



Informatica® Test Data Management
10.5.3

Upgrade Guide

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Preface

Follow the instructions in the Informatica *Test Data Management Upgrade Guide* to upgrade Test Data Management. The guide also includes information on prerequisite tasks and post upgrade tasks that you need to perform to complete the upgrade. Unless otherwise noted, the upgrade path includes hotfixes and service packs.

Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

Informatica Network

The Informatica Network is the gateway to many resources, including the Informatica Knowledge Base and Informatica Global Customer Support. To enter the Informatica Network, visit <https://network.informatica.com>.

As an Informatica Network member, you have the following options:

- Search the Knowledge Base for product resources.
- View product availability information.
- Create and review your support cases.
- Find your local Informatica User Group Network and collaborate with your peers.

Informatica Knowledge Base

Use the Informatica Knowledge Base to find product resources such as how-to articles, best practices, video tutorials, and answers to frequently asked questions.

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Informatica Product Availability Matrices

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To find online support resources on the Informatica Network, visit <https://network.informatica.com> and select the eSupport option.

CHAPTER 1

Test Data Management upgrade

This chapter includes the following topics:

- [Upgrade overview, 8](#)
- [Upgrade Paths, 8](#)
- [Upgrade options, 9](#)

Upgrade overview

You can apply the 10.5.3 hotfix to versions 10.5 and later. To upgrade from earlier versions, you must first upgrade to 10.5 and then apply the hotfix.

Run the Informatica service installer to upgrade Test Data Management and services within an Informatica domain. After you run the installer, upgrade the required services and complete post upgrade tasks to complete the upgrade.

Upgrade Paths

The upgrade path that you take depends on the products that you upgrade. If you are on a version that doesn't support a direct upgrade, you must first upgrade to a supported version.

The following table lists the upgrade paths for each product that the installer supports.

Product	Versions
PowerCenter	You can apply the 10.5.3 hotfix to version 10.5, 10.5.1, and 10.5.2 including any service pack or cumulative patch. You can upgrade to version 10.5.3 from the following previous versions: <ul style="list-style-type: none">- 10.2 including any hotfix, service pack, or cumulative patch- 10.4 including any service pack or cumulative patch- 10.4.1 including any service pack or cumulative patch
Informatica Data Quality	You can upgrade to version 10.5.3 from the following previous versions: <ul style="list-style-type: none">- 10.2 including any hotfix, service pack, or cumulative patch- 10.4 including any service pack or cumulative patch- 10.4.1 including any service pack or cumulative patch

Product	Versions
Data Engineering Integration Data Engineering Quality	<p>You can apply the 10.5.3 hotfix to version 10.5, 10.5.1, and 10.5.2 including any service pack or cumulative patch.</p> <p>You can upgrade to version 10.5.3 from the following previous versions:</p> <ul style="list-style-type: none"> - 10.2 including any hotfix, service pack, or cumulative patch - 10.2.1 including any hotfix, service pack, or cumulative patch - 10.2.2 including any hotfix, service pack, or cumulative patch - 10.4 including any service pack or cumulative patch - 10.4.1 including any service pack or cumulative patch <p>Important: If Data Engineering is in the same domain as any other product supported by the Informatica installer, verify that all products are upgraded to the same supported upgrade version before you upgrade to 10.5.3.</p>
Data Engineering Streaming	<p>You can apply the 10.5.3 hotfix to version 10.5, 10.5.1, and 10.5.2 including any service pack or cumulative patch.</p> <p>You can upgrade to version 10.5.3 from the following previous versions:</p> <ul style="list-style-type: none"> - 10.2.2 including any hotfix, service pack, or cumulative patch - 10.4 including any service pack or cumulative patch - 10.4.1 including any service pack or cumulative patch
Data Privacy Management	<p>You can apply the 10.5.3 hotfix to versions 10.5, 10.5.1, and 10.5.2 including any service pack or cumulative patch.</p>
Enterprise Data Catalog	<p>You can apply the 10.5.3 hotfix to version 10.5, 10.5.1, and 10.5.2 including any service pack or cumulative patch.</p> <p>You can upgrade to version 10.5.3 from the following previous versions:</p> <ul style="list-style-type: none"> - 10.4 including any service pack or cumulative patch - 10.4.1 including any service pack or cumulative patch <p>Important: If Enterprise Data Catalog and Data Engineering are in the same domain of a version earlier than 10.4, upgrade them both to version 10.4 or 10.4.1 before you upgrade to 10.5.3.</p>
Enterprise Data Preparation	<p>You can apply the 10.5.3 hotfix to version 10.5, 10.5.1, and 10.5.2 including any service pack or cumulative patch.</p> <p>You can upgrade to version 10.5.3 from the following previous versions:</p> <ul style="list-style-type: none"> - 10.4 including any service pack or cumulative patch - 10.4.1 including any service pack or cumulative patch <p>Important: If Data Engineering, Enterprise Data Catalog, and Enterprise Data Preparation are in the same domain of a version earlier than 10.4, upgrade them all to version 10.4 or 10.4.1 before you upgrade to 10.5.3.</p>
Test Data Management	<p>You can apply the 10.5.3 hotfix to versions 10.5, 10.5.1, and 10.5.2 including any service pack or cumulative patch.</p>

Upgrade options

You can run the Informatica 10.5.3 installer to apply the hotfix on Test Data Management versions 10.5 and later.

If you are on version 10.5 or later, see [“Hotfix installation and rollback overview” on page 11](#) for the steps to apply the hotfix.

The following table describes the upgrade path from previous versions:

Test Data Management Version	Upgrade Path
<ul style="list-style-type: none"> - 10.4.1 - 10.4 - 10.2.0 Hotfix 2 	<p>Upgrade to 10.5 and then apply the 10.5.3 hotfix. See Chapter 3, "Test Data Management upgrade to version 10.5" on page 27 for information about how to upgrade to version 10.5.</p> <p>Apply the 10.5.3 hotfix after you perform all post upgrade tasks for 10.5.</p>
<p>All earlier versions.</p>	<p>Upgrade to one of the following versions and then upgrade to 10.5:</p> <ul style="list-style-type: none"> - 10.4.1 - 10.4 - 10.2.0 Hotfix 2 <p>Apply the 10.5.3 hotfix after you perform all post upgrade tasks for 10.5.</p> <p>Note: You must perform all post upgrade tasks for each version that you upgrade to. See the <i>Test Data Management Upgrade Guide</i> of the corresponding version for instructions about how to upgrade to the version.</p>

CHAPTER 2

Hotfix Installation and Rollback

This chapter includes the following topics:

- [Hotfix installation and rollback overview, 11](#)
- [Applying the services hotfix, 12](#)
- [Rolling back the services hotfix, 19](#)
- [Applying the client hotfix, 22](#)
- [Rolling back the client hotfix, 25](#)

Hotfix installation and rollback overview

When you apply the hotfix, the installer backs up existing directories, applies the new version of the product, and updates required configuration and run-time files. You can roll back the hotfix if required. When you roll back a hotfix, the installer restores Informatica to the previously installed version.

