

Sterling Commerce

An IBM Company

Sterling Warehouse Management System: Business Intelligence Guide (Operational Reports)

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Preface

This document describes how to use Sterling Warehouse Management System: Business Intelligence to create operational and analytical reports.

Intended Audience

This document is intended for use by application developers, system administrators who use Sterling Warehouse Management System: Business Intelligence to design, deploy, and analyze reports that present your warehouse management data from various angles, enabling you to quickly identify performance trends and make consistent, coordinated decisions to strengthen your supply chain relationships.

This document assumes a working knowledge of the related Cognos products and the Selling and Fulfillment Foundation[®]. Therefore, it is highly recommended that you read the related Cognos documentation first for a better understanding of Sterling Warehouse Management System: Business Intelligence.

Structure

This document contains the following chapters:

Chapter 1, "Introduction"

This chapter introduces the Sterling Warehouse Management System: Business Intelligence and its architecture.

Chapter 2, "Installing and Configuring Sterling Warehouse Management System: Business Intelligence"

This chapter explains how to install Sterling Warehouse Management System: Business Intelligence.

Chapter 3, "The Sterling Warehouse Management System: Business Intelligence Framework"

This chapter provides a detailed description of the aspects of the Sterling Warehouse Management System: Business Intelligence Framework (YNA); the foundation where you build a rich set of reports, and (in future releases) other OLAP objects and tools.

Chapter 4, "Sterling Warehouse Management System: Business Intelligence Reports"

This chapter describes the reports provided with Sterling Warehouse Management System: Business Intelligence.

Chapter 5, "Deploying Reports"

This chapter explains how to deploy the Sterling Warehouse Management System: Business Intelligence reports and the reports that have been created using Cognos products.

Chapter 6, "Localizing Reports"

This chapter explains how to localize the Sterling Warehouse Management System reports.

Chapter 7, "Troubleshooting and Tuning"

This chapter provides information for solving the problems that may occur when using Sterling Warehouse Management System: Business Intelligence.

Appendix A, "Sterling Warehouse Management System: Business Intelligence Views"

This appendix describes the abstraction layer on the YFS tables called the Sterling Warehouse Management System: Business Intelligence Views.

Appendix B, "Server Sizing Requirements"

This appendix describes the server requirements for the Cognos 8 components.

Appendix C, "Cognos Components"

This appendix provides a complete list of Cognos components.

Documentation

For more information about the Sterling Warehouse Management System™ components, see the following manuals:

- *Sterling Warehouse Management System: Release Notes*
- *Sterling Warehouse Management System: Installation Guide*
- *Sterling Warehouse Management System: Overview*
- *Sterling Warehouse Management System: Implementation Guide*
- *Sterling Warehouse Management System: Reports Guide*
- *Sterling Warehouse Management System: Business Intelligence Guide*
- *Sterling Warehouse Management System: Printed Documents Guide*
- *Sterling Warehouse Management System: Billing Activity Reporting Engine Guide*
- *Sterling Warehouse Management System: Upgrade Guide*
- *Sterling Warehouse Management System: Voxware Integration Guide*
- *Sterling Warehouse Management System: Javadocs*

For more information about the Selling and Fulfillment Foundation components, see the following manuals:

- *Selling and Fulfillment Foundation: Release Notes*
- *Selling and Fulfillment Foundation: Installation Guide*
- *Selling and Fulfillment Foundation: Upgrade Guide*
- *Selling and Fulfillment Foundation: Configuration Deployment Tool Guide*
- *Selling and Fulfillment Foundation: Performance Management Guide*
- *Selling and Fulfillment Foundation: High Availability Guide*
- *Selling and Fulfillment Foundation: System Management Guide*
- *Selling and Fulfillment Foundation: Localization Guide*

- *Selling and Fulfillment Foundation: Customization Basics Guide*
- *Selling and Fulfillment Foundation: Customizing APIs Guide*
- *Selling and Fulfillment Foundation: Customizing Console JSP Interface for End User Guide*
- *Selling and Fulfillment Foundation: Customizing the RCP Interface Guide*
- *Selling and Fulfillment Foundation: Customizing User Interfaces for Mobile Devices Guide*
- *Selling and Fulfillment Foundation: Customizing Web UI Framework Guide*
- *Selling and Fulfillment Foundation: Customizing Swing Interface Guide*
- *Selling and Fulfillment Foundation: Extending the Condition Builder Guide*
- *Selling and Fulfillment Foundation: Extending the Database Guide*
- *Selling and Fulfillment Foundation: Extending Transactions Guide*
- *Selling and Fulfillment Foundation: Using Sterling RCP Extensibility Tool Guide*
- *Selling and Fulfillment Foundation: Integration Guide*
- *Selling and Fulfillment Foundation: Product Concepts Guide*
- *Sterling Warehouse Management™ System: Concepts Guide*
- *Selling and Fulfillment Foundation: Application Platform Configuration Guide*
- *Sterling Distributed Order Management™: Configuration Guide*
- *Sterling Supply Collaboration: Configuration Guide*
- *Sterling Global Inventory Visibility™: Configuration Guide*
- *Sterling Catalog Management™: Configuration Guide*
- *Sterling Logistics Management: Configuration Guide*
- *Sterling Reverse Logistics™: Configuration Guide*
- *Sterling Warehouse Management System: Configuration Guide*

- *Selling and Fulfillment Foundation: Application Platform User Guide*
- *Sterling Distributed Order Management: User Guide*
- *Sterling Supply Collaboration: User Guide*
- *Sterling Global Inventory Visibility: User Guide*
- *Sterling Logistics Management: User Guide*
- *Sterling Reverse Logistics: User Guide*
- *Sterling Warehouse Management System: User Guide*
- *Selling and Fulfillment Foundation: Mobile Application User Guide*
- *Selling and Fulfillment Foundation: Business Intelligence Guide*
- *Selling and Fulfillment Foundation: Javadocs*
- *Sterling Selling and Fulfillment Suite: Glossary*
- *Parcel Carrier: Adapter Guide*
- *Selling and Fulfillment Foundation: Multitenant Enterprise Guide*
- *Selling and Fulfillment Foundation: Password Policy Management Guide*
- *Selling and Fulfillment Foundation: Properties Guide*
- *Selling and Fulfillment Foundation: Item Concepts Guide*
- *Selling and Fulfillment Foundation: Pricing Concepts Guide*
- *Business Center: Item Administration Guide*
- *Business Center: Pricing Administration Guide*
- *Business Center: Customization Guide*
- *Business Center: Localization Guide*

Cognos Documentation

For more information about the Cognos components, go to your Cognos customer support site at: <http://support.cognos.com/>.

Conventions

Sterling Warehouse Management System: Business Intelligence Components refers to Cognos products only.

Sterling Warehouse Management System: Business Intelligence refers to the Sterling Warehouse Management System: Business Intelligence Components plus the Sterling Warehouse Management System: Business Intelligence Framework.

Sterling Warehouse Management System: Business Intelligence Framework is the framework that includes the Sterling Warehouse Management System reports.

The following conventions may be used in this manual:

Convention	Meaning
. . .	Ellipsis represents information that has been omitted.
< >	Angle brackets indicate user-supplied input.
mono-spaced text	Mono-spaced text indicates a file name, directory path, attribute name, or an inline code example or command.
/ or \	Slashes and backslashes are file separators for the Windows, UNIX, and LINUX operating systems. The file separator for the Windows operating system is "\" and the file separator for UNIX and Linux systems is "/". The UNIX convention is used unless otherwise mentioned.
<YANTRA_HOME_OLD>	User-supplied location of the installation directory for previously installed releases. This is only applicable for Releases 7.7, 7.9, and 7.11.
<YFS_HOME_OLD>	This is the <YANTRA_HOME>/Runtime directory of previously installed releases. This is only applicable for Releases 7.7, 7.9, and 7.11.
<INSTALL_DIR>	User-supplied location of the Selling and Fulfillment Foundation installation directory. This is applicable for Release 8.0.

Note: The Selling and Fulfillment Foundation documentation set uses the following conventions in the context of the product name:

- Yantra is used for Release 7.7 and earlier.
- Sterling Supply Chain Applications is used for Releases 7.9 and 7.11.
- Sterling Multi-Channel Fulfillment Solution is used for Releases 8.0 and 8.2.
- Selling and Fulfillment Foundation for Release 8.5.

Introduction

The Sterling Warehouse Management System: Business Intelligence component is an optional component, providing powerful analytic and performance metrics that interface with the Selling and Fulfillment Foundation data set. The Sterling Warehouse Management System: Business Intelligence component enables you to explore and analyze warehouse data. Warehouse managers, inventory supervisors, etc. can then use this data to identify performance trends and make consistent and coordinated decisions to strengthen your extended enterprise and value chain relationships.

Sterling Warehouse Management System: Business Intelligence component is delivered through a partnership with Cognos Corporation. The goal of Sterling Warehouse Management System: Business Intelligence is to enhance the value of the Selling and Fulfillment Foundation application by providing operational and analytical reporting capabilities to Selling and Fulfillment Foundation users and their suppliers and partners.

This chapter provides information about:

- [Cognos Products](#)
- [Sterling Warehouse Management System: Business Intelligence Components](#)
- [Report Flow Diagram](#)
- [Sterling Warehouse Management System: Business Intelligence and Cognos Integration](#)

1.1 Cognos Products

The Sterling Warehouse Management System: Business Intelligence component integrates with the following Cognos products:

- **Cognos 8 Business Intelligence:** Cognos' Web-enabled client-side reporting tool is used for creating and managing both ad-hoc and scheduled reports. Cognos 8 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 such as cubes.
- **PowerPlay Client:** Cognos' OLAP reporting tool that enables you to explore multi-dimensional information by pointing, clicking, and dragging. Users can selectively view different dimensions, such as sales by region by product. Data can be viewed in cross-tab formats as well as a variety of graphical formats. For more information about this reporting tool, see the Cognos PowerPlay documentation.
- **PowerPlay Web:** Cognos' server-based product for the web deployment of analytic cubes. Users access PowerPlay Web through their browser. No client-side reporting software is required. For more information about PowerPlay Web, see the Cognos PowerPlay documentation.
- **PowerPlay Transformer:** Transformer is the modeling tool that you use to build multi-dimensional models from your source data (with IQD's created using Cognos 8 Business Intelligence). These models are distributed as PowerCubes that you can view in PowerPlay for Windows or PowerPlay Web.
- **Impromptu:** Cognos' customizable user interface or portal where users publish, find, organize, and view analytic reports and cubes on the web. For more information about Impromptu, see the Cognos Impromptu documentation.

1.2 Sterling Warehouse Management System: Business Intelligence Components

The Sterling Warehouse Management System: Business Intelligence component is delivered with the following:

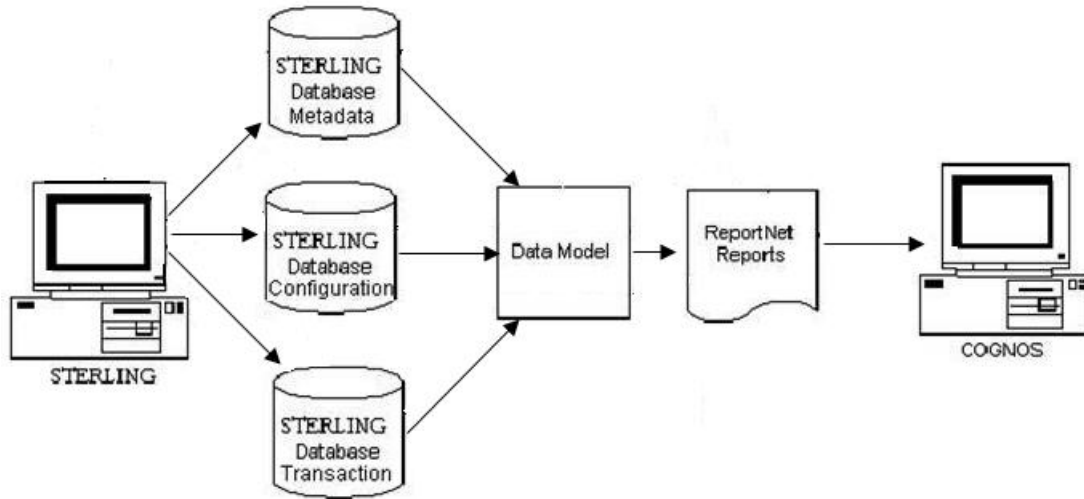
- [Data Model](#)
- [Database Scripts](#)
- [Custom Files](#)

The Sterling Warehouse Management System: Business Intelligence Data Model is a metadata model created using Framework Manager. This Data Model is used to build Cognos 8 reports. The reports generated by Report Studio are viewed using Cognos Connection. Cognos Connection is used for administering security.

1.2.1 Data Model

The Data Model provided by Sterling Warehouse Management System: Business Intelligence is the base for creating reports. The Data Model consists of a set of functionally grouped entities. [Figure 1–1, "Report Flow Diagram"](#) illustrates the flow of report creation.

Figure 1–1 Report Flow Diagram



1.2.2 Database Scripts

The Sterling Warehouse Management System: Business Intelligence component provides the set of scripts that creates the Sterling Warehouse Management System: Business Intelligence views on the Selling and Fulfillment Foundation Database. These are located in:

Analytics/Database/oracle/Scripts,
 Analytics/Database/db2/Scripts,
 Analytics/Database/sqlserver/Scripts

For more information about the scripts, see [Chapter 2, "Installing and Configuring Sterling Warehouse Management System: Business Intelligence"](#).

1.2.3 Custom Files

The custom files (located in `Analytics/Custom`) are used to enhance the user's experience of the Sterling Warehouse Management System: Business Intelligence.

For more information about custom files, see [Chapter 2, "Installing and Configuring Sterling Warehouse Management System: Business Intelligence"](#).

1.3 Sterling Warehouse Management System: Business Intelligence and Cognos Integration

Sterling Warehouse Management System: Business Intelligence provides access to Cognos Reports through the Sterling Warehouse Management System Console. You must have authorization to access these reports.

Installing and Configuring Sterling Warehouse Management System: Business Intelligence

This chapter describes how to install Cognos products when using the Sterling Warehouse Management System: Business Intelligence component. This chapter also explains the subsequent Sterling Warehouse Management System setup.

2.1 Cognos Setup

Before using the Sterling Warehouse Management System: Business Intelligence component, install the following Cognos products in accordance with Cognos' installation instructions for each product:

Note: If you are installing all Cognos products on one machine, we recommend that you install them in the order presented here.

- Cognos 8 Business Intelligence
- Framework Manager

Note: Depending on your usage (volume, users, data) Cognos recommends different configurations for the various servers used in this setup. Follow these recommendations to avoid setup-related performance issues down the road. For sample server sizing guidelines, see [Appendix B, "Server Sizing Requirements"](#).

2.1.1 Security Setup

The Sterling Warehouse Management System: Business Intelligence components do not ship with security enabled because it would complicate the deployment at a client site. All report components of the Sterling Warehouse Management System are developed with the default "administrator" user privileges (login id=administrator, no password) using the default "Creator" user class in the "default" namespace. It is recommended that you enable security for the various Cognos components and subsequently the Sterling Warehouse Management System: Business Intelligence components after they are installed.

2.2 Pre-Installation Setup

Before you begin installing Sterling Warehouse Management System: Business Intelligence, ensure if the following tasks are completed:

- The Cognos Connection has been installed.
- The content repository has been created through the Cognos Applications Manager.
- If you install Selling and Fulfillment Foundation and Sterling Warehouse Management System on the same computer, ensure that <INSTALL_DIR> and <YNW_ANALYTICS_HOME> do not point to the same directory.

Note: To generate reports using an Oracle database, the Oracle Client should be installed on the same machine as Cognos 8 Business Intelligence.

For more information, see the Cognos Configuration User Guide.

2.3 For Localizing Reports

If you need to localize your reports, you must set the `NLS_LANG` environment variable to the appropriate value. The `NLS_LANG` environment variable has three components: language, territory, and character set.

If you have installed Cognos on Unix

Export the `NLS_LANG` environment variable in the format `language_territory.UTF8`. For example, `American_America.UTF8`

If you have installed Cognos on Windows

Do the following:

1. Stop ReportNet on the Cognos server.
2. Navigate to Start > Run > Regedit.
3. Create a backup of the registry by selecting Registry > Export Registry File.
4. Navigate to `HKEY_LOCAL_MACHINE > SOFTWARE > ORACLE`.
5. Under the `ORACLE` directory, locate `Key_OraDB10g_home1` or similar.
6. On the right-hand side of the registry window, right-click `NLS_LANG` and select Modify.
7. Modify the `NLS_LANG` entry as follows:
`NLS_LANG = language_territory.UTF8`
For example, `NLS_LANG = American_America.UTF8`
8. Close the registry editor.
9. Navigate to Start > My Computer and right-click My Computer.
10. From the menu, select Properties. The System Properties dialog box displays.
11. In the System Properties pop-up window, click the Advanced tab.
12. In the Advanced tab window, click Environment Variables. The Environment Variables pop-up window displays.
13. In the Environment Variables pop-up window > System variables area, click New. The New System Variable pop-up window displays.

