



Interstage Business Process Manager Analytics V12.1



Management Console Guide

Windows/Linux

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About this Manual

This section explains summary, chapter overview, abbreviations, and provides useful information.

The contents in this section are as follows:

- [Purpose](#)
- [Intended Audience](#)
- [Chapter Overview](#)
- [Typographical Conventions](#)
- [Reference Materials](#)
- [Abbreviations](#)
- [Export Regulations](#)
- [Trademarks](#)
- [Requests](#)
- [Copyright](#)

Purpose

This document describes how to use the Management Console and Management Commands to configure the core parameters, how to start/stop the service of the Analytics Server and how to display its status.

Intended Audience

This manual is intended for System Administrators. It is assumed that the end user has a working knowledge of the following topics:

- Operating system administration
- Application server administration
- Database administration

Chapter Overview

Chapter	Title	Description
1	Management Console	Summary of the Management Console.
2	Analytics Management Console: Login and Welcome	How to use the Web based user interface of the Management Console.
3	Server Management	How to use the console to start, stop and view the status of the Analytics Server.
4	Sensor Management	How to use the console to start, stop and view the status of the Sensors.
5	System Setting	Configuration of the core parameters.
6	Management Command Line User Interface	How to use the Command Line based user interface of the Management Console.

Typographical Conventions

The following conventions are used throughout this manual:

Example	Meaning
command	User input that must be typed is identified by the Courier font

Example	Meaning
screen text	<ul style="list-style-type: none"> - GUI options to be selected by the end user are bold - GUI options that are emphasized are bold
<i>Reference</i>	Reference material or related documentation is specified in <i>italics</i>
Parameter	Command parameters are identified by the Courier font

Reference Materials

The following related documentation is also available.

Release Notes

Contains an overview of the Analytics software and late-breaking information that could not be included in the manuals

Overview

Describes the architecture and features of the Analytics software

Dashboard / Output Guide

Explains how to use the Analytics Dashboard

Administration Guide

Covers administration tools and tips, message references, and troubleshooting

Analytics Studio Guide

Explains how to use the Analytics Studio to configure parameters that enforce Analytics features

Management Console Guide

Explains how to use the Management Console and Management Commands to configure key parameters, such as how to start/stop the Analytics software service or how to display the software status

Process Discovery Guide

Explains how to use Process Discovery that generates process diagrams using historical data

Migration Guide

Explains how to migrate from previous version of the product

Handbook for the Process Discovery

Explains how to operate the Process Discovery briefly

Abbreviations

The following abbreviations are used throughout this document.

Name	Abbreviation
Microsoft(R) Windows Server(TM) 2003, Standard Edition Microsoft(R) Windows Server(TM) 2003, Enterprise Edition Microsoft(R) Windows Server(TM) 2003 R2, Standard Edition Microsoft(R) Windows Server(TM) 2003 R2, Enterprise Edition Microsoft(R) Windows Server(R) 2008, Standard Edition Microsoft(R) Windows Server(R) 2008, Enterprise Edition Microsoft(R) Windows Server(R) 2008 R2 Standard Microsoft(R) Windows Server(R) 2008 R2 Enterprise	Windows Server
Microsoft(R) Windows Server(TM) 2003, Standard x64 Edition Microsoft(R) Windows Server(TM) 2003, Enterprise x64 Edition Microsoft(R) Windows Server(TM) 2003 R2, Standard x64 Edition Microsoft(R) Windows Server(TM) 2003 R2, Enterprise x64 Edition	Windows Server 2003(x64) or Windows Server 2003

Name	Abbreviation
Microsoft(R) Windows Server(R) 2012 Microsoft(R) Windows Server(R) 2012 Datacenter Microsoft(R) Windows Server(R) 2012 Standard Microsoft(R) Windows Server(R) 2012 Foundation	Windows Server 2012
Microsoft(R) Windows(R) XP Professional operating system Microsoft(R) Windows(R) XP Home Edition operating system	Windows XP or Windows
Microsoft(R) Windows Vista(R) Business Microsoft(R) Windows Vista(R) Enterprise Microsoft(R) Windows Vista(R) Ultimate	Windows Vista or Windows
Microsoft(R) Windows(R) 7 Home Premium Microsoft(R) Windows(R) 7 Professional Microsoft(R) Windows(R) 7 Ultimate	Windows 7 or Windows
Microsoft(R) Windows(R) 8 Microsoft(R) Windows(R) 8 Pro Microsoft(R) Windows(R) 8 Enterprise	Windows 8 or Windows
Microsoft(R) Internet Explorer 7.0 Microsoft(R) Internet Explorer 8.0 Microsoft(R) Internet Explorer 9.0 Microsoft(R) Internet Explorer 10.0	Internet Explorer
Red Hat Enterprise Linux AS Red Hat Enterprise Linux ES Red Hat Enterprise Linux 5 Red Hat Enterprise Linux 6	Linux
Interstage Application Server Enterprise Edition Interstage Application Server Standard-J Edition	Interstage Application Server
Interstage Business Process Manager	Interstage BPM or IBPM
Oracle Database 10g Enterprise Edition R10.1.0/R10.2.0 Oracle Database 10g Standard Edition R10.1.0/R10.2.0 Oracle Database 10g Standard Edition One R10.1.0/R10.2.0	Oracle10g or Oracle
Oracle Database 11g Enterprise Edition Oracle Database 11g Standard Edition Oracle Database 11g Standard Edition One Oracle Database 11g R2 Enterprise Edition Oracle Database 11g R2 Standard Edition Oracle Database 11g R2 Standard Edition One	Oracle11g or Oracle
Microsoft SQL Server 2005 Standard Edition Microsoft SQL Server 2005 Enterprise Edition	SQL Server 2005 or SQL Server
Microsoft SQL Server 2008 Standard Edition Microsoft SQL Server 2008 Enterprise Edition	SQL Server 2008 or SQL Server

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Contents

Chapter 1 Management Console.....	1
1.1 Management Console User Interface.....	1
1.2 Common Uses of the Management Console.....	2
1.2.1 After Installation.....	2
1.2.2 Regular Maintenance.....	4
Chapter 2 Analytics Management Console: Login and Welcome.....	5
2.1 Login page.....	5
2.2 Current Status.....	5
2.2.1 Execution Status.....	5
2.2.2 Data Status.....	7
2.3 Change Password.....	10
Chapter 3 Server Management.....	12
3.1 Status.....	12
3.2 View Log.....	13
3.2.1 Latest results.....	13
3.2.2 Operation log and Access log.....	13
3.3 Server Settings.....	14
3.4 Server URL.....	15
3.5 Logging.....	16
3.5.1 Operation Log.....	16
3.5.2 Access Log.....	17
3.5.3 Alert Log.....	17
3.5.4 Support Log.....	17
3.6 Machine Restrictions.....	18
Chapter 4 Sensor Management.....	20
4.1 Sensor Status.....	20
4.2 Connection Status.....	20
4.3 Creating Connections.....	22
4.3.1 RDB.....	23
4.3.2 Text.....	25
4.4 Updating a Connection.....	25
4.4.1 BPMFlow.....	26
4.4.2 MaintenanceBPMFlow.....	27
4.4.3 BPME.....	27
4.5 Deleting a Connection.....	27
4.6 Test Connection.....	28
Chapter 5 System Settings.....	29
5.1 Database Management.....	29
5.1.1 JDBC Driver Settings.....	29
5.1.2 Events Database Settings.....	29
5.1.3 Archive DB.....	30
5.1.4 Process Discovery DB.....	30
5.1.5 Table Management.....	31
5.1.6 Connection Pooling.....	32
5.2 User Management.....	33
5.2.1 User Management.....	33
5.2.1.1 User List.....	33
5.2.1.2 Creating Users.....	34
5.2.1.3 Import Users.....	36
5.2.2 Managing Groups.....	37
5.2.2.1 Group List.....	37

5.2.2.2 Creating Groups.....	38
5.2.3 Authentication Type.....	40
5.2.4 Security Settings.....	42
5.3 Process Discovery.....	43
5.3.1 Fixed-point Monitoring Settings.....	44
5.3.1.1 Event definition information.....	44
5.3.1.2 Operations.....	45
5.3.2 IBPM Integration Settings.....	45
5.3.2.1 Generating Data.....	45
5.3.2.2 Integration Data.....	45
5.3.2.3 Operations.....	46
5.4 UI Management.....	46
5.4.1 UI Customize.....	46
5.4.1.1 Customizing UI Parts.....	46
5.4.1.2 Dashboard Menu.....	47
5.4.2 Label Substitution.....	48
5.4.2.1 List of Registered Definitions.....	48
5.4.2.2 Creating New Label Substitution Definitions.....	49
5.4.2.3 CSV Upload.....	51
5.4.2.4 Modify Settings.....	51
5.5 Integration Module Management.....	51
5.5.1 Add Integrated Modules.....	51
5.5.2 List of Files.....	52
5.6 Mail.....	52
5.6.1 SMTP Server.....	52
5.6.2 SMTP Authentication.....	53
5.6.3 POP before SMTP Authentication.....	54
5.7 Data Migration.....	55
5.7.1 Archive Rules.....	55
5.7.2 Create an Archive Rule.....	55
Chapter 6 Management Command Line User Interface.....	58
6.1 Management Commands Overview.....	58
6.1.1 Analytics Server start/stop.....	58
6.1.2 Restoring status or restarting operation.....	58
6.1.3 Exporting data.....	58
6.1.4 Backup/Restoring.....	58
6.2 Using Management Commands.....	59
6.2.1 Analytics Server start/stop.....	59
6.2.1.1 bpmstart.....	59
6.2.1.2 bpmstop.....	59
6.2.1.3 bpmstat.....	60
6.2.2 Restoring status or restarting operation.....	61
6.2.2.1 bpmescalateaction.....	61
6.2.2.2 bpmregisterwef.....	62
6.2.2.3 bpmupdatesensorconf.....	64
6.2.3 Exporting data.....	65
6.2.3.1 bpmexport2csv.....	65
6.2.4 Backup/Restoring.....	69
6.2.4.1 bpmbackup.....	69
6.2.4.2 bpmrestore.....	70
6.2.4.3 bpmsensorbackup.....	72
6.2.4.4 bpmsensorrestore.....	72
6.2.4.5 bpmtextsensorbackup.....	73
6.2.4.6 bpmtextsensorrestore.....	74
6.2.4.7 aps_start.....	75
6.2.4.8 aps_stop.....	76

Chapter 1 Management Console

The Management Console is a Web-based tool used to configure the Analytics Server and to manage the Interstage BPM Analytics operations.

Management Commands

The management commands allow the user to perform the Management Console operations in the operating system's command shell.

The management commands provide additional functionality not offered by the Management Console.

Refer to chapter “Management Command Line User Interface” for details.

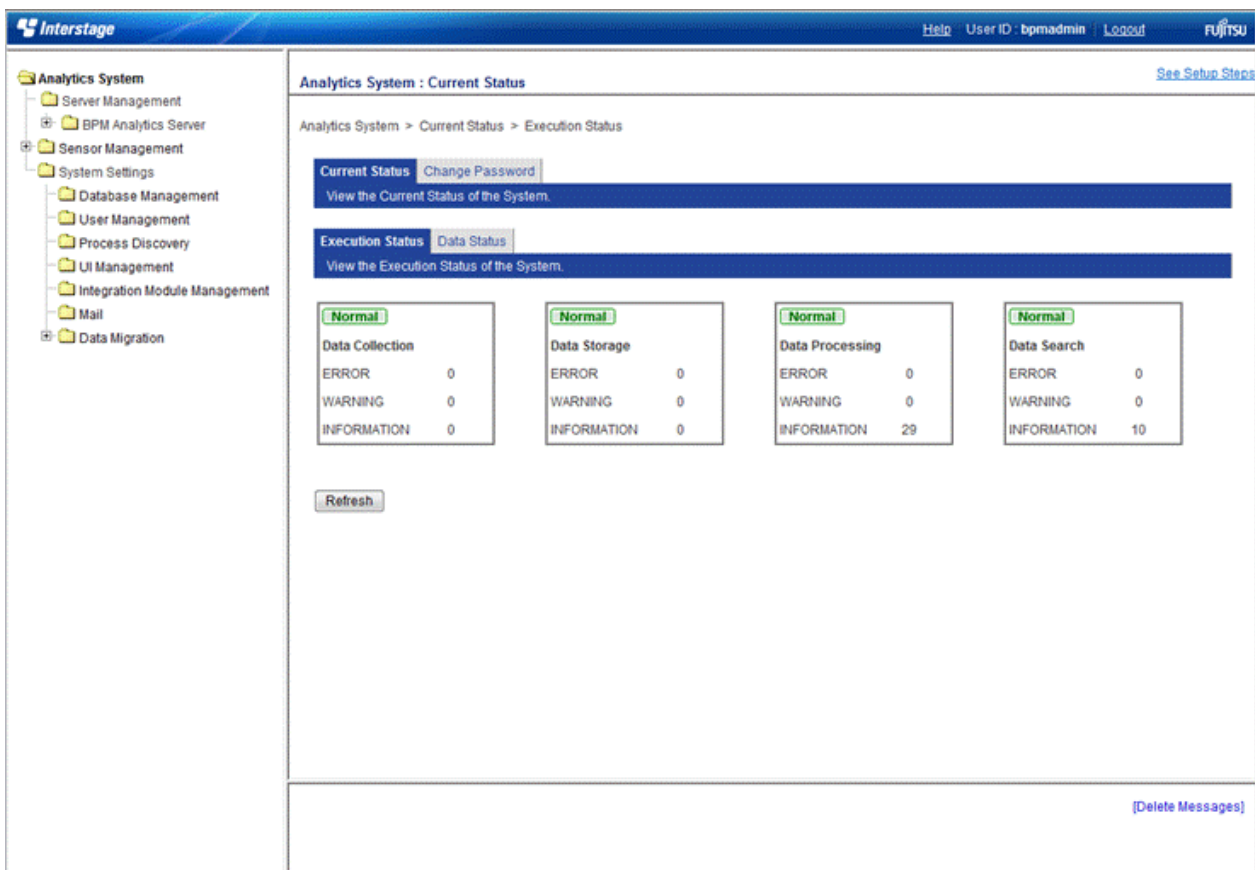


In case “Internet Explorer Enhanced Security Configuration” is active on Windows Server 2003, 2008 or 2012, Management Console or Analytics Console may not work correctly since script execution is not permitted.

To avoid this, please change configuration by registering host as “Trusted site” or change configuration of IE ESC in server manager.

1.1 Management Console User Interface

The Management Console user interface is a browser window divided into three parts.



Category	Normal	ERROR	WARNING	INFORMATION
Data Collection	Normal	0	0	0
Data Storage	Normal	0	0	0
Data Processing	Normal	0	0	29
Data Search	Normal	0	0	10

The above shows how the Analytics Management Console appears when it is first opened. To the right is the navigation pane and to the bottom right is the message area.

Resize the areas by dragging their borders.

Navigation pane (left)

The menus for the Management Console are displayed in the navigation pane.

The root item is "Analytics System".

Items with submenus have a plus sign in front of them.

Click the plus sign to see additional options for the item.

Click on items to see the available settings in the workspace to the right.

Hide the options again by clicking the minus sign.

Workspace (top right)

Available settings for the items selected in the navigation pane appear here.

Most of the workspaces include tabs.

The leftmost tab is displayed when the workspace is opened.

Click any other tab to show other options.

Message area (bottom right)

This shows messages about operations performed in the Management Console, as well as errors and warnings.

Refer to the *Interstage Business Process Manager Analytics Administration Guide* for information on the message meanings and what should be done. Delete any messages currently displayed by clicking the **Delete Messages** link.

1.2 Common Uses of the Management Console

1.2.1 After Installation

Add JDBC driver and setup the Events Database connection

Add the JDBC driver to connect the Events Database and configure the connections to the Events Database.

```
Analytics System > System Settings > Database Management > JDBC Driver settings
```

```
Analytics System > System Settings > Database Management > Event DB
```



Restart the application server if a JDBC driver is added.

This operation is not required when using built-in database.