Informatica provides installers to apply hotfixes to the Informatica services and clients.

The Informatica hotfix on PowerCenter or Data Engineering Integration includes the Test Data Management binaries.

To apply or roll back the hotfix, perform the following steps:

1. Complete the preliminary tasks. Before you apply or rollback the hotfix, ensure that you shut down the domain. For a multi-node configuration, you also need to shut down all the nodes.
2. Apply or roll back the hotfix to the Informatica services in graphical, console, or silent mode.
3. Complete the final tasks for the Informatica services. After you install the server components, start the domain on the gateway node.
4. Apply the hotfix to the Informatica clients in graphical or silent mode. If you are applying the hotfix to Informatica Developer, verify that the Informatica client hotfix version matches the Informatica services hotfix version.

Note: If the Informatica client hotfix version does not match the Informatica services hotfix version, Informatica Developer cannot connect to the domain.

Applying the services hotfix

When you apply the hotfix, the installer backs up existing directories, applies the new version of the product, and restores or updates required configuration and run-time files.

You can run the installers to apply hotfixes to Informatica services and clients.

Before you apply the hotfix

Before you run the installer to apply the hotfix, perform the following prerequisite tasks:

Verify distribution package requirements

The Informatica domain and client require the distribution packages to process complex files within the Informatica domain, or to connect to Hadoop or Databricks environment when you process within the Informatica domain, or to push processing to Hadoop or Databricks environment.

If you need a distribution package, you can install it through the installer or through Integration Package Manager (the package manager) at any time.

You can use the same distribution package that you used in the previous Informatica version to process complex files within the Informatica domain or to connect to the Hadoop or Databricks environment when you process within the Informatica domain.

For the supported distribution packages when you push processing to Hadoop or Databricks environment, see the [Product Availability Matrix](#).

Download and extract the installer files

The installer files are distributed as compressed files. You can get the Informatica installation file and distribution packages from the FTP link contained in your fulfillment email. Download the Informatica installation tar file from the Informatica Electronic Software Download site to a directory on your machine.

Note: Make sure that you download the file to a local directory or a shared network drive that is mapped on your machine. You can then extract the installer files. However, you cannot run the installer from a mapped file. Copy the extracted files to a local drive and then run the installer.

1. Download the hotfix package for your product.
2. Unzip or untar the contents of the hotfix package.
Note: On Windows, the length of the installation path, including the .zip file name, must be 60 characters or fewer. On UNIX, use the native tar or GNU tar command to extract the installer files. The user that runs the installer must have read and write permissions on the directory that contains the installer files and execute permissions on install.sh.
3. If you want to install distribution packages, download the ZIP files of the distribution packages.
4. Copy the ZIP files of the distribution packages to the location: `<Informatica installer files>/source`
Note: The installer fails if the ZIP files for distribution packages aren't available in the source directory.

Prepare for hotfix installation

1. Stop all processes that access the installation directory and subdirectories, including command prompts and command line programs.
2. Close the Informatica clients on all machines where you want to apply the hotfix.
3. Close the Informatica directory and the subdirectories.

4. Back up the repository and warehouse files. Ensure that you back up the required repositories from the Administrator tool. These backup files are required if you roll back the hotfix. Back up the following databases and files in your environment:
 - PowerCenter repository
 - Model repository
 - Metadata Manager imm.properties file
 - Metadata Manager warehouse
 - Data Transformation ServiceDB directory
5. Stop the Informatica services on all nodes in the domain.
6. Shut down the Informatica domain using the infaservice shutdown command. By default, the infaservice executable file is located in the following directory: `<Informatica installation directory>/tomcat/bin`.
7. If the machine uses HTTPS to connect to Informatica Administrator, verify that the keystore file is in the default location and that it uses the default file name. The default location for the keystore file is `<Informatica installation directory>/tomcat/conf`. The default file name for the keystore file is `Default.keystore`.
8. Set the `SKIP_VENDOR_CHECK` environment variable to true to remove the sudo prompt from the hotfix installation on UNIX.

Note: If you don't have sudo privileges, set the environment variable to true before you apply or roll back a hotfix. If you have sudo privileges, you don't need to set the environment variable.

Apply the services hotfix in graphical mode

When you apply the hotfix in graphical mode, a console window opens and runs in the background. If you close this window, the installation stops.

1. Log in to the machine with a system user account. The user account must be the same account used to install the previous version of Informatica services.
2. Close all other applications.
3. To begin the installation on Windows, run `install.bat` as administrator from the root directory where you unzipped or untarred the hotfix package. To run the file as administrator, right-click `install.bat` and select **Run as administrator**.
4. On the Informatica 10.5.3 page, select **Apply hotfix to Informatica 10.5, 10.5.1, or 10.5.2**, and then click **Start**.

The **Installation Type** page appears.
5. Select **Apply the hotfix** to apply the hotfix.
6. Read the terms and conditions of Informatica product usage toolkit and select **I agree to the terms and conditions**, and then click **Next**.

Subject to your opt-out rights described below, the software will automatically transmit to Informatica in the USA information about the computing and network environment in which the Software is deployed and the data usage and system statistics of the deployment. This transmission is deemed part of the Services under the Informatica privacy policy and Informatica will use and otherwise process this information in accordance with the Informatica privacy policy available at <https://www.informatica.com/in/privacy-policy.html>. You may disable usage collection in Administrator tool.

The **Installation Prerequisites** page appears.

7. Verify that all requirements are met before you apply the hotfix, and then click **Next**.
The **Installation Directory** page appears.
8. Enter the absolute path for the directory in which the current version of Informatica services is installed and specify the installation environment.
9. If you want to install distribution packages through the Informatica installer, select the check box.
10. If you choose to install distribution packages, select one or more packages from the list that you want to install.
11. Click **Next**.
The **Pre-Installation Summary** page appears.
12. Review the installation information, and then click **Install** to apply the hotfix.
The installer copies the Informatica files to the installation directory.
13. Complete the post-installation tasks. Verify that the hotfix completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Apply the services hotfix in console mode

Run the 10.5.3 installer to apply the hotfix to version 10.5 or 10.5.x.

When you apply the hotfix in console mode, the words Help, Quit, and Back are reserved words. Do not use them as input text.

1. Run the installer using the `./install.sh` command.
2. Press **Y** to confirm that you want to proceed with the installation.
3. Press **5** to select the option to apply the hotfix.
4. Press **1** to apply the hotfix.
5. Press **2** to agree to the terms and conditions and apply the license.
6. Verify that all installation requirements are met before you continue to apply the hotfix.
7. Press **Enter**.
8. Enter the directory where you installed Informatica 10.5 or 10.5.x.
The directory names in the path must not contain spaces or the following special characters: `@|* $ # ! % (){} [] , ; ' "`
9. Select one of the following options based on the type of installation:
 - Press **1** to set Sandbox environment for a basic environment used for proof of concept with minimal users.
 - Press **2** to set Development environment for the design environment.
 - Press **3** to set Test environment for high volume processing that is closest to a production environment.
 - Press **4** to set Production environment for high volume processing with high levels of concurrency meant for end users. Advanced production environments are typically multi-node setups.
 Default is **1** for Sandbox.
10. Choose whether you want to install distribution packages through the Informatica installer.
 - Press **1** if you don't need distribution packages or if you want to install them later.
 - Press **2** if you want to install distribution packages through the installer.
 Default is **1**.