14. In the New System Variable pop-up window, perform the following tasks:
 - a. In Variable name, enter `NLS_LANG`.
 - b. In Variable value enter `<language_territory.UTF8>`. For example, `AMERICAN_AMERICA.UTF8`.
15. In the Environment Variables pop-up window, click OK.
16. In the System Properties pop-up window, click OK.
17. Restart your computer to enable your new environment variable.

2.4 Cognos 8 Business Intelligence

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

Implementations must use the Selling and Fulfillment Foundation 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://www.ibm.com/cognos/support>.

You can copy the Oracle thin driver to `<COGNOS_HOME>/c8/webapps/p2pd/WEB-INF`. For more information about database drivers, see the Cognos documentation at <http://www.ibm.com/cognos/support>.

Since Cognos 8 cannot access the `<INSTALL_DIR>/properties/` folder, you can include the connectivity information for the Selling and Fulfillment Foundation in the `<ANALYTICS_HOME>/bin/analytics.properties` file.

Note: To execute reports successfully, ensure that you set the `Enable CAF validation?` flag to `False`, in the Cognos Configurator.

You can install the Sterling Warehouse Management System in a Windows environment.

2.5 Installing Sterling Warehouse Management System: Business Intelligence

This chapter explains how to install the Sterling Warehouse Management System: Business Intelligence on each operating system supported by the Selling and Fulfillment Foundation.

2.5.1 UNIX or Linux Operating Systems

You can install the Sterling Warehouse Management System: Business Intelligence locally in an X Windows environment, or remotely in a text-based console environment.

Installing the Sterling Warehouse Management System: Business Intelligence in a UNIX or Linux environment includes:

- [Running the GUI-Based Installation Program](#)
- [Running the Text-Based Installation Program](#)

2.5.1.1 Running the GUI-Based Installation Program

Using a graphical user interface (GUI) in an X Windows client, you can install Sterling Warehouse Management System: Business Intelligence in a UNIX or Linux environment from a command line.

Note: The following instructions assume that you received an installation CD. If you downloaded Sterling Warehouse Management System: Business Intelligence from the Electronic Software Distribution (ESD) Portal, unzip the downloaded file to an empty directory. The directory containing the unzipped files is an electronic image of an installation CD. Use this directory wherever there is a reference to the installation CD in the following instructions. Ignore any instructions to place the installation CD in a drive.

To install the Sterling Warehouse Management System: Business Intelligence, follows these steps:

1. Place the Sterling Warehouse Management System: Business Intelligence installation CD in the appropriate drive.

2. From the installation CD, copy the `SCIInstallWizard.jar` file to your home directory or base directory and change to that directory.

If you are using FTP to copy the files, verify that your session is set to binary mode.

3. Log in to a Windows machine.
 - a. Use a connectivity client to connect to your UNIX or Linux account.
 - b. Use the following command to set the display to use your X server as a client:

```
export DISPLAY=<server>:0.0
```

(or the appropriate Display identifier)

Note: The value 0.0 can be a different value. For example, 8.0.

4. Enter the following command from the directory where the `SCIInstallWizard.jar` resides:

```
<JAVA_HOME>/bin/java -Xmx512m -jar SCIInstallWizard.jar
```

Note: On Linux, do not use any soft or symbolic links in the path to the jar file. Make sure that you specify the full path to the jar file.

The Installation dialog box is displayed in a GUI.

5. Click Next to start the installation program.
6. Review the license agreement, and click Accept to accept the terms.
7. Enter the directory where your JDK is installed. Click Next.
8. Enter the directory where you want to install the Sterling Warehouse Management System: Business Intelligence. Click Select Folder and refer this directory as `<YNW_ANALYTIC_HOME>` in subsequent prompts. After selecting the folder, click Next.
9. The Pending Installation Tasks screen is displayed. This screen is read-only. The following task is shown:

- Verify Sufficient Disk Space
 - Click Next to continue.
10. On the Installation Progress screen, click Install to proceed with the installation. If you want to see detailed information about the progress of the installation, click Show Details, then click Install.
 11. Once the installation is finished, click Exit.

For specific information about the installation, verify the `ant.install.log` file generated in your home directory.

2.5.1.2 Running the Text-Based Installation Program

Using a text-based (non-GUI) interface, you can install Sterling Warehouse Management System: Business Intelligence in a UNIX or Linux environment from a command line.

Note: The following instructions assume that you received an installation CD. If you downloaded Sterling Warehouse Management System: Business Intelligence from the Electronic Software Distribution (ESD) Portal, unzip the downloaded file to an empty directory. The directory containing the unzipped files is an electronic image of an installation CD. Use this directory wherever there is a reference to the installation CD in the following instructions. Ignore any instructions to place the installation CD in a drive.

To install the Sterling Warehouse Management System: Business Intelligence, follow these steps:

1. Place the Sterling Warehouse Management System: Business Intelligence installation CD in the appropriate drive.
2. From the installation CD, copy the `SCIInstallWizard.jar` file to your home directory or base directory and change to that directory.

If you are using FTP to copy the files, verify that your session is set to binary mode.

3. Enter the following command from the directory where the `SCIInstallWizard.jar` resides:

```
<JAVA_HOME>/bin/java -Xmx512m -jar SCIInstallWizard.jar
```

4. At the "Welcome to the Sterling Warehouse Management System: Business Intelligence Installer" prompt, press Enter.
5. At the "Press Enter to view the license agreement" prompt, press Enter to begin. The first page of the license agreement is displayed.
6. Type N for the next page of the agreement, or scroll directly to the end of the agreement by pressing any other key. After the last page of the license agreement is displayed, the prompt "Do you accept the license? Y or N" is displayed. Press Y for yes, N for no.
7. Enter the folder where you want to install the Sterling Warehouse Management System: Business Intelligence. This directory refers to the <YNW_ANALYTIC_HOME> in subsequent prompts. After entering the folder, press Enter.
8. In the next screen, confirm that you have selected the correct folder, and press Enter. The installation process starts.
9. Once the installation is finished, press Enter to exit.

For specific information about the installation, verify the `ant.install.log` file generated in your home directory.

2.5.2 Windows Operating Systems

You can install the Sterling Warehouse Management System: Business Intelligence in a Windows environment.

2.5.2.1 Running the GUI-Based Installation Program

Note: The following instructions assume that you received an installation CD. If you downloaded Sterling Warehouse Management System: Business Intelligence from the Electronic Software Distribution (ESD) Portal, unzip the downloaded file to an empty directory. The directory containing the unzipped files is an electronic image of an installation CD. Use this directory wherever there is a reference to the installation CD in the following instructions. Ignore any instructions to place the installation CD in a drive.

To install the Sterling Warehouse Management System: Business Intelligence on Windows, follows these steps:

1. Close all open Windows programs and any command prompt windows.
2. Place the Sterling Warehouse Management System: Business Intelligence installation CD in the appropriate drive.
3. From the installation CD, copy the `SCIInstallWizard.jar` file to your home directory or base directory and change to that directory.
4. Enter the following command from the directory where the `SCIInstallWizard.jar` resides:

```
<JAVA_HOME>/bin/java -Xmx512m -jar SCIInstallWizard.jar
```

The Installation dialog box is displayed.

5. Click Next to start the installation program.
6. Review the license agreement, and click Accept to accept the terms.
7. Enter the directory where your JDK is installed. Click Next.
8. Enter the directory where you want to install the Sterling Warehouse Management System: Business Intelligence. Click Select Folder and refer this directory as `<YNW_ANALYTIC_HOME>` in subsequent prompts. After selecting the folder, click Next.
9. The Pending Installation Tasks screen is displayed. This screen is read-only. The following task is shown:

- Verify Sufficient Disk Space
 - Click Next to continue.
10. On the Installation Progress screen, click Install to proceed with the installation. If you want to see detailed information about the progress of the installation, click Show Details, then click Install.
 11. Once the installation is finished, click Exit.

For specific information about the installation, verify the `ant.install.log` file generated in your home directory.

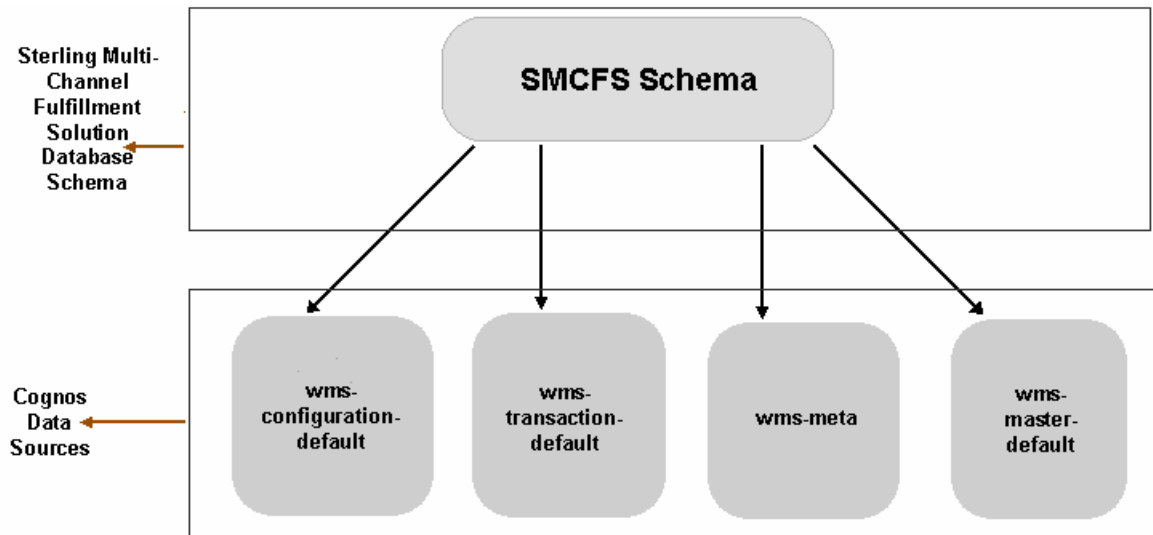
2.6 Configuring Cognos Data Sources

In order to map the Selling and Fulfillment Foundation database schemas to Cognos, data sources must be configured on Cognos. In Release 8.5, the Selling and Fulfillment Foundation is hosted either on single schema or on multischema. To support single schema or multischema on Cognos, data sources must be configured accordingly.

2.6.1 Configuration Required to Support Single Schema

Data pertaining to the Selling and Fulfillment Foundation will point to a single schema. [Figure 2–1](#) illustrates the setup required for single schema.

Figure 2–1 Single Schema Setup



Configure the following data sources on Cognos in order to represent individual table types in the Selling and Fulfillment Foundation:

- wms-configuration-default
- wms-transaction-default
- wms-meta
- wms-master-default

All the data sources will point to a single schema that is mentioned in the `jdbc.properties` file under the `<INSTALL_DIR>/properties` directory.

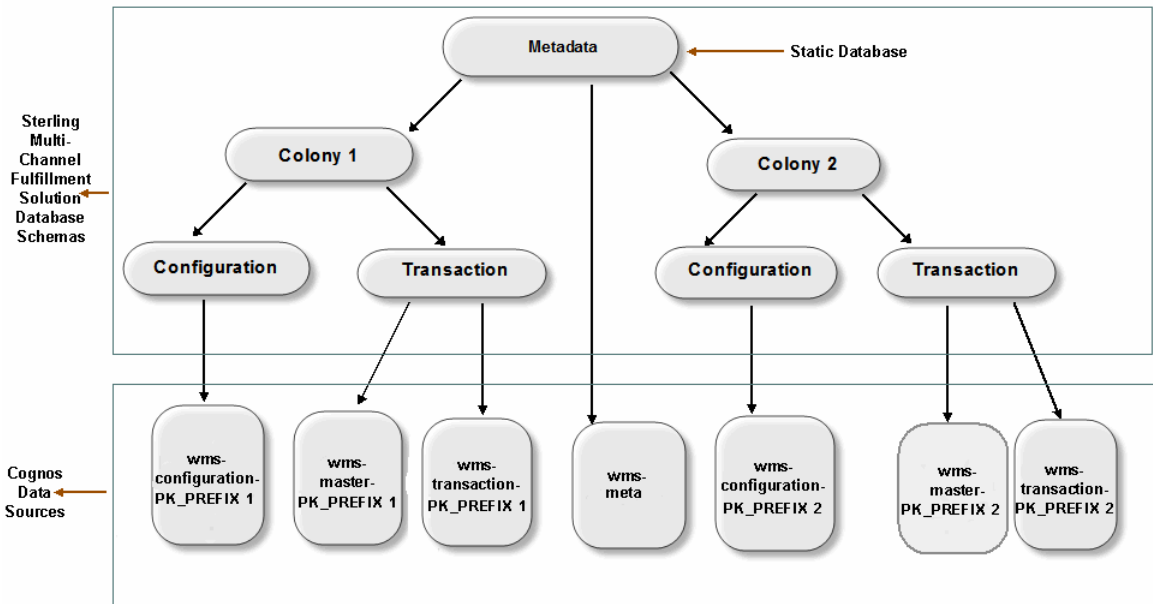
2.6.2 Configuration Required to Support Multischema

When the Selling and Fulfillment Foundation is hosted on multischema, there are three types of schemas, of which one is static, and the other two varies with the colonies.

Note: A colony represents a set of enterprises that are grouped together. A PK_PREFIX is a unique two digit number for each colony.

Figure 2–2 illustrates the setup required for multischema.

Figure 2–2 Multischema Setup



The static schema is called metadata, and contains information pertaining to colonies, and the schemas contained under the colonies. Each colony contains the following schemas:

- Configuration—This contains the configuration data.
- Transaction—This contains the master data and transaction data.

Therefore, in order to support multischema on Cognos, the following data sources must be created:

- wms-meta—Configure this data source such that it points to the metadata schema of the Selling and Fulfillment Foundation. Specify the name of the data source as wms-meta.

Note: The metadata schema contains information pertaining to the colonies. For each colony, configure the following data sources:

- wms-configuration-<PK_PREFIX>
 - wms-transaction-<PK_PREFIX>
 - wms-master-<PK_PREFIX>
- wms-configuration-<PK_PREFIX>—Configure this data source such that it points to the configuration schema of the colony in the Selling and Fulfillment Foundation.
 - wms-transaction-<PK_PREFIX>—Configure this data source such that it points to the transaction schema of the colony in the Selling and Fulfillment Foundation.
 - wms-master-<PK_PREFIX>—Configure this data source such that it points to the transaction schema of the colony in the Selling and Fulfillment Foundation. Note that the transaction schema contains both the master data and the transaction data.

2.7 Sterling Warehouse Management System: Business Intelligence Setup

Before you can use the Sterling Warehouse Management System: Business Intelligence component, you must:

1. Create the Sterling Warehouse Management System: Business Intelligence views in the Selling and Fulfillment Foundation database. For more information about creating the Sterling Warehouse Management System: Business Intelligence views, see [Section 2.7.1, "Creating Sterling Warehouse Management System: Business Intelligence Table Views"](#).
2. To install the custom files, run the scripts described in [Section 2.7.2, "Running Custom Scripts"](#).

2.7.1 Creating Sterling Warehouse Management System: Business Intelligence Table Views

Before you can use the Sterling Warehouse Management System: Business Intelligence component, you must create the Sterling Warehouse Management System: Business Intelligence views in the Selling and Fulfillment Foundation database. The Sterling Warehouse Management System: Business Intelligence metadata model is created from a set of Sterling Warehouse Management System: Business Intelligence Framework (YNA) views instead of the YFS tables directly.

Note: If you are using Microsoft SQL Server® database, ensure that Sterling Warehouse Management System: Business Intelligence is installed on Windows.

The YNA views are used specifically by the Sterling Warehouse Management System: Business Intelligence framework. The naming convention for these views is `YNA_<view_name>_VW`.

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

For more information about `WithHistory` and `WithoutHistory` views, see [Section 3.1, "Sterling Warehouse Management System: Business Intelligence Framework Views"](#).

2.7.1.1 Creating WithHistory Views

`WithHistory` views are views that include data from History tables.

To create `WithHistory` views:

1. Edit the `yna_master_db_script.xml` file located in the `<YNW_ANALYTICS_HOME>/bin` directory as follows:
 - a. Set the appropriate path for the `DB driver` directory in the `dir` attribute of the `fileset` element, for example, `<fileset dir="/db/lib">`.
 - b. Set the value of the `type` property to `withHistory` as mentioned below:

```
<property name="type" value="WithHistory"/>
```

- c. If the Selling and Fulfillment Foundation and Sterling Warehouse Management System: Business Intelligence are installed on the same server, set the `file` attribute in the `property` element to point to the `jdbc.properties` file, `sandbox.cfg` file, and `noapp.properties` file, for example, `<property file="<INSTALL_DIR>/properties/jdbc.properties"/>` and `<property file="<INSTALL_DIR>/properties/sandbox.cfg"/>`, and `<property file="<INSTALL_DIR>/properties/noapp.properties"/>`

If the Selling and Fulfillment Foundation and Sterling Warehouse Management System: Business Intelligence are installed on different servers, copy the `jdbc.properties` file and the `sandbox.cfg` file from Selling and Fulfillment Foundation to Sterling Warehouse Management System: Business Intelligence, and set the `file` attribute in the `property` element to point to the copied `jdbc.properties` file, `sandbox.cfg` file, and `noapp.properties` file, for example, `<property file="<INSTALL_DIR>/properties/jdbc.properties"/>`, `<property file="<INSTALL_DIR>/properties/sandbox.cfg"/>`, and `<property file="<INSTALL_DIR>/properties/noapp.properties"/>`.

