SPACE : Specify this when the input data format is "Variable Length", and the separator character is "Space(s)".

TAB : Specify this in the following cases:

- When the input data format is "Variable Length", and the separator character is a "Tab"
- When the input data format is "CSV Format", and the separator character is a "Tab"

FIXED : Specify this when the input data format is "Fixed Length" and the separator character is "No".

FIXED_DELIMIT : Specify this when the input data format is "Fixed Length", and the separator character is "Yes".

XML : Specify this when the input data format is "XML Format".

When performing multi-form output or combination-form output, make sure to specify this option. When the input data format is "Fixed Length" (when "FIXED" or "FIXED_DELIMIT" is specified in this option), make sure to specify the field length of the form name data with the -grpbytes option.

Caution

- Do not specify this option in the following cases:
  - During remote form output (specification with the -z option of the prputprt command)
  - During connector linkage (specification with the -z option of the prputex command)
  - When using XBRL data support/Navigator links function (specification with -command option of the prdsexec command)
  - During SAP R/3 RDI integration (specification with the COMMAND keyword)
- For [Windows], note the following points:
  - When the character code of input data is Unicode, input data format is "Variable Length", and any single-byte character is specified for the form name data separator character for multi-form/combination-form, specify a character with a code 0x007F/0x7F or less.
  - When the character code of input data is Unicode, input data format is "Fixed Length", and the separator character is specified as "Yes", specify a character with a code 0x007F/0x7F or less for the form name data separator character for multi-form/combination-form.
- For [UNIX OS], note the following points:
  - When the character code of input data is EUC (U90/S90) or UNICODE (UTF8), input data format is "Variable Length", and any single-byte character is specified for the form name data separator character for multi-form/combination-form, specify a character with a code 0x7F or less.
  - When the character code of input data is EUC (U90/S90) or UNICODE (UTF8), input data format is "Fixed Length", and the separator character is specified as "Yes", specify a character with a code 0x7F or less for the form name data separator character for multi-form/combination-form.

The following displays a specification example. This example specifies the separator character for performing multi-form output when the input data format is "CSV Format", and the separator character is a "Comma (,)".

```
-grpdelimit ","
```

-grpbytes form name data field length for multi-form

When performing multi-form output (when the -grpdelimit option is specified), specify the form name data field length in the data file.
When the input data format is "Fixed Length" (when "FIXED" or "FIXED_DELIMIT" is specified for the -grpdelimit option), make sure to specify this option.
For "Yes", specify a length which does not include the separator character.

Caution

- Do not specify this option in the following cases:
  - During remote form output (specification with the -z option of the prputprt command)
  - During connector linkage (specification with the -z option of the prputex command)
  - When using XBRL data support/Navigator links function (specification with -command option of the prdsexec command)
  - During SAP R/3 RDI integration (specification with the COMMAND keyword)

The following displays a specification example. This example specifies the separator character and form name data field length for multi-form output, when the input data format is "Fixed Length", the separator character is "No", and the form name data field length in the data file is 20 bytes.

```
-grpdelimit FIXED -grpbytes 20
```

-gcbform combination-form output

Specify this option when performing combination-form output.

no : Combination-form output is not performed.

yes : Combination-form output is performed.

When performing combination-form output, make sure to specify this option.
If you specify this option, make sure to specify the form name data separator character with the -grpdelimit option.
If this option is omitted, it will operate as if "no" was specified.

-gcbfile combination-form descriptor file name

When performing combination-form output, specify the combination-form descriptor file name with its full path.
A combination-form descriptor file defines form descriptor information to be combined and output, and the overlapping order of the form descriptor information.
If this option is omitted, the combination-form descriptor file (Lccbform.ini) under the form storage directory will be valid.

Caution

- For the character code of the combination-form descriptor file, refer to the Online Manual "Advanced Form Design".
- In the following cases, specify only the file name with this option:
  - When a combination-form descriptor file is transferred during remote form output
  - When a combination-form descriptor file is transferred during connector linkage

4.1.2.4.3 Options for Identification Information

-title title

Specify a title within 64 bytes.
Do not use the following characters: If these characters are specified, the applicable characters will be replaced with "hyphens (-)".

“/“, “,“, “:“, “;“, “*“, “?“, “"“, “<“, “>“, “|“, “¥“

If this option is omitted, the form name (combination-form name when performing combination-form output) will be the title.

Caution

- When saving as a PDF file, specify a title in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

-ttlcomment comment

Specify comments regarding the form within 64 bytes.
Do not use the following characters:

“,“, “"“

When this option is omitted, it will be enabled in the following order of priority:

1）Comment specified at the [General] tab of the [Form Output Methods] window

2）Not set

When performing combination-form output, it will be enabled in the following order of priority:

1）Comment specified in the combination-form descriptor

2）Not set

Caution

- This option will be invalid in the following case:
  - When saving as PDF files
  - When performing Excel file output

-atuserid output user ID

Specify the identification name (any string) of the user that outputs the form in order to identify the user.
The user identification name specified with this option is output to the data field for which the USERID operator is specified in the operand in the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window.
Specify the user identification name within the byte size that fits in the length of the data field in which the user ID string is output.
If this option is omitted, nothing is output in the field where the USERID operator is specified.

Note

- The user identification name specified with this option is output as user information of audit trail log.

The following displays a specification example. In this example, user1 is specified as the identification name of the user outputting the form.

```
-atuserid user1
```

4.1.2.4.4 Options for Operational Information

Note

- The operations of List Creator (including the order of priority) and the points to note when outputting forms, refer to the Online Manual "Setup & Operation".
  Also, for the points to note regarding input data, refer to the Online Manual "Advanced Form Design".

-r start page number

Specify the page number where the form output will start.
When performing multi-form output (when specifying the -grpdelimit option), specify a page number that applies for all forms.
When this option is omitted, output begins from the first page.

-e end page number

Specify the page number where the form output will end.
When performing multi-form output (when specifying the -grpdelimit option), specify a page number that applies for all forms.
When this option is omitted, output will be performed to the last page.

-atdirect output method

-atmethod output method

Specify the form output method.
Use the -atdirect option to specify an output method that overrides the output method specified on the form.
Use the -atmethod option to output the form using a specific one of the output methods specified on the form.

When performing multi-form output (when specifying the -grpdelimit option), specify the output methods for the first form.
When selecting multiple output methods, a comma (,) separator should be used for both options.

print	: Print
stream	: e-Record
fax	: Sending FAX
file	: Saving as a PDF file
owf	: OWF file creation (can be specified only with the -atdirect option)
excel	: Excel file output

The output methods of the form will be enabled in the following order of priority:

1) Output method specified with the -atdirect option
2) Output method specified with the -atmethod option
3) All output methods specified in the form
   When performing multi-form output (when specifying the -grpdelimit option), all the output methods for the first form are used.

Caution

- When specifying the -atdirect option, make sure to specify the information required for each output method with the command option if it is not indicated in the form.
- When specifying the -atmethod option, if an output method not indicated on the form is specified, an error will occur.
- OWF files cannot be created by specifying the -atmethod option. To create OWF files, specify the -atdirect option.
- OWF files cannot be created by specifying an output method in the form.

The following displays a specification example. In this example, printing and saving as a PDF file are performed at the same time.

```
-atdirect print , file

-atmethod print , file
```

-s SET operator replacement string

Specify the replacement string of "%" when the variable "%" is specified for the SET operator in the operand of the data field in the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window. After setting the replacement string for the data field of the [Data Definitions (Report Header)] tab, specify the replacement string for the data field of the [Data Definitions] tab.
For details on the specification format of the replacement string, refer to the Online Manual "Setup & Operation".
When the variable "%" is specified for the SET operator, make sure to specify the replacement string with this option.

Note

- When performing multi-form output/combination-from output (when specifying the -grpdelimit option), the same replacement string specified with the -s option will be valid for all forms used.

The following displays a specification example. This example specifies "SET (%)" for the "Company Code" and "Company Name" in the [Data Definitions] tab of the [Data Definitions] window, and replaces the "%" in "Company Code" with the numeric constant "123", and the "%" in "Company Name" with the character constant ""XX Company"" during form output.

Specification at the [Data Definitions] tab of the [Data Definitions] window

Data fields	Operand
Company code Company name Post code Address Name	SET (%) <- want to replace with the numeric constant "123" SET (%) <- want to replace with the character constant ""XX Company""

For [Windows]

=>During output of the form, specify "prprint -s "123;"XX Company"" ...".

For [UNIX OS]

=>When starting from a COBOL interface provided by List Creator, or shell programs, specify as follows:

"prprint -s \"123\;\ "XX Company\"\" ..."

When starting in a method which does not use a shell from a program such as C language, set as follows:

"prprint -s "123;"XX Company"" ..."

-atoutputscale scale according to paper size specification

Specify the paper size to output, when it is necessary to enlarge or reduce the form according to the specified paper size. If the specified paper size is larger than the defined paper size, the form will be enlarged. If the specified paper size is smaller than the defined paper size, the form will be reduced. When adjusting output size, the aspect ratio of width and height will be maintained.

A3	: A3 paper
A4	: A4 paper
A5	: A5 paper
A6	: A6 paper
B4	: B4 paper
B5	: B5 paper
PS	: Postcard
LT	: Letter
LG	: Legal
OT	: Optional (for [UNIX OS], valid only when creating an OWF file)

When this option is omitted, the Adjust Output Size at the [Print Size] tab in the [Form Properties] window of the [Form Style Descriptor] window will be enabled.
When "Optional (OT)" is specified, the form is enlarged or reduced according to the form name specified with the -atpapercode option.

Caution

- In case of [Windows], when any option other than Optional (OT) is specified with this option, if the -atpapercode option is specified, an error will occur. Also, when Optional (OT) is specified with this option, if the -atpapercode option is not specified, an error will occur.

-atpos print offset specification

The print offset during form output is specified in inches or millimeters.
When specifying print offset in inches, specify it in XXi, YYi format.
Specify the unit "i" behind the horizontal position and the vertical position, and separate them with a comma (,).

XX : Specifies the horizontal position at the start of printing.
Specify within a range from 0.00 to 22.50.

YY : Specifies the vertical position at the start of printing.
Specify within a range from 0.00 to 22.50.

When specifying print offset in millimeters, specify it in XXm, YYm format.
Specify the unit "m" behind the horizontal position and the vertical position, and separate them with a comma (,).

XX : Specifies the horizontal position at the start of printing.
Specify it within a range from 0.0 to 571.5.

YY : Specifies the vertical position at the start of printing.
Specify it within a range from 0.0 to 571.5.

When this option is omitted, the print offset specified in the [Margins] tab in the [Form Properties] window of the [Form Style Descriptor] window will be applied.

Caution

- This option is enabled only when the output method is Print, Sending FAX or Saving as a PDF file, or when printing a form that is saved as e-Record. This is disabled when displaying a form that is saved as e-Record.
- In the following cases, an error will occur when executing the command:
  - Either the horizontal position or vertical position is omitted
  - The unit is omitted in either the horizontal position or vertical position

The following displays a specification example. In this example, a position "1 inch in the horizontal direction and 1.5 inches in the vertical direction" is specified.

```
-atpos 1i, 1.5i
```

-atlfcode linefeed code control specification

Specify a control method for a line containing only linefeed code (0x0D0A or 0x0A) in input data formats of "Variable Length", "Fixed Length", or "CSV Format".

do : Performs only linefeed processing for lines containing only linefeed codes. One blank line will be output.

skip : Skips lines containing only linefeed code. Operation will be performed as if there was no linefeed code.

If this option is omitted, it will operate as if "skip" was specified.

Caution

- This option is valid if the input data format is "Variable Length", "Fixed Length", or "CSV Format". An error will occur if the format is "XML Format".
- This option will apply when using the following form formats:
  - Free frame
  - Multipart table
  - Simple table
  - Block repeat
  - Sticky label

  For a single page, do not specify "do" (specification to only perform linefeed processing for lines with only linefeed codes) with this option. If this is specified, an empty page (in which input data is not output) will be output.
- If "do" (specification to only perform linefeed processing for lines containing only linefeed codes) is specified with this option, and "BREAK" is specified for the operand of the data field in the [Data Definitions] tab of the [Data Definitions] window, an unexpected operation will be performed (a BREAK will occur on lines with data and with linefeed codes only).

-atffcode new page code control specification

Specify a control method for the new page code (0x0D0C or 0x0C) in input data formats of "Variable Length", "Fixed Length", or "CSV Format".

do	: Performs a new page processing.
skip	: A new page processing is not performed, and the new page code is skipped. Operation will be performed as if the new page code did not exist.
none	: The new page processing and new page code skip are not performed. Because input data is read with no regard to the new page code, if there is a new page code in the input data, an invalid character may be output.

If this option is omitted, it will operate as if "none" was specified.

Caution

- This option is valid if the input data format is "Variable Length", "Fixed Length", or "CSV Format". An error will occur if the format is "XML Format".
- This option will apply when using the following form formats:
  - Free frame
  - Multipart table
  - Simple table
  - Block repeat
  - Sticky label

  For a single page, do not specify "do" (specification to perform a new page processing) with this option. If this is specified, an empty page (in which input data is not output) will be output. When using input data containing a new page code in a single page, specify "skip" for this option.

Note

- It does not matter if there is a linefeed code (0x0D0A or 0x0A) in front of a new page code (0x0D0C or 0x0C), or not.

-atnodata operation when there is no input data

Specify whether or not to throw an error when the input data is 0 bytes.

no : Throws an error.

yes : Outputs without an error.
If the input data is 0 bytes, an error will not occur either. In this case, the 0 byte fields will be output as follows:

- Text field
  No output (blank).
- Numeric field
  Outputs 0.
- OCR-B field
  No output (blank).
- Radio button
  No selection.
- Checkbox
  No selection.
- Barcode field
  No output (blank).
- Image field
  No output (blank).
- Post code field
  No output (blank).
- Block text field
  No output (blank).

If this option is omitted, it will operate as if "no" was specified.

Caution

- Do not specify this option in the following cases:
  - When the input data format is "XML format"
  - During SAP R/3 RDI integration (specification with the COMMAND keyword)

Note

- If the input data is not 0 bytes, the operations are as follows:
  - If "no" is specified
    For fields other than numeric fields, the print operation will be the same as when "yes" is specified in this option. Numeric fields will be blank.
  - If "yes" is specified
    The print operation will be the same as the output of this option.
- The state when there are no records in the input data file during multi-form/ combination-form output is defined as the state when all of the following conditions are met:
  - The form name and form name data separator character for multi-form/ combination-form have been described
  - There is no data subsequent to the form name in the record
  - There is no succession of records for the same form name
    If there is a succession of records, it will be determined that there is a record for the input data; therefore, the operation specified by this option will be effective for just the first record, but normal print operations for form output will apply to the following records.

-atlabeldata specification of data file with the field name label

Specify whether the input data is treated as "a data file with the field name label".

no : Input data will not be treated as a data file with the field name label.

yes : Input data will be treated as a data file with the field name label.

If this option is omitted, it will operate as if "no" was specified.

Caution

- In the following conditions, do not set "yes" to this option:
  - When the input data format is "Fixed Length" or "XML Format"
  - During SAP R/3 RDI integration (specification with the COMMAND keyword)
- This option will be invalid in the following case:
  - When using XBRL data support/Navigator links function (specification with -command option of the prdsexec command)

-atpropertyreplace Property replace file name

Specify the property replace file name used for form output with its full path.
When outputting a form, field properties defined in the form descriptor information can be replaced with the properties specified in the property replace file.
When this option is omitted, field properties defined in the form descriptor information will be used.
Up to two property replace files can be specified. When specifying two files, separate them using a semicolon (;). The total length should not exceed 1024 bytes. If the first and second property replace files have different specifications for the same field property, the specification in the second file will override the first one.
The following displays a specification example of property replace files.

Example: -atpropertyreplace "C:¥temp¥propfile1.csv;C:¥temp¥propfile2.csv"

Caution

- For the character code of the property replace file, refer to the Online Manual "Advanced Form Design".
- In the following cases, specify only the file name with this option:
  - When a property replace file is transferred during remote form output
  - When a property replace file is transferred during connector linkage

Note

- Specify property replace files in accordance with your specific way of managing those files. For example, if a file contains the common definitions shared among all the forms while you store the definitions specific to individual output types separately in different files, you should specify two files when outputting a form.

-atmapfontfile substitute font info file name

Specify the substitute font info file name used for form output with its full path.
A substitute font info file specifies substitute information used when the font defined in the form descriptor information is replaced with another font at the time of form output.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When a substitute font info file is transferred during remote form output
  - When a substitute font info file is transferred during connector linkage
  - When a substitute font info file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

The following displays a specification example for [Windows]. In this example, the substitute font info file (C:¥temp¥mapfontfile.txt) is specified.

```
-atmapfontfile"C:¥temp¥mapfontfile.txt"
```

-atbcodadjust barcode correct info file name

Specify the barcode correct info file name used for form output with its full path.
A barcode correct info file specifies information to correct barcode output results according to the environment of output destination when outputting barcodes in a form.
When this option is omitted, it will be enabled in the following order of priority:

1）Specification of barcode correct information in the [Print]/[File]/[File(Excel)] tab of the [Form Output Methods] window

2）Not set

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When a barcode correct info file is transferred during remote form output
  - When a barcode correct info file is transferred during connector linkage
  - When a barcode correct info file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

-p form output information file name

Specify the form output information file name with its full path which is used for outputting a form.
A form output information file defines various information related to form output.
When this option is omitted, settings in the form output environment setting file will be valid.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When a form output information file is transferred during remote form output
  - When a form output information file is transferred during connector linkage
  - When a form output information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

4.1.2.4.5 Options for Printing Information

Note

- For the settings of the printer to be used, the support range and points to note for printing, refer to the Online Manual "Setup & Operation".

-d printer model name when performing FM output/FNP output specification

Specifies the printer output method (FM or FNP) and the model name of the printer used for FM output when the List Creator print server runs on UNIX OS.

- When the List Creator print server runs on Solaris
  - When performing FM output
    Specify one of the following according to the type of printer used for output.

    VSP4610A : Specify this for VSP4620A printer.

    VSP4701 : Specify this for VSP4720 or VSP4730B printer.

VSP4900 : Specify this for VSP4902 printer.

VSP4950 : Specify this for VSP4971 or VSP4980 printer.

VSPSP : Specify this for VSP2740, VSP2740B, VSP3601A, VSP3710A, VSP3710B, VSP3802A, or VSP3802B printer.

- When performing FNP output

  FNP : Specify this when performing FNP output.

- When the List Creator print server runs on Linux

  FNP : Specify this when performing FNP output.

When this option is omitted, PostScript output will be performed.

Caution

- When performing PostScript output to a printer, do not specify this option.
- When performing FNP output, the name of the printer actually used for printing must be specified with the -n option, in addition to the specification with this option.
  For List Creator, it is confirmed that the following printers can be used for output:
  - When the List Creator print server runs on Solaris
    VSP4902, VSP4971
  - When the List Creator print server runs on Linux
    VSP4720

Note

- For the printers supported by List Creator, refer to the Online Manual "Setup & Operation".

-n printer name

The following printers can be specified:

- Local printer
- Print Manager's printer

You can also specify the following remote printers when performing local output and creating OWF files (you cannot specify the printers when performing remote form output or using a connector linkage).

- Remote printer
- Print Manager's remote printer

In case of [Windows], specify the printer name displayed in the printer folder of the system by enclosing it in double quotation marks ("). When using a remote printer, specify it in "¥¥server_name¥printer_name" format.

When this option is omitted, specification will be enabled in the following order of priority:

For [Windows]

1) Printer name specified at the [Print] tab of the [Form Output Methods] window
2) Default printer

For [UNIX OS]

1) Printer name specified at the [Print] tab of the [Form Output Methods] window
2) Default printer set in the system's LP print service or in the printer settings

Caution

- When specifying a printer other than the printer for printing, or when the default printer is not for printing, the form will not be output correctly.
- In the following cases, do not specify a remote printer or Print Manager's remote printer for this option. Specifying this will result in an error during the form output.
  - During remote form output (specification with the -z option of the prputprt command)
  - During connector linkage (specification with the -z option of the prputex command)
  - During monitoring incoming data (specification at the first line of the data file)
  - During form output in remote form output mode or connector linkage mode, in XBRL data support/Navigator links

-atprintbin paper source

Specify the paper source of the printer when the paper type is cut-sheet.

CF	: Cut sheet feeder
H1	: Hopper 1
H2	: Hopper 2
H3	: Hopper 3
H4	: Hopper 4
MA	: Manual paper feed
NO	: None (Follows the settings of the printer driver property or printer device settings)
AT	: Automatic

The specification of paper source will be enabled in the following order of priority:

For [Windows]

1) Paper source specified with the -itemprintbin option
2) Paper feed name specified with the -atprintbinname option
3) Paper source specified with this option
4) Paper source specified at the [Print] tab of the [Form Output Methods] window

For [UNIX OS]

1) Paper source/paper feed name specified with the -itemprintbin option
2) Paper source specified with this option
3) Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- For [Windows], note the following points:
  - If paper is not supplied in the specified method, specify the paper feed name with the -atprintbinname option.
  - When the paper source is changed with this option, the paper feed name specified in the [Print] tab in the [Form Output Methods] window will be invalid. Specify the paper feed name with the -atprintbinname option as necessary.
  - When "NO (None)" is specified for paper source, the paper feed name will be invalid even if it is set with the -atprintbinname option. Select a setting other than "NO (None)", when specifying paper feed name.
  - If the automatic feed does not operate properly when "AT (Automatic)" is selected for paper source, specify automatic feed in the properties of the printer driver, and specify "NO (None)" for the paper source.
  - When specifying another paper source, specify the paper feed name with the -atprintbinname option.
- When using [UNIX OS], even if paper source is specified, it will be invalid when performing PostScript output to VSP series printer.

-atprintbinname paper feed name

In the following cases, specify the paper feed name of printer within 256 bytes. Check the paper feed name that can be specified, in the properties of the printer driver.

- When the paper type is a cut-sheet, and will not switch to the paper feed specified for the paper source.
- When the paper type is roll-feed, and the paper feed does not switch correctly

The paper feed name will be valid in the following order of priority:

1）Paper source/paper feed name according to the -itemprintbin option specifications

2）Paper feed name specified with this option

3）Paper source specified with the -atprintbin option

4）Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- The paper feed name may vary depending on the printer driver. Check the properties of the printer driver and enter the information accurately, taking note of the difference of full/half-width of characters and spaces, and existence of spaces.
- Do not enter a half-width space at the beginning or end of a paper feed name. Any half-width spaces that are entered at the beginning or end of a paper feed name will be deleted when that name is used.
- For [UNIX OS], this option is enabled only when creating OWF files.

-itemprintbin paper source/paper feed name switching specification

Specify "!REPORT" to change the paper source and paper feed name (enable the paper source/paper feed name specified in each form) when switching the form in multi-form output.
This option is enabled only when the paper type is "cut-sheet".
If specified when not performing multi-form output, the paper source/paper feed name specified in the [Print] tab in the [Form Output Methods] window will be applied.
If specification of this option is omitted, specification will be valid in the following order:

For [Windows]

1) Paper feed name specified with the -atprintbinname option
2) Paper source specified with the -atprintbin option
3) Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

For [UNIX OS]

1) Paper source specified with the -atprintbin option
2) Paper source specified at the [Print] tab of the [Form Output Methods] window

Caution

- For [Windows], note the following points:
  - If the paper is not supplied in the specified paper source, specify the paper feed name in the [Print] tab of the [Form Output Methods] window, and specify this option.
  - If the multi-up printing of List Creator is specified, switching the paper feed name will be invalid.
    Even if specified, printing will be performed according to the paper feed name specification defined in the first form that is output.
  - When using the multi-up printing function of the printer, do not specify this option. If specified, it will not operate correctly.
  - Some printers do not allow the paper source/paper feed name to change for each form. Make sure to check the operations of the printer actually being used.
- When using [UNIX OS], even if paper source is specified, it will be invalid when performing PostScript output to VSP series printer.

-c number of copies

Specify the number of copies of the form, from 1 to 999.
When using the printer (printer driver) settings for the number of copies, specify "PRT".
To collate output, specify "!" at the beginning. The specification of "!" is valid only when a printer defined in Print Manager is specified as the printer name.
When this option is omitted, the number of copies specified in the [Print] tab in the [Form Output Methods] window will be applied.

Caution

- Collate printing (specifying "!" at the beginning), and printing according to the number of copies set in the printer (printer driver) (specifying "PRT") cannot be specified at the same time. An error will occur if specified.
- When outputting to a printer that cannot specify the number of copies in the properties of its printer driver, the operations will be as follows:
  - When collate printing is not specified, the specification of the number of copies will be invalid
    (only one copy will be printed).
  - When collate printing is specified, the specification of the number of copies will be enabled.
- For [Windows], when outputting to a printer that can specify collate printing in the properties of its printer driver, the specifications on the printer will be valid even if "!" is not specified at the beginning.
- For [UNIX OS], specification of "PRT" is enabled only when creating an OWF file. When specified at the time of printing, the number of copies specified in the [Print] tab in the [Form Output Methods] window will be applied.
- For [Windows(x64)/Linux], collate printing (specifying "!" at the beginning) is enabled only when creating OWF files.

The following displays a specification example:

- When printing 3 collated copies
  -c !3
- When printing by using the printer (printer driver) settings for the number of copies
  -c PRT

-atprintside print side specification

Specify the following:

- Whether to print forms on both sides or to use the print side setting of the printer (printer driver)
- Whether to continue printing on the same sheet of paper or to print on a new sheet when the form is switched during a multi-form output.

SINGLEFOLLOW : Single-sided printing will be performed.
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

BOTHFOLLOW : Duplex printing will be performed.
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

PRTFOLLOW : Prints according to the print side setting of the printer (printer driver).
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

SINGLE : Single-sided printing will be performed.
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

BOTH : Duplex printing will be performed.
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

PRT : Prints according to the print side setting of the printer (printer driver).
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

The print side specification will be valid in the following order of priority:

1) Specification with -itemprintside option to perform the duplex printing, or to feed a new sheet when forms are switched during multi-form output
2) Print side set with this option
3) Specification set in the [Print] tab in the [Form Output Methods] window to perform the duplex printing, or to feed a new sheet when forms are switched during multi-form output

Caution

- If the selected printer does not have a function for the duplex printing or if this function is disabled, the duplex printing specification will become invalid (it may be printed on single side, or may output blank pages).
- For [Windows], note the following points:
  - In the following cases, do not specify "SINGLE", "BOTH", or "PRT" for this option. If specified, it will not operate correctly.
    - When using the multi-up printing function of the printer (it will operate correctly when using the List Creator columns).
    - When using a function to suppress the output of blank page from the printer.
- For [UNIX OS], note the following points:
  - When printing a form in List Creator, even if duplex printing is specified, it will be invalid when performing PostScript output to VSP series printer.
  - Specification of "PRT" is enabled only when creating an OWF file. When specified at the time of printing, it will operate as if "BOTH" was specified.
  - Specification of "PRTFOLLOW" is enabled only when creating an OWF file. When specified at the time of printing, it will operate as if "BOTHFOLLOW" was specified.

Note

- In a form in which either PAGE, TPAGE, PAGE-ALL, TPAGE-ALL, BPAGE or BTPAGE has been set to the data field of the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window, when "SINGLE", "BOTH", or "PRT" has been specified for this option, the pages that are skipped and not printed will not be counted.

-itemprintside print side switch specification

Specify "!REPORT" to switch the print side (enable the print side specified in each form) when switching the form in multi-form output.
If specified when not performing multi-form output, the print side specified in the [Print] tab in the [Form Output Methods] window will be applied.
When this option is omitted, it will be enabled in the following order of priority:

1) Print side set in the -atprintside option
2) Specification set in the [Print] tab in the [Form Output Methods] window to perform the duplex printing, or to feed a new sheet when forms are switched during multi-form output

Caution

- If the selected printer does not have a function for the duplex printing or if this function is disabled, the duplex printing specification will become invalid (it may be printed on single side, or may output blank pages).
- If the multi-up printing of List Creator is specified, it will not be possible to change the duplex printing specification. Even if specified, printing will be performed according to the duplex printing specification defined in the first form that is output.
- For [Windows], note the following points:
  - When using the multi-up printing function of the printer, do not specify this option. If specified, it will not operate correctly.
  - Some printers do not allow the print side changes for each form. Make sure to check the operations of the printer actually being used.
- For [UNIX OS], note the following points:
  - When printing a form in List Creator, even if duplex printing is specified, it will be invalid when performing PostScript output to VSP series printer.

-atpapercode print paper name specification

Specify the paper name within 64 bytes. If a paper name exceeding 64 bytes is specified, an error will occur.
When this option is omitted, it will be enabled in the following order of priority:

1) Paper size specified in the -atoutputscale option
2) Paper size or paper name specified at the [Form Descriptor] tab of the [Form Properties] window of the [Form Style Descriptor] window

Caution

- When specifying this option and the -atoutputscale option at the same time, an error will occur if an option other than "Optional (OT)" is specified with the -atoutputscale option.
- If a paper name that is not supported by the printer is specified, the print defaults to the A4 paper size.
- If a paper name that is not supported by the printer is specified and "Optional (OT)" is specified with the -atoutputscale option, blank pages are displayed when previewed. If printed with the same specifications, blank pages will be printed.
- For [UNIX OS], this option is enabled only when creating OWF files.

Note

- To enlarge or reduce the form according to the specified paper name, specify "Optional (OT)" with the -atoutputscale option.

4.1.2.4.6 Options for PDF File Save Information

Note

- For the support range, the resources to be used, and the points to note for PDF conversion function, refer to the Online Manual "Setup & Operation".

-keeppdf storage destination file name when saving as a file

Specify the storage destination file name (name of the PDF file to be saved) within the following ranges:

For [Windows]

Specify with its full path, within 259 characters and 512 bytes.

For [UNIX OS]

Specify with its full path, within 512 bytes.

When this option is omitted, the storage destination file name specified in the [File] tab in the [Form Output Methods] window will be applied.

The storage destination file name must be specified using one of these methods.

Caution

- It is not possible to specify only a folder name.
- If saving as a PDF file fails because a file with the same name already exists, the original PDF file may also be deleted.

Note

- The access privileges of the user that outputs the form are given to the PDF file.
- If the specified folder or directory does not exist, it is automatically created. When it is automatically created, the same access privileges as the parent file or directory are given to it.
  If the user outputting the form does not have access privileges to the automatically created folder or directory, an error will occur.
- If a file with the same name as the specified storage destination file name already exists, it is replaced with the new file if it has privileges to overwrite the file. An error will occur if there is no privilege to overwrite the file.
- During monitoring incoming data, the user outputting forms is the "ListCREATOR Service" logon user.

-gpdfsubtitle Subtitle of the PDF file

Specify the subtitle of the PDF file within 254 bytes.

When this option is omitted, it will be enabled in the following order of priority:

1) A subtitle of the summary specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window
2) Not set

Caution

- Specify the subtitle in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

-gpdfauthor PDF file author

Specify the author of the PDF file within 254 bytes.

When this option is omitted, it will be enabled in the following order of priority:

1) An author of the summary specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window
2) Not set

> **Caution**
> - Specify an author in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

-gpdfprint PDF file print permission specification

Specify whether or not to allow printing of the PDF file.

Y : Printing is allowed.

N : Printing is not allowed.

When this option is omitted, the "Printing Allowed" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.

> **Caution**
> - When using this option, you must specify a password with the -gpdfsecupwd option. If a password is not specified, security settings of the PDF file may not be enabled.

-gpdfmodify PDF file change permission specification

Specify whether or not to allow change of the PDF file.

Y : Changes are allowed.

N : Changes are not allowed.

When this option is omitted, the "Changes Allowed" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.

> **Caution**
> - Although changes to the PDF file are allowed, the document information (security) of the PDF file may indicate "Not Allow".
> - When using this option, you must specify a password with the -gpdfsecupwd option. If a password is not specified, security settings of the PDF file may not be enabled.

-gpdfselect PDF file text and graphics selection permission specification

Specify whether or not to allow text and graphics selection in a PDF file.

Y : Text and graphics selection is permitted.

N : Text and graphics selection is not permitted.

When this option is omitted, the "Allow content to be copied/extracted" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.

> **Caution**
> - When using this option, you must specify a password with the -gpdfsecupwd option. If a password is not specified, security settings of the PDF file may not be enabled.

-gpdfannotate allow form fields and comments to be added/changed specification

Specify whether or not to allow comment and form field addition and change to the PDF file.

Y : Comment and form field addition and change are allowed.

N : Comment and form field addition and change are not allowed.

When this option is omitted, the "Allow Notes and Form Field Add and Change Permission" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.

Caution

- Although additions and changes to the comments and form fields of the PDF file are allowed, the document information (security) of the PDF file may indicate "Not Allow".
- When using this option, you must specify a password with the -gpdfsecupwd option. If a password is not specified, security settings of the PDF file may not be enabled.

-gpdfpwd password for opening the PDF file

Specify the password for opening the PDF file within 32 bytes.
Do not use the following characters:

“" “

When this option is omitted, a password for opening will not be set.

Caution

- Specify the password in half-width alphanumeric characters and symbols (within the ASCII code character range). If other characters are specified, the PDF file may not be displayed.
- Do not specify the same password for this option and -gpdfsecupwd option. If the same password is specified, the security option settings may be changed.

-gpdfsecupwd PDF file security option change password

Specify the password for changing the security option of the PDF file within 32 bytes.
Do not use the following characters:

"" "

When this option is omitted, a password for changing the security option will not be set.

Caution

- Specify the password in half-width alphanumeric characters and symbols (within the ASCII code character range). If other characters are specified, the PDF file may not be displayed.
- Do not specify the same password for this option and -gpdfpwd option. If the same password is specified, the security option settings may be changed.

-gpdflimit Time limit/period for viewing the PDF file

Specify the time limit (start date and time/end date and time) or the number of days for viewing the PDF file.

Viewing start date and time: Specify the viewing start date and time in "YYYYMMDDhhmmss" format.
Viewing of the PDF file is restricted before the specified date and time.

Viewing end date and time: Specify the viewing end date and time in "YYYYMMDDhhmmss" format.
Viewing of the PDF file is restricted after the specified date and time.

Viewing period : Specify the viewing period in days.
When the specified period (number of days) has passed since the PDF file was created, viewing of it is restricted.

To specify the viewing start date and time/end date and time "YYYYMMDDhhmmss", specify as follows:

YYYY	: Specify the western calendar year.
MM	: Specify within the range of 01 to 12 (month).
DD	: Specify within the range of 01 to 31 (day).
hh	: Specify within the range of 00 to 23 (hours).
mm	: Specify within the range of 00 to 59 (minutes).
ss	: Specify within the range of 00 to 59 (seconds).

When specifying the viewing period, set "1" or higher value.
When specifying the viewing time limit and viewing period, specify the values in the following order, separating each value with a comma (,).

1) Viewing start date and time
2) Viewing end date and time
3) Viewing period

If the viewing time limit and viewing period are specified at the same time, setting of the viewing time limit will be applied.
If neither viewing time limit nor viewing period is specified, "Restriction of Viewing by a period" setting of the viewing restrictions specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will become invalid, and viewing will not be restricted.
When this option is omitted, the "Restriction of Viewing by a period" setting of viewing restrictions specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.

Caution

- If value specified in the form descriptor information and value specified in this option are different, the value specified in this option will be applied.
- An error will occur in following cases:
  - When "Restriction of Viewing by a period" is not specified in the form descriptor information
    However, an error will not occur if neither viewing time limit nor viewing period is specified in this option.
  - When value other than the specifiable values is specified
- Even if this option is specified, it may be invalid depending on the PDF file viewer application (e.g. in the case that Java script cannot be executed).

The following displays a specification example.

- When specifying a viewing time limit
  When specifying "1st March 2006 0:0:0" for the viewing start date and time and "31st December 2006 0:0:0" for the viewing end date and time, set as follows.

  -gpdflimit 20060301000000,20061231000000,

- When specifying a viewing period
  When specifying "100 days" for the viewing period, set as follows:

  -gpdflimit ,,100

-gpdfembed PDF file font embedding specification

Specify whether or not to embed fonts into the PDF file.

ALL	: All fonts are embedded into the PDF file.
NONE	: All fonts are not embedded into the PDF file.

When this option is omitted, the font embedding specification of "Document Management" in the [PDF Options] window, in the [File] tab under the [Form Output Methods] window will be applied.

Caution

- When using user defined characters and JEF extension characters, embed the characters into the PDF file. If they are not embedded in the PDF file, they may appear differently or not be displayed correctly depending on the system environment where the PDF file is displayed.

Note

- If you will not search for fonts embedded in the PDF file, set the -gpdfreference option to "N".

-gpdfreference PDF file embedded font search specification

Specify whether or not to search fonts that are embedded into the PDF file.

Y	: Search is allowed.
N	: Search is not allowed.

If this option is omitted, it will operate as if "Y" was specified.

Caution

- Before setting this option, specification to embed fonts in the PDF file must be set by either of the following methods:
  - Font embedding specification of "Document Management" in the [PDF Options] window, under the [File] tab of the [Form Output Methods] window
  - -gpdfembed option (Specify "ALL")
- When allowing the search for fonts embedded in the PDF file, the PDF file size will become larger.

-gpdfjpegquality PDF file JPEG compression quality specification

Specify the quality level for JPEG compression of a PDF file.

HIGH	: Performs JPEG compression with high image quality and low compression rate.
MID	: Performs JPEG compression with an image quality and compression rate in-between "HIGH" and "LOW".
LOW	: Performs JPEG compression with low image quality and high compression rate.

NONE : JPEG compression is not performed. Flate compression, which causes no image degradation, is performed.

When this option is omitted, the JPEG compression specification of "Document Management" in the [PDF Options] window, in the [File] tab under the [Form Output Methods] window will be applied.

-gpdfembedfile PDF attachment file name

Specify a name of the file attached to the PDF file with its full path. Up to 99 files can be specified. When specifying multiple files, separate them using a semicolon (;). If the same file is specified multiple times, the file is attached multiple times without throwing an error. If the specified file does not exist, an error will occur.
When this option is omitted, the order of priority will be as follows:

1) PDF file attachment setting of "Document Management" specified in the [PDF Options] window, in the [File] tab in the [Form Output Methods] window
2) No file is attached

Caution

- The file attached to a PDF file cannot be extracted if the security option is specified when saving as a PDF file.
- In the following cases, specify only the file name with this option:
  - When the file attached to a PDF file is transferred during remote form output
  - When the file attached to a PDF file is transferred during connector linkage
  - When the file attached to a PDF file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links

-gpdfautoprint PDF file automatic printing specification

Specify the setting and the timing of automatic printing of a PDF file.

OFF : Automatic printing is not performed.

OPN : When a PDF file is opened, the Print dialog box is automatically displayed.

OPN+CLS : When a PDF file is opened, automatic printing is performed with the default printer specified in the system.

When this option is omitted, the "Automatic printing of PDF file" setting of "Behavior" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will be valid.

Caution

- Even if this option is specified, it may be invalid depending on the PDF viewer application (e.g. in the case that Java script cannot be executed).

-gpdfhidetoolbar PDF file viewer toolbar display specification

Specify whether or not to show the toolbar of the PDF viewer when viewing a PDF file.

N : The toolbar is shown when viewing a PDF file.

Y : The toolbar is not shown when viewing a PDF file.

When this option is omitted, the "Show Toolbar" setting specified in the PDF File Viewer Settings of "Behavior" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will be valid.

> **Caution**
> - Even if this option is specified, it may be invalid depending on the PDF viewer application.

-gpdfhidemenubar PDF file viewer menubar display specification

Specify whether or not to show the menubar of the PDF viewer when viewing a PDF file.

N : The menubar is shown when viewing a PDF file.

Y : The menubar is not shown when viewing a PDF file.

When this option is omitted, the "Show Menubar" setting specified in the PDF File Viewer Settings of "Behavior" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will be valid.

> **Caution**
> - Even if this option is specified, it may be invalid depending on the PDF viewer application.

-gpdffullscreen PDF file viewer full screen display specification

Specify whether or not to display the PDF viewer in full screen when viewing a PDF file.

N : The PDF viewer is not displayed in full screen when viewing a PDF file.

Y : The PDF viewer is displayed in full screen when viewing a PDF file.

When this option is omitted, the "Use Full Screen Mode" setting specified in the PDF File Viewer Settings of "Behavior" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will be valid.

> **Caution**
> - Even if this option is specified, it may be invalid depending on the PDF viewer application.

-gpdfbookmark specification to insert a bookmark in the PDF file when switching forms

Specify whether or not to insert the form name in the PDF file as a bookmark. The form name is inserted as a bookmark string when the form is switched.

N : A bookmark is not inserted when the form is switched.

Y : The form name is inserted as a bookmark string when the form is switched.

If this option is omitted, it will operate as if "N" was specified.

Caution

- When performing multi-form output, a bookmark is inserted when the form is switched.
- When performing combination-form output, combination-form name is inserted as a bookmark. The bookmark is inserted when the combination-form name is changed.
- A bookmark set with this option has one level.
- When creating a PDF file while keeping the inserted bookmark displayed, specify "OUTLINES" for the display settings for viewing a PDF file with the PDF-PAGEMODE keyword in the PDF document information file.
- When displaying the PDF file in Windows XP/Windows Server 2003, surrogate pair characters used in the bookmark cannot be displayed properly.

-gpdfbookmarkitem specification to insert a bookmark in the PDF file when switching data

When inserting a field data value of a form into a PDF file as a bookmark, specify the name of the applicable field. The field data value is inserted as a bookmark string when the input data value of the specified field is switched.
For the field name, you can specify one field that is "Text field" or " Hidden field" whose field format is text field.
For the specified field, a bookmark is inserted respectively in accordance with the following output timing:

- For text fields
  A bookmark is inserted when outputting the first field of the page.
- For hidden fields
  A bookmark is inserted when outputting the first record in the page.

It is also possible to specify optional multiple timings to insert a bookmark in accordance with the above-mentioned output timing. When specifying multiple timings, put "!" at the beginning of the field name and use a comma (,) separator. The "data value" of the field to insert a bookmark is inserted as a bookmark when the input data of the field specified with "!" is switched.
If this option is omitted, a bookmark is not inserted when the field data of the form is switched.
When specifying this option and the -gpdfbookmark option at the same time, the bookmark inserted with the form name with the -gpdfbookmark option is in the top of the hierarchy, under which the bookmarks specified with this option are inserted in the following format:

[Form Name] - [Data Value]

The data value is the first data value inserted by this option. In this case, this bookmark becomes the topmost one, and the bookmarks under the hierarchy are inserted with the value of the field specified by this option.

Caution

- If there is no input data value for the specified field, no bookmark is inserted.
- Group items cannot be specified. Configuration items of a group item cannot be specified when specifying "Use Group Item Name" for the Group Item Handling in the [General] tab of the [Data Definitions] window.
- The data in which a bookmark is to be inserted must be switched in the beginning of the page. If the data is not switched in the beginning of the page, an error will occur when outputting the form.
- A bookmark set with this option has one level. If specified with the -gpdfbookmark option when performing multi-form/combination-form output, a "two-level" bookmark is set.
- When the form format is multipart table or free frame, the text field defined in the partition to be output first in the page must be specified.
- If a bookmark string exceeds 128 characters, the exceeding characters are truncated.
- When creating a PDF file while keeping the inserted bookmark displayed, specify "OUTLINES" for the display settings for viewing a PDF file with the PDF-PAGEMODE keyword in the PDF document information file.
- When displaying the PDF file in Windows XP/Windows Server 2003, surrogate pair characters used in the bookmark cannot be displayed properly.

The following displays a specification example.
In this example, a bookmark is inserted with the data value of [Name] as its bookmark string at the timing when the input data of [Department], [Section] and [Name] is switched.

```
-gpdfbookmarkitem !Department, !Section, Name
```

-in5 PDF document information file name

Specify the name of the document information file of the PDF file with its full path.
PDF document information file is a file in which PDF file save information (such as attribute information or property information) can be collectively specified when outputting a form as an PDF file.

Use it to specify PDF file save information which is not supported by the form properties or each command option, when saving as a PDF file.

Caution

- For a PDF document information file, do not specify PDF file save information supported with the [File] tab of the [Form Output Methods] window or with other prprint command options.
- Do not specify information for PDF mail distribution in a PDF document information file. To specify information for PDF mail distribution, use the options in the PDF file save information (mail distribution) or the PDF mail distribution information file.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When a PDF document information file is transferred during remote form output
  - When a PDF document information file is transferred during connector linkage
  - When a PDF document information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links
- For [Windows], note the following points:
  - When specifying the PDF-LIMITURI keyword in a PDF document information file, it is necessary that "Restriction of Viewing by a URI" of "Restriction of viewing" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, has been specified. An error will occur if it is not specified.
  - When the PDF-LIMITURI keyword is specified in a PDF document information file, the "Allow website of Viewing" setting of "Restriction of viewing" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be invalid.

Note

- PDF document information files are specified when using the PDF file save information that is not included in the prprint command options.

-gpdfoutinfofile ECM information file name

Specify the ECM information file name corresponding to the PDF file to be output with its full path, within 259 characters (within 512 bytes).
Be sure to specify this when placing the output PDF file in a folder linked with ECM products.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When an ECM information file is transferred during remote form output
  - When an ECM information file is transferred during connector linkage
  - When an ECM information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

4.1.2.4.7 Options for PDF File Save Information (Mail Distribution)

Note

- Use PDF document information files when sending an encrypted mail, or when using a mail transmission function that uses templates.
- For the PDF mail distribution function and the description format of the following files, refer to the Online Manual "Setup & Operation".
  - PDF mail distribution information file
  - PDF mail setup file

-gpdfmailconffile PDF mail distribution information file name

Specify the name of the PDF mail distribution information file which describes information required for distributing PDF files by mail, with its full path.
In the PDF mail distribution information file, specify the [MLF_Mail] and [MLF_Message] sections related to PDF mail distribution of the document information file.
The PDF mail distribution information is enabled in the following order of priority:

1) PDF mail distribution related options such as the -gpdfmailtoaddr option
2) PDF mail distribution information file specified with this option
3) PDF mail setup file

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When a PDF mail distribution information file is transferred during remote form output
  - When a PDF mail distribution information file is transferred during connector linkage
  - When a PDF mail distribution information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links

-gpdfmailtoaddr destination mail address for PDF mail distribution

Specify a destination mail address for PDF mail distribution within 4000 bytes and in the following format. [ ] indicates that this can be omitted.
When specifying multiple mail addresses, separate them using a comma (,).
However, you cannot specify multiple mail addresses when specifying nicknames.
Even if a same address is specified multiple times by mistake, redundant addresses are eliminated when sending.

Mail address [<nickname>]

- Mail address (required)
  Specify a mail address in "mailbox_name@domain_name" format.
  The following characters can be used:

  Half-width alphanumeric characters, ".", "_", "-"

- Nickname (optional) (only when the List Creator print server runs on Windows/Solaris)
  Specify a nickname within 80 bytes.
  The following characters can be used:

  Half-width alphanumeric characters

  If you specify nicknames, mails can be distributed more securely and reliably.

When this option is omitted, destination mail addresses specified in the PDF mail distribution information file specified with the -gpdfmailconffile option will be valid.
Destination mail addresses must be specified using one of these methods.

-gpdfmailsmtpsv SMTP server name for PDF mail distribution

Set an SMTP server name for PDF mail distribution.
Specify the name set in the [MLF_SMTPServer-*name*] section defined in the PDF mail setup file.
The following characters can be used:

Half-width alphanumeric characters, ".", "_", "-"

When this option is omitted, it will be enabled in the following order of priority:

1) MLF_SMTPServer keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the -gpdfmailconffile option
2) SMTP server defined in the PDF mail setup file

-gpdfmailfromaddr transmission source mail address for PDF mail distribution

Specify a transmission source mail address for PDF mail distribution.
The specified address is set to the From header of the mail which will be distributed.
The following characters can be used:

Half-width alphanumeric characters, ".", "_", "-"

When this option is omitted, it will be enabled in the following order of priority:

1) MLF_FromAddress keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the -gpdfmailconffile option
2) MLF_EnvelopeFromAddress keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the -gpdfmailconffile option
3) MLF_FromAddress keyword under the [MLF_Default] section in the PDF mail setup file
4) MLF_EnvelopeFromAddress keyword under the [MLF_Default] section in the PDF mail setup file
5) Not set

-gpdfmailfromname transmission source name for PDF mail distribution

Specify a transmission source name for PDF mail distribution.
The specified name is set to the From header of the mail which will be distributed.
The following characters can be used:

Full-width Japanese characters, half-width alphanumeric characters, ".", "_", "-"

When this option is omitted, it will be enabled in the following order of priority:

1) MLF_FromFullName keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the -gpdfmailconffile option
2) MLF_FromFullName keyword under the [MLF_Default] section in the PDF mail setup file
3) Not set

-gpdfmaildelfile PDF file delete specification at the time of PDF mail distribution

Specify whether or not to delete the PDF file after distributing it by mail.

yes	: Deletes the PDF file after distributing it by mail.
no	: Does not delete the PDF file after distributing it by mail.

When this option is omitted, it will be enabled in the following order of priority:

1) MLF_DeleteFile keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the -gpdfmailconffile option
2) MLF_DeleteFile keyword under the [MLF_Default] section in the PDF mail setup file
3) Not set

4.1.2.4.8 Options for OWF File Creation Information

Note

- For the support range and points to note for the OWF file creation (Web application linkage), embedding external fonts, and registration of fonts, refer to the Online Manual "Setup & Operation".

-gowffile OWF file path name

Specify the storage destination file name when creating an OWF file with its full path, within 259 characters and within 512 bytes. To create an OWF file, make sure to specify the OWF file name with this option.
Do not specify any of the following for the OWF file name:

For [Windows]

Do not use full-width characters, half-width spaces, and any of the following characters:
"(", ")", "|", "¥", "^", "~", "[", "]", "`", "<", ">", "#", "%", """, ";", "/", "?", ":", "@", "&", "=", ",", "*"

For [UNIX OS]

Do not use full-width characters, half-width katakana characters, half-width spaces, and any of the following characters:
"(", ")", "|", "¥", "^", "~", "[", "]", "`", "<", ">", "#", "%", """, ";", "/", "?", ":", "@", "&", "=", ",", "*"

Caution

- The file extension of the OWF file must be ".owf" (half-width lower-case characters).
  If an extension other than ".owf" is specified, Web plug-in will not start.
- If a file with the same name specified with this option already exists, an error will occur. However, if the size of the existing file is 0 byte, it will be overwritten without causing an error.
- If OWF file creation fails because a 0-byte file with the same name already exists, the original OWF file may also be deleted.

-gowfdestination operational mode during Web plug-in startup

Specify the operational mode during Web plug-in startup (during Web browser startup).

PREVIEW	: Performs a preview.
PRINT	: Prints.

If this option is omitted, it will operate as if "PREVIEW" was specified.

-gowfopenprtdlg specification of [Print] window display during printing

Specify whether or not to display the [Print] window during printing (when "PRINT" is specified for the -gowfdestination option). When displaying the [Print] window, the information during print output can be specified.

NO	: [Print] window is not displayed.
YES	: [Print] window is displayed.

If this option is omitted, it will operate as if "NO" was specified.

-gowfprtclose specification to close the Web browser after print completion

Specify whether or not to close the Web browser after printing is completed.

NO	: Web browser is not closed after printing is completed.
YES	: Web browser is closed after printing is completed.

If this option is omitted, it will operate as if "NO" was specified.

Caution

- This option is valid only when printing is performed by specifying "PRINT" in the -gowfdestination option.
- Do not specify this when using the HTML frame function.

-gowfpreviewrate specification of zoom factor during preview

Specify the zoom factor during preview.

ALL	: Displays a whole page.
WIDTH	: Displays a page according to its width.
30 - 200	: Displays at the specified magnification (%). Specify a string within the range from 30 to 200.

If this option is omitted, it will operate as if "ALL" was specified.

-gowfprtprevention specification of printer control during preview

Specify the printer control during preview.

NO	: Printing is not prevented.
TWICE	: Double printing is prevented.
YES	: Printing is prevented.

If this option is omitted, it will operate as if "NO" was specified.

-gowfembed specification of embedding external fonts in OWF files

Specify whether or not to embed (paste) external fonts in the OWF file.

NONE	: External fonts are not embedded.
USER	: External fonts are embedded.

If this option is omitted, it will operate as if "NONE" was specified.

Caution

- External fonts to be embedded should be registered using one of the following methods (unregistered external fonts are not embedded):
  - Register fonts using the -gowfregfont option of prprint
  - Register fonts on the [OWF File Font Registration] window (for [Windows])
  - Register fonts using an external font embedding command (for [UNIX OS])
- The external font embedding function is not supported in the following cases:
  - When creating OWF files in the English environment
  - When using the Web plug-in in the English environment
  - When performing combination-form output

-gowfregfont external font registration specification

Register external font files stored in a given folder. Register the external font file with the command in the following cases:

- To embed external fonts not registered in the environment setting
- To temporarily change external fonts registered in the environment setting to different external fonts, and embed the changed fonts

When this option is omitted, or for fonts not specified in this option, fonts registered in the setup will be applied.
The following shows how to specify a TTF file and a TTC file. When registering multiple files, separate them with a semicolon (;).
If specification is done multiple times for a font file, the external font file specified at the end is applied.

When specifying a TTF file

Specify in "ttfpath,ttepath" format.

ttfpath	: Full path of the font file (TTF)
ttepath	: Full path of the external font file to be linked

When specifying full path of the font file (TTF) and full path of the external font file to be linked, separate them using a comma (,).

When specifying a TTC file

Specify in "ttcpath,ttepath,order" format.

ttcpath	: Full path of the font file (TTC)
ttepath	: Full path of the external font file to be linked
order	: Specify the position of the target font in the TTC file. (when specifying the first font, specify "1")

Specify the full path of the font file (TTC), the full path of the external font file to be linked, and the number that represents the position of the target font in the font file (TTC), separating them with comma (,).
The following displays a specification example for [Windows]. The following example registers the external font file (c:¥temp¥1.tte) that is linked to the TTF file (c:¥temp¥f.ttf), and the external font file (c:¥temp¥2.tte) that is linked to the first font in the TTC file (c:¥temp¥c.ttc).

```
-gowfregfont "c:¥temp¥f.ttf,c:¥temp¥1.tte;c:¥temp¥c.ttc,c:¥temp¥2.tte,1"
```

Caution

- If an external font file is registered with this option for a font registered in the setup, the external font file specified with this option will be applied.
- When specifying the -gowfregfont option, you cannot specify a TTC file in the ttfpath parameter. An error will occur if specified.
  You cannot specify a TTF file in the ttcpath parameter.
- Do not specify external font files having a same name but different storage destinations.
- You cannot use a "comma (,)" or a "semicolon (;)" in full path.
- The external font embedding function is not supported in the following cases:
  - When creating OWF files in the English environment
  - When using the Web plug-in in the English environment
  - When performing combination-form output

-gowfcodereplace Substitute character specification

Specify whether or not to use substitute characters for output when characters that cannot be output exist during Web-to-local-print mode operation (OWF file creation).

NO : Substitute characters are not used.

YES : Substitute characters are used.

If this option is omitted, it will operate as if "NO" was specified.
In List Creator, forms and input data (data files) are converted to Shift-JIS character code internally in the program and then processed, if the following conditions are met:

- When performing Web-to-local-print mode operation in UNIX OS (when creating OWF files)
- When character code of the runtime environment of user application (setting of environment variable LANG) is EUC or UNICODE (UTF8)

If the above conditions are met, it is necessary to convert to the character code of Web client (Windows environment) which is output destination of the form. Therefore, characters which cannot be output in Shift-JIS environment may be included.

Caution

- When specification of this option is omitted, an error will occur if a character which cannot be converted to Shift-JIS exists in a form or input data (data file).
- Character code conversion is not performed in Shift-JIS environment of Solaris, and in Windows environment. Therefore, specification of this option will be invalid.

-gcmform form name for multi-form/combination-form when creating OWF files

Specify the form name for multi-form output and combination-form output.
Specify multiple form names in the order of output separating with a semicolon (;) as shown below:

```
Form1; Form2; Form3
```

Caution

- In the following case, be sure to specify the form name with this option:
  - When performing multi-form output/combination-form output when creating an OWF file
    (when the -grpdelimit option is specified)
  - When creating an OWF file during use of XBRL data support/Navigator links function
- This option will be invalid in the following case:
  - When the form used for creating an OWF file is transferred during connector linkage

-gcmvisualfile media data file name when creating OWF files

Specify the media data file name used for creating an OWF file with its full path.
When using multiple files, specify the file names in the order of output separating with a semicolon (;) as shown below:

```
File 1; File 2; File 3
```

Caution

- Specify the media data file name for image fields in the data file, with only the file name.
- In the following cases, specify only the file name with this option:
  - When the file used for creating an OWF file is transferred during remote form output
- This option will be invalid in the following case:
  - When the file used for creating an OWF file is transferred during connector linkage

4.1.2.4.9 Options for Excel File Output Information

Note

- For the support range and points to note for Excel file output, refer to the Online Manual "Setup & Operation".

-keepxlsx storage destination file name when outputting to an Excel file

Specify the storage destination file name (name of the Excel file to be saved) within the following ranges:

For [Windows]

Specify with its full path, within 259 characters and 512 bytes.

For [UNIX OS]

Specify with its full path, within 512 bytes. You cannot use full-width characters and half-width katakana characters.

When this option is omitted, the storage destination file name specified in the [File (Excel)] tab in the [Form Output Methods] window will be applied.

The storage destination file name must be specified using one of these methods.

Caution

- The file extension of the Excel file must be ".xlsx".
- It is not possible to specify only a folder name.
- If the Excel file output fails when a file with the same name already exists, the original Excel file may also be deleted.

Note

- The access privileges of the user that outputs the form are given to the Excel file.
- If the specified folder or directory does not exist, it is automatically created. When it is automatically created, the same access privileges as the parent folder or directory are given to it.
  If the user outputting the form does not have access privileges to the automatically created folder or directory, an error will occur.
- If a file with the same name as the specified storage destination file name already exists, it is replaced with the new file if it has privileges to overwrite the file. An error will occur if there is no privilege to overwrite the file.

-inexcelinfofile Excel document information file name

Specify the name of the document information file of the Excel file with its full path.

Excel document information file is a file in which Excel file output information (such as attribute information or property information) can be collectively specified when outputting a form as an Excel file.

Use it to specify Excel file output information which is not supported by the form properties or each command option, when outputting to an Excel file.

Caution

- For an Excel document information file, do not specify Excel file output information supported with the [File (Excel)] tab of the [Form Output Methods] window or with other prprint command options.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When an Excel document information file is transferred during remote form output
  - When an Excel document information file is transferred during connector linkage
  - When an Excel document information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links

-gxlsxoutputform output method of details when outputting to an Excel file

Specify the operation when detail data exceeds the height of a print range during form output of multipart tables.

PAGE : Change a sheet with the height of a print range and output.

CONT : Output without changing a sheet with the height of a print range.

When this option is omitted, the output method of details specified in the [File (Excel)] tab in the [Form Output Methods] window will be applied.

Caution

- This option will be invalid when the form format is not multipart table.

-gxlsxsheetname specification of the sheet name of the Excel file to be output

Specify setting method (naming method) of the sheet name of the Excel file to be output.

FORM : Specify this when the form name is output as the sheet name.
If you use the form name as the sheet name and perform multi-form output, the sheet name is switched when the form is switched.
When performing combination-form output, the combination-form name is set as the sheet name. The sheet name is also switched when the combination-form name is switched.

FIXED : Specify this when outputting a fixed string as the sheet name. If you use a fixed string as the sheet name, specify the string within 31 characters after "FIXED=".
If you set a fixed string as sheet name and perform multi-form output, the specified fixed string is used for the sheet name of all the forms.

When this option is omitted, the sheet name specified with the -gxlsxsheetnameitem option will be applied. When this option as well as the -gxlsxsheetnameitem option are omitted, the sheet name specified in the [File (Excel)] tab in the [Form Output Methods] window will be applied.
The following displays a specification example:

- When outputting the form name as the sheet name

  -gxlsxsheetname FORM

- When using a fixed string (Divisional Sales) as the sheet name
  -gxlsxsheetname FIXED=Divisional Sales

Caution

- Do not use the following characters in sheet names:
  "¥", "/", "?", "*", "[", "]", ":"
  Do not specify "'" (a single quotation mark) before or after the string (you can use it in the string).
- If you want to specify a fixed string by enclosing it in double quotation marks ("), it is necessary to specify it as follows:
  -gxlsxsheetname "FIXED=XXXX"
  You can use double quotation marks (") for a fixed string only to enclose it.
- An error occurs if there is a space between FIXED and equal sign (=) (FIXED =XXXX).
- If a fixed string is not specified after "FIXED=", this option is considered as unspecified (omitted).

Note

- For sheet name, the difference between full-width and half-width characters, or uppercase and lowercase is not recognized. These characters will be treated as the same.
- In case a sheet name of 32 characters or more is specified, the sheet name is truncated to fit 31 characters (Characters from the 32nd characters onwards are truncated).
- For details on Excel sheet name specification such as output results corresponding to this specification, and the points to note when specifying it, see the Online Manual "Setup & Operation".

-gxlsxsheetnameitem specification of a data field name whose input data is used as the sheet name of the Excel file to be output

Specify the name of a field whose data value is output as the sheet name when outputting to an Excel file.
If you specify this option, the first data value that is output in the field specified here will be used as the name of all sheets of the Excel file to be output.
The fields that can be specified are "Text field" or " Hidden field" (whose field format is text field only).
The following is a specification example where data value of "CustomerName" field is used as the sheet name.

-gxlsxsheetnameitem CustomerName

Caution

- If the field name specified in this option is a configuration item of a group item, "Use Configuration Item Name" must be selected in the [General] tab of the [Data Definitions] window. In case of the body area group item of simple table, sticky label and block repeat format, it can be specified even if "Use Group Item Name" is selected.
- If the field specified in this option does not exist in the form, sheet name specification will be invalid.

Note

- If you specify a data value with this option, as well as a sheet name with the -gxlsxsheetname option or in the [File (Excel)] tab of the [Form Output Methods] window, both of them will be joined by a hyphen into one sheet name.
  When the form name is specified: Form name-Data value
  When a fixed string is specified: Fixed string-Data value
- For sheet name, the difference between full-width and half-width characters, or uppercase and lowercase is not recognized. These characters will be treated as the same.
- If the data value of the selected field is 32 characters or more, it is truncated to fit 31 characters (Characters from the 32nd characters onwards are truncated).
- When performing combination-form output, the sheet name is set according to the field name of the form descriptor information that is output first.
- For details on Excel sheet name specification such as output results corresponding to this specification, and the points to note when specifying it, see the Online Manual "Setup & Operation".

-gxlsxoutinfofile ECM information file name

Specify the ECM information file name corresponding to the Excel file to be output with its full path, within 259 characters (within 512 bytes).
Be sure to specify this when placing the output Excel file in a folder linked with ECM products.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this option:
  - When an ECM information file is transferred during remote form output
  - When an ECM information file is transferred during connector linkage
  - When an ECM information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

4.1.2.5 [Description Example]

For prprint command description examples, refer to the following:
=>"3.1.2 prprint Command Description Example"

4.1.2.6 [Return Values]

The following are return values of the prprint command.