11. If you choose to install distribution packages, select one or more packages from the list that you want to install. Separate multiple packages with a comma.
Default is 1.
12. Press **Enter**.
13. At the Pre-Installation Summary, review the installation information and press **Enter** to apply the hotfix. The installer copies the Informatica files to the installation directory.
14. At the Post-Installation Summary, verify that the hotfix application completed successfully and press **Enter** to exit the installer.

Apply the services hotfix in silent mode

To apply the hotfix in silent mode, create the SilentInput.properties file and then run the installer.

Informatica provides a sample properties file, called SilentInput_hotFix.properties, that includes the parameters that the installer requires.

1. Go to the root of the directory that contains the installation files.
2. Locate the SilentInput_hotFix.properties file.
3. Back up the file before you modify it.
4. Use a text editor to open the file and modify the values. The following table describes the installation properties that you can modify:

Property Name	Description
INSTALL_TYPE	Indicates whether to apply the hotfix or roll back the hotfix. If the value is 0, the installer applies the hotfix to the current Informatica installation. If the value is 1, the installer rolls back the current hotfix. Set the value to 0 to apply the hotfix.
USER_INSTALL_DIR	Directory for the Informatica installation where you want to apply or roll back the hotfix. To apply the hotfix to Informatica services, enter the absolute path for the directory in which the current version of Informatica services is installed.
ENABLE_USAGE_COLLECTION	Enables the software to automatically transmit to Informatica in the USA information about the computing and network environment in which the Software is deployed and the data usage and system statistics of the deployment. This transmission is deemed part of the Services under the Informatica privacy policy and Informatica will use and otherwise process this information in accordance with the Informatica privacy policy available at https://www.informatica.com/in/privacy-policy.html . You may disable usage collection in Administrator tool. For more information about how to disable sending usage statistics, see the <i>Informatica Administrator Guide</i> . You must set the value to 1 to apply the hotfix.

Property Name	Description
INSTALLATION_ENVIRONMENT	<p>If you apply the hotfix, specify the environment type associated with the Informatica services installation.</p> <ul style="list-style-type: none"> • Press 1 to set Sandbox environment for a basic environment used for proof of concept with minimal users. • Press 2 to set Development environment for the design environment. • Press 3 to set Test environment for high volume processing that is closest to a production environment. • Press 4 to set Production environment for high volume processing with high levels of concurrency meant for end users. Advanced production environments are typically multi-node setups. <p>Default is 1 for Sandbox.</p>
EDC_CATALOG_INST	Required for Enterprise Data Catalog, Data Privacy Management, and Enterprise Data Preparation installations. Set the property to true if the Catalog Service runs on the node on which you want to apply the hotfix.
EDC_HF_BACKUP	Required for Enterprise Data Catalog, Data Privacy Management, and Enterprise Data Preparation installations, if you have set EDC_CATALOG_INST=true. Set the property to true if you have taken a backup of the catalog.
EDC_BACK_UP_DIR	Required for Enterprise Data Catalog, Data Privacy Management, and Enterprise Data Preparation installations, if you set the EDC_CATALOG_INST and EDC_HF_BACKUP properties to true. Enter the location of the catalog data backup file.
INSTALL_HADOOP_LIBRARIES	Determines whether to install distribution packages through the installer. Set the value to true if you want to install distribution packages through the installer. Set the value to false if you don't need distribution packages or if you want to install them later.
SELECTED_HADOOP_LIBRARIES	Determines the distribution packages that you want to install from the supported packages list. Enter the distribution packages that you want to install, separating multiple packages with a comma.

5. Save the properties file with the name SilentInput.properties in the same folder.
6. Go to the root of the services installer directory.
7. Verify that the directory contains the SilentInput.properties file that you edited and saved.
8. Begin the installation from Windows, UNIX, or Linux.
 - To apply the hotfix on Windows, run the silentInstallHotFix.bat file as administrator. To run the file as administrator, right-click the file and select **Run as administrator**.
 - To apply the hotfix on UNIX or Linux, double-click the silentInstallHotFix.sh file.

The installer copies the Informatica files to the installation directory.
9. Complete the post-installation tasks. Verify that the hotfix completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Sample silent input properties

The following example shows the contents of the `SilentInput.properties` file when you apply or roll back the hotfix in silent mode.

```
#####
# Informatica Installer Build Details
# Copyright (c) 1993-2021 Informatica LLC
# This software contains confidential and proprietary
# information of Informatica LLC.
# All Rights Reserved.
#####

# Use the following guidelines when editing this file
# * Use this file to install without user interaction.
# * After you create the properties file, save the file with the name
SilentInput.properties
# * Any error condition that leads to failure, such as an invalid
# installation directory, generates a log file in the user home directory.
# For example: c:\silentErrorLog<time_stamp>.log

#####

# Set ENABLE_USAGE_COLLECTION to 1 to accept the product usage toolkit end user license
agreement.
# You must set the value as 1 to install the Informatica platform.
# The product usage toolkit end user license agreement is available at: http://
www.informatica.com/us/eula/en-support-eula.aspx.
# As further described in the EULA, your use of the Informatica platform will enable the
product usage toolkit
# to collect certain product usage and failure information. You may disable this feature
at any time.
# For more information on how to disable this feature refer the Informatica
Administrator Guide.

ENABLE_USAGE_COLLECTION=0

## *INSTALL_TYPE - Set this value to '0' to apply the hotfix. Set this value to '1' to
roll back the hotfix.

INSTALL_TYPE=0

# * The USER_INSTALL_DIR variable must point to a valid directory with write
# permissions enabled.

USER_INSTALL_DIR=c:\Informatica\10.5

#The INSTALLATION_ENVIRONMENT property represents the installation environment
# Set the property to one of the following installation environment types: Sandbox,
Development, Test, or Production. Values are case-sensitive.
# Set to Sandbox for a basic environment used for proof of concept with minimal
users.
# Set to Development for the design environment.
# Set to Test for high volume processing that is closest to a production environment.
# Set to Production for high volume processing with high levels of concurrency meant for
end users. Advanced production environments are typically multi-node setups.

INSTALLATION_ENVIRONMENT=

# Required only for EDC installation.
# Set EDC_CATALOG_INST=true if the Catalog Service is running on the node on which you
want to apply or roll back the hotfix.EDC_CATALOG_INST=true

# Required only for EDC installation.
# Set EDC_HF_BACKUP=true if you have set EDC_CATALOG_INST=true and you have taken a
backup of the catalog.
```

```

# Run the infacmd ldm backupContents command before you apply the hotfix (INSTALL_TYPE=0)
# Run the infacmd ldm restoreContents command before you rollback the hotfix
(INSTALL_TYPE=1
EDC_HF_BACKUP=true

# Enter the location of the backup file.
# Required for Enterprise Data Catalog installation when the EDC_CATALOG_INST and
EDC_HF_BACKUP parameters are set to true
EDC_BACK_UP_DIR=/home/ilmsatsqe/CSBackup/export.zip

# The INSTALL_HADOOP_LIBRARIES property determines whether to install packages to
integrate the domain with Hadoop or Databricks.
# Set INSTALL_HADOOP_LIBRARIES=true if you want to install integration packages along
with Informatica domain services.
# Set INSTALL_HADOOP_LIBRARIES property only if INSTALL_TYPE=0
# If you don't install the integration packages now, you can install them later through
Integration Package Manager.
INSTALL_HADOOP_LIBRARIES=false

# The SELECTED_HADOOP_LIBRARIES property determines the integration packages that you
want to install.
# Lists the supported integration packages and their versions.
# Set SELECTED_HADOOP_LIBRARIES property only if INSTALL_TYPE=0
# Enter the integration package that you want to install. Separate multiple packages
with a comma.
# You can choose from the following options:
# 1->Azure HDInsight 4.0
# 2->Cloudera 6.3
# 3->Cloudera 7.1
# 4->Cloudera 7.2
# 5->Databricks 7.2
# 6->Databricks 9.1
# 7->Dataproc 2.0
# 8->Elastic MapReduce 5.29
# 9->Elastic MapReduce 6.0
# 10->Elastic MapReduce 6.4
# 11->MapR 6.1
# 12->Select all
SELECTED_HADOOP_LIBRARIES=3

