

IBM InfoSphere Information Server
Version 11 Release 3

*Importing Metadata by Using the SAP
BusinessObjects Repository Bridge*



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Note

Before using this information and the product that it supports, read the information in “Notices and trademarks” on page 25.

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Chapter 1. Importing metadata from business intelligence tools

You can use bridges to import business intelligence (BI) metadata into the metadata repository of IBM® InfoSphere® Information Server. The imported metadata includes BI reports, BI models, and related implemented data resources such as database tables.

Business intelligence metadata

When you import BI metadata into the metadata repository, you can study the components of BI reports and BI models and how they are related. You can track database tables and columns that the BI reports reference, and the jobs that use the columns.

Business intelligence reporting is the means of publishing, distributing, and reviewing data results and information. Analysts must be able to understand the meaning and authenticity of BI reports, which are generated against data sources such as marts or warehouses. You might need to know when the content that feeds a BI report was last updated, and which InfoSphere DataStage® and QualityStage® jobs or other processes were sequenced during the update. Lineage and analysis reports in InfoSphere Information Governance Catalog can display the complete data flows that transform and populate the source data that underlies the BI reports, thus satisfying requirements for data governance and data trust.

For a full list of supported BI bridges, see the technote *List of supported bridges for InfoSphere Information Server Version 11.3*: <http://www.ibm.com/support/docview.wss?&uid=swg27042029>. Not all BI bridges import BI reports.

BI reports are the report templates that are created within BI reporting tools such as the following:

- IBM Cognos® Report Studio or Query Studio
- SAP BusinessObjects Desktop Intelligence, Web Intelligence, or Crystal Reports
- Oracle Business Intelligence Report Publisher
- MicroStrategy
- Microsoft SQL Server Report Builder and Report Designer

BI reports include BI queries and query members, which source and aggregate the information to display from BI models. BI models are created within modeling tools such as Cognos Framework Manager and BusinessObjects Designer.

In InfoSphere Information Governance Catalog, you can assign stewards and glossary terms to business intelligence reports, and edit the business names and descriptions of the reports.

For best results when you import BI metadata, familiarize yourself with the following concepts and functionality:

To answer this question	Read this
How do I ensure that my imports are efficient and successful?	Importing and managing assets by using InfoSphere Metadata Asset Manager (http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.mmi.doc/topics/ct_imam_top-level.html)
Which assets are imported and used by suite tools, and how are they organized?	Common metadata assets (http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.metadata.common.doc/topics/ct_common_metadata_assets.html)
Which BI assets are imported and used?	Business intelligence assets
How do I view and report on the relationships between the imported BI metadata and the InfoSphere DataStage and QualityStage jobs that use the database tables and columns that reports are based on?.	Reporting data lineage and business lineage (http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.mdwb.doc/topics/ct_analyzingMetadataRelationships.html)

Chapter 2. Importing metadata by using InfoSphere Metadata Asset Manager

You can import by using a bridge or connector that is on any computer that is designated as a metadata interchange server. You specify connection information and information about the source metadata, and choose to run either an express import or a managed import.

Before you begin

You must have the role of Common Metadata Importer or Common Metadata Administrator.

Ensure that you meet all prerequisites for importing metadata:

- Installing InfoSphere Metadata Asset Manager and bridges (http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_install_imam.html) The bridges must be installed on the same computer where the SAP BusinessObjects client and SAP BusinessObjects Reporter are installed.
- Preparing to use InfoSphere Metadata Asset Manager (http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.mmi.doc/topics/t_first_steps.html)
- Prerequisites for using the SAP BusinessObjects Repository bridge

About this task

You create an import area by running an import. The import area is created whether you run an express import or a managed import.

When you run a managed import, you can closely study the metadata assets in the import. You can preview the effects that the import might have on the repository. You can take time to fix problems in the source metadata, or reimport with other parameters.

An express import saves time when you have high confidence in the contents of your import source. By default, an express import requires that you preview the result of sharing to the metadata repository if repository assets will be deleted as a result of the import. Your administrator can change the defaults to allow automatic sharing in all cases or to require previews in all cases.

Procedure

1. Log in to InfoSphere Metadata Asset Manager by clicking the desktop icon or entering the URL for the services tier computer in your browser. The URL is `https://server:port/ibm/iis/imam/console`. The default port number is 9443 for HTTPS.
2. On the **Import** tab, click **New Import Area**.
3. In the **New Import Area** window, take the following steps:
 - a. Specify a unique name and a description for the import area.
 - b. Select the metadata interchange server from which you want to run the import.

