Version 6.0.2





WebSphere Business Monitor Human Task Monitoring SupportPac

First Edition (June 2007)

This edition applies to IBM WebSphere Business Monitor Human Task Monitoring SupportPac, Version 6.0.2 and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Human Task Monitoring SupportPac

The IBM<sup>®</sup> WebSphere<sup>®</sup> Business Monitor Human Task Monitoring SupportPac<sup>™</sup> adds task monitoring and task administration capabilities to WebSphere Business Monitor. A sample is included in the SupportPac that gives you a framework that illustrates how you can implement a *generic task monitoring* in v6.0.2.x. Generic task monitoring means that business performance measures can be taken for human tasks of any BPEL processes running in the system being monitored. The performance measurements monitored are independent of the business payload. A sample monitor model is included in the SupportPac. (For specialized monitoring of those human tasks that are unique to a specific business application, you must incorporate monitoring logic into a customized monitor model.)

For this SupportPac release, the Human Task monitor model works only with BPEL processes that run on IBM WebSphere Process Server v6.0.2. Also, this model monitors inline human tasks only. For more information about BPEL and inline human tasks, see the IBM WebSphere Process Server InfoCenter (related tasks below).

#### **Related tasks**

WebSphere Process Server Information Center

### Human Task Monitoring SupportPac install

Follow the procedures in this topic to install, set up, and use the Human Task Monitoring monitor model contained in the SupportPac.

#### **Known Limitations**

- 1. The task transfer event swapped the current and target fields in the Common Base Event. Thus, the task is assigned back to the current owner. As a workaround, we reversed the logic to get the desired effect. APAR IY95595 fixes this problem and might be available in the next WebSphere Process Server 6.0.2 fix pack. If you apply this fix, be aware that this negates the workaround in the SupportPac.
- 2. There is a known issue in WebSphere Process Server 6.0.2 where the event FCOMPLETED is not emitted when a human task completes. Therefore, in this sample, you do not see the correct values for the metrics or measures that depend on the completion event such as total task duration and completion time. Once a fix for this problem becomes available from WebSphere Process Server, the values for these metrics and measures might be reflected correctly. Check the Technotes for any updates on the issue.

For the latest updates to the documentation, see the WebSphere Business Monitor Support Web site (http://www.ibm.com/support/search.wss?rs=802&tc=SSSRR3 &q=6.0.2.1).

# Installing and configuring the Human Task Monitoring monitor model

This procedure walks you through the installation and configuration of the Human Task Monitoring monitor model.

For the latest updates to the documentation, see the WebSphere Business Monitor Support Web site (http://www.ibm.com/support/search.wss?rs=802&tc=SSSRR3 &q=6.0.2.1).

Install and configure the Human Task Monitoring monitor model by performing the following tasks.

#### Prerequisites for this SupportPac

This section identifies the products required to install, configure, and deploy the WebSphere monitor model contained in the SupportPac.

To use this SupportPac, you must have a licensed installation of IBM WebSphere Business Monitor v6.0.2.1 on your system. If you have not upgraded to v6.0.2.1, you do must upgrade before using the SupportPac. To upgrade to WebSphere Business Monitor v6.0.2.1, see the Release Notes (http://publib.boulder.ibm.com/ infocenter/dmndhelp/v6rxmx/index.jsp?topic=/com.ibm.btools.help.monitor.doc/ Doc/concepts/release\_readme/rn\_aboutthisrelease.html) on the WebSphere Business Monitor Information Center for information on upgrading. You must also have a working knowledge of the WebSphere Business Monitor programming model and have used the product as well as the WebSphere Business Monitor Development Toolkit, the WebSphere Business Monitor Server, and dashboards.

Verify that the following software is installed on the system along with WebSphere Business Monitor:

- WebSphere Business Monitor v6.0.2.1 (all components: server, dashboard and databases)
- WebSphere Integration Developer v6.0.2 with WebSphere Business Monitor Development Toolkit v6.0.2.1 (required only when customizing the human task monitor model)
- WebSphere Process Server v6.0.2 with Business Process Container and Human Task Container (required for BPEL applications such as the SimpleBPELApp.ear that is included in the SupportPac)

In addition to the software, Global Security must be enabled on the WebSphere Business Monitor Dashboard, WebSphere Business Monitor Server and WebSphere Process Server (where the BPEL applications are running). All three must share the same user registry (for example, LDAP). If your configuration is such that the Monitor Server and Business Process Container/Task Container are installed on top of the same WebSphere Process Server, then you only need to enable Global Security on that Process Server.

#### Downloading the Human Task Monitoring SupportPac

The Human Task Monitoring SupportPac is available as a Web download.