```

After you apply the hotfix

After you run the installer to apply the hotfix, start the domain and perform the post requisite tasks to complete the hotfix application.

Remove the distribution packages from the backup location

After you apply the hotfix, remove the distribution packages from the backup folder to mitigate the security vulnerabilities.

When you apply the hotfix, all the existing files in the Informatica installation directory are backed up. You need to remove the distribution packages backup from the following location: <Informatica installation directory>\BACK_FROM_<hotfix version number>\services\shared\hadoop\<distribution package_version>

The following example shows the backup location for a distribution package when you apply the 10.5.3 hotfix: C:\Informatica\BACK_FROM_3\services\shared\hadoop\EMR_6.4

Note: The deletion process doesn't remove all files of the distribution packages from the backup folder. Some files might still exist in the following location: <Informatica installation directory>\BACK_FROM_<hotfix version number>\services\shared\ You can delete these files manually.

Important: When you roll back the hotfix, distribution packages are not restored. You can't enable the functionalities associated with the Hadoop or Databricks distribution packages in the rolled-back version. To install the distribution packages, contact Informatica Global Customer Support.

Complete the Configuration for Upgrade or Apply Hotfix

If you edit `odbc.ini`, `odbcinst.ini`, `sapnwrfc.ini`, or `infaservice.sh` files, manually merge the changes from the backup files into the latest installed files. Check with your administrator for any customization to the `*.ini` files before you applied a hotfix or an upgrade. For instance, if an administrator added some variables or java options to the `infaservice.sh` script before you applied a hotfix or upgrade, manually merge the changes to the latest install file paths.

Manually merge the latest configuration changes into the following install file paths after applying hotfix or upgrade:

- `$INFA_HOME/ODBC7.1/odbc.ini`
- `$INFA_HOME /ODBC7.1/odbcinst.ini`
- `$INFA_HOME/server/bin/sapnwrfc.ini`
- `$INFA_HOME/tomcat/bin/infaservice.sh`

Test Data Management tasks

To complete the hotfix application, you must perform some Test Data Management tasks in addition to the tasks for the other product components.

Perform the following tasks for Test Data Management:

1. Log in to the Administrator tool.
2. If you use a test data warehouse, select the Test Data Warehouse Service in the **Domain Navigator** panel and upgrade the service content and then recycle the service.
3. Select the Test Data Manager Service in the **Domain Navigator** panel and upgrade the service content. Recycle the service and then enable the service.
4. If you use format preserving encryption, you must update the required configuration file and environment variable. See [“Configure format preserving encryption masking ” on page 31](#) for information. See [“Configure format preserving encryption masking in a Hadoop environment” on page 32](#) for configuration information for Hadoop plans.

Rolling back the services hotfix

You can roll back the hotfix if required. To roll back the hotfix, run the installer.

Roll back the services hotfix in graphical mode

When you roll back the hotfix in graphical mode, a console window opens and runs in the background. If you close this window, the rollback stops.

1. Log in to the machine with a system user account. The user account must be the same account used to install the previous version of Informatica services.
2. Close all other applications.

3. To begin the installation on Windows, run `install.bat` as administrator from the root directory where you unzipped or untarred the hotfix package. To run the file as administrator, right-click `install.bat` and select **Run as administrator**.

4. On the Informatica 10.5.3 page, select **Apply the hotfix to Informatica 10.5, 10.5.1, or 10.5.2**, and then click **Start**.

The **Installation Type** page appears.

5. Select **Roll back the hotfix** to roll back the hotfix.
6. Read the terms and conditions of Informatica product usage toolkit and select **I agree to the terms and conditions**, and then click **Next**.

Subject to your opt-out rights described below, the software will automatically transmit to Informatica in the USA information about the computing and network environment in which the Software is deployed and the data usage and system statistics of the deployment. This transmission is deemed part of the Services under the Informatica privacy policy and Informatica will use and otherwise process this information in accordance with the Informatica privacy policy available at <https://www.informatica.com/in/privacy-policy.html>. You may disable usage collection in Administrator tool.

The **Installation Prerequisites** page appears.

7. Verify that all requirements are met before you roll back the hotfix, and then click **Next**.

The **Installation Directory** page appears.

8. Enter the absolute path for the directory in which the current version of Informatica services is installed, and then click **Next**.

The **Pre-Installation Summary** page appears.

9. Review the installation information, and then click **Install** to roll back the hotfix.

The installer removes the hotfix and restores Informatica to the previous version.

10. Complete the post-installation tasks. Verify that the rollback completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Important: When you roll back the hotfix, distribution packages are not restored. You can't enable the functionalities associated with the Hadoop or Databricks distribution packages in the rolled-back version. To install the distribution packages, contact Informatica Global Customer Support.

Roll back the services hotfix in console mode

You can roll back the hotfix that you applied. To roll back the hotfix in console mode, run the installer.

1. Run the installer using the `./install.sh` command.
2. Press **Y** to confirm that you want to proceed with the installation.
3. Press **5** to roll back the hotfix.
4. Press **2** to roll back the hotfix.
5. Press **2** to accept the license.
6. Verify the prerequisites and press **Enter**.
7. Enter the directory where you installed Informatica and press **Enter**.
8. At the Pre-Installation Summary, press **Enter** to continue.

