



# Infor LN Analytics for Quality Management Installation and Configuration Guide

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# About this guide

The objective of this guide is to provide information about the installation and configuration of Infor LN Analytics Quality Management.

## Intended audience

This guide is intended for use by administrators, responsible for installing and configuring the Infor LN Analytics Quality Management.

## Organization

This table lists the chapters of this guide:

Chapter	Description
About Infor LN Analytics Quality Management	Provides a brief explanation of the Infor LN Analytics Quality Management.
Installation	Describes the process to install and configure Infor LN Analytics Quality Management.
Post installation tasks	Describes the Business Vault related task that must be performed after installing Infor LN Analytics Quality Management.
Post installation tasks for Reports and Dashboards	Describes the post installation tasks that must be performed for Infor LN Analytics Quality Management and Business Vault.

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# About Infor LN Analytics Quality Management

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In Quality Management, business intelligence (BI) refers to the software-based techniques used for:

- Operational Analysis: Lists the metrics, in a graphical format, summarizing the quality management data, which can be customized as per the user requirement.
- Statistical Qualitative Analysis: Displays the metrics that allows a user to analyze specific process results, and to identify sources of variation in the quality of a product.

Before the installation, you must familiarize yourself with the content of:

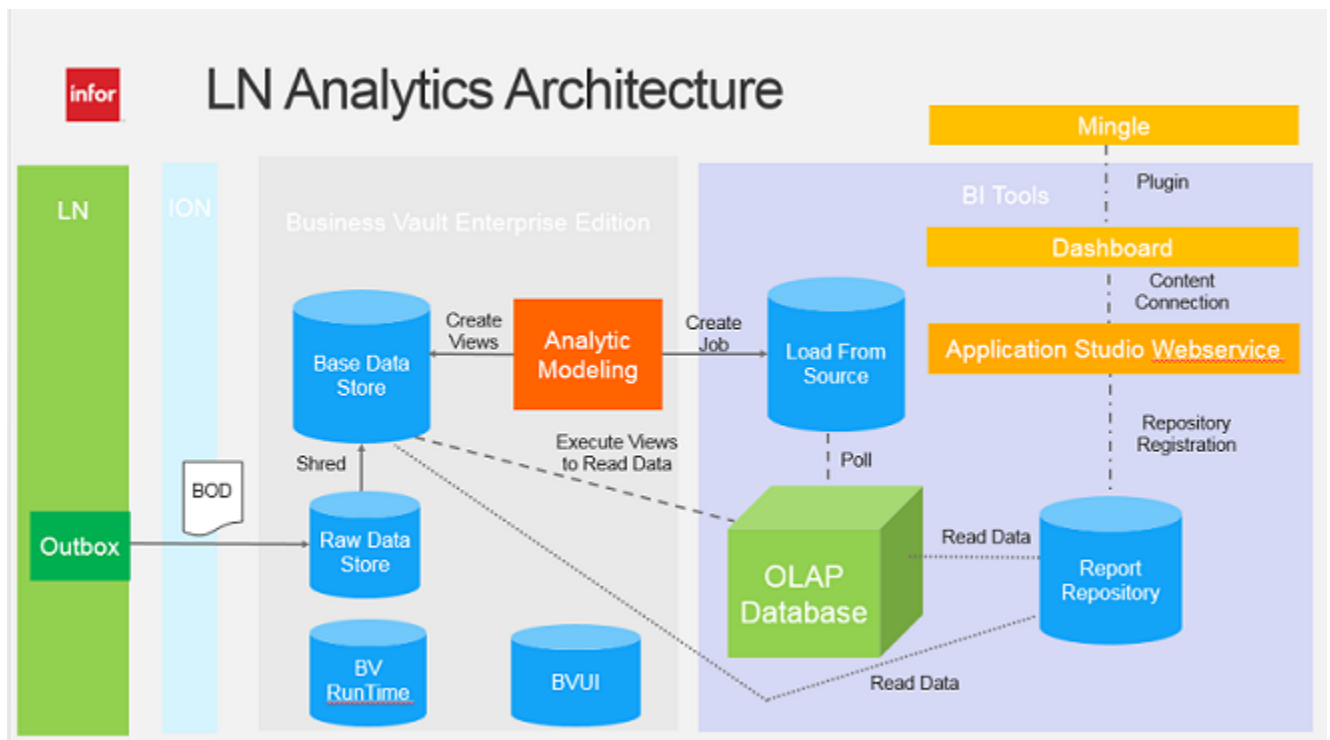
- Infor Connect documentation
- Infor Business Vault documentation
- Infor LN Integration Guide for Infor ION Business Vault
- Infor BI Installation Guide
- Infor BI Hardware Recommendations Guide
- Infor BI Platform Support.

You can find these documents in the Documentation section of the Infor Xtreme Support portal at <http://www.infor.com/inforxtreme>.

Use this guide as a reference at your site. This guide explains the process to use the Infor DVD Browser and administrative and user functions to complete specific setup and maintenance tasks.

## Architecture

Infor LN Analytics offers an optimal solution to implement an advanced business intelligence environment for the ERP system. The solution includes the common metrics that are required by the users for Quality Testing analysis and reporting. This helps the users to accomplish the daily tasks effectively.



