

# Business Intelligence Guide

Release 9.1.0.10



# Business Intelligence Guide

Release 9.1.0.10

Note Before using this information and the product it supports, read the information in "Notices" on page 43.						
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### Copyright

This edition applies to the 9.1 Version of IBM Sterling Call Center and IBM Sterling Store and to all subsequent releases and modifications until otherwise indicated in new editions.

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# **Chapter 1. Introduction**

# Introduction to IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

The IBM® Sterling Call Center and Sterling Store Business Intelligence Operational Reports component is an optional component, providing powerful analytic and performance metrics that interface with the IBM Sterling Call Center and IBM Sterling Store data set. The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component enables users to explore and analyze multi-enterprise order, inventory, or catalog data. You can then identify performance trends and make consistent, coordinated decisions to strengthen your extended enterprise and value chain relationships.

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component is delivered through a partnership with Cognos® Corporation. The goal of IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component is to enhance the value of the IBM Sterling Call Center and IBM Sterling Store applications by providing operational and analytical reporting capabilities to the users, suppliers, and partners of the IBM Sterling Call Center and IBM Sterling Store applications.

### **Overview of Cognos Products**

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports components integrate with the following Cognos products:

- Cognos 8.4.1 Business Intelligence: Cognos' Web-enabled client-side reporting tool is used for creating and managing ad-hoc and scheduled reports. Cognos 8.4.1 Business Intelligence includes Query Studio, Report Studio, and Analysis Studio. Query Studio enables you to create ad-hoc reports through a graphical user interface and save the reports in a variety of formats, such as pdf, Excel, real-time reports, or prompted reports. Report Studio is used to create managed reports that are maintained, reused, and require a higher level of complexity than a report produced in Query Studio. Analysis Studio enables you to create ad-hoc cross-tab reports based on the multi-dimensional data sources.
- Framework Manager: Framework Manager is used to design the data models for reports.

# Overview of the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Component

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Data Model is a metadata model created using Framework Manager. This Data Model is used to build Cognos 8.4.1 reports and PowerPlays. The reports generated by Report Studio are viewed using Cognos Connection. Cognos Connection is used for administering security.

#### Data Model

The Data Model provided by IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports is the base for creating reports and queries (.iqd). The Data Model consists of a set of functionally grouped entities. The following

figure illustrates the flow of report creation.

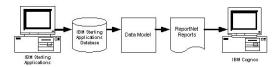


Figure 1. Report Flow Diagram

### **Database Scripts**

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component provides a set of scripts that create Sterling Analytics views on the IBM Sterling Call Center and IBM Sterling Store Database. These are located in <a href="mailto:knowledge-40.2"><a href="mailto:knowledge-40.2">knowledge-40.2</a> knowledge-40.

### **Scripts and Custom Files**

The custom files (located in <ANALYTICS\_HOME>/custom) are used to enhance the user's experience of Analytics.

# IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports and Cognos Integration

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component provides direct access to the Cognos Connection. When you launch IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports, the IBM Sterling Call Center and IBM Sterling Store-customized Cognos Connection is accessed. The Cognos Connection is then used to launch reports. You must, however, have the necessary authorization to perform these functions.

# Chapter 2. Installing and Configuring IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

# IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Prerequisites

Before using the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component, install the following Cognos products in accordance with Cognos' installation instructions for each product:

- Cognos 8.4.1 Business Intelligence
- Framework Manager

**Note:** If you are installing all the Cognos products on one machine, it is recommended that you install them in the order presented here. For a list of the Cognos CDs, refer to the *Sterling Call Center and Sterling Store: Deployment Guide*. When installing the LDAP server, use the same settings used to configure the IBM Sterling Call Center and IBM Sterling Store applications.

**Note:** Depending on your usage (volume, users, data), Cognos recommends different configurations for the various servers used in this setup. Follow the recommendations to avoid setup-related performance issues down the road.

# **Enabling Security for Cognos Components and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports**

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component does not ship with the security enabled because it would complicate the deployment at a client site. It is recommended that you enable security for the various Cognos components and subsequently the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component after they are installed.

### **Setting Up Users in Access Manager**

The Access Manager provides authentication information for users. It also provides a level of data access control by allowing the setup of User Classes and Groups. All the users of IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports are set up in Access Manager, which provides access configuration for data sources and other Cognos servers.

# Access Manager and IBM Sterling Call Center and IBM Sterling Store User Independence

The user and user group setup in the IBM Sterling Call Center and IBM Sterling Store applications are not linked to the user and user class setup in Cognos' Access Manager. Nor are they synchronized between the two products. This is not possible because of the proprietary nature of the Cognos LDAP storage scheme.

The users and user groups for the IBM Sterling Call Center and IBM Sterling Store applications must be maintained independent of the users and user classes for the IBM Sterling Call Center and Sterling Store Business Intelligence Operational

Reports. This is required because each user in the IBM Sterling Call Center and IBM Sterling Store applications may not have access to the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component, or some users of IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports may not have access to the other components of the IBM Sterling Call Center and IBM Sterling Store applications. Additionally, it is necessary that users common to both the IBM Sterling Call Center and IBM Sterling Store applications and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports have the same user identifier (ID) and password setup. Otherwise that user does not have seamless access to IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports from the IBM Sterling Call Center and IBM Sterling Store applications.

# Setting Up Users in IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

The IBM Sterling Call Center and IBM Sterling Store applications use the concept of user groups and organizations. User classes in Access Manager also support a hierarchical structure. For visual consistency and ease of understanding, it is recommended that you create IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports users and user classes in Access Manager, and that they correspond to the users and user groups in the IBM Sterling Call Center and IBM Sterling Store applications.

