Business Insight

Installation and Setup Guide

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Hyland™

Documentation Notice

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Overview

The Perceptive Business Insight suite allows you to use high-level dashboards, self-service reporting tools, and report scheduling and distribution tools to evaluate and improve the efficiency of content-related routines in your organization.

Note Business Insight is the Enterprise Software integration layer that sits on top of IBM Cognos. For this guide, the terms IBM Cognos and Perceptive Business Insight can be used interchangeably.

Using Business Insight, you can achieve the following goals.

- Use dashboards to make more informed decisions associated with ECM-supported processes.

- Improve process and workflow efficiencies using advanced reporting tools.

- Expedite audit across your enterprise.

- Provide non-intrusive system transparency.

- Identify deficiencies and discrepancies in your content and data repository.

- Measure productivity using standard and consistent reporting.

    Supply all users with the metrics they need for system-wide report access.

What is the installation process?

The following steps outline the high-level procedures that you need to perform to install and configure Business Insight and information you need to verify before the installation.

Note Starting with Perceptive Content, version 7.0.x and higher, you must install Integration Server as part of the Business Insight product suite.

Prepare for the installation

Before you install Business Insight, verify the following information.

- Perceptive Content Server and Integration Server are started.

- On the computer where you install Business Insight, network ports 9300, 9362, and 9399 are open.

- Optional. If setting up an IIS Gateway is required for specific use cases, such as for Single Sign-On or other specific requirements, ensure that a version of Internet Information Services (IIS) 7.5 or greater is installed.

- If setting up an IIS Gateway, a version of Internet Information Services (IIS) 7.5 or greater is installed.

- Obtain the TCP/IP host name or TCP/IP address and the authorization port of the computer where you install Business Insight.

- Obtain the server name and authorization port of the computer that hosts the Business Insight content store database.

- Obtain the SMTP Server Name and authorization port of the e-mail server computer. A connection to a mail server is required to send report notifications.

- Make sure that you have sufficient disk space for executables and object storage, as outlined in the *Technical Specifications* document.

- Make sure that you have a user name and password for the Enterprise Software Customer Portal so you can download product files for installation.

- Verify your installation of Business Insight is compatible with your version of Perceptive Content Server.

- Make sure you are not installing Business Insight on the same computer as the Forms Server.

Installation checklist

To install Business Insight, perform the following procedures in the listed order.

1. Create the database for the Business Insight Content Store.

2. Download the Business Insight setup kit from the Enterprise Software Customer Portal.

3. Run the Business Insight Installation Wizard.

4. Configure your web application server.

5. Start Business Insight services.

6. Run the Business Insight integration utility.

Important This document assumes you are installing Business Insight for the first time and that you have a Perceptive Content Server and at least one Perceptive Content Client in your environment. For details of steps to upgrade follow the Appendix F: IBM Cognos Analytics 11.1.x upgrade.

Download required files

To obtain Perceptive product installation files, contact the Hyland Software Technical Support group. For a list of Technical Support phone numbers, go to hyland.com/pswtscontact.

Install IBM Cognos

Before you can run the IBM Cognos installation wizard, you must first create the content store, download the installation package, and install the required components. IBM Cognos is bundled with its own Java runtime environment unless a system environment variable for JAVA_HOME has been set. If you need to use multiple applications on the server where IBM Cognos will be installed, please be aware that use of JAVA_HOME will cause IBM Cognos to utilize it instead of its own bundled Java.

More information can be found here: https://www.ibm.com/support/pages/node/537523.

Create and configure the content store database

On the computer that hosts the DBMS, you must create a new database to use for Business Insight reporting. The database will be defined in content store that is required for IBM Cognos to function.

Create the content store on SQL Server

This procedure varies depending on your version of SQL Server.

1. Open **SQL Server Management Studio**.

2. In **Object Explorer**, right-click **Databases** and select **New Database**.

3. In the **New Database** dialog box, complete the following substeps.

    1. In the **Database name** box, type **INOWBI**.

Note Content Store (INOWBI) schema is not currently working for remote device configuration, such as, IPaddress or FQDN_Of_Your_Machine.

2. Optional. To specify an owner for the content store database, in the **Owner** box, type a user or click the ellipsis button to browse for an existing user.

Note You can change the owner setting at any time in the **Files** area of the **Database Properties** dialog box.

3. Click **OK**.

Create the content store on Oracle

The following steps explain how to create the content store database for a Windows operating system.

1. To open the **Oracle Database Configuration Assistant**, click **Start**, point to **Programs > Oracle OraHome > Configuration and Migration Tools**, and then select **Database Configuration Assistant**.

2. In the **Welcome** page, click **Next**.

3. In the **Operations** page, verify that **Create a Database** is selected and click **Next**.

4. In the **Database Templates** page, choose **Custom Database** and click **Next**.

5. In the **Database Identification** page, in the **Global Database Name** box, type **INOWBI** and click **Next**.

6. In the **Management Options** page, accept the defaults and click **Next**.

7. In the **Database Credentials** page, create your passwords based on your company security policy. For example, you can verify that **Use the Same Password for All Accounts** is selected, type a password, confirm it, and then click **Next**.

8. In the **Storage Options** page, accept the defaults and click **Next**.

9. In the **Database File Locations** page, accept the defaults and click **Next**.

10. In the **Recovery Configuration** page, accept the defaults and click **Next**.

Note By default, archiving is not enabled for the INOWBI database. If you want to enhance your backup and recoverability options, we recommend that you enable archiving. When you enable this feature, additional archive log storage and backup management are required.

11. In the **Database Content** page, select the options you want and click **Next**.

Note For Business Insight, you do not need to install Oracle Data Mining, Oracle text, Oracle OLAP, Oracle Spatial, Oracle Ultra Search, or Oracle Warehouse Builder.

12. In the **Initialization Parameters** page, complete the following substeps.

1. On the **Memory** tab, click **Custom** and change the following settings.

Value	Oracle 10g and 11g Dedicated
SGA Size	500MB
PGA Size	Keep default value

2. On the **Character Set** tab, under **Database Character Set**, select **Choose** from the list of character sets and complete one of the following options.

- To set the character set encoding to UTF-8, use **AL32UTF8 – Unicode UTF-8 Universal character set**.

- To set the character set encoding to UTF-16, use **AL32UTF16 – Unicode UTF-16 Universal character set**.

  Note We recommend using UTF-8 for non-Unicode languages, such as English and UTF-16 for Unicode languages, such as Japanese.

13. For Oracle 11g, complete the following substeps.

    1. In the **Security Settings** page, click **Next**.

    2. In the **Automatic Maintenance Tasks** page, click **Next**.

14. In the **Database Storage** page, complete the following substeps.

    1. To change the file directory for the control files, under **Storage**, click **Controlfile** and complete the following substeps.

       1. Click the **General** tab.

       2. To ensure that the control files are located across multiple physical disks for multiplexing, change the file directory so there are at least two locations for these files.

    2. To add a second member to each Redo Log Group, complete the following substeps.

       1. Under **Redo Log Options**, click a group.

       2. On the **General** tab, under **File Name**, enter a file name for a second member and change the directory so that each member of the group is on a different physical disk.

       3. Repeat these substeps for any additional groups.

    3. To create the DATA tablespace, click **Tablespaces** and complete the following substeps.

       1. Click **Create**.

       2. In the **Create Tablespace** page, in **Name**, type DATA.

       3. In the **File Name** box, type **data01.dbf**, in **File Directory**, keep the default directory or change it as needed, in **Size**, type **250 MB**, and then click **Create**.

    4. To edit the TEMP tablespace, in the **Tablespaces** page, complete the following substeps.

       1. In the left pane, click **TEMP**.

       2. Double-click **Size** and set the **File Size** to **100 MB**. Click **OK**.

          Note Leave the remaining tablespaces as default. Do not delete the **USERS** tablespace.

    5. To allow a data file to autoextend, in the **Database Storage** page, click **Datafiles** and complete the following substeps.

       1. As an example, select the **data01.dbf** file.

       2. In the right pane, on the **Storage** tab, select the **Automatically extend datafile when full (AUTOEXTEND)** check box.

       3. In the **Increment** box, type a value to identify the next extent size.

          Note To help reduce the number of extents, Enterprise Software recommends that you start with 1 GB. Adjust the increment size as needed.