Using the LN Analytics solution, you can extract, transform, and load the data from an LN system to a BI environment. By default, the Infor suite manages the communication between modules and the storage data in the Business Vault.

The Business Vault is the central staging area. The ERP system can be connected to the vault using the standard ION connectors, custom-built ION connectors, or point-to-point integrations. When an ION connector is used, information corresponding to each transaction, posted in ERP, is converted to a standardized XML file, called a BOD (Business Object Document). This document is transferred to the Infor Business Vault using ION Connect. The information is stored in a raw data format and is automatically transformed to a relational schema in the Base Data Store, using a transformation process known as Shredding.

Business Vault Analytic Modeling is used for filling the OLAP database. Information to create the dimensions and cubes are published to the Load From Source database and the Base Data Store during a publication process. After that the OLAP database will find the published information in the Load From Source database and uses this information and the information in the Base Data Store to create dimensions and cubes.

The reports are reading data from the OLAP database and Base Data Store. Web services and plugins are used to display the reports and metrics in Infor Ming.le.



The chapter describes the process to install LN Analytics Quality Management. The chapter also lists the prerequisites for the installation process.

## System requirements

Prerequisites for the LN analytics Quality Management installation:

- SQL Server 2014
- SQL Server 2016

**Note:** It is recommended to use the Simple Recovery model for the Base Data Store database.

- Windows
  - The installer does not work on Windows 10.
- Infor LN
  - Infor LN 10.4.2 or later.
  - At a minimum, PMC solutions from January through June 2017 in generic KB article 22945150. You must also install the solution components of the BO2.1 packages.
- Infor BI
  - Infor ION BI 11.0 tools (see Infor BI installation Guide):
    - Infor BI Application Studio 11.0.0.304 including Web Services
    - Infor BI Dashboards 11.0.0.211
    - Infor BI OLAP Server 11.0.0.330
    - Infor BI Repository 11.0.0.197

**Note:**

- When you install Infor BI OLAP Server on a separate server, you must install Infor BIRepository on the same server. The Infor BI Repository version on both BI servers must be same. Ensure that both servers have the LN Analytics QM 10.5.2 repository registration.
- Infor BI repository is part of the BI Application Studio, BI Dashboards, and BI OLAP Server setups.
- The BI tools versions mentioned are minimum requirement. The higher version of BI tools must take care of backward compatibility. All BItools should be compiled on the same Repository version. For more information, refer generic KB article 655736.

- For LN Analytics it is mandatory to install the ODBC driver for SQL Server on the Infor BI OLAP Server.
- ION
  - ION 11.1 including ION connect or higher
- Business Vault
  - ION Business Vault Base Data Store 10.4.6
  - ION Business Vault Enterprise Edition 11.3.1

**Note:**

- In Business Vault, the database connection must point to the Base Data Store Database. Also, import the BOD mappings provided with the Base Data Store installation, to a data store definition that uses the same database connection.

Other prerequisites: Infor Ming.le

**Note:** Ensure that the drill backs are registered in Infor Ming.le.

## Installation overview

You can install the latest version of LN Analytics Quality Management 10.5.2 or you can upgrade an older version of the application. When you upgrade the existing environment to LN Analytics Quality Management 10.5.2, the existing version is overwritten.

**Note:** Infor does not support multiple installations of the application, on one server.

## Backup Base Data Store

If you customize an existing QM database objects and/or if you create new database objects during installation, these components in the Base Data Store, are deleted:

- Tables with the prefix QM\_ and some tables prefix LN\_
- Views with the prefix QM\_ and LN\_
- Stored Procedures with the prefix QM\_
- Functions with the prefix LN\_ and QM\_

**Note:**

- It is recommended that you take a backup of the customized database objects that can be deleted.
- If you customize an existing LN Analytics database object and/or if you upgrade, the customizations deleted. When you customize a new database object the object name should not start with 'PCL\_', 'QM\_', 'BI\_', 'BA\_', 'LN\_' or 'SRV\_'. Else the customized database objects will still be deleted. Use another prefix for the customized database objects.

## Installing a new version

The new version overwrites the existing version, making the existing version obsolete.

For all installations, the installer overwrites:

- The existing LN Analytics Quality Management related database objects in the Business Vault Base Data Store.

**Note:**

- Infor does not support multiple installations of the application on one server.
- It is recommended to remove the components of the existing solution that are not deleted during the installation, after the new version is installed. See Chapter 5.

## During an update of an existing version

When updating an existing version, the installer attempts to delete the existing components of the application and reinstall that component. In case the installer is unable to delete these objects, you are prompted to delete the objects before you can complete the installation process.

**Note:** If you want to use the existing User Management configuration, select the **Export User Management Data** option to export User Management data before you delete the repository database and registration. After the installation, use **Import User Management Data** to import the exported User Management data.

## Installer Component

This section describes the individual components in the installer. By default, the installer installs all the components on one server. To install specific components, click the drop-down box adjacent to the component and select 'X'.

