Systemwalker

Systemwalker
Runbook Automation

Release Note

Windows/Linux

Preface

Purpose of This Document

This document describes additional features of the Systemwalker Runbook Automation V15.1.1, including compatibility issues.

Intended Readers

This document is intended for users who need to install the Systemwalker Runbook Automation or those who want to upgrade to this version.

Abbreviations and Generic Terms Used

- The term "Windows(R) 7" refers to the following products:

    - Windows(R) 7 Home Premium(x86)

    - Windows(R) 7 Professional(x86)

    - Windows(R) 7 Ultimate(x86)

    - Windows(R) 7 Home Premium(x64)

    - Windows(R) 7 Professional(x64)

    - Windows(R) 7 Ultimate(x64)

- The term "Windows Server 2008" refers to the following products

    - Microsoft(R) Windows Server(R) 2008 R2 Standard(x64)

    - Microsoft(R) Windows Server(R) 2008 R2 Enterprise(x64)

    - Microsoft(R) Windows Server(R) 2008 R2 Datacenter(x64)

    - Microsoft(R) Windows Server(R) 2008 Standard(x86)

    - Microsoft(R) Windows Server(R) 2008 Enterprise(x86)

    - Microsoft(R) Windows Server(R) 2008 Standard(x64)

    - Microsoft(R) Windows Server(R) 2008 Enterprise(x64)

    - Microsoft(R) Windows Server(R) 2008 Datacenter(x64)

    - Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(x86)

    - Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(x86)

    - Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(x64)

- The term "Windows Vista(R)" refers to the following products:

    - Windows Vista(R) Home Basic(x86)

    - Windows Vista(R) Home Premium(x86)

    - Windows Vista(R) Business(x86)

    - Windows Vista(R) Ultimate(x86)

    - Windows Vista(R) Enterprise(x86)

    - Windows Vista(R) Business(x64)

    - Windows Vista(R) Ultimate(x64)

- The term "Windows Server 2003" refers to the following products:

    - Microsoft(R) Windows Server(R) 2003, Standard Edition

    - Microsoft(R) Windows Server(R) 2003, Enterprise Edition

    - Microsoft(R) Windows Server(R) 2003, Standard x64 Edition

    - Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition

    - Microsoft(R) Windows Server(R) 2003 R2, Standard Edition

    - Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition

    - Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition

    - Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition

- The term "Windows(R) XP" refers to the following products:

    - Microsoft(R) Windows(R) XP Professional x64 Edition

    - Microsoft(R) Windows(R) XP Professional

    - Microsoft(R) Windows(R) XP Home Edition

- The Oracle Solaris Operating System may be referred to as Solaris, Solaris Operating System or Solaris OS.

- Microsoft(R) Cluster Server and Microsoft(R) Cluster Service are referred to as MSCS.

- The versions of Systemwalker Runbook Automation that run on Windows systems are referred to as the Windows version.

- The versions of Systemwalker Runbook Automation that run on Linux systems are referred to as the Linux version.

Export Restriction

If this document is to be exported or provided overseas, it is necessary to check Foreign Exchange and Foreign Trade Law, and take the necessary procedure according to these laws.

Trademarks

This guide uses screenshots in accordance with Microsoft Corporation's guidelines.

September 2012

Revision history
March 2012: First edition
July 2012: Second edition
September 2012: Third edition

Copyright

Contents

Chapter 1 Overview of Additional Features

This section explains features added since the last version.

Notations used in this chapter

The following table layout is used to present an overview of the additional features.

Item No.	VL	Feature	Description	Reference

Item No.

This column indicates a serial number for each feature in the table.

VL

This column indicates the version and level where the feature was added.

Feature

This column indicates the name of the additional feature.

Description

This column indicates details of the additional feature.

Reference

This column indicates the section in the manual where information about the additional feature can be found.

1.1 Overview of Additional Features of V15.1.1

This section explains features added to V15.1.1.

