Installation Guide

for Informix[®] Dynamic Server[™]

on Windows NT™

Informix Dynamic Server Informix Dynamic Server, Developer Edition Informix Dynamic Server, Workgroup Edition

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About This Manual

This manual contains instructions on how to install Informix Dynamic Server on computers that run Windows NT. In addition, it explains how to start, stop, and remove the database server. Keep this installation guide with your Informix software documentation for easy reference.

The information in this guide describes the basic installation procedures in a Windows NT environment for Informix Dynamic Server, Version 7.3.

In this manual, all references to the database server refer to Informix Dynamic Server.

Preparing for Installation

You can install Informix products only as licensed by Informix. You must not transfer software from one computer to another or to another portion of your network without re-registration and the written consent of Informix.

This guide assumes that you are familiar with the operating procedures of your computer and with the Windows NT environment. For information about your file system and windowing environment, refer to your Windows NT documentation.

If you encounter difficulties when you install these products, refer to "Error Messages" on page 31. If you continue to encounter problems, contact the Informix Technical Support Department. In North America, call toll-free (800) 274-8184 or send a FAX to (913) 599-8590. Outside North America, contact your distributor or the nearest Informix subsidiary.

Installation Requirements

You must be a member of the Windows NT Administrators group to install the database server. Before installation, verify that your computer meets the following minimum requirements:

- Windows NT. Version 4.0 or later
- Service Pack 3
- TCP/IP
- Sum of RAM and swap file must be at least 64 megabytes
- Destination drive with a Windows NT file system (NTFS)
- 16 megabytes of RAM
- 140 megabytes of disk space (including a minimum of 30 megabytes for the root dbspace and 20 megabytes for the additional dbspace)
- If installation files already exist on the system, the amount of disk space needed is determined at runtime.

Your Informix product materials package contains a serial-number key card and a CD-ROM. The serial-number key card contains information that you need for the installation.

Order of Installation

If you install more than one Informix product on the same computer, you do not have to install them in a specific order.

If you want to preserve product files of earlier versions, you must create separate directories for each version of your Informix products. If you install multiple versions of an Informix product, you must set the INFORMIXDIR environment variable to the appropriate directory name for the version that you want to access.

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

Preinstallation Considerations

Before you install the database server, you must address the following considerations:

- Check that user **informix** is a member of the Administrators group.
- Decide whether you want to install the database server on a domain or a local computer.

Administrators Group Membership

To execute the installation program, you must be a member of the Windows NT Administrators group for the local computer on which you plan to install the database server. If you plan to install in a domain, you must be a member of the Windows NT Administrators group for the domain as well as the local administrator. The User Manager program allows you to add members to the Administrators group. To access **User Manager**, choose Start→Programs→Administrative Tools (Common)→User Manager. Context-sensitive, on-line help provides detailed instructions on how to create groups and add users to groups.

Domain Installation

If you plan to access the database server from client computers, install the database server on the domain controller. Users on other Windows NT computers can then access the database server if they belong to either the same domain or a trusted domain. You can use the Windows NT domain controller to manage the user account information for all domain members. (For information on how you can provide increased database security, see "Dividing Administrative Tasks" on page 11.)

If you want the database server to run on a domain, log on to the domain before you run the installation program. If you are logged on to a domain in which you have user privileges but not administrative privileges, you will only be able to perform a local installation.

For more information on domains and the domain controller, refer to your operating-system documentation.

Local Installation

If you do not plan to have client computers access the database server, install the database server on a local computer. If you do not have administrative privileges on the domain, local installation is the only option available to you.

If you choose to install the database server locally and later want to allow client computers to have access to the database server, at that time you can create a **hosts.equiv** file to specify trusted database server clients who can connect from remote computers. For more information, see your *Administrator's Guide*.

If you do not have domain administrator privileges, the database server is installed locally.

Logging on to a Domain Without Being the Domain Administrator

If the user who performs the install operation is logged on to a domain, the installation program asks whether the user wants to create global groups on the domain controller or local groups. If the user wants to create global groups, the user still needs domain administrator privileges to create the group. However, if the user wants to create only local groups, the user only needs to have local administrator privileges.

In a domain install, all security information is created on the primary domain controller. However, if you select a local install, the security information is created on the local computer.

The security information created on the domain controller or the local computer concerns the various groups who are allowed to administer the database server. If the groups are local, the groups have to be administered locally on the computer. If multiple computers in the Windows NT domain run different database servers, the group memberships in the groups on each computer have to be administered separately. However, if the user chooses to create global groups, administering the group on the domain controller makes the groups available on all of the computers that use the same global group.

The following table shows the privilege requirement for local administrator	rs
and domain administrators.	

