



Common Criteria Certification: Installing DB2 Universal Database Enterprise Server Edition and DB2 Universal Database Workgroup Server Edition

Version 8.2 Revision 08

IBM® DB2 Universal Database™



Common Criteria Certification: Installing DB2 Universal Database Enterprise Server Edition and DB2 Universal Database Workgroup Server Edition

Version 8.2 Revision 08

Before using this information and the product it supports, be sure to read the general information under *Notices*.

This document contains proprietary information of IBM. It is provided under a license agreement and is protected by copyright law. The information contained in this publication does not include any product warranties, and any statements provided in this manual should not be interpreted as such.

You can order IBM publications online or through your local IBM representative.

- To order publications online, go to the IBM Publications Center at www.ibm.com/shop/publications/order
- To find your local IBM representative, go to the IBM Directory of Worldwide Contacts at www.ibm.com/planetwide

To order DB2 publications from DB2 Marketing and Sales in the United States or Canada, call 1-800-IBM-4YOU (426-4968).

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© Copyright International Business Machines Corporation 1993-2004. All rights reserved.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Common Criteria certification of DB2 Universal Database products v

Supported interfaces for a Common Criteria evaluated configuration vii

About This Book. ix

Part 1. About DB2 Universal Database. 1

Chapter 1. DB2 servers 3

DB2 UDB Enterprise Server Edition. 3

DB2 Workgroup Server Edition 4

Chapter 2. DB2 clients 5

DB2 clients 5

Client types. 6

 DB2 Run-Time Client Lite 6

 DB2 Run-Time Client 6

 DB2 Application Development Client 7

Part 2. Installing DB2 UDB servers. . . 9

Chapter 3. Installation overview 11

Installation methods for DB2 UDB (Windows and UNIX) 11

Single-partition installation (Windows) 12

Single-partition installation (UNIX) 13

DB2 users and group (UNIX) 14

Granting user rights (Windows) 15

DB2 UDB system administrator group (Windows) 16

Chapter 4. Installation requirements . . 17

Disk and memory requirements (Windows and UNIX) 17

NIS installation considerations 17

DB2 server installation (Windows). 18

 Installation requirements for DB2 servers (Windows). 18

 Security issues when installing DB2 Universal Database 21

 Required user accounts for installation of DB2 servers (Windows) 22

DB2 server installation (UNIX) 25

 Installation requirements for DB2 servers (AIX) 25

 Installation requirements for DB2 servers (Linux) 30

 Installation requirements for DB2 servers (Solaris Operating Environment) 31

Chapter 5. Preinstallation tasks 35

Installing the IBM Developer Kit for Java (UNIX). . 35

Java SDK levels for DB2 UDB 37

Creating group and user IDs for a DB2 UDB installation (UNIX) 38

Kernel parameters (UNIX) 40

 Modifying kernel parameters (Linux). 40

 Modifying kernel parameters (Solaris Operating Environment). 41

Chapter 6. Installation tasks 43

Single-partition database environment (Windows) 43

 Installing DB2 servers in a single-partition database environment (Windows) 43

 Installing DB2 Enterprise Server Edition on Windows 2000 for a Common Criteria compliant installation 45

 Installing DB2 Workgroup Server Edition on Windows 2000 for a Common Criteria compliant installation 71

Single-partition database environment (UNIX). . . 96

 Installing DB2 servers in a single-partition environment (UNIX) 96

 Installing DB2 UDB Enterprise Server Edition on Linux SuSE for a Common Criteria compliant installation 99

 Installing DB2 UDB Enterprise Server Edition on AIX 5.2 for a Common Criteria compliant installation 125

 Installing DB2 UDB Enterprise Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation 150

 Installing DB2 UDB Workgroup Server Edition on Linux SuSE for a Common Criteria compliant installation. 176

 Installing DB2 UDB Workgroup Server Edition on AIX 5.2 for a Common Criteria compliant installation 201

 Installing DB2 UDB Workgroup Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation 225

Part 3. Postinstallation tasks . . . 253

Chapter 7. After installing DB2 UDB 255

Password rules and maintenance 255

Enabling the execution of remote commands (UNIX) 255

Applying the latest FixPak (Windows and UNIX) 256

Verifying the installation (Windows and UNIX) . . 257

 Verifying the installation using the command line processor (CLP) 257

Part 4. Installing DB2 clients . . . 259

Chapter 8. Installing DB2 clients (Windows)	261
Client requirements	261
DB2 client installation requirements (Windows)	261
Disk and memory requirements (Windows and UNIX)	262
Installing DB2 clients (Windows)	263

Chapter 9. Installing DB2 clients (UNIX)	265
DB2 client requirements	265
DB2 client installation requirements (AIX)	265
DB2 client installation requirements (Linux)	266
DB2 client installation requirements (Solaris Operating Environment)	267
Disk and memory requirements (Windows and UNIX)	268
Installing DB2 clients (UNIX)	269

Part 5. Configuring a client-to-server connection 271

Chapter 10. Client-to-server support	273
Supported and non-supported client configurations	273

Chapter 11. Configuring a connection using the command line processor (CLP)	275
Configuring client-to-server connections using the command line processor (CLP)	275
Cataloging the node	276
Cataloging a TCP/IP node from the DB2 client	276

Cataloging the database and testing the connection	277
Cataloging a database from a DB2 client using the CLP	277
Testing the client-to-server connection using the CLP	279

Part 6. Appendixes 281

Appendix A. Language support.	283
Changing the DB2 interface language (Windows)	283
Changing the DB2 interface language (UNIX)	283
Supported DB2 interface languages	284
Language identifiers for running the DB2 Setup wizard in another language	285
Displaying the db2setup command in your national language	286

Appendix B. Mounting the DB2 product CD-ROM (UNIX).	287
Mounting the CD-ROM (AIX)	287
Mounting the CD-ROM (Linux)	288
Mounting the CD-ROM (Solaris Operating Environment)	288

Appendix C. Notices	291
Trademarks	293

Index	295
--------------	------------

Contacting IBM	297
Product information	297

Common Criteria certification of DB2 Universal Database products

For Version 8.2, DB2 Universal Database (DB2 UDB) products are certified according to the Common Criteria evaluation assurance level 4 (EAL4), augmented with Flaw remediation ALC_FLR.1. The following products are certified on the following operating systems:

Table 1. Certified DB2 Universal Database configurations

	Windows [®] 2000	Linux SuSE Enterprise Server V8	AIX [®] 5.2	Solaris Operating Environment, 8
Enterprise Server Edition Note: Single-partition environment only.	Yes (32-bit only)	Yes (32-bit only)	Yes (64-bit only)	Yes (64-bit only)
Workgroup Server Edition	Yes (32-bit only)	Yes (32-bit only)	Yes (64-bit only)	Yes (64-bit only)
Personal Edition	Yes (32-bit only)	Yes (32-bit only)	N/A	N/A
Express Edition	Yes (32-bit only)	Yes (32-bit only)	N/A	N/A

Notes:

1. DB2 UDB configurations on the Linux SuSE environment are Common Criteria certified on Intel-based hardware only.
2. In a Common Criteria certified DB2 UDB environment, DB2 UDB clients are supported on the following operating systems:
 - Windows 2000
 - Linux SuSE Enterprise Server V8
 - AIX 5.2
 - Solaris Operating Environment, 8

Only 32-bit clients are supported.

For more information about Common Criteria, see the Common Criteria web site at: <http://niap.nist.gov/cc-scheme/>.

For information about installing and configuring a DB2 UDB system that conforms to the Common Criteria EAL4, see the following books:

- *DB2 Universal Database Common Criteria Certification: Installing DB2 Universal Database Enterprise Server Edition and DB2 Universal Database Workgroup Server Edition*
- *DB2 Universal Database Common Criteria Certification: Installing DB2 Universal Database Personal Edition*
- *DB2 Universal Database Common Criteria Certification: Installing DB2 Universal Database Express Edition*
- *DB2 Universal Database Common Criteria Certification: Administration and User Documentation*

These books are available in PDF format from the DB2 Information Management Library.

Supported interfaces for a Common Criteria evaluated configuration

The set of DB2 Universal Database interfaces that are used in the Common Criteria evaluation of DB2 Universal Database are as follows:

- The DB2 Universal Database install program
- The command line processor
- DB2 commands
- DB2 application programming interfaces (APIs)
- SQL statements

You can use these DB2 Universal Database interfaces when installing and configuring a Common Criteria compliant DB2 Universal Database system.

Other interfaces that are provided by DB2 Universal Database, such as the Control Center or Command Editor were not used during the Common Criteria evaluation of DB2 Universal Database, **and must not be used in the Common Criteria evaluation configuration.**

NOT FENCED routines are not supported.

In the Common Criteria evaluation configuration, the installation procedures as documented in the following sections must be followed and the configuration options selected must not be modified while in the evaluation configuration:

- “Installing DB2 Enterprise Server Edition on Windows 2000 for a Common Criteria compliant installation” on page 45
- “Installing DB2 Workgroup Server Edition on Windows 2000 for a Common Criteria compliant installation” on page 71
- “Installing DB2 UDB Enterprise Server Edition on Linux SuSE for a Common Criteria compliant installation” on page 99
- “Installing DB2 UDB Enterprise Server Edition on AIX 5.2 for a Common Criteria compliant installation” on page 125
- “Installing DB2 UDB Enterprise Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation” on page 150
- “Installing DB2 UDB Workgroup Server Edition on Linux SuSE for a Common Criteria compliant installation” on page 176
- “Installing DB2 UDB Workgroup Server Edition on AIX 5.2 for a Common Criteria compliant installation” on page 201
- “Installing DB2 UDB Workgroup Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation” on page 225

About This Book

This book describes how to install DB2 Universal Database Enterprise Server Edition and DB2 Universal Database Workgroup Server Edition for a Common Criteria evaluation. It includes detailed instructions on installing these DB2 Universal Database (DB2 UDB) products on the following operating systems:

- Windows 2000
- Linux SuSE
- Sun Solaris Operating Environment 8
- AIX Version 5.2

If you need to install other DB2 UDB products for evaluation, refer to the following books:

- *DB2 Universal Database Common Criteria Certification: Installing DB2 Universal Database Personal Edition*
- *DB2 Universal Database Common Criteria Certification: Installing DB2 Universal Database Express Edition*

For information about security in a DB2 UDB environment, and for information on configuring DB2 UDB for the Common Criteria evaluation, refer to the following book:

- *DB2 Universal Database Common Criteria Certification: Administration and User Documentation*

Some topics in this book may link to topics that are not in any of the books listed above. Topics that are referenced outside of the Common Criteria certification documentation are for informational purposes only, and are not required for either installing or configuring a Common Criteria compliant environment.

Part 1. About DB2 Universal Database

Chapter 1. DB2 servers

DB2 UDB Enterprise Server Edition

DB2[®] Universal Database (UDB) Enterprise Server Edition (ESE) is a multiuser version of DB2 that allows you to create and manage single-partitioned or partitioned database environments. Partitioned database systems can manage high volumes of data and provide benefits such as increased performance and high availability. Other features of DB2 UDB Enterprise Server Edition include:

- A data warehouse server and related components.
- DB2 Connect[™] functionality for accessing data stored on midrange and mainframe database systems such as DB2 for iSeries[™] or DB2 UDB for z/OS[™] and OS/390[®]. DB2 UDB Enterprise Server Edition provides support for both local and remote DB2 clients.

Use of the DB2 Connect component is limited to five (5) registered users per server. If additional users are required, a separate DB2 Connect program must be acquired. Contact your IBM[®] sales representative for more information.

- Satellite administration capabilities allow DB2 UDB ESE to remotely administer DB2 UDB Personal Edition and DB2 UDB Workgroup Server Edition database servers that are configured as satellites. For more information about satellite capabilities, refer to the satellite administration documentation.

DB2 UDB Workgroup edition offers a multiuser product similar to DB2 UDB ESE, but without the ability to create partitioned database environments and without DB2 Connect functionality.

Note: If you are installing a The Common Criteria compliant DB2 Universal Database environment, the following features have not been evaluated, and are not supported:

- Multiple-partition database environments
- Access to data stored on midrange and mainframe database systems via DB2 Connect
- Satellite administration capability

The following diagram shows a DB2 UDB ESE configuration with four database partition servers, one per computer. Setup instructions are based on this configuration but can easily be adjusted for partitioned configurations with a fewer or greater number of computers and database partition servers.

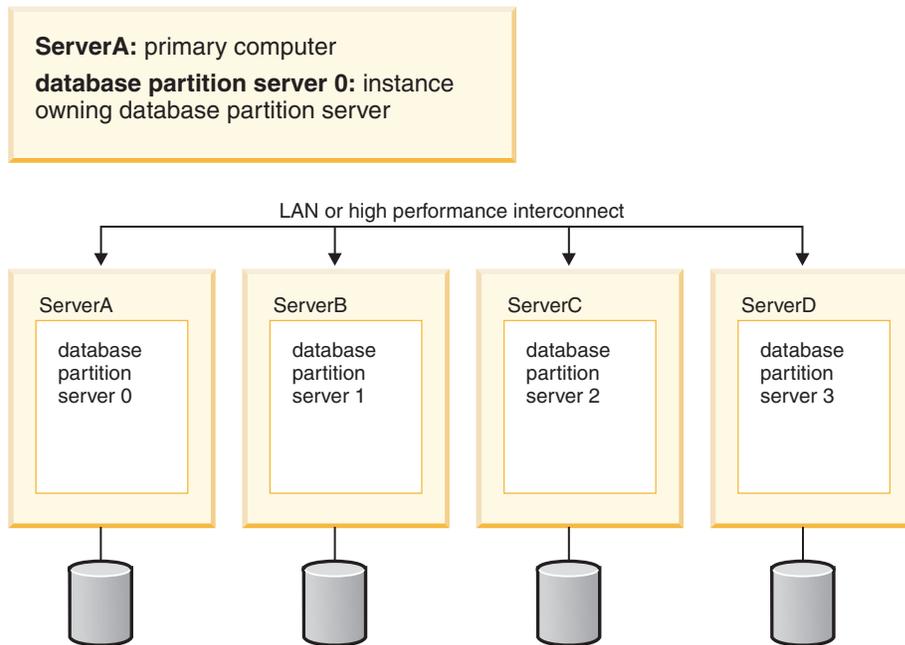


Figure 1. A typical partitioned DB2 server environment with one instance owning computer and four participating computers

ServerA is the primary or instance-owning computer. ServerB, ServerC, and ServerD are additional participating computers.

Related tasks:

- "Single-partition installation (Windows)" on page 12
- "Partitioned installation (Windows)" in the *Quick Beginnings for DB2 Servers*
- "Single-partition installation (UNIX)" on page 13
- "Partitioned installation (UNIX)" in the *Quick Beginnings for DB2 Servers*

DB2 Workgroup Server Edition

DB2® Workgroup Server Edition is a multi-user version of DB2. It is designed for use in a Local Area Network (LAN) environment and provides support for both local and remote DB2 clients. DB2 Workgroup Server Edition also includes data warehouse capabilities, high availability function, and can be administered remotely from a satellite control database. For more information about satellite functionality, refer to the satellite administration documentation.

Related tasks:

- "Single-partition installation (Windows)" on page 12
- "Single-partition installation (UNIX)" on page 13

Chapter 2. DB2 clients

DB2 clients

There are four types of DB2[®] clients:

- Run-Time Client Lite. The DB2 Run-Time Client Lite is a smaller footprint version of the DB2 Run-Time Client and is available only on Windows[®]. Windows Installer Merge Modules are also available for this product that can be used to embed the functionality from this client into your own product
- Run-Time Client. Use this type of DB2 client to provide basic, non-GUI access to DB2 databases.
- Administration client. Use this type of DB2 client to remotely administer a DB2 server. The DB2 Administration client also contains all of the functionality available in the DB2 Run-Time client.

Note: The Administration Client is not supported in Common Criteria compliant environments.

- Application Development client. Use this type of DB2 client to develop DB2 database applications, including stored procedures, user defined functions, and client applications. The DB2 Application Development client also contains all of the functionality available in the DB2 Run-Time client.

A database cannot be created on a DB2 client; you can only access databases that reside on DB2 servers.

Client backlevel support:

- DB2 UDB Version 8 clients support DB2 UDB Version 8 servers.
- DB2 UDB Version 8 clients can connect to DB2 UDB Version 7 servers only if the DB2 UDB version server is running DRDA[®]-AS.
- DB2 UDB Version 7 and Version 6 clients can connect to DB2 UDB Version 8 server with limited capacity.
- DB2 UDB Version 8 clients cannot connect to DB2 Connect[™] Version 7 servers.

Note: In Common Criteria compliant environments, DB2 clients must be at the same version level as the DB2 server.

Related concepts:

- “DB2 Run-Time Client” on page 6
- “DB2 Administration Client” in the *Quick Beginnings for DB2 Clients*
- “DB2 Application Development Client” on page 7
- “Response file installation basics” in the *Installation and Configuration Supplement*
- “DB2 Run-Time Client Lite” on page 6

Related tasks:

- “Installing DB2 clients (Windows)” on page 263
- “Installing DB2 clients (UNIX)” on page 269

Related reference:

- “Version 8 incompatibilities with previous releases” in the *Administration Guide: Planning*
- “DB2 client merge modules” in the *Quick Beginnings for DB2 Clients*

Client types

DB2 Run-Time Client Lite

The DB2[®] Run-Time Client Lite provides basic functions that allow your applications to access DB2 Universal Database[™] servers. The DB2 Run-Time Client Lite also contains support necessary for JDBC, SQLJ, ODBC, CLI, OLE DB and .NET similar to the DB2 Run-Time client.

With its reduced installation image size, the DB2 Run-Time Client Lite is ideal for mass deployment or for bundling with your applications.

The installation program installs the language that the installation is running in, as well as the English language which is mandatory. The DB2 Run-Time Client Lite consists of one language that has support for all languages and several images that are language specific. All images contain English language support. You must use the appropriate image for the language(s) that you want to install.

Limitations:

- DB2 Run-Time Client Lite is available only on Windows[®] operating systems and supports only the TCP/IP and Named Pipes communication protocols.

Note: In Common Criteria compliant environments, only TCP/IP is supported.

- The Configuration Assistant is not packaged with the DB2 UDB Run-Time Client Lite. The only available GUI is the CLI/ODBC administration GUI.

Note: If you are installing a Common Criteria compliant environment, the CLI/ODBC administration GUI has not been evaluated, and is not supported.

- You must bind the CLI packages from a system with the proper bind files before you can use the DB2 client for CLI applications.

Related concepts:

- “DB2 Run-Time Client” on page 6
- “DB2 Administration Client” in the *Quick Beginnings for DB2 Clients*
- “DB2 Application Development Client” on page 7

Related tasks:

- “Installing DB2 clients (Windows)” on page 263

Related reference:

- “DB2 client merge modules” in the *Quick Beginnings for DB2 Clients*

DB2 Run-Time Client

The DB2[®] Run-Time Client provides the functionality required for an application to access DB2 Universal Database[™] servers and DB2 Connect[™] servers. Functionality

includes communication protocol support and support for application interfaces such as JDBC, SQLJ, ODBC, CLI, OLE DB, and .NET.

Limitations:

- The Configuration Assistant is not packaged with the DB2 UDB Run-Time Client. The only available GUI is the CLI/ODBC administration GUI.
- With the DB2 Run-Time Client, you must bind the CLI packages from a system with the proper bind files before you can use the DB2 client for CLI applications.

Supported platforms:

DB2 Run-Time Clients are available for AIX[®], HP-UX, Linux, Solaris Operating Environment, and Windows[®] operating systems.

Related concepts:

- “DB2 clients” on page 5
- “DB2 Administration Client” in the *Quick Beginnings for DB2 Clients*
- “DB2 Application Development Client” on page 7
- “DB2 Run-Time Client Lite” on page 6

Related tasks:

- “Installing DB2 clients (Windows)” on page 263
- “Installing DB2 clients (UNIX)” on page 269

DB2 Application Development Client

The DB2[®] Application Development Client is a collection of graphical and non-graphical tools and components for developing character-based, multimedia, and object-oriented applications. Special features include the Development Center and sample applications for all supported programming languages. The Application Development Client includes the tools and components provided as part of the DB2 Administration Client product.

Supported platforms:

DB2 Application Development Clients are available for the following platforms: AIX[®], HP-UX, Linux, the Solaris Operating Environment, and Windows[®] operating systems.

Related concepts:

- “DB2 clients” on page 5
- “DB2 Run-Time Client” on page 6
- “DB2 Administration Client” in the *Quick Beginnings for DB2 Clients*
- “DB2 Run-Time Client Lite” on page 6

Related tasks:

- “Installing DB2 clients (Windows)” on page 263
- “Installing DB2 clients (UNIX)” on page 269

Part 2. Installing DB2 UDB servers

Chapter 3. Installation overview

Installation methods for DB2 UDB (Windows and UNIX)

This topic provides information about DB2[®] UDB installation methods. The following table shows the installation methods that are available by operating system.

Table 2. Installation method by operating system.

Installation method	Windows [®]	UNIX [®]
DB2 Setup wizard	Yes	Yes
db2_install script	No	Yes
Response file installation	Yes	Yes
Native installation tools	No	Yes

The following list describes installation methods for DB2 UDB.

DB2 Setup wizard

The DB2 Setup wizard is a GUI installer available on both UNIX and Windows operating systems. The DB2 Setup wizard provides an easy-to-use interface for installing DB2 UDB and for performing initial setup and configuration tasks. The DB2 Setup wizard can also be used to create instances and response files.

On UNIX systems, the DB2 Setup wizard replaces the text-based installer interface (db2setup).

Note: If you are installing a Common Criteria compliant environment, the DB2 Setup wizard is the only supported method for installing DB2 Universal Database. Other methods have not been evaluated.

db2_install script

The db2_install script uses the operating systems's native installation utility to install DB2 UDB. The db2_install script prompts for a DB2 product keyword. This script installs *all* components for the DB2 product you specify, in English only. You cannot select or deselect components or interface language support. The db2_install script does not perform user and group creation, instance creation, or configuration. It installs the DB2 components to your system. This method of installation might be preferred in cases where greater control over the installation setup process than the GUI installer provides is required.

Response file installation

A response file is an ASCII file that contains setup and configuration values. The file is passed to the DB2 setup program and the installation is performed according to the values that have been specified. There are a number of ways to create a response file:

- Using the response file generator (Windows)
- Using the DB2 Setup wizard (UNIX and Windows)
- By customizing sample response files that are provided for each DB2 product (UNIX and Windows)

Using the response file generator, you can create a response file that replicates an existing installation. For example, you might install a DB2 client, fully configure the client, then generate a response file to replicate the installation and configuration of the client to other computers. The response file generator is available only on Windows.

The DB2 Setup wizard can create a response file for both UNIX and Windows installations. The selections you make as you proceed through the DB2 Setup wizard are recorded in a response file that you can save to a location on your system.

For your convenience, you can create a response file without performing an installation. This feature can be useful in an environment where a DBA does not have the authority required to perform an installation. The DBA can create a response file for the installation and provide it to the system administrator who installs the product on the DBA's behalf.

An alternative to using the response file generator or the DB2 Setup wizard to create a response file is to manually modify a sample response file. Sample response files are provided on the DB2 product CD-ROM.

Native installation tools

Installing DB2 using your operating system's native installation provides the greatest control over the installation process, but it is also more difficult than the other installation methods. When installing a particular DB2 product, you have to ensure that the required components are installed and that component dependencies are maintained. Advanced knowledge of both DB2 and your operating environment is required. User and group creation, instance creation, and configuration must be performed manually.

Related tasks:

- "Installing a DB2 product manually" in the *Installation and Configuration Supplement*
- "Response file installation of DB2 overview (UNIX)" in the *Installation and Configuration Supplement*
- "Response file installation of DB2 overview (Windows)" in the *Installation and Configuration Supplement*

Single-partition installation (Windows)

This topic outlines the steps for installing DB2 Enterprise Server Edition or Workgroup Server Edition in a single-partition database environment on Windows.

Procedure:

To install DB2 Enterprise Server Edition or Workgroup Server Edition in a single-partition database environment on Windows:

1. Review the DB2 product prerequisites.
2. Install the DB2 product using the DB2 Setup wizard. DB2 Setup wizard features include:
 - A launchpad from which you can view installation notes and release notes, and learn about DB2 UDB Version 8 features.
 - Typical, compact, and custom installation types.
 - Multiple language selection in which to perform the installation.

- The user interface and product messages are available in several languages and are installed in the languages that you choose. By installing multiple languages, you can view the interface and messages in your preferred languages.
- DB2 Administration Server setup (including DAS user setup).
- Administration contact and health monitor notification setup.
- Instance setup and configuration (including instance user setup).
- DB2 tools metadata and data warehouse control database setup.
- Response file creation. You can save your installation choices in a response file for later installation or to duplicate the installation on another computer.

Related tasks:

- “Tools catalog database and DAS scheduler setup and configuration” in the *Administration Guide: Implementation*
- “Notification and contact list setup and configuration” in the *Administration Guide: Implementation*

Related reference:

- “UPDATE ADMIN CONFIGURATION Command” in the *Command Reference*
- “Installation requirements for DB2 servers (Windows)” on page 18
- “Required user accounts for installation of DB2 servers (Windows)” on page 22
- “Disk and memory requirements (Windows and UNIX)” on page 17
- “setup - Install DB2 Command” in the *Command Reference*

Single-partition installation (UNIX)

This topic outlines steps for installing DB2 Enterprise Server Edition in a single-partition database environment or DB2 Workgroup Server Edition on AIX, HP-UX, Linux, and Solaris Operating Environment.

Procedure:

To install DB2 Enterprise Server Edition in a single-partition database environment or DB2 Workgroup Server Edition on AIX, HP-UX, Linux, and Solaris Operating Environments:

1. Review the DB2 product prerequisites.
2. Mount the DB2 product CD-ROM.
3. Modify kernel parameters on HP-UX, Linux, and Solaris Operating Environment.
4. Install the DB2 product using the DB2 Setup wizard. DB2 Setup wizard features include:
 - A launchpad from which you can view installation notes and release notes, and learn about DB2 Version 8 features
 - Typical, Compact, and Custom installation types
 - Multiple language selection in which to perform the installation.
 - The user interface and product messages are available in several languages and are installed in the languages that you choose. By installing multiple languages, you can view the interface and messages in your preferred languages.
 - DB2 Administration Server setup (including DAS user setup)

- Administration contact and health monitor notification setup
- Instance setup and configuration (including instance user setup)
- DB2 tools metadata and data warehouse control database setup
- Response file creation

Related reference:

- “Installation requirements for DB2 servers (AIX)” on page 25
- “Installation requirements for DB2 servers (HP-UX)” in the *Quick Beginnings for DB2 Servers*
- “Installation requirements for DB2 servers (Linux)” on page 29
- “Installation requirements for DB2 servers (Solaris Operating Environment)” on page 31
- “db2setup - Install DB2 Command” in the *Command Reference*

DB2 users and group (UNIX)

Three users and three groups are required to operate DB2[®] UDB on UNIX[®]. The DB2 Setup Wizard can create the following users and groups automatically during the installation of your DB2 product.

Note: For a Common Criteria compliant installation, these users and groups must be created manually.

Instance owner

The DB2 instance is created in the instance owner home directory. This user ID controls all DB2 processes and owns all file systems and devices used by the databases contained within the instance. The default user is db2inst1 and the default group is db2iadm1.

If a user already exists with the same default name, for example, db2inst1, the DB2 installer will then search for the user db2inst2. If that user doesn't exist, it will then create that user. If that user does exist, the DB2 installer will continue its search (db2inst3, db2inst4, etc.) until it finds an available user. This algorithm also applies to the creation of fenced users and DB2 administration server users.

Fenced user

The fenced user is used to run user defined functions (UDFs) and stored procedures outside of the address space used by the DB2 database. The default user is db2fenc1 and the default group is db2fadm1. If you do not need this level of security, for example in a test environment, you may use your instance owner as your fenced user.

DB2 administration server user

The user ID for the DB2 administration server user is used to run the DB2 administration server on your system. Default user is dasusr1 and default group is dasadm1. This user ID is also used by the DB2 GUI tools to perform administration tasks against the local server database instances and databases.

This user does not contain any databases and there is only one administration server per machine. For example, one administration server can service multiple database instances.

Related tasks:

- “Creating required users for a DB2 server installation in a partitioned database environment (AIX)” in the *Quick Beginnings for DB2 Servers*
- “Creating required users for a DB2 server installation in a partitioned database environment (HP-UX)” in the *Quick Beginnings for DB2 Servers*
- “Creating required users for a DB2 server installation in a partitioned database environment (Linux)” in the *Quick Beginnings for DB2 Servers*
- “Creating required users for a DB2 server installation in a partitioned database environment (Solaris Operating Environment)” in the *Quick Beginnings for DB2 Servers*

Granting user rights (Windows)

This topic describes the steps required to grant user rights on Windows operating systems. Specific user rights are recommended for user accounts required to install and set up DB2.

Prerequisites:

To grant advanced user rights on Windows you must be logged on as a local Administrator.

Procedure:

Windows NT

1. Click **Start** and select **Programs** → **Administrative Tools (Common)** → **User Manager for Domains**.
2. In the User Manager window, select **Policies** → **User Rights** from the menu bar.
3. In the User Rights Policy window, select the **Show Advanced User Rights** check box then in the **Right** drop down box, select the user right you want to grant. Click **Add**.
4. In the Add Users and Groups window select the user or the group you want to grant the right to and click **OK**.
5. In the User Rights Policy window, select the user or the group you have added from the **Grant To** list box and click **OK**.

Windows 2000, Windows XP, and Windows Server 2003

1. Click **Start** and select **Settings** → **Control Panel** → **Administrative Tools**.

Note: On Windows XP and Windows Server 2003 computers, for some Windows Themes, this will be: **Settings** → **Control Panel** → **Performance and Maintenance** → **Administrative Tools**.

2. Select **Local Security Policy**.
3. In the left window pane, expand the **Local Policies** object, then select **User Rights Assignment**.
4. In the right window pane, select the user right that you want to assign.
5. From the menu, select **Action** → **Security...**
6. Click **Add**, then select a user or group to assign the right to, and click **Add**.
7. Click **OK**.

Note: If your computer belongs to a Windows 2000 or Windows Server 2003 domain, the domain user rights may override your local settings. In this case, your Network Administrator will have to make the changes to the user rights.

Related concepts:

- “User, user ID and group naming rules” in the *Administration Guide: Implementation*

Related tasks:

- “Installing DB2 Personal Edition - overview (Windows)” in the *Quick Beginnings for DB2 Personal Edition*

Related reference:

- “Required user accounts for installation of DB2 servers (Windows)” on page 22

DB2 UDB system administrator group (Windows)

By default, system administrative (SYSADM) authority is granted to any valid DB2® user account that belongs to the Administrators group on the computer where the account is defined. If the account is a local account, then it must belong to the local Administrators group. If the account is a domain account, then it must belong to the Administrators group at the domain controller.

For example, if a user logs on to a domain account and tries to access a DB2 database, DB2 goes to a domain controller to enumerate groups (including the Administrators group). You can force DB2 to always perform group lookup on the local computer by setting the registry variable `DB2_GRP_LOOKUP=local` and adding the domain accounts (or global groups) to the local group.

For a domain user to have SYSADM authority, it must belong to the Administrators group on the domain controller. Since DB2 always performs authorization at the machine where the account is defined, adding a domain user to the local Administrators group on the server does not grant the domain user SYSADM authority to this group.

To avoid adding a domain user to the Administrators group at the domain controller, create a global group and add the domain users to which you want to grant SYSADM authority to it, and then update the DB2 configuration parameter `SYSADM_GROUP` with the name of the global group. To do so, enter the following commands:

```
db2stop
db2 update dbm cfg using sysadm_group global_group
db2start
```

Related tasks:

- “Installing DB2 Personal Edition - overview (Windows)” in the *Quick Beginnings for DB2 Personal Edition*

Chapter 4. Installation requirements

Disk and memory requirements (Windows and UNIX)

Disk requirements:

The disk space required for your product depends on the type of installation you choose and the type of file system you have. The DB2 Setup wizard provides dynamic size estimates based on the components selected during a typical, compact, or custom installation.

On Windows, you might require significantly more space on FAT (File Allocation Table) drives with large cluster sizes than with NTFS (New Technology File System) drives.

Remember to include disk space for required software, communication products, and documentation.

Memory requirements:

At a minimum, DB2 UDB requires 256 MB of RAM. 512MB of RAM memory is recommended if you use the GUI tools. When determining memory requirements, be aware of the following:

- For DB2 client support, these memory requirements are for a base of 5 concurrent client connections. You will need an additional 16 MB of RAM per 5 client connections.
- Additional memory is required for other software that is running on your system.
- Additional memory might be required to improve the performance of the DB2 GUI tools.
- Specific performance requirements can determine the amount of memory needed.
- Memory requirements are affected by the size and complexity of your database system.
- Memory requirements are affected by the extent of database activity and the number of clients accessing your system.
- On Linux, a SWAP space of at least twice as large as your RAM is recommended, but not required.

NIS installation considerations

In environments that include security software, such as NIS or NIS+, there are some installation considerations. The DB2 installation scripts attempt to update objects that are under the control of the security packages, such as users and groups, and will not be able to do so if NIS or NIS+ is installed.

At instance creation, without a security component present, the instance-owning user's group properties are automatically modified to add the administrative server's group as a secondary group, and the administrative server's group properties are modified to include the instance owner's group. If the instance

creation program is unable to modify these properties (it will not if NIS/NIS+ is controlling the group), it reports that it could not. The warning message provides the necessary information to manually make the changes.

These considerations hold true for any environment in which an external security program does not allow the DB2 installation or instance creation programs to modify user characteristics.

If the DB2 Setup wizard detects NIS on your computer, you are not given the option of creating new users during the installation. Instead, you must choose existing users.

Consider the following restrictions if you are using NIS or NIS+:

- Groups and users must be created on the NIS server before running the DB2 Setup wizard.
- Secondary groups must be created for the DB2 instance owner and the DB2 Administration Server on the NIS server. You must then add the primary group of the instance owner to the secondary DB2 Administration Server group. Likewise, you must add the primary DB2 Administration Server group to the secondary group for the instance owner.
- On a DB2 ESE system, before you create an instance, there must be an entry for the instance in the etc/services file. For example, if you want to create an instance for the user db2inst1, you require an entry similar to the following:

```
DB2_db2inst1    50000/tcp
```

Related tasks:

- “Installing DB2 Personal Edition - overview (Linux)” in the *Quick Beginnings for DB2 Personal Edition*
- “Manually creating required groups and users for DB2 Personal Edition (Linux)” in the *Quick Beginnings for DB2 Personal Edition*

DB2 server installation (Windows)

Installation requirements for DB2 servers (Windows)

To install a DB2 UDB server, the following operating system, software, hardware, and communications requirements must be met:

Operating system requirements

For the most up-to-date operating system information, see <http://www.ibm.com/software/data/db2/udb/sysreqs.html>.

DB2 UDB Workgroup Server Edition runs on:

- Windows NT Version 4 with Service Pack 6a or later
- Windows 2000 Professional, Standard Server, Advanced Server, and Datacenter Servers
- Windows XP (32-bit)
- Windows Server 2003 (32-bit)

DB2 UDB Enterprise Server Edition runs on:

- Windows NT Version 4 with Service Pack 6a or later

- Windows 2000 Professional, Standard Server, Advanced Server, and Datacenter Servers. Windows 2000 Service Pack 2 or later is required for Windows Terminal Server.
- Windows Server 2003 (32-bit and 64-bit)

Windows 2000 Service Pack 3 and Windows XP Service Pack 1 are required for running DB2 applications in either of the following environments:

- Applications that have COM+ objects using Open Database Connectivity (ODBC).
- Applications that use OLE DB Provider for ODBC with OLE DB resource pooling disabled

If you are unsure about whether your application environment qualifies, it is recommended that you install the appropriate Windows service level.

For more information about COM+, see the following Microsoft Knowledge Base article:

- <http://support.microsoft.com/default.aspx?scid=KB;EN-US;306414>

The Windows 2000 Service Pack 3 and Windows XP Service Pack 1 are not required for the DB2 server or any of the applications that are shipped as part of the DB2 products.

Note: Windows 2000 is the only supported Windows-based platform for Common Criteria compliant environments.

Hardware requirements

For 32-bit DB2 products, a Pentium or Pentium compatible CPU is required. For 64-bit DB2 products, an Itanium or Itanium compatible CPU is required.

Note: For Common Criteria compliant environments, only 32-bit configurations are supported. 64-bit configurations are not certified.

Software requirements

- MDAC 2.7 is required. The DB2 Setup wizard will install MDAC 2.7 if it is not already installed.
- You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.
- A browser is required to view online help.

Windows 2000 Terminal Server installation limitation:

You cannot install DB2 Version 8 from a network mapped drive using a remote session on Windows 2000 Terminal Server edition. The available workaround uses Universal Naming Convention (UNC) paths to launch the installation or run the installation from the console session.

For example, if the directory `c:\pathA\pathB\...\pathN` on a serverA is shared as `serverdir`, you can open `\\serverA\serverdir\filename.ext` to access the file `c:\pathA\pathB\...\pathN\filename.ext` on the server.

Communication requirements

You can use APPC, TCP/IP, MPTN (APPC over TCP/IP), Named Pipes, and NetBIOS. To administer a Version 8 DB2 UDB database remotely, you

must connect using TCP/IP. DB2 Version 8 servers, using the DB2 Connect server support feature, support only outbound client APPC requests; there is no support for inbound client APPC requests.

Note: For Common Criteria compliant environments, only TCP/IP is supported.

- For TCP/IP, Named Pipes, and NetBIOS connectivity, no additional software is required.
- For APPC (CPI-C) connectivity, through the DB2 Connect server support feature, one of the communication products shown in the following table is required.

Table 3. Supported SNA (APPC) products

Operating system	SNA (APPC) communication product
Windows NT	IBM Communications Server Version 6.1.1 or later IBM Personal Communications for Windows Version 5.0 with CSD 3 Microsoft SNA Server Version 3 Service Pack 3 or later
Windows 2000	IBM Communications Server Version 6.1.1 or later IBM Personal Communications for Windows Version 5.0 with CSD 3 Microsoft SNA Server Version 4 Service Pack 3 or later
Windows XP	IBM Personal Communications for Windows Version 5.5 with APAR IC23490
Windows Server 2003	Not supported.

- If you plan to use LDAP (Lightweight Directory Access Protocol), you require either a Microsoft LDAP client or an IBM SecureWay LDAP client V3.2.1 or later.

Windows (64-bit) considerations

- Local 32-bit applications are supported.
- 32-bit UDFs and stored procedures are supported.
- SQL requests from remote 32-bit downlevel clients are supported.
- DB2 Version 8 Windows 64-bit servers support connections from DB2 Version 6 and Version 7 32-bit clients only for SQL requests. Connections from Version 7 64-bit clients are not supported.

Related tasks:

- “Single-partition installation (Windows)” on page 12

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

Security issues when installing DB2 Universal Database

Security issues are important to the DB2[®] administrator from the moment the product is installed.

To complete the installation of DB2 Universal Database[™] (DB2 UDB), a user ID, a group name, and a password are required. The GUI-based DB2 UDB install program creates default values for different user IDs and the group. Different defaults are created, depending on whether you are installing on UNIX[®] or Windows[®] platforms:

- On UNIX platforms, the DB2 UDB install program creates different default users for the DAS (dasusr), the instance owner (db2inst), and the fenced user (db2fenc).

The DB2 UDB install program appends a number from 1-99 to the default user name, until a user ID that does not already exist can be created. For example, if the users db2inst1 and db2inst2 already exist, the DB2 UDB install program creates the user db2inst3. If a number greater than 10 is used, the character portion of the name is truncated in the default user ID. For example, if the user ID db2fenc9 already exists, the DB2 UDB install program truncates the c in the user ID, then appends the 10 (db2fen10). Truncation does not occur when the numeric value is appended to the default DAS user (for example, dasusr24).

- On Windows platforms, the DB2 UDB install program creates the default user db2admin for the DAS user, the instance owner, and fenced users. Unlike UNIX platforms, no numeric value is appended to the user ID.

To minimize the risk of a user other than the administrator from learning of the defaults and using them in an improper fashion within databases and instances, change the defaults during the install to a new or existing user ID of your choice.

Note: Response file installations do not use default values for user IDs or group names. These values must be specified in the response file.

Passwords are very important when authenticating users. If no authentication requirements are set at the operating system level and the database is using the operating system to authenticate users, users will be allowed to connect. For example on UNIX operating systems, undefined passwords are treated as NULL. In this situation, any user without a defined password will be considered to have a NULL password. From the operating system's perspective, this is a match and the user is validated and able to connect to the database. Use passwords at the operating system level if you want the operating system to do the authentication of users for your database.

Note: You cannot use undefined passwords if you want your database environment to adhere to Common Criteria requirements.

After installing DB2 Universal Database also review, and change (if required), the default privileges that have been granted to users. By default, the installation process grants system administration (SYSADM) privileges to the following users on each operating system:

Windows 9x

Any Windows 98, or Windows ME user.

Other Windows environments

On Windows NT[®], Windows 2000, Windows XP, or Windows Server 2003, a valid DB2 UDB username that belongs to the Administrators group.

UNIX platforms

A valid DB2 UDB username that belongs to the primary group of the instance owner.

The SYSADM authority level provides the most powerful set of privileges available within DB2 Universal Database. As a result, you may not want all of these users to have SYSADM authority by default. DB2 UDB provides the administrator with the ability to grant and revoke privileges to groups and individual user IDs.

By updating the database manager configuration parameter *sysadm_group*, the administrator can control which group of users possesses SYSADM authority. You must follow the guidelines below to complete the security requirements for both DB2 UDB installation and the subsequent instance and database creation.

