IBM

IBM Directory Server

# QuickStart

Version 5.1

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Note

Before using this information and the product it supports, read the general information under "Notices" on page 11.

First Edition (November 2002)

This edition applies to version 5, release 1, of the IBM<sup>®</sup> Directory Server and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Preface

This document describes how to install IBM Directory Server version 5.1 through the InstallShield graphical user interface (GUI) using the Typical installation option, for the following platforms:

- Windows NT<sup>®</sup> 4.0, Windows<sup>®</sup> 2000, Windows XP. (XP is supported for the client and the Web Administration Tool only.)
- AIX<sup>®</sup> 4.3.3, 5.1, and 5.2
- Linux RedHat 7.2, 7.3, Red Hat Linux Advanced Server v2.1
- Linux SuSe 7.2, 7.3, and 8.0
- Solaris 7, 8, and 9

If you want to customize your installation or install on other platforms, do not use this document. Use the *IBM Directory Server Version 5.1 Installation and Configuration Guide* instead.

**Note:** For more information about hardware and software requirements, including required patches and FixPaks, see the *IBM Directory Server Version 5.1 Installation and Configuration Guide.* 

A new graphical user interface (GUI) called the Web Administration Tool is provided in this release for administering servers. The Web Administration Tool is supported on all operating system platforms supported for the client or the server. To install the Web Administration Tool to administer servers, you need the following:

- One of the following application servers:
  - embedded version of WebSphere<sup>®</sup> Application Server Express, V5.0 (Provided with IBM Directory Server)
  - Apache Tomcat 4.0.3 (Non-JVM 1.4 version), plus one of the following versions of Java<sup>™</sup>:
    - IBM version 1.3.1, Service release 2 (and up for 1.3.1, but not 1.4)
    - Sun version 1.3.1\_4
    - HP-UX version 1.3.1.06
- One of the following Web browsers:

On AIX

– Netscape version 7.0

On Linux

- On all Linux distributions: Netscape version 6.2.3, 7.0

#### On Solaris 7, 8, or 9

- Netscape version 6.2.3, 7.0
- Microsoft<sup>®</sup> Internet Explorer version 5.0

On Windows NT, 2000, and XP

- Microsoft Internet Explorer version 5.5
- Netscape version 6.2.3, 7.0

IBM Directory Server version 5.1 requires all of these platforms to have a minimum of 256 MB of memory.

The Typical installation uses default values for the installation location and other settings.

#### Notes:

- 1. If you do not want to accept the defaults in the Typical installation, do not use this document. Follow the instructions in the *IBM Directory Server Version 5.1 Installation and Configuration Guide* to use non-default values.
- 2. To install IBM Directory Server on Linux for S/390<sup>®</sup>, UnitedLinux, or Hewlett-Packard platforms, see the *IBM Directory Server Version 5.1 Installation and Configuration Guide*.
- **3**. If you have a previous version of IBM Directory Server or a version of SecureWay<sup>®</sup> Directory installed, do not use this document. See the *IBM Directory Server Version 5.1 Installation and Configuration Guide*.

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# Chapter 1. Installing using the InstallShield GUI

The InstallShield GUI has two installation options: Typical and Custom. This QuickStart focuses on Typical installation. For information about Custom installation, see the *IBM Directory Server Version 5.1 Installation and Configuration Guide*.

Typical installation uses default settings.

**Note:** If you install IBM Directory Server version 5.1 and its components using the InstallShield GUI, you must uninstall IBM Directory Server, if necessary, using the InstallShield GUI. See the *IBM Directory Server Version 5.1 Installation and Configuration Guide* for more information.

## Installing IBM Directory Server version 5.1 on Windows platforms

Use the following information to install the IBM Directory Server on Windows platforms.

# Before you install on Windows: creating the DB2<sup>®</sup> database owner

Before you begin installation, create or be sure that you have created a user ID for the user who will own the DB2 database used to store the directory data. (You will provide this user ID during configuration.)

The user ID you specify will own the database instance where the DB2 database will exist, and the instance will be in the user's home directory. The user can be no longer than 8 characters. In addition, the user must be a member of the Administrators group.

## Installing on Windows

To begin installing IBM Directory Server version 5.1 on a Windows platform:

- 1. On the computer where you are installing the IBM Directory Server, stop any programs that are running and close all windows. If you have open windows, the initial IBM Directory Server installation window might be hidden behind other windows.
- 2. Log on using an Administrator ID.
- If you are installing from a CD, insert the CD in your CD-ROM drive. If the CD-ROM does not automatically start the installation program, click Start->Run.
- 4. If you are installing locally from a CD or remotely from the network, select the drive for your CD-ROM or for the appropriate network path. If you downloaded a zip or tar file, go to the directory where you unzipped or untarred the file.
- 5. In the \ismp folder, double-click the **setup.exe** icon.

