

IBM InfoSphere Information Server
Version 11 Release 3

*Guide to Migrating to IBM InfoSphere
Information Server*



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Note

Before using this information and the product that it supports, read the information in “Notices and trademarks” on page 79.

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Migrating to IBM InfoSphere Information Server, Version 11.3

Use these procedures to move an existing source installation to InfoSphere® Information Server, Version 11.3.

Before installing InfoSphere Information Server on the target computer, you must review the migration process for your product set and the version of your source computer. For information about the migration requirements, see *Performing a migration*.

Verifying migration requirements

Before you migrate to a new version of IBM® InfoSphere Information Server, design the migration topology and collect the required information.

Verifying requirements

Before you begin a migration, verify the requirements for exporting your source products and for the installation of the new version.

The preferred method of migrating from an older version of InfoSphere Information Server to a new version is to retain the original installation and to install the new version so both versions can be run at the same time. For Windows installations, the new version needs to be on new hardware or in a new virtual machine. For Linux or Unix installations, if you have enough disk space and memory, you also have the option of installing the new version into a new location on the same machine.

Having both versions at the same time provides the following benefits:

- You can continue using your existing system to run your business needs while validating the function on the new system.
- You can reduce the system down time when you do the switch over to the new system.
- You can stage the migration by product or project to match the availability of testing resources.
- There are less stringent requirements on the export process because the source system is still available and you do not have to ensure that all collateral has been exported or backed up prior to un-installing and reinstalling.

If you do install your new version on new hardware, you should contact your IBM account representative about a license waiver to cover licensing for both systems during the migration process. For more information about topology options for your new installation, see *Designing the migration topology*.

In addition to planning the hardware resources for the migration, you must also review the migration export process for the products you need to migrate. The asset interchange capabilities of different versions of InfoSphere Information Server vary. You need to confirm that export capabilities of your source system are sufficient to meet your migration requirements. For all versions of InfoSphere Information Server, InfoSphere DataStage®, InfoSphere QualityStage®, and InfoSphere Information Services Director products can be migrated using the documented migration instructions. In most cases, if you are migrating from

Version 8.5 or later, you can use asset interchange to migrate your system for all products. If you are migrating from Versions 8.0.1 or 8.1 and are using InfoSphere Information Analyzer, InfoSphere Metadata Workbench, InfoSphere FastTrack, or InfoSphere Business Glossary, there are limitations in the export capabilities that might prevent a full migration of those products. You should carefully review the documentation in the Performing a migration section to determine if the export support is acceptable for your product set. If not, contact IBM Customer Support for assistance prior to installing your new system. A successful migration might require specific configuration options in the new installation.

Designing the migration topology

A critical planning step is to design the migration topology that describes both the source topology and the target topology.

Each migration topology consists of three tiers: engine tier, services tier, and metadata repository tier. If you are familiar with earlier versions of IBM InfoSphere Information Server, the services tier was referred to as the domain.

You have the following choices for installing these three tiers:

- Install the tiers on a new computer or if you are distributing the tiers, on multiple new computers.
- Install the tiers on existing computers, after you remove the prior version of InfoSphere Information Server.
- If you are not using the Windows operating system, install Version 11.3 tiers alongside the prior version on the existing computers, so that you can retain the source installation.

There are advantages to retaining the prior version. First, you can continue to use the prior version after the export is complete. Second, the prior version exists as a reference that you can use when you validate the Version 11.3 installation.

If you choose to install two versions side-by-side, keep the following points in mind:

- The system requirements must be met for both Version 11.3 and the prior version.
- The target computer must have enough disk space, I/O, processor power, memory, and swap space to run both versions simultaneously.
- The second installation will not be able to use the same ports as the first, so it will be assigned non-default ports for the client and internal connections. Therefore, client users must specify non-default ports for services tier and engine tier connections and open the additional ports in the firewall.
- To perform system management actions, such as installing a patch, shutting down and restarting services, and so on, the administrator must be careful to set environment variables to the correct version's installation.

For more information about topologies, see the following topic: Basic installation topologies.

Using multiple engine tiers

The source or target topology can include multiple engine tiers.

Note:

- This topic uses the term "engine tier." If you currently use InfoSphere DataStage Version 7.5.3 or earlier, the engine tier is referred to as the DataStage server.

There are two configurations for multiple engine tiers:

- Each engine tier can each be on a separate computer, but all engine tiers must be registered to the same IBM InfoSphere Information Server services tier.
- Multiple engine tiers, each of which runs a different version of InfoSphere Information Server, can be on the same UNIX or Linux computer, but each engine must be registered to a different services tier. This configuration is called an ITAG installation.

When you install InfoSphere Information Server Version 11.3, the installation wizard detects existing engine tiers. You must provide a unique ITAG value and port number to use for the Version 11.3 installation.

For more information about multiple engine tiers, see this topic: Basic installation topologies.

Migrating side-by-side versions of InfoSphere Information Server (Linux and UNIX only)

If your engine tier is on a Linux or UNIX computer, you can keep that instance and also install InfoSphere Information Server, Version 11.3 on the same computer. You can also install multiple InfoSphere Information Server engine tiers on different computers and have them all registered with one InfoSphere Information Server services tier.

Each engine tier that is installed on the same computer must be registered to a different instance of the InfoSphere Information Server services tier.

Note: There is a change of terminology between DataStage 7 and InfoSphere DataStage, Version 8.0.1 and later. In earlier versions the engine component was identified as the DataStage server, for release 8.0.1 and later, the engine component is identified as the engine tier.

If you maintain different releases of various engine tiers, or multiple instances of the same engine tier, you can keep all of those instances.

Each instance of an engine tier is identified by a tag ID (an ITAG) and allocated a different port. You must specify a different installation directory for each engine tier. Each engine tier has a different set of InfoSphere DataStage projects that you access through that server. You connect to different servers by specifying the port number in addition to the UNIX server ID.

The existing engine tier instance retains the default port number, 31538, and uses the default ITAG, ADE. If you already have multiple server instances, then you already have servers that use different ports and ITAGs.

Each version of DataStage requires clients of the same version. You must use the Multi-Client Manager program to switch between different client versions on your Windows client computers.

The following table shows a scenario of a multi-server installation, and illustrates the use of port numbers and ITAGs.

Table 1. Scenario 1: Engine tier for InfoSphere Information Server, Version 11.3 server installed on the same computer as an existing DataStage 7.5.1 server

Engine tier instance	Server details
WebSphere® DataStage, release 7.5.1 server	<ul style="list-style-type: none"> • Itag ADE • Port 31538 • /disk1/Ascential/DataStage
InfoSphere Information Server, Version 11.3 engine tier	<ul style="list-style-type: none"> • Itag 123 • Port 31540 • /opt/IBM/InformationServer/Server

The following table shows a scenario of a multi-server installation with three servers, and illustrates the use of port numbers and ITAGs.

Table 2. Scenario 2: InfoSphere Information Server, Version 11.3 engine tier installed on the same computer as an existing DataStage 7.5 server and an existing InfoSphere Information Server, Version 8.1 engine tier.

Engine tier instance	Server details
WebSphere DataStage, release 7.5 server	<ul style="list-style-type: none"> • Itag ADE • Port 31538 • /disk1/Ascential/DataStage
InfoSphere Information Server, Version 8.1 engine tier	<ul style="list-style-type: none"> • Itag A23 • Port 31546 • /opt/IBM/InformationServer/Server
InfoSphere Information Server, Version 11.3 engine tier	<ul style="list-style-type: none"> • Itag 123 • Port 31540 • /opt113/IBM/InformationServer/Server

The following table shows a scenario of with three InfoSphere Information Server, Version 11.3 engine tiers, and illustrates the use of port numbers and ITAGs for Version 11.3 installations.

Table 3. Scenario 3: Three instances of InfoSphere Information Server, Version 11.3 engine tiers installed on the same computer

Engine tier instance	Server details
InfoSphere Information Server, Version 11.3 engine tier	<ul style="list-style-type: none"> • Itag ADE • Port 31538 • /opt/IBM/InformationServer/Server
InfoSphere Information Server, Version 11.3 engine tier	<ul style="list-style-type: none"> • Itag BED • Port 31540 • /opt2/IBM/InformationServer/Server
InfoSphere Information Server, Version 11.3 engine tier	<ul style="list-style-type: none"> • Itag 123 • Port 31542 • /opt3/IBM/InformationServer/Server

Determining the sequential order for migrating multiple InfoSphere Information Server products when using istool

If you are planning on migrating multiple InfoSphere Information Server products as part of your migration process, you must consider the order in which you will migrate the products in order to obtain the best performance.

Before you start migrating multiple InfoSphere Information Server products by using the istool command-line, you must decide how you want to migrate your common metadata assets. You have the following options:

- Migrate all common metadata for the entire suite all at once by using the istool commands for each individual product. Migrating all common metadata before the product assets that depend on them can greatly improve the overall performance of exports and imports. However, a global export and import of metadata could include metadata assets you no longer need and this step could be longer than necessary because of the quantity of data moved. When you migrate the common metadata, you can include all data connections to the databases, data files, and data files folders that you are migrating, with the exception of data connections that are created in InfoSphere DataStage. After you migrate all common metadata, then you can export assets for individual products, such as InfoSphere DataStage, InfoSphere Information Analyzer, and InfoSphere Business Glossary by using the istool commands for each individual product.
- For the best performance, delete all common metadata assets that you do not want to migrate on your source computer and then migrate all the remaining common metadata assets by using istool. Review all common metadata assets that are used in the individual InfoSphere Information Server products and delete all assets that you do not want on your target computer. After you delete all the assets that you do not want to move, you can export all common metadata assets.
- If you do not want to change your source computer, you can export and import all the common metadata and then delete what you do not want on the target computer before importing the product assets. The export and import of the common metadata might still be slow, but the import of the product assets will be faster with a smaller metadata repository. You can also use the istool filtering options to export only the metadata that you want. This is the most efficient option, but might require the generation of many istool commands to move the data.
- Migrate assets for individual InfoSphere Information Server products by using the istool export and import commands for each product. Specify the **-includeCommonMetadata** option when you export to export all common metadata related to the individual products. If you migrate multiple products and specify the **-includeCommonMetadata** option, you might end up transferring the same common metadata multiple times, if the products use the same common metadata. This will slow down your performance.

After you determine how you want to export your data, you can start exporting assets for the individual InfoSphere Information Server products. You export assets from the individual products to archive files. Archive files can contain assets from multiple exports of multiple tools. For best performance, when you import from an archive file, or when you migrate assets of varying types in multiple archive files, run separate commands to import the following types of assets in the following order:

1. Users and groups
2. Common metadata

3. InfoSphere DataStage and QualityStage assets
4. Reports
5. InfoSphere Information Analyzer assets
6. InfoSphere FastTrack assets
7. Custom attributes for extended data sources and extension mapping documents from InfoSphere Metadata Workbench. Import by using the Administration tab of InfoSphere Information Governance Catalog.
8. Extended data sources from InfoSphere Metadata Workbench
9. Extension mappings from InfoSphere Metadata Workbench
10. InfoSphere Business Glossary assets

Asset types not listed can be imported in any order.

Installing the new version of InfoSphere Information Server

The order in which you install the various InfoSphere Information Server tiers is important. You must install the engine tier and services tier before you perform the migration process. You can install the client tier at this time, or you can wait and install it after you complete the migration process.

Installing a new version of InfoSphere Information Server on the target computer

As part of the migration process, you must install a new version of InfoSphere Information Server. If you do not have a new system that you are using as the target computer, you can perform a side-by-side migration, as long as you are not using a Windows computer. Before you replace an existing version of InfoSphere Information Server with a new version, you need to export all assets on the source computer. After the export is complete, you can uninstall the existing version and then install the new version. If you want your new installation to use the same ports and location as the source installation or you are using the same Windows system, you will have to uninstall before installing the new version.

Procedure

1. Optional: Uninstall the existing version. For complete information about uninstalling the existing version, see this topic:
 - Removing InfoSphere Information Server, Versions 8.0.1 and 8.1:
http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_rem_is.html
 - Note:** The Version 8.1 instructions work for Version 8.0.1.
 - Removing InfoSphere Information Server software, Version 8.5:
http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_rem_is.html
 - Removing InfoSphere Information Server software, Version 8.7:
http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_rem_is.html
 - Removing InfoSphere Information Server software, Version 9.1:
http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_rem_is.html

- Removing InfoSphere Information Server software, Version 11.3:
http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_rem_is.html

Note: If you are migrating to a Windows computer, and you plan on installing InfoSphere Information Server on the same host, then this step is mandatory. You must uninstall InfoSphere Information Server and reboot the computer after you are finished uninstalling InfoSphere Information Server.

2. Install the new version. For complete information about installing the new version, see http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_install_start_install_gui.html.

Installing side-by-side versions of InfoSphere Information Server

If you are not installing on a Windows computer, and you do not want to uninstall the previous version of InfoSphere Information Server, you can have both installations, side-by-side, on the same computer or computers. Side-by-side installations are not supported on Windows computers.

Before you begin

To make the second installation successful, you must consider issues such as the new version's system requirements, disk space constraints, and potential port conflicts for IBM DB2®, IBM WebSphere Application Server, and InfoSphere Information Server. These conflicts will be identified during the prerequisite checks that are performed during installation. It is recommended that you leave your original installation running during the installation wizard interview through both sets of system requirement checks so the suite installer can accurately detect all ports that are in use. If your system has only the minimum memory requirements for the new installation, once you have completed the second system requirements check, you should shut down the original system during the installation process. You must open the new ports in your firewall as required. For more information see, *Configuring your network*.

Below is prerequisite information for each tier related to side-by-side installation.

Repository Tier

If you are installing a second copy of DB2 using the InfoSphere Information Server suite installer, you can ignore the following prerequisite error messages:

WARNING: There should be no active DB2-processes that might disturb the installation.

WARNING: Delete the file `global.reg` in use by the current installation.

FAIL - Ensure directory `/var/db2` is empty or does not exist.

Services Tier

If you are installing IBM WebSphere Application Server as part of the InfoSphere Information Server suite installation, verify that **Customize WebSphere Application Server profile ports** is checked and the selected ports do not reuse ports from your existing installation. You can ignore this prerequisite error message:

FAIL - The IBM WebSphere Application Server installation directory `/opt/IBM/WebSphere/AppServer` must not be present in the WebSphere Application Server registry files.

If you plan to use a pre-installed IBM WebSphere Application Server Network Deployment, we recommend that you do not use the same installation as your source version even if that version is supported by InfoSphere Information Server version 11.3. If you install a new copy of IBM WebSphere Application Server to a different path, it will be easier to distinguish which processes map to each version of InfoSphere Information Server. This approach uses a bit more disk space, but that space is returned when you uninstall the original computer after the validation is complete.

Engine Tier

Before you install InfoSphere Information Server version 11.3, remove the `/.dshome` file. This file defines the default location for the InfoSphere Information Server engine on the current system. When you have multiple engines installed on the same system, its existence can cause administrative tasks to be run against the wrong engine. Also the `/.dshome` file has to be removed again after installing InfoSphere Information Server, Version 11.3. You should also remove the automatic setting of the `DSHOME` environment variable and the sourcing of the previous version of the `dsenv` file if you added that to the `dsadm` profile. You should not add any InfoSphere version specific settings to the `dsadm` profile unless you use different user IDs for the InfoSphere DataStage administrator for each version. You can create a version 11.3 script, as well as a script for the previous version of InfoSphere Information Server, and source the appropriate version based on the current task. You must source the correct `dsenv` file prior to any administrative tasks.

An ITAG value needs to be specified for the InfoSphere Information Server engine. This is a three character hexadecimal value. Do not select `fff`, `ace`, or `dcd`.

The InfoSphere Information Server suite installer automatically checks for ports that are in use, as well as and ports that are registered in the services file. The job monitor is not registered in the services file and if it is not running, the port conflict will not be identified. To avoid conflicts for the parallel job monitor select unique ports on the installation panel that are above 13401. You can ignore this prerequisite error message:

```
WARNING: No processes of the IBM InfoSphere Information Server-Engine  
can run on the target computer
```

Procedure

See the following topic for complete information about installing Version 11.3: [Installing InfoSphere Information Server by using the wizard \(graphical mode\)](#).

Note: When you invoke the installer for a side-by-side installation, add the **-force** option to the command line. This allows you to ignore prerequisite check failures that are acceptable for a side-by-side installation. WARNING or FAIL messages that can be ignored are documented in the tiers to which they apply.

