

Deltek Costpoint Business Intelligence 8.0

> Upgrade Installation Guide

> > September 1, 2020

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Contents

Overview	1
If You Need Assistance	2
Customer Services	2
Deltek Support Center Site	2
Additional Documentation	4
System Requirements	6
Test Environment	7
Back Up the Content Store Database	8
Identify the Content Store Database	8
Back Up the Microsoft SQL Server Database	9
Back Up the Oracle Database	11
Back Up the Costpoint Enterprise Reporting Implementation	12
Create an Export Job and Back Up CER	13
Back Up Your Framework Manager Models	16
Back Up Your Analytics Folder	17
Downloading Deltek Products using Deltek Software Manager	18
Accessing DSM from within the Deltek Support Center Site	18
DSM Documentation and Troubleshooting	19
Installing Cognos Analytics	20
Cognos Analytics in 64-bit Environment	20
Install Cognos Analytics Server 11	20
Configuring IIS with Cognos Analytics	22
Configuring the Cognos Analytics Data Access from Cognos Configuration	24
Configure the Data Access Object for Microsoft SQL Server (for Upgrade Install)	24
Configuring the Data Access Object for Oracle (for Upgrade Install)	25
Import CER Content Store Deployment to Test Environment	28
Import Created Deployment into the Test Environment	28
Installing the Cognos Framework Manager	30
Install Cognos Framework Manager 11	30
Upgrade Previous Framework Manager Models to Cognos 11	31
Replace the JSQL Driver for MS SQL Server with MS JDBC Driver (For MS SQL Server Users only)	32

Install Costpoint Business Intelligence 8.0	33
Installation Procedure	33
Import the Deltek Content into Cognos Analytics	35
New Deployment Files/Reports	35
Notes on Importing Reports	35
Import Deltek Content	35
Costpoint Authentication Provider	39
Set Up the Costpoint Authentication Provider in Costpoint	44
Set Up the Costpoint Authentication Provider in Cognos	46
CAP Troubleshooting	55
Create New View for Organization Security	57
Set the as_of_date Global Parameter	58
Deploying Reports to a Location Other Than the Standard Location	59
Redefine Links to Drill Reports	59
Lifecycle Manager	60
Interactive Mode in Reports	61
Special Topic: Hiding and Displaying Entries in Costpoint Business Intelligence	62
Make an Entry Visible in Costpoint Business Intelligence	62
Troubleshooting	63
Unable to See Changes on the Welcome Page	63
Error Message When Creating a Project in Framework Manager	63
Unable to See Legacy Studios	63
Error When Opening a Copied Report Specification	64
Cannot Retrieve Data from Data Set	64
Unable to See Data for Any Organization	65
Cannot Connect to SOL Server CM Database in CA 11 When TLS 1 0 is Disabled	65

Overview

This guide includes the procedures in upgrading to Cognos Analytics 11.1.5 and Costpoint Business Intelligence 8.0.

The sections in this document are divided into two parts and should be performed in the following order:

- 1. Upgrading to Cognos Analytics 11.1.5
- 2. Upgrading to Costpoint Business Intelligence 8.0.

You will be guided throughout the document to help you in your upgrade process.

If You Need Assistance

Deltek can help you in the implementation of Costpoint Business Intelligence in your organization.

If you need assistance installing, implementing, or using Costpoint Business Intelligence, Deltek makes a wealth of information and expertise readily available to you through various customer services and the Deltek Support Center site.

To access the Deltek Support Center site:

- 1. Go to https://deltek.custhelp.com.
- 2. Enter your Deltek Support Center **Username** and **Password**.
- 3. Click Login.

Note: If you forget your username or password, you can click the **Login Help?** button on the login screen for help.

Customer Services

There are different customer services that Deltek provides.

For over 30 years, Deltek has maintained close relationships with client firms, helping with their problems, listening to their needs, and getting to know their individual business environments. A full range of customer services has grown out of this close contact, including the following:

- Extensive self-support options through the Deltek Support Center
- Phone and email support from Support Center analysts
- Technical services
- Consulting services
- Custom programming
- Classroom, on-site, and Web-based training

Attention: Find out more about these and other services from the Deltek Support Center site.

Deltek Support Center Site

Deltek provides a Web portal for customers.

The Deltek Support Center site is a support Web site for Deltek customers who purchase an Ongoing Support Plan (OSP).

The following are some of the many options that the Deltek Support Center site provides:

- Search for product documentation, such as release notes, install guides, technical information, online help topics, and white papers
- Ask questions, exchange ideas, and share knowledge with other Deltek customers through the Deltek Support Center Community

- Access Cloud specific documents and forums
- Review comprehensive listing of product compatibilities
- Review product lifecycle information to check on schedule for versions moving to sustaining support.
- Download the latest versions of your Deltek products
- Search Deltek's knowledge base
- Submit a support case and check on its progress
- Transfer requested files to a Customer Care analyst
- Subscribe to Deltek communications about your products and services
- Receive alerts of new Deltek releases and hot fixes
- Use Quick Chat to submit a question to a Customer Care analyst online

Note: For more information regarding Deltek Support Center, refer to the online help available from the Web site.

Access Deltek Support Center

You need your Deltek Support Center (formerly known as Customer Care Connect) **Username** and **Password** to access the site.

To access the Deltek Support Center site, complete the following steps:

- 1. Go to http://support.deltek.com.
- 2. Enter your Deltek Support Center **Username** and **Password**.
- 3. Click Login.

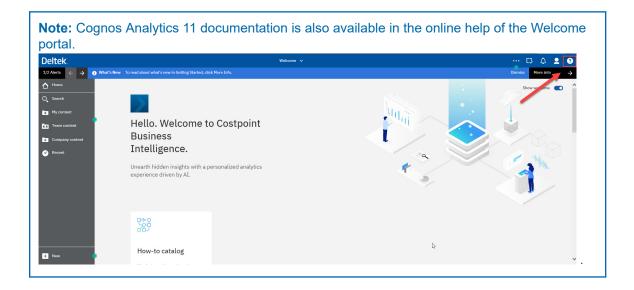
Note: If you do not have a username and password for the Deltek Support Center site, contact your firm's Costpoint Business Intelligence Administrator. If you forget your username or password, you can click the **Login Help?** button on the login screen for help.

Additional Documentation

There are several documents that can help in your implementation of Costpoint Business Intelligence 8.0.

The following table lists the additional Deltek documentation available for this release. Except where noted, all the user guides and quick reference guides listed in this table are available for download from the Deltek Support Center site.

Document Name	Description
Deltek Costpoint Business Intelligence 8.0 Model spreadsheets	There are several model spreadsheets that are provided in this release. The spreadsheets show the objects found in the different models supported by this release.
Deltek Costpoint Business Intelligence 8.0 New User/Full Installation Guide	This document includes instructions for installing and configuring the software for Costpoint Business Intelligence 8.0.
Deltek Costpoint Business Intelligence 8.0 Release Notes	This document provides release information, such as new features, resolved software issues, and support resources, about Costpoint Business Intelligence 8.0
Deltek Costpoint Business Intelligence 8.0 Reports Guide	This document provides a list of the reports in each reporting package and references to the Costpoint Business Intelligence guides that contain report descriptions and related information.
Deltek Costpoint Business Intelligence 8.0 Report List	This document includes the list of all reports that are provided in this release.
Deltek Costpoint Business Intelligence 8.0 Post Installation and Configuration Guide	This document includes configuration procedures to be done after the successful installation of Costpoint Business Intelligence 8.0.
Deltek Costpoint Business Intelligence 8.0 Smart Al	This document provides information about the Smart AI feature in Costpoint Business Intelligence.
IBM Cognos Analytics 11.1.x Product Documentation	IBM provides extensive documentation for Cognos Analytics, the underlying foundation for Costpoint Business Intelligence. In addition to the Cognos documentation provided with Costpoint Business Intelligence, you can find all of the most current Cognos documentation on the IBM Support website.



System Requirements

There are several requirements that you need to meet before you upgrade to Costpoint Business Intelligence 8.0.

Costpoint Business Intelligence 8.0 runs with Cognos Analytics 11.1.5.

You should have at least one of the following Deltek products:

- Deltek Costpoint 8.0
- Deltek Shop Floor Time 1.3 or 2.0

Note: If you use Costpoint 7.0.1 or 7.1.1 and want to upgrade to Cognos Analytics 11.1.x, it is possible to upgrade your Cognos application and remain on a Costpoint 7.0.1 or 7.1.1 compatible CER version. However, Costpoint Business Intelligence 8.0 only supports Costpoint 8.0 or higher. The most recent Costpoint Enterprise Reporting version with Costpoint 7.0.1 compatibility is CER 7.1.4. The most recent version with Costpoint 7.1.1 is CER 7.2.3.

Test Environment

Deltek recommends that you use a test environment where you can emulate your existing production environment.

First, create a deployment of your content store (from production). And then, import this deployment to the non-production environment (into test). For detailed steps and other procedures for the upgrade, you can find them in this guide.

Back Up the Content Store Database

There are three major steps to back up your Content Store database.

- First, you should identify the database to back up.
- Next, back up the Microsoft SQL Server database. Or...
- Back up your Oracle database.

Identify the Content Store Database

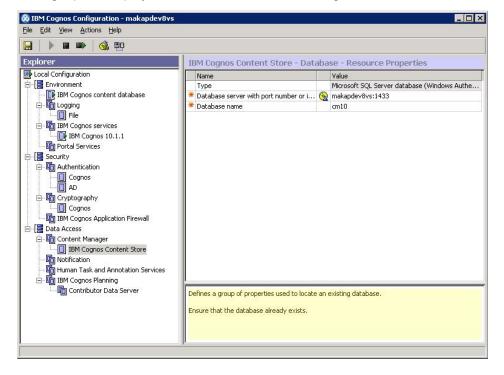
The first step in the back up process is to identify the Content Store database.

To identify your Content Store database, complete the following steps:

- 1. Open Cognos Configuration.
- 2. In the left pane, click Data Access » Content Manager » Content Store.

Note: The Content Store label is a user-editable label, so this node may display with a different name in your version of Cognos Configuration.