Create tables for the Events Database

To start the Analytics Server, a system table must be created in the specified RDBMS. Access the following menu to create tables.

```
Analytics System > System Settings > Database Management > Table Management
```



This operation is not required when using built-in database.

Start the Analytics Server

Start the Analytics Server.

Analytics System > Server Management > BPM Analytics Server > Server Status

Create users and groups

Create users for the Dashboard, Process Analyzer Tool, Process Generator Tool, Analytics Studio, and other features. Also create groups as necessary.

Analytics System > System Settings > User Management > User

Configure user authentication

Determine the type of user authentication to be used.

The default setting is "Built-in Authentication". Do not change the settings while the server is operating.

Analytics System > System Settings > User Management > Authentication Type

Security settings

Determine the security settings. These include whether to allow users to change their passwords, or to allow the Analytics Console to remember login credentials.

Analytics System > System Settings > User Management > Security Settings

Create connection information

Configure the physical connections to the data source where the data is collected. The configurations made here are used as Collection Rules in Analytics Studio.

Analytics System > Sensor Management > [Sensor Name] > Connection Status

Configure Process Discovery

Setup event extraction schedules if Process Discovery is to be used.

Analytics System > System Settings > Process Discovery

Configure the UI Customize

Configure the UI customize as necessary.

Analytics System > System Settings > UI Management

Add Integration Module to the Analytics Server

Add Integration Module as necessary. Do this to add the required JAR files when linking to the Interstage Business Process Manager server, or to distribute the JDBC driver to sensors.

Analytics System > System Settings > Integration Module Management



Note

Restart the application server if a Integration Module is added.

Mail server setup

Enter information for the mail server that the Analytics Server will access to enable the e-mail functionality used by Escalation.

Analytics System > System Settings > Mail

1.2.2 Regular Maintenance

Managing Sensor connections

Sensors can be stopped and started as necessary.

Use this if a connection to an RDBMS needs to be stopped for maintenance. Event collection from the Analytics Server can be stopped temporarily.

```
Analytics System > Sensor Management > [Sensor Name] > Connection Status
```

Data migration rules

This allows the volume of data in the Events Database to be controlled, and to maintain redundant data and records, by migrating Event Data from the Events Database to the Analysis DB.

```
Analytics System > System Settings > Data Migration > Archive Rules
```

Database cleanup

This keeps the volume of data in the Events Database under control by deleting old Event Data regularly.

```
Analytics System > System Settings > Database Management > Table Management
```

Managing the Events Database, Analysis DB, and Process Discovery Database

This updates changes to the RDBMS (used as the Events Database, Analysis DB, or Process Discovery Database), such as changes to the user passwords or JDBC driver connection.

```
Analytics System > System Settings > Database Management > Event DB  
Analytics System > System Settings > Database Management > Analysis DB  
Analytics System > System Settings > Database Management > Process Discovery Database
```

View logs

View the logs to check on the results of using operation definitions.

```
Analytics System > Server Management > BPM Analytics Server > Server Status > View Log
```

logging

Configure log file settings to fit in an operation situation.

```
Analytics System > Server Management > BPM Analytics Server > Server Status > Logging
```

Start and stop the Analytics Server

Use the following when the Analytics Server needs to be stopped because, for example, the RDBMS being used for the Events Database has to be stopped for maintenance.

```
Analytics System > Server Management > BPM Analytics Server > Server Status > Status
```

Chapter 2 Analytics Management Console: Login and Welcome

2.1 Login page

Enter the following URL into the address bar of a browser to start the Analytics Management Console.

Enter the address in the following format:

```
http://server:port/ibpmm/admintool/BPMAdminTool
```

- Server name:
Specify the host name or IP address of the Analytics Server.
- Port Number:
Specify the port number of the Web server.
The value will be 40330 when you select Built-in Application Server.

Login

Enter the administrator password and click **Login**.

Logout

After logging in, a **Logout** button will appear in the top right of the window.

Click **Logout** to exit the Analytics Management Console.

2.2 Current Status

The Current Status page appears as the first page when the Analytics Management Console is first opened.

The Current Status workspace has two tabs, one showing the status of the data being treated by BPMA and the other showing the status of the various processes that are run with BPMA.

- Execution Status
- Data Status

2.2.1 Execution Status

The Execution Status workspace shows the error occurrence by the process type. Panel for each process type is displayed and you are able to see the detail by clicking each process type panel.

Analytics System : Current Status [See Setup Steps](#)

Analytics System > Current Status > Execution Status

Current Status [Change Password](#)
View the Current Status of the System.

Execution Status [Data Status](#)
View the Execution Status of the System.

Normal Data Collection ERROR 0 WARNING 0 INFORMATION 0	Normal Data Storage ERROR 0 WARNING 0 INFORMATION 10	Normal Data Processing ERROR 0 WARNING 0 INFORMATION 26	Normal Data Search ERROR 0 WARNING 0 INFORMATION 0
---	---	--	---

[Refresh](#)

The following table shows the process types and their roles.

Process type	Role
Data Collection	Data collected from the monitored system by the sensors
Data Storage	Data collected by the sensor is passed to the BPMA server and stored in the Events database
Data Processing	One of the following processes performed in the BPMA server on the collected data Statistical Calculation Alerts Reports
Data Search	Searches for data stored in the Events database using an interface such as the dashboard

The numbers next to "ERROR", "WARNING", and "INFORMATION" are the total of the messages occurring for the definitions in detail screen of each process type panel. The limit on the number displayed depends on the number of definitions. Each definition is limited to 10 messages, so the maximum is the total number of definitions multiplied by 10.

The number of "Error", "Warning" and "Information" displayed in process type panel is calculated from result of message shown in detail screen shown as follows.

type	"result" type target for calculation
Error	error
Warning	warning
Information	information executed occurrence active

Click on a process type panel to show the following status page.

Analytics System : Current Status [See Setup Steps](#)

Analytics System > Current Status > Execution Status > Data Collection

Current Status [Change Password](#)
View the Current Status of the System.

Execution Status [Data Status](#)
View the Execution Status of the System.

<p>Normal</p> <p>Data Collection</p> <p>ERROR 0</p> <p>WARNING 0</p> <p>INFORMATION 1</p>	<p>Normal</p> <p>Data Storage</p> <p>ERROR 0</p> <p>WARNING 0</p> <p>INFORMATION 10</p>	<p>Normal</p> <p>Data Processing</p> <p>ERROR 0</p> <p>WARNING 0</p> <p>INFORMATION 26</p>	<p>Normal</p> <p>Data Search</p> <p>ERROR 0</p> <p>WARNING 0</p> <p>INFORMATION 0</p>
--	--	---	--

Data Collection

Collection Rule [Open/Close](#)

Sensor Name / Connection Name		IBPM-VPDC / Salesinformation		
Name	Result	Execution Time	Comment	
Salesinformation	History executed	Dec 9, 2011 6:41:13 PM	Collection rule is executed.[1 data is notified.]	

[Refresh](#)

Click the [History] link next to the name to show the following page.

Current Status [Change Password](#)
View the Current Status of the System.

Execution Status [Data Status](#)
View the Execution Status of the System.

Name	Component Type
Salesinformation	SENSORTASK

Date	Status	Comment
Dec 9, 2011 6:42:12 PM	executing	Collection rule is executing.
Dec 9, 2011 6:42:13 PM	executed	Collection rule is executed.[1 data is notified.]
Dec 9, 2011 6:42:42 PM	executing	Collection rule is executing.
Dec 9, 2011 6:42:43 PM	executed	Collection rule is executed.[1 data is notified.]
Dec 9, 2011 6:43:12 PM	executing	Collection rule is executing.
Dec 9, 2011 6:43:13 PM	executed	Collection rule is executed.[1 data is notified.]
Dec 9, 2011 6:43:42 PM	executing	Collection rule is executing.
Dec 9, 2011 6:43:43 PM	executed	Collection rule is executed.[1 data is notified.]
Dec 9, 2011 6:44:12 PM	executing	Collection rule is executing.
Dec 9, 2011 6:44:13 PM	executed	Collection rule is executed.[1 data is notified.]

[Back](#)

The history page shows the 10 most recent processes.

2.2.2 Data Status

The Data status tab has the following information about the data dealt with by BPMA.

- Events
- Events(statistics)

- Alerts

Current Status Change Password
 View the Current Status of the System.

Execution Status Data Status
 View the Data Status of the System.

Event Group ALL Filter by using Data Name

Event Group	Data Name	Data Type	Count	Latest Updated Date	Next Execution Date
System	Activity delinquency alert (Dynamic RPM Event)	ALERT	0	----	---
System	Alert Count System Statistics Event	EVENT(statistics)	2	Nov 1, 2012 12:00:00 AM	Nov 2, 2012 12:00:00 AM
System	BankAlert	ALERT	1	Oct 30, 2012 8:17:09 PM	---
System	BankEvent	EVENT	2635	Oct 30, 2012 8:17:08 PM	Nov 1, 2012 10:15:23 AM
System	Dynamic RPM Event	EVENT	0	----	Nov 1, 2012 10:15:00 AM
System	FAI-1799	ALERT	1	Oct 31, 2012 8:47:21 AM	---
System	FAI-Order2Ship	EVENT	1068	Oct 31, 2012 5:47:26 AM	Nov 1, 2012 10:16:00 AM
System	FAI-Retail	EVENT	53	Oct 31, 2012 8:47:21 AM	Nov 1, 2012 10:15:00 AM

Data Name	Info	Description
Number of files ready to be stored	0	The number of data files ready to be stored in the event storage database.
Number of files that failed to be stored	0	The number of data files that the Analytics Server failed to store in the event storage database in the past one hour.

Number of files ready for delivery to the server

Sensor System	Count
VFWFYMAJDK0001	0

The upper section shows a summary of data accumulation. The following table shows the information shown.

Item	Description
Event Group	Name of the event group to which the data belongs.
Data Name	Name allocated to the data.
Data Type	There are three types of data. Event Event (statistics) Alert
Count	A count of the data stored in the Events database.
Latest Updated Date	The date for the most recent data.
Next Execution Date	The date schedule for processing of the data. (for collection or generation)

The lower section shows information about the data accumulated in the system and about data waiting to be received.

Item	Description
Number of files ready to be stored	Events received by the BPMA server. This is the amount of data that is waiting to be stored in the Events database.

Number of files that failed to be stored	The amount of data that failed to be stored for some reason. Please refer to chapter “Management Command Line User Interface” for the detail of how to register failed data.
Number of files ready for delivery to the server	The amount of data that is has been collected by the sensor system and is waiting to be received by the server. Details are shown for each sensor system.

The following **Details** tab is displayed when you click an event’s link.

Data Status Details
View Data Status details.

Details

Meta data	Info	Description
Event Group	System	The name of the Event Group to which the data belongs.
Data Name	Alert Count System Statistics Event	The name of the data requested.
Data Type	EVENT(statistics)	The type of the data requested.
Count	5	Amount of the data which is stored in the Events database.
Latest Updated Date	Nov 12, 2012 12:00:00 AM	The date when the data was last updated.
Definition’s last published date	Nov 4, 2012 1:12:19 PM	The date when the definition was last published.
Newest data date	Nov 11, 2012 12:00:00 AM	The date when the latest data was generated.
Oldest data date	Oct 31, 2012 12:00:00 AM	The date when the oldest data was generated.
Last data migration date		The date when the data was last migrated.
Amount of data generated during last one hour	0	The number of events generated in the last one hour.
Error data ratio	0.0	The ratio of alerts detected among the total number of alerts.
Amount of flow statistics data	0	The total number of statistics records.

Related Collection Rules or Event Modifiers

Definition Name	Next Execution Date
Alert Count System Event Modifier	Nov 13, 2012 12:00:00 AM

Table Name	B_ASCount
------------	-----------

Column Info of B_ASCount

Column Name	Attribute Name	Data Type
-------------	----------------	-----------

Detailed information about the data accumulated appears in the “Details” section. The following table lists some of the key fields of this section.

Item	Description
Event Group	Name of the event group to which the data belongs.
Data Name	Name allocated to the data.
Data Type	There are three types of data. Event Event (statistics) Alert
Count	A count of the data stored in the Events database.
Latest Updated Date	The date when the data was last updated.

Definition's last published Date	The last date that the definition was published.
Newest data date	The date when the latest data was generated.
Oldest data date	The date when the oldest data was generated.
Last data migration date	The last time data was migrated.
Amount of data generated during last one hour	The volume of data in the past hour.
Error data ratio	The percentage of data where errors have occurred. This is displayed if the data type is Event.
Amount of flow statistics data	The amount of related statistical data. This is displayed if the data was acquired from IBPM.

The following information is shown in “Related Collection Rules or Event Modifiers” section.

Item	Description
Definition Name	The name of the definition.
Next Execution Date	The date when the process for the definition are scheduled next.
Manual Execution	Click "Execute" button to execute Collection Rule and Event Modifier manually. Note that definitions are required to be activated for execution. For Collection Rule, related Sensor System and Connection must be started before execution. Collection Rule running on Windows Service Edition text file sensor cannot be executed manually.

If the data type is Event, information about the table for that event in the Events database is shown.

Item	Description
Table Name	Table name in the Events database
Column Name	Column name in the Events database
Attribute Name	Attribute name in the event definition that corresponds to the column name
Data Type	Data type in the Events database
Restriction	Constraints on the Events database specified in the column

2.3 Change Password

Select the **Change Password** tab to change the password for the Administrator.

Current Status **Change Password**

Set the Password for the Analytics System Administrator.

Enter Password	
Current Password	••••••••
New Password	••••••••
Confirm New Password	••••••••

First enter the existing password in the **Current Password** field. Next, enter the new password in the **New Password** field. Finally, enter the new password again in the **Confirm New Password** field. Click the **Modify** button to make the changes.

Enter 1 to 64 characters for the password.

Manage passwords based on a security policy.

Chapter 3 Server Management

The following settings are available from the Server Management sub-menu of the Management Console:

- Server Status
 - Status
 - View Log
- Server Settings
 - Settings
 - Server URL
 - Logging
 - Machine Restrictions

3.1 Status

The **Status** tab shows the operational status of the Analytics Server. The server can also be started and stopped in this workspace.

Click **Status** to open the tab.

Analytics Server Name	Status	Start Time
BPM Analytics Server	Running	Oct 30, 2012 1:27:13 PM

The **Status** tab shows the name of the Analytics Server, its operational status, and the time and date that it was started.

Status

Status can be "Running", "Stopped", or "Not Connected".

Click the **Start** button to start the Analytics Server (the status changes to "Running").

Click the **Stop** button to stop the Analytics Server (the status changes to "Stopped").

"Not Connected" indicates that the status of the server could not be determined (due to incorrect connection settings or a network problem, for example).

Click **Refresh** to update the Status field.

Click **Restart** to stop the server and then start it again. It stops first, then starts.



Note

Start and stop can also be performed with the management commands.

Refer to chapter "Management Command Line User Interface" for details.

3.2 View Log

This workspace presents the latest log records from definitions configured in the Analytics Studio.

3.2.1 Latest results

The latest results from the operation log are shown here along with the definition name.

BPM Analytics Server : Server Status : View Log

[See Setup Steps](#)

Analytics System > Server Management > BPM Analytics Server > Server Status > View Log > Latest results

Status **View Log**

View the Log information for the Analytics server.

Latest results Operation Log Access Log

View the latest execution results by each definition.

Task [\[Open/Close\]](#)

Sensor Name / Connection Name			
IBPM-VPDC / Salesinformation			
Name	Result	Execution Time	Comment
Salesinformation	executing	Dec 8, 2011 7:45:42 PM	Collection rule is executing.

Calculation [\[Open/Close\]](#)

Alert [\[Open/Close\]](#)

Escalation [\[Open/Close\]](#)

[Refresh](#)

The latest results are summarized from the Operation Log. Tasks for remote sensors are not listed on this page.

Update to latest information

Click the Refresh button to see the most recent status.

3.2.2 Operation log and Access log

The View Log tab displays the logs under the Operation log and Access log tabs. These are output by the Analytics Server for each of these activities while the server is operating.