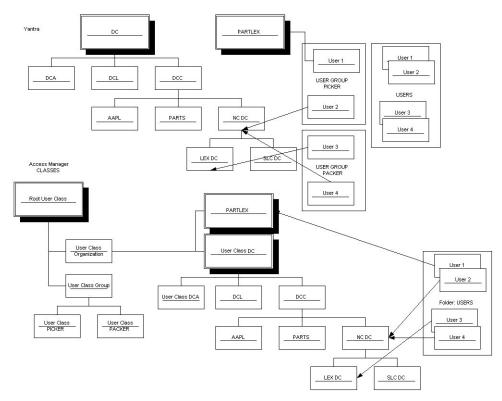


Figure 2. Cognos Users

You can also set up the following user classes in Access Manager that relate to the roles played by an organization in the IBM Sterling Call Center and IBM Sterling Store applications:

Hub

- Enterprise
- Buyer
- Seller
- Carrier

### **Setting Up Cognos 8.4.1 Business Intelligence**

The reporting component does not ship with security enabled. Cognos Connection should be used to enable security for these components.

Implementations must use the IBM Sterling Call Center and IBM Sterling Store Authentication Mechanism to authenticate users for viewing reports.

The database for content store for Oracle must have either UTF-8 or UTF-16 encoding. For more information about creating the database for content store, see the Cognos documentation at http://support.cognos.com/

You can copy the Oracle thin driver to <COGNOS\_HOME>/webapps/p2pd/WEB-INF as classes12.jar. For more information about Oracle or DB2® drivers, see the Cognos documentation at http://support.cognos.com/

Because Cognos 8.4.1 cannot access the <INSTALL\_DIR>/properties/ folder, you can include the connectivity information for the IBM Sterling Call Center and IBM Sterling Store applications in the <ANALYTICS\_HOME>/bin/analytics.properties file.

# Authenticate Setting Up the IBM Sterling Call Center and IBM Sterling Store

#### About this task

To set up the IBM Sterling Call Center and IBM Sterling Store Authentication Mechanism:

#### **Procedure**

- 1. Launch Cognos Configuration.
- 2. Navigate to Security > Authentication.
- 3. Add a new namespace resource "smcfs", of the type Custom Java Provider.
- 4. Assign the namespace ID "smcfs" to this namespace resource.
- 5. Assign the com.yantra.authenticator.YantraAuthentication Java class name.

### Assigning Access Permission to Cognos Administration and Reporting

To help increase the security of your business systems and data with the IBM Sterling Call Center and IBM Sterling Store applications, you can selectively assign access to Cognos administrative functions, reports, folders, and packages. The Business Intelligence Administrator platform resource is used to assign permissions to Cognos.

Setting up access requires the following tasks:

 Controlling access to Cognos Administration (set the permissions for the Business Intelligence Administrator resource in the Channel Applications Manager and remove the Everyone group from the Cognos System Administrator role)  Controlling access to Cognos reports, folders, and packages (after the above task is completed, only Administrators can set permissions for reports, folders and packages)

# **Controlling Access Permission to Cognos Administration**

#### About this task

The first task in limiting user access to Cognos administrative functionality is to grant permissions to the Business Intelligence Administrator resource in the Sterling Application Platform.

**Note:** You must have security groups created in the IBM Sterling Call Center and IBM Sterling Store prior to completing this task.

#### **Procedure**

- 1. In the Applications Manager, select ApplicationsSterling Application Platform.
- 2. From the tree in the application rules side panel, select **Security** → **Groups**. The Groups window displays in the work area.
- 3. Select the group to be given permissions to access the Cognos screens.
- 4. Under the **Permissions** tab, select the Permission box for Sterling Application Platform.
- 5. From the Permissions screen, select **Applications** → **Sterling Business Intelligence** → **Entities** → **Business Intelligence Admin**
- 6. Right-click Business Intelligence Admin and select **Grant Permission**.
- 7. Click Save.

### Modifying the System Administrator Role in Cognos

The second task in limiting access to Cognos administration functionality is to make two changes to the System Administrator role in Cognos. You can only complete this task after you set access to Cognos administration.

When a user launches Cognos Connection through the Console, all user groups to which that user belongs are displayed. If the user has permission to access the Business Intelligence Administrator, the user sees all groups defined in the database and an additional group called smcfs/SYSTEM. Otherwise, the user sees only the groups to which he belongs.

In Cognos, by default, all users have administrative capabilities because the Everyone group (which includes all users) is included in the System Administrator role

# Add the smcfs/SYSTEM Group

#### About this task

**Note:** You *must* complete this task before deleting the Everyone group.

When you grant BI Admin rights to a user in the Channel Applications Manager, a new group called SYSTEM is displayed in the user's list of groups under the smcfs namespace in Cognos. Add this smcfs/SYSTEM group to the System Administrator role in Cognos:

#### Procedure

- 1. Start your Web browser and enter the URL of your Cognos applications (the default is http://localhost/cognos8).
  - The Cognos 8.4.1 home page displays.
- 2. Click Cognos Connection.
- 3. Log in to the Cognos Connection portal as a System Administrator.
- 4. Locate smcfs in the list of roles, and click a in the Action column next to it.
- 5. Locate SYSTEM in the list, and click in the Action column next to it.
- 6. The Set Properties SYSTEM screen is displayed.
- 7. Check the Override the access permissions acquired from the parent entry checkbox.
- 8. Click Add.
- 9. In the screen displayed, Select System Administrators and click OK.

### Remove the Everyone Group from the Sys Admin Role

#### About this task

After adding the smcfs/SYSTEM group to the System Administrator role, remove the Everyone group from the System Administrator role:

#### **Procedure**

- 1. Log in to the Cognos Connection portal as a System Administrator.
- 2. Go to Tools > Directory and select the Cognos namespace.
- 3. Locate System Administrator in the list of roles, and click in the Action column next to it.
- 4. Select the Members tab. Select Everyone, and click Remove.

#### Results

The result is that only users who have permission to access the Business Intelligence Administrator have administrative capabilities in Cognos.

# Control Access to Cognos Reports, Folders, and Packages

#### About this task

The second part of controlling Cognos access through IBM Sterling Call Center and IBM Sterling Store is to set specific permissions to entries in Cognos.