The right pane displays details on which database Cognos uses as the Content Store.

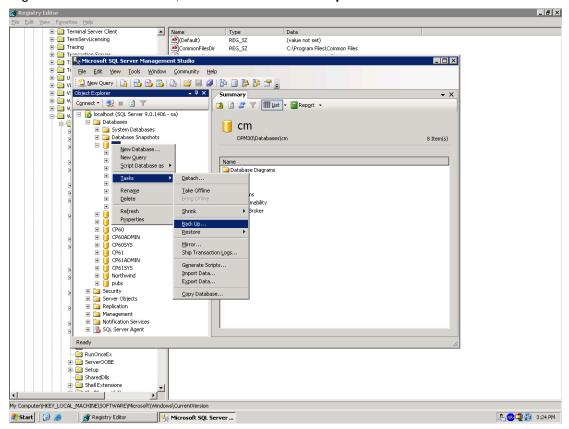


Back Up the Microsoft SQL Server Database

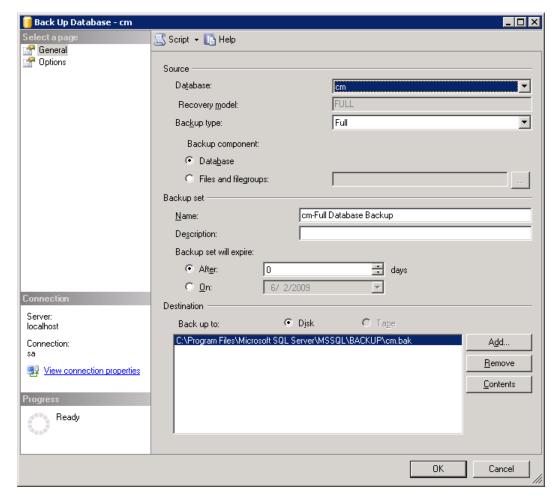
Your Content Store database may be a Microsoft SQL Server. There are several steps to back up this database.

To back up your Content Store database (Microsoft SQL Server):

- 1. Open Microsoft SQL Server Management Studio.
- 2. Right-click the CM database, and click Tasks » Back Up.



3. On the Back Up Database dialog box, select **Full** in **Backup type**, specify the location of the backup file in **Destination**, and click **OK**.



4. When the following message displays, click **OK**.



5. Close SQL Server Management Studio.

Note: Deltek strongly recommends that you test your database backup before proceeding with the remainder of this installation.

Back Up the Oracle Database

Your Content Store database may be an Oracle server. There are several steps to back up this database.

To back up your Content Store database (Oracle), complete the following steps:

1. On the database server that hosts the Content Store database, execute an Oracle command similar to the following:

```
exp system/<Password>@<Oracle_Sid_Instance> file=CM.DMP
log=CMBackup.log owner=COGNOS10
```

Note: <Password> is the Oracle SYSTEM user's password, and <Oracle_Sid_Instance> is the Oracle instance that hosts your Cognos Content Store database.

- 2. Open the CMBackup.log file with a text editor (for example, Notepad), and search for any 'ERROR:' messages.
- 3. If any 'ERROR:' messages are found, contact Deltek Support Center.

Note: Deltek strongly recommends that you test your database backup before proceeding with the remainder of this installation.

Back Up the Costpoint Enterprise Reporting Implementation

Before you begin the Costpoint Business Intelligence upgrade, you should export your current Costpoint Enterprise Reporting folder in Cognos Connection or Cognos Analytics. This will provide you with a restore point if the upgrade overwrites a report that you customized and forgot to rename prior to importing the new deployment ZIP file.

Warning: Aside from the Costpoint Enterprise Reporting backup, it is also important that you make a backup copy of your Framework Manager models, particularly if you have created custom versions of any of the models.

To back up the Costpoint Enterprise Reporting folder:

- 1. Open Internet Explorer, and navigate to Cognos Connection.
 - If you are using the server itself, you normally find it at http://localhost/ibmcognos.
 - If you are using a different computer, replace "localhost" with the server name.
 - If your installation defined a different IIS virtual directory name other than ibmcognos, replace "ibmcognos" with the custom virtual directory name.
 - If you are using Cognos Analytics, go to the Welcome portal and click Manage »
 Administration Console. And then, proceed to step 3.
- In the upper-right corner of the Cognos Connection screen, click Launch » IBM Cognos Administration.



 $\textbf{Note:} \ \textbf{If you are coming from the Welcome screen, click the } \textbf{IBM Cognos content link}.$



- 3. In IBM Cognos Administration, click the Configuration tab and click **Content Administration** in the left pane to display the Export and Import job lists.
 - If you have already created an Export job for Costpoint Enterprise Reporting, you can run that instance to create your backup.

If you have not created an Export job for Costpoint Enterprise Reporting, follow the steps in the Create an Export Job and Back Up CER section to create one.

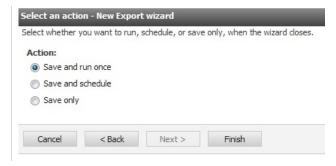


Create an Export Job and Back Up CER

There are several steps to follow to create an Export job and back up CER.

To create an Export job and back up Costpoint Enterprise Reporting, complete the following steps:

- Click the New Export icon
- 2. Enter a name for the export, and click **Next**.
- Select the Select the entire Content Store deployment method, and click Next.
 The next screen displays a blank list of items to export.
- 4. On the Specify a deployment archive screen, enter a **New archive** name. Click **Next**.
- On the Enter an encryption password screen, enter a Password for the archive and fill out the Confirm Password field. Click OK.
- 6. On the Review the Summary screen, review the entries you made to create the Export job, and click **Next**.
- 7. On the Select an action screen, select Save and run once, and click Finish.

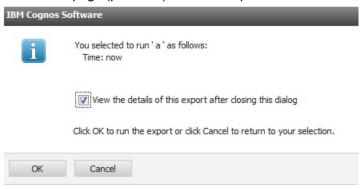


8. On the Run with options screen, select **Now**, and click **Run**.

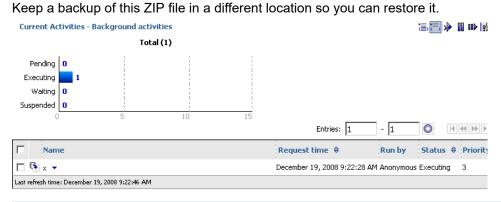


9. Select the **View the details of this import after closing this dialog** option before you click **OK** to see the export progress.

Refresh the page (press **F5**) to see the updated status.



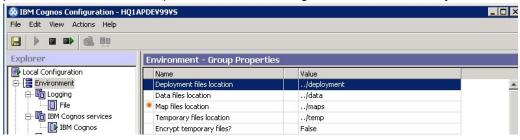
10. After the executing task is cleared from the page (you need to refresh the page to update the view), check the deployment folder to see if your ZIP file has been generated.



Note: Take note of the name and location of ZIP file.

11. If you do not know the location of the deployment folder, run Cognos Configuration, expand **Local Configuration**, and click **Environment**.

The location is displayed in the **Value** column for the **Deployment files location** parameter. If it is a relative path, it will be in the Cognos installation directory.



Back Up Your Framework Manager Models

You need to back up your Framework Manager Models before you upgrade to Costpoint Business Intelligence.

To back up your framework models:

1. In Windows Explorer, navigate to the location of the framework models with extension .cpf and .xml.

The default location of the model files are:

- For CER 7.2.3 C:\Program Files (x86)\Deltek\CostpointEnterpriseReporting \723\<product/area>\model
- For CER 7.2.2 C:\Program Files (x86)\Deltek\CostpointEnterpriseReporting \722\product/area>\model
- **For CER 7.2.1** C:\Program Files (x86)\Deltek\CostpointEnterpriseReporting \721\product/area>\model
- For CER 7.2. C:\Program Files (x86)\Deltek\CostpointEnterpriseReporting \72\product/area>\model
- For CER 7.1.4 C:\Program Files (x86)\Deltek\CostpointEnterpriseReporting \714\product/area>\model
- For CER 7.1.3 C:\Deltek\CostpointEnterpriseReporting\713\product/area>\model
- For CER 7.1.1 C:\Deltek\CostpointEnterpriseReporting\711\product/area>\model
- For CER 7.1 C:\Deltek\CostpointEnterpriseReporting\71\<product/area>\model
- For CER 7.0.2 C:\Deltek\CostpointEnterpriseReporting\702product/area>\model

For example, the default location for **Costpoint Enterprise Reporting.cpf** and **model.xml** files for CER 7.2.3 is C:\Program Files (x86)\Deltek \CostpointEnterpriseReporting\723\Costpoint Enterprise Reporting\model.

Copy the .cpf and .xml files of the models that you want to back up to a separate location or directory.

Note: Remember the backup files and location. You will need these files when you upgrade.

Back Up Your Analytics Folder

Do this procedure if you will upgrade from an existing Cognos Analytics 11 installation. You need to back up the **Analytics** folder in your Cognos server to save the current configurations for Cognos, CAP, JDBC drivers, customized logos, and other objects that you use in your Cognos Analytics implementation.

To back up the Analytics folder:

- 1. In your Cognos server, go to C:\Program Files\ibm\cognos .
- 2. Look for the **Analytics** folder and copy.
- 3. Put the copied **Analytics** folder in a different and safe directory location.

Downloading Deltek Products using Deltek Software Manager

You can use Deltek Software Manager (DSM) to download complete Deltek products, hot fixes, and sub-releases.

You can access DSM directly or through the Deltek Support Center site.

When you access DSM directly, you will be prompted to log on before you can access the application. If you access DSM from within the Deltek Support Center site, you do not have to log on since you are already logged into the Support Center site.

Accessing DSM from within the Deltek Support Center Site

You can access DSM within the Deltek Support Center site in a few easy steps.

To access DSM from within the Deltek Support Center site:

- 1. In your Web browser, go to https://deltek.custhelp.com.
- 2. Enter your Deltek Support Center Username and Password, and click Login.
- 3. When the Deltek Support Center page displays, click **Product Downloads**.
- 4. On the Deltek Software Manager screen, click Launch Deltek Software Manager.
- 5. Click **Settings** at the top right of the dialog box to use the Settings dialog box to specify the folder where you want to download Deltek products, and click **OK**.