1.1.1 General Features of Systemwalker Runbook Automation

Item No.	VL	Feature	Description	Reference
1	V15.1.1	Support for IPv6	Systemwalker Runbook Automation can now be used in IPv6 environments. This has enabled you to use Systemwalker Runbook Automation also in IPv6 environments, as well as IPv4 environments.	*Technical Guide* "System Configuration" "Operating Systems" *Installation Guide* "Design the operation in an IPv6 environment" *Reference Guide* "Reference for Operation Components"

1.2 Overview of Additional Features of V15.1.0

This section explains the added features of V15.1.0.

1.2.1 General Features of Systemwalker Runbook Automation

Item No.	VL	Feature	Description	Reference
1	V15.1.0	-	Users can now use Oracle Solaris 10 or Oracle Solaris 11 Business Servers.	*Technical Guide* "Operating Systems"

1.2.2 Install/Setup

Item No.	VL	Feature	Description	Reference
1	V15.1.0	Addition of Management Server support OS	The following operating system is additionally supported on the Management Server: - Red Hat Enterprise Linux 6.2 Including SELinux (Security-Enhanced Linux) features.	*Technical Guide* "Operating Systems"
2	V15.1.0	Addition of Business Server support OS	The following operating system is additionally supported on the Business Server. - Oracle Solaris 10 - Oracle Solaris 11	*Technical Guide* "Operating Systems" *Installation Guide* "Installing on Business Servers"
3	V15.1.0	Adding a repository in a ServerView Operations Manager Single Sign-On environment	In addition to OpenDS, users can now use Active Directory as a repository in a ServerView Operations Manager Single Sign-On environment.	*Installation Guide* "Authentication Using ServerView Operations Manager Single Sign-On"
4	V15.1.0	Changing the Management Server's host name/IP address	Users can now change the host name/IP address of the Management Server.	*Installation Guide* "Changing the Management Server's host name/IP address"
5	V15.1.0	Simplified upgrade procedure	Users can now upgrade Systemwalker Runbook Automation using the windows.	*Installation Guide* "Upgrading Systemwalker Runbook Automation"

1.2.3 Operation Components

Item No.	VL	Feature	Description	Reference
1	V15.1.0	"Install OS update" Expansion of operation components	The following features have been added to the "Install OS update" operation components. - Supports Linux OS updates - Improve output information	*Reference Guide* "Install OS update"
2	V15.1.0	Addition of operation components related to the VMware HA operation management template	The following operation components in relation to the VMware HA operation management template have been added. - Stop virtual server on the VM host - Set the maintenance mode of the VM host - Stop VM host forcibly	*Reference Guide* "Stop virtual server on the VM host" "Set the maintenance mode of the VM host" "Stop VM host forcibly"
3	V15.1.0	Addition of operation components linked to the release automation template	The following operation components have been added in relation to the provision of the release automation template. - Register Schedule Definitions - Delete Schedule Definitions - Collect fingerprint	*Reference Guide* "Register Schedule Definitions" "Delete Schedule Definitions" "Collect fingerprint"

1.2.4 Development Environment (Studio)

Item No.	VL	Feature	Description	Reference
1	V15.1.0	Improved operability of the filter	Operability of the output information filters was improved in the following ways: - Users can now insert variables and execution results in part of the XPath expression using the **Extract XML attribute** filter. - White space characters can now be displayed in the text input field. - Variables and execution results inserted into the filter conditions can now be tested.	*Studio User's Guide* "Defining Operation Component Filters (Script-less)" "Filter Details"
2	V15.1.0	Improved operability of I/O information	Operability of input/output information flow was improved in the following ways: - An icon is displayed if there is an error in the input information, and the error location is now easier to find. - When using tabular format for information input, is now easier to tell if there is any null value data. - The date format for the "Obtain current date" operation component can now be selected from a list. - The content of error messages in the **Problems** view and status view has been improved.	*Studio User's Guide* "Input Definitions for Operation Component Nodes"
3	V15.1.0	Additional reference formats in the manual	In addition to the *Studio User's Guide* and *Reference Guide*, all manuals provided with Systemwalker Runbook Automation can now be viewed with the Help function of Studio.	-