The language window is displayed.

**Note:** When installing on Windows, if the installation program exits without displaying the language window, it might be caused by backlevel video drivers. Update your video drivers if this happens.

- 6. Select the language you want to use during IBM Directory Server installation. Click **OK**.
  - **Note:** This is the language used in the installation program, not the language used for storing data in the IBM Directory Server. You choose the language for storing data in the directory database in step 10.
- **Note:** If a previous version of IBM Directory Server or a version of SecureWay Directory is installed on your system, use the instructions in the *IBM Directory Server Version 5.1 Installation and Configuration Guide*. Do not use this document.
- 7. On the Welcome window, click Next.
- 8. After reading the Software license agreement, click I accept the terms in the license agreement. Click Next.
- **9**. Any previously installed components and corresponding version levels are displayed. Click **Next**.
- 10. Select the language you want to use in IBM Directory Server 5.1. Click Next.
- 11. Click Typical and click Next.
- 12. To install to the default directory, click Next.
- **13**. The following list is displayed:
  - Client SDK 5.1
  - Web Administration 5.1
  - Server 5.1

Select the features you want to install and click Next.

#### Notes:

- a. The Web Administration Tool is a tool for administering servers both locally and remotely. It can be installed with the server or the client, or it can be installed on a computer without the server or client.
- b. If you select to install the server, you must also select to install the client.
- **c.** If you select **Web Administration 5.1** and embedded version of WebSphere Application Server Express, V5.0 is not installed, it is installed for you.
- 14. If you selected **Server 5.1** in step 13, and DB2 is not installed on your system, DB2 8.1 Enterprise Server Edition will be installed for you. You will see a window prompting you to enter a Windows user ID and password for the DB2 system ID. The user ID default is **db2admin**.
- 15. Type the password, and then type the password again for verification.
  - If you are using an existing Windows user ID, be sure the password is correct. Otherwise, DB2 does not install correctly.
  - If you do not want to use an existing user ID, DB2 creates the user ID with the password you type.

**Note:** This user ID does not need to be the same as the user ID you created before you started installation.

- **16.** Click **Next**. A window summarizing the components selected for installation and configuration is displayed.
  - **Note:** Any corequisite products needed by IBM Directory Server, such as DB2, are automatically installed. These products are listed in the summary

described in this step.

If you want to change any of your selections, click **Back**. To begin installation, click **Next**.

- 17. After the files are installed, the Client README file opens. Read the file and click **Next**. If you installed the server, the Server README file opens. Read the file and click **Next**.
- The restart panel is displayed. You can select to restart now or later. Click Finish.
- **19**. If in the previous step you selected to restart your computer now, the computer starts the restart immediately.
  - **Note:** If you installed the server, you must restart your system to complete the IBM Directory Server configuration and to create the DB2 database. You are unable to use the IBM Directory Server product until this is completed. After the restart, the Configuration Tool runs, prompting you for the necessary information to complete server configuration.
- 20. You have completed a Typical installation. Click **Start->Programs->IBM Directory Server 5.1** to see a list of the installed components.

After your computer is restarted, if you installed the server, the Configuration Tool automatically runs, prompting you for the necessary information to complete configuration. To complete configuration, use the instructions in Chapter 2, "Configuring IBM Directory Server" on page 7.

Verify the installation and configuration of the IBM Directory Server by loading a sample database. See Chapter 3, "Loading a sample database" on page 9 for instructions.

# Installing IBM Directory Server version 5.1 on a UNIX<sup>®</sup>-based platform

Use the following information to install the IBM Directory Server on UNIX platforms.

## Before you install on UNIX: creating the DB2 database owner

Before you install, create a user ID for the user who will own the DB2 database used to store the directory data. (You will provide this user ID during configuration.)

The user ID you specify will own the database instance where the DB2 database will exist, and the instance will be in the user's home directory. The user can be no longer than 8 characters. In addition:

- The user's Primary group can be any general group (such as **other**, **dbsysadm**, or **db2iadm**). There might be some groups that do not work correctly as the user's primary group when configuring the database. For example, if the user's primary group on Linux is **users**, problems might occur.
- The user **root** must be a member of the user's primary group. If **root** is not a member of this group, add **root** as a member of the group.
- For best results, the user's login shell should be the Korn shell script (/usr/bin/ksh).
- The user's password must be set correctly and ready to use, For example, the password cannot be expired or waiting for a first-time validation of any kind. (The best way to verify that the password is correctly set is to telnet to the same computer and successfully log in with that user ID and password.)