- c. From the list of bridges and connectors, select **SAP BusinessObjects Repository**.
- d. Click **Next**.
4. For connector imports, and imports with the HDFS bridge, select or create a data connection. You can edit the properties of a selected data connection.
5. Specify import parameters for the SAP BusinessObjects Repository bridge. Help for each parameter is displayed when you hover over the value field.
 - a. After you enter connection information for an import from a server, click **Test Connection**.
 - b. For imports from databases and repositories, browse to select the specific assets that you want to import.
 - c. Click **Next**.
6. If required, on the Identity Parameters screen, specify identity parameters for database assets or data models that you are importing. Consult the help for each selected parameter. Click **Next**.
7. Type a description for the import event and specify whether to run an express import or a managed import.
8. Click **Import**. The import area is created. The import runs and status messages are displayed.

Leave the import window open to avoid the possibility that long imports time out.

Results

When the import completes, if you ran a managed import, analyze the imported assets in the **Staged Imports** tab of the import area.

If you ran an express import, take one of the actions that are listed in the following table.

Table 1. Choices after an express import

In this case	Take this action
If the analysis shows problems that you must fix	The Staged Imports tab is displayed. Review the analysis results. If necessary, reimport the staged event.
If your administration settings require a preview	The View Share Preview screen is displayed. Preview the result of sharing the import.
If your administration settings do not require a preview	The assets are shared to the metadata repository. The Shared Imports tab is displayed. You can browse the assets on the Repository Management tab and work with them in other suite tools.

What to do next

If you want to use imported database tables or data file structures in InfoSphere DataStage and QualityStage jobs, you must create table definitions. To create table definitions from the database tables or data file structures, in the Designer client, click **Repository > Metadata sharing > Create table definition from shared table**, and then select the imported asset that you want to create a table definition from.

Chapter 3. SAP BusinessObjects Repository bridge reference

Prerequisites, frequently asked questions, troubleshooting, and parameter information for the SAP BusinessObjects Repository bridge.

About this bridge

The SAP BusinessObjects Repository bridge imports business intelligence reports, business intelligence models, and related implemented data resources such as database tables from versions 11 through 12.4 of SAP BusinessObjects Designer and BusinessObjects Desktop Intelligence.

Note: This bridge contains beta support for BusinessObjects versions XI 4.0 and 4.1. The XI 4.0 and 4.1 versions do not support BusinessObjects Desktop Intelligence and thus do not require BusinessObjects Desktop Intelligence as a prerequisite.

For BusinessObjects versions up to XI 3.1, the bridge uses the following client tools and APIs to import metadata:

- BusinessObjects Designer OLE/COM API to import universe metadata
- Business Objects Desktop Intelligence COM/OLE API to import Desktop Intelligence report metadata
- Business Objects WebIntelligence Report Engine (Rebean) SDK to import Web Intelligence report metadata

For BusinessObjects versions 4.0 SP6 and newer, the bridge uses the following client tools and APIs to import metadata:

- BusinessObjects Designer OLE/COM API to import universe metadata.
- Business Objects Web Intelligence RESTful Web Service SDK to import Web Intelligence report metadata.
- Semantic Layer Java SDK to import Information Design Tool universe metadata.

Note: The Semantic Layer Java SDK is supported for XI versions 4.1 and newer. Therefore, import of Information Design Tool universe metadata is not supported on version 4.0.

“Prerequisites”

“Frequently asked questions” on page 6

“Troubleshooting” on page 7

“Import parameters” on page 8

Prerequisites

Meet the following prerequisites before you use the bridge to import metadata.

- A supported version of the BusinessObjects Designer client and Developer Components (SDKs) must be installed on the same computer that the bridges are installed on. For BusinessObjects versions up to XI 3.1, the Business Objects Desktop Intelligence client must be installed on the same computer. For BusinessObjects versions XI 4.0 and newer, you must also install the SAP BusinessObjects Semantic Layer Java SDK and Crystal Reports Java SDK on the same computer. Do not install the bridges on a computer where the BusinessObjects server is installed.