## Installing Repository Database and OLAP Database

This component:

- Installs the application Repository Database titled QM\_Rep\_LNA\_QM\_10\_5\_2.
- Creates a repository registration titled LN Analytics QM 10.5.2.
- Installs the OLAP Database titled LN Analytics QM 10.5.2.
- Deploys SQL scripts to the Business Vault Base Data Store database. To identify the database objects that you must take backup, see "Backup Base Data Store" on page 10.

- Configures a Database Alias titled LNAalyticsQM.
- Configures a Database Alias titled BV\_BDS\_QM.

**Note:** You must install these components on the system which hosts Infor BI OLAP Server.

To install LN Analytics Quality Management, Repository Database and OLAP Database:

- 1 Run the LN Analytics Quality Management installer Setup.exe.
- 2 On the Welcome to the Installation Wizard for Infor LN Analytics Quality Management window, click **Next**.
- 3 In the Custom Installation window, select **LN Analytics QM, Repository Database, and OLAP Database**.
- 4 Click **Next**.
- 5 In the Database Server window, set **Server Type** to **SQL Server**, specify the name of the database server on which the Repository database must be installed and click **Next**.
- 6 Specify the name of the server, Business Vault Data Store database, user name and the password in the Database Server - Relational Alias (BV\_BDS\_QM) window.  
This information is used to configure the BV\_BDS\_QM relational alias.
- 7 Click **Next**.
- 8 In the Script Execution dialog box, specify the server name, database name, user name and password of the Business Vault Data Store in which the scripts must be executed. By default, the information is copied from the previous step.
- 9 Click **Next**.
- 10 In the Repository window, specify the name of the server on which the OLAP runs and click **Next**.
- 11 In the Ready to Install the Program window, click **Install**.  
The installation can take several minutes.
- 12 In the Installation Wizard Completed window, click **Finish**

**Note:** The OLAP database is installed in the Database root directory of the BI OLAP server.

## Copying Analytic Modeling files

This component is used to copy the Analytical Modeling zip files to the LN Analytics QM 10.5.2\Analytic Modeling sub folder of the installation folder. The default installation folder is C:\Program Files (x86)\Infor\BI\.

The Analytic Modeling files must be installed on a machine with a browser. You must have access to the Business Vault Enterprise Edition URL.

To copy the Analytical Modeler files:

- 1 Run the LN Analytics Quality Management installer Setup.exe.
- 2 In the Welcome to the Installation Wizard for Infor LN Analytics Quality Management window, click **Next**.

- 3 In the Custom Installation window, select **Copy Analytic Modeling Files**. If required change the installation folder and click **Next**.
- 4 In the Ready to Install the Program window, click **Install**.  
The Installation can take several minutes.
- 5 In the Installation Wizard Completed window, click **Finish**.

## Copying Dashboard files

This component is used to copy the LN Analytics QM.app\_dashboards file to the LN Analytics QM 10.5.2\Dashboards sub folder of the installation folder. The default installation folder is C:\Program Files (x86)\Infor\BI\.

The dashboard files must be installed on a machine with a browser. You must have access to the BI Dashboard URL.

To install the dashboard file:

- 1 Run the LN Analytics Quality Management installer Setup.exe.
- 2 In the Welcome to the Installation Wizard for Infor LN Analytics Quality Management window, click **Next**.
- 3 In the Custom Installation window, select **Copy Dashboard Files**. If required change the installation folder and click **Next**.
- 4 In the Ready to Install the Program window, click **Install**.  
The installation can take several minutes.
- 5 In the Installation Wizard Completed window, click **Finish**.

## Configuring Application Studio Web

This component is used to create an Application Studio Web Service. All LN Analytics are configured to a default Application Studio Web Service, titled LN\_AnalyticsWebservice. If you want to reuse an existing Application Studio Web Service, this component is not required. The Application Studio Web Service must be installed on the machine on which Application Studio Web Services is installed.

To configure the Application Studio Web:

- 1 Run the LN Analytics Quality Management installer Setup.exe.
- 2 In the Welcome to the Installation Wizard for Infor LN Analytics Quality Management window, click **Next**.
- 3 In the Custom Installation window, select **Configure Application Studio Web** and click **Next**.
- 4 In the Ready to Install the Program window, click **Install** to start the installation.

In the Application Studio WebServices Name window, the default name LN\_AnalyticsWebservice for the LN Analytics is displayed. This name is part of the URL used to access the LN Analytics Quality Management reports through the Application Studio WebServices.

- 5 Click **Next**.
- 6 Select the method used to authenticate the Application Studio Web Services users.  
**Note:** When using Ming.le, you must use IFS.
- 7 Click **Finish**.
- 8 To restart IIS, click **Yes**.
- 9 In the Configuration Progress window, click **Close**.
- 10 In the Installation Wizard Completed window, click **Finish**.

## Configuring Dashboards Web and Content Connection

This component is used to create a BI dashboard and a content connection titled LN Analytics Quality Management. All LN Analytics are configured for a default Dashboard titled of LN\_AnalyticsDashboard. If you want to reuse an existing Dashboard, this component is not required. The Dashboard feature must be installed on the machine on which BI Dashboards is installed.