Status **View Log**

View the Log information for the Analytics server.

Latest results **Operation Log** Access Log

View the Operation Log.

```

information [.....] mainmessage:BTSK0001: Schedule [ Salesinformation ] was
executed.
2011/12/08 21:00:12.015+GMT+09:00 INFO mainID:BSDK0404 subID:..... sensor
executing [.....] mainmessage:BSDK0404: Collection
[Salesinformation:Salesinformation] was executed.
2011/12/08 21:00:13.031+GMT+09:00 INFO mainID:BSDK0405 subID:..... sensor
executed [.....] mainmessage:BSDK0405: The collection [Salesinformation]
(connection information : [Salesinformation]) ended.( 1 data is notified.)
2011/12/08 21:00:42.234+GMT+09:00 INFO mainID:BTSK0001 subID:..... engine
information [.....] mainmessage:BTSK0001: Schedule [ Salesinformation ] was
executed.
2011/12/08 21:00:42.234+GMT+09:00 INFO mainID:BSDK0404 subID:..... sensor
executing [.....] mainmessage:BSDK0404: Collection
[Salesinformation:Salesinformation] was executed.
2011/12/08 21:00:43.265+GMT+09:00 INFO mainID:BSDK0405 subID:..... sensor

```

Update to latest information

Click the Refresh button to see the most recent log information.

Download

Click the Download button to download logs.

Downloaded files also contain information older than the log information displayed in the workspace.

3.3 Server Settings

The **Settings** tab contains settings for the selected Analytics Server.

Click **Settings** to open the tab.

Settings **Server URL** Logging Machine Restrictions

Modify Settings of the Analytics Server.

Analytics Server Settings	
Analytics Server ID	MON_0000000000
Analytics Server Name *	<input type="text" value="BPM Analytics Server"/>
Max Number of Sessions *	<input type="text" value="100"/>
BPM Integration	<input checked="" type="radio"/> Use <input type="radio"/> Not Used
Searching for Events and Alerts	<input checked="" type="radio"/> Use <input type="radio"/> Not Used
Event Calculation	<input checked="" type="radio"/> Use <input type="radio"/> Not Used
Event Registration	<input checked="" type="radio"/> Use <input type="radio"/> Not Used

Analytics Server ID and Analytics Server Name

Analytics Server ID and Analytics Server Name are shown. Analytics Server ID cannot be changed.

The Analytics Server Name is used in menus and lists to indicate and select this server. This name can be changed. Enter a name between 1 and 64 characters and click the Modify button to change the name.

Max Number of Sessions

The current setting for the **Max Number of Sessions** is displayed.

A "session" is started when a user logs into the Analytics Server, and this field defines the maximum number of concurrent sessions.

Enter a number in the field and click the Modify button to change the maximum.



Note

Please don't modify this parameter. Please contact support personnel to estimate number of sessions.

BPM Integration

Select "Use" to allow users to use Interstage BPM integrated features. Select "Not Used" to disable integrated features. Default value is "Use". "BPMFlow" type connection gets unavailable if you select "Not Used".

Searching for Events and Alerts

Select "Use" to allow users to search for events and alerts. Select "Not Used" to disable searches.

Event Calculation

Select "Use" to allow users to use Event Calculation. Select "Not Used" to disable.

The administrator can decide whether to allow Event Calculation.

Event Calculation uses data from the Events Database to present analysis results for use in business processes, such as inventory control.

Event Registration

Select "Use" to allow users to use Event Registration. Select "Not Used" to disable.

Event Registration accepts events data from sensors and stores it.



Note

"Use" is the default and recommended setting for these three features.

Unless otherwise advised by support personnel, do not change these settings.

3.4 Server URL

Enter the current URL address of the Analytics Server in the Server URL tab.

Click the Server URL tab to open this workspace.

Settings **Server URL** Logging Machine Restrictions

Modify the Connection Information for the Analytics Server for remote Sensors.

Server Connection Information

URL *

Modify

Modify URL

The URL address can be changed in this field.

The host name is the host name or IP address of the machine running the Analytics Server.

Specify the URL using the following format:

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

Specify the port number of the Web server. This is optional. Default port number will be 40330 when you select Built-in Application Server on install.

Enter the URL correctly and click the Modify button.



Note

This Server URL information is also used by remote sensors. Use names that can be resolved by the remote sensor machines.

3.5 Logging

Configure log file settings in the Logging tab.

Set the maximum size of log files, the maximum number of backup log files, and the level of logging.

Click **Logging** to open the tab to see the workspace where logs can be configured.

Settings	Server URL	Logging	Machine Restrictions
Modify the Logging settings for the Analytics Server.			
Operation Log			
Capacity of Log File	1MB		
Max Number of Backup Files *	5	file(s)	
Access Log			
Log Level	INFORMATION	and higher levels	
Capacity of Log File	1MB		
Max Number of Backup Files *	5	file(s)	
Alert Log [Open/Close]			
Active	<input type="checkbox"/>		
Capacity of Log file	1MB		
Max number of backup files *	5	file(s)	
Support Log [Open/Close]			
<input type="button" value="Modify"/>			

3.5.1 Operation Log

The Operation log records the behavior of the Analytics Server and sensors.

Operation log is stored in followings:

[ibpmm.war location of the Web application]/log/operation/operation.log



In case of Built-in Application Server, deployment path is as followings.

[workspace directory]/tomcat6/webapps/ibpmm

C:\ibpmm_data\tomcat6\webapps\ibpmm

3.5.2 Access Log

The Access log records access to the Analytics Server from sensors and the Management Console.

Access log is stored in followings:

[ibpmm.war location of the Web application]/log/access.log

3.5.3 Alert Log

The Access log records the alerts occurred.

Alert content will be recorded to log file by checking “Active” check box on.

Alert log is stored in followings:

[ibpmm.war location of the Web application]/log/alert/alert.log

Alert Log message format

Alert log will be outputted by following order.

Name	Meaning
Log output date	The date log is outputted.
Alert Type	Type of Alert.
Event name	Event name of the alert
Alert occur date	The date alert occurred.
Level	Shows alert severity.
Message	messages.

3.5.4 Support Log

The Support log records the behavior of the Analytics Server.

The Support log is not used under normal circumstances. This log is used by support personnel investigating problems.

Support log is stored in followings:

[ibpmm.war location of the Web application]/log/server.log

Record Log Level

Records in logs are divided into levels by importance. Enter the log level to output to the log file.

The following shows the log levels in descending order of importance.

- 1. Fatal

Logs for fatal errors are output.

- 2. Error

This setting logs errors that require intervention. Logs for errors and fatal errors are output.

- 3. Warning

This settings logs warnings that require attention. Logs for warnings, errors, and fatal errors are output.

- 4. Detailed Information

These are status logs. These are output along with the warning, error, and fatal error logs above.

- 5. Debugging Information

This logging level is for support personnel to output debugging information.



Note

Note that setting the level to 5 will mean records from all logs will be output, which can lead to a very large amount of information.

Select the level from the drop down menu and click the Modify button to apply it.

3.6 Machine Restrictions

The **Machine Restrictions** tab has settings which allow the administrator to restrict the machines that can register events.

Click **Machine Restrictions** to open the tab.

Settings | Server URL | Logging | **Machine Restrictions**

Set Machine Restrictions for Event Registration from remote Sensors.

Machine Restrictions

Disabled Enabled

IP Address

Restriction Address

Address List

Add Delete

Modify

Disabled

Select Disabled if no restrictions are to be applied to events being collected by the Analytics Server.

All events collected by sensors will be sent to the Analytics Server.

The Add and Delete buttons are disabled when this option is selected.

Enabled

Select Enabled and enter the IP addresses of the machines allowed access in the field below.

This means that the administrator can restrict the machines that can send events to the Analytics Server.

Add button

Enter the IP address of a permitted machine in the entry field.

Specify as follows:

10.22.33.44

Click the Add button to add the IP address to the Address List.

Delete button

Select an address in the list and click the Delete button to delete it from the list.



Restrictions apply only to remote sensors of the Analytics Server.

Sensors on the same machine as the Analytics Server cannot have their event registration restricted.

Sensors on the same machine as the Analytics Server are automatically allowed access so there is no need to enter the IP address of the Analytics Server machine.

There is an exception to this. When event registration is not to be accepted from any other sensor, that is, when sensors that are on the same machine as the Analytics Server are to given exclusive access to register events, enter only the IP address of the Analytics Server machine.

Chapter 4 Sensor Management

The **Sensor Management** workspace is used to display the status of registered sensors, and to start and stop them.

The **Sensor Status** displays all registered sensors.

Click one of the sensor names to open the **Connection Status** tab. The status of the sensor is shown here, and can be started or stopped as required.

4.1 Sensor Status

Select **Sensor Management** from the navigation pane.

Sensor Name	Status
LOCALHOST	Running

Refresh

A list of all registered sensors is displayed. One sensor has been registered in the example above.

The **Status** column shows whether the status of a sensor is "Running" or "Stopped".

Click the **Refresh** button to update the list to see if a sensor has been added or if the status of existing sensors has changed.

Click the sensor names to open the **Connection Status** tab. **Connection Status** shows details about the sensors.

4.2 Connection Status

Click a sensor name in **Sensor Status** to open the **Connection Status** tab.

The first section of the **Connection Status** tab shows the sensor name and its current status (running or stopped).

Connection Status Create Connection

View the status of Connections. Start, Stop or Delete them. Modify the Sensor Settings.

Sensor Name	Status
LOCALHOST	Running

	Connection Name	Connection Type	Status
<input type="checkbox"/>	Process Discovery Connection	BPME	Stopped
<input type="checkbox"/>	BPMConnection	BPMFlow	Stopped
<input type="checkbox"/>	BPMConnection	MaintenanceBPMFlow	Stopped
<input type="checkbox"/>	Sales Information	Text	Stopped

Sensor Settings	
Sensor Id	AID_0000000000
Sensor Name *	<input type="text" value="LOCALHOST"/>
Max number of Events per WEF *	<input type="text" value="10"/>
Sensor URL *	<input type="text" value="http://LOCALHOST:40330"/>

The second section shows a list of the connections for the sensor, along with the connection type and status.

The third section is where the sensor can be configured. There are some very advanced settings in this section. Do not change them without first seeking the advice of support personnel.

Sensor Name

Name of the registered Sensor.

Connection Name

Displays the names of the connections.

To control the status of the sensor, select the checkboxes and click the **Start** or **Stop** button.

The **Start** and **Stop** buttons are disabled if none of the checkboxes are selected.

Connection Type

Connection Type indicates the type of resource from which the sensor collects event information. The following types are available.

- RDB
- Text
- BPMFlow
- MaintenanceBPMFlow
- BPME

BPMFlow, MaintenanceBPMFlow, BPME type connection is predefined. These type of connections cannot be deleted.

Status

The status is either **Running** or **Stopped**.

Select the checkboxes on the left and click the **Start** button to change the status to **Running**.

Select the checkboxes and click the **Stop** button to change the status to **Stopped**.

To change the status of all the connections, click the **Select All** button and then click the **Start** button to start all the connections or the **Stop** button to stop all the connections.

Refresh button

The information in this workspace is not automatically updated, even though the Analytics Server is constantly monitoring the activities of the sensors.

Information may have changed since opening the workspace. Click the **Refresh** button to see the most recent information.



- The **Start** and **Stop** buttons cannot be used with Windows Service Edition text file sensors. To start or stop this type of sensor, start or stop the "Analytics Text File Sensor" service on the machines where the sensor is installed.
When the Work Unit for the monitoring server is restarted, the status of Windows Service Edition text file sensors may not be up to date. Wait a while, and then check the status of these sensors again.

Sensor Settings

Displays sensor settings information. There are following fields.

Parameters	Explanations
Sensor Id	Unique ID to identify sensor. You cannot edit this.
Sensor Name	Name of the Sensor.
Max number of Events per WEF	Specifies max number of WEF notified by sensor
Sensor URL	URL of the sensor.

Modify button

Click the **Modify** button to apply any changes made in the **Sensor Settings** text fields (**Sensor Name**, **Max number of Events per WEF**, and **Sensor URL**).

None of these settings need to be changed under normal circumstances. Apply changes only after receiving advice from support personnel.

Delete Sensor button

Click the **Delete Sensor** button to delete unused sensors. Delete all of the sensors connections before deleting the sensor itself.

4.3 Creating Connections

Click Create Connection tab to open the tab to create new connections.

The information entered depends on the system to be monitored.

The following information needs to be entered for all systems.

Parameters	Values
Connection Name	Specify a name to identify the connection using up to 64 characters.
Connection Type	Specify the type of system from the following options: - RDB

Parameters	Values
	- Text
Description	Enter a description of the connection. This is not required.
Sensor system	Select the sensor system of the connection.
Pushing Event intervals (secs)	Specifies number of interval to send to Monitoring Server from 0-10800 by second. If 0 is specified, event will be sent occasionally.
Starting mode	Select Connection operation mode. There are following options. <ul style="list-style-type: none"> - AUTOMATIC···Start connection automatically. - MANUAL···Start connection manually. - SCHEDULE···Start connection according to specified schedule. Specify [AUTOMATIC] in case you wish to run connection all of the time.

4.3.1 RDB

Connection Status
Create Connection

Create your own Connection.

Name*	Sales Information
Connection Type *	RDB ▼ Form will change depending on Connection Type
Description	<div style="border: 1px solid #ccc; height: 20px;"></div>
Sensor System *	LOCALHOST ▼
Starting mode	AUTOMATIC ▼

JDBC parameters for the target system

DB Type *	Oracle (oracle.jdbc.driver.OracleDriver) ▼
URL *	jdbc:oracle:thin:@[host]:[port 1521]:[SID]
Username *	user1
Password	*****

Advanced JDBC parameters [\[Open/Close\]](#)

Timezone [\[Open/Close\]](#)

Pushing Parameters to the Analytics Server

Pushing Event Intervals (secs) *	0
Replace NULL values with empty strings when sending data	<input type="checkbox"/>

Create
Test Connection

Parameters	Values
JDBC Connections	
Database Type	Specify the type of RDB system database from the following options: <ul style="list-style-type: none"> - Oracle - SQL Server 2000 - SQL Server 2005/2008

Parameters	Values
	- PostgreSQL
JDBC URL	Specify the JDBC URL using the appropriate format for the selected database type.
Username	Specify the username for accessing the database.
Password	Specify the password for accessing the database.
Advanced JDBC Options	
Max active	Specify an integer between 1 and 64 as the maximum number of active connections that can be used by the RDBMS at a time.
Max Idle	Specify an integer between 0 and 64 as the maximum number of connections that can be used by the RDBMS while remaining in an idle state without being released. Connections are released every time a connection is made if 0 is specified.
Wait Time (secs)	Specify an integer between 0 and 86400 as the maximum number of seconds to wait if there are no available connections.
Transaction level	Specifies the RDBMS transaction isolation level of the monitored system. Select one of the following: Default (default setting) READ_COMMITTED (committed reads) READ_UNCOMMITTED (uncommitted reads) REPEATABLE_READ (repeatable reads) SERIALIZABLE (serializable) Specify "Default" to operate using the standard RDBMS transaction isolation level. Supported isolation levels depend on the RDBMS. Refer to the RDBMS manual for details. An error occurs when the sensor is started if an unsupported isolation level is selected. The following levels are not supported under Oracle and should not be selected if Oracle is being used: TRANSACTION_READ_COMMITTED TRANSACTION_REPEATABLE_READ When using Symfoware, the sensor will operate under the isolation level of the Symfoware database environment if that level is stricter than the level chosen here.
Advanced Options	
Timezone	Specify timezone which business server is running. If "LOCAL_TIMEZONE" is selected, timezone which sensor is running will be used. Examples: Japan Standard Time(JST): "Asia/Tokyo" or "Japan" Greenwich mean time(GMT): "Europe/London"
Replace NULL values with empty strings when sending data	You are able to prepare an alert condition by treating NULL value of column as empty strings. Alert settings can be done on Analytics Studio. Check if you require to do such operation.