4. Under **Maximum Size**, select **Value** and, in the **Value** box, type the maximum size for the datafile. Base the size on how much storage you have available and how big you want the datafile to grow.

5. Repeat the previous substeps for the data files you want to autoextend.

6. Click **Next**.

7. Click **Finish**. A summary of the database parameters displays.

15. Click **OK** to create the database. This may take some time, depending on your system configuration.

16. When the database is complete, a summary displays with database log and connection information. Click **OK**.

Create a content store user account

If your INOWBI content store and your INOW database exist on separate DBMS computers, or if you use an Oracle DBMS, you must create a new user to administer the content store. Otherwise, you can assign the inuser or reports user as the administrator.

- To create a new user in SQL Server, complete the following steps.

    1. In **SQL Server Management Studio**, in the **Object Explorer** pane, expand **Security**.

    2. Right-click the **Logins** folder and select **New login**.

    3. In the **Login-new** dialog box, in the **General** page, type a new user name, select **SQL Server Authentication** and define a password for the new user.

    4. In the **Default database** list, select **INOWBI**.

    5. In the **Server roles** page, select **sysadmin**.

    6. In the **User mapping** page, select the **Map** check box for the **INOWBI** database and, under **Database role membership**, select the public check box.

    7. Click **OK**.

- To create a new user in Oracle, complete the following steps.

    1. Open a web browser and run **Oracle Enterprise Manager** (http://<*machinename*>:<*port*>/em).

    2. In the **Login** page, log on as **SYS,** type the password you set in the **Database Credentials** page in **Password**, type **SYSDBA** in **Connect as**, and then click **Login**.

    3. In the **Database Instance** page, on the **Server** tab, under **Security**, select **Users**.

    4. In the **Users** page, click **Create**.

    5. In the **Create User** page, type a new user name, then enter and confirm the user password.

    6. In **Default Tablespace**, click the icon. In the **Select Tablespace** dialog box, select **DATA** and click **Select**.

    7. In **Temporary Tablespace**, click the icon. In the **Select Tablespace** dialog box, select **TEMP** and click **Select**.

    8. Select the **System Privileges** tab and click **Edit List**. In the **Modify System Privileges** page, in **Available System Privileges**, select **SYSDBA** and click **>** to move it to **Selected System Privileges**. Then, select **SYSOPER** and click **>** to move it to **Selected System Privileges**, and then click **OK**.

9. Click the **Roles** tab and click **Edit List**. In the **Modify Roles** page, in **Available Roles**, select **DBA**, click **>** to move it to **Selected Roles**, and then click **OK**.

Content store database permissions

While we recommend assigning the database owner role to the content store administrative user, it is not required. At a minimum, this user must have the following privileges granted in your DBMS.

DBMS	Active Permissions
SQL Server	• Connect to the content store database • Create and execute database tables • Insert, select, update, and delete data in database tables
Oracle	• Connect to the content store database • Create, alter, and drop tables, triggers, views, procedures, and sequences • Insert, update, and delete data in the database tables

Verify the INOWBI database user authentication in SQL Server

If you use an SQL Server DBMS, you must verify that the content store uses mixed mode authentication.

1. In **SQL Server Management Studio**, in the **Object Explorer** pane, right-click your server, which is typically the first item in the tree, and then select **Properties**.

2. In the **Server Properties** dialog box, under **Select a page**, click **Security**.

3. Under **Server Authentication**, perform one of the following actions.

   • If **SQL Server and Windows Authentication mode** is selected, click **OK**.

   • If **Windows Only** or **Windows Authentication** is selected, change it to **SQL Server and Windows Authentication** mode, click **OK**, and then click **Yes** to restart the server. If you are not prompted to restart the server after changing the user authentication method, click the **Refresh** button.

4. Click **OK** and exit **SQL Server Management Studio**.

Install Cognos

Navigate to the the directory where you unzipped the Perceptive Business Insight Foundation Supporting Files (Cognos 11).zip file. To Install the IBM Cognos Server, component services, fix packs, and patches complete the following steps.

Note: If you are upgrading, refer to the Appendix E: IBM Cognos Analytics 11.1.x upgrade section.

1. Double-click **analytics-installer-2.2.16-win.exe**. The system starts the installation wizard.

2. In the **Installation Language** list, select the appropriate language and click **Next**.

3. On the **Repository Location** page, select **casrv-11.1.7-2205311318-winx64h** and click **Next**. This repository contains the Cognos Server.

4. On the **Product Install** page, select **IBM Cognos Analytics** and click **Next**.

5. On the **License Agreement** page, review the license information, select **I accept the terms of the License Agreement** and then click **Next**.

6. On the **Location** page, in the **Install location** field, enter the location where you want Cognos to be installed and click **Next**.

7. On the confirmation dialog box, click **Yes** to confirm the installation location.

8. On the **Install Type** page, select **Custom** if you also want to setup IIS Gateway and and click **Next**.

9. On the **Component Selection** page, select **Gateway** if you want to setup IIS Gateway and click **Next**.

10. Click **Next** and then click **Finish**.

Notes

- If installing on the same box as an existing version of Cognos, choose a new Installation Directory.

- For more information, see the *IBM Cognos Analytics Installation and Configuration 11.1.x* found on the IBM website.

- When prompted with the **Component Selection** dialog box in the Server installer, keep the default selection that has the Cognos Content Database deselected. You have already set up the Content Store using your production RDBMS.

- If you have already applied the fix packs before installing your component services, like Cognos Mobile, make sure to re-run the fix packs again after installing all services. This will ensure that they are on the same fix pack.

Install Business Insight

Run the Business Insight Installation Wizard

1. To open the Business Insight Installation Wizard, navigate to the location of the installers and then double-click **BI_64Setup.exe**.

2. In the **Welcome to the Installation Wizard for Business Insight** page, click **Next**.

3. In the **License Agreement** page, review the terms of the License Agreement, scroll to the end of the agreement, select the **I accept the terms in the license agreement**, and then click **Next**.

4. In the **Connection Settings** page, complete the following substeps and click **Next**.

    1. In the **Content Store Type** list, select the DBMS associated with the Business Insight reporting database.

    2. Under **Integration Server Settings**, enter the server URL for Integration Server.

    3. Under **Business Insight administrator user name**, enter the user name of the Business Insight owner. This user must already exist within the Perceptive Content Server.

5. In the **Content Store Settings** page, complete one of the following procedures and click **Next**.

    - If you are using a Microsoft SQL Server content store without Windows authentication, complete the following substeps.

        1. Under **Content Store Properties**, in the **Database server and port number** box, enter the host name and port number of the computer where the content store reporting database is located. Separate the name and number with a colon.

> **Note** The default port for an SQL Server content store is 1433. For example, **REPORTSERVER:1433**.

2. In the **Database name** box, verify that the database name matches the name of the content store you created. By default, this name is **INOWBI**.

3. Under **Content Store Authentication**, enter the user name and password of the content store administrative user you specified and then confirm the password.

- If you are using a Microsoft SQL Server content store with Windows authentication, complete the following substeps.

   1. Under **Content Store Properties**, in the **Database server and port number** box, enter the host name and port number of the computer where the content, store-reporting database is located. Separate the name and number with a colon.

      > **Note** The default port for an SQL Server content store is 1433. For example, **REPORTSERVER:1433**.

   2. In the **Database name** box, verify that the database name matches the name of the content store you created. By default, this name is **INOWBI**.

- If you are using a standard Oracle content store, complete the following substeps.

   1. Under **Content Store Properties**, in the **Database server and port number** box, enter the host name and port number of the computer where you are installing Business Insight. Separate the name and number with a colon.

      > **Note** Because we require an Oracle runtime client on the Business Insight computer to connect to the computer hosting the Oracle DBMS, you do not need to specify the Oracle server. The default port for an Oracle DBMS is 1521. For example, **LOCALHOST:1521**

   2. In the **Service name** box, verify the name matches the name of the content store you created. By default, this name is **INOWBI**.

   3. Under **Content Store Authentication**, enter the user name and password of the content store administrative user you specified, and then confirm the password.

- If you are using an advanced Oracle content store, complete the following substeps.

   1. Under **Content Store Properties**, in the **Database specifier** box, verify the database connection string.

   2. Under **Content Store Authentication**, enter the user name and password of the content store administrative user you specified, and then confirm the password.