#### **Procedure**

- 1. In Cognos Connection, on the Capabilities screen, search the entry for which you want to set access permissions.
- 2. In the Actions column, click in the Action column next to the desired entry. The Set Properties screen displays.
- 3. In the Set properties page, select the Permissions tab. The Permissions tab is displayed.
- 4. Choose whether to use the permissions of the parent entry or select permissions specifically for the entry:

- To use the permissions of the parent entry, clear the Override the access permissions acquired from the parent entry option. If you are prompted to use the parent permissions, click OK in the prompt dialog. Click OK on the Set Properties screen.
- To set access permissions for the entry, select the Override the access permissions acquired from the parent entry option, then proceed to step 5.
- 5. To remove an entry from the list, select it and click Remove.
- 6. To specify a new entry for which you want to grant or deny access, click Add.
- 7. In the screen that is displayed, under Available entries, select the gmail.com
- 8. checkbox and click the arrow to move it to the Selected Entries. Click OK.
- 9. In the screen displayed, under Available entries, select the SYSTEM checkbox and click the arrow to move it to the Selected Entries. Click OK.
- 10. Select entries using one of the following methods:
  - To choose from the listed entries, click the appropriate namespace, and select the users, groups, or roles.
  - To enter new names, click Type and type the names of the groups, roles, or users into the Entries field. Separate multiple entries with a semicolon (;), as shown in the following example:
    - For example: smcfs/SYSTEM;Cognos/Everyone
- 11. Click the right-arrow to move entries to the Selected entries box and click OK when done. You return to the Permissions tab. For each entry in the list, check the box for the types of access you want to grant or deny.
- 12. Click Apply. The icon next to each user, group, or role in the Permissions column represents the type of access granted or denied.
- 13. If you want to replace the existing permissions of the child entries with the permissions you set for this entry, in the Option section, select the Delete the access permissions of all child entries check box. This option appears only with the entries that are containers.
- 14. Click OK.

# Authenticating Users Between Cognos and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

In IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports, the YantraAuthenticationServlet authenticates the user credentials being passed from Cognos. The servlet resides on the IBM Sterling Call Center and IBM Sterling Store server and does the following:

- Authenticates the user
- Provides information about user details/user groups
- Verifies that the user is a Cognos Administrator and returns user groups based on the user resource permissions

The following table contains the interfaces provided by Cognos that are used for authentication:

Table 1. Cognos Authentication Interfaces

Interface	Description
	Main interface. Must be implemented for authenticating users to log in to the Cognos applications. YantraAuthentication is the implementation class.

Table 1. Cognos Authentication Interfaces (continued)

Interface	Description
com.cognos.CAM_AAA.authentication.IAccount	Interface that holds user information. YantraAccount is the implementation class.
com.cognos.CAM_AAA.authentication.IGroup	Interface that holds user group information. YantraGroup is the implementation class.
com.cognos.CAM_AAA.authentication.IVisa	Interface that holds user information such as user details/user groups and user roles. YantraVisa is the implementation class.

The following figure illustrates the Cognos authentication process flow:

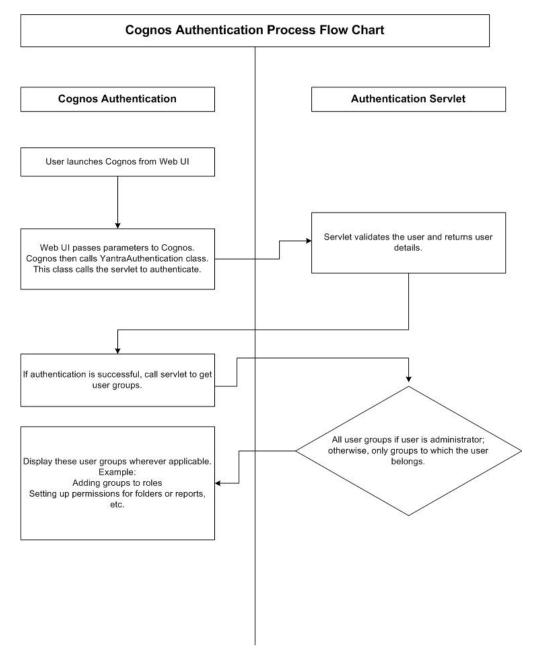


Figure 3. Cognos Authentication Process Flow Chart

# Isolating IBM Sterling Call Center and IBM Sterling Store Data from IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

Typically, users who use the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports and Cognos prefer to separate the IBM Sterling Call Center and IBM Sterling Store data from IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports and grant read-only permissions to the Cognos data source because:

- Users do not want to risk the unauthorized usage of the database user name or password or both pertaining to the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports in Cognos.
- If the user name or password or both pertaining to the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports changes, the Cognos data source must be modified.

To overcome these limitations, users must create and expose views without having the need for the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports user name or password or both.

# Separate the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports data from the IBM Sterling Selling and Fulfillment Foundation Tables

#### About this task

To separate the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports data from the IBM Sterling Selling and Fulfillment Foundation tables:

#### **Procedure**

- In the IBM Sterling Call Center and IBM Sterling Store Database, create the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports views.
- 2. Grant select privileges to a non-IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports administrative user (for example, yanalytics).
- 3. Create synonyms under the yanalytics schema to point to the views created in the IBM Sterling Call Center and IBM Sterling Store schema.
- 4. Create or modify the Cognos data source to point to the yanalytics schema.

# Prerequisites to Set Up IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

Before using the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component, you must:

- 1. Install IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports.
- 2. Create the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports views in the IBM Sterling Call Center and IBM Sterling Store database.
- 3. Run scripts to install the custom files.

# Install the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

#### About this task

To install IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports, perform the following tasks:

#### **Procedure**

- 1. Place the IBM Sterling Call Center and IBM Sterling Store installation CD in the appropriate drive.
- 2. From the installation CD, copy the YCDAnalytics.jar file to your home directory or base directory. This directory is referred to as the <TEMP> directory. If you are using FTP to copy the files, ensure that your session is set to binary mode.
- 3. Create a directory where you want to install IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports, and navigate to that directory. This directory is referred to as the <ANALYTICS HOME> directory.
- 4. Run the following command: <JAVA HOME>/bin/jar -xvf <TEMP>/YCDAnalytics.jar

# Creating the IBM Sterling Call Center and Sterling Store Business **Intelligence Operational Reports Table Views**

Before using the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports component, create the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework views in the IBM Sterling Call Center and IBM Sterling Store database. The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports metadata model is created from a set of Framework views instead of from the YFS tables directly.