Any group defined as the system administration group (by updating *sysadm_group*) must exist. The name of this group should allow for easy identification as the group created for instance owners. User IDs and groups that belong to this group have system administrator authority for their respective instances.

The administrator should consider creating an instance owner user ID that is easily recognized as being associated with a particular instance. This user ID should have as one of its groups the name of the SYSADM group created above. Another recommendation is to use this instance-owner user ID only as a member of the instance owner group and not to use it in any other group. This should control the proliferation of user IDs and groups that can modify the instance, or any object within the instance.

The created user ID must be associated with a password to provide authentication before being permitted entry into the data and databases within the instance. The recommendation when creating a password is to follow your organization's password naming guidelines.

Related concepts:

- "Naming rules in an NLS environment" in the *Administration Guide: Implementation*
- "Naming rules in a Unicode environment" in the *Administration Guide: Implementation*
- "Windows NT platform security considerations for users" in the *Administration Guide: Implementation*
- "UNIX platform security considerations for users" in the *Administration Guide: Implementation*
- "Authentication" in the *Administration Guide: Planning*
- "Authorization" in the *Administration Guide: Planning*
- "Location of the instance directory" in the *Administration Guide: Implementation*
- "General naming rules" in the *Administration Guide: Implementation*
- "User, user ID and group naming rules" in the *Administration Guide: Implementation*

Required user accounts for installation of DB2 servers (Windows)

If you are installing on Windows NT, Windows 2000, Windows XP, or Windows Server 2003, you require the following DB2 server user accounts:

- an installation user account and

- one or more setup user accounts
 - a DB2 Administration Server (DAS) user account
 - a DB2 instance user account.

The installation user account must be defined prior to running the DB2 Setup wizard. The setup user accounts can be defined prior to installation or you can have the DB2 Setup program create them for you.

Note: In a Common Criteria compliant installation, the user accounts are created before DB2 is installed.

All user account names must adhere to your system naming rules and to DB2 naming rules.

DB2 enhanced security on Windows:

DB2 now offers enhanced Windows security. You can install DB2 with a user ID, but unless that user ID belongs to either the DB2ADMNS or DB2USERS group, that user ID won't be able to run any DB2 commands.

The DB2 installer creates these two new groups. You can either use a new name or accept the default names.

To enable this security feature, select the Enable operating system security check box on the Enable operating system security for DB2 object panel during the installation of DB2. Accept the default values for the DB2 Administrators Group field, and the DB2 Users Group field. The default group names are DB2ADMNS and DB2USERS. If there is a conflict with existing group names, you will be prompted to change the group names. If required, you can specify your own values.

Note: In a Common Criteria compliant installation of DB2, these groups are not used.

DB2 server user accounts:

Installation user account

A local or domain user account is required to perform the installation. The user account must belong to the *Administrators* group on the machine where you will perform the installation.

For domain accounts, to verify userIDs on the DB2 server, the installation userID must belong to the Domain Administrators group on the domain where the accounts are going to be created.

You may also use the built-in LocalSystem account to run the installation for all products except DB2 UDB Enterprise Server Edition.

DB2 Administration Server (DAS) user account

A local or domain user account is required for the DB2 Administration Server (DAS).

If you are performing a response file installation, you can also specify the Local System Account in the response file. For more details, refer to the sample response files in the db2\windows\samples directory.

The DB2 Administration Server (DAS) is a special DB2 administration service used to support the GUI tools and assist with administration tasks

on local and remote DB2 servers. The DAS has an assigned user account that is used to log the DAS service on to the computer when the DAS service is started.

You can create the DAS user account before installing DB2 or you can have the DB2 Setup wizard create it for you. If you want to have the DB2 Setup wizard create a new domain user account, the user account you use to perform the installation must have authority to create domain user accounts. The user account must belong to the *Administrators* group on the machine where you will perform the installation. This account will be granted the following user rights:

Note: In a Common Criteria compliant installation of DB2, the DAS user account is created before DB2 is installed.

- Act as part of the operating system
- Debug programs
- Create token object
- Lock pages in memory
- Log on as a service
- Increase quotas
- Replace a process level token

The Lock pages in memory privilege is required for AWE (Advanced Windowing Extensions) support. The "Debug programs" privilege is only needed when DB2 group lookup is explicitly specified to use the access token.

If the user account is created by the install program, the user account will be granted these privileges and if the user account already exists, this account will also be granted these privileges. If the install grants the privileges, some of them will only be effective on first log-on by the account that was granted the privileges or reboot.

It is recommended that the DAS user have SYSADM authority on each of the DB2 systems within your environment so that it can start or stop other instances if required. By default, any user that is part of the *Administrator* group has SYSADM authority.

DB2 instance user account

A local or domain user account is required for the DB2 instance. Every DB2 instance has one user that is assigned when the instance is created. DB2 logs on with this user name when the instance is started.

You may also use the built-in LocalSystem account to run the installation for all products except DB2 UDB Enterprise Server Edition.

You can create the DB2 instance user account before installing DB2 or you can have the DB2 Setup wizard create it for you. If you want to have the DB2 Setup wizard create a new domain user account, the user account you use to perform the installation must have authority to create domain user accounts. The user account must belong to the *Administrators* group on the machine where you will perform the installation. This account will be granted the following user rights:

Note: In a Common Criteria compliant installation of DB2, the instance user account is created before DB2 is installed.

- Act as part of the operating system

- Debug programs
- Create token object
- Increase quotas
- Lock pages in memory
- Log on as a service
- Replace a process level token

The Lock pages in memory privilege is required for AWE (Advanced Windowing Extensions) support. The "Debug programs" privilege is only needed when DB2 group lookup is explicitly specified to use the access token.

If the user account is created by the install program, the user account will be granted these privileges and if the user account already exists, this account will also be granted these privileges. If the install grants the privileges, some of them will only be effective on first log-on by the account that was granted the privileges or reboot.

Related concepts:

- "User, user ID and group naming rules" in the *Administration Guide: Implementation*

Related tasks:

- "Single-partition installation (Windows)" on page 12
- "Partitioned installation (Windows)" in the *Quick Beginnings for DB2 Servers*

DB2 server installation (UNIX)

Installation requirements for DB2 servers (AIX)

This topic lists the hardware, operating system, software, and communications requirements for DB2 Enterprise Server Edition and DB2 Workgroup Server Edition on AIX.

Hardware requirements

One of:

- IBM RISC/6000
- eServer pSeries

Operating system requirements

For the most up-to-date operating system information, see <http://www.ibm.com/software/data/db2/udb/sysreqs.html>.

DB2 Enterprise Server Edition, for either single-partition or partitioned database environment, is available on:

AIX Version 4.3.3 (32-bit only)
with Maintenance level 11

For JFS filesystems:
APAR IY49385

For Java:
OpenGL.OpenGL_X.rte.base

OpenGL.OpenGL_X.rte.soft

X11.adt.lib

AIX Version 5.1.0 (32-bit and 64-bit)

with Maintenance level 5

For JFS filesystems:

APAR IY48735

For JFS2 filesystems:

APAR IY49254

For Java:

Recommended Maintenance Package AIX 5100-04 and
APAR IY46667

For running more than 1000 db2agents:

APAR IY49220, and specify "vmtune -T 0" before db2start
or in AIX bootup

AIX Version 5.2.0 (32-bit and 64-bit)

with Maintenance level 2, and:

Note: Common Criteria compliant environments are only certified
on AIX Version 5.2.0, 64-bit only. Other configurations are
not certified.

**For Concurrent I/O (CIO) and Direct I/O (DIO) mounted
volume:**

APARs IY49129 and IY49346

For JFS filesystems:

APAR IY48339

For JFS2 filesystems:

APAR IY49304

For Java:

Recommended Maintenance Package AIX 5200-01 and
APAR IY46668

**For running more than 1000 db2agents and using the 32-bit AIX
kernel:**

APAR IY49885, and specify "vmo -o
pta_balance_threshold=0" before db2start or in AIX bootup

DB2 Workgroup Server Edition, on single-partition environments only, is
available on:

AIX Version 4.3.3 (32-bit only)

with Maintenance level 11

For JFS filesystems:

APAR IY49385

For Java:

OpenGL.OpenGL_X.rte.base

OpenGL.OpenGL_X.rte.soft

X11.adt.lib

AIX Version 5.1.0 (32-bit and 64-bit)

with Maintenance level 5

For JFS filesystems:
APAR IY48735

For JFS2 filesystems:
APAR IY49254

For Java:
Recommended Maintenance Package AIX 5100-04 and
APAR IY46667

For running more than 1000 db2agents:
APAR IY49220, and specify "vmtune -T 0" before db2start
or in AIX bootup

AIX Version 5.2.0 (32-bit and 64-bit)
with Maintenance level 2, and:

Note: Common Criteria compliant environments are only certified
on AIX Version 5.2.0, 64-bit only. Other configurations are
not certified.

**For Concurrent I/O (CIO) and Direct I/O (DIO) mounted
volume:**
APARs IY49129 and IY49346

For JFS filesystems:
APAR IY48339

For JFS2 filesystems:
APAR IY49304

For Java:
Recommended Maintenance Package AIX 5200-01 and
APAR IY46668

**For running more than 1000 db2agents and using the 32-bit AIX
kernel:**
APAR IY49885, and specify "vmo -o
pta_balance_threshold=0" before db2start or in AIX bootup

Note: You can query your system to see if a particular APAR is installed
with the `instfix -v -i -k <APAR>` command. For example, `instfix
-v -i -k IY31254`.

The following AIX file sets are required to install or run DB2 in languages
other than English:

- X11.fnt.ucs.ttf (AIX Windows Unicode TrueType Fonts)
- xlc.rte 5.0.2.x or 6.0.0.x
- For Asian languages, the following file sets are also required:
 - X11.fnt.ucs.ttf_CN (for zh_CN or Zh_CN)
 - X11.fnt.ucs.ttf_KR (for ko_KR)
 - X11.fnt.ucs.ttf_TW (for zh_TW or Zh_TW)
- On AIX Version 4.3.3 the following file sets are required:
 - xlc.aix43.rte 5.0.2.x or 6.0.0.x
 - OpenGL.OpenGL_X.rte.base 4.3.3.76
 - OpenGL.OpenGL_X.rte.soft 4.3.3.75
 - X11.adt.lib 4.3.3.10
- On AIX Version 5.x the following file set is required:

- x1C.aix50.rte 5.0.2.x or 6.0.0.x

AIX file sets can be downloaded from:
<http://techsupport.services.ibm.com/server/fixes>

Software requirements

- You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.
- A browser is required to view online help.

DB2 Administration Server (DAS) requirements

The following requirements must be met:

- A DAS must be created on each DB2 server that you wish to administer for the GUI tools to work properly, only one DAS needs to reside on each physical machine.
- Each DAS must be created under a user ID (same as an instance).
- If the same user ID is to be used on all physical computers, then that userID's home directory cannot be shared (cross mounted) with the other computers.
- If a different user ID is used for each DAS, then the home directories of the user IDs that are used can be shared (cross mounted).
- As long as a DAS is created on each computer, it does not matter whether:
 - A different user ID is used for each DAS, or
 - The same user ID is used and that the user ID's home directory is not shared.

DB2 UDB installation on NFS (Network File System)

The installation of DB2 products on NFS (Network File System) is not supported. Installing DB2 on NFS (for example, NFS mounting /usr/opt/db2_08_01 or /opt/IBM/db2/V8.1) can be error prone and these errors can be difficult to diagnose.

Only the DB2 installation image can be NFS-mounted (located on a system other than the one DB2 runs on, or a remote filesystem or partition). DB2 must be installed to a local drive and not an NFS-mounted drive.

For example, you can copy your DB2 product CD onto system A (for example, an NFS server), and install DB2 on systems B, C, and D using NFS to launch the DB2 installation code from system A. However, you cannot install your DB2 product on system A, and then use DB2 on systems B, C, or D. Additionally, you cannot launch the DB2 installation process on system B, install the code on system A, and use it on system B. The DB2 code must be local to the system running DB2.

Related tasks:

- “Single-partition installation (UNIX)” on page 13

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

Installation requirements for DB2 servers (Linux)

This topic lists the hardware, distribution, package, software, and communication requirements for DB2 Enterprise Server Edition, DB2 Workgroup Server Edition, and DB2 Workgroup Server Unlimited Edition on Linux.

Hardware requirements

DB2 Workgroup Server Edition and DB2 Workgroup Server Unlimited Edition are supported on:

- Intel 32-bit
- IBM eServer iSeries that support Linux
- IBM eServer pSeries that support Linux

DB2 Enterprise Server Edition, in either a single-partition or partitioned environment, is supported on:

- Intel 32-bit and 64-bit
- AMD 64-bit
- PowerPC 64-bit
- DB2 31-bit requires S/390 9672 Generation 5 or later, Multiprise 3000 or eServer zSeries.
- DB2 64-bit requires eServer zSeries.
- IBM eServer iSeries that support Linux
- IBM eServer pSeries that support Linux

Note: If you are installing a Common Criteria compliant environment, only Linux SuSE Enterprise Server V8 on 32-bit Intel based hardware is a certified configuration. Other Linux configurations are not evaluated.

Distribution requirements

For the latest information on supported distribution and kernel levels, point your browser to <http://www.ibm.com/db2/linux/validate>

Package requirements

The following tables list the package requirements for SuSE and RedHat distributions for DB2 partitioned servers (Linux) Version 8. The `pdksh` package is required for all DB2 systems. The `rsh-server` and `nfs-utils` packages are required for partitioned database systems. Both packages should be installed and running to continue with the setup of DB2 on partition database systems. To have the `rsh-server` running, `inetd` (or `xinetd`) must be installed and running as well.

For more information, see your Linux distribution documentation.

Package requirements for SuSE

Package name	Description
<code>pdksh</code>	Korn Shell. This package is required for partitioned database environments.
<code>rsh-server</code>	This package contains a set of server programs which allow users to run commands on remote computers, login in to other computers, and copy files between computers (<code>rsh</code> , <code>rexec</code> , <code>rlogin</code> , and <code>rcp</code>).
<code>nfs-utils</code>	Network File System support package. It allows access for local files to remote computers.

Package requirements for RedHat

Directory	Package name	Description
/System Environment/Shell	pdksh	Korn Shell. This package is required for partitioned database environments.
/System Environment/Daemons	rsh-server	This package contains a set of programs which allow users to run commands on a remote computer. Required for partitioned database environments.
/System Environment/Daemons	nfs-utils	Network File System support package. It allows access for local files to remote computers.

Software requirements

- You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.
- A web browser is required to view online help.
- X Window System software capable of rendering a graphical user interface is required. You require this software if you want to use the DB2 Setup wizard to install DB2 Enterprise Server Edition or if you want to use any DB2 graphical tools.

Communication requirements

TCP/IP is required to access remote databases. Your particular Linux distribution provides TCP/IP connectivity if it is selected during the installation. If your Linux computer is installed on an existing network and is required to use a static IP address, then information similar to that found in the following table should be collected from your network administrator:

Example of TCP/IP settings

Name	Example number
Host IP address	191.72.1.3
Subnet mask	255.255.255.0
Gateway	191.72.1.1
Domain name	191.72.3.1

This information should be specified either during the installation of your Linux distribution, or after the installation is finished using your distribution's setup utility.

DB2 Administration Server (DAS) requirements

The following requirements must be met:

- A DAS must be created on each physical system for the Control Center and the Task Center to work properly.
- Each DAS must be created under a userID (same as an instance).
- If the same userID is to be used on all physical systems, then that userID's home directory cannot be shared (cross mounted) with the other systems.
- If a different userID is used for each DAS, then the home directories of the userIDs that are used can be shared (cross mounted).
- As long as a DAS is created on each system, it does not matter whether:
 - A different userID is used for each DAS, or

- The same userID is used and that the userID's home directory is not shared.

Installing DB2 products or sharing instance directory on NFS (Network File System)

The installation of DB2 products on NFS (Network File System) is not supported. Installing DB2 on NFS (for example, NFS mounting /usr/opt/db2_08_01 or /opt/IBM/db2/V8.1) can be error prone and these errors can be difficult to diagnose.

Only the DB2 installation image can be NFS-mounted (located on a system other than the one DB2 runs on, or a remote filesystem or partition). DB2 must be installed to a local drive and not an NFS-mounted drive.

For example, you can copy your DB2 product CD onto system A (for example, an NFS server), and install on systems B, C, and D using NFS to launch the DB2 installation code from system A. However, you cannot install your DB2 product on system A, and then use DB2 on systems B, C, or D. Additionally, you cannot launch the DB2 installation process on system B, install the code on system A, and use it on system B. The DB2 code must be local to the system running DB2.

Related tasks:

- “Preparing to install DB2 UDB for Linux on zSeries” in the *Quick Beginnings for DB2 Servers*
- “Modifying kernel parameters (Linux)” on page 40

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

Installation requirements for DB2 servers (Solaris Operating Environment)

This topic lists the hardware, operating system, software, and communication requirements for DB2 Enterprise Server Edition or Workgroup Server Edition on the Solaris Operating Environment.

Hardware requirements

Solaris UltraSPARC-based computer

Operating system requirements

For the most up-to-date operating system information, see <http://www.ibm.com/software/data/db2/udb/sysreqs.html>.

Note: If you are installing a Common Criteria compliant environment, the only certified configuration is single-partition 64-bit Solaris 8. Other configurations are not certified.

DB2 Workgroup Server Edition (single-partition database environment only) is supported on the following Solaris Operating Environment versions:

- Solaris 7 (32-bit) “Recommended & Security Patches” + 107226-17 + 107153-01 + 106327-10
- Solaris 8 (32-bit) “Recommended & Security Patches” + 108921-12 + 108940-24 + 108434-03 and 108528-12
- Solaris 9 (32-bit)

DB2 Enterprise Server Edition, on both single-partition and partitioned database environment, is supported on the following Solaris Operating Environment versions:

- Solaris 7 (32-bit) "Recommended & Security Patches" + 107226-17 + 107153-01 + 106327-10
- Solaris 7 (64-bit) "Recommended & Security Patches" + 107226-17 + 107153-01 + 106300-11 + 106327-10
- Solaris 8 (32-bit) "Recommended & Security Patches" + 108921-12 + 108940-24 + 108434-03 and 108528-12
- Solaris 8 (64-bit) "Recommended & Security Patches" + 108921-12 + 108940-24 + 108435-03 + 108434-03 and 108528-12
- Solaris 9 (32-bit)
- Solaris 9 (64-bit)

"Recommended & Security Patches" can be obtained from the <http://sunsolve.sun.com> Web site. From the SunSolve Online Web site, click on the "Patches" menu item in the left panel.

The J2SE Solaris Operating Environment Patch Clusters and the SUNWlibC software are also required and can be obtained from the <http://sunsolve.sun.com> Web site.

For DB2 on 64-bit Fujitsu PRIMEPOWER systems, you require the following:

- Solaris 8 Kernel Update Patch 108528-16 or later to get the fix for patch 912040-01.
- Solaris 9 Kernel Update Patch 112233-01 or later to get the fix for patch 912041-01.

The Fujitsu PRIMEPOWER patches for the Solaris Operating Environment can be downloaded from FTSI at: <http://download.ftsi.fujitsu.com/>.

Software requirements

- You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.

Note: The DB2 Control Center is not supported interface in a Common Criteria compliant configuration.

- A browser is required to view online help.

Communication requirements

APPC or TCP/IP. DB2 UDB Version 8 servers, using the DB2 Connect server support feature, support only outbound APPC client requests; there is no support for inbound APPC client requests. You can use only TCP/IP to remotely administer databases.

- For TCP/IP connectivity, no additional software is required.

Note: For Common Criteria compliant environments, only TCP/IP is supported.

- For APPC (CPI-C) connectivity, through the DB2 Connect server support feature, you require SNAP-IX for Solaris V7.02.

DB2 Administration Server (DAS) requirements

The following requirements must be met:

- A DAS must be created on each physical computer for the Control Center and the Task Center to work properly.
- Each DAS must be created under a userID (same as an instance).
- If the same user ID is to be used on all physical computer, then that userID's home directory cannot be shared (cross mounted) with the other computers.
- If a different user ID is used for each DAS, then the home directories of the user IDs that are used can be shared (cross mounted).
- As long as a DAS is created on each computer , it does not matter whether:
 - A different user ID is used for each DAS, or
 - The same user ID is used and that the user ID's home directory is not shared.

DB2 UDB installation on NFS (Network File System)

The installation of DB2 products on NFS (Network File System) is not supported. Installing DB2 on NFS (for example, NFS mounting /usr/opt/db2_08_01 or /opt/IBM/db2/V8.1) can be error prone and these errors can be difficult to diagnose.

Only the DB2 installation image can be NFS-mounted (located on a system other than the one DB2 runs on, or a remote filesystem or partition). DB2 must be installed to a local drive and not an NFS-mounted drive.

For example, you can copy your DB2 product CD onto system A (for example, an NFS server), and install DB2 on systems B, C, and D using NFS to launch the DB2 installation code from system A. However, you cannot install your DB2 product on system A, and then use DB2 on systems B, C, or D. Additionally, you cannot launch the DB2 installation process on system B, install the code on system A, and use it on system B. The DB2 code must be local to the system running DB2.

Related tasks:

- “Modifying kernel parameters (Solaris Operating Environment)” on page 41

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

Chapter 5. Preinstallation tasks

Installing the IBM Developer Kit for Java (UNIX)

Depending upon your operating system, the IBM® Developer Kit for Java™ (SDK) 1.3.1, SDK 1.4.1, or SDK 1.4.2 is required for DB2® to use the DB2 Control Center or to create and run Java applications, including stored procedures and user-defined functions. The IBM Software Developer's Kit (SDK) is supported, as well as the HP-UX JDK and the Solaris Operating Environment JDK.

A hybrid platform is a platform where you get 32-bit and 64-bit instance support in the same install. On hybrid platforms, the 32-bit version of the SDK is installed during the DB2 product installation, but not the 64-bit version of the SDK. The 64-bit version of the SDK is shipped on another CD-ROM. On non-hybrid platforms, the correct 31-bit, 32-bit, or 64-bit SDK is installed during the DB2 product installation.

The 64-bit SDK is part of the DB2 product CD-ROM on non-hybrid 64-bit platforms. For hybrid 64-bit platforms the 64-bit SDK is available on a separate CD-ROM and is not shipped as part of the DB2 product CD-ROM.

The SDK is installed whenever a component that requires Java is being installed. However, if the installer detects that SDK is already installed, it will not install it again. The SDK is installed in its own directory and does not overwrite any previous levels of the SDK.

In cases where 64-bit Java is required, a message appears telling you that Java 64-bit is required. If this message appears, you must install Java 64-bit. This applies to hybrid platforms only.

Restrictions:

The installation of the Java SDK is attempted only if you use one of the following DB2 installation methods:

- GUI install program (db2setup)
- Response file installation (db2setup -r response_file)

Other methods, either using SMIT or db2_install script, will not install the Java SDK.

Procedure:

To install the SDK manually:

1. Run the command appropriate for your operating system from the /cdrom/db2/<platform>/Java-1.4 directory, where <platform> represents your operating system (for example, aix or solaris).

Operating System	Command	Installation directory
AIX® 32-bit (SDK 1.3.1)	installp -acgqX -d . Java131.adt	/usr/java131

Operating System	Command	Installation directory
AIX 64-bit (SDK 1.3.1)	installp -acgqX -d . Java131_64.adt	/usr/java13_64
AIX 32-bit	installp -acgqX -Y -d . Java14.sdk	/usr/java141
AIX 64-bit	installp -acgqX -Y -d . Java14_64.sdk	/usr/java14_64
HP-UX 32-bit and 64-bit	swinstall -x allow_incompatible=true -x mount_all_filesystems=false -s <path_to_depot_dir>/sdk14_1420_1100.depot T1456AA Note: path_to_depot_dir must be the actual path to the directory which contains the depot fileset, starting from the "/". For example, path_to_depot_dir on the HP-UX 32-bit CD would be /cdrom/db2/hpux/Java-1.4/.	/opt/java1.4
HP Itanium 32-bit and 64-bit	swinstall -x allow_incompatible=true -x mount_all_filesystems=false -s <path_to_depot_dir>/sdk14_14201_1122.depot T1458AA Note: path_to_depot_dir must be the actual path to the directory which contains the depot fileset, starting from the "/". For example, path_to_depot_dir on the HP-UX 32-bit CD would be /cdrom/db2/hpux/Java-1.4/	/opt/java1.4
Linux IA32	rpm -ivh IBMJava2-SDK-1.4.1-2.0.i386.rpm	/opt/IBMJava2-141
Linux IA64	rpm -ivh IBMJava2-SDK-1.4.1-2.0.ia64.rpm	/opt/IBMJava2-141
Linux 390	rpm -ivh IBMJava2-SDK-1.4.1-2.0.s390.rpm	/opt/IBMJava2-s390-141
Linux 390 64-bit	rpm -ivh IBMJava2-SDK-1.4.1-2.0.s390x.rpm	/opt/IBMJava2-s390-141
Linux PPC 32-bit	rpm -ivh IBMJava2-SDK-1.4.1-2.0.ppc.rpm	/opt/IBMJava2-ppc-141
Linux PPC 64-bit	rpm -ivh IBMJava2-SDK-1.4.1-2.0.ppc64.rpm	/opt/IBMJava2-ppc64-141
SUN 32-bit	pkgadd -d . SUNWj3rt SUNWj3dev SUNWj3man SUNWj3dmo	/usr/j2se
SUN 64-bit	pkgadd -d . SUNWj3rt SUNWj3dev SUNWj3man SUNWj3dmo SUNWj3rtx SUNWj3dmx SUNWj3dvx	/usr/j2se

- To verify that the IBM SDK is installed, run the <path>/jre/bin/java -version command, where <path> represents the path where the SDK was installed. Refer to the installation directory for each platform listed above.

You should receive output similar to the following, which is for AIX:

```
java version "1.4.1"
Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.1)
Classic VM (build 1.4.1, J2RE 1.4.1 IBM AIX build ca141-20030930
(JIT enabled: jitc))
```

The IBM SDK is also available from the IBM developerWorks® web site at:

- <http://www.ibm.com/developerworks/java/jdk/index.html>

RPM-based installation of DB2 on Linux:

When you install DB2 Universal Database™ Version 8 on Linux, the RPM-based installation attempts to install the IBM Java RPM (IBM SDK 1.4.1 SR2). If a later level of the RPM, such as IBM SDK 1.5.1 SR1, already exists, the back-level RPM is not installed.

However, in this case, the installation leaves the JDK_PATH database configuration parameter pointing to the back-level path. As a result, none of the Java-dependant functionality, including the installation of the DB2 Tools Catalog, will work.

To solve this problem, run the following command as the instance owner:

```
db2 update dbm cfg using JDK_PATH <existing SDK path> <back-level SDK path>
```

This update will point DB2 Universal Database to the correct IBM Developer Kit.

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

Java SDK levels for DB2 UDB

You require the appropriate level of SDK listed below to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.

If the SDK is required by some component being installed and the SDK is not already installed, the SDK will be installed if you use either the DB2 Setup wizard or a response file to install the product.

The SDK is not installed with the DB2 Run-Time client.

For the most up-to-date SDK information, see the DB2 UDB system requirements web page at <http://www.ibm.com/software/data/db2/udb/sysreqs.html>

For the most up-to-date Linux SDK information, see the IBM developer kit for Linux web page at:

<http://www-106.ibm.com/developerworks/java/jdk/linux/tested.html>

The following table lists the SDK levels for DB2 according to operating system:

Operating System		SDK level
Windows	32-bit	SDK 1.4.1 Service Release 1
	64-bit	SDK 1.4.1 Service Release 1
AIX 4.3.3	32-bit	SDK 1.3.1
AIX 5	32-bit	SDK 1.4.1 Service Release 1
	64-bit	SDK 1.4.1 Service Release 1
Solaris Operating Environment (hybrid)	32-bit	SDK 1.4.2
	64-bit	SDK 1.4.2
HP-UX RISC (hybrid)	32-bit	SDK 1.4.2.01
	64-bit	SDK 1.4.2.01

Operating System		SDK level
HP-UX Itanium (hybrid)	32-bit	SDK 1.4.2.01
	64-bit	SDK 1.4.2.01
LinuxIA	32-bit	SDK 1.4.1 Service Release 2
	64-bit	See the DB2 UDB system requirements web page for more information.
Linux390	31-bit	SDK 1.4.1 Service Release 2
	64-bit	SDK 1.4.1 Service Release 2
LinuxAMD (hybrid)	32-bit	SDK 1.4.1 Service Release 2
	64-bit	SDK 1.4.1 Service Release 2 (32-bit version)
LinuxPPC (hybrid)	32-bit	SDK 1.4.1 Service Release 2
	64-bit	SDK 1.4.1 Service Release 2

Related concepts:

- “Installing the IBM Developer Kit for Java (UNIX)” on page 35

Creating group and user IDs for a DB2 UDB installation (UNIX)

Three users and groups are required to operate DB2. The user and group names used in the following instructions are documented in the table below. You may specify your own user and group names as long as they adhere to system naming rules and DB2 naming rules.

The user IDs you create will be required to complete subsequent setup tasks.

Table 4. Required users and groups

Required user	Example user name	Example group name
Instance owner	db2inst1	db2iadm1
Fenced user	db2fenc1	db2fadm1
DB2 administration server user	dasusr1	dasadm1

- The instance owner home directory is where the DB2 instance will be created.
- The fenced user is used to run user defined functions (UDFs) and stored procedures outside of the address space used by the DB2 database.
- The user ID for the *DB2 administration server user* is used to run the DB2 administration server on your system.

Note: In a Common Criteria compliant environment, the DB2 GUI tools have not been evaluated and are not supported.

Prerequisites:

You must have root authority to create users and groups.

Procedure:

To create the required groups and user IDs for DB2:

1. Log in as a user with root authority.

2. Enter the appropriate commands for your operating system.

Note: These command line examples do not contain passwords. They are examples only. Use the *passwd username* parameter from the command line to set the password.

AIX To create groups on AIX, enter the following commands:

```
mkgroup id=999 db2iadm1
mkgroup id=998 db2fadm1
mkgroup id=997 dasadm1
```

Create users for each group:

```
mkuser id=1004 pgrp=db2iadm1 groups=db2iadm1
home=/home/db2inst1 db2inst1
mkuser id=1003 pgrp=db2fadm1 groups=db2fadm1
home=/home/db2fenc1 db2fenc1
mkuser id=1002 pgrp=dasadm1 groups=dasadm1
home=/home/dasusr1 dasusr1
```

HP-UX

To create groups on HP-UX, enter the following commands:

```
groupadd -g 999 db2iadm1
groupadd -g 998 db2fadm1
groupadd -g 997 dasadm1
```

Create users for each group:

```
useradd -g db2iadm1 -d /home/db2inst1 -m db2inst1
useradd -g db2fadm1 -d /home/db2fenc1 -m db2fenc1
useradd -g dbasgrp -d /home/dasusr1 -m dasusr1
```

Linux To create groups on Linux, enter the following commands:

```
groupadd -g 999 db2iadm1
groupadd -g 998 db2fadm1
groupadd -g 997 dasadm1
```

Create users for each group:

```
useradd -u 1004 -g db2iadm1 -m -d /home/db2inst1 db2inst1
useradd -u 1003 -g db2fadm1 -m -d /home/db2fenc1 db2fenc1
useradd -u 1002 -g dasadm1 -m -d /home/dasusr1 dasusr1
```

Solaris Operating Environment

To create groups on Solaris Operating Environment, enter the following commands:

```
groupadd -g 999 db2iadm1
groupadd -g 998 db2fadm1
groupadd -g 997 dasadm1
```

Create users for each group:

```
useradd -g db2iadm1 -u 1004 -d /export/home/db2inst1 -m db2inst1
useradd -g db2fadm1 -u 1003 -d /export/home/db2fenc1 -m db2fenc1
useradd -g dasadm1 -u 1002 -d /export/home/dasusr1 -m dasusr1
```

Related concepts:

- “General naming rules” in the *Administration Guide: Implementation*

Related tasks:

- “Installing a DB2 product manually” in the *Installation and Configuration Supplement*

Kernel parameters (UNIX)

Modifying kernel parameters (Linux)

Before installing DB2 UDB, you may want to update your Linux kernel parameters. DB2 UDB automatically raises the IPC limits where necessary. You might still want to raise these limits further depending on your particular needs.

Prerequisites:

You must have root authority to modify kernel parameters.

Procedure:

To update kernel parameters:

RedHat and SuSE

Systems using a 2.4.x series kernel have a default value for the message queue parameter (msgmni), which allows only a few simultaneous connections to DB2. Semaphore array parameters also have to be changed for DB2 to run successfully. To check shared memory segment, semaphore array, and message queue limits, issue the `ipcs -l` command.

The following is the output from the `ipcs -l` command.

```
# ipcs -l

----- Shared Memory Limits -----
max number of segments = 4096           // SHMMNI
max seg size (kbytes) = 32768
max total shared memory (kbytes) = 8388608
min seg size (bytes) = 1

----- Semaphore Limits -----
max number of arrays = 1024            // SEMMNI
max semaphores per array = 250
max semaphores system wide = 256000
max ops per semop call = 32
semaphore max value = 32767

----- Messages: Limits -----
max queues system wide = 1024         // MSGMNI
max size of message (bytes) = 65536
default max size of queue (bytes) = 16384 // MSGMAX
```

Modify the kernel parameters by adding the following entries to the default system control configuration file, `/etc/sysctl.conf`:

```
kernel.msgmni = 1024
kernel.sem = 250 256000 32 1024
```

where

```
max semaphores system wide =
max number of arrays x max semaphores/array
```

Run `sysctl` with `-p` parameter to load in `sysctl` settings from the default file `/etc/sysctl.conf`.

```
sysctl -p
```

The entries from the `sysctl.conf` file are read during startup by the network initialization script.

On some distributions you may be required to add `sysctl -p` in one of the system initialization files (for example, `rc.local`) so that kernel parameters are set after each reboot.

Modifying kernel parameters (Solaris Operating Environment)

Before installing DB2 UDB, it is recommended that you update your system kernel configuration parameters.

Use the `db2osconf` command to suggest recommended kernel parameters.

You must restart your system after modifying kernel parameters.

Prerequisites:

You must have root authority to modify kernel parameters.

Procedure:

To set a kernel parameter, add a line at the end of the `/etc/system` file as follows:

```
set parameter_name = value
```

For example, to set the value of the `msgsys:msginfo_msgmax` parameter, add the following line to the end of the `/etc/system` file:

```
set msgsys:msginfo_msgmax = 65535
```

After updating the `/etc/system` file, restart the system.

Related reference:

- “`db2osconf` - Utility for Kernel Parameter Values Command” in the *Command Reference*

Chapter 6. Installation tasks

Single-partition database environment (Windows)

Installing DB2 servers in a single-partition database environment (Windows)

This task describes how to start the DB2 Setup wizard on Windows. You will use the DB2 Setup wizard to define your installation and install DB2 to your system.

Prerequisites:

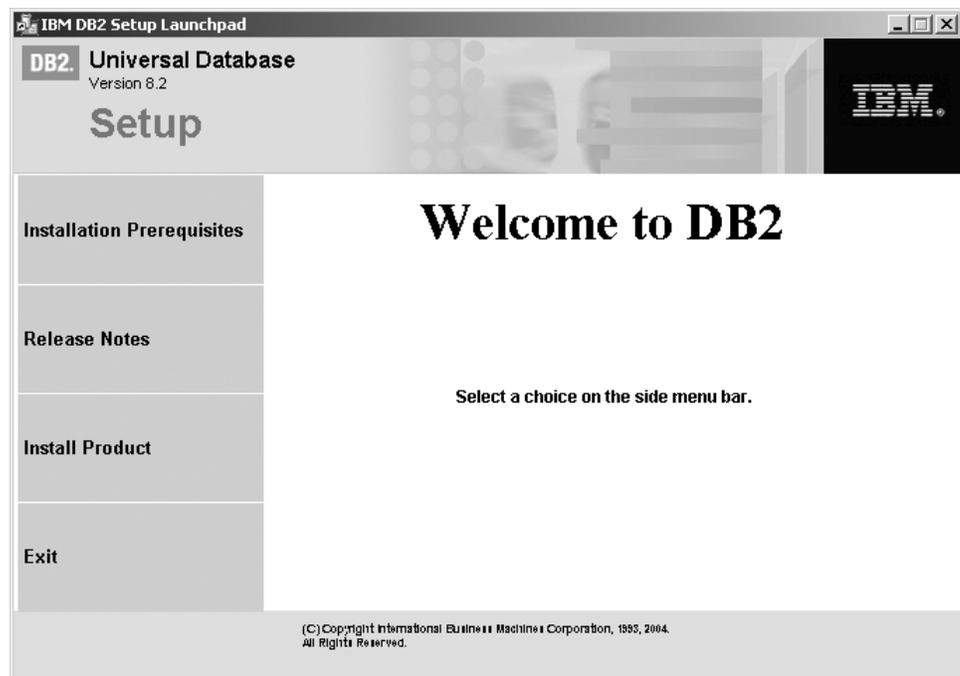
Before you start the DB2 Setup wizard:

- Ensure that your system meets installation, memory, and disk requirements.
- If you are planning to use LDAP on Windows 2000 or Windows Server 2003 to register the DB2 server in Active Directory, you must extend the directory schema before you install.
- You must have a local *Administrator* user account with the recommended user rights to perform the installation.
- Close all programs so the installation program can update files as required.

Procedure:

To start the DB2 Setup wizard:

1. Log on to the system with the Administrator account that you have defined for DB2 installation.
2. Insert the CD-ROM into the drive. If enabled, the auto-run feature automatically starts the DB2 Setup launchpad:



From this window, you can view installation prerequisites and the release notes, or you can proceed directly to the installation. You may want to review the installation prerequisites and release notes for late-breaking information. Select **Install Products** and select the DB2 product to install.

3. The DB2 Setup wizard will determine the system language, and launch the setup program for that language. If you want to run the setup program in a different language, or the setup program failed to auto-start, you can start the DB2 Setup wizard manually.

To start the DB2 Setup wizard manually:

- a. Click **Start** and select the **Run** option.
- b. In the **Open** field, enter the following command:

```
x:\setup /i language
```

where:

- *x*: represents your CD-ROM drive
- *language* is the territory identifier for your language (for example, EN for English).

If the */i* flag is not specified, the installation program will run in the default language of the operating system.

- c. Click **OK**.
4. Launch the installation and proceed by following the setup program's prompts. Online help is available to guide you through the remaining steps. To invoke the online help, click Help or press F1. You can click **Cancel** at any time to end the installation.

If you want to verify your installation using the sample database, be sure to install the sample database component under the Getting Started component group. The sample database is included as part of a Typical installation.

For information on errors encountered during installation, see the db2.log and db2wi.log files located in the 'My Documents'\DB2LOG\ directory. The location of the 'My Documents' directory will depend on the settings on your computer.

The db2wi.log file captures the most recent DB2 installation information. The db2.log captures the history of DB2 installations.

If you want your DB2 product to have access to DB2 documentation either on your local computer or on another computer on your network, then you must install the DB2 Information Center. The DB2 Information Center contains documentation for DB2 Universal Database and DB2 related products. See Installing the DB2 Information Center using the DB2 Setup wizard (Windows)

Note: The DB2 Information Center was not evaluated in the Common Criteria certification of DB2 Universal Database. If you are installing DB2 Universal Database to be Common Criteria compliant, do not install the DB2 Information Center.

Related concepts:

- "DB2 Information Center" in the *Infrastructure Topics (DB2 Common Files)*
- "DB2 Information Center installation scenarios" in the *Infrastructure Topics (DB2 Common Files)*

Related tasks:

- “Installing the DB2 Information Center using the DB2 Setup wizard (Windows)” in the *Infrastructure Topics (DB2 Common Files)*
- “Installing DB2 Personal Edition - overview (Windows)” in the *Quick Beginnings for DB2 Personal Edition*
- “Installing database partition servers on participating computers (Windows)” in the *Quick Beginnings for DB2 Servers*
- “Tools catalog database and DAS scheduler setup and configuration” in the *Administration Guide: Implementation*
- “Notification and contact list setup and configuration” in the *Administration Guide: Implementation*

Related reference:

- “UPDATE ADMIN CONFIGURATION Command” in the *Command Reference*
- “Installation requirements for DB2 servers (Windows)” on page 18
- “Language identifiers for running the DB2 Setup wizard in another language” on page 285
- “Disk and memory requirements (Windows and UNIX)” on page 17

If you are installing DB2 Universal Database on a Windows-based platform for a Common Criteria compliant environment, see the following:

- For installing DB2 UDB Enterprise Server Edition:
 - On Windows 2000, see “Installing DB2 Enterprise Server Edition on Windows 2000 for a Common Criteria compliant installation”
- For installing DB2 UDB Workgroup Server Edition:
 - On Windows 2000, see “Installing DB2 Workgroup Server Edition on Windows 2000 for a Common Criteria compliant installation” on page 71.

Installing DB2 Enterprise Server Edition on Windows 2000 for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Enterprise Server Edition on Windows 2000 for a Common Criteria compliant installation.

Prerequisites:

- Windows 2000 must be installed on the computer.
- Windows 2000 must be configured to disable remote access services (such as terminal server and filesystem shares) before DB2 Universal Database is installed. For information on performing this task, refer to the operating system documentation.
- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- The domain, user name, and password for the DB2 Administration Server. If you do not have these values, obtain them from the system administrator. For more information about the DB2 Administration Server user account, see “Required user accounts for installation of DB2 servers (Windows)” on page 22.
- The “IBM DB2 Setup Launchpad” should be open.

Procedure:

To install DB2 UDB Enterprise Server Edition on Windows 2000 for a Common Criteria compliant installation.