Type of Administrator	Local Login	Domain Login
Local	All groups are local to the computer. Domain users can be part of the local group.	All groups are local to the computer. Domain users can be part of the local group.
Domain	Not a valid combination	All groups are domain wide. The groups are local. The user account under which the database server runs (informix user) is also created on the domain. The installation program still asks you whether you want to perform a local install.

Installing the Database Server

This section describes the installation procedure.

The installation program installs the database server as a Windows NT service. It creates a user account called **informix** and an administrative group called **Informix-Admin**. The installation program automatically assigns the **informix** user account, which the database server runs under, to the **Informix-Admin** group and to the **Administrators** group. If you enable role separation when you install the database server, you can change the name of the **Informix-Admin** group.

If you plan to customize your installation of the database server, read all of these instructions before you run the installation program. Keep the following manuals nearby because they provide detailed discussions of specific installation and configuration-parameter options, such as role separation, the root dbspace, and tape devices:

- Your Trusted Facility Manual
- Your Administrator's Guide

Launching the Database Server Installation Program

To use the database server installation program, you must launch the install driver program. To launch the install driver program, enter one of the following commands at the command line:

```
X:\install.exe
X:\install.exe normal
```

In these commands X is the drive or shared volume on which the software CD is mounted.

For information on the silent-install options of the **install.exe** command, see "Silent Install" on page 20.

After you launch the install driver program, it presents a screen that allows you to select one of several installation alternatives. The following table lists these alternatives.

Alternative	Description
Full Install	Installs the database server, the IECC client, and INFORMIX-Connect.
Database Client Only	Installs INFORMIX-Connect only.
Database Server Only	Installs the database server only.
Administration Tools Only	Installs IECC only.
Custom Install	Installs the components that the user selects.

To specify a database server installation from this screen, select the **Full Install** or **Database Server Only** alternatives. The result of specifying the first alternative is to install a bundle of products, including the database server. The result of specifying the second alternative is to install the database server only. In both cases the install driver program triggers the database server installation program.

Upgrade and Reinstallation Pages

If an earlier version of the database server is already installed, the installation program displays the upgrade page. To continue with the installation procedure, you must select upgrade. The current version does not co-exist with the earlier versions. This page is informational only. You can cancel the installation if you do not want to upgrade. If you do select upgrade, the installation program skips most of the setup pages and uses existing information instead.

If the same version of the database server is already installed, the installation program displays a reinstall page. This page displays the directory where the database server is installed. This page also presents choices that specify whether to install the database server using the existing configuration, or to install the database server and reconfigure it in the same directory, or to install and configure the database server in a different directory.



Important: Reinstallation with configuration removes all existing server definitions and the associated databases.

Welcome Page

An initial welcome page gives brief introductory information about the Informix Dynamic Server installation wizard. Press **Next** to continue.

Customer Information Pages

The installation program presents several pages that collect information about the user who is performing the installation. The following table describes these pages.

Wizard Page	Description of Task
Serial Number and Key	Type the case-sensitive serial number and serial-number key exactly as shown on the serial-number key card that is provided in your Informix product materials package.
Product Registration	Type your name, title, and the name of your company. This page is optional. The installation program does not check whether information on this page is valid.
Address Information	Type your address information. This information includes your address, city, state or province, country, and zip code or postal code.
	This page is optional. The installation program does not check whether information on this page is valid.
Contact Information	Type your entire telephone number, fax number, and Internet address. This page is used to expedite customer service requests.
	This page is optional. The installation program does not check whether information on this page is valid.
Print Registration	If you want to print the completed registration to mail to Informix, click the Print Registration Information box and then click the Next button. If you do not want to print the registration information, click the Next button.

Establishing an Installation Directory

You must decide where you want the installation files to reside. You can choose to keep the default directory, type a new directory in the **Installation Directory** text box, or click the **Browse** button to select another directory from the Select Directory dialog box. The destination drive must be formatted with NTFS.

If you have created the **INFORMIXDIR** directory, the installation files reside in this directory by default. Otherwise, the default directory is an **Informix** directory on the root of the first NTFS drive that the installation program finds on your system.

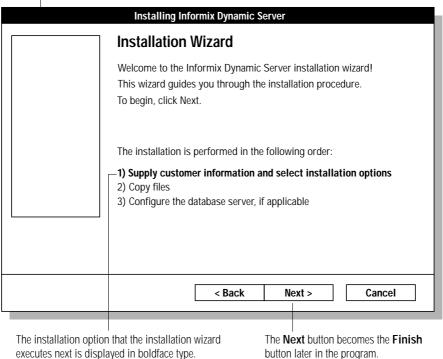
This page also displays the minimum disk space required for a database server installation.

