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Part Number: PC-UPG-95100-0001
Table of Contents

Preface .......................................................................... iv
Informatica Resources. ................................................ iv
    Informatica Customer Portal. ....................................... iv
    Informatica Documentation. ....................................... iv
    Informatica Web Site. ............................................... iv
    Informatica How-To Library. ...................................... iv
    Informatica Knowledge Base. .................................... v
    Informatica Multimedia Knowledge Base. .................. v
    Informatica Global Customer Support. ....................... v

Chapter 1: Upgrade Overview ............................................. 1
Informatica Upgrade. ................................................... 1
Upgrade Process ........................................................ 2
    Changing the Node Configuration. ............................. 3
Upgrade Tasks ........................................................... 3

Chapter 2: Before You Upgrade the Domain and Server Files ....... 5
Pre-Upgrade Tasks. ..................................................... 5
Review the UNIX Requirements. .................................... 5
    Install Java Development Kit. .................................... 6
    Verify the Minimum System Requirements. ................. 6
    Review the Upgrade Memory Requirements. ................ 7
    Review the Environment Variables. ............................ 7
    Set the File Descriptor Limit. .................................... 8
    Review the Maximum Heap Size. ............................... 8
    Set Up the X Window Server. .................................... 9
    Run the Pre-Installation (i9Pi) System Check Tool .......... 9
Review the Windows Requirements. ................................ 11
    Review the System Requirements. ............................ 11
    Review the Upgrade Memory Requirements. ............... 12
    Review the Environment Variables. .......................... 13
    Review the Maximum Heap Size. .............................. 14
    Run the Pre-Installation (i9Pi) System Check Tool ........ 14
Uninstall Data Transformation. ........................................ 16
    Backing Up Essential Files. ..................................... 16
    Uninstalling Previous Versions of Data Transformation ... 17
Prepare the Domain .................................................... 18
    Back Up the Domain. ............................................. 18
# Table of Contents

**Chapter 5: Application Service Upgrade** ........................................... 54
  - Application Service Upgrade Overview ........................................... 54
  - Service Upgrade for Data Services 9.5.0 ....................................... 54
  - Service Upgrade Wizard .................................................... 54
  - Upgrade Report ....................................................... 55
  - Running the Service Upgrade Wizard .......................................... 55

**Chapter 6: Informatica Client Upgrade** ............................................ 56
  - Informatica Client Upgrade Overview ............................................ 56
  - Informatica Client Upgrade Options ............................................. 57
  - Upgrading in Graphical Mode ................................................. 57
  - Upgrading in Silent Mode .................................................... 58
    - Creating the Properties File ............................................... 58
    - Running the Silent Installer ................................................ 59

**Chapter 7: After You Upgrade** .................................................... 60
  - Informatica Domain ........................................................ 60
    - Configure LDAP Connectivity .............................................. 60
    - Update the Log Events Directory ............................................ 60
    - Update ODBC Data Sources ................................................ 60
  - Data Integration Service .................................................... 61
    - Update the Profiling Warehouse ............................................ 61
    - Reset the HTTP Proxy Server Password ....................................... 61
  - Analyst Service .......................................................... 61
    - Verify Directories and Files ................................................ 61
    - Restart the Analyst Service ................................................ 61
    - Assign Privileges ...................................................... 62
  - Upgrade the Informatica Drivers for SQL Data Services .................... 62

**Appendix A: Upgrade Checklist** ................................................... 63
  - Upgrade Checklist Overview .................................................. 63
  - Before You Upgrade the Domain and Server Files .................................... 63
  - Domain and Server Files Upgrade .............................................. 64
  - Before You Upgrade the Application Services ..................................... 64
  - Application Service Upgrade .................................................. 65
  - Informatica Client Upgrade ................................................... 65
  - After You Upgrade ........................................................ 65

**Index** .................................................................................. 67
Preface

The Upgrade Guide for Version 9.5.0 is written for the system administrator who is responsible for upgrading the Informatica product. This guide assumes that you have knowledge of operating systems, relational database concepts, and the database engines, flat files, or mainframe systems in your environment. This guide also assumes that you are familiar with the interface requirements for your supporting applications.

Informatica Resources

Informatica Customer Portal

As an Informatica customer, you can access the Informatica Customer Portal site at http://mysupport.informatica.com. The site contains product information, user group information, newsletters, access to the Informatica customer support case management system (ATLAS), the Informatica How-To Library, the Informatica Knowledge Base, the Informatica Multimedia Knowledge Base, Informatica Product Documentation, and access to the Informatica user community.

Informatica Documentation

The Informatica Documentation team takes every effort to create accurate, usable documentation. If you have questions, comments, or ideas about this documentation, contact the Informatica Documentation team through email at infa_documentation@informatica.com. We will use your feedback to improve our documentation. Let us know if we can contact you regarding your comments.

The Documentation team updates documentation as needed. To get the latest documentation for your product, navigate to Product Documentation from http://mysupport.informatica.com.

Informatica Web Site

You can access the Informatica corporate web site at http://www.informatica.com. The site contains information about Informatica, its background, upcoming events, and sales offices. You will also find product and partner information. The services area of the site includes important information about technical support, training and education, and implementation services.

Informatica How-To Library

As an Informatica customer, you can access the Informatica How-To Library at http://mysupport.informatica.com. The How-To Library is a collection of resources to help you learn more about Informatica products and features. It includes articles and interactive demonstrations that provide solutions to common problems, compare features and behaviors, and guide you through performing specific real-world tasks.
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As an Informatica customer, you can access the Informatica Knowledge Base at http://mysupport.informatica.com. Use the Knowledge Base to search for documented solutions to known technical issues about Informatica products. You can also find answers to frequently asked questions, technical white papers, and technical tips. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team through email at KB_Feedback@informatica.com.

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As an Informatica customer, you can access the Informatica Multimedia Knowledge Base at http://mysupport.informatica.com. The Multimedia Knowledge Base is a collection of instructional multimedia files that help you learn about common concepts and guide you through performing specific tasks. If you have questions, comments, or ideas about the Multimedia Knowledge Base, contact the Informatica Knowledge Base team through email at KB_Feedback@informatica.com.

Informatica Global Customer Support

You can contact a Customer Support Center by telephone or through the Online Support. Online Support requires a user name and password. You can request a user name and password at http://mysupport.informatica.com.

Use the following telephone numbers to contact Informatica Global Customer Support:

<table>
<thead>
<tr>
<th>North America / South America</th>
<th>Europe / Middle East / Africa</th>
<th>Asia / Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toll Free</strong></td>
<td><strong>Toll Free</strong></td>
<td><strong>Toll Free</strong></td>
</tr>
<tr>
<td>Brazil: 0800 891 0202</td>
<td>France: 0805 804632</td>
<td>Australia: 1 800 151 830</td>
</tr>
<tr>
<td>Mexico: 001 888 209 8853</td>
<td>Germany: 0800 5891281</td>
<td>New Zealand: 09 9 128 901</td>
</tr>
<tr>
<td>North America: +1 877 463 2435</td>
<td>Italy: 800 915 985</td>
<td>Standard Rate</td>
</tr>
<tr>
<td></td>
<td>Netherlands: 0800 2300001</td>
<td>India: +91 80 4112 5738</td>
</tr>
<tr>
<td></td>
<td>Portugal: 800 208 360</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spain: 900 813 166</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Switzerland: 0800 463 200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>United Kingdom: 0800 023 4632</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Standard Rate</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Belgium: +31 30 6022 797</td>
<td></td>
</tr>
<tr>
<td></td>
<td>France: +33 1 4138 9226</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Germany: +49 1805 702 702</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Netherlands: +31 306 022 797</td>
<td></td>
</tr>
<tr>
<td></td>
<td>United Kingdom: +44 1628 511445</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 1

Upgrade Overview

This chapter includes the following topics:

- Informatica Upgrade, 1
- Upgrade Process, 2
- Upgrade Tasks, 3

Informatica Upgrade

The Informatica platform consists of a server component and one or more client components. Informatica provides separate installers to upgrade the Informatica services and clients.

If the product version that is currently installed cannot be upgraded to Informatica 9.5.1, you must first upgrade to a supported version. To determine the Informatica product version that is currently installed, click Help > About Informatica Administrator in the Informatica Administrator header area.

You can upgrade the following Informatica product versions to version 9.5.1:

<table>
<thead>
<tr>
<th>Informatica Product Version</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerCenter 8.1.x</td>
<td>You must first upgrade to PowerCenter 8.6.1.</td>
</tr>
<tr>
<td>PowerCenter 8.5.x</td>
<td>You must first upgrade to PowerCenter 8.6.1.</td>
</tr>
<tr>
<td>PowerCenter 8.6</td>
<td>You must first upgrade to PowerCenter 8.6.1.</td>
</tr>
</tbody>
</table>
| PowerCenter 8.6.1           | If the PowerCenter 8.6.1 domain includes the Metadata Manager Service, you must first upgrade to Informatica 9.1.0.  
If the PowerCenter 8.6.1 domain does not include the Metadata Manager Service, upgrade to Informatica 9.5.1. Effective in version 9.0.1, the Reference Table Manager functionality is available through the 9.0.1 Analyst Service. When you upgrade, you will perform the steps to migrate the PowerCenter 8.6.1 reference table data to the Informatica 9.5.1 Analyst tool. |
<p>| Data Quality 8.6.2          | You must first upgrade to Informatica Data Quality 9.0.1. |
| Data Explorer Advanced Edition 9.0 | You must first upgrade to Informatica Data Explorer Advanced Edition 9.0.1. See the Informatica Data Quality 9.0.1 upgrade documentation. Complete the steps to upgrade Informatica Data Quality 9.0.1 unless an exception is specified. |</p>
<table>
<thead>
<tr>
<th>Informatica Product Version</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Quality 9.0</td>
<td>You must first upgrade to Informatica Data Quality 9.0.1.</td>
</tr>
<tr>
<td>Data Services 9.0</td>
<td>You must first upgrade to Informatica Data Services 9.0.1.</td>
</tr>
<tr>
<td>Data Transformation 9.0.1 or earlier versions</td>
<td>You must uninstall Data Transformation and then install Informatica Data Transformation 9.5.1. See the Data Transformation 9.5.1 installation and upgrade documentation.</td>
</tr>
<tr>
<td>PowerCenter 9.0</td>
<td>If the PowerCenter 9.0 domain includes the Metadata Manager Service, you must first upgrade to Informatica 9.1.0. If the PowerCenter 8.6.1 domain does not include the Metadata Manager Service, you must first upgrade to PowerCenter 9.0.1.</td>
</tr>
<tr>
<td>Informatica Data Explorer Advanced Edition 9.0.1</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Quality 9.0.1</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Services 9.0.1</td>
<td></td>
</tr>
<tr>
<td>Informatica PowerCenter 9.0.1</td>
<td>If the PowerCenter 9.0.1 domain includes the Metadata Manager Service, you must first upgrade to Informatica 9.1.0.</td>
</tr>
<tr>
<td>Informatica Data Explorer 9.1.0</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Quality 9.1.0</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Services 9.1.0</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Transformation 9.1.0</td>
<td></td>
</tr>
<tr>
<td>Informatica PowerCenter 9.1.0</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Explorer 9.5.0</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Quality 9.5.0</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Services 9.5.0</td>
<td></td>
</tr>
<tr>
<td>Informatica Data Transformation 9.5.0</td>
<td></td>
</tr>
<tr>
<td>Informatica PowerCenter 9.5.0</td>
<td></td>
</tr>
</tbody>
</table>

**Upgrade Process**

The upgrade consists of the following phases:

- Upgrading the domain and server files. To upgrade the domain and server files, run the Informatica server installer and select the upgrade option. The domain upgrade wizard installs the server files and configures the domain. If the domain has multiple nodes, you must upgrade all nodes.
The following table describes the actions that the installer performs when you upgrade Informatica:

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installs Informatica.</td>
<td>Installs Informatica directories and files into the new directory.</td>
</tr>
<tr>
<td>Copies infa_shared directory.</td>
<td>Copies the contents of the infa_shared directory from the existing installation directory into the new installation directory.</td>
</tr>
<tr>
<td>Upgrades the domain.</td>
<td>Upgrades the domain to run version 9.5.1 application services. The upgrade retains the user and administrator accounts in the domain.</td>
</tr>
<tr>
<td>Starts Informatica Services.</td>
<td>Starts Informatica Services on the node.</td>
</tr>
</tbody>
</table>

- Upgrading the application services. After you upgrade the domain and server files, log in to the Administrator tool and upgrade the application services. The service upgrade wizard provides a list of all application services that must be upgraded. It upgrades the services based on the order required by the dependent objects.
- Upgrading the Informatica client. To upgrade the Informatica client, run the Informatica client installer and select the upgrade option. If the client is installed on multiple machines, upgrade the client on all machines.

**Changing the Node Configuration**

The installer provides the option to allow changes to node host name and port number. When you select this option you can change the node configuration. Change the node configuration when you move the Informatica installation to a different machine.

If you choose the option to update the node configuration on one gateway node, you must use this option on all gateway nodes in the domain.

If you choose the option to update the node configuration, you need to perform additional upgrade steps. There are additional steps before you upgrade the domain and server files, and before you upgrade the application services.

**Upgrade Tasks**

To upgrade Data Services, complete the following tasks:

1. Complete the pre-upgrade tasks for the domain and server files to ensure that you can successfully run the installer.
2. Upgrade the Informatica domain and server files. Use the server installer to upgrade Informatica domain and upgrade the server files on each node. If the domain contains multiple nodes, upgrade the gateway node before you upgrade the worker nodes. After you upgrade the first gateway node, verify that the upgrade was successful before you upgrade the other nodes in the domain.
3. Complete the pre-upgrade tasks for the application services.
4. Upgrade the application services. After installation, log in to the Administrator tool and upgrade the application services.
5. Upgrade Informatica Developer. Use the client installer to upgrade Informatica Developer. Upgrading Informatica Developer also installs or upgrades Data Transformation Studio. If you have Data Transformation 9.1.0 installed, upgrading Informatica Developer also upgrades Data Transformation Studio. If you do not have Data Transformation installed, upgrading Informatica Developer installs Data Transformation Studio.

   **Note:** You cannot connect to the Informatica domain using the Developer tool from a previous version.

6. Perform the post-upgrade tasks.

   **Note:** If you upgrade more than one Informatica product or if you upgrade the Informatica product on more than one machine, complete the first upgrade using the detailed instructions in this guide. You can use the upgrade checklist in the appendix to perform subsequent upgrades.
This chapter includes the following topics:

- Pre-Upgrade Tasks, 5
- Review the UNIX Requirements, 5
- Review the Windows Requirements, 11
- Uninstall Data Transformation, 16
- Prepare the Domain, 18
- Prepare the Model Repository, 19
- Prepare the Profiling Warehouse, 20
- Prepare the Staging Database, 20
- Shut Down the Domain, 20
- Prepare to Change the Node Configuration, 21

Pre-Upgrade Tasks

Before you upgrade Informatica services, set up the machine to meet the requirements to upgrade Informatica. If the machine where you upgrade Informatica is not configured correctly, the upgrade can fail.

Review the UNIX Requirements

Before you upgrade the domain, review the following UNIX requirements:

1. Install the Java Development Kit.
2. Review the system requirements.
3. Review the upgrade memory requirements.
4. Review the environment variables.
5. Verify the file descriptor settings.
6. Review the maximum heap size.
7. Set up the X Windows server.

Install Java Development Kit

If you are upgrading Informatica on AIX, HP-UX, or zLinux, verify that the Informatica version you are upgrading to supports the version of Java Development Kit (JDK) that is installed on your machine. If you do not have a supported version of JDK installed, uninstall the current version, and then download and install the supported version.

- For AIX: http://www.ibm.com/developerworks/java/jdk/aix/service.html#java6
- For HP-UX: https://h20392.www2.hp.com/portal/swdepot/displayProductInfo.do?productNumber=HPUXJDKJRE60
- For zLinux: http://www.ibm.com/developerworks/java/jdk/linux/download.html#java6

Informatica is certified with a specific JDK version. To determine which JDK version to install, see the Informatica Release Notes. If you have problems installing JDK, contact the JDK vendor.

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Verify the Minimum System Requirements

Verify that your machine meets the minimum system requirements to upgrade the Informatica server component.