Installing the new version of InfoSphere Information Server on the client computer

You do not migrate the client; instead, you install the new version of the client programs on the client tier.

Procedure

1. See the following topic for complete information about installing Version 11.3:
http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_chk_server.html.
2. If your topology includes multiple versions of IBM InfoSphere Information Server, you can install the Version 11.3 client tier on a separate Microsoft Windows computer or install it on the same computer with the prior versions of the client. For InfoSphere DataStage, use the Multi-client Manager to switch between versions. If you choose to install the Version 11.3 client tier along with prior clients, use the Microsoft Windows Add or Remove Programs utility to remove the existing MKS Toolkit before you install the Version 11.3 client tier. After you install Version 11.3, both the prior versions and Version 11.3 will use the latest MKS Toolkit, which is installed along with the client tier.

Note: If you want to install the Version 11.3 client tier along with a Version 11.3 engine or services tier on the same Microsoft Windows computer, you cannot have any additional client installations on the computer. You can install only one Version 11.3 client on the computer. In addition, you must install the client tier and the engine tier in the same installation directory.

Complete these steps to install the Version 11.3 client on the same Microsoft Windows computer where the client for the prior version is located.

- a. Log on to the Windows computer as an administrator.
- b. Turn off any firewall software that is installed on the computer.
- c. Optional: Turn off antivirus software.
- d. Go to the root directory on the InfoSphere Information Server Version 11.3 installation media or downloaded installation image.
- e. Double-click **setup.exe** and run the file as an administrator.
- f. When asked for an installation directory, select **New Installation** and specify a directory that does not contain an existing InfoSphere Information Server client.
- g. Select the product modules and components as required.

Installing IBM Support Assistant Lite for InfoSphere Information Server

Use IBM Support Assistant Lite for InfoSphere Information Server (ISALite for InfoSphere Information Server) to run diagnostic tests and generate reports that confirm the stability of the installation environment.

About this task

Because ISALite for InfoSphere Information Server is updated frequently, it is important to use the latest version of the tool.

Procedure

Download and install the latest version of ISALite for InfoSphere Information Server. For details on downloading and installing the tool, see <http://www.ibm.com/support/docview.wss?uid=swg24022700>.

Note: If you already have ISALite installed, verify that it's the latest version. To verify the version that you have installed:

- On Linux and Unix computers, issue the `./runISALite.sh -version` command from the `install_dir/ISALite` directory.
- On Windows computers, issue the `runISALite.bat -version` command from the `install_dir\ISALite` directory.

Verify the version number by looking for the string IBM ISALite for InfoSphere Information Server:. The version number can be found after the colon. For example, IBM ISALite for InfoSphere Information Server: S9.1.007.5. If a newer version of the tool is available, download and install the latest version of ISALite. See the download page or the *IBM Support Assistant Lite for Information Server User's Guide* for details on downloading and installing the tool. The *IBM Support Assistant Lite for Information Server User's Guide* can be found on the web page referenced above, or it can be found by going to the following directory on your computer:

Table 4. The location of the ISALite User's Guide

Operating system	Directory
AIX®, HP-UX, or Solaris	<code>install_dir/ISALite/doc</code>
Linux	<code>install_dir/ISALite/doc</code>
Linux on System z®	<code>install_dir/ISALite/doc</code>
Windows	<code>install_dir\ISALite\doc</code>
z/OS®	<code>install_dir/ISALite/doc</code>

Generating the Diagnostic Health Checker reports

Use IBM Support Assistant Lite for InfoSphere Information Server (ISALite for InfoSphere Information Server) to check the health of the system and to generate a system topology map.

Procedure

1. For Linux or Unix users, log in as the root or sudo root. Windows users should log in as an administrator.
2. Start ISALite for InfoSphere Information Server.
3. Follow the instructions in the *IBM Support Assistant Lite for Information Server User's Guide* to select the **General Diagnostic Health Checker** collection. The *IBM Support Assistant Lite for Information Server User's Guide* can be found in the following directory:

Table 5. The directory where you can find the ISALite User's Guide

Operating system	Directory
AIX	<code>install_dir/ISALite/doc</code>
Linux	<code>install_dir/ISALite/doc</code>
Windows	<code>install_dir\ISALite\doc</code>

After you run the health checker, ISALite will output a zipped file of reports. The health checker tool produces two reports.

- The `SuiteHealthChecker.html` report contains all results from all tests and also a topology map that lists the details of the communication channels between InfoSphere Information Server components.

The report also contains two cluster topology maps for IBM WebSphere Application Server when IBM WebSphere Application Server Network

Deployment is being used. This report is only created when the Diagnostic Health Checker is run on the services tier computer.

- The SuiteHealthChecker-Failures.html report contains only the failed diagnostic tests.

4. Review the reports and resolve all failures before continuing.

The following messages might appear in the log on the target system and are normal for a new installation prior to configuration:

CDIHC5027W:

The DB2 database configuration parameters are not required to be set to the values that are recommended for running Information Server. The database administrator should verify that the value being used is the right value for your installation.

CDIHC4004I Validate IADB Connection

CDIHC4011E:[ERROR] Unknown Exception. See

Information Server logs

(SystemOut.log and SystemErr.log in WebSphere Application Server, or messages.log and console.log in WebSphere Liberty) for further details javax.naming.NameNotFoundException:

Context: isa1Node01Cell/nodes/

isa1Node01/servers/server1, name: xmeta:

First component in name xmeta not found.

[Root exception is org.omg.

CosNaming.NamingContextPackage.

NotFound: IDL:omg.org/CosNaming/

NamingContext/

NotFound:1.0]

Note: This error is reported when Information Analyzer has not yet been configured, which is the case immediately after installation.

If you have not yet configured Information Analyzer you can ignore this error.

CDIHC4002I Validate DataStage Connection

DS Project = ANALYZERPROJECT

Host = MYHOSTNAME

Port = 31538

User =

CDIHC4013E++ [ERROR] DataStage Exception

CDIHC4013E ++The user name provided is incorrect

CDIHC4013E ++Note: This error is reported

when Information Analyzer has

not yet been configured,

which is the case

immediately after installation.

If you

have not yet configured Information Analyzer

you can ignore this error.

CDIHC4006I Validate EngineJobExecution

DS Project = ANALYZERPROJECT

Host = MYHOSTNAME

Port = 31538

DSUser =

Driver = com.ibm.db2.jcc.DB2Driver

DatabaseUrl = jdbc:db2://hostname:50000/iadb

IADBUser = iauser

CDIHC4013E ++[ERROR] Error running the job. See log

for additional details

CDIHC4013E ++ Note: This error is reported

when Information Analyzer

has not

yet been configured, which is the case immediately after installation. If you have not yet configured Information Analyzer you can ignore this error.

Backing up the installation

Before you begin the export and after you complete the import process, it is a best practice to back up the installation.

About this task

Backing up the installation before you begin the export process is optional. It is mandatory only if you are uninstalling InfoSphere Information Server and replacing it with a new installation on the same machine. In the case of side-by-side migration, backing up the installation is highly recommended. It is also recommended when the target system is on separate hardware.

Backing up the target system after you complete the import process is optional, but highly recommended.

Procedure

To back up the installation, use one of these procedures based on the version of the source installation:

Version	Link
Version 8.0.1	Use the 8.1 instructions below to back up version 8.0.1.
Versions 8.1, 8.1.1, and 8.1.2	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.found.admin.common.doc/topics/t_admin_backup_infsrv.html
Version 8.5	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.found.admin.burest.doc/topics/t_admin_backup_infsrv.html
Version 8.7	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.found.admin.burest.doc/topics/t_admin_backup_restore_super.html
Version 9.1	http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.found.admin.burest.doc/topics/t_admin_backup_restore_super.html
Version 11.3	Backing up and restoring IBM InfoSphere Information Server

Performing a migration

Use these procedures to perform a migration. The migration process includes exporting and importing assets by using the `istool` command line.

The following procedures guide you through the migration process:

- “Migrating credentials” on page 13
- “Migrating InfoSphere DataStage” on page 14
- “Migrating InfoSphere QualityStage” on page 33
- “Migrating common metadata” on page 42
- “Migrating IBM InfoSphere Data Quality Console” on page 43

- “Migrating IBM WebSphere RTI” on page 44
- “Migrating InfoSphere Business Glossary” on page 45
- “Migrating InfoSphere FastTrack” on page 46
- “Migrating InfoSphere Information Analyzer” on page 48
- “Migrating InfoSphere Metadata Workbench” on page 51
- “Migrating InfoSphere Information Services Director” on page 60
- “Migrating reports” on page 61

Note: Depending on the version of InfoSphere Information Server on the source computer that you are migrating from, you might not be able to migrate all of the common metadata assets associated with InfoSphere FastTrack, InfoSphere Information Analyzer, the IBM InfoSphere QualityStage Standardization Rules Designer database, the metadata repository database, metadata workbench, the IBM InfoSphere Data Quality Console database, or your credentials. Review the migration limitations based on your source version.

Migrating credentials

Use this procedure to migrate user IDs, user groups, user roles, associated credentials, and associated common metadata. Migrate this metadata before importing assets for individual products.

Before you begin

Prior to Version 8.5, the export of credentials is not supported. You will need to manually recreate the credentials using the InfoSphere Information Server Web console. The import of common metadata and InfoSphere Business Glossary assets with steward assignments requires that all user IDs from the source computer exist on the target computer before you start importing the assets. In order for steward assignments to be set up correctly, the users and groups must exist on the target computer before you start the import process.

About this task

You export assets by using the version of the istool command-line that corresponds to your source computer. You import assets by using Version 11.3 of the istool command-line.

Procedure

To migrate security assets:

Table 6. Procedures for migrating security assets

Version	Procedure
Version 8.5	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/index.jsp?topic=/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/security_cli.html • Importing security assets
Version 8.7	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/index.jsp?topic=/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/security_cli.html • Importing security assets

Table 6. Procedures for migrating security assets (continued)

Version	Procedure
Version 9.1	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/index.jsp?topic=/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/security_cli.html • Importing security assets
Version 11.3	<ul style="list-style-type: none"> • Exporting security assets • Importing security assets

Migrating InfoSphere DataStage

Use one of these procedures to migrate InfoSphere DataStage. You need to export the InfoSphere DataStage assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere DataStage files and assets that cannot be migrated by using istool, InfoSphere Information Server Manager, or the Designer client.

About this task

There are three methods that you can use to migrate InfoSphere DataStage:

- **Version 8.0.1 and later:** By using the InfoSphere DataStage Designer
- **Version 8.5 and later:** By using InfoSphere Information Server Manager
- **Version 8.5 and later:** By using istool

For InfoSphere DataStage versions 8.5 and later, it is recommended that you use the istool command line interface (CLI) to migrate your InfoSphere DataStage assets if you want to export common metadata assets that are associated with your InfoSphere DataStage projects.

You export assets by using the version of the InfoSphere DataStage Designer, InfoSphere Information Server Manager, or the istool command-line that corresponds to your source system. You import assets exported by using the InfoSphere DataStage Designer, by using the InfoSphere DataStage Designer, Version 11.3. You import assets that were exported by using InfoSphere Information Server Manager by using InfoSphere Information Server Manager, Version 11.3. You import assets that were exported by using istool with Version 11.3 of the istool command-line.

Procedure

To migrate from InfoSphere DataStage 7.5.3 or later to InfoSphere DataStage 11.3, see “Migrating from InfoSphere DataStage” on page 16.

Note: You can use InfoSphere Information Server Manager to export and import most InfoSphere DataStage assets, however you cannot export or import packages of assets that you built by using InfoSphere Information Server Manager. You must use istool functionality to import and export the assets in the packages.

Use the links in the table below for details of the specific export tools available in each version of InfoSphere DataStage:

Table 7. Procedures for manually migrating InfoSphere DataStage

Version	Procedure
Version 8.0.1	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r0/topic/com.ibm.swg.im.iis.productization.iisinfsv.migrate.doc/tasks/exportinglegacyprojects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r0/topic/com.ibm.swg.im.iis.productization.iisinfsv.migrate.doc/tasks/importingdatastageprojects.html
Versions 8.1, 8.1.1, 8.1.2	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html
Version 8.5	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolexp.html • http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolimp.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.ds.deploy.help.doc/topics/exportingobjects.html • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ds.deploy.help.doc/topics/importingobjects.html
Version 8.7	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolexp.html • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolimp.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.ds.deploy.help.doc/topics/exportingobjects.html • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ds.deploy.help.doc/topics/importingobjects.html
Version 9.1	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolexp.html • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolimp.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.ds.deploy.help.doc/topics/exportingobjects.html • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ds.deploy.help.doc/topics/importingobjects.html
Version 11.3	<ul style="list-style-type: none"> • Exporting objects by using the Designer • Importing objects by using the Designer • Export by using istool • Importing by using istool • Exporting by using InfoSphere Information Server Manager • Importing by using InfoSphere Information Server Manager

Migrating from InfoSphere DataStage

Complete these tasks to migrate IBM InfoSphere DataStage.

About this task

Before you use this process to migrate jobs, review the jobs that you plan to migrate to determine which items might require manual intervention. The following list describes the additional items that you might need to manually move to the target:

- DSParams for each project and the DSParams in the template for new projects
- User-modified IBM InfoSphere QualityStage overrides
- The FTP/Sendmail template in the project directory
- The uvodbc.config file in the project directory
- MessageHandlers, which are under the Server directory
- Job control language (JCL) templates (DS390)
- Parallel engine configuration uvconfig file which contains specific options for the environment
- User-defined entries in the dsenv file
- Data sources in the odbc.ini file
- Parallel engine maps and locales
- Parallel engine configuration files

The following list describes the additional tasks that you might need to perform:

- Recreate user names and credential mappings
- Run the Connector Migration tool to update connectors

For information about migrating data sets, see <http://www.ibm.com/support/docview.wss?uid=swg21392477>.

Prerequisites for migrating InfoSphere DataStage jobs that use Oracle 8 projects:

If you are migrating from InfoSphere DataStage, Version 7.5 and earlier, and have jobs that are using ORAOCI8 plugins, then you must first convert the jobs to use the ORAOCI plugin, which can support either Oracle 8 or Oracle 9. You must convert the jobs before exporting them to the source computer.

About this task

The OCI8TO9.B utility allows you to migrate any Oracle OCI 8 (OCI8) stage in your jobs to an Oracle OCI (OCI9) stage. This utility can be run on the InfoSphere DataStage release 6.0 and later. Before you begin to migrate the jobs, create a backup of the project to be converted. Also verify that no other user is accessing the project at the time of the conversion.

Procedure

1. Use ftp in binary mode to move the utility to your InfoSphere DataStage server, with the name OCI8TO9.B, placing it into a temporary directory. The OCI8TO9.B conversion utility is located on the WebSphere DataStage versions 6.1 to 7.5.3 installation media in the following directory: Utilities/Unsupported/Oci820ci9.

2. Copy the utility into the DSU_BP.0 directory of each project that you want to convert. In addition, on Unix you need to run the following command: `chmod 750 OCI8T09.B`.
3. Start the InfoSphere DataStage and QualityStage Administrator from any of the InfoSphere DataStage Client workstations.
 - a. Select the **Project** tab, highlight the project you are converting, and click **Command**.
 - b. At the command prompt, type the following command: `RUN DSU_BP OCI8T09.B`.
4. Click **Execute**. You are prompted to continue or exit. Reply with either 'Y' or 'N' and click **Respond**. If continuing, the output will pause at end-of-page by default; you can either click **Next** after each pause or clear **Pause....**

Results

The utility creates a report of the jobs that were converted in the &COMO& directory called OCI8T09.CONV.

Note: To migrate from versions of InfoSphere DataStage prior to version 6.0 on which the OCI8T09.B utility is not available, you need to use an intermediate WebSphere DataStage version 6.0 or version 7.5 installation, which contains the tool. Perform the following steps:

1. Migrate the jobs with OCI8 stages to jobs with OCI9 stages on a WebSphere DataStage version 6.0 or version 7.5 installation that contains the tool.
2. Import those migrated jobs to InfoSphere Information Server, version 8.1 or later.

Exporting InfoSphere DataStage projects:

Complete these tasks to export InfoSphere DataStage projects.

Procedure

1. "Capturing job log information"
2. "Backing up the installation" on page 12
3. "Saving InfoSphere DataStage settings files" on page 20
4. "Moving job dependency files, hashed files, and job level message handlers" on page 20
5. "Exporting the projects" on page 23

Capturing job log information:

If you plan to remove the source installation and replace it with the target installation, save the job log information, which includes environment settings and other information that you later use to validate the results on the target system.

