WebSphere WebSphere Business Monitor Healthcare Monitor Model SupportPac

Version 6.0.2





WebSphere Business Monitor Healthcare Monitor Model SupportPac

First Edition (June 2007)

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

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Healthcare Monitor Model SupportPac

This industry-specific monitor model SupportPac[™] for IBM[®] WebSphere[®] Business Monitor v6.0.2.1 contains a custom model for a specific industry process and customized dashboards. The goal of this SupportPac is to improve your monitor model lifecycle by targeting your particular industry. The sample monitor model and dashboard included in the SupportPac can be extended and customized based on your needs.

In this SupportPac, you will find:

- An installable monitor model for health care featuring a simplified claims process. This was developed in a J2EE application.
- Two WebSphere Business Monitor Project Interchange files containing the source for the monitor model and event definitions. You will need WebSphere Business Monitor Development Toolkit V6.0.2.1 to load this project interchange and recreate the installable monitor model (J2EE application).
- An installer for a prebuilt industry-specific dashboard which you can easily configure.
- A set of sample events which you can feed to the monitor model and populate the Monitor databases.
- A simple tool for emitting the sample events.

The sample monitor model provides you with a base monitor model that is developed towards a specific process in the health care industry. The monitor model was carefully designed and reviewed with the help of industry experts. The models were intentionally simplified to limit the scope and to facilitate the learning process. This SupportPac was developed with the intention that you will customize and extend the model by providing model logic for your specific needs. The SupportPac contains a Project Interchange file for the model that you can use for your industry needs.

You can also extend and reconfigure the sample dashboard provided in the SupportPac. The sample events are provided to quickly populate your databases and see results on your dashboard.

About the Healthcare Monitor Model SupportPac

The Healthcare Revenue monitor model provided in the SupportPac is readily installable on your WebSphere Business Monitor server. The SupportPac also contains a sample industry-specific dashboard. This sample is a simplified model developed to illustrate the concepts and the capabilities of the WebSphere Business Monitor programming model in the industry-specific scenario. You can enhance or customize this monitor model to meet your Healthcare Revenue needs using the Project Interchange file provided in the SupportPac. This sample was designed with the guidance and feedback from the industry experts.

The design of the Healthcare Revenue monitor model uses the outpatient claims process. This monitor model is based on the revenue cycle that involves outpatient care claims in a hospital. The main steps of the process are:

- 1. A patient visits a hospital.
- 2. Practitioner provides care and then discharges patient.

- **3.** Charges for the services are captured and coding is added to the patient's account.
- 4. The patient's account is closed.
- 5. Bills are generated for the services.
- 6. Claims are issued and any disputes or discrepancies are resolved.
- 7. Payments are collected or amounts are written off.

Installing the Healthcare monitor model

Install the Healthcare monitor model and dashboards provided with the provided with the support pack for IBM WebSphere Business Monitor v6.0.2.1.

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).

Prerequisites for the Healthcare monitor model

Before you can use the Healthcare Monitor Model SupportPac files, you must ensure that the required products are installed.

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.

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).

Downloading the Healthcare Monitor Model SupportPac

The Healthcare Monitor Model SupportPac is available as a Web download.

- Go to the WebSphere Business Monitor SupportPacs index page (http://www.ibm.com/support/docview.wss?rs=171&uid=swg) and click Healthcare Monitor Model 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
 - EAR file
 - Dashboard installer
 - Sample events
 - Installation doc (PDF file)

Installing an EAR file

Use the WebSphere Administrative Console to install the Healthcare Monitor Model SupportPac 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.

Deploying a monitor model

You can use the WebSphere Administrative Console to deploy an installed version of a monitor model.

If the CEI server is located in a different cell than the Monitor server, a service integration link must be created prior to completing this task.

Complete the following steps to deploy the monitor model 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[®] 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 Healthcare monitor model" on page 14 Using the procedures in this section, you can troubleshoot some common problem you might encounter with the Healthcare monitor model.

Installing the Healthcare dashbaords

Use this procedure to install the Healthcare dashboards included in the SupportPac. This procedure installs all the portlets, pages, and dashboard extensions associated with the monitoring model.

Install the dashboards by performing the following steps:

- 1. Unzip the dashboard import files into a working directory on the WebSphere Portal Server.
- **2**. Open a command prompt and change to the directory where where you unzipped the files.
- **3**. Type the installDashboard command with its associated parameters to install the dashboard.

For Windows: installDashboard.bat "WAS_HOME" "WAS_PROFILE_HOME" cellName "PORTAL_HOME" portalConfigURL portalAdminID portalAdminPassword

For AIX: installDashboard.sh "WAS_HOME" "WAS_PROFILE_HOME" cellName "PORTAL_HOME" portalConfigURL portalAdminID portalAdminPassword where:

WAS_HOME

Specifies the root directory of the WebSphere Application Server installation used by WebSphere Portal Server (for example, "C:\IBM\WAS").