When using [Windows]

When the -jobwait option is not specified

Return value	Definition
0	Normal end
-1	Abnormal end

When the -jobwait option is specified

Return value	Definition
0	(Form output is completed. Message will not be output)
-101	Spool document was deleted.
-102	Spool document was held.
-103	Form could not be output because the output device is offline or "Stopped".

Return value	Definition
-104	Form could not be output because the output device is out of paper.
-105	Form could not be output because of an output device error.
-106	An error occurred during transfer of the spool document to the remote output device.
-107	An error occurred when saving after output.
-108	Output end wait was released to wait for a reply to the paper replacement or output start message.
-1	(Some other error has occurred. Another message will be displayed)

Error detail codes when failing in creating an OWF file

Detail code	Definition
1	Access to the specified file or directory has been refused. Check the access privileges of the file or directory specified in the parameter.
2	Failed to compress the OWF file.
3	Insufficient disk space to create the OWF file.
5	File or directory cannot be created on the volume. Check the following: • Another OWF file with the same name may already exist in the directory in which the OWF file is to be created. • The upper limit to open a file may be exceeded.
7	There is insufficient disk space to create a file.
8	The specified handle is invalid.
9	Cannot find the file or directory specified in the parameter.
10	Parameters are set incorrectly. The parameters required for creating an OWF file may not be set.
12	Could not secure enough memory for the process. Check the following: • Are any unnecessary processes running? • Is there enough virtual memory? • Is the installed memory sufficient?
13	The process unsupported by the product was specified.
14	Some other error has occurred.
26	The value specified for parameter is incorrect.
101	Code conversion failed.
102	OWF file could not be created because a file with the same name already exists.
201	Failed to access the program settings.
202	Program settings may be damaged. Register the OWF file font, and then retry.
203	Failed to access the font file specified in the program settings or the method.
204	Font file specified in the program settings or the -gowfregfont option may be corrupt.
205	Failed to access the external font file specified in the required settings or method.
206	Cannot find a font in the font file to match the font number specified in the program settings or the -gowfregfont option.
207	An error occurred while reading the form.
208	Failed to access the form specified in the parameter. Check for the access privileges and existence of the file.
209	The form descriptor file specified in the parameter may be corrupt.
210	Failed to access the data file specified in the parameter. Check for the access privileges and existence of the file.
211	The data file specified in the parameter may be corrupt.
212	Failed to create the work file.
213	Failed to read the substitute font info file.
214	Failed to analyze the substitute font info file.

When using [UNIX OS]

Return value	Definition
0	Normal end
Other than 0	Abnormal end

Error detail codes when failing in creating an OWF file

Detail code	Definition
1	Access to the specified file or directory has been refused. Check the access privileges of the file or directory specified in the parameter.
2	Failed to compress the OWF file.
3	Insufficient disk space to create the OWF file.
5	File or directory cannot be created on the volume. Check the following: • Another OWF file with the same name may already exist in the directory in which the OWF file is to be created. • The upper limit to open a file may be exceeded.
7	There is insufficient disk space to create a file.
8	The specified handle is invalid.
9	Cannot find the file or directory specified in the parameter.
10	Parameters are set incorrectly. The parameters required for creating an OWF file may not be set.
12	Could not secure enough memory for the process. Check the following: • Are any unnecessary processes running? • Is there enough virtual memory? • Is the installed memory sufficient?
13	The process unsupported by the product was specified.
14	Some other error has occurred.
26	The value specified for parameter is incorrect.
101	Code conversion failed.
102	OWF file could not be created because a file with the same name already exists.
201	Failed to access the program settings.
202	Program settings may be damaged. Register the OWF file font, and then retry.
203	Failed to access the font file specified in the program settings or the method.
204	Font file specified in the program settings or the -gowfregfont option may be corrupt.
205	Failed to access the external font file specified in the required settings or method.
206	Cannot find a font in the font file to match the font number specified in the program settings or the -gowfregfont option.
207	An error occurred while reading the form.
208	Failed to access the form specified in the parameter. Check for the access privileges and existence of the file.
209	The form descriptor file specified in the parameter may be corrupt.
210	Failed to access the data file specified in the parameter. Check for the access privileges and existence of the file.
211	The data file specified in the parameter may be corrupt.
212	Failed to create the work file.
213	Failed to read the substitute font info file.
214	Failed to analyze the substitute font info file.

4.1.2.7 [Cautions]

- For notes on specification of file names and file storage destinations, refer to the following:
=>"4.1.2.2 [Description Format]"

4.1.3 prprintx Command

4.1.3.1 [Function]

Specify the prprint command line in a data file to output a form.

4.1.3.2 [Description Format]

The following is the description format.
[ ] indicates that this can be omitted.
In Option 1, Option 2, Option 3 ..., the prprintx command options are described.
In the prprintx command options, "data file name" cannot be omitted.

```
prprintx    [Option 1] [Option 2] [Option 3] ...
```

●Points to note during command specification

When using [Windows]

- Do not specify a string of 0 length ("" on command line) in the values specified in command options. If a string of 0 length is specified, the command may not operate properly.
- When blanks or characters having special meaning to the executing environment are included in the string specified for the command options, enclose it with double quotation marks (").

When using [UNIX OS]

- Do not specify a string of 0 length ("" on command line) in the values specified in command options. If a string of 0 length is specified, the command may not operate properly.
- When a blank is included in the string specified for the command options, enclose it with double quotation marks (").
- There are characters that have special meaning when the command is executed using shells such as the COBOL interface provided by List Creator, shell programs (Bourne shell, C shell, etc.), and system() functions of C language programs.

  The characters having special meaning are described below. For details on characters which have special meaning per shell, refer to the manual of the shell used.

  """, "'", "|", "¥", "\", ";", "$", "*", "?", etc.

  When specifying a character with special meaning as a command option, the special meaning must be deleted using one of the following methods:

  - Enclose the option in double quotation marks ("). (Not available for """, "¥", "\", and "$"). Example: When specifying a vertical bar (|) in the comment
    prprint -ttlcomment "|"
  - Enclose the option in single quotation marks ('). (Not available for "'", "¥" and "\").
    Example: When specifying a dollar sign ($) in the comment
    prprint -ttlcomment '$'
  - Specify a backslash (\) before the characters with special meanings.
    Example: When specifying a backslash (\) in the comment
    prprint -ttlcomment \\

  When starting a C language program by a command other than those above, however, no character with special meaning exists. Specify the options and use the command as usual.
- When executing the command from the command line, use the Bourne shell or C shell. Executing on a shell other than these may cause the characters set in the command option to be interpreted incorrectly, and may prevent proper operation.

●Points to note regarding specification of files and file storage destinations

- You can specify only local disk and remotely mounted directory as a file storage destination in the - prprintx command.
  For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

4.1.3.3 [List of Options]

The following is a list of the prprintx command options.

Table 4.2 List of prprintx command options

Option type	Option		[Operating system] W : Windows W64 : Windows (x64) S : Solaris L : Linux Y: Supported -: Unsupported			
			W	W64	S	L
Options for user resource information	-indatacode	input data character code	Y	Y	-	-
	data file name	(*1)	Y	Y	Y	Y

*1:Cannot be omitted.

4.1.3.4 [Explanation]

The following explains prprintx command options.
Function ranges and points to note of the options may vary depending on the operating system. The descriptions that are different depending on the operating system are explained respectively.

4.1.3.4.1 Options for user resource information

-indatacode input data character code

Specify the character code for the input data.

SJIS	: Shift-JIS
UCS2LE	: UNICODE (UTF16 little endian)
UCS2BE	: UNICODE (UTF16 big endian)
UTF8	: UNICODE (UTF8)

When omitted, the character code specified in the [General] tab of the [List Creator Settings] window will be valid.

Caution

- -indatacode option specified in the prprint command line in the data file will be invalid.
- When the input data format is "XML Format", only UNICODE (UTF8) or Shift-JIS can be specified for the XML file character code. In this option, use the character code specified in the XML declaration in the XML file. If the character code is not specified in the XML file, specify "UTF8" in this option or "UNICODE (UTF8)" in setup.

data file name

Specify the data file name in which the prprint command line is described on the first line.
Make sure to specify this option.

Caution

- The -f option specified in the prprint command line in the data file will be invalid.
- For data in data files, use the following character codes for description.
  - For [Windows]
    Character code of input data specified in the -indatacode option, or in the "Character Set" of the [General] tab of the [List Creator Settings] window for the List Creator print server
  - For [UNIX OS]
    Character code specified in the input data, environment variable LANG, and environment variable OA_EUCTYPE
- Describe the prprint command line on the first line of the data file and enter the input data from the second line. (Do not enter blank lines.)
- Also, when the input data format is "XML Format", create a data file in which the prprint command line is described on the first line.

4.1.3.5 [Description Example]

For prprintx command description examples, refer to the following:
=>"3.1.3 prprintx Command Description Example"

4.1.3.6 [Return Values]

The following are return values of the prprintx command.

When using [Windows]

When the -jobwait option is not specified in the prprint command line in the data file

Return value	Definition
0	Normal end
-1	Abnormal end

When the -jobwait option is specified in the prprint command line in the data file

Return value	Message
0	(Form output is completed. Message will not be output)
-101	Spool document was deleted.
-102	Spool document was held.
-103	Form could not be output because the output device is offline or "Stopped".
-104	Form could not be output because the output device is out of paper.
-105	Form could not be output because of an output device error.
-106	An error occurred during transfer of the spool document to the remote output device.
-107	An error occurred when saving after output.
-108	Output end wait was released to wait for a reply to the paper replacement or output start message.
-1	(Some other error has occurred. Another message will be displayed)

When using [UNIX OS]

Return value	Definition
0	Normal end
Other than 0	Abnormal end

4.1.3.7 [Cautions]

- When monitoring incoming data, specify the character code of the incoming data file in the "Character Set" of the [General] tab of the [List Creator Settings] window for the List Creator print server in advance.
- For notes on specification of file names and file storage destinations, refer to the following:
=>"4.1.3.2 [Description Format]"

4.2 Remote Form Output Command

The commands used during remote form output are described below.

- prputprt command (output a form at the List Creator print server from the application server)

4.2.1 Environment Variables Set during Execution of the Remote Form Output Command (When Using [UNIX OS])

When this command is used, set the following environment variable:

- LD_LIBRARY_PATH
- PATH
- LANG
- OA_EUCTYPE

When executing the command from the command line, use the Bourne shell or C shell. Executing on a shell other than these may cause the characters set in the command option to be interpreted incorrectly, and may prevent proper operation.

4.2.1.1 LD_LIBRARY_PATH (required)

This environment variable specifies the library storage directory of List Creator.
Be sure to specify this environment variable.
Add the following library storage directories of List Creator to this environment variable so that they will have the highest priority:

- "/opt/FJSVoast/lib"

When using Charset Manager, add the following library storage directories.

- For [Solaris/Linux for x86/Linux for Itanium]
  - "/etc/opt/FSUNiconv/lib"
- For [Linux for Intel64]
  - "/etc/opt/FSUNiconv/lib"
  - "/etc/opt/FSUNiconv/lib64"

The following displays a specification example:

Example: When specifying the LD_LIBRARY_PATH environment variable using the Bourne shell

```
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

4.2.1.2 PATH (when required)

This environment variable specifies the command storage directory of List Creator.
When executing the command with only the command name, add the List Creator command storage directory ("/opt/FJSVoast/bin") to this environment variable.
When specifying commands by their full paths, it is not necessary to specify this environment variable.
The following displays a specification example:

Example: When specifying the PATH environment variable using the Bourne shell

```
PATH=/opt/FJSVoast/bin:$PATH
export PATH
```

4.2.1.3 LANG (required)

This environment variable specifies the character code of the command execution environment (character code for when the command handles the command options and forms). This character code is also used for the input data when the input data format is "Variable Length", "Fixed Length", or "CSV Format".
Be sure to specify this environment variable.

The following displays values that can be specified in the environment variable LANG for each operating system of the application server.

When the application server runs on Solaris

Value that can be specified (*1)	Definition
ja (*2) ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.PCK	Indicates a Shift-JIS character code.
ja_JP.UTF-8 en_US.UTF-8	Indicates a UNICODE (UTF8) character code.

*1:If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2:If "ja" or "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE. Operations are same for both "ja" and "ja_JP.eucJP".

When the application server runs on Linux

Value that can be specified (*1)	Definition
ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.UTF-8 en_US.UTF-8 (*3)	Indicates a UNICODE (UTF8) character code.

*1:If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2:If "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE.

*3:"en_US.UTF-8" is not supported for [Linux for x86/Linux for Itanium].

The following displays a specification example:

Example: When specifying the environment variable LANG

(1) When using the Bourne shell to specify UNICODE (UTF8)

```
LANG=ja_JP.UTF-8
export LANG
```

(2) When using the Bourne shell to specify Shift-JIS code (only when the application server runs on Solaris)

```
LANG=ja_JP.PCK
export LANG
```

4.2.1.4 OA_EUCTYPE (when required)

When EUC code is specified as a character code, this environment variable specifies the EUC code type.

When the application server runs on Solaris

If EUC code ("ja" or "ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If Shift-JIS code ("ja_JP.PCK") or UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified. However, it will be valid if Shift-JIS code is specified when performing remote form output to Linux, because the character code is converted from Shift-JIS code to EUC code on Solaris.

When the application server runs on Linux

If EUC code ("ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified.

The following displays values that can be specified in the environment variable OA_EUCTYPE:

Value that can be specified	Definition
u90 (*1)	Indicates an EUC (U90) character code.
s90 (*1)	Indicates an EUC (S90) character code.

*1:Be sure to specify it in lowercase.

The following displays the relationship between the environment variable LANG and the environment variable OA_EUCTYPE for each operating system of the application server.

When the application server runs on Solaris

Environment variable LANG	Environment variable OA_EUCTYPE	Character code with which List Creator commands operate on the application server		
		When performing remote form output to Windows	When performing remote form output to Solaris (*1)	When performing remote form output to Linux (*1)
ja ja_JP.eucJP	u90	U90 (*2)	U90	U90
	s90	S90 (*2)	S90	S90
	None (*3)	Solaris standard EUC (*2)	U90	U90
ja_JP.PCK	u90 (*4)	Shift-JIS	Shift-JIS	U90 (*5)
	s90 (*4)			S90 (*5)
ja_JP.UTF-8 en_US.UTF-8	-(*6)	UNICODE (UTF8)	UNICODE (UTF8)	UNICODE (UTF8)

*1:When performing remote form output to UNIX OS, input data is transferred to the List Creator print server as is.

*2:When performing remote form output to Windows, if the character code of the input data is EUC and the input data format is "Variable Length", "Fixed Length", or "CSV Format", it is converted to Shift-JIS on UNIX OS and then transferred to the List Creator print server (Windows). If the character code of the input data is Shift-JIS or Unicode, it is transferred to the List Creator print server (Windows) as is.

*3:If the environment variable OA_EUCTYPE is not specified when EUC code is specified in the environment variable LANG, the following characters may not be output correctly:

- User defined characters (U90 / S90)
- OASYS extension kanji characters (U90)
- JEF extension kanji/non-kanji characters (U90)
- Among JIS kanji/non-kanji characters, the characters whose style was changed in JIS in 1983, and the characters which were added to JIS in 1990 (U90 / S90)

*4:It is valid only when performing remote form output to Linux and the character code of the input data is Shift-JIS. When performing remote form output to a non-Linux operating system and the character code of the input data is Shift-JIS, it will be invalid even if specified.

*5:When performing remote form output to Linux, if the character code of the input data is Shift-JIS and the input data format is "Variable Length", "Fixed Length", or "CSV Format", it is converted to EUC (U90 or S90) on Solaris according to the setting of OA_EUCTYPE, and then transferred to the List Creator print server (Linux). If the character code of the input data is EUC or Unicode, it is transferred to the List Creator print server (Linux) as is.

*6:It will be invalid even if specified.

When the application server runs on Linux

Environment variable LANG	Environment variable OA_EUCTYPE	Character code with which List Creator commands operate on the application server		
		When performing remote form output to Windows	When performing remote form output to Solaris (*1)	When performing remote form output to Linux (*1)
ja_JP.eucJP	u90	U90 (*2)	U90	U90
	s90	S90 (*2)	S90	S90
ja_JP.UTF-8 en_US.UTF-8 (*4)	-(*3)	UNICODE (UTF8)	UNICODE (UTF8)	UNICODE (UTF8)

*1:When performing remote form output to UNIX OS, input data is transferred to the List Creator print server as is.

*2:When performing remote form output to Windows, if the character code of the input data is EUC and the input data format is "Variable Length", "Fixed Length", or "CSV Format", it is converted to Shift-JIS on UNIX OS and then transferred to the List Creator print server (Windows). If the character code of the input data is Shift-JIS or Unicode, it is transferred to the List Creator print server (Windows) as is.

*3:It will be invalid even if specified.

*4:"en_US.UTF-8" is not supported for [Linux for x86/Linux for Itanium].

The following displays a specification example:

Example: When specifying the environment variables LANG and OA_EUCTYPE

(1) When using the Bourne shell to specify EUC (U90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
export LANG OA_EUCTYPE
```

(2) When using the Bourne shell to specify EUC (S90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
export LANG OA_EUCTYPE
```

Caution

- It is necessary to convert the character code of the form and specify the command options according to the input data. For details, refer to the description about deploying and preparing resources in the Online Manual "Setup & Operation".

4.2.2 prputprt Command

4.2.2.1 [Function]

Transfers forms, data files and media data files to the List Creator print server from the application server to output forms.

4.2.2.2 [Description Format]

The following is the description format.
[ ] indicates that this can be omitted.
In Option 1, Option 2, Option 3 ..., prputprt command options are described.
In the prputprt command options, "-h" cannot be omitted.

```
prputprt    [Option 1] [Option 2] [Option 3] ...
```

●Points to note during command specification

When using [Windows]

- When blanks or characters having special meaning to the executing environment are included in the string specified for the command options, enclose it with double quotation marks (").

When using [UNIX OS]

- When a blank is included in the string specified for the command options, enclose it with double quotation marks (").
- There are characters that have special meaning when the command is executed using shells such as the COBOL interface provided by List Creator, shell programs (Bourne shell, C shell, etc.), and system() functions of C language programs.

  The characters having special meaning are described below. For details on characters which have special meaning per shell, refer to the manual of the shell used.

  """, "'", "|", "¥", "\", ";", "$", "*", "?", etc.

  When specifying a character with special meaning as a command option, the special meaning must be deleted using one of the following methods:

  - Enclose the option in double quotation marks ("). (Not available for """, "¥", "\", and "$"). Example: When specifying a vertical bar (|) in the comment
    prputprt ... -z -ttlcomment "|"
  - Enclose the option in single quotation marks ('). (Not available for "'", "¥" and "\").
    Example: When specifying a dollar sign ($) in the comment
    prputprt ... -z -ttlcomment '$'
  - Specify a backslash (\) before the characters with special meanings.
    Example: When specifying a backslash (\) in the comment
    prputprt ... -z -ttlcomment \\

  When starting a C language program by a command other than those above, however, no character with special meaning exists. Specify the options and use the command as usual.

●Points to note regarding specification of files and file storage destinations

- You can specify only local disk, UNC specification (¥¥computer_name¥shared_name¥directory_name), and remotely mounted directory as a file storage destination on the application server.
  You can specify only local disk and remotely mounted directory as a file storage destination on the List Creator print server.
  For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

4.2.2.3 [List of Options]

The following is a list of the prputprt command options.

Table 4.3 List of prputprt command options(1 / 2)

Option type	Option		[Operating system of the application server] W : Windows W64 : Windows (x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported -: Unsupported					
			W	W64	S	L64	L	LI
Options for Operational Information	-h	target computer name (*1)	Y	Y	Y	Y	Y	Y
	-e	error message output method	Y	Y	Y	Y	Y	Y
	-c	compression transfer specification	Y	Y	Y	Y	Y	Y
	-b	form transfer specification	Y	Y	Y	Y	Y	Y
	-u	process mode of the transfer destination file	Y	Y	Y	Y	Y	Y

Table 4.3 List of prputprt command options(2 / 2)

Option type	Option		[Operating system of the application server] W : Windows W64 : Windows (x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported -: Unsupported					
			W	W64	S	L64	L	LI
Options for User Resource Information	-s	"form name" (*2)	Y	Y	Y	Y	Y	Y
	-d	transfer form storage directory (*2)	Y	Y	Y	Y	Y	Y
	-indatacode	input data character code (*3)	Y	Y	Y	Y	Y	Y
	-n	transfer data file name (*2)	Y	Y	Y	Y	Y	Y
	-lcvisualfile	transfer media data file name (*2)	Y	Y	Y	Y	Y	Y
	-lcfile	transfer file name (*2)	Y	Y	Y	Y	Y	Y
	-lcbinfile	transfer file name during binary transfer (*2)	Y	Y	Y	Y	Y	Y
	-a	form storage directory for form output (*2)	Y	Y	Y	Y	Y	Y
Options for User Resource Information for Multi-form/ Combination-form Output	-lcform	transfer form name for multi-form/combination-form output (*2)	Y	Y	Y	Y	Y	Y
	-grpdelimit	form name data separator character for multi-form/ combination-form	Y	Y	Y	Y	Y	Y
	-grpbytes	form name data field length for multi-form	Y	Y	Y	Y	Y	Y
	-gcbform	combination-form output	Y	Y	Y	Y	-	-
Options for e-Record information	-lclwfaxrcvfile	The name of the transferred FAX recipient information file for sending an e-Record of the form by FAX (*2) (*3)	Y	Y	Y	Y	Y	Y
Options for FAX send information	-lcinfaxrcvfile	The name of the transferred FAX recipient information file for sending a form by FAX (*2) (*4)	Y	Y	Y	Y	Y	Y
Other Options	-rmuserpasswd		Y	Y	-	-	-	-
	-z	form output option	Y	Y	Y	Y	Y	Y

*1:Cannot be omitted.

*2:For notes on specification of file names and file storage destinations, refer to the following:

=>"3.5 Cautions regarding Development and Execution of User Applications"

*3:This can be specified only if the List Creator print server supports making e-Record and sending FAX.

*4:This can be specified only if the List Creator print server supports sending FAX.

The differences between the required options for outputting a single form, performing multi-form output, and performing combination-form output are indicated below:

- When outputting a single form
  - -h option
  - -s option
- When performing multi-form output
  - -h option
  - -b option (when the form is not transferred) or -lcform option (when the form is transferred)
  - -n option
  - -grpdelimit option

- When performing combination-form output
  -h option
  -b option (when the form is not transferred) or -lcform option (when the form is transferred)
  -n option
  -grpdelimit option
  -gcbform option

4.2.2.4 [Explanation]

The following explains prputprt command options.
Function ranges and points to note of the options may vary depending on the operating system. The descriptions that are different depending on the operating system are explained respectively.

Note

- The work directory for remote form output is specified on the List Creator print server in one of the following method according to the print server operating system.
  - If the List Creator print server runs on Windows
    Specify the work directory in the [General] tab of the [List Creator Settings] window.
  - If the List Creator print server runs on UNIX OS
    Specify the work directory with the prsetremenv command.

4.2.2.4.1 Options for Operational Information

-h target computer name

Specify the computer name of the transmission target List Creator print server with the TCP/IP host name or IP address.
Make sure to specify this option.

Caution

- If the List Creator print server runs on Windows, configure network settings so that the computer name and the TCP/IP host names are the same. If the computer name and the TCP/IP host names differ, specify them by the IP address.

-e error message output method

Specify the output method of the error message.

e : Outputs as follows:

For [Windows] : Outputs the error to an event log.

For [UNIX OS] : Outputs the error to standard error output.

m : Outputs as follows:

For [Windows] : Displays the error in a message box.

For [UNIX OS] : Outputs the error to standard error output and a system log.

If this option is omitted, it will operate as if "e" was specified.

Caution

- On the List Creator print server, errors will be reported in the following ways, depending on the print server operating system type.
  - If the List Creator print server runs on Windows: Event log
  - If the List Creator print server runs on Solaris: System log (/var/adm/messages)
  - If the List Creator print server runs on Linux: System log (/var/log/messages)

-c compression transfer specification

Specify when compressing and transferring the data such as forms, data files, and media data files of the application server.
When this option is omitted, the data is transferred without compression.

-b form transfer specification

Specify this option when using a form that is already placed in the List Creator print server to output the form, without transferring the form from the application server to the print server.
If this option is omitted, the form of the application server is transferred to the work directory of the List Creator print server.
When performing multi-form output or combination-form output (when the -grpdelimit option is specified), make sure to specify this option or -lcform option. However, if both options are specified at the same time, an error will occur.

Caution

- If the List Creator print server runs on UNIX OS, and when performing FM output or FNP output to a printer, be sure to place the form descriptor information on the List Creator print server, and specify this option.
  If this option is omitted, overlays may not be printed, or different overlays may be printed.

-u process mode of the transfer destination file

This option is valid only when transferring the form from the application server to the List Creator print server (when the -b option is not specified).
Specify what kind of processing will be performed when a form with the same name exists in the work directory of the List Creator print server.

y	: Overwrites all. This will also overwrite read-only forms.
q	: Transfers and overwrites only if the form in the application server has been renewed (when the date on the file of application server form is newer than that of the List Creator print server). This will also overwrite read-only forms.

If this option is omitted, it will operate as if "q" was specified.

4.2.2.4.2 Options for User Resource Information

-s "form name"

This option is only valid when a single form is output (when the -grpdelimit option is not specified).
Specify the form name by enclosing it in double quotation marks (").
When performing a single form output (when the -grpdelimit option is not specified), make sure to specify this option.

Note

- When performing multi-form output or combination-form output (when the -grpdelimit option is specified), the form name is specified in the input data, thus it is not necessary to specify in this option.

-d transfer form storage directory

This option is valid only when transferring the form from the application server to the List Creator print server (when the -b option is not specified).
Specify the full path of the directory where the form to be transferred by the application server is stored.

If omitted when transferring the form (when the -b option is not specified), specification of the following directory will be enabled.

For [Windows]

Work directory specified in the [General] tab of the [List Creator Settings] window for the application server

For [UNIX OS]

Work directory specified with the prsetremenv command on the application server

Also, the following substitute parameters can be set for the directory name.

%ASSETSDIR% : It will operate as if the following directory was specified.

For [Windows]

The form storage directory specified in the [General] tab of the [List Creator Settings] window (when List Creator Designer is installed, it is also possible to change the form storage directory from the [Options] window of the [Form Descriptor List] window).

For [UNIX OS]

Form storage directory set with the prsetassetsdir command

Caution

- Refer to the following for cautions when specifying the form storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"

-indatacode input data character code

Specify the character code for the input data. The character code specified on the application server will be adopted on the List Creator print server.

SJIS : Shift-JIS

UCS2LE : UNICODE (UTF16 little endian)

UCS2BE : UNICODE (UTF16 big endian)

UTF8 : UNICODE (UTF8)

When this option is omitted, the following specification will be valid:

For [Windows]

The character code specified in the [General] tab of the [List Creator Settings] window will be valid.

For [UNIX OS]

Specification in the environment variable LANG and environment variable OA_EUCTYPE will be valid.

Caution

- Specify as follows when the input data format is "XML Format".
  - For [Windows]
    This option is only valid when the input data format is "Variable Length", "Fixed Length", or "CSV Format". When the input data format is "XML Format", specify the character code in the XML declaration in the XML file. If the XML declaration in the XML file is omitted, or if the character code is not specified in the XML declaration, it is regarded as UNICODE (UTF8).
  - For [UNIX OS]
    Specify Shift-JIS (SJIS) regardless of the character code specified in the XML declaration in the XML file.
- In case of [UNIX OS], to specify EUC character code, do not specify this option (omit it), and specify EUC in the environment variable LANG and OA_EUCTYPE.
- To use the form descriptor information for which Unicode characters are defined, specify any UNICODE for the input data character code.
- When outputting a form in the English environment (English locale), specify any UNICODE for the input data character code.

-n transfer data file name

When transferring the data file of the application server to the List Creator print server, specify the data file name of the application server with its full path.
For [Windows], specify it within 259 bytes.
The data file transferred to the List Creator print server will be deleted after form output.
If omitted when outputting a single form (when the -grpdelimit option is not specified), the data file will not be transferred, and a data file with the same name as the form name under the form storage directory on the List Creator print server ("form_name.dat") will be used as the specified file.
When performing multi-form output or combination-form output (when the -grpdelimit option is specified), make sure to specify this option.

Caution

- For data in data files, be sure to use the following character codes for description.
  - For [Windows]
    Describe with the character code specified in the [General] tab of the [List Creator Settings] window, or with the character code of input data specified in the -indatacode option.
  - For [UNIX OS]
    Describe with the character code specified in the environment variable LANG and environment variable OA_EUCTYPE, or in the -indatacode option.
- If the application server runs on UNIX OS and the input data format is "XML Format", use the character code specified in the XML declaration in the XML file.
- If the data file is described in EUC (U90), EUC (S90), or Solaris standard EUC when the application server is running on UNIX OS and the List Creator print server is running on Windows, it will be converted to Shift-JIS on the application server. Therefore, it must be specified within the range of Shift-JIS character code.
  If a character that does not exist in Shift-JIS is selected, degeneracy will occur. In that case, a half-width or full-width underscore is output as a substitute character.

-lcvisualfile transfer media data file name

When transferring the media data file of the application server to the List Creator print server, specify the media data file name of the application server with its full path. When specifying multiple files, separate them using a semicolon (;).
The media data file transferred to the List Creator print server will be deleted after form output.

When creating an OWF file using the transferred media data file, specify the media data file transferred by the application server for this option with its full path, and in addition, specify only the file name of the media data file transferred with the -gcmvisualfile option of the -z option.
When this option is omitted, the media data file will not be transferred.
During form output at the List Creator print server, the media data storage directory will be valid in the following order of priority:

1）Invalid (Only media data files transferred with this option are valid)
2）Media data storage directory specified with the -visualdir option of the -z option
3）Form storage directory during form output specified in the -a option
4）Directory specified as follows:
For [Windows]
Work directory specified in the [General] tab of the [List Creator Settings] window for the List Creator print server
For [UNIX OS]
Work directory specified in the List Creator print server

Caution

- When transferring the media data file, specify only the file name of the media data file in the input data for the image field.
- In case of [UNIX OS], when executing the command with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, etc., enclose the entire transfer media data file name in double quotation marks (").
  Example: -lcvisualfile "File name1;File name2;File name3"

-lcfile transfer file name

-lcbinfile transfer file name during binary transfer

When transferring the file of the application server to the List Creator print server, specify the file name of the application server to be transferred with its full path. When specifying multiple files, separate them using a semicolon (;).
The file transferred to the List Creator print server will be deleted after form output.
When this option is omitted, the file will not be transferred.
The following explains the specification method of each option.

-lcfile option

When transferring an information file and a combination-form descriptor file, be sure to specify this option.
When a file specified in this option is transferred from the application server to the List Creator print server, character code of the file is automatically converted.
The following explains the specification method of a file when transferring the file.

- When using a substitute font info file
  Specify it with this option and the -atmapfontfile option of the -z option. Specify only the file name in the -atmapfontfile option of the -z option.
- When using a barcode correct info file
  Specify it with this option and the -atbcodadjust option of the -z option. Specify only the file name in the -atbcodadjust option of the -z option.
- When using a form output information file
  Specify it with this option and the -p option of the -z option.
  Specify only the file name in the -p option of the -z option.
- When using an electronic form information file
  Specify it with this option and the -in2 option of the -z option. Specify only the file name in the -in2 option of the -z option.
- When using a PDF mail distribution information file for PDF mail distribution
  Specify it with this option and the -gpdfmailconffile option of the -z option.
  Specify only the file name in the -gpdfmailconffile option of the -z option.
- When using a PDF document information file
  Specify it with this option and the -in5 option of the -z option. Specify only the file name in the -in5 option of the -z option.

- When using an Excel document information file
  Specify it with this option and the -inexcelinfofile option of the -z option. Specify only the file name in the -inexcelinfofile option of the -z option.
- When using an ECM information file
  For PDF file output, specify it with this option and the -gpdfoutinfofile option of the -z option. Specify only the file name in the -gpdfoutinfofile option of the -z option.
  For Excel file output, specify it with this option and the -gxlsxoutinfofile option of the -z option. Specify only the file name in the -gxlsxoutinfofile option of the -z option.
- When using a combination-form descriptor file
  Specify it with this option and the -gcbfile option of the -z option. Specify only the file name in the -gcbfile option of the -z option.

-lcbinfile option

When transferring a file attached to a PDF file, an ECM linkage file, or a property replace file, be sure to specify this option.
A file specified in this option is transferred from the application server to the List Creator print server in binary mode.
The following explains the file specification method when transferring a file attached to a PDF file, an ECM linkage file, or a property replace file.

- When transferring a file to be attached to the PDF file
  Specify it with this option and the -gpdfembedfile option of the -z option. Specify only the file name in the -gpdfembedfile option of the -z option.
  The file names of PDF file attachments are enabled in the following order of priority:
  1）The file specified in this option (full path of the application server) and the -gpdfembedfile option of the -z option (file name only)
  2）PDF attachment file specified in the -gpdfembedfile option of the -z option (full path of the List Creator print server)
  3）PDF attachment file specified in this option (full path of the application server) and in "Document Management" of the [PDF Options] window, in the [File] tab in the [Form Output Methods] window (file name only)
  4）PDF attachment file specified in "Document Management" of the [PDF Options] window, in the [File] tab in the [Form Output Methods] window (full path of the List Creator print server)
- When transferring an ECM linkage file
  Specify it with this option and the "ATTRFILE_TMPL" keyword in the ECM information file. Specify only the file name in the "ATTRFILE_TMPL" keyword in the ECM information file.
  The specification of an ECM information file name is enabled in the following order of priority:
  1）An ECM linkage file specified with this option (full path of the application server) and the "ATTRFILE_TMPL" keyword in the ECM information file (file name only)
  2）An ECM linkage file specified with the "ATTRFILE_TMPL" keyword in the ECM information file (full path of the List Creator print server)
- When transferring a property replace file
  Specify it with this option and the -atpropertyreplace option of the -z option.
  Specify only the file name in the -atpropertyreplace option of the -z option.
  The specification of a property replace file name is enabled in the following order of priority:
  1）The file specified in this option (full path of the application server) and the -atpropertyreplace of the -z option (file name only)
  2）Property replace file specified in the -atpropertyreplace option of the -z option (full path of the List Creator print server)

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In case of [UNIX OS], if all the following conditions are met, it will be converted to Shift-JIS on the application server. Therefore, it must be specified within the range of Shift-JIS character code.
  - When the List Creator print server runs on Windows
  - When transferring the file with the -lcfile option
  - When the file is described in EUC (U90), EUC (S90), Solaris standard EUC, or UNICODE (UTF8) character code

  If a character that does not exist in Shift-JIS is selected, degeneracy will occur. In that case, a half-width or full-width underscore is output as a substitute character.

-a form storage directory for form output

This option is only valid when the application server form is not transferred to the List Creator print server, and when a form that is already placed in the print server is used for form output (when the -b option is specified).
Specify the form storage directory of the List Creator print server with its full path.
If omitted when not transferring the form (when the -b option is specified), specification of the following directory will be enabled.

For [Windows]

Form storage directory specified in the [General] tab of the [List Creator Settings] window on the List Creator print server will be valid.
If List Creator Designer is installed, it is also possible to switch the form storage directory from the [Options] window of the [Form Descriptor List] window.

For [UNIX OS]

The form storage directory of the List Creator print server will be valid.

Caution

- Specify the separator character of the form storage directory path according to the specification methods of the List Creator print server as shown below:
  - If the List Creator print server runs on Windows: ¥
  - If the List Creator print server runs on UNIX OS: /
- Refer to the following for cautions when specifying the form storage directory name:
  =>"3.5 Cautions regarding Development and Execution of User Applications"
- When the application server runs on UNIX OS and the List Creator print server runs on Windows, and when the command is executed with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, specify two "yen marks (¥)" as path separator.
  Example: -a C:¥¥ListCREATOR¥¥Assets

4.2.2.4.3 Options for User Resource Information for Multi-form/Combination-form Output

When performing multi-form output, refer to the description regarding the points to note when outputting multi-forms in the Online Manual "Advanced Form Design".
For combination-form output, refer to the description regarding the design of combination-forms in the Online Manual "Advanced Form Design".

-lcform transfer form name for multi-form/combination-form output

This option is only valid if transferring the form in the application server to the List Creator print server (when the -b option is not specified), and performing multi-form output or combination-form output (when the -grpdelimit option is specified).
Specify the form name to be transferred from the application server. Specify multiple form names separating with a semicolon (;).
When performing multi-form output or combination-form output (when the -grpdelimit option is specified), make sure to specify this option or -b option. However, if both options are specified at the same time, an error will occur.
If this option is specified when outputting a single form (when the -grpdelimit option is not specified), an error will occur.

Caution

- To create OWF files using the transferred form, specify the -gcmform option of the -z option.
- In case of [UNIX OS], when executing this option with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, etc., enclose the entire form name in double quotation marks (").
  Example: -lcform "Form name1;Form name2;Form name3"

-grpdelimit form name data separator character for multi-form/combination-form

Specify this option when performing multi-form output or combination-form output. Separator characters are specified according to the input data format and separator character specified in the [General] tab in the [Data Definitions] window.

Any single-byte character

: In the following cases, specify the separator character actually used.
In case of [Windows], specify by enclosing it in double quotation marks (").

- When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom"
- When the input data format is "CSV Format" and the separator character is a "Comma (,)"

Caution

- When performing combination-form output, do not specify a "Colon (:)".
- In case of [UNIX OS], when executing the command with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, etc., enclose the selected single-byte character in double quotation marks (").

SPACE : Specify this when the input data format is "Variable Length", and the separator character is "Space(s)".

TAB : Specify this in the following cases:

- When the input data format is "Variable Length", and the separator character is a "Tab"
- When the input data format is "CSV Format", and the separator character is a "Tab"

FIXED : Specify this when the input data format is "Fixed Length" and the separator character is "No".

FIXED_DELIMIT : Specify this when the input data format is "Fixed Length", and the separator character is "Yes".

XML : Specify this when the input data format is "XML Format".

When performing multi-form output or combination-form output, make sure to specify this option. When the input data format is "Fixed Length" (when "FIXED" or "FIXED_DELIMIT" is specified in this option), make sure to specify the field length of the form name data with the -grpbytes option. When specifying this option, make sure to specify the -lcform option or the -b option. Also make sure to specify the -n option.

Caution

- For [Windows], note the following points:
  - When the character code of input data is Unicode, input data format is "Variable Length", and any single-byte character is specified for the form name data separator character for multi-form/combination-form, specify a character with a code 0x007F/0x7F or less.
  - When the character code of input data is Unicode, input data format is "Fixed Length", and the separator character is specified as "Yes", specify a character with a code 0x007F/0x7F or less for the form name data separator character for multi-form/combination-form.
- For [UNIX OS], note the following points:
  - When the character code of input data is EUC (U90/S90), input data format is "Variable Length", and any single-byte character is specified for the form name data separator character for multi-form/combination-form, specify a character with a code 0x7F or less.
  - When the character code of input data is EUC (U90/S90), input data format is "Fixed Length", and the separator character is specified as "Yes", specify a character with a code 0x7F or less for the form name data separator character for multi-form/combination-form.
  - When the character code of input data is UNICODE (UTF8), input data format is "Variable Length", and any single-byte character is specified for the form name data separator character for multi-form/combination-form, specify a character with a code 0x7F or less.
  - When the character code of input data is UNICODE (UTF8), input data format is "Fixed Length", and the separator character is specified as "Yes", specify a character with a code 0x7F or less for the form name data separator character for multi-form/combination-form.
  - When the List Creator print server runs on Windows, the character code of input data is Unicode, input data format is "Variable Length", and any single-byte character is specified for the form name data separator character for multi-form/combination-form, specify a character with a code 0x007F/0x7F or less.
  - When the List Creator print server runs on Windows, the character code of input data is Unicode, input data format is "Fixed Length", the separator character is specified as "Yes", specify a character with a code 0x007F/0x7F or less for the form name data separator character for multi-form/combination-form.

The following displays a specification example. This example specifies the separator character for performing multi-form output when the input data format is "CSV Format", and the separator character is a "Comma (,)".

```
-grpdelimit ","
```

-grpbytes form name data field length for multi-form

Specify the form name data field length in the data file when performing multi-form output.
When the input data format is "Fixed Length" (when "FIXED" or "FIXED_DELIMIT" is specified for the -grpdelimit option), make sure to specify this option. When the separator character is "Yes", specify this option in length without separator character.
The following displays a specification example. This example specifies the separator character and form name data field length for multi-form output, when the input data format is "Fixed Length", the separator character is "No", and the form name data field length in the data file is 20 bytes.

```
-grpdelimit FIXED -grpbytes 20
```

-gcbform combination-form output

Specify this option when performing combination-form output.

no : Combination-form output is not performed.

yes : Combination-form output is performed.

When performing combination-form output, make sure to specify this option.
If you specify this option, make sure to specify the form name data separator character with the -grpdelimit option.
If this option is omitted, it will operate as if "no" was specified.

4.2.2.4.4 Other Options

-rmuserpasswd

Specify this option when performing remote form output with the user set with the prsetpasswd command.
If the user executing the prputprt command has not been set in the prsetpasswd command, remote form output will be performed with the user first registered with the prsetpasswd command.
If no users are registered with the prsetpasswd command, an error will occur.
If this option is omitted, remote form output will be performed with the user who executed the prputprt command on the List Creator print server.

Caution

- When performing the following operations, use the prsetpasswd command in the application server to set the remote form output user and specify the -rmuserpasswd option.
  - When the List Creator print server runs on Windows XP, and when remote form output is performed with the folder option set to "Use simple file sharing (Recommended)"
  - When remote form output is performed from a service process which operates with the SYSTEM account
  - When 445/tcp port (microsoft-ds (*1)) is blocked by firewall or router

    *1: This is a port number used for communication of direct hosting SMB service. It is used for sharing or remotely managing files and printers.

-z form output option

Specify the options during form output. All options after the -z option are considered as form output options.
Because the prprint command for remote form output is executed on the List Creator print server, specify the prprint command options for the form output option. However, the following options in the prprint command will be ignored even if specified.

Form name

-assetsdir : Form storage directory name

-indatacode	: Input data character code
-f	: Data file name
-visualdir	: Media data storage directory (Invalid only when the media data file is transferred by specifying the -lcvisualfile option in the prputprt command.)
-grpdelimit	: Form name data separator character for multi-form/ combination-form (Do not specify this option.)
-grpbytes	: Form name data field length for multi-form (Do not specify this option.)
-gcbform	: Combination-form output (Do not specify this option.)
-lwfaxrcv	: FAX recipient information when making e-Record (Invalid only when the FAX recipient information file for making e-Record is transferred by specifying the -lclwfaxrcvfile option in the prputprt command.)
-lwfaxrcvfile	: FAX recipient information file name when making e-Record (Invalid only when the FAX recipient information file for making e-Record is transferred by specifying the -lclwfaxrcvfile option in the prputprt command.)
-atfaxrcv	: FAX recipient information when sending FAX (Invalid only when the FAX recipient information file for sending FAX is transferred by specifying the -lcinfaxrcvfile option in the prputprt command.)
-infaxrcvfile	: FAX recipient information file name when sending FAX (Invalid only when the FAX recipient information file for sending FAX is transferred by specifying the -lcinfaxrcvfile option in the prputprt command.)

When specifying the -n option, do not specify a remote printer or Print Manager's remote printer.
When specifying the -afax option, do not specify a Print Manager's remote printer.
When specifying the -lwfaxrcvfile option, copy the FAX recipient information file for making e-Record to the List Creator print server.
When specifying the -infaxrcvfile option, copy the FAX recipient information file for sending FAX to the List Creator print server.

Caution

- When specifying a directory or a file in this option, refer to the following notes:
  =>"3.5 Cautions regarding Development and Execution of User Applications"
- When the application server runs on UNIX OS and the List Creator print server runs on Windows, and when the command is executed with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, specify two "yen marks (¥)" as path separator.
  Example: -keeppdf C:¥¥Data¥¥PDF¥¥Form.pdf

4.2.2.5 [Description Example]

For prputprt command description examples, refer to the following:
=>"3.1.4 prputprt Command Description Example"

4.2.2.6 [Return Values]

When using [Windows]

The following are return values.
In the definition of the Table 4.4, the "local computer" refers to the "application server", and "target computer" refers to the "print server".

Table 4.4 prputprt command return values (for [Windows])(1 / 2)

Return value	Definition
0	Normal end
-1	Abnormal end of the form output (prprint command)
-20	Invalid execution parameter has been specified.
-21	Error has occurred during processing.
-22	Failed to acquire program settings.
-23	Connection failed. Maximum number of computers are already connected to the target computer.
-24	Process cannot be carried out because a communication error was found.
-25	Connection was refused because the target computer does not have the required user account.
-26	Connection has been disabled because the ListCREATOR Service has been stopped or the target computer shutdown.
-27	Target computer is not turned on or it cannot be found.
-28	Communication time out occurred because of a high network load or because the network has been disconnected.
-29	Target computer does not exist, or its name could not be resolved, or a communication error has occurred.
-30	Software is not installed on the target computer.
-31	Failed to compress the form or file.
-33	Form output failed.
-34	Specified option is not supported by the version of the software installed on the target computer.
-35	Connection failed due to the number of sessions connected exceeding the limit of the OS of the target computer.
-40	Process cannot be carried out because the local computer has insufficient memory.
-41	Process cannot be carried out because the local computer has insufficient free disk space.
-42	Process cannot be carried out because the ListCREATOR Service is not running on the local computer.
-43	Process cannot be carried out because the local computer has insufficient resources.
-44	Process cannot be carried out because the directory on the local computer could not be accessed.
-45	Process cannot be carried out because the directory name on the local computer is incorrect.
-46	Process cannot be carried out because access to the directory on the local computer was refused.
-47	Process cannot be carried out because the directory does not exist on the local computer.
-49	Local Computer had a Form or File Access Error. Cannot be processed.
-50	Local Computer: Incorrect Form Name or File Name. Cannot be processed.
-51	Process cannot be carried out because access to the directory, file, or form on the local computer was refused.
-52	Local Computer: Form or File does not exist. Cannot be processed.
-55	Local Computer: Form or File Size is too large. Cannot be processed.
-56	Local Computer is using the Form or the File. Cannot be processed.
-60	Process cannot be carried out because the target computer has insufficient memory.
-61	Process cannot be carried out because the target computer has insufficient free disk space.
-62	Process cannot be carried out because the ListCREATOR Service is not running on the target computer.
-63	Process cannot be carried out because the target computer has insufficient resources.
-64	Process cannot be carried out because the directory on the target computer could not be accessed.
-65	Process cannot be carried out because the directory name on the target computer is incorrect.
-66	Process cannot be carried out because access to the directory on the target computer was refused.

Table 4.4 prputprt command return values (for [Windows])(2 / 2)

Return value	Definition
-68	Process cannot be carried out because the directory in the target computer is read-only.
-67	Process cannot be carried out because the directory does not exist on the target computer.
-69	Target computer: Form or File Access Error. Cannot be processed.
-70	Target computer: Incorrect Form Name or File Name. Cannot be processed.
-71	Process cannot be carried out because access to the directory, file, or form on the target computer was refused.
-72	Target computer: Form or File is missing. Cannot be processed.
-75	Process cannot be carried out because the file size of the form or the file on the target computer is too big.
-76	At the target computer, form or file is being used. Cannot be processed.
-101	Error occurred while waiting for the form output (prprint command). Spool document was deleted.
-102	Error occurred while waiting for the form output (prprint command). Spool document was held.
-103	Error occurred while waiting for the form output (prprint command). Form could not be output because the output device is offline or "Stopped".
-104	Error occurred while waiting for the form output (prprint command). Form could not be output because the output device is out of paper.
-105	Error occurred while waiting for the form output (prprint command). Form could not be output because of an output device error.
-106	Error occurred while waiting for the form output (prprint command). An error occurred during transfer of the spool document to the remote output device.
-107	Error occurred while waiting for the form output (prprint command). An error occurred when saving after output.
-108	Error occurred while waiting for the form output (prprint command). Output end wait was released to wait for a reply to the paper replacement or output start message.
-200	Remote form owner has not been registered.
128	Process failed to start in the target computer. The form output command (prprint command) failed to start due to insufficient resources.
Other	An internal contradiction occurred while processing form output. If the same error continues, contact our system engineer.

When using [UNIX OS]

The following are return values.
In the definition of the Table 4.5, the "local computer" refers to the "application server", and "target computer" refers to the "print server".

Table 4.5 prputprt command return values (for UNIX OS)(1 / 2)

Return value	Definition
0	Normal end
255	Abnormal end of the form output (prprint command)
20	Invalid execution parameter has been specified.
21	Error has occurred during processing.
22	Failed to acquire program settings.
23	Connection failed. Maximum number of computers are already connected to the target computer.
24	Process cannot be carried out because a communication error was found.
25	Connection was refused because the target computer does not have the required user account.
26	Connection has been disabled because the ListCREATOR Service has been stopped or the target computer shutdown.
27	Target computer is not turned on or it cannot be found. Contact the system administrator and check the network settings.
28	Communication time out occurred because of a high network load or because the network has been disconnected.
29	Target computer does not exist, or its name could not be resolved, or a communication error has occurred.
30	Software is not installed on the target computer.
31	Failed to compress the form or file.
32	File code conversion failed.
33	Form output failed.
34	Specified option is not supported by the version of the software installed on the target computer.
40	Process cannot be carried out because the local computer has insufficient memory.
41	Process cannot be carried out because the local computer has insufficient free disk space.
42	Process cannot be carried out because the ListCREATOR Service is not running on the local computer.
43	Process cannot be carried out because the local computer has insufficient resources.
44	Process cannot be carried out because the directory on the local computer could not be accessed.
45	Process cannot be carried out because the directory name on the local computer is incorrect.
46	Process cannot be carried out because access to the directory on the local computer was refused.
47	Process cannot be carried out because the directory does not exist on the local computer.
49	Local Computer had a Form or File Access Error. Cannot be processed.
50	Local Computer: Incorrect Form Name or File Name. Cannot be processed.
51	Process cannot be carried out because access to the directory, file, or form on the local computer was refused.
52	Local Computer: Form or File does not exist. Cannot be processed.
55	Local Computer: Form or File Size is too large. Cannot be processed.
56	Local Computer is using the Form or the File. Cannot be processed.
60	Process cannot be carried out because the target computer has insufficient memory.
61	Process cannot be carried out because the target computer has insufficient free disk space.
62	Process cannot be carried out because the ListCREATOR Service is not running on the target computer.
63	Process cannot be carried out because the target computer has insufficient resources.
64	Process cannot be carried out because the directory on the target computer could not be accessed.
65	Process cannot be carried out because the directory name on the target computer is incorrect.
66	Process cannot be carried out because access to the directory on the target computer was refused.
67	Process cannot be carried out because the directory does not exist on the target computer.

Table 4.5 prputprt command return values (for UNIX OS)(2 / 2)

Return value	Definition
68	Process cannot be carried out because the directory in the target computer is read-only.
69	Target computer: Form or File Access Error. Cannot be processed.
70	Target computer: Incorrect Form Name or File Name. Cannot be processed.
71	Process cannot be carried out because access to the directory, file, or form on the target computer was refused.
72	Target computer: Form or File is missing. Cannot be processed.
75	Process cannot be carried out because the file size of the form or the file on the target computer is too big.
76	At the target computer, form or file is being used. Cannot be processed.
101	Error occurred while waiting for the form output (prprint command). Spool document was deleted.
102	Error occurred while waiting for the form output (prprint command). Spool document was held.
103	Error occurred while waiting for the form output (prprint command). Form could not be output because the output device is offline or "Stopped".
104	Error occurred while waiting for the form output (prprint command). Form could not be output because the output device is out of paper.
105	Error occurred while waiting for the form output (prprint command). Form could not be output because of an output device error.
106	Error occurred while waiting for the form output (prprint command). An error occurred during transfer of the spool document to the remote output device.
107	Error occurred while waiting for the form output (prprint command). An error occurred when saving after output.
108	Error occurred while waiting for the form output (prprint command). Output end wait was released to wait for a reply to the paper replacement or output start message.
128	Process failed to start in the target computer. The form output command (prprint command) failed to start due to insufficient resources.
200	Remote form owner has not been registered.
Other	An internal contradiction occurred while processing form output. If the same error continues, contact our system engineer.

4.2.2.7 [Cautions]

The following are the points to note regarding specification of the prputprt command.
For the cautions for setup and operation of remote form output, refer to the description regarding the points to note for remote form output in the Online Manual "Setup & Operation".

Cautions common to [Windows/UNIX OS]

- If an error occurs during processing when a form is transferred from the application server, the form at the transfer destination cannot be guaranteed. Re-execute the prputprt command.
- Remote form output will be performed on the List Creator print server with user privileges used to execute the prputprt command.
  Therefore, set a user account and privileges on the List Creator print server as follows:
  - When the application server runs on Windows
    Make sure to create an identical account with the same user name and password on both the application server and the List Creator print server, so that remote form output can be performed from the List Creator print server with the user privileges used to execute the prputprt command.
    For the following cases, use the prsetpasswd command on the application server to set the remote form output user and specify the -rmuserpasswd option in the prputprt command before performing remote form output.
    - When the List Creator print server runs on Windows XP, and when remote form output is performed with the folder option set to "Use simple file sharing (Recommended)"
    - When remote form output is performed from a service process which operates with the SYSTEM account
    - When 445/tcp port (microsoft-ds (*1)) is blocked by firewall or router

      *1: This is a port number used for communication of direct hosting SMB service. It is used for sharing or remotely managing files and printers.
  - When the application server runs on UNIX OS
    When the print server runs on Windows, set up an identical user account on both the application server that executes the prputprt command and the List Creator print server that outputs the form.
    Also, register the user name/password of the List Creator print server on the application server, as the remote form output user.
    When the print server runs on UNIX OS, set up an identical user account on both the application server that executes the prputprt command and the List Creator print server that outputs the form.
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"4.2.2.2 [Description Format]"

When using [Windows]

- When outputting a form through the prputprt command, the maximum number of processes that can be sent to a single List Creator print server at the same time is 50 in total. When one application server is connected to multiple List Creator print servers, the application server can send up to 50 processes to each List Creator print server (up to the number of List Creator print server x 50) at the same time.
  When multiple application servers are connected to one List Creator print server, the maximum number of processes that the application servers can send at the same time is 50 in total. The 51st and later form outputting processes may be cancelled. In this case, the prputprt command returns with the return value "-23". When executing the prputprt command consistently, re-execute the commands as necessary.
- If the network traffic is heavy, the network route has been cut off, or the network hardware error has occurred, the error may be notified up to 30 minutes later. In this case, the prputprt command returns with the return value "-28". Check to make sure that there are no problems in the network route to the List Creator print server, or that there are no errors occurring in the network hardware.

When using [UNIX OS]

- The maximum number of processes that can be processed by a single print server at the same time is 50. The 51st and later form outputting processes may be cancelled. In this case, the prputprt command returns with the return value "23".
  When executing the prputprt command consistently, re-execute the commands as necessary.
- If the network traffic is heavy, the network route has been cut off, or the network hardware error has occurred, the error may be notified up to 30 minutes later. In this case, the prputprt command returns with the return value "28". Check to make sure that there are no problems in the network route to the List Creator print server, or that there are no errors occurring in the network hardware.

4.3 Connector Linkage Command

The commands used in the connector linkage are described below.

- prputex Command (use the connector linkage in List Creator)

4.3.1 Environment Variables Set during Connector Linkage Command Execution (When Using [UNIX OS])

When this command is used, set the following environment variable:

- LD_LIBRARY_PATH
- PATH
- LANG
- OA_EUCTYPE

When executing the command from the command line, use the Bourne shell or C shell. Executing on a shell other than these may cause the characters set in the command option to be interpreted incorrectly, and may prevent proper operation.

4.3.1.1 LD_LIBRARY_PATH (required)

This environment variable specifies the library storage directory of List Creator.
Be sure to specify this environment variable.
Add the following library storage directories of List Creator to this environment variable so that they will have the highest priority:

- "/opt/FJSVoast/lib"
- Folder in which Java runtime environment libraries ("libjvm.so" and "libjava.so") exist
  (only for [Linux for x86])

When using Charset Manager, add the following library storage directories.

- For [Solaris/Linux for x86/Linux for Itanium]
  - "/etc/opt/FSUNiconv/lib"
- For [Linux for Intel64]
  - "/etc/opt/FSUNiconv/lib"
  - "/etc/opt/FSUNiconv/lib64"

The following displays a specification example:

Example: When specifying the LD_LIBRARY_PATH environment variable using the Bourne shell
(When Java installation directory is "/usr/java/j2sdk1.4.2")

```
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:/usr/java/j2sdk1.4.2/jre/lib/
i386:/usr/java/j2sdk1.4.2/jre/lib/i386/client:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

4.3.1.2 PATH (when required)

This environment variable specifies the command storage directory of List Creator.
When executing the command with only the command name, add the List Creator command storage directory ("/opt/FJSVoast/bin") to this environment variable.
When specifying commands by their full paths, it is not necessary to specify this environment variable.
The following displays a specification example:

Example: When specifying the PATH environment variable using the Bourne shell

```
PATH=/opt/FJSVoast/bin:$PATH
export PATH
```

4.3.1.3 LANG (required)

This environment variable specifies the character code of the command execution environment (character code for when the command handles the command options and forms). This character code is also used for the input data when the input data format is "Variable Length", "Fixed Length", or "CSV Format".
Be sure to specify this environment variable.
The following displays values that can be specified in the environment variable LANG for each operating system of the application server.

When the application server runs on Solaris

Value that can be specified (*1)	Definition
ja (*2) ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.PCK	Indicates a Shift-JIS character code.
ja_JP.UTF-8 en_US.UTF-8	Indicates a UNICODE (UTF8) character code.

*1:If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2:If "ja" or "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE. Operations are same for both "ja" and "ja_JP.eucJP".

When the application server runs on Linux

Value that can be specified (*1)	Definition
ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.UTF-8 en_US.UTF-8 (*3)	Indicates a UNICODE (UTF8) character code.

*1:If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2:If "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE.

*3:"en_US.UTF-8" is not supported for [Linux for x86/Linux for Itanium].

The following displays a specification example:

Example: When specifying the environment variable LANG

(1) When using the Bourne shell to specify UNICODE (UTF8)

```
LANG=ja_JP.UTF-8
export LANG
```

(2) When using the Bourne shell to specify Shift-JIS code (when the application server runs on Solaris)

```
LANG=ja_JP.PCK
export LANG
```

4.3.1.4 OA_EUCTYPE (when required)

When EUC code is specified as a character code, this environment variable specifies the EUC code type.

When the application server runs on Solaris

If EUC code ("ja" or "ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If Shift-JIS code ("ja_JP.PCK") or UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified.

When the application server runs on Linux

If EUC code ("ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified.

The following displays values that can be specified in the environment variable OA_EUCTYPE:

Value that can be specified	Definition
u90 (*1)	Indicates an EUC (U90) character code.
s90 (*1)	Indicates an EUC (S90) character code.

*1:Be sure to specify it in lowercase.

The following displays the relationship between the environment variable LANG and the environment variable OA_EUCTYPE for each operating system of the application server.

When the application server runs on Solaris

Environment variable LANG	Environment variable OA_EUCTYPE	Character code with which List Creator commands operate on the application server	
		During connector link to Windows (*1)	During connector link to UNIX OS (*2)
ja ja_JP.eucJP	u90	U90	U90
	s90	S90	S90
ja_JP.PCK	-(*3)	Shift-JIS	Shift-JIS
ja_JP.UTF-8 en_US.UTF-8	-(*3)	UNICODE (UTF8)	UNICODE (UTF8)

*1:During connector link to Windows, if the input data is EUC and the input data format is "Variable Length", "Fixed Length", or "CSV Format", it is converted to Shift-JIS on the List Creator print server. If the input data is Shift-JIS or UNICODE, it is transferred to the List Creator print server (Windows) as is.

*2:During connector link to UNIX OS, input data is transferred to the List Creator print server (UNIX OS) as is.

*3:It will be invalid even if specified.

When the application server runs on Linux

Environment variable LANG	Environment variable OA_EUCTYPE	Character code with which List Creator commands operate on the application server	
		During connector link to Windows (*1)	During connector link to UNIX OS (*2)
ja_JP.eucJP	u90	U90	U90
	s90	S90	S90
ja_JP.UTF-8 en_US.UTF-8 (*4)	-(*3)	UNICODE (UTF8)	UNICODE (UTF8)

*1:During connector link to Windows, if the input data is EUC and the input data format is "Variable Length", "Fixed Length", or "CSV Format", it is converted to Shift-JIS on the List Creator print server. If the input data is Shift-JIS or UNICODE, it is transferred to the List Creator print server (Windows) as is.

*2:During connector link to UNIX OS, input data is transferred to the List Creator print server (UNIX OS) as is.

*3:It will be invalid even if specified.

*4:"en_US.UTF-8" is not supported for [Linux for x86/Linux for Itanium].

The following displays a specification example:

Example: When specifying the environment variables LANG and OA_EUCTYPE

(1) When using the Bourne shell to specify EUC (U90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
export LANG OA_EUCTYPE
```

(2) When using the Bourne shell to specify EUC (S90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
export LANG OA_EUCTYPE
```

Caution

- It is necessary to convert the character code of the form and specify the command options according to the input data.For details, refer to the description about deploying and preparing resources in the Online Manual "Setup & Operation".

4.3.2 prputex Command

4.3.2.1 [Function]

Transfers forms, data files and media data files to the List Creator print server from the application server to output forms.
If PDF files, OWF files or Excel files are created, they can be placed in the application server.

4.3.2.2 [Description Format]

The following is the description format.
[ ] indicates that this can be omitted.
In Option 1, Option 2, Option 3 ..., prputex command options are described.
In the prputex command options, "-h" cannot be omitted.

```
prputex    [Option 1] [Option 2] [Option 3] ...
```

●Points to note during command specification

When using [Windows]

- Do not specify a string of 0 length ("" on command line) in the values specified in command options. If a string of 0 length is specified, the command may not operate properly.
- When blanks or characters having special meaning to the executing environment are included in the string specified for the command options, enclose it with double quotation marks (").

When using [UNIX OS]

- Do not specify a string of 0 length ("" on command line) in the values specified in command options. If a string of 0 length is specified, the command may not operate properly.
- When a blank is included in the string specified for the command options, enclose it with double quotation marks (").
- There are characters that have special meaning when the command is executed using shells such as the COBOL interface provided by List Creator, shell programs (Bourne shell, C shell, etc.), and system() functions of C language programs.

  The characters having special meaning are described below. For details on characters which have special meaning per shell, refer to the manual of the shell used.

  """, "", "|", "¥", "\", ";", "$", "*", "?", etc.