2. Execute the following script in the `<YNW_ANALYTICS_HOME>/bin` directory:


```
ant -f yna_master_db_script.xml -l yna_master_db_script.log
```
3. On executing the above command, `yna_master_db_script.log` file is created under the `bin` directory. You can use this file to search for errors, if any.

2.7.1.2 Creating WithoutHistory Views

WithoutHistory views are views that do not include data from History tables.

To create WithoutHistory Views:

1. Edit the `yna_master_db_script.xml` file located in the `<YNW_ANALYTICS_HOME>/bin` directory as follows:
 - a. Set the appropriate path for the DB driver directory in the `dir` attribute of the `fileset` element, for example, `<fileset dir="/db/lib">`.

- b. Set the value of the `type` property to `withoutHistory` as mentioned below:

```
<property name="type" value="WithoutHistory"/>
```

- c. If the Selling and Fulfillment Foundation and Sterling Warehouse Management System: Business Intelligence are installed on the same server, set the `file` attribute in the `property` element to point to the `jdbc.properties` file, `sandbox.cfg` file, and `noapp.properties` file, for example, `<property file="<INSTALL_DIR>/properties/jdbc.properties"/>`, `<property file="<INSTALL_DIR>/properties/sandbox.cfg"/>`, and `<property file="<INSTALL_DIR>/properties/noapp.properties"/>`

If the Selling and Fulfillment Foundation and Sterling Warehouse Management System: Business Intelligence are installed on different servers, copy the `jdbc.properties` file and the `sandbox.cfg` file from the Selling and Fulfillment Foundation server to the Sterling Warehouse Management System: Business Intelligence server, and set the `file` attribute in the `property` element to point to the copied `jdbc.properties` file, `sandbox.cfg` file, and `noapp.properties` file, for example, `<property file="<INSTALL_DIR>/properties/jdbc.properties"/>`, `<property file="<INSTALL_DIR>/properties/sandbox.cfg"/>`, and `<property file="<INSTALL_DIR>/properties/noapp.properties"/>`.

2. Execute the following script in the `<YNW_ANALYTICS_HOME>/bin` directory:

```
ant -f yna_master_db_script.xml -l yna_master_db_script.log
```

3. On executing the above command, `yna_master_db_script.log` file is created under the `WithoutHistory` directory. You can use this file to search for errors, if any.

Error Messages in the DB2 Universal Database

Some Failed to execute errors may be displayed during the **first run** of the above command in DB2 Universal Database. The errors are typically of the following type and may be ignored:

```
[sql] Failed to execute: DROP VIEW YNA_STATUS_VW
```



```
[sql] com.ibm.db2.jcc.b.SqlException: DB2 SQL error: SQLCODE: -204,  
SQLSTATE: 42704, SQLERRMC: STAGING.YNA_STATUS_VW
```

Some other Failed to execute errors could be displayed when running the above script from Windows operating system on the DB2 Universal Database. The errors are typically of the following type and may be ignored:

```
[sql] Failed to execute: DROP VIEW YNA_STATUS_VW  
[sql] com.ibm.db2.jcc.b.SqlException: A result has opened by the previous  
getResultSet() or getUpdateCount() call, Need to call getMoreResults()
```

2.7.2 Running Custom Scripts

To install a set of customized Web pages and images that enhance the users' experience of the Sterling Warehouse Management System: Business Intelligence Web component and to enable the Selling and Fulfillment Foundation branding in this installation, you must complete the following tasks:

For Windows

1. Set the environment variables for Cognos and Sterling Warehouse Management System: Business Intelligence in the following script:
 - `<YNW_ANALYTICS_HOME>/scripts/image_setup.bat`
2. Images: Execute `<YNW_ANALYTICS_HOME>\scripts\Image_Setup.bat`. This copies some of the Selling and Fulfillment Foundation images over the Cognos connection.

For UNIX

1. Set the environment variables for Cognos and Sterling Warehouse Management System: Business Intelligence in the following script:
 - `<YNW_ANALYTICS_HOME>/scripts/image_setup.sh`
2. Images: Execute `<YNW_ANALYTICS_HOME>/scripts/image_setup.sh`. This copies some of the Selling and Fulfillment Foundation images over the Cognos connection.

2.7.3 Hiding the Unused Buttons on the Cognos Toolbar

If the Sterling Warehouse Management System: Business Intelligence is installed on the same server on which Cognos 8 BI 8.4 is installed, by default, the Cognos toolbar will be displayed. To hide the unused buttons on the Cognos toolbar, perform the following steps:

1. Set the <COGNOS_HOME> environment variable as the parent of the Cognos 8 BI 8.4 installation directory, for example, if Cognos 8 BI 8.4 is installed in the /usr/local/cognos/c8 directory, <COGNOS_HOME> must point to the /usr/local/cognos directory.
2. Browse to the <YNW_ANALYTICS_HOME>/customs directory, open the custom_system.xml file, and uncomment the objects corresponding to the buttons that must be hidden on the Cognos toolbar.
3. Run the ant -f ynwinstallanalytics.xml customizeview command from the <YNW_ANALYTICS_HOME>/bin folder.

Note: If you want to display the hidden buttons, manually comment the corresponding object from the UI_OBJECTS parameter in the <COGNOS_HOME>/c8/templates/ps/portal/system.xml file.

2.8 Disabling or Modifying a Cognos Cache Session

By default, the session cache setting is always enabled in Cognos 8 BI 8.4. In Cognos 8 BI 8.4, you can either disable or modify the session cache setting to increase or decrease the number of cache requests for each session.

To disable or modify the default session cache setting, perform the following steps:

1. Rename the CQEConfig.xml.sample file, which can be accessed from the path <COGNOS_HOME>/c8/configuration/, as CQEConfig.xml.
2. Open the CQEConfig.xml file using a text editor such as Notepad.
3. By default, the value of the queryReuse parameter is set to 5.

To modify the session cache setting, change the value of the queryReuse parameter, as required, to increase or decrease the number of cache requests for each session.

To disable the session cache setting, set the value of the queryReuse parameter to 0.

4. Save the `CQEConfig.xml` file.
5. Using Cognos Configuration, stop the Cognos 8 BI 8.4 server, and restart it.

2.9 Deploying the Sterling Warehouse Management System: Business Intelligence Reports

To deploy the Sterling Warehouse Management System: Business Intelligence Reports follow these steps to Import the `WMS-Analytics.zip` into the Cognos Content Repository.

1. Set the `YNW_ANALYTICS_HOME` environment variable as the Sterling Warehouse Management System: Business Intelligence Installation directory.
2. Set the `COGNOS_HOME` environment variable as the parent of the Cognos 8 Installation directory, for example, If Cognos 8 is installed in the `/usr/local/cognos/c8` directory, `COGNOS_HOME` should point to the `/usr/local/cognos` directory.
3. Set the `Display` environment variable as appropriate to an X-Windows terminal.
4. The `ynwinstallanalytics.xml` file assumes that you have installed Cognos 8 and Sterling Warehouse Management System: Business Intelligence on the same machine. If, however, you have installed Cognos 8 and Sterling Warehouse Management System: Business Intelligence on two separate machines, modify the following line of the XML by replacing `localhost` with the IP address of the machine where Cognos 8 has been installed:

```
<property name="cognosurl"
value="http://localhost:9300/p2pd/servlet/dispatch"/>
```

Note: Ensure that you copy the following third-party jar files from <COGNOS_HOME>/c8/webapps/p2pd/WEB-INF/lib to <YNW_ANALYTICS_HOME>/lib:

- axis.jar
 - axisCrnpClient.jar
 - CAM_AAA_CustomIF.jar
 - commons-discovery.jar
 - commons-logging.jar
 - dom4j.jar
 - jaxrpc.jar
 - saaj.jar
 - wsdl4j.jar
 - xalan.jar
 - xercesImpl.jar
 - xml-apis.jar
-

5. If Sterling Warehouse Management System: Business Intelligence and Cognos 8 are installed on the same machine, you must additionally run the target `copylib` in `ynwinstallanalytics.xml`.

Run the following command from <YNW_ANALYTICS_HOME>/bin:
`ant -f ynwinstallanalytics.xml copylib`

This command copies:

- <YNW_ANALYTICS_HOME>/lib/sscap-auth.jar to <COGNOS_HOME>/c8/webapps/p2pd/WEB-INF/lib directory
- <YNW_ANALYTICS_HOME>/bin/analytics.properties.sample to <COGNOS_HOME>/c8/webapps/p2pd/WEB-INF/classes directory
- <YNW_ANALYTICS_HOME>/deployment/WMS-Analytics.zip to <COGNOS_HOME>/c8/deployment directory

If Sterling Warehouse Management System: Business Intelligence and Cognos 8 are installed on different machines:

- Copy `<YNW_ANALYTICS_HOME>/lib/sscap-auth.jar` to `<COGNOS_HOME>/c8/webapps/p2pd/WEB-INF/lib` directory on the machine.
 - Copy the `<YNW_ANALYTICS_HOME>/bin/analytics.properties.sample` file to the `<COGNOS_HOME>/c8/webapps/p2pd/WEB-INF/classes` directory.
 - Copy the `<YNW_ANALYTICS_HOME>/deployment/WMS-Analytics.zip` file to the `<COGNOS_HOME>/c8` deployment directory.
6. Ensure that the Cognos service has been started with `Allow anonymous access` set to `True`. After successful import of the content repository, set `Allow anonymous access` to `False`.
 7. Run the following command from `<YNW_ANALYTICS_HOME>/bin`:

```
ant -f ynwinstallanalytics.xml
```

This publishes the Sterling Warehouse Management System: Business Intelligence package with reports on the Cognos Content Repository.

8. Save the `<COGNOS_HOME>/c8/webapps/p2pd/WEB-INF/classes/analytics.properties.sample` file as `analytics.properties` in the same directory.
9. Change the value of the `sscap.app.url` property in the `analytics.properties` file to point to the Selling and Fulfillment Foundation Application URL as follows:

```
sscap.app.url=http://hostname:portnumber/smcfs
```

In this instance,

- `hostname` is the computer name or IP address of the computer where the Selling and Fulfillment Foundation is installed.
- `portnumber` is the listening port of the computer where the Selling and Fulfillment Foundation is installed.

2.10 Selling and Fulfillment Foundation Authentication Mechanism

Sterling Commerce recommends that implementations use the Selling and Fulfillment Foundation Authentication Mechanism to authenticate users for viewing reports.

To setup the Selling and Fulfillment Foundation Authentication Mechanism:

- Launch Cognos Configuration
- Navigate to Security > Authentication
- Add a new namespace `sscapi` resource of the type Custom Java Provider
- Assign the namespace ID `sscapi` to this namespace resource
- Assign the Java classname `com.yantra.authenticator.YantraAuthentication`

2.11 Modifying properties

To launch reports using the Application Console, the following properties has to be specified in the

`<INSTALL_DIR>/properties/customer_overrides.properties` file.

The Cognos 8 BI 8.4 URL format is:

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

`<machinename>` should be replaced with the machine name or the IP address of the Cognos 8 installation machine.

For additional information about modifying the properties and the `customer_overrides.properties` file, see the *Selling and Fulfillment Foundation: Installation Guide*.

Note: DO NOT change the other parts of this URL. The Sterling Warehouse Management System: Business Intelligence access from the Selling and Fulfillment Foundation may fail.

Note: By default, the following property is set in the `yfs.properties_ynw_ext` file:

```
yfs.analytics.reportnet.url=http://<machinename>/cognos8/cgi-bin/cognos.cgi
```

This property can be commented out if it is set in the `yfs.customeroverrides.properties` file. When executing the Cognos reports, the application will consider the URL set in the `customeroverrides.properties` file.

You must also configure the `yfs.analytics.namespace` property in the `<INSTALL_DIR>/properties/customer_overrides.properties` file. This property indicates the namespace that is to be configured to authenticate users in Cognos 8 BI.

2.11.1 To Launch Cognos 8 BI 8.4

To launch Cognos 8 BI 8.4 from the Sterling Warehouse Management System, you must configure:

```
yfs.analytics.reportnet.url=http://<machinename>/cognos8/cgi-bin/cognos.cgi  
property
```

`<machinename>` should be replaced with the machine name or the IP address of the Cognos 8 BI installation machine.

Note: Do not change the other parts of the URL mentioned earlier. The Sterling Warehouse Management System: Business Intelligence access from the Selling and Fulfillment Foundation may fail.

You must also configure the `yfs.analytics.namespace=<sscap>` property which indicate the namespace that will be configured to authenticate the Cognos 8 BI.

The Sterling Warehouse Management System: Business Intelligence Framework

This chapter provides a detailed description of the Sterling Warehouse Management System: Business Intelligence Framework (YNA), which is the foundation on which you build a set of reports.

The Sterling Warehouse Management System: Business Intelligence Framework consists of:

- Sterling Warehouse Management System: Business Intelligence Framework views in the Selling and Fulfillment Foundation database (see [Section 3.1, "Sterling Warehouse Management System: Business Intelligence Framework Views"](#) on page 32)
- Data Model (see [Section 3.2, "Data Model"](#))

You must complete the following tasks for a complete utilization of Sterling Warehouse Management System: Business Intelligence for analysis and reporting:

- Create views in the Selling and Fulfillment Foundation database (see [Section 2.7.1, "Creating Sterling Warehouse Management System: Business Intelligence Table Views"](#) on page 20)
- Optionally, build reports (see [Section 3.6, "Designing Reports"](#) on page 39)
- Deploy reports (see [Chapter 5, "Deploying Reports"](#))
- Refresh reports (see [Chapter 5, "Deploying Reports"](#))
- Optionally, extend reports

[Figure 1–1, "Report Flow Diagram"](#) illustrates the flow for report building.

3.1 Sterling Warehouse Management System: Business Intelligence Framework Views

The Sterling Warehouse Management System: Business Intelligence Framework (YNA) views are the foundation for the Sterling Warehouse Management System: Business Intelligence 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 Selling and Fulfillment Foundation system. If you extend the basic Data Model to include other tables from the Selling and Fulfillment Foundation Database, Sterling Commerce recommends following the same methodology. For more details about extending the Data Model, see [Section 3.3, "Extending the Sterling Warehouse Management System: Business Intelligence Data Model"](#). 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.

Sterling Warehouse Management System: Business Intelligence provides two sets of views: WithHistory and WithoutHistory. WithHistory views contain Sterling Warehouse Management System: Business Intelligence view set and run against the historical and non-historical data. WithoutHistory views contain the Sterling Warehouse Management System: Business Intelligence view set but only run against non-historical data.

Important: WithHistory and WithoutHistory views work off the same view names and set of folders. Configure the model to access different view sets from different schema, one for historical data and one for non-historical data.

3.2 Data Model

The Data Model is a metadata model that provides:

- A single administration point for metadata supporting Cognos 8 reports.
- 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)

3.2.1 Star to Snowflake Model

In a normalized database, there are typically master tables and transactional tables. The master table data is shared by many transactional tables, or a given transactional table may have multiple columns as foreign keys for the same master table. In a query, this type of transactional table(s) are joined to the same master table, the master table is repeated in the SQL query, for example,

```
SELECT <Required_Column> FROM YFS_ORGANIZATION O, YFS_PERSON_INFO PI1,
YFS_PERSON_INFO PI2,
      YFS_PERSON_INFO PI3
WHERE O.CORPORATE_ADDRESS_KEY = PI1.PERSON_INFO_KEY (+) AND
      O.CONTACT_ADDRESS_KEY = PI2.PERSON_INFO_KEY (+) AND O.BILLING_ADDRESS_KEY =
      PI3.PERSON_INFO_KEY (+)
```

In this example, the Person Info master table has been repeated for each referencing column. If the Organization table was joined to another table that had more references to the Person Info table, you could have viewed see more Person Info tables in the query.

In the Data Model, joins are created between the entities to represent the relationships between them. Naturally, if there is only one entity for a master table, and more than one reference to it is required in a particular query, the SQL that is produced will not be correct, for example,

```
SELECT <Required_Column> FROM YNA_ORDER_LINE_VW OL,
YNA_ORGANIZATION_SHIP_NODES_VW SN
WHERE OL.SHIP_NODE_KEY = SN.SHIP_NODE_KEY AND OL.RECEIVING_NODE =
      SN.SHIP_NODE_KEY .
```

This query is not correct. Therefore, in this case, you need two entities in the Catalog that correspond to the YNA_ORGANIZATION_SHIP_NODES_VW view. This is done by replicating

the entity Organization Distribution Nodes into Organization Receiving Nodes and Organization Ship Nodes and separate joins are created with the Order Line entity.