<table>
<thead>
<tr>
<th>RAM</th>
<th>Disk Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 GB</td>
<td>10 GB</td>
</tr>
</tbody>
</table>

Temporary Disk Space Requirements for Installation

The installer writes temporary files to the hard disk. Verify that you have enough available disk space on the machine to support the installation. When the installation completes, the installer deletes the temporary files and releases the disk space.

The following table lists the temporary disk space requirements during installation:

<table>
<thead>
<tr>
<th>Product</th>
<th>Disk Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installer</td>
<td>1 GB</td>
</tr>
<tr>
<td>Informatica Services</td>
<td>605 MB</td>
</tr>
</tbody>
</table>
Review the Upgrade Memory Requirements

Informatica 9.5.1 requires more memory than previous versions. The following table shows the change in memory requirements between Informatica 9.5.1 and Informatica 8.6, 9.0.1, and 9.1.0 for sample domain configurations.

<table>
<thead>
<tr>
<th>Domain Configuration</th>
<th>Version</th>
<th>Virtual Memory Increase for 9.5.1</th>
<th>Physical RAM Increase for 9.5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain runs PowerCenter:</td>
<td>8.6.1</td>
<td>34%</td>
<td>102%</td>
</tr>
<tr>
<td>- 1 PowerCenter Repository Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 PowerCenter Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Metadata Manager Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain runs PowerCenter:</td>
<td>9.0.1</td>
<td>13%</td>
<td>66%</td>
</tr>
<tr>
<td>- 1 PowerCenter Repository Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 PowerCenter Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Metadata Manager Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain runs Data Services, Data Quality, or Data Explorer:</td>
<td>9.0.1</td>
<td>19%</td>
<td>39%</td>
</tr>
<tr>
<td>- 1 Model Repository Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Data Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Analyst Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain runs PowerCenter:</td>
<td>9.1.0</td>
<td>None</td>
<td>9%</td>
</tr>
<tr>
<td>- 1 PowerCenter Repository Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 PowerCenter Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Metadata Manager Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain runs Data Services, Data Quality, or Data Explorer:</td>
<td>9.1.0</td>
<td>5%</td>
<td>None</td>
</tr>
<tr>
<td>- 1 Model Repository Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Data Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Analyst Service</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Review the Environment Variables

Configure the environment variables to work with the Informatica installation.

Set the environment variables before you install Informatica. The following table describes the environment variables to review on UNIX:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATEMPDIR</td>
<td>Location of the temporary files created during installation. Informatica</td>
</tr>
<tr>
<td></td>
<td>requires 1 GB disk space for temporary files. Configure the environment</td>
</tr>
<tr>
<td></td>
<td>variable if you do not want to create temporary files in the / tmp directory.</td>
</tr>
<tr>
<td>INFA_DOMAINS_FILE</td>
<td>Contains the location of the domains.infa file. Clear this variable before</td>
</tr>
<tr>
<td></td>
<td>you start the upgrade.</td>
</tr>
<tr>
<td>INFA_HOME</td>
<td>Contains the location of the Informatica installation directory. Clear this</td>
</tr>
<tr>
<td></td>
<td>variable before you start the upgrade.</td>
</tr>
<tr>
<td>INFA_JDK_HOME</td>
<td>Location of the folder containing the supported Java Development Kit (JDK).</td>
</tr>
<tr>
<td></td>
<td>Set the INFA_JDK_HOME environment variable if you are installing Informatica</td>
</tr>
<tr>
<td></td>
<td>on AIX, HP-UX, or zLinux.</td>
</tr>
</tbody>
</table>
Variable | Description
--- | ---
INFA_JDK_HOME | In the configuration file for your shell, for example the .bashrc file, set the INFA_JDK_HOME environment variable to the directory that contains the JDK. Verify that the login shell can access the INFA_JDK_HOME environment variable.
JRE_HOME | If you install the Informatica services on a machine with 32-bit or 64-bit SUSE Linux or Linux EMT64 operating system, clear the JRE_HOME environment variable before you start the installation.
LANG and LC_ALL | Change the locale to set the appropriate character encoding for the terminal session. For example, set the encoding to Latin1 or ISO-8859-1 for French, EUC-JP or Shift JIS for Japanese, or UTF-8 for Chinese or Korean. The character encoding determines the types of characters that appear in the UNIX terminal.
LD_PRELOAD | On HP-UX, the environment variable selects the Data Transformation libjvm shared object of the JRE.
Library path | Verify that the library path environment variables do not contain earlier versions of Informatica.
PATH | Verify that the PATH environment variables do not contain earlier versions of Informatica.

Set the File Descriptor Limit

Verify that the operating system meets the file descriptor requirement.

Informatica service processes can use a large number of files. Set the file descriptor limit per process to 8,000 or higher. The recommended limit is 16,000 file descriptors per process.

Review the Maximum Heap Size

Verify that Informatica Services uses the required maximum heap size for the number of users in the domain.

The following table lists the minimum requirement for the maximum heap size settings, based on the number of users and services in the domain:

<table>
<thead>
<tr>
<th>Number of Domain Users</th>
<th>Maximum Heap Size (1-5 Services)</th>
<th>Maximum Heap Size (6-10 Services)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 or less</td>
<td>512 MB (default)</td>
<td>1024 MB</td>
</tr>
<tr>
<td>5,000</td>
<td>2048 MB</td>
<td>3072 MB</td>
</tr>
<tr>
<td>10,000</td>
<td>3072 MB</td>
<td>5120 MB</td>
</tr>
<tr>
<td>20,000</td>
<td>5120 MB</td>
<td>6144 MB</td>
</tr>
<tr>
<td>30,000</td>
<td>5120 MB</td>
<td>6144 MB</td>
</tr>
</tbody>
</table>
**Note:** The maximum heap size settings in the table are based on the number of PowerCenter Repository Services in the domain.

If the domain has more than 1,000 users, update the maximum heap size based on the number of users in the domain.

1. Extract the installation files.
2. Go to the following directory: `<installer>/source/tomcat/bin`.
3. Use a text editor to open the `infaservice` file.
4. Search for the following text: `INFA_JAVA_OPTS="INFA_JAVA_OPTS=-XX:GCmsSize=-XmX`.
5. Set the value for `-Xmx` to the maximum heap size required for the number of Informatica domain users.
   For example, to set the maximum heap size to 3072 MB, use the following configuration:
   ```
   set INFA_JAVA_OPTS="INFA_JAVA_OPTS=-XX:GCmsSize=-XmX=3072m`
   ```

### Set Up the X Window Server

When you run the installer in graphical mode, you must use a graphics display server. On UNIX, the graphics display server is typically an X Window server. If you do not have the X Window server installed on the machine where you want to install the product, you can run the installer using an X Window server installed on another machine. Use the `DISPLAY` variable to redirect output of the X Window server to another UNIX machine.

The following table lists the commands to set the `DISPLAY` environment variable:

<table>
<thead>
<tr>
<th>Shell</th>
<th>Command</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td><code>setenv DISPLAY &lt;TCP/IP node of XWindow server&gt;:0</code></td>
<td><code>setenv DISPLAY 10.1.50.23:0</code></td>
</tr>
<tr>
<td>Bash/Korn</td>
<td><code>export DISPLAY=&quot;&lt;TCP/IP node of XWindow server&gt;:0&quot;</code></td>
<td><code>export DISPLAY=&quot;10.1.50.23:0&quot;</code></td>
</tr>
<tr>
<td>Bourne</td>
<td><code>DISPLAY=&quot;&lt;TCP/IP node of XWindow server&gt;:0&quot; export display</code></td>
<td><code>DISPLAY=&quot;10.1.50.23:0&quot; export display</code></td>
</tr>
</tbody>
</table>

If you do not know the IP address of a UNIX machine where the X Window server is installed, ask your network administrator. For more information about redirecting the `DISPLAY` variable, see the documentation from the UNIX vendor.

If the X Window server does not support the font that the installer uses, the installer can display incorrect labels on the buttons.

### Run the Pre-Installation (i9Pi) System Check Tool

If you are upgrading Informatica in silent mode, run the Pre-installation (i9Pi) System Check Tool to verify whether the machine meets the system requirements for the upgrade.

1. Log in to the machine with a system user account.
2. Close all other applications.
3. On a shell command line, run the `install.sh` file from the root directory.
   The installer displays the message to verify that the locale environment variables are set.
4. If the environment variables are not set, press `n` to exit the installer and set them as required.
   If the environment variables are set, press `y` to continue.
5. Press 1 to install or upgrade Informatica.
6. Press y to run the Pre-Installation (i9Pi) System Check Tool that verifies whether the machine meets the system requirements for the installation or upgrade.
7. From the Informatica Pre-Installation (i9Pi) System Check Tool Welcome section, press Enter.
   The System Information section appears.
8. Type the absolute path for the installation directory.
   The directory names in the path must not contain spaces or the following special characters: @|* $ # ! % ( ) { }
   [ ] , ; '
10. Type the starting port number for the node that is being created or upgrade on the machine.
11. Press Enter.
   The Database and Connection Information section appears.
12. To enter the JDBC connection information using a custom JDBC connection string, press 1. To enter the JDBC connection information using the JDBC URL information, press 2.
13. Enter the JDBC connection information.
   ✦ To enter the connection information using a custom JDBC connection string, type the connection string.
   IBM DB2: jdbc:Informatica:db2://host_name:port_no;DatabaseName=
   Oracle: jdbc:Informatica:oracle://host_name:port_no;ServiceName=
   SQL Server: jdbc:Informatica:sqlserver://host_name:port_no;SelectMethod=cursor;DatabaseName=
   Sybase: jdbc:Informatica:Sybase://host_name:port_no;DatabaseName=
   Verify that the connection string contains all the connection parameters required by your database system.
   ✦ To enter the connection information using the JDBC URL information, specify the JDBC URL properties.
The tool checks the settings of the hard drive, the availability of the ports, and the configuration of the database. After the system check is complete, the **System Check Summary** section appears, displaying the results of the system check.

14. Analyze the results of the system check.

Each requirement is listed in the table, along with one of the following check statuses:

- **[Pass]** - The requirement meets the criteria for the Informatica installation or upgrade.
- **[Fail]** - The requirement does not meet the criteria for the Informatica installation or upgrade. Resolve the issue before proceeding.
- **[Information]** - Verify the information and perform any additional tasks as outlined in the details.

The results of the system check are saved to the following file: `/Server/i9Pi/I9Pi/en/i9Pi_summary.txt`.

15. Press **Enter** to close the Pre-Installation (i9Pi) System Check Tool.

16. Press **n** to stop the Informatica services installation or upgrade.

If the Pre-Installation (i9Pi) System Check Tool finishes with failed requirements, resolve the failed requirements and run the Pre-Installation (i9Pi) System Check Tool again.

**Note:** If the Informatica Pre-Installation (i9Pi) System Check Tool check finishes with failed requirements, you can still perform the Informatica installation or upgrade. However, it is highly recommended that you resolve the failed requirements before proceeding.

---

**Review the Windows Requirements**

Before you upgrade the domain, review the following Windows requirements:

1. Review the system requirements.
2. Review the upgrade memory requirements.
3. Review the environment variables.
4. Review the maximum heap size.

---

**Review the System Requirements**

Verify that your system meets the upgrade requirements.

Verify that your machine meets the minimum system requirements to upgrade the Informatica server component.

<table>
<thead>
<tr>
<th>RAM</th>
<th>Disk Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 GB</td>
<td>10 GB</td>
</tr>
</tbody>
</table>

**Note:** When you upgrade, the installer requires an additional 4 GB disk space plus the amount of disk space used by the existing infa_shared directory.
The following table lists the minimum system requirements to run Informatica Developer:

<table>
<thead>
<tr>
<th>Client</th>
<th>Processor</th>
<th>RAM</th>
<th>Disk Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatica Developer</td>
<td>1 CPU</td>
<td>512 MB</td>
<td>2.5 GB</td>
</tr>
<tr>
<td>Data Transformation Studio</td>
<td>1 CPU</td>
<td>512 MB</td>
<td>708 MB</td>
</tr>
</tbody>
</table>

For more information about product requirements and supported platforms, see the Product Availability Matrix on the Informatica Customer Portal: https://communities.informatica.com/community/my-support/tools/product-availability-matrices

**Temporary Disk Space Requirements for Installation**

The installer writes temporary files to the hard disk. Verify that you have enough available disk space on the machine to support the installation. When the installation completes, the installer deletes the temporary files and releases the disk space.

The following table lists the temporary disk space requirements during installation of Informatica services:

<table>
<thead>
<tr>
<th>Product</th>
<th>Disk Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installer</td>
<td>1 GB</td>
</tr>
<tr>
<td>Informatica Services</td>
<td>605 MB</td>
</tr>
</tbody>
</table>

The following table lists the temporary disk space requirements during installation of Informatica clients:

<table>
<thead>
<tr>
<th>Product</th>
<th>Disk Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installer</td>
<td>1 GB</td>
</tr>
<tr>
<td>Informatica Clients</td>
<td>550 MB</td>
</tr>
</tbody>
</table>

**Review the Upgrade Memory Requirements**

Informatica 9.5.1 requires more memory than previous versions. The following table shows the change in memory requirements between Informatica 9.5.1 and Informatica 8.6, 9.0.1, and 9.1.0 for sample domain configurations.

<table>
<thead>
<tr>
<th>Domain Configuration</th>
<th>Version</th>
<th>Virtual Memory Increase for 9.5.1</th>
<th>Physical RAM Increase for 9.5.1</th>
</tr>
</thead>
</table>
| Domain runs PowerCenter:  
  - 1 PowerCenter Repository Service  
  - 1 PowerCenter Integration Service  
  - 1 Metadata Manager Service | 8.6.1 | 34% | 102% |
| Domain runs PowerCenter:  
  - 1 PowerCenter Repository Service  
  - 1 PowerCenter Integration Service  
  - 1 Metadata Manager Service | 9.0.1 | 13% | 66% |
### Domain Configuration

<table>
<thead>
<tr>
<th>Domain runs Data Services, Data Quality, or Data Explorer:</th>
<th>Version</th>
<th>Virtual Memory Increase for 9.5.1</th>
<th>Physical RAM Increase for 9.5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 Model Repository Service</td>
<td>9.0.1</td>
<td>19%</td>
<td>39%</td>
</tr>
<tr>
<td>- 1 Data Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Analyst Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain runs PowerCenter:</td>
<td>9.1.0</td>
<td>None</td>
<td>9%</td>
</tr>
<tr>
<td>- 1 PowerCenter Repository Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 PowerCenter Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Metadata Manager Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain runs Data Services, Data Quality, or Data Explorer:</td>
<td>9.1.0</td>
<td>5%</td>
<td>None</td>
</tr>
<tr>
<td>- 1 Model Repository Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Data Integration Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 Analyst Service</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Review the Environment Variables

Configure the environment variables to work with the Informatica installation.

The following table describes environment variables to review on Windows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>%TEMP%</td>
<td>Location of the temporary files created during installation. Informatica requires 1 GB disk space for temporary files. Configure environment variable if you do not want to create temporary files in the default drive.</td>
</tr>
<tr>
<td>PATH</td>
<td>Verify that the PATH environment variables do not contain earlier versions of Informatica.</td>
</tr>
<tr>
<td>Library path</td>
<td>Verify that the library path environment variables do not contain earlier versions of Informatica.</td>
</tr>
<tr>
<td>INFA_HOME</td>
<td>Contains the location of the Informatica installation directory. Clear this variable before you start the upgrade.</td>
</tr>
<tr>
<td>INFA_DOMAINS_FILE</td>
<td>Contains the location of the domains.infa file. Clear this variable before you start the upgrade.</td>
</tr>
</tbody>
</table>
Review the Maximum Heap Size

Verify that Informatica Services uses the required maximum heap size for the number of users in the domain.

The following table lists the minimum requirement for the maximum heap size settings, based on the number of users and services in the domain:

<table>
<thead>
<tr>
<th>Number of Domain Users</th>
<th>Maximum Heap Size (1-5 Services)</th>
<th>Maximum Heap Size (6-10 Services)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 or less</td>
<td>512 MB (default)</td>
<td>1024 MB</td>
</tr>
<tr>
<td>5,000</td>
<td>2048 MB</td>
<td>3072 MB</td>
</tr>
<tr>
<td>10,000</td>
<td>3072 MB</td>
<td>5120 MB</td>
</tr>
<tr>
<td>20,000</td>
<td>5120 MB</td>
<td>6144 MB</td>
</tr>
<tr>
<td>30,000</td>
<td>5120 MB</td>
<td>6144 MB</td>
</tr>
</tbody>
</table>

**Note:** The maximum heap size settings in the table are based on the number of PowerCenter Repository Services in the domain.