To configure the Dashboard Web and Content connection:

- 1 Run the LN Analytics Quality Management installer Setup.exe.
- 2 In the Welcome to the Installation Wizard for Infor LN Analytics Quality Management window, click **Next**.
- 3 In the Custom Installation window, select **Configure Dashboards Web and Content Connections** and click **Next**.
- 4 In the Ready to Install the Program window, click **Install**, to start the installation.  
In the Infor BI Dashboard Name window, the default Dashboard name for Infor LN Analytics Quality Management is displayed. This name is part of the URL used to access the LN Analytics Quality Management Dashboards in Infor BI Dashboards.
- 5 Click **Next**.
- 6 In the dashboard Authentication window, select the method to be used to authenticate the Dashboards users.  
**Note:** Select the method used to authenticate the Application Studio Web Services users. When using Mingle, you must use IFS.
- 7 Click **Finish**.
- 8 In the Configuration Progress window, click **Close**.
- 9 In the Installation Wizard Completed window, click **Finish**.  
**Note:** This feature must be installed on the machine which hosts Infor BI Application StudioWebServices.

To fill the OLAP database, you must perform these tasks:

- Creating and configuring the OLAP LoadFromSource Database.
- Configuring Analytic Modeling in Business Vault.
- Executing the Publications

## Creating and Configuring the OLAP LoadFromSource Database

The LoadFromSource database is the interface between the Business Vault and the Infor BI OLAP Server. The LoadFromSource database is a SQL Server relational database. From the Business Vault perspective this database is referred to as the 'target database', and from the OLAP Server perspective as the 'LoadFromSource database'. The Business Vault sends instructions to build dimensions, cubes, and load facts to the target database when dimensions and cubes are published. Infor BI OLAP Server reads instructions and processes jobs from the LoadFromSource database. First, you must create the LoadFromSource database and then configure the interface between the BI OLAP database and the LoadFromSource database. The interface between the Business Vault and the LoadFromSource database is configured later.

See *BI OLAP Server Administrator Manual*.

### Creating the OLAP LoadFromSource database

- 1 In SQL Server Management Studio, create a new database and specify a name such as, OLAP\_LoadFromSource\_QM.
- 2 In SQL Server Management Studio, create the tables for the LoadFromSource database by executing the CreateOlapMetada.sql script in the database.

**Note:** The CreateOlapMetada.sql script is copied during the BI OLAP server installation and can be located in the bin64 folder of the BI OLAP server installation. The default path is: C:\Program Files\Infor\BI\OLAP.

## Configuring the OLAP LoadFromSource database in BI OLAP

The BI OLAP database must be configured so that the OLAP database can connect to the LoadFromSource database. The configuration process exists for setting the connection string and specifying the parameters that define the polling behavior of the OLAP database to the LoadFromSource database.

To configure the BI OLAP Server, execute these steps:

- 1 Access BI OLAP Administration and go to **Computer Configuration > Local Computer**. If the LN Analytics QM 10.5.2 database is not displayed, right-click on the Local computer and select **Add Database** to add the OLAP database.
- 2 In the LN Analytics QM 10.5.2 database section, select **Database Settings > LoadFromSource database > Connection string**.
- 3 Set the connection string.

Example for connection strings on SQL Server:

```
Driver={SQL Server};Server=MySERVERNAME;  
Database=OLAP_LoadFromSource_QM;Trusted_Connection=Yes;
```

```
Driver={SQL Server};Server=MySERVERNAME;  
Database=OLAP_LoadFromSource_QM;Trusted_Connection=No;UID=MySQLUser;  
PWD=MySQLPassword;
```

- 4 Specify the information required for the ODBC driver when the OLAP server just passes the connection string to the ODBC library.
- 5 Specify the time period after which the OLAP database connects to the LoadFromSource database to check if a job is present for the OLAP database. In the LN Analytics QM 10.5.2 database, select **Scheduler Settings > Other > LoadFromSource** and set the value to **Yes**.
- 6 Select **Scheduler Settings > Other > LoadFromSource polling interval** and specify a value **1**.
- 7 The modified settings of the OLAP database must be applied. Go to the Favorite Databases section and connect to the LN Analytics QM 10.5.2 database. If the database does not exist in the Favorite Database section, you must register the database.
- 8 Right-click database registration and select **Apply Runtime Settings**.

**Note:**

- A LoadFromSource database can only be used by one BI OLAP database. Therefore, when you reuse a LoadFromSource database during an analytic upgrade, ensure that the LoadFromSource setting of the "old" olap database is set to False and changes are applied to runtime.
- When the connection string in the BI OLAP database is incorrect, the logging information is displayed in the ALEAPR.txt OLAP log file.



# Configuring Analytic Modeling in the Business Vault

After the Creating and Configuring the OLAP LoadFromSource step is completed, you must configure the Business Vault to fill the OLAP database with data. It is assumed that users are set up with the IFS roles and a standard database connection to a filled Base Data Store is available. These are the prerequisites to configure the Business Vault.

To configure the Analytic Modeling in Business Vault, execute these steps:

- 1 Creating a Database Connection.
- 2 Importing and Setting up Models.
- 3 Setting up a Data Store.
- 4 Setting up an Application.
- 5 Importing Publications and Definitions.
- 6 Setting up a Target.
- 7 Configuring Publications.
- 8 Configuring the Definitions.
- 9 Executing the Publications.

