

IBM InfoSphere Information Services Director
Version 11 Release 3

*Administration and Deployment Tool
Guide*



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Note

Before using this information and the product that it supports, read the information in “Notices and trademarks” on page 55.

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IBM InfoSphere Information Services Director command line interface

You can use the command line interface to administer and deploy IBM® InfoSphere® Information Services Director project resources such as applications and services.

You use commands to export project resources from one InfoSphere Information Services Director environment and import them into another InfoSphere Information Services Director environment for backup and restore and reuse of existing project resources.

You can also enable and disable service providers attached to project resources, deploy and undeploy applications from projects, upgrade applications with current service information, and update metadata information in project resources.

Overview and user roles for the InfoSphere Information Services Director command line interface

You run commands from the IBM InfoSphere Information Services Director administration and deployment command line interface to administer InfoSphere Information Services Director resources such as applications and services. You can use this tool to move these resources between different installations of InfoSphere Information Services Director, deploy and undeploy these resources, and modify the metadata information in these resources.

The command line tools are available in the ASBNode\bin and ASBServer\bin directories of your InfoSphere Information Server directory, for example C:\IBM\InformationServer\ASBNode\bin or C:\IBM\InformationServer\ASBServer\bin.

Possible scenarios for when you might want to move project resources from one InfoSphere Information Services Director environment and deploy them on another include:

- Backing up project resources on a second computer to be able to restore them in the event of a system failure or for compliance purposes
- Moving project resources between development environments, test environments, and production environments
- Reusing project resources to save the time and expense of re-creating them in another environment
- Deploying project resources on an upgraded InfoSphere Information Services Director
- Merging services that are developed on different systems in a distributed development environment into a single project and deploying them

Administration tasks you can complete by using the commands provided in the command line tool:

- Enable and disable service providers attached to project resources
- Deploy and undeploy applications from projects to manage service requests to the services in these applications

- Upgrade applications with current service information to ensure that the most recent information is published
- Update imported metadata information to ensure it matches the metadata information in the new environment

The InfoSphere Information Services Director Administrator, the InfoSphere Information Services Director Operator, and the InfoSphere Information Services Director Designer are the only user roles that have the appropriate permissions to run the InfoSphere Information Services Director command line actions.

InfoSphere Information Services Director Administrator

Users with the Information Services Director Administrator role can access all of the Information Services Director functions.

InfoSphere Information Services Director Operator

Provides access to the InfoSphere Information Services Director runtime functions. An operator can add and remove providers as well as configure runtime parameters of a deployed application, service and operation. In addition, an operator can deploy applications from the design time view.

InfoSphere Information Services Director Designer

The InfoSphere Information Services Director Designer role can only access projects that it is authorized for at design time. At the project level at design time, the Designer can view project details and the list of projects; view the list of applications; update applications; export applications; import services into an existing application; and view, add, or remove services.

At run time, the InfoSphere Information Services Director Designer can view the list of applications.

Command line support

The IBM InfoSphere Information Services Director Administration and Deployment tool provides commands for improved administration capabilities on InfoSphere Information Services Director resources.

You must have ISD Administrator or ISD Operator permissions to run the following commands for runtime applications and services. You can run Import, Export, and Deploy design time commands with ISD Operator permissions, but you cannot create any new IBM InfoSphere Information Services Director resources.

You can migrate all or selected applications and services among test, development, and production environments by using the **IMPORT** and **EXPORT** commands.

Table 1. Supported migration commands

Command	Description
ISDImportExport -action designtimeexport	Export design time metadata from applications and services in a project from the source InfoSphere Information Services Director environment.
ISDImportExport -action runtimeexport	Export runtime application metadata from the source InfoSphere Information Services Director environment.

Table 1. Supported migration commands (continued)

Command	Description
ISDImportExport -action designtimeimport	Import design time metadata from applications and services in a project into the target InfoSphere Information Services Director environment.
ISDImportExport -action runtimeimport	Import runtime application metadata into the target InfoSphere Information Services Director environment. Upgrade application and service provider information in deployed applications.
ISDImportExport -help	View details about using the ISDImportExport command. Arguments in square brackets ([and]) are optional. Arguments that can be used multiple times are followed by an asterisk (*). Argument explanations are followed by a double-minus sign (--).

You can modify project resources and connections by using the administration commands.

Table 2. Supported administration commands

Command	Description
ISDAdmin -action enable	Enable service providers attached to deployed service operations.
ISDAdmin -action disable	Disable service providers from deployed service operations.
ISDAdmin -action deploy	Deploy applications in projects to enable the services in these applications to receive service requests. Upgrade and redeploy applications by regenerating the application executable files.
ISDAdmin -action undeploy	Undeploy all deployed applications or selected deployed applications.
ISDAdmin -action update	Update the application and service provider metadata information in the project resources that you imported into another environment. You can use this command to: <ul style="list-style-type: none"> • Run bulk operations to update application objects like operations and service providers based on a specified provider property • Update single or specified operations or provider objects • Run bulk updates of information services connection objects

Table 2. Supported administration commands (continued)

Command	Description
ISDAdmin -help	View details about using the ISDImportExport command. Arguments in square brackets ([and]) are optional. Arguments that can be used multiple times are followed by an asterisk (*). Argument explanations are followed by a double-minus sign (--).

Command line constraints

This section describes actions that are not supported on the IBM InfoSphere Information Services Director administration and deployment command line interface.

Constraints for the administration and deployment command line interface in IBM InfoSphere Information Server, Version 8.5, include the following:

- A runtime export cannot be imported into an environment that uses a different application server or a different version of an application server.
- The **EXPORT** command cannot export selected services and operations from multiple applications in a single project.
- The **UPDATE** command cannot synchronize the following types of information:
 - Metadata for the names and descriptions of projects, applications, services, and operations.
 - Column names and table names for IBM DB2®, Oracle, and IBM InfoSphere Federation Server providers; and SQL queries.
 - Design time metadata for projects, applications, and services.
- The number of operations, services, and applications that you can specify with an **ISDImportExport** or **ISDAdmin** command is restricted by hierarchy. For example:
 - You can import or export multiple operations only within one particular service for that particular application in a specific project.
 - You can import or export multiple services only within that particular application in a specific project (and you cannot specify any operations during this action).
 - You can import or export multiple applications only for a specific project (and you cannot specify any services or operations during this action.)

Importing and exporting applications

You can move your existing applications to another instance of IBM InfoSphere Information Services Director by using the **EXPORT** and **IMPORT** commands. You can then deploy these applications on this InfoSphere Information Services Director by using the **DEPLOY** command.

When you create an InfoSphere Information Services Director application, design time metadata is created for the application and any services and operations that it contains. You can deploy this application, which creates runtime metadata for the application and its services and operations. The InfoSphere Information Services Director Administration and Deployment tool supports import and export capabilities for both design time and runtime metadata.

Some considerations for exporting and importing metadata:

- If you import runtime metadata into another environment, you cannot modify the application design on the new system.
- If you import design time metadata into another environment, you can modify the application design on the new system.

Use the EXPORT and IMPORT commands to move your applications among InfoSphere Information Services Director test, development, and production environments.

Exporting applications

You can export applications from one IBM InfoSphere Information Services Director environment and import them into another InfoSphere Information Services Director environment to back up or deploy these applications on the second system.

About this task

The **EXPORT** command is supported for design time and runtime applications.

- On design time project resources, ISD Designers, ISD Administrators, or ISD Operators can use this command to export all or selected applications and services from the project. An XML file is generated for each exported project or each group of applications that belong to the same project.
- On runtime applications, ISD Administrators and ISD Operators can use this command to export all or selected applications. A DAT file is generated for each exported application or each group of services that belong to the same application.