  When specifying a character with special meaning as a command option, the special meaning must be deleted using one of the following methods:

  - Enclose the option in double quotation marks ("). (Not available for """, "¥", "\", and "$"). Example: When specifying a vertical bar (|) in the comment
    prputex ... -z -ttlcomment "|"
  - Enclose the option in single quotation marks ('). (Not available for """, "¥" and "\").
    Example: When specifying a dollar sign ($) in the comment
    prputex ... -z -ttlcomment '$'
  - Specify a backslash (\) before the characters with special meanings.
    Example: When specifying a backslash (\) in the comment
    prputex ... -z -ttlcomment \\

When starting a C language program by a command other than those above, however, no character with special meaning exists. Specify the options and use the command as usual.

●Points to note regarding specification of files and file storage destinations

- You can specify only local disk, UNC specification (¥¥computer_name¥shared_name¥directory_name), and remotely mounted directory as a file storage destination.
  For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

4.3.2.3 [List of Options]

The following is a list of the prputex command options.

Table 4.6 List of prputex command options

Option type	Option		[Operating system of the application server] W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported -: Unsupported					
			W	W64	S	L64	L	LI
Options for Operational Information	-h	target computer name (*1)	Y	Y	Y	Y	Y	Y
	-c	compression transfer specification	Y	Y	Y	Y	Y	Y
	-b	form transfer specification	Y	Y	Y	Y	Y	Y
Options for User Resource Information	-s	"form name" (*2)	Y	Y	Y	Y	Y	Y
	-d	transfer form storage directory (*2)	Y	Y	Y	Y	Y	Y
	-indatacode	input data character code	Y	Y	Y	Y	Y	Y
	-n	transfer data file name (*2)	Y	Y	Y	Y	Y	Y
	-lcvisualfile	transfer media data file name (*2)	Y	Y	Y	Y	Y	Y
	-lcfile	transfer file name (*2)	Y	Y	Y	Y	Y	Y
	-lcbinfile	transfer file name during binary transfer (*2)	Y	Y	Y	Y	Y	Y
	-a	form storage directory for form output (*2)	Y	Y	Y	Y	Y	Y
Options for User Resource Information for Multi-form/ Combination-form Output	-lcform	transfer form name for multi-form/combination-form output (*2)	Y	Y	Y	Y	Y	Y
	-grpdelimit	form name data separator character for multi-form/ combination-form	Y	Y	Y	Y	Y	Y
	-grpbytes	form name data field length for multi-form	Y	Y	Y	Y	Y	Y
	-gcbform	combination-form output	Y	Y	Y	Y	-	-
Options for e-Record information	-lclwfaxrcvfile	The name of the transferred FAX recipient information file for sending an e-Record of the form by FAX (*2) (*3)	Y	Y	Y	Y	Y	Y
Options for FAX send information	-lcinfaxrcvfile	The name of the transferred FAX recipient information file for sending a form by FAX (*2) (*4)	Y	Y	Y	Y	Y	Y
Other Options	-lckeeppdf	created PDF file name (*2)	Y	Y	Y	Y	Y	Y
	-lckeepowf	created OWF file name (*2)	Y	Y	Y	Y	Y	Y
	-lckeepxlsx	created Excel file name (*2)	Y	Y	Y	Y	-	Y
	-z	form output option (*2)	Y	Y	Y	Y	Y	Y

*1:Cannot be omitted.

*2:For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

*3:This can be specified only if the List Creator print server supports making e-Record and sending FAX.

*4:This can be specified only if the List Creator print server supports sending FAX.

The differences between the required options for outputting a single form, performing multi-form output, and performing combination-form output are indicated below:

- When outputting a single form
  -s option
- When performing multi-form output
  -b option (when the form is not transferred) or -lcform option (when the form is transferred)
  -n option
  -grpdelimit option
- When performing combination-form output
  -b option (when the form is not transferred) or -lcform option (when the form is transferred)
  -n option
  -grpdelimit option
  -gcbform option

4.3.2.4 [Explanation]

The following explains prputex command options.
Function ranges and points to note of the options may vary depending on the operating system. The descriptions that are different depending on the operating system are explained respectively.

4.3.2.4.1 Options for Operational Information

-h target computer name

Specify the computer name of the transmission target List Creator print server with the TCP/IP host name or IP address.
Make sure to specify this option.

> **Caution**
> - If the List Creator print server runs on Windows, configure network settings so that the computer name and the TCP/IP host names are the same. If the computer name and the TCP/IP host names differ, specify them by the IP address.

-c compression transfer specification

Specify when compressing and transferring the data such as forms, data files, and media data files of the application server.
When this option is omitted, the data is transferred without compression.

-b form transfer specification

Specify this option when using a form that is already placed in the List Creator print server to output the form, without transferring the form from the application server to the print server.
If this option is omitted, the form of the application server is transferred to the work directory of the List Creator print server.
When performing multi-form output or combination-form output (when the -grpdelimit option is specified), make sure to specify this option or -lcform option. However, if both options are specified at the same time, an error will occur.

> **Caution**
> - If the List Creator print server runs on UNIX OS, and when performing FM output or FNP output to a printer, be sure to place the form on the List Creator print server, and specify the -b option.
> If specification of this option is omitted, overlays are not printed correctly.

4.3.2.4.2 Options for User Resource Information

-s "form name"

This option is only valid when a single form is output (when the -grpdelimit option is not specified).
Specify the form name by enclosing it in double quotation marks (").
When performing a single form output (when the -grpdelimit option is not specified), make sure to specify this option.

> **Note**
> - When performing multi-form output or combination-form output (when the -grpdelimit option is specified), the form name is specified in the input data, thus it is not necessary to specify in this option.

-d transfer form storage directory

This option is valid only when transferring the form from the application server to the List Creator print server (when the -b option is not specified).
Specify the full path of the directory where the form to be transferred by the application server is stored.
If omitted when transferring the form (when the -b option is not specified), specification of the following directory will be enabled.

For [Windows]

Form storage directory specified in the [General] tab of the [List Creator Settings] window for the application server will be valid.
If List Creator Designer is installed, it is also possible to switch the form storage directory from the [Options] window of the [Form Descriptor List] window.

For [UNIX OS]

Form storage directory specified with the prsetassetsdir command on the application server will be used.

> **Caution**
> - Refer to the following for cautions when specifying the form storage directory name:
> =>"3.5 Cautions regarding Development and Execution of User Applications"

-indatacode input data character code

Specify the character code for the input data. The character code specified on the application server will be adopted on the List Creator print server.

SJIS	: Shift-JIS
UCS2LE	: UNICODE (UTF16 little endian) (Valid only when the List Creator print server runs on Windows)
UCS2BE	: UNICODE (UTF16 big endian) (Valid only when the List Creator print server runs on Windows)
UTF8	: UNICODE (UTF8)

When this option is omitted, the following specification will be valid:

For [Windows]

It will operate as if "SJIS" was specified.

For [UNIX OS]

Specification in the environment variable LANG and environment variable OA_EUCTYPE will be valid.

Caution

- This option is only valid when the input data format is "Variable Length", "Fixed Length", or "CSV Format".
- Specify as follows when the input data format is "XML Format".
  - For [Windows]
    Specify the character code in the XML declaration in the XML file. If the XML declaration in the XML file is omitted, or if the character code is not specified in the XML declaration, it is regarded as UNICODE (UTF8).
  - For [UNIX OS]
    Specify Shift-JIS (SJIS) regardless of the character code specified in the XML declaration in the XML file.
- In case of [UNIX OS], to specify EUC, do not specify this option (omit it), and specify EUC character code in the environment variable LANG and OA_EUCTYPE.
- To use the form descriptor information for which Unicode characters are defined, specify any UNICODE for the input data character code.
- When outputting a form in the English environment (English locale), specify any UNICODE for the input data character code.

-n transfer data file name

When transferring the data file of the application server to the List Creator print server, specify the data file name of the application server with its full path.
For [Windows], specify it within 259 bytes.
The data file transferred to the List Creator print server will be deleted after form output.
If omitted when outputting a single form (when the -grpdelimit option is not specified), the data file will not be transferred, and a data file with the same name as the form name under the form storage directory on the List Creator print server ("form_name.dat") will be used as the specified file.
When performing multi-form output or combination-form output (when the -grpdelimit option is specified), make sure to specify this option.

Caution

- For data in data files, be sure to use the following character codes for specification:
  - For [Windows]
    Describe with the character code of input data specified in the -indatacode option.
  - For [UNIX OS]
    Describe with the character code specified in the environment variable LANG and environment variable OA_EUCTYPE, or in the -indatacode option.
- If the application server runs on UNIX OS and the input data format is "XML Format", use the character code specified in the XML declaration in the XML file.
- If the data file is described in EUC (U90), EUC (S90), or Solaris standard EUC when the application server is running on UNIX OS and the List Creator print server is running on Windows, it will be converted to Shift-JIS on the application server. Therefore, it must be specified within the range of Shift-JIS character code.
  If a character that does not exist in Shift-JIS is selected, degeneracy will occur. In that case, a half-width or full-width underscore is output as a substitute character.

-lcvisualfile transfer media data file name

When transferring the media data file of the application server to the List Creator print server, specify the media data file name of the application server with its full path. When specifying multiple files, separate them using a semicolon (;).
When this option is omitted, the media data file will not be transferred.
During form output at the List Creator print server, the media data storage directory will be valid in the following order of priority:

1）Invalid (Only media data files transferred with this option are valid)
2）Media data storage directory specified with the -visualdir option of the -z option
3）Form storage directory during form output specified in the -a option

Caution

- When transferring the media data file, specify only the file name of the media data file in the input data for the image field.
- In case of [UNIX OS], when executing the command with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, etc., enclose the entire transfer media data file name in double quotation marks (").
  Example: -lcvisualfile "File name1;File name2;File name3"

-lcfile transfer file name

-lcbinfile transfer file name during binary transfer

When transferring the file of the application server to the List Creator print server, specify the file name of the application server to be transferred with its full path. When specifying multiple files, separate them using a semicolon (;).
The file transferred to the List Creator print server will be deleted after form output.
When this option is omitted, the file will not be transferred.
The following explains the specification method of each option.

-lcfile option

Specify this option in the following cases:

- When using a substitute font info file
  Specify it with this option and the -atmapfontfile option of the -z option. Specify only the file name in the -atmapfontfile option of the -z option.
- When using a barcode correct info file
  Specify it with this option and the -atbcodadjust option of the -z option. Specify only the file name in the -atbcodadjust option of the -z option.
- When using a form output information file
  Specify it with this option and the -p option of the -z option.
  Specify only the file name in the -p option of the -z option.
- When using an electronic form information file
  Specify it with this option and the -in2 option of the -z option. Specify only the file name in the -in2 option of the -z option.
- When using a PDF mail distribution information file for PDF mail distribution
  Specify it with this option and the -gpdfmailconffile option of the -z option.
  Specify only the file name in the -gpdfmailconffile option of the -z option.
- When using a PDF document information file
  Specify it with this option and the -in5 option of the -z option. Specify only the file name in the -in5 option of the -z option.
- When using an Excel document information file
  Specify it with this option and the -inexcelinfofile option of the -z option. Specify only the file name in the -inexcelinfofile option of the -z option.
- When using an ECM information file
  For PDF file output, specify it with this option and the -gpdfoutinfofile option of the -z option.
  Specify only the file name in the -gpdfoutinfofile option of the -z option.

For Excel file output, specify it with this option and the -gxlsxoutinfofile option of the -z option. Specify only the file name in the -gxlsxoutinfofile option of the -z option.

- When using a combination-form descriptor file
  Specify it with this option and the -gcbfile option of the -z option. Specify only the file name in the -gcbfile option of the -z option.

-lcbinfile option

Specify this option in the following cases where the file is transferred in the binary mode:

- When transferring a file to be attached to the PDF file
  Specify it with this option and the -gpdfembedfile option of the -z option. Specify only the file name in the -gpdfembedfile option of the -z option.
  The file names of PDF file attachments are enabled in the following order of priority:
  1) The file specified in this option (full path of the application server) and the -gpdfembedfile option of the -z option (file name only)
  2) PDF attachment file specified in the -gpdfembedfile option of the -z option (full path of the List Creator print server)
  3) PDF attachment file specified in this option (full path of the application server) and in "Document Management" of the [PDF Options] window, in the [File] tab in the [Form Output Methods] window (file name only)
  4) PDF attachment file specified in "Document Management" of the [PDF Options] window, in the [File] tab in the [Form Output Methods] window (full path of the List Creator print server)
- When transferring an ECM linkage file
  Specify it with this option and the "ATTRFILE_TMPL" keyword in the ECM information file. Specify only the file name in the "ATTRFILE_TMPL" keyword in the ECM information file.
  The specification of an ECM information file name is enabled in the following order of priority:
  1) An ECM linkage file specified with this option (full path of the application server) and the "ATTRFILE_TMPL" keyword in the ECM information file (file name only)
  2) An ECM linkage file specified with the "ATTRFILE_TMPL" keyword in the ECM information file (full path of the List Creator print server)
- When transferring a property replace file
  Specify it with this option and the -atpropertyreplace option of the -z option.
  Specify only the file name in the -atpropertyreplace option of the -z option.
  The specification of a property replace file name is enabled in the following order of priority:
  1) The file specified in this option (full path of the application server) and the -atpropertyreplace of the -z option (file name only)
  2) Property replace file specified in the -atpropertyreplace option of the -z option (full path of the List Creator print server)

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- If the file is described in EUC (U90), EUC (S90), or Solaris standard EUC when the application server is running on UNIX OS and the List Creator print server is running on Windows, it will be converted to Shift-JIS on the List Creator print server. Therefore, it must be specified within the range of Shift-JIS character code. If a character that does not exist in Shift-JIS is selected, degeneracy will occur. In that case, a half-width or full-width underscore is output as a substitute character.
- If attaching a text file to the PDF file, the file must be created according to the character code of the application server.

-a form storage directory for form output

This option is only valid when the application server form is not transferred to the List Creator print server, and when a form that is already placed in the print server is used for form output (when the -b option is specified).
Specify the form storage directory of the List Creator print server with its full path.
If omitted when not transferring the form (when the -b option is specified), the form storage directory of the List Creator print server will be enabled.

Caution

- Specify the separator character of the form storage directory path according to the specification methods of the List Creator print server as shown below:
  - If the List Creator print server runs on Windows: ¥
  - If the List Creator print server runs on UNIX OS: /
- Refer to the following for cautions when specifying the form storage directory name:
  =>"3.5 Cautions regarding Development and Execution of User Applications"
- When the application server runs on UNIX OS and the List Creator print server runs on Windows, and when the command is executed with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, specify two "yen marks (¥)" as path separator.
  Example: -a C:¥¥ListCREATOR¥¥Assets

4.3.2.4.3 Options for User Resource Information for Multi-form/Combination-form Output

When performing multi-form output, refer to the description regarding the points to note when outputting multi-forms in the Online Manual "Advanced Form Design".
For combination-form output, refer to the description regarding the design of combination-forms in the Online Manual "Advanced Form Design".

-lcform transfer form name for multi-form/combination-form output

This option is only valid if transferring the form in the application server to the List Creator print server (when the -b option is not specified), and performing multi-form output or combination-form output (when the -grpdelimit option is specified).
Specify the form name to be transferred from the application server. Specify multiple form names separating with a semicolon (;).
When performing multi-form output or combination-form output (when the -grpdelimit option is specified), make sure to specify this option or -b option. However, if both options are specified at the same time, an error will occur.
If this option is specified when outputting a single form (when the -grpdelimit option is not specified), an error will occur.

Caution

- When the application server runs on UNIX OS, to execute the command with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, etc. enclose the entire form name in double quotation marks (").
  Example: -lcform "Form name1;Form name2;Form name3"

-grpdelimit form name data separator character for multi-form/combination-form

Specify this option when performing multi-form output or combination-form output. Separator characters are specified according to the input data format and separator character specified in the [General] tab in the [Data Definitions] window.

Any single-byte character

: In the following cases, specify the separator character actually used. In case of [Windows], specify by enclosing it in double quotation marks (").

- When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom"
- When the input data format is "CSV Format" and the separator character is a "Comma (,)"

Caution

- When performing combination-form output, do not specify a "Colon (:)".
- In case of [UNIX OS], to execute the command with a shell such as the COBOL interface provided by List Creator, shell programs or the C language system() function, etc., enclose the selected single-byte character in "double quotation marks (")".

SPACE : Specify this when the input data format is "Variable Length", and the separator character is "Space(s)".

TAB : Specify this in the following cases:

- When the input data format is "Variable Length", and the separator character is a "Tab"
- When the input data format is "CSV Format", and the separator character is a "Tab"

FIXED : Specify this when the input data format is "Fixed Length" and the separator character is "No".

FIXED_DELIMIT : Specify this when the input data format is "Fixed Length", and the separator character is "Yes".

XML : Specify this when the input data format is "XML Format".

When performing multi-form output or combination-form output, make sure to specify this option. When the input data format is "Fixed Length" (when "FIXED" or "FIXED_DELIMIT" is specified in this option), make sure to specify the field length of the form name data with the -grpbytes option. When specifying this option, make sure to specify the -lcform option or the -b option. Also make sure to specify the -n option.

Caution

- For [Windows], note the following points:
  - When the character code of input data is Unicode, input data format is "Variable Length", and any single-byte character is specified for the form name data separator character for multi-form/combination-form, specify a character with a code 0x007F/0x7F or less.
  - When the character code of input data is Unicode, input data format is "Fixed Length", and the separator character is specified as "Yes", specify a character with a code 0x007F/0x7F or less for the form name data separator character for multi-form/combination-form.
- For [UNIX OS], refer to the following. It shows the character code of the separator character used when "Any single-byte character" or "Yes" is specified for the form name data separator character for multi-form/combination-form under the conditions stated in the table.

Application server	Input data character code	Input data format	Character code of the form name data separator character for multi-form/combination-form
Windows	Unicode	Variable length	Character of 0x007F/0x7F or less
		Fixed length	

	UNIX OS	EUC (U90/S90) or UNICODE (UTF8)	Variable length	Character of 0x7F or less
			Fixed length	

The following displays a specification example. This example specifies the separator character for performing multi-form output when the input data format is "CSV Format", and the separator character is a "Comma (,)".

```
-grpdelimit ","
```

-grpbytes form name data field length for multi-form

Specify the form name data field length in the data file when performing multi-form output.
When the input data format is "Fixed Length" (when "FIXED" or "FIXED_DELIMIT" is specified for the -grpdelimit option), make sure to specify this option. When the separator character is "Yes", specify this option in length without separator character.
The following displays a specification example. This example specifies the separator character and form name data field length for multi-form output, when the input data format is "Fixed Length", the separator character is "No", and the form name data field length in the data file is 20 bytes.

```
-grpdelimit FIXED -grpbytes 20
```

-gcbform combination-form output

Specify this option when performing combination-form output.

no : Combination-form output is not performed.

yes : Combination-form output is performed.

When performing combination-form output, make sure to specify this option.
If you specify this option, make sure to specify the form name data separator character with the -grpdelimit option.
If this option is omitted, it will operate as if "no" was specified.

4.3.2.4.4 Other Options

Note

- For the form resources to be used and the file path length that can be specified for output files when using connector linkage, refer to the description regarding connector linkage in the Online Manual "Setup & Operation".

-lckeeppdf created PDF file name

Specify the PDF file name created in the application server with its full path.
For [UNIX OS], do not use full-width characters or half-width katakana characters in the full path.

Caution

- Do not specify this option with the -lckeepowf option or the -lckeepxlsx option.
- If a file with the same name specified with this option already exists, an error will occur.

Note

- When creating a PDF file in the application server, specify the PDF file path with this option. When creating a PDF file in the List Creator print server, specify the -keeppdf option after the -z option to specify the path of the PDF file to be created.

-lckeepowf created OWF file name

Specify the OWF file name created in the application server with its full path.
Do not specify any of the following for the OWF file name:

For [Windows]

Do not use full-width characters, half-width spaces, and any of the following characters:
"(", ")", "|", "¥", "^", "~", "[", "]", "`", "<", ">", "#", "%", """, ";", "/", "?", ":", "@", "&", "=", ",", "*"

For [UNIX OS]

Do not use full-width characters, half-width katakana characters, half-width spaces, and any of the following half-width characters:
"(", ")", "|", "¥", "^", "~", "[", "]", "`", "<", ">", "#", "%", """, ";", "/", "?", ":", "@", "&", "=", ",", "*"

Caution

- If a file with the same name specified with this option already exists, an error will occur.
- Do not specify this option with the -lckeeppdf option or the -lckeepxlsx option.
- The file extension of the OWF file must be ".owf" (half-width lower-case characters).
  If an extension other than ".owf" is specified, Web plug-in will not start.

Note

- When creating an OWF file in the application server, specify the OWF file path with this option. When creating an OWF file in the List Creator print server, specify the -gowffile option after the -z option to specify the path of the OWF file to be created.

-lckeepxlsx created Excel file name

Specify the Excel file name created in the application server with its full path.
For [UNIX OS], do not use full-width characters or half-width katakana characters in the full path.

Caution

- Do not specify this option with the -lckeeppdf option or the -lckeepowf option.
- If a file with the same name specified with this option already exists, an error will occur.
- The file extension of the Excel file must be ".xlsx".

Note

- When creating an Excel file in the application server, specify the Excel file path with this option. When creating an Excel file in the List Creator print server, specify the -keepxlsx option after the -z option to specify the path of the Excel file to be created.

-z form output option

Specify the options during form output. All options after the -z option are considered as form output options.
Because the prprint command for form output by connector linkage is executed on the List Creator print server, specify the prprint command options for the form output option. However, the following options in the prprint command will be ignored even if specified.

Form name

-assetsdir : Form storage directory name

-indatacode : Input data character code

-f : Data file name

-visualdir	: media data storage directory (Invalid only when the media data file is transferred by specifying the -lcvisualfile option in the prputex command.)
-grpdelimit	: Form name data separator character for multi-form/ combination-form (Do not specify this option.)
-grpbytes	: Form name data field length for multi-form (Do not specify this option.)
-gcbform	: Combination-form output (Do not specify this option.)
-lwfaxrcv	: FAX recipient information when making e-Record (Invalid only when the FAX recipient information file for making e-Record is transferred by specifying the -lclwfaxrcvfile option in the prputex command.)
-lwfaxrcvfile	: FAX recipient information file name when making e-Record (Invalid only when the FAX recipient information file for making e-Record is transferred by specifying the -lclwfaxrcvfile option in the prputex command.)
-atfaxrcv	: FAX recipient information when sending FAX (Invalid only when the FAX recipient information file for sending FAX is transferred by specifying the -lcinfaxrcvfile option in the prputex command.)
-infaxrcvfile	: FAX recipient information file name when sending FAX (Invalid only when the FAX recipient information file for sending FAX is transferred by specifying the -lcinfaxrcvfile option in the prputex command.)
-gcmvisualfile	: media data file name (Invalid only when the media data file is transferred by specifying the -lcvisualfile option in the prputex command.)
-gcmform	: Form name during multi-form/combination-form output (Invalid only when the form is transferred by specifying the -lcform option in the prputex command.)

When specifying the -n option, do not specify a remote printer or Print Manager's remote printer.
When specifying the -afax option, do not specify a Print Manager's remote printer.
When specifying the -lwfaxrcvfile option, copy the FAX recipient information file for making e-Record to the List Creator print server.
When specifying the -infaxrcvfile option, copy the FAX recipient information file for sending FAX to the List Creator print server.

Caution

- When specifying the -indatacode option after this option, this option will result in the following on the List Creator print server:
  - If the List Creator print server runs on Windows: Specification will be invalid.
  - If the List Creator print server runs on UNIX OS: An error will occur on the List Creator print server.
- For [UNIX OS], note the following points:
  - When the List Creator print server runs on Windows, and when this option is executed with shells such as the COBOL interface provided by List Creator, shell programs, or the C language system() function, specify two "yen marks (¥)" as path separator.
    Example: -keeppdf C:¥¥Data¥¥PDF¥¥Form.pdf
- When specifying a directory or a file in this option, refer to the following notes:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

Note

- To place the output form (PDF file/OWF file/Excel file) on the application server during connector linkage, specify the name of the file to be placed with its full path in -lckeeppdf, -lckeepowf, or -lckeepxlsx option.
  When outputting a form (PDF file/OWF file/Excel file) on the List Creator print server, specify the name of the file to be created with its full path in -keeppdf, -gowffile, or -keepxlsx option after the -z option.

4.3.2.5 [Description Example]

For prputex command description examples, refer to the following:
=>"3.1.5 prputex Command Description Example"

4.3.2.6 [Return Values]

The following are return values of the connector linkage.
For the setup of connector linkage, and details on the connector linkage service, refer to the Online Manual "Setup & Operation".

When using [Windows]

In the definition in the following table (Table 4.7), the "local computer" refers to the "application server", and "target computer" refers to the "print server".

Table 4.7 prputex command return values (for [Windows])(1 / 2)

Return value	Definition
0	Ended without error.
1	Internal error occurred.
2	Java may not be installed. For details on the Java runtime environment, refer to the description about executing the batch file/shell for setup in the Online Manual "Setup & Operation".
3	Failed to access the Java execution module. The Java module may be damaged.
4	Failed to access the Java class file. The Java class file may be corrupt.
5	Insufficient memory. The process will be aborted.
6	Invalid execution parameter has been specified.
7	Character code conversion failed.
8	Failed to access the registry.
9	Failed to access the setting file. The setting file may be damaged.
11	The process will be aborted because the connector linkage service has been stopped. Start the connector linkage service and try again.
12	Process cannot be carried out because an error occurred in the interprocess communication with the connector linkage service.
23	Connection failed. Maximum number of computers are already connected to the target computer. Try again.
24	Process cannot be carried out because a communication error was found.
27	Target computer is not turned on or it cannot be found. Contact the system administrator and check the network settings.
29	Target computer does not exist, or its name could not be resolved, or a communication error has occurred. Contact the system administrator and check the network settings.
33	An error occurred on the List Creator print server during form output.
49	Process cannot be carried out because the directory, file, or form on the local computer could not be accessed.
51	Process cannot be carried out because access to the directory, file, or form on the local computer was refused.
52	Process cannot be carried out because the directory, file, or form does not exist on the local computer.
60	Process cannot be carried out because the target computer has insufficient memory.
61	Process cannot be carried out because the target computer has insufficient free disk space.
63	Process cannot be carried out because the target computer has insufficient system resources.
69	Process cannot be carried out because the directory, file, or form on the target computer could not be accessed.

Table 4.7 prputex command return values (for [Windows])(2 / 2)

Return value	Definition
71	Process cannot be carried out because access to the directory, file, or form on the target computer was refused.
72	Process cannot be carried out because the directory, file, or form does not exist on the target computer.
101	Error occurred on the List Creator print server while waiting for the form output. Spool document was deleted.
102	Error occurred on the List Creator print server while waiting for the form output. Spool document was held.
103	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is offline or "Stopped".
104	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is out of paper.
105	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because of an output device error.
106	Error occurred on the List Creator print server while waiting for the form output. An error occurred during transfer of the spool document to the remote output device.
107	Error occurred on the List Creator print server while waiting for the form output. An error occurred when saving after output.
108	Error occurred on the List Creator print server while waiting for the form output. Output end wait was released to wait for a reply to the paper replacement or output start message.
121	Error occurred in the communication module during form output.
122	Connection has been disabled because the connector linkage service has been stopped or the target computer shutdown. Activate the target computer, start the connector linkage service, and try again.
124	The connector linkage service is not running on the target computer so process cannot be carried out. Start the connector linkage service and try again.
125	Cannot connect to the target computer or a communication error has occurred.
126	Failed to create the file because it already exists on the local computer.
150	Some other communication module system error has occurred.
200	An exception has occurred during Java method executing.
201	Insufficient memory to perform operation.
202	Insufficient disk resource during work file creation.
203	Insufficient non-memory, non-disk system resources.
204	Access to the specified file or directory has been refused.
205	A file sharing violation has occurred.
206	Cannot find the file.
207	Java internal error has occurred.
208	Work file error has occurred while processing.
209	Error occurred on the application server. Specified parameter or attribute data is incorrect.
212	Some other system error has occurred.
226	Character code conversion error has occurred.
255	Error occurred during form output. For error details, check the event log (or system log) of print server.

●Error details when using connector linkage

The following explains the detail codes of errors displayed while using connector linkage.

Detail code	Cause and solution
X-0-0	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up - Whether the connector linkage service has been started - Whether the machine is experiencing heavy traffic - Whether the same value has been set for the destination port on the application server and the List Creator print server
X-20-32	There may be insufficient disk space on the target computer. Perform the following solutions: - Delete unnecessary files from the installation destination of the List Creator on the target computer to free space, then try again.

Detail code	Cause and solution
X-29-16842788	The following may have occurred during communication: - The machine is experiencing heavy traffic - Transfer timeout
X-24-16	The DefaultTransferProperty file may include some properties with no value specified. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-24-32	A value that is out of range may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-24-48 X-24-64	An incorrect value may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-0-41000010301	The following may have occurred during communication: - The machine is experiencing heavy traffic
X-0-41000010005	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up

The "X" in the above table represents an output number.

When using [UNIX OS]

In the definition in the following table (Table 4.8), the "local computer" refers to the "application server", and "target computer" refers to the "print server".

Table 4.8 prputex command return values (for [UNIX OS]) (1 / 2)

Return value	Definition
0	Ended without error.
1	Internal error occurred.
2	Java may not be installed. For details on the Java runtime environment, refer to the description about executing the batch file/shell for setup in the Online Manual "Setup & Operation".
3	Failed to access the Java execution module. The Java module may be damaged.
4	Failed to access the Java class file. The Java class file may be corrupt.
5	Insufficient memory. The process will be aborted.
6	Invalid execution parameter has been specified.
7	Character code conversion failed.
8	Failed to access the registry.
9	Failed to access the setting file. The setting file may be damaged.
11	The process will be aborted because the connector linkage service has been stopped. Start the connector linkage service and try again.
12	Process cannot be carried out because an error occurred in the interprocess communication with the connector linkage service.
23	Connection failed. Maximum number of computers are already connected to the target computer. Try again.
24	Process cannot be carried out because a communication error was found.
27	Target computer is not turned on or it cannot be found. Contact the system administrator and check the network settings.
29	Target computer does not exist, or its name could not be resolved, or a communication error has occurred. Contact the system administrator and check the network settings.
33	An error occurred on the List Creator print server during form output.
49	Process cannot be carried out because the directory, file, or form on the local computer could not be accessed.
51	Process cannot be carried out because access to the directory, file, or form on the local computer was refused.

Table 4.8 prputex command return values (for [UNIX OS]) (2 / 2)

Return value	Definition
52	Process cannot be carried out because the directory, file, or form does not exist on the local computer.
60	Process cannot be carried out because the target computer has insufficient memory.
61	Process cannot be carried out because the target computer has insufficient free disk space.
63	Process cannot be carried out because the target computer has insufficient system resources.
69	Process cannot be carried out because the directory, file, or form on the target computer could not be accessed.
71	Process cannot be carried out because access to the directory, file, or form on the target computer was refused.
72	Process cannot be carried out because the directory, file, or form does not exist on the target computer.
101	Error occurred on the List Creator print server while waiting for the form output. Spool document was deleted.
102	Error occurred on the List Creator print server while waiting for the form output. Spool document was held.
103	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is offline or "Stopped".
104	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is out of paper.
105	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because of an output device error.
106	Error occurred on the List Creator print server while waiting for the form output. An error occurred during transfer of the spool document to the remote output device.
107	Error occurred on the List Creator print server while waiting for the form output. An error occurred when saving after output.
108	Error occurred on the List Creator print server while waiting for the form output. Output end wait was released to wait for a reply to the paper replacement or output start message.
121	Error occurred in the communication module during form output.
122	Connection has been disabled because the connector linkage service has been stopped or the target computer shutdown. Activate the target computer, start the connector linkage service, and try again.
124	The connector linkage service is not running on the target computer so process cannot be carried out. Start the connector linkage service and try again.
125	Cannot connect to the target computer or a communication error has occurred.
126	Failed to create the file because it already exists on the local computer.
150	Some other communication module system error has occurred.
200	An exception has occurred during Java method executing.
201	Insufficient memory to perform operation.
202	Insufficient disk resource during work file creation.
203	Insufficient non-memory, non-disk system resources.
204	Access to the specified file or directory has been refused.
205	A file sharing violation has occurred.
206	Cannot find the file.
207	Java internal error has occurred.
208	Work file error has occurred while processing.
209	Error occurred on the application server. Specified parameter or attribute data is incorrect.
212	Some other system error has occurred.
226	Character code conversion error has occurred.
255	Error occurred during form output. For error details, check the event log (or system log) of print server.

●Error details when using connector linkage

The following explains the detail codes of errors displayed while using connector linkage.

Detail code	Cause and solution
X-0-0	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up - Whether the connector linkage service has been started - Whether the machine is experiencing heavy traffic - Whether the same value has been set for the destination port on the application server and the List Creator print server
X-20-32	There may be insufficient disk space on the target computer. Perform the following solutions: - Delete unnecessary files from the installation destination of the List Creator on the target computer to free space, then try again.
X-29-16842788	The following may have occurred during communication: - The machine is experiencing heavy traffic - Transfer timeout
X-24-16	The DefaultTransferProperty file may include some properties with no value specified. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-24-32	A value that is out of range may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-24-48 X-24-64	An incorrect value may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-0-41000010301	The following may have occurred during communication: - The machine is experiencing heavy traffic
X-0-41000010005	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up

The "X" in the above table represents an output number.

4.3.2.7 [Cautions]

For the cautions for setup and operation of connector linkage, refer to the description regarding the points to note for connector linkage in the Online Manual "Setup & Operation".

The following are the points to note regarding specification of the prputex command.

- When outputting a form through the prputex command, the number of processes that can be processed by a single List Creator print server at the same time depends on the setup file ("Maximum number of authorized connections" in the DaemonProperty file). If the number of processes exceeds the number set at the time of setup, form outputting processes may be cancelled after that. In this case, the prputex command returns with the return value "23".
  When multiple application servers are connected to one List Creator print server, the total number of processes that the application servers can send at the same time is the "Maximum number of authorized connections" in the setup file (DaemonProperty file).
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

Chapter 5
Java Interface

This chapter explains the Java interface for outputting List Creator forms from Servlet and typical Java applications.

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5.1 Module Configuration

The Java interface of List Creator provides a Java class library which serve as the Java language interface for outputting List Creator forms.
For details on the Java interface configuration, refer to the following:
=>"3.2.1 Development Environment"

5.2 Java Package Name

The following packages are available for the Java interface provided by List Creator:

Interface for outputting forms

Classes are provided for outputting forms in List Creator.
The package name is as follows.

com.fujitsu.systemwalker.outputassist.connector

5.3 About the Classes

5.3.1 List of Classes

The following is a list of classes of the packages provided by List Creator:
com.fujitsu.systemwalker.outputassist.connector package

Interface name	Description
FormBase Interface	Holds the forms and input data used for form output. Implemented in Forms, FormsFile, and FormsStream.

Class name	Description
Forms Class	Holds the forms and input data used for form output.
FormsFile Class	Holds the forms and input data files used for form output.
FormsStream Class	Holds the forms and input data used for form output.
PrintProperties Class	Holds the output methods and other attribute information used for form output.
PrintForm Class	Performs form output, remote form output, connector linkage, and OWF file creation based on FormBase and PrintProperties.

Exception name	Description
ConnectorException Class	Reports exceptions which occurred in the Java interface.
RemoteException Class	Reports exceptions which occurred during remote form output and connector linkage.
OwfException Class	Reports exceptions which occurred during OWF file creation.

5.4 Class Interface

5.4.1 FormBase Interface

Holds the forms and input data used for form output.
Implemented in Forms class, FormsFile class, and FormsStream classes.

com.fujitsu.systemwalker.outputassist.connector.FormBase

public interface
FormBase

5.4.1.1 Field Overview

The fields which signify the character code are described below.

Constant	Description
CODE_SJIS	Shift-JIS
CODE_UCS2LE	UNICODE (UTF16 little endian)
CODE_UCS2BE	UNICODE (UTF16 big endian)
CODE_UTF8	UNICODE (UTF8)
CODE_EUC_U90	EUC U90 coding system of Fujitsu
CODE_EUC_S90	EUC S90 coding system of Fujitsu
CODE_EUC	EUC

Note

- Used in the setFileType method of the FormBase interface, and in classes inheriting the FormBase interface.
  For details, refer to the setFileType method of the FormBase interface, and the following classes which inherit the FormBase interface:
  =>"5.4.2 Forms Class"
  =>"5.4.3 FormsFile Class"
  =>"5.4.4 FormsStream Class"

5.4.1.2 Method Overview

The FormBase interface methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Method for Common Properties	All	void	setFileType(int code) Specify the character code of the runtime environment.

5.4.1.3 Method Details

5.4.1.3.1 Method for Common Properties

```
public void
setFileType(int code)
throws ConnectorException
```

Usage

Specify the character code of the runtime environment.

Parameter

code	:	Specify the used character code.		
		CODE_SJIS	:	Shift-JIS
		CODE_EUC_U90	:	EUC U90 coding system of Fujitsu
		CODE_EUC_S90	:	EUC S90 coding system of Fujitsu
		CODE_UTF8	:	UNICODE (UTF8)

Exception

ConnectorException

Caution

- Refer to the following in regards to the supported character code:
  =>"5.6.2 Cautions Regarding the Character Code"

5.4.2 Forms Class

Holds the forms and input data used for form output.

java.lang.Object
└ **com.fujitsu.systemwalker.outputassist.connector.Forms**

public class Forms
extends java.lang.Object
implements FormBase

5.4.2.1 Field Overview

For the fields which signify the character code inherited from the com.fujitsu.systemwalker.outputassist.connector.FormBase interface, refer to the following:
=>"5.4.1.1 Field Overview"

5.4.2.2 Constructor Overview

The Forms class constructor is described below.

Constructor overview
Forms(java.lang.String formname, java.lang.String assets) (*1) Specify the form name and the form storage directory, and create a Forms object which contains the form and form data sets.
Forms(java.lang.String formname, java.lang.String assets, java.lang.String cbformname) (*1) Specify the form name, form storage directory and combination-form name, and create a Forms object which contains the form and form data sets.

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.2.3 Method Overview

The Forms class methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Method for Record (Line) Output	All	void	pushRecord(java.lang.String record) Adds a record (line) string which becomes the input data for outputting the form.
Method for Switching Forms	All	void	ChangeForm(java.lang.String formname) Switches the form used when performing multi-form output or combination-form output.
Methods for Combination-form Output	All	void	ChangeCbForm(String cbformname) Switches the combination-form name used when outputting multiple combination-forms.
	All	void	setCbFile(String cbfilename) Specify the combination-form descriptor file name.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Methods for XBRL data support/ Navigator links function	W/S	void	setDataSource(java.lang.String dsinfo) Specify the specific information used as extraction conditions for input data to be placed in the form when using the XBRL data support/Navigator links function.
	W/S	void	execDataSource() execDataSource(java.lang.String csv) Extracts input data according to the form descriptor information and the definition of setDataSource method.
Methods for User Resource Information	All	void	setFileType(int code) Specify the character code of the runtime environment.
	All	void	setDataCode(int encoding) Specify the character code for outputting the form.
Method for Releasing Resources	All	void	cleanup() The resource used by the Java interface is released.

5.4.2.4 Constructor Details

public
Forms(java.lang.String formname, java.lang.String assets)
throws ConnectorException

Usage

Specify the form name and the form storage directory, and create a Forms object which contains the form and form data sets.

Parameter

formname	:	Specify the form name. When performing multi-form output, specify the form name that is to be output first.
assets	:	Specify the form storage directory with its full path.

Exception

ConnectorException

Caution

- For the form storage directory, specify the form storage directory of the application server. When performing remote form output or connector linkage, but not transferring a form, specify the form storage directory of the List Creator print server with the ID_REMOTEDIRECTORY key of the setProperty method of the PrintProperties class.
- When performing combination-form output, use the Forms (String formname, String assets, String cbformname) constructor.
- Refer to the following for cautions when specifying the form storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"

Remarks

- When performing multi-form output, switch the form used with the ChangeForm method.

public
Forms(java.lang.String formname, java.lang.String assets, java.lang.String cbformname)
throws ConnectorException

Usage

This constructor is used when performing combination-form output.

Specify the form name, form storage directory and combination-form name, and create a Forms object which contains the form and form data sets.

Parameter

formname	:	Specify the form name. Specify the form name that is to be output first.
assets	:	Specify the form storage directory with its full path.
cbformname	:	Specify the combination-form name.

Exception

ConnectorException

Caution

- For the form storage directory, specify the form storage directory of the application server. When performing remote form output or connector linkage, but not transferring a form, specify the form storage directory of the List Creator print server with the ID_REMOTEDIRECTORY key of the setProperty method of the PrintProperties class.
- When not performing combination-form output, use Forms(string formname, string assets) constructor.
- Refer to the following for cautions when specifying the form storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"

Remarks

- When performing combination-form output, switch the form used with the ChangeForm method. Also, use the ChangeCbForm method to switch the combination-form used.
- When performing multi-form output, switch the form used with the ChangeForm method.

5.4.2.5 Method Details

5.4.2.5.1 Method for Record (Line) Output

```
public void
pushRecord(java.lang.String record)
throws ConnectorException
```

Usage

Adds a record (line) string which becomes the input data for outputting the form.

Parameter

record	:	Specify a record (line) string.

Exception

ConnectorException

Caution

- Set record (line) strings per one record (line).
- Do not include linefeed codes in the record (line) string.
- When performing multi-form/combination-form output, switch the form used with the ChangeForm method, and specify the record (line) string without including the form name in this method.
- When outputting multiple combination-forms, switch the combination-form name used with the ChangeCbForm method, and specify the record (line) string without including the combination-form name and form names in this method.
- When this method is called repeatedly, the data is added. The added data is saved in the temporary work directory under the work directory. Deleted when the cleanup method is called.
- When specifying the character code during form output, specify the character code with the setDataCode method and the setFileType method before specifying this method here.
- Character code conversion cannot be specified after specifying this method.

- To create OWF files in remote form output mode, you must specify -gcmform option (form name for multi-form/combination-form) of the prprint command in the ID_EXECBUFFER key which is specified in the setProperty method of the PrintProperties class.

5.4.2.5.2 Method for Switching Forms

public void
ChangeForm(java.lang.String formname)
throws ConnectorException

Usage

Switches the form used when performing multi-form output or combination-form output. The input data specified after calling this method will become input data of this form.

Parameter

formname : Specify the name of the form to switch.

Exception

ConnectorException

Caution

- When performing multi-form/combination-form output, switch the form used with this method, and then specify the record (line) string without including the form name in the pushRecord method.

5.4.2.5.3 Methods for Combination-form Output

public void
ChangeCbForm(String cbformname)
throws ConnectorException

Usage

Switches the combination-form name used when outputting multiple combination-forms. The input data specified after calling this method will become input data of this combination-form.

Parameter

cbformname : Specify the name of the combination-form to switch.

Exception

ConnectorException

Caution

- When outputting multiple combination-forms, use this method to switch the combination-form name used.
  Also, switch the form used with the ChangeForm method, and specify the record (line) string without including the combination-form name and form names in the pushRecord method.

public void
setCbFile(String cbfilename)
throws ConnectorException

Usage

Specify the combination-form descriptor file name.
A combination-form descriptor file defines form descriptor information to be combined and output, and the overlapping order of the form descriptor information.
If this method call is omitted, the combination-form descriptor file in the form storage directory (Lccbform.ini) becomes valid.

Parameter

cbfilename : Specify the combination-form descriptor file name with the full path.

Exception

ConnectorException

Caution

- For the character code of the combination-form descriptor file, refer to the Online Manual "Advanced Form Design".
- In the following cases, specify only the file name with this method:
  - When a combination-form descriptor file is transferred during remote form output
  - When a combination-form descriptor file is transferred during connector linkage
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.2.5.4 Methods for User Resource Information

```
public void
setFileType(int code)
throws ConnectorException
```

Usage

Specify the character code of the runtime environment.
For details, refer to the following:
=>"5.4.1.3 Method Details"

Exception

ConnectorException

Caution

- Specify this method before specifying the pushRecord method. After specifying the pushRecord method, it is not possible to specify this method.

```
public void
setDataCode(int encoding)
throws ConnectorException
```

Usage

Specify the character code for outputting the form.

Parameter

encoding : Specify the character code of the data file.

CODE_SJIS	:	Shift-JIS
CODE_UTF8	:	UNICODE (UTF8)
CODE_EUC	:	EUC U90/S90 settings specified in the setFileType method is used.

Exception

ConnectorException

Caution

- Specify this method before specifying the pushRecord method. After specifying the pushRecord method, it is not possible to specify this method.
- If the method is not called, the following character codes are used.
  - When the application server runs on Windows
    - UNICODE (UTF8)
  - When the application server runs on UNIX OS
    - The character code specified in the setFileType method

  - Character code specified in the environment variables (LANG) and (OA_EUCTYPE) (if it is not specified in the setFileType method)
- To use the form descriptor information for which Unicode characters are defined, specify "CODE_UTF8".
- To output forms in the English environment (English locale), specify "CODE_UTF8".

5.4.2.5.5 Method for Releasing Resources

```
public void
cleanup()
throws ConnectorException
```

Usage

The resource used by the Java interface is released.

Exception

ConnectorException

Caution

- When the object is no longer required, make sure to call this method.

5.4.2.6 Precautions

- If the input data format of the form is "XML Format", this class cannot be used for form output. Use the FormsFile class or the FormsStream class.
- Refer to the following in regards to the supported character code:
  =>"5.6.2 Cautions Regarding the Character Code"
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.3 FormsFile Class

Holds the forms and input data files used for form output.

java.lang.Object
└ **com.fujitsu.systemwalker.outputassist.connector.FormsFile**

public class FormsFile
extends java.lang.Object
implements FormBase

5.4.3.1 Field Overview

The fields specified in the setGrpOut method of the FormsFile class are shown below.

Table 5.1 Fields specified in the setGrpOut method of the FormsFile class

Constant	Description
GRPOUT_NOGRP	Multi-form output will not be performed.
GRPOUT_GRP	Multi-form output will be performed.

The fields specified in the setGrpDelimitMode method of the FormsFile class are shown below.

Table 5.2 Fields specified in the setGrpDelimitMode method of the FormsFile class

Constant	Description
DELIMIT_ANY	Specify in the following cases: - When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom" - When the input data format is "CSV Format" and the separator character is a "Comma (,)"
DELIMIT_SPACE	Specify when the input data format is "Variable Length", and the separator character is "Space(s)".
DELIMIT_TAB	Specify in the following cases: - When the input data format is "Variable Length", and the separator character is a "Tab" - When the input data format is "CSV Format", and the separator character is a "Tab"
DELIMIT_FIXED	Specify when the input data format is "Fixed Length" and the separator character is "No".
DELIMIT_FIXEDDELIMIT	Specify when the input data format is "Fixed Length" and the separator character is "Yes".
DELIMIT_XML	Specify when the input data format is "XML Format".

For the fields which signify the character code inherited from the com.fujitsu.systemwalker.outputassist.connector.FormBase interface, refer to the following:
=>"5.4.1.1 Field Overview"

5.4.3.2 Constructor Overview

The FormsFile class constructor is described below.

Constructor overview
FormsFile(java.lang.String assets) (*1) Specify the form storage directory, and create a FormsFile which contains the form and input data file set.

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.3.3 Method Overview

The FormsFile class methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Methods for User Resource Information	All	void	setScriptFile(java.lang.String name) (*1) (*2) Specify the form name when outputting a single form.
	All	void	setDataFile(java.lang.String pathname) (*1) (*2) Specify the data file name.
	All	void	setDataFile(java.lang.String pathname, int encoding) (*1) (*2) Specify the data file name and the character code for the input data.
	All	void	setFileType(int code) Specify the character code of the runtime environment.
	All	void	setXmlDataRoot(java.lang.String xmlroot) When the input data format is "XML Format" and the XML root and the data root are different, specify the data root parent element path in the XML data.
Methods for User Resource Information for Multi-form/ Combination-form Output	All	void	setGrpOut(int group) (*1) Specify when performing multi-form output.
	All	void	setLcForm(java.lang.String names) (*1) (*2) Specify the form name for multi-form/combination-form output.
	All	void	setGrpDelimitMode(int mode) (*1) Specify the type of a form name data separator character for multi-form/ combination-form.
	All	void	setGrpDelimit(java.lang.String delimit) Specify the form name data separator character for multi-form/ combination-form.
	All	void	setGrpBytes(int length) Specify the form name data field length for multi-form.
	All	void	setCbForm(boolean cbform) (*1) Specify when performing combination-form output.
	All	void	setCbFile(String cbfilename) (*2) Specify the combination-form descriptor file name.
Method for Releasing Resources	All	void	cleanup() The resource used by the Java interface is released.

*1:Required methods differ depending on the output method. The differences between the required methods for outputting a single form, performing multi-form output, and performing combination-form output are indicated below:

- When outputting a single form
  - setScriptFile method
- When performing multi-form output
  - setDataFile method
  - setGrpOut method
  - setLcForm method
  - setGrpDelimitMode method
- When performing combination-form output
  - setDataFile method
  - setCbForm method

setLcForm method
setGrpDelimitMode method

However, when performing local output, the setLcForm method need not be specified.
When not transferring a form during remote form output or connector linkage, the setLcForm method need not be specified.

*2: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.3.4 Constructor Details

public
FormsFile(java.lang.String assets)
throws ConnectorException

Usage

Specify the form storage directory, and create a FormsFile which contains the form and input data file set.

Parameter

assets : Specify the form storage directory with its full path.

Exception

ConnectorException

Caution

- For the form storage directory, specify the form storage directory of the application server. When performing remote form output or connector linkage, but not transferring a form, specify the form storage directory of the List Creator print server with the ID_REMOTEDIRECTORY key of the setProperty method of the PrintProperties class.
- Refer to the following for cautions when specifying the form storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.3.5 Method Details

5.4.3.5.1 Methods for User Resource Information

public void
setScriptFile(java.lang.String name)
throws ConnectorException

Usage

Specify the form name when outputting a single form.

Parameter

name : Specify the form name used when outputting a single form.

Exception

ConnectorException

Caution

- When performing a single form output (when multi-form output or combination-form output is not performed), make sure to specify this method.

public void
setDataFile(java.lang.String pathname)
throws ConnectorException

Usage

Specify the data file name.

Parameter

pathname : Specify the data file name with its full path.

Exception

ConnectorException

Caution

- Describe the data file using Shift-JIS characters when the application server runs on Windows.
- Enter the data in the data file using one of the following character codes when the application server runs on UNIX OS:
  - The character code specified in the setFileType method
  - Character code specified in the environment variables LANG and OA_EUCTYPE (if it is not specified in the setFileType method)
- To use the form descriptor information for which Unicode characters are defined, describe the data in the data file in Unicode.
- When outputting a single form during local output and OWF file creation (when multi-form output or combination-form output is not performed), if the setDataFile method calls are omitted, it will operate as though a data file with the same name as the form under the form storage directory ("form_name.dat") was specified.
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), make sure to specify the setDataFile method.

public void
setDataFile(java.lang.String pathname, int encoding)
throws ConnectorException

Usage

Specify the data file name and the character code for the input data.

Parameter

pathname : Specify the data file name with its full path.

encoding : Specify the character code for the input data.

CODE_SJIS	:	Shift-JIS
CODE_UCS2LE	:	UNICODE (UTF16 little endian)
CODE_UCS2BE	:	UNICODE (UTF16 big endian)
CODE_UTF8	:	UNICODE (UTF8)
CODE_EUC	:	EUC

Exception

ConnectorException

Caution

- When outputting a single form during local output and OWF file creation (when multi-form output or combination-form output is not performed), if the setDataFile method calls are omitted, it will operate as though a data file with the same name as the form under the form storage directory ("form_name.dat") was specified.
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), make sure to specify the setDataFile method.
- If you specify EUC ("CODE_EUC") as the input data character code when the application server runs on UNIX OS, be sure to specify the EUC type ("CODE_EUC_U90" or "CODE_EUC_S90") in the setFileType method. Similarly, when specifying UNICODE (UTF8) ("CODE_UTF8") as the input data character code, be sure to specify "CODE_UTF8" in the setFileType method.
- If the input data format is "Variable Length", "Fixed Length", or "CSV Format", describe the data in the data file with the character code specified in the parameter of this method.

- When performing form output using data files with input data in "XML Format", the character code specified in this method will be invalid.
  When creating OWF files using data files with input data in "XML Format", specify the character code in the XML declaration in the XML file, and specify Shift-JIS ("CODE_SJIS") for the character code in this method.
- To use the form descriptor information for which Unicode characters are defined, specify any UNICODE for the input data character code.
- When outputting a form in the English environment (English locale), specify any UNICODE for the input data character code.

```
public void
setFileType(int code)
throws ConnectorException
```

Usage

Specify the character code of the runtime environment.
For details, refer to the following:
=>"5.4.1.3 Method Details"

Exception

ConnectorException

```
public void
setXmlDataRoot(java.lang.String xmlroot)
throws ConnectorException
```

Usage

When the input data format is "XML Format" and the XML root and the data root are different, specify the data root parent element path in the XML data.
Specify the data root parent element path by separating the element name with a slash (/) beginning from a slash (/) to the end of the data root parent element name. Other formats cannot be specified.
If multiple data roots exist directly under the path specified with this method in the XML data, all the data roots are searched.
If this method call is omitted, the data roots of the form are searched in the following order:

1) If the XML root and the data root have the same name, the XML root is regarded as the data root.
2) If the XML root and the data root are different, the data root is searched from the child elements directly under the XML root.

Parameter

xmlroot	:	Specify the data root parent element path in the XML data.

Exception

ConnectorException

5.4.3.5.2 Methods for User Resource Information for Multi-form/Combination-form Output

```
public void
setGrpOut(int group)
throws ConnectorException
```

Usage

Specify when performing multi-form output.

Parameter

group	:	Specify whether to perform multi-form output.	
		GRPOUT_NOGRP	: Multi-form output will not be performed.
		GRPOUT_GRP	: Multi-form output will be performed.

Exception

ConnectorException

Caution

- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method), be sure to specify the form name with the setLcForm method (during OWF file creation).
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method), specify the form name with the setLcForm method, or specify "NOSEND" for the ID_SENDRESOURCE key of the setProperty method of the PrintProperties class (during remote form output and connector linkage).

public void
setLcForm(java.lang.String names)
throws ConnectorException

Usage

Specify the form name for multi-form/combination-form output.
Specify the form name of the application server. Specify multiple form names separating with a semicolon (;).

Parameter

names	:	When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), specify the form name to be used. Specify multiple form names separating with a semicolon (;).

Exception

ConnectorException

Caution

- This method is valid only during remote form output, connector linkage, and OWF file creation.
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), make sure to specify the form name in this method (when creating OWF files).
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), specify the form name with this method, or specify "NOSEND" for the ID_SENDRESOURCE key of the setProperty method of the PrintProperties class (during remote form output and connector linkage).

public void
setGrpDelimitMode(int mode)
throws ConnectorException

Usage

Specify the type of a form name data separator character for multi-form/combination-form.

Parameter

mode : Specify the type of a form name data separator character for multi-form/combination-form.

DELIMIT_ANY : Specify in the following cases:
- When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom"
- When the input data format is "CSV Format" and the separator character is a "Comma (,)"

DELIMIT_SPACE : Specify when the input data format is "Variable Length", and the separator character is "Space(s)".

DELIMIT_TAB : Specify in the following cases:
- When the input data format is "Variable Length", and the separator character is a "Tab"
- When the input data format is "CSV Format", and the separator character is a "Tab"

DELIMIT_FIXED : Specify when the input data format is "Fixed Length" and the separator character is "No".

DELIMIT_FIXEDDELIMIT : Specify when the input data format is "Fixed Length" and the separator character is "Yes".

DELIMIT_XML : Specify when the input data format is "XML Format".

Exception

ConnectorException

Caution

- When performing multi-form/combination-form output, make sure to specify this method. When the input data format is "Fixed Length" (when "DELIMIT_FIXED" or "DELIMIT_FIXEDDELIMIT" is specified in this method), make sure to specify the field length of the form name data with the setGrpBytes method.
- The following shows the character code of the separator character used when "Any single-byte character" or "Yes" is specified for the form name data separator character for multi-form/combination-form under the conditions stated in the table.

List Creator print server	Input data character code	Input data format	Character code of the form name data separator character for multi-form/combination-form
Windows	Unicode	Variable length	Character of 0x007F/0x7F or less
		Fixed length	
UNIX OS	EUC (U90/S90) or UNICODE (UTF8)	Variable length	Character of 0x7F or less
		Fixed length	

public void
setGrpDelimit(java.lang.String delimit)
throws ConnectorException

Usage

When using an optional separator character (when "DELIMIT_ANY" is specified in setGrpDelimitMode) and performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), specify the separator character that will actually be used.

Separator characters are specified according to the input data format and separator character specified in the [General] tab in the [Data Definitions] window.

Parameter

delimit : Specify the form name data separator character for multi-form/combination-form with a single-byte string.

Exception

ConnectorException

Caution

- If the character code of the input data is Unicode, specify a code 0x007F/0x7F or less.
- When performing combination-form output, do not specify a "Colon (:)".

public void
setGrpBytes(int length)
throws ConnectorException

Usage

When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method), specify the field length of the form name data in the data file.
When the input data format is "Fixed Length" (when "DELIMIT_FIXED" or "DELIMIT_FIXEDDELIMIT" is specified to the setGrpDelimitMode method), make sure to specify this method. For "Yes", specify a length which does not include the separator character.

Parameter

length : Specify the form name data field length for multi-form.

Exception

ConnectorException

public void
setCbForm(boolean cbform)
throws ConnectorException

Usage

Specify when performing combination-form output.
If this method is not called, combination-form output is not performed.

Parameter

cbform : Specify whether to perform combination-form output.

false	:	Combination-form output will not be performed.
true	:	Combination-form output will be performed.

Exception

ConnectorException

Caution

- When performing combination-form output, specify the form name data separator character in the setGrpDelimitMode method and setGrpDelimit method.
- When creating OWF files and performing combination-form output, make sure to specify the form name with the setLcForm method.
- When performing combination-form output during remote form output or connector linkage, specify the form name with the setLcForm method, or specify "NOSEND" for the ID_SENDRESOURCE key of the setProperty method of the PrintProperties class.

public void
setCbFile(String cbfilename)
throws ConnectorException

Usage

Specify the combination-form descriptor file name.
A combination-form descriptor file defines form descriptor information to be combined and output, and the overlapping order of the form descriptor information.
If this method call is omitted, the combination-form descriptor file in the form storage directory (Lccbform.ini) becomes valid.

Parameter

cbfilename	:	Specify the combination-form descriptor file name with the full path.

Exception

ConnectorException

Caution

- For the character code of the combination-form descriptor file, refer to the Online Manual "Advanced Form Design".
- In the following cases, specify only the file name with this method:
  - When a combination-form descriptor file is transferred during remote form output
  - When a combination-form descriptor file is transferred during connector linkage
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.3.5.3 Method for Releasing Resources

public void
cleanup()
throws ConnectorException

Usage

The resource used by the Java interface is released.

Exception

ConnectorException

Caution

- Before deleting the object, make sure to call this method.

5.4.3.6 Precautions

- Refer to the following in regards to the supported character code:
  =>"5.6.2 Cautions Regarding the Character Code"
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.4 FormsStream Class

This is the output stream for writing data given to the Java connector.

java.lang.Object
└ Java.io.OutputStream
└ **com.fujitsu.systemwalker.outputassist.connector.FormsStream**

public class FormsStream
extends java.io.FileOutputStream
implements FormBase

5.4.4.1 Field Overview

The fields specified in the setGrpOut method of the FormsStream class are shown below.

Table 5.3 Fields specified in the setGrpOut method of the FormsStream class

Constant	Description
GRPOUT_NOGRP	Multi-form output will not be performed.
GRPOUT_GRP	Multi-form output will be performed.

The fields specified in the setGrpDelimitMode method of the FormsStream class are shown below.

Table 5.4 Fields specified in the setGrpDelimitMode method of the FormsStream class

Constant	Description
DELIMIT_ANY	Specify in the following cases: - When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom" - When the input data format is "CSV Format" and the separator character is a "Comma (,)"
DELIMIT_SPACE	Specify when the input data format is "Variable Length", and the separator character is "Space(s)".
DELIMIT_TAB	Specify in the following cases: - When the input data format is "Variable Length", and the separator character is a "Tab" - When the input data format is "CSV Format", and the separator character is a "Tab"
DELIMIT_FIXED	Specify when the input data format is "Fixed Length" and the separator character is "No".
DELIMIT_FIXEDDELIMIT	Specify when the input data format is "Fixed Length" and the separator character is "Yes".
DELIMIT_XML	Specify when the input data format is "XML Format".

For the fields which signify the character code inherited from the com.fujitsu.systemwalker.outputassist.connector.FormBase interface, refer to the following:
=>"5.4.1.1 Field Overview"

5.4.4.2 Constructor Overview

The FormsStream class constructor is described below.

Constructor overview
FormsStream(java.lang.String assets) (*1) Specify the form storage directory, and create an output stream for writing data.

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.4.3 Method Overview

The FormsStream class methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Methods for User Resource Information	All	void	setScriptFile(java.lang.String name) (*1) (*2) Specify the form name when outputting a single form.
	All	void	setFileType(int code) Specify the character code of the runtime environment.
	All	void	setDataCode(int encoding) Specify the character code of the data given to the stream.
	All	void	setXmlDataRoot(java.lang.String xmlroot) When the input data format is "XML Format" and the XML root and the data root are different, specify the data root parent element path in the XML data.
Methods for User Resource Information for Multi-form/ Combination-form Output	All	void	setGrpOut(int group) (*1) Specify when performing multi-form output.
	All	void	setLcForm(java.lang.String names) (*1) (*2) Specify the form name for multi-form/combination-form output.
	All	void	setGrpDelimitMode(int mode) (*1) Specify the type of a form name data separator character for multi-form/ combination-form.
	All	void	setGrpDelimit(java.lang.String delimit) Specify the form name data separator character for multi-form/ combination-form.
	All	void	setGrpBytes(int length) Specify the form name data field length for multi-form.
	All	void	setCbForm(boolean cbform) (*1) Specify when performing combination-form output.
	All	void	setCbFile(String cbfilename) (*2) Specify the combination-form descriptor file name.
Methods for Data Output	All	void	write(byte[] b) Write the b.length byte of the specified byte array to this output stream.
	All	void	write(byte[] b, int off, int len) Write the len byte starting from the offset position off, from the specified byte array, to this output stream.
	All	void	write(int b) Write the specified byte data to the output stream.
	All	void	close() Close the output stream, and release the system resource related to this stream.
Method for Releasing Resources	All	void	cleanup() The resource used by the Java interface is released.