6. In the **E-mail Settings** page, complete the following substeps and click **Next**.

   1. Under **E-mail Notification Settings**, in the **SMTP mail server and port** box, enter the name of the e-mail server you use to send e-mail notifications and the port number the server uses. Separate the name and number with a colon.

      > **Note** By default, the port number the e-mail server uses is 25. For example, **mail.server.com:25**

   2. In the **Mail logon ID** box, enter the user name for the user that administers the e-mail server and then enter the password for the user.

   3. In the **Default sender** box, type the e-mail address you use to send notifications.

      > **Note** Not all mail servers have an administrator. If your mail server does not have an administrative user, you can leave the Mail Logon ID and passwords fields blank.

7. In the **ImageNow Database Settings** page, complete the following substeps and click **Next**.

1. Under **Database Server Settings**, enter the name of the server computer running the DBMS that hosts the Perceptive Content database and enter the port Business Insight uses to connect to the Perceptive Content database.

   Note By default, SQL Server uses port 1433 and Oracle uses port 1521.

2. Under **ImageNow Database Properties**, enter the name of the Perceptive Content database and select the DBMS type from the list.

3. Under **Database User Authentication**, enter the user name and password for a database user who can access the Perceptive Content database.

8. If the **Business Intelligence Folder** page displays, verify the installation folder and click **Next**.

9. In the **Ready to Install the Program** page, click **Install**.

10. In the **Installation Wizard Completed** page, select the **Launch Business Insight Configuration** check box, and then click **Finish**.

Note After the installation is complete, the Business Insight Configuration program launches as well as the file directory containing the Business Insight integration utility files. Leave both windows open.

Configure agent token authentication for Business Insight

Optional. To configure Business Insight to use token-based agent authentication, complete the following steps.

1. On the Perceptive Content Server machine, generate an authentication token for Business Insight by running the following command.

   ```
   intool --cmd create-authentication-token --lictype ImageNow Business Insight --
   file BusinessInsight.txt
   ```

2. On the Business Insight machine, navigate to the `[drive]:\Program Files\ibm\cognos\analytics\configuration` directory.

3. Open the **INAuth_Config_ImageNow.properties** file with a text editor.

   Note: While saving ensure the file is encoded to 'UTF-16-LE_BOM'

4. Set the `integration.server.authentication.token` setting to the contents of the **BusinessInsight.txt** file. For example, `integration.server.authentication.token=[authentication token]`.

5. Save and close the file.

Configure Integration Server for token-based agent authentication

After you configure agent token authentication, you must also configure Integration Server to support token-based authentication for agent connections. For more information on importing a token signing certificate and configuring Integration Server, refer to the Perceptive Integration Server on Tomcat Installation Guide or Perceptive Integration Server on WebSphere Installation Guide.

Install Oracle components

Important These procedures only apply if you use an Oracle DBMS.

Install Oracle Runtime

If you are installing Business Insight on a computer that does not host your Oracle DBMS on the computer where you install Business Insight, you must do the following steps. You only need to install the 32-bit Oracle runtime client application.

1. Unzip the contents of the Oracle runtime client application to a temporary folder on the root drive of the Business Insight computer.

2. Run the **Oracle client application installer**. In the installer, select **Oracle Runtime**.

3. After the installation completes, run the **Net Configuration Assistant**.

4. In **Net Configuration Assistant**, select the **Local Net Service Name** configuration and complete the wizard according to your configuration.

Install Oracle drivers

You must copy the appropriate Oracle JDBC .jar file to the appropriate Cognos folder to establish a database connect and for Cognos to connect to your Oracle Content Store and Data Source.

1. Navigate to the **<*Oracle Home*>\jdbc\lib** directory.

2. Select the **JAR** files associated with your Java version.

3. On the computer where Business Insight is installed, navigate to **[*drive*]:\Program Files\ibm\cognos\analytics\drivers**

4. Copy the selected JAR files and restart the Business Insight service.

Install SQL Server Driver

1. Download the Microsoft JDBC Driver 4.2 for SQL Server from the Microsoft website. Click https://www.microsoft.com/en-us/download/details.aspx?id=54671 to download the file.

   Note: Download the TAR.GZ file only.

2. Extract the sqljdbc42.jar file from the archive, and then move the file to [drive]:\Program Files\ibm\cognos\analytics\drivers directory.

3. Restart the Cognos service.

Start the IBM Cognos service

1. Open IBM Cognos Configuration.

2. In the **Explorer Pane**, under the **Local Configuration** tree, expand the appropriate section and verify the information is correct.

Setting Location	Setting Name	Setting Value
Environment	Gateway Settings > Gateway URI	http://[host name]:9300/bi/v1/disp
Environment	Dispatcher Settings > External dispatcher URI	http://[host name]::9300/p2pd/servlet/dispatch

Environment	Dispatcher Settings > Internal dispathcher URI	http://[host name]::9300/p2pd/servlet/dispatch
Environment	Other URI Settings > Dispatcher URI for external applications	http://[host name]:9300/bi/v1/disp
Environment	Other URI Settings > Content Manager URIs	http://[host name]::9300/p2pd/servlet
Environment > Configuration Group	Group Settings > Group name	GRP_[MachineName]
Environment > Configuration Group	Group Settings > Group Contact Host	[MachineName]
Environment > Configuration Group	Local Member Settings > Member Coordination Host	[MachineName]
Security > Cryptography > Cognos	Identity name > Server common name	[MachineName]
Security > Cryptography > Cognos	Subject Alternative Name > DNS names	[MachineName]
Local Configuration > Advanced Properties	dbmsType	ORA (for Oracle) SQL (for SQL Server)

3. In **IBM Cognos Configuration**, click the **Start** ▶ button.

4. If you receive the message "The configuration settings have changed. Do you want to save the changes?", click **Yes**.

   The program verifies the system connections and settings, builds the reporting database, and then starts the Business Insight service. Because the program builds the reporting database the first time you start the service, this process may take a few minutes to complete.

5. After the service is started, click **Close**.

   Note If you encounter any errors during this step, see the Troubleshooting Business Insight installation section of this guide.

Configure Login on Business Insight with Introspection Token to support SSO Login with Perceptive Content

To enable SSO login between Perceptive Content and Business Insight you must configure Business Insight to use login based on the introspection token. This configuration establishes the trust required between the two applications and enables access to Business Insight without requiring a new login from the user. To configure Perceptive Content to support this login you must complete the following steps.

1. Log in with your credentials in the **IBM Cognos Analytics** web home page.

2. Navigate to **Manage>Configuration>System>Security**.

3. Click the **Security** pane.

4. In the **Login parameters allowed in URL** box, type **m_bildentityToken**.

5. Click **Apply**.

6. On the Perceptive Content Server, run the below command to generate the introspection token for Business Insight.

```
intool.exe --cmd create-introspection-bearer-token —file

c:\inserver\bearer-tokens\introspection-bearer-token.txt
```

   See the Generate keys and certificates for Perceptive Content token authentication to view the complete steps to generate the token.

7. On the Business Insight Server, navigate to the Cognos installation directory. In the configuration folder open the **INAuth_Config_ImageNow.properties** file with a text editor and set the `integration.server.introspection.token` value that was previously generated.

   Note: While saving ensure the file is encoded to 'UTF-16-LE_BOM'

8. Set the value for `license.group.id`. See the Validate and introspect a Perceptive identity token to know how to get the `lgid` value.

9. On the **Perceptive Server**, navigate to Perceptive>Installation>etc. Open `inserver.ini` file using any text editor.

10. Set the `psw.identity.token.allowed.scopes` value to `psw-bi-auth`. See below

```
psw.identity.token.allowed.scopes=psw-bi-auth
```

   See the Whitelist custom scopes for Perceptive identity tokens for additional information.

11. Save and close the files.

12. Restart Perceptive Server and then restart IBM Cognos.

Configure Internet Information Services (IIS) for IBM Cognos 11.x

The need for an IIS Gateway may depend on specific requirements, such as Single Sign-On (SSO) or load balancing. If you do not need functionalities that requires an IIS Gateway, you can use Business Insight without Internet Information Services (IIS). It is recommended to evaluate your requirements before opting for an IIS Gateway.

To configure IIS for IBM Cognos 11.x, complete the following steps below or refer to the IIS Script document. You can find the IBM IIS Gateway Configuration tool and guide in the **[drive]:\Program Files\ibm\cognos\analytics\cgi-bin\templat\IIS** folder.