Note: Use double quotes in case the path includes spaces.

WAS_PROFILE_HOME

Specifies the location of the WebSphere Application Server profile created for the server WebSphere_Portal (for example, "C:\IBM\WAS\profiles\wp_profile").

Note: Use double quotes in case the path includes spaces.

cellName

Specifies the name of the cell to which the WebSphere_Portal server belongs (for example, iapetusNode01Cell).

PORTAL_HOME

Specifies the root directory of the WebSphere Portal Server installation that is used for the dashboard of WebSphere Business Monitor v6.0.2.1 (for example, "C:\IBM\PortalServer").

Note: Use double quotes in case the path includes spaces.

portalConfigURL

Specifies the URL used for configuring the WebSphere Portal Server (for example, http://localhost:9081/wps/config).

portalAdminID

Specifies the administrator ID for your WebSphere Portal Server (for example, wpsadmin).

portalAdminPassword

Specifies the password for the Portal administrator (for example, wpsadmin).

4. Restart the Portal Server.

Verifying the Healthcare dashboard install

Use this procedure to verify that the industry-specific dashboard installed correctly.

Verify the dashboard install:

- 1. Open the Portal URL: http://localhost:9081/wps/portal.
- 2. Click login and type the user ID and password.
- 3. Click Administration → Manage Pages → My Portal.
- Verify that My Heathcare Dashboard has been added. If the dashboard install was successful, you see the My Healthcare Dashboard page the following tabs:
 a. Welcome
 - a. vvelcome
 - b. Healthcare Revenue Cycle overview
 - c. Process Context Diagram
 - d. Healthcare Instances
 - e. Healthcare dimensional Analysis
 - f. Healthcare Revenue Cycle Trends
 - g. Help

Using the BatchCBEWriter in Windows[®]

Use the BatchCBEWriter utility to copy the sample data provided with the industry-specific monitor model to the Process Server.

Unzip the sample events files that extracted from the industry-specific monitor model package.

Note: If you imported and edited the Project interchange File, then you must amend the sample events to coincide with you changes.

Setup the BatchCBEWriter and copy the sample events by performing the following steps:

- 1. Organize your events into either files or directories or both.
 - **Note:** The values for the source.filename parameter can either be a file or a directory.
- 2. Setup BatchCBEWriter by performing the following steps:

- a. Extract the files from the BatchCBEWriter.zip file.
- b. Edit the directory for PROCSERV_HOME in the BatchCBEWriter.bat file. Ensure that the directory is the one where the Process Server is installed.
- c. Edit the Java[™] path, %PROCSERV_HOME%\java\bin\java, in the BAtchCBEWriter.bat file. Ensure it is the correct name for the Java folder.
- d. Save and close the BatchCBEWriter.bat file when you are done.
- 3. Configure BatchCBEWriter by performing the following steps:
 - a. Open the config.properties file.
 - b. Modify the parameters as necessary.

Note: When modifying a file path in the config.properties:

- Always use forward slashes.
- Do not use quotes around the path even if the path name contains spaces.
- If the events are stored in a directory instead of a file, use the source.extensions property to filter out events or miscellaneous files that are not events.
- c. Save and close the config.properties file when you are done.
- 4. Run the BatchCBEWriter by entering BatchCBEWriter.bat in a command window.

If you want to override the properties specified in the config.properties file when running the BatchCBEWriter, you can use the -D option with the command. For example you can change the source filename, the connection port, and the file extensions filters when you are running the utility. The following is an example of a command specifying these value changes:

BatchCBEWriter.bat -Dsource.filename="c:/my events"
-Dconnect.portNumber=2810 -Dsource.extensions=xml;txt;cube

Troubleshooting the BatchCBEWriter

As you use the BatchCBEWriter utility, some problems can occur. The following information will help you to troubleshoot those problems.

Solving the path error:

If the PROCSERV_HOME property is not set correctly in the BatchCBEWriter.bat file, you will receive the following message. The system cannot find the path specified.

You can resolve the error by changing the path in the BatchCBEWriter.bat file.

java.io.FileNotFoundException:

The source.filename parameter is not resolving. Doublecheck the following:

- Verify that the file specified in the source.filename parameter exists. If the file exists, specify the full path with the file name.
- If source.filename is specified in the config.properties file verify that the file name is specified correctly.

Configuring the Instances view for Healthcare

You must configure the Healthcare instances view before you can use this sample.