*1: Required methods differ depending on the output method. The differences between the required methods for outputting a single form, performing multi-form output, and performing combination-form output are indicated below:

- When outputting a single form
  - setScriptFile method
- When performing multi-form output
  - setGrpOut method
  - setLcForm method
  - setGrpDelimitMode method
- When performing combination-form output
  - setCbForm method
  - setLcForm method
  - setGrpDelimitMode method

However, when performing local output, the setLcForm method need not be specified.
When not transferring a form during remote form output, the setLcForm method need not be specified.

*2: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.4.4 Constructor Details

```
public
FormsStream(java.lang.String assets)
throws ConnectorException, IOException
```

Usage

Specify the form storage directory, and create an output stream for writing data.

Parameter

assets	:	Specify the form storage directory with its full path.

Exception

ConnectorException, IOException

Caution

- For the form storage directory, specify the form storage directory of the application server. When performing remote form output or connector linkage, but not transferring a form, specify the form storage directory of the List Creator print server with the ID_REMOTEDIRECTORY key of the setProperty method of the PrintProperties class.
- Refer to the following for cautions when specifying the form storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.4.5 Method Details

5.4.4.5.1 Methods for User Resource Information

```
public void
setScriptFile(java.lang.String name)
throws ConnectorException
```

Usage

Specify the form name when outputting a single form.

Parameter

name	:	Specify the form name used when outputting a single form.

Exception

ConnectorException

Caution

- When performing a single form output (when multi-form output or combination-form output is not performed), make sure to specify this method.

public void
setFileType(int code)
throws ConnectorException

Usage

Specify the character code of the runtime environment.
For details, refer to the following:
=>"5.4.1.3 Method Details"

Exception

ConnectorException

public void
setDataCode(int encoding)
throws ConnectorException

Usage

Specify the character code of the data given to the stream.

Parameter

encoding	:	Specify the character code of the data given to the stream.		
		CODE_SJIS	:	Shift-JIS
		CODE_UCS2LE	:	UNICODE (UTF16 little endian)
		CODE_UCS2BE	:	UNICODE (UTF16 big endian)
		CODE_UTF8	:	UNICODE (UTF8)
		CODE_EUC	:	EUC

Exception

ConnectorException

Caution

- Specify the character code of the input data given to the stream in the parameter of this method.
- If you specify EUC ("CODE_EUC") as the input data character code when the application server runs on UNIX OS, be sure to specify the EUC type ("CODE_EUC_U90" or "CODE_EUC_S90") in the setFileType method. Similarly, when specifying UNICODE (UTF8) ("CODE_UTF8") as the input data character code, be sure to specify "CODE_UTF8" in the setFileType method.
- When performing form output using data files with input data in "XML Format", the character code specified in this method will be invalid.
  When creating OWF files using data files with input data in "XML Format", specify the character code in the XML declaration in the XML file, and specify Shift-JIS ("CODE_SJIS") for the character code in this method.
- To use the form descriptor information for which Unicode characters are defined, specify any UNICODE for the input data character code.
- When outputting a form in the English environment (English locale), specify any UNICODE for the input data character code.

public void
setXmlDataRoot(java.lang.String xmlroot)
throws ConnectorException

Usage

When the input data format is "XML Format" and the XML root and the data root are different, specify the data root parent element path in the XML data.
Specify the data root parent element path by separating the element name with a slash (/) beginning from a slash (/) to the end of the data root parent element name. Other formats cannot be specified.

If multiple data roots exist directly under the path specified with this method in the XML data, all the data roots are searched.
If this method call is omitted, the data roots of the form are searched in the following order:

1) If the XML root and the data root have the same name, the XML root is regarded as the data root.
2) If the XML root and the data root are different, the data root is searched from the child elements directly under the XML root.

Parameter

xmlroot : Specify the data root parent element path in the XML data.

Exception

ConnectorException

5.4.4.5.2 Methods for User Resource Information for Multi-form/Combination-form Output

```
public void
setGrpOut(int group)
throws ConnectorException
```

Usage

Specify when performing multi-form output.

Parameter

group : Specify whether to perform multi-form output.

GRPOUT_NOGRP	:	Multi-form output will not be performed.
GRPOUT_GRP	:	Multi-form output will be performed.

Exception

ConnectorException

Caution

- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method), be sure to specify the form name with the setLcForm method (during OWF file creation).
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method), specify the form name with the setLcForm method, or specify "NOSEND" for the ID_SENDRESOURCE key of the setProperty method of the PrintProperties class (during remote form output and connector linkage).

```
public void
setLcForm(java.lang.String names)
throws ConnectorException
```

Usage

Specify the form name for multi-form/combination-form output.
Specify the form name of the application server. Specify multiple form names separating with a semicolon (;).

Parameter

names : When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), specify the form name to be used.
Specify multiple form names separating with a semicolon (;).

Exception

ConnectorException

Caution

- This method is valid only during remote form output, connector linkage, and OWF file creation.
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), make sure to specify the form name in this method (when creating OWF files).
- When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), specify the form name with this method, or specify "NOSEND" for the ID_SENDRESOURCE key of the setProperty method of the PrintProperties class (during remote form output and connector linkage).

```
public void
setGrpDelimitMode(int mode)
throws ConnectorException
```

Usage

Specify the type of a form name data separator character for multi-form/combination-form.

Parameter

mode : Specify the type of a form name data separator character for multi-form/combination-form.

DELIMIT_ANY	:	Specify in the following cases: - When the input data format is "Variable Length" and the separator character is either "Vertical Bars (|)", "Sharp (#)", "Asterisk (*)", or "Custom".
DELIMIT_SPACE	:	Specify when the input data format is "Variable Length", and the separator character is "Space(s)".
DELIMIT_TAB	:	Specify in the following cases: - When the input data format is "Variable Length", and the separator character is a "Tab" - When the input data is "CSV Format", and the separator character is a "Tab"
DELIMIT_FIXED	:	Specify when the input data format is "Fixed Length" and the separator character is "No".
DELIMIT_FIXEDDELIMIT	:	Specify when the input data format is "Fixed Length" and the separator character is "Yes".
DELIMIT_XML	:	Specify when the input data format is "XML Format".

Exception

ConnectorException

Caution

- When performing multi-form/combination-form output, make sure to specify this method.
  When the input data format is "Fixed Length" (when "DELIMIT_FIXED" or "DELIMIT_FIXEDDELIMIT" is specified in this method), make sure to specify the field length of the form name data with the setGrpBytes method.
- The following shows the character code of the separator character used when "Any single-byte character" or "Yes" is specified for the form name data separator character for multi-form/combination-form under the conditions stated in the table.

List Creator print server	Input data character code	Input data format	Character code of the form name data separator character for multi-form/combination-form
Windows	Unicode	Variable length	Character of 0x007F/0x7F or less
		Fixed length	
UNIX OS	EUC (U90/S90) or UNICODE (UTF8)	Variable length	Character of 0x7F or less
		Fixed length	

public void
setGrpDelimit(java.lang.String delimit)
throws ConnectorException

Usage

When using an optional separator character (when "DELIMIT_ANY" is specified in setGrpDelimitMode) and performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method) or combination-form output (when "true" is specified for the setCbForm method), specify the separator character that will actually be used.
Separator characters are specified according to the input data format and separator character specified in the [General] tab in the [Data Definitions] window.

Parameter

delimit : Specify the form name data separator character for multi-form/combination-form with a single-byte string.

Exception

ConnectorException

Caution

- If the character code of the input data is Unicode, specify a code 0x007F/0x7F or less.
- When performing combination-form output, do not specify a "Colon (:)".

public void
setGrpBytes(int length)
throws ConnectorException

Usage

When performing multi-form output (when "GRPOUT_GRP" is specified for the setGrpOut method), specify the field length of the form name data in the data file.
When the input data format is "Fixed Length", (when "DELIMIT_FIXED" or "DELIMIT_FIXEDDELIMIT" is specified to the setGrpDelimitMode method), be sure to specify this method. For "Yes", specify a length which does not include the separator character.

Parameter

length : Specify the form name data field length for multi-form.

Exception

ConnectorException

public void
setCbForm(boolean cbform)
throws ConnectorException

Usage

Specify when performing combination-form output.
If this method is not called, combination-form output is not performed.

Parameter

cbform : Specify whether to perform combination-form output.

false	:	Combination-form output will not be performed.
true	:	Combination-form output will be performed.

Exception

ConnectorException

Caution

- When performing combination-form output, specify the form name data separator character in the setGrpDelimitMode method and setGrpDelimit method.
- When creating OWF files and performing combination-form output, make sure to specify the form name with the setLcForm method.
- When performing combination-form output during remote form output or connector linkage, specify the form name with the setLcForm method, or specify "NOSEND" for the ID_SENDRESOURCE key of the setProperty method of the PrintProperties class.

public void
setCbFile(String cbfilename)
throws ConnectorException

Usage

Specify the combination-form descriptor file name.
A combination-form descriptor file defines form descriptor information to be combined and output, and the overlapping order of the form descriptor information.
If this method call is omitted, the combination-form descriptor file in the form storage directory (Lccbform.ini) becomes valid.

Parameter

cbfilename : Specify the combination-form descriptor file name with the full path.

Exception

ConnectorException

Caution

- For the character code of the combination-form descriptor file, refer to the Online Manual "Advanced Form Design".
- In the following cases, specify only the file name with this method:
  - When a combination-form descriptor file is transferred during remote form output
  - When a combination-form descriptor file is transferred during connector linkage
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.4.5.3 Methods for Data Output

```
public void
write(byte[] b)
throws IOException
```

Usage

Write the specified byte array to the output stream.

Parameter

b	:	Data to be written into the output stream

Exception

IOException

```
public void
write(byte[] b, int off, int len)
throws IOException
```

Usage

Write the len byte starting from the offset position off, from the specified byte array, to this output stream.

Parameter

b	:	Data
off	:	Data start offset
len	:	Number of bytes to be written into this output stream

Exception

IOException

```
public void
write(int b)
throws IOException
```

Usage

Write the specified byte data to the output stream. This implements the write method of the OutputStream.

Parameter

b	:	byte

Exception

IOException

```
public void
close()
throws IOException
```

Usage

Close the output stream, and release the system resource related to this stream. Hereafter, it is not possible to use this output stream for writing bytes.

Exception

IOException

Caution

- Before performing form output, make sure to call this method.

5.4.4.5.4 Method for Releasing Resources

```
public void
cleanup()
throws ConnectorException
```

Usage

The resource used by the Java interface is released.

Exception

ConnectorException

Caution

- Before deleting the object, make sure to call this method.

5.4.4.6 Precautions

- Before performing form output, be sure to close the output stream.
  If form output is performed without closing, a ConnectorException (Error code "OAJC_ERROR_PRINTOUT") will occur, and a message "[%1] [%2] Data File <%3> Read Error. Check Data File Name." will be notified to the event log or system log.
  If OWF file creation is attempted without closing, ConnectorException (Error code "OAJC_ERROR_OWFEXCEPTION") will occur and OwfException (Error code "OWF_ERROR_ACCESS_DENIED") will be reported as the detailed information.
- For character codes used by List Creator during form output, refer to the following:
  =>"5.6.2 Cautions Regarding the Character Code"
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

5.4.5 PrintProperties Class

Holds the output methods and other attribute information used for form output.

java.lang.Object
└ **com.fujitsu.systemwalker.outputassist.connector.PrintProperties**

public class PrintProperties
extends java.lang.Object
implements java.io.Serializable

5.4.5.1 Field Overview (ID Key List)

Fields specified by the setProperty method of the PrintProperties class and supported fields for each operating system running on the application server are indicated in the following categories:

- Keys for user resource information
- Keys for identification information
- Keys for operational information
- Keys for printing information
- Keys for e-Record information
- Keys for FAX send information
- Keys for PDF file save information
- Keys for print option information
- Keys for OWF file creation information
- Keys for Excel file output information
- Keys for remote form output information and connector linkage information
- Other keys

●Keys for user resource information

Table 5.5 Fields specified by the setProperty method of the PrintProperties class (keys for user resource information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_BARCODEDATA (barcode data BASE64 encoding specification)	Y	Y	Y	Y	Y	Y
ID_VISUALDIR (media data storage directory) (*1)	Y	Y	Y	Y	Y	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Keys for identification information

Table 5.6 Fields specified by the setProperty method of the PrintProperties class (keys for identification information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_TITLE (title)	Y	Y	Y	Y	Y	Y
ID_COMMENT (comment)	Y	Y	Y	Y	Y	Y
ID_USERID (output user ID)	Y	Y	Y	Y	-	Y

●Keys for operational information

Table 5.7 Fields specified by the setProperty method of the PrintProperties class (keys for operational information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_STARTPAGE (start page number)	Y	Y	Y	Y	Y	Y
ID_ENDPAGE (end page number)	Y	Y	Y	Y	Y	Y
ID_DIRECTMETHOD (output method)	Y	Y	Y	Y	Y	Y
ID_OUTPUTMODE (output method)	Y	Y	Y	Y	Y	Y
ID_REPLACESTRING (SET operator replacement string)	Y	Y	Y	Y	Y	Y
ID_OUTPUTSCALE (scale according to paper size specification)	Y	Y	Y	Y	Y	Y
ID_STARTPOSITIONGRIDUNIT (unit of the print offset specification)	Y	Y	Y	Y	Y	Y
ID_STARTPOSITIONX (print offset (the horizontal position for starting the print job))	Y	Y	Y	Y	Y	Y
ID_STARTPOSITIONY (print offset (the vertical position for starting the print job))	Y	Y	Y	Y	Y	Y
ID_LFCODE (linefeed code control specification)	Y	Y	Y	Y	Y	Y
ID_FFCODE (new page code control specification)	Y	Y	Y	Y	Y	Y
ID_NODATA (operation when there is no input data)	Y	Y	Y	Y	Y	Y
ID_LABELDATA (specification of data file with the field name label)	Y	Y	Y	Y	-	-
ID_PROPERTYREPLACE (property replace file name) (*1)	Y	Y	Y	Y	-	-
ID_MAPFONTFILE (substitute font info file name) (*1)	Y	Y	Y	Y	-	Y
ID_BCODADJUST (barcode correct info file name) (*1)	Y	Y	Y	Y	-	Y
ID_PRINTENVFILE (form output information file name) (*1)	Y	Y	Y	Y	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Keys for printing information

Table 5.8 Fields specified by the setProperty method of the PrintProperties class (keys for printing information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_PRTDEVNAME (printer model name) (*1)	-	-	Y	Y	Y	Y
ID_PRINTER (printer name)	Y	Y	Y	Y	Y	Y
ID_PRINTBIN (paper source)	Y	Y	Y	Y	Y	Y
ID_PRINTBINNAME (paper feed name)	Y	Y	D	D	D	D
ID_ITEMPRINTBIN (paper source/paper feed name switching specification)	Y	Y	Y	Y	Y	Y
ID_COPYNUMBER (number of copies)	Y	Y	Y	Y	Y	Y
ID_COPYNUMBERPRT (number of copies according to the printer settings)	Y	Y	D	D	-	-
ID_COPYNUMBERCOLLATE (collate output)	Y	D	Y	D	D	D
ID_PRINTSIDE (print side specification)	Y	Y	Y	Y	Y	Y
ID_ITEMPRINTSIDE (print side switch specification)	Y	Y	Y	Y	Y	Y
ID_PAPERCODE (paper name)	Y	Y	D	D	D	D

*1: When the List Creator print server runs on Linux, only FNP printing is supported.

●Keys for e-Record information

Table 5.9 Fields specified by the setProperty method of the PrintProperties class (keys for e-Record information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_LW_DRVNAME (e-Record device name)	Y	-	Y	Y	-	Y
ID_LW_MAKER (e-Record creator)	Y	-	Y	Y	-	Y
ID_LW_GENERATEDAY (e-Record creation date)	Y	-	Y	Y	-	Y
ID_LW_GENERATETIME (e-Record creation time)	Y	-	Y	Y	-	Y
ID_LW_KEEPDIR (e-Record storage folder path name) (*1)	Y	-	Y	Y	-	Y
ID_LW_NOTE1 (e-Record comment 1)	Y	-	Y	Y	-	Y
ID_LW_NOTE2 (e-Record comment 2)	Y	-	Y	Y	-	Y
ID_LW_NOTE3 (e-Record comment 3)	Y	-	Y	Y	-	Y
ID_LW_NOTE4 (e-Record comment 4)	Y	-	Y	Y	-	Y
ID_LW_TERM (Validity period of e-Record)	Y	-	Y	Y	-	Y
ID_LW_DELTYPE (Specification of auto-delete following expiry of e-Record)	Y	-	Y	Y	-	Y
ID_LW_SEARCH (Indexed searching specification when making e-Record)	Y	-	Y	Y	-	Y
ID_LW_MAIL (Mail notification when making e-Record)	Y	-	-	-	-	-
ID_LW_MAILRCV (Mail destination when making e-Record)	Y	-	-	-	-	-
ID_LW_PRINTBIN (Paper source when printing after making e-Record)	Y	-	Y	Y	-	Y
ID_LW_PRINTBINNAME (Paper feed name when printing after making e-Record)	Y	-	Y	Y	-	Y
ID_LW_COPYNUMBER (Number of copies when printing after making e-Record)	Y	-	Y	Y	-	Y
ID_LW_COPYNUMBERCOLLATE (Collate output specification when printing after making e-Record)	Y	-	Y	Y	-	Y
ID_LW_PRINTSIDE (Print side specification when printing after making e-Record)	Y	-	Y	Y	-	Y
ID_LW_ITEMPRINTSIDE (Print side switch specification when printing after making e-Record)	Y	-	Y	Y	-	Y
ID_LW_FAXSEND (FAX sender information when making e-Record)	Y	-	-	-	-	-
ID_LW_FAXRCV (FAX recipient information when making e-Record)	Y	-	-	-	-	-
ID_LW_FAXRCVFILE (FAX recipient information file name when making e-Record) (*1)	Y	-	-	-	-	-
ID_LW_FAXSUBJECT (FAX send attached subject when making e-Record)	Y	-	-	-	-	-
ID_LW_FAXCOMMENT (FAX send attached comment when making e-Record)	Y	-	-	-	-	-
ID_LW_DSTFOLDER (Distribution folder ID during form print distribution)	Y	-	-	-	-	-
ID_LW_DSTMETHOD (Form print distribution specification)	Y	-	-	-	-	-
ID_LW_STREAMENVFILE (Electronic form information file name) (*1)	Y	-	Y	Y	-	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Keys for FAX send information

Table 5.10 Fields specified by the setProperty method of the PrintProperties class (keys for FAX send information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_FAX_DRVNAME (FAX drive name)	Y	-	-	-	-	-
ID_FAX_SEND (FAX sender information when sending FAX)	Y	-	-	-	-	-
ID_FAX_RCV (FAX recipient information when sending FAX)	Y	-	-	-	-	-
ID_FAX_RCVFILE (FAX recipient information file name when sending FAX) (*1)	Y	-	-	-	-	-
ID_FAX_SUBJECT (Attached subject when sending FAX)	Y	-	-	-	-	-
ID_FAX_COMMENT (Attached comment when sending FAX)	Y	-	-	-	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Keys for PDF file save information

Table 5.11 Fields specified by the setProperty method of the PrintProperties class (keys for PDF file save information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_KEEPPDF (storage destination file name when saving as a file) (*1)	Y	Y	Y	Y	Y	Y
ID_PDF_SUBTITLE (PDF file subtitle)	Y	Y	Y	Y	Y	Y
ID_PDF_AUTHOR (PDF file author)	Y	Y	Y	Y	Y	Y
ID_PDF_PRINT (PDF file print permission specification)	Y	Y	Y	Y	Y	Y
ID_PDF_MODIFY (PDF file change permission specification)	Y	Y	Y	Y	Y	Y
ID_PDF_SELECT (PDF file text and graphics selection permission specification)	Y	Y	Y	Y	Y	Y
ID_PDF_ANNOTATE (Allow form fields and comments to be added/changed specification)	Y	Y	Y	Y	Y	Y
ID_PDF_PWD (password for opening the PDF file)	Y	Y	Y	Y	Y	Y
ID_PDF_SECUPWD (PDF file security option change password) (*2)	Y	Y	Y	Y	Y	Y
ID_PDF_LIMIT (Time limit/period for viewing the PDF file)	Y	Y	Y	Y	-	Y
ID_PDF_EMBED (PDF file font embedding specification)	Y	Y	Y	Y	Y	Y
ID_PDF_EMBEDREFERENCE (PDF file embedded font search specification)	Y	Y	Y	Y	Y	Y
ID_PDF_JPEGQUALITY (PDF file JPEG compression quality specification)	Y	Y	Y	Y	Y	Y
ID_PDF_EMBEDFILE (PDF attachment file name) (*1)	Y	Y	Y	Y	Y	Y
ID_PDF_AUTOPRINT (PDF file automatic printing specification)	Y	Y	Y	Y	Y	Y
ID_PDF_HIDETOOLBAR (PDF file viewer toolbar display specification)	Y	Y	Y	Y	Y	Y
ID_PDF_HIDEMENUBAR (PDF file viewer menubar display specification)	Y	Y	Y	Y	Y	Y
ID_PDF_FULLSCREEN (PDF file viewer full screen display specification)	Y	Y	Y	Y	Y	Y
ID_PDF_BOOKMARK (specification to insert a bookmark in the PDF file when switching forms)	Y	Y	Y	Y	Y	Y
ID_PDF_BOOKMARKITEM (specification to insert a bookmark in the PDF file when switching data)	Y	Y	Y	Y	Y	Y
ID_PDF_DOCENVFILE (PDF document information file name) (*1)	Y	Y	Y	Y	Y	Y
ID_PDF_OUTINFOFILE (ECM information file name) (*1)	Y	Y	-	-	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

*2: When specifying the following keys, be sure to specify a password with this key.

- ID_PDF_PRINT
- ID_PDF_MODIFY
- ID_PDF_SELECT
- ID_PDF_ANNOTATE

●Keys for print option information

Table 5.12 Fields specified by the setProperty method of the PrintProperties class (keys for print option information)

Constant (constant settings) (*1)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_PRTMODE (Output timing)	Y	D	Y	D	-	D
ID_JOBHRESUME (Resume date time)	Y	D	Y	D	-	D
ID_JOBPRIORITY (Output priority)	Y	D	D	D	D	D
ID_INFORM (Message notification destination (notification message))	Y	D	Y	D	-	D
ID_JOBRMSGHOST (Message notification destination (reply message))	Y	D	D	D	-	D
ID_JOBBANNER (Separator page output specification)	Y	D	D	D	D	D
ID_JOBWAIT (Output end wait)	Y	D	D	D	D	D
ID_JOBPAPERCODE (Change paper messages)	Y	D	D	D	D	D
ID_JOBUSERNAME (Print document owner name (user name) specification)	Y	-	-	-	-	-

*1: It is valid only if a printer defined in Print Manager is specified as an output device.

●Keys for OWF file creation information

Table 5.13 Fields specified by the setProperty method of the PrintProperties class (keys for OWF file creation information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_CMVISUALFILE (media data file name) (*1)	Y	Y	Y	Y	Y	Y
ID_KEEPOWF (OWF file name) (*1)	Y	Y	Y	Y	Y	Y
ID_OWF_DESTINATION (operational mode during Web plug-in startup)	Y	Y	Y	Y	Y	Y
ID_OWF_OPENPRTDLG (specification of [Print] window display during printing)	Y	Y	Y	Y	Y	Y
ID_OWF_PRTCLOSE (specification to close the Web browser after print completion)	Y	Y	Y	Y	Y	Y
ID_OWF_PREVIEWRATE (specification of zoom factor for preview)	Y	Y	Y	Y	Y	Y
ID_OWF_PRTPREVENTION (specification of printer control during preview)	Y	Y	Y	Y	Y	Y
ID_OWF_EMBED (specification of embedding external fonts in OWF files)	Y	Y	Y	Y	Y	Y
ID_OWF_REGFONT (external font file registration) (*1)	Y	Y	Y	Y	Y	Y
ID_OWF_WORKDIRECTRY (work directory during OWF file creation) (*1)	Y	Y	Y	Y	Y	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Keys for Excel file output information

Table 5.14 Fields specified by the setProperty method of the PrintProperties class (keys for Excel file output information)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_KEEPXLSX (storage destination file name when outputting to an Excel file) (*1)	Y	Y	Y	Y	-	Y
ID_XLSX_DOCENVFILE (Excel document information file name) (*1)	Y	Y	Y	Y	-	Y
ID_XLSX_OUTPUTFORM (output method of details when outputting to an Excel file)	Y	Y	Y	Y	-	Y
ID_XLSX_SHEETNAME (specification of the sheet name of the Excel file to be output)	Y	Y	Y	Y	-	-
ID_XLSX_SHEETNAMEITEM (specification of a data field name whose input data is used as the sheet name of the Excel file to be output)	Y	Y	Y	Y	-	-
ID_XLSX_OUTINFOFILE (ECM information file name) (*1)	Y	Y	-	-	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Keys for remote form output information and connector linkage information

Table 5.15 Fields specified by the setProperty method of the PrintProperties class (keys for remote form output information and connector linkage information)

Constant (constant settings)	Support status based on the type of operating system of the application server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_HOST (target computer name)	Y	Y	Y	Y	Y	Y
ID_COMPRESSRESOURCE (compression of transfer data)	Y	Y	Y	Y	Y	Y
ID_SENDRESOURCE (form transfer specification)	Y	Y	Y	Y	Y	Y
ID_UPDATERESOURCE (control specification when multiple instances of a file name exist in the destination directory)	Y	Y	Y	Y	Y	Y
ID_LCVISUALFILE (transfer media data file name) (*1)	Y	Y	Y	Y	Y	Y
ID_REMOTEDIRECTORY (form storage directory for form output) (*1)	Y	Y	Y	Y	Y	Y
ID_LCLWFAXRCVFILE (The name of the transferred FAX recipient information file for sending an e-Record of the form by FAX) (*1)	Y	Y	Y	Y	Y	Y
ID_LCFAXRCVFILE (The name of the transferred FAX recipient information file for sending a form by FAX) (*1)	Y	Y	Y	Y	Y	Y
ID_LCFILE (transfer file name) (*1)	Y	Y	Y	Y	Y	Y
ID_LCBINFILE (transfer file name during binary transfer) (*1)	Y	Y	Y	Y	Y	Y
ID_RETURNPDFPATH (created PDF file name) (*1)	Y	Y	Y	Y	Y	Y
ID_RETURNOWFPATH (created OWF file name) (*1)	Y	Y	Y	Y	Y	Y
ID_RETURNXLSXPATH (created Excel file name) (*1)	Y	Y	Y	Y	-	Y
ID_REMOTEOPTION (remote form output option)	Y	Y	Y	Y	Y	Y
ID_REMOTEMODE (remote form output mode)	Y	Y	Y	Y	Y	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Other keys

Table 5.16 Fields specified by the setProperty method of the PrintProperties class (other keys)

Constant (constant settings)	Support status based on the type of operating system of the List Creator print server W : Windows W64 : Windows(x64) S : Solaris L64 : Linux for Intel64 L : Linux for x86 LI : Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
	W	W64	S	L64	L	LI
ID_EXECBUFFER (form output option)	Y	Y	Y	Y	Y	Y

5.4.5.2 Constructor Overview

The PrintProperties class constructor is described below.

Constructor overview
PrintProperties() Create a PrintProperties object.

5.4.5.3 Method Overview

The PrintProperties class methods are described below.

When outputting a form using the PrintProperties class, set the attributes related to the form output by using the setProperty method described below.

Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
All	void	setProperty(int key, java.lang.String val) Specify the key and value pair of the properties that are specified during the form output. For the keys and values that can be specified, refer to the following: =>"5.4.5.5 Key and Value Pairs Specified by the setProperty Method"

5.4.5.4 Constructor Details

public
PrintProperties()

Usage

Create a PrintProperties object.

5.4.5.5 Key and Value Pairs Specified by the setProperty Method

The following discusses the keys specified by the setProperty method and their values.

5.4.5.5.1 Keys for User Resource Information

ID_BARCODEDATA (barcode data BASE64 encoding specification)

Specify the encoding method for barcode CODE128, EAN-128 input data.
If this key is omitted, it will operate as if "NONE" was specified.

NONE : Specify data that is not encoded as input data of CODE128, EAN-128.

BASE64 : Specify data that is BASE64 encoded as input data of CODE128, EAN-128.

Caution

- When specifying this key, perform the following settings for the barcode field (CODE128, EAN-128) which apply during form design:
  - The data length of the [Properties] tab of the target barcode field property
    The barcode data length before performing BASE64 encoding +2
  - The number of bytes in the data field in the [Data Definitions (Report Header)] tab and the [Data Definitions] tab of the [Data Definitions] window (when the input data format is "Fixed Length")
    The number of bytes after performing BASE64 encoding
- In the following conditions, do not set "BASE64" for this key:
  - When specifying an operand for the corresponding data field in the [Data Definitions (Report Header)] tab and [Data Definitions] tab of the [Data Definitions] window
  - When specifying a corresponding data field name for the operands in the [Data Definitions (Report Header)] tab and [Data Definitions] tab of the [Data Definitions] window
  - When specifying a corresponding data field name for the [Extended] tab of the [Data Definitions] window

ID_VISUALDIR (media data storage directory)

Specify the media data storage directory with its full path.
If the data of the image field is only a file name, this property searches under the media data storage directory.
If this key is omitted, the Forms class, FormsFile class, or the form storage directory specified in the FormsStream class constructor will be valid.

Caution

- Refer to the following for cautions when specifying the media data storage directory name:
  =>"3.5 Cautions regarding Development and Execution of User Applications"
- This key will be invalid in the following cases:
  - When the ID_LCVISUALFILE key is specified during remote form output
  - When the ID_LCVISUALFILE key is specified during connector linkage
  - When creating OWF files

5.4.5.5.2 Keys for Identification Information

ID_TITLE (title)

Specify a title within 64 bytes.
Do not use the following characters: If these characters are specified, the applicable characters will be replaced with "hyphens (-)".

"/", ",", ":", ";", "*", "?", """, "<", ">", "|", "¥"

If this key is omitted, the form name (combination-form name when performing combination-form output) will become the title.

Caution

- When saving as a PDF file, specify a title in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

ID_COMMENT (comment)

Specify comments regarding the form within 64 bytes.
Do not use the following characters:

";", """

If this key is omitted, it will be valid in the following order:

1) Comment specified at the [General] tab of the [Form Output Methods] window
2) Not set

When performing combination-form output, it will be enabled in the following order of priority:

1）Comment specified in the combination-form descriptor

2）Not set

Caution

- This key will be invalid in the following cases:
  - When saving as PDF files
  - When Performing Excel File Output

ID_USERID (output user ID)

Specify the identification name (any string) of the user that outputs the form in order to identify the user.
The user identification name specified with this key is output to the data field for which the USERID operator is specified in the operand in the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window.
Specify the user identification name within the byte size that fits in the length of the field in which the user ID string is output.
If this key is omitted, nothing is output in the field where the USERID operator is specified.

Caution

- The user identification name specified with this key is output as user information of audit trail log.

5.4.5.5.3 Keys for Operational Information

Note

- The operations of List Creator (including the order of priority) and the points to note when outputting forms, refer to the Online Manual "Setup & Operation".
  Also, for the points to note regarding input data, refer to the Online Manual "Advanced Form Design".

ID_STARTPAGE (start page number)

Specify the page number where the form output will start.
When performing multi-form output, specify the page numbers through all forms.
When this key is omitted, output will start from the first page.

ID_ENDPAGE (end page number)

Specify the page number where the form output will end.
When performing multi-form output, specify the page numbers through all forms.
If this key is omitted, output will be continued to the final page.

ID_DIRECTMETHOD (output method)
ID_OUTPUTMODE (output method)

Specify the form output method.
Specify the ID_DIRECTMETHOD key in order to specify the output method, ignoring the output method specified on the form.
Set the ID_OUTPUTMODE key in order to output the form in a specific output method, from the output methods specified on the form.
The following displays values that may be specified:

DEFAULT	: Outputs the form in the output method defined in the form.
PRINT	: Prints.
LIST	: Makes e-Record.
PDF	: Saves as a PDF file.
FAX	: Sends FAX.
OWF	: Creates the OWF file. (can only be specified for the ID_DIRECTMETHOD key)
EXCEL	: Outputs to an Excel file.

When selecting multiple output methods, separate them using a comma (,).

Example) To print a form and make an e-Record of the form in a single form output

```
prop.setProperty( PrintProperties.ID_DIRECTMETHOD, "PRINT,LIST" );
```

The output methods of the form will be enabled in the following order of priority:

1) Output method specified by the ID_DIRECTMETHOD key
(However, when "DEFAULT" is specified, the value specified by the ID_OUTPUTMODE key is enabled)
2) Output method specified by the ID_OUTPUTMODE key
3) All output methods specified in the form

Note

- For information that is required for each output method but is not specified in the form, be sure to specify with the ID_DIRECTMETHOD key of the setProperty method.
- If an output method not specified in the form is specified when specifying the ID_OUTPUTMODE key, an error will occur during the PrintOut method call of the PrintForm class.
- OWF files cannot be created by specifying the ID_OUTPUTMODE key. To create OWF files, specify the ID_DIRECTMETHOD key.

ID_REPLACESTRING (SET operator replacement string)

Specify the replacement string of the SET operator.
Specify the replacement string of "%" when the variable "%" is specified for the SET operator in the operand of the data field in the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window. After setting the replacement string for the data field of the [Data Definitions (Report Header)] tab, specify the replacement string for the data field of the [Data Definitions] tab.
When the variable "%" is specified for the SET operator, make sure to specify the replacement string with this key. For details on the specification format of the replacement string, refer to the Online Manual "Setup & Operation".

Note

- When performing multi-form/combination-form output, the same replacement string specified with this method will be valid for all forms used.

ID_OUTPUTSCALE (scale according to paper size specification)

Specify the paper size to output, when it is necessary to enlarge or reduce the form according to the specified paper size.
If the specified paper size is larger than the defined paper size, the form will be enlarged. If the specified paper size is smaller than the defined paper size, the form will be reduced. When adjusting output size, the aspect ratio of width and height will be maintained.

A3	: A3 paper
A4	: A4 paper
A5	: A5 paper
A6	: A6 paper
B4	: B4 paper
B5	: B5 paper
PS	: Postcard
LT	: Letter
LG	: Legal

OT : Optional (Only when creating OWF file or when the List Creator print server is Windows)

If this key is omitted, the Adjust Output Size at [Print Size] tab in the [Form Properties] window of the [Form Style Descriptor] window be enabled.

Caution
- When any value other than Optional (OT) is specified for this key, if the ID_PAPERCODE key is specified, an error will occur. Also, when Optional (OT) is specified for this key, if the ID_PAPERCODE key is not specified, an error will occur.

ID_STARTPOSITIONGRIDUNIT (unit of the print offset specification)

Specify the units to use when specifying the print offset during form output.

INCH : Specified in inches.

MM : Specified in millimeters.

When this key is omitted, the print offset specified in the [Margins] tab in the [Form Properties] of the [Form Style Descriptor] window will be applied.

Caution
- This key is enabled only when the output method is Print, Sending FAX or Saving as a PDF file, or when printing a form that is saved as e-Record. This is disabled when displaying a form that is saved as e-Record.
- When specifying the ID_STARTPOSITIONX key or ID_STARTPOSITIONY key, be sure to specify the grid units using this key. When this key is omitted, the ID_STARTPOSITIONX and ID_STARTPOSITIONY keys are disabled even if specified.
- When specifying this key, be sure to specify the print offset using the ID_STARTPOSITIONX and ID_STARTPOSITIONY keys.

ID_STARTPOSITIONX (print offset (the horizontal position for starting the print job))

The horizontal original position for printing is specified in inches or millimeters.

00~22.50 : For inch specification

0.0~571.5 : For millimeter specification

Caution
- This key is enabled only when the output method is Print, Sending FAX or Saving as a PDF file, or when printing a form that is saved as e-Record. This is disabled when displaying a form that is saved as e-Record.
- When specifying this key, be sure to specify the grid units using the ID_STARTPOSITIONGRIDUNIT key. When the ID_STARTPOSITIONGRIDUNIT key is omitted, this key is disabled even if specified.
- When specifying this key, be sure to specify the vertical position for starting the print job using the ID_STARTPOSITIONY key.

ID_STARTPOSITIONY (print offset (the vertical position for starting the print job))

The vertical original position for printing is specified in inches or millimeters.

0.00~22.50 : For inch specification

0.0~571.5 : For millimeter specification

Caution

- This key is enabled only when the output method is Print, Sending FAX or Saving as a PDF file, or when printing a form that is saved as e-Record. This is disabled when displaying a form that is saved as e-Record.
- When specifying this key, be sure to specify the grid units using the ID_STARTPOSITIONGRIDUNIT key. When the ID_STARTPOSITIONGRIDUNIT key is omitted, this key is disabled even if specified.
- When specifying this key, be sure to specify the horizontal position for starting the print job using the ID_STARTPOSITIONX key.

ID_LFCODE (linefeed code control specification)

Specify a control method for a line containing only linefeed code (0x0D0A or 0x0A) in input data formats of "Variable Length", "Fixed Length", or "CSV Format".

SKIP : Skips lines containing only linefeed code. Operation will be performed as if there was no linefeed code.

DO : Processes linefeed code in rows where present. One blank line will be output.

If this key is omitted, it will operate as if "SKIP" was specified.

Caution

- This key is only valid if input data format is "Variable Length", "Fixed Length", or "CSV Format". An error will occur if the format is "XML Format".
- This key is used in the following form formats:
  - Free frame
  - Multipart table
  - Simple table
  - Block repeat
  - Sticky label

  For a single page, do not specify "DO" (specification to only perform linefeed processing for lines with only linefeed codes) with this key. If this is specified, an empty page (in which input data is not output) will be output.
- If "DO" (specification to only perform linefeed processing for lines containing only linefeed codes) is specified with this key, and "BREAK" is specified for the operand of the data field in the [Data Definitions] tab of the [Data Definitions] window, an unexpected operation will be performed (a BREAK will occur on lines with data and with linefeed codes only).

ID_FFCODE (new page code control specification)

Specify a control method for the new page code (0x0D0C or 0x0C) in input data formats of "Variable Length", "Fixed Length", or "CSV Format".

SKIP : A new page processing is not performed, and the new page code is skipped. Operation will be performed as if the new page code did not exist.

DO : A new page processing is performed (the next record is output to the next page).

NONE : The new page processing and new page code skip are not performed. Because input data is read with no regard to the new page code, if there is a new page code in the input data, an invalid character may be output.

If this key is omitted, it will operate as if "NONE" was specified.

Caution

- This key is only valid if input data format is "Variable Length", "Fixed Length", or "CSV Format". An error will occur if the format is "XML Format".
- This key is used in the following form formats:
  - Free frame
  - Multipart table
  - Simple table
  - Block repeat
  - Sticky label

  For a single page, do not specify "DO" (specification to perform a new page processing) with this key. If this is specified, an empty page (in which input data is not output) will be output. When using input data containing a new page code in a single page, specify "SKIP" for this key.

Note

- It does not matter if there is a linefeed code (0x0D0A or 0x0A) in front of a new page code (0x0D0C or 0x0C), or not.

ID_NODATA (operation when there is no input data)

Specify whether or not to throw an error when the input data is 0 bytes.

false	: Throws an error.
true	: Outputs without an error.

When specifying "true", an error will not occur if the input data is 0 bytes.
In this case, the 0 byte fields will be output as follows:

Text field	: No output (blank).
Numeric field	: Outputs 0.
OCR-B field	: No output (blank).
Radio button	: No selection.
Checkbox	: No selection.
Barcode field	: No output (blank).
Image field	: No output (blank).
Post code field	: No output (blank).
Block text field	: No output (blank).

If this key is omitted or if a value other than "true" or "false" is specified, it will operate as if "false" was specified.

Caution

- Do not specify this key in the following case:
  - When the input data format is "XML format"

Note

- If the input data is not 0 bytes, the operations are as follows:
  - When "false " is specified
    For fields other than numeric fields, the print operation will be the same as when "true" is specified by this key. Numeric fields will be blank.
  - When "true" is specified
    The print operation will be the same as the output of this key.
- The state when there are no records in the input data file during multi-form/ combination-form output is defined as the state when all of the following conditions are met:
  - The form name and form name data separator character for multi-form/ combination-form have been described
  - There is no data subsequent to the form name in the record
  - There is no succession of records for the same form name
    If there is a succession of records, it will be determined that there is a record for the input data; therefore, the operation specified by this key will be effective for just the first record, but normal print operations for form output will apply to the following records.

ID_LABELDATA (specification of data file with the field name label)

Specify whether the input data is treated as "a data file with the field name label".

false	: Input data will not be treated as a data file with the field name label.
true	: Input data will be treated as a data file with the field name label.

If this key is omitted, it will operate as if "false" was specified.

Caution

- In the following conditions, do not set "true" for this key:
  - When the input data format is "Fixed Length" or "XML Format"
- This key will be invalid in the following case:
  - When XBRL data support/Navigator links function is used

ID_PROPERTYREPLACE (property replace file name)

Specify the property replace file name used for form output with its full path.
When outputting a form, field properties defined in the form descriptor information can be replaced with the properties specified in the property replace file.
When this key is omitted, field properties defined in the form descriptor information will be used.
Up to two property replace files can be specified. When specifying two files, separate them using a semicolon (;). The total length should not exceed 1024 bytes. If the first and second property replace files have different specifications for the same field property, the specification in the second file will override the first one.
The following displays a specification example of property replace files.

Example: setProperty(PrintProperties.ID_PROPERTYREPLACE,"C:¥temp¥propfile1.csv;C:¥temp¥propfile2.csv");

Caution

- For the character code of the property replace file, refer to the Online Manual "Advanced Form Design".
- In the following cases, specify only the file name for this key.
  - When a property replace file is transferred during remote form output
  - When a property replace file is transferred during connector linkage

Note

- Specify property replace files in accordance with your specific way of managing those files. For example, if a file contains the common definitions shared among all the forms while you store the definitions specific to individual output types separately in different files, you should specify two files when outputting a form.

ID_MAPFONTFILE (substitute font info file name)

Specify the substitute font info file name used for form output with its full path.
A substitute font info file specifies substitute information used when the font defined in the form descriptor information is replaced with another font at the time of form output.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name for this key.
  - When a substitute font info file is transferred during remote form output
  - When a substitute font info file is transferred during connector linkage
  - When a substitute font info file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

ID_BCODADJUST (barcode correct info file name)

Specify the barcode correct info file name used for form output with its full path.
A barcode correct info file specifies information to correct barcode output results according to the output destination environment when outputting barcodes in a form.
If this key is omitted, it will be valid in the following order:

1) Specification of barcode correct information in the [Print]/[File]/[File(Excel)] tab of the [Form Output Methods] window
2) Not set

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name for this key.
  - When a barcode correct info file is transferred during remote form output
  - When a barcode correct info file is transferred during connector linkage
  - When a barcode correct info file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

ID_PRINTENVFILE (form output information file name)

Specify the form output information file name with its full path which is used for outputting a form.
A form output information file defines various information related to form output.
When this key is omitted, settings in the form output environment setting file will be valid.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name for this key.
  - When a form output information file is transferred during remote form output
  - When a form output information file is transferred during connector linkage
  - When a form output information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

5.4.5.5.4 Keys for Printing Information

Note

- For the settings of the printer to be used, the support range and points to note for printing, refer to the Online Manual "Setup & Operation".

ID_PRTDEVNAME (printer model name)

Specifies the printer output method (FM or FNP) and the model name of the printer used for FM output when the List Creator print server runs on UNIX OS.

- When the List Creator print server runs on Solaris
  - When performing FM output
    Specify one of the following according to the type of printer used for output.

    VSP4610A : Specify this for VSP4620A printer.

    VSP4701 : Specify this for VSP4720 or VSP4730B printer.

    VSP4900 : Specify this for VSP4902 printer.

    VSP4950 : Specify this for VSP4971 or VSP4980 printer.

    VSPSP : Specify this for VSP2740, VSP2740B, VSP3601A, VSP3710A, VSP3710B, VSP3802A, or VSP3802B printer.

  - When performing FNP output

    FNP : Specify this when performing FNP output.

- When the List Creator print server runs on Linux

    FNP : Specify this when performing FNP output.

If this key is omitted, PostScript output will be performed.

Caution

- This key is valid only when the List Creator print server runs on UNIX OS. In addition, when the List Creator print server runs on Linux, only FNP output is supported.
- Do not call this key in the following cases:
  - When the List Creator print server runs on Windows
  - When performing PostScript output to a printer
- This key will be invalid when OWF files are created.
- When performing FNP output, the name of the printer actually used for printing must be specified with the ID_PRINTER key, in addition to the specification with this key. For List Creator, it is confirmed that the following printers can be used for output:
  - When the List Creator print server runs on Solaris
    VSP4902, VSP4971
  - When the List Creator print server runs on Linux
    VSP4720

Note

- For the printers supported by List Creator, refer to the Online Manual "Setup & Operation".

ID_PRINTER (printer name)

Specify the name of the printer to be used.
During OWF file creation, or when the List Creator print server is Windows, specify a printer name that is displayed in the Printers folder of the system. When using a remote printer in Windows, specify it in "¥¥server_name¥printer_name" format.
The following printers can be specified:

- Local printer
- Print Manager's printer

You can also specify the following remote printers when performing local output and creating OWF files (you cannot specify the printers when performing remote form output or using a connector linkage).

- Remote printer
- Print Manager's remote printer

If this key is omitted, it will be valid in the following order:

For [Windows]

1) Printer name specified at the [Print] tab of the [Form Output Methods] window
2) Default printer

For [UNIX OS]

1) Printer name specified at the [Print] tab of the [Form Output Methods] window
2) Default printer set in the system's LP print service or in the printer settings

Caution

- When a printer other than the one used for printing is specified, or if the normally used printer/default printer is not set as the output printer, the form will not be printed correctly.
- Do not specify a remote printer for this key when performing remote form output or connector linkage. Specifying this will result in an error during the form output.

ID_PRINTBIN (paper source)

Specify the paper source of the printer when the paper type is "cut-sheet".

CF	: Cut sheet feeder
H1	: Hopper 1
H2	: Hopper 2
H3	: Hopper 3
H4	: Hopper 4

MA	: Manual paper feed
NO	: None (During OWF creation or if the List Creator print server is Windows, the settings of the print driver properties will be followed. If the List Creator print server runs on UNIX, the printer settings will be followed.)
AT	: Automatic

The paper source will become valid in the following order of priority:

1）Paper source/paper feed name corresponding to the ID_ITEMPRINTBIN key specification

2）Paper feed name specified with the ID_PRINTBINNAME key (for List Creator print servers for Windows only)

3）Paper source specified with this key

4）Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- This key is valid in the following cases:
  - When the List Creator print server runs on Windows
  - For FM or FNP output when the List Creator print server runs on Solaris
  - For FNP output when the List Creator print server runs on Linux
- In the following cases, specify the paper feed name using the ID_PRINTBINNAME key:
  - When the List Creator print server is Windows and when specifying another paper source
  - During OWF file creation or if the List Creator print server is Windows, and when the paper is not fed in the specified method
- When the paper source is changed with this key, the paper feed name specified in the [Print] tab in the [Form Output Methods] window will be invalid. Specify the paper feed name with the ID_PRINTBINNAME key as necessary.
- If "NO (None)" is specified for the paper source, during OWF file creation or when the List Creator print server is Windows, the paper source will be invalid even if the paper feed name is specified from the ID_PRINTBINNAME key. Select a setting other than "NO (None)", when specifying paper feed name.
- If the automatic paper feed does not operate properly even when specifying "AT (Automatic)", during OWF file creation or when the List Creator print server is Windows, specify automatic paper feed in the properties of the List Creator printer driver, and specify "NO (None)" for the paper source.

ID_PRINTBINNAME (paper feed name)

In the following cases, specify the paper feed name of printer within 256 bytes.

- When the paper type is "cut-sheet", and the paper feed does not switch as specified for the paper source
- When the paper type is "roll-feed", and the paper feed does not switch correctly

Check the paper feed name that can be specified, in the properties of the printer driver.

The paper source will become valid in the following order of priority:

1）Paper source/paper feed name corresponding to the ID_ITEMPRINTBIN key specification

2）Paper feed name specified with this key

3）Paper source specified with the ID_PRINTBIN key

4）Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- This key is valid only when creating the OWF file or when the List Creator print server is Windows.
- The paper feed name may vary depending on the printer driver. Check the properties of the printer driver and enter the information accurately, taking note of the difference of full/half-width of characters and spaces, and existence of spaces.
- Do not enter a half-width space at the beginning or end of a paper feed name. Any half-width spaces that are entered at the beginning or end of a paper feed name will be deleted when that name is used.

ID_ITEMPRINTBIN (paper source/paper feed name switching specification)

Specify to change the paper source and paper feed name (enable the paper source/paper feed name specified in each form) when switching the form in multi-form output. This key is enabled only when the paper type is "cut-sheet".
If specified when not performing multi-form output, the paper source/paper feed name specified in the [Print] tab in the [Form Output Methods] window will be applied.

!REPORT : Enables the paper source/paper feed name specified in each form.

If this key is omitted, it will be valid in the following order:

1) Paper feed name specified with the ID_PRINTBINNAME key
2) Paper source specified with the ID_PRINTBIN key
3) Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- If the List Creator print server is Windows and the multi-up printing function of List Creator is specified, specification to switch the paper feed name will be invalid. Even if specified, printing will be performed according to the paper feed name specification defined in the first form that is output.
- When the List Creator print server runs on UNIX OS, even if paper source is specified, it will be invalid when performing PostScript output to the VSP series printer.
- If the paper is not supplied in the specified paper source, specify the paper feed name in the [Print] tab of the [Form Output Methods] window, and specify this key.
- Some printers do not allow changes made to the paper source/paper feed name for each form. Make sure to check the operations of the printer actually being used.
- When using the multi-up printing of the printer, do not specify this key. If specified, it will not operate correctly.

ID_COPYNUMBER (number of copies)

Specify the number of copies of the form, from 1 to 999.
If this key is omitted, the number of copies and collate output specification set in the [Print] tab in the [Form Output Methods] window will be applied.

Caution

- When specifying "true" with the ID_COPYNUMBERPRT key at the same time as this key, the specification of this key will be disabled.
- When outputting to a printer that cannot specify the number of copies in the properties of its printer driver, the operations will be as follows:
  - When collate printing is not specified, the specification of the number of copies will be invalid (only one copy will be printed).
  - When collate printing is specified, the specification of the number of copies will be enabled.

ID_COPYNUMBERPRT (number of copies according to the printer settings)

Specifies whether to specify the number of copies using the printer (printer driver) settings.

true : Uses the printer (printer driver) settings for the number of copies (specification of the ID_COPYNUMBER key and ID_COPYNUMBERCOLLATE key will become invalid).

false : Uses the specification of the ID_COPYNUMBER and ID_COPYNUMBERCOLLATE keys.

If this key is omitted or if a value other than "true" or "false" is specified, it will operate as if "false" was specified.

Caution

- If the List Creator print server runs on UNIX OS, it will be enabled only when creating OWF files.

ID_COPYNUMBERCOLLATE (collate output)

When the ID_COPYNUMBER key is specified, specify whether to collate output.

true : Collate printing is performed.

false : Collate printing is not performed.

If the ID_COPYNUMBER key is specified and this key is omitted, or if a value other than "true" or "false" is specified, it will operate as if "false" was specified.

Caution

- This key is valid only when a printer defined in Print Manager is specified as the printer name. For [Linux], it will be valid only when creating OWF files.
- When specifying "true" with the ID_COPYNUMBERPRT key at the same time as this key, the specification of this key will be disabled.
- If the List Creator print server runs on Windows, when outputting to a printer that can specify collate printing in the properties of its printer driver, the specifications on the printer will be valid even if "false" is specified.
- When outputting to a printer that cannot specify the number of copies in the properties of its printer driver, the operations will be as follows:
  - When collate printing is not specified, the specification of the number of copies will be invalid (only one copy will be printed).
  - When collate printing is specified, the specification of the number of copies will be enabled.

ID_PRINTSIDE (print side specification)

Specify the following:

- Whether to print forms on both sides or to use the print side setting of the printer (printer driver)
- Whether to continue printing on the same sheet of paper or to print on a new sheet when the form is switched during a multi-form output.

SINGLEFOLLOW : Single-sided printing will be performed.
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

BOTHFOLLOW : Duplex printing will be performed.
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

PRTFOLLOW : Prints according to the print side setting of the printer (printer driver).
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

SINGLE : Single-sided printing will be performed.
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

BOTH : Duplex printing will be performed.
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

PRT : Prints according to the print side setting of the printer (printer driver).
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

The print side specification will become valid in the following order of priority:

1) Specification according to the ID_ITEMPRINTSIDE key to perform the duplex printing and print on a new sheet when forms are switched during multi-form output
2) Print side specification set with this key
3) Specification set in the [Print] tab in the [Form Output Methods] window to perform the duplex printing, or to feed a new sheet when forms are switched during multi-form output

Caution

- If the selected printer does not have a function for the duplex printing or if this function is disabled, the duplex printing specification will become disabled (it may be printed on single side, or may output blank pages).
- In the following cases, do not specify "SINGLE", "BOTH" or "PRT" for this key. If specified, it will not operate correctly.
  - When using the multi-up printing function of the printer (it will operate correctly when using the List Creator columns)
  - When using a function to suppress the output of blank paper from the printer
- For [UNIX OS], note the following points:
  - When printing a form in List Creator, even if duplex printing is specified, it will be invalid when performing PostScript output to VSP series printer.
  - Specification of "PRT" is enabled only when creating an OWF file. When specified at the time of printing, it will operate as if "BOTH" was specified.
  - Specification of "PRTFOLLOW" is enabled only when creating an OWF file. When specified at the time of printing, it will operate as if "BOTHFOLLOW" was specified.

Note

- In a form in which either PAGE, TPAGE, PAGE-ALL, TPAGE-ALL, BPAGE, or BTPAGE has been set to the data field of the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window, when "SINGLE", "BOTH" or "PRT" has been specified for this key, the pages that are skipped and not printed will not be counted.

ID_ITEMPRINTSIDE (print side switch specification)

Specify to change the print side (enable the print side specified in each form) when switching the form in multi-form output.
If specified when not performing multi-form output, the print side specified in the [Print] tab in the [Form Output Methods] window will be applied.

!REPORT: Enables the print side setting specified in each form.

If this key is omitted, it will be valid in the following order:

1) Print side specification set with the ID_PRINTSIDE key
2) Specification set in the [Print] tab in the [Form Output Methods] window to perform the duplex printing, or to feed a new sheet when forms are switched during multi-form output

Caution

- When the List Creator print server runs on UNIX OS, even if duplex printing is specified, it will be invalid when performing PostScript output to the VSP series printer.
- If the multi-up printing of List Creator is specified, it will not be possible to change the duplex printing specification. Even if specified, printing will be performed according to the duplex printing specification defined in the first form that is output.
- If the selected printer does not have a function for the duplex printing or if this function is disabled, the duplex printing specification will become disabled (it may be printed on single side, or may output blank pages).
- When using the multi-up printing of the printer, do not specify this key. If specified, it will not operate correctly.
- Some printers do not allow the print side changes for each form. Make sure to check the operations of the printer actually being used.

ID_PAPERCODE (paper name)

Specify the paper name within 64 bytes.
When this key is omitted, printing is performed according to the paper size or paper name specified in the [Form Descriptor] tab in the [Form Properties] of the [Form Style Descriptor] window will be applied.

Caution

- This key is valid only when creating the OWF file or when the List Creator print server is Windows.
- When specifying this key and the ID_OUTPUTSCALE key at the same time, an error will occur if a value other than "Optional (OT)" is specified for the ID_OUTPUTSCALE key.
- If a paper name that is not supported by the printer is specified, the print defaults to the A4 paper size.
- If a paper name that is not supported by the printer is specified and "Optional (OT)" is specified for the ID_OUTPUTSCALE key, blank pages are displayed when previewed. If printed with the same specifications, blank pages will be printed.

Note

- To enlarge or reduce the form according to the specified paper name, specify "Optional (OT)" for the ID_OUTPUTSCALE key.

5.4.5.5.5 Keys for PDF File Save Information

Caution

- For the support range, the resources to be used, and the points to note for PDF conversion function, refer to the Online Manual "Setup & Operation".

ID_KEEPPDF (storage destination file name when saving as a file)

Specify the storage destination file name (PDF file name) with its full path, within 259 characters and 512 bytes.
When this key is omitted, the storage destination file name specified in the [File] tab in the [Form Output Methods] window will be applied.
The storage destination file name must be specified using one of these methods.

Caution

- It is not possible to specify only a folder name.
- If saving as a PDF file fails because a file with the same name already exists, the original PDF file may also be deleted.

Note

- The access privileges of the user that outputs the form are given to the PDF file.
- If the specified folder does not exist, the folder is automatically created. The folder is given the same access privileges as the parent folder. If the user outputting the form does not have access privileges to the automatically created folder, an error will occur when the PrintOut method of the PrintForm class is called.
- If a file with the same name already exists, it is replaced with the new file if it has privileges to overwrite. An error occurs when calling the PrintOut method of the PrintForm class if the privileges to overwrite are not given.
- When creating a PDF file in the List Creator print server, specify the PDF file path with this key.
  When placing the PDF file in the application server during connector linkage, specify the PDF file path with the ID_RETURNPDFPATH key.

ID_PDF_SUBTITLE (PDF file subtitle)

Specify the subtitle of the PDF file within 254 bytes.
If this key is omitted, it will be valid in the following order:

1) A subtitle of the summary specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window
2) Not set

Caution

- Specify the subtitle in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

ID_PDF_AUTHOR (PDF file author)

Specify the author of the PDF file within 254 bytes.
If this key is omitted, it will be valid in the following order:

1) An author of the summary specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window
2) Not set

Caution

- Specify an author in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

ID_PDF_PRINT (PDF file print permission specification)

Specify whether or not to allow printing of the PDF file.

true	: Printing is allowed.
false	: Printing is not allowed.

When this key is omitted, the "Printing Allowed" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution

- When specifying this key, be sure to specify a password with the ID_PDF_SECUPWD key. If a password is not specified, security settings of the PDF file may not be enabled.

ID_PDF_MODIFY (PDF file change permission specification)

Specify whether or not to allow change of the PDF file.

true	: Change is allowed.
false	: Change is not allowed.

When this key is omitted, the "Changes Allowed" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution

- Although changes to the PDF file are allowed, the document information (security) of the PDF file may indicate "Not Allow".
- When specifying this key, be sure to specify a password with the ID_PDF_SECUPWD key. If a password is not specified, security settings of the PDF file may not be enabled.

ID_PDF_SELECT (PDF file text and graphics selection permission specification)

Specify whether or not to allow text and graphics selection in a PDF file.

true	: Text and graphics selection is allowed.
false	: Text and graphics selection is not allowed.

When this key is omitted, the "Allow content to be copied/extracted" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution

- When specifying this key, be sure to specify a password with the ID_PDF_SECUPWD key. If a password is not specified, security settings of the PDF file may not be enabled.

ID_PDF_ANNOTATE (Allow form fields and comments to be added/changed specification)

Specify whether or not to allow comment and form field addition and change to the PDF file.

true	: Comment and form field addition and change are allowed.
false	: Comment and form field addition and change are not allowed.

When this key is omitted, the "Allow Notes and Form Field Add and Change Permission" setting of security privileges specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution

- Although additions and changes to the comments and form fields of the PDF file are allowed, the document information (security) of the PDF file may indicate "Not Allow".
- When specifying this key, be sure to specify a password with the ID_PDF_SECUPWD key. If a password is not specified, security settings of the PDF file may not be enabled.

ID_PDF_PWD (password for opening the PDF file)

Specify the password for opening the PDF file within 32 bytes.
Do not use the following characters:

"

If this key is omitted, a password for opening the PDF is not set.

Caution

- Specify the password in half-width alphanumeric characters and symbols (within the ASCII code character range). If other characters are specified, the PDF file may not be displayed.
- Do not specify the same password for this key and the ID_PDF_SECUPWD key. If the same password is specified, the security option settings may be changed.
- Values set in this property will not be serialized.

ID_PDF_SECUPWD (PDF file security option change password)

Specify the password for changing the security option of the PDF file within 32 bytes.
Do not use the following characters:

"

If this key is omitted, the security option change password is not set.

Caution

- Specify the password in half-width alphanumeric characters and symbols (within the ASCII code character range). If other characters are specified, the PDF file may not be displayed.
- Do not specify the same password for this key and the ID_PDF_PWD key. If the same password is specified, the security option settings may be changed.
- Values set in this property will not be serialized.

ID_PDF_LIMIT (Time limit/period for viewing the PDF file)

Specify the time limit (start date and time/end date and time) or the number of days for viewing the PDF file.

Viewing start date and time: Specify the viewing start date and time in "YYYYMMDDhhmmss" format.
Viewing of the PDF file is restricted before the specified date and time.

Viewing end date and time: Specify the viewing end date and time in "YYYYMMDDhhmmss" format.
Viewing of the PDF file is restricted after the specified date and time.

Viewing period : Specify the viewing period in days.
When the specified period (number of days) has passed since the PDF file was created, viewing of it is restricted.

To specify the viewing start date and time/end date and time "YYYYMMDDhhmmss", specify as follows:

YYYY : Specify the western calendar year.

MM : Specify within the range of 01 to 12 (month).

DD : Specify within the range of 01 to 31 (day).

hh : Specify within the range of 00 to 23 (hours).

mm : Specify within the range of 00 to 59 (minutes).

ss : Specify within the range of 00 to 59 (seconds).

When specifying the viewing period, set "1" or higher value.
When specifying the viewing time limit and viewing period, specify the values in the following order, separating each value with a comma (,).

1) Viewing start date and time
2) Viewing end date and time

3）Viewing period

If the viewing time limit and viewing period are specified at the same time, setting of the viewing time limit will be applied.
If neither viewing time limit nor viewing period is specified, "Restriction of Viewing by a period" setting of the viewing restrictions specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will become invalid, and viewing will not be restricted.
When this key is omitted, the "Restriction of Viewing by a period" setting of viewing restrictions specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.
The following displays a specification example:

- When specifying a viewing time limit
  When specifying "1st March 2006 0:0:0" for the viewing start date and time and "31st December 2006 0:0:0" for the viewing end date and time, set as follows.

```
setProperty( PrintProperties.ID_PDF_LIMIT, "20060301000000,20061231000000," );
```

- When specifying a viewing period
  When specifying 100 days for the viewing period, set as follows:

```
setProperty( PrintProperties.ID_PDF_LIMIT, ",,100" );
```

Caution

- If value specified in the form descriptor information and value specified in this key are different, the value specified in this key will be applied.
- An error will occur in following cases:
  - When "Restriction of Viewing by a period" is not specified in the form descriptor information
    However, an error will not occur if neither viewing time limit nor viewing period is specified in this key.
  - When value other than the specifiable values is specified
- Even if this key is specified, it may be invalid depending on the PDF file viewer application (e.g. in the case that Java script cannot be executed).

ID_PDF_EMBED (PDF file font embedding specification)

Specify whether or not to embed fonts into the PDF file.

ALL	: All fonts are embedded into the PDF file.
NONE	: All fonts are not embedded into the PDF file.