Prerequisites

Verify the following software and tools are installed before configuring IIS.

- IBM Cognos Analytics Gateway

- Internet Information Services 7.5 or above

- Supported version of Microsoft Internet Information Services with following features:

  - World Wide Web Services > Application Development Features > ISAPI Extentions and ISAPI Filters

  - World Wide Web Services > Security > Request Filtering and Windows Authentication

- Application Request Routing (ARR) for IIS

    Note: Go to https://www.iis.net/downloads/microsoft/application-request-routing to install ARR.

Clear old IIS configuration

To clear old IIS configuration, complete the following steps.

1. Open IIS.

2. In the **Connections** pane, expand the appropriate connection and then click **Application Pools**.

3. Under **Applications Pools**, right-click **Cognos 11 App Pool** and select **Stop**.

4. Complete expand the **Cognos 11 App Pool** tree**.**

5. Right-click **sso application** and select **Remove**.

6. Right-click **ibmcognos** and select **Remove**.

7. Under **Applications Pools**, right-click **Cognos 11 App Pool** and select **Delete**.

8. Close IIS.

9. Navigate to the Cognos gateway install directory and delete the following web.config files:

    - cgi-bin\web.config

    - webcontent\web.config

    - webcontent\bi\web.config

Set variables

Complete the following steps to set IIS variables.

1. Navigate to the **[drive]:\Program Files\ibm\cognos\analytics\cgi-bin\templates\IIS** folder.

2. In a text editor, open the **CA_IIS_config.bat** configuration file.

3. Modify the appropriate variables.

    Note: For detailed information, refer to the **IIS Script document (IIS Script doc.docx)** in the **[drive]:\Program Files\ibm\cognos\analytics\cgi-bin\templates** folder.

4. Save the file and close the text editor.

Run the automated script for IIS Gateway

Complete the following steps to run the automated script for IIS Gateway.

1. Open a command prompt with administration privileges.

2. Change the directory to **[drive]:\Program Files\ibm\cognos\analytics\cgi-bin\templates\IIS**.

3. Execute the **CA_IIS_Config.bat** configuration file. The command lists your configured variables. Complete one of the following options:

    - If any of the variables are incorrect, exit and then reopen the configuration file in a text editor and correct the issue.

    - If the variables are correct, press **y** to continue.

Enable SSO

Complete the following steps to enable SSO.

1. Open IIS Manager.

2. Expand the web site and alias you just created.

3. Click the **bi** folder.

4. Under IIS, click **URL Rewrite**.

   Note: If URL Rewrite is not listed, clear all the configuration, install Application Request Routing, and re-run the automated script.

5. In the list, locate and click **SSO Login**. In the right pane, click **Enable Rule**.

6. In the list, locate and click **Legacy SSO**. In the right pane, click **Enable Rule**.

7. Close IIS.

Configure the Perceptive Content connection

To configure Business Insight for initial use, you must modify some settings in the **inserver.ini** file and run an INTool command on the Perceptive Content Server computer to prepare the Perceptive Content database for reporting.

Note If Business Insight is installed on the same computer as the Perceptive Content Server, the values for the inserver.ini settings and the database enumerations are passed from the Business Insight Installer and these steps are not required. If it is installed on a different computer, you must configure these settings on the Perceptive Content Server computer.

Configure the inserver.ini

The following steps explain how to configure the inserver.ini file for Business Insight.

1. On the Perceptive Content Server computer, navigate to **[*drive*]:\inserver\etc** and open the **inserver.ini** file with a text editor.

2. Under **[Business Insight]**, modify the following settings.

   - In the **business.insight.authnamespace** setting, type **ImageNow**.

   - In the **business.insight.url** setting, enter the following URL(IIS Gateway is setup), where *[host name]* represents the server where the Cognos Gateway is installed.

     ```
     http://[host name]/ibmcognos/bi/v1/disp
     ```

     If Gateway is not setup, set the provided by IBM Cognos Configuration. Open **IBM Cognos Configuration**, go to **Environment**, select the value against **Gateway URI**. The url should be similar to below:

     ```
     http://[host name]:9300/bi/v1/disp
     ```

     Important If your environment requires you to secure Business Insight with an SSL certificate, see Appendix D of this document for configuration instructions.

   - In the **business.insight.dispatcher** setting, enter the dispatcher address. The dispatcher address can be found from **IBM Cognos Configuration** -> **Environment** -> **Dispatcher URIs for gateway**. It will be something similar to

     ```
     http://[host name]:9300/bi/v1/disp
     ```

- In the **business.insight.max.output.default** setting, enter the number of saved report output versions you want to retain at one time. This default can be changed for a report or report folder.

3. Save and close the **inserver.ini** file.

Prepare your Perceptive Content database

The following steps explain how to run the commands that are required for the Perceptive Content database to run reports.

1. On the Perceptive Content Server computer, access a **Command Prompt** window.

2. In the **Command Prompt** window, perform one of the following actions.

   - In Windows, change to the **[*drive*:]\inserver\bin64** directory.

   - In UNIX, change to the $**IMAGENOWDIR/bin** directory.

3. Complete the following substeps.

   1. To create the database enumeration values needed for reporting, at the prompt, enter the following command.
   ```
   intool --cmd populate-enumerations
   ```

   2. To create the calendar values needed for reporting, at the prompt, enter the following command.
   ```
   intool --cmd populate-calendar
   ```

Install Perceptive Content Client integration

To view Business Insight reports in your Perceptive Content Client, you must update your Perceptive Content Client installation for each client computer that will use Business Insight reports.

Important You only need to perform this step if you did not install Business Insight Integration as part of your Perceptive Content Client installation.

1. On the **Start** menu, access the **Control Panel** and click **Add and Remove Programs**.

   Note If you use a Windows Vista or Windows Server 2008 operating system, this option is **Programs and Features**.

2. In the **Add and Remove Programs** dialog box, select **Perceptive Content Desktop Client** and click **Change**.

3. In the **Welcome to the Installation Wizard for Perceptive Content Desktop Client** page, click **Next**.

4. In the **Program Maintenance** page, select **Modify** and click **Next**.

5. In the **Custom Setup**, click the down arrow for **Business Insight Integration** and select **This feature will be installed on the local hard drive**.

6. Click **Next**.

7. In the **Ready to Modify the Program** page, click **Install**.

8. In the **InstallShield Completed** page, click **Finish**.

Obtain the license files

To obtain the hardware information for the Perceptive Content Server, you must be the admin user on Windows.

1. Generate a system fingerprint using the following substeps.

   1. Click **Start**, point to **All Programs > ImageNow**, and then click **ImageNow Management Console**.

   2. In the **Login** page, click **License Manager**.

   3. In the **License Management** dialog box, select **Save system fingerprint** and click **OK**.

   4. In the **Save As** dialog box, enter a name for the file and then navigate to the location where you want to save the report. Click **Save**.

2. Contact your Enterprise Software representative for instructions on where to send the system fingerprint file to obtain your license. The system fingerprint file has a SYSFP extension.

3. When you receive the license files, store the license files in a temporary directory on the Perceptive Content Server computer.

License Business Insight

The following steps explain how to install the Business Insight license and author licenses.

Install Perceptive Content product licenses

Before entering your licenses, you must have installed the Perceptive Content Server and at least one Perceptive Content Client. You must have Service Administrator privileges to install Perceptive Content licenses. The Perceptive Content Client must be available on a Windows machine in order to install the Perceptive Content product licenses.

1. When you receive the license files from your Enterprise Software representative, copy them to a temporary folder where you can access them with a Perceptive Content Client.

2. To upload licenses, complete the following substeps.

   1. Click **Start**, point to **All Programs > ImageNow**.

   2. In the login page, click **License Manager**.

   3. In the **License Management** dialog box, select **Upload Licenses** and click **OK**.

   4. Navigate to the folder where you stored the Perceptive Content license files, select the LIC files to upload, and click **Open**.

   5. Enter the **User Name**, **Password**, and **Server Location** and click **OK**.

   6. Optional. The **License Upload** dialog box lets you view the type name, actual license code, and status of each license upload. To display detailed information for a specific license, select the appropriate row.

3. Click **OK**.

Run the Business Insight integration utility

The Business Insight integration utility performs the necessary actions to securely authenticate your Business Insight system and specify a user who can perform administrative actions for Business Insight in Perceptive Content.