1. On the "IBM DB2 Setup Launchpad", click **Install Product**.

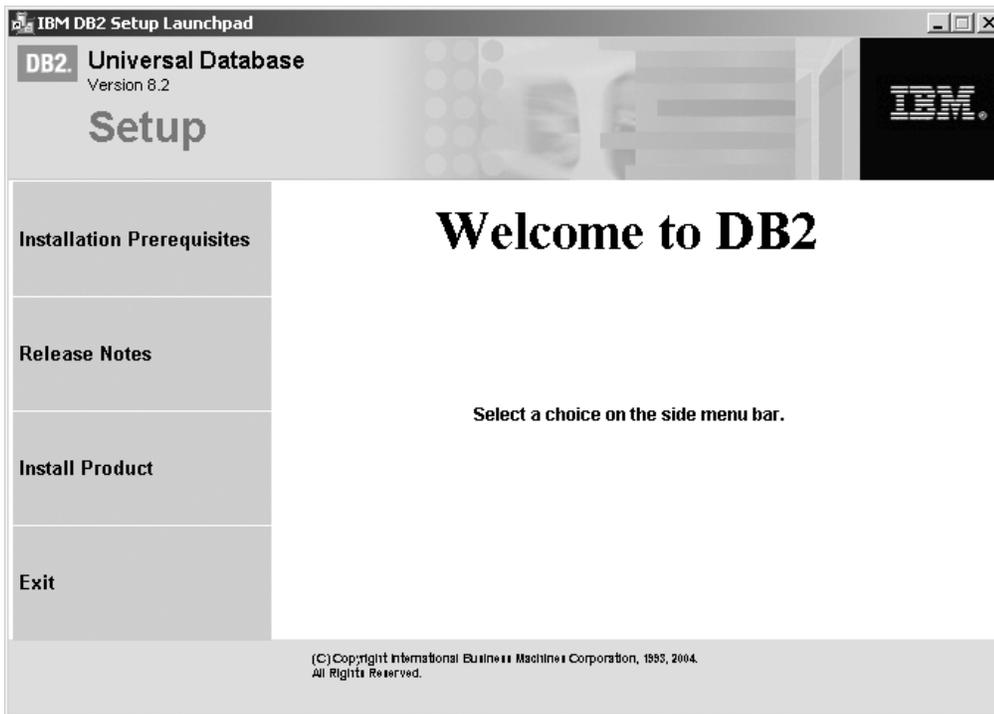


Figure 2. DB2 Setup Launchpad

2. On the second page of the "IBM DB2 Setup Launchpad"
 - a. In the **Select the product you would like to install** box, ensure that the **DB2 UDB Enterprise Server Edition** radio button is selected, as follows:

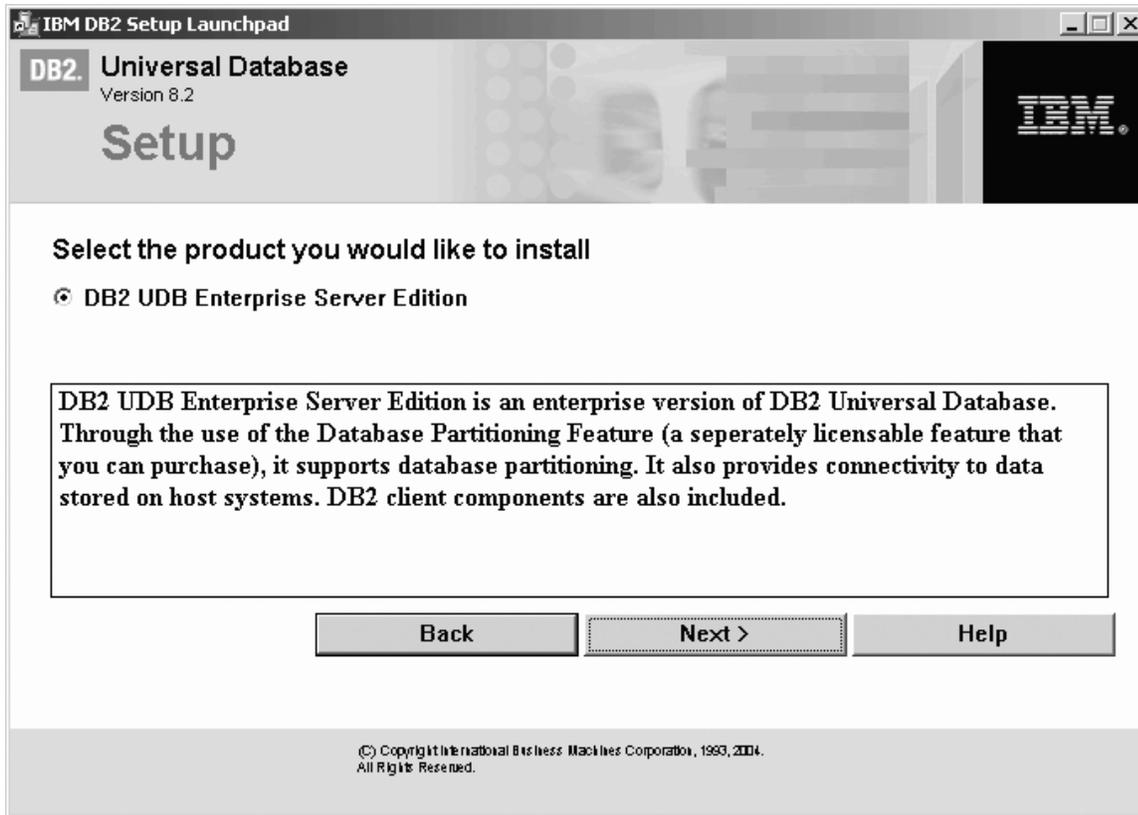


Figure 3. IBM DB2 Setup Launchpad

- b. Click **Next**. In a moment, the "DB2 Setup wizard" opens, as follows:

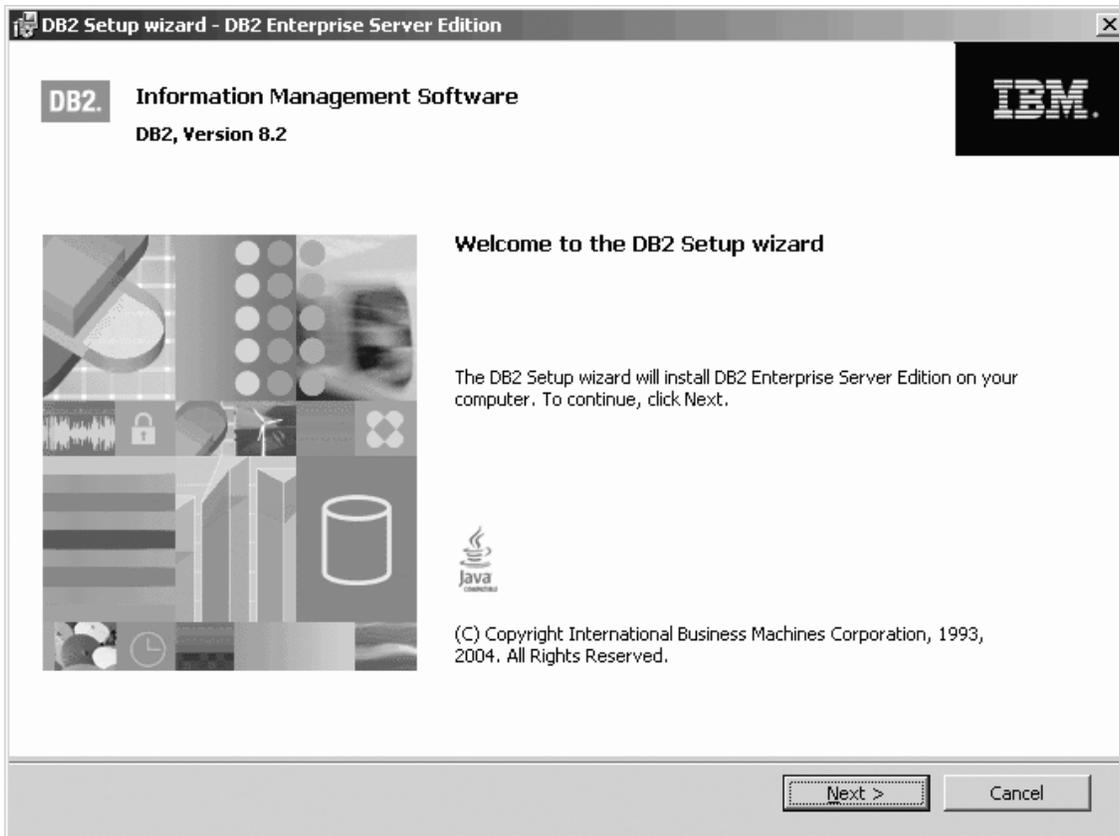


Figure 4. DB2 Setup wizard

3. Click **Next**. The "License Agreement" page opens.
4. On the "License Agreement" page:
 - a. Select the **I accept the terms in the license agreement** radio button:

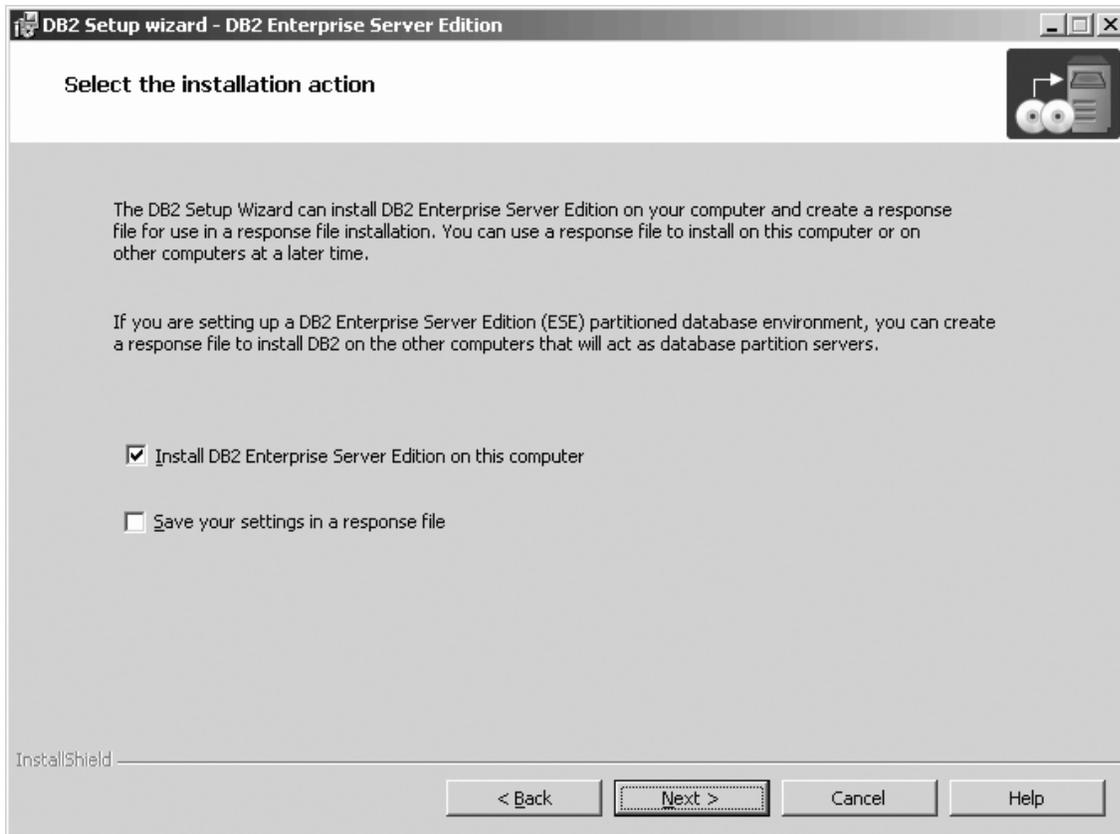


Figure 7. DB2 Setup wizard - Select the installation action page

- b. Click **Next**. The "Select how this computer will be used" page opens.
7. On the "Select how this computer will be used" page:
 - a. Select the **Single-partition database environment** radio button.

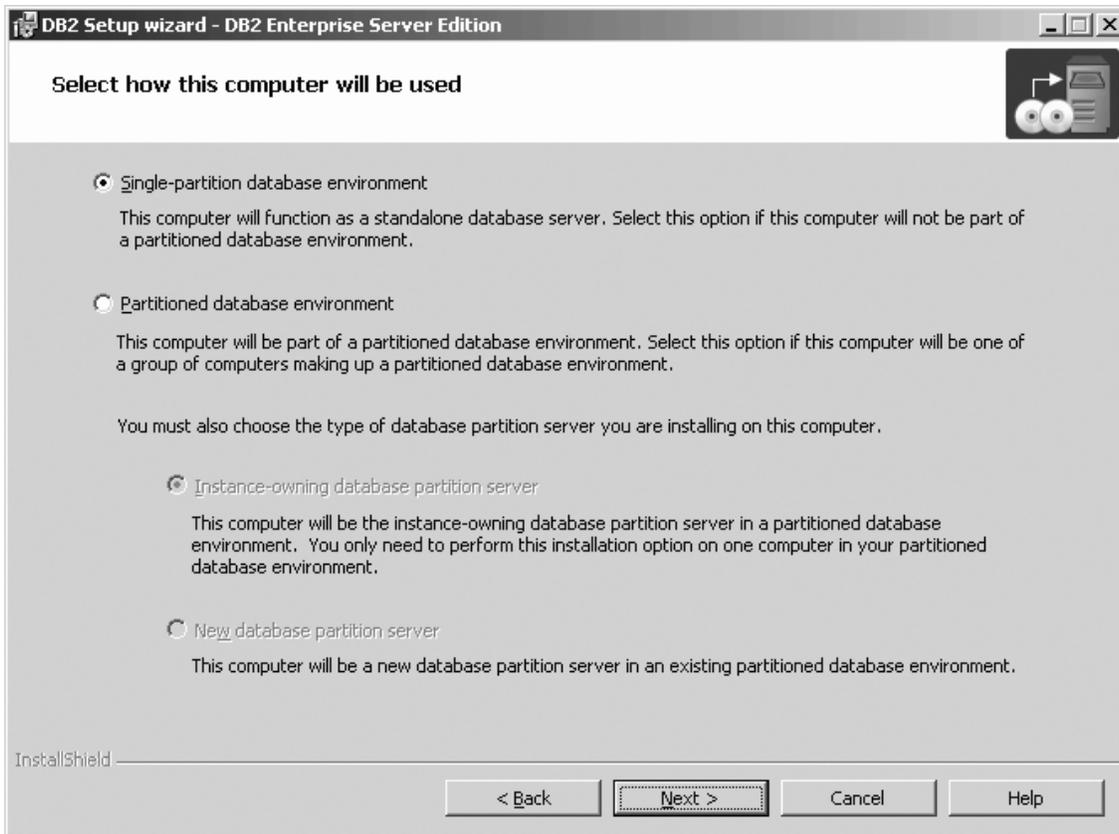


Figure 8. DB2 Setup wizard - Select how this computer will be used page

- b. Click **Next**. The "Select the features you want to install" page opens.
 8. On the "Select the features you want to install" page:
 - a. Open the + beside the **Getting started** option.
 - b. Select the **First Steps** option, and left click. Select **This feature will not be available** from the pop-up menu. Performing this action prevents the **First Steps** option from being installed.

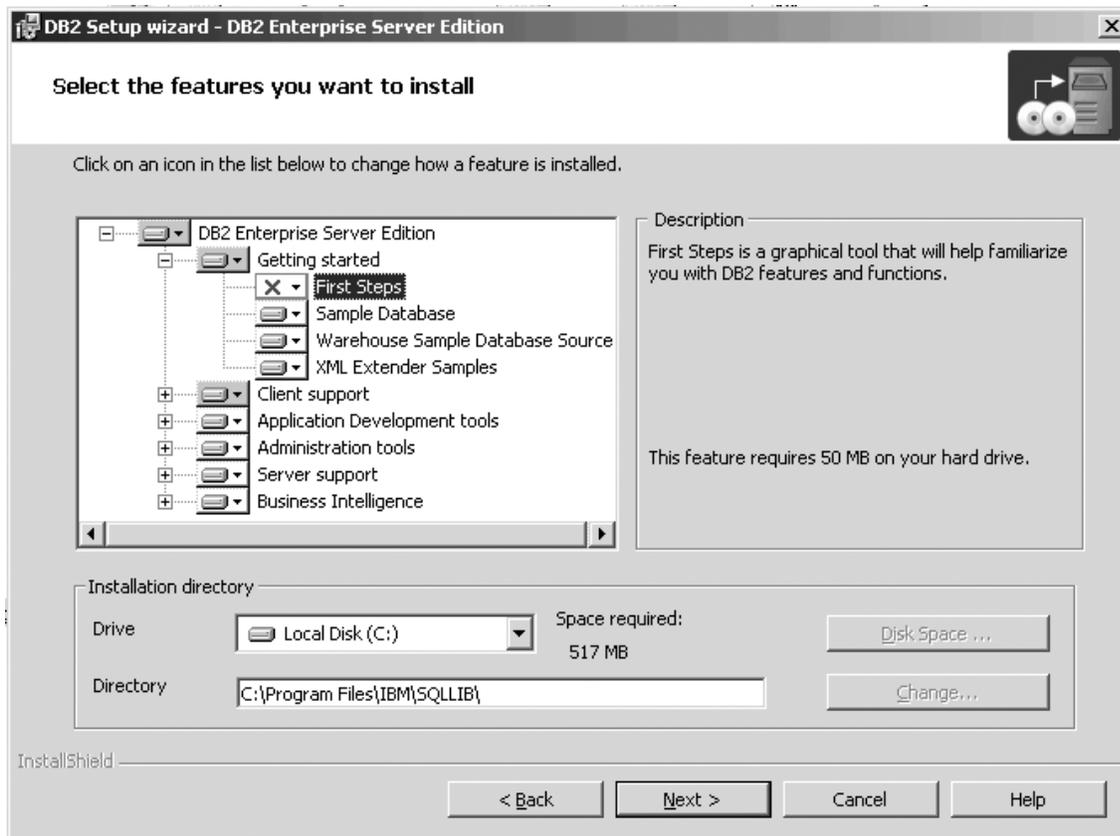


Figure 9. DB2 Setup wizard - Select the features you want to install page; First Steps option deselected for installation

- c. Open the + beside the **Client support** option.
- d. Open the + beside the **Communication protocols** option.
- e. Select the **APPC** option, and left click. Select **This feature will not be available** from the pop-up menu. Use the **This feature will not be available** option of the pop-up menu to also deselect the **NetBIOS** option and the **Named Pipes** option. These protocols are not supported in a Common Criteria compliant environment.

Note: TCP/IP is supported in a Common Criteria compliant environment. Do *not* deselect the **TCP/IP** option.

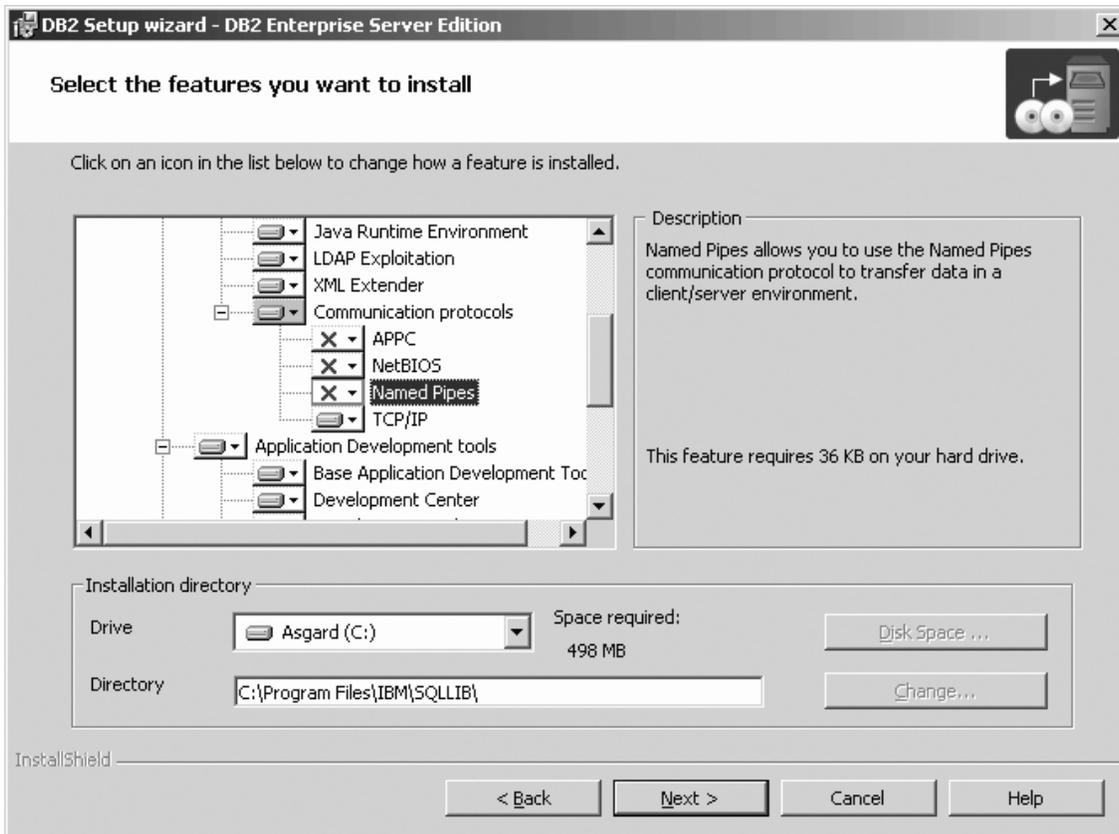


Figure 10. DB2 Setup wizard - Select the features you want to install page; APPC, NetBIOS, and Named Pipes options deselected for installation

- f. Open the + beside the **Application Development tools** option.
- g. Select the **Warehouse Samples** option, and left click. Select **This feature will not be available** from the pop-up menu to deselect the **Warehouse Samples** option.

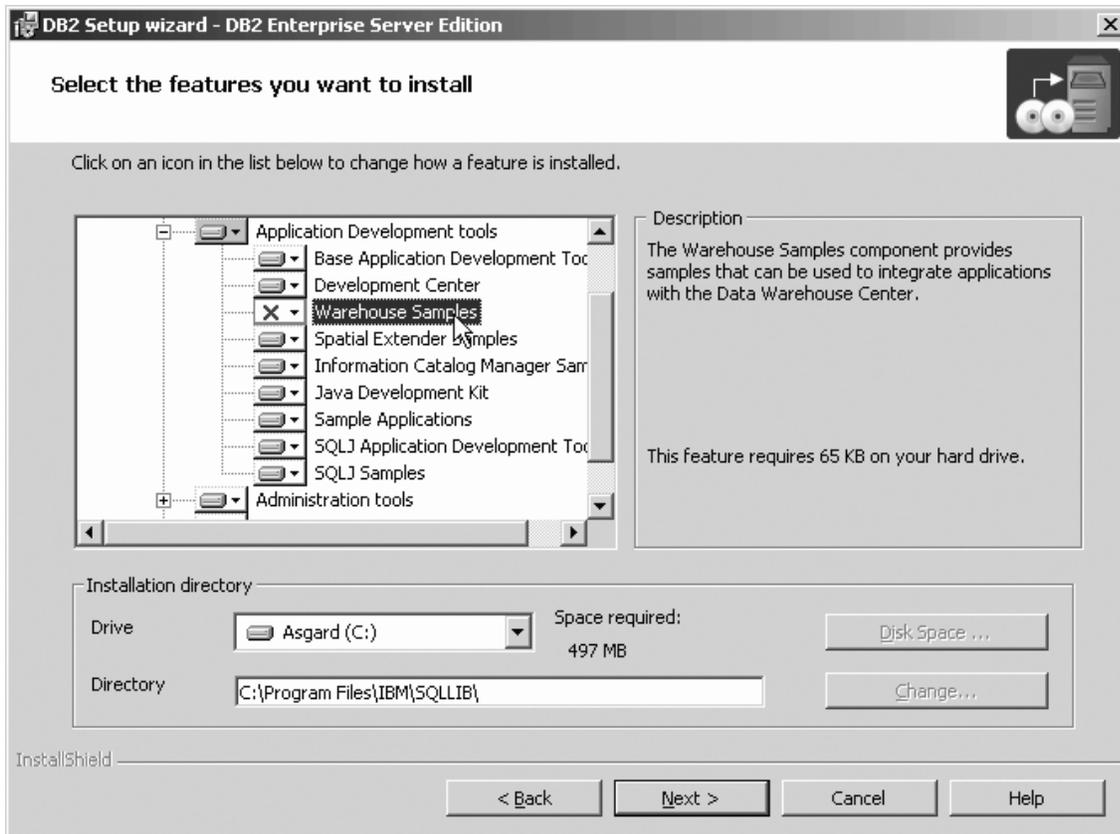


Figure 11. DB2 Setup wizard - Select the features you want to install page; Warehouse Samples option deselected for installation

- h. Select the **Administration tools** option, and left click. Select **This feature will not be available** from the pop-up menu to deselect the **Administration tools** option.

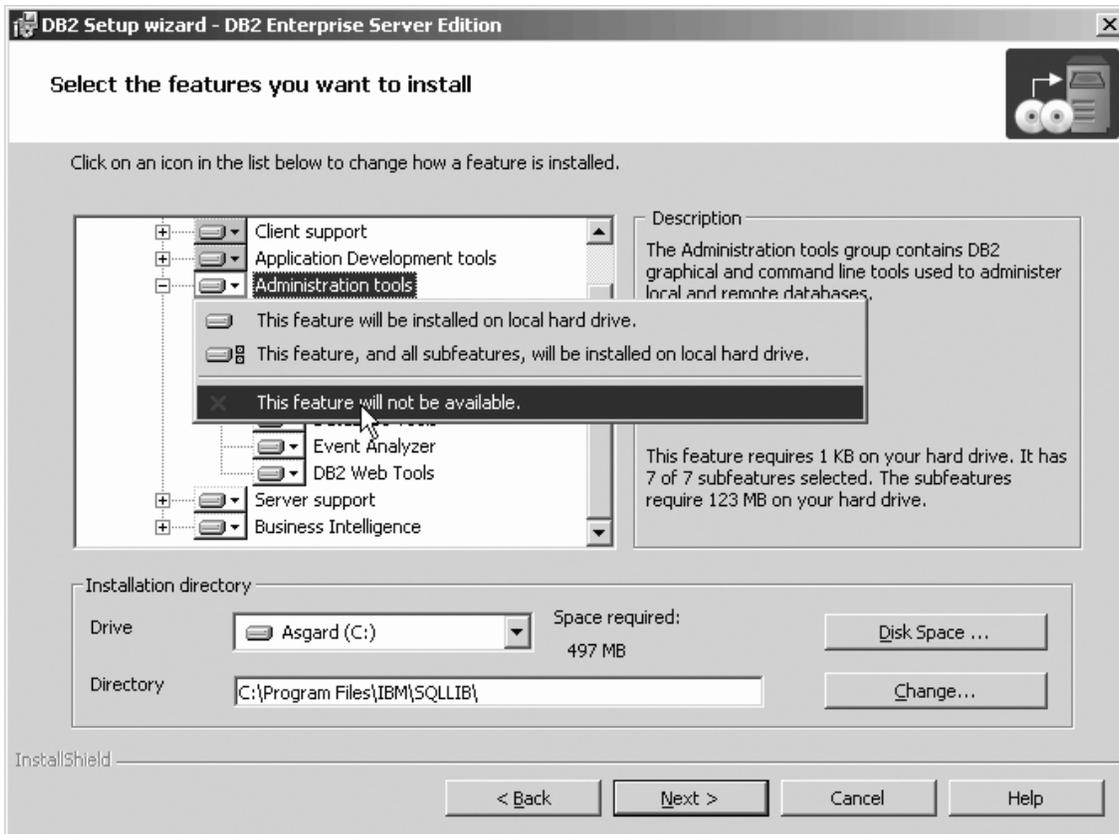


Figure 12. DB2 Setup wizard - Select the features you want to install page; Administration tools option deselected for installation

- i. Open the + beside the **Server support** option
- j. Select the **Apply** option and left click. Select **This feature will not be available** from the pop-up menu to deselect the **Apply** option. Also ensure that following options under **Server support** are deselected for installation:
 - 1) **Capture**
 - 2) **Connect Support**
 - 3) **Satellite Control Server**
 - 4) **Informix data source support**

After the **Server support** options are deselected, open the + beside the **Communications protocols** option, and deselect the **NetBIOS Listener** option and the **Named Pipes Listener** option.

Note: Do *not* deselect the **TCP/IP Listener** option.

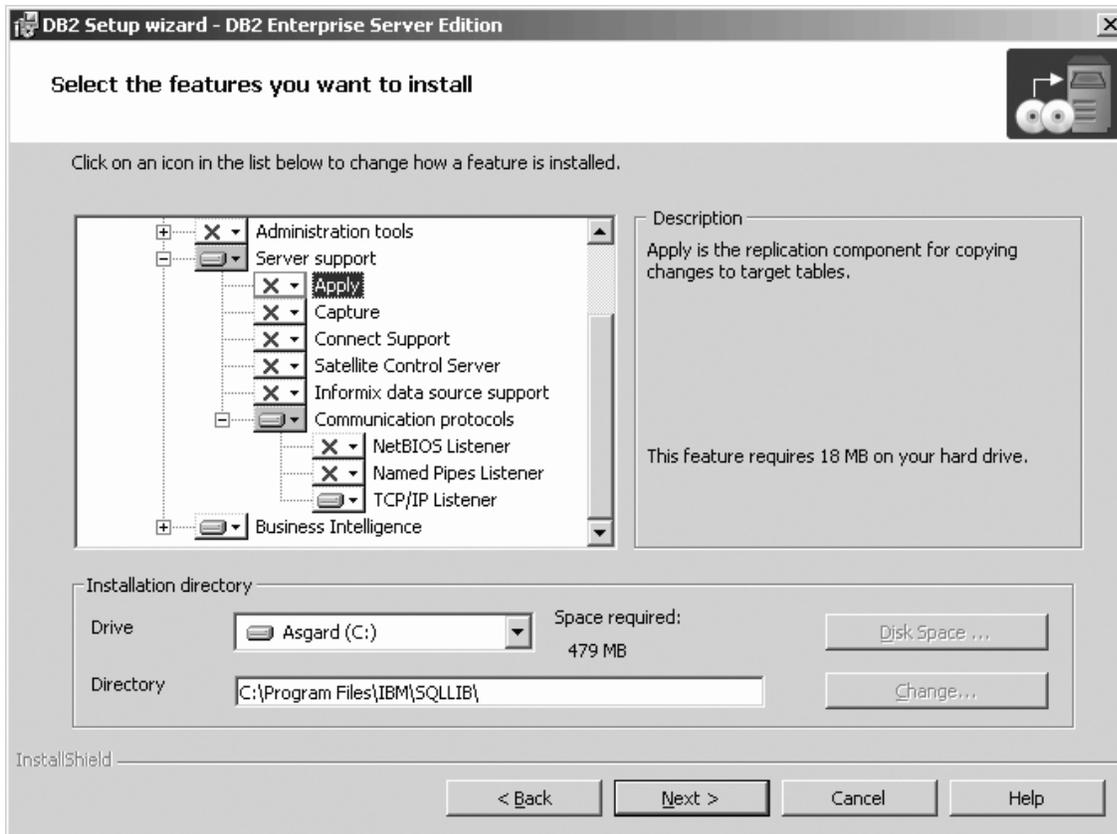


Figure 13. DB2 Setup wizard - Select the features you want to install page; all options except TCP/IP Listener deselected for installation

- k. Select the **Business Intelligence** option and left click. Select **This feature will not be available** from the pop-up menu to deselect the **Business Intelligence** option.

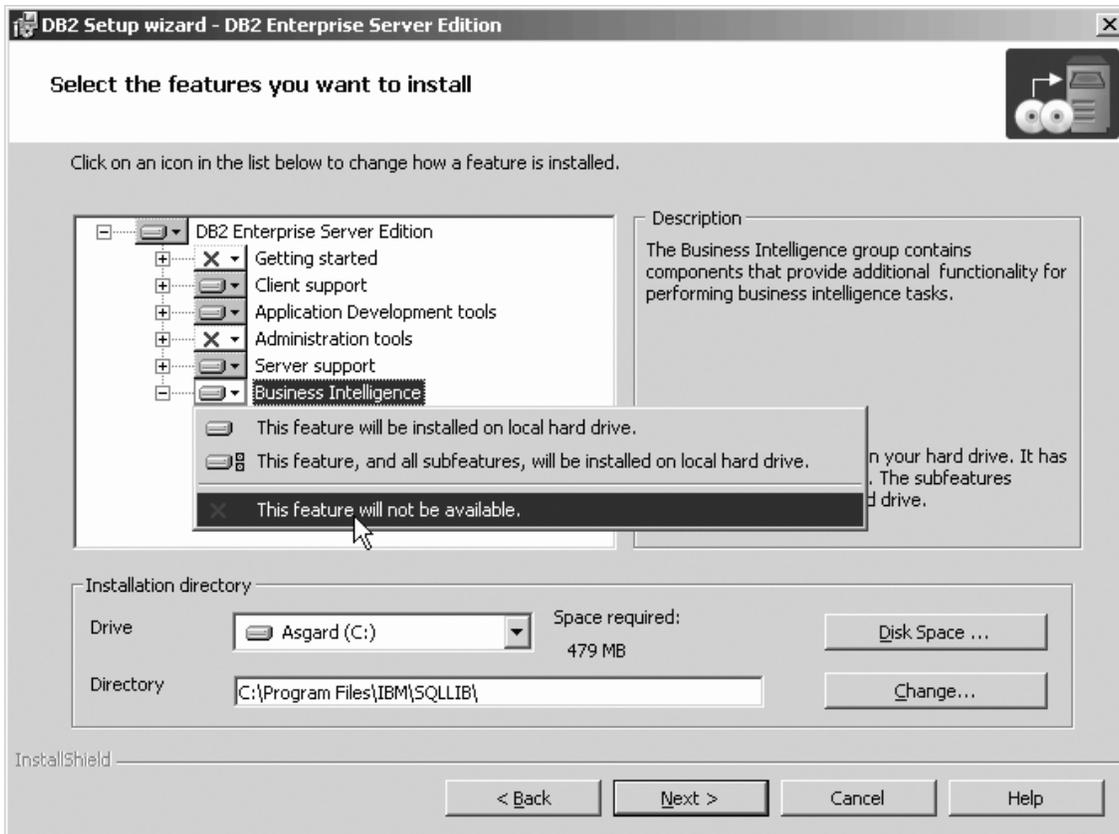


Figure 14. DB2 Setup wizard - Select the features you want to install page; Business Intelligence option deselected for installation

- l. Click **Next**. The "Select the languages to install" page opens.
9. On the "Select the languages to install" page, English is the only language support that is installed by default.

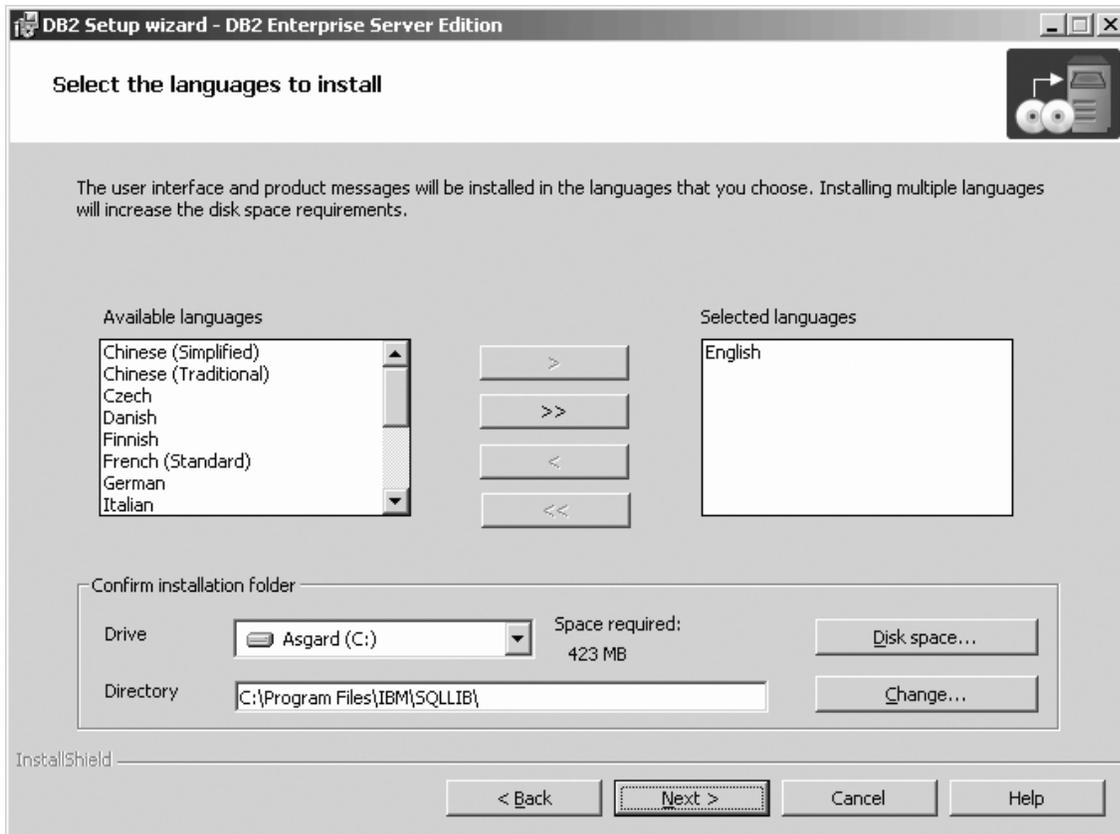


Figure 15. DB2 Setup wizard - Select the languages to install page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
10. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

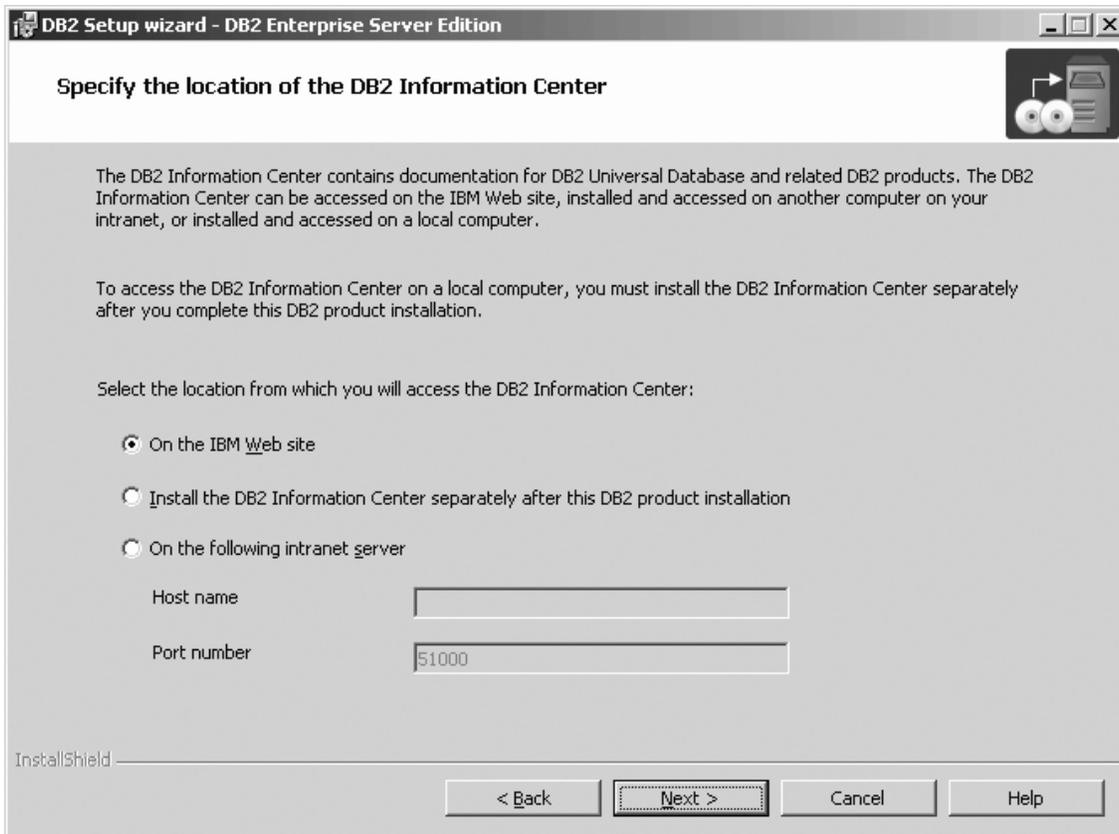


Figure 16. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
 11. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the domain of the user from the **Domain** drop-down list.
 - b. Type the user name for the DB2 Administration Server in the **User name** field.
 - c. Type the password for the user in the **Password** field.
 - d. Type the password again in the **Confirm password** field.
 - e. Ensure that the **Use the same user name and password for the remaining DB2 services** check box is not selected.