- Ensure that there are no firewall restrictions for access to the BusinessObjects API and server. If the bridge fails to connect properly, disable the firewall temporarily to ensure that it is not the cause of the failure.
 - Ensure that the latest BusinessObjects service packs are installed consistently on the server and client computers. If you use BusinessObjects 4.0, install SP7 or later.
 - Clean up the temporary universe download directory because stale or locked files can prevent you from importing universes. Delete all temporary files from this directory. This directory path is configured in BusinessObjects Designer: **Tools > Options > Save > Default Universe Folder**. This directory path can be saved in the registry in: HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite XXXX\default\Shared\General\Directories\Universes.
 - Exit client tools such as Designer or Desktop Intelligence before running the bridge. If any designer.exe processes are running on the system before you start the bridge, end the process by using the task manager. Such processes can interfere with successful execution of the COM API.
 - You must publish a universe and reports to the BusinessObjects central management server (CMS).
 - If you import Crystal reports, use the **Crystal CORBA port** import parameter to specify the client port number on which the Crystal SDK communicates with the report application server (RAS). Ensure that the local Windows firewall is disabled or allows receiving communication on this port. If you use an enterprise firewall, configure it to allow communication from the RAS server to the client computer on this port.
 - At runtime, the bridge requires the following servers to be started and enabled in the BusinessObjects environment:
 - WebIntelligenceProcessingServer for the WebIntelligence Report Engine (Rebean) SDK
 - WebApplicationContainerServer for the WebIntelligence RESTful Web Service SDK, for Business Objects XI 4.1 and newer
 - Crystal Report Application Server (RAS)
- In the Central Management Console web application take the following actions:
- Select the **Servers** menu to check that both servers are available and running correctly.
 - Select the **Applications** menu to check that the RESTful Web Service is available, because the web service might not be installed by default.

Frequently asked questions

What report file formats does this bridge support?

For BusinessObjects versions up to XI 3.1, this bridge reads the following report formats that are supported by BusinessObjects Desktop Intelligence:

- BusinessObjects documents (*.rep)
- BusinessObjects document templates (*.ret)
- BusinessQuery files (*.bqy)
- Web Intelligence Version 2 documents (*.wqy)
- Crystal reports (*.rpt) starting with version 11

What report file formats are not supported?

BusinessObjects Desktop Intelligence and this bridge do not support the following report formats:

- Web Intelligence Version 6 documents (*.wid)

- Crystal reports (*.rpt) before version 11
- Crystal OLAP Analysis reports (*.car)

What are the best firewall settings for running this bridge?

This bridge relies on the BusinessObjects client components to be able to communicate reliably with the BusinessObjects server. BusinessObjects Designer, Desktop Intelligence, Web Intelligence, and Crystal Reports must be able to log on with the Central Management Server (CMS), download and open universes and documents.

If your firewall is not properly configured, the bridge might hang indefinitely, or fail with no clear explanation. For detailed firewall settings, consult your system administrator and see the BusinessObjects documentation. Alternately, you can disable the firewall and ensure that the bridge runs correctly without it.

Why do some universe-dependent report documents seem to be missing?

The subsetting-by-universe feature relies on the BusinessObjects repository metadata cache of the dependencies between universes and report documents. It works well on production environments where all reports are actively used.

However, in the context of BusinessObjects repositories in development and test environments, some universes and report documents might be redesigned or moved. These changes can leave inaccurate dependency information in the repository cache. In such cases, some dependent report documents for a particular universe might not be detected. You can refresh the BusinessObjects repository cache by editing such documents, refreshing the queries, and saving the documents back to the BusinessObjects server.

To verify that a particular document is correctly linked to its universes in the BusinessObjects server cache, navigate through the public folders in the CMC administration web console (not InfoView). Find the document and view its properties. The **Universe** tab in version 11 and the **Report Universes** tab in version 12 show the universe dependencies

Why are some universes imported that are not in the folders that were specified for the import?

The bridge tries to harvest a self-contained set of objects. If the bridge parameter **Add dependent objects** is selected, the bridge imports all reports that depend on the specified universes. If these reports depend on any other universes, the bridge imports the other universes to be sure that these reports are fully defined.

How do I provide information to help the support team reproduce an issue?

For BusinessObjects Designer 11 and 12, create a Business Intelligence Archive file (*.BIAR) by using the Business Objects Import Wizard utility (ImportWiz.exe). Include the universes and any other documents of interest.

For Business Objects 14 (XI R4), use the Lifecycle Management Console to create a promotion job that has the required InfoObjects in it. Export the job as a BIAR file and send it to the support team. For more information, see *Lifecycle management console for SAP BusinessObjects Business Intelligence platform 4.0 User Guide*.

Troubleshooting

You can use the SAP BusinessObjects Diagnostic Tool to test for connectivity issues.

Log in with the same credentials that you use with the bridge, and run all tests. If any test fails, contact the local SAP BusinessObjects Administrator to resolve the issues. See *Working with Firewalls* in the *SAP BusinessObjects Administration Guide*.

In addition, you can customize the configuration file that is used to control which tests are run. The path to the configuration file is C:\Program Files (x86)\Business Objects\common\4.0\java\lib\TestClasses.xml in the default BusinessObjects client installation.

Import parameters

The SAP BusinessObjects Repository bridge uses the following import configuration parameters.