If you plan to perform an upgrade or a reinstall, select the existing database server directory as the installation directory.

Main Page

Figure 1 illustrates the main page of the installation wizard.

Figure 1 The Installation Wizard Main Page





The installation wizard guides you through three steps of the installation procedure. The pages of the installation wizard contain buttons that enable you to navigate between pages. In most cases, you can click **Next** to advance to the following page or click **Back** to return to the previous page. To abort the process at any time and return to Windows NT, click **Cancel**.

Tip: On pages in which you are required to enter information, press TAB to move the cursor from one text box to another.

The installation program checks the information that you enter and displays an error message if the information is not valid. If an error occurs, refer to "Error Messages" on page 31 for information.

Selecting Installation Options

Step 1 of the installation procedure includes pages that prompt you to select installation options. The following sections describe these installation options.

Domain Install Option

You must indicate whether you want to perform a domain installation. For more information on domain installation, see "Domain Installation" on page 3.

Specifying the Type of Installation

You must specify the type of installation program to run. Your choices are as follows:

- Typical installation
- Minimal installation
- Custom installation

Informix recommends the typical installation for most databases. If you select typical or minimal installation, the program does not display some of the following pages.

Dividing Administrative Tasks

The **Role Separation** page allows you to enable role separation. If you enable role separation, you provide increased database security because you can split administrative tasks into mutually exclusive roles. If you enable role separation, you gain control over who accesses the database server.

However, when you enable role separation, only users who are designated as members of the IXUSERS group can access the database. Each new user must be a member of the **IXUSERS** group. For more information about role separation, see your Trusted Facility Manual.

If you do not enable role separation, the **Informix-Admin** group is used to perform all administrative tasks.

The following table describes the administrative-role categories that make up role separation.

Role Category	Role Definition
Auditing	The person who 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.
Security Administration	The person who maintains the security of the database server
	Functions of this role include audit adjustment and changing security characteristics of storage objects.
General Administration	The person responsible for general administrative tasks, such as archiving and restoring data, monitoring use and performance, and tuning the system

If you want to enable role separation, make sure that the box on the **Role Separation** page is checked. If you do not want to enable role separation, click on **Next** to go to the next page.



Important: If you do not enable role separation, you must reinstall the database server to enable role separation in the future. However, reinstallation removes all existing database servers.

If you do not enable role separation, continue with "Naming the Database Server" on page 13.

Specifying Database Server Administrative Groups

Using the roles described in the previous section, you can specify the names of administrative groups that access the database server. The following table describes the groups and gives their default names.

Name	Group Type
IXDBSA (INFORMIX-ADMIN)	General administration tasks
IXDBSSO	Security-related tasks
IXAAO	Audit administration tasks
IXUSERS	End-user tasks

You can choose to keep the default group names, type new group names, or click **Browse** to select other group names from the Select Group dialog box.

Establishing the Auditing Administrator

When you enable role separation, the database server uses a special account for auditing. You can choose to keep the default user name, type a new user name, or click **Browse** to select another user name from the Select User dialog box. You then type a password in the **Password** and **Confirm Password** text boxes.

Establishing a Security Administrator

When you enable role separation, the database server uses a special account for security administration. You can choose to keep the default user name, type a new user name, or click **Browse** to select another user name from the Select User dialog box. You then type a password in the **Password** and Confirm Password text boxes.

Specifying the Informix Account Password

The installation program now displays a page that asks you to specify the password for user **informix**. The database server service that the installation program creates runs using this account. If the account does not exist, the installation program creates the account.

Copying Files

When you click **Next** on the **Informix Account Password** page, the main page of the wizard reappears with Step 2 highlighted. When you click **Next** on this page, the installation program installs the files on your system in the location and in the manner that you specified. The program also displays messages that give the pathname of the source files and the target files.

Configuring the Database Server

After the installation program installs the files on your system, the main page of the wizard reappears with Step 3 highlighted. The display of the configuration page starts the Instance Manager to configure an instance of the database server. The pages in this part of the program allow you to set specific configuration parameters.

If you choose, you can cancel the installation program at this time and use the Instance Manager to configure a database server at a later time.

Specifying the Database Server Number

The **Server Number** page enables you to specify a number that uniquely identifies a database server if many instances of the database server are installed. If only one database server is present, you can set this number to 0.

Naming the Database Server

On the **Server Name** page, you are required to specify a name for the database server that you are configuring. You specify a default value in most cases. When a client application connects to a database server, the client application must specify its database server name.



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

Specifying Protocol Parameters

For the TCP/IP network protocol, specify the service name and port number. If only one server instance exists on the computer, the installation program provides a default value. Informix recommends that you use this default value. For subsequent instances, you must provide a separate value.