Note: When you log on for the first time, DSM asks you to select a default folder where Deltek products are to be downloaded. You can change this folder anytime in the Settings dialog box.

- 6. In the left pane of Deltek Software Manager, expand the Deltek product that you want to download, if it is not already expanded.
- 7. Select the product type that you want to download. Options include:.
 - Complete
 - Cumulative Updates
 - HotFixes
 - Sub-Release
- 8. In the table, select the check box that corresponds to the Deltek product that you want to download.

The right pane displays a message stating that the product has been added to the download queue.

Note: To view the items in the download queue, click **View Download Queue** at the bottom of the left pane.

9. Click **Download** at the bottom of the left pane to download the product to the folder that you selected.

DSM Documentation and Troubleshooting

There are several reference materials that can help you use DSM such as the online help, tutorial, and troubleshooting information.

- To view the online help for Deltek Software Manager, click <u>here</u>.
- To view a tutorial on how to use Deltek Software Manager, click <u>here</u>.
- To view more information on troubleshooting Deltek Software Manager, click <u>here</u>.

Note: When you click a link, you will be asked to log into DSM if you are not already logged in.

Installing Cognos Analytics

When you install the Cognos Analytics 11.1.x software on your application server, the installation includes the Cognos Workspace, Reporting, Lifecycle Manager, and Data Modeling components.

This section includes instructions for installing the Cognos Analytics 11.1.x software on your application server.

One of the components that is included in your Cognos Analytics 11 installation is the Lifecycle Manager.

Note: Costpoint Business Intelligence leverages on Cognos Analytics software. The installation instructions in this section are just one of many possible installation solutions. In certain situations, the Costpoint Business Intelligence installation may require special consideration. There are variables that may affect your installation such as in the case of multiple server installation, load balancing, database replication, or firewall and DMZ deployments.

Attention: If you are performing an advanced installation, refer to the *IBM Cognos Analytics Version 11.1.x Installation and Configuration* (<u>inst_cr_winux.pdf</u>). It is also recommended that you contact ConsultingSalesRequest@deltek.com for assistance.

Cognos Analytics in 64-bit Environment

You can install Cognos Analytics in a 64-bit environment.

The default installation folder of Cognos Analytics 11 is C:\Program Files\ibm\cognos\analytics.

Note:

- Cognos Analytics Server components are the only true 64-bit components of Cognos Analytics. The 64-bit Cognos Analytics Server component must be installed on a 64-bit server.
- Cognos Analytics components (Framework Manager and Lifecycle Manager) are not 64-bit components, but they can be installed on the 64-bit server or on a separate 32-bit computer. If you install them on the 64-bit server, however, they must be in a separate directory from the 64-bit components.

Install Cognos Analytics Server 11

Install Cognos Analytics Server 11 software in your application server.

To install Cognos Analytics Server 11, complete the following steps:

- Go to the location of the ca_instl_win_2.0.191003.exe (IBM Cognos Analytics Server 11.1.x Microsoft Windows Multilingual) that you downloaded from Deltek Software Manager.
- 2. Right-click ca_instl_win_2.0.191003.exe file and select Run as administrator.
- Select the language that you want to use for the installation process, click Next.

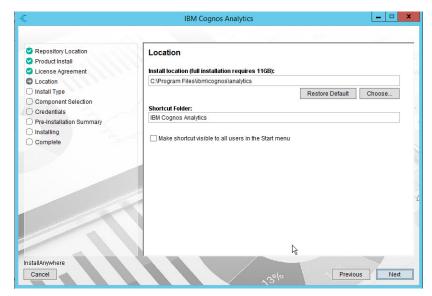


- 4. On the **Repository selection** screen, click **Choose...** and browse to the file location of **ca_srv-11.1.5-2007111157-winx64h.zip**. Click **Open**.
- 5. On the Let's get started! screen, select IBM Cognos Analytics and click Next.

Note: The **IBM Cognos Analytics tools** option lets you install the Lifecycle Manager. You can select it once you have installed the IBM Cognos Analytics server.

- 6. On the License Agreement screen, read the agreement, select the I accept the terms of the License Agreement check box, and click Next.
- 7. On the **Location** screen, enter or select the folder in which you want to install the Cognos Analytics Server. Click **Next**.

Note: Take note of the installation path that you use. You will need it for other installation and configuration tasks, such as configuring Microsoft IIS. The default folder will depend on the environment you are using.



8. On the Installation Type screen, select Custom. Click Next.

Note: When you select **Custom**, it enables you to set up Microsoft's Internet Information Services (IIS) for Single Sign-On (SSO).

If you have a previous Cognos Analytics 11 installation, the Installation Type used in that setup will be the default.

9. On the **Choose components** screen, make your selections. Click **Next**.

Note: Select the Gateway check box if you plan to use IIS and/or SSO.

- 10. On the Pre-Installation Summary screen, review the information, and click Next.
 The installation progress displays at the bottom of the Installation Progress screen. When the installation is complete, the Finish screen displays.
- 11. Click **Done** to complete the installation.

Configuring IIS with Cognos Analytics

Configuring Microsoft Internet Information Server (IIS) to support IBM Cognos Analytics is different than the procedure performed when you set it in previous versions of IBM Cognos such as version 10.

To set up IIS with Cognos Analytics, follow the procedure on the IBM website, <u>Configuring IIS with Cognos Analytics</u>.

An automated procedure is also available to configure Microsoft's IIS to support IBM Cognos Analytics on the IBM website, <u>Automate the configuration of Microsoft's Internet Information Service to support IBM Cognos Analytics</u> You need the following as pre-requisite to run this automated procedure.

Microsoft IIS installed with the following features:

- World Wide Web Services » Application Development Features » ISAPI Extentions and Isapi Filters
- World Wide Web Services » Security » Request Filtering and Windows Authentication

Configuring the Cognos Analytics Data Access from Cognos Configuration

You must configure the Cognos Analytics Data Access object to point to the Content Store database, for example **cm**, that you made a back up of using the instructions in the Back Up the Content Store Database section.

You perform this configuration on the database server. Follow the instructions for Microsoft SQL Server or for Oracle, depending on your database platform.

Configure the Data Access Object for Microsoft SQL Server (for Upgrade Install)

From your Microsoft SQL database server, you need to specify the Cognos Content Store and Notification settings on the Data Access object in IBM Cognos Configuration.

To configure the Data Access object, complete the following steps:

- 1. From your Cognos server, open IBM Cognos Configuration.
- 2. From the **Explorer** pane on the left side of the screen, expand **Data Access** » **Content Manager**, and click **Cognos Content Store**.
- 3. In the **Cognos Content Store** section, enter the following:

Option	Description
Туре	If Type is set to something other than Microsoft SQL Server database , delete the entire Cognos Content Store folder and add a new Content Store with Microsoft SQL Server database in Type .
Database Server with port number	Enter your database server and port. The default port is 1433 for SQL Server. For example, localhost:1433
User ID and password	Enter cognos as the user and enter the password you set up in SQL Server.
Database name	Enter the database name. For example, cm .

4. If you are setting up email notification now, select **Notification** under **Data Access** in the **Explorer** pane, and enter the following:

Option	Description
SMTP mail server	Enter the SMTP email server.

25

Option	Description
Account and password	Enter the authentication information, if necessary.
Default sender	Enter the email address of the default sender.

Note: If you do not set up notification information at this point, when you start the Cognos Analytics Server from Cognos Configuration, you will receive a mail server setup error. You can ignore the error and continue starting up the server. You can set up the SMTP mail server information at a later time.

- 5. Click 🔙 on the toolbar to save changes.
- 6. Click on the toolbar to start the service and test connectivity.
- 7. If prompted, click **Yes** to save changes and continue. A dialog box displays the server startup status.
- 8. When the process is complete, click the **Details** button to review the details.
- 9. Close the dialog box, and exit Cognos Configuration.

Note: If you receive an installation error message, the prerequisite Microsoft SQL TCP/IP protocol may not be enabled. See Troubleshoot Your Installation for additional information.

Cannot Connect to SQL Server CM Database in CA 11 When TLS 1.0 is Disabled

When you test the Content Manager connection without SSL, but the Microsoft JDBC displays an error: **Unexpected Error occurred attempting to open an SQL connection.** class java.io.IOException: SQL Server did not return a response. The connection has been closed.

Check out the <u>IBM KB article</u> to know more about this error and its resolution.

Configuring the Data Access Object for Oracle (for Upgrade Install)

From your Oracle database server, you need to specify the Cognos Content Store and Notification settings on the Data Access object in IBM Cognos Configuration.

To configure the Data Access object for Oracle, complete the following steps:

- 1. From the database server, open IBM Cognos Configuration.
- 2. From the **Explorer** pane on the left side of the screen, expand **Data Access** » **Content Manager**, and click **Content Store**.
- 3. In the Content Store area, enter the following:

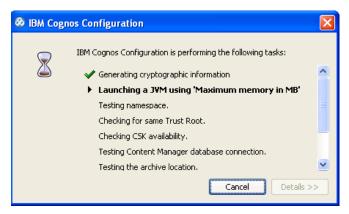
Option	Description
Туре	If Type is set to something other than Oracle database , delete the entire Cognos Content Store folder and add a new Content Store with Oracle database in Type .
Database Server and port number	Enter your database server and port.
User ID and password	Enter cognos as the user and enter the password you set up in Oracle.
Service name	Enter the service name. For example, cm .

4. If you are setting up email notification now, select **Notification** under **Data Access** in the **Explorer** pane, and enter the following:

Option	Description
SMTP mail server	Enter the SMTP email server.
Account and password	Enter the authentication information, if necessary.
Default sender	Enter the email address of the default sender.

Note: If you do not set up notification information at this point, when you start the Cognos Analytics Server from Cognos Configuration you will receive a mail server setup error. You can ignore the error and continue starting up the server. You can set up the SMTP mail server information at a later time.