Procedure

1. On the source system, run a small number of jobs to capture the job log information.

Note: Run both server and parallel jobs, if you have both in your environment, because the environment variables might be different for the job types.

2. For each job, complete these steps:

- a. From the InfoSphere DataStage and QualityStage Director, open the job log view for one of the jobs.
 - b. Choose **Project > Print All entries > Full details > Print to file**, and then enter a file name that clearly identifies the job.
3. Save the logs for future use.

Backing up the installation:

Before you begin the export and after you complete the import process, it is a best practice to back up the installation.

About this task

Backing up the installation before you begin the export process is optional. It is mandatory only if you are uninstalling InfoSphere Information Server and replacing it with a new installation on the same machine. In the case of side-by-side migration, backing up the installation is highly recommended. It is also recommended when the target system is on separate hardware.

Backing up the target system after you complete the import process is optional, but highly recommended.

Procedure

To back up the installation, use one of these procedures based on the version of the source installation:

Version	Link
Version 8.0.1	Use the 8.1 instructions below to back up version 8.0.1.
Versions 8.1, 8.1.1, and 8.1.2	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.found.admin.common.doc/topics/t_admin_backup_infsrv.html
Version 8.5	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.found.admin.burest.doc/topics/t_admin_backup_infsrv.html
Version 8.7	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.found.admin.burest.doc/topics/t_admin_backup_restore_super.html
Version 9.1	http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.found.admin.burest.doc/topics/t_admin_backup_restore_super.html
Version 11.3	Backing up and restoring IBM InfoSphere Information Server

Backing up Version 7.5.3 and earlier on UNIX or Linux:

Before you begin the export process and after you complete the import process, back up your Version 7.5.3 (or earlier) installation.

Procedure

1. Complete these steps to stop InfoSphere DataStage services:
 - a. Disconnect all user sessions and ensure that no jobs are running.

- b. Log on to the InfoSphere DataStage server as dsadm or an equivalent administrative user.
 - c. Change to the `../Ascential/DataStage/DSEngine/` directory.
 - d. Source the dsenv file:


```
./dsenv
```
 - e. Run the following commands to stop the services:


```
./bin/uv -admin -stop
```
 - f. Back up the `../Ascential/DataStage` directory and all of its subdirectories. If any projects are located in other directories, back up those projects.
 - g. Back up all directories that contain external files or libraries that the jobs use. External files are data sets, file sets, sequential files, hashed files, and other similar files. External libraries might be custom C++ functions that the parallel engine calls.
2. Complete these steps to start the InfoSphere DataStage services:
 - a. Log on to the InfoSphere DataStage server as the dsadm user or as an equivalent administrative user.
 - b. Change to the `../Ascential/DataStage/DSEngine/` directory.
 - c. Source the dsenv file:


```
./dsenv
```
 - d. Run the following commands to start the services:


```
./bin/uv -admin -start
```

Backing up Version 7.5.3 and earlier on Microsoft Windows:

Before you begin the export or import process, back up your Version 7.5.3 (or earlier) installation. You should also back up the Windows registry. You should export HKEY_LOCAL_MACHINE\SOFTWARE as a back up.

Procedure

1. Complete these steps to stop InfoSphere DataStage services:
 - a. Close all DataStage clients.
 - b. Log on to the DataStage server. Choose **Start > Settings > Control Panel > DataStage**.
 - c. Click **Stop all services**.
 - d. Back up the `..\Ascential\DataStage` directory and all of its subdirectories. If any projects are located in other directories, back up those projects.
 - e. Back up all directories that contain external files or libraries that the jobs use. External files are data sets, file sets, sequential files, hashed files, and other similar files. External libraries might be custom C++ functions that the parallel engine calls.
2. Complete these steps to start the InfoSphere DataStage services:
 - a. Log on to the DataStage server. Choose **Start > Settings > Control Panel > DataStage**.
 - b. Select **DSRPC Service** and then click **Start**.
 - c. If Startup is not listed as Automatic, click **Startup...**, then click **Automatic**. The service now restarts automatically whenever the server is rebooted.
 - d. Repeat Steps b and c for the **DataStage Engine Resource Service**, and **DataStage Telnet Service**.

Saving InfoSphere DataStage settings files:

Save the settings files from the source installation. Then after you install the new version, integrate the saved settings into the settings files on the target installation.

About this task

In the following procedure, the environment variable `$DSHOME` identifies the engine directory of the IBM InfoSphere DataStage installation.

In Linux and UNIX, for Version 7.5.3 and earlier, the engine directory is `/user_home/Ascential/DataStage/DSEngine`, where `user_home` is the home directory of the InfoSphere DataStage administrator who originally installed InfoSphere DataStage. By default, this user is named `dsadm`. For Version 8.0.1 and later, the engine directory is `/opt/IBM/InformationServer/Server/DSEngine`. For Version 7.5.3 and earlier, the default location for each project is in its own directory in the `/user_home/Ascential/DataStage/Projects` directory. For Version 8.0.1 and later, the default location for each project is in its own directory in the `/opt/IBM/InformationServer/Server/Projects` directory.

In Microsoft Windows, the engine directory is `C:\IBM\InformationServer\Server\DSEngine`. For Version 7.5.3 and earlier, each project has its own directory located, by default, in the `C:\Ascential\DataStage\Projects` directory. For Version 8.0.1 and later, each project has its own directory located, by default, in the `C:\IBM\InformationServer\Server\Projects` directory.

Procedure

1. Complete these steps to save the required settings files:
 - a. Copy the `$DSHOME/dsenv` file to a location that is outside of the InfoSphere DataStage file structure.
 - b. To keep a record of the existing configuration and the configuration of the ODBC drivers, copy the following files to a location that is outside of the InfoSphere DataStage file structure:
 - `$DSHOME/.odbc.ini`
 - `$DSHOME/uvodbc.config`
 - The `uvodbc.config` file that is located in each project directory
2. Complete these steps to save the required settings files:
 - a. Copy the `DSParams` file from each project directory to a safe location.
 - b. Copy the `DSParams` file from the Template project. For example, save the `C:\Ascential\DataStage\Template\DSParams` file.
 - c. Copy the `$DSHOME\uvodbc.config` file in the engine directory.
 - d. Copy the `uvodbc.config` file that is located in each project directory.

Moving job dependency files, hashed files, and job level message handlers:

If the jobs in the source installation depend on files such as flat files, schema files, library files, and hashed files that are located in directory structures that will not be accessible from the target installation of InfoSphere DataStage, you must save the files and manually move them to the target installation.

About this task

The InfoSphere DataStage export procedure exports InfoSphere DataStage objects such as job designs, table definitions, and customer routines. If jobs rely on flat files, files that contain schemas that parallel jobs use, and libraries that are called by parallel job custom routines, you must manually move the files if they are located in the InfoSphere DataStage server directory structure or in the InfoSphere DataStage client directory structure or if you are installing InfoSphere DataStage on a different target computer.

If the parallel job custom routines call libraries, you cannot move the libraries if the target operating system or computer is different from the source operating system or computer. For these libraries, you must find alternative versions of the libraries or rebuild them from source code.

In addition to saving files, document the current operating system. Record the project and directory structure, security settings, database connection information, ODBC driver installation, and other key information about the environment. Also log into the IBM InfoSphere DataStage and QualityStage Administrator client and record the non-administrator user roles for each project.

If you need information about hashed files that come from a computer that uses a different byte order, or for information about moving hashed files that come from a non-globalized (non-NLS) installation when you are migrating to a globalized (NLS) installation, see Restoring job dependency files and hashed files.

Review the jobs that you are planning to migrate to determine all of the items that must be manually copied to the target computer. The following list contains items that you might need to copy:

- DSParams settings, which are per-project
- FTP/Sendmail template in the Project directory
- `uvodbc.config` file in the Project directory
- Message handlers, which are under the Server directory
- Job Control Language (JCL) templates
- DSEngine configuration, which is in the `uvconfig` file
- User-defined entries in the `dsenv` file. For more information about setting up the `dsenv` file, see Configuring the `dsenv` file.
- Data sources in the `odbc.ini` file. For all versions before Version 9.1, you need to manually merge the changes in the file. For Version 9.1 and later, you should be able to copy the file from your source computers and move it to your target computers. For more information about setting up the `odbc.ini` file, see Configuring the `odbc.ini` file
- Parallel job configuration files.

In InfoSphere DataStage versions 8.5 and later, you can export DSParams environment variables by using the Administrator client.

Procedure

Manually move job dependency files, hashed files, and job level message handlers to your target computer. Ensure that your file ownership and access permissions are retained in the move.

Option	Description
To move the job dependency files	Use operating system commands. If you have jobs that can repopulate the data sets and file sets from external sources, use the jobs to repopulate the data sets and file sets rather than manually moving them.
To move hashed files	<ol style="list-style-type: none"> 1. Locate the hashed files in the directory structure: <ul style="list-style-type: none"> • Each static hashed file is represented by two operating system files. For example, a static hashed file named <code>price_lookup</code> is contained in the two files named <code>price_lookup</code> and <code>d_price_lookup</code>. • Each dynamic hashed file is represented by a directory with the same name as the hashed file and a file named <code>D_hashed_file_name</code>. For example, a dynamic hashed file named <code>code_lookup</code> is represented by the directory named <code>code_lookup</code> and the file named <code>D-code_lookup</code>. 2. Copy the files and directories that represent each hashed file to a safe location that is outside of the InfoSphere DataStage directory structure.
To move InfoSphere DataStage message handlers that were specified at the job level	<p>If you only have project level message handlers, manually copy them from the <code>C:\IBM\InformationServer\Server\MsgHandlers</code> or <code>/opt/IBM/InformationServer/Server/MsgHandlers</code> directory to the same location on the new installation. Export job level message handlers with the InfoSphere DataStage job. If you are exporting InfoSphere DataStage jobs by using <code>istool</code>, specify the -includeexecutable parameter to export job level message handlers. The message handlers are not exported as part of the job design.</p> <p>If you import the executable, the message handlers will come with it. You must recompile and run the InfoSphere DataStage job after importing it on your target system, but the message will get promoted. You can confirm that the message handlers were promoted by checking the <code>/Projects/project_name/RT_SC</code> directory for the job. You should see a <code>Local.msh</code> file. The job level message handlers are stored in this directory. Project level message handlers are stored in the <code>/InformationServer/Server/MsgHandlers</code> directory.</p> <p>Note: Some message IDs might have changed. To verify the message IDs, review the IBM InfoSphere Information Server Parallel Engine Message Reference guide.</p>

Exporting the projects:

Use the istool command line interface (CLI) to export all versions of InfoSphere DataStage projects. You can also use the dscmdexport command or the InfoSphere DataStage Manager client for Version 7.5.3 or earlier. You can use the InfoSphere DataStage Designer client for Version 8.0.1 or later to export InfoSphere DataStage projects. You can use the InfoSphere Information Server Manager for Version 8.1 or later to export InfoSphere DataStage projects. If you use the istool or dscmdexport command, you can create a script that exports all projects at one time.

About this task

Unless you need to migrate job level message handlers, you can export jobs without executables. Do not export compiled jobs. You will recompile all migrated jobs when the migration is complete. If any export file is larger than 2 GB, export the project into two or more smaller files.

Note: For best performance when using the istool command line interface (CLI) to move large volumes of assets, try to export no more than 2,000 jobs to the same archive file.

Procedure

Use the istool command line interface (CLI), the dscmdexport command, the InfoSphere Information Server Manager client, or the InfoSphere DataStage Designer client to export projects.

Option	Description
To use the istool command line interface (CLI) to export projects,	See the following topic for information about using the istool command line interface to export projects: Istool export command for InfoSphere DataStage and QualityStage assets. Note: When using istool to export projects, you can use the -includedependent parameter to transfer common metadata assets, such as database tables that are related to the exported table definitions. However, depending on your migration strategy, you might prefer to transfer all common metadata assets by using the -commonmetadata parameter in a separate export command. You must transfer implemented data resources before transferring InfoSphere DataStage jobs. The istool command line interface (CLI) is the only method that gives you the option to export common metadata assets that are associated with the projects.

Option	Description
<p>To use the <code>dscmdexport</code> command to export projects</p>	<ol style="list-style-type: none"> <li data-bbox="935 226 1421 485">1. On the DataStage client computer, open a command line editor and go to the DataStage client directory. For Version 7.5.3 and earlier, the default path is <code>C:\Ascential\Program Files\Ascential\DataStage\version</code>. For Version 8.0.1 and later, the default path is <code>C:\IBM\InformationServer\Clients\Classic</code>. <li data-bbox="935 499 1421 1318">2. Enter the following command: <pre>dscmdexport /AF=authfile /D=domainname /U=username /P=password /H=hostname project_name export_file_path [/V]</pre> <p>The arguments are the following:</p> <ul style="list-style-type: none"> <li data-bbox="971 716 1421 793">• <i>authfile</i> is the name of the encrypted credentials file that contains the connection details. <li data-bbox="971 808 1421 865">• <i>domainname</i> is the name of the services tier computer. <li data-bbox="971 879 1421 936">• <i>hostname</i> is the name of the InfoSphere DataStage services tier computer. <li data-bbox="971 951 1421 1008">• <i>username</i> is your user name to log on to InfoSphere DataStage. <li data-bbox="971 1022 1421 1079">• <i>password</i> is the password for the user name. <li data-bbox="971 1094 1421 1150">• <i>project_name</i> is the name of the project that you are exporting. <li data-bbox="971 1165 1421 1222">• <i>export_file_path</i> is the path name of the destination file. By convention, export files have the file extension <code>.dsx</code>. <li data-bbox="971 1236 1421 1314">• <code>/V</code> turns the verbose option on so that you can follow the progress of the export procedure. <li data-bbox="935 1333 1421 1650">3. Example: This example uses the command line to export the project named <code>monthlyaudit</code> that is located on the server named <code>R101</code> and writes the project to a file named <code>monthlyaudit.dsx</code>. The target file is located in a directory named <code>migrated_projects</code> on the client computer: <pre>dscmdexport /D=DOM1 /U=BillG / P=paddock /H=R101 monthlyaudit C:\migrated_projects\monthlyaudit.dsx</pre>

Option	Description
<p>To use the InfoSphere Information Server Manager client to export projects</p>	<ol style="list-style-type: none"> 1. Open the InfoSphere Information Server Manager client and attach to the project that you want to export. 2. Confirm that View > Host View is selected. 3. Select Export > DataStage Components. 4. In the Export window, specify details about the project that you want to export: <ul style="list-style-type: none"> • In the Export to file field, type or browse for the path name of the file in which to store the project. By default, export files have the file extension .dsx. • On the Components tab, select Whole Project. 5. Click OK. The project is exported to the file that you specify. 6. In the left pane of the InfoSphere Information Server Manager client, select the next project and repeat steps c through e.
<p>To use the InfoSphere DataStage Designer client to export projects</p>	<ol style="list-style-type: none"> 1. Select the project in the tree on the left pane of the Designer client. 2. Right-click the project and select Export item from the context menu. This brings up the Repository Export dialog. All items in the project are automatically selected in this dialog. 3. Edit the Export to file field. Specify the absolute path of the export file name. This file is created by the export process. For example, C:\Temp\project_export_file.dsx. 4. Select Export. 5. Select Close when the export is complete. <p>To export other projects, close the InfoSphere DataStage Designer client and open the InfoSphere DataStage Designer client against another project to repeat the export process.</p>

Removing the InfoSphere DataStage server and clients:

If you plan to replace the existing version with the new version, remove the InfoSphere DataStage server and clients before you install the new version.

About this task

In Version 8.0.1 and later, the InfoSphere DataStage server is called the engine tier.