When this key is omitted, the font embedding specification of "Document Management" in the [PDF Options] window, in the [File] tab under the [Form Output Methods] window will be applied.

Caution

- When using user defined characters and JEF extension characters, embed the characters into the PDF file. If they are not embedded in the PDF file, they may appear differently or not be displayed correctly depending on the system environment where the PDF file is displayed.

Note

- When making it possible to search fonts embedded in the PDF file, it is necessary to specify "ALL".
- To not search for fonts embedded in the PDF file, set the ID_PDF_EMBEDREFERENCE key to "false".

ID_PDF_EMBEDREFERENCE (PDF file embedded font search specification)

Specify whether or not to search fonts that are embedded into the PDF file.

true	: Search is permitted.
false	: Search is not permitted.

Use the ID_PDF_EMBED key to specify whether or not to embed fonts to the PDF file.
If this key is omitted, it will operate as if "true" was specified.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution

- Before setting this key, specification to embed fonts in the PDF file must be set by either of the following methods:
  - Font embedding specification of "Document Management" in the [PDF Options] window, under the [File] tab of the [Form Output Methods] window
  - ID_PDF_EMBED key (Specify "All")
- When using user defined characters and JEF extension characters, embed the characters into the PDF file. If they are not embedded in the PDF file, they may appear differently or not be displayed correctly depending on the system environment where the PDF file is displayed.
- When allowing the search for fonts embedded in the PDF file, the PDF file size will become larger.

Note

- If the fonts are embedded in the PDF file, it will be possible to view even if the font is not installed in the system on which the PDF file is viewed. However, in order to search embedded fonts, it is necessary to specify "true".
- When specifying "NONE" for the ID_PDF_EMBED key, this key is disabled (proceeds as "false" was specified).

ID_PDF_JPEGQUALITY (PDF file JPEG compression quality specification)

Specify the quality level for JPEG compression of a PDF file.

HIGH	: Performs JPEG compression with high image quality and low compression rate.
MID	: Performs JPEG compression with an image quality and compression rate in-between HIGH and LOW.
LOW	: Performs JPEG compression with low image quality and high compression rate.
NONE	: JPEG compression is not performed. Flate compression, which causes no image degradation, is performed.

When this key is omitted, the JPEG compression specification of "Document Management" in the [PDF Options] window, in the [File] tab under the [Form Output Methods] window will be applied.

ID_PDF_EMBEDFILE (PDF attachment file name)

Specify a name of the file attached to the PDF file with its full path.
Up to 99 files can be specified. When specifying multiple files, separate them using a semicolon (;). If the same file is specified multiple times, the file is attached multiple times without throwing an error.
If the specified file does not exist, an error will occur.
If this key is omitted, it will be valid in the following order:

1）PDF file attachment setting of "Document Management" specified in the [PDF Options] window, in the [File] tab in the [Form Output Methods] window

2）No file is attached

Caution

- When transferring files attached to a PDF file during a remote form output or connector linkage, specify this key along with the ID_LCBINFILE key. In this case, only specify the name of the attached file for this key.
  During remote form output or connector linkage, the files attached to the PDF file are enabled in the following order of priority:
  1）The file name specified with this key (only the file name) and the name of the file attached to the PDF file specified by the ID_LCBINFILE key (full path on the application server)
  2） The name of the file attached to the PDF file specified by this key (full path on the List Creator print server)
  3） The name of the file attached to the PDF file in "Document Management", which is specified in the [PDF Options] window, in the [File] tab in the [Form Output Methods] window (full path on the List Creator print server)
- Do not perform security addition or encryption for the PDF file that uses the file attachment function. If security addition or encryption is performed, it may not be possible to extract the attached file in Acrobat.

ID_PDF_AUTOPRINT (PDF file automatic printing specification)

Specify the setting and the timing of automatic printing of a PDF file.

OFF	: Automatic printing is not performed.
OPN	: When a PDF file is opened, the Print dialog box is automatically displayed.
OPN_CLS	: When a PDF file is opened, automatic printing is performed with the default printer specified in the system.

If this key is omitted, the "Automatic printing of PDF file" setting specified in "Behavior" of the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will become valid.

Caution

- Even if this key is specified, it may be invalid depending on the PDF viewer application (e.g. in the case that Java script cannot be executed).

ID_PDF_HIDETOOLBAR (PDF file viewer toolbar display specification)

Specify whether or not to show the toolbar of the PDF viewer when viewing a PDF file.

true	: The toolbar is not shown when viewing a PDF file.
false	: The toolbar is shown when viewing a PDF file.

If this key is omitted, the "Show Toolbar" setting specified in the PDF File Viewer Settings of "Behavior" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will become valid.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution

- Even if this key is specified, it may be invalid depending on the PDF viewer application.

ID_PDF_HIDEMENUBAR (PDF file viewer menubar display specification)

Specify whether or not to show the menubar of the PDF viewer when viewing a PDF file.

true	: The menubar is not shown when viewing a PDF file.
false	: The menubar is shown when viewing a PDF file.

If this key is omitted, the "Show Menubar" setting specified in the PDF File Viewer Settings of "Behavior" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will become valid.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution
- Even if this key is specified, it may be invalid depending on the PDF viewer application.

ID_PDF_FULLSCREEN (PDF file viewer full screen display specification)

Specify whether or not to display the PDF viewer in full screen when viewing a PDF file.

true	: The PDF viewer is displayed in full screen when viewing a PDF file.
false	: The PDF viewer is not displayed in full screen when viewing a PDF file.

If this key is omitted, the "Use Full Screen Mode" setting specified in the PDF File Viewer Settings of "Behavior" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will become valid.
If any other value other than "true" or "false" is specified for this key, it will operate as if "false" was specified.

Caution
- Even if this key is specified, it may be invalid depending on the PDF viewer application.

ID_PDF_BOOKMARK (specification to insert a bookmark in the PDF file when switching forms)

Specify whether or not to insert the form name in the PDF file as a bookmark. The form name is inserted as a bookmark string when the form is switched.

true	: A bookmark is inserted when the form is switched.
false	: A bookmark is not inserted when the form is switched.

If this key is omitted or if a value other than "true" or "false" is specified, it will operate as if "false" was specified.

Caution
- When performing multi-form output, a bookmark is inserted when the form is switched.
- When performing combination-form output, combination-form name is inserted as a bookmark. The bookmark is inserted when the combination-form name is changed.
- A bookmark set with this key has one level.
- When creating a PDF file while keeping the inserted bookmark displayed, specify "OUTLINES" for the display settings for viewing a PDF file with the PDF-PAGEMODE keyword in the PDF document information file.
- When displaying the PDF file in Windows XP/Windows Server 2003, surrogate pair characters used in the bookmark cannot be displayed properly.

ID_PDF_BOOKMARKITEM (specification to insert a bookmark in the PDF file when switching data)

When inserting a field data value of a form into a PDF file as a bookmark, specify the name of the applicable field. The field data value is inserted as a bookmark string when the input data value of the specified field is switched.
For the field name, you can specify one field that is "Text field" or " Hidden field" whose field format is text field.

For the specified field, a bookmark is inserted respectively in accordance with the following output timing:

- For text fields
  A bookmark is inserted when outputting the first field of the page.
- For hidden fields
  A bookmark is inserted when outputting the first record in the page.

It is also possible to specify optional multiple timings to insert a bookmark in accordance with the above-mentioned output timing. When specifying multiple timings, put "!" at the beginning of the field name and use a comma (,) separator. The "data value" of the field to insert a bookmark is inserted as a bookmark when the input data of the field specified with "!" is switched.
If omitted, a bookmark is not inserted when the field data of the form is switched.
When specifying this key and the ID_PDF_BOOKMARK key at the same time, the bookmark inserted with the form name with the ID_PDF_BOOKMARK key is in the top of the hierarchy, under which the bookmarks specified with this key are inserted in the following format:

[Form Name] - [Data Value]

The data value is the first data value inserted by this key. In this case, this bookmark becomes the topmost one, and the bookmarks under the hierarchy are inserted with the value of the item specified by this key.
The following displays a specification example.
In this example, a bookmark is inserted with the data value of [Name] as its bookmark string at the timing when the input data of [Department], [Section] and [Name] is switched.

```
ID_PDF_BOOKMARKITEM !Department, !Section, Name
```

Caution

- If there is no input data value for the specified field, no bookmark is inserted.
- Group items cannot be specified. Configuration items of a group item cannot be specified when specifying "Use Group Item Name" for the Group Item Handling in the [General] tab of the [Data Definitions] window.
- The data in which a bookmark is to be inserted must be switched in the beginning of the page. If the data is not switched in the beginning of the page, an error will occur when outputting the form.
- A bookmark set with this key has one level. If specified with the ID_PDF_BOOKMARK key when performing multi-form/combination-form output, a "two-level" bookmark is set.
- When the form format is multipart table or free frame, the text field defined in the partition to be output first in the page must be specified.
- If a bookmark string exceeds 128 characters, the exceeding characters are truncated.
- When creating a PDF file while keeping the inserted bookmark displayed, specify "OUTLINES" for the display settings for viewing a PDF file with the PDF-PAGEMODE keyword in the PDF document information file.
- When displaying the PDF file in Windows XP/Windows Server 2003, surrogate pair characters used in the bookmark cannot be displayed properly.

ID_PDF_DOCENVFILE (PDF document information file name)

Specify the name of the document information file of the PDF file with its full path.
PDF document information file is a file in which PDF file save information (such as attribute information or property information) can be collectively specified when outputting a form as an PDF file.
Use it to specify PDF file save information which is not supported by the form properties or each key/method of the Java interface, when saving as a PDF file.

Caution

- Do not specify the PDF file save information that is supported by the form properties or other keys/methods.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify the PDF document information file using both this key and the ID_LCFILE key. When doing so, only specify the file name for this key.
  - When a PDF document information file is transferred during remote form output
  - When a PDF document information file is transferred during connector linkage
- When specifying the PDF-LIMITURI keyword in a PDF document information file, it is necessary that "Restriction of Viewing by a URI" of "Restriction of viewing" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, has been specified. An error will occur if it is not specified.
- When the PDF-LIMITURI keyword is specified in a PDF document information file, the "Allow website of Viewing" setting of "Restriction of viewing" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be invalid.

Note

- PDF document information files are specified when using PDF file save information that cannot be specified by the keys or methods of the Java interface.

ID_PDF_OUTINFOFILE (ECM information file name)

Specify the ECM information file name corresponding to the PDF file to be output with its full path, within 259 characters (within 512 bytes).
Be sure to specify this when placing the output PDF file in a folder linked with ECM products.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify the ECM information file using both this key and the ID_LCFILE key. When doing so, only specify the file name for this key.
  - When an ECM information file is transferred during remote form output
  - When an ECM information file is transferred during connector linkage
  - When an ECM information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

5.4.5.5.6 Keys for OWF File Creation Information

Caution

- To perform multi-form/combination-form output when creating OWF files in remote form output mode, you must specify the form name for multi-form/combination-form in the ID_EXECBUFFER key by using the -gcmform option of the prprint command.
- For the support range and points to note for the OWF file creation (Web application linkage), embedding external fonts, and registration of fonts, refer to the Online Manual "Setup & Operation".

ID_CMVISUALFILE (media data file name)

Specify the media data file name used for creating an OWF file with its full path.
When using multiple files, specify the file names in the order of output separating with a semicolon (;) as shown below:

File 1; File 2; File 3

Caution

- Specify the media data file name for image fields in the data file, with only the file name.
- Do not specify this key in the following case:
  - When the file used for creating an OWF file is transferred during connector linkage

ID_KEEPOWF (OWF file name)

Specify the full path of the OWF file to be created in the List Creator print server. It is not possible to specify only a folder name.
An error occurs if the file already exists.
For the OWF file name, do not specify full-width characters, half-width spaces, or any of the following characters:

"(", ")", "|", "¥", "^", "~", "[", "]", "`", "<", ">", "#", "%", """, ";", "/", "?", ":", "@", "&", "=", ",", "*"

Caution

- The file extension of the OWF file must be ".owf" (half-width lower-case characters). If an extension other than ".owf" is specified, Web plug-in will not start.
- It is not possible to specify only a folder name.
- If a file with the same name already exists, an error occurs and the original OWF file may also be deleted.

Note

- When placing the created OWF file in the application server during connector linkage, specify the OWF file path on the application server with the ID_RETURNOWFPATH key.

ID_OWF_DESTINATION (operational mode during Web plug-in startup)

Specify the operational mode during Web plug-in startup (during Web browser startup).

PREVIEW	: Performs a preview.
PRINT	: Prints.

If this key is omitted, it will operate as if "PREVIEW" was specified.

ID_OWF_OPENPRTDLG (specification of [Print] window display during printing)

Specify whether or not to display the [Print] window during printing (when "PRINT" is specified for the ID_OWF_DESTINATION key).

false	: [Print] window is not displayed when printing.
true	: [Print] window is displayed when printing.

When displaying the [Print] window, the information during print output can be specified.
If this key is omitted or if a value other than "true" or "false" is specified, it will operate as if "false" was specified.

ID_OWF_PRTCLOSE (specification to close the Web browser after print completion)

Specify whether or not to close the Web browser after printing is completed.

false	: Web browser is not closed after printing is completed.
true	: Web browser is closed after printing is completed.

If this key is omitted or if a value other than "true" or "false" is specified, it will operate as if "false" was specified.

Caution

- This key is valid only when printing is performed by specifying "PRINT" for the ID_OWF_DESTINATION key.
- Do not specify this when using the HTML frame function.

ID_OWF_PREVIEWRATE (specification of zoom factor for preview)

Specify the zoom factor during preview.

0	: Specify when displaying an entire page.
W	: Specify when displaying a page according to its width.
30~200	: Specify a string within the range from 30 to 200 (%).

If this key is omitted, it will operate as if "0" was specified.

ID_OWF_PRTPREVENTION (specification of printer control during preview)

Specify the printer control method during preview.

FALSE	: Printing is not prevented.
TWICE	: Double printing is prevented.
TRUE	: Printing is prevented.

If this key is omitted, it will operate as if "FALSE" was specified.

ID_OWF_EMBED (specification of embedding external fonts in OWF files)

Specify whether or not to embed (paste) external fonts in the OWF file.

FALSE	: External fonts are not embedded.
USER	: External fonts are embedded.

If this key is omitted, it will operate as if "FALSE" was specified.

Caution

- External fonts to be embedded should be registered using one of the following methods (unregistered external fonts are not embedded):
  - Registration of fonts in the setup
  - Registration of fonts using the ID_OWF_REGFONT key
- The external font embedding function is not supported in the following cases:
  - When creating OWF files in the English environment
  - When using the Web plug-in in the English environment
  - When performing combination-form output

ID_OWF_REGFONT (external font file registration)

Register external font files stored in a given folder.
When specifying a TTF file, specify it in "ttfpath, ttepath" format using a comma (,) separator. When specifying a TTC file, specify it in "ttcpath, ttepath, order" format using a comma (,) separator.
When registering multiple files, separate them with a semicolon (;). However, if the same font file is specified multiple times, the external font file specified at the end is applied.

ttfpath/ttcpath	: Specify the full path to the font file (TTF file or TTC file).
ttepath	: Specify the full path to the linked external font file (TTE file).
order	: If a TTC file is specified, specify the position of the target font in the TTC file. When specifying the first font, specify "1".

Register the external font file with this key in the following cases:

- To embed external fonts not registered in the environment setting
- To temporarily change external fonts registered in the environment setting to different external fonts, and embed the changed fonts

When this key is omitted, or for fonts not specified with this key, fonts registered in the setup will be applied.

Caution

- If an external font file is registered with this key for a font registered in the setup, the external font file specified with this key will be applied.
- When specifying a TTF file as the font file, do not specify "order". If specified, ConnectorException (Error code "OAJC_ERROR_OWFEXCEPTION") will occur and OwfException (Error code "OWF_ERROR_NOT_FIND_FACENUMBER") will be reported as the detailed information.
- When specifying a TTC file as the font file, be sure to specify "order". If it is not specified, ConnectorException (Error code "OAJC_ERROR_OWFEXCEPTION") will occur and OwfException (Error code "OWF_ERROR_INVALID_PARAMETER") will be reported as the detailed information.
- Do not specify external font files having a same name but different storage destinations.
- You cannot use a "comma (,)" or a "semicolon (;)" in full path.
- The external font embedding function is not supported in the following cases:
  - When creating OWF files in the English environment
  - When using the Web plug-in in the English environment
  - When performing combination-form output

ID_OWF_WORKDIRECTRY (work directory during OWF file creation)

Set the work directory to use when creating OWF files.

Caution

- When the work directory is not specified using this key, the following directories will be used:
  - When creating an OWF file on Windows
    Paths will become valid in the following order of priority:
    1）The path specified by the environment variable TMP
    2）The path specified by the environment variable TEMP
  - When creating an OWF file on UNIX OS
    Paths will become valid in the following order of priority:
    1）The path specified by the environment variable TMPDIR
    2）Under /var/tmp

5.4.5.5.7 Keys for Excel File Output Information

Caution

- The keys for Excel file output information are enabled only when "Excel File" is specified for the output method.
- For the support range and points to note for Excel file output, refer to the Online Manual "Setup & Operation".

ID_KEEPXLSX (storage destination file name when outputting to an Excel file)

Specify the storage destination file name (Excel file name) with its full path, within 259 characters and 512 bytes.
When this key is omitted, the storage destination file name specified in the [File (Excel)] tab in the [Form Output Methods] window will be applied.
The storage destination file name must be specified using one of these methods.

Caution

- The file extension of the Excel file must be ".xlsx".
- It is not possible to specify only a folder name.
- If the Excel file output fails when a file with the same name already exists, the original Excel file may also be deleted.

Note

- The access privileges of the user that outputs the form are given to the Excel file.
- If the specified folder does not exist, the folder is automatically created. The folder is given the same access privileges as the parent folder. If the user outputting the form does not have access privileges to the automatically created folder, an error will occur when the PrintOut method of the PrintForm class is called.
- If a file with the same name already exists, it is replaced with the new file if it has privileges to overwrite. An error occurs when calling the PrintOut method of the PrintForm class if the privileges to overwrite are not given.
- When creating an Excel file in the List Creator print server, specify the Excel file path with this key.
  When placing the Excel file in the application server during connector linkage, specify the Excel file path with the ID_RETURNXLSXPATH key.

ID_XLSX_DOCENVFILE (Excel document information file name)

Specify the name of the document information file of the Excel file with its full path.
Excel document information file is a file in which Excel file output information (such as attribute information or property information) can be collectively specified when outputting a form as an Excel file.
Use it to specify Excel file output information which is not supported by the form properties or each key/method of the Java interface, when outputting to an Excel file.

Caution

- For an Excel document information file, do not specify Excel file output information supported with the [File (Excel)] tab of the [Form Output Methods] window or with other keys/methods.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify the Excel document information file using both this key and the ID_LCFILE key. When doing so, only specify the file name for this key.
  - When an Excel document information file is transferred during remote form output
  - When an Excel document information file is transferred during connector linkage

ID_XLSX_OUTPUTFORM (output method of details when outputting to an Excel file)

Specify the operation when detail data exceeds the height of a print range during form output of multipart tables.

PAGE	: Change a sheet with the height of a print range and output.
CONT	: Output without changing a sheet with the height of a print range.

When this key is omitted, the output method of details specified in the [File (Excel)] tab in the [Form Output Methods] window will be applied.

Caution

- This key will be invalid when the form format is not multipart table.

ID_XLSX_SHEETNAME (specification of the sheet name of the Excel file to be output)

Specify setting method (naming method) of the sheet name of the Excel file to be output.

FORM	: Specify this when the form name is output as the sheet name. If you use the form name as the sheet name and perform multi-form output, the sheet name is switched when the form is switched. When performing combination-form output, the combination-form name is set as the sheet name. The sheet name is also switched when the combination-form name is switched.

FIXED : Specify this when outputting a fixed string as the sheet name. If you use a fixed string as the sheet name, specify the string within 31 characters after "FIXED=".
The following displays a specification example:

FIXED=DivisionalSales

If you set a fixed string as sheet name and perform multi-form output, the specified fixed string is used for the sheet name of all the forms.

If this key is omitted, the sheet name specified with the ID_XLSX_SHEETNAMEITEM will be valid. If both this key and the ID_XLSX_SHEETNAMEITEM key are omitted, the sheet name specified in the [File(Excel)] tab in the [Form Output Methods] window will be applied.

Caution

- Do not use the following characters in sheet names:
  "¥", "/", "?", "*", "[", "]", ":"
  Do not specify "'" (a single quotation mark) before or after the string (you can use it in the string).
- An error occurs if there is a space between FIXED and equal sign (=) (FIXED =XXXX).
- If a fixed string is not specified after "FIXED=", this key is considered as unspecified (omitted).

Note

- For sheet name, the difference between full-width and half-width characters, or uppercase and lowercase is not recognized. These characters will be treated as the same.
- In case a sheet name of 32 characters or more is specified, the sheet name is truncated to fit 31 characters (Characters from the 32nd characters onwards are truncated).
- For details on Excel sheet name specification such as output results corresponding to this specification, and the points to note when specifying it, see the Online Manual "Setup & Operation".

ID_XLSX_SHEETNAMEITEM (specification of a data field name whose input data is used as the sheet name of the Excel file to be output)

Specify the name of a field whose data value is output as the sheet name when outputting to an Excel file.
If you specify this key, the first data value that is output in the field specified here will be used as the name of all sheets of the Excel file to be output.
The fields that can be specified are "Text field" or " Hidden field" (whose field format is text field only).

Caution

- If the field name specified with this key is a configuration item of a group item, "Use Configuration Item Name" must be selected in the [General] tab of the [Data Definitions] window. In case of the body area group item of simple table, sticky label and block repeat format, it can be specified even if "Use Group Item Name" is selected.
- If the field specified with this key does not exist in the form, sheet name specification will be invalid.

Note

- If you specify a data value with this option, as well as a sheet name with the ID_XLSX_SHEETNAME key or in the [File (Excel)] tab of the [Form Output Methods] window, both of them will be joined by a hyphen into one sheet name.
  When the form name is specified: Form name-Data value
  When a fixed string is specified: Fixed string-Data value
- For sheet name, the difference between full-width and half-width characters, or uppercase and lowercase is not recognized. These characters will be treated as the same.
- If the data value of the selected field is 32 characters or more, it is truncated to fit 31 characters (Characters from the 32nd characters onwards are truncated).
- When performing combination-form output, the sheet name is set according to the field name of the form descriptor information that is output first.
- For details on Excel sheet name specification such as output results corresponding to this specification, and the points to note when specifying it, see the Online Manual "Setup & Operation".

ID_XLSX_OUTINFOFILE (ECM information file name)

Specify the ECM information file name corresponding to the Excel file to be output with its full path, within 259 characters (within 512 bytes).
Be sure to specify this when placing the output Excel file in a folder linked with ECM products.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify the ECM information file using both this key and the ID_LCFILE key. When doing so, only specify the file name for this key.
  - When an ECM information file is transferred during remote form output
  - When an ECM information file is transferred during connector linkage
  - When an ECM information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

5.4.5.5.8 Keys for Remote Form Output Information and Connector Linkage Information

Note

- When using connector linkage, pay attention to the form resources to be used and the file path length that can be specified for output files.
  For the support range and points to note for remote form output or connector linkage, refer to the Online Manual "Setup & Operation".

ID_HOST (target computer name)

Specify the computer name of the transmission target List Creator print server with the TCP/IP host name or IP address.
This key must be specified for remote form outputs and connector linkage.

Caution

- If the List Creator print server runs on Windows, configure network settings so that the computer name and the TCP/IP host names are the same. If the computer name and the TCP/IP host names differ, specify them by the IP address.

ID_COMPRESSRESOURCE (compression of transfer data)

Specify when compressing and transferring the data such as forms, data files, and media data files of the application server.

UNCOMPRESS : Transferred without compressing.

COMPRESS : Compressed, then transferred.

If this key is omitted, it will operate as if "UNCOMPRESS" was specified.

ID_SENDRESOURCE (form transfer specification)

Specify whether or not to transfer the form of the application server to the List Creator print server.

SEND	: Transfers the form.
NOSEND	: Does not transfer the form. Uses the form that is already placed in the List Creator print server.

If this key is omitted, it will operate as if "SEND" was specified.
When performing multi-form/combination-form output, make sure to specify one of the following:

- Specify "NOSEND" for the ID_SENDRESOURCE key.
- Specify the setLcForm method of the FormsFile or FormsStream class.

Caution

- If the List Creator print server runs on UNIX OS, and when performing FM output or FNP output to a printer, be sure to place the form on the List Creator print server and specify "NOSEND" for the ID_SENDRESOURCE key. If this key is omitted, or if "SEND" is specified, overlays are not printed correctly.

ID_UPDATERESOURCE (control specification when multiple instances of a file name exist in the destination directory)

Specify what kind of processing will be performed when a form of the same name exists in the destination directory of the List Creator print server.
This key is only valid when transferring the form from the application server to the List Creator print server (when specifying "SEND" for the ID_SENDRESOURCE key).

ALWAYS	: Overwrites all. This will also overwrite read-only forms.
OVERRIDE	: Transfers and overwrites only if the form in the application server has been renewed (when renewal date on the form of the application server is newer than the renewal date on the List Creator print server). This will also overwrite read-only forms.

If this key is omitted, it will operate as if "OVERRIDE" was specified.

Caution

- During connector linkage, this key is disabled even if specified.

ID_LCVISUALFILE (transfer media data file name)

When transferring the media data file of the application server to the List Creator print server, specify the media data file name of the application server with its full path. When specifying multiple files, separate them using a semicolon (;).
The media data file transferred to the List Creator print server will be deleted after form output.
If this key is omitted, the media data file will not be distributed.
During form output at the List Creator print server, the media data storage directory will become valid in the following order of priority (except during OWF file creation):

1）Disabled (Only media data files transferred with this key are valid)
2）Media data storage directory specified by the ID_VISUALDIR key
3）Form storage directory during form output, specified with the ID_REMOTEDIRECTORY key

Note that during OWF file creation, the following priority is used:

1）Disabled (only when this key is specified)
2）File specified by the ID_CMVISUALFILE key

Caution

- Place the media data file specified by this key on the application server.

ID_REMOTEDIRECTORY (form storage directory for form output)

Specify the form storage directory of the List Creator print server with its full path.
This key is only valid when the application server form is not transferred to the List Creator print server, and when a form that is already placed in the List Creator print server is used for form output (when "NOSEND" is specified for the ID_SENDRESOURCE key).
If this key is omitted when not transferring the form (when "NOSEND" is specified for the ID_SENDRESOURCE key), the form storage directory of the List Creator print server will become valid (when List Creator Designer is installed, it is also possible to change the form storage directory from the [Options] window of the [Form Descriptor List] window).

Caution

- Specify the separator character of the form storage directory path according to the specification methods of the List Creator print server as shown below:
  If the List Creator print server runs on Windows: ¥
  If the List Creator print server runs on UNIX OS: /
- Refer to the following for cautions when specifying the form storage directory name:
  =>"3.5 Cautions regarding Development and Execution of User Applications"
- When the List Creator print server runs on Windows, specify two "yen marks (¥)" as path separator.
  Example: prop.setProperty(PrintProperties.ID_REMOTEDIRECTORY, "C:¥¥ListCREATOR¥¥Assets");

ID_LCFILE (transfer file name)

When transferring the file of the application server to the List Creator print server, specify the file name of the application server to be transferred with its full path.
When specifying multiple files, separate them using a semicolon (;).
This key is specified when converting the character code of the transfer file.
The file transferred to the List Creator print server will be deleted after form output.
The following explains the specification method of an information file when transferring the file.

- When using a substitute font info file
  Specify it with this key and the ID_MAPFONTFILE key. Specify only the file name for the ID_MAPFONTFILE key.
- When using a barcode correct info file
  Specify it with this key and the ID_BCODADJUST key. Specify only the file name for the ID_BCODADJUST key.
- When using a form output information file
  Specify it with this key and the ID_PRINTENVFILE key. Specify only the file name for the ID_PRINTENVFILE key.
- When using an electronic form information file
  Specify it with this key and the ID_LW_STREAMENVFILE key. Specify only the file name for the ID_LW_STREAMENVFILE key.
- When using a PDF mail distribution information file for PDF mail distribution
  Specify it with this key and the -gpdfmailconffile option of the ID_EXECBUFFER key. Specify only the file name in the -gpdfmailconffile option of the ID_EXECBUFFER key.
- When using a PDF document information file
  Specify it with this key and the ID_PDF_DOCENVFILE key. Specify only the file name for the ID_PDF_DOCENVFILE key.
- When using an Excel document information file
  Specify it with this key and the ID_XLSX_DOCENVFILE key. Specify only the file name for the ID_XLSX_DOCENVFILE key.
- When using an ECM information file
  For PDF file output, specify it with this key and the ID_PDF_OUTINFOFILE key. Specify only the file name for the ID_PDF_OUTINFOFILE key.
  For Excel file output, specify it with this key and the ID_XLSX_OUTINFOFILE key. Specify only the file name for the ID_XLSX_OUTINFOFILE key.

Caution

- If attaching a text file to the PDF file, the file must be created according to the character code of the application server.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".

ID_LCBINFILE (transfer file name during binary transfer)

When transferring the file of the application server to the List Creator print server, specify the file name of the application server to be transferred with its full path.
When specifying multiple files, separate them using a semicolon (;).
This key is specified when transferring a file in binary mode.
The file transferred to the List Creator print server will be deleted after form output.
This key is specified when transferring a file attached to a PDF file, an ECM linkage file, or a property replace file.

ID_RETURNPDFPATH (created PDF file name)

Specify the PDF file name created in the application server with its full path.
Do not specify full-width characters or half-width katakana characters in the full path.

Caution

- This key is disabled during remote form output.
- If a file with the same name specified with this key already exists, an error occurs.
- Do not specify this key and the ID_RETURNOWFPATH key or the ID_RETURNXLSXPATH key at the same time.

Note

- When creating a PDF file in the application server during connector linkage, specify the PDF file path with this key.
  When creating a PDF file in the List Creator print server, specify the PDF file path with the ID_KEEPPDF key.

ID_RETURNOWFPATH (created OWF file name)

Specify the OWF file name created in the application server with its full path.
For the OWF file name, do not specify full-width characters, half-width spaces, or any of the following characters:

"(", ")", "|", "¥", "^", "~", "[", "]", "`", "<", ">", "#", "%", """, ";", "/", "?", ":", "@", "&", "=", ",", "*"

Caution

- This key is disabled during remote form output.
- The file extension of the OWF file must be ".owf" (half-width lower-case characters).
  If an extension other than ".owf" is specified, Web plug-in will not start.
- If a file with the same name specified with this key already exists, an error occurs.
- Do not specify this key and the ID_RETURNPDFPATH key or the ID_RETURNXLSXPATH key at the same time.

Note

- When creating an OWF file in the application server during connector linkage, specify the OWF file path with this key.
  When creating an OWF file in the List Creator print server, specify the OWF file path with the ID_KEEPOWF key.

ID_RETURNXLSXPATH (created Excel file name)

Specify the Excel file name created in the application server with its full path.
Do not specify full-width characters or half-width katakana characters in the full path.

Caution

- The file extension of the Excel file must be ".xlsx".
- This key is disabled during remote form output.
- If a file with the same name specified with this key already exists, an error occurs.
- Do not specify this key and the ID_RETURNPDFPATH key or the ID_RETURNOWFPATH key at the same time.

Note

- When creating an Excel file in the application server during connector linkage, specify the Excel file path with this key.
  When creating an Excel file in the List Creator print server, specify the Excel file path with the ID_KEEPXLSX key.

ID_REMOTEOPTION (remote form output option)

Specify a prputprt command option which is not supported by the Java interface.
For details on the prputprt command, refer to the following:
=>"4.2.2 prputprt Command"

Caution

- This key is disabled during connector linkage.
- Do not specify the -z option of the prputprt command or command options after the -z option for this key. When specifying the form output option, use the ID_EXECBUFFER key.

ID_REMOTEMODE (remote form output mode)

Specify the operation mode when performing remote form output.

COMPATIBLE : Specify this when performing remote form output.

If this key is omitted, connector linkage is performed.

● Other keys

This section discusses a key for specifying a prprint command option, which is not supported by the Java interface keys or methods.

ID_EXECBUFFER (form output option)

Specify the prprint command option, which is not supported by the Java interface keys and methods.
For details on the prprint command option, refer to the following:
=>"4.1.2 prprint Command"

Caution

- When performing remote form outputs or connector linkage, specify command options beyond the -z option of the prputprt command and prputex command for this key.
- Do not use the following command options:
  - -atdirect
  - Command options for OWF file creation

5.4.5.6 Method Details

When outputting a form using the PrintProperties class, set the attributes related to the form output by using the setProperty method described below.
The following discusses details regarding the setProperty method.

```
public void
setProperty(int key, java.lang.String val)
throws ConnectorException
```

Usage

Specify the ID key and value pair of the properties that are specified during the form output.

Parameter

key	: Specify the property key.
val	: Specify the string of the property key value. If null is specified, ConnectorException occurs.

For the parameter ID keys and values that can be specified, refer to the following:
=>"5.4.5.5 Key and Value Pairs Specified by the setProperty Method"

Exception

ConnectorException

Caution

- When specifying this method, do not specify "null" values. An error will occur if "null" is specified.

5.4.5.7 Methods and Keys That are Enabled/Disabled during OWF File Creation

During OWF file creation, only the "Print" method is enabled for the output method. "e-Record", "FAX", "saving as a PDF file", and "Excel file output" are not supported.

The following are the keys for the setProperty methods of the PrintProperties class that are disabled when creating OWF files:

- Common (user resource information/identification information/operational information)
  The following keys will be invalid even if specified:
  - ID_VISUALDIR key
  - ID_DIRECTMETHOD key (only when the GenerateOwf method is used)
  - ID_OUTPUTMODE key
- Print information
  The following keys will be invalid even if specified:
  - ID_PRTDEVNAME key
- e-Record information
  All invalid.
- FAX send information
  All invalid.
- PDF file save information
  All invalid.
- Excel file output information
  All invalid.
- Other
  All invalid.

The following are the methods of the PrintProperties class that are disabled when creating OWF files:

- Common (user resource information/identification information/operational information)
  The following methods will be invalid even if specified:
  - setVisualDir method
  - setDirectMethod method
  - setOutputMode method
- Print information
  The following methods will be invalid even if specified:
  - setPrtDevName method
- e-Record information
  All invalid.
- FAX send information
  All invalid.

- PDF file save information
  All invalid.
- Excel file output information
  All invalid.
- Other
  All invalid.

5.4.6 PrintForm Class

Performs form output, remote form output, connector linkage, and OWF file creation based on FormBase and PrintProperties.

java.lang.Object
└ **com.fujitsu.systemwalker.outputassist.connector.PrintForm**

public class PrintForm
extends java.lang.Object

5.4.6.1 Constructor Overview

The PrintForm class constructor is described below.

Constructor overview
PrintForm() Creates a PrintForm object.

5.4.6.2 Method Overview

The PrintForm class methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Methods for form output	All	void	PrintOut(Forms form) The form is output according to Forms.
	All	void	PrintOut(Forms form, PrintProperties prop) The form is output according to Forms and PrintProperties.
	All	void	PrintOut(FormBase form, PrintProperties prop) Remote form output or connector linkage is performed according to Forms, FormsFile, FormsStream, and PrintProperties.

5.4.6.3 Constructor Details

public
PrintForm()

Usage

Creates a PrintForm object.

5.4.6.4 Method Details

5.4.6.4.1 Methods for form output

public void
PrintOut(Forms form)
throws ConnectorException

Usage

The form is output according to Forms. Attributes such as output methods will follow information defined on the form.

Parameter

form	:	Specifies Forms used for form output.

Exception

ConnectorException

public void
PrintOut(Forms form, PrintProperties prop)
throws ConnectorException

Usage

The form is output according to Forms and PrintProperties.
The following outputs are performed by specifying the key and value pair of the setProperty method of the PrintProperties class:

1) When specifying the ID_HOST key of the setProperty method of the PrintProperties class
Connector linkage is performed.
2) When specifying the ID_HOST key of the setProperty method of the PrintProperties class as well as specifying "COMPATIBLE" for the ID_REMOTEMODE key Remote form output is performed.
3) Other
Local form output and OWF file creation are performed.

Parameter

form	:	Specifies Forms used for form output.
prop	:	Specifies PrintProperties used for form output.

Exception

ConnectorException

public void
PrintOut(FormBase form, PrintProperties prop)
throws ConnectorException

Usage

The form is output according to Forms, FormsFile, FormsStream and PrintProperties. The following outputs are performed by specifying the key and value pair of the setProperty method of the PrintProperties class:

1) When specifying the ID_HOST key of the setProperty method of the PrintProperties class
Connector linkage is performed.
2) When specifying the ID_HOST key of the setProperty method of the PrintProperties class as well as specifying "COMPATIBLE" for the ID_REMOTEMODE key Remote form output is performed.
3) Other
Local form output and OWF file creation are performed.

Parameter

form	:	Specifies Forms, FormsFile, and FormsStream used for form output.
prop	:	Specifies PrintProperties used for form output.

Exception

ConnectorException

5.4.7 ConnectorException Class

Reports exceptions which occurred in the Java interface.

java.lang.Object
└ java.lang.Throwable
└ java.lang.Exception
└ **com.fujitsu.systemwalker.outputassist.connector.ConnectorException**

public class ConnectorException
extends java.lang.Exception

5.4.7.1 Field Overview

The error code fields that can be acquired in the getCode method of the ConnectorException class are indicated below.

Table 5.17 Error code fields which can be acquired in the getCode method of the ConnectorException class (1 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147483650	0x80000002	OAJC_ERROR_FILE_NOT_FOUND	Cannot find the file. Cannot find the specified file. Perform the following solutions: - Check whether the file specified in the property (parameter or attribute information) exists. - Set security so that the file specified in the property (parameter or attribute information) can be read. - If UNC specification (¥¥computer_name¥shared_name¥directory_name) is used, check whether the account performing the form output is accessible to the UNC-specified computer in the network environment, or whether it is registered as the account that can read the file specified in the property (parameter or attribute information).
2147483653	0x80000005	OAJC_ERROR_ACCESS_DENIED	Access to the specified file or directory has been refused. The file or directory specified in the property (parameter or attribute information) cannot be accessed. Check for the access privileges of the file or directory.
2147483654	0x80000006	OAJC_ERROR_INVALID_HANDLE	A work file error has occurred while executing a method. Work file error has occurred while processing. Process cannot be carried out because the specified file is being used or the load is heavy. If the same error continues, report this message and operation contents to our system engineer.
2147483658	0x8000000a	OAJC_ERROR_BAD_ENVIRONMENT	Invalid system setup. Invalid system setup. If the same error continues, report this message and operation contents to our system engineer.

Table 5.17 Error code fields which can be acquired in the getCode method of the ConnectorException class (2 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147483662	0x8000000e	OAJC_ERROR_OUTOFMEMORY	Insufficient memory to perform operation. Process cannot be carried out because of insufficient memory. Check the following: - Are any unnecessary applications running? - Is there enough virtual memory? - Is the installed memory sufficient? Perform the following solutions according to the cause. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory.
2147483680	0x80000020	OAJC_ERROR_SHARING_VIOLATION	A file sharing violation has occurred. A file sharing violation has occurred. Process cannot be carried out because the specified file is being used or the load is heavy. Check the status of the specified file or the status of the system.
2147483698	0x80000032	OAJC_ERROR_NOT_SUPPORTED	Cannot be executed as an unsupported method was called. An unsupported method was called. Check the method.
2147483735	0x80000057	OAJC_ERROR_INVALID_PARAMETER	Specified method parameter or attribute information is incorrect. Property (parameter or attribute information) specified at the time of executing method is incorrect. Check the contents of the property (parameter or attribute information).
2147483760	0x80000070	OAJC_ERROR_DISK_FULL	Insufficient disk resource during work file creation. Failed to output the form due to insufficient free disk space. Check the free disk space and delete unnecessary files, then try again.
2147485098	0x800005aa	OAJC_ERROR_NO_SYSTEM_RESOURCES	Insufficient non-memory, non-disk system resources. Insufficient non-memory, non-disk system resources. Contact the system administrator, and reduce the system load by terminating unnecessary applications, increasing virtual memory or increasing memory.
2147549152	0x8000ffe0	OAJC_ERROR_INTERNAL	Java internal error has occurred. It is possible to acquire the internal error through the getThrowable method. Java internal error has occurred. Check the error contents through the getThrowable method. If the same error continues, report this message and operation contents to our system engineer.
2147549153	0x8000ffe1	OAJC_ERROR_INVALID_SCRIPT	A form name specified for the method is incorrect. A form name specified for the method is incorrect. Check the form name.
2147549154	0x8000ffe2	OAJC_ERROR_REMOTEEXCEPTION	RemoteException occurred. (%Details%) RemoteException occurred. For details, refer to the following: =>"5.4.8RemoteException Class"

Table 5.17 Error code fields which can be acquired in the getCode method of the ConnectorException class (3 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147549155	0x8000ffe3	OAJC_ERROR_OWFEXCEPTION	OwfException occurred. (%Details%) OwfException occurred. For details, refer to the following: =>"5.4.9 OwfException Class"
2147549158	0x8000ffe6	OAJC_ERROR_JAVA_INTERNAL	Internal error has occurred in the process of sharing to connector service. The following may be the causes: - Temporary system load has occurred. - Error has occurred in the memory condition managed by List Creator. Perform the following solutions according to the cause. - Try again. - Reboot the computer. If the same error continues, report this message and operation contents to our system engineer.
2147549182	0x8000fffe	OAJC_ERROR_CHARCNV	Character code conversion error has occurred. Failed in the character code conversion of form resources or input data during form output. This could be due to one of the following: - Incorrect specification of the character code for the input data. - Incorrect code in the form or input data. Check the input data or specification of the character code for the input data.
2147549183	0x8000ffff	OAJC_ERROR_OTHER	Some other system error has occurred. A system error has occurred. If the same error continues, report this message and operation contents to our system engineer.
2147549185	0x80010001	OAJC_ERROR_PRINTOUT	An error occurred during form output. The details of the error are recorded to the event log. An error occurred during form output. For details, refer to the event log or system log.
2147549285	0x80010065	OAJC_ERROR_SPOOL_DELETED(*1)	Spool document was deleted while waiting for form output completion. Spool document was deleted during form output.
2147549286	0x80010066	OAJC_ERROR_SPOOL_PAUSE(*1)	Spool document was held while waiting for form output completion. Spool document was held during form output.
2147549287	0x80010067	OAJC_ERROR_SPOOL_OFFLINE(*1)	Form could not be output because the output device is offline or "Stopped". Output device is "Offline" or "Stopped". Make the output device online.
2147549288	0x80010068	OAJC_ERROR_SPOOL_PAPEROUT(*1)	Form could not be output because the output device is out of paper. Form could not be output because the output device is out of paper. Insert the paper in an output device.
2147549289	0x80010069	OAJC_ERROR_SPOOL_DEVERROR(*1)	Form could not be output because of an output device error. Output device is "error". Remove the cause of error of the output device.

Table 5.17 Error code fields which can be acquired in the getCode method of the ConnectorException class (4 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147549290	0x8001006a	OAJC_ERROR_SPOOL_FWERROR(*1)	An error occurred during transfer of the spool document to the remote output device.
			An error occurred during transfer of the spool document to the remote form output device. For error details, check the event log or system log.
2147549291	0x8001006b	OAJC_ERROR_SPOOL_SAVEERROR(*1)	An error occurred when saving after printing.
			An error occurred when saving after form output. For error details, check the event log or system log.
2147549292	0x8001006c	OAJC_ERROR_SPOOL_MESSAGE(*1)	Output end wait was released to wait for the reply to the paper replacement or output start message.
			Output end wait was released to wait because there is a wait for a reply to the paper replacement or output start message during the form output. Respond to the message.
2147942400	0x80070000	OAJC_ERROR_DATASOURCE_PRDSEXEC_ERROR	An error occurred during data source linkage. The details of the error are recorded to the event log.
			An error occurred when using Navigator links function/XBRL data support function. For details, refer to the event log or system log.
2147942900	0x800701f4	OAJC_ERROR_DATASOURCE_RECORDANDDSEXEC	An error occurred during data source linkage. Do not use the execDataSource method, the setDataSource method and the pushRecord method at the same time.
			An error occurred when using Navigator links function/XBRL data support function. Do not use the following methods at the same time. - The execDataSource method, the setDataSource method and the pushRecord method
2147942901	0x800701f5	OAJC_ERROR_DATASOURCE_DS_TWICEEXECDB	An error occurred during data source linkage. Do not use the execDataSource method several times. Do not use the setDataSource method after using the execDataSource method.
			An error occurred when using Navigator links function/XBRL data support function. Do not use the execDataSource method several times. Do not use the setDataSource method after using the execDataSource method.

*1: Can be acquired only when output end wait is specified in the Print Manager's printer.

5.4.7.2 Constructor Overview

The ConnectorException class constructor is described below.

Constructor overview
ConnectorException(int i) ConnectorException(int i, Throwable e) An object created and thrown by List Creator internally during occurrence of an error.

5.4.7.3 Method Overview

The ConnectorException class methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Methods for Error Tracing	All	int	getCode() Acquires the error code.
	All	Throwable	getThrowable() Acquires exceptions which occurred internally in the Java

5.4.7.4 Constructor Details

public
ConnectorException(int i)

public
ConnectorException(int i, Throwable e)

Usage

An object created and thrown by List Creator internally during occurrence of an error.

5.4.7.5 Method Details

5.4.7.5.1 Methods for Error Tracing

public int
getCode()

Usage

Acquires the error code. For details regarding the error code, refer to the following:
=>"Table 5.17 Error code fields which can be acquired in the getCode method of the ConnectorException class"

public Throwable
getThrowable()

Usage

Acquires exceptions which occurred internally in the Java interface.

5.4.8 RemoteException Class

A class which reports exceptions which occurred during remote form output.

java.lang.Object
└ java.lang.Throwable
└ java.lang.Exception
└ **com.fujitsu.systemwalker.outputassist.connector.RemoteException**

public class RemoteException
extends java.lang.Exception

5.4.8.1 Field Overview

The error code fields that can be acquired in the getCode method of the RemoteException class are indicated below. In the description of the Table 5.18, the "local computer" refers to the "application server", and "target computer" refers to the "print server".

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (1 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147549183	0x8000ffff	PRSA_ERROR_OTHER (*1)	Some other system error has occurred. If the same error continues, report this message and operation contents to our system engineer.
2147680257	0x80030001	PRSA_ERROR_PRINT	Error occurred during form output. For error details, check the event log (or system log) of print server. Error occurred during form output. For error details, check the event log (or system log) of print server.
2147680276	0x80030014	PRSA_ERROR_PARAMETER	Invalid execution parameter has been specified. Property (parameter or attribute information) is incorrect. Check the contents of the specified property (parameter or attribute information) and then specify it again.
2147680277	0x80030015	PRSA_ERROR	Error has occurred during processing. Error has occurred during processing. If the same error occurs after retry, report this message and operation contents to our system engineer.
2147680278	0x80030016	PRSA_ERROR_ENVIRONMENT_INVALID	Failed to acquire program settings. The following may be the causes: - List Creator is not installed properly in the List Creator print server. - Performed remote form output with the folder option set to "Use simple file sharing (Recommended)" when the List Creator print server runs on Windows XP. Perform the following solutions according to the cause. - Uninstall and then reinstall List Creator on the List Creator print server - When the List Creator print server runs on Windows XP, use the prsetpasswd command on the application server to set the remote form output user before performing remote form output, and specify the -rmuserpasswd option when performing remote form output.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (2 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147680279	0x80030017	PRSA_ERROR_TRANS_BUSY	Connection failed. Maximum number of computers are already connected to the target computer. Maximum number of computers are already connected to the target computer. Wait for a while and try again. If the same error continues, report this message and operation contents to our system engineer.
2147680280	0x80030018	PRSA_ERROR_NETWORKS	Process cannot be carried out because a communication error was found. Communication error occurred. Check the following status and try again. - Network connection status - CPU load of target computer - Disk load and free disk space If the same error continues, report this message and operation contents to our system engineer.
2147680281	0x80030019	PRSA_ERROR_SERVICE_ACCESS_DENIED	Connection was refused because the target computer does not have the required user account. Failed to connect to the target computer because of either of the following: - User account with which the remote form output was performed has not been registered in the target computer. - The passwords for the local computer and target computer are different. Check with the system administrator regarding the account of the form output user and restart the process.
2147680282	0x8003001a	PRSA_ERROR_SHUTDOWN	Connection has been disabled because the ListCREATOR Service has been stopped or the target computer shutdown. The process could not be completed due to one of the following: - The target computer was shut down during the process of remote form output. - The service was stopped. - The network traffic is heavy. - The network route has been cut off (gateway power cut or bad cable connection, etc.). - Error in the network hardware. Restart the target computer or start the service, and try again. If the same error occurs even after starting the service on the target computer, contact the system administrator and check for problems in the network route or errors in the network hardware.
2147680283	0x8003001b	PRSA_ERROR_STOP	Target computer is not turned on or it cannot be found. The following may be the causes: - The target computer is not turned on. - The computer which does not exist is specified. - Cable has not been connected properly. - Target computer is experiencing heavy traffic. Contact the system administrator and check the network settings.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (3 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147680284	0x8003001c	PRSA_ERROR_TRANS_NETWORKS_PATH	Communication time out occurred because of a high network load or because the network has been disconnected. Communication time out occurred due to one of the following: - The network traffic is heavy. - The network route has been cut off (gateway power cut or bad cable connection, etc.). - Error in the network hardware. Contact the system administrator to make sure that there are no problems in the network route or that there are no errors occurring in the network hardware.
2147680285	0x8003001d	PRSA_ERROR_TRANS_NETWORKS_UNRESOLVED	Target computer does not exist, or its name could not be resolved, or a communication error has occurred. The following may be the causes: - Target computer is not defined. - The computer which does not exist is specified. Check to make sure that non-existing host name or invalid host name has not been specified and try again. If the same error continues, contact the system administrator and check the network environment.
2147680286	0x8003001e	PRSA_ERROR_NOTINSTALL	Software is not installed on the target computer. Software may not be installed properly on the target computer. Contact the system administrator and check whether the software is installed properly.
2147680287	0x8003001f	PRSA_ERROR_FILE_COMPRESS_FAIL	Failed to compress the form or file. An error has occurred while compressing the form or data file. Report this message and operation contents to our system engineer.
2147680288	0x80030020	PRSA_ERROR_FILE_CONVCODE_FAIL	File code conversion failed. File code conversion failed. Check to see whether the character code of the form and the character code at the time of running the Java interface are different.
2147680289	0x80030021	PRSA_ERROR_EXECAPL	Form output failed. Form output process failed on the target computer. If the same error continues, report this message and operation contents to our system engineer.
2147680290	0x80030022	PRSA_ERROR_REMOTEVL	Specified option is not supported by the version of the software installed on the target computer. Process could not be carried out because the specified property (parameter or attribute information) is not supported by the version of the software installed on the target computer. Specify only the property (parameter or attribute information) supported by the version of the software installed on the target computer and try again.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (4 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description
			Cause and solution
2147680291	0x80030023	PRSA_ERROR_SESSION_BUSY	Connection failed. Maximum number of sessions allowed by the OS are already connected on the target computer.
			Connection failed due to the number of sessions connected exceeding the limit of the OS of the target computer. Check the number of sessions connected to the target computer and disconnect unnecessary sessions, then try again. Or, contact the system administrator and check the system environment of the target computer.
2147680296	0x80030028	PRSA_ERROR_NOMEM_L	Process cannot be carried out because the local computer has insufficient memory.
			Process cannot be carried out because the local computer has insufficient memory. Check the following: - Are any unnecessary applications running? - Is there enough virtual memory? - Is the installed memory sufficient? Perform the following solutions according to the cause. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory.
2147680297	0x80030029	PRSA_ERROR_NOSPACE_L	Process cannot be carried out because the local computer has insufficient free disk space.
			The local computer has insufficient free disk space. Check the free disk space and delete unnecessary files, then try again.
2147680298	0x8003002a	PRSA_ERROR_SERVICE_STOP_L	Process cannot be carried out because the ListCREATOR Service is not running on the local computer.
			The service (ListCREATOR Service in case of Windows) on the local computer has not been started. Start the service (ListCREATOR Service in case of Windows) and try again.
2147680299	0x8003002b	PRSA_ERROR_NORESOURCE_L	Process cannot be carried out because the local computer has insufficient resources.
			Process cannot be carried out because the local computer has insufficient resources. Terminate unnecessary applications, increase virtual memory or increase memory and try again. Or, contact the system administrator and check the system load.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (5 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147680300	0x8003002c	PRSA_ERROR_DIR_FAIL_L	Process cannot be carried out because the directory on the local computer could not be accessed. Failed to access the directory on the local computer. Perform one of the following solutions: - Check the specified directory and try again. - If the directory in a removable medium is specified, check whether the medium is set. - If UNC specification (¥¥computer_name¥shared_name¥directory_name) is used, check whether the account performing the form output is accessible to the UNC-specified computer in the network environment, or whether it is registered as the account that can write to the directory. If the same error continues, report this message and operation contents to our system engineer.
2147680301	0x8003002d	PRSA_ERROR_DIR_INVALID_L	Process cannot be carried out because the directory name on the local computer is incorrect. The directory name on the local computer is incorrect. Specify a correct directory name.
2147680302	0x8003002e	PRSA_ERROR_DIR_ACCESS_DENIED_L	Process cannot be carried out because access to the directory on the local computer was refused. Process could not be carried out because there were no access privileges to the directory on the local computer or system load was heavy. Check for the access privileges of the directory. If the same error continues, contact the system administrator and check the operating environment of the system.
2147680303	0x8003002f	PRSA_ERROR_DIR_NOTEXIST_L	Process cannot be carried out because the directory does not exist on the local computer. Process could not be carried out because the directory on the local computer did not exist or system load was heavy. Create the directory or specify the existing directory. If the same error continues, contact the system administrator and check the operating environment of the system.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (6 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147680305	0x80030031	PRSA_ERROR_FILE_FAIL_L	Local Computer had a Form or File Access Error. Cannot be processed. The directory, form or file on the local computer could not be accessed. Either of the following may be applicable to the specified form or file. Check the following and try again. - Access privileges of the file - Is the file corrupt? - Is the file being used by another application? - Does the file exist? - If UNC specification (¥¥computer_name¥shared_name¥directory_name) is used, check whether the account performing the form output is accessible to the UNC-specified computer in the network environment, or whether it is registered as the account that can read the file. If the same error continues, report this message and operation contents to our system engineer.
2147680306	0x80030032	PRSA_ERROR_FILE_INVALID_L	Local Computer: Incorrect Form Name or File Name. Cannot be processed. The form name or file name on the local computer is incorrect. Specify a correct form name or file name.
2147680307	0x80030033	PRSA_ERROR_FILE_ACCESS_DENIED_L	Process cannot be carried out because access to the directory, file, or form on the local computer was refused. Process cannot be carried out because there are no access privileges to the directory, form, or file on the local computer, or the load on the system was heavy. Check the access privileges of the directory, file, or form. Or, check whether the directory, form or file are being used by the other application. If the same error continues, contact the system administrator and check the operating environment of the system.
2147680308	0x80030034	PRSA_ERROR_FILE_NOTEXIST_L	Local Computer: Form or File does not exist. Cannot be processed. Process could not be carried out because the directory, form or file did not exist on the local computer or system load was heavy. Check whether the form exists. If the computer is experiencing heavy traffic, run processing again after waiting for a while. If the same error continues, contact the system administrator and check the operating environment of the system.
2147680311	0x80030037	PRSA_ERROR_FILE_TOOBIG_L	Local Computer: Form or File Size is too large. Cannot be processed. The size of the forms or files on the local computer exceeds 4GB (gigabytes). Use the forms or files not exceeding 4GB.
2147680312	0x80030038	PRSA_ERROR_FILE_SHARING_VIOLATION_L	Local Computer is using the Form or the File. Cannot be processed. Process could not be carried out because the form or file on the local computer was being used by another program or system load was heavy. If the corresponding file is a data file created in the application, the file may not be closed. Remove the cause of the error and try again.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (7 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147680316	0x8003003c	PRSA_ERROR_NOMEM_R	Process cannot be carried out because the target computer has insufficient memory. The target computer has insufficient memory. Check the following: - Are any unnecessary applications running? - Is there enough virtual memory? - Is the installed memory sufficient? Perform the following solutions according to the cause. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory.
2147680317	0x8003003d	PRSA_ERROR_NOSPACE_R	Process cannot be carried out because the target computer has insufficient free disk space. The target computer has insufficient free disk space. Check the free disk space and delete unnecessary files, then try again.
2147680318	0x8003003e	PRSA_ERROR_SERVICE_STOP_R	Process cannot be carried out because the ListCREATOR Service is not running on the target computer. The service on the target computer (ListCREATOR Service in case of Windows) (*2) has not been started. Start the service (ListCREATOR Service in case of Windows) (*2) and try again.
2147680319	0x8003003f	PRSA_ERROR_NORESOURCE_R	Process cannot be carried out because the target computer has insufficient resources. Process cannot be carried out because the target computer has insufficient system resources. Perform the following solutions and try again. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory. - Contact the system administrator and check the system load.
2147680320	0x80030040	PRSA_ERROR_DIR_FAIL_R	Process cannot be carried out because the directory on the target computer could not be accessed. Failed to access the directory on the target computer. Check the specified directory and try again. If the same error continues, report this message and operation contents to our system engineer.
2147680321	0x80030041	PRSA_ERROR_DIR_INVALID_R	Process cannot be carried out because the directory name on the target computer is incorrect. The directory name on the target computer is incorrect. Specify a correct directory name.
2147680322	0x80030042	PRSA_ERROR_DIR_ACCESS_DENIED_R	Process cannot be carried out because access to the directory on the target computer was refused. Process could not be carried out because there were no access privileges to the directory on the target computer or system load was heavy. Check for the access privileges of the directory. If the same error continues, contact the system administrator and check the operating environment of the system.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (8 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description
			Cause and solution
2147680324	0x80030044	PRSA_ERROR_DIR_READONLY_R	Process cannot be carried out because the directory in the target computer is read-only.
			The directory in the target computer is read-only. Remove the read-only setting of the directory.
2147680325	0x80030045	PRSA_ERROR_FILE_FAIL_R	Target computer: Form or File Access Error. Cannot be processed.
			The directory, form or file on the target computer could not be accessed. Check the specified directory, form or file and try again. If the same error continues, report this message and operation contents to our system engineer.
2147680326	0x80030046	PRSA_ERROR_FILE_INVALID_R	Target computer: Incorrect Form Name or File Name. Cannot be processed.
			The form name or file name on the target computer is incorrect. Specify a correct form name or file name.
2147680327	0x80030047	PRSA_ERROR_FILE_ACCESS_DENIED_R	Process cannot be carried out because access to the directory, file, or form on the target computer was refused.
			No access privileges to the directory, form, or file on the target computer. Or, process cannot be carried out because the load on the system is heavy. Check the access privileges of the directory, file, or form. If the computer is experiencing heavy traffic, run processing again after waiting for a while. If the same error continues, contact the system administrator and check the operating environment of the system.
2147680328	0x80030048	PRSA_ERROR_FILE_NOTEXIST_R	Target computer: Form or File is missing. Cannot be processed.
			The directory, file or form does not exist on the target computer. Or, process cannot be carried out because the load on the system is heavy. Check that the directory, file, or form exists. If the computer is experiencing heavy traffic, run processing again after waiting for a while. If the same error continues, contact the system administrator and check the operating environment of the system.
2147680331	0x8003004b	PRSA_ERROR_FILE_TOOBIG_R	Process cannot be carried out because the file size of the form or the file on the target computer is too big.
			The size of the forms or files on the target computer exceeds 4GB (gigabytes). Use the forms or files not exceeding 4GB.
2147680332	0x8003004c	PRSA_ERROR_FILE_SHARING_VIOLATION_R	At the target computer, form or file is being used. Cannot be processed.
			Process could not be carried out because the form or file on the target computer was being used by another program or system load was heavy. Remove the cause of the error and try again.
2147680357	0x80030065	PRSA_ERROR_PRPRINT_SPLDEL	Error occurred while waiting for the form output (prprint command). Spool document was deleted.
			Error occurred on the List Creator print server while waiting for the form output. Spool document was deleted during form output.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (9 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description
			Cause and solution
2147680358	0x80030066	PRSA_ERROR_PRPRINT_SPLPAUSE	Error occurred while waiting for the form output (prprint command). Spool document was held.
			Error occurred on the List Creator print server while waiting for the form output. Spool document was held during form output.
2147680359	0x80030067	PRSA_ERROR_PRPRINT_SPLOFFLINE	Error occurred while waiting for the form output (prprint command). Form could not be output because the output device is offline or "Stopped".
			Error occurred on the List Creator print server while waiting for the form output. Output device is "Offline" or "Stopped". Make the output device online.
2147680360	0x80030068	PRSA_ERROR_PRPRINT_SPLPAPEROUT	Error occurred while waiting for the form output (prprint command). Form could not be output because the output device is out of paper.
			Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is out of paper. Insert the paper in an output device.
2147680361	0x80030069	PRSA_ERROR_PRPRINT_SPLERROR	Error occurred while waiting for the form output (prprint command). Form could not be output because of an output device error.
			Error occurred on the List Creator print server while waiting for the form output. Output device is "error". Remove the cause of error of the output device.
2147680362	0x8003006a	PRSA_ERROR_PRPRINT_SPLTRANS	Error occurred while waiting for the form output (prprint command). An error occurred during transfer of the spool document to the remote output device.
			Error occurred on the List Creator print server while waiting for the form output. An error occurred during transfer of the spool document to the remote output device. For error details, check the event log of the computer executing the form output.
2147680363	0x8003006b	PRSA_ERROR_PRPRINT_SPLSAVE	Error occurred while waiting for the form output (prprint command). An error occurred when saving after output.
			Error occurred on the List Creator print server while waiting for the form output. An error occurred when saving after form output. For error details, check the event log of the computer executing the form output.
2147680364	0x8003006c	PRSA_ERROR_PRPRINT_SPLWAIT	Error occurred while waiting for the form output (prprint command). Output end wait was released to wait for the reply to the paper replacement or output start message.
			Error occurred on the List Creator print server while waiting for the form output. Output end wait was released to wait because there is a wait for a reply to the paper replacement or output start message during the form output. Respond to the message.
2147680456	0x800300c8	PRSA_ERROR_NOUSER	Remote form owner has not been registered.
			Remote form owner has not been defined. Specify it after checking the user name defined by the "prsetpasswd -l" command.

