

Informix Product Family
Informix
Version 12.10

*IBM Informix Installation Guide
for Windows*



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Version 12.10

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Note

Before using this information and the product it supports, read the information in "Notices" on page B-1.

Edition

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Introduction

This introduction provides an overview of IBM® Informix® products and of this publication as well as the conventions that it uses.

About this publication

This guide explains how to install, configure, and initialize an Informix server on a computer running a Windows operating system. The documentation assumes that you are familiar with the operating procedures of your computer and with your operating system. For information about your operating system, see your Microsoft Windows documentation.

The following additional products can be installed from the IBM Informix installation media:

- IBM Informix BladeManager
- IBM Informix DataBlade® Developers Kit (DBDK)
- IBM Informix ClusterIT
- IBM Informix Connect
- IBM Informix Client Software Development Kit (Client SDK)
- IBM Informix JDBC Driver
- The IBM Informix ODBC Driver can be installed as part of Client SDK.
- IBM Data Server Driver Package

For information about installing Client SDK and related programs, see the *IBM Informix Client Products Installation Guide*.

Types of users

This publication is for database administrators (DBAs) who install IBM Informix products. This guide assumes that you are familiar with the operating procedures of your computer and with your operating system. For information about your operating system, see your Microsoft Windows documentation.

Example code conventions

Examples of SQL code occur throughout this publication. Except as noted, the code is not specific to any single IBM Informix application development tool.

If only SQL statements are listed in the example, they are not delimited by semicolons. For instance, you might see the code in the following example:

```
CONNECT TO stores_demo
...

DELETE FROM customer
  WHERE customer_num = 121
...

COMMIT WORK
DISCONNECT CURRENT
```

To use this SQL code for a specific product, you must apply the syntax rules for that product. For example, if you are using an SQL API, you must use EXEC SQL at the start of each statement and a semicolon (or other appropriate delimiter) at the end of the statement. If you are using DB–Access, you must delimit multiple statements with semicolons.

Tip: Ellipsis points in a code example indicate that more code would be added in a full application, but it is not necessary to show it to describe the concept being discussed.

For detailed directions on using SQL statements for a particular application development tool or SQL API, see the documentation for your product.

Additional documentation

Documentation about this release of IBM Informix products is available in various formats.

You can access Informix technical information such as information centers, technotes, white papers, and IBM Redbooks® publications online at <http://www.ibm.com/software/data/sw-library/>.

Compliance with industry standards

IBM Informix products are compliant with various standards.

IBM Informix SQL-based products are fully compliant with SQL-92 Entry Level (published as ANSI X3.135-1992), which is identical to ISO 9075:1992. In addition, many features of IBM Informix database servers comply with the SQL-92 Intermediate and Full Level and X/Open SQL Common Applications Environment (CAE) standards.

The IBM Informix Geodetic DataBlade Module supports a subset of the data types from the *Spatial Data Transfer Standard (SDTS)—Federal Information Processing Standard 173*, as referenced by the document *Content Standard for Geospatial Metadata*, Federal Geographic Data Committee, June 8, 1994 (FGDC Metadata Standard).

Syntax diagrams

Syntax diagrams use special components to describe the syntax for statements and commands.

Table 1. Syntax Diagram Components







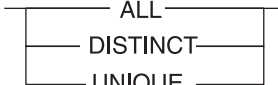
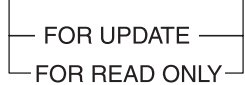
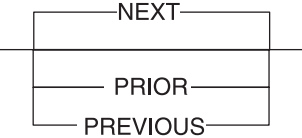
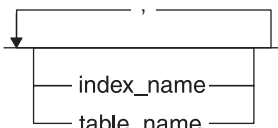

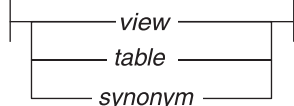
Component represented in PDF	Component represented in HTML	Meaning
	>>-----	Statement begins.
	----->	Statement continues on next line.
	>-----	Statement continues from previous line.
	-----><	Statement ends.

Table 1. Syntax Diagram Components (continued)

Component represented in PDF	Component represented in HTML	Meaning
	-----SELECT-----	Required item.
	---+-----+--- '-----LOCAL-----'	Optional item.
	---+-----+--- +--DISTINCT-----+ '---UNIQUE-----'	Required item with choice. Only one item must be present.
	---+-----+--- +--FOR UPDATE-----+ '--FOR READ ONLY--'	Optional items with choice are shown below the main line, one of which you might specify.
	.---NEXT-----. ---+-----+--- +---PRIOR-----+ '---PREVIOUS-----'	The values below the main line are optional, one of which you might specify. If you do not specify an item, the value above the line is used by default.
	.----- v----- ---+-----+--- +---index_name---+ '---table_name---	Optional items. Several items are allowed; a comma must precede each repetition.
	>>- Table Reference -><	Reference to a syntax segment.
Table Reference 	Table Reference ---+-----+--- +-----view-----+ +-----table-----+ '-----synonym-----'	Syntax segment.

How to read a command-line syntax diagram

Command-line syntax diagrams use similar elements to those of other syntax diagrams.

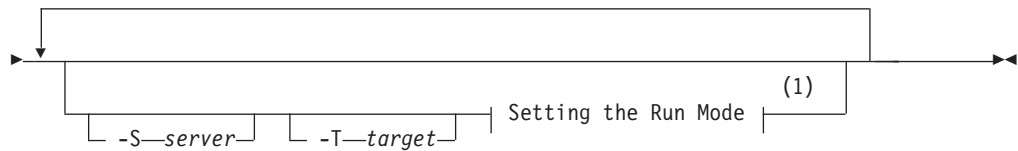
Some of the elements are listed in the table in Syntax Diagrams.

Creating a no-conversion job

```

>> onpladm create job—job— [—p—project—] —n— -d—device— -D—database—>
>> -t—table—>

```

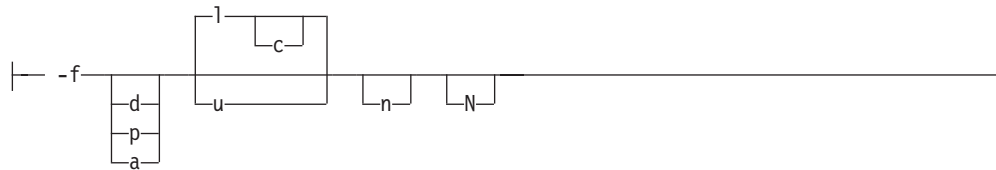


Notes:

- 1 See page Z-1

This diagram has a segment named “Setting the Run Mode,” which according to the diagram footnote is on page Z-1. If this was an actual cross-reference, you would find this segment on the first page of Appendix Z. Instead, this segment is shown in the following segment diagram. Notice that the diagram uses segment start and end components.

Setting the run mode:



To see how to construct a command correctly, start at the upper left of the main diagram. Follow the diagram to the right, including the elements that you want. The elements in this diagram are case-sensitive because they illustrate utility syntax. Other types of syntax, such as SQL, are not case-sensitive.

The Creating a No-Conversion Job diagram illustrates the following steps:

1. Type **onpladm create job** and then the name of the job.
2. Optionally, type **-p** and then the name of the project.
3. Type the following required elements:
 - **-n**
 - **-d** and the name of the device
 - **-D** and the name of the database
 - **-t** and the name of the table
4. Optionally, you can choose one or more of the following elements and repeat them an arbitrary number of times:
 - **-S** and the server name
 - **-T** and the target server name
 - The run mode. To set the run mode, follow the Setting the Run Mode segment diagram to type **-f**, optionally type **d**, **p**, or **a**, and then optionally type **l** or **u**.
5. Follow the diagram to the terminator.