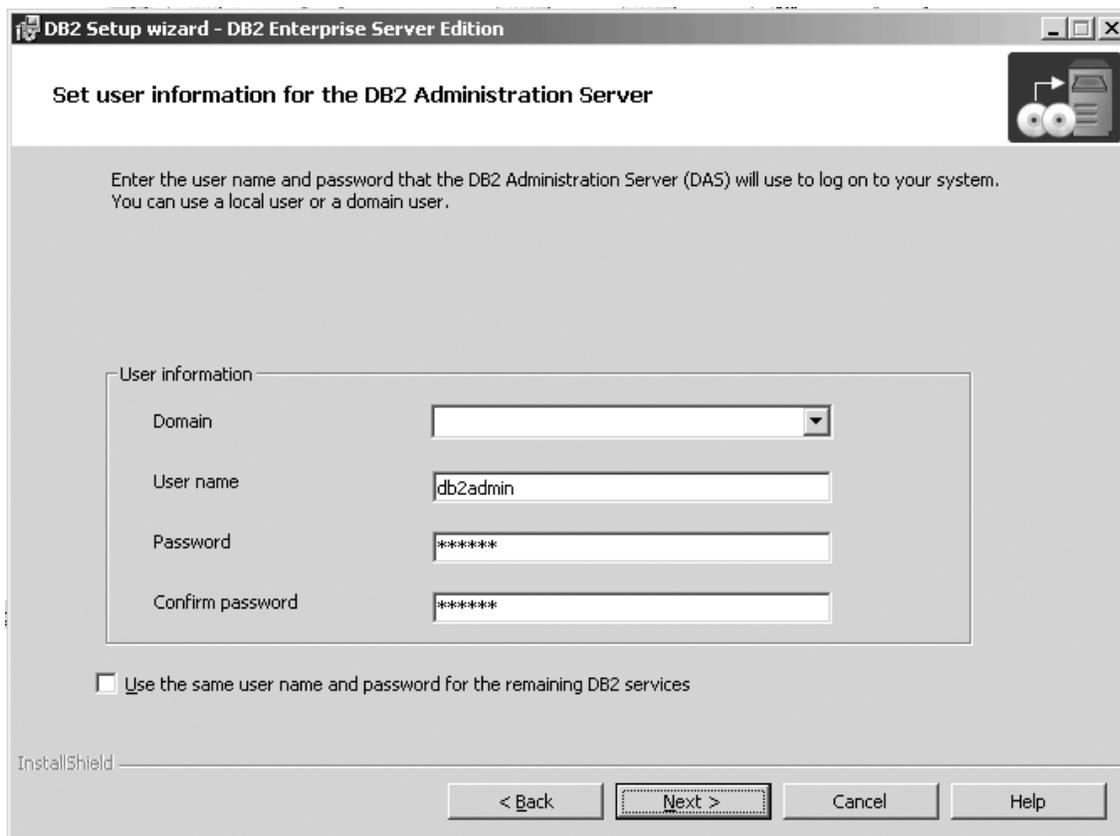


Figure 17. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- f. Click **Next**. The "Set up the administration contact list" page opens.
12. On the "Set up the administration contact list" page:
 - a. Select the **Local - Create a contact list on this system** radio button.
 - b. Ensure that the **Enable notification** check box is not selected.

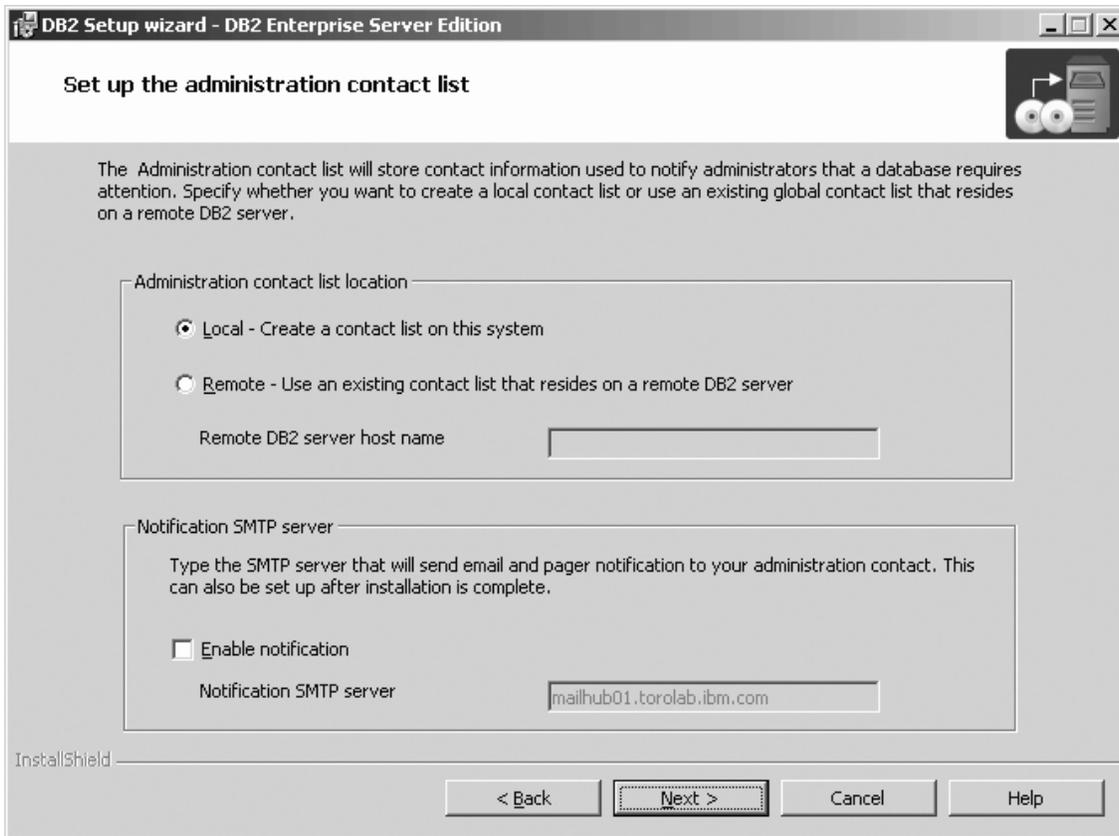


Figure 18. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the "Set up the administration contact list" page, the following warning message is displayed:

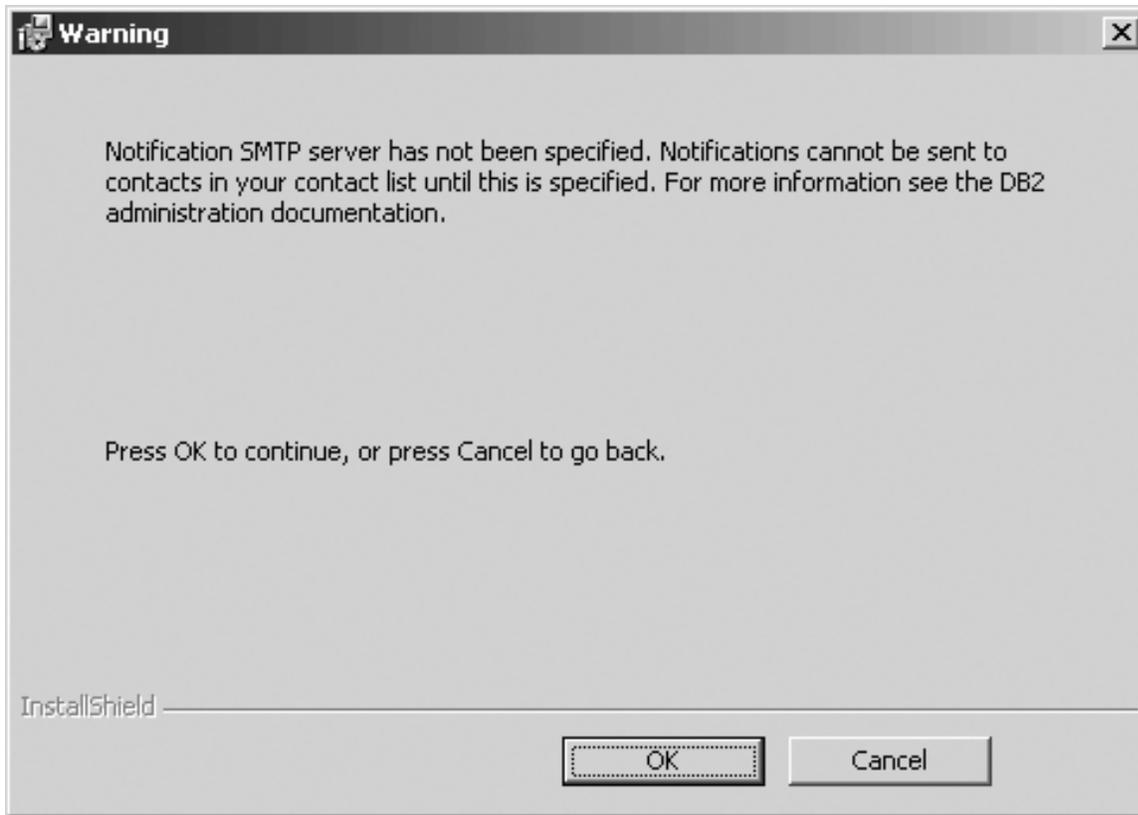


Figure 19. DB2 Setup wizard - Warning message

Click **OK**. The "Configure DB2 instances" page opens.

13. On the "Configure DB2 instances" page, click the **Startup** button. The "Startup options" window opens.

On the "Startup options" window:

- a. Select the **Do not autostart the instance. The instance must be started manually** radio button.

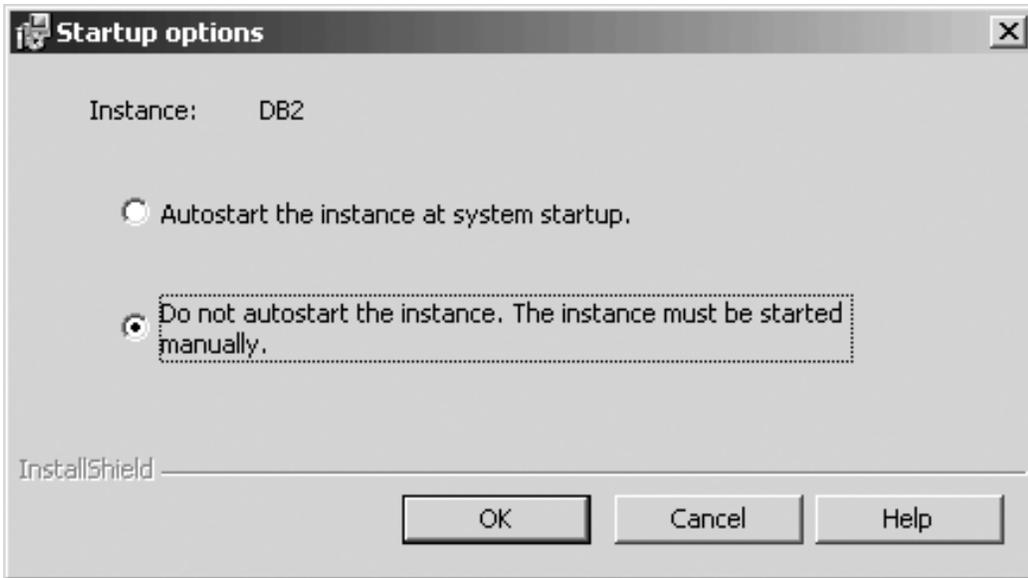


Figure 20. Startup options window

b. Click **OK**. The "Startup options" window closes.

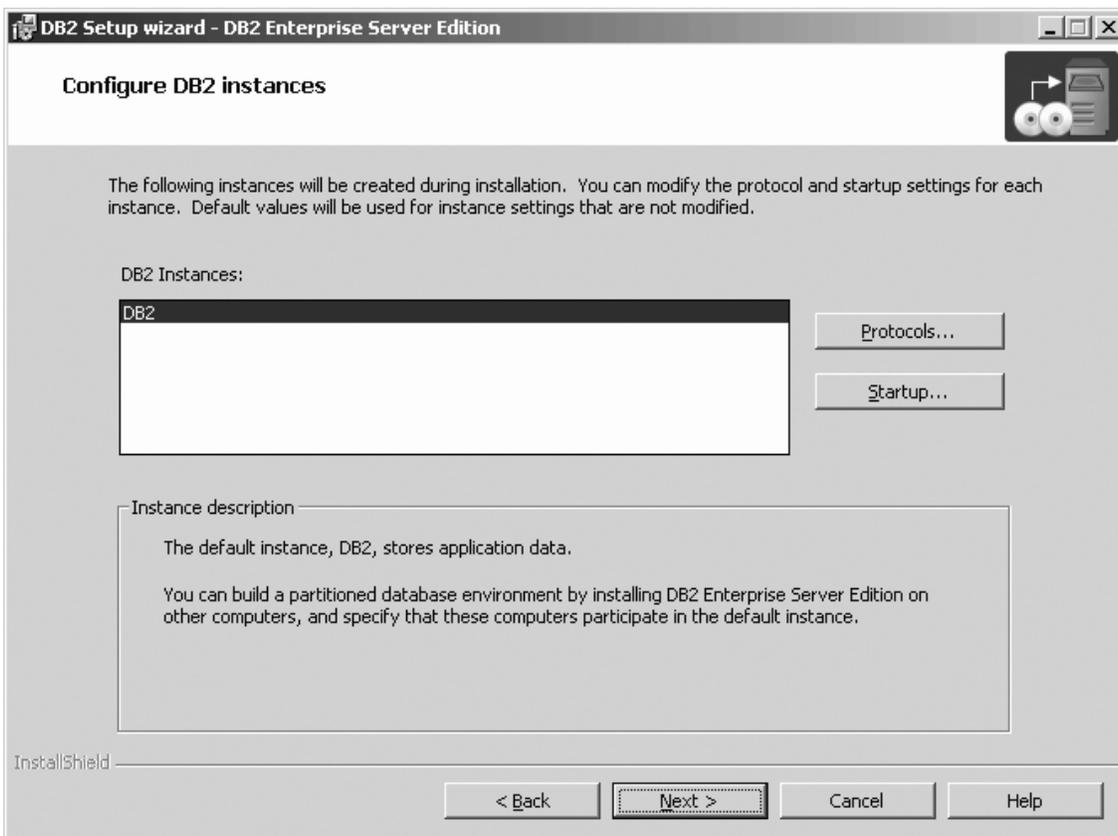


Figure 21. DB2 Setup wizard - Configure DB2 instances page

On the "Configure DB2 instances" page, click **Next**. The "Set user information for the DB2 instance" page opens.

14. On the "Set user information for the DB2 instance" page:
 - a. Select the domain of the user from the **Domain** drop-down list.
 - b. Type the user name for the DB2 Administration Server in the **User name** field.
 - c. Type the password for the user in the **Password** field.
 - d. Type the password again in the **Confirm password** field.
 - e. Ensure that the **Use the same user name and password for the remaining DB2 services** check box is not selected.

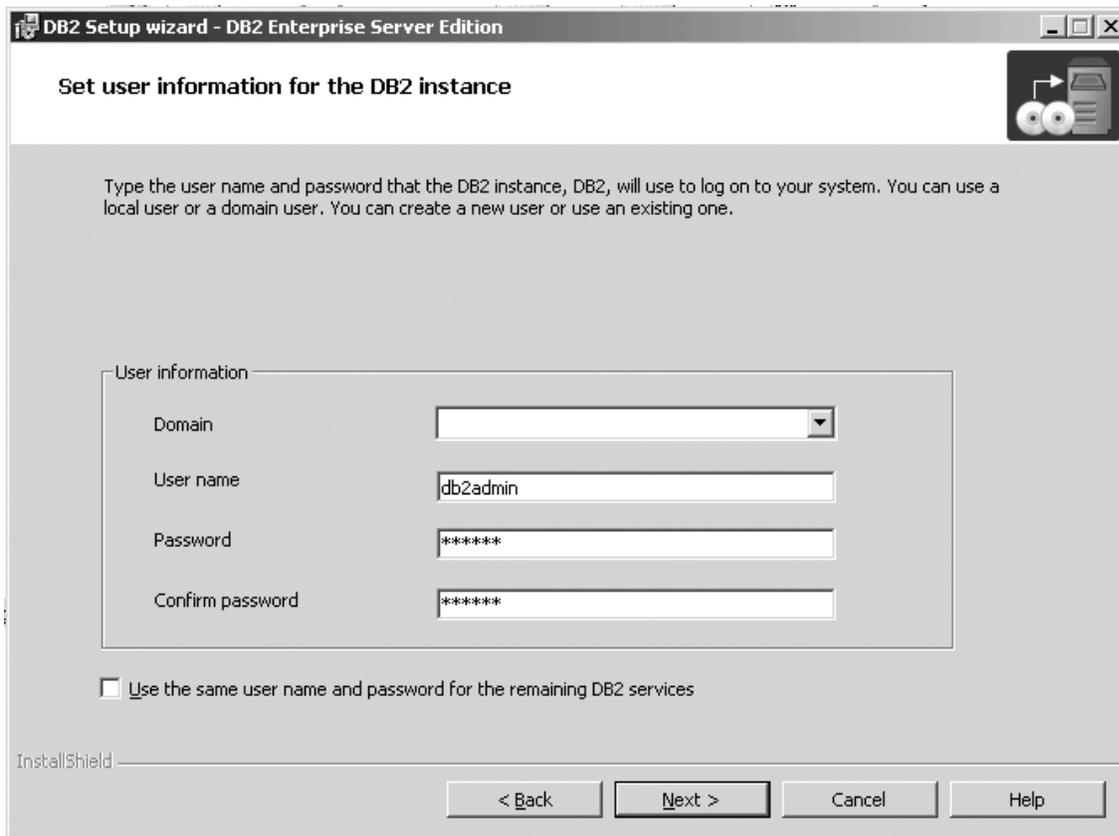


Figure 22. DB2 Setup wizard - Set user information for the DB2 instance

- f. Click **Next**. The "Prepare the DB2 tools catalog" page opens.
15. On the "Prepare the DB2 tools catalog" page:
 - a. Click the **Do not prepare the DB2 tools catalog on this computer** radio button.

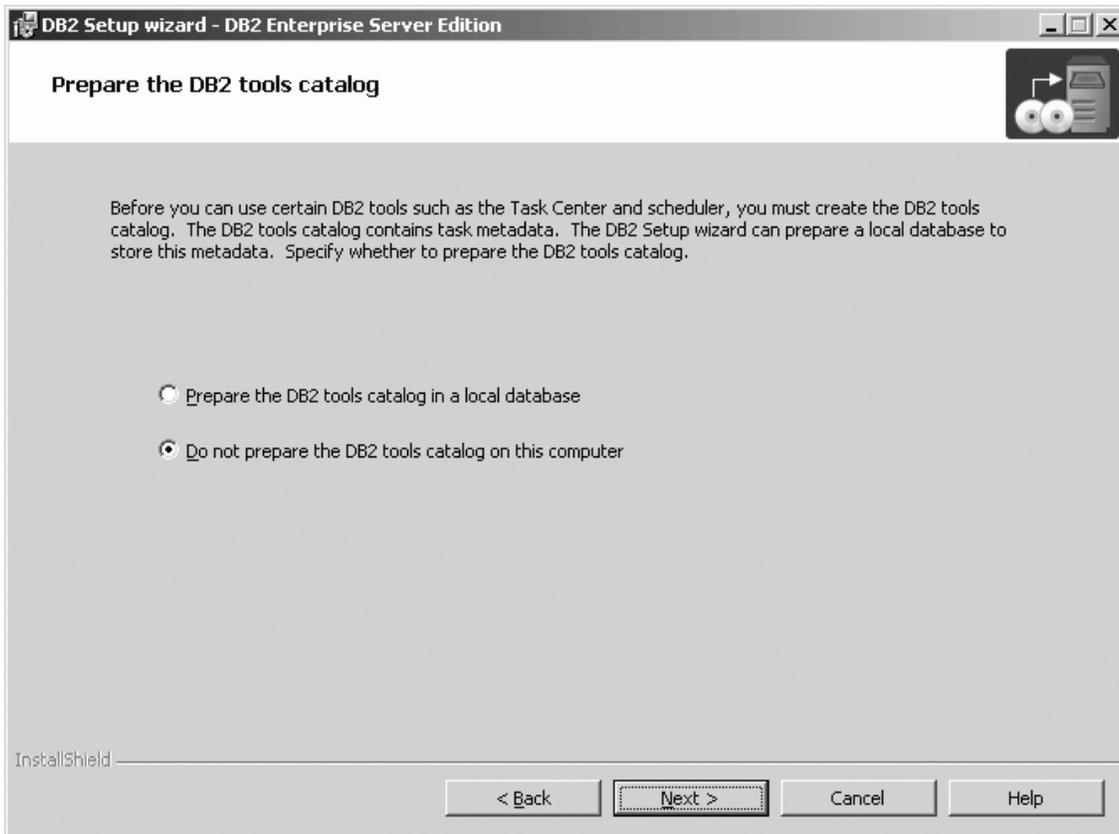


Figure 23. DB2 Setup wizard - Prepare the DB2 tools catalog page

- b. Click **Next**. The "Specify a contact for health monitor notification" page opens.
16. On the "Specify a contact for health monitor notification" page:
 - a. Click the **Defer the task until after installation is complete** radio button.

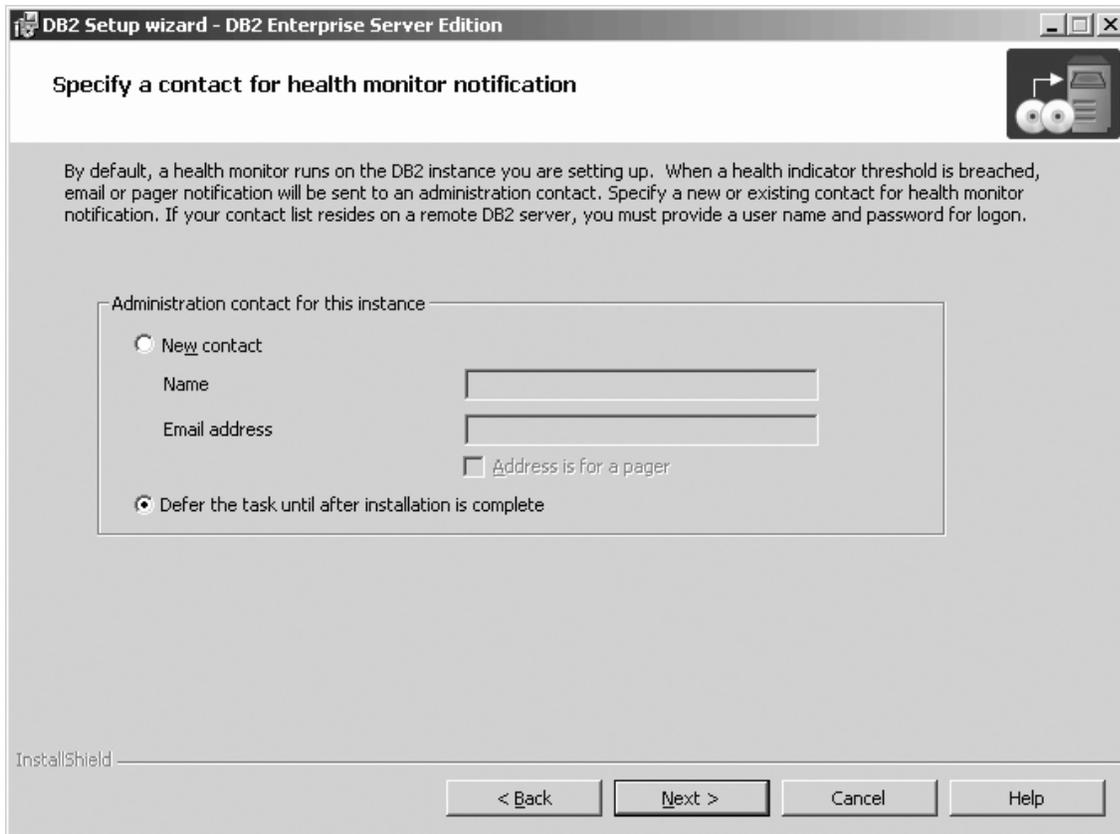


Figure 24. DB2 Setup wizard - Specify a contact for health monitor notification page

- b. Click **Next**. The "Enable operating system security for DB2 objects" page opens.
17. On the "Enable operating system security for DB2 objects" page:
 - a. Deselect the **Enable operating system security** check box.

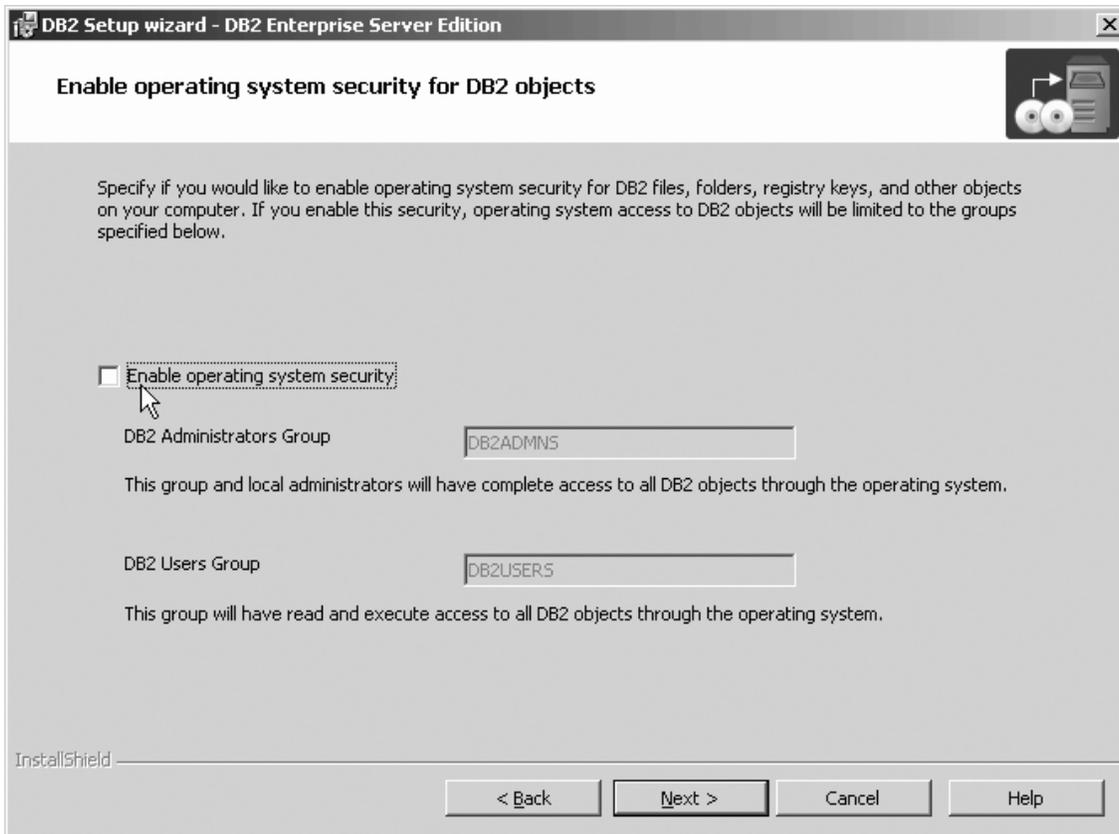


Figure 25. DB2 Setup wizard - Enable operating system security for DB2 objects page

- b. Click **Next**. The "Start copying files" page opens.
18. On the "Start copying files" page, click **Install** to begin installing DB2 on your computer.

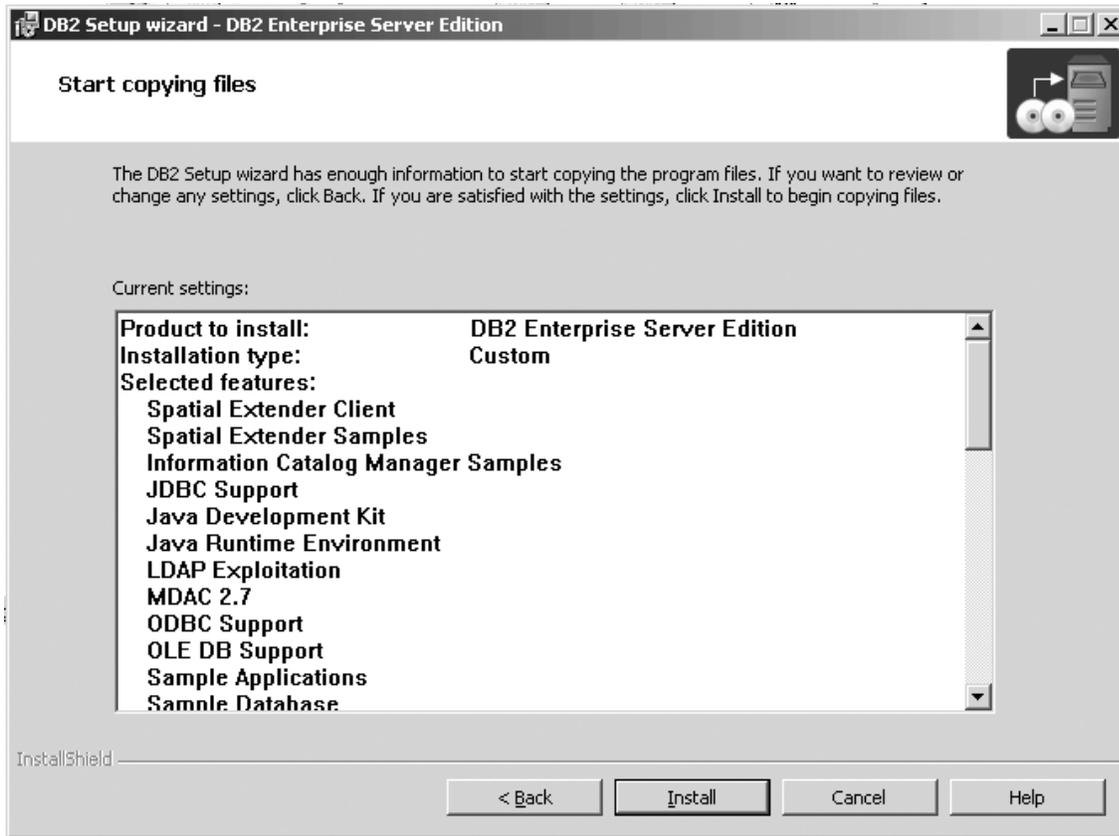


Figure 26. DB2 Setup wizard - Start copying files page

|
|

The "Installing DB2 Enterprise Server Edition" page opens.

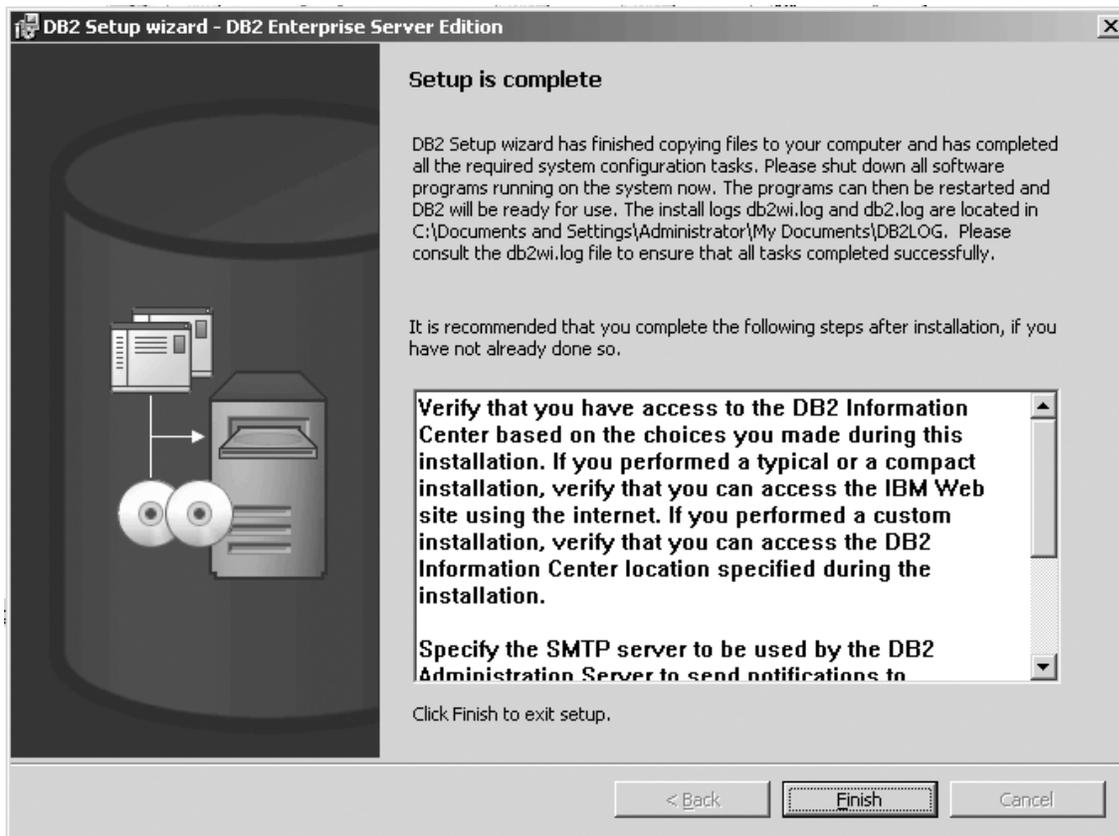


Figure 28. DB2 Setup wizard - Setup is complete page

Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Enterprise Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Installing DB2 Workgroup Server Edition on Windows 2000 for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Workgroup Server Edition on Windows 2000 for a Common Criteria compliant installation.

Prerequisites:

- Windows 2000 must be installed on the computer.
- Windows 2000 must be configured to disable remote access services (such as terminal server and filesystem shares) before DB2 Universal Database is installed. For information on performing this task, refer to the operating system documentation.
- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- The domain, user name, and password for the DB2 Administration Server. If you do not have these values, obtain them from the system administrator. For more information about the DB2 Administration Server user account, see "Required user accounts for installation of DB2 servers (Windows)" on page 22.
- The "IBM DB2 Setup Launchpad" should be open.

Procedure:

To install DB2 UDB Workgroup Server Edition on Windows 2000 for a Common Criteria compliant installation.

1. On the "IBM DB2 Setup Launchpad", click **Install product**.

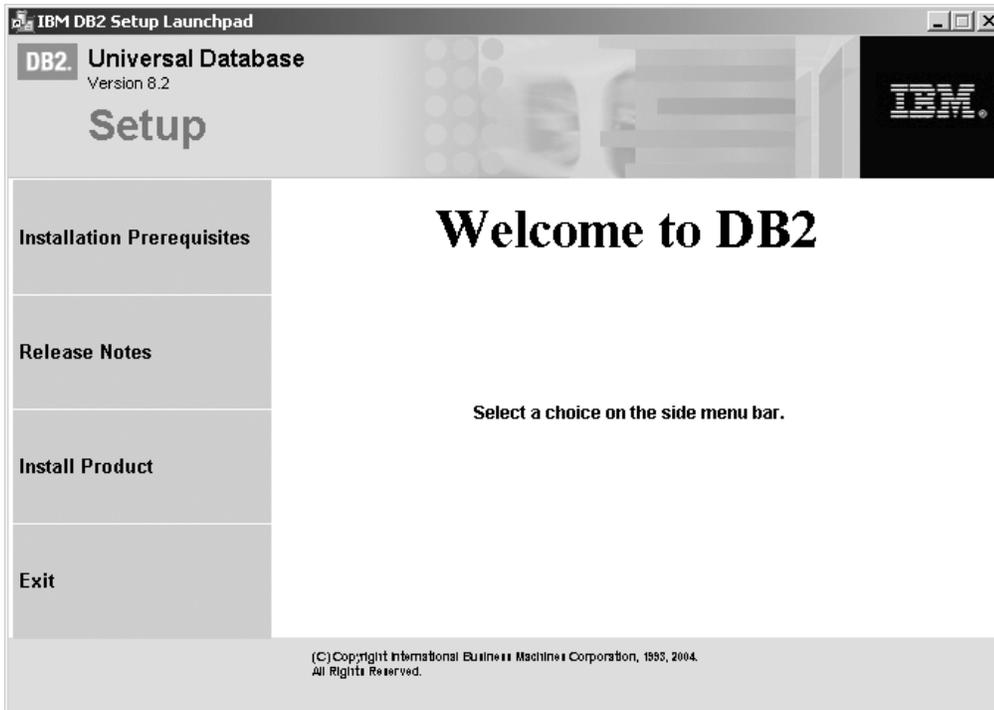


Figure 29. DB2 Setup Launchpad

2. On the second page of the "IBM DB2 Setup Launchpad":
 - a. In the **Select the product you would like to install** box, ensure that the **DB2 UDB Workgroup Server Edition** radio button is selected, as follows:

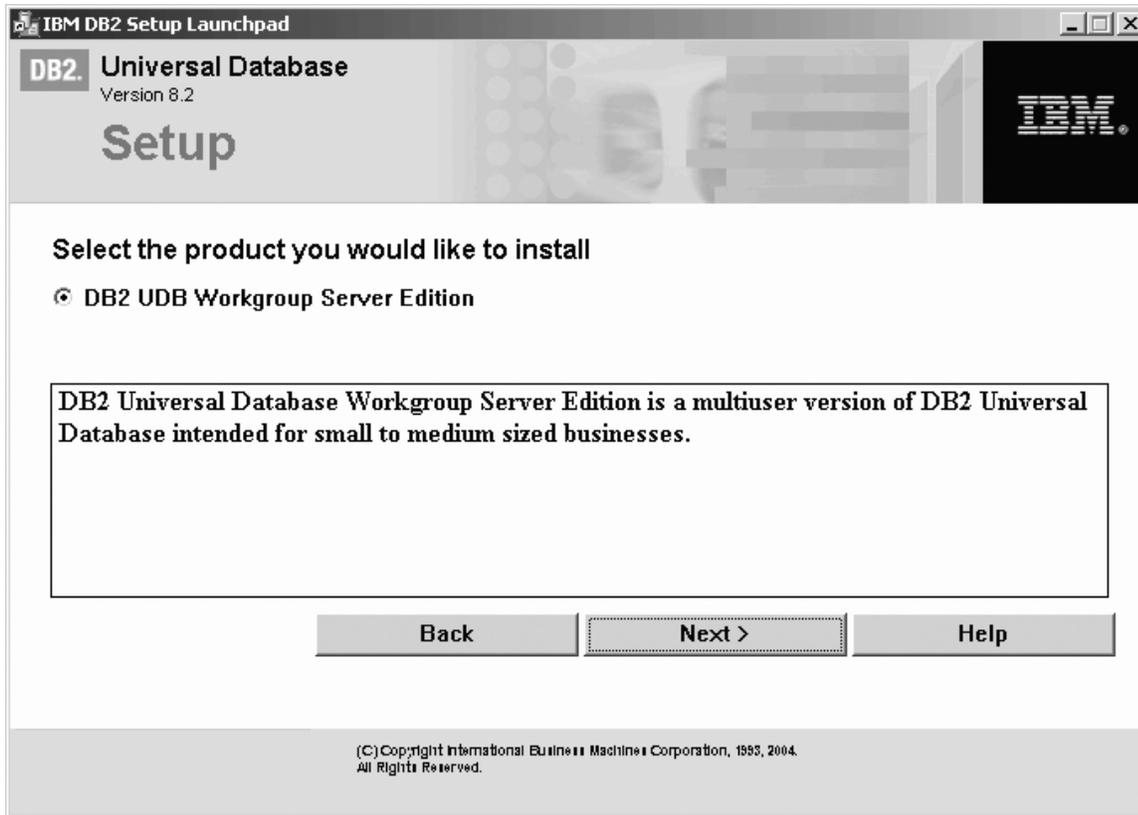


Figure 30. IBM DB2 Setup Launchpad

- b. Click **Next**. In a moment, the "DB2 Setup wizard" opens, as follows:

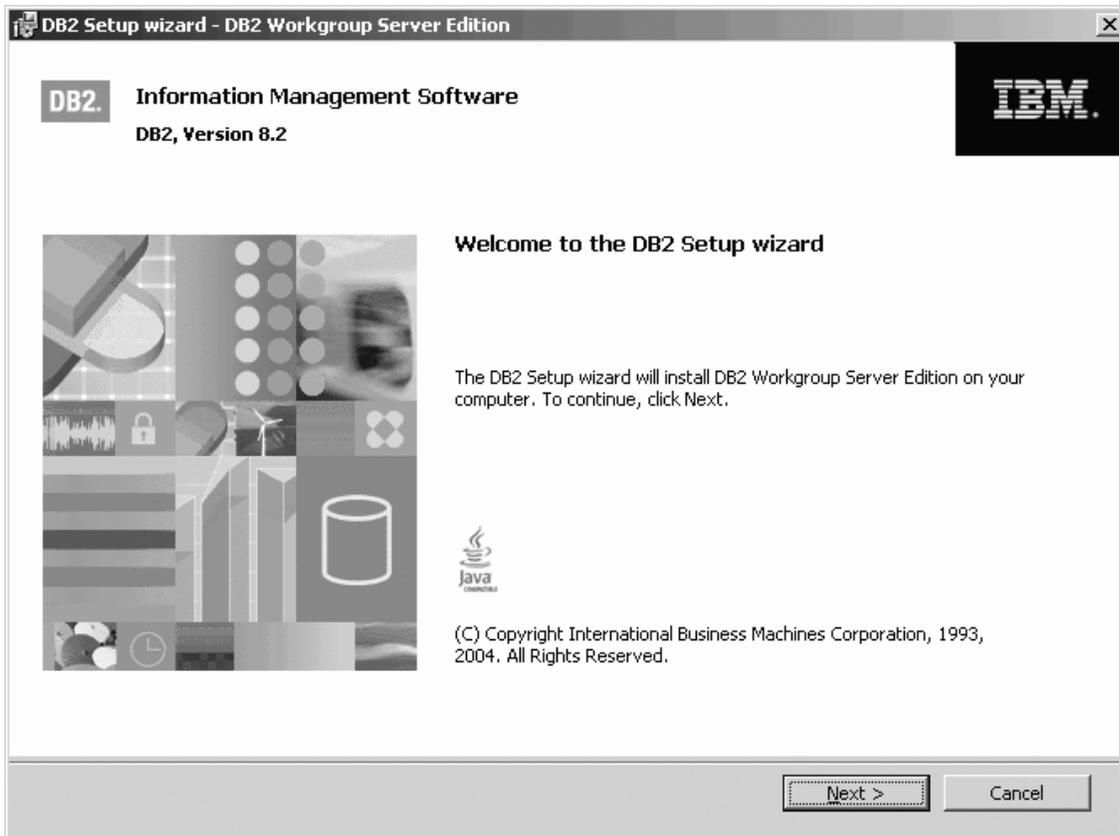


Figure 31. DB2 Setup wizard

3. Click **Next**. The "License Agreement" page opens.
4. On the "License Agreement" page:
 - a. Select the **I accept the terms in the license agreement** radio button:

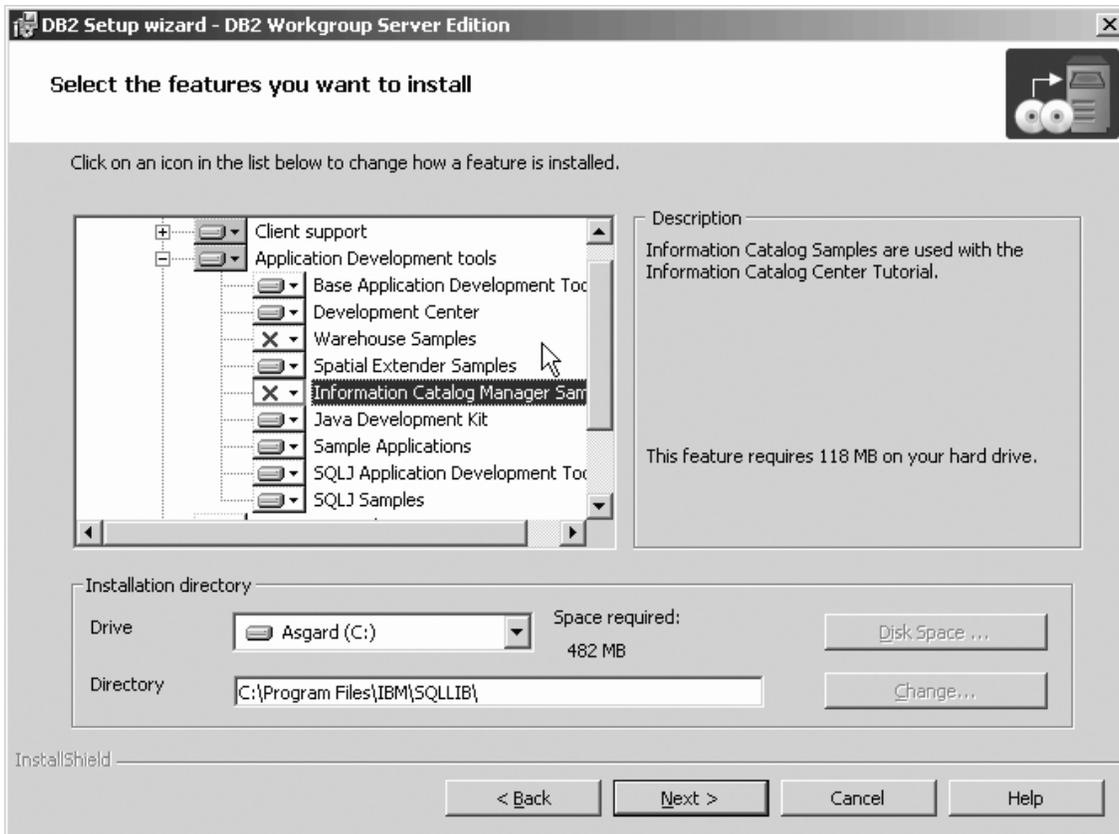


Figure 35. DB2 Setup wizard - Select the features you want to install page; Warehouse Samples option deselected for installation

- c. Open the + beside the **Client support** option.
- d. Under the **Client support** option, open the + beside the **Communication protocols** option.
- e. Select the **APPC** option, and left click. Select **This feature will not be available** from the pop-up menu. Performing this action prevents the **APPC** option from being installed. Repeat this step for the **NetBIOS** and **Named Pipes** options.