- The user must have a home directory and must be the owner of the home directory.
- The group ownership of the user's home directory must be the user's primary group.
- When configuring the database, it is not necessary, but only customary, to specify the home directory of the user ID as the database location. However, if you specify some other location, the user's home directory still must have 3 to 4 MB of space available. This is because DB2 creates links and adds files into the home directory of the instance owner (that is, the user) even though the database itself is elsewhere.

### Installing on UNIX

To begin installing IBM Directory Server 5.1 on a UNIX-based platform:

- 1. Log in as **root**.
- 2. If you are installing from a CD, insert the CD in the CD-ROM drive. Go to the root directory on your CD and invoke setup. A language window is displayed.
- **3**. Select the language you want to use during IBM Directory Server installation. Click **OK**.
  - **Note:** This is the language used in the installation program, not the language used for storing data in the IBM Directory Server. You choose the language for storing data in the directory database in step 7.
- **Note:** If a previous version of IBM Directory Server or a version of SecureWay Directory is installed on your system, do not use this document. See the *IBM Directory Server Version 5.1 Installation and Configuration Guide*.
- 4. On the Welcome window, click Next.
- 5. After reading the Software license agreement, click I accept the terms in the license agreement. Click Next.
- 6. Any preinstalled components and corresponding version levels are displayed. Click **Next**.
- 7. Select the language you want to use in IBM Directory Server 5.1. Click Next.
- 8. Click **Typical** and click **Next**.
- 9. The following list is displayed:
  - Client SDK 5.1
  - Web Administration GUI
  - Server 5.1

Select the features you want to install and click Next.

#### Notes:

- a. If you select to install the server, you must select to install the client.
- b. The Web Administration Tool is a tool for administering servers both locally and remotely. It can be installed with the server or the client, or it can be installed on a computer without the server or client.
- c. If you select **Web Administration 5.1** and embedded version of WebSphere Application Server Express, V5.0 is not installed, it is installed for you.
- A window summarizing the components selected for installation and configuration is displayed. If you want to change any of your selections, click Back. To begin installation, click Next.

- **Note:** Any corequisite products needed by IBM Directory Server, such as DB2, are automatically installed. These products are listed in the summary described in this step.
- After the files are installed, the Client README file opens. Read the file and click Next. If you installed the server, the Server README is also displayed. Read the file and click Next.
- 12. Click Finish. You have completed a Typical installation.
- **13**. If you installed the server, the Configuration Tool automatically runs, prompting you for the necessary information to complete configuration. To complete configuration, use the instructions in Chapter 2, "Configuring IBM Directory Server" on page 7.

Verify the installation and configuration of the IBM Directory Server by loading a sample database. See Chapter 3, "Loading a sample database" on page 9 for instructions.

# **Chapter 2. Configuring IBM Directory Server**

To configure the server, you must:

- 1. Set the IBM Directory Server administrator DN. Use the instructions in "Setting the IBM Directory Server administrator DN and password".
- 2. Configure the DB2 database that will be used to store the directory data. Use the instructions in "Configuring a directory database".
- **Note:** On Windows, the Configuration Tool is launched during restart, before the system is fully operational. Either configure at that time and then exit the Configuration Tool, or cancel from the Configuration Tool. Restart will not complete until you exit the Configuration Tool. Do **not** minimize the Configuration Tool window during restart.

You can start the Configuration Tool at any time after restart by typing ldapxcfg at a command prompt.

## Setting the IBM Directory Server administrator DN and password

To set the IBM Directory Server administrator DN and password:

- 1. In the IBM Directory Server Configuration Tool window, click **Administrator DN/password** in the task list on the left.
- 2. In the Administrator DN/password window on the right, type a valid DN (or accept the default DN) in the **Administrator DN** field.

The IBM Directory Server administrator DN is the DN used by the administrator of the directory. This is the one user who has full access to all data in the directory.

The default DN is **cn=root**. DNs are not case-sensitive. If you are unfamiliar with X.500 format, or if for any other reason you do not want to define a new DN, accept the default DN.

3. Type the password for the Administrator DN in the **Administrator Password** field. You must define a password. Passwords are case-sensitive.

Record the password for future reference.

- 4. Retype the password in the **Confirm password** field.
- 5. Click OK.

# Configuring a directory database

When you configure the database, the Configuration Tool adds information about the database that will be used to store directory data to the configuration file (ibmslapd.conf). In addition, if the database does not already exist, the Configuration Tool creates the database.

**Note:** Before configuring the database, be sure that the environment variable DB2COMM is **not** set.

To configure the directory database:

- 1. In the Configuration Tool, click Configure database in the task list on the left.
- 2. The Configuration Tool attempts to determine whether you already have a database. If you have a database already configured (that is, the information for

the database is in the configuration file), the Configuration Tool prompts you for information about what you want to do. For example, if the database is configured but cannot be found on the system, you might choose to create a database using the name specified in the configuration file. Use the information shown in the windows that are displayed to configure the database.