Keywords and punctuation

Keywords are words reserved for statements and all commands except system-level commands.

When a keyword appears in a syntax diagram, it is shown in uppercase letters. When you use a keyword in a command, you can write it in uppercase or lowercase letters, but you must spell the keyword exactly as it appears in the syntax diagram.

You must also use any punctuation in your statements and commands exactly as shown in the syntax diagrams.

Identifiers and names

Variables serve as placeholders for identifiers and names in the syntax diagrams and examples.

You can replace a variable with an arbitrary name, identifier, or literal, depending on the context. Variables are also used to represent complex syntax elements that are expanded in additional syntax diagrams. When a variable appears in a syntax diagram, an example, or text, it is shown in *lowercase italic*.

The following syntax diagram uses variables to illustrate the general form of a simple SELECT statement.

►►—SELECT—*column_name*—FROM—*table_name*—◄◄

When you write a SELECT statement of this form, you replace the variables *column_name* and *table_name* with the name of a specific column and table.

How to provide documentation feedback

You are encouraged to send your comments about IBM Informix user documentation.

Use one of the following methods:

- Send email to docinf@us.ibm.com.
- In the Informix information center, which is available online at <http://www.ibm.com/software/data/sw-library/>, open the topic that you want to comment on. Click the feedback link at the bottom of the page, fill out the form, and submit your feedback.
- Add comments to topics directly in the information center and read comments that were added by other users. Share information about the product documentation, participate in discussions with other users, rate topics, and more!

Feedback from all methods is monitored by the team that maintains the user documentation. The feedback methods are reserved for reporting errors and omissions in the documentation. For immediate help with a technical problem, contact IBM Technical Support at <http://www.ibm.com/planetwide/>.

We appreciate your suggestions.

Chapter 1. Preparing to install Informix and client products on Windows

Read the following information and complete the tasks appropriate for your installation environment.

Online notes

See the release notes, documentation notes, and machine notes in the Release Information subtopic under the Product Overview topic for useful topics and links about an IBM Informix product or fix pack. Also review the online notes about the known and fixed defects for the product or fix pack.

All these notes are in the Information Center at <http://pic.dhe.ibm.com/infocenter/informix/v121/index.jsp>.

Verify system requirements

See the IBM Informix machine notes for a list of supported Windows operating systems on which you can install the products.

Important: The following requirements might be lower for your system, depending on the operating system and environment.

A typical installation of the IBM Informix software bundle requires approximately 750 MB of disk space. Some installation choices require additional disk space. The installation application informs you of the total disk space required by your setup before you copy the binary files to your host computer.

An installation requires approximately 1 GB RAM.

Ensure that you have 1 GB free space available in your temporary directory before installation. This is to allow the extraction of the installation media and for running the installation program. This location can be altered by setting the IATEMPDIR environment variable to a location that contains sufficient storage prior to invoking the installation program.

32-bit installation media on 64-bit Windows computers

If you want to use the 32-bit installation media on a 64-bit Windows computer, the Windows 32 on Windows 64 bit compatibility folder (usually %windir%\SysWOW64) must occur in the path environment variable in front of the native 64-bit folder (usually %windir%\system32) before installation is started. Failure to meet this prerequisite can result in an aborted installation because of a missing prerequisite.

Following is the suggested installation method:

1. Run a command prompt as an Administrator.
2. Add the compatibility folder to the path. For example, if the Windows on Windows compatibility folder is in %windir%\SysWOW64, issue the following command:

```
set path=%windir%\syswow64;%path%
```

3. Open the `ids_install.exe` file from this command prompt to start the installation application instead of clicking the executable file through Windows Explorer or by using another method to open the installation executable file.

To complete the installation, see “Installing with the GUI typical setup” on page 2-1 or “Installing with the GUI custom setup” on page 2-2.

Verify Administrators group membership

Verify that you are logged in as a member of the Windows Administrators group.

For information about how to create groups and add users to groups, see your Windows documentation.

Multiple installations of the Informix server on one computer

You can complete multiple installations of the Informix 12.10 database server on the same computer. Each Informix installation on the host computer can run with its own installation setup, including unique role separation settings.

Copies of the same version

You can install multiple copies of the same version of the Informix server on one Windows operating system, provided that each installation is placed in a different directory. A copy refers to an installation in a different location from any other installation. The benefits of doing this include:

- The ability to test new features before using them in a production database
- The ability to have both 32-bit and 64-bit versions on the same computer

Each installation adds a corresponding program group on the **Start > Programs** menu.

The first installation on a computer, by default, does not have an installation number appended to the program group name. When you install additional copies of the product on the same computer, a number is appended to the program group name. The first copy (that is, the second installation of the product on the computer) has 1 appended at the end of the program group entry, and the number of each subsequent copy that you install increases by 1. For example, the installation number of the third copy is 2 and the installation number of the next copy is 3.

You cannot install copies of IBM Informix Client Software Development Kit or IBM Informix Connect on a computer that already has an installation of one of these client products.

Choose your installation setup

Typical setup installs all Informix products on the installation media, with all features, and requires minimal user input. Custom setup lets you select specific products and features to exclude from the installation to minimize the footprint (disk size) and provides options to install the Informix server with more advanced security and configuration features.

Installation application setup types

The installation application has two setup options:

Typical installation

Typical setup is recommended for most database server environments, but the installation requires more disk space and memory than an installation created using custom setup.

Custom installation

Custom setup lets you select products and features to exclude from the installation. Some features are mutually dependent, and must be installed with one another. The installation application enforces these dependencies.

In addition, custom setup lets you select whether to create a database server instance automatically after installation. If you create an instance in custom installation, you have the option to set specific configuration parameters or to let the installation application set them automatically.

You must select custom setup to complete a domain installation or to enable role separation.

You can run the installation application on Windows in either of the following modes:

- Graphical user interface (GUI).
- Silent installation. You can perform a *silent installation*, an installation method that requires no user interaction with the installation application after you start it. Silent installation is useful when you plan to install Informix or related products on multiple computers. You must have a complete *response file*, which indicates how you want the installation to be configured, before you can perform a silent installation.

Which setup type you select depends on your system architecture, your technical expertise, and the requirements of your implementation.

Silent installation

If you expect to replicate your installation configuration with silent installation, read “Performing a silent installation of Informix and client products” on page 2-4 first.

Installing database server to run as local system account

To install the Informix database server as a local system account on Windows, you must select a custom installation and complete the administrative user configuration accordingly. With the option to run the Informix service as local system, the database server is started using the Windows local system account, instead of user **informix**.

Related tasks:

“Installing with the GUI typical setup” on page 2-1

“Installing with the GUI custom setup” on page 2-2

“Performing a silent installation of Informix and client products” on page 2-4

Plan role separation

Role separation provides increased database security because the database server splits administrative tasks into mutually exclusive roles.

If you do not enable role separation, the **Informix-Admin** group performs all administrative tasks. For detailed information about the role separation feature, see the *IBM Informix Security Guide*.

Important: You must select custom installation setup to enable role separation. You cannot turn off role separation after you enable it. To remove role separation from your system, you must use the uninstaller to remove all database instances and related files. After the uninstallation, reinstall the database server without role separation.

If you enable role separation during installation, you are prompted to create groups and users and add the users to the corresponding groups.