Procedure

1. **Windows** To remove InfoSphere DataStage Version 7.5.3 and earlier, perform these steps:
 - a. Ensure that DataStage is not running and that no clients are connected to the server.
 - b. Open the Microsoft Windows Control Panel, and select **Add or Remove Programs**.
 - c. In the list of installed programs, select **DataStage server**.
 - d. Click **Change/Remove**.
2. **Linux** **UNIX** To remove InfoSphere DataStage 7.5.3 and earlier, perform these steps:
 - a. Mount the original installation CD, or copy the CD contents to the computer.
 - b. Log in as the root user.
 - c. Change the directory to the top-level directory of the CD or to the directory where you copied the CD contents.
 - d. Enter one of the following commands to start the uninstallation program, which guides you through the process for removing the InfoSphere DataStage server:

Table 8. Commands for removing the InfoSphere DataStage server

Operating system	Command
HP-UX	'UNINSTLL.SH;1'
IBM AIX	uninstll.sh
Linux	'uninstll.sh'
Solaris	uninstll.sh

3. To remove the InfoSphere DataStage clients, complete these steps:
 - a. Open the Microsoft Windows control panel, and select **Add or Remove Programs**.
 - b. In the list of installed programs, select **DataStage clients**.
 - c. Click **Change/Remove**.
4. To remove InfoSphere Information Server, Version 8.0.1 or later, see the following topics:

Version	Procedure
Version 8.0.1	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r0/topic/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/containers/wsisinst_rem_is.html
Version 8.1	http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_rem_is.html
Version 8.5, 8.7, and 9.1	http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_rem_is.html
Version 11.3	Removing InfoSphere Information Server software

Installing the new version of InfoSphere Information Server on the client computer:

You do not migrate the client; instead, you install the new version of the client programs on the client tier.

Procedure

1. See the following topic for complete information about installing Version 11.3:
http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.svg.im.iis.productization.iisinfsv.install.doc/topics/wsisinst_chk_server.html
2. If your topology includes multiple versions of IBM InfoSphere Information Server, you can install the Version 11.3 client tier on a separate Microsoft Windows computer or install it on the same computer with the prior versions of the client. For InfoSphere DataStage, use the Multi-client Manager to switch between versions. If you choose to install the Version 11.3 client tier along with prior clients, use the Microsoft Windows Add or Remove Programs utility to remove the existing MKS Toolkit before you install the Version 11.3 client tier. After you install Version 11.3, both the prior versions and Version 11.3 will use the latest MKS Toolkit, which is installed along with the client tier.

Note: If you want to install the Version 11.3 client tier along with a Version 11.3 engine or services tier on the same Microsoft Windows computer, you cannot have any additional client installations on the computer. You can install only one Version 11.3 client on the computer. In addition, you must install the client tier and the engine tier in the same installation directory.

Complete these steps to install the Version 11.3 client on the same Microsoft Windows computer where the client for the prior version is located.

- a. Log on to the Windows computer as an administrator.
- b. Turn off any firewall software that is installed on the computer.
- c. Optional: Turn off antivirus software.
- d. Go to the root directory on the InfoSphere Information Server Version 11.3 installation media or downloaded installation image.
- e. Double-click **setup.exe** and run the file as an administrator.
- f. When asked for an installation directory, select **New Installation** and specify a directory that does not contain an existing InfoSphere Information Server client.
- g. Select the product modules and components as required.

Importing InfoSphere DataStage projects:

Complete these tasks to import IBM InfoSphere DataStage projects into the new version of InfoSphere Information Server.

Procedure

1. "Importing project information" on page 28
2. "Merging the contents of the InfoSphere DataStage settings files" on page 28
3. "Restoring job dependency files and hashed files" on page 29
4. "Recompiling jobs" on page 30

Importing project information:

Use the istool command line interface (CLI) to import InfoSphere DataStage projects, for Versions 8.5 and later. You can also use the dscmdimport command, the InfoSphere DataStage Designer client, or the InfoSphere Information Server Manger client to import projects.

About this task

Use the same method to import InfoSphere DataStage assets that you used to export the assets.

Procedure

1. Open the InfoSphere DataStage Administrator client, and create a new project on the target computer.
 - a. On the **Projects** page, click **Add**.
 - b. In the **Add Project** window, type the name of the project that you want to create and specify a path name for it. You can use the original name of the project.
 - c. Click **OK** to create the project.
2. Import InfoSphere DataStage assets by using the istool command line interface (CLI), the dscmdimport command, the InfoSphere Information Server Manager client, or the InfoSphere DataStage Designer client.

Option	Description
To use the istool command line interface (CLI) to import projects	See the following topic for information about using the istool command line interface to import projects: Istool import command for InfoSphere DataStage and QualityStage assets.
To use the dscmdimport command to import projects	See the following topic for information about using the dscmdimport command to import projects: dscmdimport command.
To use the InfoSphere Information Server Manager client to import projects	See the following topic for information about using the InfoSphere Information Server Manager client to import projects: Importing assets by using the InfoSphere Information Server Manager client .
To use the InfoSphere DataStage Designer client to import projects	<ol style="list-style-type: none">1. Move the .dsx files that you created to the computer where the InfoSphere DataStage clients are installed.2. Open the InfoSphere DataStage Designer client and attach to the target project.3. Select Import > DataStage Components.4. Specify the name of the .dsx file to import, and click OK.5. Repeat steps b through e for each project that you need to import.

Merging the contents of the InfoSphere DataStage settings files:

Project environment variables and other setting are stored in the DSParams file in each project. For Version 8.5 and later, use the InfoSphere DataStage Administrator

client to export and import the environment variable settings or the **dsadmin** command line tools to manually merge the DSParams settings that you saved during the export process. For Version 8.1 and earlier, use the Administrator client or **dsadmin** command line to manually create the environment variables in the new system. For Version 8.0.1 and earlier, use the Administrator client to perform these tasks.

About this task

The import process sets the required environment variable definitions in the project, if they are used as parameter variables in the job or parameter set. In general you only set project environment variable values, if required, and environment variables that are required by third-party components and that are not referenced as job parameters.

If your source computer has InfoSphere DataStage, Version 8.5 or later, use the InfoSphere DataStage Administrator client to export environment variables to *.env files. You can then import these files into InfoSphere DataStage, Version 11.3. Select each project, click **Properties**, select the **General** tab, and click the **Environment** to access the export function. The environment variables are exported per project. An .env file is created to hold environment variables for that project. When you complete the import process, you will import the corresponding files. Other settings files, such as uvconfig, .odbc.init, and so on, must be exported manually.

Only add settings to or edit settings in the new versions of the settings files. Do not delete any settings and do not copy the saved versions of the DSParams files onto the new versions of the files.

For more information about using the dsadmin command line tools, see the following topic: [Commands for administering projects](#).

Restoring job dependency files and hashed files:

Restore job dependency and hashed files to the new installation.

Procedure

1. To restore each job dependency file, complete these tasks:
 - a. Find the location for the file in the new IBM InfoSphere Information Server directory structure. For example, if the file was in the project directory in the previous installation, find the project directory to which you imported the project contents.
 - b. Use operating system commands to copy the saved file to the required location. Verify that the file ownership and permissions will allow appropriate access by using your InfoSphere DataStage credentials.
 - c. Ensure that the job that references the file can locate it. If the file is referred to directly, you must edit the path name in the job design. If the file is referred to by a job parameter, you might need to edit the default value of the parameter to reference the new location for the file.
2. To restore hashed files, complete these steps:
 - a. Open the IBM InfoSphere DataStage and QualityStage Director client and attach to the migrated project that uses the hashed files.
 - b. Run or validate the job that creates the hashed files.

- c. Close all InfoSphere DataStage clients and stop the InfoSphere DataStage services.
 - d. Locate the newly created files in the directory structure and copy the hashed files on top of them. For a dynamic file, ensure that the .Type30 file accompanies the DATA.30 and OVER.30 files in the hashed file directory.
3. If the hashed files come from a computer that uses a different byte order, complete these steps. Note that file formats are compatible between certain operating systems. Files moved between Microsoft Windows, Suse, and Redhat should not require this step. The same is true for relocating files between IBM AIX, Solaris, HP-UX , and Z Linux.
 - a. Log in as dsadm or an equivalent user.
 - b. Linux UNIX Change to the ../InformationServer/Server/DSEngine directory.
 - c. Linux UNIX Source the dsenv file to set up the required environment variables:
./dsenv
 - d. Linux UNIX Change to the project home directory.
 - e. Linux UNIX Run \$DSHOME/bin/fnuxihash_file.
 - f. Windows Run ..\InformationServer\DSEngine\bin\fnuxihash_file.
 4. If the hashed files come from a non-globalized (non-NLS) installation and you are migrating to a globalized (NLS) installation, complete these steps to run the UNICODE.FILE:
 - a. Log in as dsadm or an equivalent user.
 - b. Linux UNIX Change to the ../InformationServer/Server//DSEngine directory.
 - c. Linux UNIX Source the dsenv file to set up the required environment variables:
./dsenv
 - d. Run bin/uvsh (Linux or UNIX) or bin\uvsh (Microsoft Windows) to get the DSEngine shell prompt.
 - e. The shell converts uppercase characters to lowercase characters, and vice-versa. To turn off this feature, enter the command PTERM CASE NOINVERT.
 - f. Enter the command LOGTO *project_name* to change to the project.
 - g. Enter the command UNICODE.FILE *hash_file*.
 - h. Repeat steps f and g for each project.
 - i. Enter QUIT to exit the DSEngine shell.
 5. Restart the InfoSphere DataStage services.

Recompiling jobs:

Before you can run jobs and routines, you must recompile them.

About this task

You recompile jobs on your target computer after importing them.

If you will be exporting jobs with executables from another 11.3 computer into the target computer and you will not be compiling any jobs on your target computer,

you should run the `DSStageTypeUpdater.exe` utility to populate stage type records into the runtime repository for each project. The utility can be found in the `Clients\Classic` subdirectory, along with the `DSStageTypeUpdater_readme.txt` file, which describes how to run the utility.

Procedure

1. From the DataStage Designer client, select **Tools > Multiple Job Compile** and specify the criteria for selecting items to compile. Choose one or more of the following:
 - Server
 - Parallel
 - Mainframe
 - Sequence
 - Custom server routines
 - Custom parallel stages

You can also specify that you want to manually select the items to compile.

2. Click **Next**. If you chose **Show manual selection page**, the **Job Selection Override** window appears. Use the Add and Remove buttons to add all of the jobs that you want to recompile to the right pane.
3. Click **Next**. If you are compiling parallel or mainframe jobs, specify **Force compile** for parallel jobs or specify an upload profile for mainframe jobs.
4. Click **Next**. The name of each selected item and the compilation status displays.
5. Click **Start Compile** to start the compilation. The compilation output window displays the current status and details about each compiled job.
6. Click **Finish**. If you selected **Show compile report**, the report that is generated by the compilation displays.

What to do next

For information about additional ways to recompile jobs, see the following topics:

- Compiling from the client command line
- Compiling Multiple Jobs

Using InfoSphere DataStage clients:

Use the Multi-client Manager to choose which version of the client you want to use.

About this task

You use a different procedure depending on the version of IBM InfoSphere DataStage and whether you are connecting from the command line. The clients for Version 7.5.3 and earlier attach directly to the engine. The clients for Version 8.0.1 and later connect to the services tier, and credential mapping provides the necessary credentials that you need to connect to the engine tier.

Procedure

1. To specify the client version that you want to use, complete these steps:
 - a. Start the Multi-client Manager by double-clicking the desktop shortcut.
 - b. In the Current Installation field, check whether the currently selected version is the version that you want to use. If the correct version is selected,

- take no further action. If the correct version is not selected, select the correct client in the **Known installations** list, and click **Select**.
- c. Click **Close** to close the Multi-client Manager.
2. To connect to Version 7.5.3 or earlier, complete these steps:
 - a. Select the client from the Start menu.
 - b. In the **Host System** field of the **Attach to Project** window, type the identify of the server in the form *hostname:portnumber*, where *portnumber* is the port number that the server uses. For example, type R101:31538.
 - c. Type your user name and password.
 - d. If you used the Manager, Director, or Designer client, specify the name of the project that you want to attach to.
 3. To use the Designer or Director client to connect to Version 8.0.1 and later, complete these steps:
 - a. Select the client from the **Start** menu.
 - b. In the **Services tier** field, type the identify of the server in the form *hostname:portnumber*, where *portnumber* is the port number that the server uses. For example, type R101:9080.
 - c. Type your user name and password.
 - d. In the **Project** field, specify the identity of the project that you want to attach to in the form *engine_hostname/project*. For example, type R101/datastage.
 4. To use the Administrator client to connect to Version 8.0.1 and later, complete these steps:
 - a. Select the client from the **Start** menu.
 - b. In the **Services tier** field of the **Attach to DataStage** window, type the host name of the InfoSphere DataStage services tier in the form *hostname:9080*. For example, type R101:9080 in the field or type R201:80 in the field if you are using a front-end Web server.
 - c. Enter your user name and password.
 - d. In the **DataStage Engine** field, specify the host name of the computer that you want to attach to.
 5. To use the command line to connect to Version 8.0.1 and later, complete these steps:
 - a. Log into the operating system as the user who runs the job.
 - b. Use one of the following to run a job:
 - To connect to a project from the command line, specify the server name and port number of the required instance with the **-server** argument in the form **-server *server:portnumber*** for local computers.
 - For computers that do not use the default ports, to connect to a project that is on a local server, specify the **-server** option with only the port number and do not specify the server name. You do not need to specify your user name and password. For example: `dsjob -server :31539 -lprojects`
 - For remote computers that run InfoSphere DataStage Version 11.3 instances, you must specify the domain and the server name in the form **-domain *domain.domain_portnumber* -server *server:portnumber***. The default domain port number is 9080. For example, to run a job on the local computer on the server that uses port 31359, use this command: `dsjob -server r101:31359 -run myproj myjob`.

- To run a job on the local computer on the default server, use this command: `dsjob -run myotherproj myotherjob`.
- To run a job on a remote computer called R101 on the Version 8.5 server that uses port 31360, you must also specify the host computer, the domain, and provide the login information. For example, enter the following command: `dsjob -domain mydomain:9080 -server r101:31360 -user billg -password paddock -run myproj myjob`

Migrating InfoSphere QualityStage

Use one of these procedures to migrate InfoSphere QualityStage. You need to export the InfoSphere QualityStage assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere QualityStage files and assets that cannot be migrated by using istool or the Designer client.

About this task

When you use istool, InfoSphere QualityStage assets can be exported and imported with InfoSphere DataStage assets. When you export a project, all types of assets that are in the project are exported. If InfoSphere QualityStage and InfoSphere DataStage assets are in the same archive file, a single command imports them both. You do not need to issue separate commands to import the assets.

You can migrate InfoSphere QualityStage standardization rule sets and match specifications.

The IBM InfoSphere QualityStage migration utility and the QualityStage Legacy stage are no longer available. If you have jobs that use stages from InfoSphere QualityStage Version 7.5.3 or earlier, you must configure the jobs to use the stages that are available in the current version. To manually migrate standardization rule sets from InfoSphere QualityStage, use the Version 11.3 import and export commands that are listed below.

You export assets by using the version of InfoSphere QualityStage or the istool command-line that corresponds to your source system. You import assets by using InfoSphere QualityStage, Version 11.3 or Version 11.3 of the istool command-line.

Procedure

Use one of these procedures to migrate InfoSphere QualityStage:

Table 9. Procedures for migrating InfoSphere QualityStage

Version	Procedure
Version 8.0.1	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r0/topic/com.ibm.swg.im.iis.productization.iisinfsv.migrate.doc/tasks/exportinglegacyprojects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r0/topic/com.ibm.swg.im.iis.productization.iisinfsv.migrate.doc/tasks/importingdatastageprojects.html

Table 9. Procedures for migrating InfoSphere QualityStage (continued)

Version	Procedure
Versions 8.1, 8.1.1, 8.1.2	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html
Version 8.5	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolexp.html • http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r5/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolimp.html
Version 8.7	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolexp.html • http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolimp.html
9.1	<ul style="list-style-type: none"> • http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.ds.design.doc/topics/g_ddesref_Exporting_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.ds.design.doc/topics/c_ddesref_Importing_Objects.html • http://publib.boulder.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.iisinfsv.assetint.doc/topics/istoolexp.html
Version 11.3	<ul style="list-style-type: none"> • Exporting objects by using the Designer • Importing objects by using the Designer • Export by using istool • Importing by using istool

Updating jobs to use newer stages

Use this table to select the stage to substitute for InfoSphere QualityStage stages.

If you have jobs from IBM InfoSphere QualityStage 7.5.3 or earlier, you must configure the jobs to use the stages that are available in the current version.

The following table lists replacement stages for previous versions of InfoSphere QualityStage stages.

Table 10. Replacement stages for InfoSphere QualityStage stages

Stage	Purpose	Replacement stage
Abbreviate	Creates match keys from company names.	No direct replacement. Use the Standardize stage to reformat company names and pair with an appropriate match.