Version

Required. Select the version of BusinessObjects that you want to connect to. The default selection, **Auto-detect**, identifies the version of BusinessObjects client software that is installed locally.

Applying different BusinessObjects service packs can change the version number. Make the following choices based on the service pack installed:

- For 14.1 (XI R4.1) service packs, select **14.1 (XI R4.1) - Beta bridge**.
- For 14.0 (XI R4.0) Service Pack 6 and above, select **14.0.6 (XI R4.0 SP6 and above)**.
- For 14.0 (XI R4.0) up to Service Pack 5, select **14.0 (XI R4.0 up to SP5)**.
- For 12.1 service packs, select **12.1 (XI R3.1)** or **Auto-detect**.
- For 11.5 service packs, select **11.5 (XI R2)** or **Auto-detect**.
- For 11.0 service packs, select **11.0 (XI)** or **Auto-detect**.

System

Required. Type the name of the BusinessObjects repository to log in to. Type the name of the CMS, for example, localhost. This server logs in by default on port 6400.

If the CMS is configured in a cluster environment, you can specify the cluster name with the following syntax: *cms:port@cluster*. For example: localhost:6400@MYCLUSTER.

Authentication mode

Required. Select the login authentication mode. You can log in by using the default BusinessObjects Enterprise login or by using an LDAP server.

User name

Required. Type the user name to log in to BusinessObjects. Specify the BusinessObjects user Administrator when you using this bridge, because many of the API calls that the bridge uses provide complete information only if you connect as Administrator.

If you are not sure which user name and password to use, contact your BusinessObjects system administrator. For versions 11 and 12, the user must be a member of the Universe Designer Users group to open universes and of the Administrators group to access favorite folders.

Password

Type the password to log in to BusinessObjects.

Repository browsing mode

Specify what types of objects are retrieved when you browse the BusinessObjects repository. For complete data lineage, select the default, **All**.

This parameter is used only if you browse for assets in the **Assets to import** field. It is not used if you specify a list of IDs of objects to import.

Assets to import

Browse to select assets in a remote BusinessObjects repository, or type the IDs of the objects that you want to import. You can specify multiple IDs of universes, reports, and folders to be retrieved, separated by semicolons (;).

Incremental import

Keep this parameter selected. When you reimport from the same source, the bridge uses cached information to determine which objects did not change since the previous import. Only changed objects are retrieved from BusinessObjects. Using the cached information can increase performance for large imports.

For new imports, or when the cache is deleted or corrupted, the bridge imports all objects from the source regardless of the selection that is specified.

Add dependent objects

By default, documents that are dependent on the selected universes are imported. Clear the check mark if you do not want to import documents that are dependent on the selected universes.

When you import from BusinessObjects repositories that are in development and test environments, some universes and report documents might have been redesigned or moved. Inaccurate dependency information might remain in the BusinessObjects repository cache. Some report documents for a particular universe might not be imported, and all dependent report documents of a universe might not be detected. To avoid this situation, before you import, refresh the cache by loading any modified or moved report documents and refreshing the queries.

Add specific objects

Select whether to import additional objects that do not depend on a particular universe. The default is **None**. If you select **Universe-independent documents**, documents that do not depend on any universe are imported.

Crystal CORBA port

If you import Crystal reports, specify the client port number on which the Crystal SDK communicates with the report application server (RAS). If no port is specified, the RAS server randomly selects a port for each execution. If a port is specified, the RAS server uses that port to send metadata to the local client computer.

Ensure that the local Windows firewall is disabled or allows receiving communication on this port. If you use an enterprise firewall, configure it to allow communication from the RAS server to the client computer on this port. If a firewall blocks communication, the client Crystal SDK waits for metadata indefinitely.

Class representation

Specify how the tree structure of classes and subclasses is imported. By

default, the bridge imports each class that contains objects as a dimension, as defined by the CWM OLAP standard. Only the default option, **As a flat structure**, is supported.

Worker threads

Specify the number of worker threads to retrieve metadata asynchronously from the source. For the most reliable performance, leave the parameter blank to have the bridge compute the default value, which is based on JVM architecture and the number of available CPU cores.

If you must experiment with increasing retrieval speed, specify a number from 1 to 6 to provide the actual number of threads. If the value specified is invalid, a warning is issued and the number 1 is used instead. If you experience out-of-memory conditions when you are importing metadata asynchronously, experiment with smaller numbers. If your computer has a large amount of available memory, for example, 10 GB or more, you can try larger numbers when you are retrieving many documents. However, setting the number too high can decrease performance due to resource contention.

Import joins

You can import joins that are defined in the BI model. By default, joins are not imported.