- 5. Click 🗔 on the toolbar to save changes.
- 6. Click on the toolbar to start the service and test the connectivity.
- 7. If prompted, click **Yes** to save changes and continue. A dialog box displays the server startup status.



- 8. When the process is complete, review the details by clicking the **Details** button.
- 9. Close the dialog box, and exit Cognos Configuration.

Import CER Content Store Deployment to Test Environment

Perform this procedure if you are setting up your non-production (test) environment. It is not necessary to perform this procedure when you are just upgrading to Cognos Analytics 11.

Import Created Deployment into the Test Environment

When you import your previous CER implementation (created in the "Create an Export Job and Back Up CER" section), the process automatically upgrades it to Cognos 11.

To import the created deployment and upgrade to Cognos 11:

1. Copy the ZIP files into the deployment folder from your install location, if they do not already reside in the folder.

Note: If you do not know the location of the deployment folder, run Cognos Configuration, expand **Local Configuration**, and click **Environment**.

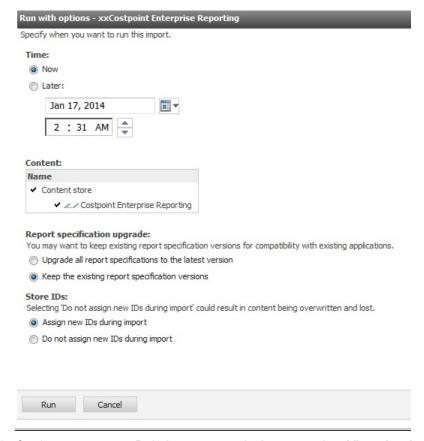
The location displays in the **Value** column for the **Deployment files location** parameter. If it is a relative path, it will be in the Cognos installation directory.

- 2. Open Internet Explorer, go to the Cognos Analytics portal using http://<your host server name>:9300/bi/.
- 3. Click Manage » Administration Console, and click the Configuration tab.
- 4. Click **Content Administration** in the left pane.
- Click the **New Import** icon <a>[
- 6. Under **Select a deployment archive**, select the backup file from which you want to import content, and click **Next**.
- 7. Enter the encryption password.
- 8. Under Specify a name and description, enter a name for the import, and click Next.
- 9. Review the information on the **Review the summary** screen, and click **Next**.
- 10. Under Select an action, select Save and run once, and click Finish.



11. Under Run with options, select Now, and click Run.

29



- 12. On the next screen, Deltek recommends that you select **View the details of this import after closing this dialog** to see the import progress.
- 13. Click **OK** to import the reports, and press **F5** to refresh the page and see the updated status.
- 14. After the process finishes, check the Team Content location of Cognos Analytics to see if the last modified dates have changed. Click the **More** icon (...) adjacent to the folder and select **Properties**.

Note: If the last modified dates remain unchanged after the process has finished, you may have either imported the reports in a different location or you have selected the default **Keep the existing report specification versions** option on step 11.

Installing the Cognos Framework Manager

You will need to install Cognos Framework Manager on your application server to be able to manage the Framework Manager models in Costpoint Business Intelligence.

Attention: If you are performing an advanced installation, refer to the <u>IBM website</u> of how to install Cognos Analytics 11.1.x. It is also recommended that you contact ConsultingSalesReguest@deltek.com for assistance.

Install Cognos Framework Manager 11

When you install Cognos Framework Manager 11 on your application server, you should select the client repository file.

To install Cognos Framework Manager 11, complete the following steps:

- Go to the location of the ca_instl_win_2.0.191003.exe (IBM Cognos Framework Manager 11.1.x Microsoft Windows Mutilingual) that you downloaded from Deltek Software Manager.
- 2. Right-click ca_instl_win_2.0.191003.exe and select Run as administrator.
- 3. On the first screen, select the language that you will use for the installation. Click Next.



- 4. On the **Repository selection** screen, click **Choose...** and browse to the location of **ca_client_MP_11.1.5.zip** and select this file. Click **Open**. Click **Next**.
- On the Let's get started! screen, select IBM Cognos Analytics tools. Click Next.
- On the IBM Cognos Analytics Tools screen, select IBM Cognos Framework Manager. Click Next.
- 7. On the License Agreement screen, read the agreement, select the I accept the terms of the License Agreement check box, and click Next.
- 8. On the **Location** screen, enter or select the folder where you want to install Cognos Framework Manager, and click **Next**.

Note: The default folder depends if you use a 32-bit or 64-bit environment.

- 9. On the **Pre-Installation Summary** screen, review the information and click **Next**. The installation progress displays at the bottom of the screen. When the installation is complete, the Finish screen displays.
- 10. Click **Done** to complete the installation.

Upgrade Previous Framework Manager Models to Cognos 11

The Framework Manager models in your previous CER implementation must be upgraded to the Cognos 11 in order to use it for Costpoint Business Intelligence 8.0.

Prepare the backup of your Framework Manager models that were created in <u>Back Up Your</u> Framework Manager Models section.

To upgrade your old Framework Manager models to Cognos 11, complete the following steps:

- Navigate to the location of the backup of your Framework Manager models and look for the *.cpf and *.xml files (for example, Costpoint Enterprise Reporting.cpf and model.xml).
- 2. Run IBM Cognos Framework Manager.
- 3. Click **Open a project...**, and select the backup model's CPF file. Opening the old model will automatically upgrade it to Cognos 11.
- 4. After the model has been upgraded to Cognos 11, click File » Save.
- 5. Click File » Close to close the Framework Manager model.
- 6. Repeat steps 3-5 for the other Framework Manager models.

Replace the JSQL Driver for MS SQL Server with MS JDBC Driver (For MS SQL Server Users only)

The JSQL driver for Microsoft SQL Server has been replaced with Microsoft JDBC driver starting in IBM Cognos Analytics 11.0.5 onwards.

For Cognos Analytics 11.0.8 and later, use **sqljdbc42.jar**. Download the **sqljdbc42.jar** file from Microsoft and copy to your Cognos server's *install location*\drivers directory.

Note: The MS JDBC driver will depend on the MS SQL server database that you are using. Go to the Microsoft website as reference when <u>choosing the right JAR file</u>. Just make sure that it is for JRE 8.0.

For example, copy sqljdbc42.jar to C:\Program Files\ibm\cognos\analtyics\drivers.

To learn more about other configuration actions, see the IBM website, <u>Critical Configuration</u> Actions.

Install Costpoint Business Intelligence 8.0

Be sure to check the system requirements first before you install Costpoint Business Intelligence 8.0.

Installation Procedure

There are several steps to follow when you install Costpoint Business Intelligence 8.0.

Note: Even if you want to retain your existing Costpoint Enterprise Reporting implementation and do not want to upgrade to Costpoint Business Intelligence 8.0, perform this procedure to download a copy of the change scripts so that you can update your framework manager models. This procedure also enables you to download the branding images. For more information in applying the Deltek branding, see the "Adding the Deltek Theme to Cognos Analytics" section in the Costpoint Business Intelligence 8.0 Post Installation and Configuration Guide for On-premises Users.

Warning: If you have an existing CER installation, make sure that you made a backup of your CER folders. The Costpoint Business Intelligence 8.0 installation process will overwrite existing CER folders in your installation directory.

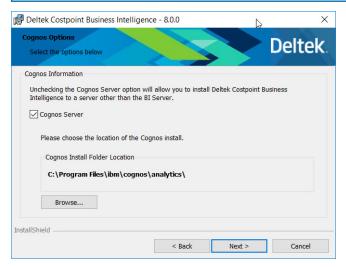
To install Costpoint Business Intelligence 8.0:

- Download Costpoint Business Intelligence 8.0 from the Product Downloads page of the Deltek Support Center site (https://support.deltek.com), and extract the contents of the downloaded file.
- 2. From the application server, use Windows Explorer to go to the folder to which you downloaded Costpoint Business Intelligence 8.0.
- 3. Right-click the **DeltekCostpointBusinessIntelligence800.exe** file and click **Run as administrator** to begin the installation.
- On the Welcome screen, click **Next**.
 Deltek recommends that you close all other open programs before continuing with the installation.
- Specify the folder where you want to install Costpoint Business Intelligence 8.0, and click Next.

Note: The default folder location is C:\Program Files (x86)\Deltek \CostpointEnterpriseReporting\. This folder may be different from earlier releases of CER.

- 6. On the Cognos Options screen, do one of the following actions:
 - If you are installing on the Cognos server, select the Cognos Server check box, and then specify the Cognos Install Folder Location. Click Next.
 - If you are not installing on the Cognos server, leave the check box clear, and click Next.

Note: If you clear the **Cognos Server** check box, you can still proceed with the installation which will enable you to download the files needed for the Costpoint Business Intelligence 8.0 upgrade, such as deployment files, change scripts, and model spreadsheets.



7. On the Ready to Install the Program screen, click Install.

Warning: Do not cancel the installation during this step because folders are being created on your drive, and the models are being extracted from the installation and stored in these folders.

8. When the InstallShield Wizard Completed screen displays, click Finish.

Import the Deltek Content into Cognos Analytics

Deltek recommends that you import the Deltek Content in this Costpoint Business Intelligence release to get the latest versions.

You can import these reports after you have upgraded to Cognos 11.

New Deployment Files/Reports

This release includes new deployment files and reports that you can use.

The deployment file is CER 80.zip

You can find the deployment file in C:\Program Files (x86)\Deltek\CostpointEnterpriseReporting (or CostpointBusinessIntelligence)\CER800\Deploy.

Notes on Importing Reports

There are some notes to consider when you import reports.

- Deltek does not recommend deploying reports to any location other than the standard location under Team Content because of the danger of breaking links to packages, common library reports, and drill reports. However, if you want to deploy reports to a different location, it is important that you read the information in Deploying Reports to a Location Other Than the Standard Location before you begin the import procedure.
- Be sure you import new versions of drill-through reports into Cognos with their standard names. If you change the name of a report that is a drill-through target, the drill-through will take you to the old version of the report rather than the current version. If you want to preserve the old version, you should rename it and use the standard name for the new version.

Import Deltek Content

There are several steps to follow when you import Deltek content.