Table 10. Replacement stages for InfoSphere QualityStage stages (continued)

Stage	Purpose	Replacement stage
Build	Rebuilds a single record from multiple records that are created with a Parse stage.	No direct replacement. Build was often used with Parse to analyze multi-domain data fields. Use Standardize to accomplish the same function in one step.
Collapse	Generates a list of each unique value in single-domain data fields.	Sort stage
Collapse	Generates frequency counts of data values in a field or a group of fields.	Aggregate stage
Format Convert	Reformats files from delimited to fixed-length and vice versa.	Sequential File stage
Format Convert	Provides I/O to an ODBC database.	ODBC stage or database specific stage
Investigate	Analysis of data quality.	Investigate stage and the Reporting tab for the Web Console for InfoSphere Information Server.
Match	Identifying data duplicates in a single file by using fuzzy match logic.	One-source Match stage in conjunction with the Match Frequency stage.
Match	Pairing records from one file with those in another by using fuzzy match logic.	Two-source Match stage in conjunction with the Match Frequency stage.
Multinational Standardize	Standardize multinational address data.	MNS stage
Parse	Tokenizes a text field by resolving free-form text fields into fixed-format records that contain individual data elements.	No direct replacement. Parse was often used with Build to analyze multi-domain data fields. Use the Standardize stage to accomplish the same function in one step.
Program	Invokes a customer-written program.	Depends on the functionality of the customer-written program. Possibilities include adding a Parallel Build, Custom, or Wrapped stage type.
Select	Conditionally routes records that are based on values in selected fields.	Switch and Filter stages
Sort	Sorts a list.	Sort stage
Standardize	Breaks down multi-domain data columns into a set of standardized single-domain columns.	Standardize stage
Survive	Produces the best results record from a group of related records.	Survive stage
Transfer	Rearranges and reformats columns in a record.	No separate stage is required to do this

Table 10. Replacement stages for InfoSphere QualityStage stages (continued)

Stage	Purpose	Replacement stage
Transfer	Acts as a gatekeeper for files in non-standard formats (variable length records, non-standard code page, binary or packed data).	Sequential File or Complex Flat File stage
Transfer	Produces multiple output records from a single input record.	Splitting records can be achieved by Copy stage followed by Funnel stage
Transfer	Adds record keys that consists of sequence number plus an optional fixed "file identifier."	Surrogate Key Generator stage
Unijoin	Join records from two files based on a key.	Join stage or Lookup stage
Unijoin	Pairing records from one file with those in another by using fuzzy match logic.	Two-source Match stage in conjunction with Match Frequency stage
Unijoin	Merges data from multiple records into one.	Join stage and Merge stage
Unijoin	Manipulate and transform data record.	Transformer stage

Migrating InfoSphere QualityStage standardization rule sets

Use these procedures to migrate standardization rule sets that are used in the IBM InfoSphere QualityStage Standardization Rules Designer. You need to export the standardization rule sets that are on the source computer, and then import the assets to the target computer to complete the migration.

Migrating InfoSphere QualityStage, Version 9.1 standardization rule sets:

Use this procedure to migrate InfoSphere QualityStage, Version 9.1 standardization rule sets that are used in the IBM InfoSphere QualityStage Standardization Rules Designer. You need to export the standardization rule sets that are on the source computer, and then import the assets to the target computer to complete the migration.

About this task

You can migrate only published standardization rule sets. You can use the InfoSphere DataStage and QualityStage Designer or istool to export and import your standardization rule sets to the new computer.

Procedure

1. Export and import the standardization rule sets by using the InfoSphere DataStage and QualityStage Designer.
2. On your old computer, open the InfoSphere DataStage and QualityStage Designer and navigate to the standardization rule sets that you want to migrate.
3. Select the standardization rule sets and export them. For information on exporting assets, see Exporting directly from the repository tree.
4. Copy the exported files to your new computer.

5. On your new computer, open the InfoSphere DataStage and QualityStage Designer and import the standardization rule sets that you exported from your old computer. For information on importing assets, see Importing previously exported objects.

To export and import the standardization rule sets by using istool:

Use this procedure to migrate InfoSphere QualityStage, Version 9.1 standardization rule sets that are used in the IBM InfoSphere QualityStage Standardization Rules Designer by using istool. You need to export the standardization rule sets that are on the source computer, and then import the assets to the target computer to complete the migration.

About this task

You can migrate only published standardization rule sets. You can use asset interchange to import and export your standardization rule sets to the new system.

Procedure

1. Export the assets from the Version 9.1 computer. For information on exporting assets from your Version 9.1 system, see Export command for InfoSphere DataStage and QualityStage assets. The asset type of a standardization rule set is a data quality specification. The file extension of a data quality specification is .dqs. For example, you might specify the following export command to export a standardization rule set:

- **Linux** **UNIX**

```
istool.sh export -domain
localhost:9080 -username isadmin
-password ibmXYZ
-archive "/opt/archive.isx"
-ds '<server>:31538/
<project>/Standardization Rules
/NEW.SET.dqs' -incdep'
```

- **Windows**

```
istool.bat export -domain
localhost:9443
-username isadmin
-password ibmXYZ
-archive "C:\archive.isx"
-ds '<server>:31538/
<project>/Standardization Rules
/NEW.SET.dqs"
-incdep'
```

2. Import assets to your 11.3 computer. For information about importing assets to your Version 11.3 computer, see Import command for InfoSphere DataStage and QualityStage assets. The asset type of a standardization rule set is a data quality specification. The file extension of a data quality specification is .dqs. For example, you might specify the following import command to export a standardization rule set:

- **Linux** **UNIX**

```
istool.sh import -domain
localhost:9080
-username isadmin
-password ibmXYZ
-archive "/opt/archive.isx"
-ds '<server>:31538/
<project>' -replace
```

- **Windows**

```
istool.bat import -domain
localhost:9080
-username isadmin
-password ibmXYZ
-archive "C:\archive.isx"
-ds '<server>:31538/
<project>' -replace
```

Migrating InfoSphere QualityStage, Version 11.3 standardization rule sets:

Use this procedure to migrate InfoSphere QualityStage, Version 11.3 standardization rule sets that are used in the IBM InfoSphere QualityStage Standardization Rules Designer. You need to export the standardization rule sets that are on the source computer, and then import the assets to the target computer to complete the migration.

About this task

You can migrate only published standardization rule sets. You use the InfoSphere DataStage and QualityStage Designer or istool to export and import your standardization rule sets to the new system.

Procedure

1. Export and import the standardization rule sets by using the InfoSphere DataStage and QualityStage Designer.
2. On your old computer, open the InfoSphere DataStage and QualityStage Designer and navigate to the standardization rule sets that you want to migrate.
3. Select the standardization rule sets and export them. For information on exporting assets, see Exporting directly from the repository tree.
4. Copy the exported files to your new computer.
5. On your new computer, open the InfoSphere DataStage and QualityStage Designer and import the standardization rule sets that you exported from your old system. For information on importing assets, see Importing previously exported objects.

Exporting and importing the standardization rule sets by using istool.:

About this task

You can migrate only published standardization rule sets. You use asset interchange to import and export your standardization rule sets to the new computer.

Procedure

1. Export assets from your Version 11.3 computer. For information about exporting assets from your Version 11.3 computer, see Export command for InfoSphere DataStage and QualityStage assets. The asset type of a standardization rule set is a data quality specification. The file extension of a data quality specification is .dqs. For example, you might specify the following export command to export a standardization rule set:

- **Linux** **UNIX**

```
istool.sh export -domain
localhost:9443
-username isadmin
```

```

    -password ibmXYZ
    -archive "/opt/archive.isx"
    -ds '<server>:31538/
    <project>/Standardization Rules
    /NEW.SET.dqs"
    -incdep'

```

- **Windows**

```

istool.bat export
-domain localhost:9443
-username isadmin
-password ibmXYZ
-archive "C:\archive.isx"
-ds '<server>:31538/
<project>/Standardization Rules
/NEW.SET.dqs"
-incdep'

```

2. Import assets to your Version 11.3 computer. For information about importing assets to your Version 11.3 system, see Import command for InfoSphere DataStage and QualityStage assets. The asset type of a standardization rule set is a data quality specification. The file extension of a data quality specification is .dqs. For example, you might specify the following import command to export a standardization rule set:

- **Linux** **UNIX**

```

istool.sh import
-domain localhost:9443
-username isadmin
-password ibmXYZ
-archive "/opt/archive.isx"
-ds '<server>:31538
/<project>' -replace

```

- **Windows**

```

istool.bat import
-domain localhost:9443
-username isadmin
-password ibmXYZ
-archive "C:\archive.isx"
-ds '<server>
:31538/<project>'
-replace

```

Updating the Match Designer database

If the source installation uses the Match Designer database, you must back it up on the source computer and restore it on the target computer, or recreate the database on the target computer.

Procedure

1. On the source computer, back up the Match Designer database. Refer to the documentation for the database that you are using as your exceptions database. For example, refer to the DB2 documentation for the version of DB2 that you are using.
2. On the target installation, do one of the following:
 - Restore the Match Designer database from the backup that you created.
 - Recreate the Match Designer database. For more information, see Creating the InfoSphere QualityStage Match Designer database.
3. Update the environment for each match specification and recreate the ODBC data source name (DSN) and DSN connections. For more information, see Configuring InfoSphere QualityStage Match Designer.

Migrating the InfoSphere QualityStage exceptions database

If you want to use the InfoSphere QualityStage exceptions database (ESDB) from the source computer on the target computer, you must back it up on the source computer and restore it on the target installation.

Procedure

1. On the source computer, back up the InfoSphere QualityStage exceptions database. Refer to the documentation for the database that you are using as your exceptions database. For example, refer to the DB2 documentation for the version of DB2 that you are using.
2. On the target installation, do one of the following:
 - Restore the InfoSphere QualityStage exceptions database from the backup that you created.
 - Recreate the InfoSphere QualityStage exceptions database. For more information, see *Creating the exceptions database schema*.

Migrating InfoSphere QualityStage modules

You must migrate InfoSphere QualityStage modules and reference files for the modules. You must update the modules and files.

Procedure

1. Download and install compatible versions of the InfoSphere QualityStage modules on the target installation.
2. Download and install the associated reference files on the target installation.
3. Edit InfoSphere QualityStage jobs to point to the location of the reference files.
4. Edit the InfoSphere QualityStage jobs, as necessary, to take advantage of updates to the modules.

Using InfoSphere DataStage clients

Use the Multi-client Manager to choose which version of the client you want to use.

About this task

You use a different procedure depending on the version of IBM InfoSphere DataStage and whether you are connecting from the command line. The clients for Version 7.5.3 and earlier attach directly to the engine. The clients for Version 8.0.1 and later connect to the services tier, and credential mapping provides the necessary credentials that you need to connect to the engine tier.

Procedure

1. To specify the client version that you want to use, complete these steps:
 - a. Start the Multi-client Manager by double-clicking the desktop shortcut.
 - b. In the Current Installation field, check whether the currently selected version is the version that you want to use. If the correct version is selected, take no further action. If the correct version is not selected, select the correct client in the **Known installations** list, and click **Select**.
 - c. Click **Close** to close the Multi-client Manager.
2. To connect to Version 7.5.3 or earlier, complete these steps:
 - a. Select the client from the Start menu.

- b. In the **Host System** field of the **Attach to Project** window, type the identify of the server in the form *hostname:portnumber*, where *portnumber* is the port number that the server uses. For example, type R101:31538.
 - c. Type your user name and password.
 - d. If you used the Manager, Director, or Designer client, specify the name of the project that you want to attach to.
3. To use the Designer or Director client to connect to Version 8.0.1 and later, complete these steps:
 - a. Select the client from the **Start** menu.
 - b. In the **Services tier** field, type the identify of the server in the form *hostname:portnumber*, where *portnumber* is the port number that the server uses. For example, type R101:9080.
 - c. Type your user name and password.
 - d. In the **Project** field, specify the identity of the project that you want to attach to in the form *engine_hostname/project*. For example, type R101/datastage.
4. To use the Administrator client to connect to Version 8.0.1 and later, complete these steps:
 - a. Select the client from the **Start** menu.
 - b. In the **Services tier** field of the **Attach to DataStage** window, type the host name of the InfoSphere DataStage services tier in the form *hostname:9080*. For example, type R101:9080 in the field or type R201:80 in the field if you are using a front-end Web server.
 - c. Enter your user name and password.
 - d. In the **DataStage Engine** field, specify the host name of the computer that you want to attach to.
5. To use the command line to connect to Version 8.0.1 and later, complete these steps:
 - a. Log into the operating system as the user who runs the job.
 - b. Use one of the following to run a job:
 - To connect to a project from the command line, specify the server name and port number of the required instance with the **-server** argument in the form **-server *server:portnumber*** for local computers.
 - For computers that do not use the default ports, to connect to a project that is on a local server, specify the **-server** option with only the port number and do not specify the server name. You do not need to specify your user name and password. For example: `dsjob -server :31539 -lprojects`
 - For remote computers that run InfoSphere DataStage Version 11.3 instances, you must specify the domain and the server name in the form **-domain *domain:domain_portnumber* -server *server:portnumber***. The default domain port number is 9080. For example, to run a job on the local computer on the server that uses port 31359, use this command: `dsjob -server r101:31359 -run myproj myjob`.
 - To run a job on the local computer on the default server, use this command: `dsjob -run myotherproj myotherjob`.
 - To run a job on a remote computer called R101 on the Version 8.5 server that uses port 31360, you must also specify the host computer, the domain, and provide the login information. For example, enter the following command: `dsjob -domain mydomain:9080 -server r101:31360 -user billg -password paddock -run myproj myjob`

Migrating common metadata

Use these procedures to migrate common metadata assets. You need to export the common metadata assets that are on the source computer, and then import the assets to the target computer to complete the migration.

About this task

The metadata repository of InfoSphere Information Server contains many different types of common metadata assets, including implemented data resources, business intelligence (BI) assets, and logical and physical data model assets. You might want to migrate these common metadata assets, so they are available to use on your new computer.

When you export common metadata, you can include any data connections to the databases, data files, or data file folders that you export. Alternately, you can export the data connections separately by type.

When you are performing a suite-wide migration, you might want to move all data connections for the entire suite. To move all data connections that exist across all products, except for InfoSphere DataStage, you must issue three separate commands. You issue one command to export all data connections for data file folders, one command to export all data connections for databases, and one command to export all data connections for data files. The first command exports data connections for data file folders:

```
istool export -dom domain_name:port_number -user user_name -password password
-ar path_to_archive_file -cm '/host_name/datafile_folder_path/
datafile_folder_name/*.rcn'
```

For example:

```
istool export -dom ABC:9443 -u user1 -p pass1 -ar "c:\myarchive.isx" -cm
'/host1/c:\mydatafile_folders/data/*.rcn'
```

The second command exports data connections for databases:

```
istool export -dom domain_name:port_number -user user_name -password password
-ar path_to_archive_file -cm '/host_name/
database_name/*.dcn'
```

The third command exports data connections for data files:

```
istool export -dom domain_name:port_number -user user_name -password password
-ar path_to_archive_file -cm '/host_name/
datafile_path/datafile_name/*.fcn'
```

InfoSphere DataStage data connections are moved when you use istool commands for InfoSphere DataStage, InfoSphere Information Server Manager, or the InfoSphere DataStage Designer to move InfoSphere DataStage projects.

You export assets by using the version of the istool command-line that corresponds to your source computer. You import assets by using Version 11.3 of the istool command-line.

Procedure

To migrate common metadata assets, use istool:

Table 11. Procedures for manually migrating common metadata assets

Version	Procedure
Versions 8.0.1, 8.1, 8.1.1	Not available.
Version 8.1.2	<ul style="list-style-type: none"> Exporting common metadata assets by using the command line Importing common metadata assets by using the command line
Version 8.5	<ul style="list-style-type: none"> Exporting common metadata assets by using the command line Importing common metadata assets by using the command line
Version 8.7	<ul style="list-style-type: none"> Exporting common metadata assets by using the command line Importing common metadata assets by using the command line
Version 9.1	<ul style="list-style-type: none"> Exporting common metadata assets by using the command line Importing common metadata assets by using the command line
Version 11.3	<ul style="list-style-type: none"> Migrating common metadata assets Exporting common metadata assets by using the command line Importing common metadata assets by using the command line

Example

For performance considerations when you use istool to transfer very large amounts of common metadata, use the following command, which exports all databases:

```
istool export -dom domain_name:port_number -user user_name -password password
-ar path_to_archive_file -cm '/*/*.db'
```

The metadata related to each database is exported into a separate XMI file within the ISX archive file. When you import the metadata in the archive file, each XMI file is imported separately.