Note: TCP/IP is supported in a Common Criteria compliant environment. Do *not* deselect the **TCP/IP** option.

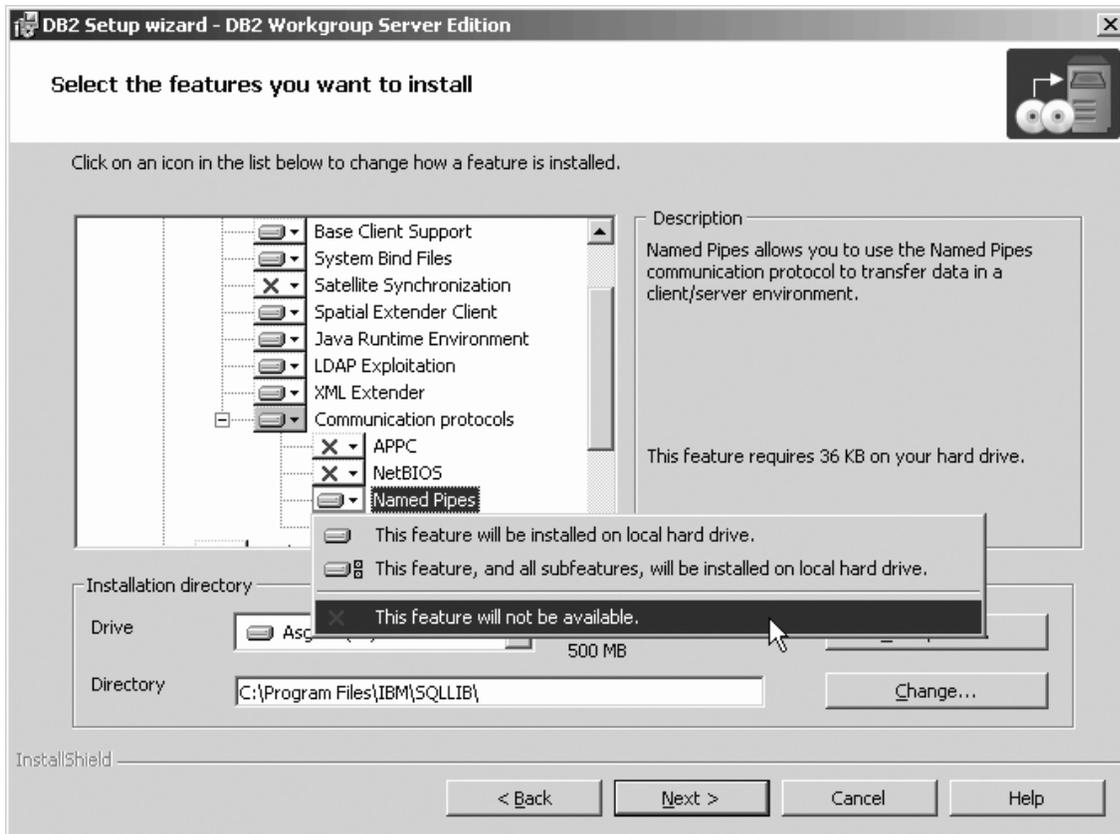


Figure 36. DB2 Setup wizard - Select the features you want to install page; APPC, NetBIOS, and Named Pipes options deselected for installation

- f. Open the + beside **Getting started** option.
- g. Select the **First Steps** option, and left click. Select **This feature will not be available** from the pop-up menu. Performing this action prevents the **First Steps** option from being installed.

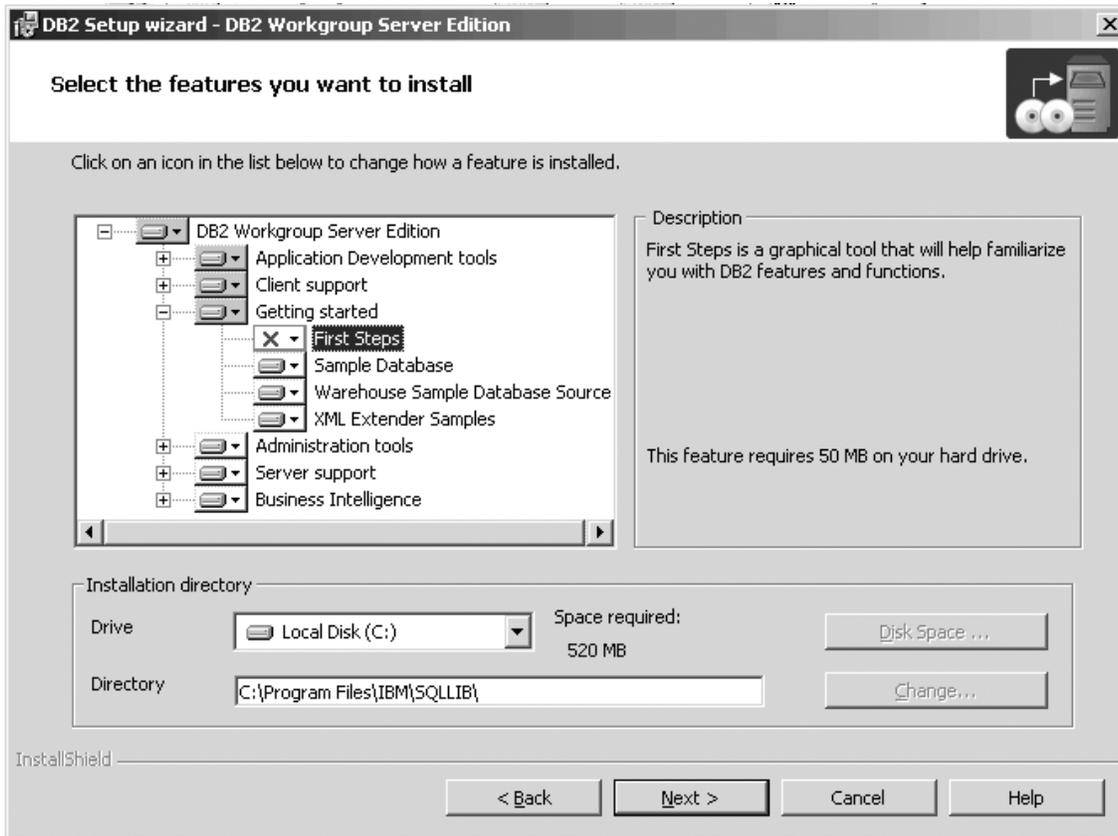


Figure 37. DB2 Setup wizard - Select the features you want to install page; First Steps option deselected for installation

- h. Select the **Administration tools** option and left click. Select **This feature will not be available** from the pop-up menu. Performing this action prevents the options under **Administration tools** from being installed.

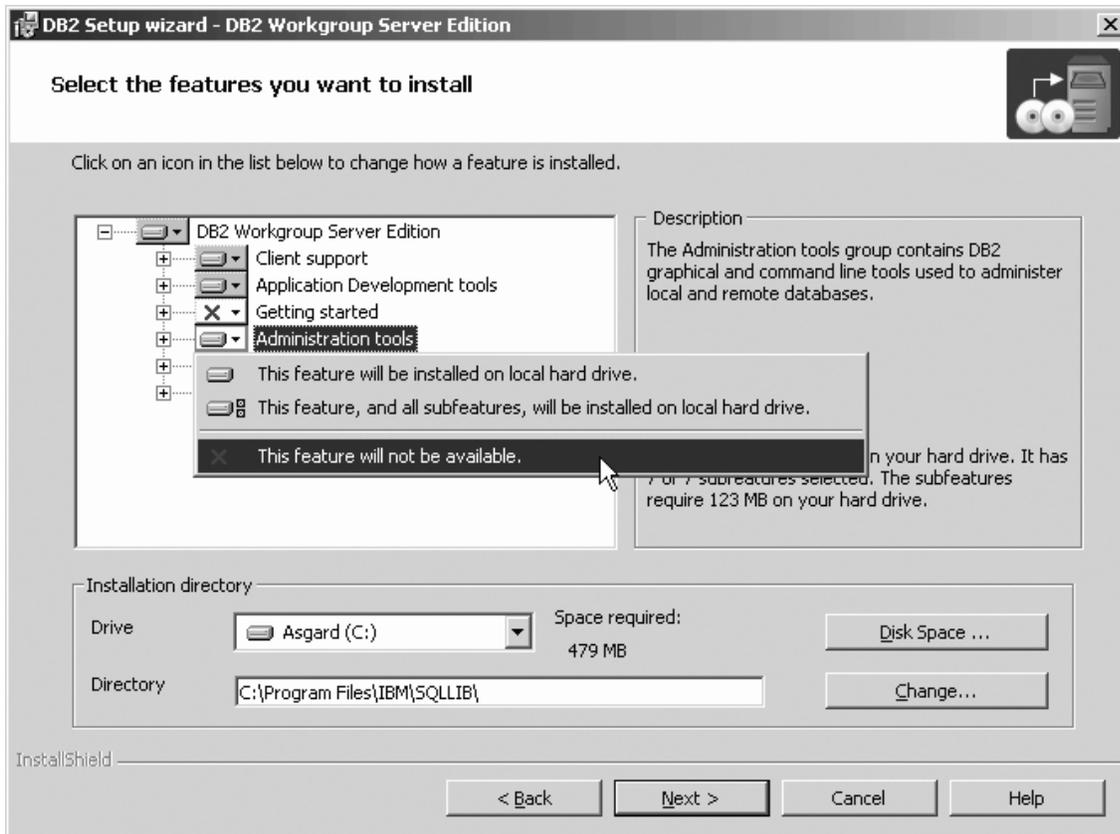


Figure 38. DB2 Setup wizard - Select the features you want to install page; Administration tools option deselected for installation

- i. Open the + beside the **Server support** option.
- j. Select the **Apply** option and left click. Select **This feature will not be available** from the pop-up menu to deselect the **Apply** option. Also ensure that following options under **Server support** are deselected for installation:
 - 1) **Capture**
 - 2) **Connect Support**
 - 3) **Informix data source support**

After the **Server support** options are deselected, open the + beside the **Communications protocols** option, and deselect the **NetBIOS Listener** option and the **Named Pipes Listener** option.

Note: Do *not* deselect the **TCP/IP Listener** option.

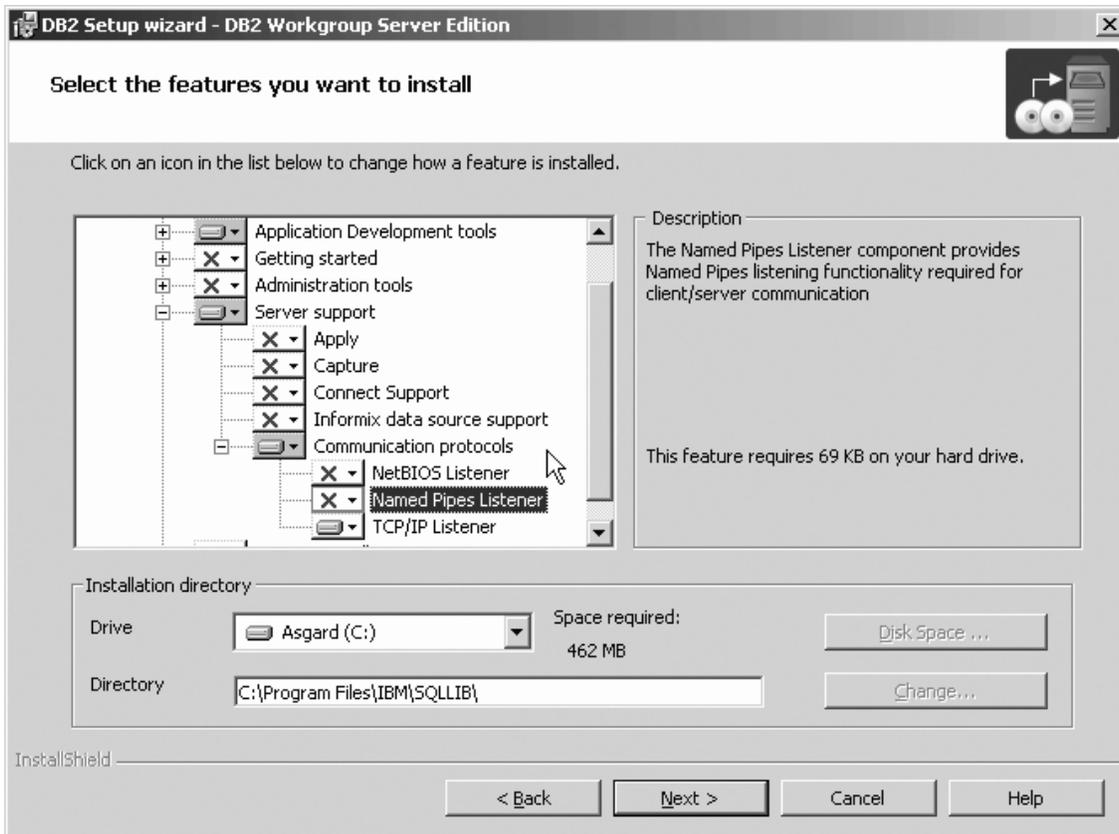


Figure 39. DB2 Setup wizard - Select the features you want to install page; Apply, Capture, Connect Support, Informix data source support, NetBIOS Listener, and Named Pipes Listener options deselected for installation

- k. Select the **Business Intelligence** option and left click. Select **This feature will not be available** from the pop-up menu to deselect the **Business Intelligence** option.

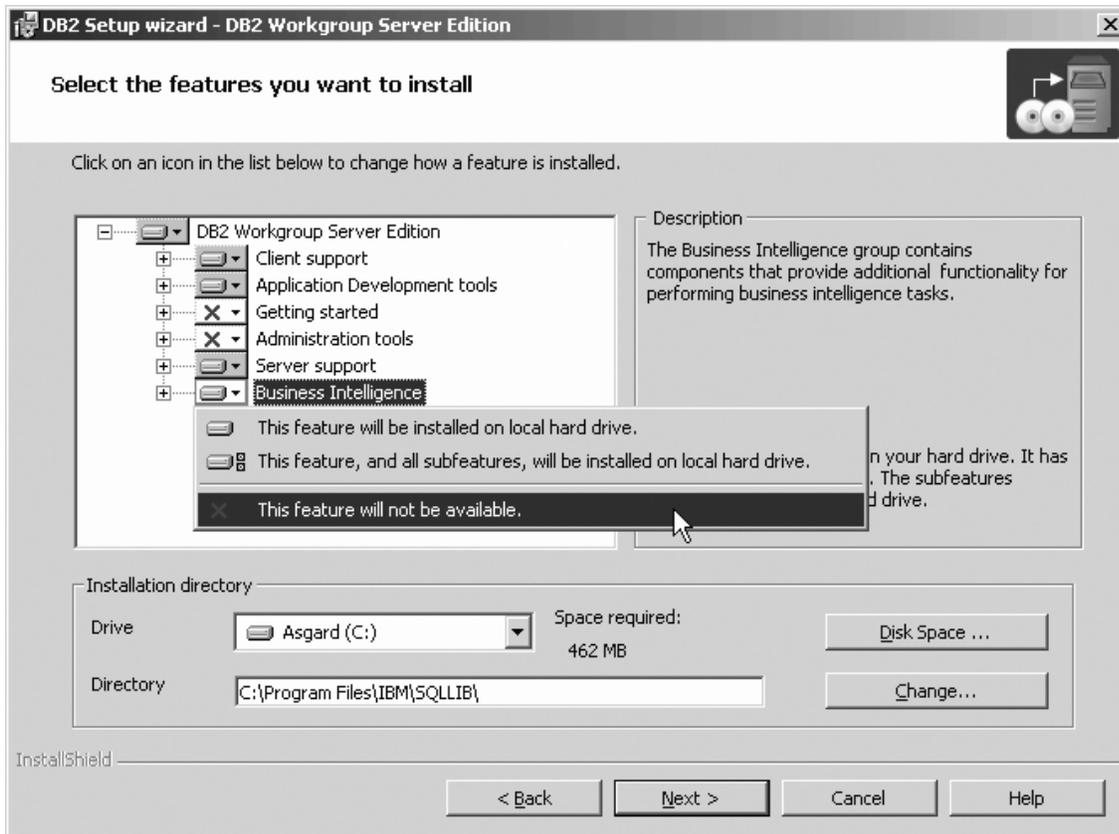


Figure 40. DB2 Setup wizard - Select the features you want to install page; Business Intelligence option deselected for installation

- l. Click **Next**. The "Select the languages to install" page opens.
8. On the "Select the languages to install" page, English is the only language support that is installed by default.

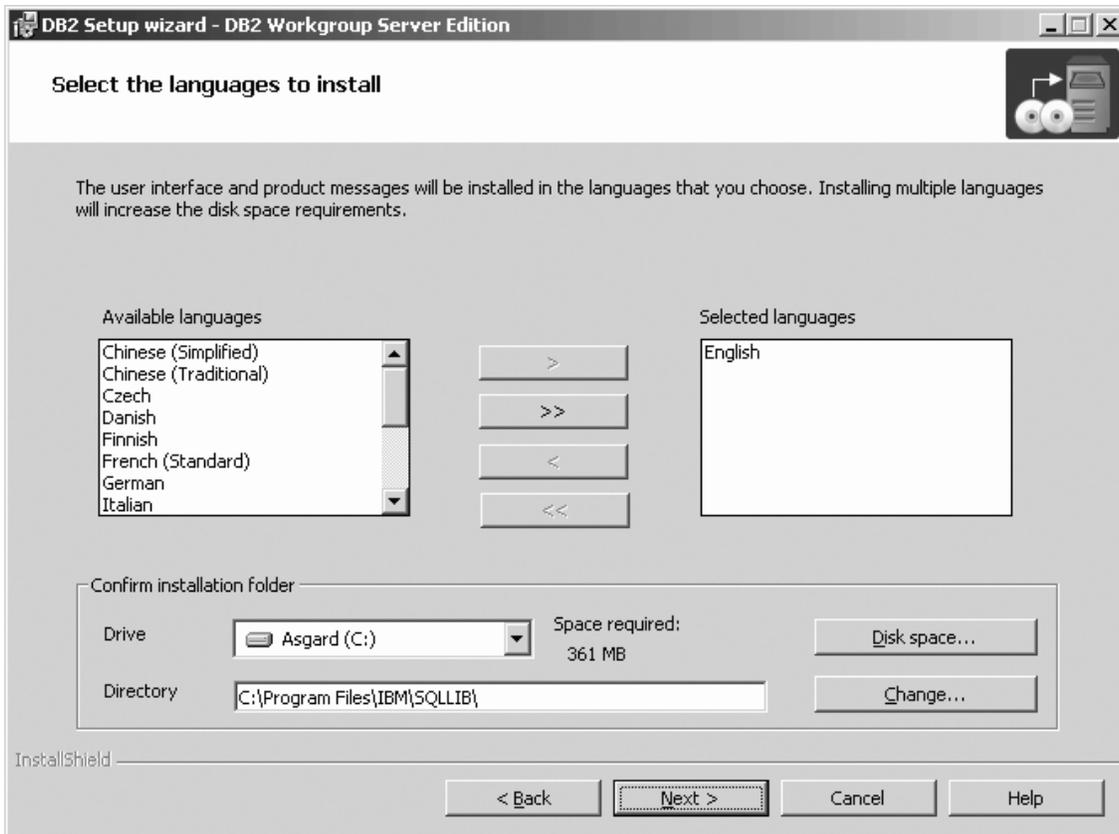


Figure 41. DB2 Setup wizard - Select the languages to install page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
9. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

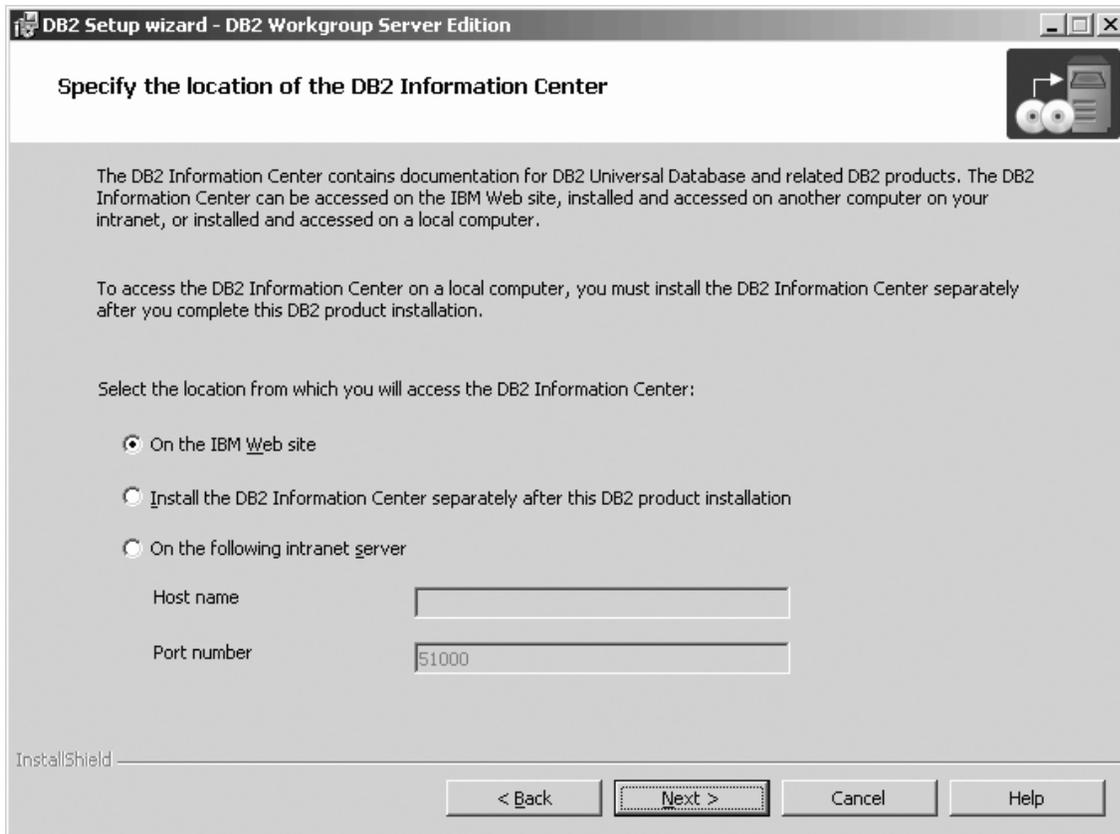


Figure 42. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
10. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the domain of the user from the **Domain** drop-down list.
 - b. Type the user name for the DB2 Administration Server in the **User name** field.
 - c. Type the password for the user in the **Password** field.
 - d. Type the password again thin the **Confirm password** field.
 - e. Ensure that the **Use the same user name and password for the remaining DB2 services** check box is not selected.

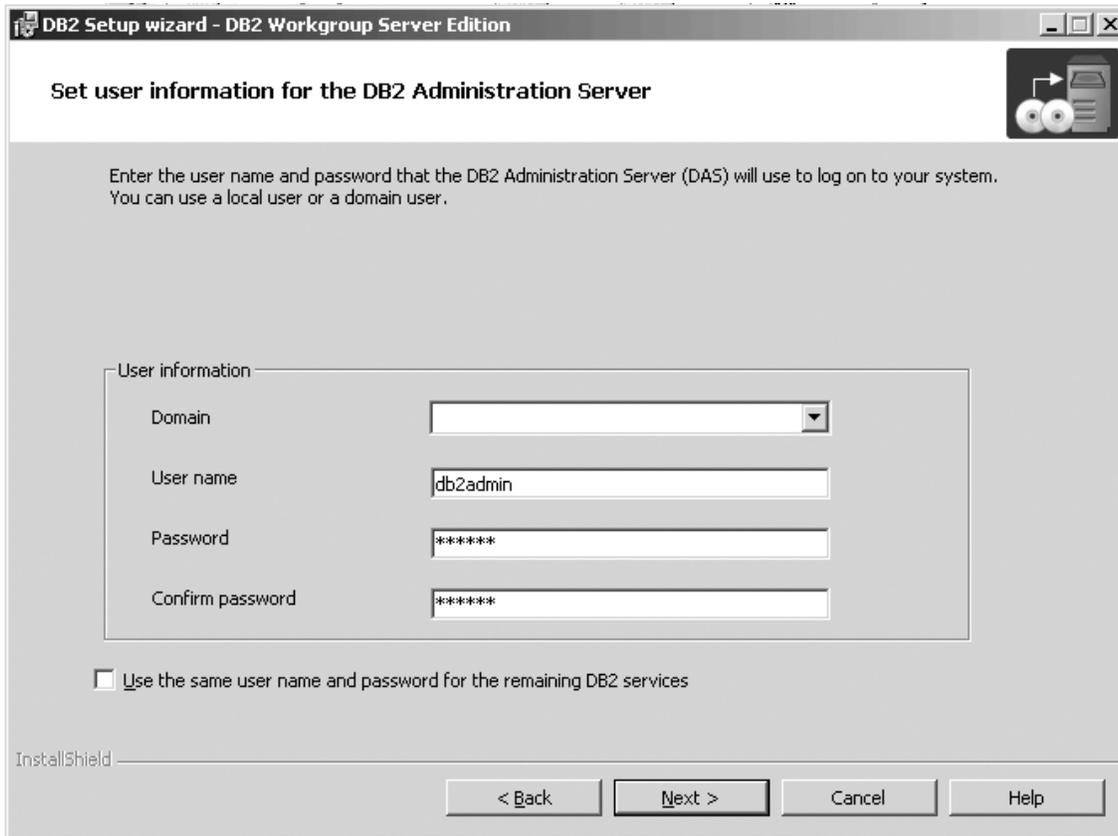


Figure 43. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- f. Click **Next**. The "Set up the administration contact list" page opens.
- 11. On the "Set up the administration contact list" page:
 - a. Select the **Local - Create a contact list on this system** radio button.
 - b. Ensure that the **Enable notification** check box is not selected.

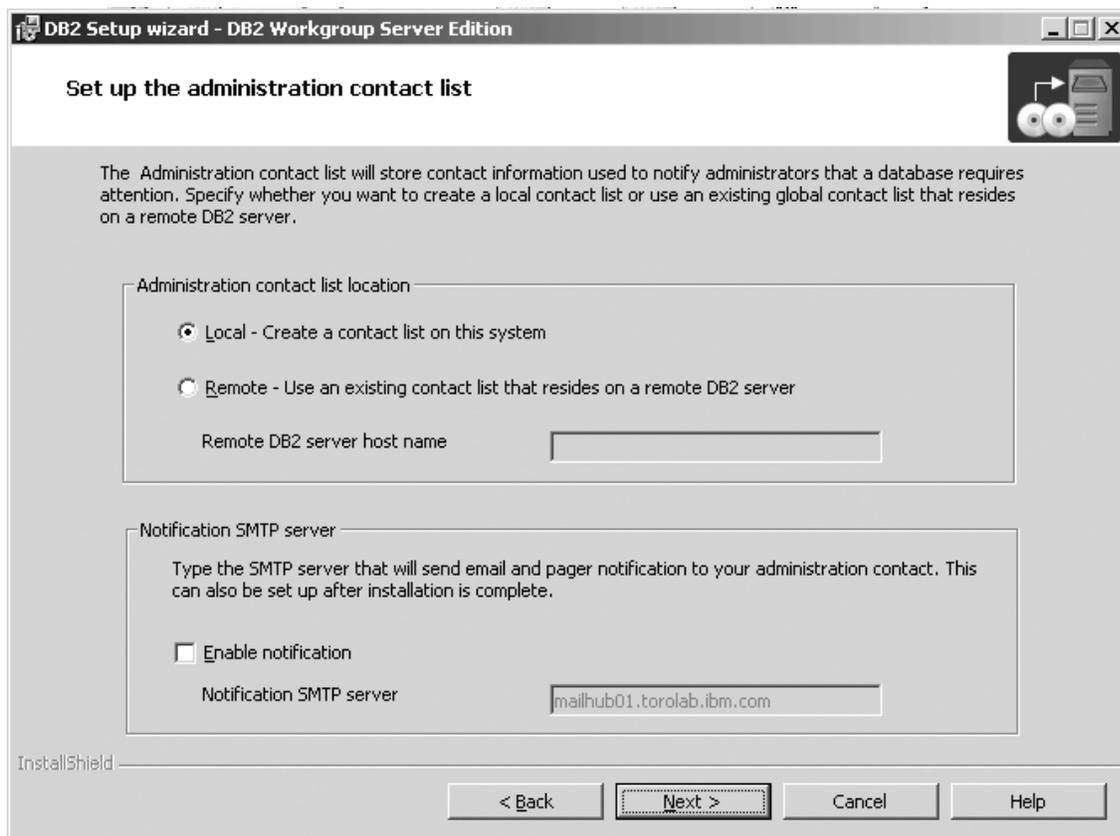


Figure 44. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the "Set up the administration contact list" page, the following warning message is displayed:

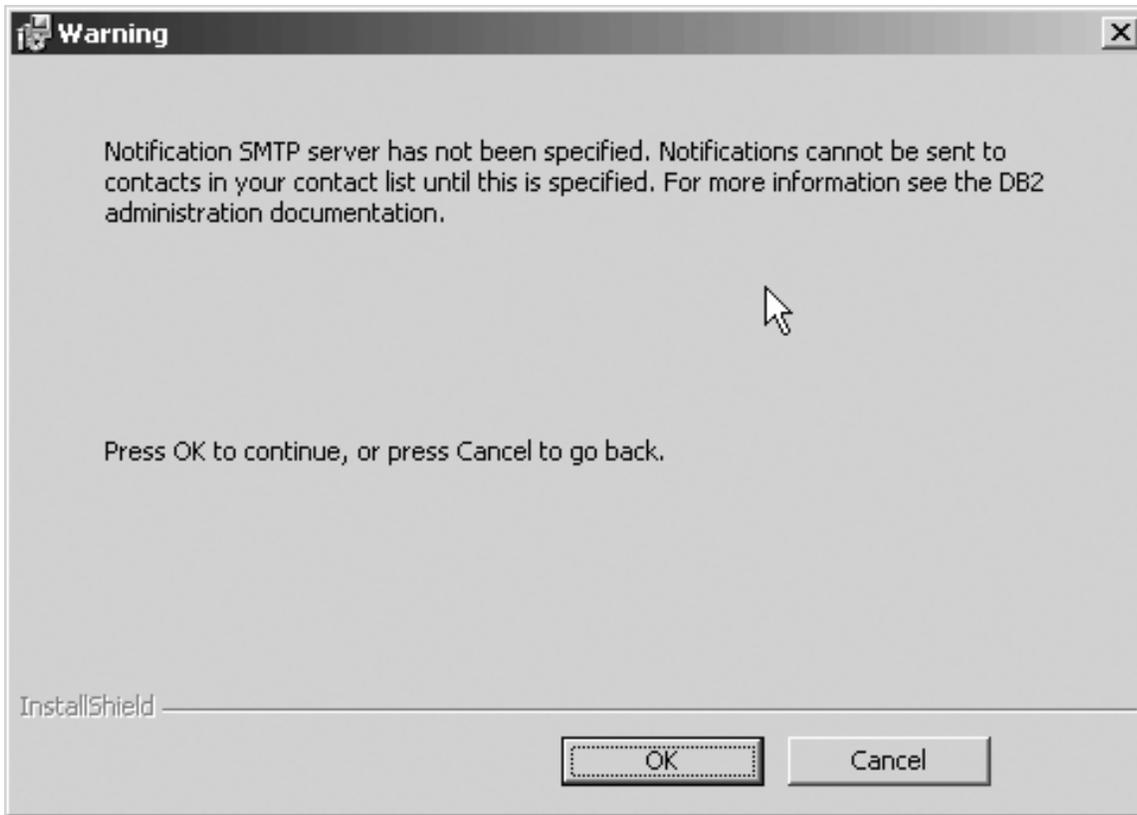


Figure 45. DB2 Setup wizard - Warning message

Click **OK**. The "Configure DB2 instances" page opens.

12. On the "Configure DB2 instances" page, click the **Startup** button. The "Startup options" window opens.

On the "Startup options" window:

- a. Select the **Do not autostart the instance. The instance must be started manually** radio button.

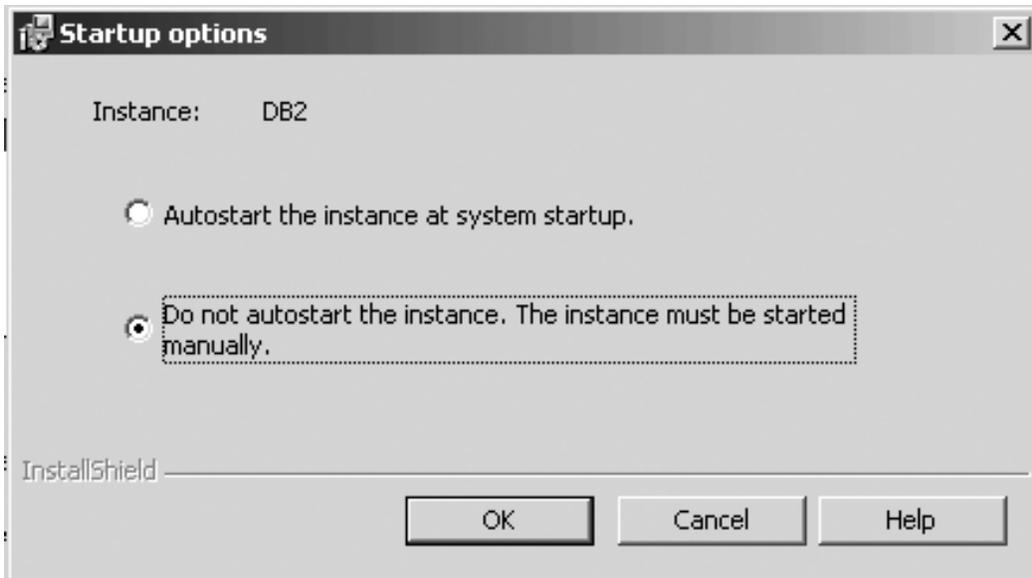


Figure 46. Startup options window

- b. Click **OK**. The "Startup options" window closes.

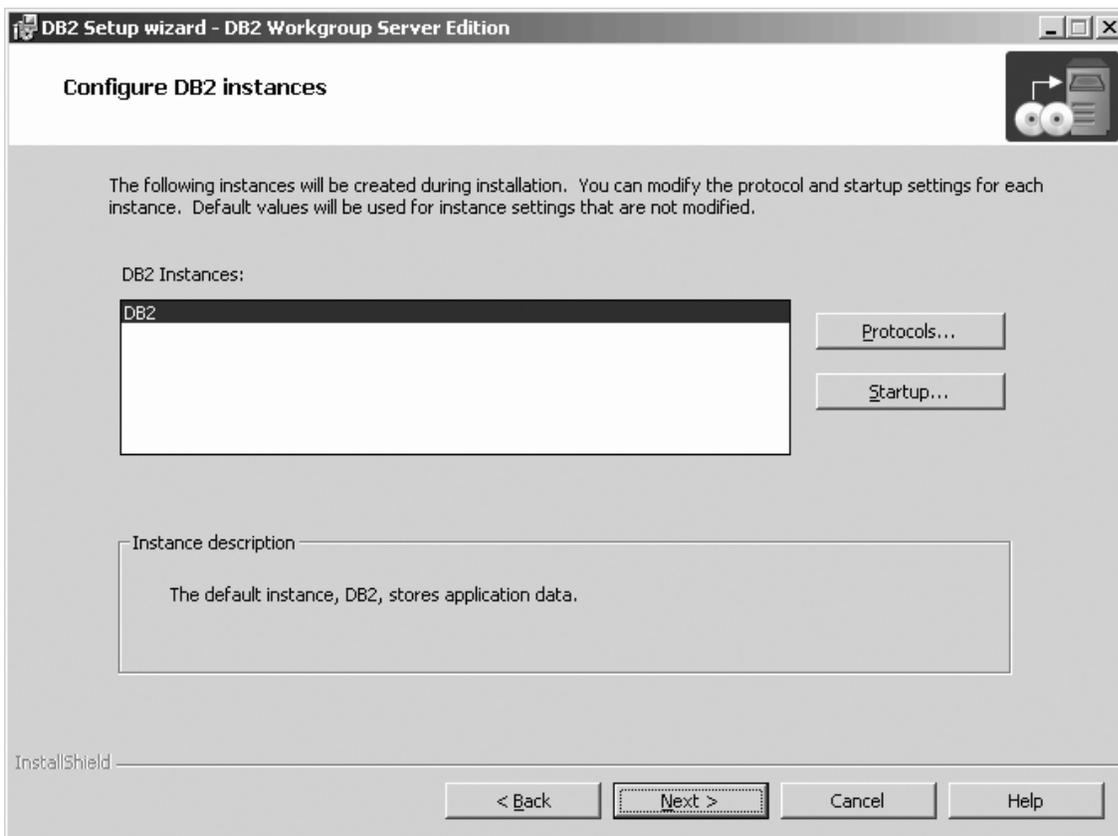


Figure 47. DB2 Setup wizard - Configure DB2 instances page

- On the "Configure DB2 instances" page, click **Next**. The "Set user information for the DB2 instance" page opens.

13. On the "Set user information for the DB2 instance" page:
 - a. Select the domain of the user from the **Domain** drop-down list.
 - b. Type the user name for the DB2 Administration Server in the **User name** field.
 - c. Type the password for the user in the **Password** field.
 - d. Type the password again in the **Confirm password** field.
 - e. Ensure that the **Use the same user name and password for the remaining DB2 services** check box is not selected.



Figure 48. DB2 Setup wizard - Set user information for the DB2 instance

- f. Click **Next**. The "Prepare the DB2 tools catalog" page opens.
14. On the "Prepare the DB2 tools catalog" page:
 - a. Click the **Do not prepare the DB2 tools catalog on this computer** radio button.