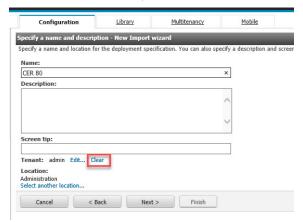
To import Deltek content into Cognos Analytics, complete the following steps:

- Copy the CER 80.zip file into the deployment folder from your install location, if it does not already reside in the folder.
 - If you do not know the location of the deployment folder, run Cognos Configuration, expand **Local Configuration**, and click **Environment**. The location displays in the **Value** column for the **Deployment files location** parameter. If it is a relative path, it will be in the Cognos installation directory.
- 2. Open Internet Explorer and the Cognos Analytics Welcome portal using http://<your host server name>:9300/bi/.
- 3. Click the Manage » Administration console. Click the Configuration tab.
- 4. Click **Content Administration** in the left pane.

- 5. Click the **New Import** icon 🙀
- 6. Under **Select a deployment archive**, select the **CER 80** file from which you want to import reports, and click **Next**.
- 7. Enter InstallCPBI in the Password field. Click OK.

Note: This password is required by IBM Cognos Analytics to unzip a data set into the content store upon installation. In this version Deltek has provided a Calendar Data Set which allows for using relative time (such as, Current Period, Prior Year Period, and so on) in a data module. The inclusion of this data set has caused the need for this password.

8. Under **Specify a name and description**, enter a name for the import. If you are logged on as an admin tenant, click **Clear** in the **Tenant** field. Click **Next**.



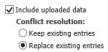
9. Under **Select the public folders content**, select the appropriate folder so it will be included in the import, and click **Next**.

Deltek recommends that you import the **Administration** folder that contains the version information that helps to keep track of which CER version has been deployed.

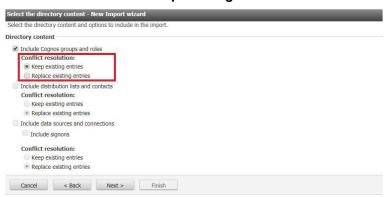
Note: Deltek does not recommend deploying Deltek content to any location other than the standard location under Team Content because of the danger of breaking links to packages, common library reports, drill reports, and security permissions. However, if you want to deploy reports to a different location, it is important that you read the information in <u>Deploying Reports to a Location Other Than the Standard Location</u> before you begin the import procedure.



Under **Options**, make sure that the **Include uploaded data - Replace existing entries** is selected.

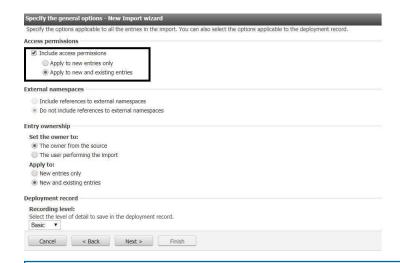


10. On the Select the directory content screen, select the **Include Cognos groups and roles** check box. Select **Keep existing entries**. Click **Next**.



Attention: Make sure to select the **Keep existing entries** option. Otherwise, your existing mapped Cognos groups will be overwritten because the Deltek CAP groups are not the same as your own CAP groups.

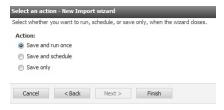
11. On the Specify the general options screen, select the **Include access permissions** check box. And then select **Apply to new and existing entries** option. Click **Next**.



Note: If you select the **Include access permissions - Apply to new entries only** option, the new Deltek security groups will not be added to your installation.

A summary of your import parameters displays.

- 12. Review the information under Review the summary, and click Next.
- 13. Under Select an action, select Save and run once, and click Finish.



- 14. From the Run with options screen, click Run.
- 15. Click **OK** to confirm the run options.

Note: After you have successfully imported the reports, make sure to delete the duplicate reports (if any) in the old location. Removing the report files will avoid conflict with the new versions of the reports.

Costpoint Authentication Provider

Costpoint Authentication Provider (CAP) lets you use Costpoint Business Intelligence with the Costpoint database as the authentication source.

CAP is the tool that verifies your user credentials whenever you access Costpoint BI in Costpoint. It checks for your Costpoint BI user group and access rights that are set up one time in Costpoint and in Costpoint Business Intelligence.

Cognos and Costpoint User Groups Mapping Table

Note: Please take note of the double underscore used as prefix for CAP user groups in Costpoint. For example, **CER__**ACCTG.

Group or Role in Cognos	Group ID in Costpoint	Group Name in Costpoint	Use	Description
CER Accounting	CER_ACCTG	CER Accounting	Object Security	This is a Deltek group used to set permissions on Accounting content such as reports, dashboards, stories, packages, and others.
CER Accounting All Secure	CER_ACCT_ALL_ SECURE	CER Accounting All Secure	Object Security	This is a Deltek group used to set permissions on all secured Accounting content.
CER Accounts Payable Secure	CER_AP_SECURE	CER Accounts Payable Secure	Object Security	This is a Deltek group used to set permissions on secured Accounts Payable content.
CER Accounts Receivable Secure	CER_AR_SECUR E	CER Accounts Receivable Secure	Object Security	This is a Deltek group used to set permissions on secured Accounts Receivable content.
CER Advanced Lite	CER_ADV_LITE	CER Advanced User Lite	Cognos Capabiliti es	This is similar to CERADV but with limited capabilities.
CER Advanced User	CER_ADV	CER Advanced User	Cognos Capabiliti es	This is a Deltek role used to secure capabilities in the IBM Cognos software based on Deltek's licensing structure.

Group or Role in Cognos	Group ID in Costpoint	Group Name in Costpoint	Use	Description
CER All	CER_ALL	CER All	Object Security	This is a Deltek group used to set permissions for all domains.
CER CP Administrator	CERCP_ADMIN	CER Costpoint Administrator		
CER Cloud Administrator	CER_ADMIN	CER Cloud Administrator	Cognos Capabiliti es	This is a Deltek role used to secure capabilities in the IBM Cognos software based on Deltek's licensing structure. This limited administrator role is intended for SaaS customers where Deltek Cloud OPS is performing some of the administration.
CER Consumer	CER_CONSUMER	CER Consumer	Cognos Capabiliti es	This is a Deltek role used to secure capabilities in the IBM Cognos software based on Deltek's licensing structure.
CER Contracts	CER_CONTRACT S	CER Contracts	Object Security	This is a Deltek group used to set permissions on Contract & Opportunity Management content such as dashboards, packages, reports, and others.
CER Developer	CERDEV	CER Developer	Cognos Capabiliti es	This is a Deltek role used to secure capabilities in the IBM Cognos software based on Deltek's licensing structure.
CER Executive Secure	CER_EXEC_SECU RE	CER Executive Secure	Object Security	This is a Deltek group used to set permissions on secured executive content in CER.

Group or Role in Cognos	Group ID in Costpoint	Group Name in Costpoint	Use	Description
CER Expense Secure	CER_EXPENSE_S ECURE	CER Expense Secure	Object Security	This is a Deltek group used to set permissions on secured expense content. This will be used for a future release of Costpoint BI.
CER General Ledger Secure	CER_GL_SECURE	CER General Ledger Secure	Object Security	This is a Deltek group used to set permissions on secured General Ledger content.
CER HR	CER_HR	CER HR	Object Security	This is a Deltek group used to set permissions on Human Resources content such as reports, dashboards, stories, packages, and others.
CER Manufacturin g Secure	CER_MFG_SECU RE	CER Manufacturing	Object Security	This is a Deltek group used to set permissions on secured Manufacturing content
CER Materials	CER_MATERIALS	CER Materials	Object Security	This is a Deltek group used to set permissions on Materials content such as reports, dashboards, stories, packages, and others.
CER Materials Manufacturin g All Secure	CERMM_ALL_SE CURE	CER Manufacturing	Object Security	This is a Deltek group used to set permissions on all secured Materials Manufacturing content
CER Materials Secure	CERMATERIAL_ SECURE	CER Materials	Object Security	This is a Deltek group used to set permissions on secured Materials content.
CER People	CER_PEOPLE	CER People	Object Security	This is a Deltek group used to set permissions on People content such as reports, dashboards, stories, packages, and others.

Group or Role in Cognos	Group ID in Costpoint	Group Name in Costpoint	Use	Description
CER Planning (Projects)	CERPLAN_PROJ	CER Planning (Projects)	Object Security	This is a Deltek group used to set permissions on project-based Planning content such as reports, dashboards, stories, packages, and others.
CER Planning (Projects) Secure	CERPLAN_PROJ _SECURE	CER Planning (Projects) Secure	Object Security	This is a Deltek group used to set permissions on secured project based Planning content.
CER Procure Secure	CER_PROCURE_ SECURE	CER Procurement	Object Security	This is a Deltek group used to set permissions on secured Procurement content.
CER Project Manager Security	CER_PM_MGR	CER Project Manager Security	Project Security	This is a Deltek group used to limit data access. If model security is enabled in Costpoint (Manage BI Settings), and the user is a member of the Project Manager Security group, the user will only see projects where they are assigned as the project manager. In this case, organizational security settings are ignored. Applicable to the Projects and Accounts Receivable area and the data source is from the Costpoint database only.
CER Projects	CER_PROJECTS	CER Projects	Object Security	This is a Deltek group used to set permissions on Costpoint project content such as reports, dashboards,

Group or Role in Cognos	Group ID in Costpoint	Group Name in Costpoint	Use	Description
				stories, packages, and others.
CER Project Secure	CERPROJ_SECU RE	CER Project Secure	Object Security	This is a Deltek group used to set permissions on secured Costpoint project content.
CER Time & Expense	CER_TE	CER Time & Expense	Object Security	This is a Deltek group used to set permissions on Time & Expense content.
CER Time Secure	CERTIME_SECU RE	CER Time Secure	Object Security	This is a Deltek group used to set permissions on secured Time & Expense content.
CER User	CER_USER	CER User	Cognos Capabiliti es	This is a Deltek role used to secure capabilities in the IBM Cognos software based on Deltek's licensing structure.

When you use these user groups with the combination of the Deltek-shipped add-on deployment packages, you will automatically secure Deltek add-on folders/packages based on these default user groups and roles.