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (10 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
2147745760	0x8003ffe0	PRSA_ERROR_CONNECT (*1)	Error occurred in the communication module during form output. For error details, check the event log (or system log). Error occurred in the communication module during form output. Refer to the event log or system log output from the service (ListCREATOR RemotePrint in case of Windows). For details, refer to the following: =>" ● Error details when using connector linkage" If the same error continues, contact the system administrator and check the operating environment of the system.
2147745761	0x8003ffe1	PRSA_ERROR_CONNECT_SHUTDOWN	Connection has been disabled because the ListCREATOR RemotePrint service has been stopped or the target computer shutdown. The following may be the causes: - Target computer is shutdown. - Service (for Windows, ListCREATOR RemotePrint) is stopped. - The network route has been cut off (gateway power cut or bad cable connection, etc.). - Error in the network hardware. Restart the target computer or start the service (for Windows, ListCREATOR RemotePrint), and try again. If the same error occurs, contact the system administrator and check for problems in the network route or errors in the network hardware.
2147745762	0x8003ffe2	PRSA_ERROR_CONNECT_SERVICE_STOP_L	Process cannot be carried out because the List CREATOR RemotePrint service has not been started on the local computer. Process cannot be carried out because the service (for Windows, List CREATOR RemotePrint) has not been started on the local computer. Start the service (ListCREATOR RemotePrint in case of Windows) on the local computer and try again.
2147745763	0x8003ffe3	PRSA_ERROR_CONNECT_SERVICE_STOP_R	Target computer service (ListCREATOR RemotePrint) is not running so process cannot be carried out. Target computer service (for Windows, ListCREATOR RemotePrint) is not running so process cannot be carried out. The following may be the causes: Perform the solutions according to the cause. - The service (for Windows, ListCREATOR RemotePrint) on the target computer has not been started. Start the service (for Windows, ListCREATOR RemotePrint) of the target computer and try again. - The application server and the List Creator print server have different setting values specified for the destination port number in each connector linkage setup file (DefaultTransferProperty file). Check the setting values for the destination port (jp.co.pfu.atool.delivery.requester.transferPort) in the connector linkage setup files (DefaultTransferProperty) on the application server and the List Creator print server. For details on the destination port, refer to the Online Manual "Setup & Operation".

Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class (11 / 11)

Value (Decimal)	Value (Hexadecimal)	Constant	Description
			Cause and solution
2147745764	0x8003ffe4	PRSA_ERROR_CONNECT_NETWORKS	Cannot connect to the target computer or a communication error has occurred.
			A communication error has occurred during communication with the target computer. The following may be the causes: - The network traffic is heavy. - The time out occurred during communication. - Target computer is shutdown. - The network route has been cut off (gateway power cut or bad cable connection, etc.). - Error in the network hardware. Wait for a while and try again. If the same error continues, report this message and operation contents to our system engineer.
2147745765	0x8003ffe5	PRSA_ERROR_FILE_EXIST_L	Failed to create the file because it already exists on the local computer.
			Failed to create file because it already exists on the local computer. If a file with the same name exists in a path specified in the "ID_RETURNPDFPATH (created PDF file name)" key, "ID_RETURNOWFPATH (created OWF file name)" key or "ID_RETURNXLSXPATH (created Excel file name)" key of the setProperty method, it cannot be overwritten. Delete the target file or change the file path.

*1: In the event of a PRSA_ERROR_CONNECT or PRSA_ERROR_OTHER error, refer to the following for details:

- If the List Creator print server runs on Windows
  The description regarding the List Creator event logs in the Online Manual "Troubleshooting & Messages"
- If the List Creator print server runs on UNIX OS
  The description regarding the FJSVoast messages in the Online Manual "Troubleshooting & Messages"

*2: If OutputASSIST is installed on the target computer, read "ListCREATOR Service" as "OutputASSIST Service".

●Error details when using connector linkage

The following explains the detail codes of errors displayed while using connector linkage.

Detail Code	Cause and solution
X-0-0	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up - Whether the connector linkage service has been started - Whether the machine is experiencing heavy traffic - Whether the same value has been set for the destination port on the application server and the List Creator print server
X-20-32	There may be insufficient disk space on the target computer. Perform the following solutions: - Delete unnecessary files from the installation destination of the List Creator on the target computer to free space, then try again.
X-29-16842788	The following may have occurred during communication: - The machine is experiencing heavy traffic - Transfer timeout
X-24-16	The DefaultTransferProperty file may include some properties with no value specified. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.

Detail Code	Cause and solution
X-24-32	A value that is out of range may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-24-48 X-24-64	An incorrect value may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-0-41000010301	The following may have occurred during communication: - The machine is experiencing heavy traffic
X-0-41000010005	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up

The "X" in the above table represents an output number.

5.4.8.2 Constructor Overview

The RemoteException class constructor is described below.

Constructor overview
RemoteException(int i) RemoteException(int i, Throwable e) An object created and thrown by List Creator internally during occurrence of an error.

5.4.8.3 Method Overview

The RemoteException class methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Methods for Error Tracing	All	int	getCode() Acquires the error code.
	All	Throwable	getThrowable() Acquires exceptions which occurred internally in the Java

5.4.8.4 Constructor Details

public
RemoteException(int i)

public
RemoteException(int i, Throwable e)

Usage

An object created and thrown by List Creator internally during occurrence of an error.

5.4.8.5 Method Details

5.4.8.5.1 Methods for Error Tracing

public int
getCode()

Usage

Acquires the error code. For details regarding the error code, refer to the following:
=>"Table 5.18 Error code fields which can be acquired in the getCode method of the RemoteException class"

public Throwable
getThrowable()

Usage

Acquires exceptions which occurred internally in the Java interface.

5.4.9 OwfException Class

A class which reports exceptions which occurred during OWF file creation.

java.lang.Object
└ java.lang.Throwable
└ java.lang.Exception
└ **com.fujitsu.systemwalker.outputassist.connector.OwfException**

public class OwfException
extends java.lang.Exception

5.4.9.1 Field Overview

The error code fields that can be acquired in the getCode method of the OwfException class are indicated below.

Table 5.19 Error code fields which can be acquired in the getCode method of the OwfException class (1 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
1	0x00000001	OWF_ERROR_ACCESS_DENIED	Access to the specified file or directory has been refused. The file or directory specified in the property (parameter or attribute information) cannot be accessed. Check for the access privileges of the file or directory.
2	0x00000002	OWF_ERROR_ARC_CORRUPTED	OWF file is damaged. If this error occurs, report this message and operation contents to our system engineer.
3	0x00000003	OWF_ERROR_ARC_FULL	Insufficient disk space to create the OWF file. The following has insufficient free disk space: - Directory in which the OWF file is to be created - Work directory Check the free disk space and delete unnecessary files, then try again.
5	0x00000005	OWF_ERROR_CANNOT_WRITE	File or directory cannot be created on the volume. The upper limit to open a file may be exceeded. Check the system environment.
6	0x00000006	OWF_ERROR_CRC_OWF	File is damaged. If this error occurs, report this message and operation contents to our system engineer.
7	0x00000007	OWF_ERROR_DISK_FULL	Insufficient space on the volume you are trying to write to. The following has insufficient free disk space: - Directory in which the OWF file is to be created - Work directory Check the free disk space and delete unnecessary files, then try again.
8	0x00000008	OWF_ERROR_INVALID_HANDLE	The specified handle is invalid. If this error occurs, report this message and operation contents to our system engineer.

Table 5.19 Error code fields which can be acquired in the getCode method of the OwfException class (2 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
9	0x00000009	OWF_ERROR_INVALID_NAME	Cannot find the file or directory specified in the parameter. The file or directory specified in the property (parameter or attribute information) does not exist. Check the file or directory.
10	0x0000000a	OWF_ERROR_INVALID_PARAMETER	Parameters are set incorrectly. The property (parameter or attribute information) required for creating an OWF file may not be set. Check that the required property (parameter or attribute information) has been set, and set it if otherwise.
12	0x0000000c	OWF_ERROR_NOT_ENOUGH_MEMORY	Could not secure enough memory for the process. Insufficient Memory. Check the following: - Are any unnecessary applications running? - Is there enough virtual memory? - Is the installed memory sufficient? Perform the following solutions according to the cause. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory.
14	0x0000000e	OWF_ERROR_UNKNOWN	Some other error. If this error occurs, report this message and operation contents to our system engineer.
101	0x00000065	OWF_ERROR_CODE_CONVERT	Code conversion failed. Check to see whether the character code of the form and the character code at the time of running the Java interface are different. Check the following: - If "CODE_EUC_U90" or "CODE_EUC_S90" is specified in the setFileType method, check whether Charset Manager is installed properly. - Check whether the language (environment variable LANG) of the operating environment of UNIX OS and the character code of the file are not different.
102	0x00000066	OWF_ERROR_FILE_EXIST	OWF file could not be created because a file with the same name already exists. Another OWF file with the same name may already exist in the directory in which the OWF file is to be created. In the directory in which the OWF file is to be created, check whether an OWF file with the same name exists.
201	0x000000c9	OWF_ERROR_ENV_ACCESS_DENIED	Failed to access the program settings. If this error occurs, report this message and operation contents to our system engineer.
202	0x000000ca	OWF_ERROR_ENV_CORRUPTED	Program settings may be damaged. Perform the setup for the external font embedding function (OWF file font registration) and then retry.

Table 5.19 Error code fields which can be acquired in the getCode method of the OwfException class (3 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description Cause and solution
203	0x000000cb	OWF_ERROR_FONTFILE_ACCESS_DENIED	Failed to access the font file specified in the program settings or the method. Check the following: - Check the existence of the specified font file in the property (parameter or attribute information) specified during setup or form output. - Check the access privileges of the specified font file in the property (parameter or attribute information) specified during setup or form output.
204	0x000000cc	OWF_ERROR_INVALID_FONT	Font file specified in the program settings or the method maybe corrupt. Check whether the specified font file in the property (parameter or attribute information) specified during setup or form output is a TrueType font file.
205	0x000000cd	OWF_ERROR_EUDCFILE_ACCESS_DENIED	Failed to access the external font file specified in the required settings or method. Check the following: - Check the existence of the specified external font file in the property (parameter or attribute information) specified during setup or form output. - Check the access privileges of the specified external font file in the property (parameter or attribute information) specified during setup or form output.
206	0x000000ce	OWF_ERROR_NOT_FIND_FACENUMBER	Cannot find a font in the font file to match the font number specified in the program settings or the method. Check the specified font number in the property (parameter or attribute information) specified during setup or form output.
212	0x000000d4	OWF_ERROR_WORKFILE_CREATE	Failed to create the work file. Failed to create the work file because there are no access privileges to the work directory. Check for the access privileges of the work directory and try again.
213	0x000000d5	OWF_ERROR_MAPFONT_READ	Failed to read the substitute font info file. The file specified in the substitute font info file may be corrupt. Check whether the file specified in the substitute font info file is set correctly.
214	0x000000d6	OWF_ERROR_MAPFONT_ANALYZE	Failed to analyze the substitute font info file. Failed to read the substitute font info file due to the following: - The substitute font info file does not exist. - The path specified in the substitute font info file does not exists as a file. - Another application is using the substitute font info file. - There are no access privileges to the substitute font info file. Perform the following solutions according to the cause. - Check whether the substitute font info file exists. - Check that the path specified in the substitute font info file exists as a file. - Check whether another application is using the substitute font info file. - Check the access privileges of the substitute font info file.

Table 5.19 Error code fields which can be acquired in the getCode method of the OwfException class (4 / 4)

Value (Decimal)	Value (Hexadecimal)	Constant	Description
			Cause and solution
254	0x000000fe	OWF_ERROR_ENVIRONMENT	Program Setting Error, or Unsupported Function in the Product Package. Cannot Run.
			Contact the system administrator and check whether List Creator Enterprise Edition is installed properly.
255	0x000000ff	OWF_ERROR_INTERNAL	Java internal error has occurred. It is possible to acquire the internal error through the getThrowable method.
			Java internal error has occurred. Check the error contents through the getThrowable method.

5.4.9.2 Constructor Overview

The OwfException class constructor is described below.

Constructor overview
OwfException(int i) OwfException(int i, Throwable e) An object created and thrown by List Creator internally during occurrence of an error.

5.4.9.3 Method Overview

The OwfException class methods are described below.

Method type	Method overview W : A method that can be used when the application server runs on Windows. W64 : A method that can be used when the application server runs on Windows (x64). S : A method that can be used when the application server runs on Solaris. L : A method that can be used when the application server runs on Linux. All : A method that can be used in all the environments.		
Methods for Error Tracing	All	int	getCode() Acquires the error code.
	All	Throwable	getThrowable() Acquires exceptions which occurred internally in the Java

5.4.9.4 Constructor Details

public
OwfException(int i)

public
OwfException(int i, Throwable e)

Usage

An object created and thrown by List Creator internally during occurrence of an error.

5.4.9.5 Method Details

5.4.9.5.1 Methods for Error Tracing

public int
getCode()

Usage

Acquires the error code. For details regarding the error code, refer to the following:
=>"Table 5.19 Error code fields which can be acquired in the getCode method of the OwfException class"

public Throwable
getThrowable()

Usage

Acquires exceptions which occurred internally in the Java interface.

5.5 Setup for Using the Java Interface

This section describes the setup required for executing applications using the Java interface, and for performing development using the Java interface.

5.5.1 Setup When the Application Server Runs on Windows

5.5.1.1 CLASSPATH Settings (Required)

●During development

When compiling the Java source, set the Jar file (fjoajif.jar) to the CLASSPATH.
An example for compiling with the javac command is shown below.

```
javac -classpath .;List_Creator_installation_directory\classes\fjoajif.jar Xyz.java
                                                                          (*1)
```

*1:Specify the source name to compile.

●During execution

When executing the compiled program, set the Jar file (fjoajif.jar) to the CLASSPATH. When creating OWF files during local output in List Creator, be sure to set the Jar file (fjoaweb.jar) to the CLASSPATH (this is not necessary for remote form outputs and connector linkage).
When performing a connector linkage, set the following Jar files to the CLASSPATH:

- ardus.jar
- ardusobj.jar
- ArdusRepository.jar
- jomcli.jar
- jomrequester.jar

An example for compiling with the java command is shown below.

```
java -classpath .;List_Creator_installation_directory\classes\fjoajif.jar Xyz
                                                                          (*1)
Or,
java -classpath .;List_Creator_installation_directory\classes\fjoajif.jar;List_Creator_installation_
directory\classes\fjoaweb.jar Xyz
                                    (*1)
Or,
java -classpath .;List_Creator_installation_directory\classes\fjoajif.jar;
        List_Creator_installation_directory\remoteprint\requester\lib\ardus.jar;
        List_Creator_installation_directory\remoteprint\requester\lib\ardusobj.jar;
        List_Creator_installation_directory\remoteprint\requester\lib\ArdusRepository.jar;
        List_Creator_installation_directory\remoteprint\requester\lib\jomcli.jar;
        List_Creator_installation_directory\remoteprint\requester\lib\jomrequester.jar;  Xyz
                                                                                    (*1)
```

*1:Specify the compiled Java class name.

5.5.1.2 Environment Variable Settings (During Execution)

To execute the compiled program, set the following environment variables:

Caution

- Depending on the environment where the Java interface is used, it may be necessary to make environment variable settings differently from what is shown in this example. For details, refer to the manual of the utilized environment.

●PATH (required)

This environment variable specifies List Creator installation directory. Because the Java interface uses JNI (Java Native Interface), it is necessary to set the environment variable PATH to allow loading of Shared Libraries of JNI.
Add to this environment variable so that the List Creator installation directory will have the highest priority.
Be sure to specify this environment variable.
The following displays a specification example:

Example: When specifying PATH

```
set PATH=List_Creator_installation_directory;%PATH%
```

Caution

- Normally, there is no need to perform the settings again, because the List Creator installation directory is set for the system environment variable PATH during installation of List Creator. However, depending on the environment, it may be necessary to make the environment variable PATH settings in addition to the above, in order to use the JAR files (fjoajif.jar, fjoaweb.jar).

5.5.2 Setup When the Application Server Runs on UNIX OS

During execution, specify the following environment variables:

5.5.2.1 CLASSPATH Settings (Required)

●During development

When compiling the Java source, set the Jar file (fjoajif.jar) to the CLASSPATH.
An example for compiling with the javac command is shown below.

```
javac -classpath .:/opt/FJSVoast/classes/fjoajif.jar Xyz.java
                                                     (*1)
```

*1:Specify the source name to compile.

●During execution

When executing the compiled program, set the Jar file (fjoajif.jar) to the CLASSPATH. When creating OWF files during local output in List Creator, be sure to set the Jar file (fjoaweb.jar) to the CLASSPATH (this is not necessary for remote form outputs and connector linkage).
When performing a connector linkage, set the following Jar files to the CLASSPATH:

- ardus.jar
- ardusobj.jar
- ArdusRepository.jar
- jomcli.jar
- jomrequester.jar

An example for compiling with the java command is shown below.

```
java -classpath .:/opt/FJSVoast/classes/fjoajif.jar Xyz
                                                    (*1)
Or,
java -classpath .:/opt/FJSVoast/classes/fjoajif.jar:/opt/FJSVoastw/classes/fjoaweb.jar Xyz
                                                                                      (*1)

Or,
java -classpath .:/opt/FJSVoast/classes/fjoajif.jar:
        /opt/FJSVoast/remoteprint/requester/lib/ardus.jar:
        /opt/FJSVoast/remoteprint/requester/lib/ardusobj.jar:
        /opt/FJSVoast/remoteprint/requester/lib/ArdusRepository.jar:
        /opt/FJSVoast/remoteprint/requester/lib/jomcli.jar:
        /opt/FJSVoast/remoteprint/requester/lib/jomrequester.jar  Xyz
                                                                  (*1)
```

*1:Specify the compiled Java class name.

5.5.2.2 Environment Variable Settings (During Execution)

During execution, specify the following environment variables:

> **Caution**
> - Depending on the environment where the Java interface is used, it may be necessary to make environment variable settings differently from what is shown in this example. For details, refer to the manual of the utilized environment.

●LD_LIBRARY_PATH (required)

This environment variable specifies the library storage directory of List Creator.
Because the Java interface uses JNI (Java Native Interface), it is necessary to set the environment variable LD_LIBRARY_PATH to allow loading of Shared Libraries of JNI.
Be sure to specify this environment variable.

Add the following library storage directories of List Creator to this environment variable so that they will have the highest priority:

- /opt/FJSVoast/lib
- /opt/FJSVnavac/lib (only when using Navigator links function)
- /opt/FJSVoastw/lib (only when creating an OWF file)
- Path where libjvm.so exists (only when using XBRL data support function)

  Example: If Interstage Application Server Enterprise Edition is used as Java environment
  /opt/FJSVawjbk/jdkl4/jre/lib/sparc/server

When using Charset Manager, add the following library storage directories.

- For [Solaris/Linux for x86/Linux for Itanium]
  - "/etc/opt/FSUNiconv/lib"
- For [Linux for Intel64]
  - "/etc/opt/FSUNiconv/lib"
  - "/etc/opt/FSUNiconv/lib64"

The following displays a specification example:

Example: When specifying LD_LIBRARY_PATH using the Bourne shell

```
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/etc/opt/FSUNiconv/lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
Or,
LD_LIBRARY_PATH=/opt/FJSVoast/lib:/opt/FJSVoastw/lib:/etc/opt/FSUNiconv/
lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

●LANG (when required)

This environment variable specifies the character code (character code for when the Java interface handles the form) of the command execution environment.
Specify it as EUC, Shift-JIS, or UNICODE (UTF8) character code.
Be sure to specify the character code with this environment variable or the setFileType method of the FormBase interface.
The following displays values that can be specified in the environment variable LANG for each operating system of the application server.

When the application server runs on Solaris

Value that can be specified (*1)	Definition
ja (*2) ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.PCK (*3)	Indicates a Shift-JIS character code.
ja_JP.UTF-8 en_US.UTF-8	Indicates a UNICODE (UTF8) character code.

*1: If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2: If "ja" or "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE. Operations are same for both "ja" and "ja_JP.eucJP".

*3: Be sure to specify "ja_JP.PCK" when using Navigators links function.

When the application server runs on Linux

Value that can be specified (*1)	Definition
ja_JP.eucJP (*2)	Indicates an EUC character code.
ja_JP.UTF-8 en_US.UTF-8 (*3)	Indicates a UNICODE (UTF8) character code.

*1: If you specify a value (string) other than the values that can be specified, problems may occur such as the characters not appearing during form output.

*2: If "ja_JP.eucJP" is specified, make sure to specify EUC code type ("u90" or "s90") in the environment variable OA_EUCTYPE.

*3: "en_US.UTF-8" is not supported for [Linux for x86/Linux for Itanium].

The following displays a specification example:

Example: When specifying the environment variable LANG

(1) When using the Bourne shell to specify UNICODE (UTF8)

```
LANG=ja_JP.UTF-8
export LANG
```

(2) When using the Bourne shell to specify Shift-JIS code (when the application server runs on Solaris)

```
LANG=ja_JP.PCK
export LANG
```

●OA_EUCTYPE (when required)

When EUC code is specified as a character code, this environment variable specifies the EUC code type.

When the application server runs on Solaris

If EUC code ("ja" or "ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If Shift-JIS code ("ja_JP.PCK") or UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified.

When the application server runs on Linux

If EUC code ("ja_JP.eucJP") is specified in the environment variable LANG, make sure to specify the EUC code type in this environment variable.
If UNICODE (UTF8) code (such as "ja_JP.UTF-8") is specified in the environment variable LANG, this environment variable will be invalid even if specified.

The following displays values that can be specified in the environment variable OA_EUCTYPE:

Value that can be specified	Definition
u90 (*1)	Indicates an EUC (U90) character code.
s90 (*1)	Indicates an EUC (S90) character code.

*1: Be sure to specify it in lowercase.

The following displays a specification example:

Example: When specifying the environment variables LANG and OA_EUCTYPE

(1) When using the Bourne shell to specify EUC (U90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=u90
export LANG OA_EUCTYPE
```

(2) When using the Bourne shell to specify EUC (S90)

```
LANG=ja_JP.eucJP
OA_EUCTYPE=s90
export LANG OA_EUCTYPE
```

Caution

- The cord of form descriptor information must be converted according to the execution environment of the user application. For details, refer to the Online Manual "Setup & Operation".

5.6 Notes

5.6.1 Points of Caution for Using the Java Interface

●Points of Caution for Using the Java Interface

Common cautions

- Do not use copies of the Java interface Jar files (fjoajif.jar, fjoaweb.jar, etc.). For example, if the Jar files are copied with the entire Servlet container, proper operation cannot be guaranteed.
  Be sure to use them by specifying the CLASSPATH.
- The Java interface is used on the application server where List Creator is installed.
  The application cannot be used by distributing it to clients for use on them like a Java applet.
- If a ConnectorException occurs during the individual method calls of Forms class, FormsFile class, FormsStream class, and the PrintForm class, the Forms object, FormsFile object and FormsStream object will become invalid. In this case, call the cleanup method of the Forms class, FormsFile class, and FormsStream class, and release the resource that the Java interface is using.
- The Forms class cannot be used when using XML data. Use the FormsStream class or the FormsFile class.
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

Cautions when the application server runs on UNIX OS

- The characters other than half-width alphanumeric characters (full-width characters and half-width katakana characters) cannot be used for form file names or other file names.
- The application created by using the Java interface will only operate in native thread mode.
  If operating in green thread mode is attempted, Java applications which called the Java interface may hang, or an exception may occur.

  To specify the thread option, specify the environment variable THREADS_FLAG as follows.

```
THREADS_FLAG=native
export THREADS_FLAG
```

- Specify individual methods of each class within the range of the specified character code, since they are converted internally to the character code specified at the setFileType method (if the setFileType method is omitted, the character code specified in the environment variable LANG and environment variable OA_EUCTYPE).

Cautions when the application server runs on Windows

- The Java interface for [Windows] that runs as 32 bit application cannot be called by 64 bit native applications.

  Use the Java interface for [Windows (x64)] when running 64 bit native applications.
- Because the methods other than the Forms class pushRecord method, and individual methods of classes other than the Forms class will be converted to Shift-JIS internally, specify them within the range of Shift-JIS character code. If a character that does not exist in Shift-JIS is selected, degeneracy will occur. In that case, a half-width or full-width underscore is output as a substitute character.

●Cautions When Performing Remote Form Output

The following describes the cautions when performing remote form output.
For the cautions for setup and operation of remote form output, refer to the description regarding the points to note for remote form output in the Online Manual "Setup & Operation".

Common cautions

- If an error occurs during processing when a form is transferred from the application server, the form at the transfer destination cannot be guaranteed. Perform remote form output again.
- If the network traffic is heavy, the network route has been cut off, or the network hardware error has occurred, the error may be notified up to 30 minutes later.
  In that case, one of the following exceptions is reported.
  - ConnectorException (Error code "OAJC_ERROR_REMOTEEXCEPTION") will occur and RemoteException (Error code "PRSA_ERROR_TRANS_NETWORKS_PATH") will be reported as the detailed information.
  - RemoteException (Error code PRSA_ERROR_TRANS_NETWORKS_PATH) will be reported.

  Check to make sure that there are no problems in the network route to the List Creator print server, or that there are no errors occurring in the network hardware.

Cautions when the List Creator print server runs on Windows

- When performing remote form output, work will be performed on the List Creator print server with the privileges of the user who executed the Java application. Make sure to create an identical account with the same user name and password on both the application server and the List Creator print server, so that work can be performed on the List Creator print server with the privileges of the user who executed the Java application. Also, register the user name/password of the List Creator print server on the application server, as the remote form output user.
  When setting to operate with the privileges of the user registered with the prsetpasswd command, or when performing the following type of operation, use the prsetpasswd command on the application server, and set a remote form output user:
  - When the List Creator print server runs on Windows XP, and when remote form output is performed with the folder option set to "Use simple file sharing (Recommended)"
  - When remote form output is performed from a service process which operates with the SYSTEM account
  - When 445/tcp port (microsoft-ds (*1)) is blocked by firewall or router

    *1: This is a port number used for communication of direct hosting SMB service. It is used for sharing or remotely managing files and printers.
- When outputting a form through remote form output, the maximum number of processes that can be sent to a single List Creator print server at the same time is 50 in total. When one application server is connected to multiple List Creator print servers, the application server can send up to 50 processes to each List Creator print server (up to the number of List Creator print server x 50) at the same time. When multiple application servers are connected to one List Creator print server, the maximum number of processes that the application servers can send at the same time is 50 in total. The 51st and later form outputting processes may be cancelled.
  In that case, one of the following exceptions is reported.
  - ConnectorException (Error code "OAJC_ERROR_REMOTEEXCEPTION") will occur and RemoteException (Error code "PRSA_ERROR_TRANS_BUSY") will be reported as the detailed information.
  - RemoteException (Error code PRSA_ERROR_TRANS_BUSY) will be reported.

  When performing the remote form output in series, perform remote form output again as necessary.

Cautions when the List Creator print server runs on UNIX OS

- When performing remote form output, work will be performed on the List Creator print server with the privileges of the user who executed the Java application. Set up an identical user account at the application server executing the Java application, and the List Creator print server which will output the form.
- The maximum number of processes that can be processed by a single print server at the same time is 50. The 51st and later form outputting processes may be cancelled.

  In that case, one of the following exceptions occurs.

- ConnectorException (Error code "OAJC_ERROR_REMOTEEXCEPTION") will occur and RemoteException (Error code "PRSA_ERROR_TRANS_BUSY") will be reported as the detailed information.
- RemoteException (Error code PRSA_ERROR_TRANS_BUSY) will occur.

When performing the remote form output in series, perform remote form output again as necessary.

●Cautions during Connector Linkage

For the cautions for setup and operation of connector linkage, refer to the description regarding the points to note for connector linkage in the Online Manual "Setup & Operation".

The following describes the cautions for connector linkage.

- When outputting a form with connector linkage, the maximum number of processes that can be processed by a single List Creator print server at the same time depends on the environment settings. If the number of processes exceeds the number set in the setup, form outputting processes may be cancelled after that. When executing connector linkage in series, perform connector linkage again as necessary.

5.6.2 Cautions Regarding the Character Code

When using the Java interface, set the character code according to the operating mode of List Creator.

●When specifying input data using the pushRecord method of the Forms class

When specifying input data using the pushRecord method of the Forms class, take note of the following points:

- Use the character code specified at the setFileType method.
- The input data will be converted to the character code specified at the setDataCode method. Incorrect results may occur during conversion of the character code.

The character codes that can be used when specifying input data using the Forms class are indicated below.

When the application server runs on Windows

Method specified on the application server	Character code handled in output destination (according to the operating mode)					
	Local form output	Remote form output (According to the List Creator print server)		OWF file creation	Connector linkage (According to the List Creator print server)	
		Windows	UNIX OS		Windows	UNIX OS
setFileType	Shift-JIS	Shift-JIS	-	Shift-JIS	Shift-JIS	Shift-JIS
setDataCode	Shift-JIS, UTF8	Shift-JIS, UTF8	-	Shift-JIS, UTF8	Shift-JIS, UTF8	Shift-JIS, UTF8

UTF8: UNICODE (UTF8)
-: Cannot be specified.

When the application server runs on UNIX OS

If the application server is UNIX OS, and if EUC (U90 or S90) is specified for the setDataCode method, make sure to specify u90 or s90 with the setFileType method.
If Shift-JIS is specified for the setDataCode method, make sure to specify Shift-JIS with the setFileType method (For Linux, Shift-JIS cannot be specified). If UNICODE (UTF8) is specified for the setDataCode method, make sure to specify UNICODE (UTF8) with the setFileType method.

Method specified on the application server	Character code handled in output destination (according to the operating mode)					
	Local form output	Remote form output (According to the List Creator print server)		OWF file creation	Connector linkage (According to the List Creator print server)	
		Windows	UNIX OS		Windows	UNIX OS
setFileType	Y	Y (*1)	Y	Y (*1)	Y (*1)	Y
setDataCode (*2)	Y	Y (*3)	Y	Y (*3)	Y (*3)	Y

Y: Can specify all character codes that can be specified in individual methods.

*1: If EUC (U90 or S90) or UNICODE (UTF8) is specified, everything will be converted to Shift-JIS. If a character that does not exist in Shift-JIS is selected, degeneracy will occur.

*2: If the character code is omitted, the character code of the environment variable LANG is set as though it was specified.
The environment variable LANG is used for UNIX OS. However, if EUC code is specified in LANG, the character code U90 or S90 specified in the environment variable OA_EUCTYPE will become valid.

*3: If EUC (U90 or S90) is specified, conversion to Shift-JIS will be performed. If a character that does not exist in Shift-JIS is selected when EUC (U90 or S90) is specified, degeneracy will occur.

●When specifying input data using the FormsFile class

When specifying input data using the FormsFile class, take note of the following points:

- Use the character code specified at the setFileType method.
- Enter the data file in the character code specified at the character code specification of the setDataFile method.

The character codes that can be used when specifying input data using the FormsFile class are indicated below.

When the application server runs on Windows

Method specified on the application server	Character code handled in output destination (according to the operating mode)					
	Local form output	Remote form output (According to the List Creator print server)		OWF file creation	Connector linkage (According to the List Creator print server)	
		Windows	UNIX OS		Windows	UNIX OS
setFileType	Shift-JIS	Shift-JIS	-	Shift-JIS	Shift-JIS	Shift-JIS
setDataFile	Shift-JIS, Unicode (*1)	Shift-JIS, Unicode (*1)	-	Shift-JIS, Unicode (*2)	Shift-JIS, Unicode (*1)	Shift-JIS, UTF8

UTF8: UNICODE (UTF8)
-: Cannot be specified.

*1: When specifying an XML file for output, the character code is not required.

*2: When specifying XML data, be sure to specify Shift-JIS regardless of the character code of the data.

When the application server runs on UNIX OS

If the application server is UNIX OS, and if EUC (U90 or S90) is specified for the setDataFile method, make sure to specify u90 or s90 with the setFileType method.
If Shift-JIS is specified for the setDataFile method, make sure to specify Shift-JIS with the setFileType method. If UNICODE (UTF8) is specified for the setDataFile method, make sure to specify UNICODE (UTF8) with the setFileType method.

Method specified on the application server	Character code handled in output destination (according to the operating mode)					
	Local form output	Remote form output (According to the List Creator print server)		OWF file creation	Connector linkage (According to the List Creator print server)	
		Windows	UNIX OS		Windows	UNIX OS
setFileType (*1)	Y	Y (*2)	Y	Y (*2)	Y (*2)	Y
setDataFile (*1)(*3)	Shift-JIS, EUC, UTF8 (*4)(*5)	Y (*4)(*6)	Shift-JIS, EUC, UTF8 (*4)(*5)(*7)	Y (*6)(*8)	Y (*4)(*6)	Shift-JIS, Unicode (*4)(*7)

UTF8: UNICODE (UTF8)
Y: Can specify all character codes that can be specified in individual methods.

*1: UNICODE (UTF8) is valid only when the List Creator print server runs on UNIX OS.

*2: If EUC (U90 or S90) or UNICODE (UTF8) is specified, everything will be converted to Shift-JIS. If a character that does not exist in Shift-JIS is selected, degeneracy will occur.

*3: If the character code is omitted, the character code of the environment variable LANG is set as though it was specified.
The environment variable LANG is used for UNIX OS. However, if EUC code is specified in LANG, the character code U90 or S90 specified in the environment variable OA_EUCTYPE will become valid.

*4: When specifying an XML file for output, the character code is not required.

*5: Shift-JIS character code cannot be used when the List Creator print server runs on Linux.

*6: If EUC (U90 or S90) is specified, conversion to Shift-JIS will be performed. If a character that does not exist in Shift-JIS is selected when EUC (U90 or S90) is specified, degeneracy will occur.

*7: When specifying an XML file for remote form output or connector linkage, specify Shift-JIS for the setDataFile method and UNICODE (UTF8) for the setFileType method.

*8: When specifying XML data, be sure to specify Shift-JIS regardless of the character code of the data.

●When specifying input data using the FormsStream class

When specifying input data using the FormsStream class, take note of the following points:

- Use the character code specified at the setFileType method.
- Enter the data file in the character code specified at the character code specification of the setDataCode method.

The character codes that can be used when specifying input data using the FormsStream class are indicated below.

When the application server runs on Windows

Method specified on the application server	Character code handled in output destination (according to the operating mode)					
	Local form output	Remote form output (According to the List Creator print server)		OWF file creation	Connector linkage (According to the List Creator print server)	
		Windows	UNIX OS		Windows	UNIX OS
setFileType	Shift-JIS	Shift-JIS	-	Shift-JIS	Shift-JIS	Shift-JIS
setDataCode	Shift-JIS, Unicode (*1)	Shift-JIS, Unicode (*1)	-	Shift-JIS, Unicode (*2)	Shift-JIS, Unicode (*1)	Shift-JIS, UTF8

UTF8: UNICODE (UTF8)
-: Cannot be specified.

*1: When specifying XML data for output, the character code is not required.

*2: When specifying XML data, be sure to specify Shift-JIS regardless of the character code of the data.

When the application server runs on UNIX OS

If the application server is UNIX OS, and if EUC (U90 or S90) is specified for the setDataCode method, make sure to specify u90 or s90 with the setFileType method.
If Shift-JIS is specified for the setDataCode method, make sure to specify Shift-JIS with the setFileType method. If UNICODE (UTF8) is specified for the setDataCode method, make sure to specify UNICODE (UTF8) with the setFileType method.

Method specified on the application server	Character code handled in output destination (according to the operating mode)					
	Local form output	Remote form output (According to the List Creator print server)		OWF file creation	Connector linkage (According to the List Creator print server)	
		Windows	UNIX OS		Windows	UNIX OS
setFileType	Y	Y (*2)	Y	Y (*2)	Y (*2)	Y (*3)
setDataCode (*1)	Shift-JIS, EUC, UTF8 (*4)(*5)	Y (*4)(*6) (*7)	Shift-JIS, EUC, UTF8 (*4)(*5) (*7)(*8)	Y (*6)(*9)	Y (*4)(*6) (*7)	Shift-JIS, EUC, UTF8 (*4)(*7) (*8)

UTF8: UNICODE (UTF8)
Y: Can specify all character codes that can be specified in individual methods.

*1: If the character code is omitted, the character code of the environment variable LANG is set as though it was specified.
The environment variable LANG is used for UNIX OS. However, if EUC code is specified in LANG, the character code U90 or S90 specified in the environment variable OA_EUCTYPE will become valid.

*2: If EUC (U90 or S90) or UNICODE (UTF8) is specified, everything will be converted to Shift-JIS. If a character that does not exist in Shift-JIS is selected, degeneracy will occur.

*3: UNICODE (UTF16 little endian) and UNICODE (UTF16 big endian) cannot be used.

*4: When specifying an XML file for output, the character code is not required.

*5: Shift-JIS character code cannot be used when the List Creator print server runs on Linux.

*6: If EUC (U90 or S90) is specified, conversion to Shift-JIS will be performed. If a character that does not exist in Shift-JIS is selected when EUC (U90 or S90) is specified, degeneracy will occur.

*7: When specifying an XML file for remote form output or connector linkage, specify Shift-JIS for the setDataCode method and UNICODE (UTF8) for the setFileType method.

*8: UNICODE (UTF8) is valid only when the List Creator print server runs on UNIX OS.

*9: When specifying XML data, be sure to specify Shift-JIS regardless of the character code of the data.

Chapter 6
.NET Interface

This chapter explains the .NET interface to output List Creator forms from typical .NET applications.

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6.1 Module Configuration

For details on the module configuration of the .NET interface, refer to the following:
=>"3.3.1 Development Environment"

6.2 .NET Namespace

The following namespaces are available for the .NET interface provided by List Creator:

Interface for outputting forms

Classes are provided for outputting forms in List Creator.
The namespaces are as follows.

fujitsu.listcreator

6.3 About the Classes

6.3.1 List of Classes

Following is a list of classes of the .NET interface provided by List Creator.

●fujitsu.listcreator

Class name	Description
FormBase Class	Holds the forms and input data used for form output. A class which is inherited by Forms and FormsFile.
Forms Class	Holds the forms and input data used for form output.
FormsFile Class	Holds the forms and input data files used for form output.
PrintProperties Class	Holds the form output methods and the properties specified for form output.
PrintForm Class	Performs form output and connector linkage mode output based on FormBase and PrintProperties.

Exception name	Description
PrintException class	Reports exceptions which occurred in the .NET interface.

6.4 Class

6.4.1 FormBase Class

Holds the forms and input data used for form output.
A class which is inherited by Forms class and FormsFile class.

System.Object
└ **fujitsu.listcreator.FormBase**

public class FormBase

6.4.1.1 Field Overview

The fields which signify the character code are described below.

Table 6.1 FormBase class fields

Constant	Description
CODE_SJIS	Shift-JIS
CODE_UCS2LE	UNICODE (UTF16 little endian)
CODE_UCS2BE	UNICODE (UTF16 big endian)
CODE_UTF8	UNICODE (UTF8)

6.4.1.2 Property Overview

The FormBase class properties are described below.

Table 6.2 FormBase class properties

Property types	Property name (property settings)	Data type
Properties for User Resource Information	DataCode (Input data character code specification)	int

6.4.1.3 Property Details

6.4.1.3.1 Properties for User Resource Information

DataCode (Input data character code specification)

Specify the character code for the input data.

CODE_SJIS : Shift-JIS

CODE_UCS2LE : UNICODE (UTF16 little endian)

CODE_UCS2BE : UNICODE (UTF16 big endian)

CODE_UTF8 : UNICODE (UTF8)

For the details on the character code when using the .NET interface, refer to the following:
=>"6.6.2 Cautions Regarding the Character Code"

Note

- Used by the class inheriting the FormBase class.
  For details, refer to the following classes inheriting the FormBase class.
  =>"6.4.2 Forms Class"
  =>"6.4.3 FormsFile Class"

6.4.2 Forms Class

A class that holds the forms and input data used for form output.

fujitsu.listcreator.FormBase
└ **fujitsu.listcreator.Forms**

public class Forms : FormBase

6.4.2.1 Constructor Overview

The Forms class constructor is described below.

Table 6.3 Forms class constructor

Constructor overview
Forms(string formname, string assets) (*1) Specify the form name and the form storage directory, and create Forms which contains the form and input data sets.
Forms(string formname, string assets, string cbformname) (*1) Specify the form name, form storage directory and combination-form name, and create Forms which contains the form and form data sets.

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

6.4.2.2 Property Overview

The Forms class properties are described below.

Table 6.4 Form class properties

Property types	Property name (property settings)	Data type
Properties for switching forms	ChangeForm (Specify the name of the form to switch)	string
Properties for Combination-form Output	ChangeCbForm (Specify the name of the combination-form to switch)	string
	CbFile (combination-form descriptor file name)	string
Properties for User Resource Information	DataCode (Input data character code specification)	int

6.4.2.3 Method Overview

The Forms class methods are described below.

Table 6.5 Forms class methods(1 / 2)

Method type	Method overview W: A method that can be used when the application server runs on Windows. W64: A method that can be used when the application server runs on Windows (x64). All: A method that can be used in all the environments.		
Method for Record (Line) Output	All	void	pushRecord(string record) Adds a record (line) string which becomes the input data for outputting the form.

Table 6.5 Forms class methods(2 / 2)

Method type	Method overview W: A method that can be used when the application server runs on Windows. W64: A method that can be used when the application server runs on Windows (x64). All: A method that can be used in all the environments.		
Methods for XBRL data support/ Navigator links function	W	void	setDataSource(string dsinfo) Specify the specific information used as extraction conditions for input data to be placed in the form when using the XBRL data support/Navigator links function.
	W	void	execDataSource() execDataSource(string csv) Extracts input data according to the form descriptor information and the definition of setDataSource method.

6.4.2.4 Constructor Details

public
Forms(string formname, string assets)
throws PrintException

Usage

Specify the form name and the form storage directory, and create a Forms object which contains the form and input data sets.

The form name specified here is used as the specified data form until the form is switched in the ChangeForm properties.

Parameter

formname	:	Specify the form name. When performing multi-form output, specify the form name that is to be output first.
assets	:	Specify the form storage directory with its full path. For the form storage directory, specify the form storage directory of the application server.

Exception

PrintException

Caution

- When performing connector linkage, but not transferring a form, specify the form storage directory of the List Creator print server with the RemoteDirectory property of the PrintProperties class.
- Refer to the following for cautions when specifying the form storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"

Remarks

- When performing multi-form output, switch the form used with the ChangeForm property.
- When performing combination-form output, use the Forms (string formname, string assets, string cbformname) constructor.

public
Forms(string formname, string assets, string cbformname)

Usage

Specify the form name, form storage directory and combination-form name, and create Forms object which contains the form and form data sets.
The form name and combination-form name specified here is used as the specified data combination-form and specified data form until the form is switched in the ChangeForm or ChangeCbForm properties.

Parameter

formname	:	Specify the form name. Specify the form name that is to be output first.
assets	:	Specify the form storage directory with its full path.
cbformname	:	Specify the combination-form name.

Exception

PrintException

Caution

- When performing connector linkage, but not transferring a form, specify the form storage directory of the List Creator print server with the RemoteDirectory property of the PrintProperties class.
- When not performing combination-form output, use Forms(string formname, string assets) constructor.

Remarks

- When performing multi-form output or combination-form output, switch the form used with the ChangeForm property. Also, use the ChangeCbForm property to switch the combination-form used.

6.4.2.5 Property Details

6.4.2.5.1 Properties for switching forms

ChangeForm (Specify the name of the form to switch)

Switches the form used when performing multi-form output/combination-form output. The input data specified in the pushRecord method after this property will become input data of this form.

Caution

- When performing multi-form/combination-form output, switch the form used with this property, and then specify the record (line) string without including the form name and combination-form name in the pushRecord method.

6.4.2.5.2 Properties for Combination-form Output

ChangeCbForm (Specify the name of the combination-form to switch)

Switch the combination-form name used when outputting multiple number of combination-forms. The input data specified in the pushRecord method after setting this property will become input data of this combination-form.

Caution

- When outputting multiple combination-forms, use this property to switch the combination-form name used.
  Also. switch the form used with the ChangeForm property, and specify the record (line) string without including the combination-form name and form names in pushRecord method.

CbFile (combination-form descriptor file name)

Specify the combination-form descriptor file name with the full path.
A combination-form descriptor file defines form descriptor information to be combined and output, and the overlapping order of the form descriptor information.
If this property is omitted, the combination-form descriptor file in the form storage directory (Lccbform.ini) becomes valid.

Caution

- For the character code of the combination-form descriptor file, refer to the Online Manual "Advanced Form Design".
- When transferring the combination-form descriptor file from the application server during connector linkage, specify the combination-form descriptor file with both this property and LcFile property. When doing so, only specify the file name for this property.

6.4.2.5.3 Properties for User Resource Information

DataCode (Input data character code specification)

Specify the character code for the input data.

CODE_SJIS	: Shift-JIS
CODE_UTF8	: UNICODE (UTF8)

Caution

- Specify this property before specifying the pushRecord method. After specifying the pushRecord method, it is not possible to specify this property.
- To use the form descriptor information for which Unicode characters are defined, specify "CODE_UTF8".
- To output forms in the English environment (English locale), specify "CODE_UTF8".

6.4.2.6 Method Details

6.4.2.6.1 Method for Record (Line) Output

```
public void
pushRecord(string record)
throws PrintException
```

Usage

Adds a record (line) string which becomes the input data for outputting the form.

Parameter

record	:	Specify a record (line) string. Set record (line) strings per one record (line). Do not include linefeed codes in the record (line) string.

Exception

PrintException

Caution

- When performing multi-form/combination-form output, switch the form used with the ChangeForm property, and then specify the record (line) string without including the form name in this method.
- When outputting multiple combination-forms, switch the combination-form name used with the ChangeCbForm property, and specify the record (line) string without including the combination-form name and form name in this method.
- When specifying the character code during form output, specify the character code with the DataCode property before specifying this method.

6.4.2.7 Precautions

- If the input data format of the form is "XML Format", this class cannot be used for form output. Use the FormsFile class.
- For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

6.4.3 FormsFile Class

A class that holds the forms and input data used for form output.

```
fujitsu.listcreator.FormBase
    └── fujitsu.listcreator.FormsFile
```

```
public class FormsFile : FormBase
```

6.4.3.1 Field Overview

The fields specified in the GrpOut property of the FormsFile class are shown below.

Table 6.6 Fields specified at the GrpOut property of the FormsFile class

Constant	Description
GRPOUT_NOGRP	Multi-form output will not be performed.
GRPOUT_GRP	Multi-form output will be performed.

The fields specified in the GrpDelimitMode property of the FormsFile class are shown below.

Table 6.7 Fields specified at the GrpDelimitMode property of the FormsFile class

Constant	Description
DELIMIT_ANY	Specify in the following cases: - When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom" - When the input data format is "CSV Format" and the separator character is a "Comma (,)"
DELIMIT_SPACE	Specify when the input data format is "Variable Length", and the separator character is "Space(s)".
DELIMIT_TAB	Specify in the following cases: - When the input data format is "Variable Length", and the separator character is a "Tab" - When the input data format is "CSV Format", and the separator character is a "Tab"
DELIMIT_FIXED	Specify when the input data format is "Fixed Length" and the separator character is "No".
DELIMIT_FIXEDDELIMIT	Specify when the input data format is "Fixed Length" and the separator character is "Yes".
DELIMIT_XML	Specify when the input data format is "XML Format".

For the fields which signify the character code inherited from the fujitsu.listcreator.FormBase interface, refer to the following:
=>"6.4.1.1 Field Overview"

6.4.3.2 Constructor Overview

The FormsFile class constructor is described below.

Table 6.8 FormsFile class constructor

Constructor overview
FormsFile(string assets) (*1) Specify the form storage directory, and create a FormsFile which contains the form and input data set.

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

6.4.3.3 Property Overview

The FormsFile class properties are described below.

Table 6.9 FormsFile class properties(1 / 2)

Property types	Property name (property settings)	Data type
Properties for User Resource Information	ScriptFile (form name) (*1)	string
	DataFile (data file name) (*1) (*2)	string
	XmlDataRoot (data root parent element path)	string
	DataCode (Input data character code specification)	int

Table 6.9 FormsFile class properties(2 / 2)

Property types	Property name (property settings)	Data type
Properties for User Resource Information for Multi-form/ Combination-form Output	GrpOut (multi-form output specification) (*1)	int
	GrpDelimitMode (Separator character type of form name when using multi-form/combination-form) (*1)	int
	GrpDelimit (Separator character of form name when using multi-form/ combination-form)	string
	GrpBytes (field length of form name when using multi-form)	int
	LcForm (form name for multi-form output/combination-form output) (*1)	string
	CbForm (combination-form output) (*1)	bool
	CbFile (combination-form descriptor file name) (*2)	string

*1: The differences between the required properties for outputting a single form, performing multi-form output, and performing combination-form output are indicated below:

- When outputting a single form
  ScriptFile property
- When performing multi-form output
  DataFile property
  GrpOut property
  GrpDelimitMode property
  LcForm property
- When performing combination-form output
  DataFile property
  GrpDelimitMode property
  LcForm property
  CbForm property

However, when outputting forms in the stand-alone mode, or when not transferring a form during connector linkage, the LcForm property need not be specified.

*2: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

6.4.3.4 Constructor Details

public
FormsFile(string assets)
throws PrintException

Usage

Specify the form storage directory, and create a FormsFile which contains the form and input data set.

Parameter

assets : Specify the form storage directory with its full path.
For the form storage directory, specify the form storage directory of the application server.

Exception

PrintException

Caution

- When performing connector linkage, but not transferring a form, specify the form storage directory of the List Creator print server with the RemoteDirectory property of the PrintProperties class.
- Refer to the following for cautions when specifying the form storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"

6.4.3.5 Property Details

6.4.3.5.1 Properties for User Resource Information

ScriptFile (form name)

Specify the form name.
When performing a single form output (when multi-form output or combination-form output is not performed), make sure to specify this property.

DataFile (data file name)

Specify the file name of the input data of List Creator with its full path, within 259 bytes.
When performing multi-form output (when GrpOut property is specified) or combination-form output (when CbForm property is specified), make sure to specify this property.
If omitted when outputting a single form (when the ScriptFile property is specified) during connector linkage, the data file will not be transferred, and a data file with the same name as the form name under the form storage directory on the List Creator print server ("form_name.dat") will be used as the specified file.

XmlDataRoot (data root parent element path)

When the input data format is "XML Format" and the XML root and the data root are different, specify the data root parent element path in the XML data.
Specify the data root parent element path by separating the element name with a slash (/) beginning from a slash (/) to the end of the data root parent element name. Other formats cannot be specified.
If multiple data roots exist directly under the path specified with this property in the XML data, all the data roots are searched.
If this property call is omitted, the data roots are searched from XML data in the following order:

1) If the XML root and the data root have the same name, the XML root is regarded as the data root.
2) If the XML root and the data root are different, the data root is searched from the child elements directly under the XML root.

DataCode (Input data character code specification)

Specify the character code for the input data.

CODE_SJIS	: Shift-JIS
CODE_UCS2LE	: UNICODE (UTF16 little endian)
CODE_UCS2BE	: UNICODE (UTF16 big endian)
CODE_UTF8	: UNICODE (UTF8)

If this property call is omitted, the following character codes are assumed:

- In case of local form output
  The character code specified in the [General] tab of the [List Creator Settings] window will be valid.
- In case of using connector linkage
  The Shift-JIS character code is assumed.

Caution

- When the input data format is "XML Format", the specification of this property is disabled.
- When the input data format is "XML Format", specify the character code in the XML declaration in the XML file. If the XML declaration in the XML file is omitted, or if the character code is not specified in the XML declaration, it is regarded as UNICODE (UTF8).
- To use the form descriptor information for which Unicode characters are defined, specify one of the UNICODE.
- To output forms in the English environment (English locale), specify one of the UNICODE.

6.4.3.5.2 Properties for User Resource Information for Multi-form/Combination-form Output

GrpOut (multi-form output specification)

Specify whether to perform multi-form output.

GRPOUT_NOGRP: Multi-form output will not be performed (a single form will be output).

GRPOUT_GRP : Multi-form output will be performed.

When performing multi-form output, use the GrpDelimitMode property to specify the type of the separator character used to get the form name from the input data. If necessary, use the GrpDelimit property to specify the separator character that will actually be used, and then use the GrpBytes property to specify the field length of the form name data in the data file.
If this property is omitted, it will operate as if "GRPOUT_NOGRP" was specified.

Note

- Make sure to specify the form name using the LcForm property when creating OWF files and performing multi-form output (specifying "GRPOUT_GRP" for the GrpOut property).
- When performing multi-form output during connector linkage (when "GRPOUT_GRP" is specified for the GrpOut property), transfer the form by specifying the form name in the LcForm property (use in multi-form), or specify "RESOURCE_NOSEND" in the SendResource property of the PrintProperties class (without transferring the form used in multi-form), and specify the form storage directory of the form deployed on the List Creator print (form output) server (specify the RemoteDirectory property of the PrintProperties class).

GrpDelimitMode (Separator character type of form name when using multi-form/combination-form)

Specify the type of the separator character used to get the form name from the input data.
When performing multi-form output (when GrpOut property is specified for GrpOut property) or combination-form output (when true is specified for CbForm property), make sure to specify this property.
Separator character types are specified according to the input data format and separator character specified in the [General] tab in the [Data Definitions] window.

DELIMIT_ANY : Specify in the following cases:

- When the input data format is "Variable Length" and the separator character is either "Vertical Bar (|)", "Sharp (#)", "Asterisk (*)", or "Custom"
- When the input data format is "CSV Format" and the separator character is a "Comma (,)"

DELIMIT_SPACE : Specify when the input data format is "Variable Length", and the separator character is "Space(s)".

DELIMIT_TAB : Specify in the following cases:

- When the input data format is "Variable Length", and the separator character is a "Tab"
- When the input data format is "CSV Format", and the separator character is a "Tab"

DELIMIT_FIXED : Specify this when the input data format is "Fixed Length" and the separator character is "No".

DELIMIT_FIXEDDELIMIT:
Specify when the input data format is "Fixed Length" and the separator character is "Yes".

DELIMIT_XML : Specify this when the input data format is "XML Format".

When using an optional separator character (specifying "DELIMIT_ANY" for this property), use the GrpDelimit property to specify the separator character that will actually be used.
When the input data format is "Fixed Length" (when "DELIMIT_FIXED" or "DELIMIT_FIXEDDELIMIT" is specified in this property), be sure to specify the field length of the form name data with the GrpBytes property.

GrpDelimit (Separator character of form name when using multi-form/combination-form)

When using an optional separator character (when "GRPOUT_GRP" is specified in GrpOut property) and performing multi-form output (when "true" is specified for CbForm property) or combination-form output (when "DELIMIT_ANY" is specified for the GrpDelimitMode property), specify the separator character that will actually be used. Separator characters are specified according to the input data format and separator character specified in the [General] tab in the [Data Definitions] window.
If this property is omitted, it will operate as if "vertical bar (|)" was specified.

Caution

- When performing combination-form output, do not specify a "Colon (:)".

Note

- If the character code of the input data is Unicode, specify a code 0x007F/ 0x7F or less.

GrpBytes (field length of form name when using multi-form)

Specify the field length of the form name data in the data file, when performing multi-form output (specifying "GRPOUT_GRP" for the GrpOut property).
This property must be specified when the input data format is "Fixed Length" (when "DELIMIT_FIXED" or "DELIMIT_FIXEDDELIMIT" is specified to the GrpDelimitMode property).
For "Yes", specify a length which does not include the separator character.

LcForm (form name for multi-form output/combination-form output)

When performing multi-form output (when "GRPOUT_GRP" is specified for the GrpOut property) or combination-form output (when "true" is specified for the CbForm property), specify the form name to be used.
When performing multi-form output/combination-form output during connector linkage, specify the form name in this property, or specify the form storage directory of the form deployed on the List Creator print (form output) server (specify the RemoteDirectory property of the PrintProperties class).
Specify multiple form names separating with a semicolon (;).

> **Caution**
> - This property is valid only during connector linkage and OWF file creation.
> - When creating OWF files and performing multi-form output/combination-form output, make sure to specify the form name with this method.
> - When performing multi-form output/combination-form output during connector linkage, transfer the form by specifying the form name in this property, or specify "RESOURCE_NOSEND" in the SendResource property of the PrintProperties class (without transferring the form used in multi-form/ combination-form), and specify the form storage directory of the form deployed on the List Creator print (form output) server (specify the RemoteDirectory property of the PrintProperties class).

CbForm (combination-form output)

Specify whether to perform combination-form output.

false	: Combination-form output will not be performed.
true	: Combination-form output will be performed.

When performing combination-form output, specify the form name data separator character in GrpDelimitMode property and GrpDelimit property.
If this property is not called, combination-form output is not performed.

> **Note**
> - When creating OWF files and performing combination-form output, make sure to specify the form name with LcForm method.
> - When performing combination-form output during connector linkage, transfer the form by specifying the form name in the LcForm property (used in combination-form), or specify "RESOURCE_NOSEND" in the SendResource property of the PrintProperties class (without transferring the form used in combination-form), and specify the form storage directory of the form deployed on the List Creator print (form output) server (specify the RemoteDirectory property of the PrintProperties class).

CbFile (combination-form descriptor file name)

Specify the combination-form descriptor file name with the full path.
A combination-form descriptor file defines form descriptor information to be combined and output, and the overlapping order of the form descriptor information.
If this property is omitted, the combination-form descriptor file in the form storage directory (Lccbform.ini) becomes valid.

> **Caution**
> - For the character code of the combination-form descriptor file, refer to the Online Manual "Advanced Form Design".
> - When transferring the combination-form descriptor file from the application server during connector linkage, specify the combination-form descriptor file with both this property and LcFile property. When doing so, only specify the file name for this property.

6.4.3.6 Precautions

- The differences between the required properties for outputting a single form, performing multi-form output, and performing combination-form output are indicated below:
  - When outputting a single form
    ScriptFile property
  - When performing multi-form output
    DataFile property
    GrpOut property
    GrpDelimitMode property
    LcForm property

- When performing combination-form output
  DataFile property
  GrpDelimitMode property
  LcForm property
  CbForm property

  However, when outputting forms in the stand-alone mode, or when not transferring a form during connector linkage, the LcForm property need not be specified.

- Refer to the following in regards to the supported character code:
  =>"6.6.2 Cautions Regarding the Character Code"
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

6.4.4 PrintProperties Class

A class that holds the form output methods and the properties specified for form output.

System.Object
└ **fujitsu.listcreator.PrintProperties**

public class PrintProperties : System.Object

6.4.4.1 Field Overview

The fields specified in the PrintProperties class are shown below.

User resource information

The fields specified by the BarCodeData property of the PrintProperties class are shown below.

Table 6.10 Fields specified by the BarCodeData property of the PrintProperties class

Constant	Description
BARDATA_NONE	Specify data that is not encoded as input data of CODE128, EAN-128.
BARDATA_BASE64	Specify data that is BASE64 encoded as input data of CODE128, EAN-128.

Operational information

The fields specified by the DirectMethod property and OutputMode property of the PrintProperties class are shown below.

Table 6.11 Fields specified by the DirectMethod property and OutputMode property of the PrintProperties class

Constant	Description
OUTPUTMODE_DEFAULT	Outputs the form in the output method defined in the form
OUTPUTMODE_PRINT	Print
OUTPUTMODE_LIST	e-Record
OUTPUTMODE_FAX	Sending FAX
OUTPUTMODE_PDF	File
OUTPUTMODE_OWF	OWF file creation (Only DirectMethod property can be specified)
OUTPUTMODE_EXCEL	Excel file output

The fields specified by the OutputScale property of the PrintProperties class are shown below.

Table 6.12 Fields specified by the OutputScale property of the PrintProperties class

Constant	Description
OUTPUTSCALE_NONE	The Adjust Output Size at the [Print Size] tab in the [Form Properties] window of the [Form Style Descriptor] window will be enabled.
OUTPUTSCALE_A3	A3 Paper
OUTPUTSCALE_A4	A4 Paper
OUTPUTSCALE_A5	A5 Paper
OUTPUTSCALE_A6	A6 Paper
OUTPUTSCALE_B4	B4 Paper
OUTPUTSCALE_B5	B5 Paper
OUTPUTSCALE_PS	Postcard
OUTPUTSCALE_LT	Letter
OUTPUTSCALE_LG	Legal
OUTPUTSCALE_OT	Optional

The fields specified by the GridUnit property of the PrintProperties class are shown below.

Table 6.13 Fields specified by the GridUnit property of the PrintProperties class

Constant	Description
GRIDUNIT_INCH	Specified in inches.
GRIDUNIT_MM	Specified in millimeters.

The fields specified by the LFCode property of the PrintProperties class are shown below.

Table 6.14 Fields specified by the LFCode property of the PrintProperties class

Constant	Description
LFCODE_DO	Processes linefeed code in rows where present. One blank line will be output.
LFCODE_SKIP	Lines containing linefeed codes only are skipped. (They are processed as if there is no data in the line.)

The fields specified by the FFCode property of the PrintProperties class are shown below.

Table 6.15 Fields specified by the FFCode property of the PrintProperties class

Constant	Description
FFCODE_DO	A new page processing is performed (the next record is output to the new page).
FFCODE_SKIP	No new page processing (skips the new page code).
FFCODE_NONE	No new page processing (new page code is also not skipped).

Printing information

The fields specified by the PrintBin property of the PrintProperties class are shown below.

Table 6.16 Fields specified by the PrintBin property of the PrintProperties class(1 / 2)

Constant	Description
BIN_CF	Cut sheet feeder
BIN_H1	Hopper 1
BIN_H2	Hopper 2
BIN_H3	Hopper 3
BIN_H4	Hopper 4
BIN_MA	Manual paper feed

Table 6.16 Fields specified by the PrintBin property of the PrintProperties class(2 / 2)

Constant	Description
BIN_NO	None
BIN_AT	Automatic

The fields specified by the PrintSide property of the PrintProperties class are shown below.

Table 6.17 Fields specified by the PrintSide property of the PrintProperties class

Constant	Description
PRINTSIDE_SINGLEFOLLOW	Single-sided printing will be performed. When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.
PRINTSIDE_BOTHFOLLOW	Duplex printing will be performed. When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.
PRINTSIDE_PRTFOLLOW	Prints according to the print side setting of the printer (printer driver). When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.
PRINTSIDE_SINGLE	Single-sided printing will be performed. When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.
PRINTSIDE_BOTH	Duplex printing will be performed. When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.
PRINTSIDE_PRT	Prints according to the print side setting of the printer (printer driver). When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

PDF file save information

The fields specified by the PdfEmbed property of the PrintProperties class are shown below.

Table 6.18 Fields specified in the PdfEmbed property of the PrintProperties class

Constant	Description
PDFEMBED_ALL	All fonts are embedded into the PDF file.
PDFEMBED_NONE	All fonts are not embedded into the PDF file.

The fields specified by the PdfJpegQuality property of the PrintProperties class are shown below.

Table 6.19 Fields specified in the PdfJpegQuality property of the PrintProperties class

Constant	Description
PDFQUALITY_HIGH	Performs JPEG compression with high image quality and low compression rate.
PDFQUALITY_MID	Performs JPEG compression with an image quality and compression rate in between PDFQUALITY_HIGH and PDFQUALITY_LOW.
PDFQUALITY_LOW	Performs JPEG compression with low image quality and high compression rate.
PDFQUALITY_NONE	JPEG compression is not performed. Flate compression, which causes no image degradation, is performed.