4.3.2 Text

Connection Status **Create Connection**

Create your own Connection.

Name*	Sales Information
Connection Type *	Text <small>Form will change depending on Connection Type</small>
Description	
Sensor System *	LOCALHOST
Starting mode	AUTOMATIC

Parameters for the target system

No parameters exist for the target system. Please set the parameters using Analytics Studio.

Pushing Parameters to the Analytics Server

Pushing Event Intervals (secs) *	0
----------------------------------	---

There are no items that are specific to text file systems.

4.4 Updating a Connection

To update a connection, click the connection in the **Connection Status** tab and update the information as necessary.

4.4.1 BPMFlow

Modify Connection

Modify the Connection details.

Name *	BPMConnection
Connection Type *	BPMFlow
Description	<input style="width: 90%;" type="text"/>
Sensor System *	LOCALHOST ▾
Starting mode	AUTOMATIC ▾

System Setting

Server Host Name *	<input style="width: 90%;" type="text"/>
Superuser name *	<input style="width: 90%;" type="text"/>
Password *	<input style="width: 90%;" type="password"/>
Naming Service Vendor *	Interstage application server ▾

JDBC

DB type *	Oracle (oracle.jdbc.driver.OracleDriver) ▾
URL *	jdbc:oracle:thin:@[host]:[port 1521]:[SID]
Username *	<input style="width: 90%;" type="text"/>
Password *	<input style="width: 90%;" type="password"/>

Maintenance

JMS Connection URL *	<input style="width: 90%;" type="text"/>
Naming Service Connection URL *	<input style="width: 90%;" type="text"/>
Username	<input style="width: 90%;" type="text"/>
Password	<input style="width: 90%;" type="password"/>

Pushing Parameters to the Analytics Server

Pushing Event Intervals (secs) *	0 <input style="width: 50px;" type="text"/>
----------------------------------	---

Parameters	Values
IBPM System Settings	
Server Host Name	Enter the Server Host Name of the connected IBPM. The Server Host Name can be checked by accessing the following URL and logging on as the administrator. <a href="http://<hostname>:<port number>/console/TenantManager.page">http://<hostname>:<port number>/console/TenantManager.page
Superuser name/Password	Enter the superuser name and password. The superuser name and password are set with the IBPM deployment tool during installation.
Naming Service Vendor	Select the type of application server used to connect to IBPM and RMI from the drop down menu.
JDBC Connections	
Database Type	Select from the drop down menu the database type of the JDBC connection used when the IBPM database was first created.

Parameters	Values
URL	Enter the JDBC URL for the database that IBPM will use.
Username/Password	Enter the username and password for accessing the IBPM database. The username and password are set as the IBPM database user with the IBPM deployment tool during installation.
Maintenance Settings	
JMS Connection URL	Enter the JMS Connection URL. The settings for the application servers are as follows: <hostname> (Interstage) iiop://<hostname> (WebSphere) t3://<hostname>:49950 (WebLogic) jnp://<hostname>:1099 (JBOSS)
Naming Service Connection URL	Enter the Naming Service Connection URL. (This is the same as the JMS connection URL.)
Username/Password	Enter the username and password for the JMS connection if necessary.

4.4.2 MaintenanceBPMFlow

Detail information is not available for this type.

Only Start/Stop operation is available.

4.4.3 BPME

Modify Connection
Modify the Connection details.

Name*	Process Discovery Connection
Connection Type *	BPME
Description	<div style="border: 1px solid #ccc; height: 20px;"></div>
Sensor System *	LOCALHOST
Starting mode	MANUAL

Pushing Parameters to the Analytics Server

Pushing Event Intervals (secs) *	0
---	---

Modify
Test Connection
Cancel

There are no items that are specific to BPME.

4.5 Deleting a Connection

To delete a connection, select the connection to be deleted in the **Connection Status** tab and click the **Delete** button.

Note that data collection will be stopped when a connection is deleted.

Following types of connection cannot be deleted.

- BPMFlow

- MaintenanceBPMFlow
- BPME

4.6 Test Connection

You can confirm the connection to monitoring system by this feature. Click Test Connection button in creation or update screen.

This feature is available when connection type is as RDB or BPMFlow.

Chapter 5 System Settings

Sub-menus for **System Settings** are displayed in the navigation pane of the Analytics Management Console.

The sub-menus link to the following workspaces:

- Database Management
- User Management
- Process Discovery
- UI Management
- Integration Module Management
- Mail
- Data Migration

Each of these windows has a number of tabbed pages containing settings and data.

5.1 Database Management

The **Database Management** workspace has tabs to operate and maintain the Events database:

- JDBC driver settings
- Events DB
- Archive DB
- Process Discovery DB
- Table Management
- Connection Pooling

5.1.1 JDBC Driver Settings

JDBC driver settings contain Java Database Connectivity (JDBC) settings to connect the Analytics Server and databases.

JDBC driver settings	Events DB	Archive DB	Process Discovery DB	Table Management	Connection Pooling
Add or Delete JDBC driver file(s).					
JDBC driver file settings					
JDBC driver file(s)	ojdbc6.jar				
File path	<input type="text"/>				
To apply the changes made to JDBC driver settings, restart the application server.					
<input type="button" value="Add"/> <input type="button" value="Delete"/>					



Note

Restart the application server where the Analytics Server is running if a JDBC driver is added.

5.1.2 Events Database Settings

Events DB shows the type of database environment being used (Oracle, SQL Server, etc.).

Only one Events database may be connected at a time.

If a JDBC driver is selected from the drop-down list, the fields in the **Events DB Connection** table change to suit the selected database type.

The following JDBC compliant databases can be used:

- Oracle
- SQLServer 2005/2008
- PostgreSQL

To use Built-in RDB, please specify "PostgreSQL".

The following example shows Oracle as the selected database type:

Events DB Connection	
JDBC Driver	Oracle oracle.jdbc.driver.OracleDriver
JDBC Connection URL	jdbc:oracle:thin:@[host]:[port 1521]:[SID]
Table Space Name	
User Name	
Password	<input checked="" type="checkbox"/> Set new password
Cannot use the same Schema and User for the Events DB, Archive DB and Process Discovery DB.	

Modify

The example shows that the **Table Space Name** field is displayed because an Oracle database has been selected.



Note

To update value other than password, check off "Set new password". Password input will be required if you check this checkbox.

5.1.3 Archive DB

Open the **Archive DB** tab to configure an Archive Database.

The Archive Database is used to archive events from the Events database to free up space and improve performance.

The Archive Database can also be used to store archive events in a separate database so that they can be analyzed at a later date, thereby freeing up the Events database for day-to-day operations.

The fields in **Archive DB Connection** are identical to the fields in **Events DB Connection**. Refer to "Events DB Connection" for details.

5.1.4 Process Discovery DB

Use this tab to configure the Process Discovery Database.

The following JDBC compliant databases can be used:

- Oracle
- PostgreSQL

The fields in **Process Discovery DB Connection** are identical to the fields in **Events DB Connection**. Refer to "Events DB Connection" for details.

5.1.5 Table Management

Once the Events, Archive, and Process Discovery databases have been defined and registered, their Database tables can be created using the tools in the **Table Management** tab.

The **Table Management** tab displays details for the databases.

This tab also enables you to create system tables and delete (or initialize) data.

Tables contain the data from the events, it is a common a maintenance task to clean out unwanted information from the Events database.

Click the **Table Management** tab in the **Database Management** window to access the table management tools:

Type of database	Status	Status
Events DB	Created	<input type="button" value="Create Table"/>
Archive DB	Not defined	<input type="button" value="Create Table"/>
Process DB	Created	<input type="button" value="Create Table"/>

Deletion Condition for data in System Tables

Delete unnecessary data from the System tables. The deleted data cannot be restored.

Type

- Initialize (Delete all events and alerts.)
- Select Event Group: System
- Select Event: Alert Count System Statistics Event [System]
- Select Alert: Inventory shortage

When the event is deleted, the alert that relates to the event will be deleted at the same time.

Time Range

Time Range (If not checked, the differential collection information of the corresponding event will be initialized.)

Start time: 2012 Oct 31st 00:00:00

End time: 2012 Oct 31st 00:00:00

Password:

The deleted data cannot be restored.

There are two sections and a variety of controls in the tab.

The upper section shows details about registered databases. The lower section allows obsolete data to be deleted.

Type of database

This field displays the status of the databases. An Events database is required, but Archive DBs and Process Discovery DBs are optional.



Note

To use an Archive DB, restart the Analytics Server where the Archive DB was created.

Status

This field displays the status of the system tables of the databases.

The statuses are "Created", "Not defined", and "Error".

"Created" means the system table has been created, registered, and is working correctly.

"Error" means that the table has been created but there is a problem with it.

"Not defined" means that a database has not been created.

Create Table

The **Create Table** button is enabled if the status is "Undefined".
Click the button to create the table used by the databases to manage events.

Clean up Table

Click the **Delete Data** button to clean up the Events DB.

Type

Specify the type of data to be deleted.

Initialize

Deletes all event data and alert data.

If a time range is not specified, the differential collection information for the event is initialized.

Select Event Group

Select an event group name to limit the data to be deleted.

Select an event group from the drop-down list. Event data of the events which is related to selected event group are deleted.

Select Event

Select an event definition name to limit the data to be deleted.

Select an event definition from the drop-down list. The alerts for the selected event are deleted along with the data.

If a time range is not specified, the differential collection information for the event is initialized. **Select Alert**

Select an alert definition from the drop-down list to delete alerts.

Time Range

Specify a period for the data to be deleted. This is not required.

The **End time** is not included in the range.

So if "18:00" is specified, for example, data from 18:00 on the end date is not deleted.



Stop the connection used for the collection of an event if the differential collection information of the event is to be initialized.

The differential collection information of the event is initialized when the connection is restarted after cleaning up the database table.

The differential collection information of the event is also initialized under the following conditions (in addition to the situation when time range is not specified):

- If the type of sensor collecting the event is 'Text' or 'RDB'
- If the Collection Rules is not modified in Analytics Studio between the time the clean up is performed and when the connection is restarted

Password

Enter the password of Super user when you create during install to confirm the operation.

5.1.6 Connection Pooling

Connection Pooling is a way of maintaining performance by keeping a pool of JDBC connections open. The connections are closed when the JDBC connection is no longer required.

Configure Connection Pooling in this tab. The administrator can decide how many connections to have in a pool and how long they are to remain open when not being used.

Click **Connection Pooling** to open the tab.

Usage of Pooling	Max Number of Connections	Max Waiting Time for Connection
Searching for Events and Alerts *	8	60 second(s)
Event Calculation *	4	300 second(s)
Event Registration *	4	300 second(s)

Usage of Pooling

Shows the types of Connection Pooling and has entries for how many times an available connection can be used.

There are three types:

- Searching for Events and Alerts
- Event Calculation
- Event Registration

Please set appropriate value according to actual operation since setting parameters will affect above processing if parameter exceeds max connections or max wait time.

Searching for Events and Alerts

These connections are used to search for business events, calculation events, and alert data when charts and alerts are displayed in the Dashboard.

Event Calculation

These connections are used to search for general events during event calculations and to store statistics events as part of the Event Calculation processing.

Event Registration

These connections are used to store business events sent from sensors to the Events database.

Modify button

Click the **Modify** button to apply the changes. Restart the Analytics Server for the changes to take effect.

5.2 User Management

User Management is where you manage the users and groups used by the dashboard. Analytics Studio, Process Analyzer, and Process Generator. Users and groups can be created, modified, and deleted here. There are also settings for authentication and security.

5.2.1 User Management

Create, modify, and remove users in the **User** tab.

5.2.1.1 User List

Users available in the system are listed in the User List tab.

The user IDs are those specified in the **Create User** tab. Refer to the next section for details.

The list also shows other details about the user.

Click the user ID link to see more details about the user and to modify their details.

User | Group | Authentication Type | Security Settings
View options related to Analytics Users.

User List | Create User | Import Users
View the Analytics User list.

	User ID	User Name	Assigned Groups	Description
<input type="checkbox"/>	bpm	BPM Sample User	Administrator User	bpm
<input type="checkbox"/>	eric	Eric	Dashboard User	
<input type="checkbox"/>	jimmy	Jimmy	Presentation Designer Publisher	
<input type="checkbox"/>	steve	Steve	Process Generator User	
<input type="checkbox"/>	tom	Tom	Studio Super User	
<input type="checkbox"/>	zack	Zack	Data Analyst Process Analyzer User	

Delete

Delete button

To delete a user, select the checkbox and click the **Delete** button.

5.2.1.2 Creating Users

Click the **Create User** tab to create new users.

User Group Authentication Type Security Settings							
View options related to Analytics Users.							
User List Create User Import Users							
Create a new Analytics User.							
Analytics User Definition							
User ID *	<input type="text" value="john"/>						
User Name	<input type="text" value="John Smith"/>						
E-mail Address	<input type="text" value="jonS@xxx.yyy.com"/>						
Password *	<input type="password" value="*****"/>						
Password (confirm) *	<input type="password" value="*****"/>						
Assigned Groups *	<table border="1"> <tr> <td>Available Groups</td> <td>Assigned Groups</td> </tr> <tr> <td> --- Please Select --- Administrator User Dashboard User Data Analyst Process Analyzer Power User Process Analyzer User Process Generator User Publisher Studio Super User </td> <td> --- Please Select --- Presentation Designer </td> </tr> <tr> <td></td> <td style="text-align: center;"> <input type="button" value="->"/> <input type="button" value="<-"/> </td> </tr> </table>	Available Groups	Assigned Groups	--- Please Select --- Administrator User Dashboard User Data Analyst Process Analyzer Power User Process Analyzer User Process Generator User Publisher Studio Super User	--- Please Select --- Presentation Designer		<input type="button" value="->"/> <input type="button" value="<-"/>
Available Groups	Assigned Groups						
--- Please Select --- Administrator User Dashboard User Data Analyst Process Analyzer Power User Process Analyzer User Process Generator User Publisher Studio Super User	--- Please Select --- Presentation Designer						
	<input type="button" value="->"/> <input type="button" value="<-"/>						
Description	<input type="text"/>						
<input type="button" value="Create"/>							

User ID

Enter a new Analytics user ID. Specify a user ID of 64 characters or less.

User Name

Type a name for the Analytics user.

E-mail Address

Enter the user's e-mail address.

Password

Enter a new password for the user ID.

Password (confirm)

Specify the new password again.

Assigned Groups

Assign the user to a group.

Description

Enter a description for the user.

Create button

Click the **Create** button to save the new user.

The new user will be added to the **User List** tab and can now be used in Analytics.

Note

If you configure the Process monitoring, set the Login ID using the following format:

```
IBPM User ID@tenant name
```

Specify "Default" as the tenant name if Non-SaaS mode is used.

Note

Changes to user information and permissions will be available during user login.

5.2.1.3 Import Users

Users can also be added by importing them in CSV or IBPM import compliant LDIF files.

User Management : User : Import Users [See Setup Steps](#)

Analytics System > System Settings > User Management > User > Import Users

User Group Authentication Type Security Settings
View options related to Analytics Users.

User List Create User **Import Users**
Import User. Allows Creation, Deletion or Updation of Users.

Analytics User Definition

CSV Format LDIF Format

Note: If Passwords are imported they must be in plain text

参照...

Import

File formats

Specify CSV or IBPM import compliant LDIF.

Please specify in a plain text format when you are importing password information in LDIF file. Password information cannot be extracted if encrypted.

Format according to IBPM import LDIF file is supported.

Please refer to IBPM "Server and Console Installation Guide" for detail.

CSV file format

- file format

```
Operation type, user id, password, user name
```

Operation type: A(Add), U(Update), D(Delete)

- example

```
A,tanaka,tan123,Tanaka
D,sato,sato123,Sato
U,ito,ito123,saito
```

[2012/10/31 23:43:09] INFO BADM0626: Import User(s) Successful.

1 SUCCESS : A : tanaka Added user tanaka successfully.

2 FAILURE : D : sato Specified user sato is not found.

3 FAILURE : U : ito Specified user ito is not found.

File name

Specify the file to be imported.