- Go to the WebSphere Business Monitor SupportPac index page (http://www.ibm.com/support/docview.wss?rs=171&uid=swg) and click Human Task Monitoring SupportPac.
- 2. Scroll down to the Download Package section and download the SupportPac.
- **3**. Extract the contents of the SupportPac to a working directory. Verify that your working directory contains the following files:
  - Project Interchange file (HumanTaskMonitorPI.zip)
  - Installable Human Task Monitor Model (HumanTaskMonitor.ear)
  - Human Task Administration Portlet application (HumanTaskAdmin.war)
  - Sample BPEL application with inline human tasks (SimpleBPELApp.ear)
  - Installation doc (PDF file)

### Enabling security for the Human Task Monitoring

To use Human Task Monitoring, you must enable Global security in the WebSphere Process Server where the BPEL application with human tasks is running, in the WebSphere Business Monitor Server, and in the Portal Server used by WebSphere Business Monitor Dashboard.

These servers must be using the same Lightweight Directory Access Protocol (LDAP) user registry and they must share the same single sign-on (SSO) domain.

To enable security:

- 1. Set up security in the WebSphere Process Server:
  - **a**. Enable Global security in WebSphere Process Server using LDAP and Lightweight Third Party Authentication (LTPA).
  - b. Enable SSO and specify a domain.

For more information, see the documentation for enabling Global security in WebSphere Process Server http://publib.boulder.ibm.com/infocenter/ dmndhelp/v6rxmx/index.jsp?topic=/com.ibm.wsps.602.sec.doc/doc/ tsec\_enablingglobal.html.

- **2**. Set up security in the WebSphere Application Server 6.0.2 used by the Portal Server:
  - a. Enable Global security in WebSphere Application Server 6.0.2 (used by Portal Server) using LDAP and LTPA.
  - b. Enable SSO and specify the same domain as in WebSphere Process Server.

For more information, see the documentation for enabling Global security in WebSphere Application Server (http://publib.boulder.ibm.com/infocenter/wasinfo/v6r0/topic/com.ibm.websphere.base.doc/info/aes/ae/tsec\_csec.html ).

- 3. Set up security in the WebSphere Portal:
  - a. Enable Portal Security using LDAP. For more information on enabling Portal Security, see the documentation for WebSphere Portal Server documentation (http://publib.boulder.ibm.com/infocenter/wpdoc/v510/ topic/com.ibm.wp.ent.doc/wpf/cfg\_sec.html).
- 4. Verify that the LDAP information for the WebSphere Process Server matches the LDAP information for the Portal Server match.
- 5. Using the CSIv2 protocol, enable identity assertion for WebSphere Process Server and WebSphere Application Server:
  - a. Log in to the WebSphere Process Server administrative console.
  - b. Select Security → Global Security → Authentication Protocol → CSIv2 Inbound authentication.
  - c. Select Identity assertion and click OK.
  - d. Select Security → Global Security → Authentication Protocol → CSIv2 Outbound authentication.
  - e. Select Identity assertion and click OK and Save.
- 6. Add the LTPA key to WebSphere Application Server:
  - a. Export the generated LTPA key in WebSphere Process Server.
  - b. Import the exported key into WebSphere Application Server, making sure that you enter the same LTPA password as you did in WebSphere Process Server.
- **7**. Verify that the LDAP user ID and password are set correctly for the following aliases:

- SCA\_Auth\_Alias (set if Alphablox security enabled)
- ActionManagerBusAuth
- MonitorBusAuth
- MonitorQueueConnectionFactoryAuth
- nodeName/CommonEventInfrastructureJMSAuthAlias
- SCA\_Auth\_Alias
- 8. Enable Alphablox security, if it is installed in the Portal Server:
  - a. Open %ABLOX\_HOME%\repository\servers\AlphabloxAnalytics\ Server.properties for editing.
  - b. Replace the line containing ws.admin.password.protected with ws.admin.password.
  - c. Change the value of ws.admin.username to the LDAP administrative name.
  - d. Change the value of the **ws.admin.password** to the LDAP administrative password.
  - e. Save the properties file, and then open a command window.
  - f. Go to %WAS\_HOME%\bin and run the following commands:

wsadmin -conntype SOAP -host <hostname> -port <port> where port is in the port that is in the SOAP connector Address.

\$AdminApp edit AlphabloxPlatform {-MapRolesToUsers
{{"AlphabloxAdministrator" No No "<Portal Admin ID>" ""}}}

For example,

\$AdminApp edit AlphabloxPlatform {-MapRolesToUsers

```
{{"AlphabloxAdministrator" No No "wpsadmin" ""}}}
```

```
$AdminConfig save
```

9. Restart WebSphere Process Server and the Portal Server.

Security is now enabled and you can install the Human Tasks Monitoring sample.

**Note:** If your WebSphere Business Monitor Server is running on its own WebSphere Process Server, then follow the steps for enabling Global Security for WebSphere Process Server. Make sure that it has the same LTPA key and SSO domain as the Portal Server.