Note: Application names and service names are optional, if they are not specified all applications and their services in the project are exported. You can use the **-omitPassword** option to exclude the password from the exported XML for design time export. Also, you can use the **-omitPassword** option to exclude the password from the exported DAT file for run time export.

Procedure

Open a command line editor.

- To export design time applications and services, enter the following command:

```
ISDImportExport -action designtimeexport -p <project name>  
-a <application name> -s <service name>  
-output <full path name of the target XML file>
```

- To export a run time application, enter the following command:

```
ISDImportExport -action runtimeexport -a <application name>  
-output <full path name of the target DAT file>
```

Example

The following examples describe how to export design time project resources:

Export all the design time applications in the project:

```
ISDImportExport -action designtimeexport -p <project name> -output <full  
path name of the folder or the file where the XML file with the exported  
information is be written>
```

Export selected design time applications in the project:

```
ISDImportExport -action designtimeexport -p <project name> -a <application name1> -a <application name2> -output <full path name of the XML file where the exported information is to be written>
```

Export selected services from a design time application in the project:

```
ISDImportExport -action designtimeexport -s <service name1> -p <project name> -a <application name> -s <service name2> -output <full path name of the folder where the XML file with the exported information is to be written>
```

Export all the design time applications in the project but omit the password from the exported artifacts:

```
ISDImportExport -action designtimeexport -omitPassword -p <project name> -output <full path name of the folder where the XML file with the exported information is to be written>
```

The following examples describe how to export runtime applications:

Export multiple runtime applications:

```
ISDImportExport -action runtimeexport -a <application name1> -a <application name2> -a <application name3> -output <full path name of the folder where the DAT file generated for each application with the exported information is to be written>
```

Export a runtime application but omit the password from the exported resources:

```
ISDImportExport -action runtimeexport -omitPassword -a <application name> -output <full path name of the folder where the DAT file generated for each application with the exported information is to be written>
```

Importing applications

After you export applications from an IBM InfoSphere Information Services Director, you can import them into another InfoSphere Information Services Director environment for back up or deployment on the second system.

About this task

The **IMPORT** command is supported for design time and runtime applications. This command can be configured to replace any matching artifacts that are found.

- For design time import, ISD Designers, ISD Administrators, or ISD Operators can use this command to import all or selected existing applications and services from the input XML file. You can specify the name of the project into which the design time metadata must be imported or you can use the project name that is defined in the input XML file. If a project does not exist on the target system, only a user with the ISD Administrator role can import it and create the project on the target system.
- For runtime import, all providers are disabled by default. To enable providers for runtime import, you must specify the **-enableProvider** parameter in the

runtime import command. The application name into which the information is imported is defined in an input DAT file.

Important: Providers are disabled by default because metadata might need to be updated before enabling them (for example, if a database port number, user ID, or password that is used in a database provider is not the same for the systems you are exporting from and importing to). Before enabling the providers, make sure that all the provider metadata you are importing matches the provider metadata for the system you are importing to.

Procedure

Open a command-line editor.

- To import design time applications and services, enter the following command:

```
ISDImportExport -action designtimeimport  
-project <project name> -input <full path name of the source XML file>
```

- To import runtime applications, enter the following command:

```
ISDImportExport -action runtimeimport  
-input <full path name of the source DAT file>
```

Example

The following examples describe how to import design time applications and services:

Import all existing artifacts contained in the input XML file:

```
ISDImportExport -action designtimeimport -input <full path name of the XML  
file from which the exported information is read>
```

Import selected design time applications in the project:

```
ISDImportExport -action designtimeimport -a <application name1> -a  
<application name2> -input <full path name of the XML file from which the  
exported information is read>
```

Import selected services from a design time application in the project:

```
ISDImportExport -action designtimeimport -a <application name> -s <service  
name1> -s <service name2> -input <full path name of the XML file from which  
the exported information is read>
```

Import all existing artifacts in the input XML file and rename any matching projects found:

```
ISDImportExport -action designtimeimport -rename -input <full path name of  
the XML file from which the exported information is read>
```

Note: The **-rename** parameter is a toggle option only and it does not accept values. This command example imports the artifacts and renames matching projects by appending the current time stamp to the old name.

Import all existing artifacts in the input XML file and replace any matching projects found:

ISDImportExport -action designtimeimport -replace -input *<full path name of the XML file from which the exported information is read>*

Import all existing artifacts in the input XML file into a specified existing project:

ISDImportExport -action designtimeimport -project *<project name>* -input *<full path name of the XML file from which the exported information is read>*

The following examples describe how to import runtime applications. The service providers for the applications are disabled during an import to allow you update metadata information before you enable them.

Import all runtime applications in a specified folder without enabling its service providers:

ISDImportExport -action runtimeimport -input *<full path name of the folder where the DAT file with the exported information is to be read>*

Import a runtime application and enable its service providers:

ISDImportExport -action runtimeimport -enableProvider -input *<full path name of the DAT file from which the exported information is read>*

Administering applications

You can upgrade and deploy your IBM InfoSphere Information Services Director project resources and enable service providers for them by using administration commands.

Use the administration commands to manage your project resources on InfoSphere Information Services Director.

Note: In the examples, replace the angle brackets and the information inside the angle brackets with your actual keys and values. For example, to specify the key for updating a IBM InfoSphere DataStage® user ID, replace **-key** *<key value>* with **-key** DS_USERID in the command line.

Enabling service providers

You can enable service providers that are attached to deployed IBM InfoSphere Information Services Director service operations.

About this task

The **ENABLE** command is supported for the following runtime application resources:

- All or selected applications
- All services in selected applications
- Selected agent hosts
- Selected service provider type for a particular agent host
- Selected service provider host for a particular agent host

Procedure

1. Open a command line editor.
2. For selected operations, enter the command:
ISDAdmin -action enable
-a <application name> -s <service name> -o <operation name>
3. For bulk operations, enter the command:
ISDAdmin -action enable
-agentHost <agent server host name> -providerType <service provider type>
-providerHost <service provider server host name>

Example

The following examples describe how to enable service providers:

Enable service providers attached to services in a specified application:

```
ISDAdmin -action enable -a <application name>
```

Enable service providers attached to services in multiple applications:

```
ISDAdmin -action enable -a <application name1> -a <application name2>
```

Enable service providers attached to selected services in a specified application:

```
ISDAdmin -action enable -a <application name> -s <service name1> -s  
<service name2> -s <service name3>
```

Enable service providers across all applications and services for a specific agent server host:

```
ISDAdmin -action enable -agentHost <agent server host name>
```

Enable service provider types across all applications and services for a specific agent server host, provider type, and provider server host:

```
ISDAdmin -action enable -agentHost <agent server host name> -providerType  
<service provider type> -providerHost <service provider server host name>
```

Disabling service providers

You can disable service providers that are attached to deployed IBM InfoSphere Information Services Director service operations.

About this task

The **DISABLE** command is supported for the following runtime application resources:

- All or selected applications
- All services in selected applications
- Selected agent hosts
- Selected service provider type for a particular agent host
- Selected service provider host for a particular agent host

Procedure

1. Open a command line editor.
2. For selected operations, enter the command:
ISDAdmin -action disable
-a <application name> -s <service name> -o <operation name>
3. For bulk operations, enter the command:
ISDAdmin -action disable
-agentHost <agent server host name> -providerType <service provider type>
-providerHost <service provider server host name>

Example

The following examples describe how to disable service providers:

Disable service providers attached to services in a specified application:

```
ISDAdmin -action disable -a <application name>
```

Disable service providers attached to services in multiple applications:

```
ISDAdmin -action disable -a <application name1> -a <application name2>
```

Disable service providers attached to selected services in a specified application:

```
ISDAdmin -action disable -a <application name> -s <service name1> -s  
<service name2> -s <service name3>
```

Disable service providers across all applications and services for a specific agent server host:

```
ISDAdmin -action disable -agentHost <agent server host name>
```

Disable service provider types across all applications and services for a specific agent server host, provider type, and provider server host:

```
ISDAdmin -action disable -agentHost <agent server host name> -providerType  
<service provider type> -providerHost <service provider server host name>
```

Deploying applications

You can deploy applications from IBM InfoSphere Information Services Director projects to enable the services in these applications to receive service requests.