Define the archive import

1. Access the **Blintegrator** folder that opened automatically after installation. If this folder does not appear, navigate to **[*drive*]:\Program Files\ibm\cognos\analytics\bin\utilities\biintegrator**.

2. Open the **biintegrator.properties** file with a text editor, such as Notepad.

3. To change the report archive file the integration utility installs, copy the report archive file to [*drive*]:\Program Files\cognos\analytics\deployment**.

4. In the properties file, in the **ARCHIVE** setting, enter the name of the file. By default, this setting specifies the report archive file for the Perceptive Content Report Library, which is installed in the file directory.

5. To skip the integration step that includes installing the Perceptive Content Report Library or the specified report archive file, in the properties file, set the **ARCHIVE.IMPORT.SKIP** value to **1**.

6. Save and close the file.

Run the integrator

1. Access the **Blintegrator** folder that opened automatically after installation. If this folder does not appear, navigate to **[*drive*]:\Program Files\ibm\cognos\analytics\bin\utilities\biintegrator**.

2. Double-click the **run.bat** file for the Business Insight integration utility.

3. Verify that the utility completes successfully. If the data source connection or archive import process fails, see the Troubleshooting Business Insight installation section in this document.

4. When prompted, press any key to close the utility.

   Note This utility creates the connection to the Perceptive Content database you specified during installation. If you want to create connections to additional Perceptive Content databases, use the procedure in Appendix A of this document.

Connect to Perceptive Content

For your consumers to access reports within the Client, you must configure report privileges. This is done directly in Cognos. For the Reports button to be available in the Perceptive Content clients, you must also have the Reports View privilege.

Note A Perceptive Manager can grant the Reports View privilege without requiring the Manage Reports privilege. The Manage Reports privilege has changed and will no longer implicitly grant you Run and View privileges in Cognos.

Business Insight privileges

You maintain most Business Insight privileges directly through IBM Cognos, starting with Perceptive Business Insight version 7.1.*x*. However, you must assign some privileges in Management Console to allow users access to view, author, and schedule reports.

BI Owner

The BI Owner role provides the user the necessary privileges to manage or administrate and author under one role assignment. However, to access the Reports button on the Perceptive Content toolbars, another manager-level user must assign the BI Owner the Global > Reports > View and the Reports > View privileges in Management Console. Note that you must install Business Insight for these privileges to appear.

Reassign BI Owner privilege

You select the BI Owner during the Business Insight installation process. There can only be one BI Owner in the system, but you can switch the BI Owner credentials to another user at any time. To change the BI Owner role to a different user account, complete the following steps.

1. On the system where you installed **Business Insight**, open the **INAuth_Config_ImageNow.properties** file in Notepad from the **Program Files > ibm > Cognos > analytics > configuration** folder.

   Note: While saving ensure the file is encoded to 'UTF-16-LE_BOM'

2. In the properties file, following the text **biowner=**, replace the user name of the current BI Owner with a valid **Perceptive Content** user name.

3. Click **File** and then **Save**.

4. Run the BIIntegrator.

5. To change the BI Owner immediately, restart the Cognos service.

Note The Perceptive Content Custom Authenticator stores the BI Owner user in a time-based cache. It may take up to thirty minutes before the new role assignment is in effect, but restarting the Cognos service changes the BI Owner immediately.

View User

To view reports, you must grant the user the Read, Execute, and Traverse permissions to the report folder or report in Cognos. Refer to the IBM website for Cognos capabilities and permissions documentation. To view reports in Perceptive Content Client, the user must also have the Reports > View privilege in Management Console.

Author User

To create and modify customized Business Insight reports, the user must be a member of the Cognos Author role. To view reports in Perceptive Content Client, the user must also have the Reports > View privilege in Management Console.

Scheduling

To schedule Business Insight reports, the user must have the "Write" permission to a report folder or report in Cognos. Scheduling reports does not involve any additional steps when trusted credentials are established using the standard methods of authentication. Users with OIDC credentials can schedule reports to run at any time in the future by logging in using OIDC provider. OIDC users must follow the below steps to schedule reports to run in future time.

1. Log in with your credentials in the **IBM Cognos Analytics** web home page.

2. Click the **Profile<** **>** icon and navigate to **My Preferences > Personal**.

3. Click the **Advanced** pane and then click **Renew**. The **Renew** dialog box appears.

4. Enter the OIDC credentials.

5. Click **OK**. A confirmation message appears.

6. This credential is now recorded as a trusted credential and the scheduler can use it.

Note: Users logged in using Perceptive Namespace credentials are not required to perform these steps.

Troubleshooting Business Insight installation

This section outlines procedures for correcting errors encountered during installation of Business Insight.

Issues starting the Business Insight service

If you encounter an issue while starting the Business Insight service in the Business Insight Configuration program, you can use this section to resolve the issues.

When starting the service, the content manager connection is not successful

The settings in this pane default from the settings entered in the Business Insight installation wizard. You can use this pane to change these settings as necessary.

1. To open IBM Cognos Configuration, point to **All Programs > IBM Cognos Analytics > IBM Cognos Configuration**.

2. In the **Explorer** pane, under **Content Manager** select the content store. By default, this name is **INOWBI**.

3. Verify that the type of database you use for the Business Insight content store displays in the **Value** column for the **Type** setting.

4. To change the database server name or port, in the **Value** column of the **Database server with port number or instance name** setting,

   Note If you installed Business Insight using **localhost** as the database server name in your content store settings, you must change the server name from **localhost** to the server name. For example, **smithj:389** or **smithj\administrator**.

5. To change the logon information for the content store database, in the **Value** column of the **User ID and password** setting, click the **Edit** 🖉 button and then, in the **Value – User ID and password** dialog box, enter the logon information for the user that administers the content store and click **OK**.

6. To change the name of the content store, in the **Value** column of the **Database name** setting, type the name.

7. To configure the content store connection, in the **Explorer** pane, under **Content Manager**, right-click **INOWBI** and click **Test**.

When starting the service, Tomcat returns an error

If you are installing Business Insight on a computer with an active firewall, you must add a rule to your firewall settings.

1. To open Windows Firewall wth Advanced Security, point to **Administrative Analytics > Windows Firewall with Advanced Security**.

2. In the left pane, under **Windows Firewall with Advanced Security**, select **Inbound Rules**.

3. In the **Actions** pane, under **Inbound Rules**, select **New Rule**.

4. In the **New Inbound Rule Wizard** dialog box, complete the following substeps.

    1. In the **Rule Type** page, select **Port** and click **Next**.

    2. In the **Protocol and Ports** page, select **TCP** and **Specific local ports**.

5. In the **Specific local ports** dialog box, type **9300**, **9362**, **9399** and click **Next**.

    1. In the **Action** page, select **Allow the connection** and click **Next**.

    2. In the **Profile** page, select the **Domain, Private**, and **Public** check boxes and click **Next**.

    3. In the **Name** page, in the **Name** box, type **Business Insight** and add an optional description.

    4. Click **Finish**.

6. In the **Inbound Rules** pane, verify the **Business Insight** rule is enabled.

Note By default, Business Insight uses port 9300 to communicate with the web application server to host report content and port 9362 to communicate with the local log server.

Issues running the BI Integrator

If the Business Insight integration utility fails to create the INOW data source or deploy the report package library archive, you must take the appropriate corrective action using one of the following procedures.

Note To simplify troubleshooting issues with the BI integration utility, verify you can access the configuration.dir file in the **[*drive*]:\Program Files\cognos\analytics** folder.

When connecting to the INOW database, the data source connection is not successful

If the data source test connection and creation step fails, complete the following procedure.

1. Verify that the Perceptive Content server service is started.

2. To open the **Blintegrator** folder, navigate to **[*drive*]:\Program Files\cognos\analytics\bin\utilities**.

3. Open the **biintegrator.properties** file in a text editor

4. Verify the following settings are configured correctly.

Setting	Value
IN_DB	The name of the Perceptive Content database against which you want to report.
IN_DB.DBMS	The database type for the Perceptive Content database. Valid values are SQL and ORA.
IN_DB.SERVER	The name of the server that hosts the DBMS with the Perceptive Content database.
IN_DB.USERNAME	The user name of a user in the Perceptive Content database with access privileges.
IN_DB.PASSWORD	The password of the database user.
IN.DB.PORT	The port number Business Insight uses to connect to the Perceptive Content database. By default, this port is 1433 for SQL Server and 1521 for Oracle.