9. Press **Enter** to exit the installer when the rollback completes successfully.

Important: When you roll back the hotfix, distribution packages are not restored. You can't enable the functionalities associated with the Hadoop or Databricks distribution packages in the rolled-back version. To install the distribution packages, contact Informatica Global Customer Support.

Roll back the services hotfix in silent mode

To roll back the hotfix in silent mode, update the SilentInput.properties file and then run the silent installer.

Informatica provides a sample properties file, called SilentInput_hotFix.properties, that includes the parameters that are required by the installer.

1. Go to the root of the directory that contains the installation files.
2. Locate the SilentInput_hotFix.properties file.
3. Back up the file before you modify it.
4. Use a text editor to open the file and modify the values. The following table describes the installation properties that you can modify:

Property Name	Description
INSTALL_TYPE	Indicates whether to apply the hotfix or roll back the hotfix. Set the value to 1 to roll back the current hotfix.
USER_INSTALL_DIR	Directory for the Informatica installation where you want to roll back the hotfix.
ENABLE_USAGE_COLLECTION	Enables the software to automatically transmit to Informatica in the USA information about the computing and network environment in which the Software is deployed and the data usage and system statistics of the deployment. This transmission is deemed part of the Services under the Informatica privacy policy and Informatica will use and otherwise process this information in accordance with the Informatica privacy policy available at https://www.informatica.com/in/privacy-policy.html . You may disable usage collection in Administrator tool. For more information about how to disable sending usage statistics, see the <i>Informatica Administrator Guide</i> . You must set the value to 1 to roll back the hotfix.
INSTALLATION_ENVIRONMENT	You can ignore the property during rollback.
EDC_CATALOG_INST	Required for Enterprise Data Catalog, Data Privacy Management, and Enterprise Data Preparation installations. Set the property to true if the Catalog Service runs on the node on which you want to apply the hotfix.
EDC_HF_BACKUP	Required for Enterprise Data Catalog, Data Privacy Management, and Enterprise Data Preparation installations, if you have set EDC_CATALOG_INST=true. Set the property to true if you have taken a backup of the catalog.
EDC_BACK_UP_DIR	Required for Enterprise Data Catalog, Data Privacy Management, and Enterprise Data Preparation installations, if you set the EDC_CATALOG_INST and EDC_HF_BACKUP properties to true. Enter the location of the catalog data backup file.

5. Save the properties file with the name SilentInput.properties.
6. Go to root of the Informatica services installer directory.
7. Verify that the directory contains the SilentInput.properties file that you edited and saved.

8. Begin the installation from Windows, UNIX, or Linux.
 - To roll back the hotfix on Windows, run the silentInstallHotFix.bat as administrator. To run the file as administrator, right-click the file and select **Run as administrator**.
 - To roll back the hotfix on UNIX or Linux, double-click silentInstallHotFix.sh.

The installer removes the last hotfix and restores the previous version of Informatica services.

9. Complete the post rollback tasks. Verify that the rollback completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Important: When you roll back the hotfix, distribution packages are not restored. You can't enable the functionalities associated with the Hadoop or Databricks distribution packages in the rolled-back version. To install the distribution packages, contact Informatica Global Customer Support.

After you roll back the hotfix

After you roll back the hotfix, you must perform some manual tasks to complete the roll back.

When you apply the hotfix, the Test Data Management and test data warehouse repository version tables create an entry for the version. The roll back does not delete the version entry. You must manually delete the entry for the version.

1. Open the Test Data Management repository database in the database client and run a query to search for data in the ILM_VERSION table.
For example: `Select * from ILM_VERSION`
2. Delete the entry for the hotfix version.
3. Restart the Test Data Manager Service.
4. If you have a test data warehouse, open the test data warehouse repository database in the database client and run a query to search for data in the TDW_VERSION table.
For example: `Select * from TDW_VERSION`
5. Delete the entry for the hotfix version.
6. Restart the Test Data Warehouse Service.

Applying the client hotfix

When you apply the hotfix, the installer backs up existing directories, applies the new version of the client, and restores or updates required configuration and run-time files.

You can run the client installer to apply a hotfix to Informatica clients that you use. After you apply the hotfix, you can remove the backup files of the distribution packages from the backup folder.

Apply the client hotfix in graphical mode

When you run the installer in graphical mode, a console window opens and runs in the background. If you close this window, the installation stops.

1. Log in to the machine with a system user account. The user account must be the same account used to install the previous version of Informatica services.
2. Close all other applications.

3. To begin the installation, run `install.bat` from the root directory where you unzipped or untarred the client hotfix installation package.
4. On the Informatica 10.5.3 page, select **Apply the hotfix to version 10.5, 10.5.1, or 10.5.2 or roll back the hotfix**, and then click **Start**.
The **Installation Type** page appears.
5. Select **Apply the hotfix** to choose to apply the hotfix.
6. Verify that all requirements are met before you continue the hotfix, and then click **Next**.
The **Installation Directory** page appears.
7. Enter the absolute path for the directory in which the current version of the Informatica client is installed and specify the installation environment.
8. If you want to install distribution packages through the Informatica installer, select the check box.
9. If you choose to install distribution packages, select one or more packages from the list that you want to install.
10. Click **Next**.
The **Pre-Installation Summary** page appears.
11. Review the installation information, and then click **Install** to apply the hotfix.
The installer copies the Informatica files to the installation directory.
12. Complete the post-installation tasks. Verify that the hotfix completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Apply the client hotfix in silent mode

To apply the hotfix in silent mode, create the `SilentInput.properties` file and then run the installer.

Informatica provides a sample properties file, called `SilentInput_hotFix.properties`, that includes the parameters that the installer requires.

1. Go to the root of the directory that contains the client installation files.
2. Locate the `SilentInput_hotFix.properties` file.
3. Back up the file before you modify it.
4. Use a text editor to open the file and modify the values. The following table describes the installation properties that you can modify:

Property Name	Description
INSTALL_TYPE	Indicates whether to apply the hotfix or roll back the hotfix. If the value is 0, the installer applies the hotfix to the current Informatica client installation. If the value is 1, the installer rolls back the current hotfix. Set the value to 0 to apply the hotfix.
USER_INSTALL_DIR	Directory for the Informatica client installation where you want to apply or roll back the hotfix. To apply the hotfix, enter the absolute path for the directory in which the current version of the Informatica clients is installed.

Property Name	Description
INSTALL_HADOOP_LIBRARIES	Determines whether to install distribution packages through the installer. Set the value to true if you want to install distribution packages through the installer. Set the value to false if you don't need distribution packages or if you want to install them later.
SELECTED_HADOOP_LIBRARIES	Determines the distribution packages that you want to install from the supported packages list. Enter the distribution packages that you want to install, separating multiple packages with a comma.