About this task

The **DEPLOY** command is supported for all or selected services in design time applications.

Procedure

1. Open a command line editor.
2. Enter the following command:
ISDAdmin -action deploy -p <project name> -a <application name>

Example

The following examples describe how to deploy applications. If an application with the same name is already deployed, a warning is displayed and the new application is not deployed.

Deploy all services in a design time application.

```
ISDAdmin -action deploy -p <project name> -a <application name>
```

Redeploy an existing application.

```
ISDAdmin -action deploy -replace -p <project name> -a <application name>
```

Upgrade existing applications by replacing the application executable files without changing service provider information.

```
ISDAdmin -action deploy -replace -preserveProvider -p <project name> -a <application name1> -a <application name2> -a <application3>
```

Undeploying applications

You can undeploy applications from IBM InfoSphere Information Services Director.

About this task

The **UNDEPLOY** command is supported for runtime applications.

Procedure

1. Open a command line editor.
2. Enter the command:

```
ISDAdmin -action undeploy -a <application name>
```

Example

The following example describes how to undeploy multiple applications:

```
ISDAdmin -action undeploy -a <application name1> -a <application name2> -a <application name3>
```

Upgrading applications

You can upgrade application and service information in deployed IBM InfoSphere Information Services Director applications.

Before you begin

You must be using the Network Deployment edition of WebSphere® Application Server to perform this task.

About this task

The upgrade process is supported for runtime applications to upgrade the artifacts that are generated for the application.

Some reasons to upgrade applications include:

- You move an application into an environment that is running a different fix pack/patch level. The application upgrade is performed by using the `ISDImportExport -action runtimeimport` command.
- A new patch/fix pack is installed in an environment that is hosting deployed applications. Use the `ISDAdmin -action deploy` command for this scenario.

You can upgrade applications by using the following options:

- Option 1 enables you to update both application and service provider information with the application and service provider information contained in the input DAT file. This option uses the `ISDImportExport -action runtimeimport` command with a **replace** parameter to handle matching applications.
- Option 2 enables you to update an application without replacing the existing service provider information. This option uses the `ISDImportExport -action runtimeimport` command with the **replace** and **preserveProvider** parameters to deploy the application contained in the input DAT file without modifying service provider information.
- Option 3 enables you to update and redeploy the application without modifying service provider information by regenerating and redeploying the executable code. This option uses the names of the applications to be upgraded as input. The design metadata must be available in the environment so the application can be redeployed. This option uses the `ISDAdmin -action deploy` command with the **replace** and **preserveProvider** parameters to deploy regenerated application without modifying service provider information.

Procedure

1. Open a command line editor.
2. Enter the following command for the upgrade option that you want.
 - To upgrade both the application and its service provider information:


```
ISDImportExport -action runtimeimport -replace
-input <full path name of the source DAT folder>
```
 - To upgrade only the application by using the input DAT file:


```
ISDImportExport -action runtimeimport -replace
-preserveProvider -input <full path name of the source DAT folder>
```
 - To upgrade and redeploy only the application by regenerating and redeploying the executable code:


```
ISDAdmin -action deploy -replace
-preserveProvider -p <project name> -a <application name1>
-a <application name2>
```

Example

Upgrade both the application and its service provider information:

```
ISDImportExport -action runtimeimport -replace -input <full path name of
the DAT folder from which the new information is read>
```

Upgrade only the application by using the input DAT file:

```
ISDImportExport -action runtimeimport -replace -preserveProvider -input
<full path name of the DAT folder from which the new information is read>
```

Upgrade and redeploy only the application by regenerating and redeploying the executable code:

```
ISDAdmin -action deploy -replace -preserveProvider -project <project name>
-a <application name1> -a <application name2>
```

Updating metadata

You update the metadata to ensure that it matches the metadata in the new IBM InfoSphere Information Services Director environment. After you import InfoSphere Information Services Director resources into a new environment, run the **UPDATE** command to synchronize the imported metadata with the metadata in the new environment.

Before you begin

You must disable the operation or information provider before you can update the metadata for those resources. If you deploy an application that was imported at design time, run the **DISABLE** command to disable the information provider. If you import an application that was exported at run time, the application is automatically disabled.

About this task

- The **UPDATE** command is supported only for runtime applications and information services connections.
- You can update only one metadata attribute at a time. To update multiple metadata attributes, you must run a separate **UPDATE** command for each attribute.
- There are three paths (application, agent host, or connection name) for using this command. Each path has different mandatory and optional options. For every metadata **UPDATE** command that you enter, you must specify one of the following options: **-agenthost**, **-application**, or **-cname**.

Procedure

1. Open a command line editor.
2. Update metadata by application, or agent host name, or connection name by running the appropriate **UPDATE** command:

- To update metadata by application, use the following command:

```
ISDAdmin -action update
-a <application name> -s <service name> -o <operation name>
-key <key for the metadata attribute to be updated>
-subkey <job parameter argument you want to modify>
-oldvalue <old value of the attribute you want to modify>
-newvalue <new value for the attribute that you are modifying>
-dsproject <project name> -dsjob <job name> -providerUser <service provider>
```

- To update metadata by agent host name, use the following command:

```
ISDAdmin -action update
-agentHost <agent host name> -providerType <DS, DB2, ORA, or DB2CF>
-providerHost <service provider server host name>
-key <key for the metadata attribute to be updated>
-subkey <job parameter argument you want to modify>
-oldvalue <old value of the attribute you want to modify>
-newvalue <new value for the attribute that you are modifying>
-dsproject <project name> -dsjob <job name> -providerUser <service provider>
```

- To update metadata by connection name, use the following command:

```
ISDAdmin -action update
-cname <connection name> -key <key for the metadata attribute to be updated>
-oldvalue <old value of the attribute you want to modify>
-newvalue <new value for the attribute that you are modifying>
```

Examples of updating metadata

This section contains examples for the following scenarios:

- Bulk updates for provider-specific metadata
- Bulk updates for service provider metadata
- Bulk updates for operation metadata
- Updates to IBM InfoSphere Information Server connections metadata
- Updates to IBM InfoSphere Information Services Director job parameters

Examples of bulk updates for provider-specific metadata

The following commands show you how to make bulk metadata updates to the providers by using IBM InfoSphere DataStage metadata and DB2 metadata as examples.

- Update the InfoSphere DataStage password for a specific agent host and InfoSphere DataStage user ID:

Note: The **-oldvalue** parameter is optional because the identifiers (the combination of agent host and user ID) uniquely qualify the key that is being updated. Also, for a key of DS_PASSWORD, the value for **-newvalue** can be provided as a string encrypted with the encrypt command.

```
ISDAdmin -action update -agentHost <agent host name> -key DS_PASSWORD -providerUser <DataStage user ID> -oldvalue <old DataStage password> -newvalue <new DS password>
```

- Update the InfoSphere DataStage user ID for a specific agent host:

Note: You must use the **-oldvalue** parameter to specify which user ID you are updating.

```
ISDAdmin -action update -agentHost <agent host name> -key DS_USERID -oldvalue <old DataStage user ID> -newvalue <new DataStage user ID>
```

- Update the InfoSphere DataStage job name for a specific agent host and project:

Note: You must use the **-oldvalue** parameter to specify which job name you are updating.

```
ISDAdmin -action update -agentHost -key DS_JOBNAME -dsproject <DataStage project name> -oldvalue <old job name> -newvalue <new job name>
```

- Update the DataStage project name for a specific agent host:

Note: You must use the **-oldvalue** parameter to specify which InfoSphere DataStage project name you are updating.

```
ISDAdmin -action update -agentHost <agent host name> -key DS_PROJECT_NAME -oldvalue <old DS project name> -newvalue <new DS project name>
```

- Update the agent host for a specific InfoSphere DataStage host:

Note: It is not possible to have more than one InfoSphere DataStage host for a given agent, so the **-oldvalue** parameter is not required in this scenario.

```
ISDAdmin -action update -agentHost <agent host name> -key  
AGENT_HOST -providerHost <DS server host name> -newvalue <new  
agent host name>
```

- Update the InfoSphere DataStage port number for a specific agent host:

```
ISDAdmin -action update -agentHost <agent host name> -key DS_PORT  
-newvalue <new DS server port number>
```

- Update the DB2 host name for a specific agent host:

Note: You must use the **-oldvalue** parameter to specify which DB2 host name you are updating.

```
ISDAdmin -action update -agentHost <agent host name> -key DB2_HOST  
-oldvalue <old DB2 server host name> -newvalue <new DB2 server  
host name>
```

- Update the DB2 port number for a specific agent host and DB2 host:

Note: You must use the **-oldvalue** parameter to specify which port number you are updating.

```
ISDAdmin -action update -agentHost <agent host name> -key DB2_PORT  
-providerHost <DB2 server host name> -oldvalue <old DB2 server  
port number> -newvalue <new DB2 server port number>
```

- Update the DB2 database name for a specific agent host and DB2 host:

Note: You must use the **-oldvalue** parameter to specify which database name you are updating.

```
ISDAdmin -action update -agentHost <agent host name> -key  
DB2_DATABASE -providerHost <DB2 server host name> -oldvalue <old  
DB2 database name> -newvalue <new DB2 database name>
```

- Update the DB2 user ID for a specific agent host and DB2 host:

Note: You must use the **-oldvalue** parameter to specify which user ID you are updating.

```
ISDAdmin -action update -agentHost <agent host name> -key  
DB2_USERID -providerHost <DB2 server host name> -oldvalue <old DB2  
user ID> -newvalue <new DB2 user ID>
```

- Update the DB2 password for a specific agent host, DB2 host, and DB2 user ID:

Note: The **-oldvalue** parameter is optional because the **-providerUser** parameter is used. Also, for a key of DB2_PASSWORD, the value for **-newvalue** can be provided as a string encrypted with the encrypt command.

```
ISDAdmin -action update -agentHost <agent host name> -key  
DB2_PASSWORD -providerHost <DB2 server host name> -providerUser  
<DB2 user ID> -oldvalue <old DB2 password (optional because the  
providerUser parameter is used)> -newvalue <new DB2 password>
```

Examples of bulk updates for service provider metadata

The following commands show you how to make updates to service provider metadata:

In the following examples, the **-oldvalue** parameter is optional. You can use this parameter to update only one specific value.

- Change the activation threshold for all InfoSphere DataStage service providers across applications for a specific agent host:
ISDAdmin -action update -agentHost <agent host name> -key ACTIVATION_THRESHOLD -providerType DS -oldvalue <old activation threshold> -newvalue <new activation threshold>
- Change the activation delay for a specific DB2 service provider across applications for a specific agent host:
ISDAdmin -action update -agentHost <agent host name> -providerType DB2 -key ACTIVATION_DELAY -oldvalue <old activation delay> -newvalue <new activation delay>
- Change the activation delay for a specific DB2 service provider residing on a specific host across applications for a specific agent host:
ISDAdmin -action update -agentHost <agent host name> -providerType DB2 -key ACTIVATION_DELAY -providerHost <DB2 server host name> -oldvalue <old activation delay> -newvalue <new activation delay>
- Change the maximum idle time for all of the operations in a specified application and service:
ISDAdmin -action update -a <application name> -s <service name> -key MAX_IDLE -oldvalue <old max idle> -newvalue <new max idle>

Examples of bulk updates for operation metadata

The following commands show you bulk updates for operation metadata:

In the following examples, the **-oldvalue** parameter is optional. You can use this parameter to update only one specific value.

- Change the load balancer for all operations for a specific agent server host:
ISDAdmin -action update -agentHost <agent host name> -key LOAD_BALANCER -oldvalue <old load balancer> -newvalue <new load balancer>
- Change the maximum number of retries for all operations of a specified service in an application:
ISDAdmin -action update -a <application name> -s <service name> -key MAX_RETRIES -oldvalue <old max retries> -newvalue <new max retries>

Example of updating common providers

The following command shows you how to update metadata for a common provider:

- Update the agent server port number for a specific agent host:
ISDAdmin -action update -agentHost <agent host name> -key AGENT_PORT -newvalue <new agent server port number>

Example of updating IBM InfoSphere Information Server connections metadata

The following command shows you how to update metadata for connections:

- Update the DataStage or DB2 user ID for a specific connection:
ISDAdmin -action update -cname <connection name> -key USER -oldvalue <old DS user ID or old DB2 user ID> -newvalue <new DS or DB2 user ID>

Examples of updating IBM InfoSphere Information Services Director job parameters

The following commands show you how to update IBM InfoSphere Information Services Director job parameters:

- Update an IBM InfoSphere Information Services Director job parameter:

Note: If you do not specify a service name and operation name, then all matches within the application will be updated. You can use the InfoSphere DataStage project name and job name to identify a specific project or job attached to an operation for the update.

In the following examples, the **-oldvalue** parameter is optional. You can use this parameter to update only one specific value.

```
ISDAdmin -action update -a <application name> -s <service name> -o  
<operation name> -dsproject <DataStage project name> -dsjob  
<DataStage job name> -key JOB_PARAMETER -subkey <specific job  
parameter whose value is being modified> -oldvalue <old value>  
-newvalue <new value of the job parameter being modified>
```

- Update a job parameter value across multiple applications for a bulk scenario: ISDAdmin -action update -agenthost <agent host name> -dsproject <DataStage project name> -dsjob <DataStage job name> -key JOB_PARAMETER -subkey <specific job parameter for the value that is being modified>

What to do next

After you finish updating metadata, run the ENABLE command to enable the information provider.

Command reference

You run the IBM InfoSphere Information Services Director administration and deployment commands from the command line interface.

Use the command reference to find more detailed information including syntax examples and parameter descriptions for each of the InfoSphere Information Services Director tool commands.

Note: In the examples, replace the angle brackets and information inside the angle brackets with your actual keys and values. For example, to specify the key for updating an IBM InfoSphere DataStage user ID, replace **-key <key value>** with **-key DS_USERID** in the command line.

EXPORT command

You can use the **EXPORT** command to export resources from IBM InfoSphere Information Services Director.

Purpose

The **EXPORT** command exports applications and selected services from applications. This command is supported for design time and runtime applications.

Syntax

For a design time application, use the following syntax:


```
ISDImportExport -action designtimeexport [-user <user name>
[-password <user password>] | -authfile <file name>]
-p <project name> -a <application name> -s <service name> -omitPassword
-output <full path name of the target XML file>
```

For a runtime application, use the following syntax:

```
ISDImportExport -action runtimeexport [-user <user name>
[-password <user password>] | -authfile <file name>]
-a <application name> -omitPassword
-output <full path name of the target DAT file>
```

Parameters

The following parameters are available for the **EXPORT** command.

Table 3. Export command parameters

Parameter name (short name)	Description
-action (-act)	Required Enter the action command: <ul style="list-style-type: none"> • For design time applications, type designtimeexport or dte • For runtime applications, type runtimeexport or rte
-authfile (-af)	Optional The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.
-user (-ur)	Optional Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.
-password (-pw)	Optional Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.
-project (-p)	Required for designtimeexport only Enter the name of the project from which you are exporting applications.
-application (-a)	Required for runtimeexport Optional for designtimeexport Enter the name of the application in the project that you are exporting.
-service (-s)	Optional for designtimeexport only. Not applicable to runtimeexport. Enter the name of the service in the application that you are exporting.