Migrating IBM InfoSphere Data Quality Console

Use these procedures to migrate content from the data quality console. You need to export data quality console assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the data quality console files and assets that cannot be migrated.

About this task

You export assets by using the version of the istool command-line that corresponds to your source computer. You import assets that were exported by using the istool command-line, by using Version 11.3 of the istool command-line.

To migrate exceptions stored in the InfoSphere QualityStage exceptions database (ESDB), you copy the database on your source computer and move it to the target computer. After you move the database, you must register it. For information about registering the database, see Registering the repository for the exceptions database.

The InfoSphere Information Analyzer exceptions stored in the analysis database (IADB) cannot be migrated. They must be recreated on the target computer. If you want to use the exceptions in InfoSphere Information Analyzer, you must repopulate the analysis results in the analysis database by rerunning the analysis on the target computer.

Procedure

To manually migrate content from data quality console, use one of the following procedures:

Table 12. Procedures for manually migrating data quality console content

Version	Procedure
Version 9.1	<ul style="list-style-type: none">Exporting by using istoolhttp://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iisinfsv.assetint.doc/topics/r_data_quality_console_import.html <p>Note: When you import data quality console assets, you must specify the -replace parameter in order for your assets to be imported properly.</p> <p>After you migrate from Version 9.1 to Version 11.3, you might notice that the connections that are used by the data quality console have changed. Version 9.1 used remote HTTP connections to connect to providers. In Version 11.3, local connections are used to connect to InfoSphere Information Analyzer, InfoSphere QualityStage, or both. The URL that is displayed on the data quality console Administration Project Connections page on the target computer always contains the local host and the default port number 9443. For example, https://localhost:9443/InformationAnalyzer/. However, if you chose a port other than 9443 during installation, the actual connection is made to the port number you chose, not to the default port, regardless of the display. The connection still works, even though the default port number is displayed.</p>
Version 11.3	<ul style="list-style-type: none">http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iisinfsv.assetint.doc/topics/r_data_quality_console_export.htmlhttp://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iisinfsv.assetint.doc/topics/r_data_quality_console_import.html <p>Note: When you import data quality console assets, you must specify the -replace parameter in order for your assets to be imported properly.</p>

Migrating IBM WebSphere RTI

Use the WebSphere RTI Export Wizard to migrate IBM WebSphere RTI to InfoSphere Information Services Director.

About this task

Use this task to migrate IBM WebSphere RTI Version 7.5, 7.5.1, or 7.5.2 to IBM InfoSphere Information Services Director Version 11.3.

Procedure

1. Use the WebSphere RTI Export Wizard on the source computer to create an RTIX file. This RTIX file contains descriptions of operations and services.
2. Move the RTIX file to the computer that has the newer version of InfoSphere Information Server on it.
3. Use the IBM InfoSphere Information Server console Import function to import the RTIX file. This imported file is the equivalent of the output of the console design function.
4. You must associate the imported service descriptions with an application object before you can deploy the services. The import function is done at the application level to create this association.

Results

The imported service description is the equivalent of a service that is designed in InfoSphere Information Server. You can deploy the service description the same way that you deploy any natively designed information service.

Migrating InfoSphere Business Glossary

Use these procedures to migrate content from InfoSphere Business Glossary to Information Governance Catalog. When you migrate InfoSphere Business Glossary Versions 9.1 and earlier, the assets are migrated into Information Governance Catalog, Version 11.3. You need to export the InfoSphere Business Glossary assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere Business Glossary files and assets that cannot be migrated.

About this task

You export assets by using the version of InfoSphere Business Glossary or the istool command-line that corresponds to your source computer. You import assets that were exported by using InfoSphere Business Glossary, by using Version 11.3 of Information Governance Catalog. You import assets that were exported by using the istool command-line, by using Version 11.3 of the istool command-line.

After migrating InfoSphere Business Glossary assets into Information Governance Catalog, you can find the assets by going to the **Glossary** menu.

Note: InfoSphere Business Glossary term history cannot be migrated. Links to stewards are migrated and included in the InfoSphere Business Glossary archive file only when the steward has been pre-defined on the new target computer. The selection and definition of a user as a steward is not migrated. For example, if John was defined as a steward on your Version 9.1 source computer, even if John exists as a user on the Version 11.3 target computer, unless an administrator added John as a steward, his asset assignments will not be migrated.

Before you import the glossary assets, import users and groups and assigned assets, such as common metadata and InfoSphere DataStage assets. The exported links are then established when you import the InfoSphere Business Glossary assets.

Procedure

To manually migrate content from InfoSphere Business Glossary, use one of the following procedures:

Table 13. Procedures for manually migrating Business Glossary content

Version	Procedure
Version 8.0.1	<ul style="list-style-type: none">Exporting categories and termshttp://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.doc/topics/t_iadmgde_ManageImportExport.html

Table 13. Procedures for manually migrating Business Glossary content (continued)

Version	Procedure
Versions 8.1, 8.1.1, 8.1.2	<ul style="list-style-type: none"> Exporting glossary content by using the InfoSphere Business Glossary administrative interface http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.doc/topics/t_iadmge_ManageImportExport.html Exporting from the command line http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.cli.doc/topics/bg_cli_import.html
Version 8.5	<ul style="list-style-type: none"> Exporting glossary content by using the InfoSphere Business Glossary administrative interface http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.doc/topics/t_iadmge_ManageImportExport.html Exporting by using istool http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.cli.doc/topics/bg_cli_import.html
Version 8.7	<ul style="list-style-type: none"> Exporting glossary content by using the InfoSphere Business Glossary administrative interface http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.doc/topics/t_iadmge_ManageImportExport.html Exporting by using istool http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.cli.doc/topics/bg_cli_import.html
Version 9.1	<ul style="list-style-type: none"> Exporting glossary content by using the InfoSphere Business Glossary administrative interface http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.doc/topics/t_iadmge_ManageImportExport.html Exporting by using istool http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.cli.doc/topics/bg_cli_import.html
Version 11.3	<ul style="list-style-type: none"> http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.doc/topics/t_ng_export.html http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.doc/topics/t_ng_import.html http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.cli.doc/topics/bg_cli_export.html http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.bg.cli.doc/topics/bg_cli_import.html

Migrating InfoSphere FastTrack

Use one of these procedures to migrate InfoSphere FastTrack. You need to export the InfoSphere FastTrack assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere FastTrack files and assets that cannot be migrated.

About this task

When choosing an export method, review the metadata that each method supports.

You export assets by using the version of InfoSphere FastTrack or the istool command-line that corresponds to your source system. You import assets by using

InfoSphere FastTrack, Version 11.3 or Version 11.3 of the istool command-line.

Procedure

Use one of the following procedures to migrate InfoSphere FastTrack:

Table 14. Procedure for migrating InfoSphere FastTrack

Version	Procedure
Version 8.0.1	<ul style="list-style-type: none"> Exporting mapping specifications as .csv files http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ft.usage.doc/topics/importcsvoptions.html <p>Note: The switch and aggregate mapping elements are not exported or imported as .csv files.</p>
Versions 8.1 and 8.1.1	<ul style="list-style-type: none"> Exporting mapping specifications as .csv files http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ft.usage.doc/topics/importcsvoptions.html <p>Note: The switch and aggregate mapping elements cannot be exported or imported as .csv files.</p>
Version 8.1.2	<ul style="list-style-type: none"> Exporting mapping specifications as .csv files http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ft.usage.doc/topics/importcsvoptions.html Exporting by using istool Importing by using istool <p>Note: The switch and aggregate mapping elements cannot be exported or imported as .csv files, but they can be exported and imported by using istool.</p>
Version 8.5	<ul style="list-style-type: none"> Exporting mapping specifications as .csv files http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ft.usage.doc/topics/importcsvoptions.html Exporting by using istool Importing by using istool <p>Note: The switch and aggregate mapping elements cannot be exported or imported as .csv files, but they can be exported and imported by using istool.</p>

Table 14. Procedure for migrating InfoSphere FastTrack (continued)

Version	Procedure
Version 8.7	<ul style="list-style-type: none"> • Exporting mapping specifications as .csv files • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ft.usage.doc/topics/importcsvoptions.html • Exporting by using istool • Importing by using istool <p>Note: The switch and aggregate mapping elements cannot be exported or imported as .csv files, but they can be exported and imported by using istool.</p>
Version 9.1	<ul style="list-style-type: none"> • Exporting mapping specifications as .csv files • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ft.usage.doc/topics/importcsvoptions.html • Exporting by using istool • Importing by using istool <p>Note: The switch and aggregate mapping elements cannot be exported or imported as .csv files, but they can be exported and imported by using istool.</p>
Version 11.3	<ul style="list-style-type: none"> • Exporting mapping specifications • http://www.ibm.com/support/knowledgecenter/SSZJPZ_11.3.0/com.ibm.swg.im.iis.ft.usage.doc/topics/importcsvoptions.html • Exporting by using istool • Importing by using istool <p>Note: The switch and aggregate mapping elements cannot be exported or imported as .csv files, but they can be exported and imported by using istool.</p>

Migrating InfoSphere Information Analyzer

Use these procedures to migrate InfoSphere Information Analyzer. You need to export the InfoSphere Information Analyzer assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere Information Analyzer files and assets that cannot be migrated.

The following conditions must be met before you begin this task:

- The analysis database exists on the target computer, and a JDBC data source for the analysis database exists in WebSphere Application Server. If the analysis

database that you are planning to use was created during the installation process of InfoSphere Information Analyzer, version 11.3, then this JDBC data source was created automatically. If the analysis database that you are planning to use is a different database, that was not created during the installation process of InfoSphere Information Analyzer, version 11.3, then follow the instructions in Configuring a JDBC data source for the InfoSphere Information Analyzer analysis database to create this JDBC data source.

- Data sources that contain the data that you want to analyze and that correspond to the data sources that were used in the earlier release exist and are accessible locally or over a computer network.
- You must create a data connection for the analysis database by using IBM InfoSphere Metadata Asset Manager to create an import area with no data imported. See Defining a connection to the analysis database.

Before you start migrating InfoSphere Information Analyzer by using the `istool` command-line, decide how you want to migrate your common metadata assets. You have the following options:

- Migrate all common metadata for the entire suite all at once. When you migrate the common metadata, you can include all data connections to the databases, data files, and data files folders that you are migrating, with the exception of data connections that are created in InfoSphere DataStage. After you migrate all common metadata, then you can export all of the InfoSphere Information Analyzer projects by using the InfoSphere Information Analyzer commands for `istool`.
- Migrate only InfoSphere Information Analyzer assets by using the InfoSphere Information Analyzer export commands for `istool`, and specifying the `-includeCommonMetadata` option when you export. When you use this method, you move InfoSphere Information Analyzer assets that are related to InfoSphere Information Analyzer projects. For example, `-ia '-projects=* -includeCommonMetadata' -cm '-includeDataConnection -includeAnnotation'` . This command exports InfoSphere Information Analyzer projects, all common metadata related to the projects, all data connections related to the common metadata that is exported, and annotations related to the common metadata. To determine which common metadata assets that InfoSphere Information Analyzer uses, open each InfoSphere Information Analyzer project and click on **Project Properties**. Review the **Data Sources** tab and document the names of all databases used in the project. Repeat this for each InfoSphere Information Analyzer project and gather the names of all databases used in the projects. You then export them by using the `-cm` parameter and specifying the database for each project.

Note: When you use `istool` to export projects, you can use the `-includeCommonMetadata` option to transfer common metadata assets that are used by the projects, including data connections. However, depending on your migration strategy, you might prefer to transfer all common metadata assets by using the `-commonmetadata` parameter in a separate export command.

About this task

You migrate InfoSphere Information Analyzer, Versions 8.5 and later by using `istool`. The migration of the InfoSphere Information Analyzer analysis database (IADB) is unsupported.

High-level analysis summaries, which include high-level details of column analysis such as maximum values, minimum values, total number of records for a column,

and so on, are exported and imported with InfoSphere Information Analyzer projects. The detailed analysis results, which are stored in the analysis database, cannot be migrated. After you have imported the project with istool, you can see the inferred properties of each column collected during column analysis, data rules and statistics from past analysis runs, but you will not be able to drill down to the distinct values of the column or to the rows collected when you ran the data rules. You must rerun the analysis to populate the new analysis database with the detailed analysis results. Data rules are exported and imported as part of the common metadata.

You export assets by using the version of the istool command-line that corresponds to your source computer. You import assets by using Version 11.3 of the istool command-line.

For the latest updates about migrating InfoSphere Information Analyzer, see InfoSphere Information Analyzer, Version 11.3 migration documentation updates.

Procedure

Use one of the following procedures to migrate InfoSphere Information Analyzer:

Table 15. Procedures for migrating InfoSphere Information Analyzer

Version	Procedure
Version 8.0.1	Not available.
Version 8.1	Not available.
Versions 8.1.1 and 8.1.2	Deploying quality components Only the rule definitions are exported or imported.
Version 8.5	<ul style="list-style-type: none"> Exporting InfoSphere Information Analyzer assets by using istool Importing by using istool
Version 8.7	<ul style="list-style-type: none"> Exporting InfoSphere Information Analyzer assets by using istool Importing by using istool
Version 9.1	<ul style="list-style-type: none"> Exporting InfoSphere Information Analyzer assets by using istool Importing by using istool
Version 11.3	<ul style="list-style-type: none"> Exporting InfoSphere Information Analyzer assets by using istool Importing by using istool

What to do next

After exporting and importing InfoSphere Information Analyzer by using istool, you must perform the following configuration tasks:

- Configure the analysis database settings. You can configure global analysis database settings, which are inherited by all projects, or you can configure analysis database settings for each project. See [Configuring global analysis database settings](#) or [Modifying project analysis database settings](#).

- Configure the analysis settings, such as thresholds. You can configure global analysis settings, which are inherited by all projects, or you can configure analysis settings for each project. See *Configuring global analysis details settings* or *Modifying project analysis settings*.
- Run analysis jobs. Analysis results are not included in the export and reimport process. You must rerun column analysis, cross domain analysis, primary key, foreign key, natural key analysis and other analyses on the source data that has been imported with each project. You must also rerun data quality analyses such as data rules, data rule sets, and metrics.

Migrating InfoSphere Metadata Workbench

Use these procedures to migrate from InfoSphere Metadata Workbench to Information Governance Catalog. When you migrate InfoSphere Metadata Workbench Versions 9.1 and earlier, the assets are migrated into Information Governance Catalog, Version 11.3.

Migrating InfoSphere Metadata Workbench, Versions 8.1 and 8.1.1

Use these procedures to migrate from InfoSphere Metadata Workbench, Versions 8.1 and 8.1.1 to Information Governance Catalog, Version 11.3. When you migrate InfoSphere Metadata Workbench Versions 8.1 and 8.1.1, the assets are migrated into Information Governance Catalog, Version 11.3. You need to export the InfoSphere Metadata Workbench assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere Metadata Workbench files and assets that cannot be migrated.

About this task

All of the InfoSphere Metadata Workbench functionality exists in Information Governance Catalog, however, the way you access that functionality has changed. For additional information about Information Governance Catalog, see *IBM Information Governance Catalog*

You can export and import the following InfoSphere Metadata Workbench assets:

- Extension mapping documents and their contained mappings
- All types of extended data sources
- Custom attribute definitions
- Published queries and user queries

When choosing an export method, review the metadata that each method supports.

Procedure

1. Import all common metadata assets (such as databases, data files, and BI reports) by using asset interchange. For information about importing common metadata assets by using asset interchange, see *Common metadata assets*.
2. For InfoSphere DataStage:
 - a. Import all InfoSphere DataStage projects (InfoSphere DataStage jobs, table definitions, and so on) by using asset interchange. Verify that you use the same host name for the engine, the same project names, and so on. For more information, see *InfoSphere DataStage and QualityStage assets*.

- b. Export and import the InfoSphere DataStage project user environment variables by using the IBM InfoSphere DataStage and QualityStage Administrator.
3. To migrate data lineage:
 - a. Map any required database alias mappings on the target computer. The mapping should be identical to that of the old computer (this is a manual step). For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_runningDatabaseAlias.html.
 - b. Optional: Manually bind InfoSphere DataStage stages to the data source or stage they read from or write to. This recreates the manual bindings of the old computer.
 - c. Optional: Include or exclude InfoSphere FastTrack mapping specifications for lineage. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/c_extensionMappings.html.
 - d. Optional: Re-configure business lineage according to the settings of the old computer. Include or exclude assets from business lineage (system filter). For additional information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_configAssetsForBusinessLineage.html.
 - e. Re-map the data source identities. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_runningDataSourceIdentity.html.
 - f. On the target computer, import environment variables by using the command-line interface or a batch file. For more information, see [Importing project-level environment variables](#).
4. Export and import user defined and published queries. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.doc/topics/t_managingQueries.html.
5. Manually take note of and update custom attributes.
6. Recreate all custom attribute definitions on extension mapping documents on the new computer. This is a manual step. For more information, see [Creating custom attributes](#).