1.2.5 Templates

Item No.	VL	Feature	Description	Reference
1	V15.1.0	Provision of VMware HA operation management templates	A template is now provided that makes it possible to automatically stop ESX Servers in the appropriate order, if a power failure occurs when using VMware in an HA cluster configuration with Systemwalker Runbook Automation installed..	*Template Operator's Guide* "VMware HA Operation Management Template"
2	V15.1.0	Provision of the release automation template	A template is now provided that automates the process of obtaining relevant releases from the developers, a task normally handled manually by operators, and applying them to the server.	*Template Operator's Guide* "Release Automation Template"

1.3 Overview of Additional Features of V15.0.0

This section explains features that have been added to V15.0.0.

1.3.1 General Features of Systemwalker Runbook Automation

Item No.	VL	Feature	Description	Reference

| 1 | V15.0.0 | - | The Business Server feature is now installed on the Management Server. | - |

1.3.2 Installation and Setup

Item No.	VL	Feature	Description	Reference
1	V15.0.0	Simplified installation procedure	Users can now select from two installation methods: Standard Installation and Custom Installation. - With Standard Installation, all default values are set, and there is no longer any need to enter values during the installation. - Unlike V14.1.0A, Custom Installation no longer requires a password.	*Installation Guide* "Installing on Management Servers"
2	V15.0.0	Simplified setup procedure	The following setup steps have been simplified or eliminated: - Registering the mail server - Tuning the desktop heap	*Installation Guide* "Setting up the Management Server"
3	V15.0.0	Expanded support for single sign-on	ServerView Operations Manager single sign-on is now supported.	*Installation Guide* "Installing in a ServerView Operations Manager Single Sign-On Environment"
4	V15.0.0	Expanded support for directory services in cluster environments	The Interstage Directory Service and OpenLDAP are now supported in cluster environments.	*Cluster Setup Guide* "LDAP Environment Build and Settings"

1.3.3 Operation Components

Item No.	VL	Feature	Description	Reference
1	V15.0.0	Enhanced lineup of operation components	A total of 31 components have been added, including both control components and operation components (basic operations, monitoring operations).	*Reference Guide* "Reference for Operation Components"
2	V15.0.0	Improved performance for operations	The performance of Automated Operation Processes has been improved by using parallel control to process operations on multiple targets from a single component.	*Reference Guide* Operation components for which multiplicity can be specified, such as "Stop OS" and "Restart OS"
3	V15.0.0	Conditional branching depending on whether operation components terminate normally or abnormally	It is now possible to have multiple branches coming from an operation component so that subsequent processing can be determined by whether the return value is "normal" or "abnormal", for example. This eliminates the need to determine branching using Conditional nodes.	*Reference Guide* "Reference for Operation Components"

1.3.4 Development Environment (Studio)

Item No.	VL	Feature	Description	Reference
1	V15.0.0	Extended debugging features	Debugging features are now easier to use, such as shorter startup times as a result of filtering the debug target,	*Studio User's Guide* "Process Debugging"