## Creating a Database Connection

Each analytic has its own database connection to the Base Data Store. The LN analytic does not use the Database connection to the Base Data Store that was created during the installation of the Base Data Store. Therefore, create a new database connection.

- 1 Select **Administration>Database Connections**. The Database Connections page opens.
- 2 Click **New** and create a new Standard Database Connection; specify the Name (for example, LN Analytics QM Source) and Description. Also, specify the database connection information to connect to the Base Data Store.
- 3 Click Save.

**Note:**

- Users must have the BVDatabaseAdmin role to execute this step.
- Each analytic will have its own database connection for better customization control by the customer.

## Importing and Setting up Models

Now you can import the models on the Standard database connection of the Base Data Store. For LN Analytics Quality Management, you must import the following two models.

- Base Data Store Model (version 10.4.3)

- LN Analytics QM Model (version 10.5.2)

To import a model, use the Database Connections function. Database Connections is secured for users with the BVDATABASEADMIN role.

To import the models:

**1 Select Administration > Database Connections.**

The Database Connections page opens.

**2 Select the standard database connection that connects to the Base Data Store (For example, LN Analytics QM Source. See "Creating a Database Connection" on page 17.) and click **drill-down**.**

**3 Select the **Models** tab and click **Import**.**

The Import Wizard opens.

**4 Browse and select the Infor Base Data Store 10.4.3 model.zip.**

During the installation, the Analytic Modeling zip files are copied to the LN Analytics QM 10.5.2\Analytic Modeling sub folder of the default installation folder ..Program Files (x86)\Infor\BI.

**5 Follow the Import Wizard and select **Overwrite existing definitions with the imported versions**. Click **Import**.**

**6 To import the LN Analytics QM Model, repeat step 2 to step 5, and select the LN Analytics QM 10.5.2 BV Model.zip file.**

**7 When the models are displayed under the **Available grid in the Model** Tab, use the arrow to move the Base Data Store Model and LN Analytics QM model to the Selected grid.**

**8 Add the models to the selected grid in the correct order. Move the Base Data Store Model to the bottom.**

**Note:**

- When the same version of the Base Data Store model exists, you are not required to re-import the model.
- The LN Analytics QM 10.5.2 model file overwrites the LN Analytics QM model file of a previous version. After the import of the LN Analytics QM 10.5.2 model the existing LN Analytics QM analytic that is available on the system is obsolete.
- The delivered models are **Infor-Locked**. You can select and use an Infor-locked model within a database connection, but you cannot edit or delete the model or the objects in the model.

## Setting up a Data Store

LN analytics Quality Management requires these two data stores:

- The first data store is required to load the metadata bod mappings of the base data store.
- The second data store is required to load the metadata bod mappings of LN Analytics QM.

**Note:** Analytic Modeling requires the Model and Data Store information to generate SQL views.

## Loading Base Data Store Metadata Mappings

To load the metadata for the Base Data Store, you must create a Data Store and import the BOD mappings:

- 1 Select **Analytic Modeling > Data Stores**.
- 2 Click **New**.
- 3 On the New Data Store page, specify the **Name** (for example, LN Analytics QM BDS Metadata), **Description** (for example, this data store should not be activated. It is for metadata purposes only), and **Database Connection**. For the database connection select the database connection to the Base Data Store (For example, LN Analytics QM Source).
- 4 Click **Save**.
- 5 Import the Base Data Store BOD mappings into the new Data Store. Click **Import** and select the Business Vault BOD Mappings XXXX.zip.  
During the installation of the Base Data Store the Business Vault BOD Mappings.zip file was copied to the server where the installation took place.
- 6 Click **Save** to save the data store definition again.
  - The imported BOD Mappings and Metadata Data Store status must be always set to **Inactive**. It is recommended to specify this in the Description of the data Store so that the status is not set to Active accidentally.

## Loading LN Analytics Quality Management Metadata Mappings

To load the metadata for LN Analytics Quality Management, you must create a new Data Store and import the BOD mappings:

- 1 Select **Analytic Modeling > Data Stores**.
- 2 Click **New**.
- 3 On the New Data Store page, specify the **Name** (for example, LN Analytics QM Metadata), **Description** (for example, this data store should not be activated. It is for metadata purposes only), and **Database Connection**. For the database connection select the database connection to the Base Data Store (For example, LN Analytics QM Source).
- 4 Click **Save**.
- 5 Import the meta data for LN Analytics Quality Management BOD mappings into the new Data Store. Click **Import** and select the LN Analytics QM 10.5.2 Metadata Data Store BOD Mappings.zip.  
During the installation Analytic Modeling zip files are copied to the LN Analytics QM 10.5.2\Analytic Modeling sub folder of the default installation folder ..Program Files (x86) \Infor\BI\.
- 6 Click **Save** to save the data store definition again.
  - The imported BOD Mappings and Metadata Data Store status must be always set to **Inactive**. It is recommended to specify this in the Description of the data Store so that the status is not set to Active accidentally.
  - When you upgrade from an earlier version of QM, the related Data Store is also available. It is recommended to delete the existing metadata Data Store and create a new Data Store.

Ensure that no two Data Stores with BOD mappings of different Quality Management versions exist on your system. In installation guides of previous QM versions, the metadata data store was referred to as LNAalyticsQMDataStore and / or QM\_METADATA.