If the domain has more than 1,000 users, update the maximum heap size based on the number of users in the domain.

1. Extract the installation files.
2. Go to the following directory: `<installer>/source/tomcat/bin`.
3. Use a text editor to open the infaservice file.
4. Search for the following text: `INFA_JAVA_OPTS=-XX`.
5. Set the value for `-Xmx` to the maximum heap size required for the number of Informatica domain users. For example, to set the maximum heap size to 3072 MB, use the following configuration:

   ```
   set INFA_JAVA_OPTS=-XX:GCTimeRatio=9 -Xmx3072m
   ```

Run the Pre-Installation (i9Pi) System Check Tool

If you are upgrading Informatica in silent mode, run the Pre-installation (i9Pi) System Check Tool to verify whether the machine meets the system requirements for the upgrade.

1. Log in to the machine with a system user account.
2. Close all other applications.
3. Run the install.bat file from the root directory.
4. Select **Install or upgrade Informatica**.
5. Select **Run the Pre-Installation (i9Pi) System Check Tool** to verify whether the machine meets the system requirements for the installation or upgrade.
6. Click **Start**.
   
   The Informatica Pre-Installation (i9Pi) System Check Tool **Welcome** page appears.
7. Click **Next**.
   
   The **System Information** page appears.
8. Enter the absolute path for the installation directory. The default directory is `c:\`. 
The directory names in the path must not contain spaces or the following special characters: @ | * $ ! % ( ) {} [] , ; '

9. Enter the starting port number for the node that is being created on the machine. The default port number for the node is 6005.

10. Click **Next**.

The **Database and JDBC Connection Information** page appears.

11. Enter the domain configuration repository database information:

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>Type of database for the domain configuration repository. Select from the following options:</td>
</tr>
<tr>
<td></td>
<td>1 - Oracle</td>
</tr>
<tr>
<td></td>
<td>2 - Microsoft SQL Server</td>
</tr>
<tr>
<td></td>
<td>3 - IBM DB2</td>
</tr>
<tr>
<td></td>
<td>4 - Sybase ASE</td>
</tr>
<tr>
<td>Database user ID</td>
<td>Name for the domain configuration database user account.</td>
</tr>
<tr>
<td>Database user password</td>
<td>Password for the domain configuration database user account.</td>
</tr>
</tbody>
</table>

The domain configuration repository must be accessible to all gateway nodes in the domain.

12. Enter the JDBC connection information.

- To enter the connection information using the JDBC URL information, select **Specify the JDBC connection properties** and specify the JDBC URL properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database host name</td>
<td>Host name for the database.</td>
</tr>
<tr>
<td>Database port number</td>
<td>Port number for the database.</td>
</tr>
<tr>
<td>Database service name</td>
<td>Service name for Oracle and IBM DB2 databases or database name for Microsoft SQL Server and Sybase ASE.</td>
</tr>
</tbody>
</table>

- To enter the connection information using a custom JDBC connection string, select **Custom JDBC connection string** and type the connection string.
  
  IBM DB2: `jdbc:Informatica:db2://host_name:port_no;DatabaseName=`
  
  Oracle: `jdbc:Informatica:oracle://host_name:port_no;ServiceName=`
  
  SQL Server: `jdbc:Informatica:sqlserver://host_name:port_no;SelectMethod=cursor;DatabaseName=`
  
  Sybase: `jdbc:Informatica:sybase://host_name:port_no;DatabaseName=`

  Verify that the connection string contains all the connection parameters required by your database system.

13. Click **Test Connection** to verify that you can connect to the database, and then click **OK** to continue.

14. Click **Next** to start the system check.

The tool checks the settings of the hard drive, the availability of the ports, and the configuration of the database. After the system check is complete, the **System Check Summary** page appears, displaying the results of the system check.
15. Analyze the results of the system check.
   Each requirement is listed, along with one of the following check statuses:
   - [Pass] - The requirement meets the criteria for the Informatica installation or upgrade.
   - [Fail] - The requirement does not meet the criteria for the Informatica installation or upgrade. Resolve the issue before proceeding with the installation or upgrade.
   - [Information] - Verify the information and perform any additional tasks as outlined in the details.
   The results of the system check are saved to the following file: Server\i9Pi\i9Pi\en\i9Pi_summary.html.

16. Click Done to close the Pre-Installation (i9Pi) System Check Tool.
If the Pre-Installation (i9Pi) System Check Tool finishes with failed requirements, resolve the failed requirements and run the Pre-Installation (i9Pi) System Check Tool again.

   Note: If the Informatica Pre-Installation (i9Pi) System Check Tool check finishes with failed requirements, you can still perform the Informatica installation or upgrade. However, it is highly recommended that you resolve the failed requirements before proceeding.

Uninstall Data Transformation

If your machine has Data Transformation 9.0.1 or earlier versions, you must uninstall it before you install the Informatica services or clients. The Informatica installation overwrites the Data Transformation configuration file. Before you upgrade the Informatica services or clients, back up the essential Data Transformation files and uninstall the previous version of Data Transformation.

Backing Up Essential Files

Before you install a new version of Data Transformation, you must back up the following essential files that were created under previous versions:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Default Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workspace (Data Transformation client only)</td>
<td>C:\Documents and Settings&lt;user&gt;\My Documents\Informatica\DataTransformation&lt;version_number&gt;\workspace</td>
</tr>
<tr>
<td>Repository</td>
<td>&lt;INSTALL_DIR&gt;/DataTransformation/ServiceDB</td>
</tr>
<tr>
<td>Custom Global Components directory (TGP files)</td>
<td>&lt;INSTALL_DIR&gt;/DataTransformation/autoinclude/user</td>
</tr>
<tr>
<td>Custom Global Components directory (DLL and JAR files)</td>
<td>&lt;INSTALL_DIR&gt;/DataTransformation/externLibs/user</td>
</tr>
<tr>
<td>Configuration file</td>
<td>&lt;INSTALL_DIR&gt;/DataTransformation/CMConfig.xml</td>
</tr>
<tr>
<td>License file</td>
<td>&lt;INSTALL_DIR&gt;/DataTransformation/CDELicense.cfg</td>
</tr>
<tr>
<td>Library files</td>
<td>&lt;INSTALL_DIR&gt;/DataTransformation/Libraries</td>
</tr>
</tbody>
</table>
### Uninstalling Previous Versions of Data Transformation

The installer cannot upgrade Data Transformation directly from 9.0.1 or previous versions. If you have Data Transformation 9.0.1 or previous versions installed, you must uninstall it before you install the current version.

1. Close all applications that use Data Transformation services.
2. If you are uninstalling version 9.x, uninstall all libraries.
3. To run the uninstaller, in the Windows Control Panel, select **Add or Remove Programs** or **Programs and Features**, depending on the Windows operating system version, and then select the option to remove Data Transformation.

   The **Uninstallation** window appears.

4. Click **Uninstall**.

   The system prompts you to shut down all services.

5. Click **Continue**.

   Data Transformation files are removed from the computer, essential customer customized files are backed up in the `<INSTALL_DIR>/DataTransformation_<VERSION>_Backup` directory, and the system displays the following message:

   **Uninstallation completed.**

   **Note:** There is no log file containing the details of the uninstall operation.

6. Click **Done**.

7. When the uninstallation is complete, move the `<INSTALL_DIR>/DataTransformation_<VERSION>_Backup` directory, and then delete the installation directory and all files remaining in it.
Prepare the Domain

Before you upgrade the domain, complete the steps to prepare the domain.

Back Up the Domain

Before you upgrade the domain, you must back up the domain.

Complete the following steps to back up the domain:

- Run the infasetup BackupDomain command to back up the domain configuration repository to a file.
- Back up the metadata configuration files to any directory accessible by the machines where you install Informatica.

Informatica infasetup includes command line programs to back up and restore the domain. infasetup is located in the following directory:

<Informatica Installation Directory>\server

To back up the domain with infasetup, use the following syntax:

```
BackupDomain
<<DatabaseAddress|-da> database_hostname:database_port>
<<DatabaseConnectionString|-cs> database_connection_string>
<<DatabaseUserName|-du> database_user_name
<<DatabasePassword|-dp> database_password
<<DatabaseType|-dt> database_type
[<<DatabaseServiceName|-ds> database_service_name]
<<BackupFile|-bf> backup_file_name
[<<Force|-f>]
<<DomainName|-dn> domain_name
[<<SchemaName|-sc> schema_name Microsoft SQL Server only]
```

Back up the metadata configuration files to any directory accessible by the machines where you install Informatica. The following table describes the metadata files and the locations where you can find them:

<table>
<thead>
<tr>
<th>Metadata File</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>nodemeta.xml</td>
<td>Contains metadata for a node.</td>
<td>Stored in the isp/config directory on each node in the domain. If you use the same backup directory name on all the nodes, rename nodemeta.xml before copying it to the backup location. For example, you back up nodemeta.xml to the /nodebak directory on nodeA and nodeB. Rename the configuration files so that on nodeA the file is backed up to /nodebak/nodemeta_A.xml,</td>
</tr>
<tr>
<td>Metadata File</td>
<td>Description</td>
<td>Location</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and on nodeB the file is backed up to /nodebak/nodemeta_B.xml.</td>
</tr>
</tbody>
</table>
| domains.infa  | Contains connectivity information for the gateway nodes. | Stored in one of the following locations:  
- The Informatica installation directory on the client and server machines.  
- The location configured through the INFA_DOMAINS_FILE environment variable. |

Verify Database User Account Requirements

If the domain configuration repository database is on Oracle, set the OPEN_CURSORS parameter to 4000 or higher.

If the domain configuration repository database is on IBM DB2, set the DynamicSections parameter to 3000 or higher.

Prepare the Model Repository

Before you upgrade the domain, complete the steps to prepare the Model repository.

1. Back up the repository.
2. Verify the database user account requirements.
3. Verify the maximum heap size.

Back Up the Repository

Before you upgrade the domain, back up the Model repository.

To back up each Model repository, select the Model Repository Service in the Administrator tool. Then, on the Domain Actions menu, click *Repository Contents > Backup*.

Verify the Database User Account Requirements

If the Model repository database is on Oracle, set the OPEN_CURSORS parameter to 4000 or higher.

If the Model repository database is on IBM DB2, set the DynamicSections parameter to 3000 or higher.

Verify the Maximum Heap Size Setting

If the Model repository is large, increase the maximum heap size.

For example, if the Model repository is 3 GB, increase the maximum heap size to 2048 MB.

To increase the maximum heap size, select the Model Repository Service in the Administrator tool, select the Properties view, click *Edit* in the Advanced Properties section, and then edit the Maximum Heap Size property.
Prepare the Profiling Warehouse

Before you upgrade the domain, prepare the profiling warehouse.

1. Back up the database.
2. Verify database user account permissions.

Back Up the Database

Before you upgrade the domain, back up the profiling warehouse.

Use the native database back up option to back up the profiling warehouse.

Verify Database User Account Permissions

The profiling warehouse user account for an IBM DB2 or Microsoft SQL Server database requires the Create Function privilege.

To grant the Create Function privilege for an IBM DB2 database, you can use the following syntax:

```
grant dbadm, createtab, bindadd, connect, implicit_schema, load on database to <DATABASEUSER>
```

To grant the Create Function privilege for a Microsoft SQL Server database, you can use the following syntax:

```
USE <DatabaseName>
GRANT CREATE FUNCTION TO <DatabaseUser>
GO
```

Prepare the Staging Database

Before you upgrade the domain, back up the staging database.

Use the native database back up option to back up the staging database.

Shut Down the Domain

You must shut down the domain before you upgrade it.

To shut down the domain, stop the Informatica service process on each node in the domain.

You can stop the Informatica service process on each node using one of the following methods:

- To stop Informatica from the Windows Start menu, click Programs > Informatica[Version] > Server > Stop Informatica Services.
- To stop Informatica on UNIX, you use the infaservice command. By default, the infaservice executable file is installed in the following directory:
  
  `<InformaticaInstallationDir>/tomcat/bin`

  Enter the following command to stop the daemon:

  `infaservice shutdown`

  You can also stop the Informatica service from the Windows control panel or from the Administrator tool.
Prepare to Change the Node Configuration

Before you change the node configuration, complete the following steps on the machine where you want the new version of Informatica to run:

1. Review the operating system specific requirements.
2. Copy the installation directory.
3. Verify the keystore file name and location.

Configure the Windows Machine

Before you upgrade the domain and server files, complete the following Windows tasks:

1. Determine port availability.
2. Create a system user account.

Note: Services may fail to start if there is a port number conflict.

Verify the Port Availability

The installer sets up the ports for components in the Informatica domain, and it designates the ports to use for application service processes that run on the node where you install Informatica.

You can specify the port numbers to use for the components and a range of port numbers to use for the application services. Or you can use the default port numbers provided by the installer. Verify that the port numbers are available on the machines where you install the Informatica services.

The following table describes the ports used by Informatica:

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain port</td>
<td>Port number for the node created during installation. Default is 6005.</td>
</tr>
<tr>
<td>Service Manager port</td>
<td>Port number used by the Service Manager on the node. The Service Manager listens for incoming connection requests on this port. Client applications use this port to communicate with the services in the domain. This is the port that the Informatica command line programs use to communicate to the domain. This is also the port for the SQL data service JDBC/ODBC driver. Default is 6006.</td>
</tr>
<tr>
<td>Service Manager shutdown port</td>
<td>Port number that controls server shutdown for the domain Service Manager. The Service Manager listens for shutdown commands on this port. Default is 6007.</td>
</tr>
<tr>
<td>Informatica Administrator port</td>
<td>Port number used by Informatica Administrator. Default is 6008.</td>
</tr>
<tr>
<td>Informatica Administrator shutdown port</td>
<td>Port number that controls server shutdown for Informatica Administrator. Informatica Administrator listens for shutdown commands on this port. Default is 6009.</td>
</tr>
<tr>
<td>Range of ports for application services</td>
<td>Range of port numbers that can be assigned to the application service processes that run on the node. When you create an application service in the domain, the Service Manager assigns the first available port in this range to the service process. At a minimum, the number of ports in the range must be at least twice the number of application service processes that will run on the node. Default is 6013 to 6113.</td>
</tr>
</tbody>
</table>

Note: Services and nodes can fail to start if there is a port conflict. You can update the range of ports for application services after you upgrade.
Create a System User Account

Create a system user account to perform the installation and to run the Informatica service. Verify that the user account that you use to install the Informatica services has write permission on the installation directory.

You can install Informatica with the user account logged in to the machine and run it under another user account. You can create a local account or a domain account to install Informatica or run the Informatica Windows service.

**Note:** To access a repository on Microsoft SQL Server that uses a Windows trusted connection, create a domain account.

The user accounts require the following permissions to run the installer or to run the Informatica Windows service:

- **Logged in user account.** The user account must be a member of the Administrators group and have the *Log on as a service* permission. Log in with this user account before you install Informatica.
- **Another user account.** The user account must be a member of the Administrators group and have *Log on as a service* and *Act as operating system* permissions. You do not have to log in with this user account before you install Informatica. During installation, you can specify the user account to run the Informatica Windows service.

Configure the UNIX Machine

Before you upgrade the domain and server files, complete the following UNIX tasks:

1. Determine port availability.
2. Create a system user account.

**Note:** Services may fail to start if there is a port number conflict.

Determine Port Availability

The installer sets up the ports for components in the Informatica domain, and it designates the ports to use for application service processes that run on the node where you install Informatica.

You can specify the port numbers to use for the components and a range of port numbers to use for the application services. Or you can use the default port numbers provided by the installer. Verify that the port numbers are available on the machines where you install the Informatica services.

The following table describes the ports used by Informatica:

<table>
<thead>
<tr>
<th>Port Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain port</td>
<td>Port number for the node created during installation.</td>
</tr>
<tr>
<td>Service Manager port</td>
<td>Port number used by the Service Manager on the node. The Service Manager listens for incoming connection requests on this port. Client applications use this port to communicate with the services in the domain. This is the port that the Informatica command line programs use to communicate to the domain. This is also the port for the SQL data service JDBC/ODBC driver. Default is 6006.</td>
</tr>
<tr>
<td>Service Manager shutdown port</td>
<td>Port number that controls server shutdown for the domain Service Manager. The Service Manager listens for shutdown commands on this port. Default is 6007.</td>
</tr>
<tr>
<td>Informatica Administrator port</td>
<td>Port number used by the Administrator tool. Default is 6008.</td>
</tr>
<tr>
<td>Port Type</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Informatica Administrator shutdown port</td>
<td>Port number that controls server shutdown for the Administrator tool. The Administrator tool listens for shutdown commands on this port. Default is 6009.</td>
</tr>
<tr>
<td>Range of ports for application services</td>
<td>Range of port numbers that can be assigned to the application service processes that run on the node. When you create an application service in the domain, the Service Manager assigns the first available port in this range to the service process. At a minimum, the number of ports in the range must be at least twice the number of application service processes that will run on the node. Default is 6013 to 6113.</td>
</tr>
</tbody>
</table>

**Note:** Services and nodes can fail to start if there is a port conflict. You can update the range of ports for application services after you upgrade.