Import button

Click the **Import** button to save the new users based on the data in the file.

The new user will be added to the **User List** tab and can now be used in Analytics.



Note

Please note that user created in import is not assigned to any groups. Assign to appropriate group after creation.

5.2.2 Managing Groups

Create, modify, and delete groups in the **Group** tab.

5.2.2.1 Group List

Groups available in the system are listed in the Group List tab.

This tab also has the descriptions of the groups.

Click the group link to see more details about the group and to modify its details.

The following table shows the default groups:

No.	Group name	Description
1	Dashboard User	This is the group for general users of the Dashboard. They have permissions to view the Dashboard.
2	Process Analyzer User	This is a group for users that can navigate in the Process Analyzer. They have permissions to view the Process Analyzer.
3	Process Analyzer Power User	In addition to Process Analyzer User permissions, users in this group also have permissions to create chart and alert definitions in Analytics Studio.
4	Process Generator User	This is a group for users that can control Process Generator tool.
5	Data Analyst	Users in this group determine the data to be collected and analyzed in Analytics Studio. They have permissions to create collection rules and create events.
6	Presentation Designer	Users in this group determine how data is presented in Analytics Studio. They have permissions to create charts and layouts.
7	Studio Super User	Users in this group have permissions to change any of the elements in Analytics Studio.

No.	Group name	Description
8	Publisher	Users in this group have permissions to publish in Analytics Studio.
9	Administrator User	Users in this group have administrator permissions. This user has all permissions other than those reserved for the superuser.

Apart from the above users, there is a superuser that is created when the software is installed. The permissions granted to this user cannot be created in this tab.

The superuser has the same permissions as the Administrator User and also has the permissions to start and stop the Analytics Server.

Delete button

To delete a group, select the checkbox and click the **Delete** button.

The default groups cannot be deleted.



Note

Please note that if you remove group, user who was assigned to only that group will not have any permission.

User Group Authentication Type Security Settings

View options related to Analytics User Groups.

Group List Create Group

View the Analytics Group list.

	Group Name	Description
	Administrator User	User who have permission to operate Management Console and other applications
	Dashboard User	User for Dashboard navigation
	Data Analyst	User for editing datasource specific elements on Studio
<input type="checkbox"/>	Generic Users	
	Presentation Designer	User for editing presentation specific elements on Studio
	Process Analyzer Power User	User for Process Analyzer navigation and element creation
	Process Analyzer User	User for Process Analyzer navigation
	Process Generator User	User for Process Generator navigation
	Publisher	User who can do Publishing on Studio
	Studio Super User	User with all permissions on Studio

Delete
Select All
Clear All

5.2.2.2

Creating Groups

Click the **Create Group** tab to create new groups.

View options related to Analytics User Groups.

Create a new Analytics Group.

Analytics Group Definition

Group Name *

Description

Assign Users

Available Users	Assigned Users
bpm eric tom zack	jimmy steve

Navigation buttons: > <

Permissions [\[Open/Close\]](#)

Tool	Permission	Permission Target	Assign
Studio	Editing Permission		
	Publishing Permission		<input type="checkbox"/>
	Unlocking		<input type="checkbox"/>
Process Analyzer	Process Analyzer Navigation		<input type="checkbox"/>
Process Generator	Process Generator Navigation		<input type="checkbox"/>
Dashboard	Dashboard Navigation		<input type="checkbox"/>

Group name

Enter a group name. Specify a user ID of 64 characters or less.

The default groups cannot be renamed.

Description

Enter a description for the group.

Assign Users

Assign users to the group. Users can be members of more than one group.

Permissions

Specify the permissions that members of the group will have.

The permissions of the default groups cannot be changed.

No.	Tools	Operations	Tool element
1	Analytics Studio	Editing	Event Modifiers
2			Collection Rule, Event Groups & Events
3			Alerts
4			Alert Filters
5			Charts
6			Layout
7			Dashboard Profiles
8			Dashboard Groups
9			Reports
10			Publishing
11	Unlocking	-	
12	Process Analyzer	Use of the Process Analyzer	-
13	Process Generator	Use of the Process Generator	-
14	Dashboard	Navigate in the Dashboard	-



Note

Changes to user information and permissions will be available during user login.

5.2.3 Authentication Type

Determine the type of authentication to be used.

User
Group
Authentication Type
Security Settings

View options related to Analytics User Authentication.

User Authentication
Login Module List
Create a new Login Module

Modify the Authentication type.

Authentication Type for the Dashboard

Modify

After modification, restart the Analytics Server to apply the changes.

Authentication Type

This is list of the authentication types. (Including the option to use no authentication at login.)

If a user-defined LoginModule is defined, it will be added to the list. Select an authentication type from the following:

Built-in

The authentication provided by this product is used, without accessing an external authentication server.

Do not authenticate

No authentication is performed at login.

LDAP (authentication server)

Authentication is performed via an LDAP server.

Active Directory Service (authentication server)

Authentication is performed via an Active Directory Service.

Native Windows (authentication server)

Windows account management is used for authentication.

Interstage SSO (authentication server)

Authentication is performed via Interstage SSO. In **Option**, specify the business system name using the format "business-system-name=<business system name>".

For example: business-system-name="Business001"

User-defined LoginModule

Authentication is performed against a custom Login Module.

Modify button

Each authentication type has different requirements.

No items need to be changed for "Built-in" and "Do not Authenticate".

There are a variety of fields and options displayed when "LDAP", "Active Directory Service", or "Native Windows" is selected.



Point

If **Active Directory Service** is to be selected as the authentication type, please fill out the fields as follows:

Name	Example	Description
Server Address	hostname.domain.fujitsu.com	Specify the hostname (FQDN, IP address, etc.) of authentication server.
Port Number	389	Specify the port number of authentication server.
Base DN	DC=hostname,DC=domain,DC=fujitsu,DC=com	Specify the base DN of authentication server.
Organizational Unit	CN=Users	Specify the organizational unit of users. (Optional)
key attribute	sAMAccountName	Specify the key attribute name of authentication server to identify a user.
Object Class	user	Specify the object class name of key attribute.
Enable SSL Encryption	Not Use	If using SSL encryption to access to authentication server, please select Use ; otherwise, Not Use .
bindDN	CN=Administrator,CN=Users,DC=hostname,DC=domain,DC=fujitsu,DC=com	Specify the administrator DN of Active Directory to search users.
bindPassword	*****	Specify the password of the administrator DN as mentioned above.

Name	Example	Description
Time Out	0	Specify the timeout to search user DN. If setting 0, the timeout is infinite.

 **Note**

Restart the Analytics Server for changes to take effect.

 **Note**

If Interstage SSO is to be selected as the authentication type, first setup Interstage Single sign-on on the Interstage Application Server. Also confirm that the following items are set correctly on the system where the Dashboard is running.

- Ensure a sign off URL is requested
- Ensure the single sign-on JavaAPI is used
- Ensure session management is used
- Set "/ibpmm/dashboard/" as the protection path.

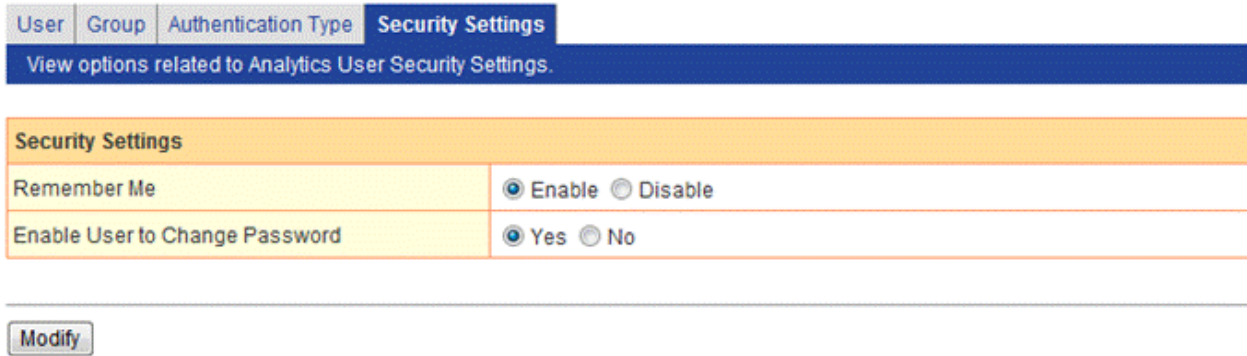
Login Module List and Create a new Login Module

These two tabs are used to manage user-defined LoginModules.

Use this tab to develop LoginModules that extend the functionality of Dashboard authentication.

5.2.4 Security Settings

Set up the security for the system in the **Security Settings** tab.



The screenshot shows a navigation bar with tabs: 'User', 'Group', 'Authentication Type', and 'Security Settings'. Below the tabs is a blue header bar that says 'View options related to Analytics User Security Settings.' The main content area is titled 'Security Settings' and contains two rows of settings:

Remember Me	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Enable User to Change Password	<input checked="" type="radio"/> Yes <input type="radio"/> No

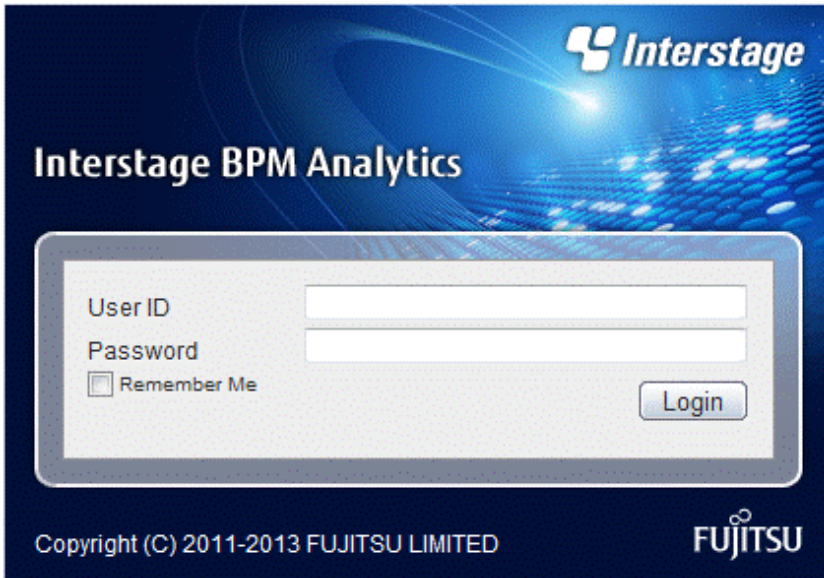
At the bottom of the settings area is a 'Modify' button.

Remember Me

Select whether to enable users to save their user ID in the login window.

The default is "Disable".

The "Remember Me" checkbox will not be shown in the login window when "Disable" is selected.

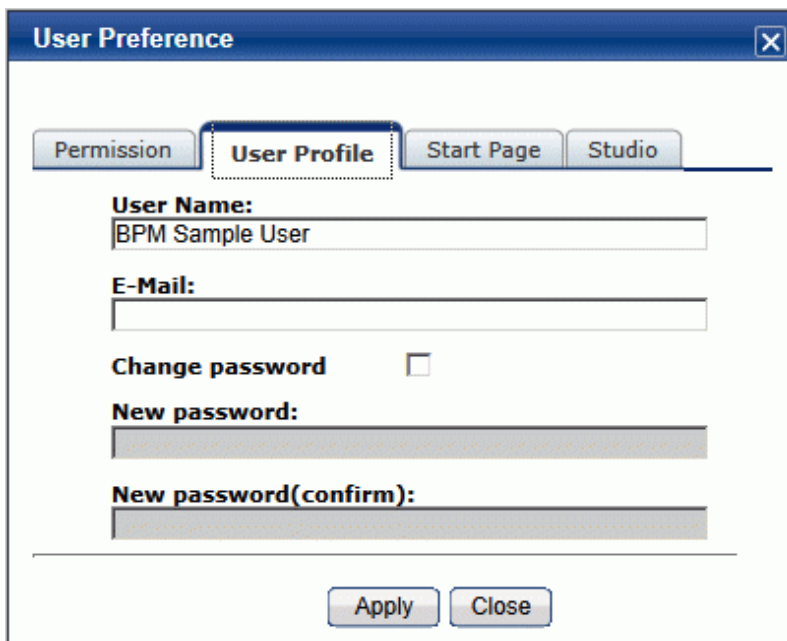


Enable User to Change Password

Select whether to enable users to change their passwords.

The default is "Yes".

Users can change their own login passwords for their user definition from the **User Profile** tab.



5.3 Process Discovery

Specify settings to integrate Process Discovery and Analytics.

Fixed-point Monitoring Information	
Model Name	Please select a Model Name
System Sensor	LOCALHOST
Event Group	System
Event Name *	
Scheduler	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
Schedule Type	<input type="radio"/> Accumulate Data <input checked="" type="radio"/> Update Data
Execution Schedule	Yearly <input type="button" value="v"/> On Jan <input type="button" value="v"/> 1st <input type="button" value="v"/> <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday At 00 <input type="button" value="v"/> : 00 <input type="button" value="v"/> Interval: 1 <input type="button" value="v"/> day(s) <input type="button" value="v"/>

5.3.1 Fixed-point Monitoring Settings

A unit of analysis called a "model" is generated for each general event with Process Discovery's flow generation tool.

Each model requires collection definitions, which are necessary when fixed point analysis is to be performed on business processes. Allocate the definitions to the models in the **Fixed-point Monitoring Settings** tab.

5.3.1.1 Event definition information

Model Name

This shows a list of models created with the flow generation tool that have been generated correctly.

Select a model from this list when allocating an Analytics collection definition.

System sensor

This shows a list of system sensors configured in Analytics.

The flow information generated by Process Discovery is saved as data so that it can be analyzed in Analytics when performing fixed point analysis on business processes. Data collection uses "Process Discovery Sensor Connection" to do this.

"Process Discovery Sensor Connection" operates under the system sensor specified here.

Event Group

This shows a list of event groups configured in Analytics.

The Analytics collection definition is generated under the Event Group specified here.

Event Name

Specify a name for the Analytics event definition.

Scheduler

Specify **Enabled** if fixed point analysis of business processes is to be performed according to a schedule. Specify **Disabled** if not.

Schedule Type

Specifies how to save process information generated in business fixed-point monitoring.

If you specify "Accumulate Data", add new process information to existing process information.

If you specify “Update Data”, existing process information will be deleted and save only create process information.

Execution Schedule

Set up the schedule if fixed point analysis of business processes is to be performed according to a schedule. The default is every day at 00:00.

5.3.1.2 Operations

Create button

An Analytics collection definition is generated according to the event definition.

Modify button

An Analytics collection definition is modified according to the event definition.

Delete button

An Analytics collection definition is deleted according to the event definition.

5.3.2 IBPM Integration Settings

Set the information required for Process Discovery to integrate with Interstage BPM/Wily events in the **IBPM Integration Settings** tab.

Fixed-point Monitoring Settings **IBPM Integration Settings**

Configure the IBPM integration parameters.

Data Generation Method

Scheduler Enabled Disabled

Execution Schedule

Interval On Jan 1st

Monday Tuesday Wednesday Thursday Friday

Saturday Sunday

At 00 : 00

Interval: 1 day(s)

Integration Data

Preservation Type Persistence Temporary

Modify

After modification, restart the Analytics Server to apply changes.

5.3.2.1 Generating Data

Scheduler

Select **Enabled** to have the data generated according to a schedule. Specify **Disabled** if not.

Execution Schedule

Setup a schedule to generate Interstage BPM event data for use in Process Discovery. The default is every day at 00:00.

5.3.2.2 Integration Data

Preservation Type

Select how the data will be stored. Select **Persistence** to accumulate the data in Process Discovery. Select **Temporary** to discard the data.

5.3.2.3 Operations

Modify button

Once the changes have been entered, click the **Modify** button to enter the changes.

5.4 UI Management

- The following operations are available from the **UI Management** sub-menu of the Management Console: UI Customize
- Label Substitution

Click the sub-menu to show the options in the workspace.

Tabs in each of the workspaces open pages with different settings.