The fields specified by the PdfAutoPrint property of the PrintProperties class are shown below.

Table 6.20 Fields specified by the PdfAutoPrint property of the PrintProperties class(1 / 2)

Constant	Description
PDFAUTOPRINT_OFF	PDF file is not printed automatically.
PDFAUTOPRINT_OPN	When a PDF file is opened, the Print dialog box is automatically displayed.

Table 6.20 Fields specified by the PdfAutoPrint property of the PrintProperties class(2 / 2)

Constant	Description
PDFAUTOPRINT_OPN_CLS	When a PDF file is opened, automatic printing is performed with the default printer specified in the system.

OWF file creation information

The fields specified in the Destination property of the PrintProperties class are shown below.

Table 6.21 Fields specified by the Destination property of the PrintProperties class

Constant	Description
DESTINATION_PREVIEW	Performs a preview.
DESTINATION_PRINT	Performs printing.

The fields specified by the PrtPreventionEx property of the PrintProperties class are shown below.

Table 6.22 Fields specified by the PrtPreventionEx property of the PrintProperties class

Constant	Description
PRTPREVENTION_TWICE	Double printing is prevented.
PRTPREVENTION_TRUE	Printing is prevented.
PRTPREVENTION_FALSE	Printing is not prevented.

The fields specified by the OwfEmbed property of the PrintProperties class are shown below.

Table 6.23 Fields specified by the OwfEmbed property of the PrintProperties class

Constant	Description
OWFEMBED_ALL	Perform external character embedding (pasting).
OWFEMBED_FALSE	Do not perform external character embedding (pasting).

Excel file output information

The fields specified by the XlsxOutputForm property of the PrintProperties class are shown below.

Table 6.24 Fields specified by the XlsxOutputForm property of the PrintProperties class

Constant	Description
XLSXOUTPUTFORM_PAGE	Change a sheet with the height of a print range and output.
XLSXOUTPUTFORM_CONT	Output without changing the sheet with the height of a printing range.

Connector linkage information

The fields specified by the CompressResource property of the PrintProperties class are shown below.

Table 6.25 Fields specified by the CompressResource property of the PrintProperties class

Constant	Description
RESOURCE_COMPRESS	Compressed, then transferred.
RESOURCE_UNCOMPRESS	Transferred without compressing.

The fields specified by the SendResource property of the PrintProperties class are shown below.

Table 6.26 Fields specified by the SendResource property of the PrintProperties class(1 / 2)

Constant	Description
RESOURCE_SEND	Transfers the form (Transfers the form of the application server and output).

Table 6.26 Fields specified by the SendResource property of the PrintProperties class(2 / 2)

Constant	Description
RESOURCE_NOSEND	Uses the form that is already placed in the List Creator print server.

6.4.4.2 Constructor Overview

The PrintProperties class constructor is described below.

Table 6.27 PrintProperties class constructor

Constructor overview
PrintProperties() Creates an empty PrintProperties object.

6.4.4.3 Property Overview (Property List)

Display the properties of the PrintProperties class as per the types below.

- Properties for User Resource Information
- Properties for identification information
- Properties for operational information
- Properties for Printing Information
- Properties for e-Record information
- Properties for FAX sending information
- Properties for PDF file save information
- Properties for PDF File Save Information (Mail Distribution)
- Properties for print options information
- Properties for OWF file creation information
- Properties for Excel file output information
- Properties for connector linkage information

●Properties for User Resource Information

Table 6.28 Properties of the PrintProperties class (properties for user resource information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
BarCodeData (barcode data BASE64 encoding specification)	int	Y	Y	Y	Y	Y	Y
VisualDir (media data storage directory) (*1)	string	Y	Y	Y	Y	Y	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Properties for identification information

Table 6.29 Properties of the PrintProperties class (properties for identification information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
OutputName (title)	string	Y	Y	Y	Y	Y	Y
TtlComment (comment)	string	Y	Y	Y	Y	Y	Y
UserId (Output User ID)	string	Y	Y	Y	Y	-	Y

●Properties for operational information

Table 6.30 Properties of the PrintProperties class (properties for operational information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
StartPage (start page number)	int	Y	Y	Y	Y	Y	Y
EndPage (end page number)	int	Y	Y	Y	Y	Y	Y
DirectMethod (output method)	int	Y	Y	Y	Y	Y	Y
OutputMode (output method)	int	Y	Y	Y	Y	Y	Y
ReplaceString (SET operator replacement string)	string	Y	Y	Y	Y	Y	Y
OutputScale (Scale according to paper size)	int	Y	Y	Y	Y	Y	Y
GridUnit (unit of the print offset specification)	int	Y	Y	Y	Y	Y	Y
StartPosX (print offset (the horizontal position for starting the print job))	float	Y	Y	Y	Y	Y	Y
StartPosY (print offset (the vertical position for starting the print job))	float	Y	Y	Y	Y	Y	Y
LFCode (linefeed code control specification)	int	Y	Y	Y	Y	Y	Y
FFCode (new page code control specification)	int	Y	Y	Y	Y	Y	Y
NoData (operation when there is no input data)	bool	Y	Y	Y	Y	Y	Y
LabelData (Specification of data file with the field name label)	bool	Y	Y	Y	Y	-	-
PropertyReplace (property replace file name) (*1)	string	Y	Y	Y	Y	-	-
MapFontFile (Substitute font info file name) (*1)	string	Y	Y	Y	Y	-	Y
BarcodeAdjust (barcode correct info file name) (*1)	string	Y	Y	Y	Y	-	Y
PrintEnvFile (Form output information file name) (*1)	string	Y	Y	Y	Y	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Properties for Printing Information

Table 6.31 Properties of the PrintProperties class (properties for printing information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
PrtDevName (printer model name when performing FM output/FNP output specification)	string	-	-	Y	Y	Y	Y
PrinterName (printer name)	string	Y	Y	D	D	D	D
PrintBin (paper source)	int	Y	Y	Y	Y	Y	Y
PrintBinName (paper feed name)	string	Y	Y	D	D	D	D
ItemPrintBin (paper source/paper feed name switching specification)	string	Y	Y	Y	Y	Y	Y
ItemPrintBinName (Specification of the paper feed name attribute)	string	Y	Y	Y	Y	Y	Y
CopyNumber (number of copies)	int	Y	Y	Y	Y	Y	Y
CopyNumberPrt (number of copies according to the printer settings)	bool	Y	Y	D	D	-	-
Collate (Collate output)	bool	Y	D	Y	D	D	D
PrintSide (print side specification)	int	Y	Y	Y	Y	Y	Y
ItemPrintSide (print side switch specification)	string	Y	Y	Y	Y	Y	Y
PaperCode (Paper name)	string	Y	Y	D	D	D	D

●Properties for e-Record information

Table 6.32 Properties of the PrintProperties class (properties for e-Record information) (1 / 2)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
StreamDrvName (e-Record device name)	string	Y	-	Y	Y	-	Y
LwMaker (e-Record creator)	string	Y	-	Y	Y	-	Y
GenerateDay (e-Record creation date)	string	Y	-	Y	Y	-	Y
GenerateTime (e-Record creation time)	string	Y	-	Y	Y	-	Y
LwKeepDir (e-Record storage folder path name)	string	Y	-	Y	Y	-	Y
LwNote1 (e-Record comment 1)	string	Y	-	Y	Y	-	Y
LwNote2 (e-Record comment 2)	string	Y	-	Y	Y	-	Y
LwNote3 (e-Record comment 3)	string	Y	-	Y	Y	-	Y
LwNote4 (e-Record comment 4)	string	Y	-	Y	Y	-	Y

Table 6.32 Properties of the PrintProperties class (properties for e-Record information) (2 / 2)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
LwTermFlag (flag specifying number of days for validity period of e-Record)	bool	Y	-	Y	Y	-	Y
LwTerm (Validity period of e-Record)	int	Y	-	Y	Y	-	Y
LwDelType (Specification of auto-delete following expiry of e-Record)	int	Y	-	Y	Y	-	Y
LwSearch (Indexed searching specification when making e-Record)	int	Y	-	Y	Y	-	Y
LwMail (Mail notification when making e-Record)	int	Y	-	-	-	-	-
LwMailRcv (Mail destination when making e-Record)	string	Y	-	-	-	-	-
LwPrintBin (Paper source when printing after making e-Record)	int	Y	-	Y	Y	-	Y
LwPrintBinName (Paper feed name when printing after making e-Record)	string	Y	-	Y	Y	-	Y
LwCopyNumber (Number of copies when printing after making e-Record)	int	Y	-	Y	Y	-	Y
LwCollate (Collate output specification when printing after making e-Record)	int	Y	-	Y	Y	-	Y
LwPrintSide (Print side specification when printing after making e-Record)	int	Y	-	Y	Y	-	Y
LwItemPrintSide (Print side switch specification when printing after making e-Record)	string	Y	-	Y	Y	-	Y
LwFaxSend (FAX sender information when making e-Record)	string	Y	-	-	-	-	-
LwFaxRcv (FAX recipient information when making e-Record)	string	Y	-	-	-	-	-
LwFaxRcvFile (FAX recipient information file name when making e-Record) (*1)	string	Y	-	-	-	-	-
LwFaxSubject (FAX send attached subject when making e-Record)	string	Y	-	-	-	-	-
LwFaxComment (FAX send attached comment when making e-Record)	string	Y	-	-	-	-	-
LwDstFolder (Distribution folder ID during form print distribution)	string	Y	-	-	-	-	-
LwDstMethod (Form print distribution specification)	int	Y	-	-	-	-	-
StreamEnvFile (Electronic form information file name) (*1)	string	Y	-	Y	Y	-	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Properties for FAX sending information

Table 6.33 Properties of the PrintProperties class (properties for FAX sending information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
FaxDrvName (FAX device name)	string	Y	-	-	-	-	-
FaxSend (FAX sender information when sending FAX)	string	Y	-	-	-	-	-
FaxRcv (FAX recipient information when sending FAX)	string	Y	-	-	-	-	-
FaxRcvFile (FAX recipient information file name when sending FAX) (*1)	string	Y	-	-	-	-	-
FaxSubject (Attached subject when sending FAX)	string	Y	-	-	-	-	-
FaxComment (Attached comment when sending FAX)	string	Y	-	-	-	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Properties for PDF file save information

Table 6.34 Properties of the PrintProperties class (properties for PDF file save information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
KeepPdf (storage destination file name when saving as a file) (*1)	string	Y	Y	Y	Y	Y	Y
PdfSubtitle (PDF file subtitle)	string	Y	Y	Y	Y	Y	Y
PdfAuthor (PDF file author)	string	Y	Y	Y	Y	Y	Y
PdfPrint (PDF file print permission specification)	int	Y	Y	Y	Y	Y	Y
PdfModify (PDF file changes permission specification)	int	Y	Y	Y	Y	Y	Y
PdfSelect (PDF file text and graphics selection permission specification)	int	Y	Y	Y	Y	Y	Y
PdfAnnotate (allow form fields and comments to be added/ changed specification)	int	Y	Y	Y	Y	Y	Y
PdfPwd (password for opening the PDF file)	string	Y	Y	Y	Y	Y	Y
PdfSecuPwd (PDF file security option change password)	string	Y	Y	Y	Y	Y	Y
PdfLimit (Time limit/period for viewing the PDF file)	string	Y	Y	Y	Y	-	Y
PdfEmbed (PDF file font embedding specification)	int	Y	Y	Y	Y	Y	Y
PdfReference (PDF file embedded font search specification)	bool	Y	Y	Y	Y	Y	Y
PdfJpegQuality (PDF file JPEG compression quality specification)	int	Y	Y	Y	Y	Y	Y
PdfEmbedFile (PDF attachment file name) (*1)	string	Y	Y	Y	Y	Y	Y
PdfAutoPrint (PDF file automatic printing specification)	int	Y	Y	Y	Y	Y	Y
PdfHideToolBar (PDF file viewer toolbar display specification)	int	Y	Y	Y	Y	Y	Y
PdfHideMenuBar (PDF file viewer menubar display specification)	int	Y	Y	Y	Y	Y	Y
PdfFullScreen (PDF file viewer full screen display specification)	int	Y	Y	Y	Y	Y	Y
PdfBookmark (specification to insert a bookmark in the PDF file when switching forms)	bool	Y	Y	Y	Y	Y	Y
PdfBookmarkItem (specification to insert a bookmark in the PDF file when switching data)	string	Y	Y	Y	Y	Y	Y
PdfDocEnvFile (PDF document information file name) (*1)	string	Y	Y	Y	Y	Y	Y
PdfOutInfoFile (ECM information file name) (*1)	string	Y	Y	-	-	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Properties for PDF File Save Information (Mail Distribution)

Table 6.35 Properties of the PrintProperties class
(properties for PDF file save information (mail distribution))

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
PdfMailConfFile (PDF mail distribution information file name) (*1)	string	Y	-	Y	Y	Y	Y
PdfMailToAddr (destination mail address for PDF mail distribution)	string	Y	-	Y	Y	Y	Y
PdfMailSmtpsv (SMTP server name for PDF mail distribution)	string	Y	-	Y	Y	Y	Y
PdfMailFromAddr (Transmission source mail address for PDF mail distribution)	string	Y	-	Y	Y	Y	Y
PdfMailFromName (transmission source name for PDF mail distribution)	string	Y	-	Y	Y	Y	Y
PdfMailDeleteFile (PDF file delete specification at the time of PDF mail distribution)	int	Y	-	Y	Y	Y	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Properties for print options information

Table 6.36 Properties of the PrintProperties class (properties for print options information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
PrtMode (Output timing)	int	Y	D	Y	D	-	D
JobHResume (Resume date time)	string	Y	D	Y	D	-	D
JobPriority (Output priority)	int	Y	D	D	D	D	D
InForm (Message notification destination (notification message))	string	Y	D	Y	D	-	D
JobRMsgHost (Message notification destination (response message))	string	Y	D	D	D	-	D
JobBanner (Separator page output specification)	bool	Y	D	D	D	D	D
JobWait (Output end wait)	int	Y	D	D	D	D	D
JobPaperCode (Change paper messages)	string	Y	D	D	D	D	D
JobUserName (Print document owner name (user name) specification)	string	Y	-	-	-	-	-

●Properties for OWF file creation information

Table 6.37 Properties of the PrintProperties class (properties for OWF file creation information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
CmVisualFile (media data file name) (*1)	string	Y	Y	Y	Y	Y	Y
KeepOwf (OWF file name) (*1)	string	Y	Y	Y	Y	Y	Y
Destination (Operational mode during Web plug-in startup)	int	Y	Y	Y	Y	Y	Y
OpenPrtDlg (specification of [Print] window display during printing)	bool	Y	Y	Y	Y	Y	Y
PrtClose (specification to close the Web browser after print completion)	bool	Y	Y	Y	Y	Y	Y
PreviewRate (specification of zoom factor for preview)	string	Y	Y	Y	Y	Y	Y
PrtPreventionEx (specification of printer control during preview)	int	Y	Y	Y	Y	Y	Y
OwfEmbed (specification of embedding external character font in OWF files)	int	Y	Y	Y	Y	Y	Y
OwfRegFont (external font file registration) (*1)	string	Y	Y	Y	Y	Y	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

●Properties for Excel file output information

Table 6.38 Properties of the PrintProperties class (properties for Excel file output information)

Property name (property settings)	Data type	Support status based on the type of operating system of the List Creator print server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
KeepXlsx (Storage destination file name when outputting to an Excel file) (*1)	string	Y	Y	Y	Y	-	Y
XlsxDocEnvFile (Excel document information file name) (*1)	string	Y	Y	Y	Y	-	Y
XlsxOutputForm (Output method of details when outputting to an Excel file)	int	Y	Y	Y	Y	-	Y
XlsxSheetName (specification of the sheet name of the Excel file to be output)	string	Y	Y	Y	Y	-	-
XlsxSheetNameItem (specification of a data field name whose input data is used as the sheet name of the Excel file to be output)	string	Y	Y	Y	Y	-	-
XlsxOutInfoFile (ECM Information file name) (*1)	string	Y	Y	-	-	-	-

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

● Properties for connector linkage information

Table 6.39 Properties of the PrintProperties class (properties for connector linkage information)

Property name (property settings)	Data type	Support status based on the type of operating system of the application server W: Windows W64: Windows(x64) S: Solaris L64: Linux for Intel64 L: Linux for x86 LI: Linux for Itanium Y: Supported D: Supported (only when creating an OWF file) -: Unsupported					
		W	W64	S	L64	L	LI
Host (Target computer name)	string	Y	Y	Y	Y	Y	Y
CompressResource (compression of transfer data)	int	Y	Y	Y	Y	Y	Y
SendResource (form transfer specification)	int	Y	Y	Y	Y	Y	Y
LcVisualFile (transfer media data file name) (*1)	string	Y	Y	Y	Y	Y	Y
RemoteDirectory (Form storage directory for form output) (*1)	string	Y	Y	Y	Y	Y	Y
LcLwFaxRcvFile (FAX recipient information file name to be transferred when making e-Record) (*1)	string	Y	Y	Y	Y	Y	Y
LcFaxRcvFile (The name of the FAX recipient information file to be transferred when sending FAX) (*1)	string	Y	Y	Y	Y	Y	Y
LcFile (transfer file name) (*1)	string	Y	Y	Y	Y	Y	Y
LcBinFile (transfer file name during binary transfer) (*1)	string	Y	Y	Y	Y	Y	Y
ReturnPdfPath (PDF file name to be created) (*1)	string	Y	Y	Y	Y	Y	Y
ReturnOwfPath (OWF file name to be created) (*1)	string	Y	Y	Y	Y	Y	Y
ReturnXlsxPath (Excel file name to be created) (*1)	string	Y	Y	Y	Y	-	Y

*1: For notes on specification of file names and file storage destinations, refer to the following:
=>"3.5 Cautions regarding Development and Execution of User Applications"

6.4.4.4 Method Overview

The PrintProperties class methods are described below.

Table 6.40 PrintProperties class method

Method overview	
void	setExecBuffer(string param) Specify the prprint command option, which is not supported by the .NET interface properties and methods.

6.4.4.5 Constructor Details

public
PrintProperties()

Usage

Creates an empty PrintProperties object.

6.4.4.6 Property Details

6.4.4.6.1 Properties for User Resource Information

BarCodeData (barcode data BASE64 encoding specification)

Specify the encoding method for barcode CODE128, EAN-128 input data.

BARDATA_NONE : Specify data that is not encoded as input data of CODE128, EAN-128.

BARDATA_BASE64:
Specify data that is BASE64 encoded as input data of CODE128, EAN-128.

If this property is omitted, it will operate as if "BARDATA_NONE" was specified.

Caution

- When specifying this property, perform the following settings for the barcode field
(CODE128, EAN-128) which apply during form design:
  - The data length of the [Properties] tab of the target barcode field property
    The barcode data length before performing BASE64 encoding +2
  - The number of bytes in the data field in the [Data Definitions (Report Header)] tab and the [Data Definitions] tab of the [Data Definitions] window (when the input data format is "Fixed Length")
    The number of bytes after performing BASE64 encoding
- In the following conditions, do not set "BARDATA_BASE64" for this property.
  - When specifying an operand for the corresponding data field in the [Data Definitions (Report Header)] tab and [Data Definitions] tab of the [Data Definitions] window
  - When specifying a corresponding data field name for the operands in the [Data Definitions (Report Header)] tab and [Data Definitions] tab of the [Data Definitions] window
  - When specifying a corresponding data field name for the [Extended] tab of the [Data Definitions] window

VisualDir (media data storage directory)

Specify the media data storage directory of the List Creator print server with its full path.
When specifying multiple media data storage directories, separate them using a semicolon (;). If media data with the same name exist under the specified multiple directories, the media data under the directory specified first will be valid.
If the data of the image field is only a file name, this property searches under the media data storage directory.
If this property call is omitted, the storage directory specified in the Forms class or FormsFile class constructor will become valid.

Caution

- Refer to the following for cautions when specifying the media data storage directory name:
=>"3.5 Cautions regarding Development and Execution of User Applications"
- This property will be invalid in the following cases:
  - When the LcVisualFile property is specified during connector linkage
  - When creating OWF files

Note

- Specify the media data file used in the CmVisualFile property when creating an OWF file.
- When using the media data file placed on the application server during connector linkage, specify the media data file used in the LcVisualFile property.

6.4.4.6.2 Properties for identification information

OutputName (title)

Specify a form title within 64 bytes.
Do not use the following characters: If these characters are specified, the applicable characters will be replaced with "hyphens (-)".

"/", ",", ":", ";", "*", "?", """, "<", ">", "|", "¥"

If this property is omitted, the form name (combination-form name when performing combination-form output) will become the form title.

Caution

- When saving as a PDF file, specify a title in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

TtlComment (comment)

Specify comments regarding the form within 64 bytes.
Do not use the following characters:

";", """

If this property call is omitted, the following order is assumed:

1）Comment specified at the [General] tab of the [Form Output Methods] window
2）Not set

When performing combination-form output, it will be enabled in the following order of priority:

1）Comment specified in the combination-form descriptor
2）Not set

Caution

- This property will be invalid in the following cases:
  - When saving as PDF files
  - When performing Excel file output

UserId (Output User ID)

Specify the identification name (any string) of the user that outputs the form in order to identify the user.
The user identification name specified with this property is output to the data field for which the USERID operator is specified in the operand in the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window.
Specify the user identification name within the byte size that fits in the length of the field in which the user ID string is output.
If this property call is omitted, nothing is output in the field where the USERID operator is specified.

Caution

- The user identification name specified with this property is output as user information of audit trail log.

6.4.4.6.3 Properties for operational information

Note

- The operations of List Creator (including the order of priority) and the points to note when outputting forms, refer to the Online Manual "Setup & Operation".
  Also, for the points to note regarding input data, refer to the Online Manual "Advanced Form Design".

StartPage (start page number)

Specify the page number where the form output will start.
When performing multi-form output, specify the page numbers through all forms.

0 : Output begins from the first page.

1 or greater : Output begins from the specified page.

When this property call is omitted, output will begin from the first page.

EndPage (end page number)

Specify the page number where the form output will end.
When performing multi-form output, specify the page numbers through all forms.

0 : Outputs to the last page.

1 or greater : Outputs up to the specified page.

If this property call is omitted, output will be continued to the final page.

DirectMethod (output method)
OutputMode (output method)

Specify the form output method.
Specify the DirectMethod property in order to specify the output method, ignoring the output method specified on the form.
Set the OutputMode property in order to output the form in a specific output method, from the output methods specified on the form.
The following displays values that may be specified:

OUTPUTMODE_DEFAULT:
Outputs the form in the all the output methods defined in the form.

OUTPUTMODE_PRINT:
Prints.

OUTPUTMODE_LIST:
Makes e-Record.

OUTPUTMODE_PDF:
Saves as PDF file.

OUTPUTMODE_FAX:
Sends FAX.

OUTPUTMODE_OWF:
Creates OWF file.
(can only be specified by DirectMethod property)

OUTPUTMODE_EXCEL:
Outputs as Excel file.

When specifying multiple output methods, specify the logical sum of the each output method value.

Example) To print and make e-Record in a single form output (for Visual Basic.NET)

```
prop.DirectMethod = PrintProperties.OUTPUTMODE_PRINT Or
                    PrintProperties.OUTPUTMODE_LIST
```

The output methods of the form will be enabled in the following order of priority:

1) Output method specified by the DirectMethod property
(However, when "OUTPUTMODE_DEFAULT" is specified, the value specified by the OutputMode property is enabled)
2) Output method specified by the OutputMode property
3) All output methods specified in the form

Note

- For information that is required for each output method but is not specified in the form, be sure to specify with the DirectMethod property.
- If an output method not specified in the form is specified when specifying the OutputMode property, an error will occur during the PrintOut method call of the PrintForm class.
- OWF files cannot be created by specifying the OutputMode property. To create OWF files, specify the DirectMethod property.

ReplaceString (SET operator replacement string)

Specify the replacement string of the SET operator.
Specify the replacement string of "%" when the variable "%" is specified for the SET operator in the operand of the data field in the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window. After setting the replacement string for the data field of the [Data Definitions (Report Header)] tab, specify the replacement string for the data field of the [Data Definitions] tab.
When the variable "%" is specified for the SET operator, make sure to specify the replacement string with this property. For details on the specification format of the replacement string, refer to the Online Manual "Setup & Operation".

Note

- When performing multi-form/combination-form output, the same replacement string specified with this property will be valid for all forms used.

OutputScale (Scale according to paper size)

Specify the paper size to output, when it is necessary to enlarge or reduce the form according to the specified paper size.
If the specified paper size is larger than the defined paper size, the form will be enlarged. If the specified paper size is smaller than the defined paper size, the form will be reduced. When adjusting output size, the aspect ratio of width and height will be maintained.

OUTPUTSCALE_NONE:
The Adjust Output Size at the [Print Size] tab in the [Form Properties] window of the [Form Style Descriptor] window will be enabled.

OUTPUTSCALE_A3: A3 paper

OUTPUTSCALE_A4: A4 paper

OUTPUTSCALE_A5: A5 paper

OUTPUTSCALE_A6: A6 paper

OUTPUTSCALE_B4: B4 paper

OUTPUTSCALE_B5: B5 paper

OUTPUTSCALE_PS: Postcard

OUTPUTSCALE_LT: Letter

OUTPUTSCALE_LG: Legal

OUTPUTSCALE_OT: Optional (Only when creating OWF file or when the List Creator print server is Windows)

If this property call is omitted, the Adjust Output Size of the [Print Size] tab in the [Form Properties] window of the [Form Style Descriptor] window will be enabled.

Caution

- When "OUTPUTSCALE_OT (Optional)" is specified in this property, the form is enlarged or reduced according to the paper name specified with the PaperCode property. If this property is enabled, the scaling settings on the form are disabled.
- When any value other than "OUTPUTSCALE_OT (Optional)" is specified for this property, if the PaperCode property is specified, an error will occur. Also, when "OUTPUTSCALE_OT (Optional)" is specified for this property, if the PaperCode property is not specified, an error will occur.

GridUnit (unit of the print offset specification)

The print offset during form output is specified in inches or millimeters.

GRIDUNIT_INCH : Specified in inches.

GRIDUNIT_MM : Specified in millimeters.

When this property call is omitted, the print offset specified in the [Margins] tab in the [Form Properties] of the [Form Style Descriptor] window will be applied.

Caution

- This property is enabled only when the output method is Print, Sending FAX or Saving as PDF file, or when printing a form that is saved as e-Record. This is disabled when displaying a form that is saved as e-Record.
- When specifying the StartPosX property, and StartPosY property, be sure to specify the units using this property. When this property setting is omitted, StartPosX property and StartPosY property are disabled even if specified.

StartPosX (print offset (the horizontal position for starting the print job))

The horizontal original position for printing is specified in inches or millimeters.

0.00~22.50 : For inch specification

0.0~571.5 : For millimeter specification

If this property call is omitted, it will operate as if "0" was specified.

Caution

- This property is enabled only when the output method is Print, Sending FAX or Saving as PDF file, or when printing a form that is saved as e-Record. This is disabled when displaying a form that is saved as e-Record.
- When specifying this property, be sure to specify the units using the GridUnit property. When the GridUnit property call is omitted, this property is disabled even if specified.
- When specifying this property, be sure to specify the vertical position for starting the print job using the StartPosY property.

StartPosY (print offset (the vertical position for starting the print job))

The vertical original position for printing is specified in inches or millimeters.

0.00~22.50 : For inch specification

0.0~571.5 : For millimeter specification

If this property call is omitted, it will operate as if "0" was specified.

Caution

- This property is enabled only when the output method is Print, Sending FAX or Saving as PDF file, or when printing a form that is saved as e-Record. This is disabled when displaying a form that is saved as e-Record.
- When specifying this property, be sure to specify the units using the GridUnit property. When the GridUnit property call is omitted, this property is disabled even if specified.
- When specifying this property, be sure to specify the horizontal position for starting the print job in the StartPosX property.

LFCode (linefeed code control specification)

Specify a control method for a line containing only linefeed code (0x0D0A or 0x0A) in input data formats of "Variable Length", "Fixed Length", or "CSV Format".

LFCODE_SKIP : Skips lines containing only linefeed code. Operation will be performed as if there was no linefeed code.

LFCODE_DO : Processes linefeed code in rows where present. One blank line will be output.

If this property call is omitted, it will operate as if "LFCODE_SKIP" was specified.

Caution

- This property is only valid if input data format is "Variable Length", "Fixed Length", or "CSV Format". An error will occur if the format is "XML Format".
- This property is used in the following form formats:
  - Free frame
  - Multipart table
  - Simple table
  - Block repeat
  - Sticky label

  For a card format, do not specify "LFCODE_DO" (specification to only perform linefeed processing for lines with only linefeed codes) in this property. If this is specified, an empty page (in which input data is not output) will be output.
- If "LFCODE_DO" (a specification where lines containing only linefeed codes perform only linefeed processing) is specified for this property, and "BREAK" is specified for the operand of the data field in the [Data Definitions] tab of the [Data Definitions] window, an unexpected operation will be performed (a BREAK will occur on lines with data and with linefeed codes only).

FFCode (new page code control specification)

Specify a control method for the new page code (0x0D0C or 0x0C) in input data formats of "Variable Length", "Fixed Length", or "CSV Format".

FFCODE_SKIP : Skips the new page code without new page processing. Operation will be performed as if the new page code did not exist.

FFCODE_DO : A new page processing is performed (the next record is output to the new page).

FFCODE_NONE : The new page processing and new page code skip are not performed. Because input data is read with no regard to the new page code, if there is a new page code in the input data, an invalid character may be output.

If this property call is omitted, it will operate as if "FFCODE_NONE" was specified.

Caution

- This property is only valid if input data format is "Variable Length", "Fixed Length", or "CSV Format". An error will occur if the format is "XML Format".
- This property is used in the following form formats:
  - Free frame
  - Multipart table
  - Simple table
  - Block repeat
  - Sticky label

  For a single page, do not specify "FFCODE_DO" (specification to perform a new page processing) for this property. If this is specified, an empty page (in which input data is not output) will be output. When using input data containing a new page code in card format, specify "FFCODE_SKIP" for this property.

Note

- It does not matter if there is a linefeed code (0x0D0A or 0x0A) in front of a new page code (0x0D0C or 0x0C), or not.

NoData (operation when there is no input data)

Specify whether or not to throw an error when the input data is 0 bytes.

false	: Throws an error.
true	: Outputs without an error.

When specifying "true", an error will not occur if the input data is 0 bytes.
In this case, the 0 byte fields will be output as follows:

Text field	: No output (blank).
Numeric field	: Outputs 0.
OCR-B field	: No output (blank).
Radio button	: No selection.
Checkbox	: No selection.
Barcode field	: No output (blank).
Image field	: No output (blank).
Post code field	: No output (blank).
Block text field	: No output (blank).

If this property call is omitted, it will operate as if "false" was specified.

Caution

- Do not specify this property when the input data format is "XML Format".

Note

- If the input data is not 0 bytes, the operations are as follows:
  - When "false " is specified
    For fields other than numeric fields, the output operation is same as when "true" is specified in this property. Numeric fields will be blank.
  - When "true" is specified
    The output operation will be the same as the output of this property.
- The state when there are no records in the input data file during multi-form/ combination-form output is defined as the state when all of the following conditions are met:
  - The form name and form name data separator character for multi-form/ combination-form have been described
  - There is no data subsequent to the form name in the record
  - There is no succession of records for the same form name
    If there is a succession of records, it will be determined that there is a record for the input data; therefore, the operation specified by this property will be effective for just the first record, but normal print operations for form output will apply to the following records.

LabelData (Specification of data file with the field name label)

Specify whether the input data is treated as "a data file with the field name label".

false	: Input data will not be treated as a data file with the field name label.
true	: Input data will be treated as a data file with the field name label.

If this property call is omitted, it will operate as if "false" was specified.

Caution

- When the input data format is "Fixed length" or "XML Format", this property will be disabled.

PropertyReplace (property replace file name)

Specify the property replace file name used for form output with its full path.
When outputting a form, field properties defined in the form descriptor information can be replaced with the properties specified in the property replace file.
When this property is omitted, field properties defined in the form descriptor information will be used.
Up to two property replace files can be specified. When specifying two files, separate them using a semicolon (;). The total length should not exceed 1024 bytes. If the first and second property replace files have different specifications for the same field property, the specification in the second file will override the first one.
The following displays a specification example of property replace files.

Example: prop.PropertyReplace="C:¥temp¥propfile1.csv;C:¥temp¥propfile2.csv";

Caution

- For the character code of the property replace file, refer to the Online Manual "Advanced Form Design".
- When transferring the property replace file from the application server during connector linkage, specify the property replace file with both this property and LcBinFile property. When doing so, only specify the file name for this property.

Note

- Specify property replace files in accordance with your specific way of managing those files. For example, if a file contains the common definitions shared among all the forms while you store the definitions specific to individual output types separately in different files, you should specify two files when outputting a form.

MapFontFile (Substitute font info file name)

Specify the substitute font info file name used for form output with its full path.
A substitute font info file specifies substitute information used when the font defined in the form descriptor information is replaced with another font at the time of form output.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- When transferring the substitution font info file from the application server during connector linkage, specify the substitution font info file with both this property and LcFile property. When doing so, only specify the file name for this property.

BarcodeAdjust (barcode correct info file name)

Specify the barcode correct info file name used for form output with its full path.
A barcode correct info file specifies information to correct barcode output results according to the environment of output destination when outputting barcodes in a form.
If this property call is omitted, the following order is assumed:

1）Specification of barcode correct information in the [Print]/[File]/[File(Excel)] tab of the [Form Output Methods] window

2）Not set

> **Caution**
> - For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
> - When transferring the barcode correct info file from the application server during connector linkage, specify the barcode correct info file with both this property and LcFile property. When doing so, only specify the file name for this property.

PrintEnvFile (Form output information file name)

Specify the form output information file name with its full path which is used for outputting a form.
A form output information file defines various information related to form output.
When this property call is omitted, settings in the form output environment setting file will be valid.

> **Caution**
> - For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
> - When transferring the form output information file from the application server during connector linkage, specify the form output information file with both this property and LcFile property. When doing so, only specify the file name for this property.

6.4.4.6.4 Properties for Printing Information

> **Note**
> - If the List Creator print server runs on UNIX, available function varies depending on the printer. For details, refer to the Online Manual "Setup & Operation" accompanying the List Creator on the List Creator print server.

PrtDevName (printer model name when performing FM output/FNP output specification)

If the List Creator print server runs on UNIX OS, and when performing FM output or FNP output to a printer, specify the printer model name to be used.

- When the List Creator print server runs on Solaris
  - When performing FM output
    Specify one of the following according to the type of printer used for output.

    VSP4610A : Specify this for VSP4620A printer.

    VSP4701 : Specify this for VSP4720 or VSP4730B printer.

    VSP4900 : Specify this for VSP4902 printer.

    VSP4950 : Specify this for VSP4971 or VSP4980 printer.

    VSPSP : Specify this for VSP2740, VSP2740B, VSP3601A, VSP3710A, VSP3710B, VSP3802A, or VSP3802B printer.

  - When performing FNP output

    FNP : Specify this when performing FNP output.

- When the List Creator print server runs on Linux

    FNP : Specify this when performing FNP output.

If this property call is omitted, PostScript output will be performed.

Caution

- Do not call this property in the following cases:
  - When the List Creator print server runs on Windows
  - When performing PostScript output to a printer
- This property will be invalid when OWF files are created.
- When performing FNP output, the name of the printer actually used for printing must be specified with the PrinterName property, in addition to the specification with this key. For List Creator, it is confirmed that the following printers can be used for output:
  - When the List Creator print server runs on Solaris
    VSP4902, VSP4971, VSP4720
  - When the List Creator print server runs on Linux
    VSP4720

PrinterName (printer name)

Specify the name of the printer to be used.
The following printers can be specified:

- Local printer
- Print Manager's printer

You can also specify the following remote printers when performing local output and creating OWF files (you cannot specify the printers when using a connector linkage).

- Remote printer
- Print Manager's remote printer

During OWF file creation, or when the List Creator print server is Windows, specify a printer name that is displayed in the Printers folder of the system. When using a remote printer in Windows, specify it in "¥¥server_name¥printer_name" format.
If this property call is omitted, the following order is assumed:

For [Windows]

1) Printer name specified at the [Print] tab of the [Form Output Methods] window
2) Default printer

For [UNIX OS]

1) Printer name specified at the [Print] tab of the [Form Output Methods] window
2) Default printer set in the system's LP print service or in the printer settings

Caution

- This property is valid only when creating the OWF file or when the List Creator print server is Windows.
- When a printer other than the one used for printing is specified, or if the normally used printer/default printer is not set as the output printer, the form will not be printed correctly.

PrintBin (paper source)

Specify the paper source of the printer when the paper type is "cut-sheet".

BIN_CF	: Cut sheet feeder
BIN_H1	: Hopper 1
BIN_H2	: Hopper 2
BIN_H3	: Hopper 3
BIN_H4	: Hopper 4
BIN_MA	: Manual paper feed
BIN_NO	: None (During OWF creation or if the List Creator print server is Windows, the settings of the print driver properties will be followed. If the List Creator print server runs on UNIX, the printer settings will be followed.)
BIN_AT	: Automatic

The paper source will become valid in the following order of priority:

1）Paper source/paper feed name according to the ItemPrintBin property specifications

2）Paper feed name specified with the PrintBinName property

3）Paper source specified with this property

4）Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- This property is valid in the following cases:
  - When the List Creator print server runs on Windows
  - For FM or FNP output when the List Creator print server runs on Solaris
  - For FNP output when the List Creator print server runs on Linux
- In the following cases, specify the paper feed name using the PrintBinName property.
  - When the List Creator print server is Windows and when specifying another paper source
  - During OWF file creation or if the List Creator print server is Windows, and when the paper is not fed in the specified method
- When the paper source is changed with this property, the paper feed name specified in the [Print] tab in the [Form Output Methods] window will become invalid. Specify the paper feed name with the PrintBinName property as necessary.
- If "BIN_NO (None)" is specified for the paper source during OWF file creation, or when the List Creator print server is Windows, the paper source will be invalid even if the paper feed name is specified from the PrintBinName property. Select a setting other than "BIN_NO (None)", when specifying paper feed name.
- If the automatic paper feed does not operate properly even when specifying "BIN_AT (Automatic)", during OWF file creation or when the List Creator print server is Windows, specify automatic feed in the properties of the printer driver, and specify "BIN_NO (None)" for the paper source.

PrintBinName (paper feed name)

In the following cases, specify the paper feed name of printer within 256 bytes.

- When the paper type is "cut-sheet", and the paper feed does not switch as specified for the paper source
- When the paper type is "roll-feed", and the paper feed does not switch correctly

Check the paper feed name that can be specified, in the properties of the printer driver.

The paper feed name will become valid in the following order of priority:

1）Paper source/paper feed name according to the ItemPrintBin property specifications

2）Paper feed name specified with this property

3）Paper source specified with the PrintBin property

4）Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- This property is valid only when creating the OWF file or when the List Creator print server is Windows.
- The paper feed name may vary depending on the printer driver. Check the properties of the printer driver and enter the information accurately, taking note of the difference of full/half-width of characters and spaces, and existence of spaces.
- Do not enter a half-width space at the beginning or end of a paper feed name. Any half-width spaces that are entered at the beginning or end of a paper feed name will be deleted when that name is used.

ItemPrintBin (paper source/paper feed name switching specification)

Specify to change the paper source and paper feed name (enable the paper source/paper feed name specified in each form) when switching the form in multi-form output. This property is enabled only when the paper type is "cut-sheet".

If specified when not performing multi-form output, the paper source/paper feed name specified in the [Print] tab in the [Form Output Methods] window will be applied.

!REPORT : Enables the paper source/paper feed name specified in each form.

If this property call is omitted, the following order is assumed:

1) Paper feed name specified with the PrintBinName property
2) Paper source specified with the PrintBin property
3) Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- If the List Creator print server is Windows and the multi-up printing function of List Creator is specified, specification to switch the paper feed name will be invalid. Even if specified, printing will be performed according to the paper feed name specification defined in the first form that is output.
- When the List Creator print server runs on UNIX OS, even if paper source is specified, it will be invalid when performing PostScript output to the VSP series printer.
- If the paper is not supplied in the specified paper source, specify the paper feed in the [Print] tab of the [Form Output Methods] window, and specify this property.
- Some printers do not allow changes made to the paper source/paper feed name for each form. Make sure to check the operations of the printer actually being used.
- When using the multi-up printing function of the printer, do not specify this property. If specified, it will not operate correctly.

ItemPrintBinName (Specification of the paper feed name attribute)

Specify whether or not to change the paper source and paper feed name (enable the paper source/paper feed name specified in each form) when performing multi-form output, when the paper type is cut-sheet and the form is switched.

!REPORT : Enables the attribute of the paper feed name specified in each form.

If this property call is omitted, the following order is assumed:

1) Paper feed name specified with the PrintBinName property
2) Paper source specified with the PrintBin property
3) Paper source/paper feed name specified at the [Print] tab of the [Form Output Methods] window

Caution

- If the List Creator print server is Windows and the multi-up printing function of List Creator is specified, specification to switch the paper feed name will be invalid. Even if specified, printing will be performed according to the paper feed name specification defined in the first form that is output.
- When the List Creator print server runs on UNIX OS, even if paper source is specified, it will be invalid when performing PostScript output to the VSP series printer.
- If the paper is not supplied in the specified paper source, specify the paper feed in the [Print] tab of the [Form Output Methods] window, and specify this property.
- Some printers do not allow changes made to the paper source/paper feed name for each form. Make sure to check the operations of the printer actually being used.
- When using the multi-up printing function of the printer, do not specify this property. If specified, it will not operate correctly.

CopyNumber (number of copies)

Specify the number of copies of the form.

0	: Uses the number of copies in the [Print] tab of the [Form Output Methods] window.
1~999	: Specify the number of copies.

If this property call is omitted, it will operate as if "0" was specified.

Caution

- If the List Creator print server is Windows and output is made to a printer which does not allow specification of the number of copies in the property of the print driver, the specification of the number of copies will be invalid (only one copy will be printed).
- When specifying "true" in the CopyNumberPrt property at the same time as this property, the specification of this property will be disabled.

CopyNumberPrt (number of copies according to the printer settings)

Specifies whether to specify the number of copies using the printer (printer driver) settings.

true	: Uses the printer (printer driver) settings for the number of copies (specification of the CopyNumber property and Collate property will become invalid).
false	: Uses the specification of the CopyNumber property and Collate property.

If this property call is omitted, it will operate as if "false" was specified.

Caution

- If the List Creator print server runs on UNIX OS, it will be enabled only when creating OWF files.

Collate (Collate output)

When the CopyNumber property is specified, specify whether to collate output.

true	: Collate printing is performed.
false	: Collate printing is not performed.

If this property call is omitted, and the CopyNumber property is specified, it will operate as if "false" was specified.

Caution

- This property is valid only when a printer defined in Print Manager is specified as the printer name and the number of print copies (1 to 999) is specified in the CopyNumber property. Also, for [Linux], it is enabled only when creating OWF files.
- When specifying "true" in the CopyNumberPrt property at the same time as this property, the specification of this property will be disabled.
- If the List Creator print server runs on Windows, when outputting to a printer that can specify collate printing in the properties of its printer driver, the specifications on the printer will be valid even if "false" is specified.
- When outputting to a printer that cannot specify the number of copies in the properties of its printer driver, the operations will be as follows:
  - When collate printing is not specified, the specification of the number of copies will be invalid (only one copy will be printed).
  - When collate printing is specified, the specification of the number of copies will be enabled.

PrintSide (print side specification)

Specify the following:

- Whether to print forms on both sides or to use the print side setting of the printer (printer driver)
- Whether to continue printing on the same sheet of paper or to print on a new sheet when the form is switched during a multi-form output.

PRINTSIDE_SINGLEFOLLOW:

Single-sided printing will be performed.
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

PRINTSIDE_BOTHFOLLOW:

Duplex printing will be performed.
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

PRINTSIDE_PRTFOLLOW:

Prints according to the print side setting of the printer (printer driver).
When performing multi-form output, printing will continue on the same sheet of paper when the form is switched.

PRINTSIDE_SINGLE:

Single-sided printing will be performed.
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

PRINTSIDE_BOTH:

Duplex printing will be performed.
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

PRINTSIDE_PRT:

Prints according to the print side setting of the printer (printer driver).
When performing multi-form output, printing will continue on a new sheet of paper when the form is switched.

The print side specification will become valid in the following order of priority:

1）Specification of duplex printing of ItemPrintSide property and print on a new sheet when forms are switched during multi-form output
2）Print side specified with this property
3）Specification set in the [Print] tab in the [Form Output Methods] window to perform the duplex printing, or to feed a new sheet when forms are switched during multi-form output

Caution

- If the selected printer does not have a function for the duplex printing or if this function is disabled, the duplex printing specification will become disabled (it may be printed on single side, or may output blank pages).
- In the following conditions, do not set "PRINTSIDE_SINGLE", "PRINTSIDE_BOTH" or "PRINTSIDE_PRT" to this property. If specified, it will not operate correctly.
  - When using the multi-up printing function of the printer (it will operate correctly when using the List Creator columns)
  - When using a function to suppress the output of blank paper from the printer
- Note the following points when the List Creator print server is [UNIX OS].
  - It will be disabled when performing PostScript output to VSP series printer.
  - Specification of "PRINTSIDE_PRT" is enabled only when creating an OWF file. When specified at the time of printing, it will operate as if "PRINTSIDE_BOTH" was specified.
  - Specification of "PRINTSIDE_PRTFOLLOW" is enabled only when creating an OWF file. When specified at the time of printing, it will operate as if "PRINTSIDE_BOTHFOLLOW" was specified.

Note

- In a form in which either PAGE, TPAGE, PAGE-ALL, TPAGE-ALL, BPAGE, or BTPAGE has been set to the data field of the [Data Definitions] tab or [Data Definitions (Report Header)] tab of the [Data Definitions] window, when either "PRINTSIDE_SINGLE", "PRINTSIDE_BOTH" or "PRINTSIDE_PRT" has been specified for this property, the pages that are skipped and not printed will not be counted.

ItemPrintSide (print side switch specification)

Specify to change the print side (enable the print side specified in each form) when switching the form in multi-form output.
If specified when not performing multi-form output, the print side specified in the [Print] tab in the [Form Output Methods] window will be applied.

!REPORT: Enables the print side setting specified in each form.

If this property call is omitted, the following order is assumed:

1) Print side specified with the PrintSide property
2) Specification set in the [Print] tab in the [Form Output Methods] window to perform the duplex printing, or to feed a new sheet when forms are switched during multi-form output

Caution

- When the List Creator print server runs on Solaris, even if duplex printing is specified, it will be invalid when performing PostScript output to the VSP series printer.
- If the multi-up printing of List Creator is specified, it will not be possible to change the duplex printing specification. Even if specified, printing will be performed according to the duplex printing specification defined in the first form that is output.
- If the selected printer does not have a function for the duplex printing or if this function is disabled, the duplex printing specification will become disabled (it may be printed on single side, or may output blank pages).
- When using the multi-up printing function of the printer, do not specify this property. If specified, it will not operate correctly.
- Some printers do not allow the print side changes for each form. Make sure to check the operations of the printer actually being used.

PaperCode (Paper name)

Specify the paper name within 64 bytes.
When this property call is omitted, printing is performed according to the paper size or paper name specified in the [Form Descriptor] tab in the [Form Properties] of the [Form Style Descriptor] window will be applied.

Caution

- This property is valid only when creating the OWF file or when the List Creator print server is Windows.
- When specifying the OutputScale property along with this property, an error occurs if a value other than "OUTPUTSCALE_OT (Optional)" is specified for the OutputScale property.
- If a paper name that is not supported by the printer is specified, the print defaults to the A4 paper size.
- If a paper name that is not supported by the printer is specified and "OUTPUTSCALE_OT (Optional)" is specified for the OutputScale property, a blank page is displayed when previewing it. If printed with the same specifications, blank pages will be printed.

Note

- To enlarge or reduce the form according to the specified paper name, specify "OUTPUTSCALE_OT (Optional)" for the OutputScale property.

6.4.4.6.5 Properties for PDF file save information

Caution

- For the support range, the resources to be used, and the points to note for PDF conversion function, refer to the Online Manual "Setup & Operation".

KeepPdf (storage destination file name when saving as a file)

Specify the storage destination file name (PDF file name) which is created in the List Creator print server with its full path, within 259 characters and within 512 bytes.
When this property call is omitted, the storage destination file name specified in the [File] tab in the [Form Output Methods] property window will be applied.
The storage destination file name must be specified using one of these methods.

Caution

- It is not possible to specify only a folder name.
- If saving as a PDF file fails because a file with the same name already exists, the original PDF file may also be deleted.

Note

- The access privilege of the user that output the form is given to the created PDF file.
- If the specified folder does not exist, the folder is automatically created. The folder is given the same access privileges as the parent folder. If the user outputting the form does not have access privileges to the automatically created folder, an error will occur when the PrintOut method of the PrintForm class is called.
- If a file with the same name already exists, it is replaced with the new file if it has privileges to overwrite. An error occurs when calling the PrintOut method of the PrintForm class if the privileges to overwrite are not given.
- When placing a PDF file in the application server during connector linkage, specify the path for PDF file to be created with the ReturnPdfPath property.

PdfSubtitle (PDF file subtitle)

Specify the subtitle of the PDF file within 254 bytes.
If this property call is omitted, the following order is assumed:

1) A subtitle of the summary specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window
2) Not set

Caution

- Specify the subtitle in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

PdfAuthor (PDF file author)

Specify the author of the PDF file within 254 bytes.
If this property call is omitted, the following order is assumed:

1) An author of the summary specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window
2) Not set

Caution

- Specify an author in Japanese (JIS non-kanji, Level 1 kanji, Level 2 kanji) or alphanumeric characters. If other characters are specified, this setting may not be displayed correctly in the document information (general) of the PDF file.

PdfPrint (PDF file print permission specification)

Specify whether or not to allow printing of the PDF file.

0	: Uses the "Printing Allowed" setting specified in the security privileges in the [PDF Options] property window, in the [File] tab of the [Form Output Methods] window.
1	: Printing is not allowed.
2	: Printing is allowed.

If this property call is omitted, it will operate as if "0" was specified.
An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

Caution

- When using this property, you must specify a password with the PdfSecuPwd property. If a password is not specified, security settings of the PDF file may not be enabled.

PdfModify (PDF file changes permission specification)

Specify whether or not to allow change of the PDF file.

0	: Uses the "Changes Allowed" setting specified in the security privileges in the [PDF Options] property window, in the [File] tab of the [Form Output Methods] window.
1	: Change is not allowed.
2	: Change is allowed.

If this property call is omitted, it will operate as if "0" was specified.
An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

Caution

- Although changes to the PDF file are allowed, the document information (security) of the PDF file may indicate "Not Allow".
- When using this property, you must specify a password with the PdfSecuPwd property. If a password is not specified, security settings of the PDF file may not be enabled.

PdfSelect (PDF file text and graphics selection permission specification)

Specify whether or not to allow text and graphics selection in a PDF file.

0	: Uses the "Allow content to be copied/extracted" setting specified in the security privileges in the [PDF Options] property window, in the [File] tab of the [Form Output Methods] window.
1	: Text and graphics selection is not allowed.
2	: Text and graphics selection is allowed.

If this property call is omitted, it will operate as if "0" was specified.
An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

Caution

- When using this property, you must specify a password with the PdfSecuPwd property. If a password is not specified, security settings of the PDF file may not be enabled.

PdfAnnotate (allow form fields and comments to be added/changed specification)

Specify whether or not to allow comment and form field addition and change to the PDF file.

0	: Uses the "Allow Notes and Form Field Add and Change Permission" setting specified in the security privileges in the [PDF Options] property window, in the [File] tab of the [Form Output Methods] window.
1	: Comment and form field addition and change are not allowed.
2	: Comment and form field addition and change are allowed.

If this property call is omitted, it will operate as if "0" was specified.
An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

Caution

- Although additions and changes to the comments and form fields of the PDF file are allowed, the document information (security) of the PDF file may indicate "Not Allow".
- When using this property, you must specify a password with the PdfSecuPwd property. If a password is not specified, security settings of the PDF file may not be enabled.

PdfPwd (password for opening the PDF file)

Specify the password for opening the PDF file within 32 bytes.
Do not use the following characters:

"

If this property call is omitted, a password for opening the PDF is not set.

Caution

- Specify the password in half-width alphanumeric characters and symbols (within the ASCII code character range). If other characters are specified, the PDF file may not be displayed.
- Do not specify the same password for this property and the PdfSecuPwd property. If the same password is specified, the security option settings may be changed.

PdfSecuPwd (PDF file security option change password)

Specify the password for changing the security option of the PDF file within 32 bytes.
Do not use the following characters:

"

If this property call is omitted, the security option change password is not set.

Caution

- Specify the password in half-width alphanumeric characters and symbols (within the ASCII code character range). If other characters are specified, the PDF file may not be displayed.
- Do not specify the same password for this property and the PdfPwd property. If the same password is specified, the security option settings may be changed.

PdfLimit (Time limit/period for viewing the PDF file)

Specify the time limit (start date and time/end date and time) or the number of days for viewing the PDF file.

Viewing start date and time: Specify the viewing start date and time in "YYYYMMDDhhmmss" format.
Viewing of the PDF file is restricted before the specified date and time.

Viewing end date and time: Specify the viewing end date and time in "YYYYMMDDhhmmss" format.
Viewing of the PDF file is restricted after the specified date and time.

Viewing period : Specify the viewing period in days.
When the specified period (number of days) has passed since the PDF file was created, viewing of it is restricted.

To specify the viewing start date and time/end date and time "YYYYMMDDhhmmss", specify as follows:

YYYY : Specify the western calendar year.

MM : Specify within the range of 01 to 12 (month).

DD : Specify within the range of 01 to 31 (day).

hh : Specify within the range of 00 to 23 (hours).

mm : Specify within the range of 00 to 59 (minutes).

ss : Specify within the range of 00 to 59 (seconds).

When specifying the viewing period, set "1" or higher value.
When specifying the viewing time limit and viewing period, specify the values in the following order, separating each value with a comma (,).

1）Viewing start date and time
2）Viewing end date and time
3）Viewing period

If the viewing time limit and viewing period are specified at the same time, setting of the viewing time limit will be applied.
If neither viewing time limit nor viewing period is specified, "Restriction of Viewing by a period" setting of the viewing restrictions specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will become invalid, and viewing will not be restricted.
When this property call is omitted, the "Restriction of Viewing by a period" setting of the viewing restrictions specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be valid.
The following displays a specification example of using Visual C#.NET as a development tool.

- When specifying a viewing time limit
  When specifying "1st March 2006 0:0:0" for the viewing start date and time and "31st December 2006 0:0:0" for the viewing end date and time, set as follows.

  ```
  prop.PdfLimit = "20060301000000,20061231000000," ;
  ```

- When specifying a viewing period
  When specifying 100 days for the viewing period, set as follows:

  ```
  prop.PdfLimit = " ,,100" ;
  ```

Caution

- If value specified in the form descriptor information and value specified in this property are different, the value specified in this property will be applied.
- An error will occur in following cases:
  - When "Restriction of Viewing by a period" is not specified in the form descriptor information
    However, an error will not occur if neither viewing time limit nor viewing period is specified in this property.
  - When value other than the specifiable values is specified
- Even if this property is specified, it may be invalid depending on the PDF file viewer application (e.g. in the case that Java script cannot be executed).

PdfEmbed (PDF file font embedding specification)

Specify whether or not to embed fonts into the PDF file.

PDFEMBED_ALL : All fonts are embedded into the PDF file.

PDFEMBED_NONE: All fonts are not embedded into the PDF file.

When this property call is omitted, the document management font embedding specification in the [PDF Options] window of the [File] tab, in the [Form Output Methods] window will be applied.

Caution

- When using user defined characters and JEF extension characters, embed the characters into the PDF file. If they are not embedded in the PDF file, they may appear differently or not be displayed correctly depending on the system environment where the PDF file is displayed.

Note

- When making it possible to search fonts embedded in the PDF file, it is necessary to specify "PDFEMBED_ALL".
- To not search for fonts embedded in the PDF file, set the PdfReference property to "false".

PdfReference (PDF file embedded font search specification)

Specify whether or not to search fonts that are embedded into the PDF file.

true : Search is permitted.

false : Search is not permitted.

Use the PdfEmbed property to specify whether or not to embed fonts to the PDF file.
If the call of this property is omitted, it will operate as if "true" was specified.

Caution

- Before setting this property, specification to embed fonts in the PDF file must be set by either of the following methods:
  - Font embedding specification of "Document Management" in the [PDF Options] window, under the [File] tab of the [Form Output Methods] window
  - PdfEmbed property (Specify "PDFEMBED_ALL")
- When using user defined characters and JEF extension characters, embed the characters into the PDF file. If they are not embedded in the PDF file, they may appear differently or not be displayed correctly depending on the system environment where the PDF file is displayed.
- When allowing the search for fonts embedded in the PDF file, the PDF file size will become larger.

Note

- If the fonts are embedded in the PDF file, it will be possible to view even if the font is not installed in the system on which the PDF file is viewed. However, in order to search embedded fonts, it is necessary to specify "true".
- When specifying "PDFEMBED_NONE" for the PdfEmbed property, this property is disabled (proceeds as "false" was specified).

PdfJpegQuality (PDF file JPEG compression quality specification)

Specify the quality level for JPEG compression of a PDF file.

PDFQUALITY_HIGH:
Performs JPEG compression with high image quality and low compression rate.

PDFQUALITY_MID:
Performs JPEG compression with an image quality and compression rate in between PDFQUALITY_HIGH and PDFQUALITY_LOW.

PDFQUALITY_LOW:
Performs JPEG compression with low image quality and high compression rate.

PDFQUALITY_NONE:
JPEG compression is not performed. Flate compression, which causes no image degradation, is performed.

When this property call is omitted, the JPEG compression specification of "Document Management" in the [PDF Options] window, in the [File] tab under the [Form Output Methods] window will be applied.

PdfEmbedFile (PDF attachment file name)

Specify a name of the file attached to the PDF file with its full path.
Up to 99 files can be specified. When specifying multiple files, separate them using a semicolon (;). If the same file is specified multiple times, the file is attached multiple times without throwing an error.
If the specified file does not exist, an error will occur.
If this property call is omitted, the following order is assumed:

1) PDF file attachment setting of "Document Management" specified in the [PDF Options] window, in the [File] tab in the [Form Output Methods] window
2) No file is attached

Caution

- When a file attached to a PDF file placed on the application server is transferred during connector linkage, specify it with both this property and the LcBinFile property. In this case, only specify the name of the attached file for this property.
  During connector linkage, the files attached to the PDF file are enabled in the following order of priority:
  1) The file name specified with this property (only the file name) and the name of the file attached to the PDF file specified by the LcBinFile property (full path on the application server)
  2) The name of the file attached to the PDF file specified by this property (full path on the List Creator print server)
  3) The name of the file attached to the PDF file in "Document Management", which is specified in the [PDF Options] window, in the [File] tab in the [Form Output Methods] window (full path on the List Creator print server)
- Do not perform security addition or encryption for the PDF file that uses the file attachment function. If security addition or encryption is performed, it may not be possible to extract the attached file in Acrobat.

PdfAutoPrint (PDF file automatic printing specification)

Specify the setting and the timing of automatic printing of a PDF file.

PDFAUTOPRINT_OFF:
Automatic printing is not performed.

PDFAUTOPRINT_OPN:

Automatic printing is performed.
When a PDF file is opened, the Print dialog box is automatically displayed.

PDFAUTOPRINT_OPN_CLS:

When a PDF file is opened, automatic printing is performed with the default printer specified in the system.

If this property call is omitted, the "Automatic printing of PDF file" setting specified in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window will become valid.

Caution

- Even if this property is specified, it may be invalid depending on the PDF viewer application (e.g. in the case that Java script cannot be executed).

PdfHideToolBar (PDF file viewer toolbar display specification)

Specify whether or not to show the toolbar of the PDF viewer when viewing a PDF file.

0 : The "Show Toolbar" setting specified in the PDF File Viewer Settings in the [PDF Options] window, in the [File] tab of the [Form Output Methods] property window will be valid.

1 : The toolbar is shown when viewing a PDF file.

2 : The toolbar is not shown when viewing a PDF file.

If this property call is omitted, it will operate as if "0" was specified.
An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

Caution

- Even if this property is specified, it may be invalid depending on the PDF viewer application.

PdfHideMenuBar (PDF file viewer menubar display specification)

Specify whether or not to show the menubar of the PDF viewer when viewing a PDF file.

0 : The "Show Menubar" setting specified in the PDF File Viewer Settings in the [PDF Options] window, in the [File] tab of the [Form Output Methods] property window will be valid.

1 : The menubar is shown when viewing a PDF file.

2 : The menubar is not shown when viewing a PDF file.

If this property call is omitted, it will operate as if "0" was specified.
An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

Caution

- Even if this property is specified, it may be invalid depending on the PDF viewer application.

PdfFullScreen (PDF file viewer full screen display specification)

Specify whether or not to display the PDF viewer in full screen when viewing a PDF file.

0 : The "Use Full Screen Mode" setting specified in the PDF File Viewer Settings in the [PDF Options] window, in the [File] tab of the [Form Output Methods] property window will be valid.

1 : The PDF viewer is not displayed in full screen when viewing a PDF file.

2 : The PDF viewer is displayed in full screen when viewing a PDF file.

If this property call is omitted, it will operate as if "0" was specified.
An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

Caution

- Even if this property is specified, it may be invalid depending on the PDF viewer application.

PdfBookmark (specification to insert a bookmark in the PDF file when switching forms)

Specify whether or not to insert the form name in the PDF file as a bookmark. The form name is inserted as a bookmark string when the form is switched.

true : A bookmark is inserted when the form is switched.

false : A bookmark is not inserted when the form is switched.

If this property call is omitted, it will operate as if "false" was specified.

Caution

- When performing multi-form output, a bookmark is inserted when the form is switched.
- When performing combination-form output, combination-form name is inserted as a bookmark. The bookmark is inserted when the combination-form name is changed.
- The bookmark set with this property has one layer.
- When creating a PDF file while keeping the inserted bookmark displayed, specify "OUTLINES" for the PDF-PAGEMODE keyword in the PDF document information file.
- When displaying the PDF file in Windows XP/Windows Server 2003, surrogate pair characters used in the bookmark cannot be displayed properly.

PdfBookmarkItem (specification to insert a bookmark in the PDF file when switching data)

When inserting a field data value of a form into a PDF file as a bookmark, specify the name of the applicable field. The field data value is inserted as a bookmark string when the input data value of the specified field is switched.
For the field name, you can specify one field that is "Text field" or " Hidden field" whose field format is text field.
For the specified field, a bookmark is inserted respectively in accordance with the following output timing:

- For text fields
  A bookmark is inserted when outputting the first field of the page.
- For hidden fields
  A bookmark is inserted when outputting the first record in the page.