Table 1-1. Role separation

Default group name	Role category	Role definition
Informix-Admin	General Database Administration	Performs general administrative tasks, such as archiving and restoring data, monitoring use and performance, and tuning the system.
ix_dbssso	Database System Security Officer	Maintains the security of the database server. Functions of this role include audit adjustment and changing security characteristics of storage objects. Creation of this user role requires selection of a password during installation.
ix_aao	Auditing Analysis Officer	Audits the records of specific types of database activities. If someone attempts to circumvent or corrupt the security mechanism of the database, these actions can be traced. Creation of this user role requires selection of a password during installation.
ix_users	Database Users	Accesses the database to perform end-user tasks. Only users who are designated as members of the ix_users group can access the database.

During installation, you can replace these default users and groups with existing users or groups.

Installation directory

The drive on which the directory exists must be formatted using NTFS. You are not required to create the directory before installation. IBM Informix software refers to this installation directory as %INFORMIXDIR%, and often the **INFORMIXDIR** environment variable is set to this directory. The installation application suggests a default %INFORMIXDIR% path, which you can change by typing a different path.

For more information about the **INFORMIXDIR** environment variable, see the *IBM Informix Guide to SQL: Reference*.

User informix

User **informix** is a user account with main authority over an IBM Informix instance.

User **informix** is required for most installations because it has the unique user identifier (UID) to manage and maintain Informix instances and databases on the host server. The only exception to this requirement is when you install the Informix server as local system user.

The password for this user account must be protected. Only let trusted database and security administrators log in as user **informix**.

If you are installing Informix for the first time on your system and have not selected the local system user option, the installation program prompts you to create the **informix** user by providing a password. If user **informix** already exists on your system, the installation program prompts you to confirm the password.

Important: The database server will not start if password standards for user **informix** or any other users do not conform to local security standards.

Other IBM product installation files

The IBM Data Server Driver Package is included in the installation media for Windows.

When you use the Informix installation application on Windows, you can select to install the IBM Data Server Driver Package with either IBM Informix Client Software Development Kit (Client SDK) or IBM Informix Connect. If you select to install the driver, a separate, short installation application starts. If you do not install the driver during Informix product installation, you can install the driver separately later. The IBM Data Server Driver Package directory appears on the top level of the installation media. For more information about the driver, see the *IBM Informix Client Products Installation Guide*

Chapter 2. Installing Informix and client products on Windows

Most IBM Informix products, including the database server and the major client applications, can be installed using a packaged software bundle. You can select exactly which products you want to install. There is also a selection of supported installation methods offered to help meet the requirements of specific environments.

The executable file for the Informix software bundle installation is the `ids_install.exe` file on the installation media. If the `ids_install.exe` file does not appear on the top level of the media that you have, extract the `iif` folder maintaining the folder structure to access the executable file.

If you prefer, you can install each of the following client products individually by using a separate installation application that is available as a different executable file:

- Informix Client Software Development Kit (Client SDK)
- Informix Connect
- Informix JDBC Driver

For more information about these individual client installation applications, see the *IBM Informix Client Products Installation Guide* regarding Client SDK and Informix Connect or the *IBM Informix JDBC Driver Programmer's Guide*.

If you want to use the Informix installation application with screen reader software, perform the following actions:

1. Install the Java™ Access Bridge.
2. Start the Informix installation application from the command line with this command: `ids_install.exe LAX_VM=path_name/java.exe`

It is recommended that you use IBM Java Runtime Environment (JRE) 1.6 SR7 or later.

Installing with the GUI typical setup

Select a typical setup in the installation application GUI to install the Informix database server and client products with all features. Typical installation setup by default creates a ready-to-use database server instance that is configured for your host environment.

Verify that you have completed the appropriate "Preparing to install" tasks before performing the installation. If you are installing the 32-bit Informix server on a 64-bit computer, start the installation from the command line as documented in "Verify system requirements" on page 1-1.

To install Informix products using the GUI typical setup:

1. Open the `ids_install.exe` file.
2. Read the license agreement. You must accept it to proceed. Depending on your selections, you might have to accept more than one license agreement.
3. Accept or change the default installation directory in the Choose Install Folder window.

4. Select **Typical** in the Installation Type window.
5. Optional: If you do *not* want to set up a ready-to-use Informix instance as part of the installation, you must deactivate the **Create a server instance** option. By default, the option is checked. If you choose to install without this option, you can configure and initialize the database server manually after installation is complete to create a running Informix instance.
6. If you are prompted for an Informix administrator password, enter a password and record it in a secure location. The installation application creates the administrator account, and you must have the password to administer the Informix installation. This user account is referred to as *user **informix*** throughout Informix products and documentation.
7. Verify that the installation summary accurately reflects your installation options, and that the host computer has enough free space for the total installation. Go back to adjust the installation options as necessary.

Important: See “Configuring Informix manually” on page 3-6 to set up an Informix instance if you did not create a server instance in the installation application.

Related reference:

“Choose your installation setup” on page 1-2

“Log files” on page 2-5

Installing with the GUI custom setup

Custom setup lets you exclude some Informix products and features from the installation to reduce disk space and offers you other ways to configure installation variables for the requirements of your system.

Verify that you have completed the appropriate “Preparing to install” tasks before performing the installation. If you are installing the 32-bit Informix server on a 64-bit computer, start the installation from the command line as documented in “Verify system requirements” on page 1-1.

If you want to use a domain account to administrator Informix instances, you must run the installer as a user who has both local administrator access and domain controller administrator access.

To install Informix using GUI custom setup:

1. Open the `ids_install.exe` file.

Important: If want to record a response file with the installation configuration, you must start the installation application with a command-line script. See the documentation about performing a silent installation.

2. Read the license agreement. You must accept it to proceed. Depending on your selections, you might have to accept more than one license agreement.
3. Accept or change the default installation directory in the Choose Install Folder window.
4. Select **Custom** in the Installation Type window, and select the Informix products and features that you want to install.
 - a. Click the + character by each component node to view the products and features contained in that component.
 - b. Clear checkboxes by products and features that you do not want to install. The installation application enforces dependencies among products and

features. If you cannot configure the selected or cleared features exactly as you want, it is probably an unsupported installation configuration for your environment.

Notice that a brief description of a selected component or feature is located in the GUI window.

Important: If you want to set up clustering for failover support, select **Cluster utility**.

5. Optional: Change user authentication settings, depending on your planned usage of the installation and host environment:
 - You can change the user account that runs the Informix database server to a local system account. Running the Informix server as a local system account is useful if you are planning to embed the server in an application because this account is a service that runs as a user without a password requirement.
 - If you are installing the server as a local system account and plan to use Enterprise Replication, create the **informix** user manually.
 - If you are running the installer as a domain administrator and you want to use a domain account to administrator Informix instances, select **Domain**.
6. If you are prompted for an Informix administrator password, enter a password and record it in a secure location. The installation application creates the administrator account, and you must have the password to administer the Informix installation. This user account is referred to as *user **informix*** throughout Informix products and documentation.
7. Optional: Enable role separation for auditing procedures.

Important: If you enable role separation, you cannot turn it off after the product is installed. To remove role separation, you must uninstall the database server and reinstall it without role separation. To learn more about role separation, see “Plan role separation” on page 1-3 and click **Help** in the role separation window of the installation application.

8. Optional: If you want to set up a ready-to-use Informix instance as part of the installation, select the **Create a server instance** option. If you want the server instance to initialize at creation, click **Initialize server**. You can either accept default configuration parameters or customize configuration parameters of the instance.