**Note:** If you are using the Microsoft SQL Server<sup>®</sup> database, ensure that IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports is installed on Windows.

The Framework views that are created are used specifically by the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports framework. The naming convention for these views is YCD\_<view\_name>\_VW.

You can choose to generate WithHistory views or WithoutHistory views, based on your implementation requirements.

# **Create the WithHistory Views**

#### About this task

To create WithHistory views:

#### **Procedure**

1. If the IBM Sterling Call Center and IBM Sterling Store application and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports are installed on the same server, ensure that the <INSTALL DIR> and <ANALYTICS HOME> environment variables are set to the IBM Sterling Call Center and IBM Sterling Store installation directory and the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Installation directory respectively.

If the IBM Sterling Call Center and IBM Sterling Store application and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports are installed on different servers, perform the following tasks:

 Create a new directory and set the <INSTALL DIR> environment variable to point to the new directory.

- Copy the dbjar folder present in the IBM Sterling Call Center and IBM Sterling Store application installation directory to the new directory.
- In the new directory, create the properties subdirectory.
- Copy the jdbc.properties, sandbox.cfg, and noapp.properties file from the IBM Sterling Call Center and IBM Sterling Store application installation directory to the properties subdirectory.
- 2. Invoke the following script in the <ANALYTICS\_HOME>/bin folder: ant -f ycd\_master\_db\_script.xml -DINSTALL\_DIR=<INSTALL\_DIR> -DANALYTICS\_HOME= <ANALYTICS\_HOME> -Dtype=WithHistory -logfile ycd\_master\_db\_script.log
- 3. On executing this command, the ycd\_master\_db\_script.log file is created under the <ANALYTICS HOME>/bin folder.

### Create the WithoutHistory Views

#### **About this task**

To create WithoutHistory Views:

#### **Procedure**

- 1. If the IBM Sterling Call Center and IBM Sterling Store application and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports are installed on the same server, ensure that the <INSTALL\_DIR> and <ANALYTICS\_HOME> environment variables are set to the IBM Sterling Call Center and IBM Sterling Store installation directory and the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Installation directory respectively.
  - If the IBM Sterling Call Center and IBM Sterling Store application and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports are installed on different servers, perform the following actions:
  - Create a new directory and set the <INSTALL\_DIR> environment variable to point to the new directory.
  - Copy the dbjar folder present in the IBM Sterling Call Center and IBM Sterling Store application installation directory to the new directory.
  - In the new directory, create the properties subdirectory.
  - Copy the jdbc.properties, sandbox.cfg, and noapp.properties file from the IBM Sterling Call Center and IBM Sterling Store application installation folder to the properties subdirectory.
- 2. Invoke the following script in the <ANALYTICS\_HOME>/bin folder: ant -f ycd\_master\_db\_script.xml -DINSTALL\_DIR=<INSTALL\_DIR> -DANALYTICS\_HOME= <ANALYTICS\_HOME> -Dtype=WithoutHistory -logfile ycd\_master\_db\_script.log
- 3. On executing this command, the ycd\_master\_db\_script.log file is created under the <ANALYTICS\_HOME>/bin folder.

# **Run the Custom Scripts for Windows**

#### About this task

To install a set of customized Web pages and images that enhance the users' experience of the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Web component, and to enable the IBM Sterling Call Center and IBM Sterling Store applications branding in this installation, run the custom scripts.

To run the custom scripts for Windows, perform the following steps:

#### **Procedure**

- Set the environment variables for COGNOS\_HOME and ANALYTICS\_HOME in the following scripts:
  - Image\_Setup.bat
- 2. Set the environment variables for SKIN\_DIR in the Image Setup.bat script.
- 3. Images: Run <ANALYTICS\_HOME>\scripts\Image\_Setup.bat. This copies some of the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports images over the Cognos 8.4.1 images.

### **Run the Custom Scripts for UNIX**

#### About this task

To install a set of customized Web pages and images that enhance the users' experience of the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Web component, and to enable the IBM Sterling Call Center and IBM Sterling Store applications branding in this installation, run the custom scripts.

To run the custom scripts for UNIX, perform the following steps:

#### **Procedure**

- 1. Set the environment variables for COGNOS\_HOME and ANALYTICS\_HOME in the following scripts:
  - \$ANALYTICS HOME/scripts/image setup.sh
- 2. Set the environment variables for SKIN\_DIR in the image setup.sh script.
- 3. Images: Run \$ANALYTICS HOME/scripts/image setup.sh. This copies some of the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports images over the Cognos 8.4.1 images.

### Configuring Cognos to Run with IBM Sterling Call Center and Sterling **Store Business Intelligence Operational Reports**

Before running Cognos Connection or PowerPlay® with the IBM Sterling Call Center and IBM Sterling Store, you must ensure that you:

- Set up the Cognos components.
- Deploy reports for IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports.
- Modify your customer\_overrides.properties file.

# Prerequisites to Deploy the IBM Sterling Call Center and Sterling Store **Business Intelligence Operational Reports Reports**

Ensure that the following tasks have been completed:

- Cognos Connection has been installed.
- The content repository has been created through the Cognos Configurator.
- Data sources, which have the following names, have been created using Cognos Connection:
  - ycd-meta

- ycd-config-default
- ycd-transaction-default
- ycd-masterdata-default

Optionally, for transaction and master data schema types, you can create data sources in the following pattern:

ycd-<transaction|masterdata>-<pk\_prefix>

#### For example:

- ycd-transaction-01
- ycd-transaction-02

**Note:** IBM Sterling Selling and Fulfillment Foundation does not allow you to configure multiple meta and config schema types.

For more information about colony IDs and multischema features, see the *Sterling Selling and Fulfillment Foundation: Multi-Tenant Enterprise Guide*.

For more information, see the Cognos Configuration User Guide.