Specifying the Dbspace Name

The installation program creates an additional dbspace along with the root dbspace. You can use the **Dbspace Name** page to specify the name of the additional dbspace.

Specifying the Dbspace Location and Size

Use the **Dbspace Location and Size** page to specify the directory location and the size of the dbspace where the database server can be installed. The installation program creates the root dbspace in the same directory where the additional dbspace is created.

Specifying Tape Devices

The installation program does not prompt you to enter information about the tape devices you will use. Instead this task is part of setting up Informix Storage Manager. If you have not installed Informix Storage Manager, you must set the parameters for tape devices manually.

Establishing the Informix User Password

To launch the database server as a service, you must supply a password for the **informix** user account. On the **Informix User Password** page, type a password in the **Password** and **Confirm Password** text boxes.

Specifying the Computer for Shared Server Definition

Use the **Shared Server Definition** page to specify the computer to use for shared server definition for your database server and administrative tools. Enter a value in the **Computer** box and click **Finish**. The installation program now installs services on the computer.

Completing the Installation

When you click **Finish** on the **Shared Server Definition** page, the installation program configures the database server. If you configure a new instance of the database server, the installation program asks you whether the database server is to be initialized. If you specify that the database server is to be initialized now, the installation program initializes the configuration. Figure 2 shows the message box where the program asks the user whether the configured database server is to be initialized now.

Dynamic Server has now been fully configured. u like to initialize it now? That might take a few minutes.
Yes No

Figure 2 Ready for Initialization Message Box

To initialize the database server and root dbspace, click **Yes**. If you click **No**, you must manually initialize the database server. In addition, the second dbspace cannot be created. Using the administrative tools, you must create this dbspace manually after the database server is initialized. For more information on manual initialization of the database server, see "Starting the Database Server" on page 17.

After you make a selection in the message box, you receive a message that indicates that the database server was installed successfully.

The Informix Menu

After the database server is successfully installed, you can select various items related to the database server from the **Informix** menu. Click **Start→Programs→Informix Admin Tools** to access the **Informix** menu. The following table describes the items related to the database server that you can select from this menu.

Menu Item	Description
server-name	A one <i>server-name</i> menu item exists for each database server that is configured. Each item opens an MS-DOS command-line window that enables you to run command-line utilities such as onstat , oncheck , and onspaces . For more information about command-line utilities, refer to your <i>Administrator's Guide</i> .
Documentation Notes	This item describes features that are not covered in database server manuals or that have been modified since publication. Read the contents of this file before you use the database server.
Instance Manager	This item configures new server instances. You can also use this item to remove configured server instances and the databases associated with those instances.
Release Notes	This item describes feature differences from earlier versions of Informix products and how these differences might affect current products. This file also contains information about any known problems and their workarounds. Read the contents of this file before you use the database server.
Uninstall Server	This item allows you to remove the database server from your system.

Starting and Stopping the Database Server

This section describes how to start the database server and set up the database server to start automatically when Windows NT is launched. In addition, this section describes how to stop the database server.

Starting the Database Server

Refer to the following steps to start the database server as a service. The database server automatically starts the database server Message Server service to write to the Windows NT event log.



Warning: If you start the database server with the -iy parameters after you have already initialized it, the database server overwrites the existing root dbspace unless you have first changed the ROOTPATH parameter in the **onconfig** file. If the database server overwrites the existing root dbspace, it destroys the information that the root dbspace contains, including information about any databases that you have created. Consequently, you must then restore information from archive and backup tapes.

To start the database server

- Access the **Control Panel**. 1.
- 2. Double-click the **Services** icon.
- 3. Select Informix Dynamic Server (*server_name*) from the **Service** list box.
- Click Start. 4.

If you did not initialize the database server and the root dbspace when you installed the database server, you must use the following steps.

To initialize and start the database server

- Access the Control Panel. 1.
- Double-click the **Services** icon. 2.
- Select Informix Dynamic Server from the **Service** list box. 3.
- In the **Startup Parameters** text box, enter iy.

When you specify these parameters, the database server creates and initializes the root dbspace.

Click Start.

Automatically Starting the Database Server

You can also set up the database server to start automatically when Windows NT is launched.

To set up the database server to start automatically

- Access the **Control Panel**. 1.
- 2. Double-click the **Services** icon.
- Select Informix Dynamic Server (*server_name*) from **Service** list box. 3.
- 4. Click **Startup** and click **Automatic** in the Service dialog box.
- Click OK. 5.
- Verify that the **Startup Parameters** text box is empty.
- 7. Click Start.