#### **Related tasks**

Enabling global security (WebSphere Process Server)

Enabling security for all application servers (WebSphere Application Server)

Enabling WebSphere Application Server Security for WebSphere Portal

## Installing the Human Task Monitor EAR file on the WebSphere Business Monitor Server

Use the WebSphere Administrative Console to install the SupportPac EAR file (HumanTaskMonitor.ear) for the monitor model.

To install the HumanTaskMonitor.ear file:

- 1. Log in to the administrative console by completing the following steps:
  - a. Open a browser and navigate to the following URL: http://host\_name:port/ ibm/console

Where:

*host\_name* is the fully qualified host name of the server where the Monitor server is installed

*port* is the port used to access the console (The default port is 9060.)

- b. Enter your user ID and password. The user ID is required. A password is only required if security is enabled.
- c. Click Log in.
- 2. In navigation panel, click **Applications > Monitor Models**. The table lists all currently installed monitor models.
- 3. Click Install.
- 4. Specify the location of the EAR file you want to install, and click Next.

Note: The EAR file is located in the project folder.

- 5. On the Preparing for the application installation step (Step 1), click Next.
- 6. On the Application security warnings page, click **Continue**.
- 7. On the Select installation options page, verify the Application name is unique, and click **Next**.
- 8. On the Map modules to servers step (Step 2), accept the default options, and click **Next**.
- 9. On the Select current backend ID step (Step 3), select **DB2UDBNT\_V82-1** from the drop-down list, and click **Next**.
- **10.** On the Provide JNDI names for Beans step (Step 4), accept the default options, and click **Next**.
- 11. On the Provide default data source mapping for modules containing 2.x entity beans step (Step 5), accept the default options, and click **Next**.
- **12**. On the Map data sources for all 2.x CMP beans step (Step 6), accept the default options, and click **Next**.
- **13.** On the Map EJB references to beans step (Step 7), accept the default options, and click **Next**.
- 14. On the Map resource references to resources step (Step 8), accept the default options, and click **Next**. A window opens that gives a warning, click **Continue**.
- **15**. On the Map resource environment entry references to resources step (Step 9), accept the default options, and click **Next**. A window opens that gives a warning, click **Continue**.
- **16.** On the Ensure all unprotected 2.x methods have the correct level of protection step (Step 10), accept the default options, and click **Next**.
- 17. On the Summary step (Step 11) page, all the information you specified in the previous windows is shown. Verify that all the information is correct, and click **Finish**.
- 18. Click Save to Master Configuration, and then click Save to save all changes.

You must use the Setup Wizard to complete the monitor model deployment.

#### Deploying the Human Task Monitoring monitor model

You can use the WebSphere Administrative Console to deploy the HumanTaskMonitor.ear file.

If the CEI server is located in a different cell than the WebSphere Business Monitor server, a service integration link must be created prior to completing this task. For information on setting up the CEI server, see the following URLs:

 http://publib.boulder.ibm.com/infocenter/dmndhelp/v6rxmx/topic/ com.ibm.btools.help.monitor.doc/Doc/tasks/administration/ad\_crosscellcfg.html  http://publib.boulder.ibm.com/infocenter/dmndhelp/v6rxmx/topic/ com.ibm.btools.help.monitor.doc/Doc/tasks/administration/ ad\_cei\_cfg\_destqueue.html

Complete the following steps to deploy the HumanTaskMonitor.ear using the Setup Wizard:

- 1. Log in to the WebSphere Administration Console by completing the following steps:
  - a. Open a browser and navigate to the following URL: http://host\_name:port/ ibm/console

where:

*host\_name* is the fully qualified host name of the server where the Monitor server is installed

- port is the port used to access the console. (The default port is 9060.)
- b. Enter your user ID and password. The user ID is required. A password is required only if security is enabled.
- c. Click Log in.
- 2. In navigation pane, click **Applications** → **Monitor Models**. The table lists all currently installed monitor models.
- **3**. Click *monitor\_model\_version\_link* to display the Version Details page for the selected monitor model.
- 4. Under Version Properties, click **Setup Wizard** to complete the monitor model deployment. The Setup Wizard automatically advances to the next incomplete step. If this is a new version of a monitor model, the Run Data Services Generation step is the first step.
- 5. On the Run Data Services Generation step:
  - a. Specify the *tablespace\_file\_path* in the **Table space properties file** field. This value defines the file where database TABLESPACE values are stored. A default file is located in the following directory:

/Monitor\_Home/install/mondb/default\_minimum\_tablespace.properties

b. Specify the *directory\_path* in the **Output directory** field. This value defines the directory where Data Services Generation output is stored. The default directory is:

/Monitor\_Home/generation

- c. Specify the *capture\_log\_path* in the **Replication capture log path** field. This value specifies the location for the log files that are created by the Data Movement Services start and stop capture server scripts. At the time of script usage, the directory must exist on the same physical server where the Monitor database exists.
- d. Specify the *apply\_log\_path* in the **Replication apply log path** field. This value specifies the location for the log files that are created by the Data Movement Services start and stop apply server scripts. At the time of script usage, the directory must exist on the same physical server where the Data Mart database exists.
- e. Specify the *number\_of\_minutes* in the **Database population interval** field. This value defines the number of minutes between data replication cycles of the Data Movement Services.
- f. Click **Run** to complete the Data Services Generation step. A message displays at the top of the panel indicating the step is complete.
- g. Click Next.