To configure the Instances view:

) icon

- 1. Click the Healthcare Instances page and then click the **Configure** (for the Call Queue Instances.
- On the Call Queue Instances configuration page, select HealthcareRevenueCycle for the monitor model and HealthcareRevenueCycle MC monitoring context.
- 3. Select any of the metrics you want to view and click Next.
- 4. Click Next, Next, and Finish.

Configuring the dashboards

You must configure the dashboards for the HealthCare monitor model on the first use.

Note: To see results in the Dimensional Analysis views you are configuring, the model must be deployed and the sample events must be emitted using the batchCBEWriter tool.

Configure the dashboards:

Configure the HealthCare Dimensional Analysis page:

1. Click the **HealthCare Dimensional Analysis** tab and click the **Configure** (

) icon for the Healthcare Claim Process Dimensional view.

- Select HealthcareRevenueCycle for the monitor model, and then select HEALTHCAREREVENUECYCLE MC CUBE 2007_04_02T17_56_47 for the cube.
- **3**. From the Available dimensions, choose **Claim Submission Type Dimension** and click **Add** next to the **Row dimensions** container.
- 4. From the Available dimensions, choose **Claim Payer Dimension** and click **Add** next to the **Column dimensions** container.
- 5. From the Available dimensions, choose **Measures** and click **Add** next to the **Page dimensions** container.
- 6. Click Next.
- 7. From the Measures, select More.
- 8. Select the following:
 - Instances Count
 - Total Number of Patients
 - Total Claimed Value
 - Total Reimbursed Value
 - Total Writeoff Value
 - Total Debt Writeoff Value
 - Total Charity Writeoff Value
 - Average Claim Error Rate
 - Average Coding Claim Error Rate
 - Average Administrative Claim Error Rate
 - Average Claims With Discrepancies Rate
 - Total Accounts Receivable
 - Average Claim Cycle Duration
 - Average Accounts Receivable Duration
- 9. Click Add and then click OK.
- 10. Drill down to the desired Dimensional view.

Configuring the Trend reports

Configure the trend reports to analyze the sample data.

Note: For the data to render on the charts, the model must be deployed and the sample events must be emitted using the batchCBEWriter tool.

To configure the Trend reports:

- 1. Click Healthcare Revenue Cycle Trends tab.
- 2. Configure the Accounts Receivable Trend report:
 - a. Click Accounts Receivable Trend and click the Configure () icon.
 - b. For the Model, select HealthCareRevenueCycle.
 - c. For the **Cube**, select **HEALTHCAREREVENUECYCLE MC CUBE** 2007_04_02T17_56_47.
 - d. For Analysis type, select Trend Analysis.
 - e. For Weighing factor, type 0.18.
 - f. For Measures, select Total Accounts Receivable and the click Next.
 - g. Click Year to Date.
 - h. For Frequency, select Monthly.
 - i. Select View Report and then click Finish.
- 3. Configure the Accounts Receivable Days Outstanding Trend report:
 - a. Click Accounts Receivable Days Outstanding Trend and click the

Configure () icon.

- b. For the Model, select HealthCareRevenueCycle.
- c. For the Cube, select HEALTHCAREREVENUECYCLE MC CUBE 2007_04_02T17_56_47.
- d. For Analysis type, select Trend Analysis.
- e. For Measures, select Average Accounts Receivable Duration and the click Next.
- f. Click Year to Date.
- g. For Frequency, select Monthly.
- h. Select View Report and then click Finish.
- 4. Configure the Claim Cycle Time Trend report:
 - a. Click Claim Cycle Time Trend and click the Configure (

) icon.

- b. For the Model, select HealthCareRevenueCycle.
- c. For the **Cube**, select **HEALTHCAREREVENUECYCLE MC CUBE** 2007_04_02T17_56_47.
- d. For Analysis type, select Trend Analysis.
- e. For Measures, select Average Claim Cycle Duration and the click Next.
- f. Click Year to Date.
- g. For Frequency, select Monthly.
- h. Select View Report and then click Finish.
- 5. Configure the Claim Error Rate Trend report:

- a. Click Claim Error Rate Trend and click the Configure () icon.
- b. For the Model, select HealthCareRevenueCycle.
- c. For the **Cube**, select **HEALTHCAREREVENUECYCLE MC CUBE** 2007_04_02T17_56_47.
- d. For Analysis type, select Trend Analysis.
- e. For Measures, select Average Claim Error Rate and the click Next.
- f. Click Year to Date.
- g. For Frequency, select Monthly.
- h. Select View Report and then click Finish.

Troubleshooting the Healthcare monitor model

Using the procedures in this section, you can troubleshoot some common problem you might encounter with the Healthcare 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).

Related tasks

"Deploying a monitor model" on page 3 You can use the WebSphere Administrative Console to deploy an installed version of a monitor model.

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.

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 $Start \rightarrow Run$, 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.