In order to set up the Costpoint Authentication Provider, the following are the major steps:

- In the Costpoint Server side:
 - Add the Tenant ID in the Configuration Utility
 - Assign CER Administrators in Costpoint
 - Assign CPSUPERUSER to Costpoint BI User Groups
- In the Cognos Server side:
 - Check and Copy the Latest biintegration.res file
 - Copy Setup Files
 - Copy and Modify the Configuration Property File
 - Remove old CAP files (if any)
 - Set up the CAP Namespace
 - Set up the CAP_SSO Namespace
 - Add the Namespaces in IBM Cognos Configuration

- Add Admin Tenant on the Multitenancy Tab
- Set Up a Cognos System Administrator
- Remove 'Everyone' as System Administrator
- Update Cognos Authentication and Namespace Properties
- Restart the Cognos Server

Set Up the Costpoint Authentication Provider in Costpoint

The succeeding sections must be done in the Costpoint Server. Follow the procedures in this section in the order they were written.

Tenant ID and the Configuration Utility

The Configuration Utility tool in Costpoint establishes the Tenant ID that will be used for the Costpoint Authentication Provider.

The Costpoint System Administrator enters the Tenant ID in the Configuration Utility tool. Afterwards, he will log on to Costpoint and open the Rebuild Global Settings (SYPSTNG) application to reload settings and generate token that contains the newly added Tenant ID.

Note: You need at least one admin tenant to manage the Costpoint Authentication Provider (CAP). For more information about the Costpoint Configuration Utility, see the DeltekCostpoint80ConfigurationUtility.pdf.

Configure Costpoint Business Intelligence in the Costpoint Configuration Utility

Use the **Rpts & Analytics** tab of the Costpoint Configuration Utility to configure the interface between Costpoint Business Intelligence and Costpoint.

To configure Costpoint Business Intelligence in the Costpoint Configuration Utility:

- 1. Launch the Costpoint Configuration Utility.
- 2. On the Rpts & Analytics tab, select the Use Costpoint Enterprise Reporting (CER) Integration check box.
- 3. Enter the following information:
 - Enterprise Reporting instance URL
 - Tenant ID

For example you have the following values:

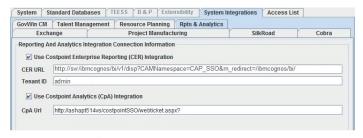
- Server Name = svr
- Tenant ID in Cognos = admin

The Tenant ID must match the tenant indicated in the **deltek_cap.properties** file. As default, **admin** is the Tenant ID in the said file. You will use the **deltek_cap.properties** file in succeeding sections of this document.

The CER URL will be:

- http://svr/ibmcognos/bi/v1/disp?CAMNamespace=CAP_SSO&m_redirect=/ibmcognos/bi/ OR
- http://svr/analytics/bi/v1/disp?CAMNamespace=CAP_SSO&m_redirect=/analytics/bi/

The **Tenant ID** must be **admin**.



Take note of the **Tenant ID** that you will enter on this screen. You will use this Tenant ID when you modify the **deltek_tenants.properties** file later when you configure CAP in the Cognos server side.

4. Restart the WebLogic servers or run the Rebuild Global Settings (SYPSTNG) application in Costpoint for changes to take effect.

Assign Costpoint Business Intelligence Administrators in Costpoint

You should assign Costpoint Business Intelligence Administrators in Costpoint via the Manage User Groups screen.

To assign Costpoint Business Intelligence administrators:

- 1. In Costpoint, go to Admin » Security » System Security » Manage User Groups.
- 2. In the **User Groups** table window, select **CER_ADMIN**.
- 3. Click the Assign Users to Group subtask.
- 4. Click the **New** button in the **Assign Users to Groups** table window.
- 5. Enter or select the CP Cloud Admin users.
- 6. Click Save.

Add CPSUPERUSER to Costpoint Business Intelligence User Groups

You should assign **CPSUPERUSER** to all CER__ User Groups. This will make the groups visible when it is time to map Costpoint and Costpoint Business Intelligence user groups.

To add CPSUPERUSER to Costpoint Business Intelligence User Groups:

- 1. In Costpoint, go to Admin » Security » System Security » Manage Users.
- 2. Click the Query button.
- 3. On the **Manage Users** query dialog box, open the **Find** tab.
- 4. In the **ID** field of the **Search Criteria** group box, select **equal to** in the drop-down and enter **CPSUPERUSER**.
- 5. Click Find button.
- 6. On the Manage Users screen, click the Assigned User Groups subtask.
- 7. Click the **New** button in the **Assigned User Groups** table window.
- 8. Enter or select a Costpoint Business Intelligence user group. For example, **CER_ACCTG**.
- 9. Repeat steps 7 to 8 for all the Costpoint Business Intelligence user groups.

Note: All Costpoint Business Intelligence User Groups has a prefix of **CER**__. Please take note of the double underscore (___).

10. Click Save.

Set Up the Costpoint Authentication Provider in Cognos

In the Cognos Server side, there are certain procedures that you should follow to set up the Costpoint Authentication Provider. Follow them in the order that they were written.

Check and Copy the Latest biintegration.res File

The biintegration.res file is the resource file that contains the key in coding the token. This file is generated by either the Costpoint Configuration Utility or at the start of Costpoint services. Make sure that you get the latest version of the biintegration.res file.

You need to have access to Costpoint server directories to get the latest file.

To check and copy the latest biintegration.res file, complete the following steps:

- 1. Check if the biintegration.res file is in this Costpoint server directory: {Costpoint Server}\deltek\costpoint\80\applications\enterprise \properties
- 2. Make a copy of the latest biintegration.res file and put it in this Cognos server directory:

{Cognos server}Program Files\ibm\cognos\analytics\configuration

Warning: If the file already exists in the Cognos server location, replace it with the new file that you just copied from the Costpoint server. This is to make sure that you have the latest key file.

Copy Setup Files to the Cognos Server

The files must be copied to the Cognos Server to complete the Costpoint Authentication Provider setup.

To copy the setup files to the Cognos server:

Go to the installation directory of CBI 8.0 and open the CAP8.0 folder. As default, the location is C:\Program Files (x86)\Deltek\CostpointBusinessIntelligence (or CostpointEnterpriseReporting)\CER800\Support\CAP8.0.

Note: CAP 8.0 does not support Cognos 10.

2. Copy the following files to their respective Cognos directories.

Filename		Copy to this Cognos directory:
	commons-dbcp2-2.1.1.jar commons-logging-1.2.jar commons-pool2-2.4.2.jar DeltekCAP.jar. log4j-1.2.17.jar	{Cognos Server}\C:\Program Files\ibm \cognos\analytics\webapps\p2pd\WEB-INF \lib
log4j.xml		C:\Program Files\ibm\cognos\analytics \configuration

Copy and Modify the Configuration Property Files

You need to locate the **sample_configuration** folder from the extracted files from DSM. After installing Costpoint Business Intelligence 8.0, the default location is **C:\Program Files** (x86)\Deltek\CostpointBusinessIntelligence\CER800\Support \CAP8.0\sample configuration.

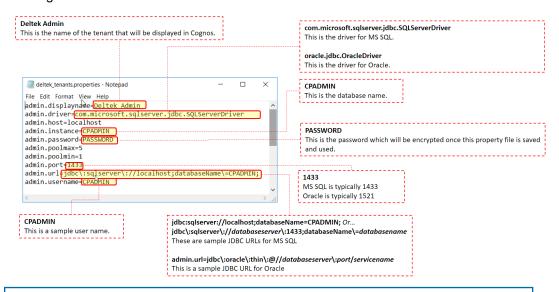
Warning: If you are upgrading your CAP installation, go to C:\Program Files\ibm\cognos \analytics\configuration in your Cognos server and back up your existing deltek_tenants.properties file. Put the file in a safe directory location. You will need to use this file as reference when you modify the new deltek_tenants.properties file from CAP 8.0.

To modify the configuration property files:

- 1. In the **sample_configuration** folder, look for the following files:
 - domainMappingCAP.xml: This file contains the namespace to be used for the Costpoint Authentication Provider. As a default, use "CAP"
 - domainMapping.xml: This file is used for backwards compatibility for old CAP versions.
 - deltek_cap.properties: Use this file to define the administrator tenant within the CAP namespace
 - detlek_cap_sql.properties: This file contains the SQL script to get information about users and user groups
 - deltek_tenants.properties: Use this file to define the new tenant with information about the database connection
- 2. Copy the configuration files mentioned above to **C:\Program Files\ibm\cognos** \analytics\configuration.

Note: You can make copies of the files and leave the original ones in the **sample_configuration** folder for backup.

- 3. Open the deltek_tenants.properties file to modify it.
- 4. In the **deltek_tenants.properties** file, add an Admin Tenant by following the syntax in this diagram:



Note: Make sure that you are using the ADMIN instance of the Costpoint database instead of the Transaction instance. If you entered a **Tenant ID** in the Costpoint Configuration Utility tool, make sure that you enter the same **Tenant ID** in the **deltek_tenants.properties** file so that they match. In the diagram above, **admin** is

used in the **deltek_tenants.properties** file which should be the same **Tenant ID** in the Costpoint Configuration Utility tool.

If you only have one tenant, make sure that it uses **admin** similar to the diagram. If you have multiple tenants, the first tenant must be **admin**.

Sample MS SQL file:



Sample Oracle file:



- 5. Remove any unused tenant property in the **deltek tenants.properties** file.
- 6. Save the configuration property file and Close.

Note: Restart **IBM Cognos Configuration** if it is already open so that the system will pick up these newly copied and modified files.

The Tenant Properties File

The **deltek_tenants.properties** file is scanned by CAP to check if there are changes to the tenants.

Five seconds after a change has been made to the **deltek_tenants.properties** file, CAP rereads its content for changes.

- If the attributes of a tenant are the same, CAP skips and checks the next tenant.
- If the attributes of a tenant have updates, the tenant is reconfigured. This includes closing
 the old database connection and opening a new connection with the updated connection
 attributes.
- If a tenant has been removed in the **deltek_tenants.properties** file, that tenant is removed from CAP and users will not be able to login. Currently, active sessions are not considered invalid for tenants that have been removed.