**Create a System User Account**

Create a user account specifically to run the Informatica daemon.

Verify that the user account you use to install Informatica has write permission on the installation directory.

**Copy the Installation Directory**

Copy the directory of the previous version of Informatica to the machine where you want the new version of Informatica to run. For example, if the previous version of Informatica is installed in `C:\Informatica\9.0.1`, copy the `C:\Informatica\9.0.1` directory and subdirectories to the new machine.

When you run the upgrade installer, specify the Informatica installation directory on the new machine as the one that you want to upgrade.

**Verify Keystore File Name and Location**

If the node uses HTTPS, verify that the keystore file is in the default location and that it uses the default file name. If the keystore file uses a different file name or directory, the Administrator tool fails to start after you upgrade the domain.

The default location for the keystore file is `<InformaticaInstallationDir>/tomcat/conf`. The default file name for the keystore file is `Default.keystore`.

After you upgrade, you can use `infasetup UpdateGatewayNode` or `UpdateWorkerNode` to update the keystore file name and location.
Domain and Server Files Upgrade Overview

Use the server installer to upgrade the server files and domain of a previous version of Data Services. The server installer provides a domain upgrade wizard to guide you through the upgrade process.

The upgrade wizard installs Informatica 9.5.1 in the installation directory you specify. It does not modify the files in the directory of the previous version.

The upgrade wizard reads the domain information from files in the previous version and uses the same settings to configure the domain and server files for Informatica 9.5.1. It upgrades the tables of the domain configuration repository in the same database as the previous version.

Complete the pre-upgrade tasks before you start the upgrade. Run the installer on all machines that host previous versions of Informatica that you want to upgrade. On Windows, you can upgrade in graphical or silent mode. On UNIX, you can upgrade in graphical, console, or silent mode.

You can perform the upgrade from a DVD or from the root of the directory where you download the installation files.

On Windows, the length of the entire installation directory path, including the zip file name, must be 60 characters or less. Verify that the zip utility version is compatible with the Windows operating system version. When you unzip the file, verify that the zip utility also extracts empty folders.

On UNIX, use native tar or GNU tar to extract the installer files. The user that runs the installer must have read and write permissions on the installer files directory and execute permissions on install.sh.
Upgrading in Graphical Mode

Use this procedure to upgrade the domain and server files on the same machine. You can upgrade the domain and server files in graphical mode on Windows or UNIX. If you install Informatica on the SUSE Linux Enterprise 11 platform, perform the installation in console mode or silent mode.

To upgrade the domain and server files to another machine and modify the node configuration, see "Upgrading with Changes to the Node Configuration" on page 34.

On Windows, if you encounter problems when you run the install.bat file from the root directory, run the following file:

```
<InformaticaInstallationDir>/server/install.exe
```

1. Log in to the machine with a system user account.
2. Close all other applications.
3. Begin the upgrade.
   
   On Windows:
   
   a. Run install.bat from the root directory.
      
      The Informatica 9.5.1 page appears.
   
   b. Select Install or upgrade Informatica.
   
   c. Select Run the Pre-Installation (i9Pi) System Check Tool to verify whether the machine meets the system requirements for the installation or upgrade.
   
   d. Click Start.
   
   On UNIX:
   
   a. Use a shell command line to run install.sh from the root directory.
      
      The installer displays the message to verify that the locale environment variables are set.
   
   b. If the environment variables are not set, press n to exit the installer and set them as required. If the environment variables are set, press y to continue.
   
   c. Press 1 to install or upgrade Informatica.
   
   d. Press n to skip the Pre-Installation (i9Pi) system check.
   
   e. Press g for graphical mode.
      
      The Installation Type page appears.
   
   f. Skip to step 5.

4. If you selected Run the Pre-Installation (i9Pi) System Check Tool, complete the following steps:
   
   a. From the Informatica Pre-Installation (i9Pi) System Check Tool Welcome page, click Next.
      
      The System Information page appears.
   
   b. Enter the absolute path for the installation directory. The default directory is C:.
      
      The directory names in the path must not contain spaces or the following special characters: @ | * $ # ! ` ( ) { } [ ] , ; '
      
      On Windows, the installation directory path must be on the machine where you are installing Informatica.
   
   c. Enter the starting port number for the node that is being created on the machine. The default port number for the node is 6005.
   
   d. Click Next.
      
      The Database and JDBC Connection Information page appears.
e. Enter the domain configuration repository database information:

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>Type of database for the domain configuration repository. Select from the following options:</td>
</tr>
<tr>
<td></td>
<td>1 - Oracle</td>
</tr>
<tr>
<td></td>
<td>2 - Microsoft SQL Server</td>
</tr>
<tr>
<td></td>
<td>3 - IBM DB2</td>
</tr>
<tr>
<td></td>
<td>4 - Sybase ASE</td>
</tr>
<tr>
<td>Database user ID</td>
<td>Name for the domain configuration database user account.</td>
</tr>
<tr>
<td>Database user password</td>
<td>Password for the domain configuration database user account.</td>
</tr>
</tbody>
</table>

The domain configuration repository must be accessible to all gateway nodes in the domain.

f. Enter the JDBC connection information.

- To enter the connection information using the JDBC URL information, select Specify the JDBC connection properties and specify the JDBC URL properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database host name</td>
<td>Host name for the database.</td>
</tr>
<tr>
<td>Database port number</td>
<td>Port number for the database.</td>
</tr>
<tr>
<td>Database service name</td>
<td>Service name for Oracle and IBM DB2 databases or database name for Microsoft SQL Server and Sybase ASE.</td>
</tr>
</tbody>
</table>

- To enter the connection information using a custom JDBC connection string, select Custom JDBC connection string and type the connection string.

IBM DB2: jdbc:Informatica:db2://host_name:port_no;DatabaseName=

Oracle: jdbc:Informatica:oracle://host_name:port_no;ServiceName=

SQL Server: jdbc:Informatica:sqlserver://host_name:port_no;SelectMethod=cursor;DatabaseName=

Sybase: jdbc:Informatica:sybase://host_name:port_no;DatabaseName=

Verify that the connection string contains all the connection parameters required by your database system.

g. Click Test Connection to verify that you can connect to the database.

h. Click Next to start the system check.

The tool checks the settings of the hard drive, the availability of the ports, and the configuration of the database. After the system check is complete, the System Check Summary page appears, displaying the results of the system check.

i. Analyze the results of the system check.

Each requirement is listed, along with one of the following check statuses:

- [Pass] - The requirement meets the criteria for the Informatica installation or upgrade.
- [Fail] - The requirement does not meet the criteria for the Informatica installation or upgrade. Resolve the issue before proceeding with the installation or upgrade.

- [Information] - Verify the information and perform any additional tasks as outlined in the details.

The results of the system check are saved to the following file: `\Server\i9Pi\i9Pi\en\i9Pi_summary.html`

j. Click **Done** to close the Pre-Installation (i9Pi) System Check Tool.

The **Installation Type** page appears.

k. If the Pre-Installation (i9Pi) System Check Tool finishes with failed requirements, click **Cancel** to quit the installation or upgrade. Resolve the failed requirements, and run the installation or upgrade again.

**Note:** If the Informatica Pre-Installation (i9Pi) System Check Tool check finishes with failed requirements, you can still perform the Informatica installation or upgrade. However, it is highly recommended that you resolve the failed requirements before proceeding.

5. If the Pre-Installation (i9Pi) System Check Tool finished with failed requirements, click **Cancel** to quit the upgrade. Resolve the failed requirements, and run the upgrade again.

If the Pre-Installation (i9Pi) System Check Tool finished and all of the requirements meet the criteria for the Informatica upgrade, select **Upgrade to Informatica 9.5.1** to proceed with the upgrade.

6. Click **Next**.

The **Upgrade Pre-Requisites** page displays the upgrade system requirements.

7. Verify the requirements before you continue the upgrade.

8. Click **Next**.

9. On the **Upgrade Directory** page, enter the following directories:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory of the Informatica product to upgrade</td>
<td>Directory that contains the previous version of Data Services that you want to upgrade.</td>
</tr>
<tr>
<td>Directory for Informatica 9.5.1</td>
<td>Directory in which to install Informatica 9.5.1. Enter the absolute path for the installation directory. The directory cannot be the same as the directory that contains the previous version of Data Services. The directory names in the path must not contain spaces or the following special characters: @! $ # % ( ) { } [ ] , ; ‘. On Windows, the installation directory must be on the current machine.</td>
</tr>
</tbody>
</table>

10. Verify that the **Allow changes to the node host name and port numbers** option is not selected.

11. Click **Next**.

The upgrade wizard displays a warning to shut down the Informatica domain before you continue the upgrade.

12. Click **OK**.

13. On the **Pre-Installation Summary** page, review the upgrade information, and click **Install** to continue.

The upgrade wizard installs the Informatica server files to the Informatica 9.5.1 installation directory.

14. If you are upgrading a gateway node, the upgrade wizard displays the database and user account information for the domain configuration repository to be upgraded.

If you are upgrading a worker node, the upgrade wizard does not display the domain configuration repository information. You cannot modify the database connection information.
The following table describes the properties that the installer displays for the domain configuration repository:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>Database for the domain configuration repository.</td>
</tr>
<tr>
<td>Database user ID</td>
<td>Database user account for the domain configuration repository.</td>
</tr>
<tr>
<td>User password</td>
<td>Password for the database user account.</td>
</tr>
</tbody>
</table>

The upgrade wizard displays the database connection string for the domain configuration repository based on how the connection string of the previous version was created at installation:

- If the previous version used a JDBC URL at installation, the upgrade wizard displays the JDBC connection properties, including the database address and service name.
  Optionally, you can specify additional JDBC parameters to include in the JDBC URL. To provide additional JDBC parameters, select JDBC parameters and enter a valid JDBC parameter string.
- If the previous version used a custom JDBC connection string at installation, the upgrade wizard displays the custom connection string.
  You cannot specify additional JDBC parameters.

15. If you are upgrading a gateway node, the upgrade wizard displays the database and user account information for the domain configuration repository to be upgraded.

If you are upgrading a worker node, the upgrade wizard does not display the domain configuration repository information. You cannot modify the database connection information.

The following table describes the properties that the installer displays for the domain configuration repository:

<table>
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<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>Database for the domain configuration repository.</td>
</tr>
<tr>
<td>Database user ID</td>
<td>Database user account for the domain configuration repository.</td>
</tr>
<tr>
<td>User password</td>
<td>Password for the database user account.</td>
</tr>
</tbody>
</table>

The upgrade wizard displays the database connection string for the domain configuration repository based on how the connection string of the previous version was created at installation:

- If the previous version used a JDBC URL at installation, the upgrade wizard displays the JDBC connection properties, including the database address and service name.
  Optionally, you can specify additional JDBC parameters to include in the JDBC URL. To provide additional JDBC parameters, select JDBC parameters and enter a valid JDBC parameter string.
- If the previous version used a custom JDBC connection string at installation, the upgrade wizard displays the custom connection string.
  You cannot specify additional JDBC parameters.

16. Click **Test Connection** to verify that you can connect to the database, and then click **OK** to continue.

17. Click **Next**.

On Windows, the upgrade wizard creates a service to start Informatica. By default, the service runs under the same user account as the account used for installation. You can run the Windows service under a different user account.
18. Select whether to run the Windows service under a different user account.

The following table describes the properties that you set:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run Informatica under a different user account</td>
<td>Indicates whether to run the Windows service under a different user account.</td>
</tr>
<tr>
<td>User name</td>
<td>User account with which to run the Informatica Windows service. Use the following format: DomainName\UserAccount</td>
</tr>
<tr>
<td></td>
<td>This user account must have the Act as operating system permission.</td>
</tr>
<tr>
<td>Password</td>
<td>Password for the user account with which to run the Informatica Windows service.</td>
</tr>
</tbody>
</table>

19. Click **Next**.

The **Post-Upgrade Summary** page indicates whether the upgrade completed successfully.

20. Click **Done**.

You can view the upgrade log files to get more information about the tasks performed by the upgrade wizard and to view the configuration of installed components.

---

**Upgrading in Console Mode**

Use this procedure to upgrade the domain and server files on the same machine. You can upgrade the Informatica domain and server files in console mode on UNIX.

To upgrade the domain and server files to another machine and modify the node configuration, see "Upgrading with Changes to the Node Configuration" on page 34.

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

1. Log in to the machine with the same user account that you used to install the previous version.
2. Stop all processes that access the directory and subdirectories of the Informatica product to upgrade, including command prompts and tail logs.
3. On a shell command line, run the install.sh file located in the root directory.
   The installer displays the message to verify that the locale environment variables are set.
4. If the environment variables are not set, enter **N** to exit the installer and set them as required.
   If the environment variables are set, enter **Y** to continue.
5. Enter **1** to install or upgrade Informatica.
6. Enter **y** to run the Pre-Installation (i9Pi) System Check Tool to verify whether the machine meets the system requirements for the installation or upgrade.
7. Enter **C** for console mode installation.
8. If you entered y to run the Pre-Installation (i9Pi) System Check Tool, complete the following steps:
   a. From the Informatica Pre-Installation (i9Pi) System Check Tool Welcome section, press Enter.
      The System Information section appears.
   b. Type the absolute path for the installation directory.
      The directory names in the path must not contain spaces or the following special characters: @* $ # ! %
      ( ) [] , ; ' Default is /home/toolinst.
   c. Press Enter.
   d. Type the starting port number for the node that is being created or upgrade on the machine. Default is 6005.
   e. Press Enter.
   f. To enter the JDBC connection information using a custom JDBC connection string, press 1. To enter the
      JDBC connection information using the JDBC URL information, press 2.
   g. Enter the JDBC connection information.
      ♦ To enter the connection information using a custom JDBC connection string, type the connection
        string.
        IBM DB2: jdbc:Informatica:db2://host_name:port_no;DatabaseName=
        Oracle: jdbc:Informatica:oracle://host_name:port_no;ServiceName=
        SQL Server: jdbc:Informatica:sqlserver://host_name:port_no;SelectMethod=cursor;DatabaseName=
        Sybase: jdbc:Informatica:sysbase://host_name:port_no;DatabaseName=
      Verify that the connection string contains all the connection parameters required by your database system.
      ♦ To enter the connection information using the JDBC URL information, specify the JDBC URL properties.

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>Type of database for the domain configuration repository. Select from the following options:</td>
</tr>
<tr>
<td></td>
<td>1 - Oracle</td>
</tr>
<tr>
<td></td>
<td>2 - Microsoft SQL Server</td>
</tr>
<tr>
<td></td>
<td>3 - IBM DB2</td>
</tr>
<tr>
<td></td>
<td>4 - Sybase</td>
</tr>
<tr>
<td>Database user ID</td>
<td>Name for the domain configuration database user account.</td>
</tr>
<tr>
<td>Database user password</td>
<td>Password for the domain configuration database user account.</td>
</tr>
<tr>
<td>Database host name</td>
<td>Host name for the database.</td>
</tr>
<tr>
<td>Database port number</td>
<td>Port number for the database.</td>
</tr>
<tr>
<td>Database service name</td>
<td>Password for the domain configuration database user account. Service name for Oracle and IBM DB2 databases or database name for Microsoft</td>
</tr>
</tbody>
</table>
The tool checks the settings of the hard drive, the availability of the ports, and the configuration of the database. After the system check is complete, the System Check Summary section appears, displaying the results of the system check.

h. Analyze the results of the system check. Each requirement is listed in the table, along with one of the following check statuses:

- [Pass] - The requirement meets the criteria for the Informatica installation or upgrade.
- [Fail] - The requirement does not meet the criteria for the Informatica installation or upgrade. Resolve the issue before proceeding.
- [Information] - Verify the information and perform any additional tasks as outlined in the details.