5. Save the properties file with the name `SilentInput.properties` in the same folder.
6. Double-click the `silentInstallHotFix.bat` to apply the hotfix.
The installer copies the Informatica client files to the installation directory.
7. Complete the post-installation tasks. Verify that the hotfix completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Sample silent input properties

The following example shows the contents of the `SilentInput.properties` file when you apply or roll back the hotfix client in silent mode.

```
#####
# Informatica Installer Build Details
# Copyright (c) 1993-2021 Informatica LLC
# This software contains confidential and proprietary
# information of Informatica LLC.
# All Rights Reserved.
#####

# Use the following guidelines when editing this file
# * Use this file to install without user interaction.
# * After you create the properties file, save the file with the name
SilentInput.properties
# * Any error condition that leads to failure, such as an invalid
# installation directory, generates a log file in the user home directory.
# For example: c:\silentErrorLog<time_stamp>.log

#####

#####
## *INSTALL_TYPE - Set this value to '0' to apply the hotfix. Set this value to '1' to
roll back the hotfix.

INSTALL_TYPE=0

# * The USER_INSTALL_DIR variable must point to a valid directory with write
# permissions enabled.

USER_INSTALL_DIR=c:\Informatica\10.5

#####
# After you create the properties file, save the file with the name
SilentInput.properties and
# run the silent installer to perform the Informatica client installation.
#####
```


Remove the distribution packages from the backup location

After you apply the hotfix, remove the distribution packages from the backup folder to mitigate the security vulnerabilities.

When you apply the hotfix, all the existing files in the Informatica installation directory are backed up. You need to remove the distribution packages backup from the following location: `<Informatica installation directory>\BACK_FROM_<hotfix version number>\clients\DeveloperClient\hadoop\<distribution package_version>`

The following example shows the backup location for a distribution package when you apply the 10.5.3 hotfix: `C:\Informatica\BACK_FROM_3\clients\DeveloperClient\hadoop\EMR_6.4`

Note: The deletion process doesn't remove all files of the distribution packages from the backup folder. Some files might still exist in the following location: `<Informatica installation directory>\BACK_FROM_<hotfix version number>\clients\DeveloperClient\` You can delete these files manually.

Important: When you roll back the hotfix, distribution packages are not restored. You can't enable the functionalities associated with the Hadoop or Databricks distribution packages in the rolled-back version. To install the distribution packages, contact Informatica Global Customer Support.

Rolling back the client hotfix

You can roll back the hotfix if required. To roll back the hotfix, perform the required prerequisite tasks and then run the installer.

Rolling back the client hotfix in graphical mode

When you run the installer in graphical mode, a console window opens and runs in the background. If you close this window, the rollback stops.

1. Log in to the machine with a system user account. The user account must be the same account used to install the previous version of Informatica services.
2. Close all other applications.
3. To begin the installation, run `install.bat` from the root directory where you unzipped or untarred the client hotfix installation package.
4. On the Informatica 10.5.3 page, select **Apply the hotfix to version 10.5, 10.5.1, or 10.5.2 or roll back the hotfix**, and then click **Start**.

The **Installation Type** page appears.

5. Select **Roll back the hotfix** to choose to roll back the hotfix.
6. Verify that all requirements are met before you continue the rollback, and then click **Next**.

The **Installation Directory** page appears.

7. Enter the absolute path for the directory in which the current version of Informatica clients is installed, and then click **Next**.

The **Pre-Installation Summary** page appears.

8. Review the installation information, and then click **Install** to roll back the hotfix.

The installer removes the last hotfix and restores Informatica clients to the previous version.

9. Complete the post-installation tasks. Verify that the rollback completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Important: When you roll back the hotfix, distribution packages are not restored. You can't enable the functionalities associated with the Hadoop or Databricks distribution packages in the rolled-back version. To install the distribution packages, contact Informatica Global Customer Support.

Rolling back the client hotfix in silent mode

To roll back the hotfix in silent mode, create the SilentInput.properties file and then run the installer with the file.

Informatica provides a sample properties file, called SilentInput_hotFix.properties, that includes the parameters that the installer requires.

1. Go to the root of the directory that contains the client installation files.
2. Locate the SilentInput_hotFix.properties file.
3. Back up the file before you modify it.
4. Use a text editor to open the file and modify the values. The following table describes the installation properties that you can modify:

Property Name	Description
INSTALL_TYPE	Indicates whether to apply the hotfix or roll back the hotfix. If the value is 0, the installer applies the hotfix to the current Informatica client installation. If the value is 1, the installer rolls back the current hotfix. Set the value to 1 to roll back the hotfix.
USER_INSTALL_DIR	Directory for the Informatica client installation where you want to roll back the hotfix. Enter the absolute path for the directory in which the current version of the Informatica clients is installed.

5. Save the properties file with the name SilentInput.properties in the same folder.
6. To roll back the hotfix on Windows, double-click the silentInstallHotFix.bat file.
The installer removes the last hotfix and restores the previous version of Informatica clients.
7. Complete the post-installation tasks. Verify that the rollback completed successfully by reviewing the log file or the **Post-Installation Summary** page.

Important: When you roll back the hotfix, distribution packages are not restored. You can't enable the functionalities associated with the Hadoop or Databricks distribution packages in the rolled-back version. To install the distribution packages, contact Informatica Global Customer Support.

CHAPTER 3

Test Data Management upgrade to version 10.5

This chapter includes the following topics:

- [Overview, 27](#)
- [Back up the Test Data Management repository, 27](#)
- [Upgrade the Informatica domain, 28](#)
- [After you upgrade, 28](#)

Overview

You can upgrade to Test Data Management 10.5 from versions 10.2.0 Hotfix 2, 10.4.0, and 10.4.1.

Perform the following high-level tasks to complete the Test Data Management upgrade:

1. Back up the repository to prepare for the Test Data Management upgrade.
2. Upgrade the Informatica domain and products that you require to work with Test Data Management.
3. Perform Test Data Management post upgrade tasks.

If you are on a different Test Data Management version, you must first upgrade to 10.2.0 Hotfix 2, 10.4.0, or 10.4.1 before you can upgrade to 10.5.

See the *Test Data Management Upgrade Guide* of the corresponding version for instructions about how to upgrade to the version.

Back up the Test Data Management repository

Back up the Test Data Management repository to ensure that you can revert to the previous version of the repository if you encounter problems with the upgrade. Use the backup utility provided by the database that contains the repository.

Upgrade the Informatica domain

Upgrade the Informatica domain, services, and clients required to work with Test Data Management.

When you run the installer to upgrade Informatica services, the installer upgrades the Test Data Management binaries. The binaries are installed with both traditional and Data Engineering products.

See the Informatica services upgrade documentation for information about how to upgrade Informatica services.

Perform all pre-upgrade, upgrade, and post upgrade tasks for Informatica services. Upgrade prerequisites and steps might differ based on how you plan to use Test Data Management.

Refer to the appropriate document to ensure you upgrade the domain as required:

- If you use Test Data Management to run mappings only with PowerCenter, see the Informatica Upgrade for PowerCenter documentation.
- If you use Test Data Management to run mappings with PowerCenter and Data Engineering, see the upgrade documentation for Data Engineering.

After you perform the required domain post upgrade tasks, complete the post upgrade tasks for Test Data Management included in this document.