Migrating InfoSphere Metadata Workbench, Version 8.1.2

Use these procedures to migrate from InfoSphere Metadata Workbench, Version 8.1.2 to Information Governance Catalog, Version 11.3. When you migrate InfoSphere Metadata Workbench Version 8.1.2, the assets are migrated into Information Governance Catalog, Version 11.3. You need to export the InfoSphere Metadata Workbench assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere Metadata Workbench files and assets that cannot be migrated.

About this task

All of the InfoSphere Metadata Workbench functionality exists in Information Governance Catalog, however, the way you access that functionality has changed. For additional information about Information Governance Catalog, see IBM Information Governance Catalog

You can export and import the following InfoSphere Metadata Workbench assets:

- Extension mapping documents and their contained mappings
- All types of extended data sources
- Custom attribute definitions
- Published queries and user queries

When choosing an export method, review the metadata that each method supports.

Procedure

1. Import all common metadata assets (such as databases, data files, and BI reports) by using asset interchange. For information about importing common metadata assets by using asset interchange, see Common metadata assets.
2. For InfoSphere DataStage:
 - a. Import all InfoSphere DataStage projects (InfoSphere DataStage jobs, table definitions, and so on) by using asset interchange. Verify that you use the same host name for the engine, the same project names, and so on. For more information, see .InfoSphere DataStage and QualityStage assets.
 - b. Export and import the InfoSphere DataStage project user environment variables by using the IBM InfoSphere DataStage and QualityStage Administrator.
3. To migrate data lineage:
 - a. Map any required database alias mappings on the target computer. The mapping should be identical to that of the old computer (this is a manual step). For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_runningDatabaseAlias.html.
 - b. Optional: Manually bind InfoSphere DataStage stages to the data source or stage they read from or write to. This recreates the manual bindings of the old computer.
 - c. Optional: Include or exclude InfoSphere FastTrack mapping specifications for lineage. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/c_extensionMappings.html.
 - d. Optional: Re-configure business lineage according to the settings of the old computer. Include or exclude assets from business lineage (system filter). For additional information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_configAssetsForBusinessLineage.html.
 - e. Re-map the data source identities. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_runningDataSourceIdentity.html.
 - f. On the target computer, import environment variables by using the command-line interface or a batch file. For more information, see Importing project-level environment variables.

4. Export and import user defined and published queries. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r1/topic/com.ibm.svg.im.iis.mdwb.doc/topics/t_managingQueries.html.
5. Recreate all custom attribute definitions on extension mapping documents on the new computer. This is a manual step. For more information, see *Creating custom attributes*.

Migrating InfoSphere Metadata Workbench, Versions 8.5 and 8.7

Use these procedures to migrate from InfoSphere Metadata Workbench, Versions 8.5 and 8.7 to Information Governance Catalog, Version 11.3. When you migrate InfoSphere Metadata Workbench Versions 8.5 and 8.7, the assets are migrated into Information Governance Catalog, Version 11.3. You need to export the InfoSphere Metadata Workbench assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere Metadata Workbench files and assets that cannot be migrated.

About this task

All of the InfoSphere Metadata Workbench functionality exists in Information Governance Catalog, however, the way you access that functionality has changed. For additional information about Information Governance Catalog, see *IBM Information Governance Catalog*

You can export and import the following InfoSphere Metadata Workbench assets:

- Extension mapping documents and their contained mappings
- All types of extended data sources
- Custom attribute definitions
- Published queries and user queries

When choosing an export method, review the metadata that each method supports.

Procedure

1. Import all common metadata assets (such as databases, data files, and BI reports) by using asset interchange. For information about importing common metadata assets by using asset interchange, see *Common metadata assets*.
2. For InfoSphere DataStage:
 - a. Import all InfoSphere DataStage projects (InfoSphere DataStage jobs, table definitions, and so on) by using asset interchange. Verify that you use the same host name for the engine, the same project names, and so on. For more information, see *InfoSphere DataStage and QualityStage assets*.
 - b. Export and import the InfoSphere DataStage project user environment variables by using the *IBM InfoSphere DataStage and QualityStage Administrator*.
3. Migrating extended data sources:
 - a. Export all extended data sources from the old computer by using the InfoSphere Metadata Workbench user interface. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.svg.im.iis.mdwb.admin.doc/topics/t_managingExtendedDataSources.html.

- b. Import those sources on to the new computer by using the istool **workbench extension source import** command or by using the Information Governance Catalog user interface. For more information, see Importing extended data sources or workbench extension source import command .

The export of the extended data sources does not include steward assignment or term assignment. The import of extended data sources is limited to files of 200K in size.

4. Migrating extension mapping documents:

- a. Export all extended mapping documents from the old system by using the InfoSphere Metadata Workbench user interface. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_managingExtensionMappings.html.
- b. Import the mapping documents on the new system by using asset interchange or by using the Information Governance Catalog user interface. For more information see, Extension mapping documents import command syntax.
- c. **For Version 8.5:** Recreate all custom attribute definitions on extension mapping documents on the new computer. This is a manual step. For more information, see Creating custom attributes.

The export of extension mapping documents does not include the type, description, term or steward assignment of the document. The import of mapping document is limited to files of 200K in size. Warnings will be given if the mapping is not able to reconcile to an existing source or target asset.

5. Migrating data lineage:

- a. Run the Manage Lineage utility and select the InfoSphere DataStage projects that you want to invoke the lineage services for on the new system. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_runningAutomatedServices.html.
- b. Map any required database alias mappings on the target computer. The mapping should be identical to that of the old system (this is a manual step). For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_runningAutomatedServices.html.
- c. **For Version 8.7:** Export custom attribute definitions from the source computer by using the from the InfoSphere Metadata Workbench user interface. Import them on to the target computer by using the Information Governance Catalog user interface. You can also use istool to export and import custom attribute definitions.

Note: You must have the custom attribute definitions and the assets that the custom attribute definitions refer to on your target computer before you import the custom attribute definitions.

For more information, see Managing custom attributes for information assets.

- d. Optional: Manually bind InfoSphere DataStage stages to the data source or stage they read from or write to. This recreates the manual bindings of the old system.
- e. Optional: Include or exclude InfoSphere FastTrack mapping specifications for lineage. For more information, see <http://pic.dhe.ibm.com/infocenter/>

- [iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_configFTMappingsForBusinessLineage.html](http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_configFTMappingsForBusinessLineage.html).
- f. Optional: Re-configure business lineage according to the settings of the old system. Include or exclude assets from business lineage (system filter). For additional information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_configAssetsForBusinessLineage.html.
 - g. Re-map the data source identities. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.admin.doc/topics/t_runningDataSourceIdentity.html.
 - h. On the target computer, import environment variables by using the command-line interface or a batch file. For more information, see [Importing project-level environment variables](#).
6. Export and import user defined and published queries. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v8r7/topic/com.ibm.swg.im.iis.mdwb.doc/topics/t_managingQueries.html.

Migrating InfoSphere Metadata Workbench, Version 9.1

Use these procedures to migrate from InfoSphere Metadata Workbench, Version 9.1 to Information Governance Catalog, Version 11.3. When you migrate InfoSphere Metadata Workbench Version 9.1, the assets are migrated into Information Governance Catalog, Version 11.3. You need to export the InfoSphere Metadata Workbench assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere Metadata Workbench files and assets that cannot be migrated.

About this task

All of the InfoSphere Metadata Workbench functionality exists in Information Governance Catalog, however, the way you access that functionality has changed. For additional information about Information Governance Catalog, see [IBM Information Governance Catalog](#)

You can export and import the following InfoSphere Metadata Workbench assets:

- Extension mapping documents and their contained mappings
- All types of extended data sources
- Custom attribute definitions
- Published queries and user queries

When choosing an export method, review the metadata that each method supports.

Procedure

1. Import all common metadata assets (such as databases, data files, and BI reports) by using asset interchange.
2. For InfoSphere DataStage:
 - a. Import all InfoSphere DataStage projects (InfoSphere DataStage jobs, table definitions, and so on) by using asset interchange. Verify that you use the

same host name for the engine, the same project names, and so on. For more information, see InfoSphere DataStage and QualityStage assets.

- b. Export and import the InfoSphere DataStage project user environment variables by using the IBM InfoSphere DataStage and QualityStage Administrator.
3. Migrating extended data sources:
 - a. Export all extended data sources from the old computer by using the InfoSphere Metadata Workbench user interface or by using istool. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.mdwb.doc/topics/t_managingExtendedDataSources.html.
 - b. Import those sources on to the new computer by using the istool **workbench extension source import** command or by using the Information Governance Catalog user interface. For more information, see Importing extended data sources or workbench extension source import command .

The export of the extended data sources does not include steward assignment or term assignment. The import of extended data sources is limited to files of 5MB in size. If the file exceeds this size, you can divide the import file into smaller files and then import them individually.

4. Re-create all custom attribute definitions on extension mapping documents in the new system. This is a manual step. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.mdwb.doc/topics/t_createCustomAttributes.html.
5. Migrating extension mapping documents:
 - a. Export all extended mapping documents from the old system by using the metadata workbench user interface or by using istool. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.mdwb.doc/topics/cli_mapping_export.html.
 - b. Import the mapping documents on the new system by using asset interchange or by using the Information Governance Catalog user interface. For more information see, Extension mapping documents import command syntax.

The export of extension mapping documents does not include the type, description, term or steward assignment of the document. The import of mapping document is limited to files of is limited to files of 5MB in size. If the file exceeds this size, you can divide the import file into smaller files and then import them individually. Warnings will be given if the mapping is not able to reconcile to an existing source or target asset.

6. Migrating data lineage:
 - a. Run Manage Lineage from the command line for the new computer. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.mdwb.doc/topics/cli_automated_services.html.
 - b. Map any required database alias mappings on the new system. The mapping should be identical to that of the old system (this is a manual step). For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.swg.im.iis.mdwb.doc/topics/ct_manageCLI.html.
 - c. Optional: Manually bind InfoSphere DataStage stages to the data source or stage they read from or write to. This recreates the manual bindings of the old system.
 - d. Optional: Include or exclude InfoSphere FastTrack mapping specifications for lineage. For additional information, see <http://pic.dhe.ibm.com/>

[infocenter/iisinfsv/v9r1/topic/com.ibm.svg.im.iis.mdwb.doc/topics/t_configFTMappingsForBusinessLineage.html](http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.svg.im.iis.mdwb.doc/topics/t_configFTMappingsForBusinessLineage.html).

- e. Optional: Re-configure business lineage according to the settings of the old system . Include or exclude assets from business lineage (system filter). For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.svg.im.iis.mdwb.doc/topics/t_configAssetsForBusinessLineage.html.
 - f. Re-map the data source identities. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.svg.im.iis.mdwb.doc/topics/t_runningDataSourceIdentity.html.
 - g. On the target computer, import environment variables by using the command-line interface or a batch file. For more information, see [Importing project-level environment variables](#).
7. Export and import user defined and published queries. For more information, see http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/topic/com.ibm.svg.im.iis.mdwb.doc/topics/t_managingQueries.html.
 8. Export custom attribute definitions from the source computer by using the InfoSphere Metadata Workbench user interface. Import them on to the target computer by using the Information Governance Catalog user interface. You can also use istool to export and import custom attribute definitions.

Note: You must have the custom attribute definitions and the assets that the custom attribute definitions refer to on your target computer before you import the custom attribute definitions.

For more information, see [Managing custom attributes for information assets](#).

Migrating InfoSphere Metadata Workbench, Version 11.3

Use these procedures to migrate from InfoSphere Metadata Workbench, Version 11.3 to Information Governance Catalog, Version 11.3. When you migrate InfoSphere Metadata Workbench Version 11.3, the assets are migrated into Information Governance Catalog, Version 11.3. You need to export the InfoSphere Metadata Workbench assets that are on the source computer, and then import the assets to the target computer to complete the migration.

Before you begin

Review the InfoSphere Metadata Workbench files and assets that cannot be migrated.

About this task

All of the InfoSphere Metadata Workbench functionality exists in Information Governance Catalog, however, the way you access that functionality has changed. For additional information about Information Governance Catalog, see [IBM Information Governance Catalog](#)

You can export and import the following InfoSphere Metadata Workbench assets:

- Extension mapping documents and their contained mappings
- All types of extended data sources
- Custom attribute definitions
- Published queries and user queries

When choosing an export method, review the metadata that each method supports.

Procedure

1. Import all common metadata assets (such as databases, data files, and BI reports) by using asset interchange. For information about importing common metadata assets by using asset interchange, see Common metadata assets.
2. For InfoSphere DataStage:
 - a. Import all InfoSphere DataStage projects (InfoSphere DataStage jobs, table definitions, and so on) by using asset interchange. Verify that you use the same host name for the engine, the same project names, and so on. For more information, see InfoSphere DataStage and QualityStage assets.
 - b. Export and import the InfoSphere DataStage project user environment variables by using the IBM InfoSphere DataStage and QualityStage Administrator.
3. Migrating extended data sources:
 - a. Export all extended data sources from the old system by using the InfoSphere Metadata Workbench user interface or by using istool. For more information, see Exporting, editing, or deleting extended data sources .
 - b. Import those sources on to the new computer by using the istool **workbench extension source import** command or by using the Information Governance Catalog user interface. For more information, see Importing extended data sources or workbench extension source import command .

The export of the extended data sources does not include steward assignment or term assignment. The import of extended data sources is limited to files of 5MB in size. If the file exceeds this size, you can divide the import file into smaller files and then import them individually.

4. Re-create all custom attribute definitions on extension mapping documents in the new system. This is a manual step. For more information, see Creating custom attributes.
5. Migrating extension mapping documents:
 - a. Export all extended mapping documents from the old system by using the InfoSphere Metadata Workbench user interface or by using istool. For more information, see Extension mapping documents export command syntax.
 - b. Import the mapping documents on the new system using asset interchange or by using the Information Governance Catalog user interface. For more information see, Extension mapping documents import command syntax.

The export of extension mapping documents does not include the type, description, term or steward assignment of the document. The import of mapping document is limited to files of 5MB in size. If the file exceeds this size, you can divide the import file into smaller files and then import them individually. Warnings will be given if the mapping is not able to reconcile to an existing source or target asset.

6. Migrating data lineage:
 - a. An Information Governance Catalog administrator must identify the InfoSphere DataStage projects and jobs that they want to detect relationships and report data lineage for. The administrator must edit each project that they want to use, by selecting each asset, editing it, and selecting the **Include for Lineage** option. By default, the **Include For Lineage** settings for a job have the same value of the transformation project, and can be manually edited and changed to a different value. For more information, see Running the Manage Lineage services.

- b. Map any required data connection mappings (previously referred to as database alias mappings) on the new computer. The mapping should be identical to that of the old system (this is a manual step).
 - c. Optional: Manually bind InfoSphere DataStage stages to the data source or stage they read from or write to. This recreates the manual bindings of the old system. Information Governance Catalog is able to determine some information about the asset, and display some lineage. Manual binding is recommended if you want relationships to be automatically detected in Information Governance Catalog. For additional information, see [Manually binding stages](#).
 - d. Optional: Include or exclude InfoSphere FastTrack mapping specifications for lineage. For additional information, see [Configuring InfoSphere FastTrack mapping specifications for lineage reports](#).
 - e. Optional: Re-configure business lineage according to the settings of the old system . Include or exclude assets from business lineage (system filter). For more information, see [Configuring asset types for business lineage reports](#).
 - f. Optional: On the target computer, redefine the database schemas so they match the database schemas on your source computer.
 - g. Re-map the data source identities. For more information, see [Specifying that schemas are identical in Manage Data Source Identity](#).
 - h. On the target computer, import environment variables by using the command-line interface or a batch file. For more information, see [Importing project-level environment variables](#).
7. Export and import user defined and published queries. To get to the export and import functionality in Information Governance Catalog, click the **Queries** tab. Select an asset and click **Export** to export. Click **Import** to import assets.
 8. Export custom attribute definitions from the source computer and import them onto the target computer by using the Information Governance Catalog user interface. You can also use istool to export and import custom attribute definitions.