# Deploy the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports reports

#### About this task

To deploy the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports reports:

#### **Procedure**

- Copy the YCD-Analytics.zip deployment file from the <IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Installation Directory>/deployment folder into the deployment directory as specified in the Cognos Configurator. The default is <Cognos 8 Installation Directory>/deployment.
- 2. Launch Cognos Connection.
- 3. Import the YCD-Analytics.zip file to Content Store. For more information about importing the deployment archive to Content Store, see the *IBMCognos8 Administration and Security Guide*.
- 4. Restart the Cognos service.

### **Modifying Properties**

IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports is provided in the form of eight reports for the Distributed Order Management (DOM) and the Warehouse Management System. For DOM, IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports is also provided in the form of PowerPlay.

# Launch the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

#### **About this task**

To launch IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports from the IBM Sterling Call Center and IBM Sterling Store console, configure the analytics.reportnet.url property in the customer\_overrides.properties file.

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports URL format is:

http://<machinename>/cognos8/cgi-bin/cognos.cgi

Here, replace <machinename> with the machine name or IP address of the Cognos ReportNet<sup>®</sup> installation machine.

**Note:** Do not change the other parts of this URL. IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports access from the IBM Sterling Call Center and IBM Sterling Store applications may fail.

Also, ensure to set the analytics.namespace property to "smcfs" in the customer\_overrides.properties file. This property indicates the namespace that is to be configured to authenticate users in COGNOS 8.4.1 BI.

# **Chapter 3. IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework**

# IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework is the foundation on which you build a set of reports.

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework comprises of:

- The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework views in the IBM Sterling Call Center and IBM Sterling Store database.
- · Data Model.

# Utilize the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports for Analysis and Reporting

### **About this task**

To effectively utilize the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports for analysis and reporting, complete the following tasks:

#### **Procedure**

- 1. Create views in the IBM Sterling Call Center and IBM Sterling Store database.
- 2. Optionally, build reports.
- 3. Deploy the reports.
- 4. Refresh the reports.
- 5. Optionally, extend the reports.

# IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework Views

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework views are the foundation for the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports metadata model. They provide flexibility when exposing the underlying table changes in the database. These views also hide some of the complex table joins and the "where" clauses that are specific to the design of the IBM Sterling Call Center and IBM Sterling Store system. If you extend the basic Data Model to include other tables from the IBM Sterling Call Center and IBM Sterling Store Database, It is recommended that you follow the same methodology. Column names of the views are usually identical to the underlying table field name.

Most of the views span one table. Others span multiple related tables, providing a list of columns containing important transactional information. Some views contain

denormalized information that help reduce the complexity of the Data Model, for example, the YFS\_PERSON\_INFO table has been denormalized in all the related views.

IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports provides two sets of views: WithHistory and WithoutHistory. WithHistory views contain the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports view set and run against historical and non-historical data. Without History views contain the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports view set but only run against non-historical data.

# Data Model Structure in IBM Sterling Call Center and Sterling Store **Business Intelligence Operational Reports**

Data Model is a metadata model that provides:

- A single administration point for metadata supporting Cognos 8.4.1 reports and PowerPlay.
- Centralized business rule definitions for maintenance and consistency.
- Access to data from several different types of sources.
- Expanded querying and reporting capabilities.
- Centralized data access setup (permissions)

# Data Model Objects IBM Sterling Call Center and Sterling Store **Business Intelligence Operational Reports**

Data Model provides a simplified, English-oriented, non-technical view of the metadata. In the Data Model, business entities are defined and renamed such that they can be represented using common business names and grouped from a business perspective. The Data Model provides intuitive access to the report building blocks. Using Tools > Modify Names, you can change the names of the columns. This function provides a list of name rules that are run for these entities.

# Filters in IBM Sterling Call Center and Sterling Store Business **Intelligence Operational Reports**

IBM Sterling Call Center and IBM Sterling Store applications provides filters that can be used to narrow down the selected data. Filters are also required for limiting access to data for different classes of users.

A filter includes the data that is "filtered" (filtered in, not filtered out). For condition-level details of a filter, see the filter properties in the model. The SQL that is formed in cases where a filter is applied contains the condition of that filter. The Sales Order filter is provided that limits data to the Document Type 0001.

# **Entities in IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports**

The Data Model includes entities from the views and entities created in the model.

#### **Entities from Views**

IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Views are a layer of abstraction on the YFS tables. Most of these views are straight select statements from the table, having a UNION with its history (archived) table, if one exists. The fields in these views are derived directly from the underlying table without any calculations. These views are not described in detail in this appendix. For their descriptions, see the Entity Relationship Diagrams .html.

### **Entities Createshd in the Catalog**

When a normalized database, typically represented as a star model, is modeled, it is denormalized in the model to allow multiple joins in the same tables. That is, a star model is expanded into a snowflake. Some of this denormalization is done in the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework views for commonly joined tables, such as YFS\_PERSON\_INFO. Other entities have been duplicated in the Data Model.

# Joins in IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

Joins are created in the Data Model. This reduces the maintenance overhead for the model.

### **Cardinality for Joins**

The cardinality for the joins are specified in accordance with the database design logic for the various entities, for example, an Order Header may not always have a Carrier Service Code. Therefore, the cardinality for the Order Header join with Organization Carrier is 0:1 on the Carrier side.

Additionally, to allow flexibility in reporting, some of the joins have optional cardinality (0:1 or 0:n). This is done so that, in a query, the main entity's data set is not restricted because of lack of data in the views it is joined with. Typically, the transactional views do not have optional joins, however, the master views have them.

The Data Model allows changing of the optional cardinality to a direct join at an individual report level, for example Join Cardinality Flexibility.