## Setting up an Application

To setup an application for LN Analytics Quality Management:

- 1 Select **Administrations > Applications**.

The Applications page opens.

- 2 Click **New**, and specify the application **Name** like *LN Analytics QM* and **Description** like the version number of the analytic version number

- 3 Click **Save**.

**Note:**

- Business Vault creates during installation an application called Default which is empty. When this default application is not used, you can also rename the Default application.
- When an older version of Quality Management exists in Business Vault, the existing application can be renamed and a new application is not required.

## Importing Publications and the Definitions

Import the publications, hierarchy, dimension, and cube definitions of LN Analytics Quality Management. You can import the publication and definitions, using the Publications home page. You cannot select individual definitions in the import file. During the import process the publications and definitions are associated with the database connection that you specify. The publications and definitions are also associated with the application that you are currently using.

**Note:** When you upgrade from an earlier version of LN Analytics Quality Management, the existing definitions are overwritten. Therefore, before you start the import, you must note the current values that are present in the **Details** tab of the dimensions that start with QM\_CONFIGURE\_. These values are reused during the configuration of the definitions. See the Configure the Definitions section.

To import the file that includes all publications and definitions:

- 1 Ensure you are using the LN Analytics QM Application. If not, select the LN Analytics QM application.
- 2 Select **Analytic Modeling > Publications**.
- 3 Click **Import**.

The Import Wizard opens.

- 4 Click **Browse** and select the LN Analytics QM 10.5.2 AM Application Definitions and Publications.zip file to import. During installation the Analytic Modeling zip files are copied to the LN Analytics QM10.5.2\ Analytic Modeling sub folder of the default installation folder ..Program Files (x86)\ Infor\BI\
- 5 Follow the import wizard and select **Overwrite existing definitions with the imported versions**.

- 6 Select the **Database Connection** that connects to the Base Data Store (For example, LN Analytics QM Source). See "Creating a Database Connection" on page 17 for more information.
- 7 Click **Import** to import the definitions.  
The imported hierarchies are displayed in the Hierarchies page. Imported dimensions are displayed in the Dimensions page, and the imported cubes are displayed in the Cubes page. The **Last Updated By** and **Last Updated On** columns are updated. If imported definitions that overwrite existing definitions exist, a new definition version is added.

## Setting up a Target

The LoadFromSource database is the interface between the Business Vault and the Infor BI OLAP Server. In the "Creating and Configuring OLAP LoadFromSource Database" section of this chapter, the OLAP database is configured to communicate with the LoadFromSource database. In this section, the Business Vault is configured to communicate with the LoadFromSource database.

First, you must create a Target Database Connection.

**Note:** From Business Vault perspective, the LoadFromSource database is referred to as the Target database.

Second, you must setup a publication target definition, that uses the created publication target. In the publication target definition, you must also specify the locales in which the dimensions and cubes must be published.

## Setting up a target database connection

To create a target database connection:

- 1 Select **Administration > Database Connections**.
- 2 On the Database Connections page, select **New Target Database Connection** or click **drill-down** to update an existing target database connection that identifies the database in which the dimension and cube definitions and data are published.
- 3 Specify all the information required to connect to the LoadFromSourceDatabase, specified in the "Creating the OLAP LoadFromSource database" on page 15 section (for example, OLAP\_LoadFromSource\_QM). Specify a name for the target database connection (for example, LN Analytics QM Target).
- 4 Click **Test Connection** to test the database connection.
- 5 Click **Save**.

While saving, you may be required to re-enter the user and password information.

## Setting up a Publication Target and specifying locales

A publication target allows you to specify a Target Database Connection and locales information required to publish cubes, dimensions, and cube facts.

To create a new publication target:

- 1 Select **Analytic Modeling > Publication Targets**. The Publication Targets page opens.
- 2 Click **New**.
- 3 Specify the required information such as Name, Target Database Connection and select the Locales that must be published to the OLAP database.  
Specify a name for the publication target such as, LN Analytics QM Target.

**Note:**

- The Default and English locales are mandatory for each publication.
- Select the Target Database connection that is created in the Setup a target database section (for example, LN Analytics QM Target).

- 4 Click **Save** to save the publication target definition.
- 5 Click **Back** to return to the Publication Targets list.
- 6 Select the Publication Target and Activate.

**Note:** Infor recommends to minimize the number of locale as including more locales will decrease Cube Load performance.

The following locales are supported: Default, Chinese, Dutch, English, German, French, Italian, Portuguese, Russian, and Spanish.

## Configuring Publications

A publication contains instructions about the dimensions and cube to be published to the BI OLAP database. A publication target allows you to specify the source of the data (Connection to the Base Data Store) and the target (Publication Target).

Two publications are imported for LN Analytics Quality Management:

- QM\_LOAD\_1\_ALL\_DIMENSIONS: This creates all dimensions.
- QM\_LOAD\_2\_ALL\_CUBES: This creates all cubes.

It is recommended that customers use the delivered publications to populate the cubes with relevant data. Customers can create own publications if required.