Table 3. Export command parameters (continued)

Parameter name (short name)	Description
-omitPassword (-o)	Optional Excludes all passwords from the exported information. For security purposes, use this setting to exclude user credentials from the exported file.
-output (-out)	Required Enter the full path name of either the file or the folder where the exported information will be written. If you specify a folder instead of a filename, the filename that is generated is the project name for design time metadata and the application name for runtime metadata.
-verbose (-v)	Optional Display detailed runtime output (not runtime logging messages).
-results (-res)	Optional Print all runtime output to the specified file.
-log (-l)	Optional Print all runtime logging messages to the specified file. Use this option with -loglevel .
-logerror (-error)	Optional Print all ERROR and FATAL runtime logging messages to the specified file.
-loginfo (-info)	Optional Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Optional Displays help for this command.

IMPORT command

You can use the **IMPORT** command to move exported applications and services to another IBM InfoSphere Information Services Director for backup or deployment.

Purpose

The **IMPORT** command imports applications and services both at design time and run time. You can configure the **IMPORT** command to replace any matching applications that are found.

Syntax

Import a design time application:

```
ISDImportExport -action designtimeimport [-user <user name>
[-password <user password>] | -authfile <file name>]
-project <project name> -application <application name>
-input <full path name of the source XML file>
```

Import a runtime application and enable its service provider:

```
ISDImportExport -action runtimeimport [-user <user name>
[-password <user password>] | -authfile <file name>]
-enableProvider -input <full path name of the source DAT file>
```

Parameters

The following parameters are available for the **IMPORT** command.

Table 4. Import command parameters

Parameter name (short name)	Description
-action (-act)	Required Enter the action command: <ul style="list-style-type: none">• For design time applications, type <code>designtimeimport</code> or <code>dti</code>• For runtime applications, type <code>runtimeimport</code> or <code>rti</code>
-authfile (-af)	Optional The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.
-user (-ur)	Optional Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.
-password (-pw)	Optional Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.

Table 4. Import command parameters (continued)

Parameter name (short name)	Description
<p>-rename (-ren)</p>	<p>Optional for <code>designTimeImport</code> only. Not applicable to <code>runtimeImport</code>.</p> <p>When a matching resource such as an application or service exists, the new name is automatically generated for the resource. The timestamp is appended to the existing name of the resource to create a unique name. Matches are resolved at the lowest specified options. For example, if applications and services are specified in the command, matching is done at the services level.</p> <p>If you do not use the -rename or -replace command, a warning is displayed when a matching resource (application or service) is found and the new resource is not imported. If there are additional resources to be imported, the <code>IMPORT</code> command moves to the next resource.</p>
<p>-replace (-rep)</p>	<p>Optional</p> <p>If an imported application has the same name as an existing application on the system, the existing application is deleted and the new application with the same name is created from the imported file.</p> <p>If you do not use the -replace or -rename command, a warning is displayed when a matching application is found and the new application is not imported. If there are additional applications to be imported, the <code>IMPORT</code> command moves to the next application.</p>
<p>-preserveProvider (-prp)</p>	<p>Optional for <code>runtimeImport</code> only. Not applicable to <code>designTimeImport</code>.</p> <p>Use the -preserveProvider parameter with the -replace parameter to replace the matching application executable files only and leave the information service provider information intact.</p> <p>The -preserveProvider parameter must be accompanied by the -replace parameter to have any effect.</p>

Table 4. Import command parameters (continued)

Parameter name (short name)	Description
-enableProvider (-enp)	<p>Optional for runtimeimport only. Not applicable to designtimeimport.</p> <p>Use the parameter to enable the service providers attached to the application that you are importing.</p> <p>If this option is not used, runtime applications are imported but service providers are disabled. Service providers must be enabled for the imported applications and services to be able to receive service requests.</p>
-project (-p)	<p>Optional for designtimeimport only. Not applicable to runtimeimport.</p> <p>Enter the name of the project into which the resources are imported.</p> <p>If you do not specify a project name, the IMPORT command uses the project name in the XML.</p> <p>For designtimeimport, the name of the project into which the information is imported is defined in the input XML file.</p> <p>For runtimeimport, the name of the application into which the information is imported is defined in the input DAT file.</p>
-application (-a)	<p>Optional for designtimeimport only. Not applicable to runtimeimport.</p> <p>Enter the name of the application in the project that you are importing.</p>
-service (-s)	<p>Optional for designtimeimport only. Not applicable to runtimeimport.</p> <p>Enter the name of the service in the application that you are importing.</p>
-input (-inp)	<p>Required</p> <p>Enter the full path name of the file from which the exported information will be read.</p>
-verbose (-v)	<p>Display detailed runtime output (not runtime logging messages).</p>
-results (-res)	<p>Print all runtime output to the specified file.</p>
-log (-l)	<p>Print all runtime logging messages to the specified file. Use this option with -loglevel.</p>
-logerror (-error)	<p>Print all ERROR and FATAL runtime logging messages to the specified file.</p>
-loginfo (-info)	<p>Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.</p>

Table 4. Import command parameters (continued)

Parameter name (short name)	Description
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Displays help for this command.

ENABLE command

You can use the **ENABLE** command to enable service providers that are attached to IBM InfoSphere Information Services Director service operations.

Purpose

The **ENABLE** command enables service providers for runtime applications, services, and operations. Once they are enabled, the services can receive and process service requests.

Syntax

There are two paths in which you can enable service providers: for a specific application or for an agent host.

Enable service providers for an application:

```
ISDAdmin -action enable [-user <user name>
[-password <user password>] | -authfile <file name>]
-a <application name>
```

Enable service providers for an agent host:

```
ISDAdmin -action enable [-user <user name>
[-password <user password>] | -authfile <file name>]
-agentHost <agent server host name>
```

Enable service provider types for an agent host. Additionally, use a provider type or use a combination of provider type and provider host to enable specific service providers:

```
ISDAdmin -action enable [-user <user name>
[-password <user password>] | -authfile <file name>]
-agentHost <agent server host name> -providerType <provider type>
-providerHost <DS host name or DB2 server host name>
```

Parameters

The **ENABLE** command uses the following parameters.

Table 5. Enable command parameters

Parameter name (short name)	Description
-action (-act)	Required Type enable or e.

Table 5. Enable command parameters (continued)

Parameter name (short name)	Description
-authfile (-af)	Optional The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.
-user (-ur)	Optional Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.
-password (-pw)	Optional Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.
-application (-a)	Required when enabling applications, services, or operations Enter the name of the application to enable the service provider for. The -application , -service , and -operation parameters work together.
-service (-s)	Optional Enter the name of the service in the application to enable the service provider for.
-operation (-o)	Optional Enter the name of the operation in the service to enable the service provider for.
-agentHost (-ahost)	Required when enabling providers for an agent host Enter the host name of the agent server. The -agentHost , -providerType , and -providerHost parameters work together.

Table 5. Enable command parameters (continued)

Parameter name (short name)	Description
-providerType (-prType)	Optional Enter the type of service provider to be enabled. The -agentHost parameter must be specified with the -providerType parameter. For DataStage, enter DS. For DB2, enter DB2. For Oracle, enter ORA. For Classic Federation Server, enter DB2CF.
-providerHost (-pHost)	Optional Enter the host name of the service provider server for which the provider is to be enabled. The -agentHost parameter must be specified with the -providerHost parameter.
-verbose (-v)	Optional Display detailed runtime output (not runtime logging messages).
-results (-res)	Optional Print all runtime output to the specified file.
-log (-l)	Optional Print all runtime logging messages to the specified file. Use this option with -loglevel .
-logerror (-error)	Optional Print all ERROR and FATAL runtime logging messages to the specified file.
-loginfo (-info)	Optional Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Optional Displays help for this command.