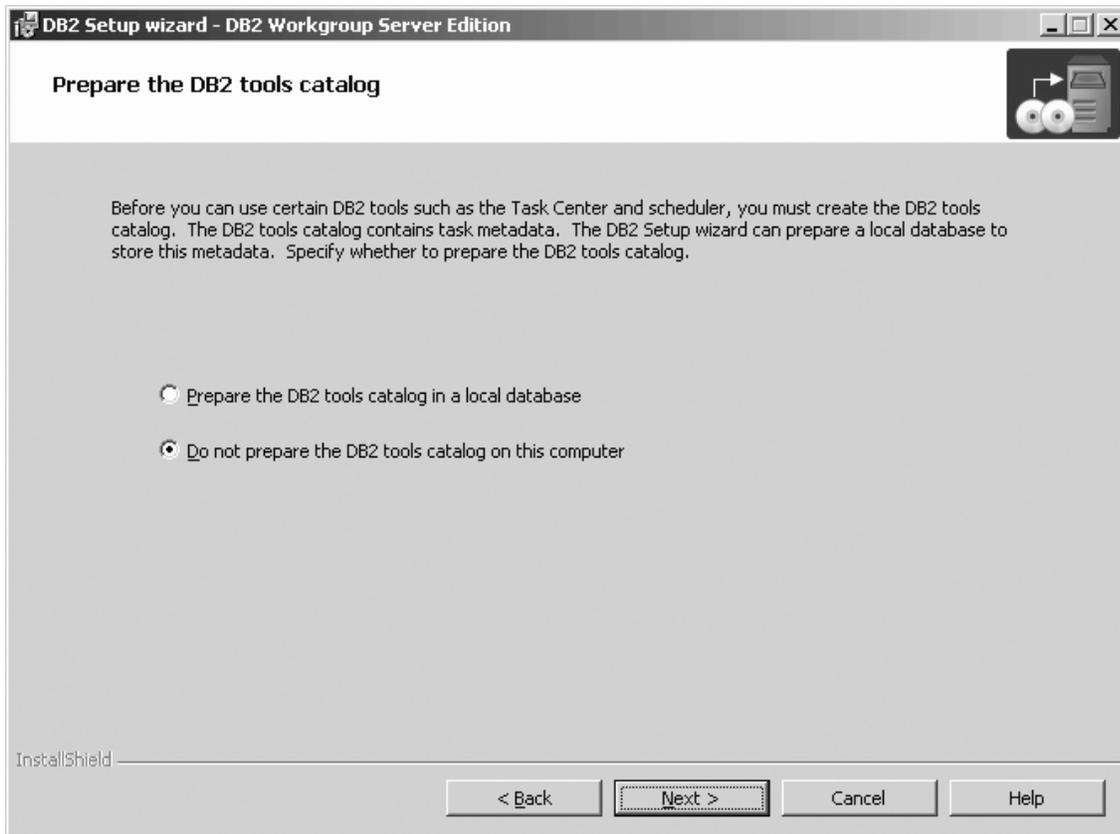


Figure 49. DB2 Setup wizard - Prepare the DB2 tools catalog page

- b. Click **Next**. The "Specify a contact for health monitor notification" page opens.
15. On the "Specify a contact for health monitor notification" page:
 - a. Click the **Defer the task until after installation is complete** radio button.

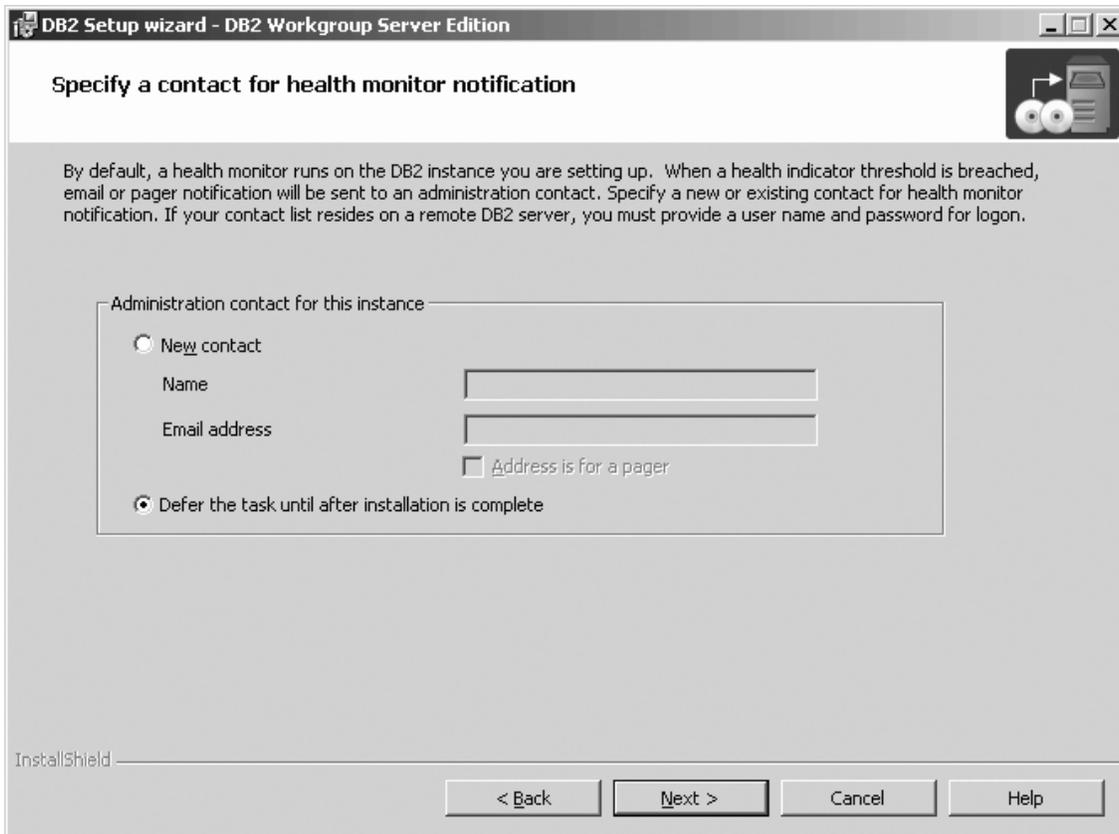


Figure 50. DB2 Setup wizard - Specify a contact for health monitor notification page

- b. Click **Next**. The "Enable operating system security for DB2 objects" page opens.
16. On the "Enable operating system security for DB2 objects" page:
 - a. Deselect the **Enable operating system security** check box.

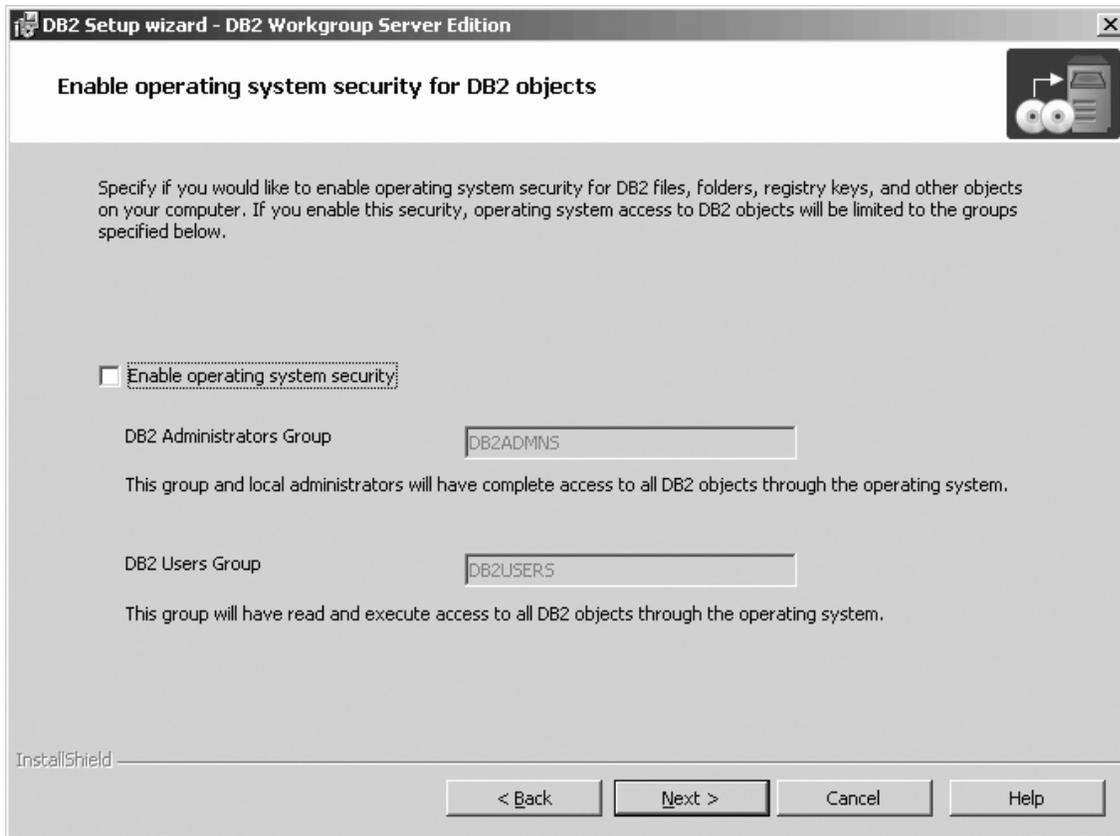


Figure 51. DB2 Setup wizard - Enable operating system security for DB2 objects page

- b. Click **Next**. The "Start copying files" page opens.
17. On the "Start copying files" page, click **Install** to begin installing DB2 on your computer.

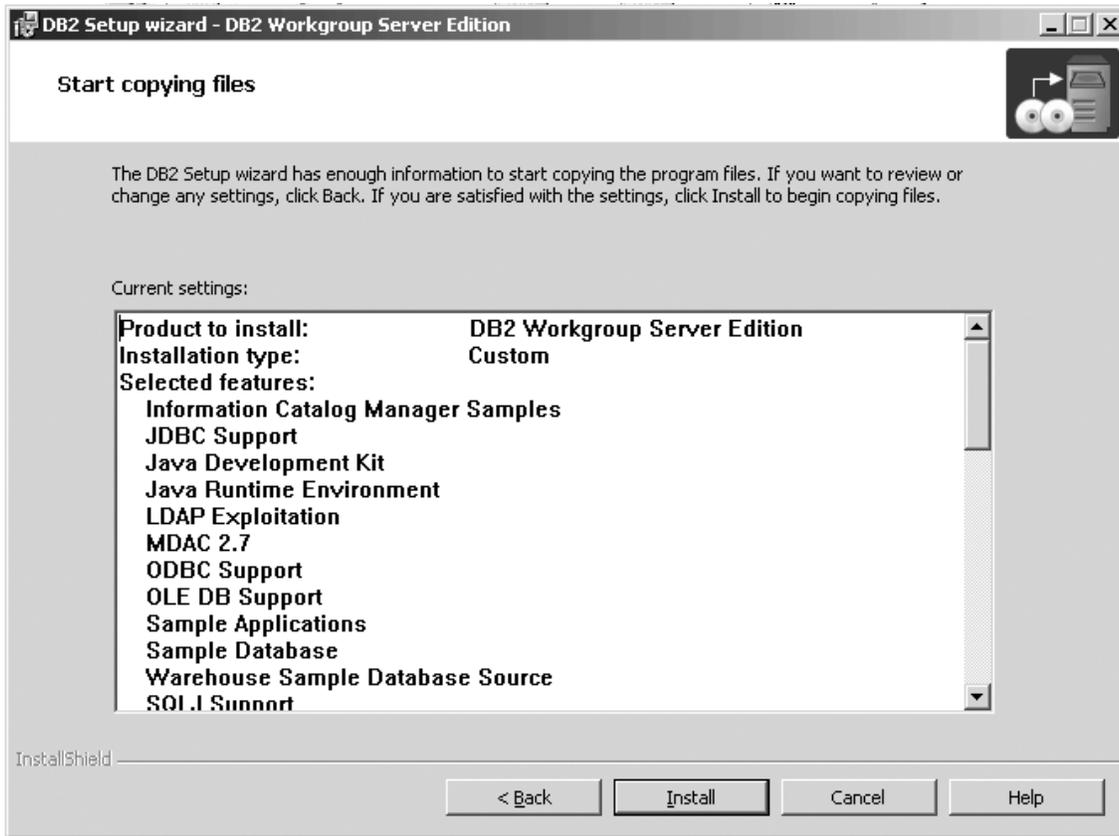


Figure 52. DB2 Setup wizard - Start copying files page

| The "Installing DB2 Workgroup Server Edition" page opens.
|

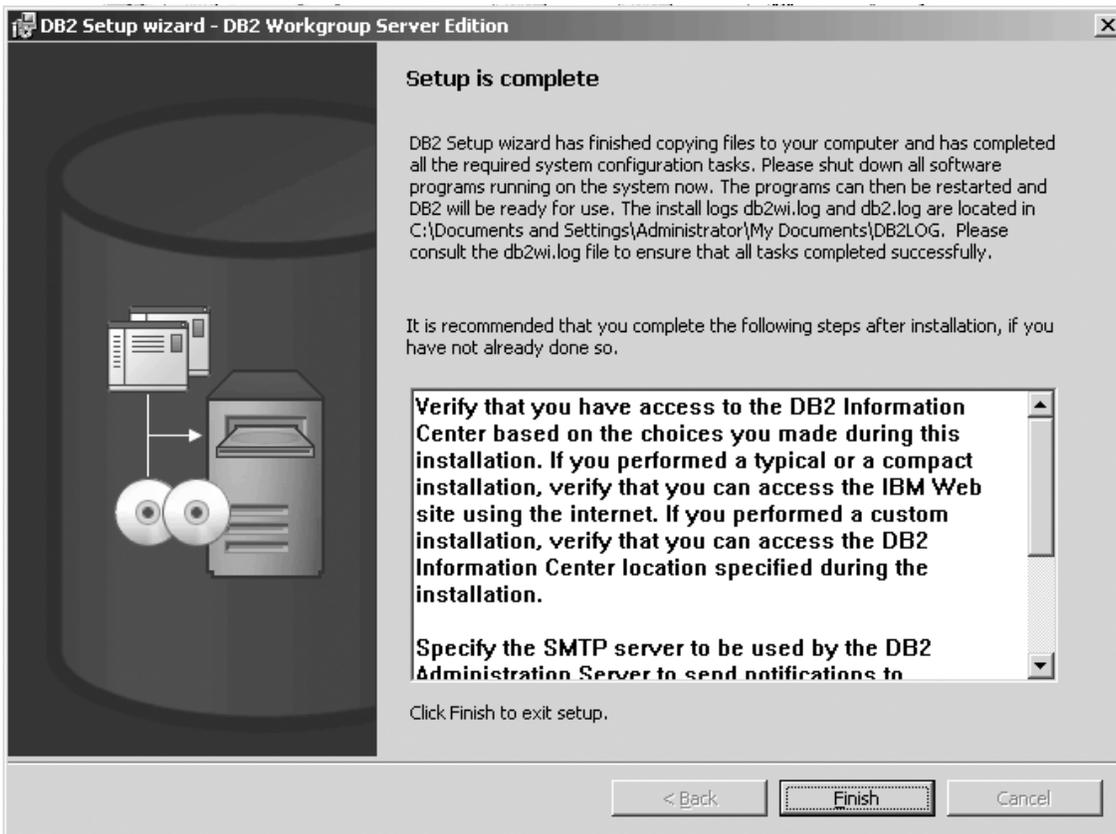


Figure 54. DB2 Setup wizard - Setup is complete page

Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Workgroup Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Single-partition database environment (UNIX)

Installing DB2 servers in a single-partition environment (UNIX)

This task describes how to start the DB2 Setup wizard on UNIX systems. The DB2 Setup wizard is used to define your installation preferences and install DB2 to your system.

Prerequisites:

Before you start the DB2 Setup wizard:

- Ensure that your system meets installation, memory, and disk requirements.
- Review the installation considerations for IBM Developer Kit for Java 1.3.1.
- You require root authority to perform the installation.
- The DB2 product CD-ROM must be mounted on your system.
- The DB2 Setup wizard is a graphical installer. You must have Xwindow software capable of rendering a graphical user interface for the DB2 Setup wizard to run

on your machine. Ensure that you have properly exported your display. For example, `export DISPLAY=9.26.163.144:0`.

- If NIS/NIS+ or similar security software is used in your environment, you must manually create required DB2 users before you start the DB2 Setup wizard. Refer to the referenced NIS topic before you begin.
- On Solaris, the files required to uninstall a FixPak or modification level using the `backoutallpatch` script, are stored in the `/var/sadm` directory. Disk space requirements for each FixPak or modification level in the `/var/sadm` directory can reach almost the same amount of disk space required by DB2 in the `/opt/IBM/db2/V8.1` directory.
- For Solaris Operating Environment and AIX 5L, you need to have a filesystem with 2 GB of free space to contain the tar.Z file and the uncompressed installation image, in addition to the software disk requirements.
- On AIX and Linux, ensure that Asynchronous I/O (AIO) has been enabled. It must be enabled before DB2 UDB can be successfully installed. AIO can be enabled and disabled at run time by issuing the `db2set` command. To use AIO on Linux, you must install `libaio-0.3.96` or later, have a kernel that supports AIO (for example, version 2.6), run the `db2set DB2NOLIOAIO=false` command, and restart DB2.

Procedure:

To start the DB2 Setup wizard:

1. Log on to the system as a user with root authority.
2. Refer to the CD-ROM label to ensure that you are using the CD-ROM with your appropriate language.
3. Change to the directory where the CD-ROM is mounted by entering the following command:

```
cd /cdrom
```

where `/cdrom` represents mount point of the CD-ROM.

4. See the appropriate section for your operating system:

For AIX 4.3.3, HP-UX and Linux

Enter the `./db2setup` command to start the DB2 Setup wizard.

For Solaris Operating Environment

- a. Copy `product.tar.Z`, where *product* represents the product you are licensed to install, to a temporary filesystem.
- b. Enter the following command to start the DB2 Setup wizard:

```
zcat product.tar.Z | tar -xf - ; ./product/db2setup
```

For example, if the product name for DB2 Enterprise Server Edition is *ese*, then enter the following command:

```
zcat ese.tar.Z | tar -xf - ; ./ese/db2setup
```

For AIX 5L

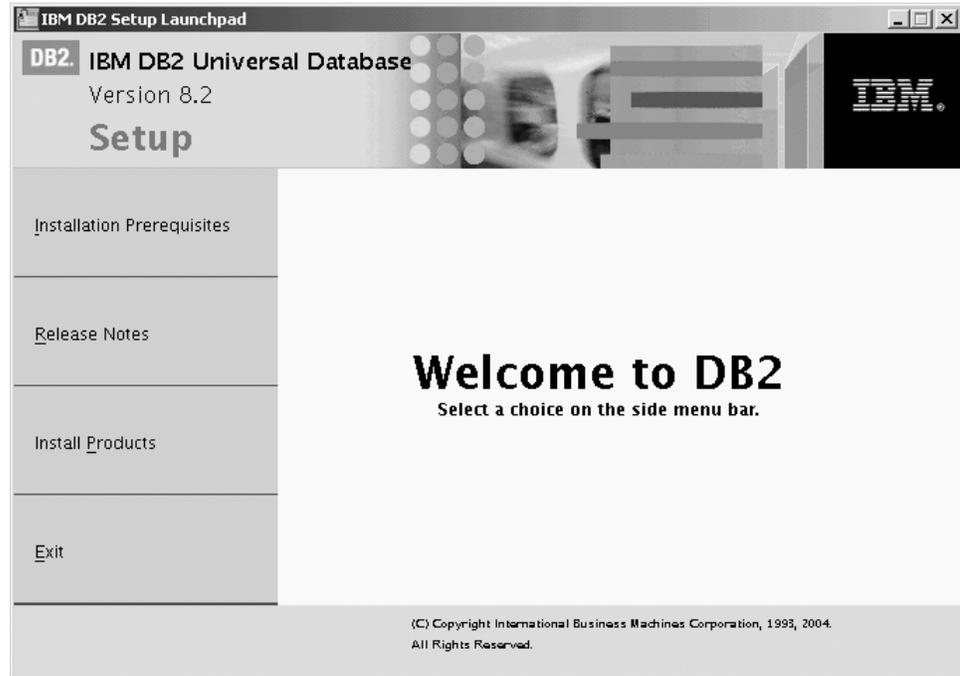
- a. Copy `product.tar.gz`, where *product* represents the product you are licensed to install, to a temporary filesystem.
- b. Enter the following command to start the DB2 Setup wizard:

```
-gzip -d < product.tar.gz | tar -xf - ; ./product/db2setup
```

For example, if the product name for DB2 Enterprise Server Edition is *ese*, then enter the following command:

```
-gzip -d < ese.tar.gz | tar -xf - ; ./ese/db2setup
```

5. After a moment, the IBM DB2 Setup Launchpad opens.



From this window, you can view installation prerequisites and the release notes, or you can proceed directly to the installation. You may want to review the installation prerequisites and release notes for late-breaking information.

Once you have initiated the installation, proceed through the DB2 Setup wizard installation panels and make your selections. Installation help is available to guide you through the remaining steps. To invoke the installation help, click **Help** or press F1. You can click **Cancel** at any time to end the installation.

When you have completed your installation, DB2 will be installed in the one of the following directories:

AIX /usr/opt/db2_08_01

HP-UX, Linux, Solaris Operating Environment

/opt/IBM/db2/V8.1

The installation logs db2setup.his, db2setup.log, and db2setup.err are located, by default, in the /tmp directory. You can specify the location of the log files.

The db2setup.log file captures all DB2 installation information including errors. The db2setup.his records all DB2 installations on your machine. DB2 appends the db2setup.log file to the db2setup.his file. The db2setup.err file captures any error output that is returned by Java (for example, exceptions and trap information).

If you want your DB2 product to have access to DB2 documentation either on your local computer or on another computer on your network, then you must install the DB2 Information Center. The DB2 Information Center contains documentation for DB2 Universal Database and DB2 related products. See Installing the DB2 Information Center using the DB2 Setup wizard (UNIX)

Related concepts:

- “DB2 Information Center” in the *Infrastructure Topics (DB2 Common Files)*

- “Installing the IBM Developer Kit for Java (UNIX)” on page 35
- “DB2 Information Center installation scenarios” in the *Infrastructure Topics (DB2 Common Files)*

Related tasks:

- “Installing the DB2 Information Center using the DB2 Setup wizard (UNIX)” in the *Infrastructure Topics (DB2 Common Files)*
- “Tools catalog database and DAS scheduler setup and configuration” in the *Administration Guide: Implementation*
- “Notification and contact list setup and configuration” in the *Administration Guide: Implementation*

Related reference:

- “UPDATE ADMIN CONFIGURATION Command” in the *Command Reference*

If you are installing DB2 Universal Database on a UNIX-based platform for a Common Criteria compliant environment, see the following:

- For installing DB2 UDB Enterprise Server Edition:
 - On Linux SuSE, see “Installing DB2 UDB Enterprise Server Edition on Linux SuSE for a Common Criteria compliant installation.”
 - On AIX 5.2, see “Installing DB2 UDB Enterprise Server Edition on AIX 5.2 for a Common Criteria compliant installation” on page 125.
 - On Solaris Operating Environment 8, see “Installing DB2 UDB Enterprise Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation” on page 150.
- For installing DB2 UDB Workgroup Server Edition:
 - On Linux SuSE, see “Installing DB2 UDB Workgroup Server Edition on Linux SuSE for a Common Criteria compliant installation” on page 176.
 - On AIX 5.2, see “Installing DB2 UDB Workgroup Server Edition on AIX 5.2 for a Common Criteria compliant installation” on page 201.
 - On Solaris Operating Environment 8, see “Installing DB2 UDB Workgroup Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation” on page 225.

Installing DB2 UDB Enterprise Server Edition on Linux SuSE for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Enterprise Server Edition on Linux SuSE for a Common Criteria compliant installation.

Prerequisites:

- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- Linux SuSE must be installed on the computer.
- You must have the installation CD mounted.
- The user names to be used for the following:
 - The DB2 instance owner
 - The DB2 Administration Server
 - The fenced user

If you do not have these user names, obtain them from your system administrator. For more information about these users, see “DB2 users and

group (UNIX)” on page 14. For information about creating these users, see “Creating group and user IDs for a DB2 UDB installation (UNIX)” on page 38.

Procedure:

Use the following steps to install DB2 UDB Enterprise Server Edition on Linux SuSe for a Common Criteria compliant environment.

1. On the “IBM DB2 Setup Launchpad”, click **Install Products**.

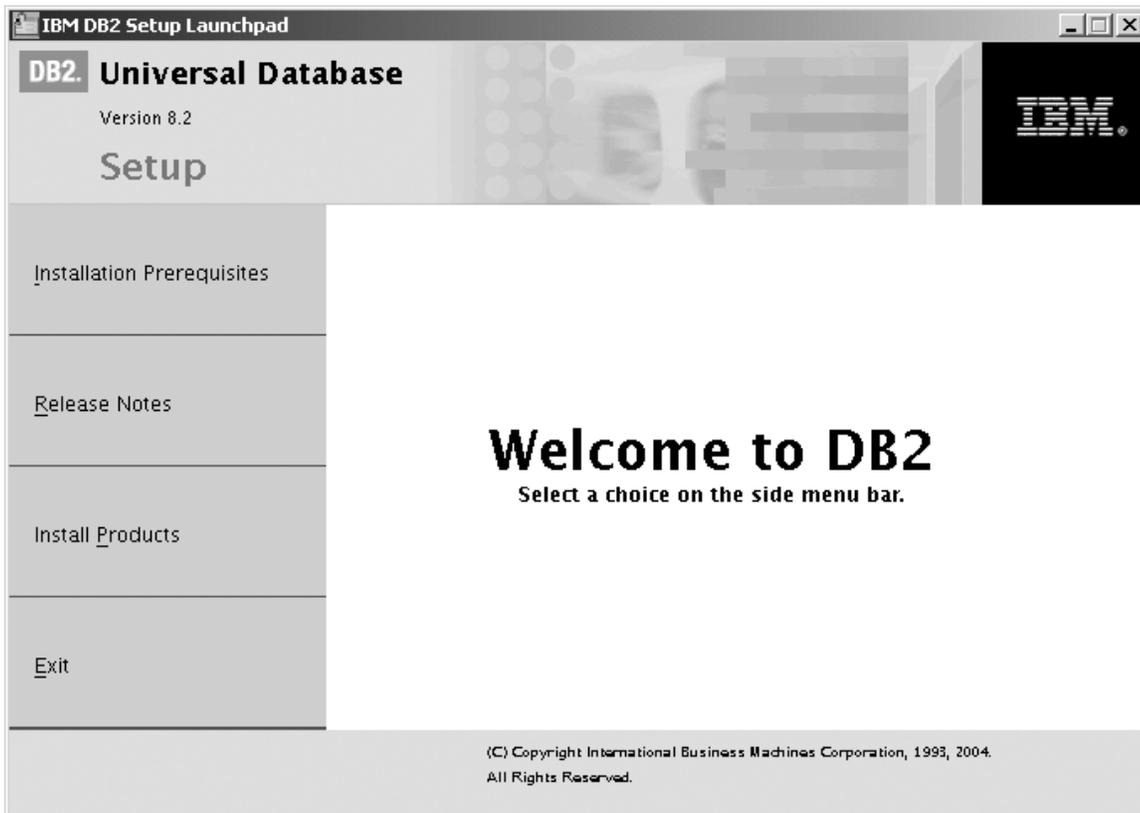


Figure 55. IBM DB2 Setup Launchpad

2. On the second page of the “IBM DB2 Setup Launchpad”:
 - a. In the **Select the product you would like to install box**, select **DB2 UDB Enterprise Server Edition**, as follows:

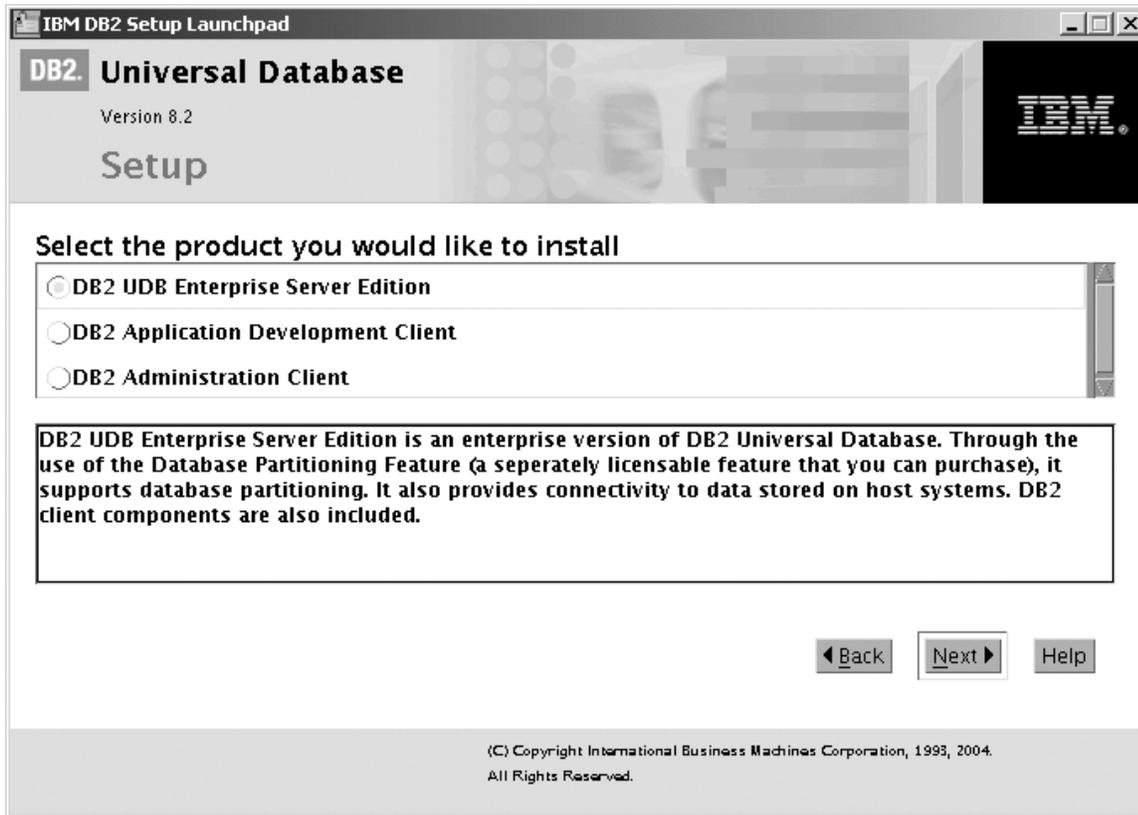


Figure 56. IBM DB2 Setup Launchpad with DB2 UDB Enterprise Server Edition selected

- b. Click **Next**. In a moment, the "DB2 Setup wizard" opens, as follows:

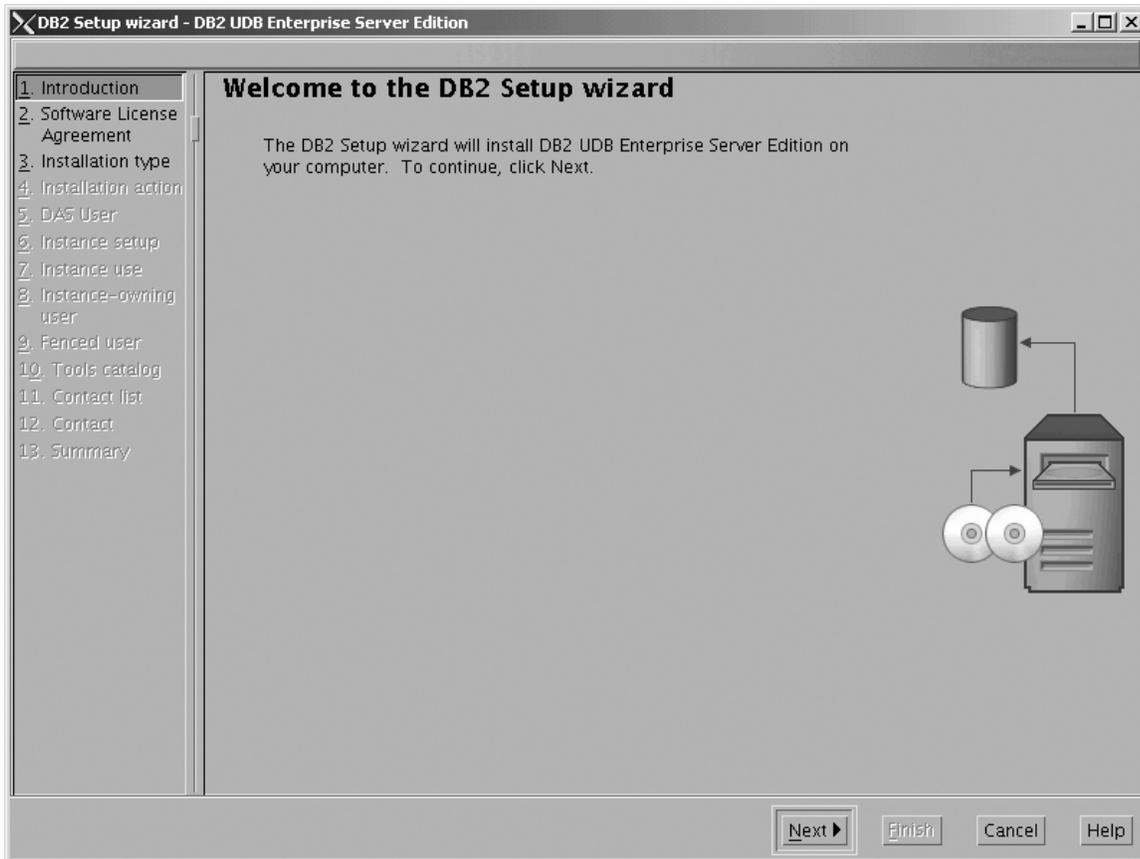


Figure 57. DB2 Setup wizard

- c. Click **Next**. The "Software License Agreement" page opens.
3. On the "Software License Agreement" page:
 - a. Click the **Accept** radio button.

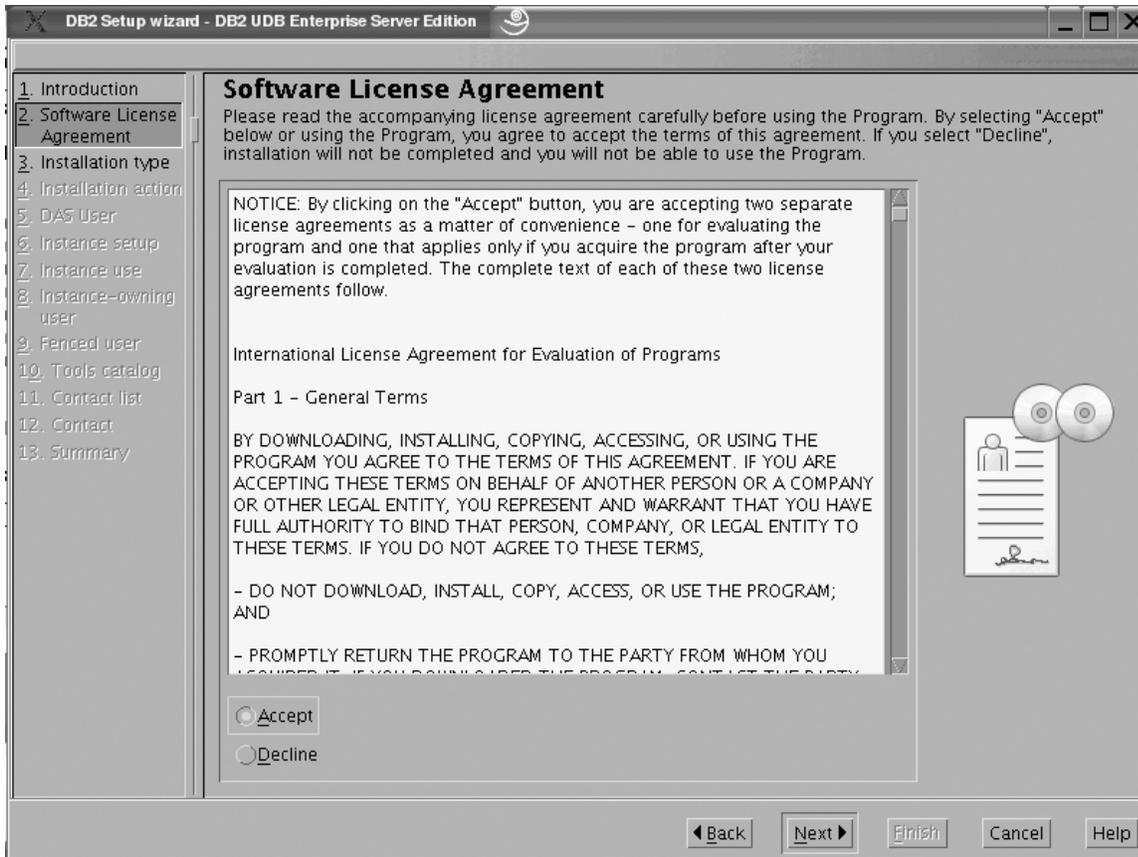


Figure 58. DB2 Setup wizard - Software License Agreement page

- b. Click **Next**. The "Select the installation type" page opens.
4. On the "Select the installation type" page:
 - a. Select the **Custom** radio button:

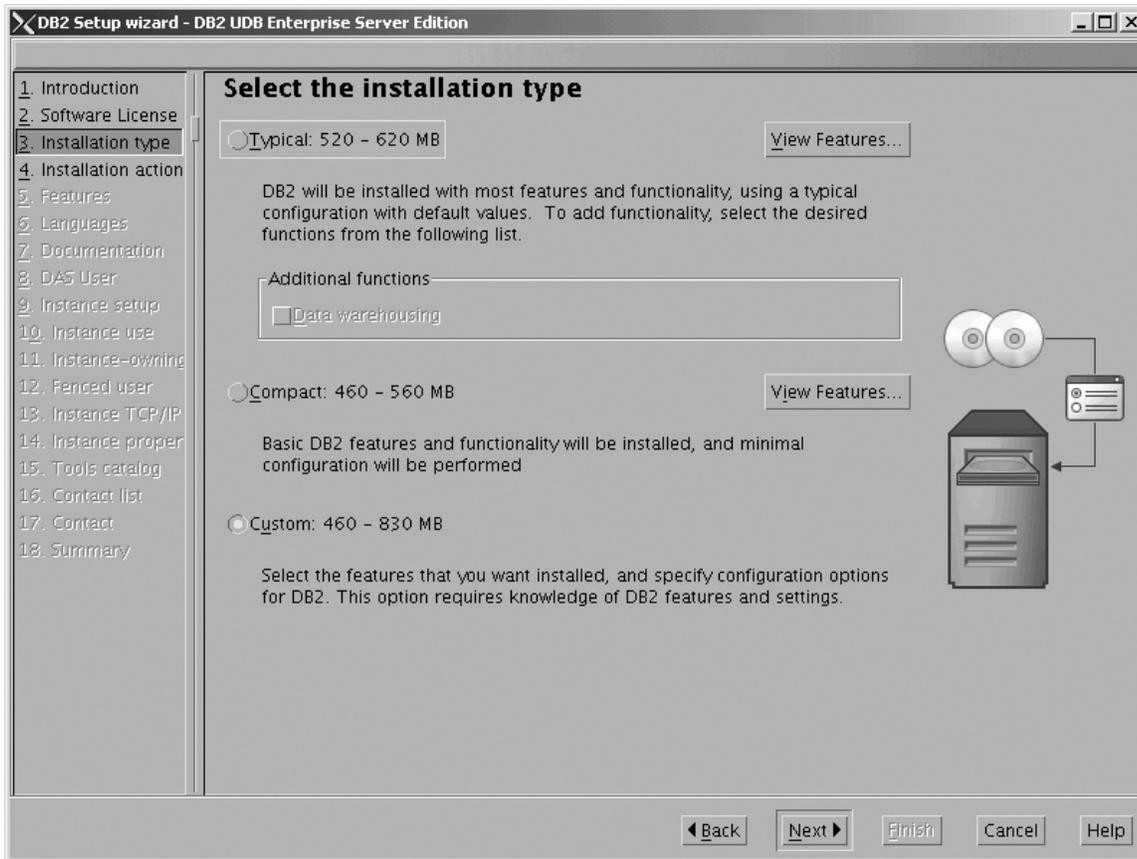


Figure 59. DB2 Setup wizard - Select the installation type page

- b. Click **Next**. The "Select the installation action" page opens.
5. On the "Select the installation action" page:
 - a. Select the **Install DB2 UDB Enterprise Server Edition on this computer** check box.