Stopping the Database Server

To stop the database server, use one of the following options:

- Services in the Windows NT Control Panel
- The **onmode** utility

To stop the database server using Services in the Windows NT Control Panel

- Access the **Control Panel**. 1.
- 2. Double-click the **Services** icon to display the **Service** list box.
- 3. Select Informix Dynamic Server from the **Service** list box.
- Click Stop.

To stop the database server with the onmode utility

- From the **Informix** menu, double-click **Command Shell** to display 1. the command shell window.
- 2. At the command-line prompt, type:

onmode -ky

Uninstalling the Database Server

You can remove the database server from your system with the uninstall program. To launch the program, double-click the **Uninstall** icon in the **Informix Administration Tools** menu. The dialog box that appears allows you to specify whether you want to remove everything or just the program files.

To remove the program files and preserve the configuration of the database server, leave the check box unchecked. This option is the default. When you click **OK**, the uninstall program removes all product files, empty directories, and product icons except the **Uninstall** icon.

To remove everything, check the **Remove configuration** check box. When you click **OK**, the uninstall program removes the program files and all database server configuration files, such as the root dbspace, the **onconfig** file, and the **sqlhosts** registry.

If you just want to remove a specific database server instance, you can run the Instance Manager and select a specific instance to remove.

If you upgraded from a Version 7.2x database server, the uninstall program also gives you the option of reverting to the earlier version of the database server. In this case the configuration information is reverted to a form that the installation program for the specified version can use.

When you choose to revert to an earlier version of the database server, only the **sqlhosts** registry is reverted. Before you invoke the uninstall, you need to use the **-b** option of the **onmode** utility. For more information, see the *Informix Migration Guide*.

The uninstall program reverts only one instance of the database server. If multiple instances of the database server are configured, the program asks the user to remove all other instances of this version of the database server, except for one. Reinstall the product again to get the previous version.

Reinstalling the Database Server

If an earlier version of the database server is already installed, the installation program proceeds only if you select an upgrade. If you want a fresh install of the database server, you must first uninstall the previous version completely.

Silent Install

The section "Installing the Database Server" on page 5 describes the normal mode of executing the installation program. In this mode the installation program presents dialog boxes and messages to the user, and the user supplies the information that the dialog boxes prompt for. As explained in "Launching the Database Server Installation Program" on page 6, you can enter one of the following commands to start the installation program in normal mode:

```
X:\install.exe
X:\install.exe normal
```

In these commands $\mbox{\ensuremath{X}}$ is the drive or shared volume on which the software CD is mounted.

You can optionally perform a silent installation of the database server or the other products listed in "Launching the Database Server Installation Program" on page 6. When you perform a silent installation, you do not have any interaction with the installation program. The installation program does not prompt you for any information or display any messages during the entire installation process. Instead the installation program uses the values from a pre-existing playback file to control the installation process.

To enable a silent installation of the database server, you must first run the installation program in record mode. You or other users can then run the installation program in playback mode. A silent installation is an execution of the installation program in playback mode. The following sections explain the record and playback modes.

Record Mode

When you run the installation program in record mode, the program behaves the same as in normal mode in that it prompts the user for input through a series of dialog boxes. However, in record mode the program makes a recording (a playback file) of the user's responses and selections.

A system administrator can copy this playback file to a shared drive accessible to all workstations and then use this file to repeat the same installation on multiple workstations with no need for user interaction. The system administrator can also choose to edit the playback file, for example, to modify the install for different groups of workstations.

To start the installation program in record mode, enter the following command:

```
X:\install.exe record, playback-directory
```

In this command, the *playback-directory* parameter specifies the full path to the directory where the playback file is to be stored. The filename is always **playback.ini** and should not be included in the path specification. If you do not specify a value for *playback-directory*, the parameter defaults to the **\$TEMP** directory on the target computer.

Playback Mode

After the system administrator has run the installation program in record mode to create the **playback.ini** file, the administrator or other users can run the installation program in playback mode to perform a silent installation. In playback mode the installation program does not display any user interface at all. Instead the installation program copies the **playback.ini** file from the specified directory and uses the values in this file to repeat the original installation.

In playback mode the installation program still performs all the validation and error checking that are normally performed on user input. Any errors that the program encounters are recorded in a log file, **iinstall.log**, that is created in the **\$TEMP** directory on the target computer. All errors cause the installation program to exit when it is running in playback mode.

To start the installation program in playback mode, enter the following command:

```
x:\install.exe playback, playback-directory, serial-number, key
```

In this command, the *playback-directory* parameter specifies the full path to the directory where the playback file has been stored. The filename is always **playback.ini** and should not be included in the path specification. If you do not specify a value for *playback-directory*, the parameter defaults to the **\$TEMP** directory on the target computer. The *serial-number* parameter specifies the user's serial number, and the key parameter specifies the user's serial-number key.