DISABLE command

You can use the **DISABLE** command to disable service providers that are attached to IBM InfoSphere Information Services Director service operations.

Purpose

The **DISABLE** command disables service providers from runtime applications, services, and operations. After you disable the service provider, service operations cannot process service requests.

Syntax

There are two paths in which you can enable service providers: for a specific application or for an agent host.

Disable service providers for an application:

```
ISDAdmin -action disable [-user <user name>
[-password <user password>] | -authfile <file name>]
-a <application name>
```

Disable service providers for an agent host:

```
ISDAdmin -action disable [-user <user name>
[-password <user password>] | -authfile <file name>]
-agentHost <agent server host name>
```

Disable service provider types for an agent host. Additionally, use a provider type or use a combination of provider type and provider host to disable specific service providers:

```
ISDAdmin -action disable [-user <user name>
[-password <user password>] | -authfile <file name>]
-agentHost <agent server host name> -providerType <provider type>
-providerHost <DS host name or DB2 server host name>
```

Parameters

The **DISABLE** command uses the following parameters.

Table 6. Disable command parameters

Parameter name (short name)	Description
-action (-act)	Required Type disable or d.
-authfile (-af)	Optional The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.
-user (-ur)	Optional Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.

Table 6. Disable command parameters (continued)

Parameter name (short name)	Description
-password (-pw)	Optional Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.
-application (-a)	Required when disabling applications, services, or operations Enter the name of the application to disable the service provider for. The -application , -service , and -operation parameters work together.
-service (-s)	Optional Enter the name of the service in the application to disable the service provider for.
-operation (-o)	Optional Enter the name of the operation in the service to disable the service provider for.
-agentHost (-ahost)	Required when disabling providers for an agent host Enter the host name of the agent server. The -agentHost , -providerType , and -providerHost parameters work together.
-providerType (-prType)	Optional Enter the type of service provider enabled. The -agentHost parameter must be specified with the -providerType parameter. For DataStage, enter DS. For DB2, enter DB2. For Oracle, enter ORA. For Classic Federation Server, enter DB2CF.
-providerHost (-pHost)	Optional Enter the host name of the service provider server from which the provider is disabled. The -agentHost parameter must be specified with the -providerHost parameter.
-verbose (-v)	Optional Display detailed runtime output (not runtime logging messages).

Table 6. Disable command parameters (continued)

Parameter name (short name)	Description
-results (-res)	Optional Print all runtime output to the specified file.
-log (-l)	Optional Print all runtime logging messages to the specified file. Use this option with -loglevel .
-logerror (-error)	Optional Print all ERROR and FATAL runtime logging messages to the specified file.
-loginfo (-info)	Optional Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Optional Displays help for this command.

DEPLOY command

You can use the **DEPLOY** command to deploy applications from IBM InfoSphere Information Services Director projects to enable the services in these applications to receive service requests.

Purpose

The **DEPLOY** command deploys design time applications and upgrades deployed applications. After you deploy the application, you can use the **DEPLOY** command to upgrade the application and service provider information by regenerating the application executable files.

Syntax

Deploy selected design time applications:

```
ISDAdmin -action deploy [-user <user name>
[-password <user password>] | -authfile <file name>]
-p <project name> -a <application name1> -a <application name2>
-a <application name3>
```

Upgrade and redeploy only the application by regenerating the application executable files:

```
ISDAdmin -action deploy [-user <user name>
[-password <user password>] | -authfile <file name>]
-replace -preserveProvider -project <project name> -a <application name1>
-a <application name2>
```

Parameters

The **DEPLOY** command uses the following parameters.

Table 7. Deploy command parameters

Parameter name (short name)	Description
-action (-act)	Required The action to perform, type deploy or dep.
-authfile (-af)	Optional The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.
-user (-ur)	Optional Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.
-password (-pw)	Optional Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.
-project (-p)	Required The name of the project that contains the application to be deployed.
-application (-a)	Required The name of the application to be deployed.
-replace (-rep)	Optional The parameter that redeploys the matching applications that are found. If the -replace command is not used, a warning is displayed when a matching application is found and the new application is not deployed. If there are additional applications to be deployed, the DEPLOY command moves to the next application.
-preserveProvider (-rep -prp)	Optional Use the -preserveProvider parameter with the combination of the -replace parameter to replace the matching application executable file only and leave the information service provider information intact. The -preserveProvider parameter must be accompanied by the -replace parameter.

Table 7. Deploy command parameters (continued)

Parameter name (short name)	Description
-verbose (-v)	Optional Display detailed runtime output (not runtime logging messages).
-results (-res)	Optional Print all runtime output to the specified file.
-log (-l)	Optional Print all runtime logging messages to the specified file. Use this option with -loglevel .
-logerror (-error)	Optional Print all ERROR and FATAL runtime logging messages to the specified file.
-loginfo (-info)	Optional Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Optional Displays help for this command.

UNDEPLOY command

You can use the **UNDEPLOY** command to undeploy applications from IBM InfoSphere Information Services Director.

Purpose

The **UNDEPLOY** command undeploys one or more runtime applications.

Syntax

```
ISDAdmin -action undeploy [-user <user name>
[-password <user password>] | -authfile <file name>]
-a <application name>
```

Parameters

The **UNDEPLOY** command uses the following parameters.

Table 8. Undeploy command parameters

Parameter name (short name)	Description
-action (-act)	Required Type undeploy or undep.

Table 8. Undeploy command parameters (continued)

Parameter name (short name)	Description
-authfile (-af)	Optional The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.
-user (-ur)	Optional Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.
-password (-pw)	Optional Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.
-application (-a)	Required Enter the name of the application to be undeployed.
-verbose (-v)	Optional Display detailed runtime output (not runtime logging messages).
-results (-res)	Optional Print all runtime output to the specified file.
-log (-l)	Optional Print all runtime logging messages to the specified file. Use this option with -loglevel .
-logerror (-error)	Optional Print all ERROR and FATAL runtime logging messages to the specified file.
-loginfo (-info)	Optional Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Optional Displays help for this command.

UPGRADE command

You can use the **UPGRADE** command to upgrade application and service information in deployed IBM InfoSphere Information Services Director applications.

Purpose

The **UPGRADE** command is supported for runtime applications to upgrade the artifacts that are generated for the application. You can upgrade application and service information in your runtime applications by using one of the following options.

- Option 1 enables you to update both applications and service provider information with the application and service provider information contained in the input DAT file. This option uses the **ISDImportExport runtimeimport** command with a **replace** parameter to handle matching applications.
- Option 2 enables you to update an application without replacing the existing service provider information. This option uses the **ISDImportExport runtimeimport** command with the **replace** and **preserveProvider** parameters to deploy the application contained in the input DAT file without modifying service provider information.
- Option 3 enables you to update the application without modifying service provider information by regenerating and redeploying the executable code. This option uses the names of the applications to be upgraded as input. The design metadata must be available in the environment so the application can be redeployed. This option uses the **ISDAdmin deploy** command with the **replace** and **preserveProvider** parameters to deploy the regenerated application without modifying service provider information.

Syntax

Upgrade an application and its service provider information:

```
ISDImportExport -action runtimeimport [-user <user name> [-password <user password>] | -authfile file name] -replace -input <full path name of the DAT file from which the new information is read>
```

Upgrade only the application by using the input DAT file:

```
ISDImportExport -action runtimeimport [-user <user name> [-password <user password>] | -authfile file name] -replace -preserveProvider -input <full path name of the DAT file from which the new information is read>
```

Upgrade only the application by regenerating and redeploying the executable code:

```
ISDAdmin -action deploy [-user <user name> [-password <user password>] | -authfile file name] -project <project name> -replace -preserveProvider -a <application1> -a <application2>
```

Parameters

The **UPGRADE** command uses the following parameters.