It is also possible to specify optional multiple timings to insert a bookmark in accordance with the above-mentioned output timing. When specifying multiple timings, put "!" at the beginning of the field name and use a comma (,) separator. The "data value" of the field to insert a bookmark is inserted as a bookmark when the input data of the field specified with "!" is switched.
If this property call is omitted, a bookmark is not inserted when the field data of the form is switched.
When specifying this property along with the PdfBookmark property, the bookmark inserted with the form name with the PdfBookmark property is the top of the hierarchy, and bookmarks are inserted according to this property in the following format for everything under that hierarchy.

[Form Name] - [Data Value]

The data value used is the first data value inserted by this property. In this case, this bookmark becomes the topmost one, and the bookmarks under the hierarchy are inserted with the value of the field specified by this property.
The following displays a specification example.
In this example, a bookmark is inserted with the data value of [Name] as its bookmark string at the timing when the input data of [Department], [Section] and [Name] is switched.

```
PdfBookmarkItem = "!Department, !Section, Name";
```

Caution

- If there is no input data value for the specified field, no bookmark is inserted.
- Group items cannot be specified. Configuration items of a group item cannot be specified when specifying "Use Group Item Name" for the Group Item Handling in the [General] tab of the [Data Definitions] window.
- The data in which a bookmark is to be inserted must be switched in the beginning of the page. If the data is not switched in the beginning of the page, an error will occur when outputting the form.
- The bookmark set with this property has one layer. If specified with the PdfBookmark property when performing multi-form/combination-form output, a "two-level" bookmark is set.
- When the form format is multipart table or free frame, the text field defined in the partition to be output first in the page must be specified.
- If a bookmark string exceeds 128 characters, the exceeding characters are truncated.
- When creating a PDF file while keeping the inserted bookmark displayed, specify "OUTLINES" for the PDF-PAGEMODE keyword in the PDF document information file.
- When displaying the PDF file in Windows XP/Windows Server 2003, surrogate pair characters used in the bookmark cannot be displayed properly.

PdfDocEnvFile (PDF document information file name)

Specify the name of the document information file of the PDF file with its full path.
PDF document information file is a file in which PDF file save information (such as attribute information or property information) can be collectively specified when outputting a form as an PDF file.
Use it to specify PDF file save information which is not supported by the form properties or each property of the .NET interface, when saving as a PDF file.

Caution

- Do not specify PDF file save information that is supported by the form properties or each property of the .NET interface.
- When a PDF document information file placed on the application server is transferred during connector linkage, specify the PDF document information file using both this property and the LcFile property. When doing so, only specify the file name for this property.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- When specifying the PDF-LIMITURI keyword in a PDF document information file, it is necessary that "Restriction of Viewing by a URI" of "Restriction of viewing" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, has been specified. An error will occur if it is not specified.
- When the PDF-LIMITURI keyword is specified in a PDF document information file, the "Allow website of Viewing" setting of "Restriction of viewing" in the [PDF Options] window, in the [File] tab of the [Form Output Methods] window, will be invalid.

Note

- PDF document information files are specified when using the PDF file save information that cannot be specified by the properties or methods of the .NET interface.

PdfOutInfoFile (ECM information file name)

Specify the ECM information file name corresponding to the PDF file to be output with its full path, within 259 characters (within 512 bytes).
Be sure to specify this when placing the output PDF file in a folder linked with ECM products.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this property.
  - When an ECM information file is transferred during connector linkage
  - When an ECM information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

6.4.4.6.6 Properties for PDF File Save Information (Mail Distribution)

Note

- Use PDF document information files when sending an encrypted mail, or when using a mail transmission function that uses templates.
- For the PDF mail distribution function and the description format of the following files, refer to the Online Manual "Setup & Operation".
  - PDF mail distribution information file
  - PDF mail setup file

PdfMailConfFile (PDF mail distribution information file name)

Specify the name of the PDF mail distribution information file which describes information required for distributing PDF files by mail, with its full path.
In the PDF mail distribution information file, specify the [MLF_Mail] and [MLF_Message] sections related to PDF mail distribution of the document information file.
The PDF mail distribution information is enabled in the following order of priority:

1）Each property for PDF file save information (mail distribution) of the .NET interface
2）PDF mail distribution information file specified with this property
3）PDF mail setup file

Caution

- When a PDF mail distribution information file is transferred during connector linkage, specify the PDF mail distribution information file using both this property and the LcFile property. When doing so, only specify the file name for this property.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".

PdfMailToAddr (destination mail address for PDF mail distribution)

Specify a destination mail address for PDF mail distribution within 4000 bytes and in the following format.
When specifying multiple mail addresses, separate them using a comma (,).
However, you cannot specify multiple mail addresses when specifying nicknames.
Even if a same address is specified multiple times by mistake, redundant addresses are eliminated when sending.

Mail address [<nickname>]

- Mail address (required)
  Specify a mail address in "mailbox_name@domain_name" format.
  The following characters can be used:

  Half-width alphanumeric characters, ".", "_", "-"

- Nickname (Optional)
  Specify a nickname within 80 bytes.
  The following characters can be used:

  Half-width alphanumeric characters

If you specify nicknames, mails can be distributed more securely and reliably.
When this property call is omitted, destination mail address specified in the PDF mail distribution information file specified with the PdfMailConfFile property will be valid.
Destination mail addresses must be specified using this property or the PDF mail distribution information file.

Caution

- When the List Creator print server runs on Linux, sending the mail using the nickname is not supported.

PdfMailSmtpsv (SMTP server name for PDF mail distribution)

Specify an SMTP server name for PDF mail distribution.
The following characters can be used:

Half-width alphanumeric characters, ".", "_", "-"

If this property call is omitted, the following order is assumed:

1) MLF_SMTPServer keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the PdfMailConfFile property.
2) SMTP server defined in the PDF mail setup file
3) Not set

PdfMailFromAddr (Transmission source mail address for PDF mail distribution)

Specify a transmission source mail address for PDF mail distribution.
The specified address is set to the From header of the mail which will be distributed.
The following characters can be used:

Half-width alphanumeric characters, ".", "_", "-"

If this property call is omitted, the following order is assumed:

1) MLF_FromAddress keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the PdfMailConfFile property.
2) MLF_EnvelopeFromAddress keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the PdfMailConfFile property.
3) MLF_FromAddress keyword under the [MLF_Default] section in the PDF mail setup file
4) MLF_EnvelopeFromAddress keyword under the [MLF_Default] section in the PDF mail setup file
5) Not set

PdfMailFromName (transmission source name for PDF mail distribution)

Specify a transmission source name for PDF mail distribution.
The specified name is set to the From header of the mail which will be distributed.
The following characters can be used:

Full-width Japanese characters, half-width alphanumeric characters, ".", "_", "-"

If this property call is omitted, the following order is assumed:

1) MLF_FromFullName keyword under the [MLF_Mail] section in the PDF mail distribution information file specified with the PdfMailConfFile property.
2) MLF_FromFullName keyword under the [MLF_Default] section in the PDF mail setup file
3) Not set

PdfMailDeleteFile (PDF file delete specification at the time of PDF mail distribution)

Specify whether or not to delete the PDF file after distributing it by mail.

0	: Use the specification of the PDF mail distribution information file or PDF mail environment setting file.
1	: Does not delete the PDF file after distributing it by mail.
2	: Deletes the PDF file after distributing it by mail.

If this property call is omitted, the following order is assumed:

1）MLF_DeleteFile keyword under the [MLF_Mail] section in the PDF mail distribution information file specified in the PdfMailConfFile property.

2）MLF_DeleteFile keyword under the [MLF_Default] section in the PDF mail setup file

3）Not set

An exception will occur (Error code: "DNIF_PROPERTY_DATAERROR") when specifying other than "0", "1" or "2" for this property.

6.4.4.6.7 Properties for OWF file creation information

> **Note**
> - For the support range and points to note for the OWF file creation (Web application linkage), embedding external fonts, and registration of fonts, refer to the Online Manual "Setup & Operation".

CmVisualFile (media data file name)

Specify the media data file name of the List Creator print server used for creating an OWF file with its full path.

When using multiple files, specify the file names in the order of output separating with a semicolon (;) as shown below:

File 1; File 2; File 3

> **Caution**
> - Specify the media data file name for image fields in the data file, with only the file name.

KeepOwf (OWF file name)

Specify the full path of the OWF file created by the List Creator print server. It is not possible to specify only a folder name.

An error occurs if the file already exists.

For the OWF file name, do not specify full-width characters, half-width spaces, or any of the following characters:

“(“, “)“, “|“, “¥“, “^“, “~“, “[“, “]“, “`“, “<“, “>“, “#“, “%“, “"“, “;“, “/“, “?“, “:“, “@“, “&“, “=“, “,“, “*“

> **Caution**
> - The file extension of the OWF file must be ".owf" (half-width lower-case characters). If an extension other than ".owf" is specified, Web plug-in will not start.
> - It is not possible to specify only a folder name.
> - If a file with the same name already exists, an error occurs and the original OWF file may also be deleted.

> **Note**
> - When placing the created OWF file in the application server during connector linkage, specify the OWF file path on the application server with the ReturnOwfPath property.

Destination (Operational mode during Web plug-in startup)

Specify the operational mode during Web plug-in startup (during Web browser startup).

DESTINATION_PREVIEW:
Performs a preview.

DESTINATION_PRINT:
Prints

If the call of this property is omitted, it will operate as if "DESTINATION_PREVIEW" was specified.

OpenPrtDlg (specification of [Print] window display during printing)

Specify whether or not to display the [Print] window during printing (when "DESTINATION_PRINT" is specified for the Destination property).

false	: [Print] window is not displayed when printing.
true	: [Print] window is displayed when printing.

When displaying the [Print] window, the information during print output can be specified.
If this property call is omitted, it will operate as if "false" was specified.

PrtClose (specification to close the Web browser after print completion)

Specify whether or not to close the Web browser after printing is completed.

false	: Web browser is not closed after printing is completed.
true	: Web browser is closed after printing is completed.

If this property call is omitted, it will operate as if "false" was specified.

Caution

- This property is only enabled when specifying "DESTINATION_PRINT" for the Destination property and printing.
- Do not specify this when using the HTML frame function.

PreviewRate (specification of zoom factor for preview)

Specify the zoom factor during preview.

0	: Specify when displaying an entire page.
W	: Specify when displaying a page according to its width.
30~200	: Displays at the specified magnification (%). Specify a string within the range from 30 to 200.

If this property call is omitted, it will operate as if "0" was specified.

PrtPreventionEx (specification of printer control during preview)

Specify the printer control method during preview.

PRTPREVENTION_FALSE:
Printing is not prevented.

PRTPREVENTION_TWICE:
Double printing is prevented.

PRTPREVENTION_TRUE:
Printing is prevented.

If the call of this property is omitted, it will operate as if "PRTPREVENTION_FALSE" was specified.

OwfEmbed (specification of embedding external character font in OWF files)

Specify whether or not to embed (paste) external fonts in the OWF file.

OWFEMBED_FALSE:
External character are not embedded.

OWFEMBED_ALL:
External character are not embedded.

If this property call is omitted, it will operate as if "OWFEMBED_FALSE" was specified.

Caution

- External fonts to be embedded should be registered in List Creator using one of the following methods (unregistered external fonts are not embedded) in advance:
  - Registration of fonts in the setup
  - Registration of font in OwfRegFont property
- The external font embedding function is not supported in the following cases:
  - When creating OWF files in the English environment
  - When using the Web plug-in in the English environment
  - When performing combination-form output

OwfRegFont (external font file registration)

Register external font files stored in a given folder.
When specifying a TTF file, specify it in "ttfpath, ttepath" format using a comma (,) separator. When specifying a TTC file, specify it in "ttcpath, ttepath, order" format using a comma (,) separator.
When registering multiple files, separate them with a semicolon (;). However, if the same font file is specified multiple times, the external font file specified at the end is applied.

ttfpath/ttcpath	: Specify the full path to the font file (TTF file or TTC file).
ttepath	: Specify the full path to the linked external font file (TTE file).
order	: If a TTC file is specified, specify the position of the target font in the TTC file. When specifying the first font, specify "1".

Register the external font file with this property in the following cases:

- To embed external fonts not registered in the environment setting
- To temporarily change external fonts registered in the environment setting to different external fonts, and embed the changed fonts

When this property setting is omitted, or for fonts not specified by this property, the fonts registered in the setup will be applied.

Caution

- If an external font file is registered with this property for a font registered in the setup, the external font file specified with this property will be applied.
- When specifying this property, you cannot specify a TTC file in the ttfpath parameter. If specified, exception occurs.
  You cannot specify a TTF file in the ttcpath parameter.
- Do not specify external font files having a same name but different storage destinations.
- The external font embedding function is not supported in the following cases:
  - When creating OWF files in the English environment
  - When using the Web plug-in in the English environment
  - When performing combination-form output

6.4.4.6.8 Properties for Excel file output information

Caution

- For the support range and points to note for Excel file output, refer to the Online Manual "Setup & Operation".

KeepXlsx (Storage destination file name when outputting to an Excel file)

Specify the storage destination file name (Excel file name) which is created in the List Creator print server with its full path, within 259 characters and within 512 bytes.
When this property call is omitted, the storage destination file name specified in the [File (Excel)] tab in the [Form Output Methods] property window will be applied.
The storage destination file name must be specified using one of these methods.

Caution

- The file extension of the Excel file must be ".xlsx".
- It is not possible to specify only a folder name.
- If the Excel file output fails when a file with the same name already exists, the original Excel file may also be deleted.

Note

- The access privilege of the user that output the form is given to the created Excel file.
- If the specified folder does not exist, the folder is automatically created. The folder is given the same access privileges as the parent folder. If the user outputting the form does not have access privileges to the automatically created folder, an error will occur when the PrintOut method of the PrintForm class is called.
- If a file with the same name already exists, it is replaced with the new file if it has privileges to overwrite. An error occurs when calling the PrintOut method of the PrintForm class if the privileges to overwrite are not given.
- When placing an Excel file in the application server during connector linkage, specify the path for Excel file to be created with the ReturnXlsxPath property.

XlsxDocEnvFile (Excel document information file name)

Specify the name of the document information file of the Excel file with its full path.
Excel document information file is a file in which Excel file output information (such as attribute information or property information) can be collectively specified when outputting a form as an Excel file.
Use it to specify Excel file output information which is not supported by the form properties or each property of the .NET interface, when outputting to an Excel file.

Caution

- Do not specify Excel file output information that is supported by the form properties or each property of the .NET interface.
- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify the Excel document information file using both this property and the LcFile property. When doing so, only specify the file name for this property.
  - When an Excel document information file is transferred during connector linkage
  - When an Excel document information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

XlsxOutputForm (Output method of details when outputting to an Excel file)

Specify the operation when detail data exceeds the height of a print range during form output of multipart tables.

XLSXOUTPUTFORM_PAGE: Change the sheet with the height of print range and output.

XLSXOUTPUTFORM_CONT: Output without changing a sheet with the height of a print range.

When this property call is omitted, the output method of details specified in the [File (Excel)] tab in the [Form Output Methods] window will be applied.

Caution

- This property will be invalid when the form format is not multipart table.

XlsxSheetName (specification of the sheet name of the Excel file to be output)

Specify setting method (naming method) of the sheet name of the Excel file to be output.

FORM : Specify this when the form name is output as the sheet name. If you use the form name as the sheet name and perform multi-form output, the sheet name is switched when the form is switched. When performing combination-form output, the combination-form name is set as the sheet name. The sheet name is also switched when the combination-form name is switched.

FIXED : Specify this when outputting a fixed string as the sheet name. If you use a fixed string as the sheet name, specify the string within 31 characters after "FIXED=". The following displays a specification example:

FIXED=DivisionalSales

If you set a fixed string as sheet name and perform multi-form output, the specified fixed string is used for the sheet name of all the forms.

If this property call is omitted, the sheet name specified with the XlsxSheetNameItem property will be valid. When this property as well as the XlsxSheetNameItem property are omitted, the sheet name specified in the [File (Excel)] tab in the [Form Output Methods] property window will be applied.

Caution

- Do not use the following characters in sheet names:
  “¥”, “/”, “?”, “*”, “[“, “]”, “:”
  Do not specify "'" (a single quotation mark) before or after the string (you can use it in the string).
- An error occurs if there is a space between FIXED and equal sign (=) (FIXED =XXXX).
- If a fixed string is not specified after "FIXED=", this property is considered as unspecified (omitted).

Note

- For sheet name, the difference between full-width and half-width characters, or uppercase and lowercase is not recognized. These characters will be treated as the same.
- In case a sheet name of 32 characters or more is specified, the sheet name is truncated to fit 31 characters (Characters from the 32nd characters onwards are truncated).
- When performing combination-form output, the sheet name is set according to the field name of the form descriptor information that is output first.
- For details on Excel sheet name specification such as output results corresponding to this specification, and the points to note when specifying it, see the Online Manual "Setup & Operation".

XlsxSheetNameItem (specification of a data field name whose input data is used as the sheet name of the Excel file to be output)

Specify the name of a field whose data value is output as the sheet name when outputting to an Excel file.
If you specify this property, the first data value that is output in the field specified here will be used as the name of all sheets of the Excel file to be output.
The fields that can be specified are "Text field" or " Hidden field" (whose field format is text field only).

Caution

- If the field name specified in this property is a configuration field of a group item, "Use Configuration Item Name" must be selected in the [General] tab of the [Data Definitions] window. In case of the body area group item of simple table, sticky label and block repeat format, it can be specified even if "Use Group Item Name" is selected.
- If the field specified in this property does not exist in the form, sheet name specification will be invalid.

Note

- If you specify a data value with this option, as well as a sheet name with the XlsxSheetName property or in the [File (Excel)] tab of the [Form Output Methods] window, both of them will be joined by a hyphen into one sheet name.
  When the form name is specified: Form name-Data value
  When a fixed string is specified: Fixed string-Data value
- For sheet name, the difference between full-width and half-width characters, or uppercase and lowercase is not recognized. These characters will be treated as the same.
- If the data value of the selected field is 32 characters or more, it is truncated to fit 31 characters (Characters from the 32nd characters onwards are truncated).
- For details on Excel sheet name specification such as output results corresponding to this specification, and the points to note when specifying it, see the Online Manual "Setup & Operation".

XlsxOutInfoFile (ECM Information file name)

Specify the ECM information file name corresponding to the Excel file to be output with its full path, within 259 characters (within 512 bytes).
Be sure to specify this when placing the output Excel file in a folder linked with ECM products.

Caution

- For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".
- In the following cases, specify only the file name with this property.
  - When an ECM information file is transferred during connector linkage
  - When an ECM information file is transferred and the form is output on the List Creator print server using XBRL data support/Navigator links function

6.4.4.6.9 Properties for connector linkage information

Note

- When using connector linkage, pay attention to the form resources to be used and the file path length that can be specified for output files.
- For the support range and points to note for connector linkage, refer to the Online Manual "Setup & Operation".

Host (Target computer name)

Specify the computer name of the transmission target List Creator print server with the TCP/IP host name or IP address.
This property must be specified for connector linkage.

Caution

- If the List Creator print server runs on Windows, configure network settings so that the computer name and the TCP/IP host names are the same. If the computer name and the TCP/IP host names differ, specify them by the IP address.

CompressResource (compression of transfer data)

Specify when compressing and transferring the data such as forms, data files, and media data files of the application server.

RESOURCE_UNCOMPRESS: Transferred without compressing.

RESOURCE_COMPRESS: Compressed, then transferred.

If the call of this property is omitted, it will operate as if "RESOURCE_UNCOMPRESS" was specified.

SendResource (form transfer specification)

Specify whether or not to transfer the form placed on the application server to the List Creator print server.

RESOURCE_SEND: Transfers the form.

RESOURCE_NOSEND: Does not transfer the form. Uses the form that is already placed in the List Creator print server.

If the call of this property is omitted, it will operate as if "RESOURCE_SEND" was specified.
When performing multi-form/combination-form output, make sure to specify one of the following.

- Specify "RESOURCE_NOSEND" for the SendResource property.
- Specify the LcForm method of the FormsFile class.

Caution

- If the List Creator print server runs on UNIX OS, and when performing FM output or FNP output to the printer, be sure to place the form on the List Creator print server and specify "RESOURCE_NOSEND" for the SendResource property.
  If this property is omitted, or if "RESOURCE_SEND" is specified, overlays are not printed correctly.

LcVisualFile (transfer media data file name)

Specify the media data file name of the application server with its full path. When specifying multiple files, separate them using a semicolon (;).
When this property is specified, the media data file placed on the application server is transferred to the List Creator print server, and the form is output using that media data file.
The media data file transferred to the List Creator print server will be deleted after form output.
When this property call is omitted, the form is output using the media data file placed on the List Creator print server (media data file is not transferred).

Caution

- Place the media data file specified by this property on the application server.

Note

- When outputting the form using the media data file placed on the List Creator print server, the order of priority for the specification of the media data file at the time of OWF file creation and in other cases is different.
  The specification of the media data file at the List Creator print server is enabled in the following order of priority:
  - When creating OWF files
    The following media data file specification will be enabled.
    1) Media data file name specified in the CmVisualFile property
    2) Media data file under the media data storage directory specified by the VisualDir property.
  - When not creating OWF files
    The media data files under the following directory will be enabled.
    1) Media data storage directory specified by the VisualDir property
    2) Form storage directory of the List Creator print server specified by the RemoteDirectory property

RemoteDirectory (Form storage directory for form output)

Specify the form storage directory of the List Creator print server with its full path.
This property is only valid when the application server form is not transferred to the List Creator print server, and when a form that is already placed in the List Creator print server is used for form output (when "RESOURCE_NOSEND" is specified for the SendResource property).
If this property call is omitted, the form storage directory of the List Creator print server specified in the environment settings of the List Creator will become valid.

Caution

- Specify the separator character of the form storage directory path according to the specification methods of the List Creator print server as shown below:
  - If the List Creator print server runs on Windows : ¥
  - If the List Creator print server runs on UNIX OS : /
- Refer to the following for cautions when specifying the form storage directory name:
  =>"3.5 Cautions regarding Development and Execution of User Applications"
- When the List Creator print server runs on Windows, specify two "yen marks (¥)" as path separator.
  Example: prop.RemoteDirectory = "C:¥¥ListCREATOR¥¥Assets";

Note

- If List Creator Designer is installed, it is also possible to switch the form storage directory from the [Options] window of the [Form Descriptor List] window.

LcFile (transfer file name)

When transferring the following information file placed on the application server to the List Creator print server, specify the name of the file to be transferred from the application server with its full path.

- Substitute font info file
- Barcode correct info file
- Form output information file
- Electronic form information file
- PDF document information file
- PDF mail distribution information file
- Excel document information file
- ECM information file

When specifying multiple files, separate them using a semicolon (;).
This property is specified when converting the character code of the transfer file.
The file transferred to the List Creator print server will be deleted after form output.

This section explains the specification method for transferring the information file.

- When transferring a substitute font info file
  Specify it with both this property and the MapFontFile property. Specify only the file name for the MapFontFile property.
- When transferring the barcode correct info file
  Specify it with both this property and the BarcodeAdjust property. Specify only the file name for the BarcodeAdjust property.
- When transferring the form output information file
  Specify it with both this property and the PrintEnvFile property. Specify only the file name for the PrintEnvFile property.
- When transferring the electronic form information file
  Specify it with both this property and the StreamEnvFile property. Specify only the file name for the StreamEnvFile property.
- When transferring the PDF document information file
  Specify it with both this property and the PdfDocEnvFile property. Specify only the file name for the PdfDocEnvFile property.
- When transferring a PDF mail distribution information file for PDF mail distribution
  Specify it with both this property and the PdfMailConfFile property. Specify only the file name for the PdfMailConfFile property.
- When transferring an Excel document information file
  Specify it with both this property and the XlsxDocEnvFile property. Specify only the file name for the XlsxDocEnvFile property.
- When transferring an ECM information file
  For PDF file output, specify it with both this property and the PdfOutInfoFile property. Specify only the file name for the PdfOutInfoFile property.
  For Excel file output, specify it with both this property and the XlsxOutInfoFile property. Specify only the file name for the XlsxOutInfoFile property.

> **Caution**
> - If attaching a text file to the PDF file, the file must be created according to the character code of the execution environment for the user application in the application server.
> - For the character code of the information file, refer to the description regarding the character code of the information file in the Online Manual "Setup & Operation".

LcBinFile (transfer file name during binary transfer)

When transferring a file attached to a PDF file, a ECM linkage file, or a property replace file placed on the application server to the List Creator print server, specify the name of the file to be transferred from the application server with its full path.
When specifying multiple files, separate them using a semicolon (;).
This property is specified when transferring a file attached to the PDF file in the binary mode.
The file transferred to the List Creator print server will be deleted after form output.

- When binary transferring a file to be attached to the PDF file
  Specify it with both this property and the PdfEmbedFile property. Specify only the name of the attached file for the PdfEmbedFile property.
  The specification for binary transfer of a file to be attached to the PDF file is enabled in the following order of priority
  1) File attached to the PDF file specified by this property and the PdfEmbedFile property (File name only)
  2) The file attached to the PDF file specified by the PdfEmbedFile property (full path on the List Creator print server)
  3) File attached to the PDF file specified in document management in the [PDF Options] window, in the [File] tab in the [Form Output Methods] window and this property (File name only)
  4) PDF attachment file specified in "Document Management" of the [PDF Options] window, in the [File] tab in the [Form Output Methods] window (full path of the List Creator print server)
- When transferring an ECM linkage file
  Specify it with this property and the "ATTRFILE_TMPL" keyword in the ECM information file. Specify only the file name in the "ATTRFILE_TMPL" keyword in the ECM information file.
  The specification of an ECM information file name is enabled in the following order of priority:
  1) An ECM linkage file specified with this property (full path of the application server) and the "ATTRFILE_TMPL" keyword in the ECM information file (file name only)
  2) An ECM linkage file specified with the "ATTRFILE_TMPL" keyword in the ECM information file (full path of the List Creator print server)
- When transferring a property replace file
  Specify it with this property and the PropertyReplace property.
  Specify only the property replace file name for the PropertyReplace property.
  The specification for binary transfer of a property replace file is enabled in the following order of priority:
  1) Property replace file specified in this property and the PropertyReplace property (file name only)
  2) Property replace file specified in the PropertyReplace property (full path of the List Creator print server)

ReturnPdfPath (PDF file name to be created)

Specify the PDF file name placed on the application server with its full path.
Do not specify full-width characters or half-width katakana characters in the file path.

> **Caution**
> - If a file with the same name specified in this property already exists, an error will occur.
> - Do not specify this property and the ReturnOwfPath property or ReturnXlsxPath property at the same time.

Note

- When creating a PDF file in the List Creator print server, specify the PDF file path with the KeepPdf property.

ReturnOwfPath (OWF file name to be created)

Specify the OWF file name placed on the application server with its full path.
For the OWF file name, do not specify full-width characters, half-width spaces, or any of the following characters:

"(", ")", "|", "¥", "^", "~", "[", "]", "`", "<", ">", "#", "%", """, ";", "/", "?", ":", "@", "&", "=", ",", "*"

Caution

- The file extension of the OWF file must be ".owf" (half-width lower-case characters).
  If an extension other than ".owf" is specified, Web plug-in will not start.
- If a file with the same name specified in this property already exists, an error will occur.
- Do not specify this property and the ReturnPdfPath property or ReturnXlsxPath property at the same time.

Note

- When creating an OWF file in the List Creator print server, specify the OWF file path with KeepOwf property.

ReturnXlsxPath (Excel file name to be created)

Specify the Excel file name placed on the application server with its full path.
Do not specify full-width characters or half-width katakana characters in the full path.

Caution

- The file extension of the Excel file must be ".xlsx".
- If a file with the same name specified in this property already exists, an error will occur.
- Do not specify this property and the ReturnPdfPath property or ReturnOwfPath property at the same time.

Note

- When creating an Excel file in the List Creator print server, specify the path name of the Excel file created with the KeepXlsx property.

6.4.4.7 Method Details

public void
setExecBuffer(string param)
throws PrintException

Usage

Specify the option of the prprint command
The prprint command options will become enabled in the following order:

1) Value specified in each property of the PrintProperties class
2) Values specified in this method

Parameter

param	:	Specify the option of the prprint command For details on the prprint command option, refer to the following: =>"4.1.2 prprint Command"

Exception

PrintException

Caution

- Do not use the following command options:
  - -atdirect

6.4.5 PrintForm Class

A class to perform form output according to Forms, FormsFile and PrintProperties.

System.Object
└ **fujitsu.listcreator.PrintForm**

public class PrintForm : System.Object

6.4.5.1 Constructor Overview

The PrintForm class constructor is described below.

Table 6.41 PrintForm Class Constructor

Constructor overview
PrintForm() Creates an empty PrintForm object.

6.4.5.2 Method Overview

The PrintForm class methods are described below.

Table 6.42 PrintForm class methods

Method overview	
void	PrintOut(FormBase form, PrintProperties prop) Form output is performed according to Forms, FormsFile and PrintProperties.

6.4.5.3 Constructor Details

public
PrintForm()

Usage

Creates a PrintForm object.

6.4.5.4 Method Details

6.4.5.4.1 Methods for form output

public void
PrintOut(FormBase form, PrintProperties prop)
throws PrintException

Usage

The form is output according to Forms, FormsFile and PrintProperties.

Parameter

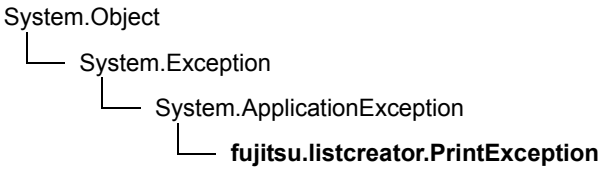
form	:	Specifies Forms and FormsFile used for form output.
prop	:	Specifies PrintProperties used for form output.

Exception

PrintException

6.4.6 PrintException class

Reports exceptions which occurred in the .NET interface.



public class PrintException : System.ApplicationException

6.4.6.1 Field Overview

The following explains the error code fields of the PrintException class.

●Error code fields of the PrintProperties class (When JobWait property is not specified)

Error code fields of the PrintProperties class (When JobWait property is not specified) are shown below.

Table 6.43 Error code fields of the PrintProperties class (When JobWait property is not specified)

Value	Constant	Description
		Cause and solution
-1	PRPT_ERROR_PRINTOUT	An error occurred during form output. The details of the error are recorded to the event log.
		An error occurred during form output. For details, refer to the event log or system log.

●Error code fields of the PrintProperties class (When JobWait property is specified)

Error code fields of the PrintProperties class (When JobWait property is specified) are shown below.

Table 6.44 Error code fields of the PrintProperties class (When JobWait property is specified)(1 / 2)

Value	Definition	Description
		Cause and solution
-1	PRPT_ERROR_PRINTOUT	An error occurred during form output. The details of the error are recorded to the event log.
		An error occurred during form output. For details, refer to the event log or system log.
-101	PRPT_ERROR_SPLDEL	Spool document was deleted.
		Error occurred on the List Creator print server while waiting for the form output. Spool document was deleted during form output.
-102	PRPT_ERROR_SPLPAUSE	Spool document was held.
		Error occurred on the List Creator print server while waiting for the form output. Spool document was held during form output.
-103	PRPT_ERROR_SPLOFFLINE	Form could not be output because the output device is offline or "Stopped".
		Error occurred on the List Creator print server while waiting for the form output. Output device is "Offline" or "Stopped". Make the output device online.
-104	PRPT_ERROR_SPLPAPEROUT	Form could not be output because the output device is out of paper.
		Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is out of paper. Insert the paper in an output device.

Table 6.44 Error code fields of the PrintProperties class (When JobWait property is specified)(2 / 2)

Value	Definition	Description
		Cause and solution
-105	PRPT_ERROR_SPLERROR	Form could not be output because of an output device error.
		Error occurred on the List Creator print server while waiting for the form output. Output device is "error". Remove the cause of error of the output device.
-106	PRPT_ERROR_SPLTRANS	An error occurred during transfer of the spool document to the remote output device.
		Error occurred on the List Creator print server while waiting for the form output. An error occurred during transfer of the spool document to the remote output device. For error details, check the event log of the computer executing the form output.
-107	PRPT_ERROR_SPLSAVE	An error occurred when saving after output.
		Error occurred on the List Creator print server while waiting for the form output. An error occurred when saving after form output. For error details, check the event log of the computer executing the form output.
-108	PRPT_ERROR_SPLWAIT	Output end wait was released to wait for a reply to the paper replacement or output start message.
		Error occurred on the List Creator print server while waiting for the form output. Output end wait was released to wait because there is a wait for a reply to the paper replacement or output start message during the form output. Respond to the message.

●Error code field (When connector linkage fails)

The error code fields for connector linkage failure are shown below.

In the description of the Table 6.45, the "local computer" refers to the "application server", and "target computer" refers to the "print server".

Table 6.45 The error code fields when connector linkage fails(1 / 7)

Value	Constant	Description
		Cause and solution
1001	PTEX_ERROR_INTERNAL	Internal error occurred.
		Internal error occurred. If the same error continues, report this message and operation contents to our system engineer.
1005	PTEX_ERROR_INT_MEMORY	Insufficient memory. The process will be aborted.
		Insufficient Memory. Check the following: - Are any unnecessary applications running? - Is there enough virtual memory? - Is the installed memory sufficient? Perform the following solutions according to the cause. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory.
1006	PTEX_ERROR_INT_PARAMETER	Invalid execution parameter has been specified.
		Property (parameter or attribute information) is incorrect. Check the contents of the specified property (parameter or attribute information) and then specify it again.
1007	PTEX_ERROR_INT_CODECONV	Character code conversion failed.
		Error occurred when converting the character code of the specified property (parameter or attribute information). Check the contents of the property (parameter or attribute information) and then run processing again. If the same error continues, report this message and operation contents to our system engineer.

Table 6.45 The error code fields when connector linkage fails(2 / 7)

Value	Constant	Description
		Cause and solution
1008	PTEX_ERROR_INT_REGACCESS	Failed to access the registry.
		An error occurred when accessing to the registry. The registry storing the product information may be corrupt. Check whether the product is correctly installed.
1009	PTEX_ERROR_INT_CONFFILEACCESS	Failed to access the setting file. The setting file may be damaged.
		An error occurred when accessing to the setting file. Or the contents of the setting file are incorrect. Check the following: - Is the product correctly installed? - Is the connector linkage set up? - Is the setting file corrupt? For details on the setting file, refer to the description regarding the example of troubleshooting when "accessing to the setting file fails" or "the contents of the setting file are incorrect" in the Online Manual "Troubleshooting & Messages".
1011	PTEX_ERROR_SERVICE	The process will be aborted because the connector service (ListCREATOR Connector) has been stopped. Start the connector service (ListCREATOR Connector) and try again.
		The following may be the causes: - The connector service (ListCREATOR Connector) is not started. - Process cannot be carried out because an error occurred in the interprocess communication with the connector service (ListCREATOR Connector). Perform the following solutions according to the cause. - Start the Connector service (ListCREATOR Connector) and try again. - If the computer is experiencing heavy traffic, run processing again after waiting for a while. If the same error continues, report this message and operation contents to our system engineer.
1012	PTEX_ERROR_LOCALAPI	Process cannot be carried out because an error occurred in the interprocess communication with the connector service (ListCREATOR Connector).
		An error occurred in the interprocess communication with the connector service (ListCREATOR Connector). Check the contents of the environment settings file and try again. If the same error continues, report this message and operation contents to our system engineer.
1023	PTEX_PRSA_ERROR_TRANS_BUSY	Connection failed. Maximum number of computers are already connected to the target computer. Try again.
		Maximum number of computers are already connected to the target computer. Wait for a while and try again. If the same error continues, report this message and operation contents to our system engineer.
1024	PTEX_PRSA_ERROR_NETWORKS	Process cannot be carried out because a communication error was found.
		Communication error occurred. Check the following status and try again. - Network connection status - CPU load of target computer - Disk load and free disk space If the same error continues, report this message and operation contents to our system engineer.
1027	PTEX_PRSA_ERROR_STOP	Target computer is not turned on or it cannot be found. Contact the system administrator and check the network settings.
		The following may be the causes: - The target computer is not turned on. - The computer which does not exist is specified. - Cable has not been connected properly. - Target computer is experiencing heavy traffic. Contact the system administrator and check the network settings.

Table 6.45 The error code fields when connector linkage fails(3 / 7)

Value	Constant	Description
		Cause and solution
1029	PTEX_PRSA_ERROR_TRANS_NETWORKS_UNRESOLVED	Target computer does not exist, or its name could not be resolved, or a communication error has occurred. Contact the system administrator and check the network settings.
		The following may be the causes: - Target computer is not defined. - The computer which does not exist is specified. Check to make sure that non-existing host name or invalid host name has not been specified and try again. If the same error continues, contact the system administrator and check the network environment.
1033	PTEX_PRSA_ERROR_EXECAPL	An error occurred on the List Creator print server during form output.
		Form output process failed on the target computer. If the same error continues, report this message and operation contents to our system engineer.
1049	PTEX_PRSA_ERROR_FILE_FAIL_L	Process cannot be carried out because the directory, file, or form on the local computer could not be accessed.
		The directory, form or file on the local computer could not be accessed. Either of the following may be applicable to the specified form or file. Check the following and try again. - Is there any error in the file access privilege? - Is the file corrupt? - Is the file being used by another application? - Does the file exist? If UNC specification (¥¥computer_name¥shared_name¥directory_name) is used, check whether the account performing the form output is accessible to the UNC-specified computer in the network environment, or whether it is registered as the account that can read the file. If the same error continues, report this message and operation contents to our system engineer.
1051	PTEX_PRSA_ERROR_FILE_ACCESS_DENIED_L	Process cannot be carried out because access to the directory, file, or form on the local computer was refused.
		Process cannot be carried out because there are no access privileges to the directory, form, or file on the local computer, or the load on the system was heavy. Check the access privileges of the directory, file, or form. Or, check whether the directory, form or file are being used by the other application. If the same error continues, contact the system administrator and check the operating environment of the system.
1052	PTEX_PRSA_ERROR_FILE_NOTEXIST_L	Process cannot be carried out because the directory, file, or form does not exist on the local computer.
		The directory, file, or form does not exist on the local computer. Or, process cannot be carried out because the load on the system is heavy. Check that the directory, file, or form exists. If the computer is experiencing heavy traffic, run processing again after waiting for a while. If the same error continues, contact the system administrator and check the operating environment of the system.
1060	PTEX_PRSA_ERROR_NOMEM_RL	Process cannot be carried out because the target computer has insufficient memory.
		The target computer has insufficient memory. Check the following: - Are any unnecessary applications running? - Is there enough virtual memory? - Is the installed memory sufficient? Perform the following solutions according to the cause. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory.
1061	PTEX_PRSA_ERROR_NOSPACE_R	Process cannot be carried out because the target computer has insufficient free disk space.
		The target computer has insufficient free disk space. Check the free disk space and delete unnecessary files, then try again.

Table 6.45 The error code fields when connector linkage fails(4 / 7)

Value	Constant	Description
		Cause and solution
1063	PTEX_PRSA_ERROR_NORESOURCE_R	Process cannot be carried out because the target computer has insufficient system resources.
		Process cannot be carried out because the target computer has insufficient system resources. Perform the following solutions and try again. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory. - Contact the system administrator and check the system load.
1069	PTEX_PRSA_ERROR_FILE_FAIL_R	Process cannot be carried out because the directory, file, or form on the target computer could not be accessed.
		The directory, form or file on the target computer could not be accessed. Check the specified directory, form or file and try again. If the same error continues, report this message and operation contents to our system engineer.
1071	PTEX_PRSA_ERROR_FILE_ACCESS_DENIED_R	Process cannot be carried out because access to the directory, file, or form on the target computer was refused.
		No access privileges to the directory, form, or file on the target computer. Or, process cannot be carried out because the load on the system is heavy. Check the access privileges of the directory, file, or form. If the computer is experiencing heavy traffic, run processing again after waiting for a while. If the same error continues, contact the system administrator and check the operating environment of the system.
1072	PTEX_PRSA_ERROR_FILE_NOTEXIST_R	Process cannot be carried out because the directory, file, or form does not exist on the target computer.
		The directory, file or form does not exist on the target computer. Or, process cannot be carried out because the load on the system is heavy. Check that the directory, file, or form exists. If the computer is experiencing heavy traffic, run processing again after waiting for a while. If the same error continues, contact the system administrator and check the operating environment of the system.
1101	PTEX_PRSA_ERROR_PRPRINT_SPLDEL	Error occurred on the List Creator print server while waiting for the form output. Spool document was deleted.
		Error occurred on the List Creator print server while waiting for the form output. Spool document was deleted during form output.
1102	PTEX_PRSA_ERROR_PRPRINT_SPLPAUSE	Error occurred on the List Creator print server while waiting for the form output. Spool document was held.
		Error occurred on the List Creator print server while waiting for the form output. Spool document was held during form output.
1103	PTEX_PRSA_ERROR_PRPRINT_SPLOFFLINE	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is offline or "Stopped".
		Error occurred on the List Creator print server while waiting for the form output. Output device is "Offline" or "Stopped". Make the output device online.
1104	PTEX_PRSA_ERROR_PRPRINT_SPLPAPEROUT	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is out of paper.
		Error occurred on the List Creator print server while waiting for the form output. Form could not be output because the output device is out of paper. Insert the paper in an output device.
1105	PTEX_PRSA_ERROR_PRPRINT_SPLERROR	Error occurred on the List Creator print server while waiting for the form output. Form could not be output because of an output device error.
		Error occurred on the List Creator print server while waiting for the form output. Output device is "error". Remove the cause of error of the output device.

Table 6.45 The error code fields when connector linkage fails(5 / 7)

Value	Constant	Description
		Cause and solution
1106	PTEX_PRSA_ERROR_PRPRINT_SPLTRANS	Error occurred on the List Creator print server while waiting for the form output. An error occurred during transfer of the spool document to the remote output device.
		Error occurred on the List Creator print server while waiting for the form output. An error occurred during transfer of the spool document to the remote output device. For error details, check the event log of the computer executing the form output.
1107	PTEX_PRSA_ERROR_PRPRINT_SPLSAVE	Error occurred on the List Creator print server while waiting for the form output. An error occurred when saving after output.
		Error occurred on the List Creator print server while waiting for the form output. An error occurred when saving after form output. For error details, check the event log of the computer executing the form output.
1108	PTEX_PRSA_ERROR_PRPRINT_SPLWAIT	Error occurred on the List Creator print server while waiting for the form output. Output end wait was released to wait for a reply to the paper replacement or output start message.
		Error occurred on the List Creator print server while waiting for the form output. Output end wait was released to wait because there is a wait for a reply to the paper replacement or output start message during the form output. Respond to the message.
1121	PTEX_PRSA_ERROR_CONNECT	Error occurred in the communication module during form output.
		Error occurred in the communication module during form output. Refer to the event log or system log output from the service (ListCREATOR RemotePrint in case of Windows). For details, refer to the following: =>" ● Error details when using connector linkage" If the same error continues, contact the system administrator and check the operating environment of the system.
1122	PTEX_PRSA_ERROR_CONNECT_SHUTDOWN	Connection has been disabled because the service has been stopped or the target computer is shutdown. Start the target computer, start the service, and try again.
		The following may be the causes: - Target computer is shutdown. - Service (for Windows, ListCREATOR RemotePrint) is stopped. - The network route has been cut off (gateway power cut or bad cable connection, etc.). - Error in the network hardware. Restart the target computer or start the service (for Windows, ListCREATOR RemotePrint), and try again. If the same error occurs, contact the system administrator and check for problems in the network route or errors in the network hardware.
1124	PTEX_PRSA_ERROR_CONNECT_SERVICE_STOP_R	The service is not running on the target computer so process cannot be carried out. Start the service and try again.
		Target computer service (for Windows, ListCREATOR RemotePrint) is not running so process cannot be carried out. Start the service (for Windows, ListCREATOR RemotePrint) of the target computer and try again.

Table 6.45 The error code fields when connector linkage fails(6 / 7)

Value	Constant	Description
		Cause and solution
1125	PTEX_PRSA_ERROR_CONNECT_NETWORKS	Cannot connect to the target computer or a communication error has occurred.
		A communication error has occurred during communication with the target computer. The following may be the causes: - The network traffic is heavy. - The time out occurred during communication. - Target computer is shutdown. - The network route has been cut off (gateway power cut or bad cable connection, etc.). - Error in the network hardware. Remove the cause of the error or wait for a while and try again. If the same error continues, report this message and operation contents to our system engineer.
1126	PTEX_PRSA_ERROR_FILE_EXIST_L	Failed to create file because it already exists on the local computer.
		Failed to create file because it already exists on the local computer. If a file with the same name specified in the ReturnPdfPath (Created PDF file name), ReturnOwfPath (Created OWF file name) or ReturnXlsxPath (Created Excel file name) property of the PrintProperties class exists, it cannot be overwritten. Delete the target file or change the file path.
1150	PTEX_PRSA_ERROR_OTHER	Some other communication module system error has occurred.
		Some other system error has occurred during the process. For details, refer to the following: =>" ● Error details when using connector linkage" If the same error continues, contact the system administrator and check the operating environment of the system.
1200	PTEX_ERROR_JAVA_EXCEPTION	An exception has occurred during Java method executing.
		A Java exception has occurred during connector linkage. If the same error continues, report this message and operation contents to our system engineer.
1201	PTEX_OAJC_ERROR_OUTOFMEMORY	Insufficient memory to perform operation.
		Process cannot be carried out because of insufficient memory. Check the following: - Are any unnecessary applications running? - Is there enough virtual memory? - Is the installed memory sufficient? Perform the following solutions according to the cause. - Terminate the unnecessary applications. - Increase virtual memory. - Increase the memory.
1202	PTEX_OAJC_ERROR_DISK_FULL	Insufficient disk resource during work file creation.
		Insufficient free disk space. Check the free disk space and delete unnecessary files, then try again.
1203	PTEX_OAJC_ERROR_NO_SYSTEM_RESOURCES	Insufficient non-memory, non-disk system resources.
		Insufficient non-memory, non-disk system resources. Terminate unnecessary applications, increase virtual memory or increase memory and try again. Or, contact the system administrator and check the system load.
1204	PTEX_OAJC_ERROR_ACCESS_DENIED	Access to the specified file or directory has been refused.
		Access to the specified file or directory has been refused. Check the access privileges of the file or directory specified in the property (parameter or attribute information).
1205	PTEX_OAJC_ERROR_SHARING_VIOLATION	A file sharing violation has occurred.
		A file sharing violation has occurred. Process cannot be carried out because the specified file is being used or the load is heavy. Check the status of the specified file or the status of the system.

Table 6.45 The error code fields when connector linkage fails(7 / 7)

Value	Constant	Description
		Cause and solution
1206	PTEX_OAJC_ERROR_FILE_NOT_FOUND	Cannot find the file.
		Cannot find the specified file. Perform the following solutions: - Check whether the file specified in the property (parameter or attribute information) exists. - Set security so that the file specified in the property (parameter or attribute information) can be read. If UNC specification (¥¥computer_name¥shared_name¥directory_name) is used, check whether the account performing the form output is accessible to the UNC-specified computer in the network environment, or whether it is registered as the account that can read the file specified with the property.
1207	PTEX_OAJC_ERROR_INTERNAL	Java internal error has occurred.
		Java internal error has occurred while processing. If the same error continues, report this message and operation contents to our system engineer.
1208	PTEX_OAJC_ERROR_INVALID_HANDLE	Work file error has occurred while processing.
		Work file error has occurred while processing. Process cannot be carried out since the file specified in the property (parameter or attribute information) is being used or the load is heavy. If the same error continues, report this message and operation contents to our system engineer.
1209	PTEX_OAJC_ERROR_INVALID_PARAMETER	Error occurred on the application server. Specified parameter or attribute data is incorrect.
		Value of the specified property (parameter or attribute information) is incorrect. Check the contents of the property (parameter or attribute information).
1212	PTEX_OAJC_ERROR_OTHER	Some other system error has occurred.
		A system error has occurred. If the same error continues, report this message and operation contents to our system engineer.
1226	PTEX_OAJC_ERROR_PRINTOUT	Character code conversion error has occurred.
		Failed in the character code conversion of form resources or input data during form output. The specification of the input data character code may be incorrect, or the form or input data may have an incorrect code. Check the input data or specification of the character code for the input data.
1255	PTEX_PRSA_ERROR_PRINT	Error occurred during form output. For error details, check the event log/system log of print server.
		An error occurred during form output. For error details, check the event log (or system log) of print server.

●Error code fields (when an error occurs during form output)

The error code fields for error during form output are shown below.

Table 6.46 The error code fields when an error occurs during form output(1 / 2)

Value	Constant	Description
		Cause and solution
2001	DNIF_ERROR_NODATA	No input data.
		No input data. Perform form output after creating the input data using the PushRecord method or execDataSource method.
2002	DNIF_ERROR_INVALID_PARAMETER	The parameter specified in the method is incorrect.
		The parameter specified in the method is incorrect. Check the contents of the parameter.
2003	DNIF_ERROR_INVALID_SCRIPT	The specified form name is incorrect.
		A form name specified for the method is incorrect. Check the contents of the form name.

Table 6.46 The error code fields when an error occurs during form output(2 / 2)

Value	Constant	Description
		Cause and solution
2004	DNIF_ERROR_BAD_ENVIRONMENT	Unsupported function is specified or the system environment is abnormal.
		For [Windows(x64)], check that an unsupported function (XBRL data support/Navigator links function) is not specified. In other cases, invalid system setup. If the same error continues, report this message and operation contents to our system engineer.
2005	DNIF_PROPERTY_DATAERROR	Property value is incorrect. Refer to the manual and try again.
		Error in the specified property (parameter or attribute information). Check the contents of the property (parameter or attribute information).
2006	DNIF_ERROR_PDFANDOWF(*1) DNIF_ERROR_RETURNPATH	Do not specify this property and the ReturnPdfPath property, ReturnOwfPath property, or ReturnXlsxPath property at the same time.
		The ReturnPdfPath property, ReturnOwfPath property, or ReturnXlsxPath property are specified at the same time. Only one property can be specified. Check the contents of the property (parameter or attribute information).
2007	DNIF_ERROR_DATACODE	After specifying the pushRecord method, it is not possible to specify the DataCode property.
		The DataCode property was specified after specifying the pushRecord method. Check the order of specification.
2008	DNIF_ERROR_PUSHDATAANDDSEXEC	Do not specify the pushRecord method and setDataSource method at the same time.
		pushRecord method and setDataSource method were specified at the same time. Only one property can be specified. Check the specification of the method.
2009	DNIF_ERROR_TWICEEXECDS	execDataSource method was already executed.
		execDataSource method was executed more than twice. Check the specification of the method.
2010	DNIF_ERROR_NODSINFO	No information specific for XBRL data support link function.
		No information specific to XBRL links function. Specify the specific information in the setDataSource method before specifying the execDataSource method.

*1: Use DNIF_ERROR_RETURNPATH in List Creator V9.0.0 or later.
DNIF_ERROR_PDFANDOWF is retained to maintain the compatibility.

●Error code fields (When creating the CSV file using the specific information specified during XBRL data support/Navigator links)

The error code fields displayed when creating CSV file using the specific information specified during XBRL data support/Navigator links are shown below:

Table 6.47 Error code fields displayed when creating the CSV file using the specific information specified during XBRL data support/Navigator links

Value	Constant	Description
4001	PRDS_ERROR_EXEC	Error occurred when creating the CSV with the field name label. The details of the error are recorded to the event log.
		Error occurred when creating the data file with the field name label. For error details, check the event log.

● Error details when using connector linkage

The following explains the detail codes of errors displayed while using connector linkage.

Detail code	Cause and solution
X-0-0	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up - Whether the ListCREATOR RemotePrint service has been started - Whether the machine is experiencing heavy traffic - Whether the same value has been set for the destination port on the application server and the List Creator print server
X-22-32	There may be insufficient disk space on the target computer. Perform the following solutions: - Delete unnecessary files from the installation destination of the List Creator on the target computer to free space, then try again.
X-29-16842788	The following may have occurred during communication: - The machine is experiencing heavy traffic - Transfer timeout
X-24-16	The DefaultTransferProperty file may include some properties with no value specified. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-24-32	A value that is out of range may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-24-48 X-24-64	An incorrect value may have been specified for a property in the DefaultTransferProperty file. Check the following: - Check the values of the properties specified in the DefaultTransferProperty file.
X-0-41000010301	The following may have occurred during communication: - The machine is experiencing heavy traffic
X-0-41000010005	The connector linkage function may not be available for use. Check the following: - Whether the connector linkage function has been set up

The "X" in the above table represents an output number.

6.4.6.2 Property Overview

The PrintException class properties are described below.

Table 6.48 PrintException class properties

Property types	Property name (property settings)	Data type
Properties for error tracing	ErrorCode (Error code tracing)	int

6.4.6.3 Property Details

6.4.6.3.1 Properties for error tracing

ErrorCode (Error code tracing)

Acquires the error code.

For details regarding the error code, refer to the following:

=>"6.4.6.1 Field Overview"

6.5 Setup for Using the .NET Interface

This chapter explains the required environment settings when using the .NET interface.

●During development

The example of using Microsoft Visual Studio .NET 2003 is shown below as the operation procedure for the environment settings when using the .NET interface.

= Procedure =

1）Expand the project node to add the reference in the solution explorer of Microsoft Visual Studio .NET 2003.

2）Right-click on the [References] node of the project and click the [Add Reference] from the pop-up menu displayed.
=>The dialog box to add the reference is displayed.

3）Open f3gbdnif.dll under the installation directory of List Creator.
=>"f3gbdnif.dll" is displayed in the selected component.

4）Click the [OK] button.
=>"f3gbdnif" is displayed under the [References] node of the project.

5）Import the .NET interface name "fujitsu.listcreator" in the code using the .NET interface.

For the operation details of the development tool used, refer to the online manual attached with the development tool.

●During execution

When executing the compiled user application, ".NET Framework" must be installed on the server executing the user application. For details, refer to the Online Manual "About the List Creator".

6.6 Notes

6.6.1 Cautions for Using the .NET Interface

●Cautions for Using the .NET Interface

- The .NET interface for [Windows] that runs as 32 bit application cannot be called by 64 bit native applications.
  Use the .NET interface for [Windows (x64)] when running 64 bit native applications.
- The Forms class cannot be used when using XML data. Use the FormsFile class.
- For notes on specification of file names and file storage destinations, refer to the following:
  =>"3.5 Cautions regarding Development and Execution of User Applications"

●Cautions during Connector Linkage

For the cautions for setup and operation of connector linkage, refer to the description regarding the points to note for connector linkage in the Online Manual "Setup & Operation".

The following describes the cautions for connector linkage.

- When outputting a form with connector linkage, the maximum number of processes that can be processed by a single List Creator print server at the same time depends on the environment settings. If the number of processes exceeds the number set in the setup, form outputting processes may be cancelled after that. When executing connector linkage in series, perform connector linkage again as necessary.

6.6.2 Cautions Regarding the Character Code

When using the .NET interface, set the character code according to the operating mode of List Creator.

●When specifying input data using the pushRecord method of the Forms class

When specifying input data using the pushRecord method of the Forms class, take note of the following points:

- The input data will be converted to the character code specified in the DataCode property. Incorrect results may occur during conversion of the character code.

The character codes that can be used when specifying input data using the Forms class are indicated below.

Table 6.49 Specified character code of the .NET interface (for Forms class)

Properties	Character code handled in output destination (according to the operating mode)			
	Local form output	OWF file creation	Connector linkage (According to the List Creator print server)	
			Windows	UNIX OS
DataCode	Shift-JIS, UTF8	Shift-JIS, UTF8	Shift-JIS, UTF8	Shift-JIS, UTF8

UTF8: UNICODE (UTF8)

●When specifying input data using the FormsFile class

When specifying input data using the FormsFile class, describe the data file in the character code specified in the DataCode property.

The character codes that can be used when specifying input data using the FormsFile class are indicated below.

Table 6.50 Specified character code of the .NET interface (for FormsFile class)

Properties	Character code handled in output destination (according to the operating mode)			
	Local form output	OWF file creation	Connector linkage (According to the List Creator print server)	
			Windows	UNIX OS
DataCode (*1)	Shift-JIS, Unicode (*2)	Shift-JIS, Unicode	Shift-JIS, Unicode (*2)	Shift-JIS, UTF8

UTF8: UNICODE (UTF8)

*1:When specifying XML data, be sure to specify Shift-JIS regardless of the character code of the data.

*2:When specifying an XML file for output, the character code is not required.

Chapter 7
COBOL Interface

This chapter explains the interface used for calling the List Creator form output command from an application created in COBOL.

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7.2 Execution Environment.....397
7.3 Form Output Subroutine 398

7.1 Development Environment

For COBOL interface module configuration and others, refer to the following:
=>"3.4.1 Development Environment"

Caution

- The COBOL interface for [Windows] that runs as 32 bit application cannot be called by 64 bit native applications.
  Use the COBOL interface for [Windows (x64)] when running 64 bit native applications.

7.2 Execution Environment

●When using [UNIX OS]

Specify the following directory under the environment variable LD_LIBRARY_PATH when executing a COBOL application that outputs forms using the dynamic library for multi threading.

```
/opt/FJSVoast/lib
```

Specify the following directory under the environment variable LD_LIBRARY_PATH when executing a COBOL application that outputs forms using the dynamic library for single threading.

```
/opt/FJSVoast/libS
```

Caution

- When using PowerCOBOL97, the COBOL interface cannot be used in the UNICODE (UTF8) environment.

Note

- For details on environment variables set during execution of the form output command, refer to the following:
  =>"4.1.1 Environment Variables Set during Execution of the Form Output Command (When Using [UNIX OS])"

7.3 Form Output Subroutine

[Function]

Activate form output command. Specify whether or not to wait for command completion.

[Description format]

Displays description format.

Parameter data definitions

```
01      Mode          PIC X (1)
01      Command line  PIC X (4096)
```

Call description

When using [Windows]

```
CALL "OAEXECCB" WITH STDCALL USING  MODE
                                    Command line
```

When using [UNIX OS]

```
CALL "OAEXECCB" USING MODE
                      Command line
```

[Explanation]

Interface is explained below.

Mode

When using [Windows]

Specify [w] or [W] when waiting for form output command completion.
If something other than [w] or [W] is specified, the subroutine resumes when the form output command starts successfully.

When using [UNIX OS]

Specify [w] or [W] when waiting for form output command completion.
If something other than [w] or [W] is specified, subroutine resumes when a process is created. In this case, it is not clear whether or not the form output command was successfully activated after creating a process.

Command line

When using [Windows]

Specify the command line of the form output command you would like to run.
It is necessary to fill in the remaining area at the end with single byte spaces.
The command line of the following commands can be specified.

=>"4.1.2 prprint Command"
=>"4.1.3 prprintx Command"
=>"4.2.2 prputprt Command"
=>"4.3.2 prputex Command"

- prdsexec command

When using [UNIX OS]

Specify the command line of the form output command you would like to run.
It is necessary to fill in the remaining area at the end with single byte spaces.

> **Caution**
> - Some characters specified for a command line may contain characters having special meaning. For the characters with special meanings and their handling, refer to the notes on each command description formats.

The command line of the following commands can be specified.
=>"4.1.2 prprint Command"
=>"4.1.3 prprintx Command"
=>"4.2.2 prputprt Command"
=>"4.3.2 prputex Command"
- prdsexec command (only when application server runs on Solaris)

[Return Values]

When using [Windows]

The following are return values when either [w] or [W] has been specified in mode:

Return value	Definition
0	Form output command is shut down normally.
10000	String not specified in command line area.
10001	Form Output Command: Failure at Start.
10002	Form output command could not be started due to inadequate memory resources.
10003~	Error not listed above occurred. Form output command could not be started.
Other	Form output command has been shut down abnormally. Returns the form output command return value as is. (*1)

*1: Refer to the description of the return values in the topic for each command.

The following are return values when neither [w] nor [W] has been specified in mode:

Return value	Definition
0	Form output command is started successfully.
10000	String not specified in command line area.
10001	Form Output Command: Failure at Start.
10002	Form output command could not be started due to inadequate memory resources.
10003~	Error not listed above occurred. Form output command could not be started.

When using [UNIX OS]

The following are return values when either [w] or [W] has been specified in mode:

Return value	Definition
0	Form output command is shut down normally.
10000	String not specified in command line area.
10001	Form Output Command: Failure at Start.
10002	Form output command could not be started due to inadequate memory resources.
10003~	Error not listed above occurred. Form output command could not be started.
Other	Form output command has been shut down abnormally. Returns the form output command return value as is.(*1) However, when the command ends after receiving a signal, the signal number is returned instead of the command return value.

*1: Refer to the description of the return values in the topic for each command.

The following are return values when neither [w] nor [W] has been specified in mode:

Return value	Definition
0	Process is created successfully. Shut down normally, even if a non-existing command is specified.
10000	String not specified in command line area.
10001	Process creation failed.
10002	Process could not be created due to inadequate memory resources.
10003~	Error not listed above occurred. Process could not be created.

Appendixes

These appendixes describe the following topics:

- Linking with Java applications

Appendix A Java Application Linkage 402

Appendix A
Java Application Linkage

This appendix explains how to link with the Web applications created in Java, using the Web application linkage.

A.1 Setup Steps when Using the Servlet Program 403

A.1 Setup Steps when Using the Servlet Program

When using the Web application linkage, perform the following procedures:

1）Designing forms

2）Deploying and preparing form resources

3）Creating the servlet program

4）Creating HTML files

A.1.1 Designing Forms

Design forms. For details on designing forms, refer to following:

- Online Manual "Advanced Form Design"
- Designer Help

A.1.2 Deploying and Preparing Form Resources

Distribute designed forms to the computer where the Servlet program is located.
For details on deploying and preparing form resources, refer to the Online Manual "Advanced Form Design".

A.1.3 Creating the Servlet Program

The Servlet program must perform the following operations:

- Creating input data
- Creating OWF files
- Transmitting the OWF file URL information to the Web browser

The following explains the points of each process.

A.1.3.1 Creating Input Data

Create the data for outputting the designed forms as data files.
For details on input data formats, refer to the Online Manual "Advanced Form Design".
Also, for details on character codes of input data, refer to the Online Manual "Advanced Form Design".

A.1.3.2 OWF File Creation

Specify the following information to create OWF files using the Java interface:

- Form resources for outputting forms
- Created input data
- Operational information of a Web plug-in

Caution

- Create OWF files in the directory that can be referenced by URL from the Web browser.
- Created OWF files must be stored in the virtual directory on the Web server.

A.1.3.3 Transmitting the OWF File URL Information to the Web Browser

Transmit the HTML file with the META tag as shown below to the Web browser:

```
<HTML>
<META HTTP-EQUIV="Refresh" CONTENT="0;URL=http://hostname/sample/xxxxxxxx.owf">
</HTML>
```

A.1.4 Creating HTML Files

HTML files must be created to call the Servlet program.
The following is an example of calling the Servlet program with the FORM tag.
This example launches a new Web browser besides the one displaying the HTML file.

```
...
<FORM METHOD="POST" ACTION="servlet/OwServlet" TARGET="_blank">
....
</FORM>
....
```

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