Parameters Required in the Playback File

Running the installation program in record mode captures the necessary information for silent installation of most supported products, but it does not capture all the necessary information for silent installation of the database server. Instead, after creating the **playback.ini** file in record mode, you must edit the file manually to add the required parameter values for database server installation. Then you can perform a successful silent installation of the database server.

The following tables show the parameters for which values must be present in the **playback.ini** file. These parameters are grouped into three sections: a bundle common section, a server install section, and a server instance section. Running the installation program in record mode captures most of the values in the bundle_common section automatically. However, you must add the server install values and the server instance values manually to the **playback.ini** file.

Bundle Common Parameters

Bundle_common parameters are not specific to the database server installation, but they are necessary for silent install of the database server. If the **user has already run the installation in record mode, the** bundle_common parameters will already have values and need not be edited.

However, you can edit the bundle_common values if you wish. For example, if you replace the value in the Name field with a blank, the installation program does not change a pre-existing value in the registry. That is, if the system administrator runs the install in record mode and enters a name in the Name field, this name is recorded in the playback file. On all computers where the administrator runs the playback, this name overwrites any preexisting name in the registry. However, if the administrator edits the playback file and removes the name, the installation program retains preexisting values.

The following table lists the minimum set of bundle_common parameters that must be present in the **playback.ini** file and explains the values for each parameter.

Parameter	Description
Serial_No	The serial number value for an installation. This field is blank in the playback file. Users must supply the serial number on the command line when they run the installation program in playback mode.
Key	The key value for an installation. This field is blank in the playback file. Users must supply the key value on the command line when they run the installation program in playback mode.
Name	Name of the person performing the install
Company	Your company
Title	Your job title
Address_1	First line of your street address
Address_2	Second line of your street address
City	Your city
State	Your state
Zip	Your zip code
Country	Your country
Phone	Your telephone number
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Parameter	Description	
Fax	Your fax number	
E-mail	Your Internet address	
Install_Dir	The directory where the product files are to be installed	
		(0 - (0)

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Server Install Parameters

The values in the Server Install section of the playback.ini file specify how the database server is to be installed. The following minimum set of parameters in this section is necessary for copying files over in a database server install.

Parameter	Description
Typical	If you specify a value of 1 , the database server is installed as a typical install. If you do not specify any value, the default value is 1 . You cannot specify both the Typical and Minimal parameters as having a value of 1 .
Minimal	If you specify a value of 1 , the program performs a minimal install. You cannot specify both the Typical and Minimal parameters as having a value of 1 .
Shutdown_Services	If you specify a value of 1 , the services that need to be shut down for the install to proceed are shut down. These services include the database server (if it is being upgraded) and other services like OnSNMP. If you specify any value other than 1 , services are not shut down. However, if you specify a value other than 1 , and some of the services are busy using the files that need to be upgraded, the install may not be completed properly.

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Parameter	Description	
Upgrade	If you specify a value of $\mathbb{1}$, and the installation program detects an existing version, the existing version is upgraded If you specify a value of $\mathbb{0}$, and the installation program detects an existing version, the database server is not installed. If you do not specify any value, your installation defaults to an install in a different directory. Because coexistence with previous versions is not supported in this release, an unspecified value implies a value of $\mathbb{0}$.	
Reinstall	The Reinstall parameter is similar to the Upgrade parameter However, you can install the same version again.	
Domain_Install	If you specify a value of 1 , the user groups are created in a domain. If you do not specify a value of 1 , all of the user accounts and groups that are created reside in the local computer. However, enabling domain install requires that the person performing the install have domain administrator privileges. This parameter is ignored if the person performing the install cannot install in a domain.	
Role_Separation	If you specify a value of 1 , role separation is enabled. If you specify any other value than 1 , role separation is not enabled. If you are installing Dynamic Server, Workgroup and Developer Editions, the installation ignores this parameter and always uses a value of 0 .	
IXDBSA_Group	This parameter specifies the name of the IXDBSA group. This group is to be used for checking if the user belongs to the IXDBSA group. The group is created in the domain if the user selected domain install. Otherwise the group is local. The group is used only if role separation is enabled. Unless you require a specific group name, it is easier to use the default value.	
IXDBSSO_Group	This parameter specifies the name of the IXDBSSO group. This group is to be used for checking if the user belongs to the IXDBSSO group. The group is created in the domain if the user selected domain install. Otherwise the group is local. The group is used only if role separation is enabled. Unless you require a specific group name, it is easier to use the default value.	