5.4.1 UI Customize

The **UI Customize** tab has settings for customizing the dashboard's header and navigation pane.

Customized titles are displayed even if the locale of the browser is changed.

5.4.1.1 Customizing UI Parts

The **UI Parts Customize** tab allows the logo displayed in the dashboard's header to be customized.

UI Customize | Label Substitution
View options to customize the Dashboard UI.

UI Parts Customize | Dashboard Menu
View options related to UI Parts Customize.

Window Title	
Customize Window Title	<input type="radio"/> Use Default <input checked="" type="radio"/> Customize
Title String	ja Interstage BPM Analytics V12.1 en Interstage BPM Analytics V12.1

Note : Uploaded Image file is scaled down to smaller than "Width:300px, Height:34px" in the Dashboard

Product Logo Image	
Customize Product Logo	<input checked="" type="radio"/> Use Default <input type="radio"/> Customize <input type="radio"/> Do not Display
Add Image File	<input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Add To List"/>
Select Image	Image File

Corporate Logo Image	
Customize Corporate Logo	<input checked="" type="radio"/> Use Default <input type="radio"/> Customize <input type="radio"/> Do not Display
Add Image File	<input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Add To List"/>
Select Image	Image File

Setting the Window Title

You can specify browser window title up to 1024 characters.

The name of this product is displayed in default.

Select **Customize** for **Customize Window Title** and enter the new title in **Title String**.

The name of this product is displayed when **Use Default** is selected.

Setting the Product Logo Image

You can change the product logo in Upper left of dashboard.

The logo of this product is displayed in default.

To change the product logo, select **Customize** for **Customize Product Logo**. Next, browse to the image file in **Add Image File** and click **Add to List** to upload the file. Finally, select the image to be displayed in the list of image files.

To remove a file from the list, click the **Delete** button.

The logo of this product is displayed when **Use Default** is selected. Select **Do not Display** if a logo is not to be displayed.

Setting the Corporate Logo Image

You can change the corporate logo in Upper right of dashboard.

The logo of FUJITSU is displayed in default.

To change the corporate logo, select **Customize** for **Customize Corporate Logo**. Next, browse to the image file in **Add Image File** and click **Add to List** to upload the file. Finally, select the image to be displayed in the list of image files.

To remove a file from the list, click the **Delete** button.

The logo of this product is displayed when **Use Default** is selected. Select **Do not Display** if a logo is not to be displayed.

Modify button

Click the **Modify** button at the bottom of the screen to save the settings.

Settings are not saved if the tab or workspace is changed without clicking the button.

5.4.1.2 Dashboard Menu

The Dashboard Menu tab has settings for customizing the dashboard's navigation pane.

The screenshot displays the 'Dashboard Menu' configuration page. At the top, there are two tabs: 'UI Customize' (selected) and 'Label Substitution'. Below the tabs, there are two blue bars with white text: 'View options to customize the Dashboard UI.' and 'View options related to Dashboard Menu.' The main content area is divided into five sections, each with a title bar and a 'Name' field for Japanese and English labels:

- Overview**: ja オーバービュー, en Overview
- Alert**: ja アラート, en Alert
- Business Reports**: ja 業務レポート, en Business Reports
- Search**: ja 検索, en Search
- Process Performance**: ja プロセス分析, en Process Performance

At the bottom of the page, there are two buttons: 'Modify' and 'Restore Default'.

The following table describes the items in the tab.

Item Name	Description
Overview	Specify settings for the Overview display in this section.
Alerts	Specify settings for the Alerts display in this section.
Business Reports	Specify settings for the Business Reports display in this section.
Search	Specify settings for the Search display in this section.
Process Performance	Specify settings for the Process Performance display in this section.

Modify button

Click the **Modify** button at the bottom of the screen to save the settings.

Settings are not saved if the tab or workspace is changed without clicking the button.

Restore Default button

Click **Restore Default** button to restore the settings to the default.

Default value is as following:

Parameters	Japanese Name	English Name
Overview	オーバービュー	Overview
Alert	アラート	Alert
Business Reports	業務レポート	Business Reports
Search	検索	Search
Process Performance	プロセス分析	Process Performance

5.4.2 Label Substitution

This workspace is where you can control how event data is displayed. It shows lists of the values and their substitutions, and allows you to modify and delete the items.

5.4.2.1 List of Registered Definitions

A list of custom labels is shown in the **Label Substitution List** tab.

View options related to Label Substitution definitions.

View the Label Substitution list.

	Definition Name	Register Type	Activated	Description	Action
<input type="checkbox"/>	Definition A	CSV	Activated		Download

The following table describes the items in the tab.

Item Name	Description
Definition Name	Displays the name of the label substitution definition. these names must be unique. click the name to modify the label substitution definition.
Register Type	Displays the registration type of the label substitution definition. The registration to mapping table changes depending on the type.
Activated	Displays whether the related label substitution definition can be used.
Description	Displays a description of the label substitution definition. The descriptions are taken from registered resources. If the resources for the language cannot be found or if undefined in the resource, this is not displayed.
Action	Downloads the current label substitution table. It is saved in CSV format. Charset Type is Shift-JIS.

Deleting definitions

To delete charts, select its checkbox and click the **Delete** button.

5.4.2.2 Creating New Label Substitution Definitions

Open the **Create a Label Substitution Definition** tab to create new label substitution definitions.

Label Substitution Definition	
Definition Name *	<input type="text"/>
Register Type	CSV ▾
Activated	<input checked="" type="radio"/> Deactivated <input type="radio"/> Activated
Description	<input type="text"/>

Specify CSV File	
Upload File *	<input type="text"/> <input type="button" value="Browse..."/>
Charset Type	Shift-JIS ▾

The following table describes the items in the tab.

Item Name	Description
Definition Name	The name of the label substitution definition. Names should be unique.
Register Type	The registration type of the definition. CSV: Upload a CSV file to update the mapping table.
Activated	Select either “Deactivated “ or “Activated” to disable or enable the definition
Description	A description of the definition.
Upload File	Select a CSV file to register in the mapping table.
Charset Type	Specify the charset type of the upload file. You can select "Shift-JIS" or "UTF-8".

 **Note**

The CSV consists of keys and their corresponding value.

Keys (the values on the left) must be unique.

Examples

"0001","Orange"

"0002","Apple"

"0003","Banana"

 **Note**

Use the non-BOM file if the encoding type of the text file is UTF-8.

Registering label substitution definitions

To upload a new label substitution definition, specify the files in the fields and then click the **Create** button.

The new definition is added to the list of definitions and can be select in Analytics Studio.

5.4.2.3 CSV Upload

From the **Label Substitution List** tab, select an existing label to display the **CSV Upload** tab.

This allows you to update the mapping table of a label substitution definition.

This has a similar function to the file upload feature in the **Create a Label Substitution Definition** tab to select a CSV file to register in the mapping table.



Using this feature deletes the previous table. Download the table to keep a copy if necessary.

5.4.2.4 Modify Settings

This updates the label substitution definitions.

The items are the same as those in the **Create a Label Substitution Definition** tab.

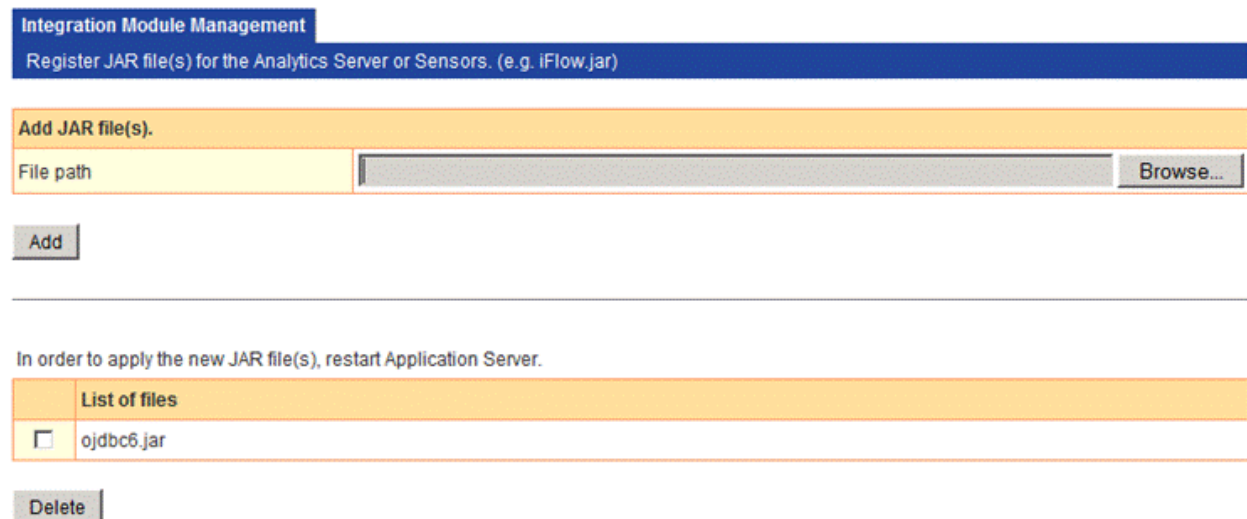
5.5 Integration Module Management

Integration Module Management is used to manage the integrated modules necessary for the Analytics Server and its sensors to work.

The major uses for these modules are:

- As JDBC drivers to access the Administrative database
- As JDBC drivers used by RDB sensors to access the business database
- As client JAR files for workflow sensors to access the Analytics server

View a list of modules and add new modules in the **Integration Module Management** tab.



The screenshot shows the 'Integration Module Management' interface. At the top, there is a blue header with the text 'Integration Module Management' and 'Register JAR file(s) for the Analytics Server or Sensors. (e.g. iFlow.jar)'. Below this is a yellow section titled 'Add JAR file(s)'. It contains a 'File path' input field with a 'Browse...' button to its right. Below the input field is an 'Add' button. A horizontal line separates this section from the next. The next section is titled 'In order to apply the new JAR file(s), restart Application Server.' Below this is a table with a yellow header 'List of files'. The table has one row with a checkbox and the text 'ojdbc6.jar'. Below the table is a 'Delete' button.

5.5.1 Add Integrated Modules

Add JAR file(s)

Enter the path of the file to be added as a module in this field.

Enter the correct path or click the **Browse** button and find the file.

Add button

Click **Add** to add the file to the server.

Delete button

To delete a file, select the checkbox and click the **Delete** button.



Restart the application server for the changes to take effect.

5.5.2 List of Files

This shows a list of the files added to the Analytics Server.

The files are in .JAR format. JAR format is the format for Java archives. These files include the Java classes that implement interfaces in databases and systems.

5.6 Mail

The Analytics Server detects alerts based on the definitions in the Analytics Studio and transmits them as e-mail messages. The following settings allow these messages to be transmitted.

There are three tabs in the **Mail** workspace.

- SMTP Server
- SMTP Authentication
- POP before SMTP Authentication

5.6.1 SMTP Server

Set the addresses of the SMTP (Simple Mail Transfer Protocol) server and sender in the **SMTP Server** tab.

The current SMTP Server settings are shown when the **SMTP Server** tab is opened. All of the settings in this tab can be modified.

SMTP Server	
SMTP Server Address	smtp.xxx.fujitsu.com
SMTP Port Number *	25
Sender Address	bpmanalytics@.xxx.fujitsu.com
Retry Count *	5 time(s)
Retry Interval *	10 second(s)

Modify

These are the settings that can be made:

SMTP Server Address

Specify the host name (FQDN) or IP address of the SMTP Server used to transmit the messages.

SMTP Port Number

Specify the SMTP port number using an integer between 1 and 65535. Specify "25" under normal circumstances.

Sender Address

Enter the address to be used as the sender when transmitting the messages. This can be a string of up to 256 characters.

Retry Count

Specify the number of retries to be attempted when the mail server cannot be connected, using an integer between 0 and 10.

Retry Interval

Specify the number of seconds between retries when the mail server cannot be connected, using an integer between 0 and 20. There is no interval between retries when "0" is specified.

Modify button

Enter the changes and click the **Modify** button.

Restart the Analytics server for changes to take effect.

5.6.2 SMTP Authentication

The current SMTP Authentication settings are shown.

SMTP Authentication	
SMTP Authentication	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Account Name	<input type="text"/>
Password	<input type="checkbox"/> Set new password <input type="text"/>

SMTP Authentication

Select whether to enable SMTP authentication.

The rest of the fields in this tab are grayed out and disabled if "Disable" is selected.

The settings are enabled when "Enable" is selected.

Account Name

Enter the account name of the SMTP server.

This can be a string of up to 256 characters long.

Password

Select the **Set new password** check-box and enter the new password in the field to set a new password or change the existing one.

This can be a string of up to 256 characters long.

Modify button

Enter the changes and click the **Modify** button.

Restart the Analytics server for changes to take effect.



To change items other than **Password**, cancel the **Set new password** check box. If the **Set new password** check box is selected, the password will have to be entered if other items are changed.

5.6.3 POP before SMTP Authentication

Enter the address and account name of the POP-before-SMTP type authentication POP (Post Office Protocol) server.

SMTP Server	SMTP Authentication	POP before SMTP Authentication
Modify the POP before SMTP Authentication settings.		
POP before SMTP Authentication		
POP before SMTP Authentication	<input checked="" type="radio"/> Disable <input type="radio"/> Enable	
POP Server Address	<input type="text"/>	
POP Port Number *	<input type="text" value="110"/>	
Account Name	<input type="text"/>	
Password	<input type="checkbox"/> Set new password <input type="text"/>	

POP before SMTP Authentication

Select whether to enable or disable POP before SMTP authentication.

The rest of the fields in this tab are grayed out and disabled if "Disable" is selected.

The settings are enabled when "Enable" is selected.

POP Server Address

Specify the address of the POP server used for authentication. This can be a string of up to 256 characters.

POP Port Number

Specify the number of the port used for POP. Specify an integer between 1 and 65535.

Specify "110" under normal circumstances.

Account Name

Specify the account name used by the POP server. This can be a string of up to 256 characters long.

Password

Select the **Set new password** check-box and enter the new password in the field to set a new password or change the existing one.

This can be a string of up to 256 characters long.

Modify button

Once the changes have been entered, click the **Modify** button to enter the changes.



To change items other than **Password**, cancel the **Set new password** check box. If the **Set new password** check box is selected, the password will have to be entered if other items are changed.

5.7 Data Migration

Archive rules are used to maintain the Events database and Archive DB.

Archive rules act as the data path between the Events database and Archive DB.

Rules are created by the administrator to delete obsolete data from the Events database or move it to the Archive DB.

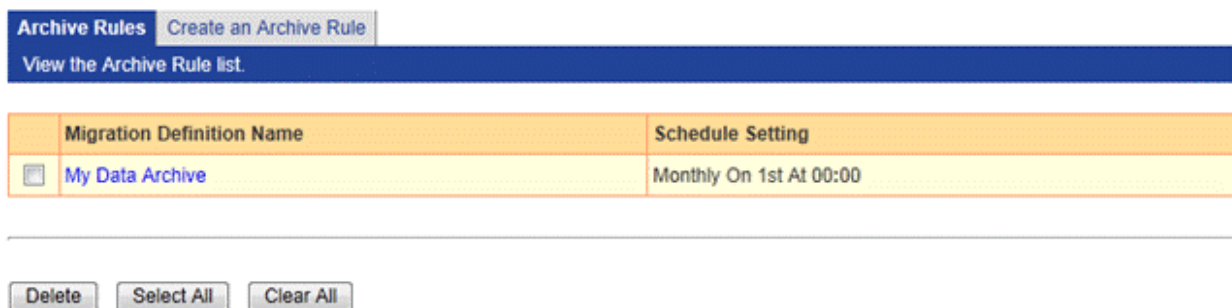
A variety of rules can be set for migrating data. For example, important historical data can be migrated to the Archive DB, while obsolete data can be deleted.

The **Data Migration** workspace has two tabs.

- Archive Rules
- Create an Archive Rule

5.7.1 Archive Rules

A list of archive rules is shown in the **Archive Rules** tab, these rules are used to migrate data to the Archive DB.