Tip: Click **Help** in this window of the installation application for information about selecting a default or customized configuration and for information about the configuration parameters if you select to customize the instance.

If you do not select the **Create a server instance** option, you can configure and initialize the database server manually after installation is complete to create a running Informix instance.

9. Verify that the installation summary accurately reflects your installation options, and that the host computer has enough free space for the total installation. Go back to adjust the installation options as necessary.

Important: See “Configuring Informix manually” on page 3-6 to set up an Informix instance if you did not create a server instance in the installation application.

Related reference:

“Choose your installation setup” on page 1-2

“Log files” on page 2-5

Performing a silent installation of Informix and client products

To perform a silent installation, which is also known as an *unattended installation*, use a response file that contains information about how you want the product installed. You invoke this response file in a command-line option to perform the silent installation.

You must be logged in as an administrator on all computers where you are complete an installation.

To complete a silent installation containing your configuration of a previous installation, you must have a response file with customized settings of how you want the product or products installed. The following procedure outlines two different ways of creating the response file: recording your configuration of an interactive GUI installation or customizing the `bundle.properties` template file. The installation media contains the text-based `bundle.properties` file that can be used as a template for creating your response file.

If you know that you have a valid response file already, begin with step 3 in the following procedure.

1. Create a response file by doing one of the following:
 - Run the Informix installation script to start the installation application in GUI mode, specifying that you want to record the installation in a response file.

```
ids_install.exe -i gui -r path_name
```

Substitute *path_name* with the full path and file name of your response file, appending `.properties` at the end of the name.
 - Create a copy of the `bundle.properties` file that is on the installation media and edit the file for the installation configuration that you want.
- Important:** Do not overwrite, move, or delete the `bundle.properties` file that is shipped in the installation media. You must change the setting for product license terms agreement to "Accept" in your customized `.properties` file for it to function as a response file during silent installation.
2. Copy the response file to the computer where you want to install Informix and any bundled client programs.
3. Run the silent installation command, indicating the relative or absolute path to the response file :
 - ```
ids_install.exe -i silent -f path_name
```
4. Repeat steps 2 and 3 for each location where you want to deploy the same installation setup.

Installation log files are located in the `$INFORMIXDIR` directory.

**Related reference:**

“Choose your installation setup” on page 1-2

“Log files”

---

## Performing an inline Informix upgrade on Windows

If you have earlier versions of IBM Informix installed, you must use an upgrade path that is appropriate for your environment.

**Important:** If you plan to complete an inline upgrade where a previous version of Informix is already located, before you upgrade you must back up the database server that you are using (including the data chunks of the existing installation) and the onconfig and SQLHOSTS files. Be sure to review the *IBM Informix Migration Guide* for detailed prerequisites and instructions about the upgrade method that is appropriate for your environment.

There is no inline upgrade support for Client SDK and Informix Connect installations. To upgrade one of these client products at the same time you perform inline upgrade of the database server, uninstall the old client product installation and select the client product in the installation application.

To complete an inline upgrade of the Informix database server:

1. Save copies of the onconfig and SQLHOSTS files of the existing installation.
2. Shut down all instances of the Informix installation before installing the new version.
3. Install Informix in the \$INFORMIXDIR path of the Informix installation that you want to upgrade.

If you want to remove any features from the upgraded installation, run the uninstallation application to selectively remove the features.

---

## Log files

Installation log files can provide helpful information about a completed installation or help you identify problems about an installation attempt.

When you install Informix products, the installation application generates log files in %INFORMIXDIR%. Log files are also created if you attempt to install any of the products but the installation application does not complete successfully.

The log file %INFORMIXDIR%/IBM\_Informix\_Software\_Bundle\_InstallLog.log is created for any installation using the Informix software bundle. Log files for other installed products are created in %INFORMIXDIR%.

If the installation application fails, then the log files are placed on the Windows Desktop.

#### Related tasks:

“Installing with the GUI typical setup” on page 2-1

“Installing with the GUI custom setup” on page 2-2

“Performing a silent installation of Informix and client products” on page 2-4

---

## Cluster installations

IBM Informix supports Microsoft Cluster Server (MSCS), which enables high availability on Microsoft Windows (Windows 2003, Windows XP and Windows Vista). MSCS allows you to cluster two Windows computers as redundant components, or nodes. When a failure occurs on one node in the cluster, Windows restarts the failed applications (such as the database server) on the surviving node in the pair.

**Important:** The database server installation must include the **Cluster utility** feature with appropriate installation configuration to set up an MSCS environment. You must install the Informix software bundle as documented in “Installing the Informix server on the primary node of a cluster environment” on page 2-7.

MSCS includes the Cluster Administrator, which enables you to designate a cluster and define *resources*, resource ownership, and dependencies on other resources. A resource is a hardware component, such as a shared disk, or a software application, such as the database server, that is shared between the two nodes in a cluster.

The Cluster Administrator also enables you to define groups that specify resource dependencies, so that the Microsoft Resource Manager can move groups of dependent resources to the surviving node in the event of failover. The Microsoft Resource Manager is a program that invokes specific start, restart, stop, and monitoring functions for a resource.

**Important:** Stop Informix before shutting down the operating system during MSCS setup to avoid any data loss.

## Overview of implementing a cluster on two nodes

After you complete cluster-implementation preparation tasks, you implement a clustering environment of the database server in three steps:

1. On the primary node, install the Informix server as documented in “Installing the Informix server on the primary node of a cluster environment” on page 2-7.
2. Convert the database servers to a cluster configuration. This step is implemented with the ClusterIT utilities:
  - Use the **clusterIT\_a.exe** utility to configure Informix on the primary node for use in a cluster.
  - Copy the **cluster.ini**, **clusterit\_b.exe**, and **silent\_install\_version.ini** files from %INFORMIXDIR% of the primary node to the directory where you want to install the database server on the secondary node. These .ini files are in %INFORMIXDIR% of the primary node as a result of the Informix server installation there.
  - On the secondary node, run the **clusterIT\_b.exe** utility. The utility installs the Informix server and configures the primary node's database server instance to run with the instance on the secondary node.



## Installing the Informix server on the primary node of a cluster environment

Before you install the server, do the following:

- Decide on an %INFORMIXDIR% path that is a local disk and is the same path on both the computer with the primary node and the computer with the secondary node.
- Verify that the shared disks of the cluster can store all chunks. All chunks must be on shared disks.

After the installations on both primary and secondary nodes, it must be possible to move the disks from one node to another. While all chunks must be on shared disks, each %INFORMIXDIR% must be local to each node.

To install the Informix database server on the host computer of a primary node for the cluster environment:

1. Install the Informix server with the following configuration:
  - a. Select **Custom** setup in the installation application.
  - b. In the Product Selection window that contains the product and feature tree, select the **Cluster utility** feature of the core database server family.
  - c. Specify a domain user **informix** account.
  - d. Select the **Create a server instance** checkbox, and verify that the **Initialize server** checkbox is *not* selected.

See “Installing with the GUI custom setup” on page 2-2 for more information about custom installation.

2. Edit the onconfig file. For more information about the onconfig file, see the *IBM Informix Administrator's Reference*.
3. Put the root dbspace on a shared disk.
4. Move all shared disks to the primary node.
5. Initialize the database server. For more information, see “Database server configuration after installation” on page 3-4.
6. Create additional dbspaces, if necessary. For more information, see “Dbspace name, location, and size” on page 3-5. Additional dbspaces must be located on shared disks.