- 6. On the Run Schema Create Scripts step, you must issue commands using the DB2 command-line environment. To update the databases as a single transaction, complete the following steps:
  - a. Open a DB2 command window, and change to the directory where Data Services Generation output is stored. For example:

/Monitor\_Home/generation/schemagen/timestamp

b. Type the following commands:

db2 connect to monitor user db2admin using password

db2 +c -stvf state.ddl

where:

monitor is the name of the Monitor database

db2admin is the user ID for the DB2 administrator

password is the password for the DB2 administrator

c. Open a second DB2 command window, and change to the directory where Data Services Generation output is stored. For example:

/Monitor\_Home/generation/schemagen/timestamp

- d. Type the following commands:
  - db2 connect to datamart user db2admin using password

db2 +c -stvf datamart.ddl

where:

datamart is the name of the Monitor database

db2admin is the user ID for the DB2 administrator

- password is the password for the DB2 administrator
- 7. Choose one of the following options based on the outcome of the previous steps:
  - If the commands are successful, complete the following steps:
    - a. In the DB2 command window that is connected to the Data Mart database, type the following commands:
      - db2 commit
      - db2 disconnect datamart

where *datamart* is the name of the Data Mart database

- b. In the DB2 Command Window that is connected to the Monitor database, type the following commands:
  - db2 commit

db2 disconnect monitor

where *monitor* is the name of the Monitor database

- If either of commands is not successful, complete the following steps:
  - a. In the DB2 Command Window that is connected to the Data Mart database, type the following commands:
    - db2 rollback

db2 disconnect datamart

- where *datamart* is the name of the Data Mart database
- b. In the DB2 Command Window that is connected to the Monitor database, type the following commands:

db2 rollback

db2 disconnect monitor

where *monitor* is the name of the Monitor database

- 8. In the WebSphere Administrative Console, click **Refresh**. A message displays at the top of the window indicating the step is complete.
- 9. Click Next.
- **10**. On the Run DMS Create Scripts step, you must issue commands using the DB2 command line environment.
  - a. Open a DB2 Command Window, and change to the directory where Data Services Generation output is stored. For example:

/Monitor\_Home/generation/schemagen/timestamp

- b. Unzip DS\_DMS\_setup.zip file. The DS\_DMS\_setup.zip file contains the start and stop scripts for capture server (in the source directory) and the start and stop scripts for apply server (in the target directory).
- c. Enter State\_to\_Datamart\_setup\_source. Provide the user ID and password for the data sources and wait until the script finishes.
- d. Enter State\_to\_Datamart\_setup\_target. Provide the user ID and password for the data sources and wait until the script finishes.
- e. Check the following logs for errors:

State\_to\_Datamart\_setup\_source.bat.log

State\_to\_Datamart\_setup\_target.bat.log

You can search the logs for keywords to determine if the commands were successful or if they failed. Use the following keywords and phrases to determine success or failure:

Success: Command returned status 0 to the command line.

**Failure**: ERROR; An error has occurred; Failed to connect to database; An internal error has occurred; An error has occurred while processing file

f. Change to the following directory:

/Monitor\_home/generation/schemagen/timestamp/State\_to\_Datamart/
source

g. Open a db2cmd window and run the StartCapture\_*xx*.bat file, where *xx* is the number.

Note: You can stop the replication by running the StopCapture\_yy.bat file.

h. Change to the following directory:

/Monitor\_home/generation/schemagen/timestamp/State\_to\_Datamart/ target

i. Open a db2cmd window and run the StartApply\_*yy*.bat file, where *yy* is the number.

**Note:** You can stop the apply by running the StopApply\_*xx*.bat file.

- j. In the WebSphere Administrative Console, click **Confirm**. A message displays at the top of the panel indicating the step is complete.
- k. Click Next.
- 11. On the Import DB2 Cube Definition step, you must issue commands using the DB2 command line environment.
  - a. Open a DB2 Command Window, and change to the directory where Data Services Generation output is stored. For example:

/Monitor\_Home/generation/schemagen/timestamp

- b. Optional: If this is the first time DB2 Cube Views is being initialized, change to the /ibm/db2/sqillib/misc directory and format the Data Mart database by typing the following commands:
  - db2 connect to datamart
  - db2 -tvf db2mdapi.sql
  - db2 disconnect datamart

where *datamart* is the name of the Data Mart database.