Setting	Value
CM_SERVER	The name of the computer where you installed Business Insight.
CM_PORT	The port Business Insight uses to connect to the DBMS server computer. By default, this value is 9300.
ARCHIVE	The name of the report archive file to import from the deployment directory.
ARCHIVE.IMPORT. SKIP	Whether to skip the archive import process when running the integrator. By default, this value is 0 and the archive import is not skipped.

5. Save and close the file.

6. If you are connecting to an Oracle DBMS, verify the following information.

    1. On the computer where you are installing Business Insight, verify that the Oracle client application is installed.

    2. Run the Oracle **Net Configuration Assistant** to set up the IP address and service name for the Perceptive Content database in the **tnsnames.ora** file.

7. Run the Business Insight integration utility again.

When connecting to the INOW database, you receive an unspecified error

If the data source creation fails, you may receive a generic error message. To determine the specific error that occurred, attempt to create the data source connection manually from the Cognos Administration portal. This procedure results in a more specific error message, which you can use to troubleshoot your particular issue. For instructions on troubleshooting a specific error, view the Cognos support documentation.

To create an IBM Cognos Data Source Connection manually, complete the following steps in the IBM Cognos Administration portal.

1. On the **Configuration** tab, under **Data Source Connections**, click the **New Data Source** button.

2. In the **Name** box, type **INOW** and click **Next**.

3. Under **Type**, select either **Microsoft SQL Server (Native SQL Client)** or **Oracle** from the list, depending on your environment.

4. Under **Isolation Level**, select **Specify a value** and select **Read uncommitted** from the drop-down list.

5. Make sure **Configure JDBC connection** is not selected and click **Next**.

6. Complete the following step that applies to your environment.

    - **SQL**. In the **Specify the Microsoft SQL Server (Native SQL Client) connection string – New Data Source Wizard** page, under **Server name**, type the name of your database server. The server name displays in the following format: server name, port number. For example, MLBBI2012,1433

    - **Oracle**. In the **Specify the Oracle connection string – New Data Source Wizard** page, under **SQL*Net connect string**, type your SQL Net connection identifier, found in the **tnsnames.ora** file on your local system.

7. Under **Signon**, select **Signons**, **Password**, and **Create a signon that every group can use**, and then type your database connection user information.

    Note The default user name is **inuser**.

8. Under **Testing**, click **Test the connection**.

9. In the **Test the connection** page, click **Test**.

10. In the results table, under **Message**, note the displayed error message if the test failed.

    Note If the connection resulted in an error, search the official Cognos support documentation to resolve your issue or contact your locate IT resource.

11. If the test succeeded, return to the previous screen of the wizard and click **Next**.

12. If you use an Oracle environment, complete the following additional substeps.

    1. In the **Set the commands – Open session commands** page, select the **Open session commands** check box and select the **Set** option.

    2. In the **Set the commands** screen, copy the contents from the **OracleOpenSession.txt** file and paste them in the **XML database commands** box in the **[*drive*]:\Program Files\cognos\analytics\bin\utilities\biintegrator** directory.

13. Click **Finish**.

When the issue is resolved, you can run the integrator again. The integration process verifies the data source connection, and if the test is successful, it continues the configuration.

When deploying the report package, the archive import process is not successful

If the Business Insight integration utility does not successfully import the report package archive, perform the following procedure.

If a message displays **in the archive import step, complete the following steps.**

Perform these steps if you receive the message or "<*Archive Name*>.zip was not found in the deployment directory. Modify the properties file to specify a different archive."

1. Verify the report archive file you want to import is stored in the **[*drive*]:\Program Files\cognos\analytics\deployment** directory.

2. Access the **Blintegrator** folder that opened automatically after installation. If this folder does not appear, navigate to **[*drive*]:\Program Files\cognos\analytics\deployment**.

3. Open the **biintegrator.properties** file with a text editor, such as Notepad.

4. In the properties file, in the **ARCHIVE** setting, enter the name of the file.

5. Verify the **ARCHIVE.IMPORT.SKIP** setting value is set to **0**.

6. Run the integration utility again. For more information, see Run the Business Insight integration utility.

If the archive import failed and you need to import the report library manually, complete the following steps.

1. Open an Internet Explorer window and, in the **Address** bar, type the Business Insight URL configured in **inserver.ini**.

    ```
    http://[host name]/ibmcognos/bi
    ```

2. Log in as the Perceptive Content user you want to specify as the Business Insight administrator.

3. In the Business Insight administrative web interface, complete the following substeps.

   1. In the welcome page, click **Manage** and then **Administrative Console**.

   2. On the **Configuration** tab, in the left pane, click **Content Administration**.

   3. On the toolbar, click the **New Import** button.

   4. In the **Deployment Archive** page, select the package and click **Next**.

   5. In the wizard, verify or change the name, add an optional description and screen tip, and then click **Next**.

   6. In the folder content page, under **Public folders content**, select the check box in the gray title bar to select all the report folders in the list, and then click **Next** until you reach the **Action** page.

   7. In the **Action** page, click **Save and run once** and click **Finish**.

   8. Under **Time**, select **Now** and click **Run**.

   9. In the confirmation prompt, click **OK**.

4. Run the integration utility again. For more information, see Run the Business Insight integration utility.

Issues logging into Business Insight

If you encounter any of the following issues while trying to connect to Business Insight, take the appropriate corrective action.

When accessing Business Insight, an authorization message displays

If your application pool identity uses a local policy, Business Insight connects to the default web site automatically. If, for security reasons, your application pool identity uses network service, the message "You do not have authorization to access this page" displays when you access Business Insight. To connect to Business Insight, complete the following steps.

1. From the **Control Panel**, click **Administrative Tools** and select **Local Security Policy**.

2. In the **Local Security Settings** dialog box, in the left pane, select **Local Policies**.

3. In the right pane, double-click **User Rights Assignment** and right-click **Adjust Memory Quotas for a Process and select Properties**.

4. In the **Adjust Memory Quotas for a Process Properties** dialog box, click **Add Users or Group** and add **Network Service**.

5. Restart IIS.

BI Administrator cannot access Business Insight reports

During the Cognos installation, you promote a Perceptive Content user to the BI Administrator role. Although the BI Administrator has unrestricted capabilities in Cognos, the BI Administrator does not automatically have access to Business Insight functionality in Management Console or the Client if the user does not have the Report View privilege.

Appendix A: Report on multiple databases

Using Perceptive Content Business Insight, you can change your configuration to report on a database other than INOW. To do so, you must create an additional data source for each database you want to use for reporting.

Important Because Business Insight is designed to report using the data in the INOW database, you must change the name of the data source you want to report against to INOW and change the INOW data source name to something else. You can have any number of data sources configured in Business Insight, but only one data source can be named INOW at any given time.

Create additional data sources

1. In the Business Insight administrative web interface.

2. Click the **Configuration** tab.

3. In the left pane, select **Data Source Connections** and click the **New Data Source** button.

4. In the **Specify a name and description** page, complete the following substeps.

    1. In the **Name** box, assign a name other than INOW and add an optional description.

        Note We recommend using the name of the database this data source references in both the **Name** and **Description** boxes.

    2. Click **Next**.

5. Create the data source according to the database type.

Specify the reporting database

1. In IBM Cognos Administration, on the **Configuration** tab, in the left pane, click **Data Source Connections**.

2. In the right pane, for the current **INOW** data source, click the **Set Properties** button.

3. In the **Set properties – INOW** page, change the entry in **Name** box to something other than INOW.

    Note If you want to report on an INOW database on another server, we recommend indicating the server name in the **Name** or **Description** box or both. For example, INOW_SMITHA.

4. Click **OK**.

5. For the data source you want to run reports against, click the **Set Properties** button.

6. In the **Set properties** page, change the entry in the **Name** box to **INOW**.

7. Click **OK**.

Appendix B: Uninstall Business Insight

Warning If, at any time, you choose to uninstall Business Insight, you remove all report data as well as the Business Insight applications, such as Query Studio and Report Studio. Enterprise Software is not responsible for any data you remove in this manner.