To complete the cluster setup on the primary node, see “Setting up the installation on the cluster primary node.”

## Setting up the installation on the cluster primary node

There must be an existing Informix instance on the computer that has been configured as documented in “Installing the Informix server on the primary node of a cluster environment.”

When you run the **clusterit\_a.exe** utility on the primary node, ClusterIT performs the following tasks:

- Extracts the resource .dll (ifxdb920.dll) to the WINDOWS\cluster directory
- Creates an IBM Informix resource group
- Moves all physical disks on which chunks are located to the IBM Informix group
- Creates a virtual IP address and a virtual host name
- Registers the resource type IFXDB920
- Creates the Informix cluster resource

- Sets dependencies
- Sets the Informix cluster resource to online

To set up a cluster on the primary node:

1. Run the **clusterit\_a.exe** utility.
2. In the window that opens when you start the utility, fill out the information about networking environment, machine names, and configuration for the cluster node:
  - a. In the **DBSERVERNAME to be clustered** text box, enter the name of your unclustered Informix instance.
  - b. In the **DBSERVERNAME final (when clustered)** text box, enter a name for your Informix instance after it has been converted into a cluster configuration.
  - c. In the **Physical hostname primary node** text box, enter the physical host name of the primary node.
  - d. In the **Informix password** text box, enter your password.
  - e. Enter the path information in the **Full path to the IDS directory on the Informix RDBMS CD** field.
  - f. Enter the location of the installation (the value of %INFORMIXDIR% must be located on a local disk and must be identical for both nodes).
  - g. In the **New virtual host name for the database host** text box, enter the new virtual host name.
  - h. In the **virtual IP address for the database host** text box, enter the IP address for the new virtual host.
  - i. In the **Subnetmask** text box, enter the value of the Subnetmask for the new virtual host.
  - j. Select the network you want to use for the IP address from the **Network** menu.
  - k. Select the **Number of shared disks** where you have chunks located.
  - l. Enter the name of the shared disks you use as chunk locations for Informix from the **Shared disks for database** text box. These disks are moved to the **Informix** group that will be created by the ClusterIT utility. In the event of failure, the disks you specify here will move over to the other node.
3. Click **Convert to Cluster**. After conversion, an Informix server comes back online, but it is now controlled by the Microsoft Cluster Service. The resource group **Informix** has been created.

The settings that you specified in the **clusterit\_a.exe** utility are written to the newly created %INFORMIXDIR%/cluster/clusterit.ini file.

You can check the state of the database server by running the **onstat** command.

## Installing the Informix server on the secondary node of a cluster environment

Uninstall any previous IBM Informix installations on the secondary node before implementing a new cluster installation.

Before starting this task, do the following:

- The primary node installation of the database server is configured following the “Installing the Informix server on the primary node of a cluster environment” on page 2-7 instructions.

- Copies of the `silent_install_version.ini`, `clusterit_b.exe`, and `cluster.ini` files in `%INFORMIXDIR%` on the primary node must be on the secondary node.
- Verify that the **INFORMIXDIR** environment variable is not set.
- Verify you have Administrator privileges to administer Windows operating system groups on the computer for the secondary node.
- The following task is documented for environments where user **informix** runs the database server instance and is a domain account.

When you run the `clusterit_b.exe` utility on the secondary node, the utility performs the following tasks:

- Installs on the secondary node (silent installation)
- Copies registry entries from the primary node
- Copies the configuration file from the primary node
- Makes the resource `.dll` file (`ifxdb920.dll`) available on the secondary node

To install the database server in a cluster configuration on the secondary node:

1. Copy the `silent_install_version.ini` file and the `cluster.ini` file from `%INFORMIXDIR%` of the primary node to computer for the secondary node.
2. Run the **clusterit\_b.exe** utility on the secondary node. The IBM Informix ClusterIT - secondary node window opens.
3. Fill in the text boxes:
  - a. In the **Physical hostname primary node** field, enter the physical host name of the primary node.
  - b. Enter the full path information in the **Full path to the Informix installation media** field.
  - c. Enter the **Instance number** for Informix on the secondary node. This number is the same as that of Informix on the first node.
  - d. Enter the location of the installation (the value of `%INFORMIXDIR%` must be located on a local disk and must be identical for both nodes).
  - e. Enter your **Informix** password.
  - f. In the **DBSERVERNAME final (when clustered)** text box, enter the name of the Informix instance in the cluster configuration. On this secondary node, Informix will be installed directly with this name.
  - g. Check whether to enable **Role separation**. For more information, see “Plan role separation” on page 1-3.
4. Click **Convert to Cluster**. After the ClusterIT utility finishes conversion, the Informix instance starts on the secondary node.

**Important:** The `silent_install_version.ini` and `cluster.ini` files contain your passwords for administering the Informix installation. After you have completed the clustering environment setup, edit these two `.ini` files on both the primary and secondary nodes to remove the passwords. Alternatively, you can delete the `silent_install_version.ini` file and the `cluster.ini` file.

---

## Multiple residency

You can set up multiple independent database server environments on the same computer.

Complete the following tasks to set up multiple residency.

## Plan for multiple residency

When you plan for multiple residency on a computer, consider the following factors:

- Storage space

Each database server must have its own unique storage space. You cannot use the same disk space for more than one instance of a database server. When you prepare an additional database server, you must repeat some of the planning that you did to install the first database server. For example, you must consider these questions:

- Will you use mirroring? Where will the mirrors reside?
- Where will the message log reside?
- Can you dedicate a tape drive to this database server for its logical logs?
- What kind of backups will you perform?

- Memory

Each database server has its own memory. Can your computer handle the memory usage that an additional database server requires?

## Creating a new database server instance

Before you set up multiple residency, you must install one database server as described in Chapter 2, “Installing Informix and client products on Windows,” on page 2-1. It is not necessary to install more than one copy of the database server binary files. All instances of the same version of the database server on one computer can share the same executable files.

To set up multiple residency, use the Server Instance Manager. To use the Server Instance Manager program, you must have administrative privileges on the database server. However, local administrator privileges are sufficient, even if the database server was installed for domain use.

Before you use the Server Instance Manager, verify that you are a member of the **Informix-Admin** group. For more information, see “Verify Administrators group membership” on page 1-2.

The following steps are for using the Server Instance Manager GUI. See “Server Instance Manager command-line options” for other ways you can use this utility.

To create a new database server instance:

1. Select **Start > Programs > IBM Informix > Server Instance Manager**.
2. Select the **Installation Method**, and click **Create New** to create a new instance of the database server.
3. Follow the prompts.

After you enter the required information, the Server Instance Manager installs services, records environment variables, updates the registry, and creates `onconfig` and `sqlhost` files for the new database server instance.

## Server Instance Manager command-line options

The **instmgr.exe** utility extends the ability to configure an IBM Informix instance with command-line options.

## Purpose

The **instmgr.exe** utility is a command-line version of the Server Instance Manager.

You must have administrative privileges on the database server. However, local administrator privileges are sufficient, even if the database server was installed for domain use.

The following table describes the **instmgr.exe** utility options.