If more entities require the same set of master tables, the master tables can be further replicated in the Catalog, for example, Organization Receiving Nodes and Organization Ship Nodes are required both by Order Line and Order Release. Therefore, there are two instances of each Node table in the Catalog.

Other tables may have to be similarly replicated from views. For details on these views, see [Appendix A, "Sterling Warehouse Management System: Business Intelligence Views"](#). Because this replication is extended for more and more master tables, the Star model of the database begins to look like a Snowflake. [Figure 3–1, "Star to Snowflake Model"](#) illustrates this concept.

3.3 Extending the Sterling Warehouse Management System: Business Intelligence Data Model

The Sterling Warehouse Management System: Business Intelligence Data Model can be modified to incorporate the specific needs of your Selling and Fulfillment Foundation installation by extending the Catalog. This chapter discusses how you can extend the Catalog.

For information about extending your Selling and Fulfillment Foundation installation, see the *Selling and Fulfillment Foundation: Customization Guide*.

Before you extend the Data Model, read the *Cognos 8* documentation so that you understand how to use the product and you can apply that knowledge to the Data Model. Be sure to create a backup of all the components that are going to be modified.

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

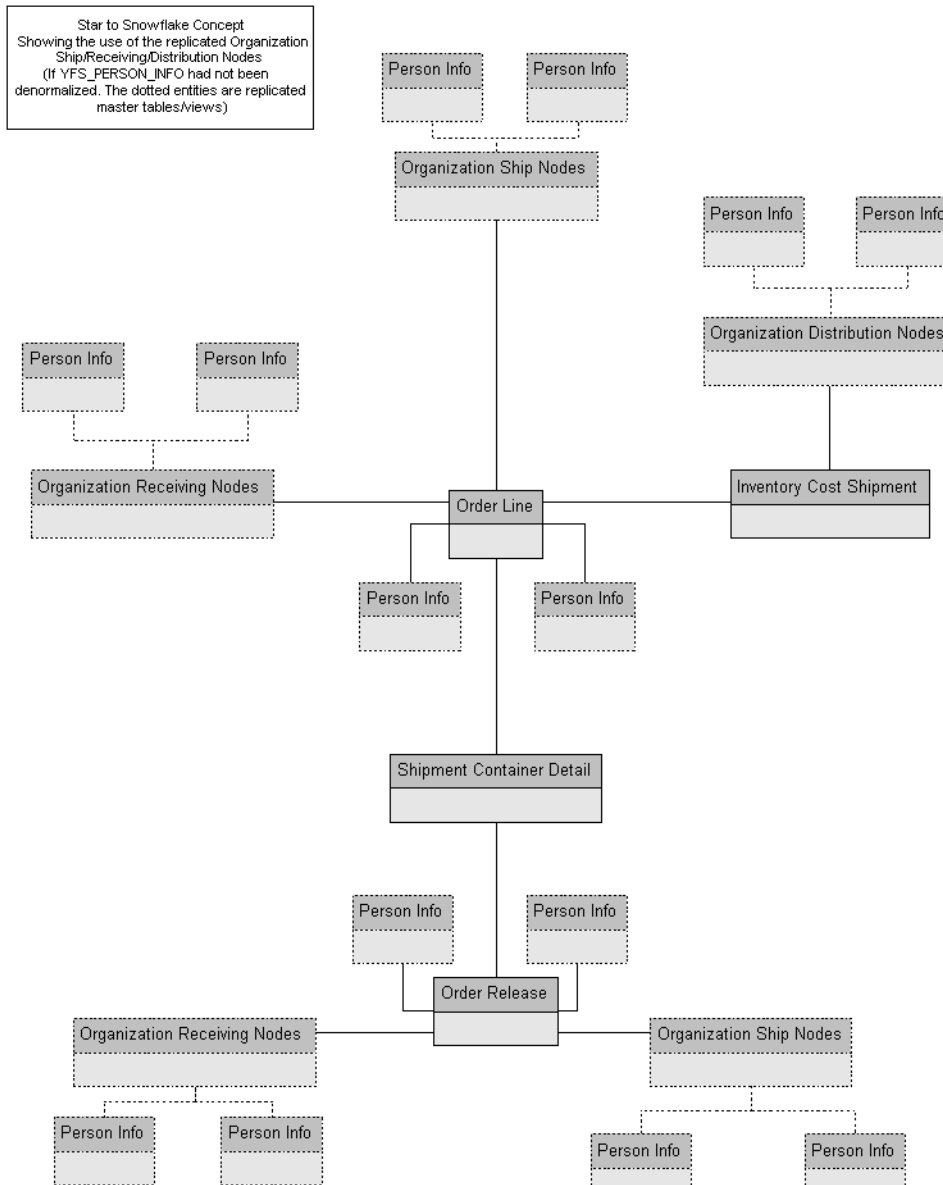
3.4 Adding Fields, Tables, and Views

To add fields, tables, and views, follow the instructions in the *Cognos 8* documentation.

3.5 Deleting or Renaming Fields, Tables, and Views

Sterling Commerce recommends that you do **not** delete or rename the objects that already exist in the Catalog delivered with Sterling Warehouse Management System: Business Intelligence. This can create compatibility problems with future versions of the Sterling Warehouse Management System: Business Intelligence Framework components. However, if it is absolutely necessary to delete some objects, follow the guidelines provided in the *Cognos 8* documentation.

Figure 3–1 Star to Snowflake Model



3.5.1 Data Model Objects

The 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. Navigate Tools>Modify Names, to change the column names. This function provides a list of name rules that are executed for these entities. The Data Model has the following components:

- [Filters](#)
- [Entities](#)
- [Joins](#)

3.5.1.1 Filters

Selling and Fulfillment Foundation provides filters that is 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 filter that is provided:

- **Sales Order** – limits data to the Document_Type of 0001.

3.5.1.2 Entities

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

Entities from Views

For details on these entities, see [Appendix A, "Sterling Warehouse Management System: Business Intelligence Views"](#).

Entities Created 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. (See [Section 3.2.1, "Star to Snowflake Model"](#).) Some of this denormalization

is done in the YNA views for commonly joined tables, such as YFS_PERSON_INFO. Other entities have been duplicated in the Data Model.

3.5.1.3 Joins

Joins are created in the Data Model. This reduces the maintenance overheads 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 by the 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, see ["Join Cardinality Flexibility"](#).

Join Cardinality Flexibility

The Item and Item Alias entities have a 1:1-0:n join in the business layer. When the Cognos 8 report containing these two entities is created, it is as follows:

```
select T1."MANUFACTURER_NAME" as c1,
       T2."ALIAS_NAME" as c2
from ("YNA_ITEM_VW" T1 left outer join "YNA_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 "YNA_ITEM_ALIAS_VW" T2,
     "YNA_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 would not have been possible to achieve.

3.6 Designing Reports

Reports are created using Cognos 8. Please refer to the Cognos 8 documentation for information about designing reports.

Sterling Warehouse Management System: Business Intelligence Reports

To aid warehouse managers who are responsible for decision-making in terms of inventory, inbound, outbound, and other operations in the warehouse, the Sterling Warehouse Management System provides many reports. Access to these reports is controlled, based on the group to which the user belongs.

The Sterling Warehouse Management System reports can also be used by enterprise users for tracking inventory across nodes. These reports aid enterprise users in better decision-making by providing complete visibility to the inventory across all nodes.

The Sterling Warehouse Management System also provides a better user interface by integrating reports with the Application Console. Dynamic menus are provided to enable users to access reports from the appropriate consoles. The reports displayed in the menu are based on the user's group. For example, only users who belong to the group representing warehouse managers can view the Order Billing Report and the Shipment Billing Report in their menu. Data security is maintained in the reports by allowing only users with appropriate permissions to access the information.

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 upon this criteria, the Sterling Warehouse Management System displays the appropriate report.

4.1 Sterling Warehouse Management System Reports

The reports provided with the Sterling Warehouse Management System are grouped into the following four menu classifications:

- [Inbound Reports](#)
- [Returns Reports](#)
- [Inventory Reports](#)
- [VAS Reports](#)
- [Outbound Reports](#)
- [Billing Activity Reporting Engine Reports](#)

4.1.1 Inbound Reports

Inbound reports provide visibility to receipts. These reports aid receiving supervisors to plan receipts and labor requirement for receipts, as well as to manage discrepancies. The warehouse manager can also see information on receipts that are expected shortly, so as to make the dock doors available for these receipts.

For more information about inbound reports, see the *Sterling Warehouse Management System: Reports Guide*.

The different inbound reports provided with the Sterling Warehouse Management System are:

- [Await Material Report](#)

This report shows the summary of the items that are waiting for material. This report helps the warehouse manager to identify items that are unavailable and to prioritize inbound shipments that can reduce the awaiting items in this report.

- [Delivery Dock Schedule Report](#)

The Dock Schedule Report provides visibility into appointments taken for one or more receiving docks, for a range of dates.

- [Dock to Stock Cycle Time KPI Report](#)

This report is used to measure the Dock to Stock cycle time on all inbound shipments or receipts. Cycle time is defined as the time that

elapses from the start of the receipt to the time that Putaway is completed.

- Inbound Labor Requirements Report

This report is used to determine labor requirements for receiving activities. The labor required is calculated based on the Standard Allowable Minutes defined.

- Item Attribute Setup Report

This report lists all items in the warehouse that do not have their attributes completely defined. This report is useful to identify items that have incomplete setup, as this information is required to execute warehouse operations.

- Receipt Discrepancy Report

This report is used to track the receipt discrepancy details between the expected and received quantities for a particular day or date range. The report displays the discrepancy as Short Receipt, Over Receipt, or Damaged.

- Receipt Detail Report

This report lists the details of the shipments received for the selected shipment, Purchase Order (PO), or date range. It provides details at the item and quantity level.

- Receiving Summary Report

This report lists the receipts for the selected shipment, PO, or date range. It provides summary receipt information at the shipment level.

- Shipment Billing Summary Report

This report displays the number of shipments and shipment lines shipped, and the number of receipts and receipt lines received. This report also provides the transaction details for the transactions in the details report.

- Vendor Non-Compliance Report

The Vendor Non-Compliance Report displays the non-compliant shipments observed during the inbound process. This report helps the warehouse to identify the vendors shipping non-compliant shipments.

4.1.2 Returns Reports

Returns reports aid warehouse managers to view information about inventory returns.

For more information about returns reports, see the *Sterling Warehouse Management System: Reports Guide*.

The returns report provided with the Sterling Warehouse Management System is:

- Returns Report by Reason Code

This report lists all shipments based on the return reason code entered during the return process. This report can also be generated for specific selected reason codes.

4.1.3 Inventory Reports

Inventory reports aid inventory supervisors to manage inventory, track the movement of inventory within the warehouse, and get visibility on the different categories of inventory, such as, inventory that are on hold. These reports can also be used to categorize inventory based on cost.

For more information about inventory reports, see the *Sterling Warehouse Management System: Reports Guide*.

The different inventory reports provided with the Sterling Warehouse Management System are:

- Containers Not Having Standard Quantity Report

This report lists all cartons stored in the warehouse that have less than the standard case or pallet quantity. This report can be used to identify opportunities for consolidation.

- Cycle Count Variance Daily Report

This report provides the cycle count variance information, on a daily basis, for a given date range.

- Cycle Count Variance Monthly Report

This report provides the cycle count variance information, on a monthly basis, for a given date range.

- **Cycle Count Variance Weekly Report**

This report provides the cycle count variance information, on a weekly basis, for a given date range.
- **Dedicated Locations Activity Report**

This report provides visibility into locations that are dedicated to certain Stock Keeping Units (SKUs). The activity report categorizes the locations based on the number of times the location is replenished.
- **Dedicated Locations Usage Report**

This report provides visibility into locations that are dedicated to certain Stock Keeping Units (SKUs). This usage report shows locations that have remained unused in various time buckets.
- **Empty Location Report**

This report provides a list of empty locations in the warehouse. This report can also be accessed as a sub-report of the Space Consolidation Report.
- **Inventory Aging Report**

This report provides the inventory age identified by its receipt date. In case the receipt date information is lost, the inventory age cannot be ascertained and is therefore classified as "Inventory with Unknown Age".
- **Inventory Audit Report**

This report is used to track inventory changes resulting from the execution of tasks in the warehouse. This report can help in tracking changes to item or location inventory, inventory changes done by a user, or a combination of these.
- **Inventory Balance Report**

This report is used to balance the opening and closing quantity of inventory for an item within a date range.
- **Inventory Hold Report**

This report lists the item and location details for all items that are on hold due to Quality Control activities, Count variances, and locations that are frozen for Picking or Putaway.

- **Item Inventory Across Nodes Report**

This report is used to track the inventory of items across nodes for either all or selected enterprises. The report can be executed only for those enterprises to which the user has access.
- **Item Inventory Report**

This report lists the details of the item inventory at the node. You can drill down to location level and container level reports from this report.
- **Item Tag No. Report**

This report lists all item transactions for the given tag number. The report displays the transactions in three categories: Inbound, Inventory, and Outbound.
- **Item Velocity Report**

Due to changes in demand, seasonal variations, and product life cycle characteristics, item velocity changes over time. This report captures the item velocity, as measured by the number of shipments that the item features in during the selected date range.
- **Location/SKU Velocity Mismatch Report**

This report matches the Location Velocity to the Item Velocity to identify locations that have a mismatch. The warehouse can use this report to reorganize item locations to optimize the utilization of locations.
- **Node Inventory Valuation Report**

This report lists the item, quantity, and valuation details for a node. This report is useful in determining the inventory valuation in a node.
- **Participant List Report**

This report lists the number of participants defined in the Participant Model with role details.
- **Space Consolidation Report**

This report provides item-wise information about the location capacity utilization. This helps in identifying space consolidation opportunities.

- Space Utilization Report
This report provides information on location capacity utilization in terms of percentage.
- Location Inventory Detail Report
This report is used to track the inventory of items and locations in the warehouse at the item, case, pallet, status, and other item attributes levels.
- Location Inventory Summary Report
This report is used to track the inventory of items and locations in the warehouse at the item or location level.

4.1.4 VAS Reports

Value Added Services (VAS) reports aid warehouse managers to view information about work orders to perform Value Added Services on the inventory.

For more information about VAS reports, see the *Sterling Warehouse Management System: Reports Guide*.

The VAS report provided with the Sterling Warehouse Management System is:

- Work Order Report
This report displays all the work orders for the node, in different stages of completion. This report is used to review open work orders.

4.1.5 Outbound Reports

Outbound reports aid shipping supervisors to see information on order billing and shipment billing. These reports can also be used to get visibility to outbound labor requirements, on-time shipments, and so on.

For more information about outbound reports, see the *Sterling Warehouse Management System: Reports Guide*.

The different outbound reports provided with the Sterling Warehouse Management System are:

- **BOL Total Weights Report**

This report lists the number of cartons or pallets, and the total weight details against each Bill Of Lading (BOL). This report lists all details for BOLs shipped for the selected carrier or date range.

- **Container Volume Monthly Report**

This report shows the number of containers shipped each month. For the current month, it only shows the total number of cartons shipped till date.

- **Daily Shipment Report**

This report provides high-level visibility into shipment activity in the warehouse, on a daily basis, for a specified date range. This report provides daily information on new shipments awaiting shipping on the day, shipments shipped on the day, shipment pending from previous days, and shipments carried over to the next day.

- **Dock Pickup Schedule Report**

The Dock Schedule Report provides visibility into appointments taken for one or more shipping docks, for a range of dates.

- **Generic Shipper Report**

This report gives details of shipments that are either to be shipped or were shipped using each carrier that the warehouse uses. The warehouse can use this report to understand the carrier usage patterns.

- **Hot Inventory Report**

This report helps to identify the inbound shipments that should be unloaded based on the hot items in the trailer or container. These items are on backorder for the warehouse, and available in the expected shipments.

- **On Time Shipment Report**

This report captures the number of shipments shipped at the scheduled time. It also categorizes the delayed shipments into buckets of delays by one, two, or more days.

- **Order Billing Summary Report**

This report lists the transaction details for all types of orders handled by the warehouse. This report helps to track metrics, such as the number of orders or order lines shipped or received.
- **Order Cycle Time KPI Report**

This report is used to measure the turnaround cycle time on all outbound shipments or orders. Cycle time is defined as the time that elapses from when an order is released to a warehouse until the time it is shipped.
- **Order Shipment Report**

This report shows the details of shipments against orders. It also shows the quantity ordered and shipped at the item level.
- **Outbound Labor Requirements Report**

This report is used to determine the labor requirements for waves or shipments that are to be picked, packed, and shipped on a future date. This report is useful to plan resource requirements for outbound activities.
- **Pack and Hold Shipments Report**

This report lists all shipments that are currently in the 'pack and hold' status, along with their location and shipper details. This report is useful to the warehouse supervisor to review pack and hold shipments.
- **Parcel Manifest Report**

This report lists the Parcel manifest details in terms of shipment details, number of containers, weight, and other details for the selected manifest number or carrier and service.
- **Pickup Dock Schedule Report**

The Dock Schedule Report provides visibility in to appointments taken for one or more shipping docks, for a range of dates.
- **Replenishment Status Report**

This report helps the monitoring of replenishment activities in the warehouse. The report provides information about the replenishment status and highlights shortages or overages of replenishment quantities.

- **Same Day Pick Pack Ship Percentage Report**

This report gives a measure of the number of shipments picked, packed, and shipped on the same day. The criterion for any shipment to be counted is that the pick date is the same as the actual ship date.
- **Shipment Billing Summary Report**

This report displays the number of shipments and shipment lines shipped, and the number of receipts and receipt lines received. This report also lists the transaction details for the transactions in the details report.
- **Shipment Fill Rate Monthly Report**

This report shows the percentage of complete shipments shipped by the warehouse. The percentage is calculated as the ratio of the complete shipments shipped to the total number of shipments shipped by the node.
- **Shipments Near or Past Cancel Date Report**

This report lists unshipped shipments that are near or past the selected order cancel date range. This report is useful to track the shipments that are due and manage resources to execute the same.
- **Shipment Shortage Report**

This report lists all shipments that have item shortages and aids warehouse managers in managing exceptions.
- **Staging Locations Report**

Warehouses have limited staging locations. Therefore, they can become a bottleneck if not managed properly. This report provides a means to identify locations that might be occupying space by having shipments that are either not loaded or awaiting containers.
- **Vendor Non-Compliance Report**

The Vendor Non-Compliance Report displays the non-compliant shipments observed during the inbound process. This report helps the warehouse to identify the vendors shipping non-compliant shipments.

4.1.6 Task Reports

Task reports aid warehouse managers to view information about the various tasks performed in the warehouse.

For more information about task reports, see the *Sterling Warehouse Management System: Reports Guide*.

The task reports provided with the Sterling Warehouse Management System are:

- In-Progress Container Summary Report

This report shows the current status of the pick-pack-ship process. The default container dashboard view shows two graphs: Number of containers by statuses and Number of Containers by Carriers.

- In-Progress Shipment Summary Report

This report shows the current status of the pick-pack-ship process. The default dashboard view shows these two graphs: Number of Shipments and Cartons Across All Carriers, and Number of Shipments and Cartons by Carrier.

- User Productivity Daily Report

This report provides user productivity information, on a daily basis, for a given date range.

- User Productivity Monthly Report

This report provides user productivity information, on a monthly basis, for a given date range.

- User Productivity Weekly Report

This report provides user productivity information, on a weekly basis, for a given date range.

- Warehouse Activity Completion Report

This report provides a summary of the various warehouse tasks that are in "Completed" status. The numbers change as more tasks enter the "Completed" status. The user can also select only a specific set of task types to populate the activity report.

4.1.7 Billing Activity Reporting Engine Reports

The Billing Activity Reporting Engine aids warehouse managers to view information about the various activities performed in the warehouse.

For more information about billing activity reporting engine reports, see the *Sterling Warehouse Management System: Reports Guide*.

The different billing activity reporting engine reports provided with the Sterling Warehouse Management System are:

- Billing Activity Report

The Billing Activity Report shows the billable activities performed in the warehouse for an Enterprise, as captured by the Billing Activity Reporting Engine.

4.2 Rules for Creating New Reports

- Never make changes to the Sterling Warehouse Management System: Business Intelligence package, or add or modify reports within. From release to release, Selling and Fulfillment Foundation may provide new deployment files. These files will overwrite all changes you made to the Sterling Warehouse Management System: Business Intelligence package.
- To add new reports, open the Sterling Warehouse Management System: Business Intelligence package model in the Framework Manager. Rename the package (for example, Sterling_NEWNAME_Analytics). Save this package and publish it to the content repository.
- After publishing the renamed package, you will see a new package folder (named, for example, Sterling_NEWNAME_Analytics) along with the previous Sterling Warehouse Management System: Business Intelligence on Cognos Connection. All new reports should be added to the new package and any changes to the model (for example, new or modified views) should also be made to the new package in Framework Manager.

Deploying Reports

To view the report data, you must deploy the reports and refresh them against your database. The resulting reports allow you to analyze the data in various forms.

For more information about the different reports provided with the Sterling Warehouse Management System, see [Chapter 4, "Sterling Warehouse Management System: Business Intelligence Reports"](#).

Read the *Cognos 8 Powerplay Enterprise Server Installation and Configuration Guide* before deploying the Sterling Warehouse Management System: Business Intelligence.

5.1 Refreshing Against a Replicated Database Instead of Transactional Database

The database impact of a refresh depends on the volume of data involved, the refresh frequency, and the report complexity. Depending on your requirements, you may have installed all the Cognos components on a single machine, 1 to 2 machines, or a distributed setup. See the *Cognos 8 Powerplay Enterprise Server Installation and Configuration Guide* for various setup scenarios. Your transactional database may be co-located. You may need to refresh your database only during offpeak hours, or have a 24/7 requirement for your system.

You must therefore, analyze your deployment scenario and setup the refresh accordingly.

Important: It is recommended that you refresh the reports against a replicated database instead of your transactional database.

Refreshing the reports against a replicated database instead of your transactional database allows you to configure and tune the replicated database according to your reporting needs, such as creating indices, keys on the tables, or tuning your database parameters. You can replicate the transactional database using the standard database replicating tools in the market. If you need to refresh against a transactional database, keep in mind the performance impact on both the refresh and the Selling and Fulfillment Foundation transactions occurring in the database during the refresh period.

5.2 Deploying Reports

Refer to the Cognos 8 documentation for information about how to deploy Sterling Warehouse Management System: Business Intelligence reports.

Remember to provide filter values for any reports that have filters, for example, data or security.

5.2.1 Suggested Directory Structure for Reports

We recommend the following steps to create your folder structure for report deployment:

1. Create a folder named "Staging" (or similar) under `<YMW_ANALYTICS_HOME>`.
2. Under the "Staging" folder create a folder named "Publish".
3. Under the "Publish" folder, create a folder for "Reports" where you will put the reports that are ready to be deployed.
4. You can create additional folders under "Reports" to group reports, for example, Finance or Marketing.

5.3 Refreshing Reports

Based on the type of report deployed, the report could be either scheduled to refresh at certain times, or is executed at the time it is viewed, for example, Burst Reports. See the Cognos 8 BI documentation for more information about refreshing reports.

6

Localizing Reports

Localization is the process of adapting the Sterling Warehouse Management System for a particular country or region. Localization enables the Sterling Warehouse Management System to support the character set of a user's locale, present numbers, literals, and report data that is appropriate to the locale.

This chapter explains how to localize the Sterling Warehouse Management System reports.

For more information about localizing the Sterling Warehouse Management System see the *Selling and Fulfillment Foundation: Localization Guide*.

6.1 Literal Localization

All Sterling Warehouse Management System reports use a common resource bundle that contains the literals displayed on the screens. Sterling Warehouse Management System enables you to customize and localize resource bundles, as needed.

This section explains how to localize report headers, column titles, field names, and so on.

6.1.1 Resource Bundles

Sterling Commerce always releases complete resource bundles in the `ycrnbundle.properties` file with the localized versions of the Sterling Warehouse Management System: Business Intelligence. Incremental updates are not provided. If you localize the Sterling Warehouse Management System reports, it is your responsibility or that of your third-party localization company to compare and validate the differences

between the resource bundles shipped with the product to those that you have localized.

The resource bundles of Sterling Warehouse Management System: Business Intelligence are located in the `<YNW_ANALYTICS_HOME>/resources/ycrnbundle.properties` file.

To localize the resource bundles:

1. Copy the `<YNW_ANALYTICS_HOME>/resources/ycrnbundle.properties` file and save it as `<YNW_ANALYTICS_HOME>/resources/ycrnbundle_<language>_<country>.properties`.
2. Each resource bundle contains a `<key>=<value>` pair where key is the resource key and value is the literal displayed for the corresponding locale. Replace `<value>` with the translated value.

- Some of the literals that need to be translated in the resource bundles contain data placeholders. These data placeholders indicate that the literal is displayed with one or more data values within the literal, for example, the application displays the error message "Priority should be greater than X" where X could be any number. Because the location of the X within the literal can be different for different languages, the resource bundle uses a placeholder that can be placed anywhere in the literal during translation. The resource bundle entry looks as follows:

```
PRIORITY_ERROR_MESSAGE=Priority should be greater than {0}
```

Notice how the `{0}` place holder indicates where the dynamic data value appears in the literal. This `{0}` can be placed anywhere in the literal, for example,

```
PRIORITY_ERROR_MESSAGE=A number greater than {0} should be entered
```

or

```
PRIORITY_ERROR_MESSAGE={0}: Priority entered should be greater than this
```

are valid possibilities. This gives you the flexibility to translate the literal in any way the language dictates. Note that multiple placeholders may appear in the literal as well, for example, `{0}`,

{1}, {2}, and so forth. Each placeholder must exist somewhere in the corresponding translated literal.

- When using literals that contain data placeholders, you cannot use single quotation marks. If a single quotation mark is used in conjunction with a placeholder, the single quotation mark is not displayed and the placeholder is not replaced with its replacement value. In order to avoid this situation, enter two single quotes wherever a single quote is required.

The following is an invalid entry:

```
PRIORITY_ERROR_MESSAGE=The primary organization's name is {0}
```

The following is valid entry:

```
PRIORITY_ERROR_MESSAGE=The primary organization''s name is {0}
```

- Files should be returned in native format with UTF-8 encoding.
 - Properties should be returned in escaped Unicode format with UTF-8 encoding.
3. Tahoma is used as default font. Therefore if you want to display or type Unicode characters, you should localize the theme. This is done by changing the font to Unicode in the theme-specific XML files.
 4. Save the modified file. If the file is in UTF-8 format, convert it to ASCII by running the `native2ascii` command as follows:

```
native2ascii -encoding UTF-8 <source file> <target file>
```

Note: Files localized in Latin1 languages do not require this conversion.

The file should be returned in the following format:

```
<filename>_<2 letter code for language as given by ISO 639>_<2 letter code for territory as given by ISO 3166>.<file extension>
```

For example, `ycrnbundle.properties` should be returned as `ycrnbundle_fr_FR.properties`.

6.1.2 Localizing Report Literals

To localize the report literals, in the `<YNW_ANALYTICS_HOME>/bin` folder, execute the following command:

```
ant -f ycrnlocalizer.xml import
```

Note: The `ycrnlocalizer.xml` command assumes that you have installed Cognos 8 BI and Sterling Warehouse Management System: Business Intelligence on the same machine. If, however, you have installed Cognos 8 BI and Sterling Warehouse Management System: Business Intelligence on two separate machines, modify the following line of the XML by replacing `localhost` with the IP address of the machine where Cognos 8 BI has been installed:

```
<property name="cognosurl"  
value="http://localhost/crn/cgi-bin/cognos.cgi"/>
```

This command reads all the bundles in the `<YNW_ANALYTICS_HOME>/resources` folder. It then adds the literal translations for each locale into the report definitions present in the `<YNW_ANALYTICS_HOME>/reports` folder. The modified report definitions are copied into the `<YNW_ANALYTICS_HOME>/localizedreports` folder, and also added into the content repository. When the reports are generated again, the literals are displayed according to the user's locale.

6.2 Report Data Localization

This section elaborates on the report data that has been localized. It also explains how to localize the data that the report displays.

6.2.1 Pre-Localized Report Data

All the columns in the reports that describe an entity are localized out-of-the-box, for example, Item Description, Shipment Status, Order Status, Task Status, Document Types, and so forth.

6.2.2 Localizing Report Data

To localize the report data in your system:

- Localized views are created by performing an outer join on the report-specific view and the `YFS_LOCALIZED_STRINGS` table.

Note: Localization of Item Descriptions is done differently. Item Descriptions are localized by performing an outer join on the report-specific view and the `YFS_LANGUAGE_DESCRIPTION` table.

- The report data is taken from the localized views created in [Step n](#).
- The report contains a mandatory filter on the locale code to fetch data specific to the user's locale.

For example, to localize Item Descriptions in the Inventory Aging Report,

- `YNA_NODE_INVENTORY_NL_VW` is a non-localized view to fetch data for the Inventory Aging Report.
- `YNA_NODE_INVENTORY_VW` is a localized view which performs an outer join between `YNA_NODE_INVENTORY_NL_VW` and the `YFS_LANGUAGE_DESCRIPTION` table.
- The Inventory Aging Report is designed from `YNA_NODE_INVENTORY_VW`. This report has a mandatory filter on the locale code.

`YNA_NODE_INVENTORY_NL_VW` is located in
`<YNW_ANALYTICS_HOME>/database/<database>/Scripts/WithHistory/
 Node Inventory MasterNL.sql`

`YNA_NODE_INVENTORY_VW` is located in
`<YNW_ANALYTICS_HOME>/database/<database>/Scripts/WithHistory/
 Node Inventory Master.sql.`

The Inventory Aging Report definition is located in:
<YNW_ANALYTICS_HOME>/Reports/Inventory_Aging_Report.xml.

6.3 Localizing Custom Reports

The Sterling Warehouse Management System enables you to create custom reports and localize them.

This section describes how to localize the custom reports in your system.

6.3.1 Localizing Custom Report Literals

To localize custom report literals, in the <YNW_ANALYTICS_HOME>/bin folder:

1. Save the extended resource bundles as
<YNW_ANALYTICS_HOME>/resources/extn/extnbundle_<language>_<country>.properties.

For example, ycrnbundle.properties should be saved as ycrnbundle_fr_FR.properties.

2. Execute the following command:

```
ant -f ycrnlocalizer.xml import
```

This command reads all the bundles in the <YNW_ANALYTICS_HOME>/resources folder. It then adds the literal translations for each locale into the report definitions present in the <YNW_ANALYTICS_HOME>/reports folder. The modified report definitions are copied into the <YNW_ANALYTICS_HOME>/localizedreports folder, and also added into the content repository. When the reports are generated again, the literals are displayed according to the user's locale.

6.3.2 Localizing Custom Report Data

To localize the custom report data in your system:

1. Create a localized view by performing an outer join on the report-specific view and the YFS_LOCALIZED_STRINGS table.

Note: Localization of Item Descriptions is done differently. Item Descriptions are localized by performing an outer join on the report-specific view and the YFS_LANGUAGE_DESCRIPTION table.

2. Take the report data from the localized views created in [Step 1](#).
3. In the report, create a mandatory filter on the locale code to fetch data specific to the user's locale. If the data is fetched from multiple localized views, the locale code should be added as a filter for each view.

Troubleshooting and Tuning

This chapter explains some of the issues that may be encountered when using Sterling Warehouse Management System: Business Intelligence. It also includes tips about overcoming this issues.

Note: This chapter does not include troubleshooting instructions for standard Cognos products or issues. For Cognos product-related troubleshooting, see the Cognos documentation.

7.1 The Access Manager is Not Working

To ensure that the Access Manager is running correctly:

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 DDN 0=yantra.
3. When registering the Access Manager using the Access Manager Wizard, configure the Cognos LDAP provided 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.

7.2 SQL Net Connect String Error

If you get the error "The SQL Net connect string shown on the Analytics catalog is BLACKHOLE after installing the Sterling Warehouse

Management System Analytics on a fresh server" 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 YNA-catalog can be opened:

1. Launch the Access Manager Administrator.
2. Right-click Root User Class, 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 the 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 tab. 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.

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

7.3 Failed to Change User Class

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

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

1. Open the catalog in Cognos 8 BI.
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.

To change the Database Logon type:

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.

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 Sterling Warehouse Management System: Business Intelligence installation. For information regarding performance tuning of individual Cognos products, see the Cognos Administration Guides.

7.4 Tuning the Sterling Warehouse Management System: Business Intelligence Reports

Because all Sterling Warehouse Management System: Business Intelligence reports are eventually based on SQL statements, Sterling Commerce recommends that you tune the SQL underlying the reports and sub-reports. You can avoid complicated report SQL by breaking the reports up into sub-reports.

7.5 Tuning Your Sterling Warehouse Management System: Business Intelligence Installation

Tuning your Sterling Warehouse Management System: Business Intelligence installation involves sizing the servers where the installation is installed. For information about sizing your servers for Sterling Warehouse Management System: Business Intelligence, see [Appendix B, "Server Sizing Requirements"](#).

7.6 Unable to View Data in the Reports

If you are unable to view data in the reports, perform these tasks:

- Ensure that the URL of the Cognos Web site is added as a trusted Web site in your browser.
- Ensure that cookies are enabled in your browser.
- Ensure that the value of the `yfs.analytics.reportnet.url` property in the `custom_override.properties` file, for example, `yfs.analytics.reportnet.url=http://<machinename>/cognos8/cgi-bin/cognos.cgi`, does not contain extra space at the end.
- Ensure that the value of the `sscapp.app.url` property in the `analytics.properties` file, for example, `sscapp.app.url=http://hostname:portnumber/smcfs`, does not contain extra space at the end.

A

Sterling Warehouse Management System: Business Intelligence Views

Sterling Warehouse Management System: Business Intelligence 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 it 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 SQL and the join where clause, see the corresponding.sql files located in:

- <YNW_ANALYTICS_HOME>/Database/oracle/Scripts/WithHistory
- <YNW_ANALYTICS_HOME>/Database/oracle/Scripts/WithoutHistory
- <YNW_ANALYTICS_HOME>/Database/db2/Scripts/WithHistory
- <YNW_ANALYTICS_HOME>/Database/db2/Scripts/WithoutHistory
- <YNW_ANALYTICS_HOME>/Database/sqlserver/Scripts/WithHistory
- <YNW_ANALYTICS_HOME>/Database/sqlserver/Scripts/WithoutHistory

For more information about WithHistory and WithoutHistory views, see [Section 3.1, "Sterling Warehouse Management System: Business Intelligence Framework Views"](#).

Note: Views to query Resource Pool capacity across service lines currently are NOT provided. This is due to bandwidth limitations

Note: Views created directly on, or joined to, the YFS_ORDER_HEADER table exclude draft order records (specifically: YNA_ORDER_HEADER_VW, YNA_ORDER_LINE_VW, YNA_ORDER_HEADER_ADD_VW, and YNA_INV_COST_SHIPMENT_VW). Therefore, reports based on, or joined with, these views will not show draft order data.

To include such records, remove this SQL clause from the views mentioned above:

```
OH.DRAFT_ORDER_FLAG = 'N'
```

To exclude such records in views that you create or modify, append this SQL clause to the view definition:

```
YFS_ORDER_HEADER.DRAFT_ORDER_FLAG = 'N'
```

The following sets of views are described in this appendix:

- Catalog (see [Section A.1, "Catalog Views"](#))
- Exceptions (see [Section A.2, "Exception Views"](#))
- General (see [Section A.3, "General Views"](#))
- Inventory (see [Section A.4, "Inventory Views"](#))
- Invoicing (see [Section A.5, "Invoicing Views"](#))
- Logistics (see [Section A.6, "Logistics Views"](#))
- Order (see [Section A.7, "Order Views"](#))
- Order Header (see [Section A.8, "Order Header Views"](#))
- Order Line (see [Section A.9, "Order Line Views"](#))
- Order Release (see [Section A.10, "Order Release Views"](#))

- Order To/From Transaction (see [Section A.11, "Order To/From Transaction Views"](#))
- Organization (see [Section A.12, "Organization Views"](#))
- Organization Levels (see [Section A.13, "Organization Levels View"](#))
- Pricing (see [Section A.14, "Pricing Views"](#))
- Receiving Discrepancy (see [Section A.15, "Receiving Discrepancy Views"](#))
- Receipt Views (see [Section A.16, "Receipt Views"](#))
- Shipment (see [Section A.17, "Shipment Views"](#))
- WMS Views (see [Section A.18, "Sterling Warehouse Management System Views"](#))
- Work Order (see [Section A.19, "Work Order Views"](#))

Note: Relationship diagrams for all of the views are available under `Analytics\Database\ERD`.

A.1 Catalog Views

This set of views expose the Item and Catalog-related data. The set consists of the views described in [Table A-1](#).

Table A-1 *Catalog Views*

View	Description	Interpreted Columns	SQL Filename
YNA_CATEGORY_ITEM_VW	This view exposes the data in the YFS_CATEGORY_ITEM table.	None	MASTER/Catalog_Category_Item.sql
YNA_CATEGORY_VW	This view exposes the data in the YFS_CATEGORY table.	None	MASTER/category_vw.sql
YNA_CATALOG_MASTER_VW	This view exposes the data in the YFS_CATALOG_MASTER table.	None	MASTER/Catalog_Master.sql

Table A-1 Catalog Views

View	Description	Interpreted Columns	SQL Filename
YNA_ITEM_VW	This view exposes the data in the YFS_ITEM table.	None	MASTER/item_vw.sql
YNA_ITEM_ALIAS_VW	This view exposes the data in the YFS_ITEM_ALIAS table.	None	MASTER/item_alias_vw.sql
YNA_ITEM_TAG_VW	This view exposes the data in the YFS_ITEM_TAG table.	None	MASTER/Item_Tag.sql
YNA_ITEM_UOM_MASTER_VW	This view exposes the data in the YFS_ITEM_UOM_MASTER table.	None	CONFIGURATION/item_uom_master_vw.sql
YNA_CATEGORY_NL_VW	This view exposes the data in the YFS_CATEGORY table.	None	MASTER/Catalog_CategoryNL.sql

A.2 Exception Views

This set of views expose the Exception-related data. The set consists of the views described in [Table A-2](#).

Table A–2 Exception Views

View	Description	Interpreted Columns	SQL Filename
YNA_EXECUTION_EXCEPTION_VW	This view exposes data from the YFS_EXECUTION_EXCEPTION table	None	CONFIGURATION/execution_exception_vw.sql
YNA_EXCEPTION_INBOX_VW	This view exposes the data in the YFS_INBOX table.	None	TRANSACTION/Exception_Inbox.sql
YNA_EXCEPTION_INBOX_REF_VW	This view exposes the data in the YFS_INBOX_REFERENCES table.	None	TRANSACTION/Exception_Inbox_References.sql
YNA_EXCEPTION_QUEUE_SUBS_VW	This view exposes the data in the YFS_QUEUE_SUBSCRIPTION table.	None	MASTER/Exception_Queue_Subscription.sql
YNA_EXCEPTION_QUEUE_NL_VW	This view exposes the data in the YFS_QUEUE table.	None	CONFIGURATION/Exception_QueueNL.sql
YNA_EXEC_EXCEPTION_AUDIT_VW	This view exposes data from the YFS_EXECUTION_EXCEPTION_AUDIT table.	None	TRANSACTION/Exec_Exception_Audit_Vw.sql

A.3 General Views

This set of views expose the general related data. The set consists of the views described in [Table A–3](#).

Table A–3 *General Views*

View	Description	Interpreted Columns	SQL Filename
YNA_COMMON_CODE_NL	This view exposes limited columns from the YFS_COMMON_CODE table	None	CONFIGURATION/Common_CodeNL.sql
YNA_COMMON_CODE_VW	This view exposes data from the YFS_COMMON_CODE table.	None	CONFIGURATION/common_code_vw.sql
YNA_DESCRIPTIONS_CONFIG_VW	This view contains DESCRIPTION column from all of Configuration Tables	None	CONFIGURATION/description_view_config.sql
YNA_DESCRIPTIONS_MASTER_VW	This view contains DESCRIPTION column from all of Master Tables	None	MASTER/description_view_master.sql
YNA_LANGUAGE_DESCRIPTION_VW	This view exposes data from the YFS_LANGUAGE_DESCRIPTION table.	None	MASTER/language_description_vw.sql
YNA_LOCALE_VW	This view exposes data from the YFS_LOCALE table.	None	CONFIGURATION/locale_vw.sql
YNA_LOCALIZED_STRINGS_VW	This view exposes data from the YFS_LOCALIZED_STRINGS table.	None	CONFIGURATION/localized_strings_vw.sql
YNA_PERSON_INFO_VW	This view exposes data from the YFS_PERSON_INFO table.	None	CONFIGURATION/person_info_vw.sql

Table A–3 General Views

View	Description	Interpreted Columns	SQL Filename
YNA_PRODUCTIVITY_VW	This view exposes data from the YFS_PRODUCTIVITY table.	None	TRANSACTION/Productivity.sql
YNA_PERSON_INFO_VW	This view exposes data from the YFS_PERSON_INFO table	None	TRANSACTION/person_info_vw.sql
YNA_WORKFLOW_PT D_VW	This view exposes the data in the YFS_PIPELINE, YFS_PIPELINE_DEFINITION, and YFS_PIPELINE_DROP_STS_COND tables. It provides information about the Pipeline, Transaction, and Drop Status (PTD) for various Process Types. It is a helper view used by other views in Sterling Warehouse Management System: Business Intelligence.	None	CONFIGURATION/Workflow_PTD.sql
YNA_PERSON_INFO_VW	This view exposes data from the YFS_PERSON_INFO table	None	MASTER/Person_Info.sql
YNA_PIPELINE_VW	This view exposes data from the YFS_PIPELINE table.	None	CONFIGURATION/pipeline_vw.sql
YNA_SCAC_AND_SERVICE_VW	This view exposes data by joining the YNA_SCAC_AND_SERVICE_NL_VW and YNA_LOCALIZED_DESCRIPTIONS_VW views.	None	CONFIGURATION/scac_and_service_vw.sql
YNA_STATUS_NL_VW	This view exposes the data for few columns in the YFS_STATUS table.	None	CONFIGURATION/StatusNL.sql

Table A-3 General Views

View	Description	Interpreted Columns	SQL Filename
YNA_STATUS_VW	This view exposes data from the YFS_STATUS table.	None	CONFIGURATION/status_vw.sql
YNA_DOCUMENT_PARAMS_VW	This view exposes data from the YFS_DOCUMENT_PARAMS table.	None	CONFIGURATION/document_params_vw.sql
YNA_QUEUE_VW	This view exposes data from the YFS_QUEUE table.	None	CONFIGURATION/queue_vw.sql

A.4 Inventory Views

This set of views expose the Inventory-related data. The set consists of the views described in [Table A-4](#).

Table A-4 Inventory Views

View	Description	Interpreted Columns	SQL Filename
YNA_INVENTORY_AUDIT_VW	This view exposes the data in the YFS_INVENTORY_AUDIT table.	None	TRANSACTION/Inventory_audit_vw.sql
YNA_INVENTORY_COST_MATCH_VW	This view exposes the data in the YFS_INVENTORY_MATCH table.	None	TRANSACTION/Inventory_Cost_Match.sql
YNA_INV_COST_SHIPMENT_VW	This view exposes the data in the YFS_INVENTORY_SHIPMENT and YFS_ORDER_HEADER tables. In addition to the columns of YFS_INVENTORY_SHIPMENT table, this view also exposes the seller organization on the order where the shipment was made.	None	TRANSACTION/Inventory_Cost_Shipment.sql
YNA_INVENTORY_DEMAND_VW	This view exposes the data in the YFS_INVENTORY_DEMAND table.	None	TRANSACTION/Inventory_Demand.sql
YNA_INVENTORY_ITEM_VW	This view exposes the data in the YFS_INVENTORY_ITEM table.	None	TRANSACTION/Inventory_item_vw.sql
YNA_INVENTORY_SUPPLY_VW	This view exposes the data in the INVENTORY_SUPPLY table.	None	TRANSACTION/Inventory_supply_vw.sql
YNA_INVENTORY_TAG_VW	This view exposes the data in the YFS_INVENTORY_TAG table.	None	TRANSACTION/Inventory_Tag.sql

Table A-4 Inventory Views

View	Description	Interpreted Columns	SQL Filename
YNA_INVENTORY_ST ATUS_VW	This view exposes data from the YFS_INVENTORY_STATUS table	None	CONFIGURATION/i nventory_status _vw.sql
YNA_INVENTORY_ST ATUS_NL_VW	This view exposes selected columns from the YFS_INVENTORY_STATUS table.	None	CONFIGURATION/I nventory_Status NL.sql
YNA_GLOBAL_SERIA L_NUM_VW	This view exposes the data in the YFS_GLOBAL_SERIAL_NUM table.	None	TRANSACTION/Glo bal_Serial_Num. sql
YNA_INVENTORY_RE CEIPT_VW	This view exposes the data in the YFS_INVENTORY_RECEIPT table.	None	TRANSACTION/inv entory_receipt_ vw.sql
YNA_RES_POOL_VW	This view exposes the data in the YFS_RES_POOL table.	None	MASTER/res_pool _vw.sql
YNA_RES_POOL_CAP CTY_CONS_VW	This view exposes data from the YFS_RES_POOL_CAPCTY_CONSMPTN table.	None	TRANSACTION/Res _pool_consmptn_ dtls_vw.sql
YNA_RES_POOL_CON SMPTN_DTLS_VW	This view exposes the data in the YFS_RES_POOL_CONSMPTN_DTLS table.	None	TRANSACTION/res _pool_consmptn_ dtl_vw.sql
YNA_SERVICE_RESO URCE_VW	This view exposes the data in the YFS_SERVICE_RESOURCE table.	None	MASTER/service_ resource_vw.sql

A.5 Invoicing Views

This set of views expose the Invoice-related data. The set consists of the views described in [Table A-5](#).

Table A-5 Invoicing Views

View	Description	Interpreted Columns	SQL Filename
YNA_INVOICE_COLLECTION_VW	This view exposes the data in the YFS_INVOICE_COLLECTION table.	None	TRANSACTION/Invoicing_Collection.sql
YNA_INVOICE_HEADER_CHARGES_VW	This view exposes the data in the YFS_HEADER_CHARGES table. It also exposes the YFS_HEADER_CHARGES table filtered for Header Charges related to Invoicing.	None	TRANSACTION/Invoicing_Header_Charges.sql
YNA_INVOICE_LINE_CHARGES_VW	This view exposes the YFS_LINE_CHARGES table for the Line Charges related to Invoicing.	None	TRANSACTION/Invoicing_Line_Charges.sql
YNA_INVOICE_LINE_TAX_VW	This view exposes the YFS_TAX_BREAKUP table filtered for Taxes related to Invoicing. It is used for Line Taxes.	None	TRANSACTION/Invoicing_Line_Tax.sql

Table A–5 Invoicing Views

View	Description	Interpreted Columns	SQL Filename
YNA_INVOICE_ORDER_DETAIL_VW	This view exposes the data in the YFS_ORDER_INVOICE_DETAIL table.	None	TRANSACTION/Invoicing_Order_Detail.sql
YNA_INVOICE_TAX_CHARGES_VW	This view exposes the YFS_TAX_BREAKUP table filtered for Taxes related to Invoicing. It is used for Header Taxes.	None	TRANSACTION/Invoicing_Tax_Breakup.sql
YNA_INVOICE_ORDER_VW	This view exposes the data in the YFS_ORDER_INVOICE table.	None	TRANSACTION/Invoicing_Order.sql

A.6 Logistics Views

This set of views expose the Shipment-related data. The set consists of the views described in [Table A–6](#).

Table A–6 Logistics Views

View	Description	Interpreted Columns	SQL Filename
YNA_DELIVERY_PLAN_VW	This view exposes the data in the YFS_DELIVERY_PLAN table.	None	TRANSACTION/Delivery_Plan.sql
YNA_LOAD_ADD_VW	This view exposes limited columns from the YFS_LOAD table	None	TRANSACTION/Load.sql
YNA_LOAD_VW	This view exposes the data in the YFS_LOAD table.	None	TRANSACTION/load_vw.sql

Table A-6 Logistics Views

View	Description	Interpreted Columns	SQL Filename
YNA_LOAD_SHIPMENT_VW	This view exposes the data in the YFS_LOAD_SHIPMENT table.	None	TRANSACTION/load_shipment_vw.sql
YNA_LOAD_SHIPMENT_ADD_VW	This view exposes limited columns from YFS_LOAD_SHIPMENT	None	TRANSACTION/Load_Shipment.sql
YNA_LOAD_SHIPMENT_CHARGE_VW	This view exposes the data in the YFS_LOAD_SHIPMENT_CHARGE table.	None	TRANSACTION/Load_Shipment_Charge.sql
YNA_LOAD_STATUS_AUDIT_VW	This view exposes the data in the YFS_LOAD_STATUS_AUDIT table.	None	TRANSACTION/Load_Status_Audit.sql
YNA_LOAD_STOP_VW	This view exposes the data in the YFS_LOAD_STOP table.	None	TRANSACTION/load_stop_vw.sql
YNA_LOAD_STOP_AUD_VW	This view exposes limited columns from the YFS_LOAD_STOP table	None	TRANSACTION/Load_Stop.sql

A.7 Order Views

This view exposes the Order-related audit data. The set consists of the views described in [Table A-7](#).