The results of the system check are saved to the following file: 

\server\I9Pi\I9Pi\en\I9Pi_summary.txt

i. Press Enter to close the Pre-Installation (i9Pi) System Check Tool.

j. If the Pre-Installation (i9Pi) System Check Tool finishes with failed requirements, press n to quit the installation or upgrade. Resolve the failed requirements, and run the installation or upgrade again.

Note: If the Informatica Pre-Installation (i9Pi) System Check Tool check finishes with failed requirements, you can still perform the Informatica installation or upgrade. However, it is highly recommended that you resolve the failed requirements before proceeding.

9. If the Pre-Installation (i9Pi) System Check Tool finished with failed requirements, click Cancel to quit the upgrade. Resolve the failed requirements, and run the upgrade again.

If the Pre-Installation (i9Pi) System Check Tool finished and all of the requirements meet the criteria for the Informatica upgrade, enter 2 to proceed with the upgrade.

10. Verify the requirements before you continue the upgrade.

11. Press Enter.

12. At the prompt, enter the following directories:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory of the Informatica product to upgrade</td>
<td>Directory that contains the previous version of Data Services that you want to upgrade.</td>
</tr>
<tr>
<td>Directory for Informatica 9.5.1</td>
<td>Directory in which to install Informatica 9.5.1. The directory cannot be the same as the directory that contains the previous version of Data Services.</td>
</tr>
</tbody>
</table>

13. Enter 1 to use the same node configuration as the previous version. The installer displays a warning to shut down the Informatica domain that you want to upgrade before you continue the upgrade.

14. Press Enter.

15. Review the upgrade information and press Enter to continue. The installer copies the server files to the Informatica 9.5.1 installation directory.
The installer displays the database and user account information for the domain configuration repository to upgrade. It displays the database connection string for the domain configuration repository based on how the connection string of the previous version was created at installation:

- If the previous version used a JDBC URL at installation, the installer displays the JDBC connection properties, including the database address and service name.
- If the previous version used a custom JDBC connection string at installation, the installer displays the custom connection string.

16. Press Enter.

17. If you use a JDBC URL, you can specify additional parameters to include in the connection string.

   If you use a custom connection string, you cannot specify additional parameters.

The Post-Installation Summary window indicates whether the upgrade completed successfully. It also shows the status of the installed components and their configuration.

You can view the upgrade log files to get more information about the upgrade tasks performed by the installer and to view the configuration properties for the installed components.

**Upgrading in Silent Mode**

Use this procedure to upgrade the domain and server files on the same machine.

To upgrade the domain and server files to another machine and modify the node configuration, see "Upgrading with Changes to the Node Configuration" on page 34.

To upgrade the Informatica services without user interaction, upgrade in silent mode. Use a properties file to specify the upgrade options. The installer reads the file to determine the upgrade options. You can use silent mode upgrade to upgrade the Informatica services on multiple machines on the network or to standardize the upgrade process across machines.

Copy the Informatica installation files to the hard disk on the machine that hosts the Informatica instance you plan to upgrade.

To upgrade in silent mode, complete the following tasks:

1. Create the upgrade properties file and specify the upgrade options.
2. Run the installer with the upgrade properties file.

**Creating the Properties File**

Informatica provides a sample properties file that includes the upgrade parameters that are required by the installer. You can customize the sample properties file to specify the options for your upgrade.

The sample upgrade properties file is named SilentInput_upgrade.properties and is located in the root directory of the installation DVD or the installer download location. After you customize the file, save it with the file name SilentInput.properties.

1. Go to the root of the directory that contains the installation files.
2. Find the file named SilentInput_upgrade.properties.
   - Back up the file before you modify it.
3. Use a text editor to open the file and modify the values of the upgrade parameters.
The following table describes the upgrade parameters that you can modify:

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTALL_TYPE</td>
<td>Indicates whether to install or upgrade Informatica. If the value is 0, the installer performs a fresh installation of Informatica. If the value is 1, the installer upgrades a previous version of Informatica.</td>
</tr>
<tr>
<td>USER_INSTALL_DIR</td>
<td>Directory in which to install the new version of Data Services. The directory cannot be the same as the directory that contains the previous version of Data Services.</td>
</tr>
<tr>
<td>UPG_BACKUP_DIR</td>
<td>Directory that contains the previous version of Data Services that you want to upgrade.</td>
</tr>
<tr>
<td>DB2_TABLESPACE</td>
<td>For IBM DB2 only. Name of the tablespace in which to create the tables. If this parameter is empty, the installer creates the tables in the default tablespace. In a multi-partition database, the tablespace page size must be 32 K. Define the database in a single-node tablespace to optimize performance. Set this parameter only if you are upgrading from PowerCenter 8.x.</td>
</tr>
<tr>
<td>ADVANCE_JDBC_PARAM</td>
<td>Optional parameters to include in the JDBC URL connection string. Verify that the parameter string is valid. The installer does not validate the parameter string before it adds the string to the JDBC URL. If this parameter is empty, the installer creates the JDBC URL without additional parameters. You can set this parameter if DB_CUSTOM_STRING_SELECTION=0. Set this parameter only if you are upgrading from PowerCenter 8.x.</td>
</tr>
<tr>
<td>ADVANCE_PORT_CONFIG</td>
<td>Indicates whether to display the list of port numbers for the domain and node components. If the value is 0, the installer assigns default port numbers to the domain and node components. If the value is 1, you can set the port numbers for the domain and node components. Set this parameter only if you are upgrading from PowerCenter 8.x.</td>
</tr>
<tr>
<td>TOMCAT_PORT</td>
<td>Port number used by the Service Manager on the node. The Service Manager listens for incoming connection requests on this port. Client applications use this port to communicate with the services in the domain. This is the port that the Informatica command line programs use to communicate to the domain. This is also the port for the SQL data service JDBC/ODBC driver. You can set this parameter if ADVANCE_PORT_CONFIG=1. Set this parameter only if you are upgrading from PowerCenter 8.x.</td>
</tr>
<tr>
<td>SERVER_PORT</td>
<td>Port number that controls server shutdown for the domain Service Manager. The Service Manager listens for shutdown commands on this port. You can set this parameter if ADVANCE_PORT_CONFIG=1.</td>
</tr>
<tr>
<td>AC_PORT</td>
<td>Port number used by the Administrator tool. You can set this parameter if ADVANCE_PORT_CONFIG=1.</td>
</tr>
<tr>
<td>AC_SHUTDWN_PORT</td>
<td>Port number that controls server shutdown for the Administrator tool. The Administrator tool listens for shutdown commands on this port. You can set this parameter if ADVANCE_PORT_CONFIG=1.</td>
</tr>
<tr>
<td>FORCE_UPGRADE</td>
<td>For upgrades from version 8.x. You can set this option when you run the installer again after a failed upgrade. The installer starts the domain upgrade process from the beginning and overrides all previous upgrades to the domain. It also overrides any upgrade contention if other administrators are upgrading nodes in the domain at the same time.</td>
</tr>
</tbody>
</table>
4. On Windows, specify whether to run the Informatica service under the same user account as the account used for upgrade.

Set the following parameters:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_LOGIN_DETAILS</td>
<td>Indicates whether to run the Windows service under a different user account. If the value is 0, the installer configures the service to run under the current user account. If the value is 1, the installer configures the service to run under a different user account.</td>
</tr>
<tr>
<td>WIN_USER_ID</td>
<td>User account with which to run the Informatica Windows service. Use the following format: DomainName\UserAccount. This user account must have the Act as operating system permission.</td>
</tr>
<tr>
<td>WIN_USER_PSSWD</td>
<td>Password for the user account with which to run the Informatica Windows service.</td>
</tr>
</tbody>
</table>

5. Save the properties file with the name SilentInput.properties.

Running the Silent Installer

After you create the properties file, open a command window to start the silent upgrade.

1. Open a command window.
2. Go to the root of the server installer directory.
3. Verify that the directory contains the file SilentInput.properties with the upgrade options.
4. To start the silent upgrade process, double click the file silentinstall.bat.

The silent upgrade runs in the background. The process can take a while. The silent upgrade process is complete when the Informatica_<Version>_Services_InstallLog.log is created in the installation directory.

The silent upgrade fails if you incorrectly configure the properties file or if the installation directory is not accessible. If the upgrade fails, view the silent upgrade log file and correct the errors. Then run the silent installer again. The silent upgrade log file name is silentErrorLog.log. The installer creates it in the root directory on Windows and in the user home directory on UNIX.

Upgrading with Changes to the Node Configuration

The installer provides the option to allow changes to the node host name and port numbers. Select this option to upgrade the server files and change the configuration the node.

Complete the pre-upgrade tasks before you run the installer. On Windows, you can run the installer in graphical or silent mode. On UNIX, you can run the installer in graphical, console, or silent mode.
Upgrading in Graphical Mode

Use this procedure to upgrade the domain and server files to another machine and modify the node configuration. To upgrade the domain and server files on the same machine, see “Upgrading in Graphical Mode” on page 25.

You can upgrade the Informatica domain and server files in graphical mode on Windows or UNIX. If you upgrade Informatica on the SUSE Linux Enterprise 11 platform, perform the upgrade in console mode or silent mode.

On Windows, if you encounter problems when you run the install.bat file from the root directory, run the following file:

```
<InformaticaInstallationDir>/server/install.exe
```

1. Log in to the machine with the same user account that you used to install the previous version.
2. Close all other applications.
3. Begin the upgrade from Windows or UNIX:
   - To begin the upgrade on Windows, run install.bat from the root directory.
   - To begin the upgrade on UNIX, use a shell command line to run install.sh from the root directory, and then select the option for graphical mode installation.
4. Select **Install or upgrade Informatica**.
5. Select **Run the Pre-Installation (i9Pi) System Check Tool** to verify whether the machine meets the system requirements for the installation or upgrade.
6. Click **Start**.
7. If you selected **Run the Pre-Installation (i9Pi) System Check Tool**, complete the following steps:
   a. From the Informatica Pre-Installation (i9Pi) System Check Tool **Welcome** page, click **Next**.
      The **System Information** page appears.
   b. Enter the absolute path for the installation directory. The default directory is `C:\`. The directory names in the path must not contain spaces or the following special characters: `@ | * $ # ! ( ) { } [ ] , ; '
      On Windows, the installation directory path must be on the machine where you are installing Informatica.
   c. Enter the starting port number for the node that is being created on the machine. The default port number for the node is 6005.
   d. Click **Next**.
      The **Database and JDBC Connection Information** page appears.
   e. Enter the domain configuration repository database information:

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>Type of database for the domain configuration repository. Select from the following options:</td>
</tr>
<tr>
<td></td>
<td>1 - Oracle</td>
</tr>
<tr>
<td></td>
<td>2 - Microsoft SQL Server</td>
</tr>
<tr>
<td></td>
<td>3 - IBM DB2</td>
</tr>
</tbody>
</table>

Upgrading with Changes to the Node Configuration
f. Enter the JDBC connection information.
   - To enter the connection information using the JDBC URL information, select **Specify the JDBC connection properties** and specify the JDBC URL properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database host name</td>
<td>Host name for the database.</td>
</tr>
<tr>
<td>Database port number</td>
<td>Port number for the database.</td>
</tr>
<tr>
<td>Database service name</td>
<td>Service name for Oracle and IBM DB2 databases or database name for Microsoft SQL Server and Sybase ASE.</td>
</tr>
</tbody>
</table>

   - To enter the connection information using a custom JDBC connection string, select **Custom JDBC connection string** and type the connection string.

   - IBM DB2: jdbc:informatica:db2://host_name:port_no;DatabaseName=
   - Oracle: jdbc:informatica:oracle://host_name:port_no;ServiceName=
   - SQL Server: jdbc:informatica:sqlserver://host_name:port_no;SelectMethod=cursor;DatabaseName=
   - Sybase: jdbc:informatica:sybase://host_name:port_no;DatabaseName=

   Verify that the connection string contains all the connection parameters required by your database system.

   g. Click **Test Connection** to verify that you can connect to the database.

   h. Click **Next** to start the system check.

   The tool checks the settings of the hard drive, the availability of the ports, and the configuration of the database. After the system check is complete, the **System Check Summary** page appears, displaying the results of the system check.

   i. Analyze the results of the system check.

   Each requirement is listed, along with one of the following check statuses:
   - [Pass] - The requirement meets the criteria for the Informatica installation or upgrade.
   - [Fail] - The requirement does not meet the criteria for the Informatica installation or upgrade. Resolve the issue before proceeding with the installation or upgrade.
   - [Information] - Verify the information and perform any additional tasks as outlined in the details.

   The results of the system check are saved to the following file:

   \Server\i9Pi\i9Pi\en\i9Pi_summary.html

   j. Click **Done** to close the Pre-Installation (i9Pi) System Check Tool.

   The **Installation Type** page appears.
k. If the Pre-Installation (i9Pi) System Check Tool finishes with failed requirements, click Cancel to quit the installation or upgrade. Resolve the failed requirements, and run the installation or upgrade again.

**Note:** If the Informatica Pre-Installation (i9Pi) System Check Tool check finishes with failed requirements, you can still perform the Informatica installation or upgrade. However, it is highly recommended that you resolve the failed requirements before proceeding.

8. If the Pre-Installation (i9Pi) System Check Tool finished with failed requirements, click Cancel to quit the upgrade. Resolve the failed requirements, and run the upgrade again.

If the Pre-Installation (i9Pi) System Check Tool finished and all of the requirements meet the criteria for the Informatica upgrade, select **Upgrade to Informatica 9.5.1** to proceed with the upgrade.

9. Click Next.

The Upgrade Pre-Requisites page displays the upgrade system requirements.

10. Verify the requirements before you continue the upgrade.

11. Click Next.

12. On the Upgrade Directory page, enter the following directories:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory of the Informatica product to upgrade</td>
<td>Directory that contains the previous version of Data Services that you want to upgrade.</td>
</tr>
<tr>
<td>Directory for Informatica 9.5.1</td>
<td>Directory in which to install Informatica 9.5.1. Enter the absolute path for the installation directory. The directory cannot be the same as the directory that contains the previous version of Data Services. The directory names in the path must not contain spaces or the following special characters: @</td>
</tr>
</tbody>
</table>

13. Select **Allow changes to the node host name and port numbers**.

   Use this option to change the configuration of the Informatica product that you upgrade. If you are upgrading to a different machine, you can change the node configuration to match the new machine.

14. Click Next.

   The upgrade wizard displays a warning to shut down the Informatica domain before you continue the upgrade.

15. Click OK.

16. On the Pre-Installation Summary page, review the upgrade information, and click Install to continue.

   The upgrade wizard installs the Informatica server files to the Informatica 9.5.1 installation directory.

17. Click Test Connection to verify that you can connect to the database, and then click OK to continue.

18. Click Next.

   The installer displays the domain and node properties.

19. Modify the node host name and port number to match the configuration of the new version of Informatica.
The following table describes the domain and node properties that you can specify:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain name</td>
<td>Name of the domain. The default domain name is Domain_&lt;MachineName&gt;. The name must not exceed 128 characters and must be 7-bit ASCII only. It cannot contain a space or any of the following characters: ` % * + ; * ? , &lt; &gt; /</td>
</tr>
<tr>
<td>Node name</td>
<td>Name of the node that you are upgrading.</td>
</tr>
<tr>
<td>Node host name</td>
<td>Host name of the machine that hosts the node you are upgrading. If the machine has a single network name, use the default host name. If the machine has multiple network names, you can modify the default host name to use an alternate network name. Optionally, you can use the IP address. Note: Do not use localhost. The host name must explicitly identify the machine.</td>
</tr>
<tr>
<td>Node port number</td>
<td>Port number for the node you are upgrading. The default port number for the node is 6005.</td>
</tr>
<tr>
<td>Gateway node host name</td>
<td>Host name of the machine that hosts the gateway node for the domain. Available if you upgrade a worker node.</td>
</tr>
<tr>
<td>Gateway node port number</td>
<td>Port number of the gateway node. Available if you upgrade a worker node.</td>
</tr>
</tbody>
</table>

20. If you are using a custom keystore file and you are upgrading to a different gateway node configuration, specify the custom keystore file password and location.

The following table describes the properties for the custom keystore file password and location:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Keystore Password</td>
<td>Plain text password for the custom keystore file.</td>
</tr>
<tr>
<td>Custom Keystore File</td>
<td>Path and file name of the custom keystore file. If you leave this field blank, the installer looks for the keystore file in the following directory: &lt;InformaticaInstallationDir&gt;\server\tomcat\conf\</td>
</tr>
</tbody>
</table>

21. Click Next.

On the Port Configuration Upgrade page, the upgrade wizard displays the port numbers assigned to the domain and node components.