Import levels

You can import levels and hierarchies. When the option is selected, levels and hierarchies that are defined in the BI model are imported. By default, levels and hierarchies are not imported.

Metadata consistency check

Perform a consistency check on the selected metadata before it is imported into the metadata repository. It is possible to save metadata in source tools in ways that cause problems when the assets are imported into the metadata repository or used in other tools. For example, a foreign key might have no connection to a primary key or to an alternate key. In some cases, the metadata might be so semantically inconsistent that the bridge cannot import it.

The metadata consistency check returns warnings and errors in the log file.

Basic check

The default. Runs the minimum consistency checks necessary to validate the metadata, including checking for missing relationships and foreign keys that are not connected to primary or alternate keys.

In some cases, the basic check might be more rigorous than necessary and you can ignore certain errors or warnings.

Detailed check

Runs the basic check plus more advanced semantic checks specific to the type of metadata that is imported. This level can be used when the source tool cannot validate the metadata.

No check

Use with extreme caution. Selecting this option might result in the import of duplicates or invalid identities and might cause serious problems with your use of suite tools and the metadata repository.

Chapter 4. Identity parameters for imported assets

You specify values for identity parameters when you import database assets, logical data models, or physical data models. Specifying identity values helps prevent duplicate assets in the metadata repository and ensures that you do not overwrite assets by mistake.

When you use consistent values for identity parameters, suite users can readily identify which assets to use for such tasks as creating jobs, designating stewards, or assigning to terms.

You specify values on the Identity Parameters screen when you import database assets, logical data models, or physical data models by using InfoSphere Metadata Asset Manager.

Database assets

The bridges and connectors that import metadata from remote databases and repositories occasionally provide incomplete or inconsistent information about the host systems and databases that contain the assets that you are importing.

The identity of a database table has the following components:

- Host system name
- Database identity, consisting of database name, DBMS name, and DBMS server instance name
- Database schema name
- Database table name

Thus, host name, database name, database management system (DBMS) name, and DBMS server instance name are critical parts of the identity of the tables and schemas that they contain. If you were to import the same database assets by two different methods, and each method produced a different DBMS name, you could create duplicate assets in the metadata repository. Assets that have technically different identities but have identical content or contain the same child assets are potential duplicates.

To avoid duplicates and to ensure that your database assets are correctly identified, you specify values for identity parameters during the import process. Identity parameters are also valuable when you want the imported assets to be associated with a different host system, database, or DBMS than you imported them from. For example, you might want the assets to be identified with the host system and database that you use for test and production. For the host system, database, and schema parameters you can either type a name or select a host, database, or schema that is already in the metadata repository to associate the imported assets with.

Depending on the bridge or connector that you choose for import, you can specify values for the following identity parameters for database assets:

Host system name

The name of the computer that hosts the database. If you are importing from a database, you can specify a different name than the name of the

source computer. For example, you might specify the computer that will host this database during development or production.

Database name

The name of the database that contains the imported schemas and tables. You can specify a different name than the name of the source database.

DBMS name

The name of the DBMS that hosts the database. The DBMS name is part of the identity of the target database. You can specify a different DBMS than the one that hosts the source database. The DBMS name should be appropriate for the value that you enter for database name.

DBMS server instance name

The name of the DBMS server instance, if it exists. Some database management systems do not have the concept of DBMS server instance. DBMS server instance name is part of the identity of the target database. You can specify a different DBMS server instance name than the one that hosts the source database. The DBMS server instance name should be appropriate for the value that you enter for database name.

Schema name

The name of the schema that the imported tables belong to.

Logical data model and physical data model assets

If you import a physical data model from a design tool, you can choose to create a database schema and database tables from the physical data model. This is necessary for InfoSphere DataStage and QualityStage users who want to create table definitions from these shared tables for use in jobs. You specify identity parameters for host system, database, and optionally DBMS to create a valid identity for the database schema. Both the physical data model and the database schema are stored in the metadata repository on import.

In the metadata repository, the identity of a logical data model or physical data model is a combination of the name of the model and a namespace value. You specify the value for the **Model namespace** parameter on the Identity Parameters screen when you import the model.

You can specify whatever value you want. The value does not have to correspond to an actual namespace structure. You can type a namespace value or browse to use an existing namespace value that is in the metadata repository.

By specifying a unique namespace value, you can distinguish between two different logical or physical models that have the same name. If you are importing logical and physical data models at the same time, the namespace value that you specify is used for each of them.

