



# Interstage Business Process Manager Analytics V11.1



## Setup Guide for Wily Introscope Integration

Windows/Solaris/Linux

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# About this Manual

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This document provides how to setup the execution environment to integrate the Wily Introscope.

## Intended Audience

This manual is intended for use by the system administrator. It assumes that the reader has a working knowledge of the following:

- Operating system administration
- Application server administration
- Wily Introscope administration

## This Manual Contains:

Chapter	Title	Description
1	Overview	Summary of setup procedures.
2	Setting up the execution environment	Details of setup procedures.

## Typographical Conventions

The following conventions are used throughout this manual:

Example	Meaning
command	Text, which you are required to type at a command line, is identified by Courier font.
<b>screen text</b>	Text, which is visible in the user interface, is <b>bold</b> .
<i>Reference</i>	Reference material is in <i>italics</i> .
Parameter	A command parameter is identified by Courier font.

## Reference Materials

The following reference materials for Interstage BPM Analytics are also available:

- *Release Notes*  
Contains an overview of Interstage BPM Analytics, and late-breaking information that could not make it into the manuals.
- *Installation Guide*  
Explains how to install Interstage BPM Analytics.
- *Dashboard / Output Guide*  
Explains how to use the Dashboard to display Analytical data.
- *Administration Guide*  
Contains Administration tools and tips, Message references and Troubleshooting.
- *Analytics Studio Guide*  
Explains how to use the Analytics Studio to configure the parameters to enable Interstage BPM Analytics features.
- *Management Console Guide*  
Explains how to use Management Console and Management Commands to configure the core parameters, how to start/stop the Interstage BPM Analytics service and how to display the Interstage BPM Analytics status.

## Abbreviations

The following references for BPM Analytics are also available:

Formal 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	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
Microsoft(R) Windows Server(R) 2008 Standard Microsoft(R) Windows Server(R) 2008,Enterprise Microsoft(R) Windows Server(R) 2008 R2 Standard Microsoft(R) Windows Server(R) 2008 R2 Enterprise	Windows Server
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) Internet Information Server Microsoft(R) Internet Information Services	IIS
Microsoft(R) Internet Explorer 6.0 Microsoft(R) Internet Explorer 7.0 Microsoft(R) Internet Explorer 8.0	Internet Explorer
Microsoft(R) Excel	Excel
Solaris(TM) 10 operating system	Solaris 10, or Solaris
Red Hat Enterprise Linux AS Red Hat Enterprise Linux ES Red Hat Enterprise Linux 5	Linux
Interstage Application Server Enterprise Edition Interstage Application Server Standard-J Edition	Interstage Application Server
Interstage Studio Enterprise Edition Interstage Studio Standard-J Edition	Interstage Studio, or Studio
Interstage Business Process Manager	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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# Chapter 1 Overview

The following shows the setup task flow.

1. Install Interstage BPM Analytics and Interstage Analytics Studio (including software required for Interstage BPM Analytics)
2. Activate Wily Introscope Sensor
3. Setup JMS Bus in the Application Server (using an example of setup for Interstage Application Server)
4. Setup Wily Introscope Sensor
5. Setup Analytics Dashboard display
6. Configure Analytics Dashboard
7. Install and setup Process Discovery (BPM-E)

## Chapter 2 Setting up the execution environment

### 2.1 Installing Interstage BPM Analytics and Interstage Analytics Studio

Certain products must be installed before installing Interstage BPM Analytics, such as Application Server and Oracle Database. Refer to the “Interstage BPM Analytics Installation Guide” for details.



Interstage BPM Analytics supports Oracle, SQL Server, and IBM DB2 for RDBMS, but use of Oracle for RDBMS is recommended because Process Discovery (BPM-E) only supports Oracle.

Install Interstage BPM Analytics onto the Analytics Server. Refer to the “Interstage BPM Analytics Installation Guide” for details.

Install Interstage Analytics Studio onto either the Analytics Server or the Web Client. Interstage Analytics Studio is used to configure the monitoring environment of the Interstage BPM Analytics and the Wily Introscope Sensor.



Interstage BPM Studio must be installed to use the Interstage Analytics Studio. Eclipse IDE may be used as a substitute for Interstage BPM Studio, in which case Eclipse 3.4.1 should be used.

### 2.2 Activating the Wily Introscope Sensor

To activate the Wily Introscope Sensor, modify the following Analytics Studio's config file;

[Analytics Studio Install folder]/plugins/com.fujitsu.bpm.designer\_11.1.0/conf/activeFunction.properties

Add "WilyIntroscope" in line 25 as follows;

```
active.sensortype=RDB,ISI,Text,BPMFlow,MaintenanceBPMFlow,WilyIntroscope
```

### 2.3 Setting up the JMS Bus in the Application Server (using an example of setup for Interstage Application Server)

JMS Queue, used to pass event messages to CA Wily Introscope , needs to be set up. Refer to the Application Server's manual for operation details .