			displaying node-specific properties, and jumping to the target Process Definition from the console view.	
2	V15.0.0	Visual enhancements to the Process Definition Editor	The display for the Process Definition Editor now uses color, and has become three dimensional.	*Studio User's Guide* "Nodes", "Property Symbols", "Arrows"
3	V15.0.0	Extended format for input data, variable settings for output data	For input data for operation component nodes, it is now possible to directly specify data such as data acquired from forms, UDA data, and data in table format. Also, the execution results (output data) for each operation component node can now be stored as variables. The execution result variables can be directly set as input data for the next operation component.	*Studio User's Guide* "Input Definitions for Operation Component Nodes" "Output Definitions for Operation Component Nodes"
4	V15.0.0	Scriptless filters	Filters are now provided to allow the execution results (output data) of operation components to be processed without having to write scripts.	*Studio User's Guide* "Defining Operation Component Filters (Script-less)", "Filter Details"
5	V15.0.0	Better searchability for operation components	- The palette for the Process Definition Editor now has a tabbed display. Icons are displayed in the palette in groups, making it easier to find the target operation component. - Operation components can be searched using multiple keywords.	*Studio User's Guide* "Adding Nodes"
6	V15.0.0	Better usability for the editor	The editor for developing operation components is now easier to use: - The editor jumps to problem sections when checking Ruby or Perl syntax. - Reserved words are highlighted when editing Ruby or Perl scripts. - A list of candidates that can be entered is displayed when editing Ruby scripts. - Syntax outlines are displayed when editing Ruby scripts.	*Studio User's Guide* "Opening the Script File from an Application" "Script File Syntax Check"

1.3.5 Scheduling, Execution, Monitoring and Management

Item No.	VL	Feature	Description	Reference
1	V15.0.0	Gantt charts for Automated Operation Processes	Gantt charts are now provided to allow the schedules and results of Automated Operation Processes to be checked at a glance.	*Operation Guide* "Process Status List window (Gantt Chart)" "Checking Schedules and Daily Performance"
2	V15.0.0	Operation schedules for Automated Operation Processes	A window is now provided to allow the operation schedules for multiple Schedule Definitions to be viewed in a month-by-month list format.	*Operation Guide* "Scheduled Operation window " "Checking Monthly Schedules"
3	V15.0.0	Commands for importing and exporting Schedule Definitions	Commands are now provided to import and export Schedule Definitions and Schedule Patterns.	*Reference Guide* "swrba_scheduleimport (Schedule Definition Import Command)" "swrba_scheduleexport

				(Schedule Definition Export Command)"
4	V15.0.0	Better management for the execution status and execution history of operation components	The execution status of operation components can now be checked. Also, the execution results of operation components can now be managed as history records.	*Operation Guide* "Confirming the Operation Component Execution Status/ Execution Results" "Managing Operation Component Execution History "
5	V15.0.0	Event notification command	It is now possible to automatically switch between nodes in an executing Automated Operation Process by linking to monitoring software.	*Operation Guide* "Automated Operation Processes that Transition According to Events"

Chapter 2 Information about Compatibility

This chapter explains the changes that have been made to the operating methods and the way of holding assets since the previous version and level. Refer to the changes according to the version and level of the product that you are using.

2.1 Changes from V15.1.0 to V15.1.1

This section explains features that have changed from V15.1.0 to V15.1.1.

2.1.1 Installation and Setup

Installation type name

[Changes]

The name of the installation type displayed in the setup window during installation has changed.

Before (V15.1.0)

Linkage Server

After (V15.1.1)

Linked Server

[Affected scenarios]

When the Linked Server is selected as the installation type

[Action method]

Select **Linked Server**.

Messages

[Changes]

The following message text has changed.

Before (V15.1.0)

FSP_SW/RB-A_BASE: ERROR: 00011: Unable to run the command because the linkage server/relay server has already been setup.

After (V15.1.1)

FSP_SW/RB-A_BASE: ERROR: 00011: Unable to run the command because the linked server/relay server has already been setup.

[Affected scenarios]

Use the new message text.

[Action method]

None.

2.2 Changes from V15.0.0 to V15.1.0

This section explains features that have changed from V15.0.0 to V15.1.0.

2.2.1 Operation Components

Execution status of the operation component

[Changes]

The execution status displayed in the custom message when an operation component terminates with a return value of failure has changed as follows:

Before (V15.0.0)

The process completion message is not displayed.

After (V15.1.0)

The following is displayed in the execution status of the custom message:

- An error occurred while executing the operation component.