Table 9. Upgrade parameters

Parameter name (short name)	Description
-action (-act)	<p>Required</p> <p>The action to perform:</p> <ul style="list-style-type: none"> • To upgrade an application and its service provider information, enter <code>runtimeimport</code> or <code>rti</code>. • To upgrade the application by using the input DAT file, enter <code>runtimeimport</code> or <code>rti</code>. • To upgrade the application by regenerating and redeploying the executable code, enter <code>deploy</code> or <code>dep</code>.
-authfile (-af)	<p>Optional</p> <p>The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.</p>
-user (-ur)	<p>Optional</p> <p>Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.</p>
-password (-pw)	<p>Optional</p> <p>Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.</p>
-replace (-rep)	<p>Required for option 1</p> <p>The new name to use to replace any matching applications that are found. The existing application is deleted and recreated with the imported data.</p>
-replace -preserveProvider (-rep -prp)	<p>Required for option 2 and option 3</p> <p>Combination of 2 parameters to use to replace the matching applications and leave the information service provider information intact.</p> <p>The -preserveProvider parameter must be accompanied by the -replace parameter to have any effect.</p>
-application (-a)	<p>Optional</p> <p>The name of the application to be updated.</p>

Table 9. Upgrade parameters (continued)

Parameter name (short name)	Description
-input (-inp)	Optional The full path name of the file from which the new information is read.
-verbose (-v)	Optional Display detailed runtime output (not runtime logging messages).
-results (-res)	Optional Print all runtime output to the specified file.
-log (-l)	Optional Print all runtime logging messages to the specified file. Use this option with -loglevel .
-logerror (-error)	Optional Print all ERROR and FATAL runtime logging messages to the specified file.
-loginfo (-info)	Optional Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Optional Displays help for this command.

UPDATE command

After you import an application or service provider, some metadata information might not match the metadata information in the environment into which it is imported. You use the **UPDATE** command to update this metadata information directly in the repository to match the metadata information in the new environment.

Restriction: You can update only one metadata attribute at a time. If you need to update multiple metadata attributes, you must run a separate **UPDATE** command for each metadata attribute.

Purpose

The **UPDATE** command updates metadata information from runtime applications and IBM InfoSphere Information Server connections. The scope of the metadata update operation is determined by looking for an agent host name, application name, or connection name. For every metadata **UPDATE** command that you enter, you must specify one of the following keys: **-agenthost**, **-application**, or **-cname**.

Syntax

Update metadata information for a specified application:

```
ISDAdmin -action update [-user <user name>
[-password <user password>] | -authfile <file name>]
-a <application name> -s <service name> -o <operation name>
-key <key for the metadata attribute to be updated>
-subkey <job parameter argument you want to modify>
-oldvalue <old value of the attribute you want to modify>
-newvalue <new value for the attribute that you are modifying>
-dsproject <project name> -dsjob <job name> -providerUser <service provider>
```

Update metadata information for a specified agent server host:

```
ISDAdmin -action update [-user <user name>
[-password <user password>] | -authfile <file name>]
-agentHost <agent host name> -providerType <DS, DB2, ORA, or DB2CF>
-providerHost <service provider server host name>
-key <key for the metadata attribute to be updated>
-subkey <job parameter argument you want to modify>
-oldvalue <old value of the attribute you want to modify>
-newvalue <new value for the attribute that you are modifying>
-dsproject <project name> -dsjob <job name> -providerUser <service provider>
```

Update metadata information for a specified connection:

```
ISDAdmin -action update [-user <user name>
[-password <user password>] | -authfile <file name>]
-cname <connection name> -key <key for the metadata attribute to be updated>
-oldvalue <old value of the attribute you want to modify>
-newvalue <new value for the attribute that you are modifying>
```

Application metadata parameters

The **UPDATE** command uses the following parameters. There are three paths (application, agent host, or connection name) for using this command. Each path has different mandatory and optional options. For every metadata **UPDATE** command that you enter, you need to specify one of the following options: **-agenthost**, **-application**, or **-cname**.

Table 10. Application metadata parameters

Parameter name (short name)	Description
-action (-act)	Required Type update.
-authfile (-af)	Optional The authorization file that includes the user and password credentials to use in lieu of providing the credentials at the command prompt or with the -user and -password parameters.
-user (-ur)	Optional Your IBM InfoSphere Information Server user ID. If not provided and the -authfile parameter is not used, you will be prompted for a user ID.

Table 10. Application metadata parameters (continued)

Parameter name (short name)	Description
-password (-pw)	Optional Your IBM InfoSphere Information Server password. If not provided and the -authfile parameter is not used, you will be prompted for a password.
-application (-a)	Optional Use the -a parameter if you want to apply the metadata update within the scope of a particular application. Enter the name of the application for which you want to update metadata. You can use the application name to qualify or restrict the operation and provider metadata update.
-agentHost (-ahost)	Optional Use the -ahost parameter if you want to apply the metadata update within the scope of a specific agent. Note: The agent host can also be used as a key when its value needs to be updated. Enter the host name of the agent server.
-cname (-c)	Optional Use the -c parameter if you want to apply the metadata update within the scope of a InfoSphere Information Server connection. Enter the name that is assigned to the connection between the service provider and InfoSphere Information Server.
-key (-k)	Required Enter the key to be updated. For example, to update the DataStage password, enter DS_PASSWORD. If the key is linked to other options, enter the parameters for those options after the key. More information on the supported keys and their dependencies on other options is provided in the tables that follow later in this topic.
-subkey (-sk)	Optional Use -subkey to update job parameter settings. Enter the argument for the setting you want to modify.

Table 10. Application metadata parameters (continued)

Parameter name (short name)	Description
-service (-s)	Optional Enter the name of the service in the application for which you want to update metadata. This parameter is part of the -application path.
-operation (-o)	Optional Enter the name of the operation in the service for which you want to update metadata. This parameter is part of the -application and -service path.
-oldvalue (-ov)	Optional Use -oldvalue when you use any of the following key values to update a metadata attribute: <ul style="list-style-type: none"> • DS_USERID • DS_JOBNAME • DS_PROJECT_NAME • DB2_HOST • DB2_DATABASE • DB2_PORT • DB2_USERID <p>Note: This parameter is required when you need to specify a particular value for a key that has more than one possible value attached to it. This parameter is optional in all other cases in which there is only one possible value for the key that you are updating. For that reason, it is unnecessary to specify a value in those scenarios.</p> <p>Enter the exact existing value of the item to be updated.</p>
-newvalue (-nv)	Required Enter the new value to assign to the metadata attribute that you are updating. When the value for the -key parameter is a password (such as DS_PASSWORD, DB2_PASSWORD, ORA_PASSWORD, DB2CF_PASSWORD, or PASSWORD), the value for this -newvalue parameter can be in the form of a string that has been encrypted with the encrypt command.

Table 10. Application metadata parameters (continued)

Parameter name (short name)	Description
-providerType (-prType)	Optional You must use -providerType when you are updating any of the following service providers: <ul style="list-style-type: none"> • For DataStage, type DS • For DB2, type DB2 • For Oracle, type ORA • For Classic Federation Server, type DB2CF
-providerUser (-pUr)	Optional You must use -providerUser when you update a service provider password. Enter the user name of the service provider.
-dsproject (-dsp)	Optional This parameter can be used when the job name is being updated. Enter the name of the project for which you want to update metadata. Note: You can also use this parameter to identify a specific project that is attached to an operation when you are updating the parameters of that job.
-dsjob (-dsj)	Optional Enter the name of the job for which you want to update metadata. Note: You can use this parameter to identify a specific DataStage job that is attached to an operation when you are updating the parameters of that job.
-providerHost (-pHost)	Optional You must use -pHost when you update the DB2 database name, DB2 port, DB2 user ID, or DB2 password. Enter the name of the service provider host server.
-verbose (-v)	Optional Display detailed runtime output (not runtime logging messages).
-results (-res)	Optional Print all runtime output to the specified file.
-log (-l)	Optional Print all runtime logging messages to the specified file. Use this option with -loglevel .