**Note:** After completing this command change back to the directory where Data Services Generation output is stored.

- c. Configure DB2 Cube Views by typing the following command: db2mdapiclient -d datamart -u user\_ID -p password -i import\_model.xml -m model\_cv.xml -o import\_response.xml where:
  - datamart is the name of the Data Mart database
  - *user\_ID* is the user ID for the DB2 administrator

password is the password associated with user\_ID

- d. In the WebSphere Administrative Console, click **Confirm**. A message displays at the top of the panel indicating the step is complete.
- e. Click Next.
- 12. On the Manage Alphablox Cube step:

**Note:** If the step fails, see the related link at the end of this topic for information about troubleshooting.

- a. Specify *host\_name* in the **Host name** field. This value represents the host name of the remote server where DB2<sup>®</sup> Alphablox is installed. For example, hostname:localhost.
- b. Specify port\_number in the RMI port field. This value represents the RMI port of the remote server where DB2 Alphablox is installed. The RMI port is listed in the SystemOut.log for WebSphere Portal. For example, Port number:2810.
- **c**. Select one of the following options based on the WebSphere Application Server global security settings for WebSphere Portal:
  - **Disabled**: Select this option if WebSphere Application Server global security is disabled.
  - **Enabled**: Select this option if WebSphere Application Server and Monitor server global security is enabled.
- d. Optional: If global security is enabled, specify the*user\_ID* in the **User ID** field.
- e. Optional: If global security is enabled, specify the *password* in the **Password** field. This value represents the password associated with the ID in the **User ID** field.WebSphere Portal user with administrator authority.
- f. Verify that the Portal Server is started. If the server is not started, you will get CWMAX4204E error stating that the Manage Alphablox Cube step failed.
- g. Click **Create** to create the DB2 Alphablox cube. A message displays at the top of the panel indicating the step is complete.
- h. Click Next.
- 13. On the Configure CEI Distribution step:
  - a. Expand CEI Server Configuration.

- b. Specify the *event\_group\_lists* in the **Event group profile list name** field. This value represents the name of the event group profile list that is associated with this monitor model. The default value is Event groups list.
- **c**. Select one of the following options for the Location based on the location of the CEI server:
  - Local: Choose this option if the CEI server is in the same cell as the Monitor server.
  - **Remote**: Choose this option if the CEI server is in a different cell than the Monitor server.
- d. Optional: If the CEI server is remote, specify the *host\_name* in the **Host name** field. This value represents the host name for the physical server where the CEI server is configured.
- e. Optional: If the CEI server is remote, specify the *port\_number* in the **RMI port** field. This value represents the RMI port for the physical server where the CEI server is configured. The RMI port is listed in the SystemOut.log for the CEI server.
- f. Specify the *cell\_name* in the **Cell** field. This value indicates the cell name in which the event group profile list resource is configured.
- g. Optional: If the scope is defined for the node or server level, select *node\_name* from the **Nodes** list. This value indicates the node name in which the event group profile list resource is configured.
- h. Optional: If the scope is defined for the server level, select *server\_name* from the **Servers** list. This value indicates the server name in which the event group profile list resource is configured.
- i. Select one of the following options based on the WebSphere Application Server global security settings for the CEI server:
  - **Disabled**: Select this option if WebSphere Application Server global security is disabled.
  - **Enabled**: Select this option if WebSphere Application Server and Monitor server global security is enabled.
- j. Optional: If global security is enabled, specify the *user\_ID* in the **User ID** field.
- k. Optional: If global security is enabled, specify the *password* in the **Password** field. This value represents the password associated with the ID in the **User ID** field.WebSphere Application Server user with administrator authority.
- I. Select one of the following options for the Distribution mode value of the monitor model after the Configure CEI Distribution is complete. The value in the **Current** field indicates the current distribution mode for the model.
  - **Inactive**: Choose this option if you do not want the model to receive events on the event queue.
  - **Inactive (event queue recoverable)**: Choose this option if you want the model to receive, but not process, events on the event queue.
  - Active: Choose this option if you want the model to receive events on the event queue and process the events when started. This is the default option for a new monitor model.
  - Active (no new MC instances): Choose this option if you want the model to receive events on the event queue and process the events when started, but you do not want to create any new monitoring context instances.

- m. Click **Apply** to update the CEI server configuration. A message displays at the top of the panel indicating the step is complete and the CEI configuration has been initiated.
- n. Click Next.
- 14. On the Confirm CEI Server Reboot step:
  - a. Reboot the CEI server.
  - b. Click **Confirm**. If the button is not available, wait for the CEI configuration to finishing processing, refresh the page, and then click **Confirm**.
- 15. Click Finish.
- **16**. Click **Save**, and then click **Save** to save all changes to the master configuration.
- 17. Log out of the WebSphere Administrative Console.

#### **Related tasks**

"Troubleshooting the Human Task Monitoring model" on page 16 Using the procedures in this section, you can troubleshoot some common problems you might encounter with the Human Task Monitoring model.

## Setting up Human Task Analysis

After installing the Human Task monitor model, you must set up human task analysis.

#### Setting up the Human Task Analysis Page

This procedure guides you through the creation of Human Task Analysis dashboards in your WebSphere Business Monitor system for Human Task Analysis.