Stop the Business Insight website

1. To open Internet Information Services (IIS), complete the following substeps.

   1. Right-click **My Computer** and select **Manage**.

   2. In **Computer Management**, in the left pane, double-click **Internet Information Services (IIS)**.

2. In the **Internet Information Services** window, in the left pane, expand the computer name and the **Web Sites** folder.

3. Select **Default Web Site** and click the **Stop Item** button.

4. Expand **Default Web Site** and delete the **Business Insight** web directory. By default, the name of this directory is **ibmcognos**.

5. Exit IIS.

6. Stop the IIS Admin service.

Run the uninstall wizard for Business Insight

1. Access the **Control Panel** and select **Add and Remove Programs**.

2. In **Add or Remove Programs**, select **ImageNow Business Insight** and click **Remove**.

3. In the confirmation prompt, click **Yes**.

4. Follow the on-screen prompts to complete the removal process and then click **Finish**.

Run the uninstall wizard for IBM Cognos

1. Click **Start**, point to **All Programs > IBM Cognos Analytics > IBM Cognos Configuration -> Right Click -> Uninstall IBM Cognos**.

2. Follow the on-screen prompts to complete the removal process and then click **Finish**.

Remove the content store

- On the computer that hosts your DBMS, delete the reporting database. By default, the name of this database is **INOWBI**.

Appendix C: Server and client configuration tables

This section outlines settings you configure in INI files associated with Perceptive Content Business Insight installation setup. They are listed in alphabetical order for quick reference.

inserver.ini

The following table provides definitions and sample data for the settings in the inserver.ini configuration file. This table displays the INI settings under group headings in brackets, for example, [General], in the order the groups appear in the INI file. Each setting offers two or more options, which are defined in the table below along with a description of each setting and its options. Use this table as a guide when customizing the file.

Group	Setting	Options	Description
Business Insight	business.insight.url	Valid URL for Business Insight	Stores the URL, including the server and port, of the Business Insight reporting website set up in your web application server. The default value is `http://[host name]:9300/bi`. In IIS gateway if you use an SSL certificate , this value is `https://[host name]/ibmcognos`
	business.insight.dispatcher	Valid URL for Cognos dispatcher address.	Stores the URL of the Cognos web service required for the Client to make administrative calls to the Cognos server. The default dispatcher port number is `9300`. To verify your current dispatcher address, look in Cognos Configuration.
	business.insight.authnamespace	Valid namespace	Stores the authentication namespace used to connect to Business Insight. By default, this value is `ImageNow`.
	business.insight.max.output.default	Any positive integer	This setting stores the default number of prior versions of report output that displays when you set the value in Perceptive Content Management Console. The default value is `5`.

Note If Business Insight is installed on the same computer as the Perceptive Content Server, the Business Insight installer creates the values for these settings automatically.

Appendix D: Configure an SSL certificate

If your environment requires you to secure your Business Insight default website with an SSL certificate, use the following procedure to enable the secure socket layer. You should complete this procedure when you configure your Business Insight default website.

If you purchased an SSL certificate, you can alternatively import this certificate in IIS, 7.x instead of creating a self-signed certificate. To complete this procedure, contact your system administrator.

Add a self-signed certificate in IIS 7

1. In **Internet Information Services (IIS)**, in the **Connections** pane, select the computer name where you installed Business Insight.

2. In the **Features View**, under **IIS**, double-click **Server Certificates**.

3. In the **Actions** pane, select **Create Self-Signed Certificate**.

4. In the **Create Self-Signed Certificate** dialog box, enter a name for the certificate and click **OK**.

5. In the **Connections** pane, select **Default Web Site** and then, in the **Actions** pane, select **Bindings**.

6. In the **Site Bindings** dialog box, click **Add**.

7. In the **Add Site Binding** dialog box, complete the following substeps.

    1. In the **Type** list, select **https**.

    2. In the **SSL certificate** list, select the name of the certificate you created in the previous steps.

    3. Click **OK**.

8. In the **Site Bindings** dialog box, click **Close**.

9. In the **Actions** pane, select **Browse *:[*port number*] (https)**, where *[port number]* is a placeholder for the port number specified in the site binding definition. By default, this value is 443.

    Note If you change the port number from its default value, you must update the port number to the **business.insight.url** setting in the inserver.ini file.

10. In the **Internet Explorer** window that displays, select **Continue to this website**.

11. In **Internet Information Services (IIS)**, in the **Features View**, select **SSL Settings**.

12. Under **SSL Settings**, select the **Require SSL** check box and then, in the **Actions** pane, click **Apply**.

13. Restart IIS.

Configure Perceptive Content Server for SSL

1. On the Perceptive Content Server computer, navigate to **[*drive*]:/inserver/etc** and open the **inserver.ini** file with a text editor, such as Notepad.

2. Under **[Business Insight]**, in the **business.insight.url** setting, change the value to **https://[*host name*]:[*port*]/ibmcognos**, where [*host name*] is a placeholder for the computer where Business Insight is installed.

   Note If your Business Insight site binding definition uses a port other than 443, you must append the port number to this address. For example: **https://[*host name*]:1234/ibmcognos**

3. Save and close the **inserver.ini** file.

4. Restart the Perceptive Content Server service.

   Note: Business Insight and Integration Server must be able to perfom SSL handshake by importing the certificate into the java trust store for Cognos. For additional information, refer to Appendix G of this document.

Appendix E: IBM Cognos Analytics 11.1.x upgrade

Upgrade from Cognos 11.1.x

Backup

To backup you Cognos files and environment, complete the following substeps.

1. Navigate to the Cognos installation directory and backup the following files:
   - \analytics\bin\utilities\biintegrator\biintegrator.properties
   - \analytics\configuration\INAuth_Config_ImageNow.properties

2. To fully backup your Cognos environment, complete the following substeps.
   1. In the Business Insight administrative web interface, complete the following substeps.
   2. In the welcome page, click **Manage** and then **Administrative Console**.
   3. On the **Configuration** tab, in the left pane, click **Content Administration**.
   4. On the toolbar, click the **New Export** button.
   5. In the wizard, type the name and add an optional description, and then click **Next**.
   6. Select **Select the entire Content Store**, select **Include user account information** if you want to backup Accounts and Users and then click **Next**.
   7. Click **Next**.
   8. To enable encryption, type the appropriate password and then click **OK**.
   9. Click **Next** and then click **Finish**.

3. Open the IBM Cognos Configuration tool and stop the Cognos services.

4. Open Database Management Tools and complete a full backup of Content Store.

Upgrade

To upgrade from Cognos 11.1.x to latest version of Cognos 11.1.7 Interim Fix 9, navigate to the the directory where you unzipped Perceptive Content Business Insight Foundation Interim Fix 9.zip file and then follow the steps below:

1. Stop the Cognos services.

2. Run the **analytics-installer-2.2.16-win.exe** installer.

3. In the **Installation Language** list, select the appropriate language and click **Next**.

4. On the **Repository Location** page, select **casrv-11.1.7-2205311318-winx64h.zip** and click **Next**.

5. On the **Product Install** page, select **IBM Cognos Analytics** and click **Next**.

6. On the **License Agreement** page, review the license information, select **I accept the terms of the License Agreement** and then click **Next**.

7. On the **Location** page, in the **Install location** field, enter the location where you want Cognos to be installed and click **Next**.

8. On the confirmation dialog box, click **Yes** to confirm the installation location.

9. Click **Install**.

10. Set the **JAVA_HOME** variable to the latest IBM JRE path: **C:\Program Files\ibm\cognos\analytics\ibm-jre\jre**.

11. Open **IBM Cognos Configuration** and start the Cognos services.

12. Run the ImageNowBI installer in repair mode.

13. Run the biintegrator installer. If required, update the jre path in the run.bat file.

Note: You can also follow the above steps to install the interim resolution for the Log4j vulnerabilities.

Restore

To restore Cognos files back to their respective locations, complete the following steps.

1. Navigate to **\analytics\bin\utilities\biintegrator\biintegrator.properties** and restore the files.

2. Run the biintegrator installer.

3. If environment settings are not as expected, complete the following substeps.

    1. Stop all services.

    2. Close IBM Cognos Configuration.

    3. Restore the backed-up file **\analytics\configuration\INAuth_Config_ImageNow.properties**.

    4. Open IBM Cognos Configuration..

    5. When prompted that **older versions of Configuration files were found and configuration files have been upgrade to the latest version** click **OK** and then click **Save**.