[Affected scenario]

If the operation component terminates with a return value of failure:

[Action method]

None.

Maximum number of characters for an operation component

[Changes]

The maximum number of characters for the commandline option of the operation components below has changed as follows:

- **Operation Component names**
  - Execute arbitrary command
  - Execute multiple commands
  - Install software

Before (V15.0.0)

Maximum number of characters: 8191 characters

After (V15.1.0)

Maximum number of characters: 8000 characters

[Affected scenario]

If using the operation components below:

- **Execute arbitrary command**
- **Execute multiple commands**
- **Install software**

[Action method]

If using an Automated Operation Process created prior to V15.0.0 in V15.1.0, reduce the number of characters in the commandline option to 8000.

Operations to the IJServer cluster in the Java EE environment

[Changes]

The operation components "Start WorkUnit", "Stop WorkUnit", and "Restart WorkUnit" have changed as follows:

Before (V15.0.0)

If the operation target is not registered on the WorkUnit the operation component will terminate abnormally.

After (V15.1.0)

If the operation target is not registered with the WorkUnit but is registered with the IJServer, the IJServer cluster runs.

There is an effect on the WorkUnit operations if using the operation components "Start WorkUnit", "Stop WorkUnit", and "Restart WorkUnit".

[Action method]

When operating WorkUnits, see "Start WorkUnit", "Stop WorkUnit", and "Restart WorkUnit" in the *Reference Guide*, and specify the operation target.

Changes to the way the ServerView Resource Orchestrator Administrator User is set

[Changes]

The way of registering beforehand with the CMDB has changed for the following operation components:

- **Start virtual server**

- **Stop virtual server**

- **Restart virtual server**

- **Build virtual server**

- **Delete virtual server**

- **Change virtual server system**

- **Get virtual server list**

- **Get detailed virtual server information**

- **Create virtual server snapshot**

- **Restore virtual server snapshot**

[Affected scenarios]

There is an effect if operating a virtual server using the operation components recorded in [Changes]**.**

[Action method]

Register information to the CMDB referring to "Information Registration to CMDB (Management Product of Virtual Environment)" in the *Reference Guide* and associate it as follows:

Source	References
Installed software	User account

2.2.2 Development Environment (Studio)

Number of lines that can be entered into the Value of the Input Data tab

[Changes]

The number of lines that can be entered into the **Value** tab of **Input Data** will change in line with operation component options.

[Affected scenarios]

There is an effect if you enter a value into the **Value** tab of **Input Data**.

[Action method]

Only enter values that reflect the number of lines that can actually be input.

Batch Edit dialogue input

[Changes]

Line feeds can no longer be input into the text input field of the **Input Data** tab's **Batch Edit** dialogue.

[Affected scenarios]

There is an impact if data is entered into the text input field of the **Batch Edit** dialogue.

[Action method]

Do not input line feeds into the **Batch Edit** dialogue. Use delimiter directed in each parameters, semicolons (;), comma (,), ampersand (&) when separating data.

2.3 Changes from V14.1.0A to V15.1.0

This section explains features that have changed from V14.1.0A to V15.1.0.

2.3.1 General Features of Systemwalker Runbook Automation

Features installed on the Management Server

[Changes]

When the Management Server is installed, the Business Server feature is now installed unconditionally.

[Affected scenarios]

There is an effect when attempting to install a Business Server on the Management Server.

[Action method]

None: When a user attempts to install a Business Server on the Management Server, a message will be displayed indicating that installation is not required.

2.3.2 Installation and Setup

WorkUnit deployment directory

[Changes]

The directory where Interstage WorkUnits are deployed has been changed.

[Affected scenarios]

There is an effect when deleting unnecessary directories.

[Action method]

By deleting unnecessary directories in accordance with "Files and directory that remain after uninstallation" in the *Systemwalker Runbook Automation Installation Guide*, the new Interstage WorkUnit deployment directory will also be deleted.