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Parameter	Description
IXAAO_Group	This parameter specifies the name of the IXAAO group. This group is to be used for checking if the user belongs to the IXAAO group. The group is created in the domain if the user selected domain install. Otherwise the group is local. The group is used only if role separation is enabled. Unless you require a specific group name, it is easier to use the default value.
IXUSERS_Group	This parameter specifies the name of the IXUSERS group. This group is to be used for checking if the user belongs to the IXUSERS group. The group is created in the domain if the user selected domain install. Otherwise the group is local. The group is used only if role separation is enabled. Unless you require a specific group name, it is easier to use the default value.
DBSSO_User	This parameter specifies the name of the Security Administrator.
DBSSO_Passwd	This parameter specifies the password of the Security Administrator.
AAO_User	This parameter specifies the name of the Auditing Administrator.
AAO_Passwd	This parameter specifies the password of the Auditing Administrator.
Account_Passwd	This parameter specifies the password for the informix user.
Configure_Instance	This parameter specifies whether a new instance of the database server is to be created. If you specify a value of 0, an instance is not configured in the case of a fresh install. If you are performing a reinstall, this parameter determines whether the existing configuration information is used, or whether a new instance of the database server is to be configured after deleting the existing instance.
Create_Icons	This parameter specifies whether icons need to be created for the installed programs. If you specify a value of θ , you disable icon creation.

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Server Instance Parameters

The Server Instance section of the playback.ini file specifies parameters that are needed to configure a particular instance of the database server. The installation program uses these parameters only in the case of a fresh install. If the install is an upgrade or you are reinstalling without reconfiguring, the installation program uses all of the existing information. The following minimum set of parameters in this section is necessary for configuring a particular instance in a database server install.

Parameter	Description	
DBSERVERNAME	This parameter specifies the name of the database server. This value can be defaulted. However, the default name might not be acceptable to the user in all cases. If you wan to assign a specific name, it is better to provide a name here The server name cannot be changed after it is installed. The default name has the form ol_computer-name.	
SERVERNUM	This parameter sets the corresponding parameter in the onconfig file. The onconfig file contains the configuration parameters for the database server. The server number needs to be unique across all instances of the database server that is configured on the computer. You can defaul this parameter only for the first instance that you are configuring. You should make the value as small as possible.	
SQLHOSTS	This parameter specifies the computer where the sqlhosts registry is located. The default is the computer where the installation takes place.	
Storage_Name	This parameter specifies the name of the additional dbspace that is created. By default, this name is the same as the database server name in the DBSERVERNAME parameter.	
Primary_Location	This parameter specifies the drive on which the root dbspace and the additional dbspace are created. This parameter can be defaulted. In that case, the dbspace is created on the same drive as the install directory.	

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Parameter	Description
Mirror_Location	This parameter specifies the drive where the mirror dbspaces are created, if mirroring is enabled. This parameter can be defaulted. If the value is just a dash (-), mirroring is not enabled.
Storage_Size	This parameter specifies the size of the additional dbspace (in kilobytes). If you do not specify a value, a default value is used.
Initialize_Server	This parameter specifies whether the database server is to be initialized after its creation. If you specify a value of $\mathbb{1}$, the program attempts to initialize the database server. Otherwise you must perform the initialization manually. If you do not specify a value, the default is $\mathbb{1}$.
Service_Start_Auto	This parameter specifies how the database server is to be started. If you specify a value of 1, the database server is set up to start automatically on reboot. If you do not specify a value of 1, you must start the database server manually.
Server_Proto	This parameter specifies the network protocol parameters for the database server. The protocol field names the protocol to be used. Normally, you use the olsoctp protocol. The service name field specifies the name of the TCP/IP service that will be used to access the database server. The port number field specifies the TCP port number to be used for the service name. You can default this parameter only when no other instance of the database server is configured. In this case the default value is <i>olsoctp turbo 1526</i> .

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Remote Installation

If you want to install the database server on a remote computer, use the Microsoft SMS utility. For example, if you are logged on to a computer in Los Angeles, you can use SMS to install the database server on a computer in New York City.

Multiple Residency

The multiple residency feature allows multiple instances of the database server to run on the same computer at the same time. Earlier versions of the database server do not support multiple instances of the database server. For this reason, earlier versions cannot coexist with the current version of the database server.

If an earlier version of the database server is present, you must uninstall it before you can install the current version. If you uninstalled an earlier version of the database server but left configuration information intact, the installation program uses that information to configure a new instance of the database server.

The installation program copies the product files to the directory that the user selected and configures one instance of the database server. Use the Instance Manager program to create and manage further database server instances.