Upgrade from Cognos 11.1.3 to Cognos 11.1.7

To upgrade from Cognos 11.1.3 to Cognos 11.1.7, run the 11.1.7 installer.

Upgrade from Cognos 10.2.x Cognos Analytics 11.1.x

When using Business Insight 7.x and upgrading from IBM Cognos version 10.2.x to Cognos Analytics 11.1.x, you can either install Cognos Analytics 11.1.x on a separate server to compare the upgrade to the server running 10.2.x, or fully uninstall Cognos10.2.x and install version Cognos Analytics 11.1.x. To ensure a smooth integration between Business Insight and Cognos after the upgrade, complete one of the following installation options.

The following steps allow you to migrate existing reports from Cognos 10.2.x or earlier. These reports are not fully compatible with Cognos 11, and the report output format as well as historically ran report might have some formatting issues. The report bundle with latest setup has all the fixes and is recommended for better experience.

Uninstall Cognos 10.2.1 and install Cognos Analytics 11.1.x

To uninstall Cognos 10.2.1 and install Cognos Analytics 11.1.x, complete the following steps. These steps also allow you to migrate existing reports from Cognos 10.2.x or earlier.

1. Back up your existing content using Cognos. For instructions on creating a deployment archive, see the IBM Cognos website.

2. Stop the Cognos services.

3. Copy the deployment archive from the **C:\Program Files (x86)\ibm\cognos\c10\deployment** folder to a safe location.

4. Uninstall ImageNow Business Insight from Programs and Features.

5. Uninstall the previous version of Cognos. For instructions on uninstalling IBM Cognos Business Intelligence, see the IBM Cognos website.

6. Delete all content from the **C:\Program Files (x86)\ibm\cognos\c10** directory.

7. Install IBM Cognos Analytics Business Intelligence version 11.1.x, for details refer to page 10.

8. Restore your existing content store in your respective database.

9. Start Cognos Configuration, save the configuration settings, and start the services.

10. Copy the deployment archive from the old server to the new server location. The file is stored in the **<installation dir>\ibm\cognos\analytics\deployment** directory. This step is not required if you do not want to migrate existing reports and take latest set of reports.

11. Run the **BIIntegrator run.bat** file.

12. On Perceptive Content Server, update the **inserver.ini** file to use the new **business.insight.url** and t**he business.insight.dispatcher** addresses. Business Insight Installation and Setup Guide 31.

13. Restart the Perceptive Content Server service.

14. Open IBM Cognos Connection and upgrade your report specifications. For instructions on upgrading report speci from fications, see the IBM Cognos website.

15. Test the functionality in Perceptive Content Client.

Install Cognos Analytics on a separate server

To install Cognos Analytics on a separate server, complete the following steps.

1. Back up your existing content using Cognos. For instructions on creating a deployment archive, see the IBM Cognos Analytics website.

2. On a second server, install IBM Cognos Business Intelligence version 11.

3. Install any fix packs.

4. Create a new content store database. For more information, see the Create and configure the content store database section.

5. Run the Perceptive Business Insight 7.x install.

6. Start Cognos Configuration, save the configuration settings, and start the services.

7. Copy the deployment archive from the old server to the new server location. The file is stored in the **<installation dir>\ibm\cognos\analytics\deployment** directory. This step is not required if you do not want to migrate existing reports and take latest set of reports.

8. Run the **BIIntegrator run.bat** file.

9. On Perceptive Content Server, update the **inserver.ini** file to use the new **business.insight.url** and the **business.insight.dispatcher** addresses. Business Insight Installation and Setup Guide 31.

10. Restart the Perceptive Content Server service.

11. Open IBM Cognos Connection and upgrade your report specifications. For instructions on upgrading report speci from fications, see the IBM Cognos website.

12. Test the functionality in Perceptive Content Client.

Note: During cognos installation time, no need to set the JAVA_HOME path in the Environmnetal variable section, If you set the path the cognos is unable to start because cognos is embedded with java.

Appendix F: Limitations of Different Report Formats

Limitations of Excel Data Format

Reports with crosstabs or charts are not supported in the Microsoft Excel Data output format in IBM Cognos version 11. For more information, see this IBM Support Page.

Appendix G: Add Keys to Perceptive Content Java Truststore

Add Keys to Perceptive Content Java Truststore

To add keys to Perceptive Content Java truststore, complete the following steps.

1. Run the command

```
"%JAVA_HOME%/bin/keytool" -import -file <path to certificate> -alias
<alias> -keystore <truststore path> -storetype JKS.
```

file is the path to the certificate

alias specifies the identifier to associate with the imported certificate

keystore specifies the path of the keystore

storetype specifies the path of the storetype

> **Note**: For the keystore type, only JKS is supported. This command creates a truststore file, if there is none.

2. Review and validate the details associated with the certificate and then type **Yes** to continue.

Appendix H: Business Insight Upgrade

Upgrade Business Insight

It is recommended to take a backup of Business Insight configuration before starting the process to upgrade. To back up, navigate to the Cognos installation directory and back up the following files.

- \analytics\bin\utilities\biintegrator\biintegrator.properties
- \analytics\configuration\INAuth_Config_ImageNow.properties

To upgrade the Business Insight complete the following steps.

1. Stop IBM Cognos

2.Using the administrator privilege, run the installer file "BI_64Setup_XXX.exe". A confirmation message is displayed.

3. Click **Yes** to confirm the upgrade. The installation window is displayed.

4. Click **Next**.

5. Click **OK**.

6. Click **Finish**. The installation window displays a message to restart the computer.

7. Click **Yes** to restart the computer.

Note: It is mandatory to restart the computer to upgrade Business Insight successfully. If you select **No**, you have to manually restart the computer and then start Cognos.

Appendix I: Support for OIDC Provider

Restrictions for OIDC Provider

The IdP must be configured to return "Resource Owner Password Credentials" grant type for the authenticated users to schedule reports to run at any time in the future or to run reports in the INUSER namespace.

For list of supported OIDC provider refer to the IBM documentation.

Appendix J: IBM Cognos Analytics 11.2.4 upgrade

Upgrade to Cognos 11.2.4

Backup

To backup you Cognos files and environment, complete the following substeps.

3. Navigate to the Cognos installation directory and backup the following files:

- \analytics\bin\utilities\biintegrator\biintegrator.properties
- \analytics\configuration\INAuth_Config_ImageNow.properties

4. To fully backup your Cognos environment, complete the following substeps.

    1. In the Business Insight administrative web interface, complete the following substeps.

    2. In the welcome page, click **Manage** and then **Administrative Console**.

    3. On the **Configuration** tab, in the left pane, click **Content Administration**.

    4. On the toolbar, click the **New Export** button.

    5. In the wizard, type the name and add an optional description, and then click **Next**.

    6. Select **Select the entire Content Store**, select **Include user account information** if you want to backup Accounts and Users and then click **Next**.

    7. Click **Next**.

    8. To enable encryption, type the appropriate password and then click **OK**.

    9. Click **Next** and then click **Finish**.

5. Open the IBM Cognos Configuration tool and stop the Cognos services.

6. Open Database Management Tools and complete a full backup of Content Store.

Upgrade

To upgrade from Cognos 11.1.x to latest version of Cognos 11.2.4 Fix Pack 4, navigate to the the directory where you unzipped Perceptive Content Business Insight Foundation 11.2.4 Fix Pack 4 zip file and then follow the steps below:

1. Stop the Cognos services.

2. Run the **analytics-installer-3.7.31-win.exe** installer.

3. In the **Installation Language** list, select the appropriate language and click **Next**.

4. On the **Repository Location** page, select **casrv-11.2.4-2406211735-winx64h.zip** and click **Next**.

5. On the **Product Install** page, select **IBM Cognos Analytics** and click **Next**.

6. On the **License Agreement** page, review the license information, select **I accept the terms of the License Agreement** and then click **Next**.

7. On the **Location** page, in the **Install location** field, enter the location where you want Cognos to be installed and click **Next**.

8. On the confirmation dialog box, click **Yes** to confirm the installation location.

9. Click **Install**.

10. Set the **JAVA_HOME** variable to the latest IBM JRE path: **C:\Program Files\ibm\cognos\analytics\ibm-jre\jre**.

11. Open **IBM Cognos Configuration** and start the Cognos services.

12. Run the BI installer in repair mode.

13. Run the biintegrator installer. If required, update the jre path in the run.bat file.