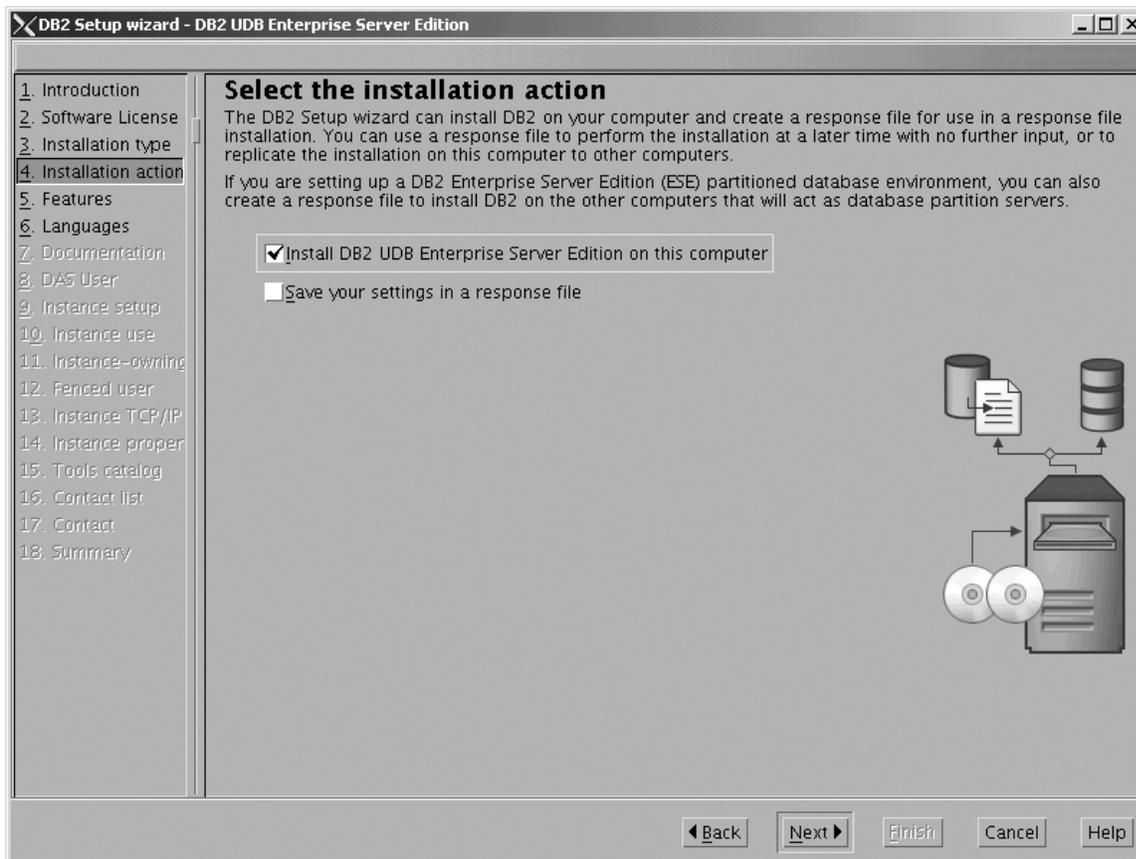


Figure 60. DB2 Setup wizard - Select the installation action page

- b. Click **Next**. The "Select the features to install" page opens.
6. On the Select the features to install page:
 - a. Open the + beside **Server support**, then select the check box beside **DB2 Data Source Support** (so that the check mark is removed). This action prevents the **DB2 Data Source Support** option from being installed.

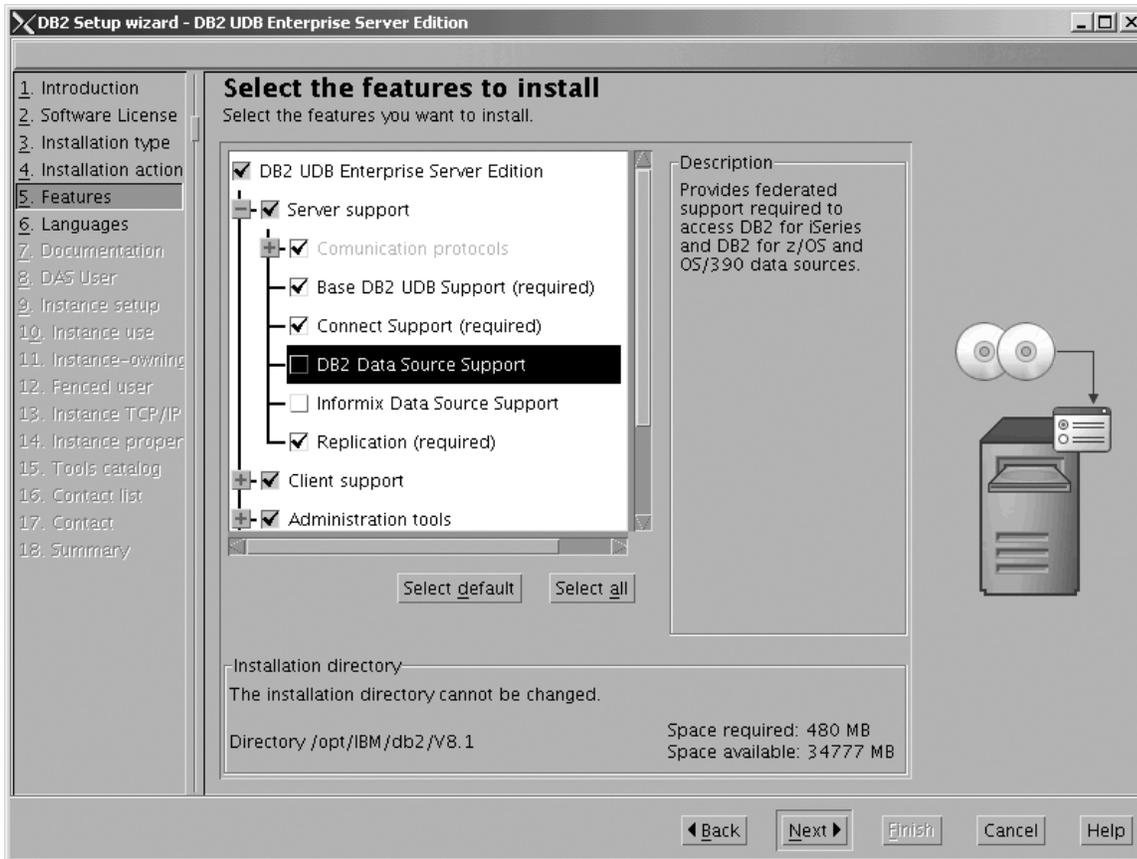


Figure 61. DB2 Setup wizard - Select the features to install page; DB2 Data Source Support option deselected for installation

- b. Open the + beside **Client support**, then select the check box beside **DB2 LDAP Support**. This action prevents the **DB2 LDAP Support** option from being installed.

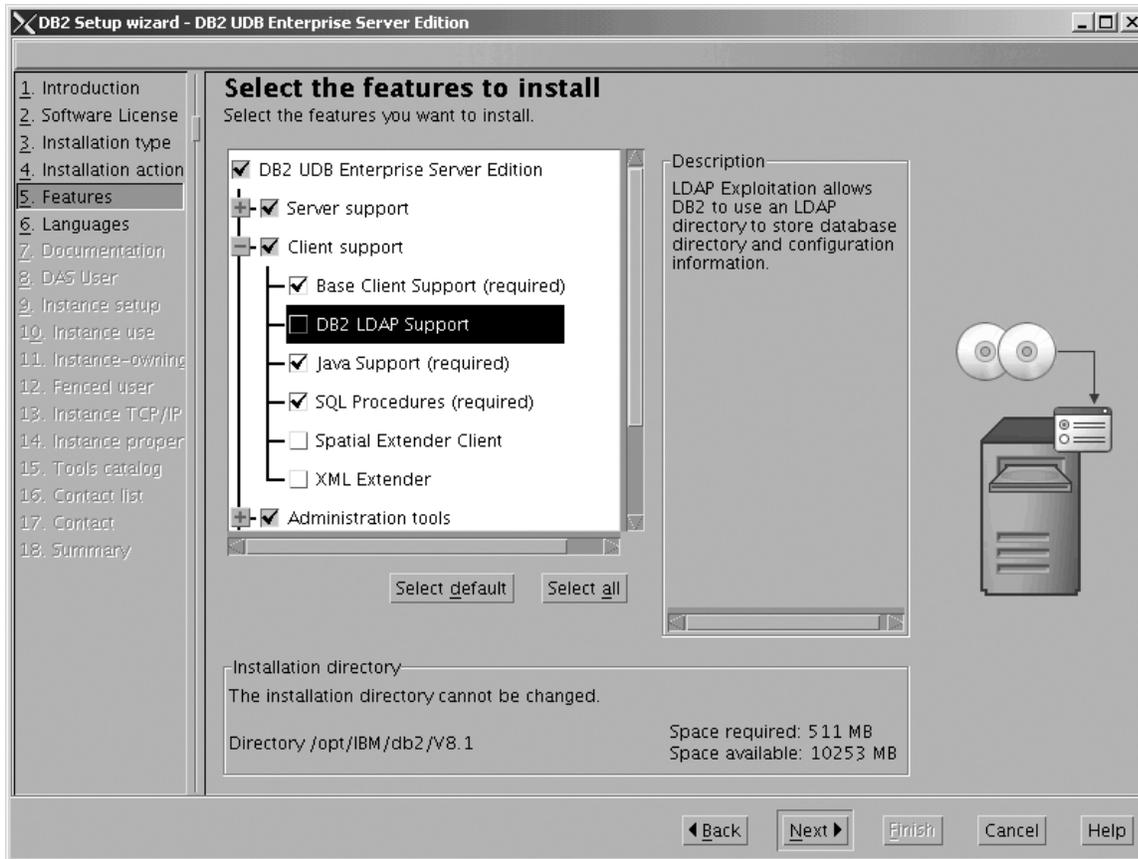


Figure 62. DB2 Setup wizard - Select the features to install page; DB2 LDAP Support option deselected for installation

- c. Open the + beside **Administration tools**, then deselect all the checked options to remove them from the list of options being installed. Note that you must deselect the **Configuration Assistant** option last.

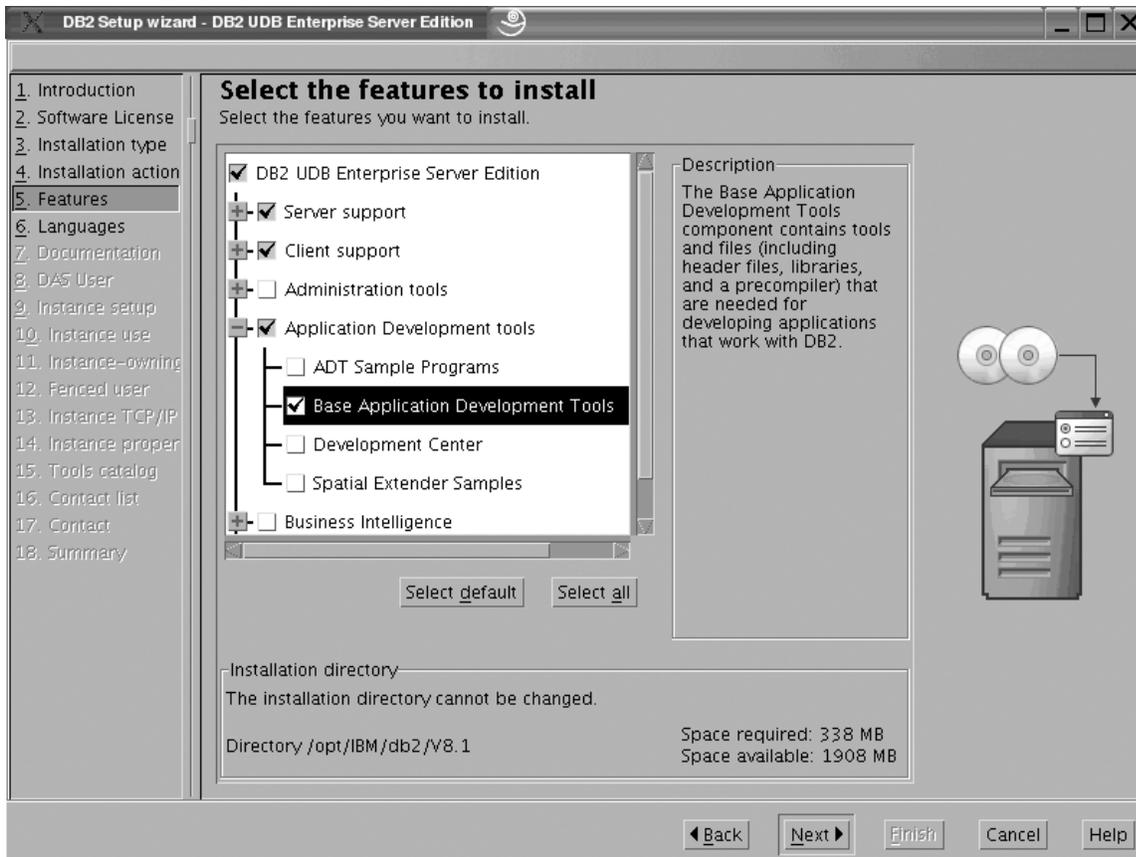


Figure 64. DB2 Setup wizard - Select the features to install page; Base Application Development Tools option selected for installation

- e. Open the + beside **Getting started**, then deselect the **First Steps** option so that this option does not get installed.

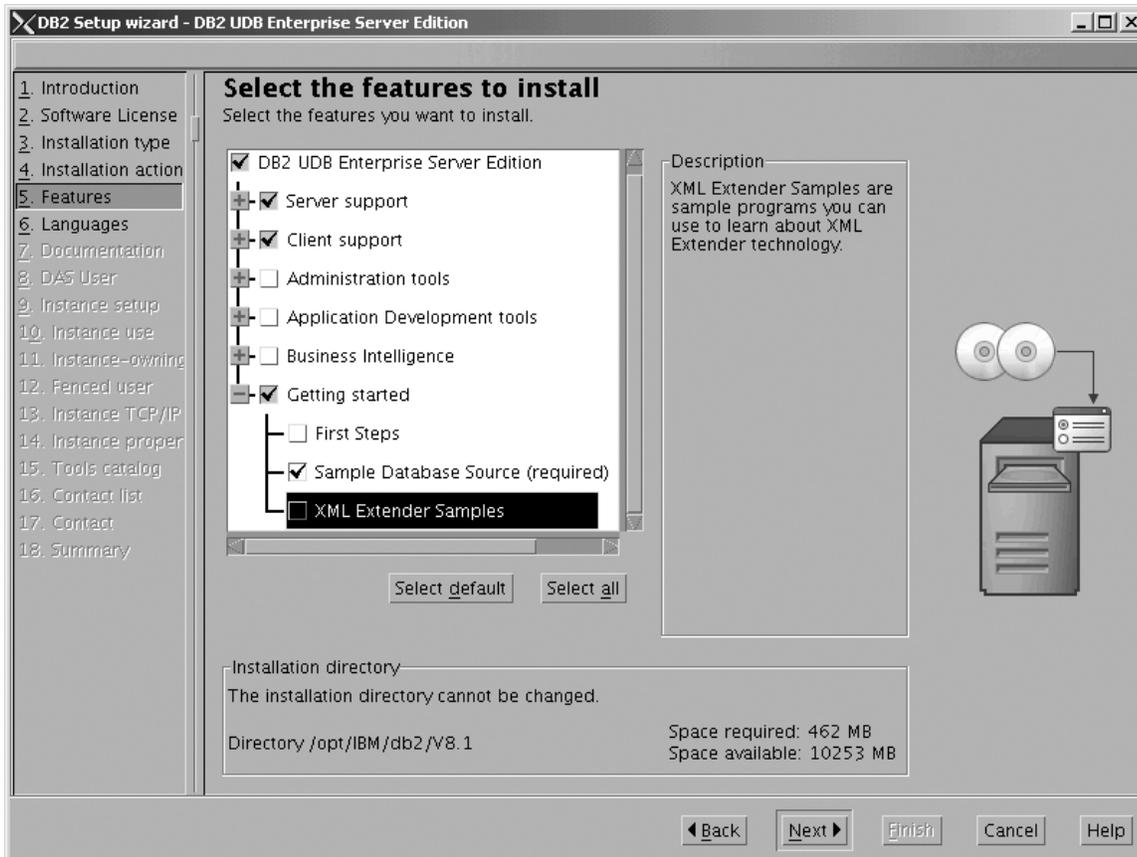


Figure 65. DB2 Setup wizard - Select the features to install page; First Steps option deselected for installation

- f. Click **Next**. The "Languages" page opens.
- 7. On the "Languages" page, English is the only language support that is installed by default.

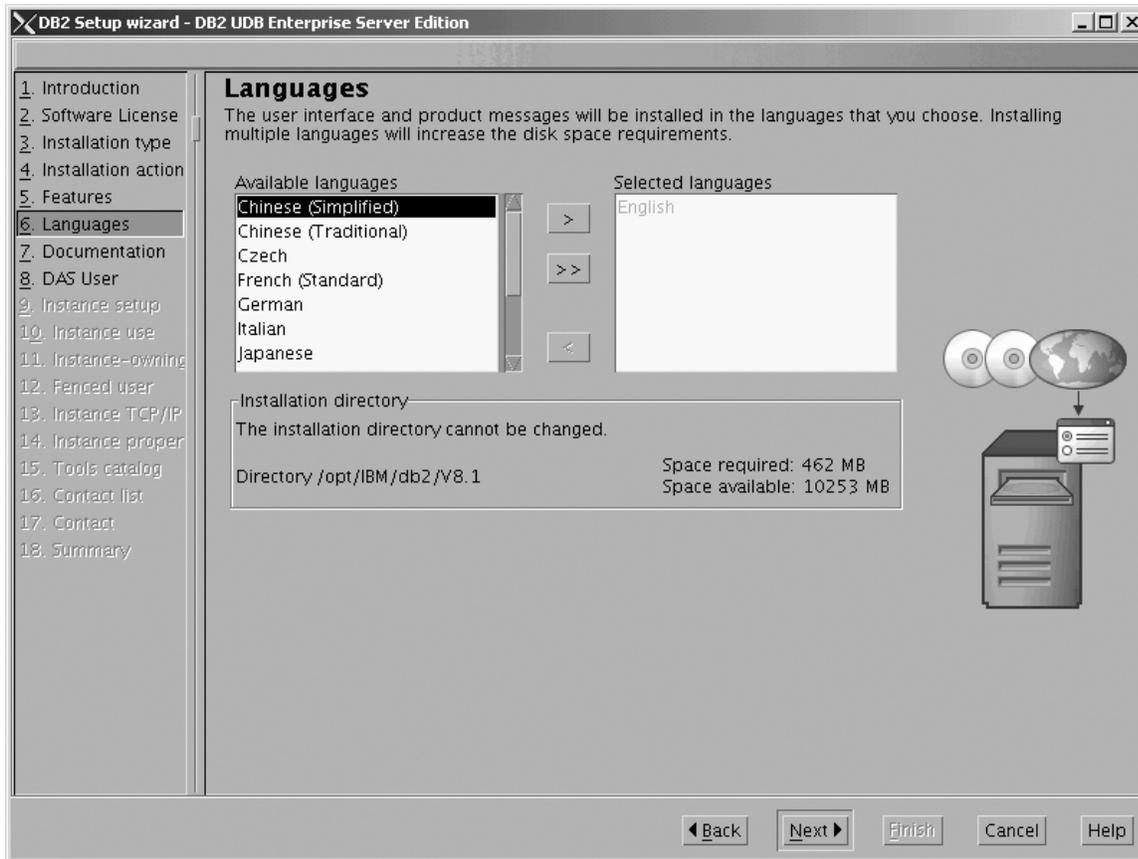


Figure 66. DB2 Setup wizard - Languages page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
8. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

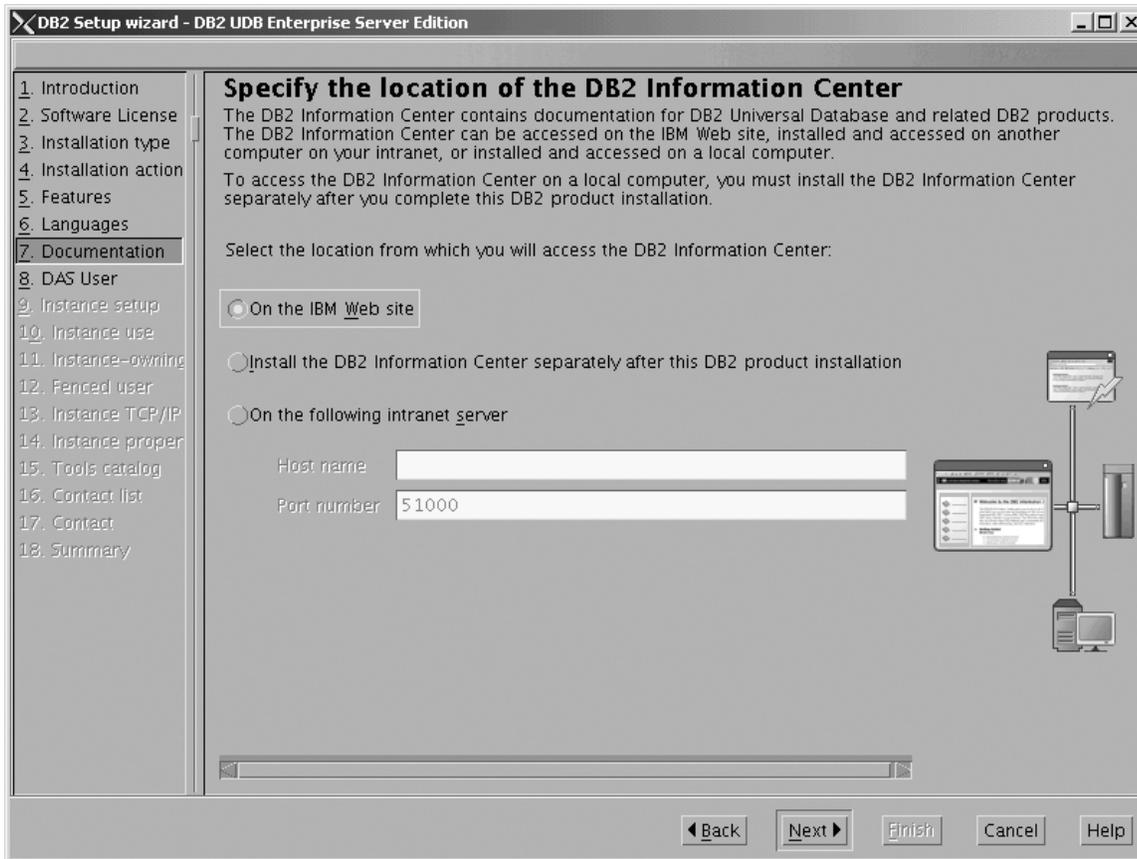


Figure 67. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
9. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

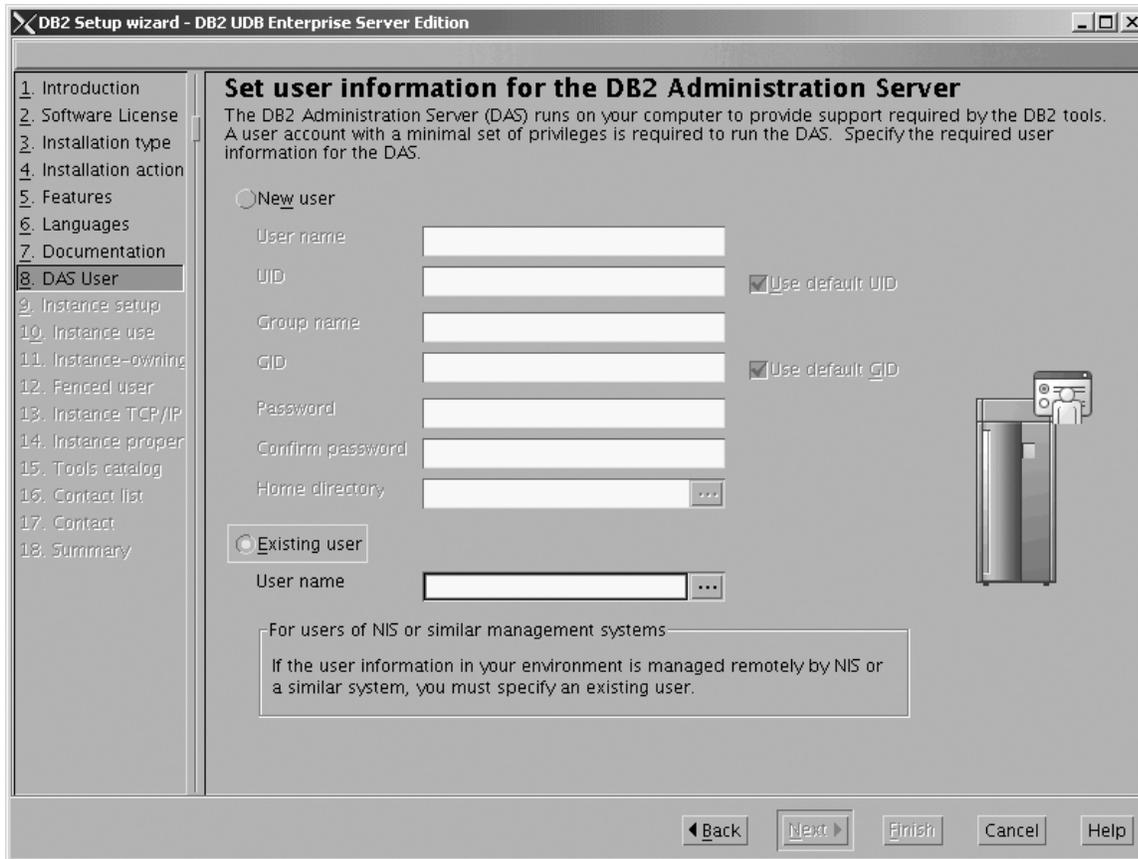


Figure 68. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- c. Click **Next**. The "Set up a DB2 instance" page opens.
10. On the "Set up a DB2 instance" page:
 - a. Select the **Create a DB2 instance** radio button.

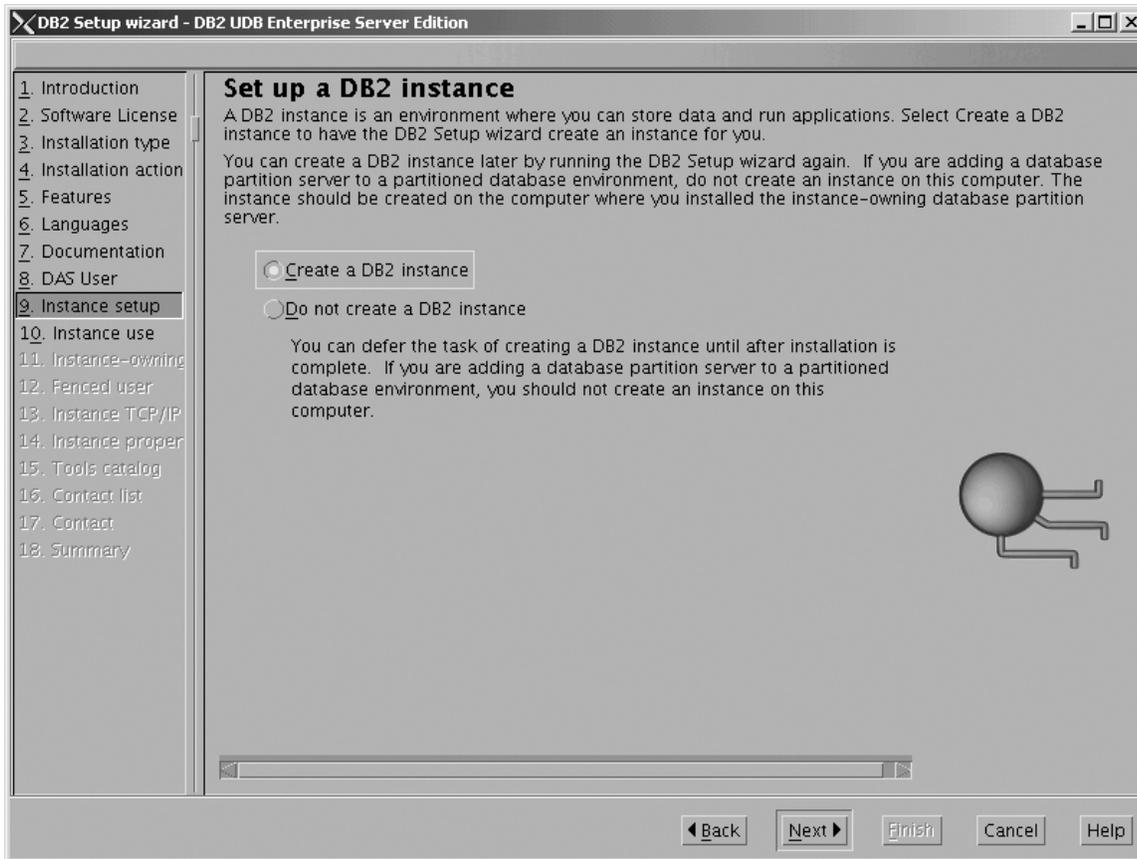


Figure 69. DB2 Setup wizard - Set up a DB2 instance page; Create a DB2 instance selected

- b. Click **Next**. The "Select how the instance will be used" page opens.
11. On the "Select how the instance will be used" page:
 - a. Select the **Single-partition instance** radio button.

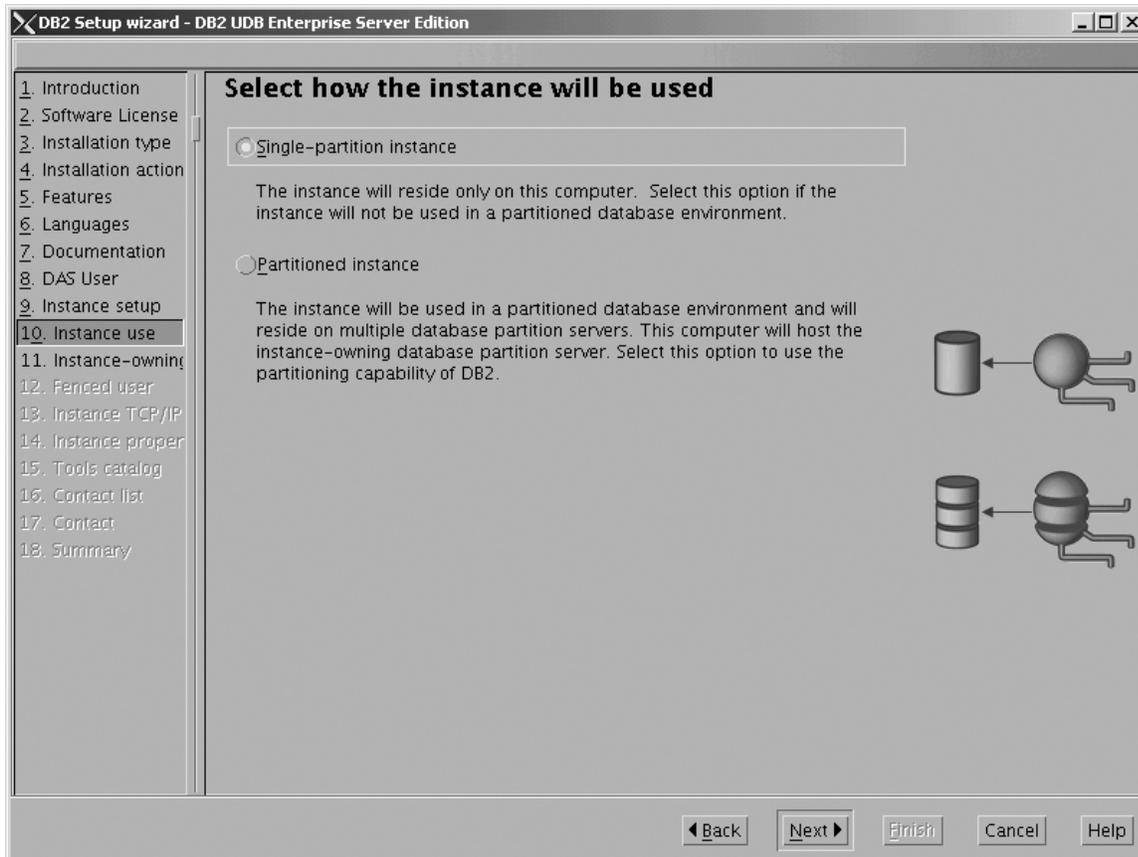


Figure 70. DB2 Setup wizard - Select how the instance will be used page; Single-partition instance selected

- b. Click **Next**. The "Set user information for the DB2 instance owner" page opens.
12. On the "Set user information for the DB2 instance owner" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

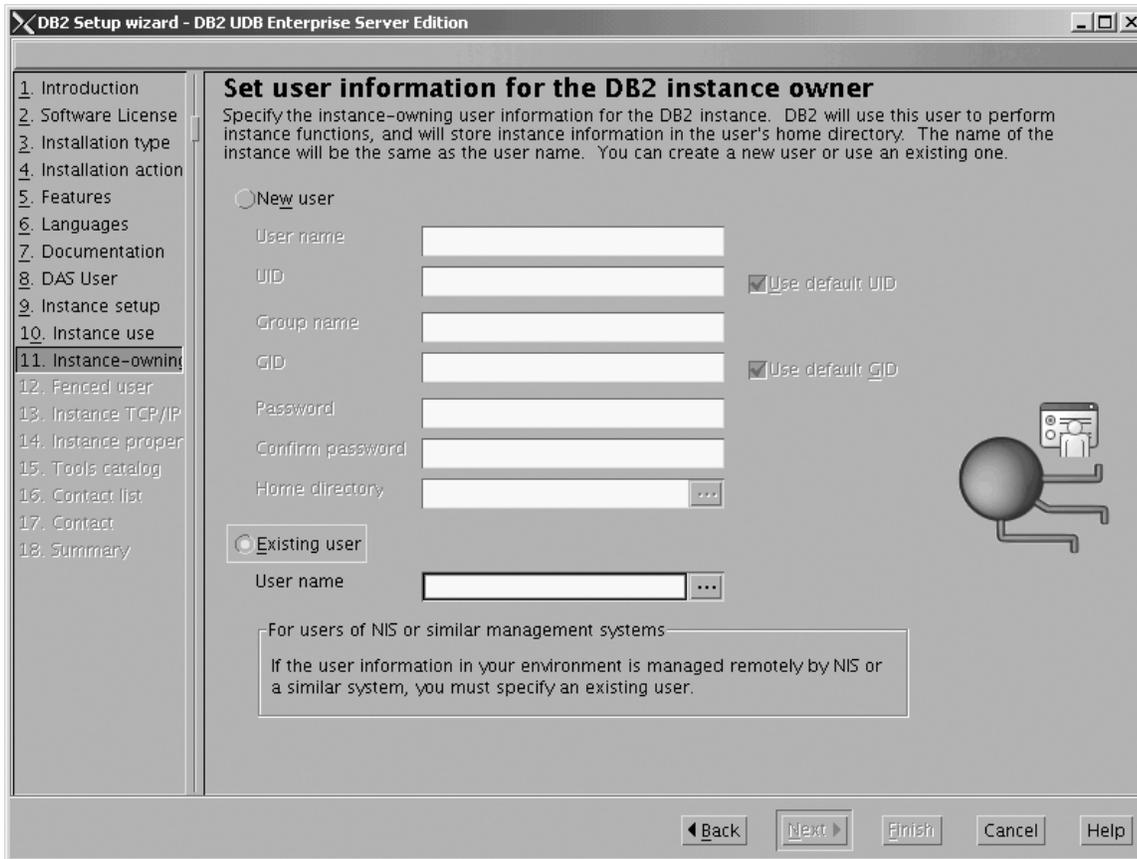


Figure 71. DB2 Setup wizard - Set user information for the DB2 instance owner page

- c. Click **Next**. The "Set user information for the fenced user" page opens.
13. On the "Set user information for the fenced user" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

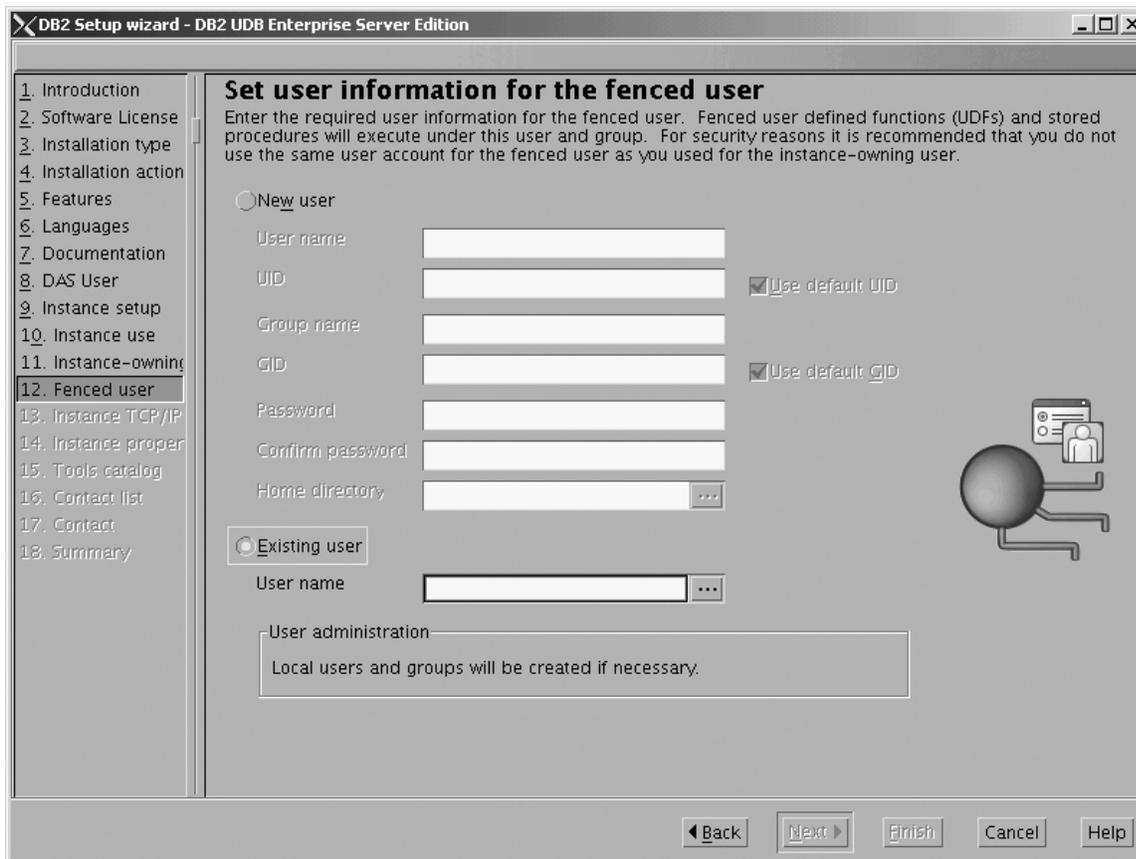


Figure 72. DB2 Setup wizard - Set user information for the fenced user page

- c. Click **Next**. The "Configure DB2 instance TCP/IP communication" page opens.
14. On the "Configure DB2 instance TCP/IP communication" page:
 - a. Select the **Configure** radio button.

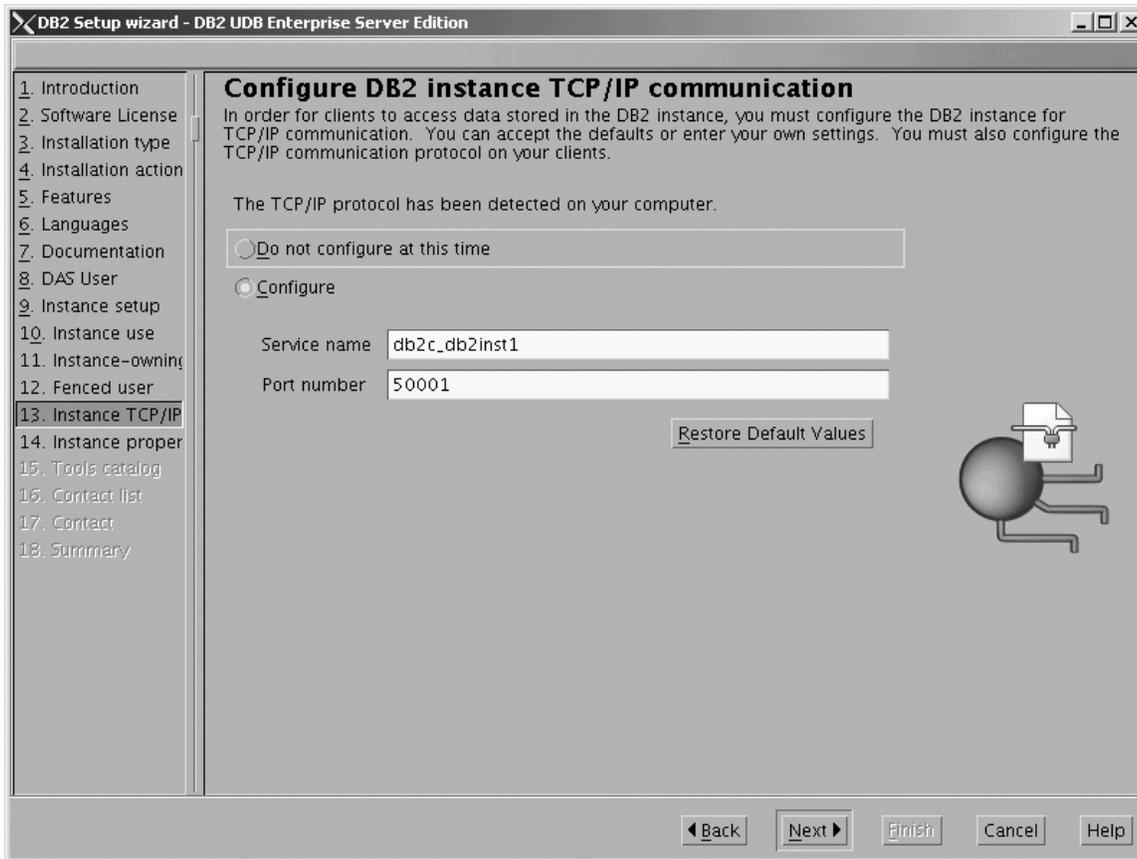


Figure 73. DB2 Setup wizard - Configure DB2 instance TCP/IP communication page

- b. Click **Next**. The "Set instance properties" page opens.
15. On the "Set instance properties" page:
 - a. Deselect the **Autostart the instance at system startup** check box.