22. You can specify new port numbers or use the default port numbers.

The following table describes the ports that you can specify:

<table>
<thead>
<tr>
<th>Port</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Manager port</td>
<td>Port number used by the Service Manager in the node. Client applications and the Informatica command line programs use this port to communicate to the services in the domain.</td>
</tr>
<tr>
<td>Service Manager shutdown port</td>
<td>Port number that controls server shutdown for the domain Service Manager. The Service Manager listens for shutdown commands on this port.</td>
</tr>
<tr>
<td>Port</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Informatica Administrator port</td>
<td>Port number used by the Administrator tool. Available if you upgrade a gateway node.</td>
</tr>
<tr>
<td>Informatica Administrator shutdown port</td>
<td>Port number used by the Administrator tool to listen for shut down commands. Available if you upgrade a gateway node.</td>
</tr>
</tbody>
</table>

23. **Click Next.**

On Windows, the upgrade wizard creates a service to start Informatica. By default, the service runs under the same user account as the account used for installation. You can run the Windows service under a different user account.

24. **Select whether to run the Windows service under a different user account.**

The following table describes the properties that you set:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run Informatica under a different user account</td>
<td>Indicates whether to run the Windows service under a different user account.</td>
</tr>
<tr>
<td>User name</td>
<td>User account with which to run the Informatica Windows service. Use the following format: DomainName\UserAccount This user account must have the Act as operating system permission.</td>
</tr>
<tr>
<td>Password</td>
<td>Password for the user account with which to run the Informatica Windows service.</td>
</tr>
</tbody>
</table>

25. **Click Next.**

The **Post-Upgrade Summary** page indicates whether the upgrade completed successfully.

26. **Click Done.**

You can view the upgrade log files to get more information about the tasks performed by the upgrade wizard and to view the configuration of installed components.

**Upgrading in Console Mode**

Use this procedure to upgrade the domain and server files to another machine and modify the node configuration. To upgrade the domain and server files on the same machine, see “Upgrading in Console Mode” on page 29.

You can upgrade the Informatica domain and server files in console mode on UNIX.

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

1. Log in to the machine with the same user account that you used to install the previous version.
2. Stop all processes that access the directory and subdirectories of the Informatica product to upgrade, including command prompts and tail logs.
3. On a shell command line, run the install.sh file located in the root directory.
   The installer displays the message to verify that the locale environment variables are set.
4. If the environment variables are not set, enter N to exit the installer and set them as required.
   If the environment variables are set, enter Y to continue.
5. Enter 1 to install or upgrade Informatica.
6. Enter y to run the Pre-Installation (i9Pi) System Check Tool to verify whether the machine meets the system requirements for the installation or upgrade.
7. Enter C for console mode installation.
8. If you entered y to run the Pre-Installation (i9Pi) System Check Tool, complete the following steps:
   a. From the Informatica Pre-Installation (i9Pi) System Check Tool Welcome section, press Enter. The System Information section appears.
   b. Type the absolute path for the installation directory. The directory names in the path must not contain spaces or the following special characters: @|* $ # ! % ( ) { } [ ] ; ’ Default is /home/toolinst.
   c. Press Enter.
   d. Type the starting port number for the node that is being created or upgrade on the machine. Default is 6005.
   e. Press Enter.
   f. To enter the JDBC connection information using a custom JDBC connection string, press 1. To enter the JDBC connection information using the JDBC URL information, press 2.
   g. Enter the JDBC connection information.
      * To enter the connection information using a custom JDBC connection string, type the connection string.
        IBM DB2: jdbc:Informatica:db2://host_name:port_no;DatabaseName=
        Oracle: jdbc:Informatica:oracle://host_name:port_no;ServiceName=
        SQL Server: jdbc:Informatica:sqlserver://host_name:port_no;SelectMethod=cursor;DatabaseName=
        Sybase: jdbc:Informatica:sybase://host_name:port_no;DatabaseName=
        Verify that the connection string contains all the connection parameters required by your database system.
      * To enter the connection information using the JDBC URL information, specify the JDBC URL properties.

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database type</td>
<td>Type of database for the domain configuration repository. Select from the following options: 1 - Oracle 2 - Microsoft SQL Server 3 - IBM DB2 4 - Sybase ASE</td>
</tr>
<tr>
<td>Database user ID</td>
<td>Name for the domain configuration database user account.</td>
</tr>
<tr>
<td>Database user password</td>
<td>Password for the domain configuration database user account.</td>
</tr>
<tr>
<td>Database host name</td>
<td>Host name for the database.</td>
</tr>
</tbody>
</table>
The tool checks the settings of the hard drive, the availability of the ports, and the configuration of the database. After the system check is complete, the **System Check Summary** section appears, displaying the results of the system check.

**h. Analyze the results of the system check.**

Each requirement is listed in the table, along with one of the following check statuses:

- **[Pass]** - The requirement meets the criteria for the Informatica installation or upgrade.
- **[Fail]** - The requirement does not meet the criteria for the Informatica installation or upgrade. Resolve the issue before proceeding.
- **[Information]** - Verify the information and perform any additional tasks as outlined in the details.

The results of the system check are saved to the following file: 

```
/Server/I9Pi/I9Pi/en/i9Pi_summary.txt
```

**i. Press Enter to close the Pre-Installation (i9Pi) System Check Tool.**

**j. If the Pre-Installation (i9Pi) System Check Tool finishes with failed requirements, press n to quit the installation or upgrade. Resolve the failed requirements, and run the installation or upgrade again.**

**Note:** If the Informatica Pre-Installation (i9Pi) System Check Tool check finishes with failed requirements, you can still perform the Informatica installation or upgrade. However, it is highly recommended that you resolve the failed requirements before proceeding.

9. **If the Pre-Installation (i9Pi) System Check Tool finished with failed requirements, click Cancel to quit the upgrade. Resolve the failed requirements, and run the upgrade again.**

If the Pre-Installation (i9Pi) System Check Tool finished and all of the requirements meet the criteria for the Informatica upgrade, enter **2** to proceed with the upgrade.

10. **Verify the requirements before you continue the upgrade.**

11. **Press Enter.**

12. **At the prompt, enter the following directories:**

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory of the Informatica product to upgrade</td>
<td>Directory that contains the previous version of Data Services that you want to upgrade.</td>
</tr>
<tr>
<td>Directory for Informatica 9.5.1</td>
<td>Directory in which to install Informatica 9.5.1. The directory cannot be the same as the directory that contains the previous version of Data Services.</td>
</tr>
</tbody>
</table>

13. **Enter 2 to allow changes to the node host name and port number.**

The installer displays a warning to shut down the Informatica domain that you want to upgrade before you continue the upgrade.

14. **Press Enter.**

15. **Review the upgrade information and press Enter to continue.**
The installer copies the server files to the Informatica 9.5.1 installation directory.
The installer displays the database and user account information for the domain configuration repository to upgrade. It displays the database connection string for the domain configuration repository based on how the connection string of the previous version was created at installation:

- If the previous version used a JDBC URL at installation, the installer displays the JDBC connection properties, including the database address and service name.
- If the previous version used a custom JDBC connection string at installation, the installer displays the custom connection string.

16. Press Enter.
17. If the domain configuration repository is in DB2, you can specify the name of the tablespace.
18. You can specify additional parameters to include in the connection string.

The installer displays the domain and node properties.

19. Modify the node host name and port number to match the configuration of the new version of Informatica.

The following table describes the domain and node properties that you can specify:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain name</td>
<td>Name of the domain. The default domain name is Domain_&lt;MachineName&gt;. The name must not exceed 128 characters and must be 7-bit ASCII only. It cannot contain a space or any of the following characters: ` % * + ; &quot; ? , &lt; &gt; /</td>
</tr>
<tr>
<td>Node name</td>
<td>Name of the node that you are upgrading.</td>
</tr>
<tr>
<td>Node host name</td>
<td>Host name of the machine that hosts the node you are upgrading. If the machine has a single network name, use the default host name. If the machine has multiple network names, you can modify the default host name to use an alternate network name. Optionally, you can use the IP address. Note: Do not use localhost. The host name must explicitly identify the machine.</td>
</tr>
<tr>
<td>Custom keystore password</td>
<td>Plain text password for the custom keystore file. Enter the custom keystore password if you are using a custom keystore file and you are upgrading to a different gateway node configuration.</td>
</tr>
<tr>
<td>Custom keystore file</td>
<td>Path and file name of the custom keystore file. Enter the custom keystore file if you are using a custom keystore file and you are upgrading to a different gateway node configuration. If you leave this field blank, the installer looks for the keystore file in the following directory: &lt;InformaticaInstallationDir&gt;\server\tomcat\conf\</td>
</tr>
<tr>
<td>Node port number</td>
<td>Port number for the node you are upgrading. The default port number for the node is 6005.</td>
</tr>
<tr>
<td>Gateway node host name</td>
<td>Host name of the machine that hosts the gateway node for the domain. Available if you upgrade a worker node.</td>
</tr>
<tr>
<td>Gateway node port number</td>
<td>Port number of the gateway node. Available if you upgrade a worker node.</td>
</tr>
</tbody>
</table>

20. The installer displays the port numbers assigned the domain components.
You can specify new port numbers or use the default port numbers.

The following table describes the ports that you can specify:

<table>
<thead>
<tr>
<th>Port</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Manager port</td>
<td>Port number used by the Service Manager in the node. Client applications and the Informatica command line programs use this port to communicate to the services in the domain.</td>
</tr>
<tr>
<td>Service Manager shutdown port</td>
<td>Port number that controls server shutdown for the domain Service Manager. The Service Manager listens for shutdown commands on this port.</td>
</tr>
<tr>
<td>Informatica Administrator port</td>
<td>Port number used by the Administrator tool. Available if you upgrade a gateway node.</td>
</tr>
<tr>
<td>Informatica Administrator shutdown port</td>
<td>Port number used by the Administrator tool to listen for shutdown commands. Available if you upgrade a gateway node.</td>
</tr>
</tbody>
</table>

The Post-Installation Summary window indicates whether the upgrade completed successfully. It also shows the status of the installed components and their configuration.

You can view the upgrade log files to get more information about the upgrade tasks performed by the installer and to view the configuration properties for the installed components.

**Upgrading in Silent Mode**

Use this procedure to upgrade the domain and server files to another machine and modify the node configuration. To upgrade the domain and server files on the same machine, see “Upgrading in Silent Mode” on page 32.

To upgrade the Informatica services without user interaction, upgrade in silent mode. Use a properties file to specify the upgrade options. The installer reads the file to determine the upgrade options. You can use silent mode upgrade to upgrade the Informatica services on multiple machines on the network or to standardize the upgrade process across machines.

Copy the Informatica installation files to the hard disk on the machine that hosts the Informatica instance you plan to upgrade.

To upgrade in silent mode, complete the following tasks:

1. Create the upgrade properties file and specify the upgrade options.
2. Run the installer with the upgrade properties file.

**Creating the Properties File**

Informatica provides a sample properties file that includes the upgrade parameters that are required by the installer. You can customize the sample properties file to specify the options for your upgrade.

The sample upgrade properties file is named SilentInput_Upgrade_NewConfig.properties and is located in the root directory of the installation DVD or the installer download location. After you customize the file, save it with the file name SilentInput.properties.

1. Go to the root of the directory that contains the installation files.
2. Find the file named SilentInput_Upgrade_NewConfig.properties.

   Back up the file before you modify it.
3. Use a text editor to open the file and modify the values of the upgrade parameters. 

The following table describes the upgrade parameters that you can modify:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTALL_TYPE</td>
<td>Indicates whether to install or upgrade Informatica. To upgrade from a previous version of Informatica, set the value to 1.</td>
</tr>
<tr>
<td>UPG_DIFF_CONFIG</td>
<td>Indicates whether to change the node configuration for the new version of Informatica. To upgrade a previous version of Informatica to a different machine configuration, set this parameter to 1.</td>
</tr>
<tr>
<td>USER_INSTALL_DIR</td>
<td>Directory in which to install Informatica the new version of Informatica. The directory cannot be the same as the directory that contains the previous version.</td>
</tr>
<tr>
<td>UPG_BACKUP_DIR</td>
<td>Directory that contains the previous version of Informatica product that you want to upgrade.</td>
</tr>
<tr>
<td>DB_TYPE</td>
<td>Database for the domain configuration repository. The value can be one of the following databases:</td>
</tr>
<tr>
<td></td>
<td>- Oracle</td>
</tr>
<tr>
<td></td>
<td>- MSSQLServer</td>
</tr>
<tr>
<td></td>
<td>- DB2</td>
</tr>
<tr>
<td></td>
<td>- Sybase</td>
</tr>
<tr>
<td>DB_UNAME</td>
<td>Database user account name for the domain configuration repository.</td>
</tr>
<tr>
<td>DB_PASSWD</td>
<td>Password for the database user account.</td>
</tr>
<tr>
<td>DB2_TABLESPACE</td>
<td>For IBM DB2 only. Name of the tablespace in which to create the tables. If this parameter is empty, the installer creates the tables in the default tablespace. In a multi-partition database, the tablespace page size must be 32 K.</td>
</tr>
<tr>
<td>SQLSERVER_SCHEMA_NAME</td>
<td>For Microsoft SQL Server. Name of the schema that will contain domain configuration tables. If this parameter is empty, the installer creates the tables in the default schema.</td>
</tr>
<tr>
<td>TRUSTED_CONNECTION</td>
<td>For Microsoft SQL Server. Indicates whether to connect to Microsoft SQL Server through a trusted connection. If this parameter is empty, the installer uses Microsoft SQL Server authentication. Set this parameter only if you are installing on Windows.</td>
</tr>
<tr>
<td>DB_CUSTOM_STRING_SELECTION</td>
<td>Determines whether to use a JDBC URL or a custom connection string to connect to the domain configuration repository database. If the value is 0, the installer creates a JDBC URL from the database properties you provide. If the value is 1, the installer uses the custom connection string you provide.</td>
</tr>
<tr>
<td>DB_SERVICENAME</td>
<td>Required if DB_CUSTOM_STRING_SELECTION=0. Service name for Oracle and IBM DB2 databases or database name for Microsoft SQL Server.</td>
</tr>
<tr>
<td>DB_ADDRESS</td>
<td>Required if DB_CUSTOM_STRING_SELECTION=0. Host name and port number for the database instance in the format HostName:Port.</td>
</tr>
<tr>
<td>ADVANCE_JDBC_PARAM</td>
<td>You can set this parameter if DB_CUSTOM_STRING_SELECTION=0.</td>
</tr>
<tr>
<td>Parameter Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DB_CUSTOM_STRING</td>
<td>Required if DB_CUSTOM_STRING_SELECTION=1. Valid custom JDBC connection string.</td>
</tr>
<tr>
<td>DOMAIN_HOST_NAME</td>
<td>Host name of the machine that hosts the node that you are upgrading. If the machine has a single network name, use the default host name. If the machine has multiple network names, you can modify the default host name to use an alternate network name. Optionally, you can use the IP address. Note: Do not use localhost. The host name must explicitly identify the machine.</td>
</tr>
<tr>
<td>DOMAIN_PORT</td>
<td>Port number for the node that you are upgrading.</td>
</tr>
<tr>
<td>GATEWAYNODE_HOST</td>
<td>Required if you upgrade a worker node. Host name of the machine that hosts the gateway node.</td>
</tr>
<tr>
<td>GATEWAYNODE_PORT</td>
<td>Required if you upgrade a worker node. Port number for the gateway node.</td>
</tr>
<tr>
<td>CUSTOM_KEYSTORE_FILE_UPGRADE</td>
<td>Path and file name of the custom keystore file. Enter the custom keystore file if you are using a custom keystore file and you are upgrading to a different gateway node configuration. If you leave this field blank, the installer looks for the keystore file in the following directory: <code>&lt;InformaticaInstallationDir&gt;\server\tomcat\conf\</code></td>
</tr>
<tr>
<td>CUSTOM_KEYSTORE_PWD_UPGRADE</td>
<td>Plain text password for the custom keystore file. Enter the custom keystore password if you are using a custom keystore file and you are upgrading to a different gateway node configuration.</td>
</tr>
<tr>
<td>ADVANCE_PORT_CONFIG</td>
<td>Indicates whether to display the list of port numbers for the domain and node components. If the value is 0, the installer assigns default port numbers to the domain and node components. If the value is 1, you can set the port numbers for the domain and node components.</td>
</tr>
<tr>
<td>TOMCAT_PORT</td>
<td>Port number used by the Service Manager on the node. The Service Manager listens for incoming connection requests on this port. Client applications use this port to communicate with the services in the domain. This is the port that the Informatica command line programs use to communicate to the domain. This is also the port for the SQL data service JDBC/ODBC driver.</td>
</tr>
<tr>
<td>SERVER_PORT</td>
<td>You can set this parameter if ADVANCE_PORT_CONFIG=1. Port number that controls server shutdown for the domain Service Manager. The Service Manager listens for shutdown commands on this port.</td>
</tr>
<tr>
<td>AC_PORT</td>
<td>Port number used by the Administrator tool.</td>
</tr>
</tbody>
</table>
### Parameter Name | Description
---|---
AC_SHUTDWN_PORT | Port number that controls server shutdown for the Administrator tool. The Administrator tool listens for shutdown commands on this port.
FORCE_UPGRADE | For upgrades from version 8.x. You can set this option when you run the installer again after a failed upgrade. The installer starts the domain upgrade process from the beginning and overrides all previous upgrades to the domain. It also overrides any upgrade contention if other administrators are upgrading nodes in the domain at the same time.