### Join Cardinality Flexibility

The Item and Item Alias entities have a 1:1-0:n join in the business layer. When a Cognos 8.4.1 report containing these two entities is created, it is as follows:

```
select T1."MANUFACTURER_NAME" as c1,
    T2."ALIAS_NAME" as c2
from ("YAF_ITEM_VW" T1 left outer join "YAF_ITEM_ALIAS_VW" T2 on T2."ITEM_KEY" =
T1."ITEM_KEY")
--If we now uncheck the Report->Query->Access->"Include the missing table join
--values (outer join)" check box, the query changes to
select T1."MANUFACTURER_NAME" as c1,
    T2."ALIAS_NAME" as c2
from "YAF_ITEM_ALIAS_VW" T2,
YAF_ITEM_VW" T1
where (T2."ITEM_KEY" = T1."ITEM_KEY")
```

However, if the join in the business layer was 1:1-1:n instead, the flexibility described here is not possible to achieve.

# Prompts in IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

A "Sales Order #" prompt is provided for selecting a single order based on Data Model organization.

The Data Model contains *Subject Folders* that group functionally related *Subjects* together. This is done to easily locate the Subject Attributes needed to create reports (Impromptu<sup>®</sup> Query Definitions - IQDs). Some of the subjects contain sets of attributes that are further grouped into subject folders for the same reasons. This creates a hierarchical folder structure for easy lookup. Such subjects, called "Categorized Subjects", have a Subject Folder and a Subject by the same name. For example, see Item under the Catalog Subject Folder as illustrated in the following figure.

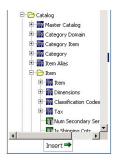


Figure 4. Item Subject Folder

An example of a case that uses multiple categorized subjects is the Order folder. Multiple categorized subjects create a more complex hierarchical folder structure and are accessed as in the following Order Line example:

- Order/Order Line/Order Line for the general attributes of Order Line
- Order/Order Line/Order Line/Financials for the Financial attributes

The following figure illustrates the Order Line subject folder hierarchy.

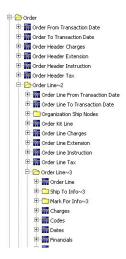


Figure 5. Orders Subject Folder

Other cases that use multiple categorized subjects are Order Release and the Order Header folders.

# Parameter Maps in IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

IBM Sterling Call Center and IBM Sterling Store supports multiple schemas in an installation. This multiple schema implementation of IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports requires you to select tables from the correct schema. A Cognos data source for each schema facilitates this. The schema is then dynamically selected for the report through the Enterprise option, which is a part of the Enterprise drop-down list.



Four data sources are present within the Cognos Framework Manager, based on the following schema types:

- Configuration
- · Metadata
- Masterdata
- Transaction

Data sources within the Framework Manager are pointers to the true data sources defined in the Cognos connection. Database query subjects are hard coded with one of these four schemas. In IBM Sterling Call Center and IBM Sterling Store, Release 9.1, the Transaction and Masterdata data sources will point to the same schema.

You can define multischema prompts in the Parameter Map Definition -MultiSchema\_Prompts window. The key associated with a prompt will be used as an input when an enterprise is selected while creating an IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports report. All reports are

specific to an enterprise.

This input will be used by other parameter maps that map Enterprise Code to Datasource and Schema. A chain of parameter maps can be created by associating the value of one parameter map with the next parameter map in the Properties



The prompt that is defined in the parameter map is used in IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports reports. The parameters defined in the Framework Manager can be reused in Cognos Report Studio.

Note: Multiple schemas do not support cross-schema unions.

# **Limiting Access to Data**

Creating filters and user classes limit access to data. Users' access to data in reports is restricted in Cognos using filters that are associated with user classes. For example, to allow various ship node users to see a common ship node report, you can create a filter for each ship node user and associate it with the user class for the corresponding user.

It is not necessary to create filters or user classes to start using Analytics. However, it is strongly recommended that you set these up before you deploy the reports. For details on how to set up Users and User Classes, see the Cognos Access Manager documentation. For details on creating filters, see the Cognos 8.4.1 documentation.

# Designing Reports in IBM Sterling Call Center and Sterling Store **Business Intelligence Operational Reports**

Reports are created using Cognos 8.4.1. Please refer to the Cognos 8.4.1 documentation for information about designing reports.

# Chapter 4. Reports for IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports

# Overview of IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Reports

IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports provides the capability to generate many reports. Call center managers and store managers may need information about the performance of a particular CSR or store associate, or the best cross-sell item. Pricing analysts and product managers may need information about the items that are frequently price matched.

Access to these reports is controlled, based on the group to which the user belongs to.

After the user navigates to the Search screen of a specific report, the criteria for generating the report can be entered in the Search screen. Based on the specified criteria, IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports generates and displays the report appropriately.

### **Cross Sell Report**

Call Center Managers and Store Managers may need information about the cross sales performance of the call center or store. This report provides information about the best cross selling items. This report also allows you to compare the average cross sell revenue per order for a given period with the previous period.

# **CSR Report**

Call Center Managers and Store Managers may need to track information about the number of sales and revenue generated by a particular CSR or store associate. This report provides visibility into the number of sales, total cross sell, revenue generated, and alerts resolved during a specific period of time.

# **Price Match Report**

Pricing Analysts and Product Managers may need information about the items that are frequently price matched, competitor against who the items are frequently priced matched etc. This report helps in making decisions such as:

- If a large number of items are price matched against a particular competitor, verify if there is a sale or if the competitor is a discount retailer and exclude the competitor from the price match list.
- If an item has been price matched frequently, then the pricing analyst may need to re-price the item. If an item is not price matched, then the pricing analyst may want to re-price the item at a higher price.

For more information about the various reports provided by IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports, see the *Sterling Customer Order Management PCA User Guide*.

# **Chapter 5. Deploying Reports**

### **Deploying Reports**

The Cognos 8.4.1 Reports and IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Transformer Cube Models (.mdl files) are merely report designs. To view the data, you must deploy the reports and refresh them against your database. The resulting reports allow you to analyze the data in various forms.

Read the Cognos 8.4.1, PowerPlay Enterprise Server, Impromptu, and Access Manager administration guides before deploying IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports.

Ensure that appropriate filter values are provided for any reports that have filters, for example, for data or security.

For more information about deploying IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports reports, see the corresponding Cognos 8.4.1 documentation.