After you upgrade

After you complete domain upgrade and post upgrade tasks, you must complete upgrade configuration tasks specific to Test Data Management.

Upgrade the application services

Upgrade the services that Test Data Manager requires.

As part of the domain post upgrade steps, you must have upgraded the following services before you perform this task:

- PowerCenter Repository Service
 - Model Repository Service
 - Data Integration Service
1. Log in to Informatica Administrator and click the **Services and Nodes** tab.
 2. Select the PowerCenter Repository Service in the **Domain Navigator** panel and on the **Repository Properties** tab, change the operating mode to Normal.
 3. Select the PowerCenter Integration Service in the **Domain Navigator** panel and perform the following tasks:
 - a. Click the **Processes** tab.
 - b. Click **Edit** on the **General Properties** tab.
 - c. In the **Edit General Properties** window, update the **\$PMRootDir** path to the latest path.
 - d. Click **OK**.
 - e. Recycle the service.

4. If you use a test data warehouse, select the Test Data Warehouse Service in the **Domain Navigator** panel and perform the following tasks:
 - a. Click **Actions > Upgrade Contents** to upgrade the content.
The content upgrade updates the table structures and schema of the test data warehouse repository.
 - b. Recycle the service.
5. Select the Test Data Manager Service in the **Domain Navigator** panel and perform the following tasks:
 - a. Click **Actions > Upgrade Contents** to upgrade the content. The content upgrade updates the schema and table structures of the Test Data Management repository.
If you delete the Test Data Manager Service before you upgrade and create the service with a different name after you upgrade, you must enter the previous service name.
 - b. Click the **Processes** tab.
 - c. Click **Edit** on the **Execution Options** tab.
 - d. Update the path to the Informatica installation directory in the **Hadoop Distribution Directory** property and click **OK**.
You cannot test the connection if you do not update the property.
 - e. Recycle the service.
 - f. Enable the service.

Run the upgrade commands for workflows

Run the following commands to run workflows created before upgrade without generating the workflows again.

Ensure that you stop the domain and set environment variables before you run the upgrade commands.

1. Update the following properties in the `<Informatica installation directory>/TDM/utilities/ilmcli/conf` configuration file and save the changes:

HTTP Mode

```
user=<Test Data Management user name>
password=<Password>
securityDomain=<Type of security domain>
isUserPasswordEncrypted=<Specify whether the password is encrypted with true or false>
TDMHostName=<host name of the machine where Test Data Management is installed>
TDMPort=<Test Data Management port number>
isHTTPS=<Specify whether HTTPS is enabled with true or false>
```

HTTPS Mode

```
user=<Test Data Management user name>
password=<Password>
securityDomain=<Type of security domain>
isUserPasswordEncrypted=<Specify whether the password is encrypted with true or false>
TDMHostName=<host name of the machine where Test Data Management is installed>
TDMPort=<Test Data Management port number>
isHTTPS=<Specify whether HTTPS is enabled with true or false>
javax.net.ssl.trustStore=<enter the complete path to the keystore file>
javax.net.ssl.trustStorePassword=<password of the keystore file>
```

2. Browse to the following location: `<Informatica installation directory>/TDM/utilities/ilmcli/bin`

3. Run the following commands:

```
sh ilmcmd -uec -ut upgrade -ct tdmcache  
sh ilmcmd -uec -ut upgrade -ct <PowerCenter repository user name> -rdl "<JDBC connection  
string>" -rdp <PowerCenter repository user name> -rdp <password> -rdt <database type>
```

You can now run workflows that you generated before upgrade.

Update the cache file location in Test Data Manager

If you configured the location of the cache file directory in the existing Test Data Management setup, you must update the location after you upgrade.

1. Log in to Test Data Manager as an Administrator.
2. Open the **Administrator** view and click **Actions > Edit > Workflow Generation**.
3. Update the location in the **Cache Location** field.

On a multinode setup you must:

- Update the cache file directory on all Test Data Management nodes.
- Update the mount ormlink for the cache file directory on all Test Data Management nodes.

4. Click **OK**.

Copy JSON and XML files

The upgrade does not copy the `ResetObject.json` and XML files from the `TDM/utilities/ilmcli/Bin` folder and the `TDM/utilities/ilmcli/Conf` folder.

If your setup contains the files in the default location, you can copy the files from the `TDM` folder that is backed up when you upgrade. Copy the files to the same location in the current `TDM` folder.

If you store the files outside the `TDM` folder, you do not need to copy the files.

Configure the PowerCenter Integration Service for Kerberos-enabled Hadoop HDFS connections

If you use a Hadoop cluster with Kerberos authentication, you must configure the PowerCenter Integration Service before you can create and use a Hadoop HDFS connection in Test Data Manager.

Ensure that the `KRB5_CONFIG` environment variable contains the `krb5.conf` file location and that the `krb5.conf` file contains the correct entries.

1. Copy the `krb5.conf` file to the following location: `<Informatica installation directory>/TDM/datadirect`
2. Create a directory in the Informatica installation directory. For example: `<Informatica installation directory>/hadoophdfs/conf/`

Ensure that the PowerCenter Integration Service is running so that the Informatica administrator user has read/write access to the directory.

3. Copy the following files from the Hadoop cluster to the directory that you created:
 - `/etc/hadoop/conf/core-site.xml`
 - `/etc/hadoop/conf/mapred-site.xml`

- /etc/hadoop/conf/hdfs-site.xml
 - /etc/hive/conf/hive-site.xml
4. Ensure that the Informatica administrator user exists on all Hadoop cluster nodes and has the same UID. To create the Kerberos ticket cache file, run the kinit command on all nodes.
 5. To create the Kerberos ticket cache file, run the kinit command on the Informatica node where the PowerCenter Integration Service is created.
The command creates the ticket cache file with the following name format:
`/tmp/krb5cc_<UID>`
Ensure that you have read permission on the ticket cache file.
Use the kinit command to verify, validate, and renew the tickets.
 6. Edit the `core-site.xml` file in the directory and add the following parameters:


```
<property>
<name>hadoop.security.kerberos.ticket.cache.path</name>
<value>/tmp/REPLACE_WITH_CACHE_FILENAME</value>
<description>Path to the Kerberos ticket cache.</description>
</property>
```
 7. Log in to the Administrator tool, select the PowerCenter Integration Service, and click the **Processes** tab.
 8. Click **Edit** on the **Environment Variables** tab. In the CLASSPATH environment variable, add the directory that you created in step 1.
 9. Restart the PowerCenter Integration Service.

Update cluster configuration information

If you created Hadoop, Hive, or HDFS connections in the previous version, you must update the connection information.

Edit the connection properties and select the required cluster configuration from the list of cluster configurations.

You must re-import the cluster configuration in Informatica Administrator before you can update the connections.

Configure format preserving encryption masking

Before you can use the format preserving encryption masking type in a plan, you must configure Test Data Management.