Human Task Analysis is the capability to capture the human task information and provide feedback to WebSphere Business Monitor for viewing.

To set up the Human Task Analysis page:

- 1. Copy the Dimensional View:
  - a. Click Administration at the top of the page, and then select Portal Management -> Portlets
  - b. For **Search**, select **Description Contains** and enter Monitor in the Search text box.
  - c. Click Search.
  - d. Find the Dimensional portlet.
  - e. On the row containing the Dimensional portlet click the icon for **Copy portlet** (
  - f. Rename the copy portlet to Human Task Dimensional.
  - g. Click OK.
- 2. Create the Human Task Dimensional Analysis dashboard in WebSphere Portal Server:
  - a. Click Administration at the top of the page, and then select Portal User Interface → Manage Pages.
  - b. Select My Portal in the Title column, and then click New Page.
  - c. In the Title field, type Human Task Dimensional Analysis.
  - d. Leave all the defaults, click **OK** and then **OK** again on the successful message page.
- **3**. Add portlets to the Human Task Dimensional Analysis page:

- a. Select the Human Task Dimensional Analysis page you just created.
- b. Select Actions → Edit Page.
- c. Click Add portlets in a container and then select Human Task Dimensional Portlet and click OK. You have successfully added the portlet to the page.
- d. Click Done.

#### Using the Dimensional Analysis view

You can configure the Dimensional Analysis view to measure Human tasks. The example shows how to measure an employee workload

Configure the Human Task Administration page to measuring employee work load by performing the following steps:

- 1. Configure the Human Task Dimensional view by performing the following steps:
  - a. Click the **Configure** ( ) icon in the upper right corner on your Dimensional view.
  - b. Select HumanTaskMM for the Monitor model.
  - c. Select **PerformTask** for Cube.
  - d. From the Available dimensions, choose **Task Name Dimension** and click **Add** next to the **Row Dimension** container.
  - e. From the Available dimensions, choose **Task Owner Dimension** and click **Add** next to the **Column Dimension** container.
  - f. From the Available dimensions, choose **Measures** and any other dimensions you would like to and click **Add** next to the **Page Dimension** container.
- 2. After completing this configuration, you will see all the task instances that were performed or are waiting to be performed by each employee. Each task is represented in different colors. Therefore, you can compare the loads of each employee and determine which employee is overloaded.

## Setting up Human Task Administration

The Human Task Administration portlet provides capabilities to administer the human tasks being monitored. To achieve this, the portlet needs to connect to the Human Task Manager that is in the WebSphere Process Server where the monitored BPEL applications are running.

To setup the Human Task Administration dashboard:

#### Installing the Human Task Monitor Administration portlet

The Human Task Monitor Administration portlet is packaged in the Web archive (WAR) file. Use this procedure to install the HumanTaskAdmin.war file containing the Human Task Monitor Administration portlet.

To install the Human Task Monitor Administration portlet (HumanTaskAdmin.war) into your into your WebSphere Portal Server:

- 1. In WebSphere Portal Server, select **Portlet Management** → **Web Modules**.
- 2. Click Install.
- 3. Click Browse and locate the WAR file for Human Task Administration.
- 4. Click Next and Finish.

Now you must configure the portlet.

#### Creating the Human Task Administration page

After installing the Human Task Administration portlet, you must create the Human Task Administration page.

To create the Human Tasks Administration page:

- 1. Copy the Instances View:
  - a. Click Administration at the top of the page, and then select Portal Management → Portlets
  - b. For Search, select Title Contains and enter Monitor in the Search text box.
  - c. Click Search.
  - d. Find the Instances portlet.
  - e. On the row containing the Instances view, click the icon for **Copy portlet** (
  - f. Rename the portlet copy to My Human Task Administration Instances, and then click **OK**.
- 2. Copy the Organizational View:
  - a. Click Administration at the top of the page, and then select Portal Management → Portlets
  - b. For **Search**, select **Description Contains** and enter Monitor in the Search text box.
  - c. Click Search.
  - d. Find the Organizational View portlet.
  - e. On the row containing the Organizational portlet, click the icon for Copy portlet (1).
  - f. Rename the portlet copy to Human Task Organizational, and then click OK.
- **3**. Copy the Human Task Administration View:
  - a. Click on Administration at the top of the page, and then select Portal Management -> Portlets
  - b. For **Search**, select **Title Contains** and enter Human Task Administration in the Search text box.
  - c. Click Search.
  - d. On the row containing Human Task Administration portlet, click the icon for **Copy portlet** (1).
  - e. Rename the portlet copy to My Human Task Administration, and then click OK.
- 4. Create the Human Task Administration dashboard in WebSphere Portal Server:
  - a. Click Administration at the top of the page, and then select Portal User Interface → Manage Pages.
  - b. Select My Portal in the Title column, and then click New Page.
  - c. In the Title field, type Human Task Administration.
  - d. Leave all the defaults, click **OK**, and then click **OK** again on the successful message page.
- 5. Add portlets to the Human Task Management page:
  - a. Select the Human Task Management page you just created.
  - b. Select Actions → Edit Page.