Important: In imports that are created by using design tool bridges in version 8.7 of InfoSphere Information Server, the identity of an imported logical or physical data model includes a namespace value that contains the path of the model file. If you imported the same data model with version 8.7, take either of the following actions:

- To merge the new data model with the previously imported data model, use the same value for **Model namespace** that was provided for you in the original import. You can copy this namespace value by browsing to the previously imported logical or physical data model and displaying the model on the **Repository Management** tab.

- To create a different identity for the current data model, specify a value for **Model namespace** that is different from the namespace value of the previously imported data model. The current data model is imported as a unique asset, while the previously imported model remains in the metadata repository. If desired, a Common Metadata Administrator can delete the previously imported data model on the **Repository Management** tab.

Chapter 5. Business intelligence assets

Business intelligence (BI) assets are used by BI tools to organize reports and models that provide a business view of data. These assets include BI reports, BI models, BI collections, and cubes.

You can use bridges to import BI assets from tools such as IBM Cognos and SAP BusinessObjects.

It is good practice when importing BI assets to simultaneously import the database tables that BI reports are based on. You can then use InfoSphere Information Governance Catalog to create data lineage reports that show the relationship between the database tables, the jobs that use the database tables, and the BI reports that are based on the tables.

You can use InfoSphere Metadata Asset Manager to browse and delete BI assets and manage duplicate BI assets.

Asset types

The following table lists and defines the types of BI assets that are stored in the metadata repository of InfoSphere Information Server.

Table 2. BI assets

Asset type	Definition	Components of the identity of the asset	Contained asset types
 BI server	<p>When a BI tool supports multiple servers on a single host computer, the BI server value is the name of the source tool server. When a BI tool supports a single server per host computer, the BI server value is the name or IP address of the host system.</p> <p>BI servers are displayed in InfoSphere Information Governance Catalog and on the Import tab of InfoSphere Metadata Asset Manager.</p>	<ul style="list-style-type: none">• BI server name	BI folder

Table 2. BI assets (continued)

Asset type	Definition	Components of the identity of the asset	Contained asset types
 BI folder	<p>The folder structure that contains BI models, or BI reports, or both in the source tool. BI folders can also contain other BI folders.</p> <p>BI folders are displayed in InfoSphere Information Governance Catalog and on the Import tab of InfoSphere Metadata Asset Manager.</p>	<ul style="list-style-type: none"> • BI folder name • Identity of the BI server, or, for subfolders, the identity of the containing BI folder 	BI folder, BI model, and BI report
 BI model	<p>A grouping of BI data collection views that are relevant to a BI application.</p>	<ul style="list-style-type: none"> • BI model name • Identity of BI folder 	Cube, BI collection, BI join, BI hierarchy, and BI filter
 BI collection	<p>A data structure that provides a view of data that is stored in databases and files. In dimensional modeling, these structures are known as dimensions and fact tables. BI collections are the data sources of BI reports.</p>	<ul style="list-style-type: none"> • BI collection name • BI collection namespace • Identity of the BI model that contains the collection, or, for subcollections, the identity of the BI collection that contains the subcollection 	BI collection member, BI level, BI hierarchy, and BI filter. BI collections can contain other BI collections.
 BI collection member	<p>The basic abstraction of a data value that is projected from a database column. BI collection members define the structure of the collection that owns them. There are two types of members: regular and measure. Regular members are dimension attributes that describe the characteristics and semantics of the owner collection. Measures represent analytic values that define a measurement entity in a fact collection.</p>	<ul style="list-style-type: none"> • BI collection member name • Identity of the BI collection 	

Table 2. BI assets (continued)

Asset type	Definition	Components of the identity of the asset	Contained asset types
 BI level	An asset that defines a logical step in the order of a BI hierarchy. A BI level consists of one or more BI collection members of the same BI collection that are related and function as a logical unit.	<ul style="list-style-type: none"> • BI level name • Identity of the BI collection 	BI level element
 BI level element	An associative class that assigns a BI collection member to a specific level within the collection.	<ul style="list-style-type: none"> • Identity of the BI collection member • Identity of the BI level 	
 Cube	A subset of a BI model that consists of a set of related analytic values that share the same dimensionality.	<ul style="list-style-type: none"> • Cube name • Cube namespace • Identity of the BI model 	Cube dimension and cube measure
 Cube dimension	An associative class that connects a cube to dimensions in the BI collection that are relevant to the analytic values of the cube. A cube dimension references the BI collection from which the dimension is derived and the relevant dimension hierarchy of the cube.	<ul style="list-style-type: none"> • Identity of the cube • Identity of the BI collection 	
 Cube measure	An associative class that connects a cube to BI collection members that are measures.	<ul style="list-style-type: none"> • Identity of the cube • Identity of the BI collection member 	
 BI filter	A filtering constraint on the source data that is viewed through a BI collection. Filters are either local or global. A local filter is owned by a single BI collection. A global filter is owned by the BI model and by one or more collections.	<ul style="list-style-type: none"> • BI filter name • BI filter namespace • Either the identity of the containing BI model or the containing BI collection 	