The installation flow described is based on the assumption that Interstage Application Server is used as the Application Server platform. Actual terminology depends on the Application Server used.

1. Create an EventChannel on the Application Server, as shown in this figure.

**EventChannels : View Status**

Interstage > Interstage Application Server > System > Resources > JMS > EventChannels > View Status

View Status | Create a New EventChannel | Auto Start Settings | Destination

View Status of an EventChannel. Start, Stop or Delete an EventChannel.

Group Name	Channel Name	Type	Destination	Unit	Start Status	Number of Messages (Current/Monitoring/Maximum)	No. of Consumed Connectors
<input type="checkbox"/> iflowECG1	iflowECEmail	Queue	EmailNotificationQueue		Running	0 / 0 / 3000	6
	iflowECEnact	Queue	EnactmentQueue		Running	0 / 0 / 3000	26
	iflowECTimerTask	Queue	TimerTaskQueue		Running	0 / 0 / 3000	10
<input type="checkbox"/> iflowECG2	iflowECAnalytics	Topic	AnalyticsTopic		Running	0 / 0 / 3000	1
	iflowECCommand	Topic	CommandTopic		Running	0 / 0 / 3000	1
	iflowECNotify	Topic	NotificationTopic		Running	124 / 0 / 3000	8
	iflowECResponse	Topic	ResponseTopic		Running	0 / 0 / 3000	0
<input type="checkbox"/> iflowECG4	iflowECActionAgent	Queue	ActionAgentQueue		Running	0 / 0 / 3000	6
	WilyEventChannel	Queue	WilyEventQueue		Running	0 / 0 / 3000	42

Refresh | Select All | Start | Stop | Delete

**Note**

When creating an Event Channel, set Detailed Settings > Persistent Channel to 'Enable'.  
 (In case of creating an Event Channel as Persistent Channel, a Unit is required to prepare in advance.)

**Note**

It is required that an Event Channel is created as Queue type.



2. Create a ConnectionFactory on the Application Server, as shown in this figure.

The screenshot shows the Interstage Administration Console interface. On the left is a tree view of the system structure, with 'ConnectionFactory' highlighted under the 'JMS' folder. The main area displays 'ConnectionFactory : View Configurations'. Below the breadcrumb navigation, there is a table listing various ConnectionFactory instances. The 'wilyEventQueueConnectionFactory' row is circled in red. Below the table are 'Refresh', 'Select All', and 'Delete' buttons.

JNDI Name	Type	Client ID	Global Transactions
<input checked="" type="checkbox"/> QueueCF001	QueueConnectionFactory	clientId_QueueCF001	Disable
<input type="checkbox"/> QueueConnectionFactory	QueueConnectionFactory	iflowQueue	Disable
<input type="checkbox"/> wilyEventQueueConnectionFactory	QueueConnectionFactory	wilyClient1	Disable
<input checked="" type="checkbox"/> TopicCF001	TopicConnectionFactory	clientId_TopicCF001	Disable
<input type="checkbox"/> TopicConnectionFactory	TopicConnectionFactory	iflowClient	Disable

 Note

It is required that a ConnectionFactory is created as Queue type.

3. Create a Destination on the Application Server, as shown in this figure.

Interstage Stand-alone Current User: administrator@10.124.166.114 Logout About Interstage FUJITSU

Interstage Application Server > System > Resources > JMS > Destination > View Configurations

View Configurations Create a New Destination  
View list of available Destinations. Delete a Destination.

JNDI Name	Type	EventChannel		Naming Service	
		Group Name	Channel Name	Host name or IP address	Port Number
<input type="checkbox"/> ActionAgentQueue	Queue	iflowECG4	iflowECActionAgent	localhost	8002
<input type="checkbox"/> AnalyticsTopic	Topic	iflowECG2	iflowECAnalytics	localhost	8002
<input type="checkbox"/> CommandTopic	Topic	iflowECG2	iflowECCCommand	localhost	8002
<input type="checkbox"/> EmailNotificationQueue	Queue	iflowECG1	iflowECEmail	localhost	8002
<input type="checkbox"/> EnactmentQueue	Queue	iflowECG1	iflowECEnact	localhost	8002
<input type="checkbox"/> NotificationTopic	Topic	iflowECG2	iflowECNotify	localhost	8002
<input type="checkbox"/> ResponseTopic	Topic	iflowECG2	iflowECResponse	localhost	8002
<input type="checkbox"/> SQNotificationTopic	Topic	iflowECG2	iflowSQNotify	localhost	8002
<input type="checkbox"/> TimerTaskQueue	Queue	iflowECG1	iflowTimerTask	localhost	8002
<input checked="" type="checkbox"/> WilyEventQueue	Queue	WilyEventGroup	WilyEventChannel	localhost	8002