- c. Click Add portlets in a container and then select Human Task Instances and Human Task Organization View, and then click OK. You have successfully added the portlets to the page.
- d. Click Done.

Now you can configure and wire the Human Task Administration portlet.

#### Configuring and wiring the Human Task Administration portlet

You must configure and wire the Human Task Administration portlet before you can use this sample.

Configure and wire the Human Task administration portlet:

- 1. Select the Human Task Management page.
- 2. Select the Human Task Administration page.
  - Note: When you first access the Human Task Administration page after installing the WAR file, you will receive the message: This view has not been configured. Click the Configure icon on the portlet toolbar to start the configuration.
- 3. Configure the Human Tasks Administration portlet:
  - a. Locate the My Human Task Administration portlet and click the Configure



- b. Specify the host name for the Business Process Choreographer.
- c. Specify the RMI port number for the Business Process Choreographer.
- d. Specify the metric name which stores the Activity Instance ID, by default the model has a metric name of Activity Instance ID.
- e. Click **Finish** on the preview page.
- 4. Configure the Instances view:
  - a. In the My Human Task Administration Instances view, click the Configure (

) icon.

- b. From the Monitor Model menu, select InlineTaskMM.
- c. From the **Monitoring context** menu, select **Perform Task** monitoring context.
- d. For the **Administration Metric**, select the **Activity Instance ID** metric for Administration metric, and then click **Next**.
- e. Click Next on the second configuration page.
- f. Click Next on the next configuration page.
- g. Click Finish on the preview page.
- 5. Wire the Instances view and Human Task Administration view:
  - a. On the portal navigation bar select **Action**  $\rightarrow$  **Edit Page**.
  - b. Select the Wires tab.
  - c. For Source portlet, select My Human Task Administration Instances.
  - d. For Sending, select admin.name.
  - e. The target page is automatically selected. For **Target portlet**, select **Human Tasks Administration**.
  - f. For Receiving, select c2aAction.Admin.Information.In.
  - g. For Wire Type, select Public to enable this wire for all users.

h. Click **Done** to save and exit.

Now you can use the administration functions.

#### Using the Human Task Administration portlet

You can administer tasks listed in the Instances portlet using the Human Task Administration portlet.

**Note:** While using the Human Tasks Administration portlet, it is important to remember the following information:

- Depending on when the latest replication occurred, the information in instances view might not show changes immediately.
- Even in Human Tasks Monitoring portlet, changes might not appear immediately due to WebSphere Process Server response delays.

In the Human Tasks Administration portlet you can perform the following administration tasks:

#### Assigning tasks

If you are the administrator for BPC, you can assign a task to a user using the Human Tasks portlet. Tasks are assigned when the task has no owner.

To assign a task:

- 1. Select the task in the Instances navigation pane that you want to release.
- 2. Click Assign.
- 3. Specify the name of the new task owner in the New Owner name field.
- 4. Click OK.
- **Note:** When you assign a task to someone else, the task remains in the READY state and the **Owner** field does not update until the assignee claims the task.

#### **Claiming tasks**

- To claim a task:
- 1. Select the task in the Instances navigation pane that you want to claim.
- 2. Click Claim.

#### Marking tasks

You can mark a task as being in progress, on hold, or complete.

The **Mark in progress** and **Mark on hold** buttons toggle. This means that when a task is marked as in progress the button shows **Mark on hold** and when the task is marked as on hold the button shows **Mark in Progress**.

To complete the task, click Mark Complete.

#### Transferring tasks

If you are the owner of a task or the administrator, you can transfer the task to another user. For example, you can transfer the task to another user to provide information to complete the task.

To transfer a task:

- 1. In the Instances navigation pane, select the task that you want to transfer.
- 2. Click Transfer.
- 3. Specify the name of the new task owner in the New Owner name field.

4. Click OK.

#### **Releasing tasks**

When you claim a task, you are responsible for completing the task. However, sometimes the claimed task must be released so that another user can claim the task.

To release a task:

- 1. In the Instances navigation pane, select the task that you want to release.
- 2. Click Release.

## Troubleshooting the Human Task Monitoring model

Using the procedures in this section, you can troubleshoot some common problems you might encounter with the Human Task Monitoring model.

For the latest updates to the documentation, see the WebSphere Business Monitor Support Web site (http://www.ibm.com/support/search.wss?rs=802&tc=SSSRR3 &q=6.0.2.1).

#### **Related tasks**

"Deploying the Human Task Monitoring monitor model" on page 5 You can use the WebSphere Administrative Console to deploy the HumanTaskMonitor.ear file.