Table 2-1. The **instmgr.exe** utility options

| Option                                                                                                                       | Meaning                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>-alias</b><br><i>DRDA_server_alias</i><br><b>-drdaport</b> <i>DRDA_port</i><br><b>drdasvc</b><br><i>DRDA_service_name</i> | Command line for standalone support of DRDA® in the DBMS.                                                                                                              |
| <b>-apw</b> <i>password</i>                                                                                                  | Specifies the user <b>informix</b> password for a new instance.                                                                                                        |
| <b>-c -n</b> <i>servername</i> <b>-apw</b> <i>informix_password</i>                                                          | Creates an instance of the database server.                                                                                                                            |
| <b>-rename -apw</b> <i>informix_password -n new_name old_name</i>                                                            | Rename an existing server name.                                                                                                                                        |
| <b>-s</b> <i>.ini_filename</i>                                                                                               | Initialize the specified instance in silent mode.                                                                                                                      |
| <b>-f</b> <i>.ini_filename</i>                                                                                               | Retrieve some information from a partial initialization file, and the remainder from the user.                                                                         |
| <b>-d -n</b> <i>servername</i>                                                                                               | Delete the specified instance.<br><b>Warning:</b> This removes related dbspaces and deletes the data.                                                                  |
| <b>-dall</b>                                                                                                                 | Delete all instances.<br><b>Warning:</b> This removes related dbspaces and deletes the data.                                                                           |
| <b>-uall -v</b> <i>version</i>                                                                                               | Upgrade all instances to the specified version. (Upgrading a single instance in a multi-instance environment is not supported.)                                        |
| <b>-r -v</b> <i>version -n servername</i>                                                                                    | Revert the specified instance to the specified version.                                                                                                                |
| <b>-rall -v</b> <i>version</i>                                                                                               | Revert all instances to the specified version.                                                                                                                         |
| <b>-b64</b> <i>Base64_password</i>                                                                                           | Specifies Base64-encoded password.                                                                                                                                     |
| <b>-l</b>                                                                                                                    | Indicates cluster installation.                                                                                                                                        |
| <b>-system</b>                                                                                                               | Create database server instance that runs as local system user instead of user <b>informix</b> . (Informix must be installed as local system user to use this option.) |



---

## Chapter 3. Post-installation tasks on Windows

Review the following information after installing IBM Informix.

---

### Working with the installation

After installing IBM Informix, determine how much of the database server setup the installation application has completed and what actions you must do before putting the server in production.

The installation sets up a database server that is ready to use and can run on your system automatically. But you may still want to perform some basic enhancements before you put the server in production. These tasks show you ways to control the way Informix runs on your system.

If you have completed a more advanced installation of Informix, these post-installation tasks might be required in order to work with the database server.

**Tip:** When you initialize a server, a shortcut is added to the **Start** menu. To run commands for an initialized server, click **Start > All Programs > IBM Informix > server\_name**.

The following tasks are covered in the next topics of the documentation:

- Starting the database server manually.
- Setting up the database server to start whenever Windows starts.
- Stopping the database server.

If you want to use a locale other than the default locale, which is U.S. English, use Global Language Support (GLS) to configure your installation for your locale. For more information, see the GLS Users Guide.

The DB-Access utility, which is provided with your IBM Informix database server products, includes one or more demonstration databases. Many examples in IBM Informix manuals are based on these demonstration databases, and you can use these databases to explore Informix functionality. The demonstration databases can be created at any time after installation. See *Create and work with the demonstration databases* for detailed information about installing, preparing, and working with the demonstration databases.

---

### Setup performed by the installation application

Before you begin manual post-installation tasks, it is helpful to know some of the major tasks the installation application has done.

A typical installation (and possibly a custom installation, depending on your choices during setup) performs the following actions to make the database server ready to run on Windows:

- Configured and installed the database server as a Windows service.
- Created an **informix** user account and an **Informix-Admin** administrative group. The administrative group name is different if you enabled role separation and changed the name of the **Informix-Admin** group.

- Automatically assigned the **informix** user account, under which the database server runs, to the **Informix-Admin** group and to the Windows Administrators group.
- Granted the following advanced privileges to the **informix** user account:
  - Logon as service
  - Act as part of the operating system
  - Increase quotas
  - Replace a process level token
  - Debug programs
  - Manage auditing and security log

## Informix program group

An IBM Informix program group is on the Windows Start menu after installation completes.

The database server program group is accessible through **Start > Programs**. The following table describes the program group menu.

*Table 3-1. IBM Informix program group*

| Menu item               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Documentation           | <p>Contains shortcuts to product documentation:</p> <p><b>Information Center</b><br/>A Web-based, powerful online interface containing the technical information about the IBM Informix products. Requires a connection to the Internet. If you do not have a connection to the Internet, you can find the product documentation on the installation media.</p> <p><b>Release notes</b><br/>Describes new features of IBM Informix products. This file also contains information about any changes to function from previous releases and any known problems and their workarounds. Read this file before you use the database server.</p> |
| Error Messages          | Provides a complete list of all of the error messages and their corrective actions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Server Instance Manager | Creates and configures new server instances and removes configured server instances.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| uninstallserver         | <p>You can select from the following uninstallation options:</p> <p><b>Complete Uninstall</b><br/>Uninstalls the whole Informix installation.</p> <p><b>Uninstall Specific Features</b><br/>Displays the Informix feature tree so that you can select which features or whole components that you want to remove.</p>                                                                                                                                                                                                                                                                                                                      |



Table 3-1. IBM Informix program group (continued)

| Menu item          | Description                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>server-name</i> | Opens a Command Prompt window for an initialized database server instance. You can use that window to run DB-Access and certain command-line utilities such as <b>onstat</b> , <b>oncheck</b> , and <b>onspace</b> . (The <b>oninit</b> utility is designed to be started by a service rather than from this window.) If you have more than one database server instance, there is a shortcut menu for each of them. |

---

## Starting the database server from the Control Panel

You can start the database server by starting the IBM Informix service in the Control Panel.

- You must be a member of the **Windows Administrators** group.
- The disk space for the database server must be initialized once to prepare the root dbspace so that it can be used by the database server. If you performed a typical installation and chose to create a server instance or you performed a custom installation and chose to create and initialize the server, disk space is already initialized.
- If you chose not to create a server instance or not to initialize the server during installation, start the server and initialize the disk space by using the **-i** option of the **oninit** command in the **Start Parameters** field of the Services application or with the **starts** command from the command line.
- If you are upgrading from a previous version of IBM Informix and you are using the same root dbspace, do not initialize the disk space.



To start the database server from the Control Panel:

1. In Administrative Tools, double-click **Services**.
2. Double-click **Informix IDS - *server\_name*** from the list.
3. Optional: Type **oninit** options in the **Start Parameters** field.
4. Click **OK**.
5. Click **Start**.
6. To verify that the server started, use the **onstat** utility.

### Related tasks:

“Starting the database server from the command line”

### Related reference:

-  The oninit utility (Administrator's Reference)
-  The onstat utility (Administrator's Reference)

---

## Starting the database server from the command line

You can start the database server by using the **starts** command from the command line.

- You must be a member of the **Windows Administrators** group.
- The disk space for the database server must be initialized once to prepare the root dbspace so that it can be used by the database server. If you performed a typical installation and chose to create a server instance or you performed a custom installation and chose to create and initialize the server, disk space is already initialized.

- If you chose not to create a server instance or not to initialize the server during installation, start the server and initialize the disk space by using the **-i** option of the **oninit** command in the **Start Parameters** field of the Services application or with the **starts** command.
- If you are upgrading from a previous version of IBM Informix and you are using the same root dbspace, do not initialize the disk space.



To start the database server by using the command line:

1. Open a command line.
2. Change to %INFORMIXDIR%\bin.
3. Enter the **starts** command followed by the server name. For example:  
`starts server_name`  
 You can add an **oninit** option. For example, to start the database server without deleting temporary tables:  
`starts server_name -p`
4. To verify that the server started, use the **onstat** utility.