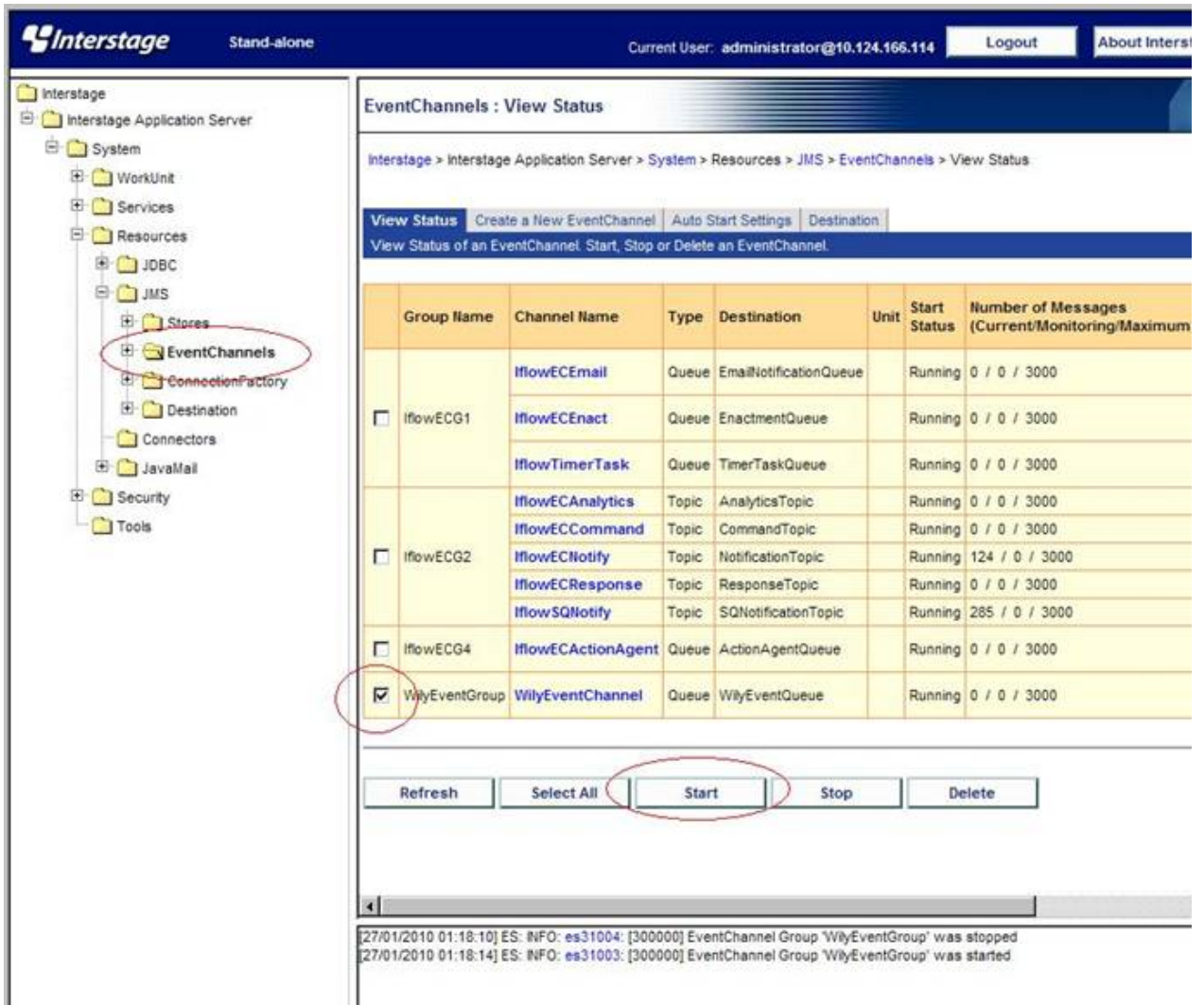
Refresh Select All Delete

[Delete Messages]

### Note

It is required that a Destination is created as Queue type.

4. In Interstage Application Server, start EventChannel, as shown in this figure.

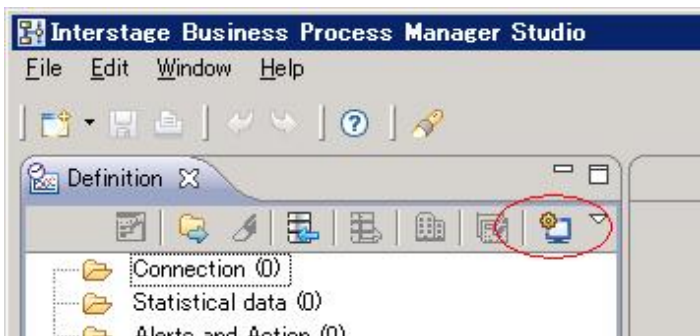


## 2.4 Setting up the Wily Introscope Sensor

Use the Interstage Analytics Studio to configure the Wily Introscope Sensor.