4. On Windows, specify whether to run the Informatica service under the same user account as the account used for upgrade.

Set the following parameters:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_LOGINDETAILS</td>
<td>Indicates whether to run the Windows service under a different user account. If the value is 0, the installer configures the service to run under the current user account. If the value is 1, the installer configures the service to run under a different user account.</td>
</tr>
<tr>
<td>WIN_USER_ID</td>
<td>User account with which to run the Informatica Windows service. Use the following format: <code>DomainName\UserAccount</code> This user account must have the Act as operating system permission.</td>
</tr>
<tr>
<td>WIN_USER_PSSWD</td>
<td>Password for the user account with which to run the Informatica Windows service.</td>
</tr>
</tbody>
</table>

5. Save the properties file with the name SilentInput.properties.

### Running the Silent Installer

After you create the properties file, open a command window to start the silent upgrade.

1. Open a command window.
2. Go to the root of the server installer directory.
3. Verify that the directory contains the file SilentInput.properties with the upgrade options.
4. To start the silent upgrade process, double click the file silentinstall.bat.

The silent upgrade runs in the background. The process can take a while. The silent upgrade process is complete when the `Informatica_<Version>_Services_InstallLog.log` is created in the installation directory.

The silent upgrade fails if you incorrectly configure the properties file or if the installation directory is not accessible. If the upgrade fails, view the silent upgrade log file and correct the errors. Then run the silent installer again. The silent upgrade log file name is silentErrorLog.log. The installer creates it in the root directory on Windows and in the user home directory on UNIX.
Troubleshooting the Domain Upgrade

If the upgrade does not complete successfully, review log files to determine the cause of the failure. The upgrade log files are in the root of the directory where the new version of Informatica is installed. Review the following log file: Informatica_<Version>_Services_Upgrade.log.

If the upgrade fails, restore the domain configuration repository database from backup and run the installer again.
Before You Upgrade the Application Services

This chapter includes the following topics:

- Pre-Upgrade Tasks, 48
- Configure Informatica Environment Variables, 48
- Configure Locale Environment Variables, 49
- Clear Browser Cache, 49
- Change the Node Configuration, 50

Pre-Upgrade Tasks

Before you upgrade the application services, complete the following tasks:

1. Configure Informatica environment variables.
2. Configure locale environment variables.
3. Clear browser cache.
4. Tasks for changing the node configuration.

Configure Informatica Environment Variables

You can configure the INFA_DOMAINS_FILE and INFA_HOME environment variables to store the domain and installation location settings.

INFA_DOMAINS_FILE

The installer creates a domains.infa file in the Informatica installation directory. The domains.infa file contains the connectivity information for the gateway nodes in a domain, including the domain names, domain host names, and domain host port numbers.

Set the value of the INFA_DOMAINS_FILE variable to the path and file name of the domains.infa file.

Configure the INFA_DOMAINS_FILE variable on the machine where you install the Informatica services. On Windows, configure INFA_DOMAINS_FILE as a system variable.
INFA_HOME

Use INFA_HOME to designate the Informatica installation directory. If you modify the Informatica directory structure, you need to set the environment variable to the location of the Informatica installation directory or the directory where the installed Informatica files are located.

For example, you use a softlink in UNIX for any of the Informatica directories. To configure INFA_HOME so that any Informatica application or service can locate the other Informatica components it needs to run, set INFA_HOME to the location of the Informatica installation directory.

Configure Locale Environment Variables

Use LANG, LC_CTYPE, or LC_ALL to set the UNIX code page. Verify that the locale setting is compatible with the code page for the repository. If the locale setting is not compatible with the repository code page, you cannot create a repository service.

Different UNIX operating systems require different values for the same locale. The value for the locale variable is case sensitive.

Use the following command to verify that the value for the locale environment variable is compatible with the language settings for the machine and the type of code page you want to use for the repository:

```
locale -a
```

The command returns the languages installed on the UNIX operating system and the existing locale settings.

Locale on Linux

All UNIX operating systems except Linux have a unique value for each locale. Linux allows different values to represent the same locale. For example, "utf8," "UTF-8," "UTF8," and "utf-8" represent the same locale on a Linux machine. Informatica requires that you use a specific value for each locale on a Linux machine. Make sure that you set the LANG environment variable appropriately for all Linux machines.

Locale for Oracle Database Clients

For Oracle database clients, set NLS_LANG to the locale you want the database client and server to use with the login. A locale setting consists of the language, territory, and character set. The value of NLS_LANG depends on the configuration. For example, if the value is americanAmerica.UTF8, set the variable in a C shell with the following command:

```
setenv NLS_LANG americanAmerica.UTF8
```

Clear Browser Cache

Before you access the Administrator tool, clear the browser cache.

On Windows Internet Explorer, delete the browsing history, including temporary files, cookies, and history. On Mozilla Firefox, clear the offline storage.

If you do not clear the browser cache, the previous Administrator tool URL is not redirected to the latest URL and some menu options may not appear.
Change the Node Configuration

If you chose the option to update the node configuration, before you upgrade the application services, you must complete the following additional steps:

1. Install the database client software.
2. Configure the environment variables.
3. Verify that a graphics display server is available.
4. Update port numbers.
5. Verify the location of the node backup directory.
6. Update the keystore file name and location.

Install the Database Client Software

Based on the types of databases that the Data Integration Service will access, install the following database clients and configure connectivity on the machine where the Data Integration Service runs:

- Oracle client
- IBM DB2 Client Application Enabler (CAE)
- Microsoft SQL Client, with Microsoft OLE DB provider for Microsoft SQL Server
- Sybase Open Client (OCS)
- Teradata BTEQ client

Database Client Environment Variables

Configure database client environment variables on the machines that run the Data Integration Service. The database client path variable name and requirements depend on the UNIX platform and repository database.

After you configure the database environment variables, you can test the connection to the database from the database client.

The following table describes the database environment variables you need to set on UNIX:

<table>
<thead>
<tr>
<th>Database</th>
<th>Environment Variable Name</th>
<th>Database Utility</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle</td>
<td>ORACLE_HOME PATH</td>
<td>sqlplus</td>
<td>Set to: &lt;DatabasePath&gt; Add: &lt;DatabasePath&gt;/bin</td>
</tr>
<tr>
<td>IBM DB2</td>
<td>DB2DIR DB2INSTANCE PATH</td>
<td>db2connect</td>
<td>Set to: &lt;DatabasePath&gt; Set to: &lt;DB2InstanceName&gt; Add: &lt;DatabasePath&gt;/bin</td>
</tr>
<tr>
<td>Sybase ASE</td>
<td>SYBASE12 or SYBASE15 SYBASE_ASE SYBASE_OCS PATH</td>
<td>isql</td>
<td>Set to: &lt;DatabasePath&gt;/sybase&lt;version&gt; Set to: $(SYBASE[12</td>
</tr>
<tr>
<td>Teradata</td>
<td>PATH</td>
<td>bteq</td>
<td>Add: &lt;DatabasePath&gt;/bin</td>
</tr>
</tbody>
</table>
Configure Environment Variables

Informatica uses environment variables to store configuration information when it runs the application services and connects to the clients. Configure the environment variables to meet the Informatica requirements. Incorrectly configured environment variables can cause the Informatica domain or nodes to fail to start or can cause connection problems between the Informatica clients and the domain.

To configure environment variables on UNIX, log in with the system user account you used to install Informatica.

Library Path Environment Variables

Configure library path environment variables on the machines that run the Data Integration Service processes. The library path variable name and requirements depend on the UNIX platform and database.

Solaris and Linux

On Solaris and Linux, configure the LD_LIBRARY_PATH environment variable.

The following table describes the values that you set for the LD_LIBRARY_PATH for the different databases:

<table>
<thead>
<tr>
<th>Database</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>IBM DB2</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>Sybase ASE</td>
<td>&quot;$(SYBASE_OCS)/lib:$(SYBASE_ASE)/lib:$LD_LIBRARY_PATH&quot;</td>
</tr>
<tr>
<td>Informix</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>Teradata</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>ODBC</td>
<td>&lt;CLOSEDODBCHOME&gt;/lib</td>
</tr>
</tbody>
</table>

AIX

On AIX, configure the LIBPATH environment variable.

The following table describes the values that you set for the LIBPATH for the different databases:

<table>
<thead>
<tr>
<th>Database</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>IBM DB2</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>Sybase ASE</td>
<td>&quot;$(SYBASE_OCS)/lib:$(SYBASE_ASE)/lib:$LIBPATH&quot;</td>
</tr>
<tr>
<td>Informix</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>Teradata</td>
<td>&lt;DatabasePath&gt;/lib</td>
</tr>
<tr>
<td>ODBC</td>
<td>&lt;CLOSEDODBCHOME&gt;/lib</td>
</tr>
</tbody>
</table>
On HP-UX, configure the SHLIB_PATH environment variable.

The following table describes the values that you set for the SHLIB_PATH for the different databases:

<table>
<thead>
<tr>
<th>Database</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle</td>
<td><code>&lt;DatabasePath&gt;/lib</code></td>
</tr>
<tr>
<td>IBM DB2</td>
<td><code>&lt;DatabasePath&gt;/lib</code></td>
</tr>
<tr>
<td>Sybase ASE</td>
<td>&quot;$(SYBASE_OCS)/lib;$(SYBASE_ASE)/lib;$(SHLIBPATH)&quot;</td>
</tr>
<tr>
<td>Informix</td>
<td><code>&lt;DatabasePath&gt;/lib</code></td>
</tr>
<tr>
<td>Teradata</td>
<td><code>&lt;DatabasePath&gt;/lib</code></td>
</tr>
<tr>
<td>ODBC</td>
<td><code>&lt;CLOSEDODBCHOME&gt;/lib</code></td>
</tr>
</tbody>
</table>

Verify that a Graphics Display Server is Available

The gateway nodes on UNIX require a graphics display server to run domain reports in Informatica Administrator. If you do not have a graphics display server, you can install and configure X Virtual Frame Buffer (Xvfb). Xvfb is an X server that renders graphics to virtual memory rather than to a graphics display device.

You can download and install Xvfb for the following operating systems:

- **HP-UX.** Xvfb is part of the HP-UX operating system. Install HP-UX patches and graphical packages to run Xvfb based on when you installed or last patched the operating system. For instructions to run Xvfb on HP-UX, see the following web site:


- **AIX and Linux.** Download and install Xvfb. For instructions to run Xvfb on AIX and Linux, see the following web site:


- **Solaris.** You can download Xvfb for Solaris from the following web site:


Download and set up Xvfb for Solaris. Use the following command to start the virtual frame buffer and send graphics outputs going to display 1 to shared memory:

```
% /usr/X11R6/bin/Xvfb :1 -screen 0 1152x900x8 &
```

This sends any graphics output going to display 1 to shared memory.

Use the following command to set the current display to use the frame buffer for graphics display in a C shell:

```
% setenv DISPLAY :1.0
```

Update Port Numbers

To avoid startup failure, update port numbers for service processes and service manager shutdown.

Services can fail to start if there are port conflicts with the service process port numbers. You can configure the minimum and maximum port numbers for service processes in the Advanced Properties section of the node Properties view.
To update the service process port numbers for a node, configure the following advanced properties:

- Minimum Port Number
- Maximum Port Number

### Verify the Node Backup Directory

Verify that the backup directory for the node is accessible by the node. View the **Backup Directory** configuration in the **Advanced Properties** section of the node **Properties** view.

### Update Keystore File Name and Location

If the node uses HTTPS and you moved the keystore file or renamed the keystore file before you upgraded the domain, you can update the file name and location to match your previous configuration.

Use `infasetup UpdateGatewayNode` or `UpdateWorkerNode` to update the keystore file name and location.

### Configure PowerExchange Adapters

If your previous installation included PowerExchange adapters, configure the PowerExchange adapters on the machine that runs the new version of Informatica. If the PowerExchange adapter has an installer, re-install the PowerExchange adapter.
Application Service Upgrade Overview

The product and product version determines the service upgrade process.

Some service versions require a service upgrade. When you upgrade a service, you must also upgrade the dependent services.

Use the service upgrade wizard, the actions menu of each service, or command line to upgrade services. The service upgrade wizard upgrades multiple services in the appropriate order and checks for dependencies. If you use the command line to upgrade services, you must upgrade services in the correct order and verify that you upgrade dependent services.

Service Upgrade for Data Services 9.5.0

Before you upgrade services, verify that the services are enabled. You must upgrade the Model Repository Service before you upgrade Data Integration Service.

A user with the Administrator role on the domain, the Model Repository Service, and the Data Integration Service can upgrade services.

To upgrade services, upgrade the following object types:

- Model Repository Service.
- Data Integration Service.
- If Data Services 9.0.1 has the profiling option, upgrade the Profiling Service Module for Data Integration Service.

Service Upgrade Wizard

Use the service upgrade wizard to upgrade services.
The service upgrade wizard provides the following options:

- Upgrade multiple services.
- Enable services before the upgrade.
- Display upgraded services in a list along with services that require an upgrade.
- Save the current or previous upgrade report.
- Automatically restart the services after they have been upgraded.

You can access the service upgrade wizard from the Manage menu in the header area.

**Upgrade Report**

The upgrade report contains the upgrade start time, upgrade end time, upgrade status, and upgrade processing details. The Services Upgrade Wizard generates the upgrade report.

To save the upgrade report, choose one of the following options:

- **Save Report**
  
  The Save Report option appears on step 4 of the service upgrade wizard.

- **Save Previous Report**
  
  The second time you run the service upgrade wizard, the Save Previous Report option appears on step 1 of the service upgrade wizard. If you did not save the upgrade report after upgrading services, you can select this option to view or save the previous upgrade report.

**Running the Service Upgrade Wizard**

Use the service upgrade wizard to upgrade services.

1. In the Informatica Administrator header area click Manage > Upgrade.
2. Select the objects to upgrade.
3. Optionally, specify if you want to Automatically recycle services after upgrade.
   
   If you choose to automatically recycle services after upgrade, the upgrade wizard restarts the services after they have been upgraded.
4. Click Next.
5. If dependency errors exist, the Dependency Errors dialog box appears. Review the dependency errors and click OK. Then, resolve dependency errors and click Next.
6. Enter the repository login information. Optionally, choose to use the same login information for all repositories.
7. Click Next.
   
   The service upgrade wizard upgrades each service and displays the status and processing details.
8. When the upgrade completes, the Summary section displays the list of services and their upgrade status. Click each service to view the upgrade details in the Service Details section.
9. Optionally, click Save Report to save the upgrade details to a file.
   
   If you choose not to save the report, you can click Save Previous Report the next time you launch the service upgrade wizard.
10. Click Close.
11. If you did not choose to automatically recycle services after upgrade, restart upgraded services.
CHAPTER 6

Informatica Client Upgrade

This chapter includes the following topics:

- Informatica Client Upgrade Overview, 56
- Informatica Client Upgrade Options, 57
- Upgrading in Graphical Mode, 57
- Upgrading in Silent Mode, 58

Informatica Client Upgrade Overview

Use the client installer to upgrade a previous version of the Informatica client tools. The Informatica client tools are installed on the installation directory you specify. The client installer configures the newly installed client tools with the same settings as the previous version. The client installer does not modify the files of the previous version of the client tools.