Table A–7 Order Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_AUDIT_VW	This view exposes the data in the YFS_ORDER_AUDIT_H table. It is provided for backward compatibility. Important: The changeOrder API creates audit information in a format that is not exposed to the Sterling Warehouse Management System: Business Intelligence Framework.	None	TRANSACTION/Order_Audit.sql
YNA_PAYMENT_VW	This view exposes the data in the YFS_PAYMENT table filtered for an Order Header.	None	TRANSACTION/Payment.sql
YNA_ORDER_RELEASE_STATUS_VW	This view exposes the data in the YFS_ORDER_RELEASE_STATUS table filtered for an Order Header.	None	TRANSACTION/order_release_status_vw.sql

A.8 Order Header Views

This set of views expose the Order Header related data. The set consists of the views described in [Table A–8](#).

Table A–8 Order Header Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_HEADER_VW	This view exposes the data in the YFS_ORDER_HEADER table.	None	TRANSACTION/order_header_vw.sql
YNA_ORDER_HEADER_ADD_VW	This view exposes limited columns from YFS_ORDER_HEADER	None	TRANSACTION/Order_Header.sql
YNA_ORDER_HEADER_CHARGES_VW	This view exposes the data in the YFS_order_header_charges table for charges filtered for an order header.	None	TRANSACTION/Order_Header_Charges.sql
YNA_ORDHDR_CHARGE_TRANSN_VW	This view exposes the data in the YFS_CHARGE_TRANSACTION table.	None	TRANSACTION/Order_Header_Charge_Xn.sql
YNA_ORDHDR_INSTRUCTION_VW	This view exposes the data in the YFS_INSTRUCTION_DETAIL table. It exposes instruction details filtered for an Order Header.	None	TRANSACTION/Order_Header_Instruction.sql
YNA_ORDHDR_TAX_VW	This view exposes data in the YFS_TAX_BREAKUP table filtered for an Order Header.	None	TRANSACTION/Order_Header_Tax.sql

Table A–8 Order Header Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_HOLD_TYPE_VW	This view exposes the data in the YFS_ORDER_HOLD_TYPE table.	None	TRANSACTION/YNA_ORDER_HOLD_TYPE_VW.sql
YNA_ORDER_HOLD_TYPE_LOG_VW	This view exposes the data in the YFS_ORDER_HOLD_TYPE_LOG table.	None	TRANSACTION/YNA_ORDER_HOLD_TYPE_LOG_VW.sql
YNA_CHARGE_TRAN_DIST_VW	This view exposes the data in the YFS_CHARGE_TRAN_DIST table.	None	TRANSACTION/YNA_CHARGE_TRAN_DIST_VW.sql

A.9 Order Line Views

This set of views expose the Order Line-related data. The set consists of the views described in [Table A–9](#).

Table A–9 Order Line Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_KIT_LINE_VW	This view exposes the data in the YFS_ORDER_KIT_LINE table.	None	TRANSACTION/Order_Kit_Line.sql
YNA_ORDER_LINE_VW	This view exposes the data in the YFS_ORDER_LINE table.	None	TRANSACTION/order_line_vw.sql
YNA_ORDER_LINE_ADD_VW	This view exposes limited columns from YFS_ORDER_LINE	None	TRANSACTION/Order_Line.sql

Table A-9 Order Line Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_LINE_CHARGES_VW	This view exposes the data in the YFS_ORDER_LINE_CHARGES table filtered for an Order.	None	TRANSACTION/Order_Line_Charges.sql
YNA_ORDER_LINE_DS_VW	This view exposes the data in the YFS_ORDER_LINE.ORDER_HEADER.YFS_PERSON_INFO table.	None	TRANSACTION/Order_Line_Delivery_Srvc.sql
YNA_ORDER_LINE_OPTION_VW	This view exposes the data in the YFS_ORDER_LINE_OPTION table.	None	TRANSACTION/Order_Line_Option.sql
YNA_ORDER_LINE_PROD_VW	This view exposes the data in the YFS_ORDERLINE.ORDER_HEADER.YFS_PERSON_INFO table.	None	TRANSACTION/Order_Line_Prod.sql
YNA_ORDER_LINE_PROVIDED_VW	This view exposes the data in the YFS_ORDER_PROD_SER_ASSOC, YFS_ORDER_LINE table.	None	TRANSACTION/Order_Line_Provided_Srvc.sql
YNA_ORDER_LINE_REQ_TAG_VW	This view exposes the data in the YFS_ORDER_LINE_REQ_TAG table.	None	TRANSACTION/Order_Line_Req_Tag.sql
YNA_ORDER_LINE_SCHEDULE_VW	This view exposes the data in the YFS_ORDER_LINE_SCHEDULE table.	None	TRANSACTION/order_line_schedule_vw.sql

Table A-9 Order Line Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_PROD_SER_ASSOC_VW	This view exposes the data in the YFS_ORDER_PROD_SER_ASSOC table.	None	TRANSACTION/Order_Prod_Srvc_Assoc.sql
YNA_ORDLINE_INSTR_VW	This view exposes the instruction details data in the YFS_INSTRUCTION_DET_ALL_H table for an Order Line.	None	TRANSACTION/Order_Line_Instruction.sql
YNA_ORDLINE_TAX_VW	This view exposes the data in the YFS_TAX_BREAKUP table filtered for an Order Line.	None	TRANSACTION/Order_Line_Tax.sql

A.10 Order Release Views

This set of views expose the Order Release-related data. The set consists of the views described in [Table A-10](#).

Table A-10 Order Release Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_RELEASE_VW	This view exposes the data in the YFS_ORDER_RELEASE table filtered for an Order Line.	None	TRANSACTION/order_release_vw.sql
YNA_ORDER_RELEASE_ADD_VW	This view exposes limited columns from YFS_ORDER_RELEASE	None	TRANSACTION/Order_Release.sql

A.11 Order To/From Transaction Views

This set of views expose the Order Transaction-related data. The set consists of the views described in [Table A-11](#).

Table A-11 Order To/From Transaction Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_RELEASE_STATUS_VW	This view exposes the data in the YNA_ORDER_RELATED_STATUSES_VW view.	None	TRANSACTION/order_release_status_vw.sql

A.12 Organization Views

This set of views expose the data related to any organization. The set consists of the views described in [Table A-12](#).

Table A-12 Organization Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORGANIZATION_VW	This view exposes data from the YFS_ORGANIZATION table	None	CONFIGURATION/organization_vw.sql
YNA_ENTERPRISE_VW	This view exposes data from the YFS_ENTERPRISE table	None	YNA_ENTERPRISE_VW
YNA_ENTERPRISE_PARTICIPANTS_VW	This view exposes limited columns from YFS_ORG_ENTERPRISE	None	CONFIGURATION/Organization_Enterprise_Participants.sql
YNA_ORG_ENTERPRISE_VW	This view exposes data from the YFS_ORG_ENTERPRISE table	None	CONFIGURATION/org_enterprise_vw.sql

Table A-12 Organization Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORGANIZATION_SHIP_NODES_VW	This view exposes the data in the YFS_SHIP_NODE.YFS_PERSON_INFO table. It is based on the YFS_SHIP_NODE table and provides information about Ship Nodes in the Selling and Fulfillment Foundation system with the Contact Address and Ship Node Address information denormalized into the view. This view is used in multiple places in the Catalog. It is replicated into Organization Ship Nodes and Organization Receiving Nodes in the Business Layer (the base entity being Organization Distribution Nodes). These entities are further multiplied in the Package Layer.	None	CONFIGURATION/Organization_Ship_Nodes.sql
YNA_ORGANIZATION_USERS_NL_VW	This view exposes the data in the YFS_USER.YFS_PERSON_INFO table. It provides information about Users in the Selling and Fulfillment Foundation system with the Contact Address and Billing Address information denormalized into the view. This view is not joined to the YFS_Organization table.	None	MASTER/Organization_UsersNL.sql

Table A–12 Organization Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORGANIZATION_NL_VW	This view exposes the data in the YFS_ORGANIZATION.YFS_PERSON_INFO table. It provides information about any Organization in the Selling and Fulfillment Foundation system with the Corporate Address, Contact Address and Billing Address information denormalized into the view.	None	CONFIGURATION/OrganizationNL.sql
YNA_ORGANIZATION_BUYER_NL_VW	This view exposes the data in the YFS_ORGANIZATION.YFS_ORG_ROLE.YFS_ROLE.YFS_PERSON_INFO table. It primarily contains columns from the YFS_ORGANIZATION table for Organizations that play the role of a Buyer in the Selling and Fulfillment Foundation. The Corporate Address, Contact Address and the Billing Address information has been denormalized into the view.	None	CONFIGURATION/Organization_BuyerNL.sql

Table A-12 Organization Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORGANIZATION_CARRIER_NL_VW	This view exposes the data in the YFS_ORGANIZATION.YFS_ORG_ROLE.YFS_ROLE.YFS_PERSON_INFO table. It primarily contains columns from the YFS_ORGANIZATION table for an Organization that plays the role of a Carrier in the Selling and Fulfillment Foundation. The Corporate Address, Contact Address and the Billing Address information has been denormalized into the view.	None	CONFIGURATION/Organization_CarrierNL.sql
YNA_ORG_ENTERPRISE_NL_VW	This view exposes the data in the YFS_ORGANIZATION.YFS_ORG_ROLE.YFS_ROLE.YFS_PERSON_INFO table. It primarily contains columns from the YFS_ORGANIZATION table for an Organization that plays the role of a Carrier in the Selling and Fulfillment Foundation. The Corporate Address, Contact Address and the Billing Address information has been denormalized into the view.	None	CONFIGURATION/Organization_EnterpriseNL.sql

Table A–12 Organization Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORG_SELLER_NL_VW	This view exposes the data in the YFS_ORGANIZATION.YFS_ORG_ROLE.YFS_ROLE.YFS_PERSON_INFO table. It primarily contains columns from the YFS_ORGANZIATION table for an Organization that plays the role of a Seller in the Selling and Fulfillment Foundation. The Corporate Address, Contact Address and the Billing Address information has been denormalized into the view.	None	CONFIGURATION/Organization_SellerNL.sql
YNA_ORG_ROLE_VW	This view returns all organizational along with their roles from the YFS_ORGANIZATION table.	None	CONFIGURATION/Organization_Role.sql
YNA_VENDOR_VW	This view exposes data from the YFS_VENDOR table.	None	MASTER/Vendor.sql
YNA_SHIP_NODE_VW	This view exposes data from the YFS_SHIP_NODE table	None	CONFIGURATION/ship_node_vw.sql

A.13 Organization Levels View

The Organization Levels view is a helper view used for representing the organizational hierarchy captured in the YFS_ORGANIZATION table. This view should be customized to reflect your organization hierarchy before the view is created.

The top of the organization corresponds to ORGANIZATION_KEY_0 that is the ORGANIZATION_KEY column from the YFS_ORGANIZATION table, next level is ORGANIZATION_KEY_1. The last level is the one where your transactional data is stored. This level must correspond to

ORGANIZATION_KEY. For each parent organization, use (uncomment) 1 ORGANIZATION_KEY_n starting from 0. So, if you have 3 levels in the organization, your view SQL will look as shown in [Example A-1, "Organization Levels View SQL"](#).

Each ORGANIZATION_KEY_n in this view can be used as a level in the organization hierarchy dimension in cubes that have data at the lowest ORGANIZATION_KEY level and also contain the ORGANIZATION_KEY in the IQD.

Note: If the transactional data is stored at different levels within the organization, the data will not rollup correctly and you may get "orphan" categories in transformer.

Note: Since the organization hierarchy depth is defined at view creation time, this dimension works for multiple organizations *only* if each has the same number of levels. You may have to create dummy hierarchies to achieve this. Otherwise, a given view (with n levels) will only display part of the hierarchy for organizations with more than n levels. It is recommended that you either create dummy hierarchies, or, create a view with the minimum number of levels that are present in all the organizations in your data.

Table A-13 Organization Levels View

View	Description	Interpreted Columns	SQL Filename
YNA_ORGANIZATION_LEVELS_VW	This view exposes the data in the YFS_ORGANIZATION table. It is a helper view used for representing the organizational hierarchy captured in the YFS_ORGANIZATION table. This view should be customized to reflect your organization hierarchy before the view is created.	None	CONFIGURATION/Organization_Levels.sql

Example A–1 Organization Levels View SQL