**Related tasks:**

“Starting the database server from the Control Panel” on page 3-3

**Related reference:**

-  The oninit utility (Administrator's Reference)
-  The onstat utility (Administrator's Reference)

---

## Stopping the database server

To stop the database server from the Control Panel, you must be a member of the Windows Administrators group. To stop the database server from the command line, you must be a member of the **Informix-Admin** group.

To stop the database server:

- From the Control Panel:
  1. Select **Start > Control Panel > Administrative Tools**.
  2. Double-click **Services**.
  3. Select **Informix IDS -server\_name** from the **Service** list box.
  4. Click **Stop**.
- From the Command Prompt window:
  1. Click **Start > Programs > IBM Informix** to display the program group for the database server.
  2. Click the database server instance (*server\_name*) to display the Command Prompt window.
  3. In the Command Prompt window, type: `onmode -ky`.

---

## Database server configuration after installation

To create an IBM Informix instance after installation completes, you can use the Server Instance Manager or use the standard configuration file (`onconfig.std`) as a basis for a new configuration file.

The **genoncfg** utility is an alternative configuration method if you are comfortable working in a command-line environment. With this utility, you set a short list of parameters in an input file, from which the utility then generates an Informix

configuration file that is optimized for both your anticipated usage and your host environment. You cannot use this utility to change a working configuration file. The **genoncfg** utility is documented in the *IBM Informix Administrator's Reference*.

The following information is provided for advanced users who must manually start or change configuration of a database server instance.

## Database server number

The database server number uniquely identifies a database server if more than one instance of the database server is installed.

If only one instance of the database server is installed, set this number to 0. The database server number that you specify is the value for the SERVERNUM configuration parameter.

The database server uses configuration parameters, set in the onconfig file, during initialization. For more information about configuration parameters and the onconfig file, see the "Configuration parameters" topic of the *IBM Informix Administrator's Reference*.

To determine how many instances of the database server are installed, run the Server Instance Manager program. To run the Server Instance Manager program, select **Start > Programs > IBM Informix > Server Instance Manager**.

## Database server name

The database server name identifies the database server to client applications.

In most cases, you can select the default database server name. The database server name that you specify is the value for the DBSERVERNAME configuration parameter.

Database server names must begin with a letter and can contain only letters, numbers, and the underscore character.

## Service name and port number

The service name specifies the service name entry and the port number specifies the port entry for the database server in the **sqlhosts** file.

Specify the service name and port number for the TCP/IP network protocol.

If only one database server instance exists on the computer, the installation program provides default values. It is recommended that you use these default values. For subsequent database server instances, you must provide unique values.

## Dbospace name, location, and size

A dbospace is a logical collection of chunks to which databases and tables are assigned.

During installation, the root dbospace is created automatically. You can configure an additional data dbospace, mirror location, or smart blob drive.

Specify the location and disk-space size for the dbospace:

**Primary data location**

By default, the primary data location is the current drive. The installation program displays the amount of available disk space; the default dbspace size is 200 megabytes.

**Smart blob drive**

A default smart blob space can be configured optionally. The default size is 200 megabytes.

**Mirror location**

The mirrored location serves as the backup area if the primary storage device fails. The mirrored location should be the same size as the primary location and should be in a different drive. The data dbspace and the smart blob can be mirrored on the same drive.

This mirrored location is also the value of the MIRRORPATH configuration parameter.

## Default sbpace name, location, size, and page size

An sbpace is a logical storage area that the database server uses to store smart large objects (CLOB and BLOB data).

The default sbpace is the location in which the database server stores a smart large object if you do not specify an sbpace name when you create the smart large object. The database server also uses the default sbpace to store user-defined statistics.

Specify the primary and mirror data-storage location for the default sbpace:

**Primary Data Location**

By default, the Primary Data Location of the sbpace is the current drive and must have a minimum of 200 megabytes. The installation program displays the amount of available disk space. This location also specifies the value of the SBSPACENAME configuration parameter.

**Mirror location**

The mirrored location serves as the backup area if the primary storage device fails. The mirrored location should be the same size as the primary location and should be in a different drive.

**Size** The size of the sbpace should be at least 200 megabytes.

**Page size**

The size of the sbpage should approximate the size of the most frequently occurring smart large object that the sbpace holds. The default is one page.

For more information about sbspaces, see the *IBM Informix Administrator's Guide*.

## Configuring Informix manually

Use the Server Instance Manager if you want to configure the database server manually after installation of the product.

To configure the installed database server:

1. Open the Server Instance Manager utility and specify the following:
  - database server number
  - database server name

- service name and port number for the TCP/IP network protocol
2. If you selected custom installation setup:
    - a. Specify a name for the root dbspace.
    - b. Specify the primary and mirror storage location and disk-space size for the root dbspace.
    - c. Specify the name of the default sbspace.
    - d. Specify the primary and mirror storage location and disk-space size for the default sbspace.
  3. Specify the computer to use for shared server definition for your database server and administrative tools.

The installation program installs services on the computer and configures the database server.
  4. If you configured a new instance of the database server, you are prompted to initialize the database server:
    - Click **Yes** to initialize the database server and the root dbspace.
    - Click **No** to skip initialization.

If you skip initialization, you must manually start the database server and specify the root dbspace size later. For more information on manual initialization, see “Starting the database server from the Control Panel” on page 3-3.

Database server initialization might take several minutes.

A message indicates that the database server was successfully installed.
  5. If you selected other products to install, the installation prompts you to configure these products.
  6. To update the members of the **Informix-Admin** group, log out and log back in. This step enables you to run the IBM Informix administration tools.
  7. Restart your computer, if prompted.

For more information about configuring the database server manually, see the *IBM Informix Administrator's Guide*.



---

## Chapter 4. Removing or modifying Informix and client products

The uninstallation application facilitates removal of IBM Informix product installations and reduction of a database server installation size without total uninstallation.

Review the following information to uninstall or modify Informix.

---

### Removing Informix software bundle installations

Open the **uninstallids.exe** file to remove both the database server and all client products that were installed with the **ids\_install.exe** command of the Informix software bundle. This method to remove the installed software bundle is faster than uninstalling each individual product separately.

You must have Windows administrator privileges to complete the uninstallation.

**Important:** Using the **uninstallids.exe** command removes all Informix server and client product installations in the folder, without the option to uninstall only specific features of an installation. You must start the uninstallation of a specific product in order to remove some of its features without entirely removing the program installation. The uninstallation of either Client SDK or Informix Connect alone is documented in the *IBM Informix Client Products Installation Guide*. The uninstallation of the JDBC Driver alone is documented in *IBM Informix JDBC Driver Programmer's Guide*.

If you have multiple installations of the software on the computer, the uninstallation application affects only the installations located in the %INFORMIXDIR% path indicated in the command.

Open the %INFORMIXDIR%\uninstall\uninstall\_ids\uninstallids.exe file.

After Informix products are removed, you can manually delete the %INFORMIXDIR% directory. It is not deleted automatically.

---

### Uninstalling or reducing an Informix database server installation

Use the shortcut on the Windows Start menu to remove an entire Informix server installation or to remove only specific features of the product.

Shut down all instances of the Informix server before uninstalling the product.

If you have multiple installations of the product on the computer, the uninstallation application affects only the server installation that created the Windows Start menu entry from which you are launching the uninstallation.