Table 10. Application metadata parameters (continued)

Parameter name (short name)	Description
-logerror (-error)	Optional Print all ERROR and FATAL runtime logging messages to the specified file.
-loginfo (-info)	Optional Print all INFO, WARN, DEBUG, and TRACE runtime logging messages to the specified file.
-loglevel (-level)	Optional Specify one of the following logging levels to print: ALL, TRACE, DEBUG, INFO, WARN, ERROR, FATAL, OFF.
-help (-?)	Optional Displays help for this command.

Operation keys

The values of the following keys can be changed to update operation metadata. These keys do not have dependencies with other parameters.

Table 11. Operation metadata keys

Key name	Description
MAX_QUEUE_SIZE	Maximum number of service requests that can be in the operation queue at the same time.
MAX_QUEUEWAIT	Maximum length of time that you want a service request to wait in an operation queue.
MAX_RETRIES	Maximum number of tries that a service request makes to the server if the request is not received the first time. This setting applies only if there is more than one ASB Agent to send a request to.
LOAD_BALANCER	Method used to send service requests to the server when multiple service providers are attached to the same operation.

Common provider keys

The values of the following keys can be changed to update common provider metadata. These keys do not have dependencies with other parameters.

Table 12. Common provider keys

Key name	Description
ACTIVATION_DELAY	Length of time, in milliseconds, that the designated number of service requests (set in ACTIVATION_THRESHOLD) must be in the operation queue before the service provider starts another job or server connection.
ACTIVATION_THRESHOLD	Number of service requests that must be in the operation queue for a designated length of time (set in ACTIVATION_DELAY) before the service provider starts another job or server connection. Applies to the number of service requests in the operation queue only; does not include the number of service requests in the pipeline.
AGENT_HOST	Host name of the agent server that communicates with the service provider.
AGENT_PORT	Port number on the agent server that is used to access the service provider.
MAX_ACTIVE	Maximum number of job instances or server connections that can be active at the same time. The service provider cannot start a new job or connection after it reaches the maximum number.
MAX_IDLE	Maximum length of time, in seconds, that a job instance or connection can be idle before it must be stopped. You can set a maximum idle time if there is a known limit to the length of time the job or connection can be idle.
MAX_RUNTIME	Maximum length of time that a job uses to process service requests. The job processes requests that are in the pipeline when the maximum run time is reached, but the job is not available for subsequent requests.
MIN_ACTIVE	Minimum number of job instances or server connections that can be active at the same time. The minimum number means that at least one job or server connection is always running.
MIN_IDLE	Length of time, in seconds, that a job instance or connection can be idle before it must be stopped.
REQUEST_LIMIT	Maximum number of service requests that the job instance processes at the same time. Only some service providers, such as InfoSphere DataStage, have this capability.
STUCK_TIMEOUT	Length of time, in seconds, over which the service provider processes an operation before returning an error.

IBM InfoSphere DataStage provider keys

The values of the following keys can be changed to update metadata for InfoSphere DataStage providers. Some of these keys must be used with the options on which they are dependent.

Table 13. InfoSphere DataStage provider keys

Key name	Description
DS_PROJECT_NAME	Name of the new IBM InfoSphere DataStage project for which to update metadata.
DS_JOBNAME	Name of the new InfoSphere DataStage job for which to update metadata.
DS_USERID	Your InfoSphere Information Server engine user ID.
DS_PASSWORD	Your InfoSphere Information Server engine password. Use with -providerUser , your login user id.
DS_HOST	Host name or server name of your InfoSphere Information Server engine.
DS_PORT	Number of the port used to access your InfoSphere Information Server engine.
JOB_PARAMETER	Name of the job parameter for which to update metadata.

IBM DB2 provider keys

The values of the following keys can be changed to update metadata for DB2 providers. Some of these keys must be used with the options to which they are dependent.

Restriction: You can use the **UPDATE** command only on computers that have a single installation of DB2.

Table 14. IBM DB2 server provider keys

Key name	Description
DB2_USERID	Your DB2 server user ID. Use with -providerHost , the DB2 server name.
DB2_PASSWORD	Your DB2 server password. Use with -providerUser , your DB2 user ID.
DB2_HOST	Host name or server name of the DB2 server.
DB2_PORT	Number of the port used to access the DB2 server.
DB2_DATABASE	Name of the DB2 database.

Oracle database provider keys

The values of the following keys can be changed to update metadata for Oracle providers.

Restriction: You can use the **UPDATE** command only on computers that have a single installation of Oracle.

Table 15. Oracle database provider keys

Key name	Description
ORA_USERID	Your Oracle database server user ID.
ORA_PASSWORD	Your Oracle database server password. Use with -providerUser , your Oracle user ID.
ORA_HOST	Host name or server name of the Oracle server.
ORA_PORT	Port number that is used to access the Oracle server.
ORA_DATABASE	Name of the Oracle database.

IBM InfoSphere Classic Federation Server for z/OS® server metadata keys

The values of the following keys can be changed to update metadata for InfoSphere Classic Federation Server for z/OS.

Table 16. InfoSphere Classic Federation Server for z/OS database provider keys

Key name	Description
DB2CF_USERID	Your InfoSphere Classic Federation Server for z/OS user ID.
DB2CF_PASSWORD	Your InfoSphere Classic Federation Server for z/OS password. Use with -providerUser , your Classic Federation user ID.
DB2CF_HOST	Host name or server name of the InfoSphere Classic Federation Server for z/OS.
DB2CF_PORT	Port number that is used to access the InfoSphere Classic Federation Server for z/OS server.
DB2CF_DATABASE	Name of the database for the InfoSphere Classic Federation Server for z/OS.

Connection metadata keys

The values of the following keys can be changed to update metadata for InfoSphere Information Server connections.

Table 17. Connection metadata keys

Key name	Description
USER	Your DataStage or DB2 server user ID.
PASSWORD	Your DataStage or DB2 server password. Use with -providerUser , your provider user ID.

Table 17. Connection metadata keys (continued)

Key name	Description
HOSTNAME	For DB2 connections only. Host name or server name of the DB2 server.
PORT	Port number that is used to access the DataStage or DB2 server.
DBNAME	For DB2 connections only. Name of the DB2 database.

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. Reading command-line syntax

This documentation uses special characters to define the command-line syntax.

The following special characters define the command-line syntax:

- [] Identifies an optional argument. Arguments that are not enclosed in brackets are required.
- ... Indicates that you can specify multiple values for the previous argument.
- | Indicates mutually exclusive information. You can use the argument to the left of the separator or the argument to the right of the separator. You cannot use both arguments in a single use of the command.
- { } Delimits a set of mutually exclusive arguments when one of the arguments is required. If the arguments are optional, they are enclosed in brackets ([]).

Note:

- The maximum number of characters in an argument is 256.
- Enclose argument values that have embedded spaces with either single or double quotation marks.

For example:

```
wsetsrc[-S server] [-l label] [-n name] source
```

The *source* argument is the only required argument for the **wsetsrc** command. The brackets around the other arguments indicate that these arguments are optional.

```
wlsac [-l | -f format] [key...] profile
```

In this example, the -l and -f format arguments are mutually exclusive and optional. The *profile* argument is required. The *key* argument is optional. The ellipsis (...) that follows the *key* argument indicates that you can specify multiple key names.

```
wrb -import {rule_pack | rule_set}...
```

In this example, the *rule_pack* and *rule_set* arguments are mutually exclusive, but one of the arguments must be specified. Also, the ellipsis marks (...) indicate that you can specify multiple rule packs or rule sets.

Appendix C. 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 D. 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 E. 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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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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