## No business events arrive in the WebSphere Business Monitor Server

Verify that the version of WebSphere Integration Developer is consistent with the WebSphere Business Monitor where the model is deployed, for example, use WebSphere Integration Developer v6.0.2.x and WebSphere Business Monitor v6.0.2.x. The Common Base Event definitions generated from WebSphere Integration Developer might not be consistent with the Common Base Events generated from the WebSphere Process Server if use v6.0.1.x with v6.0.2.x versions together. That inconsistency causes monitoring to fail.

# No Common Base Events are being received by the Monitor Server

Verify that the BPC Explorer is emitting Common Base Events:

- 1. Open the WebSphere Process Server Administration Console.
- 2. Click Integration Applications → Common Base Event Browser.
- **3**. Click **BPEL Process Events** to see all BPEL Process templates running on your WebSphere Process Server.
- 4. Click SimpleBPELApp to see the current instances for this BPEL process.
- 5. Click an instance to see all of the BPEL events for this instance.
- 6. Verify that the creation time matches the time when you were creating the instance with the BPC Explorer.

## monAAMBootstrap error

If you receive the message monAAMBootstrap.jar is missing com.ibm.websphere.ibm.websphere.security.WebSphereRuntimePermission

accessRuntimeClasses, it is caused when the Action manager is installed and Java<sup>144</sup> 2 security is enabled. To resolve this error, disable Java2 Security and enable Global Security.

### **Connection error**

If you receive a connection error when running **Step 5** of the life-cycle steps, use the following procedure as a workaround. In this procedure, you manually import the cube in Alphablox, and then mark the step as complete in the life-cycle table.

- 1. Copy the cube name from OLAP Center by completing the following steps:
  - a. In Windows, select Start → All Programs → IBM DB2 → Business Intelligence Tools → OLAP Center.
  - b. Enter your DB2 user ID and password. The ODLAP Center opens listing the Cube Models.
  - c. Right-click the cube model, and select Properties.
  - d. Select the text in the Name field, and press Ctrl+C to copy the text to the clipboard.
  - e. Click Cancel, and close the OLAP Center.
- 2. Define the cube to Alphablox:
  - a. If the WebSphere Portal server is not running, start it by selecting Start → All Programs → IBM WebSphere → WebSphere Portal v5.1 → Start the Server.
  - b. Start Alphablox in a browser by selecting Start → All Programs → IBM DB2 Alphablox 8.4 → AlphabloxAnalytics → DB2 Alphablox Administrative Pages. Note: The DB2 Alphablox Cube name must match the Cube Model name exactly, but without the WBI prefix.
  - c. When prompted, enter the user ID and password.
  - d. Click the Cubes page, and click Create.
  - e. Next to the DB2 Alphablox Cube Name, select Enabled.
  - f. Press Ctrl+V to replace New Cube with the correct cube name.
  - g. For the Relational Data Source, select **DATAMART** , and then select **Enable DB2 Cube Views Settings**.
  - h. From the Cube Model, select the model, and then click **Import Cube Definition**.

**Note:** The DB2 Alphablox Cube Name must match the Cube Model name exactly except for the WBI prefix.

- i. Click OK to save the definition. Confirm that is was added to the list.
- j. Click the **General** page and click **Runtime Management** → **DB2 Alphablox Cubes**.
- k. Select the cube in the list, and click **Start**. The status for the cube is now Running.
- 3. Find the Model ID and version number:
  - a. Find the **ModelID** value. Click **Select Applications** → **Monitor Models** and locate the ID. **ModelID** is the name listed in the Model column.
  - b. Locate the WebSphere Process Server log. The log might be found in a directory such as C:\wps602\profiles\wbmonitor\logs\server1\ SystemOut.log.
  - c. Search for "/ModelID" version in the log file. Where ModelID is the name of the model.
  - d. The versionDate follows the word version and looks similar to 1170240826.

- 4. Update the life cycle using an MBean method:
  - a. Open a command prompt window by selecting **Start** → **Run** , entering cmd, and clicking **OK**.
  - b. Enter cd %WAS\_HOME%\profiles\wbmonitor\bin to change to the monitor directory.
  - c. Enter wsadmin to connect to the server.
  - d. Enter the following command to set the Lifecycle services:

set ls [\$AdminControl completeObjectName type=LifecycleServices,\*]

e. Enter the following commands to confirm the Alphablox cubes were created:

```
$AdminControl invoke $ls confirmCreateAlphabloxCube { "model_ID", version_date, "user_ID" }
Where:
```

#### model\_ID

Represents the name of the monitor model.

version\_date

Represents the timestamp of the version of the monitor model and is defined by the number of seconds since 1970

#### user\_ID

The user ID of the command originator

For example:

\$1s confirmCreateAlphabloxCube { "MonitorModelSampleMM" 1170240826 "administrator"}

- f. Return to the Process Server Administrative Console.
- g. If the Administrative Console **Step 5** of the lifecycle is still displaying, reload the page in the browser. **Step 5** is then marked complete.
- h. Return to the instructions for the life-cycle steps starting at Step 6.