Table 2. BI assets (continued)

Asset type	Definition	Components of the identity of the asset	Contained asset types
 BI hierarchy	An organizational structure that defines an ordering or relationship of data within a BI collection.	<ul style="list-style-type: none"> • BI hierarchy name • BI hierarchy namespace • Either the identity of the containing BI model or the containing BI collection 	BI hierarchy member
 BI hierarchy member	An asset that orders BI levels within a hierarchy structure.	<ul style="list-style-type: none"> • Identity of the BI hierarchy • Identity of the BI level 	
 BI join	An asset that joins two database tables (a physical join) or two BI collections (a logical join). The physical join defines the data source of a BI collection and the logical join is used in a star schema between fact and dimension collections.	<ul style="list-style-type: none"> • BI join name • BI join condition • Identity of the BI model 	BI report query
 BI report	A business intelligence report that is based on information in a database or a BI model.	<ul style="list-style-type: none"> • BI report name • Identity of the BI folder 	BI report query
 BI report query	A query on a database or a BI model.	<ul style="list-style-type: none"> • BI report query name • BI report query namespace • Identity of the BI report 	BI report query item
 BI report query item	An asset that defines a column in a BI report query.	<ul style="list-style-type: none"> • BI report query item name • Identity of the BI report query 	

Appendix A. Product accessibility

You can get information about the accessibility status of IBM products.

The IBM InfoSphere Information Server product modules and user interfaces are not fully accessible.

For information about the accessibility status of IBM products, see the IBM product accessibility information at http://www.ibm.com/able/product_accessibility/index.html.

Accessible documentation

Accessible documentation for InfoSphere Information Server products is provided in an information center. The information center presents the documentation in XHTML 1.0 format, which is viewable in most web browsers. Because the information center uses XHTML, you can set display preferences in your browser. This also allows you to use screen readers and other assistive technologies to access the documentation.

The documentation that is in the information center is also provided in PDF files, which are not fully accessible.

IBM and accessibility

See the IBM Human Ability and Accessibility Center for more information about the commitment that IBM has to accessibility.

Appendix B. Contacting IBM

You can contact IBM for customer support, software services, product information, and general information. You also can provide feedback to IBM about products and documentation.

The following table lists resources for customer support, software services, training, and product and solutions information.

Table 3. IBM resources

Resource	Description and location
IBM Support Portal	You can customize support information by choosing the products and the topics that interest you at www.ibm.com/support/entry/portal/Software/Information_Management/InfoSphere_Information_Server
Software services	You can find information about software, IT, and business consulting services, on the solutions site at www.ibm.com/businesssolutions/
My IBM	You can manage links to IBM Web sites and information that meet your specific technical support needs by creating an account on the My IBM site at www.ibm.com/account/
Training and certification	You can learn about technical training and education services designed for individuals, companies, and public organizations to acquire, maintain, and optimize their IT skills at http://www.ibm.com/training
IBM representatives	You can contact an IBM representative to learn about solutions at www.ibm.com/connect/ibm/us/en/

Appendix C. Accessing the product documentation

Documentation is provided in a variety of formats: in the online IBM Knowledge Center, in an optional locally installed information center, and as PDF books. You can access the online or locally installed help directly from the product client interfaces.

IBM Knowledge Center is the best place to find the most up-to-date information for InfoSphere Information Server. IBM Knowledge Center contains help for most of the product interfaces, as well as complete documentation for all the product modules in the suite. You can open IBM Knowledge Center from the installed product or from a web browser.

Accessing IBM Knowledge Center

There are various ways to access the online documentation:

- Click the **Help** link in the upper right of the client interface.
- Press the F1 key. The F1 key typically opens the topic that describes the current context of the client interface.

Note: The F1 key does not work in web clients.

- Type the address in a web browser, for example, when you are not logged in to the product.