The screenshot shows a web interface for managing archive rules. At the top, there are two tabs: "Archive Rules" (selected) and "Create an Archive Rule". Below the tabs is a blue bar with the text "View the Archive Rule list." Below this is a table with two columns: "Migration Definition Name" and "Schedule Setting". The table contains one row with a checkbox, the name "My Data Archive", and the schedule "Monthly On 1st At 00:00". Below the table are three buttons: "Delete", "Select All", and "Clear All".

	Migration Definition Name	Schedule Setting
<input type="checkbox"/>	My Data Archive	Monthly On 1st At 00:00

Each rule name is shown with its **Execution Schedule**.

Create new rule names and schedules in the **Create an Archive Rule** tab. Refer to "Create an Archive Rule" for details.

To delete a rule, select its check-box and click the **Delete** button.

To delete all the rules, click the **Select All** button and then click the **Delete** button.

Click a check-box to deselect the associated rule. Click the **Clear All** button to clear all the check-boxes.

5.7.2 Create an Archive Rule

Click the **Create an Archive Rule** tab to create new archive rules.

Archive Rules **Create an Archive Rule**

Create a new Archive Rule for Data Migration.

Migration Definition Name *

Schedule Setting

Schedule Type On

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

Execution Time (HH:MM) :

Events to Migrate

Migration Type Delete from Events DB Migrate to Archive DB

Migration Target Event Group Event Alert

Migrate Alerts with related Events.

Range for leaving Events DB
The range set as Present Event Period will be kept on the Events DB without being migrated.

Migrate uncompleted process instance Yes
Force delete if the abnormal instance not completed in the specified period.

Migration Target	Migration Mode	Length of Present Event Period	Migrate Alerts	
System	Delete from Events DB	<input type="text" value="1"/> <input type="text" value="month(s)"/>	Yes	<input type="button" value="Delete"/>

Enter a new rule name in the **Migration Definition Name** field and set the following parameters.

Migration Definition Name

Enter a name for the rule.

Schedule Setting

Set a schedule for the execution of the data migration rules.

The default is to execute the rules at 00:00 on the first day of every month.

Migration Type

Select whether to migrate the data to the Archive DB or to delete from the Events database.

Migration Target

Select the event data to be migrated.

Select one of the following:

- Event Group
- Event
- Alert

Migrate Alerts with related Events

This option is available when event group or events is specified as migration target.

If this option is specified, related alerts with events will also be migrated.

Range for leaving Events DB

Events within the period specified are excluded from migration and left on the Events database. The following units of time are available.

- Years
- Months
- Days

Migration of uncompleted process instance

These options are effective on work flow events to be deleted. Work flow events are made up of a chain of processes in progress ("start", "order", "approval", "dispatch", "end", for example).

Analytics Server will not delete the chain of events that has not yet finished. If this option is selected, however, Analytics Server will delete such events.

Add to List button

A variety of conditions can be set in the data migration rules.

Click the **Add to List** button to add the newly define condition to the bottom of the list.

List of conditions

A list of migration conditions associated with a data migration rule is shown. A variety of conditions can be set in each of the data migration rules. Details about the conditions are shown in the list.

To delete a condition from the list, click the **Delete** button.

Create button

Click the **Create** button to save the rule.

The new archive rule will now appear in the list in the **Archive Rules** tab. Refer to "Archive Rules" for details.

Chapter 6 Management Command Line User Interface

Some of the functionality of this software can also be achieved by running commands.

Some are offered as alternatives to using the Management Console, while others can only be achieved by using commands.

To use the commands, enter them in the interface provided by the operating system.

The results of the commands are either shown through commands or as messages on the screen of the terminal.

6.1 Management Commands Overview

The following commands are available:

6.1.1 Analytics Server start/stop

- [6.2.1.1 bpmstart](#)
Starts the Analytics Server
- [6.2.1.2 bpmstop](#)
Stops the Analytics Server
- [6.2.1.3 bpmstat](#)
Displays the operating status of the Analytics Server

6.1.2 Restoring status or restarting operation

- [6.2.2.1 bpmescalateaction](#)
Used to repeat Escalation when failures occur in the Events database
- [6.2.2.2 bpmregisterwef](#)
Re-registers event information that failed to be registered in the Events database
- [6.2.2.3 bpmupdatesensorconf](#)
Displays and updates connections to the Analytics Server used by sensors
Use to adjust the Analytics Server connection parameters (IP address, server name, and port number of the Web server, etc.), for example, if they were entered incorrectly when the sensors were installed.

6.1.3 Exporting data

- [6.2.3.1 bpmexport2csv](#)
Outputs data (such as general events and statistics events in the Events database) so it can be analyzed or used to link to other systems.

6.1.4 Backup/Restoring

- [6.2.4.1 bpmbackup](#)
Performs back up of Analytics Server resources
- [6.2.4.2 bpmrestore](#)
Restores Analytics Server resources
- [6.2.4.3 bpmsensorbackup](#)
Performs back up of remote sensors
- [6.2.4.4 bpmsensorrestore](#)
Restores remote sensors

- [6.2.4.5 bpmtextsensorbackup](#)
Performs back up of Windows Service Edition Text File Sensors
- [6.2.4.6 bpmtextsensorrestore](#)
Restores Windows Service Edition Text File Sensors
- [6.2.4.7 aps_start](#)
Starts the application server execution environment where the Analytics Server is deployed
- [6.2.4.8 aps_stop](#)
Stops the application server execution environment where the Analytics Server is deployed

6.2 Using Management Commands

6.2.1 Analytics Server start/stop

6.2.1.1 bpmstart

Description

Starts the Analytics Server

Command name

bpmstart

Syntax

bpmstart -p AdminPassword

Parameters

-p AdminPassword

Specify the password of the Analytics super user.

Example

The Analytics Server starts when the command is successful. The results of this command are displayed in the following format:

```
> bpmstart -p XXX
BADCO101: The Analytics Server has started.
```

This message is output to the standard output.

Return values

Normal: 0

Error: An integer other than 0 is returned.

6.2.1.2 bpmstop

Description

Stops the Analytics Server

Command name

bpmstop

Syntax

bpmstop -p AdminPassword

Parameters

-p AdminPassword

Specify the password of the Analytics super user.

Example

The Analytics Server stops when the command is successful. The results of this command are displayed in the following format:

```
> bpmstop -p XXX
BADCO103: The Analytics Server has been stopped.
```

This message is output to the standard error output.

Return values

Normal: 0

Error: An integer other than 0 is returned.

6.2.1.3 bpmstat

Description

Displays the operating status of the Analytics Server

Command name

bpmstat

Syntax

bpmstat -p AdminPassword

Parameters

-p AdminPassword

Specify the password of the Analytics super user.

Example

If the command is successful, the status of the Analytics Server will be output to the standard output in the following format:

```
> bpmstat -p XXX
Server ID           : Server Name           : Status
MON_0000000000    : BPM Analytics Server       : RUNNING
```

Server ID

ID of the Analytics Server

Server Name

Name of the Analytics Server

Status

The status of the Analytics Server. The status can be one of the following:

RUNNING: The server is running.

STOPPED: The server is stopped.

UNKNOWN: The status of the server is unknown.

An error message is output to the standard error output when the command fails.

Return values

Normal: 0

Error: An integer other than 0 is returned.

6.2.2 Restoring status or restarting operation

6.2.2.1 bpmescalateaction

Description

Repeats Escalation when environmental failures occur

The command can do the following:

Show the status of Escalation when an alert occurs

Re-execute Escalation

Command name

bpmescalateaction

Syntax

```
bpmescalateaction { -s | -e } -i ActionID -p Password
```

Parameters

-s

Status check

The status of the specified ActionID is checked.

-e

Run Mode

Escalation of the specified ActionID is re-executed. If the status of the specified ActionID is "Successful" or "Running", the command will end without repeating Escalation.

-i ActionID

Specify the ActionID. Obtain this ID from **Action ID** in the alert view.

-p Password

Specify the password of the Analytics super user.

Example

The content that is displayed when this command is successful depends on which option was specified.

If the -s option is specified:

```
> bpmescalateaction -s -i 000000000008240000000000615 -p bpm
(When the command terminates normally)
The status check for escalation execution has completed.
STATUS: Executing
(When the command terminates abnormally)
The status check for escalation execution has failed.
[Detailed message]
```

If the -e option is specified:

```
> bpmescalateaction -e -i 000000000008240000000000615 -p bpm
(When the command terminates normally)
Re-executing the escalation has completed.
STATUS: Successful
(When the command terminates abnormally)
Re-executing the escalation has failed.
[Detailed message]
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Message output

There is an error in the specified syntax.

There is an error in the password.

There is an error in the ActionID.

The status of the Escalation is either "Success" or "Running". (Only if the -e option has been specified)

Re-execution failed. (Only if the -e option has been specified)

Status check failed. (Only if the -s option has been specified)

Other

6.2.2.2 bpmregisterwef

Description

Re-registers event information that failed to be registered in the Events Database

Command name

bpmregisterwef

Syntax

bpmregisterwef -p AdminPassword -r ReceivedID[-q] [-y]

Parameters

-p AdminPassword

Specify the password of the Analytics super user.

-r ReceivedID

Specify the ReceivedID of the file with the event data to be re-registered. To specify more than one ReceivedID, separate with a comma.

-q

Specify this option if message output is not required.

-y

Specify this option to accept all confirmation messages.

Example

If the command is successful, the execution format will be output to the standard output in the following format:

```
> bpmregisterwef -p XXX -r 9999999999999999AID_XXXXXXXXXX
The processing for re-registering event data has started.
The following reception ID will be re-registered. Is this OK?
[ y/n ][ Reception ID: 9999999999999999AID_XXXXXXXXXX ]
y
Reception ID | Status | Details
9999999999999999AID_XXXXXXXXXX | OK |
The processing for re-registering event information has completed.
>
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

The Analytics Server must be running when this command is executed.

Example of re-registration of event data

Events that failed to register due to a lack of event data can be re-registered on the machine running the Analytics Server by executing this command.

An event data re-registration file, which consists of the event data that failed to register and the error that caused the failure, is output to the following folder:

```
<work folder>\event\eventcollection\errorWEF
```

The name of the file becomes the ReceivedID used in the command. Note that the ReceivedID does not include the extension (.xml).

The following procedure describes the steps to re-register an event using the file output to this folder.

1. Refer to the output file and the following logs to find out what caused the error.
[ibpmm.war location of the Web application]\log\bpmeventcollectorerror.log
2. Edit the value of the event in a text editor according to the error details.
Refer to the *Administration Guide* and the vendor manuals for information on how the value should be adjusted.
A parse error may occur while re-registering the event if information other than the value is adjusted. Re-edit the file based on the error details if this occurs.

Example file

```
<?xml version="1.0" encoding="UTF-8"?>
<Header>
<RegistrationInfo ReceivedId="1149072189187003AID_EN43RST301(*1)" AgentAppId="AID_EN43RST301"
TransactionType="WEF"/>
<ErrorInfo>
<ErrorData DataIndex="1"(*2)>
<ErrorDetail ErrorCode="BECS3018" ErrorMessage="BECS3018: An attribute value for the event is
illegal. [Attribute name:Turnover][ Attribute type:xs:integer ][ Attribute
value:StringValue_NG ]"/>(*3)</ErrorData>
</ErrorInfo>
</Header>
<Body>
<bpmm-s-fmt:BusinessEvents>
<bpmm-s-fmt:BusinessEvent>(*4)<bpmm-s-fmt:EventStatus BusinessName="Turnover information
collection" EventType="BUSINESS"/>
<bpmm-s-fmt:GeneralData Name=" Turnover event 01" ReferenceTime="2006-05-11T18:00:00.000+09:00">
<bpmm-s-fmt:Data Name="Region name(*5)" Type="xs:string" Value="Kanto(*6)"/>
<bpmm-s-fmt:Data Name="Turnover (*5)"Type="xs:integer" Value="StringValue_NG(*6)"/>
</bpmm-s-fmt:GeneralData>
</bpmm-s-fmt:BusinessEvent>(*7)<bpmm-s-fmt:BusinessEvent>(*4)
</bpmm-s-fmt:BusinessEvent>(*7)
</bpmm-s-fmt:BusinessEvents>
</Body>
```

*1: ReceivedId

*2: Location in the file of the event that caused the error

This is not output if the error concerns the entire file, for example a parse error.

*3: Error detail

*4: Start of the event

*5: Attribute name

*6: Attribute values

*7: End of the event

One event is encompassed in the information between *4 and *7.

Log output example:

```
2006/05/31 19:43:20,046+JST ERROR [Thread-31]
BPM.EVENTREGISTERERROR - BECS6002: [ Reception ID:1149072189187003AID_EN43RST301(*1) ]
[Error index:1(*2) ][ Error code:BECS3018 ]
[Error message:BECS3018: An attribute value for the event is illegal. [Attribute name: Turnover]
[ Attribute type:xs:integer ][ Attribute value:StringValue_NG ](*3) ]

2006/05/31 19:55:40,203+JST ERROR [Thread-25]
BPM.EVENTREGISTERERROR - BECS6001: [Reception ID:1149072189187003AID_EN43RST301(*1) ]
[Error code:BECS3012 ]
[Error message:BECS3012: An error occurred while the WEF was being analyzed. ( Details:cvc-complex-
type.4: Attribute 'Type' must appear on element 'bpmm-s-fmt:Data'. )(*3) ]
```

*1: ReceivedID of the file that contains the event where the error occurred

*2: Location in the file of the event that caused the error

This is not output if the error concerns the entire file, for example a parse error.

*3: Error details

- Execute the command.

Note

Registration of event data may fail when the command is used. Repeat the event re-registration procedure if this occurs. The actual behavior depends on the conditions that caused the error.

- If an error occurs because the connection to the database or rule engine failed:

Re-registration is terminated at the point the error occurs.

- If an error occurred due to a problem in the event that was adjusted:

The information in the file containing the re-registration information is overwritten with the new error information. The event where the error occurred and any other events contained in the same file will not be re-registered.

If more than one ReceivedID was specified, then only the file where the error occurred is affected. Re-registration continues for other events.

6.2.2.3 bpmupdatesensorconf

Description

Displays and updates the connections to the Analytics Server used by sensors

If information about the Analytics Server (such as the IP address, server name, or Web server port number) was specified incorrectly when the sensor was installed, then use this command to change the information.

Command name

bpmupdatesensorconf

Syntax

```
bpmupdatesensorconf { -d | -s ServerName }
```

Parameters

-d

Displays the current Analytics Server connection

-s ServerName

Updates the Analytics Server connection

For ServerName, specify the host name or IP address of the machine where the Analytics Server is running. If the Web server port number for the specified machine is a value other than "80", specify the port number after the host name/IP address, separated by a colon (":").

Example:

bpm.fujitsu.com:8080

Example

The content that is displayed when this command is successful depends on which option was specified.

If the `-d` option is specified:

```
> bpmupdatesensorconf -d
Connection destination monitoring server: bpm.fujitsu.com
>
```

If the `-s` option is specified:

```
> bpmupdatesensorconf -s bpm.fujitsu.com
Do you want to update the connection destination monitoring server?
To update the connection destination monitoring server, enter "y" or "yes".
The update processing has completed.
>
```

The message when the command is successful is output to the standard output (either an INFO or WARN message).

The message when the command fails is output to the standard error output (either an INFO or WARN message).

Return values

Normal: 0

Error: An integer other than 0

Message output

There is an error in the specified syntax.

Updating the repository client connection information file has failed.

6.2.3 Exporting data

6.2.3.1 bpmexport2csv

Description

Outputs the event data specified by a search condition definition file to a CSV file.

The following output types are available:

- General event output
- Statistics event output
- Workflow event output

Command name

bpmexport2csv

Syntax

```
bpmexport2csv -u AdminUserName -p AdminPassword -o outputFile -e searchConditionFile
```

Parameters

`-p AdminPassword`

Specify the password of the Analytics super user.

`-o outputFile`

Specify the path of the CSV output file.

-e searchConditionFile

Specify the path of the search condition definition file.