Complete the pre-upgrade tasks before you start the upgrade. Run the installer on all machines that host previous versions of the Informatica client tools that you want to upgrade. You can upgrade the Informatica clients in graphical or silent mode.

When you run the client installer, select the Informatica client tool to upgrade.

For Data Services, you can upgrade Informatica Developer. The Developer tool is a client application that you use to create and run mappings, data objects, and virtual databases. Objects created in the Developer tool are stored in a Model repository and are run by a Data Integration Service.

By default, the when you upgrade Informatica Developer, the following components are also upgraded:

- JDBC and ODBC drivers to connect to SQL data services.
- DataDirect ODBC drivers
- Java Runtime Environment libraries

You can perform the upgrade from a DVD or from the root of the directory where you download the installation files.

On Windows, the length of the entire installation directory path, including the zip file name, must be 60 characters or less. Verify that the zip utility version is compatible with the Windows operating system version. When you unzip the file, verify that the zip utility also extracts empty folders.

On UNIX, use native tar or GNU tar to extract the installer files. The user that runs the installer must have read and write permissions on the installer files directory and execute permissions on install.sh.
Informatica Client Upgrade Options

You can upgrade the Informatica client tools in one of the following ways:

- Upgrade in Graphical Mode. Upgrades the Informatica client tools in graphical mode. The installer guides you through the upgrade process.
- Upgrade in Silent Mode. Upgrades the Informatica client tools using a properties file that contains the upgrade options.

Upgrading in Graphical Mode

If you encounter problems when you run the install.bat file from the root directory, run the following file:

`<InformaticaInstallationDir>/client/install.exe`

1. Close all applications.
2. Run install.bat from the root directory.
3. Select Install or Upgrade Informatica and click Start.
4. On the Installation Type page, select Upgrade to Informatica 9.5.1 Clients and click Next.
5. On the Upgrade Pre-Requisites page, verify the system requirements before you continue the installation and click Next.
6. On the Select Client Tool Selection page, select the Informatica client you want to upgrade.
   You can upgrade the following Informatica client applications:
   - Informatica Developer
   - PowerCenter Client
   - Data Transformation
   If you have Data Transformation 9.1.0 installed, upgrading Informatica Developer also upgrades Data Transformation Studio. If you do not have Data Transformation installed, upgrading Informatica Developer installs Data Transformation Studio.
7. Click Next.
8. On the Select Directory page, enter the following directories:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory of the Informatica client to upgrade</td>
<td>Directory that contains the previous version of the Informatica client tool that you want to upgrade.</td>
</tr>
</tbody>
</table>
   | Directory for the Informatica 9.5.1 client tools | Directory in which to install the Informatica 9.5.1 client tools. Enter the absolute path for the installation directory. The installation directory must be on the current machine. The directory names in the path must not contain spaces or the following special characters: @\#%(){}.:"

9. Click Next.
10. On the Pre-Installation Summary page, review the installation information and click Install.
    The installer copies the Informatica client files to the installation directory.
11. On the Post-installation Summary page, verify whether the upgrade completed successfully and click Done.
You can view the installation log files to get more information about the upgrade tasks performed by the installer.

### Upgrading in Silent Mode

To upgrade the Informatica client tools without user interaction, upgrade in silent mode. Use a properties file to specify the upgrade options. The installer reads the file to determine the upgrade options. You can use silent mode upgrade to upgrade the Informatica client tools on multiple machines on the network or to standardize the upgrade process across machines.

Copy the Informatica installation files to the hard disk on the machine that hosts the Informatica client you plan to upgrade.

To upgrade in silent mode, complete the following tasks:

1. Create the upgrade properties file and specify the upgrade options.
2. Run the installer with the upgrade properties file.

### Creating the Properties File

Informatica provides a sample properties file that includes the upgrade parameters that are required by the installer. You can customize the sample properties file to specify the options for your upgrade.

The sample properties file is named SilentInput.properties and is located in the root of the client installer directory.

1. Go to the root of the directory that contains the client installation files.
2. Locate the file named SilentInput.properties.
   - Back up the file before you modify it.
3. Use a text editor to open the file and modify the values of the upgrade parameters.

   The following table describes the upgrade parameters you can modify:

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTALL_TYPE</td>
<td>Indicates whether to install or upgrade the Informatica client tools. To upgrade from a previous version of Informatica, set the value to 1.</td>
</tr>
<tr>
<td>UPG_BACKUP_DIR</td>
<td>Directory of the previous version of the Informatica tools that you want to upgrade.</td>
</tr>
<tr>
<td>USER_INSTALL_DIR</td>
<td>Directory in which to install the new version of the Informatica client tools.</td>
</tr>
<tr>
<td>DXT_COMP</td>
<td>Indicates whether to install Informatica Developer. If the value is 1, the Developer tool will be installed. If the value is 0, the Developer tool will not be installed. Default is 1.</td>
</tr>
<tr>
<td>CLIENT_COMP</td>
<td>Indicates whether to install the PowerCenter Client. If the value is 1, the PowerCenter Client will be installed. If the value is 0, the PowerCenter Client will not be installed. Default is 1.</td>
</tr>
<tr>
<td>DT_COMP</td>
<td>Indicates whether to install Data Transformation Studio.</td>
</tr>
<tr>
<td>Property Name</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>DXT_COMP</td>
<td>If the value is 1, Data Transformation Studio will be installed. If the value is 0, Data Transformation Studio will not be installed. If DXT_COMP=1, set this parameter to 1.</td>
</tr>
<tr>
<td>NEW_ECLIPSE_SELECTION</td>
<td>You can set this parameter if DT_COMP=1. Indicates whether to install the copy of Eclipse that is bundled with the installer or use an Eclipse development environment that is already installed on your machine. If the value is 0, the installer uses the Eclipse development environment that is already installed on your machine. Set the ECLIPSE_LOCATION property. If the value is 1, the setup installs the copy of Eclipse that is bundled with the installer. Default is 1.</td>
</tr>
<tr>
<td>ECLIPSE_LOCATION</td>
<td>Required if NEW_ECLIPSE_SELECTION=0. Absolute path of the existing eclipse.exe file.</td>
</tr>
</tbody>
</table>

4. Save the properties file.

**Running the Silent Installer**

After you create the properties file, open a command window to start the silent upgrade.

1. Open a command window.
2. Go to root of the client installer directory.
3. Verify that the directory contains the file SilentInput.properties with the upgrade options.
4. To start the silent upgrade process, double click the file silentinstall.bat.

The silent upgrade runs in the background. The process can take a while. The silent upgrade process is complete when the Informatica_<Version>_Client_InstallLog.log is created in the installation directory.

The silent upgrade fails if you incorrectly configure the properties file or if the installation directory is not accessible. If the upgrade fails, view the installation log files and correct the errors. Then run the silent installer again.
CHAPTER 7

After You Upgrade

This chapter includes the following topics:
- Informatica Domain, 60
- Data Integration Service, 61
- Analyst Service, 61
- Upgrade the Informatica Drivers for SQL Data Services, 62

Informatica Domain

After you upgrade, complete the post-upgrade tasks for the domain.

Configure LDAP Connectivity

If the domain uses LDAP authentication, update the LDAP configuration after you upgrade.

The default maximum size for user import is set to 1000. Previously, the default value was set to 0, which indicated that there was no maximum value.

When you upgrade, all users are imported into the domain. However, all users over 1,000 will be dropped in reverse alphabetic order the next time the Service Manager synchronizes with the LDAP service directory.

To avoid dropping users, reset the maximum size in the LDAP connectivity configuration.

Update the Log Events Directory

When you upgrade the domain, the log events directory points to the location you specified in the previous version. When you upgrade the domain with changes to the node configuration, the log events directory points to the `isp/logs` directory in the new installation directory.

To use a different directory for the logs, update the Log Directory Path property for the domain in the Administrator tool. You can also use `infasetup updateGatewayNode` to update the directory. For example, you can configure the log events directory as the `server/infra_shared/logs` directory in the new installation directory.

Update ODBC Data Sources

The Informatica installation includes DataDirect ODBC drivers. Re-create each ODBC data source to use the new drivers.
Data Integration Service

After you upgrade, complete the post-upgrade tasks for each Data Integration Service.

Update the Profiling Warehouse

If the profiling warehouse is in an IBM DB2 9.1 database, run the DB2 `REORGCHK` command to optimize database operations. The `REORGCHK` command generates the database statistics used by the DB2 optimizer in queries and updates.

Use the following command:

```
REORGCHK UPDATE STATISTICS on SCHEMA <SchemaName>
```

Reset the HTTP Proxy Server Password

If the Data Integration Service runs Web Service Consumer transformations and is configured to use an HTTP proxy server with authentication, reset the HTTP proxy server password.

If you do not reset the password, then the Data Integration Service cannot successfully process Web Service Consumer transformations.

Reset the HTTP Proxy Server Password for the Data Integration Service in the Administrator tool.

Analyst Service

After you upgrade, complete the post-upgrade tasks for each Analyst Service.

Verify Directories and Files

If you have an Analyst Service in your Informatica domain, you must verify the accuracy of the flat file cache directory and keystore file location, as the installer does not update these locations.

If flat file cache or keystore locations point to the previous Informatica installation directory structure, copy the files to the new Informatica installation directory. If the files are located outside the Informatica installation directory structure, verify that the machine that runs Informatica can access the files.

To verify the location of the flat file cache, view **Flat File Cache Location** in the **Data Integration Service Option** section of the Analyst Service.

To verify the location of the keystore, view **Keystore File** in the **Analyst Security Options** section of the Analyst Service **Processes** view.

Restart the Analyst Service

To access the Analyst tool after you upgrade, restart the Analyst Service. Before you restart the Analyst Service, complete the upgrade and post-upgrade steps for the Model Repository Service and Data Integration Service.

Verify that the following tasks are complete before you restart the Analyst Service:

- Upgrade the Model Repository Service
- Upgrade the Data Integration Service
Assign Privileges
If you have an Analyst Service in your Informatica domain, grant the Access Mapping Specifications and Load Mapping Specification Results privileges to users.

Upgrade the Informatica Drivers for SQL Data Services

Upgrade the Informatica JDBC or ODBC drivers for SQL data services.
Upgrade the Informatica ODBC or JDBC driver on the machine from which you connect to the SQL data service.
To upgrade the driver, run the Informatica JDBC/ODBC driver installation program and select the upgrade option.
Upgrade Checklist

This appendix includes the following topics:
- Upgrade Checklist Overview, 63
- Before You Upgrade the Domain and Server Files, 63
- Domain and Server Files Upgrade, 64
- Before You Upgrade the Application Services, 64
- Application Service Upgrade, 65
- Informatica Client Upgrade, 65
- After You Upgrade, 65

Upgrade Checklist Overview

The upgrade checklist summarizes the tasks that you must perform to complete an upgrade. If you upgrade the Informatica product on more than one machine, complete the first upgrade using the detailed instructions in this guide. You can use this checklist to perform subsequent upgrades.

Before You Upgrade the Domain and Server Files

Before you upgrade the domain and server files, complete the following pre-upgrade tasks:

1. Review the operating system specific requirements.
   Review the prerequisites and environment variable configuration.


3. Prepare the domain.
   Back up the domain and verify database user account permissions.

4. Prepare the Model repository.
   Back up the Model repository, and verify the database user account permissions, and verify the maximum heap size setting.

5. Prepare the profiling warehouse.
   Back up the profiling warehouse and verify database user account permissions.

6. Prepare the Staging database.
   Back up the staging database.
7. Shut down the domain.
   You must shut down the domain before you upgrade it. To shut down the domain, stop the Informatica service process on each node in the domain.

8. Prepare to change the node configuration.
   Complete the additional pre-upgrade tasks if you choose to change the node configuration.
   a. Review the operating system specific requirements.
   b. Copy the installation directory.
   c. Verify the keystore file name and location.

**RELATED TOPICS:**
* “Before You Upgrade the Domain and Server Files” on page 5

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**Domain and Server Files Upgrade**

Use the server installer to upgrade the domain and server files. The server installer provides a domain upgrade wizard to guide you through the upgrade process.

The upgrade wizard installs the Informatica files in the installation directory you specify. It does not modify the files in the directory of the previous version.

**RELATED TOPICS:**
* “Domain and Server Files Upgrade” on page 24

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**Before You Upgrade the Application Services**

Before you upgrade application services, complete the following pre-upgrade tasks:

1. Configure Informatica environment variables.
2. Configure locale environment variables.
   Verify that the locale setting is compatible with the code page for the repository.
3. Clear browser cache.
4. If you chose the option to update the node configuration, complete the following steps:
   a. Install the database client software.
   b. Configure the environment variables.
   c. Verify that a graphics display server is available.
   d. Update port numbers.
   e. Verify the location of the node backup directory.
   f. Update the keystore file name and location.
   g. Configure PowerExchange Adapters.
Application Service Upgrade

Some service versions require a service upgrade. You can use the service upgrade wizard to upgrade services.

To upgrade application services for Data Services 9.5.0, complete the following upgrade tasks:

1. Upgrade each Model Repository Service.
2. Upgrade each Data Integration Service.
3. Upgrade the Profiling Service Module for each Data Integration Service if Data Services 9.5.0 has the profiling option.

Informatica Client Upgrade

Use the client installer to upgrade the client tools. The client tools are installed in the installation directory you specify. The client installer configures the newly installed client tools with the same settings as the previous version.

After You Upgrade

After you upgrade the domain, server files, application services, and client files, complete the following post-upgrade tasks:

1. Configure LDAP connectivity.
   The default maximum size for user import is set to 1000. Increase the value if you have more than 1000 users.
2. Update ODBC data sources.
   The Informatica installation includes DataDirect 6.0 SP3 ODBC drivers. Re-create each ODBC data source to use the new drivers.
3. Verify that the log events directory is correct.
   To use a different directory for the logs, update the Log Directory Path property for the domain.
4. Complete the following post-upgrade tasks for each Data Integration Service:
   a. Update the profiling warehouse.
b. Reset the HTTP proxy server password.
   If the Data Integration Service runs Web Service Consumer transformations and is configured to use an
   HTTP proxy server with authentication, reset the HTTP proxy server password.

5. Complete the following post-upgrade tasks for each Analyst Service:
   a. Verify directories and files.
      Verify the locations of the flat file cache directory and keystore file directory.
      The installer does not update these locations during upgrade.
   b. Restart the Analyst Service.
      Before you restart the Analyst Service, complete the upgrade and post-upgrade steps for the Model
      Repository Service and Data Integration Service.
   c. Assign privileges.
      If you have an Analyst Service in your Informatica domain, grant the Access Mapping Specifications and
      Load Mapping Specification Results privileges to users.

6. Upgrade the Informatica ODBC or JDBC driver on each machine from which you connect to the SQL data
service.

**RELATED TOPICS:**
* “After You Upgrade” on page 60
INDEX

A
AIX
configuring X Virtual Frame Buffer (Xvfb) 52

d
database client
configuring 50
environment variables 50
install for Informatica client tools 50
databases
testing connections 50
dbs2 connect
testing database connection 50
disk space requirements
installation requirements 6
DISPLAY
environment variables 13
Domain Activity Reporting
setting up on UNIX 52

E
environment variables
database client 50
DISPLAY 9
installation 7, 13
library path 51
UNIX database client 50

G
graphical mode
installation requirements 9

H
HP-UX
configuring X Virtual Frame Buffer (Xvfb) 52

I
IATEMPDIR
environment variables 7, 13
installation requirements
disk space 6
environment variables 7, 13
minimum system requirements 6
X Window Server 9

isql
testing database connection 50

J
JRE_HOME
environment variables 7, 13

L
LANG
locale environment variables 7, 13
LC_ALL
locale environment variables 7, 13
library path
environment variables 7
Linux
configuring X Virtual Frame Buffer (Xvfb) 52
database client environment variables 50
library paths 51

P
PATH
environment variables 7

S
Service Upgrade Wizard
upgrading services 55
services
Service Upgrade Wizard 55
Solaris
configuring X Virtual Frame Buffer (Xvfb) 52
sqlplus
testing database connection 50
system requirements
minimum installation requirements 6

U
uninstalling
before upgrade or migration 17
Data Transformation 16
UNIX
database client environment variables 50
database client variables 50
library paths 51
user account 23
upgrading
Service Upgrade Wizard 55
X

X Virtual Frame Buffer (Xvfb)
installing on UNIX 52