Port numbers used by the Systemwalker Runbook Automation Management Server

[Changes]

A port number that the Systemwalker Runbook Automation Management Server sets by default has been added.

The port number that has been added is as follows:

Port number for which requests from external servers must be received

Function	Port number/protocol	Changeable
HTTP listener for operation management	12001/tcp	Yes

Port numbers used internally

Function	Port number/protocol	Changeable
HTTP listener	28080/tcp	Yes
IIOP	23600/tcp	Yes

Function	Port number/protocol	Changeable
IIOP_SSL	23601/tcp	Yes
IIOP_MUTUALAUTH	23602/tcp	Yes
JMX_ADMIN	8686/tcp	Yes
Message Broker	7676/tcp	Only at the time of setup
Those used with the server function	23700/tcp	Only at the time of setup
RSH and REXEC	1014/tcp 1015/tcp 1016/tcp 1017/tcp 1018/tcp 1019/tcp 1020/tcp 1021/tcp 1022/tcp 1023/tcp	No

[Affected scenarios]

There is an effect when the port number that has been added is already being used.

[Action method]

Change the port to a port number that is not being used, by referring to "How to Change Port Numbers" in the *Systemwalker Runbook Automation Installation Guide*.

2.3.3 Operation Components

Operation component names

[Changes]

The names of some operation components have changed, as below:

Old operation component name (in V14.1.0A)	New operation component name (in V15.1.0)
Multi-Operation flow set execution	Execute multi-operation processes
Check occurrence of event	Check whether an event has occurred in the monitored product
Change status of event	Change monitored product event status
Obtain event at specified time	Get monitored product event

[Affected scenarios]

There is an effect when the same operation component as V14.1.0A is used to create a new Automated Operation Process.

If the actual Automated Operation Process created in V14.1.0A is used, it will not be affected.

[Action method]

Use the operation components corresponding to the old operation component names.

Output data for operation components

[Changes]

The output information for some operation components has changed, as below:

- Before (V14.1.0A)

For all operation components, the following user defined attributes (UDAs) are set in the output data:

- SWRBA_RCODE: Return value

- SWRBA_STDOUT: Information acquired by operation components that get information, such as the "Obtain server power status" operation component

- SWRBA_STDERR: An operation message

- After (V15.1.0)

The output data for operation components is set in the following local variables that are managed on a node-by-node basis:

- returnCode: Return value

- message: An operation message

- The specific output data for each operation component (in V14.1.0A or earlier, the information that was output to SWRBA_STDOUT)

The variable names and the number of variables output differ for each operation component.

Information is also set to the SWRBA_RCODE, SWRBA_STDOUT and SWRBA_STDERR user defined attributes when Automated Operation Processes created with V14.1.0A or earlier are imported to V15.1.0.

[Affected scenarios]

There is an effect when using operation components.

[Action method]

Check the variable names set in the output data for each operation component by referring to "Reference for Operation Components" in the *Systemwalker Runbook Automation Reference Guide*.

Maximum number of characters for an operation component

[Changes]

The maximum number of characters for the commandline option of the operation components below has changed as follows:

- **Operation Component names**

- Execute arbitrary command

- Execute multiple commands

- Install software

Before (V14.1.0A)

Maximum number of characters: 8191 characters

After (V15.1.0)

Maximum number of characters: 8000 characters

[Affected scenario]

If using the operation components below:

- **Execute arbitrary command**

- **Execute multiple commands**

- **Install software**

[Action method]

If using an Automated Operation Process created V14.1.0A in V15.1.0, reduce the number of characters in the commandline option to 8000.

Operations to the IJServer cluster in the Java EE environment

[Changes]

The operation components "Start WorkUnit", "Stop WorkUnit", and "Restart WorkUnit" have changed as follows:

Before (V14.1.0A)

If the operation target is not registered on the WorkUnit the operation component will terminate abnormally.