### QM\_LOAD\_1\_ALL\_DIMENSIONS

This publication loads all the dimensions to the BI OLAP database. It is technically not possible to load the dimensions and cubes in one publication as the QM\_CUBE\_PREREQUISITE dimension is not part of the cube. This must be executed to prepare the cube load.

During the import of a publication, the target is not set for publication.

To set the target:

- 1 Select **Analytic Modeling > Publications**.

- 2 Go to the QM\_LOAD\_1\_ALL\_DIMENSIONS publication.
- 3 On the **Details** tab, select the target that connects to LN Analytics QM Load From Source database, for example LN Analytics QM Target.
- 4 Click **Save**.

**Note:** When you create your own publication ensure:

- The dimensions with suffix QM\_CONFIGURE\_ must run as the first dimension.
- The QM\_CUBE\_PREREQUISITE dimension must run as the last dimension.

## QM\_LOAD\_2\_ALL\_CUBES

This publication loads all the cubes to the BI OLAP database.

During the import of a publication set the target manually.

To set the target:

- 1 Select **Analytic Modeling > Publications**.
- 2 Go to QM\_LOAD\_2\_ALL\_CUBES publications.
- 3 On the **Details** tab, select the target that connects to LN Analytics QM Load From Source database, for example LN Analytics QM Target.
- 4 Click **Save**.

**Note:** The delivered publications do not skip the validations. The data validation process increases the execution time of the publications. After several successful publications you can skip the validations. To skip the validation process, on the **Details** tab select the **Skip all data validations** check box .

## Configuring the Definitions

After the definitions are imported, the QM\_CONFIGURE\_PERIOD\_CALENDAR, QM\_CONFIGURE\_AGEING\_BUCKETS, and QM\_CONFIGURE\_AGEING\_BUCKETS\_HOURS dimensions must be configured.

### Defining Period Calendar

In order to define the dimension, three proper calendars must exist in Infor LN which can be used to build the Period dimensions in Infor LN Analytics Quality Management.

### Infor LN Actions

In Infor LN, open the Periods (tcccp0170m000) session to create three calendars where QM is implemented or in any relevant LN Company:

Maintain 3 periods in LN

- Daily - QM\_DAY
- Weekly - QM\_WK
- Monthly - QM\_MT

You can define the Period Table Code and ensure that gaps does not exist in the calendar periods. QM generates the yearly and quarterly periods based on the periods (QM\_DAY, QM\_WK, QM\_MT) defined in LN.

When these calendar periods are published from LN, the NID must be checked in the Base Data Store.

Run this query to retrieve the calendar nid values that must be specified on the **Details** tab in the QM\_CONFIGURE\_PERIOD\_CALENDAR dimension.

```
SELECT FC.FCID_NID ,FC.FCID_ID
      FROM FNCL_CLNDR FC
      INNER JOIN FNCL_CLNDR_MV MV ON
      FC.FCID_NID = MV.FCID_NIDAND
      FC.FCID_ID_VARIATION_ID = MV.FCID_ID_VARIATION_ID
```

## Configuring Calendar

- 1 Select **Analytic Modeling > Dimensions**.
- 2 Click **QM\_CONFIGURE\_PERIOD\_CALENDAR**.
- 3 Go to **Details** tab.
- 4 Specify the day\week\month period codes as specified in "Configuring the Definitions" on page 23.
- 5 Click **Save**.

## Defining Ageing Buckets - Hours

- 1 Select **Analytic Modeling > Dimensions**.
- 2 Click **QM\_CONFIGURE\_AGEING\_BUCKETS\_HOURS** dimension.
- 3 Go to **Details** tab.
- 4 Specify the 5 buckets for ageing analysis in Hours (all the 5 buckets must be specified).
- 5 Click **Save**.

## Defining Ageing Buckets - Days

- 1 Select **Analytic Modeling > Dimensions**.
- 2 Click **QM\_CONFIGURE\_AGEING\_BUCKETS\_DAYS** dimension.
- 3 Go to **Details** tab.
- 4 Specify the 5 buckets for ageing analysis in Days (all the 5 buckets must be specified).
- 5 Click **Save**.



After the dimensions are published, you can view the ageing buckets in the QM\_DIM\_AGEING\_BUCKETS\_AM and QM\_DIM\_AGEING\_BUCKETS\_HOURS\_AM tables.

## Executing the publications

You can execute the publications on demand or automatically based on a schedule.

To create the dimensions and cubes, execute these steps:

**1** Execute the publication on demand.

- a Select **Analytic Modeling > Publications**.
- b Select the QM\_LOAD\_1\_ALL\_DIMENSIONS publication and click **Publish**.
- c Select the QM\_LOAD\_2\_ALL\_CUBES publication and click **Publish**.
- d To view the result, select **Monitoring > Publication Monitor**.

**2** Execute the publication on a regular basis.

- a Select **Analytic Modeling > Publications Schedules**.
- b Create the required publication schedules and set the recurrence pattern.
- c Click **Activate** to activate the publication.

**Note:** You must execute the QM\_LOAD\_1\_ALL\_DIMENSIONS publication before the QM\_LOAD\_2\_ALL\_CUBES publication. Dimensions must be created before the cubes in the BI OLAP database.