Note: The deltek_tenants.properties file is AES encrypted.

Remove Old CAP Files

If you have installed a previous version of CAP, you might have old configuration files. Remove these files in your server.

Skip this procedure if you have not installed old version of CAP.

To remove configuration files of previous CAP versions:

- 1. Go to {Cognos Server} C:\Program Files\ibm\cognos\analytics\webapps\p2pd\WEB-INF\lib in your Cognos Analytics server.
- 2. Look for CAM_AAA_COSTPOINT.jar and delete this file.
- 3. Next, go to {Cognos Server}\C:\Program Files\IBM\Cognos\analytics\Configuration.
- Look for JDBC_Config_<namespace ID>.properties and dbutil.class files. Delete them.

Set Up The Cognos Authentication Provider

The authentication provider handles the verification process between Cognos and Deltek Costpoint. You need to create the namespaces for CAP and CAP_SSO.

Set Up the CAP Namespace

Create the namespace for CAP that will handle the verification process between Cognos and Costpoint cloud and non-cloud users.

To set up the CAP namespace:

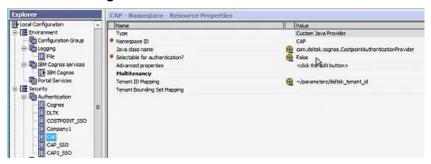
- 1. Launch the IBM Cognos Configuration application.
- 2. From the Explorer pane on the left side of the screen, go to **Security** » **Authentication**. Right-click **Authentication** and go to **New resource** » **Namespace**.
- 3. Enter the CAP in the Name field.

Note: Make sure that the **Name**, in this case **CAP**, is the same as the **Tenant ID** that has been configured in the **domainMappingCAP.xml** file.

- 4. Select Custom Java Provider in the Type field. Click OK.
- 5. On Namespace Resource Properties pane, fill out the following:
 - Namespace ID Enter CAP.
 - Java class name Enter com.deltek.cognos.CostpointAuthenticationProvider.
 - Selectable for authentication? Select False.

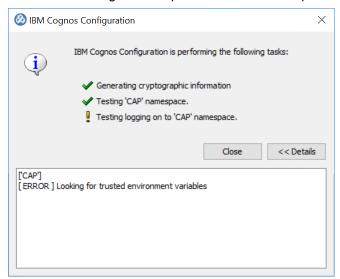
51

- Tenant ID Mapping Click the pencil icon. On the Tenant ID Mapping screen, select
 Pattern as Type. In the Value field enter ~/parameters/deltek_tenant_id.
- 6. Click Save configuration icon.



Test the connection to this newly created namespace. Right-click CAP and click Test.
 You might get a prompt to enter credentials for a user in the namespace to complete the test.

Also, an error may appear which says, "[ERROR] Looking for trusted environment variables." This error occurs when your IBM Cognos login credentials are not set as 'Trusted Credentials' and your installation will still work in their absence. Just click **Close** on the error dialog box and proceed with the set up.



Set Up the CAP_SSO Namespace

Create the CAP_SSO Namespace when you are using Costpoint Business Intelligence application via the Costpoint user interface.

To set up the CAP_SSO namespace:

- 1. Launch the IBM Cognos Configuration application.
- 2. From the Explorer pane on the left side of the screen, go to **Security** » **Authentication**. Right-click **Authentication** and go to **New resource** » **Namespace**.

- 3. Enter the CAP_SSO in the Name field.
- 4. Select Custom Java Provider in the Type field. Click OK.
- 5. On Namespace Resource Properties pane, fill out the following:
 - Namespace ID Enter CAP_SSO.
 - Java class name Enter com.deltek.cognos.sso.CostpointSSO.
 - Selectable for authentication? Select False.
- 6. Click Save configuration icon.
- 7. Test the connection to this newly created namespace. Right-click **CAP_SSO** and click **Test**.

You might get a prompt to enter credentials for a user in the namespace to complete the test.

Add 'Admin' Tenant on the Multitenancy Tab

You need to add the 'Admin' tenant on the Multitenancy Tab in the Administration Console in Cognos that is similar with the **Tenant ID** that is in the Costpoint Configuration Utility and the **deltek_tenants.properties** file.

To add the Admin tenant on the Multitenancy Tab:

- 1. Log in to Cognos Analytics.
- 2. On the pane found on the left-hand side, click the Manage » Administration Console.
- 3. Open the Multitenancy Tab.
- 4. Click the New Tenant icon a
- In the Name and Tenant ID fields, enter the Admin tenant. Make sure that it matches with the Tenant ID in the Costpoint Configuration Utility and the Admin tenant in the deltek_tenants.properties file.
- 6. Click Finish.

Set Up a Cognos System Administrator

In the **deltek_tenants.properties** file, an admin tenant has been defined. You will need to assign a user who belongs to this admin tenant as your System Administrator who will then manage your Costpoint Business Intelligence system.

To set up the System Administrator:

- Log in to Cognos Analytics. On the pane on the left-hand side, click Manage » Administration Console.
- Open the Security tab and click Cognos in the Directory table.
- 3. Look for **System Administrators** in the list and click **More...** found on the right.
- 4. Click **Set members...**. And then, click **Add**.

5. Under the **Available entries** box on the left-hand side of the screen, go to **Cognos** » **Everyone**. Click the yellow arrow button to move **Everyone** to the **Selected entries** box on the right.

Note: The **Everyone** account is added at this stage for configuration purposes, but will be removed once we are done.

- 6. Under the **Available entries** box, click on the active directory (AD) folder and select **Show users in the list** check box. Look for your AD account and it to the System Administrators account.
- 7. Click **OK**. And then, click **OK** again. **Log off** of Cognos Analytics.

Note: Close all the IBM Cognos Analytics sessions that are open or simply close your browser and open a new one.

- 8. Login to Costpoint as one of the users you added to the **CER_ADMIN** group.
- 9. Go to Reports and Analytics » Business Intelligence » Business Intelligence » Business Intelligence.
- 10. On the pane found on the left-hand side, click the Manage » Administration Console.
- 11. Open the **Security** tab and click **Cognos** in the Directory table.
- 12. Click the **Deltek** folder.
- 13. Look for CER CP Administrator and click More... on its right.
- 14. Click Set members... . Then, click Add...
- 15. Click CAP.
- 16. Click the **Deltek Groups** folder.
- 17. Select the check box before **CER CP Administrator** and click the yellow arrow.
- 18. Click **OK**. And then, click **OK** again.
- 19. Click Cognos.
- 20. Scroll through the Directory until you see **System Administrators**.
- 21. Click More... found on the right that is adjacent to System Administrators.
- 22. Click Set members.... Then, click Add...
- 23. Click on the CAP folder



Note: If the **CAP** folder is missing, try to restart the dispatch servers.

24. Click the **Deltek Groups** folder.



- Select the CER CP Administrator.
- 26. Click the yellow arrow button to add the selected groups as **System Administrators**.
- 27. Click **OK**. And then, click **OK** again. This step will add your administrators. However, further steps are needed to be done to add the rest of the Deltek groups in the appropriate Cognos user groups. You will see the procedure and more information about this once you review the Costpoint Business Intelligence Post Installation Guide.

Remove 'Everyone' as System Administrator

Once a System Administrator has been established, the 'Everyone' group should be removed in the System Administrator role.

Note: This procedure should only be done after a user with System Administrator rights has been created.

To remove the 'Everyone' group as System Administrator:

- 1. In IBM Cognos Administration, open the **Security** tab and click **Cognos** in the Directory table.
- 2. Scroll through the Directory until you see System Administrators.
- 3. Click More... found on the right that is adjacent to **System Administrators**.
- 4. Click **Set members...**
- 5. Look for **Everyone** and select.
- 6. Click Remove and then OK.

Update Cognos Authentication and Namespace Properties

You should configure the appropriate settings for anonymous settings and Cognos authentication via the IBM Cognos Configuration application.

To update the Cognos Authentication and Namespace properties:

- 1. Launch the IBM Cognos Configuration application.
- 2. On the Explorer pane, go to Security » Authentication » Cognos.
- 3. On the Cognos Namespace Resource Properties pane on the right, set the Allow anonymous access? field to False.
- 4. On the Explorer pane, go to Security » Authentication.

- 5. On the **Authentication Component Properties** pane on the right, set the **Restrict** access to members of the built-in namespace? field to True.
- 6. Click Save.

Restart the Cognos Server

Restart the Cognos server after the procedures have been successfully completed.

The procedures are:

- Check and Copy the Latest biintegration.res file
- Copy Setup Files
- Copy and Modify the Configuration Property File
- Replace the Security Policy Files in the Cognos Server
- Remove old CAP files (if any)
- Add the Namespaces in IBM Cognos Configuration
- Add Admin Tenant on the Multitenancy Tab
- Set Up a Cognos System Administrator
- Remove 'Everyone' as System Administrator
- Update Cognos Authentication and Namespace Properties

CAP Troubleshooting

Use the **Deltek_Costpoint_CAP.log** file when you need to troubleshoot a Costpoint Authentication Provider issue.

You can find the log file in:

{Cognos Server}\C:\Program Files\ibm\cognos\analytics\log\Deltek Costpoint CAP.log

User Token Error

When you experience a user token error, there are two potential issues. Check to see if they are addressed.

You can check the following:

- In the **Deltek_Costpoint_CAP.log** file, see if it indicates that the token has expired. If so, make sure that the time zones in the Costpoint, Costpoint database, and Cognos application servers are the same.
- Check that the latest biintegration.res file from the Costpoint server directory is in the Cognos server directory.
 - Costpoint server directory:
 - {Costpoint Server}\deltek\costpoint\80\applications \enterprise\properties

- Cognos server directory:
 - {Cognos server}Program Files\ibm\cognos\analytics \configuration

Create New View for Organization Security

Open the Manage BI Settings (BIMCERSETTINGS) screen in Costpoint to generate several required views for the Costpoint and Planning databases. These views will be used for the organization security that is applied to the Planning, Materials, Procurement, and Manufacturing models.