Instance Manager

Informix provides the Instance Manager program to help you manage multiple instances of the database server. This program, named **instmgr.exe**, provides the ability to add, delete, or modify database server instances. The Instance Manager is a graphical user interface (GUI) program that is installed in a group along with other database administration tools.

You must have administrative privileges on the database server in order to use the Instance Manager program. However, local administrator privileges are enough, even if the database server was installed for domain use.

When the Instance Manager program is invoked without an argument, it displays a list of all database server instances that reside on the computer. Users can use buttons to create a new instance or delete one of the existing instances.

If you select the delete option, the currently selected instance in the list of instances is deleted. However, this deletion only takes place if the Instance Manager knows how to delete the instance for the version. If the Instance Manager knows about the version, all information related to the instance is deleted. This information includes the registry keys, services, associated registry entries (for example, for OnSNMP), dbspaces, and the **onconfig** file.

The Instance Manager program does not display a wizard for deleting an instance. Before deleting an instance, the Instance Manager stops the service if it is currently running. None of the other services are stopped for removal of an instance.

The Instance Manager displays a wizard if you choose to create a new instance. This wizard collects all of the database server configuration parameters and configures the database server. The additional information that you must supply for this version of the database server is the server number. This number uniquely identifies the database server among the database server instances. In addition, you must supply the network parameter. In the case of the first database server instance, the server number and network parameter can be defaulted.

OnSNMP for Multiple Residency

Informix does not provide a separate user interface for installing OnSNMP (Simple Network Management Protocol). OnSNMP is installed in the background. The executable files for OnSNMP are copied even if the OnSNMP service is not running when the database server is installed. If the OnSNMP service was not configured on the computer at the time of the installation, a separate program, named <code>inssnmp.exe</code>, is provided for configuring OnSNMP to operate with the database server.

The uninstall operation for OnSNMP does not require any user interaction with the program. The OnSNMP product is automatically uninstalled when the database server is uninstalled.

Informix Storage Manager (ISM)

Informix Storage Manager is the default storage manager for the installation program. The installation program automatically copies the ISM executable files to the computer. These executable files are installed on the same drive as the database server installation.

Error Messages

This section presents an alphabetical list of common installation error messages and warnings.

```
The database server name you entered is not valid. Please note the following limitations: a database server name cannot exceed 18 characters; it can only contain letters, numbers, and underscores; and it must begin with a letter.
```

If the **Database Server Name** is not valid, this warning is displayed. Enter a different name and note the limitations stated in the message.

```
The serial number and key you entered is not valid. Verify and re-enter your serial number and key.
```

If the **Serial Number** or **Key** is not valid, this warning is displayed. Re-enter the serial number and key.

```
The specified drive is not formatted with NTFS. Please enter a new path.
```

If the drive specified in the **Installation-Setup Options** page is not formatted with NTFS and **Next** is clicked, this warning is displayed. Select a drive that is formatted with NTFS.

```
The supplied path is not valid. Please enter a new path.
```

If an invalid path is entered in the **Installation-Setup Options** page and **Next** is clicked, this warning is displayed. Enter a different path.

There is not enough disk space on the destination disk drive drive letter. It has number KBvtes free while the product requires number KBytes. Clear up some space or try another destination drive.

If the drive specified in the **Installation-Setup Options** page does not have enough free disk space and **Next** is clicked, this warning is displayed. Either specify a different drive or delete unnecessary directories and files from the original drive before you resume the installation process.

This installation of Informix Dynamic Server requires number MB of free page file space. After you install this product, increase your page file size to properly use your virtual memory with this product.

If sufficient page file space (virtual memory) is not available for the installation, this warning is displayed. For information about how to increase the size of your page file, refer to your Windows NT documentation.

This installation of Informix Dynamic Server requires number MB of RAM. More memory must be available before you can install Informix Dynamic Server.

If sufficient random access memory (RAM) is not available, this error is displayed. Close all other open applications. If you still receive this message, check that your system has at least 16 megabytes of RAM.

This product requires version 4.0 or greater of the Windows NT operating system. You must update your operating system before installation.

This product requires Windows NT, Version 4.0, or later. Update your operating system if this error is displayed.

You do not appear to be an administrator. In order to run this program, you must belong to the Administrators group on local computer.

If you are not a member of the Administrators group on the local computer, this error is displayed. Use the administrator account to log on or contact your system administrator to add your user account to the Administrators group.

Your password entries do not match. Please verify that your password matches in the Password and Confirm Password text

The passwords that you entered in the **Password** text box and the **Confirm** text box do not match. Re-enter the passwords in both text boxes.

Your password is not valid. Please verify and re-enter your password.

When the user account exists and the user clicks Next, the password is verified. If the password is incorrect, this message is displayed. Re-enter the password.

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