### **Create a Folder Structure for Deploying Reports**

#### About this task

It is recommended that you perform the following steps to create your folder structure for report deployment:

#### **Procedure**

- 1. Create a folder named Staging (or similar) under /<INSTALL\_DIR>/ <ANALYTICS\_HOME>.
- 2. Under the Staging folder create a folder named Publish.
- 3. Under the Publish folder, create a folder for Reports where the reports that are ready to be deployed are stored.
- 4. You can create additional folders under Reports to group reports, for example, Finance or Marketing.

# **Refreshing Reports**

Based on the type of report deployed, the report could be either scheduled to refresh at certain times, or is run at the time it is viewed, for example, Burst Reports. For more information about refreshing reports, see the Cognos 8.4.1 documentation.

# Chapter 6. Extending the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Data Model

# Extending the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Data Model

The IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Data Model can be modified to incorporate the specific needs of your IBM Sterling Call Center and IBM Sterling Store applications installation by extending the Catalog. This chapter discusses how you can extend the Catalog.

For information about extending the IBM Sterling Call Center and IBM Sterling Store applications installation, see the *Sterling Selling and Fulfillment Foundation: Customization Guide*.

Before extending the Data Model, read the Cognos 8.4.1 documentation to understand how to use the product and apply that knowledge to the Data Model. Ensure to back up all the components before modifying them.

The Data Model is extended by adding, deleting or renaming fields, tables and views, or entities.

### Add Fields, Tables and Views

#### About this task

To add fields, tables, and views, follow the instructions provided in the Cognos 8.4.1 documentation.

# Deleting or Renaming Fields, Tables, and Views

It is recommended that you do not delete or rename the objects that already exist in the Catalog delivered with IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports. This can create compatibility problems with future versions of the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework components. However, if it is absolutely necessary to delete some objects, follow the guidelines in the Cognos 8.4.1 documentation.

## **Chapter 7. Troubleshooting and Tuning**

## **Troubleshooting and Tuning**

This topic explains some of the issues that may be encountered when using IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports. It also includes tips about overcoming these issues. However, this chapter does not include troubleshooting instructions for standard Cognos products or issues. For Cognos related troubleshooting, see the Cognos documentation.

## The Access Manager is Not Working

### About this task

Perform the following verifications to ensure that the Access Manager is running correctly:

### **Procedure**

- 1. Make sure that the Access Manager is installed after the Netscape LDAP server is installed, configured, and registered.
- 2. Configure the Cognos LDAP authentication using the same settings as that used to configure the IBM Sterling Call Center and IBM Sterling Store applications.
- 3. When registering the Access Manager using the Access Manager Wizard, use the same information as in step 2.
- 4. If for some reason, the authentication is not working for the default namespace, then uninstall the Access Manager, re-install LDAP, and re-configure with proper parameters, re-register and then try connecting again.

## **SQL Net Connect String Error**

### About this task

If you get the "The SQL Net connect string shown on the Analytics catalog is BLACKHOLE after installing the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Framework on a fresh server" error message when trying to open the catalog:

The catalog's available user classes do not correspond to any defined by the Common Logon Server"

Follow these steps to ensure that the YAF-catalog can be opened:

### **Procedure**

- 1. Launch the Access Manager Administrator.
- 2. Right-click Root User Class, and select Add User Class and perform the following functions:
  - Under the General tab enter Creator in the Name text box.
  - Select the Permissions tab and set the permissions for the Creator user class.
  - Click Apply to save information.

- · Click OK to return to the Access Manager Administration Tree.
- 3. From the Administration Tree select the folder named Users.
  - Select the user(default is administrator) that you would like to associate with the user class, right-click, and select Membership.
  - Select the user class that the user belongs to. In this case the Creator user class. Alternatively you can associate the user by selecting the user named Administrator, and then drag it into the Creator user class.

#### Results

An error occurs if users not belonging to a specific user class attempt to log in to the catalog. Therefore, ensure that all the users belong to a user class before attempting to open an Impromptu catalog.

## **Failed to Change User Class**

If you receive the "Failed to change the User Class. Unable to access the user profile creator. Incomplete catalog login information for user class" error message when running reports through the browser, embed a user ID and password in the catalog.

# Embed a Database User ID and Password in a Catalog About this task

To embed a database user id and password in a catalog:

### **Procedure**

- 1. Open the catalog in Cognos 8.4.1.
- 2. Select Catalog > Profiles from the main menu.
- 3. Select the Database tab.
- 4. For each User Class, in the Database Security Options section, select Database Logon and supply a database ID and password.

# Change the Database Logon Type About this task

Perform the following steps to change the Database Logon type:

#### **Procedure**

- 1. Launch Report Administration.
- 2. Select the Report Project view.
- 3. Highlight the report set.
- 4. Select the User radio button in the Database Logon Type section.

#### Results

If the reports have already been published, delete them all and re-publish with the change mentioned above.

This chapter provides some tips for tuning reports and your IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports installation. For information about performance tuning individual Cognos products, see the Cognos Administration Guides.

## Could Not Locate analytics.properties File Error

When performing custom authentication, if the error message, "Could not locate the file analytics.properties in the classpath" is displayed, ensure that the analytics.properties file is located in the correct path.

# Tuning the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Reports

Because all the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports reports are eventually based on SQL statements, it is recommended that you tune the SQL underlying the reports and sub-reports, and tune the IQDs. You can avoid complicated report SQLs by breaking the reports up into sub-reports.

# Tuning your IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Installation

Tuning your IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports installation involves sizing the servers where the installation is installed.