To create a new view for Organization Security:

- 1. In Costpoint, enter Manage BI Settings in the Browse Applications field or go to Reports & Analytics » BI Configuration » Configuration » Manage BI Settings.
- 2. Once the Manage BI Settings application is displayed, check and verify the settings. Make the necessary changes, if needed. Click **Save** and then close the screen.

Set the as_of_date Global Parameter

As an administrator, set up the **as_of_date** global parameter that is needed to run the new Resource Management dashboard.

To set the as_of_date global parameter for data modules:

- 1. In Costpoint Business Intelligence, go to **Manage** » **Customization**. Select the **Parameters** tab.
- 2. Click +New and enter as_of_date in the space provided. Press ENTER on the keyboard.
- 3. Adjacent to the as_of_date parameter that you just made, click ... and select Properties.
- 4. Select the Applied to all roles check box.

Note: For more details in setting the **as_of_date** global parameter, see the <u>IBM</u> website.

Deploying Reports to a Location Other Than the Standard Location

Deltek does not recommend deploying reports to any location other than the standard location because of the danger of breaking links to packages, common library reports, and drill reports.

If you choose to deploy reports to a different location, note the following:

- To minimize the impact on the links, first deploy the reports to the standard directory under Team Content, and then cut and paste the reports to move them to the desired location. This approach preserves the links to the packages and Common Library reports. However, it breaks the links to drill reports because the main (source) reports and drill (target) reports are not located in the same folders.
- After you relocate the reports, you must use Report Studio to redefine the links between the main reports and the drill reports. That procedure is outlined below.

Redefine Links to Drill Reports

There are several steps to follow when you want to redefine links to drill reports.

To redefine the links to drill reports, complete the following steps:

- Go to the location of the report from Team Content and click the More (...) icon. Click Edit report.
- On the report page, click the drill-through link (displayed as blue underlined text), and click the properties icon
- 3. On the List column body pane, click **Drill-through definitions** field. Click the
- 4. On the Drill-Through definitions dialog box, click the first item in the **Drill-Through definitions**: list.
 - The **Report** field displays the drill report.
- 5. Click ___ next to **Report**, and browse to the new deployment location.
- 6. Select the drill report in that location, and click **Open**.
- 7. If the **Drill-Through Definition** list contains more than one item, repeat steps 4 6 for each one.
- 8. Click **OK** to close the Drill-Through Definitions dialog box.
- 9. Save the report.

Lifecycle Manager

Once you have completed the upgrade to Cognos Analtyics 11, Deltek recommends that you compare the output between the upgraded system and production.

The IBM Lifecycle Manager is a tool that can facilitate this process. It is a stand-alone application that compares report output and performance within a single environment or between different versions of Cognos, and presents results in a dashboard.

It can be a great tool for streamlining the upgrade process. Due to the complexity of some of the prompting in Deltek's canned reports, report output has to be manually compared in some situations. But IBM Cognos Lifecycle Manager enables the automation of much of the data comparison.

For more information on setting up and using IBM Cognos Lifecycle Manager, see the *LifeCycle Manager Installation and User Guide* on the <u>IBM website</u>.

Interactive Mode in Reports

New reports created in Cognos Analytics 11 are automatically created in Interactive mode.

Interactive mode is automatically turned off for reports that have been upgraded from previous versions. At the moment, you can only switch the Interactive mode per report and there is no way to perform a mass change.

Some features are not supported in fully interactive mode such as:

- embedded javascript
- drill through links
- prompt API

For the Costpoint Business Intelligence reports, fully interactive mode cannot be applied because of the embedded HTML components used in the prompt pages.

To see the steps to convert reports to fully Interactive mode, see <u>Converting Reports to Fully Interactive in Cognos Analytics</u>.

For more information about Interactive mode, see the IBM website.

Special Topic: Hiding and Displaying Entries in Costpoint Business Intelligence

You can show or hide entries in Costpoint Business Intelligence if you have the option to hide them. Examples of reports that you can hide if you have the rights are the drill-thru reports in Contracts and the Common Library report.

You can open the drill-thru reports in Contracts when you click their corresponding links in the Customer Inquiry report. For example, you can open the Contract Drill-Thru report and see details when you click the contract link in the Customer Inquiry report. An option to hide the drill-thru reports is available through the **My Preferences** feature.

Another Costpoint Business Intelligence entry that you have the option to hide is the Common Library report which is not an actual report that you are intended to run. Rather, it contains elements, such as Deltek logos, prompt tabs, product version number, and so on, that are used in common by all reports.

Note: Even if the Common Library report and drill-thru reports are hidden, they are still visible to users with **Show hidden entries** selected in their preferences, though the icon for the report is dimmed. System administrators may want this option selected. However, for those users who should never see these reports, it is recommended that you make sure **Show hidden entries** is not selected and that you do not give them access to change this preferences option.

Make an Entry Visible in Costpoint Business Intelligence

You can adjust whether or not to display hidden reports to users.

To make a hidden report visible in Costpoint Business Intelligence, complete the following steps:

- On the Welcome portal, open the reporting package that contains the report.
 The Common Library report is located in **Team content** » **Administration**.
 The Contracts drill-thru reports are located in **Team content** » **Contracts** » **Reports**.
- 2. If the hidden report is not visible in the list of reports, click your Username on the upper right-hand side of the screen, and click **My Preferences**.
- 3. Select the Show hidden entries check box.

Note: If the **Show hidden entries** check box is not displayed, you do not have the access rights to change it.

- 4. Go to the report, for example Common Library, click the **More** (...) icon on the right.
- 5. Click **Properties** and expand **Advanced**.
- 6. Clear the **Hide this entry** check box.
- 7. To hide the report again, repeat this procedure and select the **Hide this entry** check box in step 6.

Troubleshooting

Some installations require you to perform extra steps to avoid errors.

Unable to See Changes on the Welcome Page

When the changes you applied on the Welcome page does not display, try using another web browser.

There were instances when Chrome does not display the updates made to the Welcome page, but are reflected on Internet Explorer. Once the changes are displayed on Internet Explorer, updates are shown on Chrome as well.

Error Message When Creating a Project in Framework Manager

An error message may display if you try to create a new project in Framework Manager and your installation has not been configured yet.

Sample error messages that may display are:

- BMT-MD-0003
- CCL-BIT-0031 The requestor cannot connect to the provider at the URL http://localhost: 9300/bi/v1/disp. Code: -2,113,929,210.
- CAM-CRP-0012 The cryptographic engine is not initialized.

To resolve this, you need to configure the Framework Manager installation with the gateway and dispatcher URIs from the BI server.

Configure FM Installation with Gateway and Dispatcher URIs

You need to have access to the IBM Cognos Configuration tool.

To configure Framework Installation with Gateway and Dispatcher URIs from the BI server:

- 1. Open the Cognos Configuration tool for the Framework Manager install.
- 2. Update the gateway and external dispatcher URIs there to match what is set in the BI server Cognos Configuration tool.
- 3. Save the Framework Manager configuration.

Note: For more information about this resolution, see the IBM support website, http://www-01.ibm.com/support/docview.wss?uid=swg22001983

Unable to See Legacy Studios

To see the Legacy Studios, try using the Internet Explorer browser.

Legacy studios are Analysis Studio, Query Studio, and Event Studio.

Error When Opening a Copied Report Specification

An error message may display if you create a new report by opening it from the clipboard.

When you copy an existing CER report to another server or a new location using the copy to clipboard or open from clipboard option, the Cognos Analytics treats it as a 'new' report and the Interactivity Mode is automatically turned on. This may result to an error because the embedded HTML components in the prompt pages of the Costpoint Business Intelligence reports are not compatible with the Interactivity Mode. Switch off the Interactivity Mode to remove the error.

Turn Off the Interactivity Mode in a Report

You should be in Authoring mode to switch off the Interactivity Mode in a report.

To turn off the Interactivity Mode:

- 1. Open report for which you want to turn off the Interactivity Mode.
- 2. Click the **Edit in authoring** icon



3. Click the **pages** icon



4. Click the Report icon



and then click **Properties**



5. Under the **RUNNING & VALIDATING** section of the Properties pane, set the **Run with** full interactivity to **No**. Click **Save**

Cannot Retrieve Data from Data Set

Microsoft Internet Information Service imposes a limit on the size of the URL address. This may cause an error when you use dashboards where it says that you cannot retrieve data from a data set . To avoid this, you must modify the values in the **Maximum URL Length** and **Maximum Query String**.

To modify the Maximum URL Length and Maximum Query String:

- 1. On the Cognos Analytics IIS host server, open the **Control Panel** under **Administrative tools** option. Open **Microsoft Internet Information Service Manager**.
- On the navigation tree on the left-hand side, click Sites/Default Web Site\IBMCognos and select bi directory.
- 3. Double click Request Filtering. And then, click Edit Feature Settings.
- 4. Enter 16000 on the Maximum URL Length field.
- Enter 8000 on the Maximum Query String field.
- 6. Restart IIS.

65

Unable to See Data for Any Organization

When you have an existing organization security prior to upgrading to the latest Costpoint Business Intelligence, make sure you select the **Apply Org Security** check box for the **ALL** organization security profile. When this profile is not set up properly, you may not see data for any organization when you run a report.

To apply the organization security to the ALL profile:

- 1. In Costpoint, go to Admin » Security » Organizational Security » Manage Organization Security Profiles.
- 2. In the Manage Organization Security Profiles table window, select the ALL profile.
- 3. Select the adjacent Apply Org Security check box and Save.



- 4. Go to Admin » Security » Organizational Security » Update Organization Security Profiles.
- 5. Enter or select a Parameter ID and/or Description.
- 6. In **Selection Ranges**, select **One** in the **Option** drop-down list and **ALL** in the **Start** lookup.
- 7. Click the gear icon drop-down on the toolbar and select **Update Org Security Profiles**. **Save**.



Cannot Connect to SQL Server CM Database in CA 11 When TLS 1.0 is Disabled

When you test the Content Manager connection without SSL, but the Microsoft JDBC displays an error: **Unexpected Error occurred attempting to open an SQL connection.** class java.io.IOException: SQL Server did not return a response. The connection has been closed.

Check out the IBM KB article to know more about this error and its resolution.

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