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# Post-installation tasks for Reports and Dashboards

## 4

You must complete the post installation tasks for the reports and dashboards, after the Infor LN Analytics Quality Management installation and the Business Vault Analytic Modeler post installation tasks are complete.

These tasks must be performed:

- Configuration in Application Studio.
- Configuring Repository Administration with IFS.
- Configuring Dashboard servicePlugin in Infor Ming.le.
- Configuring online help files.
- Importing LN Analytic Quality Management dashboards.

## Configuration in Application Studio

In the Application Studio, connect the LN Analytics QM repository database using repository registration that is created during the installation process and looks like LN Analytics QM <version number>. The user name to connect is Admin. The password is not required.

Do the following:

- In the Database Structure section, verify that the BV\_BDS\_QM and LNAalyticsQM database connections are working. If required change the database and authentication settings. Make sure that you set the **Connect at log-on** option to yes. After testing right-click the database connection and select **Logon**.
- Verify the default value of the `_CurrentLanguage` variable. Select **Accessories > Global Variables**. Right-click the `_CurrentLanguage` variable and select the **Manage Values** for **Variables** option. Change the default value to English, if it is set to a different value and click **OK**.

## Configuring Repository Administration with IFS

If a dashboard is configured to the IFS, the repository must also be configured to the IFS.

- 1 Select **Start > All Programs > Business Intelligence > Repository Administration** .
- 2 Right-click **Repository Administration** and select **Run as Administrator**.
- 3 Right-click **User Management** and select **Authentication Systems**.
- 4 Select the Infor Federation Services and provide the required information. You can register an IFS group or user. Assign the required roles to the selected user(s). See BI installation guide.

## Configuring Dashboard Plug-in in Infor Ming.le

See BI Installation Guide.

## Importing Dashboards

In LN Analytics Quality Management, dashboards are delivered. However these dashboards must be imported.

To import the dashboards:

- 1 Login to Infor Ming.le.
- 2 Go to Dashboard.  
Else, you must connect to your dashboard service URL as specified in the Configure Dashboards Web and Content Connections section of the Installation chapter.
- 3 In the Share icon, select **Import Dashboards**.
- 4 In the Import wizard, on the **Source** and **Target** tab, specify the Import File by selecting the LN Analytics QM.app\_dashboards file from the LN Analytics QM 10.5.2\Dashboards sub folder of your installation folder (default ..\Program Files (x86)\Infor\BI). Also specify the Target Folder and click **Next**.

### Note:

When selecting the app\_dashboards file change the file extension filter to All files \*.\* on the **Choose File to Upload** dialog box.

- 5 On the **Dashboards** tab, select all dashboards and click **Next**.
- 6 On the **Content Connections** tab, select your existing content connection and click **Next**.
- 7 On the **Summary** tab, click **Finish**.

The Quality Manager dashboard is displayed on the **Dashboards** tab.

## Assigning users to Application roles

Application roles help to improve the usability of the role-based BI security. These roles can be used to restrict users's access to reports and dashboards.

LN analytics Quality Management includes the following user defined application roles:

- QM\_Quality: LN Analytics Quality Management role which enables viewing of all Quality and Statistical reports and dashboard content.

**Note:**

Instead of adding users directly to the roles, customers can also create User groups and assign the user group to the role. Then assign the user to the User group. For more information on BI security, refer to the *Infor BI documentation*.

## Adopting Infor Business Intelligence Self Service

Infor Business Intelligence includes a Self Service report package and dashboard, which can be used on top of the LN Analytics content. For more information, refer to KB 1668242. You can find the Application Studio version that is used to develop the Self Service report package in the Self-Service\_version.txt file. This file is included in the zip file that is downloaded.

## Importing LN Analytics Administration Reports

LN Administrative reports can be downloaded from KB 1873184. The report package file can be imported to the repository database.



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# Removing Components of Older Releases

## 5

When you install a newer version of analytic while an older version exists, all the old components are not deleted automatically.

It is recommended to manually delete these old components:

- Repository registration: The repository registration can be deleted in Infor BI Repository Administration.
- Repository Database: The repository database can be deleted using SQL Server Management Studio or together with the repository registration using the **Delete Database** option in Infor BI Repository Administration.
- OLAP Database: The OLAP database can be removed by deleting the OLAP database folder from the Database Root Directory of the BI OLAP server. To delete the OLAP database, you must stop the OLAP database using the BI OLAP Administration.
- Analytic Modeling and Dashboard files: The Analytic Modeling and Dashboard files are copied to a version specific subfolder of the installation folder used during installation. Delete the subfolder that such as LN Analytics QM <X.Y.Z>, where X,Y,Z are numbers that match with the version number. The default installation folder is `C:\Program Files (x86)\Infor\BI`.
- From LN Analytics 10.5.2 the online help is not delivered anymore but accessible online. Therefore, you can remove the online help files of previous LN Analytic QM releases. These help files are located in the `WebServices\Help\QM` subfolder of the Application Studio installation folder. The default installation folder of Infor BI Application Studio is `C:\Program Files (x86)\Infor\BI\Application Studio`.

**Note:** From LN analytics 10.5.1, Infor delivers publications. In previous versions, customers had to manually create publications. These publications can be deleted as the delivered publications can populate the OLAP database