# **Chapter 8. IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports**

# Overview of IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Views

IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports Views are a layer of abstraction on the YFS tables. Most of these views are straight select statements from the table, having a UNION with its history (archived) table, if one exists. The fields in these views are derived directly from the underlying table without any calculations. These views are not described in detail in this appendix. For their descriptions, see the Entity Relationship Diagrams .html. For a complete list of the view SQLs, see the corresponding .sql files located in:

- <ANALYTICS HOME>\Database\oracle\Scripts\WithHistory
- <ANALYTICS HOME>\Database\oracle\Scripts\WithoutHistory
- <ANALYTICS\_HOME>\Database\db2\Scripts\WithHistory
- <ANALYTICS\_HOME>\Database\db2\Scripts\WithoutHistory
- <ANALYTICS HOME>\Database\sqlserver\Scripts\WithHistory
- <ANALYTICS\_HOME>\Database\sqlserver\Scripts\WithoutHistory

**Note:** Relationship diagrams for all of the views are available under <ANALYTICS\_HOME>\database\ERD.

## **Catalog Views**

This set of views expose the Item and Catalog-related data. The set consists of the views described in following table:

Table 2. Catalog Views

View	Description	Interpreted Columns	SQL Filename
YCD_ITEM_VW	This view exposes the data in the YFS_ITEM table.	None	YCD_ITEM_VW.sql

## **Exception Views**

This set of views expose the Exception-related data. The set consists of the views described in the following table:

Table 3. Exception Views

View	Description	Interpreted Columns	SQL Filename
YCD_ALERTS_RELATED_VW	This view exposes the data in the YFS_INBOX table.	None	YCD_ALERTS_RELATED_VW.sq1

### **Order Header Views**

This set of views expose the Order Header related data. The set consists of the views described in the following table:

Table 4. Order Header Views

View	Description	Interpreted Columns	SQL Filename
YCD_ORDER_DETAILS _VW	This view exposes the data in the YFS_ORDER_HEADER and YFS_ORDER_LINE tables. It provides Order line details including order details.	None	YCD_ORDER_DETAILS_VW.sql
YCD_ORDER_RELATED _VW	This view exposes the data in the YFS_ORDER_HEADER, YFS_ORDER_LINE and YFS_ORDER_LINE_RELATIONSHIP tables. It provides Order line relationship details including order and order line details for the lines involved in the relationships.	None	YCD_ORDER_RELATED_VW.sql

### **Order Line Views**

This set of views expose the Order Line-related data. The set consists of the views described in the following table:

Table 5. Order Line Views

View	Description	Interpreted Columns	SQL Filename
YCD_OL_RELATIONSHIF	This view exposes the data in the YFS_ORDER_LINE and YFS_ORDER_LINE_RELATIONSHIP tables. It provides Order line relationship details including order line details for the lines involved in the relationships.	None	YCD_OL_RELATIONSHIP_VW.sql

## **Organization Views**

This set of views expose the data related to any organization. The set consists of the views described in the following table:

Table 6. Organization Views

* **		Interpreted	COL TIL
View	Description	Columns	SQL Filename
YCD_RELATIONSHIP RELATED VW	This view exposes the data in the YFS_ORGANIZATION	None	YCD_RELATIONSHIP_RELATED_VW.sq1
	and YFS_ASSC_RELATIONSHIP tables. It provides		
	association relationship details for an organization.		

## **Price Match Views**

This set of views expose the Price-related data. The set consists of the views described in the following table:

Table 7. Pricing Views

View	Description	Interpreted Columns	SQL Filename
YCD_PRICE_MATCH _RELATED_VW	This view exposes the data in the  YFS_PRICE_MATCH and  YFS_COMPETITOR tables. It provides Price match details including competitor details.	None	YCD_PRICE_MATCH_RELATED_VW.sql
YCD_OL_PRICE_MATCH _RELATED_VW	This view exposes the data in the  YFS_ORDER_HEADER,  YFS_ORDER_LINE and  YFS_ORDER_LINE  _PRICE_MATCH tables.  It provides Order line price  match details including order and order line details for the  price matched order lines.	None	YCD_OL_PRICE_MATCH_RELATED_VW.sq1

# **Chapter 9. Server Sizing Requirements**

## **Cognos Server Sizing Prerequisites**

Before installing Cognos 8.4.1 Business Intelligence, ensure that the Business Intelligence Server requirements as described in the following table are met:

Table 8. Cognos 8.4.1 Business Intelligence Server Requirements

		RAM	
Characteristics	Users	(# of Processes * RAM)	Disk and CPU
<ul> <li>8 catalogs</li> <li>3 databases – DB2, Microsoft SQL Server, Oracle</li> <li>10 reports per catalog</li> <li>75% personnel, 25% public</li> </ul>	200 users     10%     concurrent     (20)     Users are     evenly     distributed     across     catalogs	<ul> <li>PROCESSES</li> <li>Not applicable - dynamic</li> <li>TOTAL RAM = 256 - 512MB</li> <li>Difficult to calculate. Dependent on the size of the reports</li> <li>Memory for IWR= 256 - 512 MB</li> <li>Memory for NT Server = 70 MB</li> <li>Memory for Web Server= 5 MB</li> <li>Memory for database drivers</li> </ul>	<ul> <li>DISK SPACE</li> <li>Temporary disk space needed for report rendering to PDF (5X final report size) and final report storage. Difficult to estimate.</li> <li>Temporary disk space for IWR= 1 GIG</li> <li>IWR Software= 100 MB</li> <li>Reports and Catalogs = 100 MB</li> <li>NT Server = 500 MB</li> <li>Database drivers</li> <li>TOTAL Disk Space= 1.7 GIG</li> <li>CPU</li> <li># of PROCESSORS = 1 scalable to 2</li> <li>PROCESSOR = 200+ MHz</li> </ul>

# **Chapter 10. Cognos Components**

## **Cognos Components and Tools**

This topic describes the complete list of the Cognos components and tools.

Table 9. Cognos Components and Tools

Type	Component	Description
Client and Authoring Components	Cognos 8.4.1 Business Intelligence Administrator	This is used to build reports from the IBM Sterling Call Center and Sterling Store Business Intelligence Operational Reports catalog (YCD-Analytics.cpf).
Server Components	Cognos 8.4.1 Business Intelligence Report	This is used to Web-enable reports.
Security Components	Access Manager	This is used for user authentication.

#### Tools

- Cognos 8.4.1 Business Intelligence Report Administrator
- Cognos 8.4.1 Business Intelligence Server Administrator
- PDF Servers (for reports)
- Access Manager Configuration Wizard
- Other Server Administrator applications
- Scheduler

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