1. Create a `tokens` folder in any location on the machine where Informatica is installed.
2. Browse to the `<Informatica installation directory>\TDM\configuration` directory.
3. Open the `softhsm2.conf` file.
4. Set the `directories.tokenidir` property to the `tokens` folder that you create in step 1 and save the change.
5. Set the `SOFTSM2_CONF` environment variable to the `<Informatica installation directory>\TDM\configuration\softhsm2.conf` directory.
6. Set the `INFA_KEY_LOCATION` environment variable to the `<Informatica installation directory>\isp\config\keys` directory.
7. Restart the Informatica domain.

Configure format preserving encryption masking in a Hadoop environment

Before you can use the format preserving encryption masking type in a Hadoop plan, you must configure Test Data Management.

1. Create a folder to store tokens on the Hadoop cluster. For example, create a `tokens` folder.
2. Browse to the `softhsm2.conf` file on the `<Informatica installation directory>\TDM\configuration`
3. Copy the `softhsm2.conf` file to the Hadoop cluster.
4. Open the `softhsm2.conf` file on the Hadoop cluster machine and set the `directories.tokenidir` property to the directory that you create in step 1 and save the change.
5. Log in to Test Data Manager and click **Administrator > Connections**.
6. Open the connection that you use to push mappings to the Hadoop environment.
You can find the Hadoop pushdown connection name from the **Administrator > Preferences > Hive Properties** tab.
7. On the **Hadoop Cluster Properties** tab, add the **Cluster Environment Variable** information:
 - Name: `SOFTHSM2_CONF`
 - Value: Enter the path to the `softhsm2.conf` file on the Hadoop cluster machine. For example, enter `/home/tdmhd/ENCRYPTION_RELATED_DATA/softhsm2.conf`.

Regenerate masking plans with format preserving encryption

Format preserving encryption uses pass phrases to encrypt and decrypt source data. The pass phrases are stored encrypted.

Because version 10.5 uses an updated SiteKey algorithm, you must generate the workflows created before upgrade. The SiteKey algorithm is used to store sensitive information.

CHAPTER 4

Managing Distribution Packages

This chapter includes the following topics:

- [Managing Distribution Packages Overview, 33](#)
- [Before You Begin, 33](#)
- [Install or Remove Distribution Packages in Console Mode, 34](#)
- [Install or Remove Distribution Packages in Silent Mode, 35](#)
- [After You Install, 35](#)

Managing Distribution Packages Overview

You can use Integration Package Manager (the package manager) to install and remove distribution packages from the Informatica service and client machines.

A distribution package is a set of distribution binaries that you install within the domain for the following processing requirements:

- To push processing to the Hadoop or Databricks environment.
- To process complex files within the Informatica domain.
- To connect to the Hadoop or Databricks environment when you process within the Informatica domain.

You can install distribution packages if you didn't do so during the upgrade or install process or if you want to add a distribution package. You can remove a distribution package if you want to use a different package or if you installed a package that you don't use.

When you install or remove distribution packages, verify that you perform the operation on all service and client machines.

Before You Begin

Before you run the package manager, perform tasks such as setting environment variables and downloading files.

1. Shut down the Informatica services.

2. Set one of the following environment variables:

Variable	Description
INFA_JDK_HOME	Location of the folder containing the supported Java Development Kit (JDK). Set the INFA_JDK_HOME environment variable in the following scenarios: <ul style="list-style-type: none">- Informatica domain is on Windows or Linux- Informatica client
INFA_JRE_HOME	Location of the folder containing the supported Java Runtime Environment (JRE). If the Informatica domain is on AIX, set the INFA_JRE_HOME environment variable.

3. Verify that the user that runs the package manager has read and write permissions on the Informatica installation directory and execute permissions on the executable file.
4. Download the following files from the Informatica Electronic Software Download site:
 - [Integration Package Manager](#)
 - [Distribution packages](#)
5. Extract the Integration Package Manager ZIP files to a local drive.
6. Copy the ZIP files of distribution packages that you need to the following location: `<Integration Package Manager directory>/source`

Note: The package manager fails if the ZIP files for distribution packages aren't available in the source directory.

Install or Remove Distribution Packages in Console Mode

You can run the package manager in console mode to install or remove distribution packages.

1. From the package manager directory, run one of the following commands:
 - `./Server.sh console` for Linux or UNIX
 - `Server.bat console` for Windows
 - `Client.bat console` for client

Note: To run the command on Windows, use the administrator command prompt.
2. Enter the installation directory of the services or client and press **Enter**.
3. Choose the operation type and press **Enter**.
 - Select 1 to remove existing distribution packages.
 - Select 2 to install one or more distribution packages.

The console lists the distribution packages that you can install or remove.
4. Enter the distribution packages that you want to install or remove, separating multiple packages with a comma, and press **Enter**.
5. Verify the installation or removal status in the package manager log file.

You can find the log file in the following location: `<Integration Package Manager directory>/IntegrationPackageManager_<date and timestamp>.log`

Install or Remove Distribution Packages in Silent Mode

You can run the package manager in silent mode to install or remove distribution packages. The silent input properties file contains the properties for the package manager to run in silent mode for service and clients. Set the appropriate value for each property in the file.

1. Find the `IntegrationPackageManager.properties` file in the following location: `<Integration Package Manager directory>/`
2. Edit the properties file in a text editor.

The following table describes the properties that you can modify:

Property Name	Description
<code>USER_INSTALL_DIR</code>	The installation directory of the service or client.
<code>OPERATION_TYPE</code>	The operation that you want to perform: <ul style="list-style-type: none">- Set to <code>DELETE</code> to remove existing distribution packages.- Set to <code>EXTRACT</code> to install one or more distribution packages.
<code>SELECTED_HADOOP_LIBRARIES</code>	Lists the distribution packages and versions. Enter the distribution packages that you want to install or remove. Separate multiple packages with a comma.

3. Save the properties file.
4. From the package manager directory, run one of the following commands:
 - `./Server.sh silent` for Linux or UNIX
 - `Server.bat silent` for Windows
 - `Client.bat silent` for client

Note: To run the command on Windows, use the administrator command prompt.

5. Verify the installation or removal status in the package manager log file.

You can find the log file in the following location: `<Integration Package Manager directory>/IntegrationPackageManager_<date and timestamp>.log`

After You Install

To use the distribution packages that are installed using the package manager, configure the property or environment variable in service and client machines.

Configure the Developer Tool

After you install the distribution packages in the Developer tool, update the `developerCore.ini` file with the installed distribution package.

1. Find the `developerCore.ini` file in the following location: `<Informatica installation directory>\clients\DeveloperClient`

2. Edit the file to update the following property:

```
-DINFA_HADOOP_DIST_DIR=hadoop\<Hadoop distribution name>_<version>
```

For example,

```
-DINFA_HADOOP_DIST_DIR=hadoop\CDH_7.1
```

3. Restart the Developer tool.

Configure Environment Variables

Some adapters require environment variables for the Data Integration Service and Metadata Access Service to access the distribution packages. For more information, see

[Configure environment variables to process complex files.](#)