```

Create Or Replace View YNA_ORGANIZATION_LEVELS_VW (
  ORGANIZATION_KEY_0,
  ORGANIZATION_KEY_1,
  -- ORGANIZATION_KEY_2,
  -- ORGANIZATION_KEY_3,
  -- The last key must be called ORGANIZATION_KEY. This is the level at which the
  transaction detail (Orders) is stored.
  -- Transformer uses this column name in the Level input sources to link to the
  Transaction input sources.
  ORGANIZATION_KEY )
As Select
O.ORGANIZATION_KEY,
O1.ORGANIZATION_KEY,
O2.ORGANIZATION_KEY -- The Organization level at which data is stored
--, O3.ORGANIZATION_KEY,
--O4.ORGANIZATION_KEY,
From
YFS_ORGANIZATION O
, YFS_ORGANIZATION O1
, YFS_ORGANIZATION O2
--, YFS_ORGANIZATION O3
--, YFS_ORGANIZATION O4
Where
(O.PARENT_ORGANIZATION_CODE Is Null Or O.PARENT_ORGANIZATION_CODE = ' ')
And O1.PARENT_ORGANIZATION_CODE (+) = O.ORGANIZATION_CODE
And O2.PARENT_ORGANIZATION_CODE (+) = O1.ORGANIZATION_CODE
--And O3.PARENT_ORGANIZATION_CODE (+) = O2.ORGANIZATION_CODE
--And O4.PARENT_ORGANIZATION_CODE (+) = O3.ORGANIZATION_CODE
;

```

A.14 Pricing Views

This set of views expose the Price-related data. The set consists of the views described in [Table A–14](#).

Table A–14 Pricing Views

View	Description	Interpreted Columns	SQL Filename
YNA_PRICE_ITEM_DETAIL_LIST_VW	This view exposes the data in the YFS_ITEM_PRICE_SET_DTL table.	None	CONFIGURATION/Pricing_Item_Detail.sql
YNA_PRICE_ITEM_LIST_VW	This view exposes the data in the YFS_ITEM_PRICE_SET table.	None	CONFIGURATION/Pricing_Item.sql
YNA_PRICE_LIST_VW	This view exposes the data in the YFS_PRICE_SET table.	None	CONFIGURATION/Pricing_List.sql
YNA_PRICE_PROGRAM_DETAIL_VW	This view exposes the data in the YFS_IPRICE_PROGRAM_DEFN table.	None	CONFIGURATION/Pricing_Program_Detail.sql
YNA_PRICE_PROGRAM_VW	This view exposes the data in the YFS_PRICE_PROGRAM table.	None	CONFIGURATION/Pricing_Program.sql

A.15 Receiving Discrepancy Views

This set of views expose the Receiving Discrepancy-related data. The set consists of the views described in [Table A–15](#).

Table A–15 Receiving Discrepancy Views

View	Description	Interpreted Columns	SQL Filename
YNA_RECEIVING_DISCREPANCY_VW	This view exposes the data in the YFS_RECEIVING_DISCREPANCY table.	None	TRANSACTION/Receiving_Discrepancy.sql
YNA_RECEIVING_DISCR_DTL_VW	This view exposes the data in the YFS_RECEIVING_DISCR_DTL table.	None	TRANSACTION/Receiving_Discrepancy_Detail.sql
YNA_RECEIPT_LOT_DISCR_NL_VW	This view obtains the lot discrepancies in receipts by joining the data in the YFS_SHIPMENT, YFS_SHIPMENT_LINE, YFS_ORDER_LINE, YFS_RECEIPT_HEADER, YFS_ORDER_HEADER, YFS_ORDER_LINE_REQ_TAG, YFS_RECEIPT_LINE tables.	None	TRANSACTION/Receipt_Lot_DiscrepancyNL.sql
YNA_RECEIPT_QTY_DISCR_NL_VW	This view obtains the quantity discrepancies in receipts by joining the data in the YFS_RECEIVING_DISCREPANCY, YFS_SHIPMENT, YFS_ORDER_LINE, YFS_RECEIPT_HEADER, and YFS_ORDER_HEADER tables.	None	TRANSACTION/Receipt_Quantity_DiscrepancyNL.sql
YNA_RECEIPT_SL_DISCR_NL_VW	This view obtains the serial discrepancies in receipts by joining the data in the YFS_SHIPMENT, YFS_SHIPMENT_LINE, YFS_RECEIPT_HEADER, YFS_ORDER_LINE, and YFS_RECEIPT_LINE tables.	None	TRANSACTION/Receipt_Serial_DiscrepancyNL.sql

A.16 Receipt Views

This set of views expose the Receipt related data. The set consists of the views described in [Table A-16](#).

Table A-16 Receipt Views

View	Description	Interpreted Columns	SQL Filename
YNA_RECEIPT_HEADE R_VW	This view exposes the data in the YFS_RECEIPT_HEADER table.	None	TRANSACTION/recei pt_header_vw.sql
YNA_RECEIPT_HEADE R_ADD_VW	This view exposes limited columns from YFS_RECEIPT_HEADER	None	TRANSACTION/Recei pt_Header.sql
YNA_RECEIPT_LINE_V W	This view exposes the data in the YFS_RECEIPT_LINE table filtered by Receipt Line.	None	TRANSACTION/Recei pt_Line.sql
YNA_RECEIPT_STATU S_AUDIT_VW	This view exposes the data in the YFS_RECEIPT_STATUS_A UDIT table filtered by Receipt Line.	None	TRANSACTION/Recei pt_Status_Audit.s ql

A.17 Shipment Views

This set of views expose the Shipment-related data. The set consists of the views described in [Table A-17](#).

Table A-17 Shipment Views

View	Description	Interpreted Columns	SQL Filename
YNA_ORDER_SHIPMENT_VW	This view exposes data from the YFS_SHIPMENT, YFS_SHIPMENT_LINE, YFS_ORDER_HEADER, and YFS_ORDER_LINE tables.	None	TRANSACTION/Order_Shipment.sql
YNA_PACK_HOLD_SHIPMENTS_VW	This view obtains detail of pack and hold shipments from the YNA_SHIPMENT_VW	DOCK_LOCAL_ID = The dock door from which the pack-and-hold shipment is scheduled to be shipped.	TRANSACTION/Pack_and_Hold.sql
YNA_SHIPMENT_VW	This view exposes the data in the YFS_SHIPMENT table.	None	TRANSACTION/shipment_vw.sql
YNA_SHIPMENT_ADD_VW	This view exposes limited columns from YFS_SHIPMENT table	None	TRANSACTION/Shipment.sql
YNA_SHIPMENT_CONTAINER_VW	This view exposes the data in the YFS_SHIPMENT_CONTAINER table.	None	TRANSACTION/Shipment_Container.sql
YNA_SHIPMENT_CONTAINER_DTL_VW	This view exposes the data in the YFS_CONTAINER_DETAILS table.	None	TRANSACTION/Shipment_Container_Detail.sql
YNA_SHIPMENT_LINE_NL_VW	This view exposes limited columns from the YFS_SHIPMENT_LINE table	None	TRANSACTION/Shipment_LineNL.sql
YNA_SHIPMENT_LINE_REQ_TAG_VW	This view exposes the data in the YFS_SHIPMENT_LINE_REQ_TAG table.	None	TRANSACTION/Shipment_Line_Req_Tag.sql

Table A-17 Shipment Views

View	Description	Interpreted Columns	SQL Filename
YNA_SHIPMENT_STATUS_AUDIT_VW	This view exposes the data in the YFS_SHIPMENT_STATUS_AUDIT table.	None	TRANSACTION/Shipment_Status_Audit.sql
YNA_SHIPMENT_TAG_SERIAL	This view exposes the data in the YFS_SHIPMENT_TAG_SERIAL table.	None	TRANSACTION/Shipment_Tag_Serial.sql
YNA_PACK_HOLD_VW	This view obtains details of pack-and-hold shipments from the YNA_SHIPMENT_VW.	DOCK_LOCATION_ID = The dock door from which the pack-and-hold shipment is scheduled to be shipped.	TRANSACTION/Pack and Hold.sql
YNA_BOL_REPORT_VW	This view obtains the summary of all loads by joining the YFS_LOAD, YFS_LOAD_SHIPMENT, and YFS_SHIPMENT tables.	NO_OF_CASES = total number of containers of type 'Case' included in the load. NO_OF_PALLETS = total number of containers of type 'Pallet' included in the load.	TRANSACTION/BOL_Report.sql
YNA_CONTAINER_INNER_PACK_VW	This view exposes data from the YFS_CONTAINER_INNER_PACK table.	None	TRANSACTION/ContainerInnerPack.sql

Table A-17 Shipment Views

View	Description	Interpreted Columns	SQL Filename
YNA_CONTAINER_STG_LOCN_VW	This view obtains the details of containers in the shipment sort location by joining YNA_LPN_LOCATION_VW, YNA_SHIPMENT_CONTAINER_VW, YNA_SHIPMENT_CONTAINER_VW, and YNA_SHIPMENT_CONTAINER_DTL_VW.	None	TRANSACTION/Container_Staging_Locn.sql
YNA_SHIP_LOAD_CNTR_SUMMARY_VW	This view returns the number of cases and pallets for a shipment by joining the YNA_SHIPMENT_VW, YNA_LOAD_SHIPMENT_VW, and YNA_LOAD_STOP_VW views.	NO_OF_CASES = The total number of cases without any parent container. NO_OF_PALLETS = The total number of pallets without any parent container.	TRANSACTION/Shipment_Load_Cntr_Summary.sql
YNA_DAILY_SHIPMENT_VW	This view retrieves the data required for Daily Shipment Report from the YFS_Shipment table.	None	TRANSACTION/Daily_Shipment.sql
YNA_SHIPMENT_DISCREPANCY_VW	This view retrieves the data required for Vendor Non-Compliance Report from the YNW_Shipment_Discrepancy table.	None	TRANSACTION/Vendor_Compliance.sql
YNA_WAVE_VW	This view exposes data from the YFS_WAVE table.	None	TRANSACTION/Wave.sql

A.18 Sterling Warehouse Management System Views

This set of views expose Sterling Warehouse Management System-related data. The set consists of the views described in [Table A–18](#).

Table A–18 WMS Views

View	Description	Interpreted Columns	SQL Filename
YNA_DOCK_APP OINTMENT_VW	This view exposes data from the YFS_DOCK_APPOINTMENT table	None	TRANSACTION/dock_appointment_vw.sql
YNA_TRAN_LOCN_ATTRS_VW	This view exposes the data in the YFS_TRAN_LOCN_ATTRS table	None	TRANSACTION/tran_locn_attrs_vw.sql
YNA_SKU_DEDIC ATION_VW	This view exposes data from the YFS_SKU_DEDICATION table	None	MASTER/sku_dedication_vw.sql
YNA_COUNT_RE SULT_VW	This view exposes data from the YFS_COUNT_RESULT table	None	TRANSACTION/count_result_vw.sql
YNA_COUNT_RE QUEST_VW	This view exposes data from the YFS_COUNT_REQUEST table	None	TRANSACTION/count_request_vw.sql
YNA_USER_VW	This view exposes data from the YFS_USER table	None	MASTER/user_vw.sql
YNA_SCAC_EX_V W	This view exposes data from YFS_SCAC_EX table.	None	CONFIGURATION/Scac_Ex.sql
YNA_SCAC_VW	This view exposes data from YFS_SCAC table	None	CONFIGURATION/Scac.sql
YNA_SKU_DEDIC ATION_VW	This view exposes data from the YFS_SKU_DEDICATION table	None	MASTER/sku_dedication_vw.sql

Table A-18 WMS Views

View	Description	Interpreted Columns	SQL Filename
YNA_MANIFEST_VW	This view exposes data from the YFS_Manifest table	None	TRANSACTION/Manifest.sql
YNA_MOVE_REQUEST_VW	This view exposes data from YFS_MOVE_REQUEST table	None	TRANSACTION/Move_Request.sql
YNA_MOVE_REQUEST_STATUS_AUDIT_VW	This view exposes data from YFS_MOVE_REQ_STATUS_AUDIT table	None	TRANSACTION/Move_Request_Status_Audit.sql
YNA_TASK_VW	This view exposes data from the YFS_TASK table	None	TRANSACTION/task_vw.sql
YNA_TASK_STATUS_AUDIT_VW	This view exposes data from YFS_TASK_STATUS_AUDIT table	None	Task Status Audit.sql
YNA_UOM_CONVERSION_VW	This view exposes the data from YFS_UOM_CONVERSION table.	None	CONFIGURATION/UOM_Conversion.sql
YNA_LOCATION_VW	This view exposes data from the YFS_LOCATION table	None	MASTER/location_vw.sql
YNA_LOCATION_INVENTORY_VW	This view exposes data from the YFS_LOCATION_INVENTORY table	None	TRANSACTION/location_inventory_vw.sql
YNA_LOCATION_SIZE_VW	This view exposes data from the YFS_LOCATION_SIZE table	None	MASTER/location_size_vw.sql
YNA_LOCN_INVENTORY_AUDIT_VW	This view exposes data from the YFS_LOCN_INVENTORY_AUDIT table	None	TRANSACTION/locn_inventory_audit_vw.sql
YNA_LPN_DTL_VW	This view exposes data from the YFS_LPN_DTL table	None	TRANSACTION/lpn_dtl_vw.sql
YNA_LPN_HDR_VW	This view exposes data from the YFS_LPN_HDR table	None	TRANSACTION/lpn_hdr_vw.sql

Table A-18 WMS Views

View	Description	Interpreted Columns	SQL Filename
YNA_LPN_HEADE R_VW	This view exposes data from the YFS_LPN_HEADER table	None	TRANSACTION/Lpn_Header.sql
YNA_LPN_LOCAT ION_VW	This view exposes data from the YFS_LPN_LOCATION table	None	TRANSACTION/LPN_Location.sql
YNA_INVENTORY _BAL_NL_INNER _VW	This view exposes data from the YFS_INVENTORY_AUDIT table.	None	TRANSACTION/Inve ntory_Balance_In ner.sql
YNA_ITEM_UOM _VW	This view exposes data from the YFS_ITEM_UOM table	None	MASTER/Item_UOM. sql
YNA_ENTERPRIS E_NODE_VW	This view obtains all nodes for an enterprise by joining the YFS_ORG_ENTERPRISE and YFS_ORGANIZATION tables	None	CONFIGURATION/En terprise_Node.sq l
YNA_PRODUCTIV ITY_TYPE_VW	This view exposes data by joining the YNA_PRODUCTIVITY_TYPE_NL_VW and YNA_LOCALIZED_DESCRIPT IONS_VW views	None	CONFIGURATION/pr oductivity_type_ vw.sql
YNA_MODULE_D OCUMENT_TYPE_ VW	This view exposes data from the YFS_MODULE_DOCUMENT_ TYPE table	None	CONFIGURATION/Mo dule_Document_Ty pe.sql
YNA_PROCESS_T YPE_STAT_NL_V W	This view obtains statuses and processes obtained from each document type	None	CONFIGURATION/Pr ocess_Type_Statu sNL.sql
YNA_PRODUCTIV ITY_TYPE_NL_V W	This view exposes data from the YFS_PRODUCTIVITY_TYPE table	None	CONFIGURATION/Pr oductivity_TypeN L.sql
YNA_DOCUMENT _PARAMS_NL_V W	This view exposes the data in YFS_DOCUMENT_PARAMS table	None	CONFIGURATION/Do cument_ParamsNL. sql

Table A-18 WMS Views

View	Description	Interpreted Columns	SQL Filename
YNA_LOCATION_SIZE_NL_VW	This view exposes the data in the YFS_LOCATION_SIZE table.	None	MASTER/Location_SizeNL.sql
YNA_LOCATION_NL_VW	This view obtains data by joining the YNA_DISTNT_DEDICATED_LOCN_VW, YNA_LOCATION_VW, and YNA_TRAN_LOCN_ATTRS_VW views.	ACTIVITY_DAY_DIFF = The difference between the modify date for the location and the current date.	MASTER/LocationNL.sql
YNA_SCAC_AND_SERVICE_NL_VW	This view exposes data from YFS_SCAC_AND_SERVICE and YFS_CARRIER_SERVICE tables.	None	CONFIGURATION/Scac_And_ServiceNL.sql
YNA_TASK_ADD_VW	This view exposes limited columns from the YFS_TASK table.	None	TRANSACTION/Task.sql
YNA_TASK_STATUS_AUDIT_VW	This view exposes data from the YFS_TASK_STATUS_AUDIT table.	None	TRANSACTION/Task_Status_Audit.sql
YNA_TASK_TYPE_VW	This view exposes data from the YFS_TASK_TYPE table	None	CONFIGURATION/task_type_vw.sql
YNA_TASK_TYPE_NL_VW	This view exposes data from the YFS_TASK_TYPE table	None	CONFIGURATION/Task_TypeNL.sql
YNA_ZONE_VW	This view exposes data from the YFS_ZONE table	None	MASTER/zone_vw.sql
YNA_ZONE_MASTER_DATA_NL_VW	This view exposes the data in YFS_ZONE table for the User's Node	None	MASTER/Zone_Master_DataNL.sql
Shipment_Dashboard_Helper_VW	This view exposes the data of the YNA_Shipment_VW based on the status comparison with the YFS_Status table.	None	Shipment Dashboard Helper.sql

A.19 Work Order Views

This view exposes the Work Order-related audit data. The set consists of the views described in [Table A-19](#).

Table A-19 Work Order Views

View	Description	Interpreted Columns	SQL Filename
YNA_WORK_ORDER_NL_VW	This view exposes data from the YFS_WORK_ORDER table.	None	TRANSACTION/YNA_WORK_ORDER_NL_VW.sql
YNA_WORK_ORDER_TAG_VW	This view exposes the data in the YFS_WORK_ORDER_TAG table.	None	TRANSACTION/YNA_WORK_ORDER_TAG_VW.sql
YNA_WORK_ORDER_STS_AUDIT_VW	This view exposes the data in the YFS_WORK_ORDER_STS_AUDIT table.	None	TRANSACTION/YNA_WORK_ORDER_STS_AUDIT_VW.sql
YNA_WORK_ORDER_SERVICE_TOOL_VW	This view exposes the data in the YFS_WORK_ORDER_SERVICE_TOOL table.	None	TRANSACTION/YNA_WORK_ORDER_SERVICE_TOOL_VW.sql
YNA_WORK_ORDER_SERVICE_LINE_VW	This view exposes the data in the YFS_WORK_ORDER_SERVICE_LINE table.	None	TRANSACTION/YNA_WORK_ORDER_SERVICE_LINE_VW.sql
YNA_WORK_ORDER_PROD_DEL_VW	This view exposes the data in the YFS_WORK_ORDER_PROD_DEL table.	None	TRANSACTION/YNA_WORK_ORDER_PROD_DEL_VW.sql
YNA_WORK_ORDER_NOTES_VW	This view exposes the data in the YFS_WORK_ORDER_NOTES table.	None	TRANSACTION/YNA_WORK_ORDER_NOTES_VW.sql

Table A-19 Work Order Views

View	Description	Interpreted Columns	SQL Filename
YNA_WORK_ORDER_COMPONENT_VW	This view exposes the data in the YFS_WORK_ORDER_COMPONENT table.	None	TRANSACTION/YNA_WORK_ORDER_COMPONENT_VW.sql
YNA_WORK_ORDER_COMP_TAG_VW	This view exposes the data in the YFS_WORK_ORDER_COMP_TAG table.	None	TRANSACTION/YNA_WORK_ORDER_COMP_TAG_VW.sql
YNA_WORK_ORDER_AUDT_DTL_VW	This view exposes the data in the YFS_WORK_ORDER_AUDT_DTL table.	None	TRANSACTION/YNA_WORK_ORDER_AUDT_DTL_VW.sql
YNA_WORK_ORDER_APPT_VW	This view exposes the data in the YFS_WORK_ORDER_APPT table.	None	TRANSACTION/YNA_WORK_ORDER_APPT_VW.sql
YNA_WORK_ORDER_ACTY_DTL_VW	This view exposes the data in the YFS_WORK_ORDER_ACTY_DTL table.	None	TRANSACTION/YNA_WORK_ORDER_ACTY_DTL_VW.sql
YNA_WORK_ORDER_ACTIVITY_VW	This view exposes the data in the YFS_WORK_ORDER_ACTIVITY table.	None	TRANSACTION/YNA_WORK_ORDER_ACTIVITY_VW.sql
YNA_WO_HOLD_TYPE_VW	This view exposes the data in the YFS_WO_HOLD_TYPE table.	None	TRANSACTION/YNA_WO_HOLD_TYPE_VW.sql
YNA_WO_HOLD_TYPE_LOG_VW	This view exposes the data in the YFS_WO_HOLD_TYPE_LOG table.	None	TRANSACTION/YNA_WO_HOLD_TYPE_LOG_VW.sql
YNA_WO_APPT_USER_VW	This view exposes the data in the YFS_WO_APPT_USER table.	None	TRANSACTION/YNA_WO_APPT_USER_VW.sql

A.20 Billing Activity Reporting Engine View

This view exposes the Work Order-related audit data for the Billing Activity Report. The set consists of the views described in [Table A-20](#)

Table A-20 Billing Activity Report Views

View	Description	Interpreted Columns	SQL Filename
YNA_ARE_ACTIVITY_CODE_VW	This view exposes the data in the YNW_ARE_ACTIVITY_CODE table.	None	CONFIGURATION/are_activity_code_vw.sql
YNA_ARE_ACTIVITY_DETAIL_VW	This view exposes the data in the YNW_ARE_ACTIVITY_DETAIL table.	None	TRANSACTION/are_activity_detail_vw.sql
YNA_ARE_ACTIVITY_HEADER_VW	This view exposes the data in the YNW_ARE_ACTIVITY_HEADER table.	None	TRANSACTION/are_activity_header_vw.sql

B

Server Sizing Requirements

The server sizing requirements that should be met before installing Cognos 8 BI are listed here.

B.1 Cognos Server Sizing Requirements

Before you install Cognos 8 BI, ensure that you meet the requirements as described in [Table 0–1, "Cognos 8 BI \(IWR\) Server Requirements"](#).

Table 0-1 Cognos 8 BI (IWR) Server Requirements

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

C

Cognos Components

The complete list of Cognos components are listed below. Most of these components are automatically installed with the main Cognos components.

C.1 Client and Authoring Components

PowerPlay Transformer – used in the single computer mode versus Client/Server mode

PowerPlay for Windows - OLAP tool for designers; used to view and design cubes.

Report Studio - used to build reports from the Sterling Warehouse Management System: Business Intelligence catalog (WMS-Analytics.cpf).

Cognos Impromptu - used for viewing cube report data

Analysis Studio - used to create ad-hoc cross-tab reports based on multi-dimensional data sources such as cubes.

C.2 Server Components

PowerPlay Transformer - Cube definition builder

Cognos 8 Reports - used to web-enable reports

PowerPlay Enterprise Server - used to web-enable cubes

C.3 Security Components

Access Manager - used for user authentication

Netscape LDAP server - used as the authentication data store

Others: Ticket server

C.4 Tools

Cognos 8 Report Administrator

Cognos 8 Server Administrator

PDF Servers (for cubes and reports)

Access Manager Configuration Wizard

Other Server Administrator applications

Scheduler

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