Note: You must have the custom attribute definitions and the assets that the custom attribute definitions refer to on your target computer before you import the custom attribute definitions.

For more information, see [Managing custom attributes for information assets](#).

Migrating InfoSphere Information Services Director

Use one of these procedures to migrate InfoSphere Information Services Director.

About this task

You export assets by using the version of InfoSphere Information Services Director that corresponds to your source system. You import assets by using Version 11.3 of InfoSphere Information Services Director.

Procedure

Use one of the following procedures to migrate InfoSphere Information Services Director:

Table 16. Procedure for migrating InfoSphere Information Services Director

Version	Procedure
Version 8.0.1	<ul style="list-style-type: none"> • Exporting an application by using InfoSphere Information Services Director • Importing an application by using InfoSphere Information Services Director
Versions 8.1	<ul style="list-style-type: none"> • Exporting an application by using InfoSphere Information Services Director • Importing an application by using InfoSphere Information Services Director
Version 8.5	<ul style="list-style-type: none"> • Exporting an application by using InfoSphere Information Services Director • Importing an application by using InfoSphere Information Services Director
Version 8.7	<ul style="list-style-type: none"> • Exporting an application by using InfoSphere Information Services Director • Importing an application by using InfoSphere Information Services Director • Exporting an application by using the InfoSphere Information Services Director command line interface • Importing an application by using the InfoSphere Information Services Director command line interface
Version 9.1	<ul style="list-style-type: none"> • Exporting an application by using InfoSphere Information Services Director • Importing an application by using InfoSphere Information Services Director • Exporting an application by using the InfoSphere Information Services Director command line interface • Importing an application by using the InfoSphere Information Services Director command line interface
Version 11.3	<ul style="list-style-type: none"> • Exporting an application by using InfoSphere Information Services Director • Importing an application by using InfoSphere Information Services Director • Exporting an application by using the InfoSphere Information Services Director command line interface • Importing an application by using the InfoSphere Information Services Director command line interface

Migrating reports

Use this procedure to migrate reports.

About this task

You can migrate reports from InfoSphere Business Glossary, InfoSphere DataStage, IBM InfoSphere Information Analyzer, and IBM InfoSphere QualityStage. You can also migrate administration reports for the suite.

You export assets by using the version of the istool command-line that corresponds to your source system. You import assets by using Version 11.3 of the istool command-line.

If you are migrating administration reports for the suite, you must reconfigure who has access to the reports after you migrate the reports to your target computer. To do this, open the Administration Console and click the **Reporting** tab. Open each report that you migrated and click **Open Access Control**. You can specify who can access each report.

Procedure

To migrate reports:

Table 17. Procedures for migrating reports

Version	Procedure
Version 8.5	<ul style="list-style-type: none">• Exporting by using istool• Importing by using istool
Version 8.7	<ul style="list-style-type: none">• Exporting by using istool• Importing by using istool
Version 9.1	<ul style="list-style-type: none">• Exporting by using istool• Importing by using istool
Version 11.3	<ul style="list-style-type: none">• Exporting by using istool• Importing by using istool

Files and assets that cannot be migrated

Certain files and assets cannot be migrated by using istool and there are some files and assets that cannot be migrated at all. Some of the files that cannot be moved by using istool can be manually migrated by using other migration methods.

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- “InfoSphere Business Glossary” on page 63
- “InfoSphere Data Click” on page 63
- “InfoSphere DataStage and QualityStage” on page 63
- “IBM InfoSphere Data Quality Console” on page 65
- “IBM InfoSphere DataStage and QualityStage Operations Console” on page 65
- “InfoSphere Information Server” on page 65
- “InfoSphere Information Services Director” on page 66
- “InfoSphere FastTrack ” on page 66
- “Information Governance Dashboard ” on page 66
- “InfoSphere Information Analyzer” on page 66
- “InfoSphere Metadata Asset Manager” on page 66
- “InfoSphere Metadata Workbench” on page 67

InfoSphere Business Glossary

The following data either cannot be migrated by using istool, or cannot be migrated at all:

Data that cannot be migrated by using istool, but can be manually migrated

- Viewing permissions
- Permissions for terms and categories

You can manually reconfigure the items listed above on your new computer from the **Administration** tab in Information Governance Catalog. However, you cannot export this information to a file and then re-import it. When you export permissions for terms and categories, the permissions information is not included in the exported file. You can manually define it again on your target computer.

Data that cannot be migrated

Term history

InfoSphere Data Click

The following data cannot be migrated:

Data that cannot be migrated

- Blueprints
- Activities

InfoSphere DataStage and QualityStage

The following data either cannot be migrated by using istool, or cannot be migrated at all:

Data that cannot be migrated by using istool, but can be manually migrated

- DSParams settings, which are per-project. Export and import the settings by using the Administrator client
- FTP (file transfer protocol) and send mail templates in the Project directory. You copy this to the target computer
- The uvodbc.config file in the Project directory. You copy this to the target computer.
- Message handlers, which are under the Server directory. You copy this to the target computer.
- Job Control Language (JCL) templates. You copy this to the target computer.
- DSEngine configuration, which is in the uvconfig file. You copy this to the target computer.

Note: If you are migrating to a target computer that has a different operating system than your source computer, you need to edit the uvconfig file and then issue the uvregen command.

- User-defined entries in the dsenv file. For more information about setting up the dsenv file, see Configuring the dsenv file. Manually merge the changes you made for your environment into the new dsenv file.
- odbc.ini file. For all versions before Version 9.1, you need to manually merge the changes in the file. For Version 9.1 and later, you should be

able to copy the file from your source computers and move it to your target computers. You copy this to the target computer.

Note: If you are migrating to a target computer that has a different operating system than your source computer, the migration of the `odbc.ini` file is unsupported. You will have to edit the new file on your target computer.

- Parallel job configuration files. You copy this to the target computer.
- Non-Administrator roles for the projects
- Project files like hash files, data sets, run-time log files, and job schedules. The best practice is for jobs to recreate data sets on every invocation. If you are using data sets for persistent data, the best practice is to create jobs to export and import the data into a exportable format, such as a database table or file set. Run-time log files can be printed from the InfoSphere DataStage and QualityStage Director.
- Operational metadata. If you retain the original operational metadata import files, you can import the files onto your new computer.
- `apt_config_files`. If you are migrating to the same host names and paths, you can back up and restore the files. Otherwise, you have to manually edit them to match the current environment.
- Data sets. For information on migrating data sets, see <http://www.ibm.com/support/docview.wss?uid=swg21392477>.
- Files that are referenced by jobs that are not in the project directories. You must save the files and manually move them to the target installation.
- The InfoSphere QualityStage exceptions database (ESDB). You must back up the database on the source computer and restore it on the target computer by using back-up and restore documentation for the database you are using as your exceptions database.
- The Standardization Rules Designer database. You use asset interchange or the InfoSphere DataStage and QualityStage Designer to import and export the actual standardization rule sets to the new system, rather than migrating the whole Standardization Rules Designer database.
- The Match Designer database. You must back it up on the source computer and restore it on the target computer or recreate the database on the target computer.
- Modules and reference files. You download and install compatible versions of the modules and reference files on the target computer and edit InfoSphere QualityStage jobs to point to the location of the reference files or to use the updated modules.

Note: You cannot migrate the assets listed above by using istool or the InfoSphere DataStage Designer.

Data that cannot be migrated

- InfoSphere QualityStage postal validation reference files. You must install new reference files on your new system.
- InfoSphere QualityStage geocoding reference files. You must install new reference files on your new system.

IBM InfoSphere Data Quality Console

The following data cannot be migrated:

Data that cannot be migrated

- Activity logs
- Faceted searches on implemented data resources

IBM InfoSphere DataStage and QualityStage Operations Console

The following data cannot be migrated:

Data that cannot be migrated

The operations database. The migration of the database is not supported, and not recommended. The operations database contains data that is specific to InfoSphere DataStage jobs that were run on your old computer. That data is not required on your new computer. You should start with a new operations database on your new computer.

InfoSphere Information Server

The following data either cannot be migrated by using istool, or cannot be migrated at all:

Data that cannot be migrated by using istool, but can be manually migrated

- Owner and group read, write, and execute permissions for file systems. The user ownership, as well as the read, write, and execute permissions, cannot be migrated by using istool. You need to manually update these permissions on your target computer.
- Permissions related to who can access reports. After you move the reports to your target system by using istool, you must open each report on the **Reporting** tab in the Administration Console and click **Open Access Control**. You can specify who can read, update, delete, modify, and run each report.
- Credential mapping information. You need to manually change the credential mapping information on your target computer.
- WebSphere registry configuration for the operating system and LDAP. You will need to manually configure WebSphere when you set up WebSphere on your target computer.
- WebSphere registry configuration for SSL LDAP user registries. You will need to manually configure WebSphere when you set up WebSphere on your target computer.
- WebSphere registry configuration for federated user registries. You will need to manually configure WebSphere when you set up WebSphere on your target computer.

Data that cannot be migrated

- Mainframe assets. You cannot migrate mainframe assets to Version 11.3. They are no longer supported by all products in the InfoSphere Information Server suite. Also, you cannot migrate from InfoSphere Information Server on a mainframe to InfoSphere Information Server, Version 11.3 on a mainframe, because the mainframe is no longer supported by InfoSphere Information Server.
- Logging reports and logging views are no longer supported. These include logs such as:

- CAS+Log.log
- iasHandler-server1.log
- iasServer-server1.log
- SystemErr.log
- SystemOut.log
- DHTML reports are no longer supported
- Reporting schedules. These need to be recreated on your target computer.

InfoSphere Information Services Director

The following data cannot be migrated:

Data that cannot be migrated

The InfoSphere Information Services Director connections cannot be migrated and must be manually entered on the target computer. This should be done before importing any applications from the source computer.

InfoSphere FastTrack

The following data cannot be migrated:

Data that cannot be migrated

Aggregate and switch mapping elements in Versions 8.0.1, 8.1, and 8.1.1.

Information Governance Dashboard

The following data cannot be migrated:

Data that cannot be migrated

The migration of the Information Governance Dashboard is unsupported.

InfoSphere Information Analyzer

The following data either cannot be migrated by using istool, or cannot be migrated at all:

Data that cannot be migrated by using istool, but can be manually migrated

- Analysis database settings
- Analysis settings such as thresholds

Data that cannot be migrated

The InfoSphere Information Analyzer analysis database (IADB) cannot be migrated. High-level analysis summaries, including high-level details of column analysis such as maximum values, minimum values, total number of records for a column, and so on, can be exported and imported with istool. However, all assets that are stored in the analysis database, including detailed analysis results, cannot be migrated.

InfoSphere Metadata Asset Manager

The following data cannot be migrated:

Data that cannot be migrated

- Import areas

- Staging area schemas

You can move metadata that has been shared to the metadata repository, but you cannot move any assets that have not been shared.

InfoSphere Metadata Workbench

The following data either cannot be migrated by using istool, or cannot be migrated at all:

Data that cannot be migrated by using istool, but can be manually migrated

- Database alias mappings must be manually recreated on the new computer.
- Manual bindings, data item bindings and stage bindings must be manually recreated on the new computer.
- Data source identities must be re-mapped manually on the new computer.
- Extended data sources that you migrate will lose steward and term assignments, however you can export these attributes by using InfoSphere Business Glossary or Information Governance Catalog.
- Custom attribute definitions. You can migrate custom attribute definitions by exporting them to an XML file and then reimporting them.

Data that cannot be migrated

- Operational metadata. If you do not have the original operational metadata XML files to import, you cannot migrate the metadata.
- Extension mapping documents will lose the type, description, term and steward assignments.

Working with multiple InfoSphere Information Server engines on one computer

You can install multiple engines on only Unix or Linux computers. When multiple versions of InfoSphere DataStage are installed on a single computer, you must verify that the current environment is set for the version on which you want to perform administrative tasks. You need to follow this procedure before you start, stop, or update an engine.

About this task

You identify the InfoSphere Information Server engine that you want to start or stop by setting the \$DSHOME environment variable to reference the DSEngine subdirectory of the server that hosts the engine. For example, there are two engines on the same computer with the following DSEngine subdirectories:

- /disk1/Ascential/DataStage/DSEngine (Version 7.5.1 engine)
- /opt/IBM/InformationServer/Server/DSEngine (Version 8.7 engine)

Important: When you install the InfoSphere Information Server engine tier on a computer that runs UNIX, the file /.dshome is created. This file contains the path that is used as the default setting for the \$DSHOME environment variable. Before and after you install an additional InfoSphere Information Server engine, delete the /.dshome file. When a computer hosts more than one InfoSphere Information Server engine, having a default setting for the \$DSHOME environment variable might result in administrative tasks being run on the wrong engine.

If you are going to use the same InfoSphere DataStage administrator ID for more than one engine on the same computer, you should not source the dsenv file in its profile. Avoid mixing the InfoSphere DataStage environment settings before running administrative tasks.

Procedure

1. Log on to an operating system terminal as the InfoSphere DataStage Administrator.
2. Source the dsenv file.
 - a. Set the \$DSHOME environment variable to point to the /opt/IBM/InformationServer/Server/DSENGINE directory. Alternatively, you can set and export the DSHOME value in the dsenv file.
 - b. Change to the directory that contains the dsenv file, which you specified /opt/IBM/InformationServer/Server/DSENGINE.
 - c. Run the following command to source the dsenv file.

```
./dsenv
```

What to do next

After the environment is set to the proper version, you can administer the engine. For example:

- Enter the following command to stop the engine services:

```
$DSHOME/bin/uv -admin -stop
```

Wait 30 seconds so that the engine services stop.
- Enter the following command to start the engine services:

```
$DSHOME/bin/uv -admin -start
```

Apply updates for the current version that you are working on.

Frequently asked questions about migration

Find the answers to frequently asked questions about migration, such as how do I manually migrate InfoSphere DataStage project environment variables and how do I know if all third-party library files are available.

How do I manually migrate environment variables for IBM InfoSphere DataStage jobs?

To manually migrate project environment variables, perform the following tasks:

- Merge the contents of the InfoSphere DataStage settings files.
- During the import process, if the variable definitions are used as parameter variables in the job or parameter set, InfoSphere DataStage creates the required environment variable definitions in the project. In general, you set project environment variable values, if required, and any environment variables that are required by third-party components and are not referenced as job parameters, for example variables for the Oracle database or the IBM DB2 database. For more information about migrating these settings, see Merging the contents of the InfoSphere DataStage settings files. Do not directly edit the DSParams project files. Instead, for versions 8.5 fix pack 2 and before, you can use the InfoSphere DataStage Administrator or the **dsadm** command to set the variables manually. For versions 8.5 fix pack 2 and after, you can export the user variables by using the InfoSphere DataStage Administrator and import them using the InfoSphere

DataStage Administrator, Version 11.3 to set the variables. You can use the **dsadmin** command line tools to set the variables for all versions.

- If the platforms are changing, there are some environment variable settings that you do not copy, for example, compiler settings and operating-system-specific paths.
- There may be specific non-default settings which you have set on your source system and you need to preserve. Review the DSParams EnvVarValues section on the source computer for these settings.

How do I determine if all third-party library files are available?

Linux **UNIX** Use the following command inside the InfoSphere DataStage environment, after you source dsenv, and look for unresolved module errors:

```
ldd<shared module name>
```

Windows To determine if all third-party libraries are available use the Dependency Walker, which is a free tool and is available at www.dependencywalker.com.

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 18. 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>.

Appendix D. Providing feedback on the product documentation

You can provide helpful feedback regarding IBM documentation.

Your feedback helps IBM to provide quality information. You can use any of the following methods to provide comments:

- To provide a comment about a topic in IBM Knowledge Center that is hosted on the IBM website, sign in and add a comment by clicking **Add Comment** button at the bottom of the topic. Comments submitted this way are viewable by the public.
- To send a comment about the topic in IBM Knowledge Center to IBM that is not viewable by anyone else, sign in and click the **Feedback** link at the bottom of IBM Knowledge Center.
- Send your comments by using the online readers' comment form at www.ibm.com/software/awdtools/rcf/.
- Send your comments by e-mail to comments@us.ibm.com. Include the name of the product, the version number of the product, and the name and part number of the information (if applicable). If you are commenting on specific text, include the location of the text (for example, a title, a table number, or a page number).

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IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785 U.S.A.

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Table 19. 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 19. 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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