Execution result

If the command is successful, data matching the search conditions is output to a CSV file.

If the command fails, an error message is output to the standard error output or a CSV file.

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

- The Analytics Server must be running when this command is executed.
- The attributes output are determined by the event definitions when the command is executed.
- If attributes have not been defined in the database, then the database may be empty.
- Attributes that are not defined in the database are not output.

Search condition definition files

Use the CSV output command to specify a search condition definition file to specify the range of events to be output, and to select the output format of the data.

Search condition definition files are text files with the following format:

Parameter name = Parameter value

Create search condition definition files with a text editor. Enter the required search and output parameters, with one parameter per line. The following table shows the parameters that can be specified in the search condition definition files.

Parameter name	Parameter value	Description	Required/Optional
targetDB	EventDB or ArchiveDB	Specifies the database to be searched EventDB: Events database ArchiveDB: Archive database The default is ArchiveDB.	Optional
businessName	Business process name	Specifies the name of the business process to be output	Required
eventName	Event name	Specifies the name of the event to be output	Required
startTime and finishTime	Date and time	Specifies the period for which data is to be output startTime: Start date and time finishTime: End date and time Specify dates and times using the following format: "YYYY-MM-DD HH24:MI:SS". To output all data: Do not specify either startTime or finishTime. To output all data after a certain time: Specify startTime only. To output all data before a certain time: Specify finishTime only.	Optional

Parameter name	Parameter value	Description	Required/Optional
dateFormat	1 or 2	Specifies the output format for date/time data 1: Data is output using the YYYY-MM-DD format. 2: Data is output using the YYYY-MM-DD [time] format. The default is "2". The time in option 2 depends on the format selected in timeFormat.	Optional
timeFormat	1, 2, or 3	Specifies the output format of the time for the time and date output 1: Output format is HH24:MI. 2: Output format is HH24:MI:SS, which includes seconds. 3: Output format is HH24:MI:SS.FF, which includes milliseconds. The default is 3.	Optional
labelConversion	on , off, or both	Specify whether to activate label substitution on: Activate label substitution off: Do not activate label substitution both: Output both values - before substitution and after default: off If "both" is specified with no label substitution defined, only the value before substitution will be displayed.	Optional

Information

If the following parameters are specified in the search condition definition file, an additional file for linking to Process Discovery is output.

- BPMEInteg = true

CSV output format

Output rules:

Strings are enclosed in quotation marks and separated by commas.

Data is separated into columns using commas (,) and separated into rows with new lines.

String data items are enclosed in quotation marks.

If a data item includes quotation marks (""), another set of quotation marks is added. For example, if the actual data is "MyData", it is expressed as ""MyData"" in CSV.

If a column entry is empty (NULL), there will be consecutive commas, with nothing output for the empty column entry.

Column headings are output in the first row and record data is output starting at the second row.

Output format for general events

Column heading	Data type	Description
BusinessName	String	Name of the business system
EventName	String	Name of the business event

Column heading	Data type	Description
OccurrenceTime	String	Date and time of the event The output format follows the format specified in the dateFormat parameter of the search condition definition file.
Attribute name	String	Attribute values The output format for date and time follows the formats specified in dateFormat and timeFormat in the search condition definition file.

Output format of statistics events

Column heading	Data type	Description
BusinessName	String	Name of the business system
EventName	String	Name of the business event
OccurrenceTime	String	Date and time of the event and the date and time when calculation started Specify the output format with the dateFormat parameter.
EndTime	String	Date and time when calculations ended Specify the output format with the dateFormat parameter.
Attribute name	String	Attribute values Specify the output format of the date and time with the dateFormat and timeFormat parameters.

Output format of Workflow events

Activities of completed process are output in columns.

(System activities and transitions are not included)

Column heading	Data type	Description
TopParentProcessInstanceID	String	Identifier of the top parent process instance If a parent process instance does not exist, the identifier of this process instance itself is output.
ParentProcessInstanceID	String	Identifier of the parent process instance If a parent process instance does not exist, the identifier of this process instance itself is output.
ParentActivityID	String	Identifier of the parent activity If a parent activity does not exist, the identifier of this activity itself is output.
ParentActivityInstanceID	String	Identifier of the parent activity instance If a parent activity instance does not exist, the identifier of this activity instance itself is output.
ProcessInstanceID	String	Identifier of the process instance
ActivityID	String	Identifier of the activity instance
ActivityName	String	Activity name
ActivityInstanceID	String	Identifier of the activity instance
StartEID	String	Start event identifier
StartEOT	String	Start date and time of the activity event

Column heading	Data type	Description
		The output format follows the format specified in the dateFormat parameter of the search condition definition file.
EndEID	String	End event identifier
EndEOT	String	End date and time of the activity event The output format follows the format specified in the dateFormat parameter of the search condition definition file.
ActivityInstanceNamePath	String	Path string that leads from the parent activity to this activity
LowEndActivity	String	Flag that indicates whether this is the lowest activity 0: Not lowest 1: Lowest
Assignee	String	Name of a person to whom a task is assigned in this activity
AlertFlag	String	Flag that indicates whether an alert occurred in this activity 0: No alert 1: Alert
ProcessInstanceName	String	Process instance name
TenantName	String	Tenant name
Attribute name	String	Attribute values

6.2.4 Backup/Restoring

6.2.4.1 bpmbackup

Description

Performs back up of Analytics Server resources

Syntax

```
bpmbackup -b BackupDirectory -p AdminPassword
```

Parameters

-b BackupDirectory

Specify the directory to store Analytics Server resources. Specify an absolute path.

-p AdminPassword

Specify the password of the Analytics super user.

Usage

The application server is stopped by this command. The method to start and stop the application server depends on the type of application server. If a server other than the built-in application server or the Interstage Application Server (J2EE) is used, edit the environment variables (the aps.properties file) before executing the command. Refer to the aps_start command covered earlier in this chapter for details.

Example

If the command is successful, the results are output to the standard output in the following format:

```
>bpmbackup -b C:\BPMBBackup -p XXX
Starting backup.
Getting the deployment directory of ibpmm.war.
Stopping Analytics Server J2EE container.
```

```
Checking the status of the background service.
Stopping the background service.
Starting working directory backup.
Starting conf directory backup.
Starting agent directory backup.
Starting the background service.
The backup is complete.
>
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

- This command must be executed by a user who has the permission to execute the command for stopping the application server.
- The Analytics Server execution environment must be running when this command is executed.
- If the specified backup directory does not exist, the directory is created by the command.
- If there is a directory in the backup directory that has already been backed up, an error message is output and processing is aborted.
- This command initiates the startup process of the application server execution environment when Weblogic or Jboss is used. Use the nohup command when this command is executed from a remote environment. You may be prompted for the user name and password when the nohup command is executed, depending on the security settings of the application server. Change the security settings so that you are not prompted for the user name and password when executing the command.

6.2.4.2 bpmrestore

Description

Restores Analytics Server resources

Syntax

```
bpmrestore -b BackupDirectory -p AdminPassword [-H HostName] [-P PortNumber]
```

Parameters

-b BackupDirectory

Specify the backup directory that contains Analytics Server resources. Specify an absolute path.

-p AdminPassword

Specify the password of the Analytics super user.

-H HostName

Specify the new host name when the host name is different than the one specified during backup. (Optional)

-P PortNumber

Specify when the port number specified during backup is different than the one specified during installation. (Optional)

Usage

The application server is stopped by this command. The method to start and stop the application server depends on the type of application server. If a server other than the built-in application server or the Interstage Application Server (J2EE) is used, edit the environment variables (the `aps.properties` file) before executing the command. Refer to the `aps_start` command covered earlier in this chapter for details.

Example

If the command is successful, the results are output to the standard output in the following format:

```
>bpmrestore -b C:\BPMBackup -p XXX
Starting Restore.
Getting the deployment directory of ibpmm.war.
Checking the status of Analytics Server J2EE container.
Stopping Analytics Server J2EE container.
Checking the status of the background service.
Stopping the background service.
Renaming working directory.
Applying working directory to the system.
Renaming conf directory.
Applying conf directory to the system.
Renaming agent directory.
Applying agent directory to the system.
Starting the background service.
The restore is complete.
>
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

- This command must be executed by a user who has the permission to execute the command for stopping the application server.
- You may be prompted for the user name and password when the command is executed and when the execution environment needs to be stopped or started, depending on the security settings of the application server.
- When the command is executed, the directory to be converted is automatically backed up by the command. The character string ".org" is appended to the original directory name while saving. If a backed up directory already exists, an error message is output and processing is aborted. Delete these directories or replace with the original directories before trying to re-execute the command.
 - <deployment directory>\agent.org
 - <deployment directory>\conf.org
 - <work directory>\efs.org
 - <work directory>\event.org
 - <work directory>\report.org
 - <work directory>\bpme.org
- Windows
 - <work directory>\davroot.org
- Linux
 - <work directory>\data.org

To return to the state before the command was executed, replace the ".org" directories with the original directories.

6.2.4.3 bpmsensorbackup

Description

Performs back up of remote sensors

Syntax

```
bpmsensorbackup -b BackupDirectory
```

Parameters

-b BackupDirectory

Specify the directory to store the remote sensor resources. Specify an absolute path.

Example

If the command is successful, the results are output to the standard output in the following format:

```
>bpmsensorbackup -b C:\BPMBackup
Starting backup.
Checking the status of the J2EE container of the Remote Sensor.
Stopping the J2EE container of the Remote Sensor.
Starting working directory backup.
Starting conf directory backup.
Starting agent directory backup.
Starting the J2EE container of the Remote Sensor.
The backup is complete.
>
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

- This command must be executed by a user who has the permission to execute the command for stopping the application server.
- The remote sensor execution environment must be running when this command is executed.
- If the specified backup directory does not exist, the directory is created by the command.
- If there is a directory in the backup directory that has already been backed up, an error message is output and processing is aborted.

6.2.4.4 bpmsensorrestore

Description

Restores remote sensors

Syntax

```
bpmsensorrestore -b BackupDirectory
```

Parameters

-b BackupDirectory

Specify the directory that contains remote sensors. Specify an absolute path.

Example

If the command is successful, the results are output to the standard output in the following format:

```
>bpmsensorrestore -b C:\BPMBackup
Starting Restore.
Checking the status of the J2EE container of the Remote Sensor.
Stopping the J2EE container of the Remote Sensor.
Renaming working directory.
Applying working directory to the system.
Renaming conf directory.
Applying conf directory to the system.
Renaming agent directory.
Applying agent directory to the system.
The restore is complete.
>
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

- This command must be executed by a user who has the permission to execute the command for stopping the application server.
- When the command is executed, the directory to be converted is automatically backed up by the command. The character string ".org" is appended to the original directory name while saving. If a backed up directory already exists, an error message is output and processing is aborted. Delete these directories or replace with the original directories before trying to re-execute the command.
 - <deployment directory>\agent.org
 - <deployment directory>\conf.org
 - <work directory>\event.org

To return to the state before the command was executed, replace the ".org" directories with the original directories.

6.2.4.5 bpmtextsensorbackup

Description

Performs back up of Windows Service Edition Text File Sensors

Syntax

```
bpmtextsensorbackup -b BackupDirectory
```

Parameters

-b BackupDirectory

Specify the directory to store the Windows Service Edition Text File Sensors. Specify an absolute path.

Example

If the command is successful, the results are output to the standard output in the following format:

```
>bpmtextsensorbackup -b C:\BPMBackup
Starting backup.
Checking the status of Windows Service Edition Text File Sensor.
Stopping Windows Service Edition Text File Sensor.
Starting working directory backup.
```



```
Starting conf directory backup.
Starting agent directory backup.
Starting Windows Service Edition Text File Sensor.
The backup is complete.
>
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

- The Windows Service Edition Text File Sensors must be running when this command is executed.
- If the specified backup directory does not exist, the directory is created by the command.
- If there is a directory in the backup directory that has already been backed up, an error message is output and processing is aborted.

6.2.4.6 bpmtextsensorrestore

Description

Restores Windows Service Edition Text File Sensors

Syntax

```
bpmtextsensorrestore -b BackupDirectory
```

Parameters

-b BackupDirectory

Specify the directory that contains the Windows Service Edition Text File Sensors. Specify an absolute path.

Example

If the command is successful, the results are output to the standard output in the following format:

```
>bpmtextsensorrestore -b C:\BPMBackup
Starting Restore.
Checking the status of Windows Service Edition Text File Sensor.
Stopping Windows Service Edition Text File Sensor.
Renaming working directory.
Applying working directory to the system.
Renaming conf directory.
Applying conf directory to the system.
Renaming agent directory.
Applying agent directory to the system.
The restore is complete.
>
```

Return values

Normal: 0

Error: An integer other than 0 is returned.

Note

- When the command is executed, the directory to be converted is automatically backed up by the command. The character string ".org" is appended to the original directory name while saving. If a backed up directory already exists, an error message is output and processing is aborted. Delete these directories or replace with the original directories before trying to re-execute the command.

- <deployment directory>\agent.org
- <deployment directory>\conf.org
- <work directory>\event.org

To return to the state before the command was executed, replace the ".org" directories with the original directories.

6.2.4.7 aps_start

Description

Starts the application server execution environment where the Analytics Server is deployed

The environment variables (BPM_SVNAME and BPM_SVCMDPATH_DIR) are referred to when starting the application server execution environment. Edit the environment variables according to the following table, and then execute the command.

Environment variables	Built-in application server	Interstage Application Server(J2EE)	Interstage Application Server(Java EE)	Weblogic	WebSphere	JBoss
BPM_SVNAME	-	-	✓ (corresponding to the target name)	✓ (corresponding to the Server Instance name)	✓ (corresponding to the server name; default is server1)	-
BPM_SVCMDPATH_DIR	-	-	✓ (asadmin command directory)	✓ (startManaged WebLogic command directory)	✓ (startServer command directory)	✓ (run command directory)

✓: Editing required -: Editing not required

Syntax

aps_start

Environment variables editing example

The environment variables are in the aps.properties file in the same directory as this command.

- Interstage Application Server (Java EE)
- Windows

BPM_SVNAME=IBPMMServer

BPM_SVCMDPATH_DIR=C:\Interstage\F3FMisjee\bin

- Linux

BPM_SVNAME=IBPMMServer

BPM_SVCMDPATH_DIR=/opt/FJSVisjee/bin

BPM_SVCMDPATH_DIR editing example

•[for Interstage Application Server(Java EE)]

<Interstage Application Server Installation Directory>/FJSVisjee/bin

•[for Weblogic]

<WebLogic Home>/user_projects/domains/<Domain Name>/bin

•[for WebSphere]

<WebSphere Installation Directory>/AppServer/bin

•[for JBoss]

<JBoss Home>/bin

Note

- This command must be executed by a user who has the permission to execute the command for starting the application server.
- When the application server execution environment is Weblogic AdminServer(management server) or Interstage Application Server(Java EE) Interstage Java EE DAS Service, the BPM_SVNAME environment variable need not be edited.
- This command initiates the startup process of the application server execution environment when Weblogic or Jboss is used. Use the nohup command when this command is executed from a remote environment. You may be prompted for the user name and password when the nohup command is executed, depending on the security settings of the application server. Change the security settings so that you are not prompted for the user name and password when executing the command.
- Use "runIBPM" command instead of this command in case using configuration same server with Interstage BPM on the JBoss Application Server.

6.2.4.8 aps_stop

Description

Stops the application server execution environment where the Analytics Server is deployed

Syntax

aps_stop

Usage

The same as the aps_start command. Refer to the aps_start command covered earlier in this chapter for details.

Note

- This command must be executed by a user who has the permission to execute the command for stopping the application server.
- When the application server execution environment is Weblogic AdminServer(management server) or Interstage Application Server(Java EE) Interstage Java EE DAS Service, the BPM_SVNAME environment variable need not be edited.
- When Weblogic or Interstage Application Server (Java EE) is used and the application server execution environment where the Analytics Server is deployed is the management server, set the BPM_SERVER_IS_ADMINS environment variable to 'true'. Also, there is no need to specify a value for the BPM_SERVER_IS_ADMINS environment variable in this case.