1. Configure the Interstage Analytics Studio (first time only).

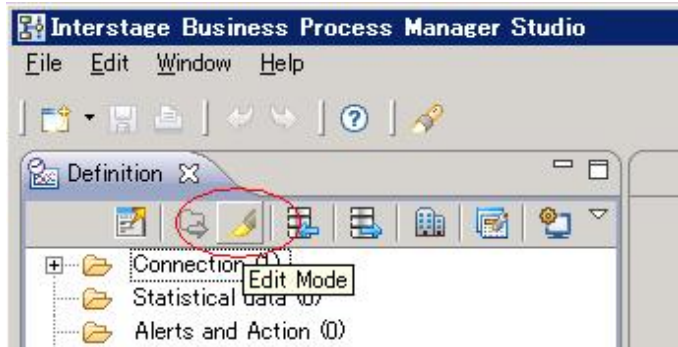
Configure “Server Connection Information” from the Server Configuration Menu.



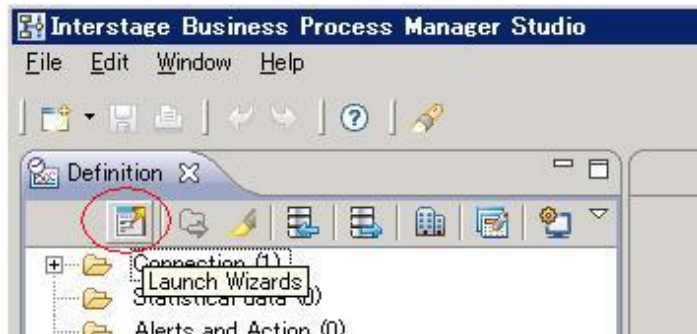
Acquire configuration definitions from the Analytics Server. Use “bpm” for the user name and password.



Change to “Single Mode”.



2. Use the configuration wizard to create new “WilyIntroscope” connection information. No parameters need to be set at this time.



3. In the definition tree view, select the created connection information under “Connect to target monitoring system”.

Connection name:

▼ **Wily Introscope basic configuration**

Naming service vendor\*:

▼ **Wily Introscope connection information (Interstage Application Server)**

Connection factory name\*:

Queue name\*:

User:

Password:

First activity list:

Last activity list:

Select the appropriate Naming Service vendor and fill in the options appropriate to the Naming Service. For Fujitsu Interstage, select “Interstage Application Server” for the Naming Service vendor and set the appropriate values in Connection factory name and Queue name.



### Note

In the “WilyFirstActivityList” and “WilyEndActivityList” fields, specify the appropriate initiator and terminator activity names for the process. The input format is as follows:

“processName=activityName,processName=activityName,…”.

4. Upload the configuration to the Analytics Server and restart the Analytics Server service.
5. Activate Wily Introscope Sensor on the Interstage BPM Analytics Management Console to start collecting events.

## 2.5 Setting up the Analytics Dashboard display

To display collected events data, a View Profile needs to be set up with Interstage BPM Analytics Studio. Refer to the “*Interstage BPM Analytics Studio Guide*” for details. Event data collection and analysis are performed at intervals. If immediate presentation of analysis is preferred, change the update interval in the schedules of “Monitor Mode” and “Analysis Mode” in the View Profile.

## 2.6 Configuring the Analytics Dashboard

Configure as follows to show the Process Performance menu on the Analytics Dashboard.

1. Open “dashboardConfig.properties”.

When using Interstage Application Server, the location of this file is:

On Windows:

<Interstage Application Server Installation Directory>

`/J2EE/var/deployment/ijserver/IBPMMServer/apps/ibpmm.war/conf/dashboardConfig.properties`

On Linux or Solaris:

`/var/opt/FJSVj2ee/deployment/ijserver/IBPMMServer/apps/ibpmm.war/conf/dashboardConfig.properties`

2. Change the value of the “dashboard.standAlone.performanceView.isDisplay” parameter to “true”, as shown below;

```
dashboard.standAlone.performanceView.isDisplay=true
```

3. Restart the based J2EE container on the Application Server.

## **2.7 Installing and setting up Process Discovery (BPM-E)**

Install Process Discovery (BPM-E) onto the Analytics Server and set up Process Discovery (BPM-E) for JSO. Refer to the following documents for details.

- *Process Discovery (BPM-E) Event Extraction Tool Operation Guide*
- *Process Discovery (BPM-E) Web Flow Viewer User's Guide*