After (V15.1.0)

If the operation target is not registered with the WorkUnit but is registered with the IJServer, the IJServer cluster runs.

[Affected scenario]

There is an effect on the WorkUnit operations if using the operation components "Start WorkUnit", "Stop WorkUnit", and "Restart WorkUnit".

[Action method]

When operating WorkUnits, see "Start WorkUnit", "Stop WorkUnit", and "Restart WorkUnit" in the *Reference Guide*, and specify the operation target.

Changes to the way the ServerView Resource Orchestrator Administrator User is set

[Changes]

The way of registering beforehand with the CMDB has changed for the following operation components:

- **Start virtual server**

- **Stop virtual server**

- **Restart virtual server**

- **Build virtual server**

- **Delete virtual server**

- **Change virtual server system**

- **Get virtual server list**

- **Get detailed virtual server information**

- **Create virtual server snapshot**

- **Restore virtual server snapshot**

[Affected scenarios]

There is an effect if operating a virtual server using the operation components recorded in [Changes]**.**

[Action method]

Register information to the CMDB referring to "Information Registration to CMDB (Management Product of Virtual Environment)" in the *Reference Guide* and associate it as follows:

Source	References
Installed software	User account

2.3.4 Development Environment (Studio)

The Server Connection Setting dialog box

[Changes]

The content entered in the **Base URL** field of the **Server Connection Setting** dialog box has changed as follows:

- Before (V14.1.0A)

```
http://<host name>:<port number>/context/_wfxml/Default/
```

- After (V15.1.0)

```
http://<host name>:<port number>
```

There is an effect when connecting to the Management Server from Studio.

[Action method]

Enter the new content for the **Base URL**.

Number of lines that can be entered into the Value of the Input Data tab

[Changes]

The number of lines that can be entered into the **Value** tab of **Input Data** will change in line with operation component options.

[Affected scenarios]

There is an effect if you enter a value into the **Value** tab of **Input Data**.

[Action method]

Only enter values that reflect the number of lines that can actually be input.

Batch Edit dialogue input

[Changes]

Line feeds can no longer be input into the text input field of the **Input Data** tab's **Batch Edit** dialogue.

[Affected scenarios]

There is an impact if data is entered into the text input field of the **Batch Edit** dialogue.

[Action method]

Do not input line feeds into the **Batch Edit** dialogue. Use delimiter directed in each parameters, semicolons (;), comma (,), ampersand (&) when separating data.

2.3.5 Schedules/Execution/Monitoring/Management

Create Schedule Definition wizard (General Settings)

[Changes]

The selections from **Execute multiple processes at a time** have changed as shown below:

- Before (V14.1.0A)

    Inhibit: Multiple Automated Operation Processes are not executed at the same time.

    Do Not Inhibit: Multiple Automated Operation Processes are executed at the same time.

- After (V15.1.0)

    Allow: Multiple Automated Operation Processes are executed at the same time.

    Do not allow: Multiple Automated Operation Processes are not executed at the same time.

[Affected scenarios]

There is an effect when a new Schedule Definition is created.

If an existing schedule is used, it will not be affected.

[Action method]

You can now select whether multiple corresponding Automated Operation Processes can be executed at the same time.

2.3.6 Templates

Operation Template for Virtual Environments

[Changes]

The operation components used in the following operation template for virtual environment Automated Operation Processes have changed:

- Deploy systems and register them in CMDB

- Change systems and register them in CMDB

    - Before (V14.1.0A)

    Execute discovery (Operation component: "Execute an arbitrary command")

    - After (V15.1.0)

    Register logical node (Operation component: "Register logical node")

[Affected scenarios]

There is an effect when the Automated Operation Process is created using the following operation template for virtual environment Automated Operation Processes:

- Deploy systems and register them in CMDB

- Change systems and register them in CMDB

[Action method]

None: The template content and the preparatory work are not changed.