To uninstall the entire Informix database server installation or just specific features of the installation:

1. Select **Start > Programs > IBM Informix Version 12.10 > uninstallserver**.
2. Select one of the following options:
  - Complete uninstallation

This option removes all installed binary files and product features of the Informix installation. Use this option with caution. Files and folders created after the installation are not affected.

- Uninstallation of specific features

If you select this option, you will be prompted to select the database server features that you want to remove.

3. Follow the prompts in the uninstallation application.

---

## Uninstalling an Informix server installation in silent mode

You can create a response file by recording a GUI-based, interactive uninstallation of IBM Informix from one location using settings in the GUI application that you want to replicate. Then you run the silent uninstallation command passing the response file, although a response file is not necessary if you do not have a customized installation to deploy.

To create the response file, you must have an installation that you can uninstall in a way that you plan to reuse for removal of other installations. It is not possible to do a silent uninstallation of Informix and any of the client products simultaneously.

If you already have a response file that is ready for silent uninstallation, skip to step 2

To uninstall Informix in silent mode with a response file:

1. On a command line, start a GUI uninstallation of Informix with the `-r` option in the script:

```
uninstall\uninstall_server\uninstallserver -i gui -r path_name
```

Substitute *path\_name* with full path and file name of where you want to generate the response file, appending `.properties` at the end of the file name.

2. Copy the response file to the location where you want to uninstall Informix.
3. Run the silent uninstallation command, indicating the full path name of the response file:

```
uninstall\uninstall_server\uninstallserver -i silent -f path_name
```

4. For each location where you want to do a silent uninstallation, repeat steps 2 and 3



---

## Appendix. Accessibility

IBM strives to provide products with usable access for everyone, regardless of age or ability.

---

### Accessibility features for IBM Informix products

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use information technology products successfully.

#### Accessibility features

The following list includes the major accessibility features in IBM Informix products. These features support:

- Keyboard-only operation.
- Interfaces that are commonly used by screen readers.
- The attachment of alternative input and output devices.

#### Keyboard navigation

This product uses standard Microsoft Windows navigation keys.

#### Related accessibility information

IBM is committed to making our documentation accessible to persons with disabilities. Our publications are available in HTML format so that they can be accessed with assistive technology such as screen reader software.

#### IBM and accessibility

See the *IBM Accessibility Center* at <http://www.ibm.com/able> for more information about the IBM commitment to accessibility.

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### Dotted decimal syntax diagrams

The syntax diagrams in our publications are available in dotted decimal format, which is an accessible format that is available only if you are using a screen reader.

In dotted decimal format, each syntax element is written on a separate line. If two or more syntax elements are always present together (or always absent together), the elements can appear on the same line, because they can be considered as a single compound syntax element.

Each line starts with a dotted decimal number; for example, 3 or 3.1 or 3.1.1. To hear these numbers correctly, make sure that your screen reader is set to read punctuation. All syntax elements that have the same dotted decimal number (for example, all syntax elements that have the number 3.1) are mutually exclusive alternatives. If you hear the lines 3.1 USERID and 3.1 SYSTEMID, your syntax can include either USERID or SYSTEMID, but not both.

The dotted decimal numbering level denotes the level of nesting. For example, if a syntax element with dotted decimal number 3 is followed by a series of syntax elements with dotted decimal number 3.1, all the syntax elements numbered 3.1 are subordinate to the syntax element numbered 3.

Certain words and symbols are used next to the dotted decimal numbers to add information about the syntax elements. Occasionally, these words and symbols might occur at the beginning of the element itself. For ease of identification, if the word or symbol is a part of the syntax element, the word or symbol is preceded by the backslash (\) character. The \* symbol can be used next to a dotted decimal number to indicate that the syntax element repeats. For example, syntax element \*FILE with dotted decimal number 3 is read as 3 \\* FILE. Format 3\* FILE indicates that syntax element FILE repeats. Format 3\* \\* FILE indicates that syntax element \* FILE repeats.

Characters such as commas, which are used to separate a string of syntax elements, are shown in the syntax just before the items they separate. These characters can appear on the same line as each item, or on a separate line with the same dotted decimal number as the relevant items. The line can also show another symbol that provides information about the syntax elements. For example, the lines 5.1\*, 5.1 LASTRUN, and 5.1 DELETE mean that if you use more than one of the LASTRUN and DELETE syntax elements, the elements must be separated by a comma. If no separator is given, assume that you use a blank to separate each syntax element.

If a syntax element is preceded by the % symbol, that element is defined elsewhere. The string following the % symbol is the name of a syntax fragment rather than a literal. For example, the line 2.1 %OP1 refers to a separate syntax fragment OP1.

The following words and symbols are used next to the dotted decimal numbers:

- ? Specifies an optional syntax element. A dotted decimal number followed by the ? symbol indicates that all the syntax elements with a corresponding dotted decimal number, and any subordinate syntax elements, are optional. If there is only one syntax element with a dotted decimal number, the ? symbol is displayed on the same line as the syntax element (for example, 5? NOTIFY). If there is more than one syntax element with a dotted decimal number, the ? symbol is displayed on a line by itself, followed by the syntax elements that are optional. For example, if you hear the lines 5 ?, 5 NOTIFY, and 5 UPDATE, you know that syntax elements NOTIFY and UPDATE are optional; that is, you can choose one or none of them. The ? symbol is equivalent to a bypass line in a railroad diagram.
- ! Specifies a default syntax element. A dotted decimal number followed by the ! symbol and a syntax element indicates that the syntax element is the default option for all syntax elements that share the same dotted decimal number. Only one of the syntax elements that share the same dotted decimal number can specify a ! symbol. For example, if you hear the lines 2? FILE, 2.1! (KEEP), and 2.1 (DELETE), you know that (KEEP) is the default option for the FILE keyword. In this example, if you include the FILE keyword but do not specify an option, default option KEEP is applied. A default option also applies to the next higher dotted decimal number. In this example, if the FILE keyword is omitted, default FILE(KEEP) is used. However, if you hear the lines 2? FILE, 2.1, 2.1.1! (KEEP), and 2.1.1 (DELETE), the default option KEEP only applies to the next higher dotted decimal number, 2.1 (which does not have an associated keyword), and does not apply to 2? FILE. Nothing is used if the keyword FILE is omitted.
- \* Specifies a syntax element that can be repeated zero or more times. A dotted decimal number followed by the \* symbol indicates that this syntax element can be used zero or more times; that is, it is optional and can be

repeated. For example, if you hear the line 5.1\* data-area, you know that you can include more than one data area or you can include none. If you hear the lines 3\*, 3 HOST, and 3 STATE, you know that you can include HOST, STATE, both together, or nothing.

**Notes:**

1. If a dotted decimal number has an asterisk (\*) next to it and there is only one item with that dotted decimal number, you can repeat that same item more than once.
  2. If a dotted decimal number has an asterisk next to it and several items have that dotted decimal number, you can use more than one item from the list, but you cannot use the items more than once each. In the previous example, you can write HOST STATE, but you cannot write HOST HOST.
  3. The \* symbol is equivalent to a loop-back line in a railroad syntax diagram.
- + Specifies a syntax element that must be included one or more times. A dotted decimal number followed by the + symbol indicates that this syntax element must be included one or more times. For example, if you hear the line 6.1+ data-area, you must include at least one data area. If you hear the lines 2+, 2 HOST, and 2 STATE, you know that you must include HOST, STATE, or both. As for the \* symbol, you can repeat a particular item if it is the only item with that dotted decimal number. The + symbol, like the \* symbol, is equivalent to a loop-back line in a railroad syntax diagram.



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