Depending on whether or not you already have a database, some or all of the following windows are displayed.

- 3. If a window is displayed requesting a user ID and password:
  - a. Type a user ID in the User ID field. This user ID must already exist before you can configure the database. (In previous releases, the user ID was created if it did not exist, but this is no longer true.) This is the user ID you created before installation. (See "Before you install on Windows: creating the DB2<sup>®</sup> database owner" on page 1 or "Before you install on UNIX: creating the DB2 database owner" on page 3.) The user ID you specify will own the database instance where the DB2 database will exist, and the instance will be in the user's home directory.
  - b. Type a password for the user in the **Password** field. Passwords are case-sensitive.
  - c. Click Next.
- 4. If a window is displayed requesting the database name:
  - **a.** Type the name you want to give the DB2 database. The name can be from 1 to 8 characters long. The database will be created in an instance with the same name as the user ID.
  - b. Click Next.
- 5. If a window is displayed requesting the database location:
  - a. Type the location for the database in the **Database location** field. For Windows platforms, this must be a drive letter. For non-Windows platforms, the location must be a directory name, such as /home/ldapdb2.

Be sure that you have at least 80 MB of free hard disk space in the location you specify and that additional disk space is available to accommodate growth as new entries are added to the directory.

- b. Click Next.
- 6. If a window is displayed requesting you to choose a character set:
  - a. Click the type of database you want to create. You can create a UCS Transformation Format (UTF-8) database, in which LDAP clients can store UTF-8 character data, or a local code page database, which is a database in the local code page.
  - b. Click Next.
- 7. In the verification window, information is displayed about the configuration options you specified. To return to an earlier window and change information, click **Back**. To begin configuration, click **Finish**.
- 8. The completion window is displayed. Click Close.

Optionally, you can verify the installation and configuration by loading the sample database. See Chapter 3, "Loading a sample database" on page 9 for instructions.

# Chapter 3. Loading a sample database

The following information enables you to load a sample database and start the server.

- 1. In the Configuration Tool, click Manage suffixes in the task list on the left.
- 2. In the Manage suffixes window, in the **SuffixDN** field, type o=ibm,c=us. This is the suffix DN that will hold the sample data. Because the sample data is part of the suffix **o=ibm,c=us**, this is the suffix DN you must add.
- 3. Click Add.
- 4. Click OK.
  - **Note:** When you click **Add**, the suffix is added to the list in the **Current suffix DNs** box; however, the suffix is not actually added until you click **OK**.
- 5. In the Configuration Tool, click Import LDIF data in the task list on the left.
- 6. In the Import LDIF data window on the right, in the **Path and LDIF file name** field, type one of the following:
  - *install\_dir*\examples\sample.ldif on Windows systems
  - install\_dir/examples/sample.ldif on UNIX systems

Alternatively, you can click **Browse** to locate the file. *install\_dir* is the directory where you installed IBM Directory Server.

- 7. Click Standard import.
- 8. Click Import.
- **9**. After processing is complete, go to a command prompt and type ibmslapd to start the server.

Messages are displayed while the server is starting. The following message is displayed if the server starts successfully:

IBM Directory, Version 5.1 Server started.

If the message is not displayed, or if you have problems installing or configuring the IBM Directory Server version 5.1 product, refer to the *IBM Directory Server Version 5.1 Installation and Configuration Guide*.

You have verified that the sample database is loaded correctly and that the installation is successful.

Use the instructions in "Starting the Web Administration Tool" to start the Web Administration Tool if you installed it. See the *IBM Directory Server version 5.1 Administration Guide* for information about using the Web Administration Tool and using the server.

### Starting the Web Administration Tool

To start the Web Administration Tool:

1. Start the application server as follows:

#### **On Windows platforms:**

- a. Go to the *install\_dir*\ldap\appsrv\bin directory.
- b. At a command prompt, type startServer.bat server1.

#### On UNIX platforms:

- a. Go to the *install\_dir*/ldap/appsrv/bin directory. (On Solaris, go to the opt/ibmldapc/appsrv/bin directory.)
- b. At a command prompt, type startServer.sh server1.
- 2. From a Web browser, type the following address:
  - http://localhost:9080/IDSWebApp/IDSjsp/Login.jsp

The IBM Directory Server Web Administration login page window is displayed.

**Note:** This address works only if you are running the browser on the computer on which the Web Administration Tool is installed. If the Web Administration Tool is installed on a different computer, replace **localhost** with the hostname of the computer where the Web Administration Tool is installed.

For information about using the Web Administration Tool, see the *IBM Directory Server version 5.1 Administration Guide*.

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