Enter the following address to access all versions of InfoSphere Information Server documentation:

```
http://www.ibm.com/support/knowledgecenter/SSZJPZ/
```

If you want to access a particular topic, specify the version number with the product identifier, the documentation plug-in name, and the topic path in the URL. For example, the URL for the 11.3 version of this topic is as follows. (The ⇒ symbol indicates a line continuation):

```
http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/⇒  
com.ibm.swg.im.iis.common.doc/common/accessingiidoc.html
```

Tip:

The knowledge center has a short URL as well:

```
http://ibm.biz/knowctr
```

To specify a short URL to a specific product page, version, or topic, use a hash character (#) between the short URL and the product identifier. For example, the short URL to all the InfoSphere Information Server documentation is the following URL:

```
http://ibm.biz/knowctr#SSZJPZ/
```

And, the short URL to the topic above to create a slightly shorter URL is the following URL (The ⇒ symbol indicates a line continuation):

```
http://ibm.biz/knowctr#SSZJPZ_11.3.0/com.ibm.swg.im.iis.common.doc/⇒  
common/accessingiidoc.html
```

Changing help links to refer to locally installed documentation

IBM Knowledge Center contains the most up-to-date version of the documentation. However, you can install a local version of the documentation as an information center and configure your help links to point to it. A local information center is useful if your enterprise does not provide access to the internet.

Use the installation instructions that come with the information center installation package to install it on the computer of your choice. After you install and start the information center, you can use the **iisAdmin** command on the services tier computer to change the documentation location that the product F1 and help links refer to. (The `⇒` symbol indicates a line continuation):

Windows

```
IS_install_path\ASBServer\bin\iisAdmin.bat -set -key ⇒  
com.ibm.iis.infocenter.url -value http://<host>:<port>/help/topic/
```

AIX® Linux

```
IS_install_path/ASBServer/bin/iisAdmin.sh -set -key ⇒  
com.ibm.iis.infocenter.url -value http://<host>:<port>/help/topic/
```

Where `<host>` is the name of the computer where the information center is installed and `<port>` is the port number for the information center. The default port number is 8888. For example, on a computer named `server1.example.com` that uses the default port, the URL value would be `http://server1.example.com:8888/help/topic/`.

Obtaining PDF and hardcopy documentation

- The PDF file books are available online and can be accessed from this support document: <https://www.ibm.com/support/docview.wss?uid=swg27008803&wv=1>.
- You can also order IBM publications in hardcopy format online or through your local IBM representative. To order publications online, go to the IBM Publications Center at <http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>.

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Table 4. Use of cookies by InfoSphere Information Server products and components

Product module	Component or feature	Type of cookie that is used	Collect this data	Purpose of data	Disabling the cookies
Any (part of InfoSphere Information Server installation)	InfoSphere Information Server web console	<ul style="list-style-type: none"> • Session • Persistent 	User name	<ul style="list-style-type: none"> • Session management • Authentication 	Cannot be disabled
Any (part of InfoSphere Information Server installation)	InfoSphere Metadata Asset Manager	<ul style="list-style-type: none"> • Session • Persistent 	No personally identifiable information	<ul style="list-style-type: none"> • Session management • Authentication • Enhanced user usability • Single sign-on configuration 	Cannot be disabled

Table 4. Use of cookies by InfoSphere Information Server products and components (continued)

Product module	Component or feature	Type of cookie that is used	Collect this data	Purpose of data	Disabling the cookies
InfoSphere DataStage	Big Data File stage	<ul style="list-style-type: none"> • Session • Persistent 	<ul style="list-style-type: none"> • User name • Digital signature • Session ID 	<ul style="list-style-type: none"> • Session management • Authentication • Single sign-on configuration 	Cannot be disabled
InfoSphere DataStage	XML stage	Session	Internal identifiers	<ul style="list-style-type: none"> • Session management • Authentication 	Cannot be disabled
InfoSphere DataStage	IBM InfoSphere DataStage and QualityStage Operations Console	Session	No personally identifiable information	<ul style="list-style-type: none"> • Session management • Authentication 	Cannot be disabled
InfoSphere Data Click	InfoSphere Information Server web console	<ul style="list-style-type: none"> • Session • Persistent 	User name	<ul style="list-style-type: none"> • Session management • Authentication 	Cannot be disabled
InfoSphere Data Quality Console		Session	No personally identifiable information	<ul style="list-style-type: none"> • Session management • Authentication • Single sign-on configuration 	Cannot be disabled
InfoSphere QualityStage Standardization Rules Designer	InfoSphere Information Server web console	<ul style="list-style-type: none"> • Session • Persistent 	User name	<ul style="list-style-type: none"> • Session management • Authentication 	Cannot be disabled
InfoSphere Information Governance Catalog		<ul style="list-style-type: none"> • Session • Persistent 	<ul style="list-style-type: none"> • User name • Internal identifiers • State of the tree 	<ul style="list-style-type: none"> • Session management • Authentication • Single sign-on configuration 	Cannot be disabled
InfoSphere Information Analyzer	Data Rules stage in the InfoSphere DataStage and QualityStage Designer client	Session	Session ID	Session management	Cannot be disabled

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