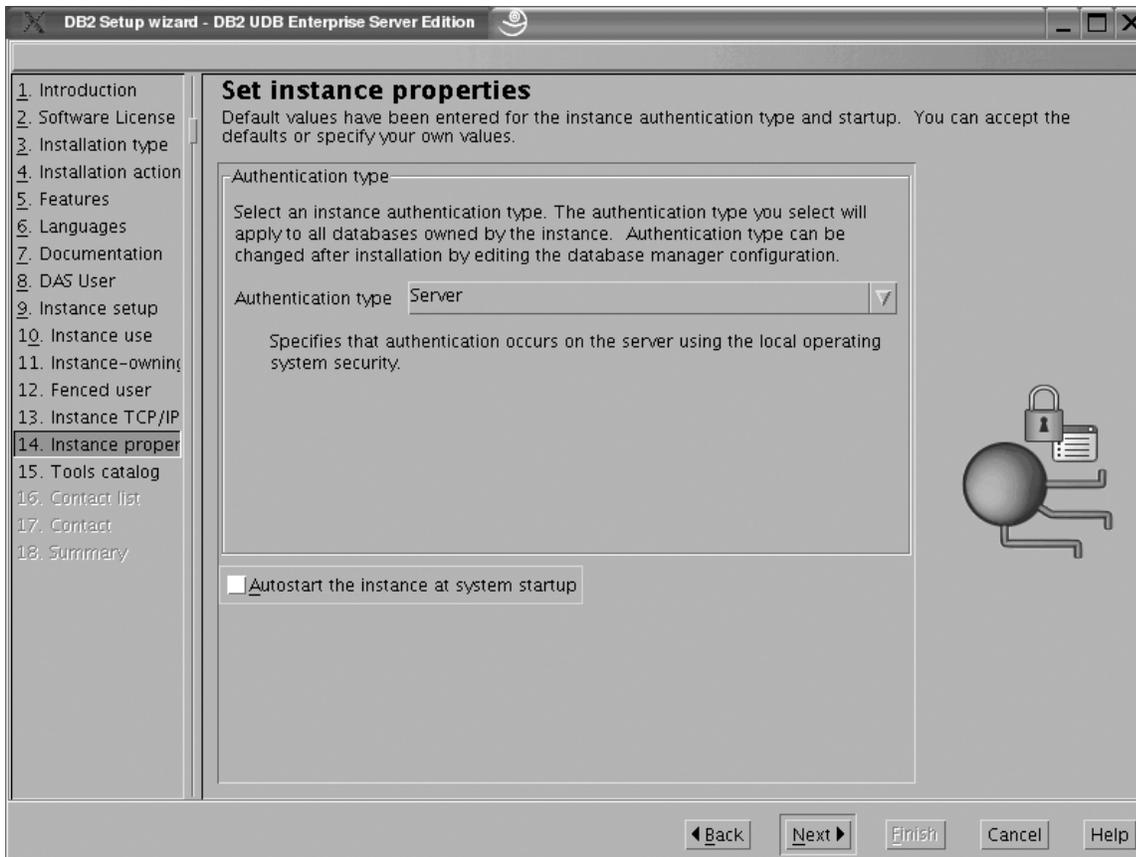


Figure 74. DB2 Setup wizard - Set instance properties page

- l
 - b. Click **Next**. The "Prepare the DB2 tools catalog" page opens.
16. On the "Prepare the DB2 tools catalog" page:
 - a. Select the **Do not prepare the DB2 tools catalog on this computer** radio button.

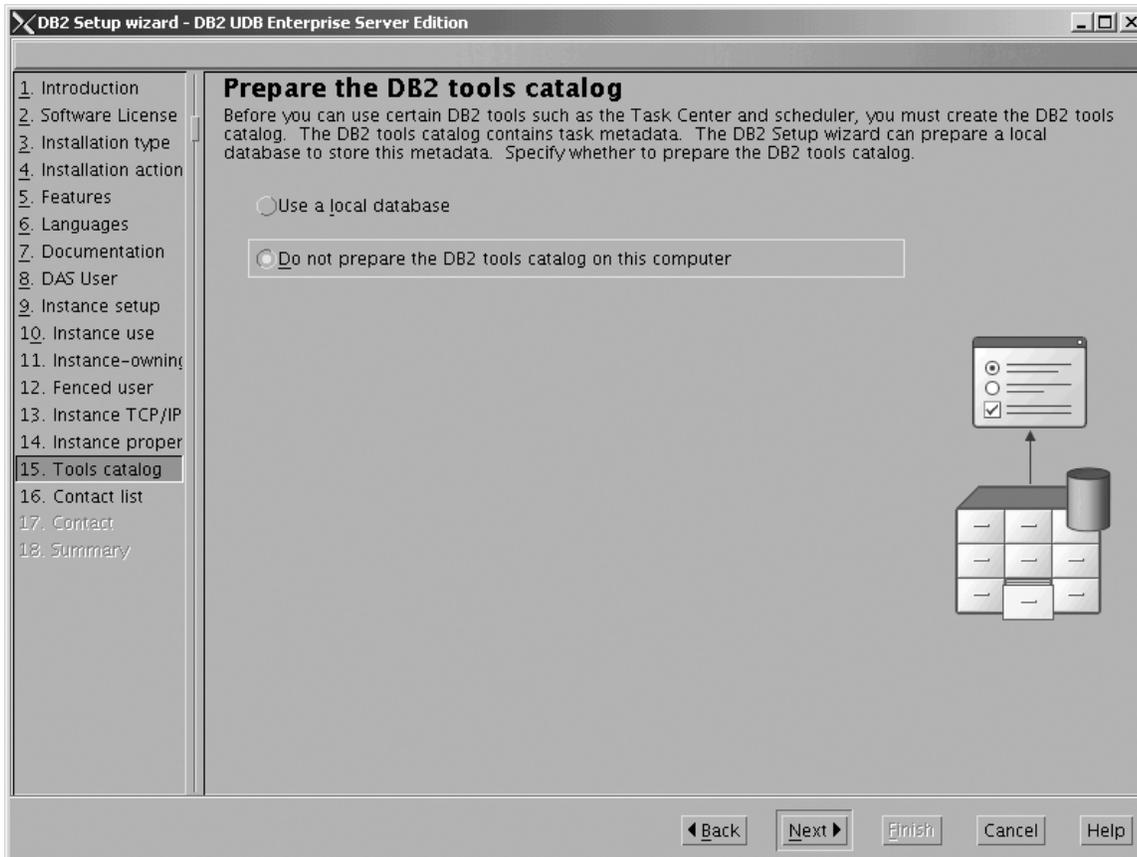


Figure 75. DB2 Setup wizard - Prepare the DB2 tools catalog page

- b. Click **Next**. The "Set up the administration contact list" page opens.
17. On the "Set up the administration contact list" page:
 - a. Select the **Local - Create a contact list on this system** radio button.
 - b. Ensure that the **Enable notification** check box is deselected.

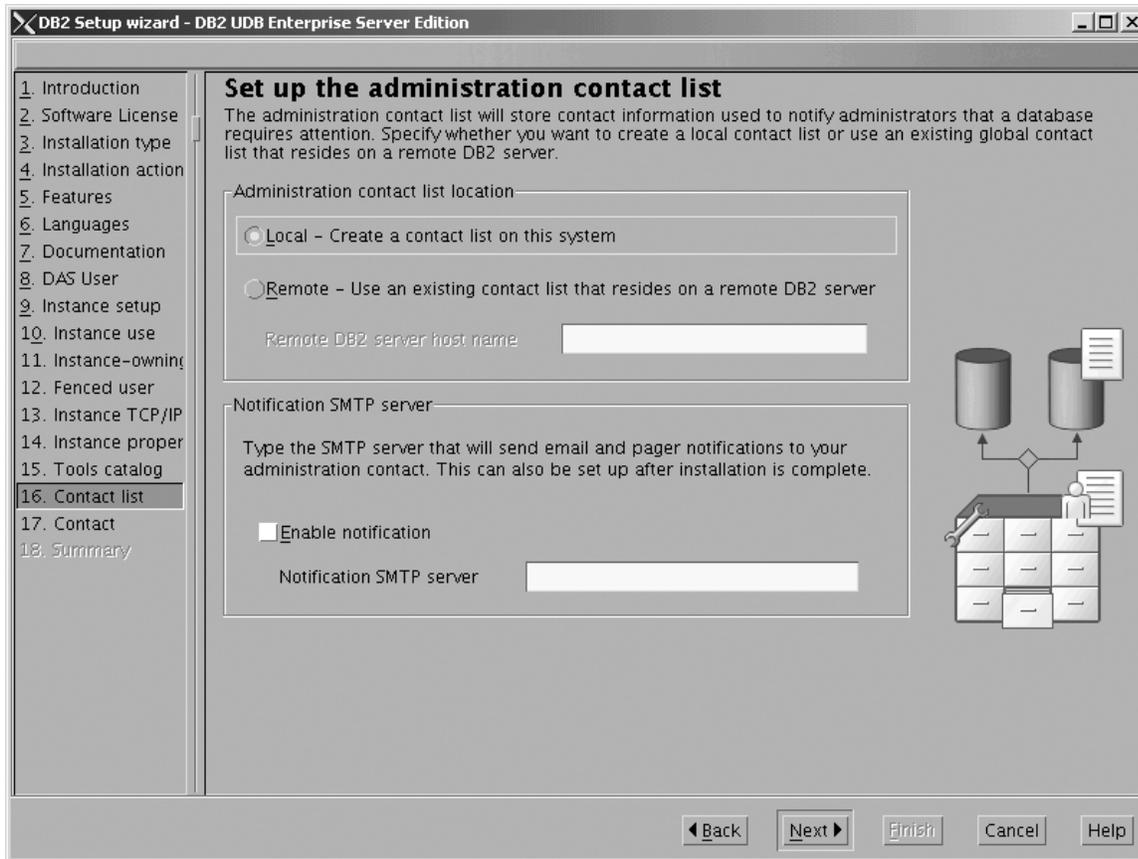


Figure 76. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the "Set up the administration contact list" page, the following warning message is displayed:



Figure 77. DB2 Setup wizard - Warning message

Click **OK**. The "Specify a contact for health monitor notification" page opens.

18. On the "Specify a contact for health monitor notification" page:
 - a. Select the **Defer this task until after installation is complete** radio button.

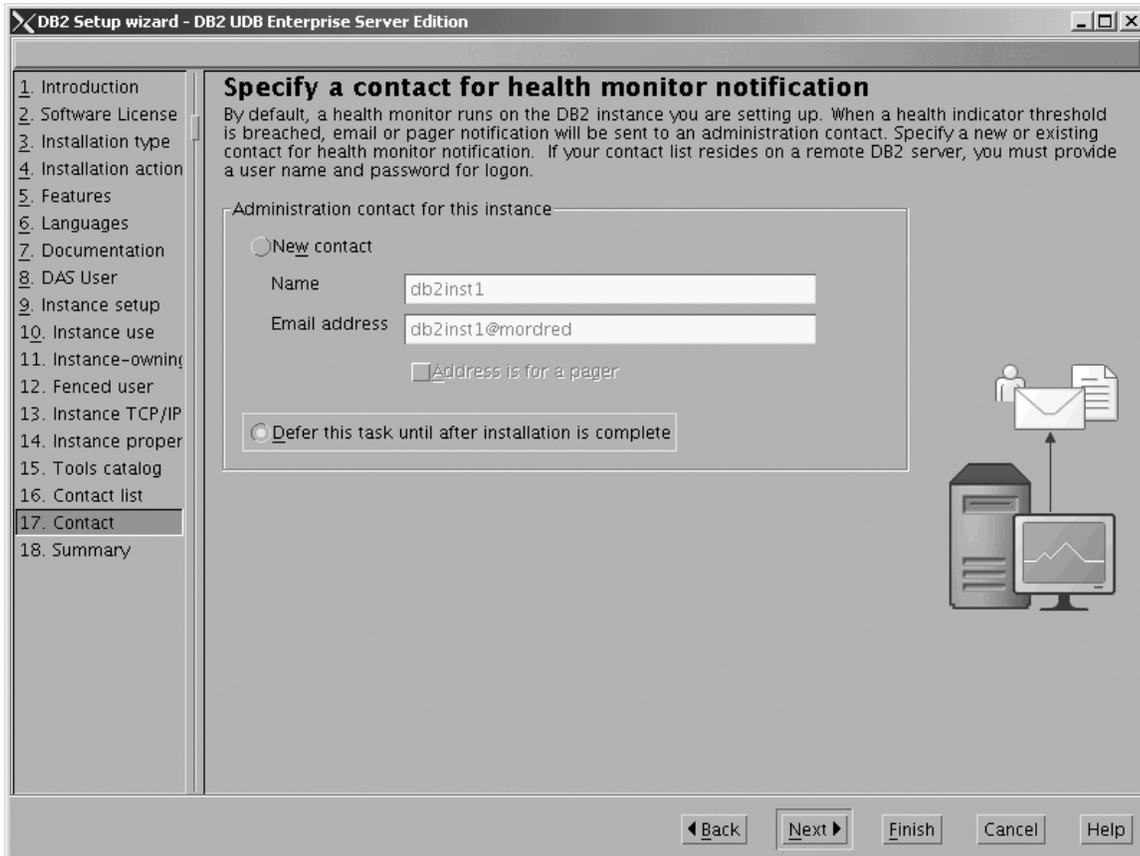


Figure 78. DB2 Setup wizard - Set up the administration contact list page

- b. Click **Next**. The "Start copying files" page opens.
19. On the "Start copying files" page, click **Finish** to begin installing DB2 UDB Enterprise Server Edition on your computer.

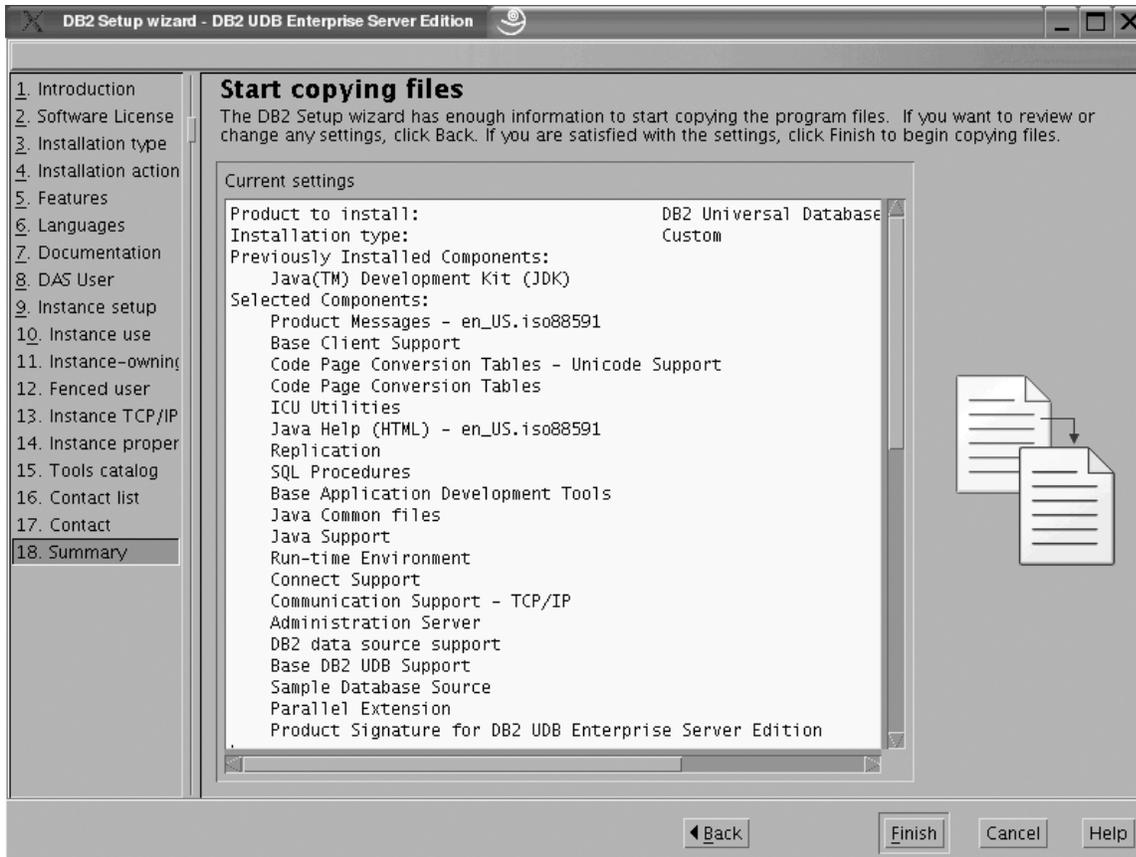


Figure 79. DB2 Setup wizard - Start copying files page

The "Installing DB2 UDB Enterprise Server Edition" page opens.

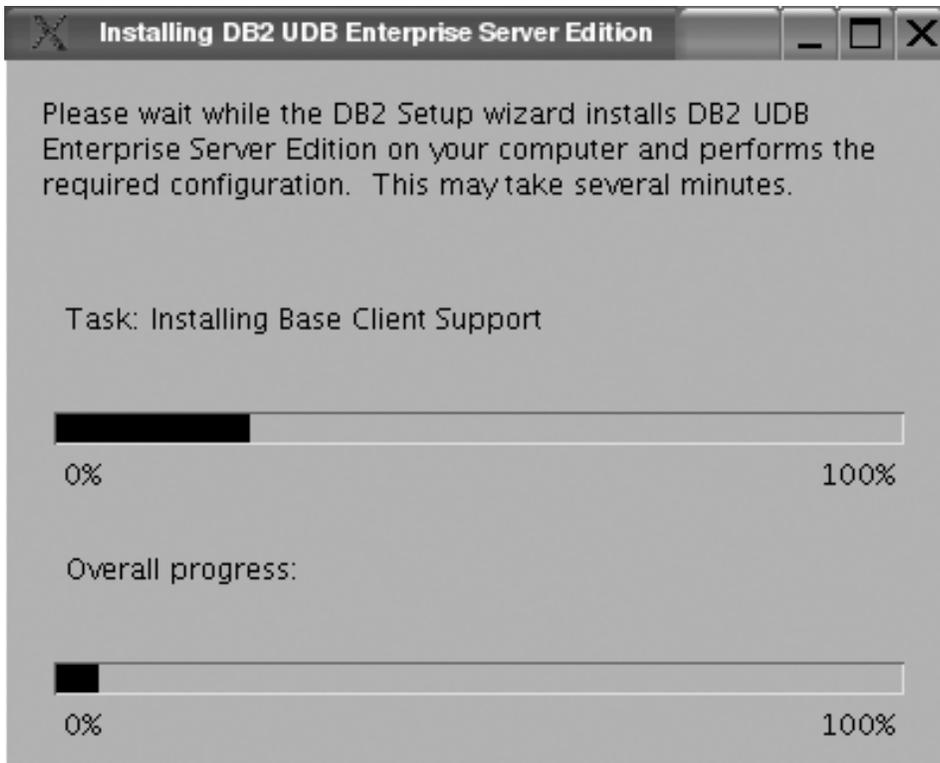


Figure 80. DB2 Setup wizard - Installing DB2 UDB Enterprise Server Edition page

When the installation completes, the "Setup is complete" page opens.

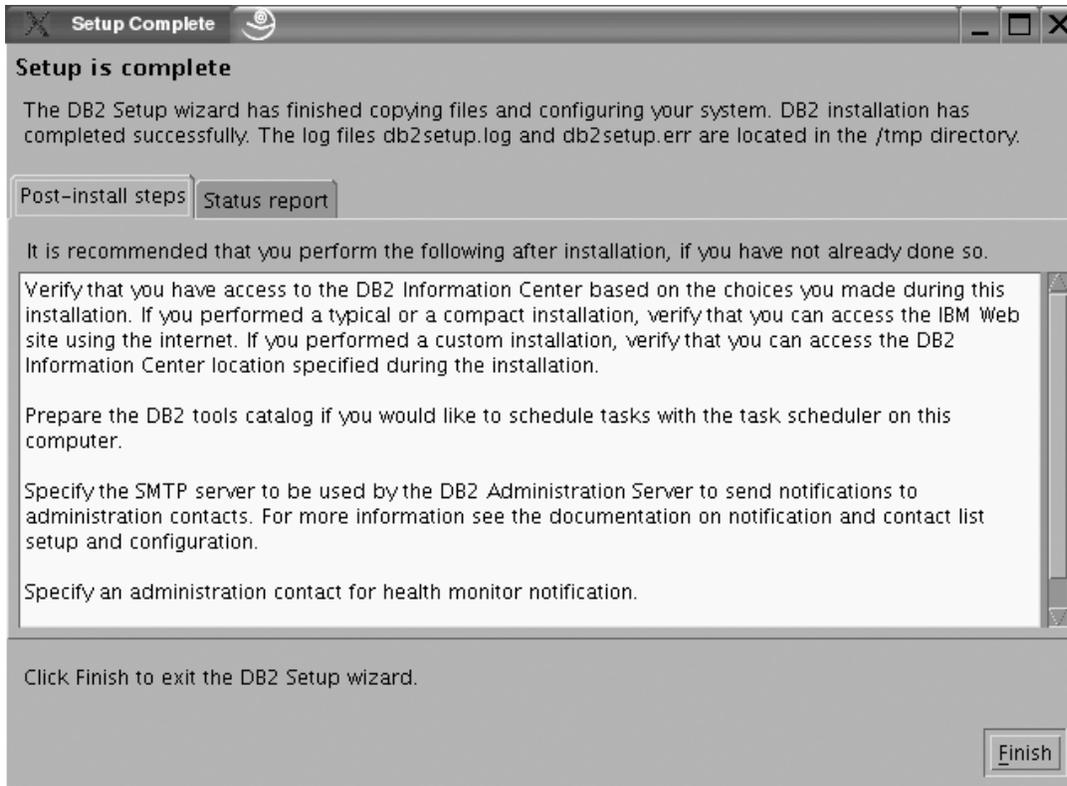


Figure 81. DB2 Setup wizard - Setup is complete page

Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Enterprise Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Installing DB2 UDB Enterprise Server Edition on AIX 5.2 for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Enterprise Server Edition on AIX 5.2 for a Common Criteria compliant installation.

Prerequisites:

- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- AIX 5.2 must be installed on the computer.
- You must have the installation CD mounted.
- The user names to be used for the following:
 - The DB2 instance owner
 - The DB2 Administration Server
 - The fenced user

If you do not have these user names, obtain them from your system administrator. For more information about these users, see "DB2 users and group (UNIX)" on page 14. For information about creating these users, see "Creating group and user IDs for a DB2 UDB installation (UNIX)" on page 38.

Procedure:

Use the following steps to install DB2 UDB Enterprise Server Edition on AIX 5.2 for a Common Criteria compliant environment.

1. On the "IBM DB2 Setup Launchpad", click **Install Products**.

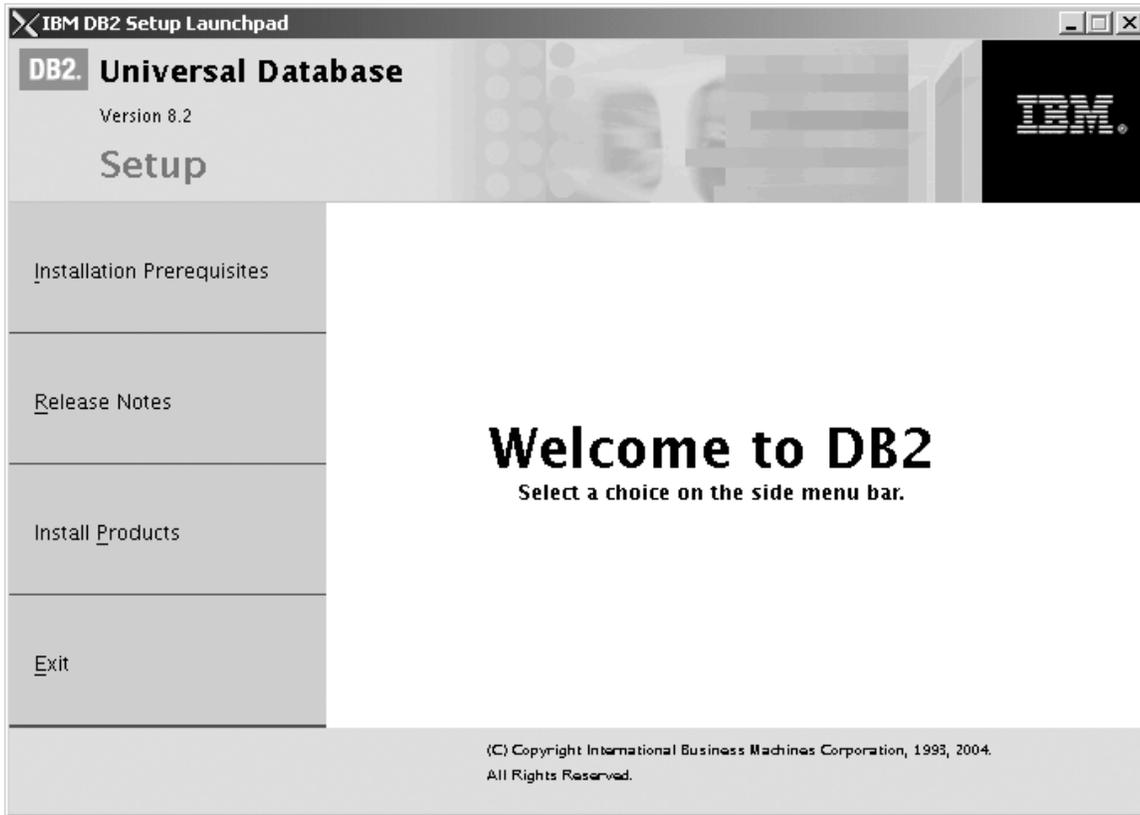


Figure 82. IBM DB2 Setup Launchpad

2. On the second page of the "IBM DB2 Setup Launchpad":
 - a. In the **Select the product you would like to install box**, select **DB2 UDB Enterprise Server Edition**, as follows:

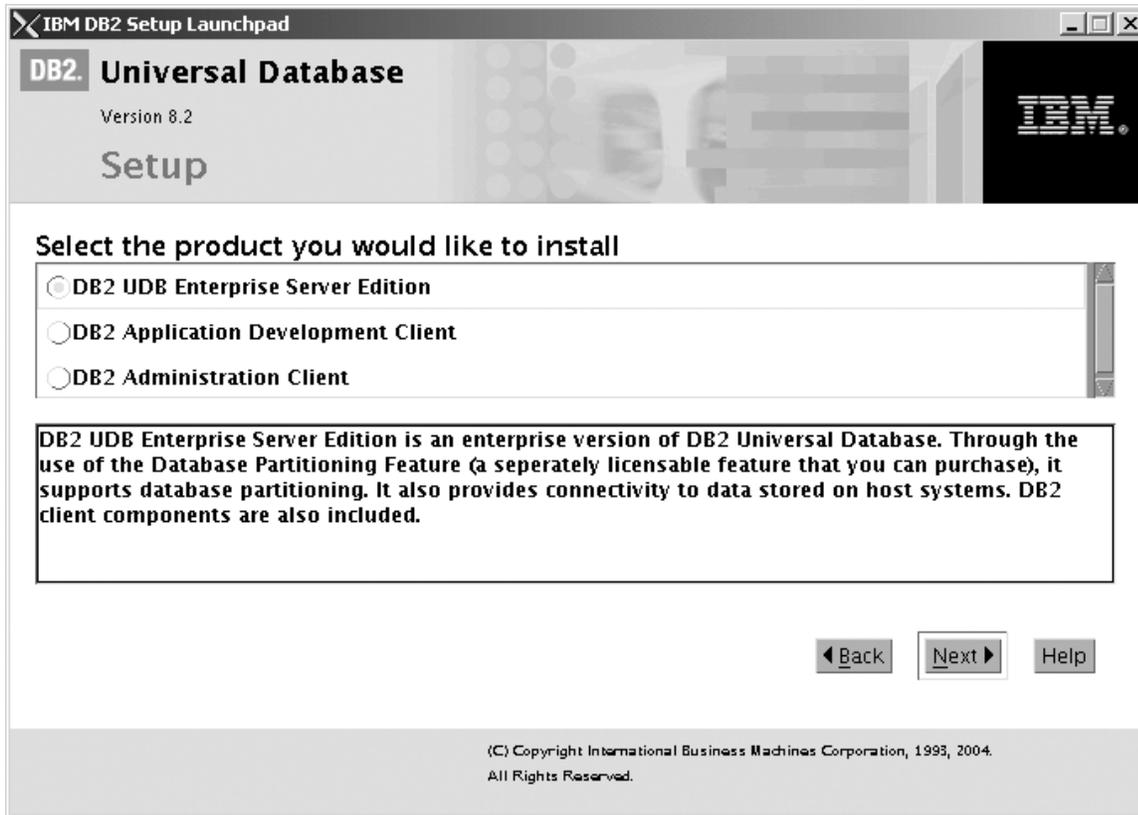


Figure 83. IBM DB2 Setup Launchpad with DB2 UDB Enterprise Server Edition selected

- b. Click **Next**. In a moment, the "DB2 Setup wizard" opens, as follows:



Figure 84. DB2 Setup wizard

- c. Click **Next**. The "Software License Agreement" page opens.
3. On the "Software License Agreement" page:
 - a. Click the **Accept** radio button.

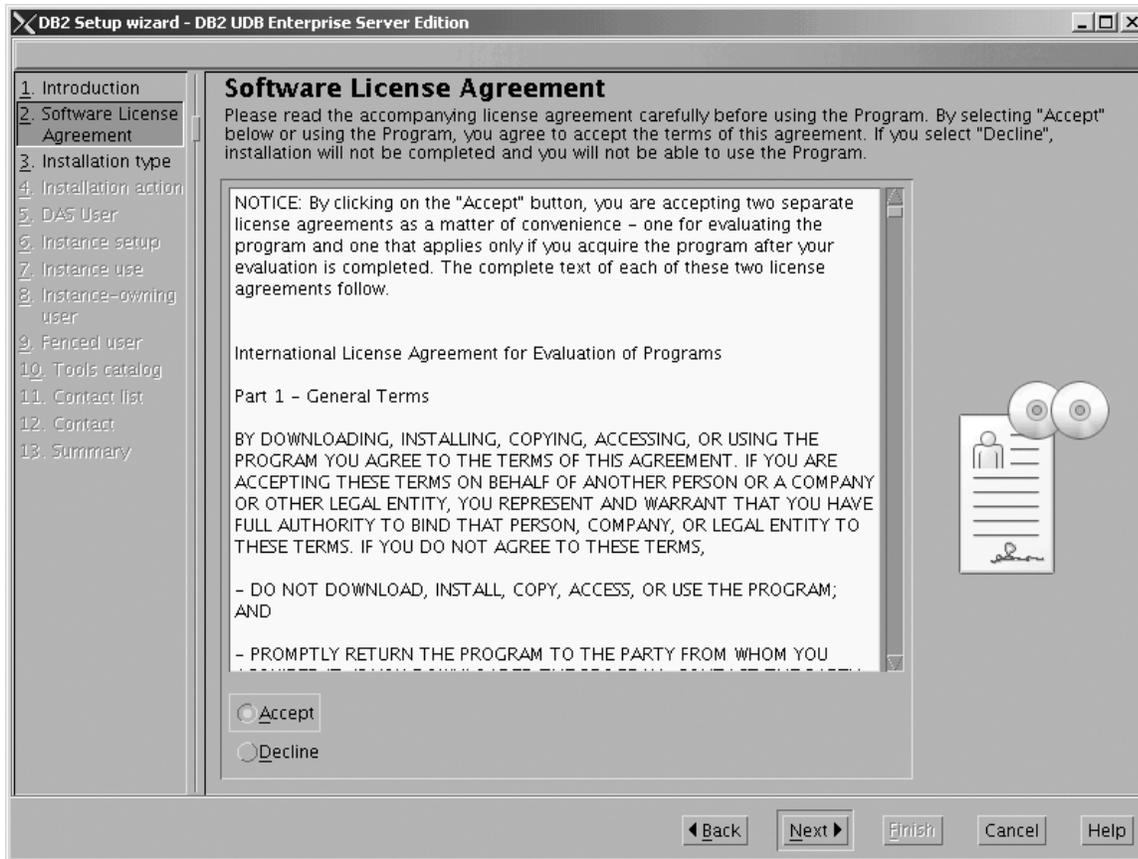


Figure 85. DB2 Setup wizard - Software License Agreement page

- b. Click **Next**. The "Select the installation type" page opens.
4. On the "Select the installation type" page:
 - a. Select the **Custom** radio button:

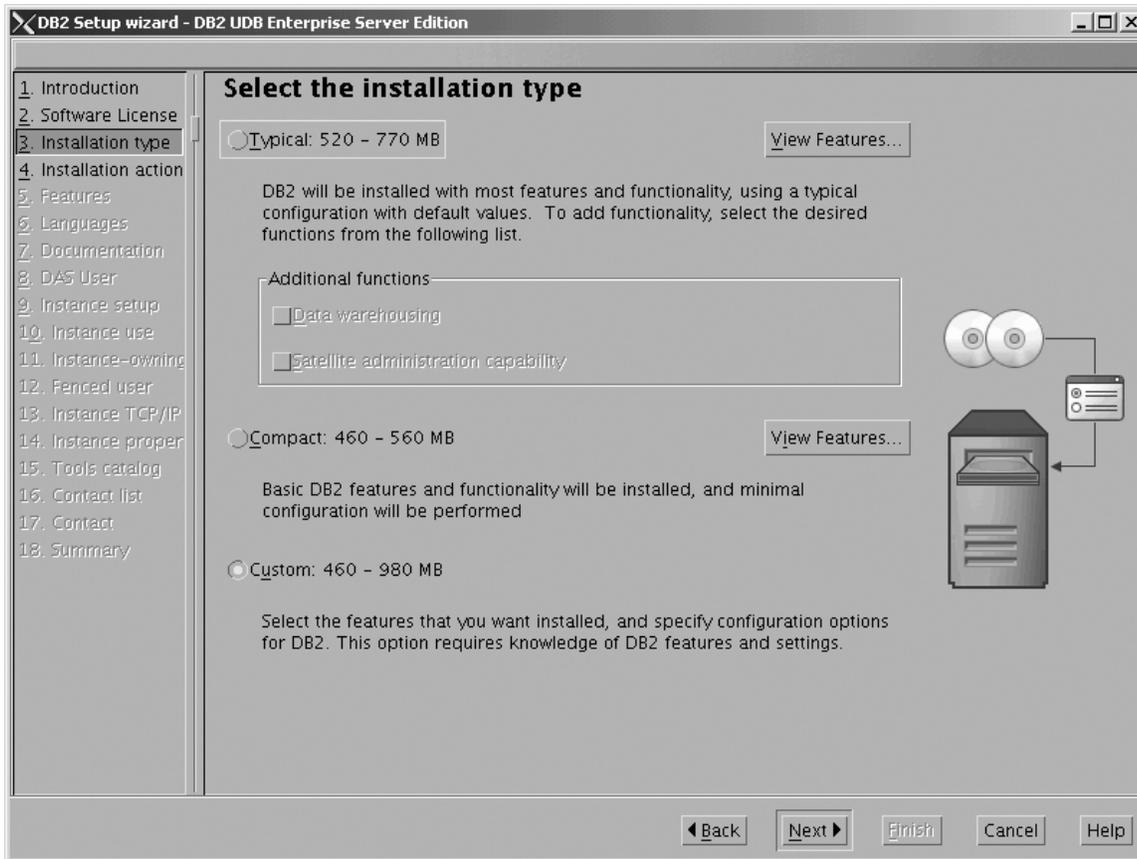


Figure 86. DB2 Setup wizard - Select the installation type page

- b. Click **Next**. The "Select the installation action" page opens.
5. On the "Select the installation action" page:
 - a. Select the **Install DB2 UDB Enterprise Server Edition on this computer** check box.

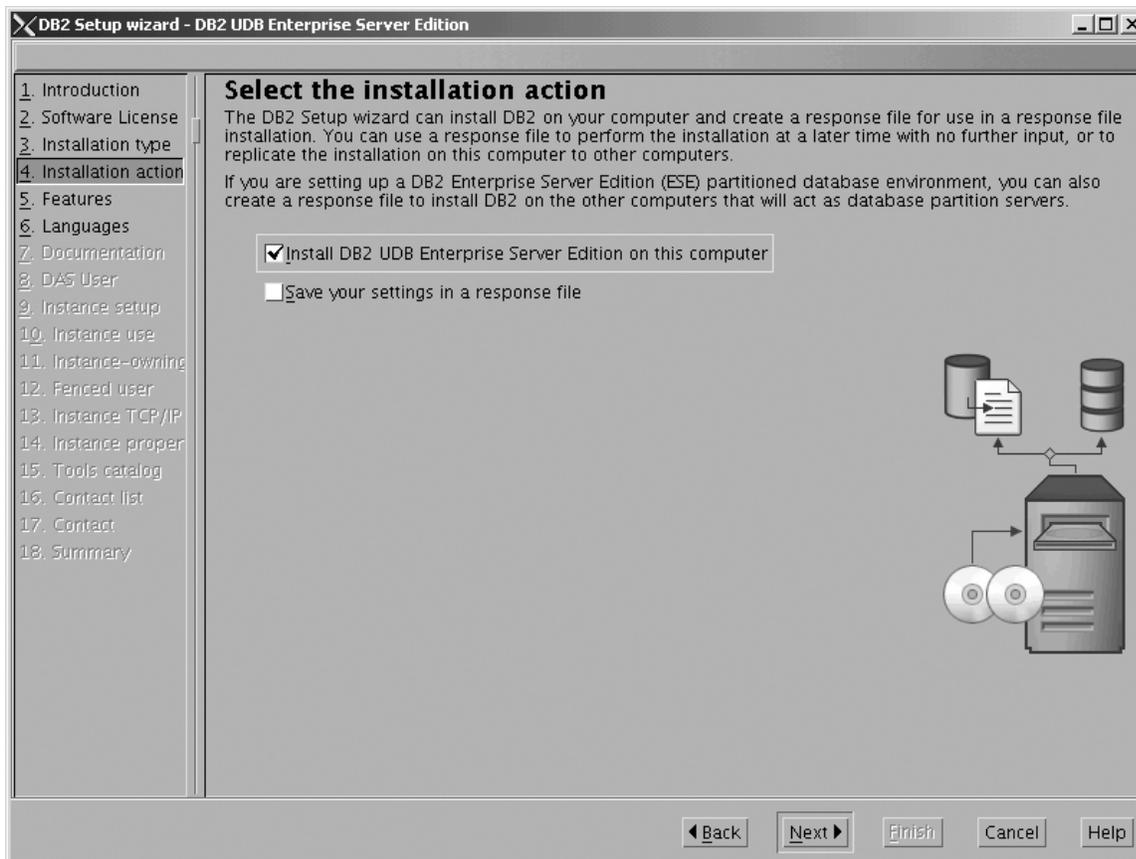


Figure 87. DB2 Setup wizard - Select the installation action page

- b. Click **Next**. The "Select the features to install" page opens.
6. On the "Select the features to install" page:
 - a. Open the + beside **Server support**, then select the check box beside **DB2 Data Source Support** (so that the check mark is removed). This action prevents the **DB2 Data Source Support** option from being installed.

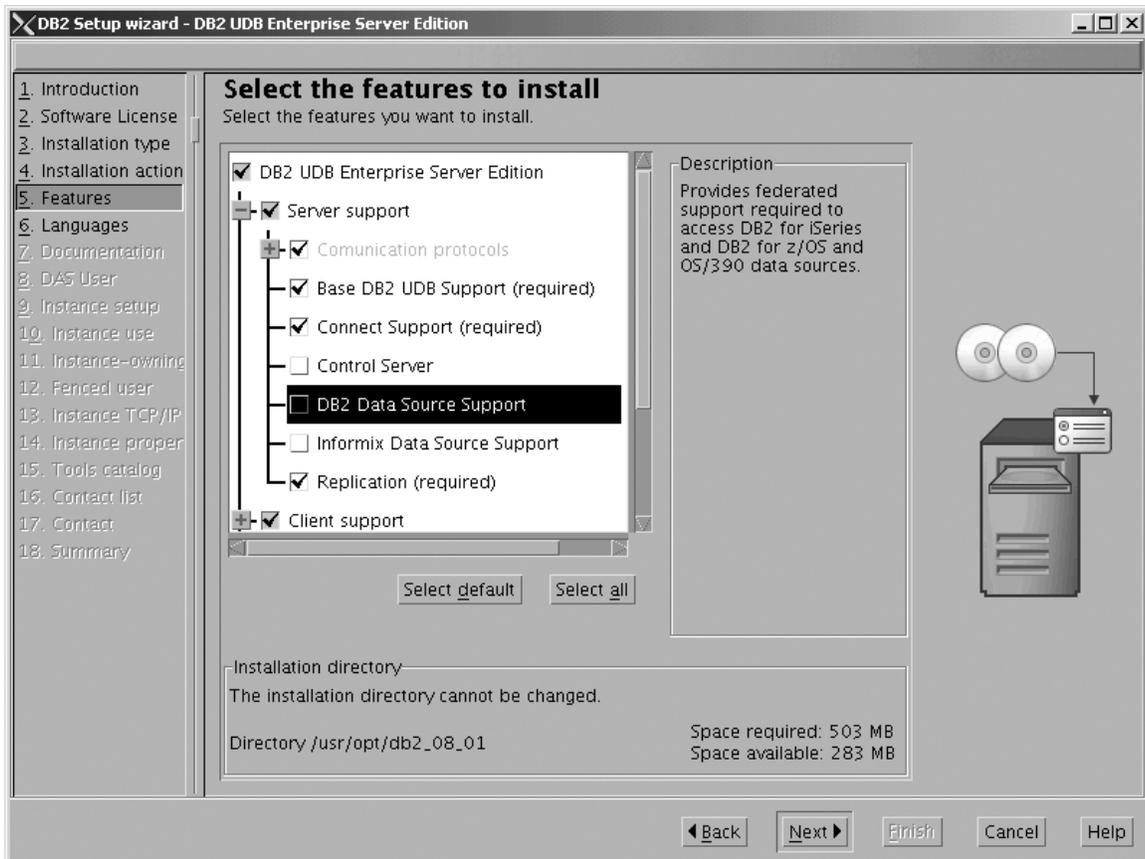


Figure 88. DB2 Setup wizard - Select the features to install page; DB2 Data Source Support option deselected for installation

- b. Open the + beside **Client support**, then select the check box beside **DB2 LDAP Support** (so that the check mark is removed). This action prevents the **DB2 LDAP Support** option from being installed.

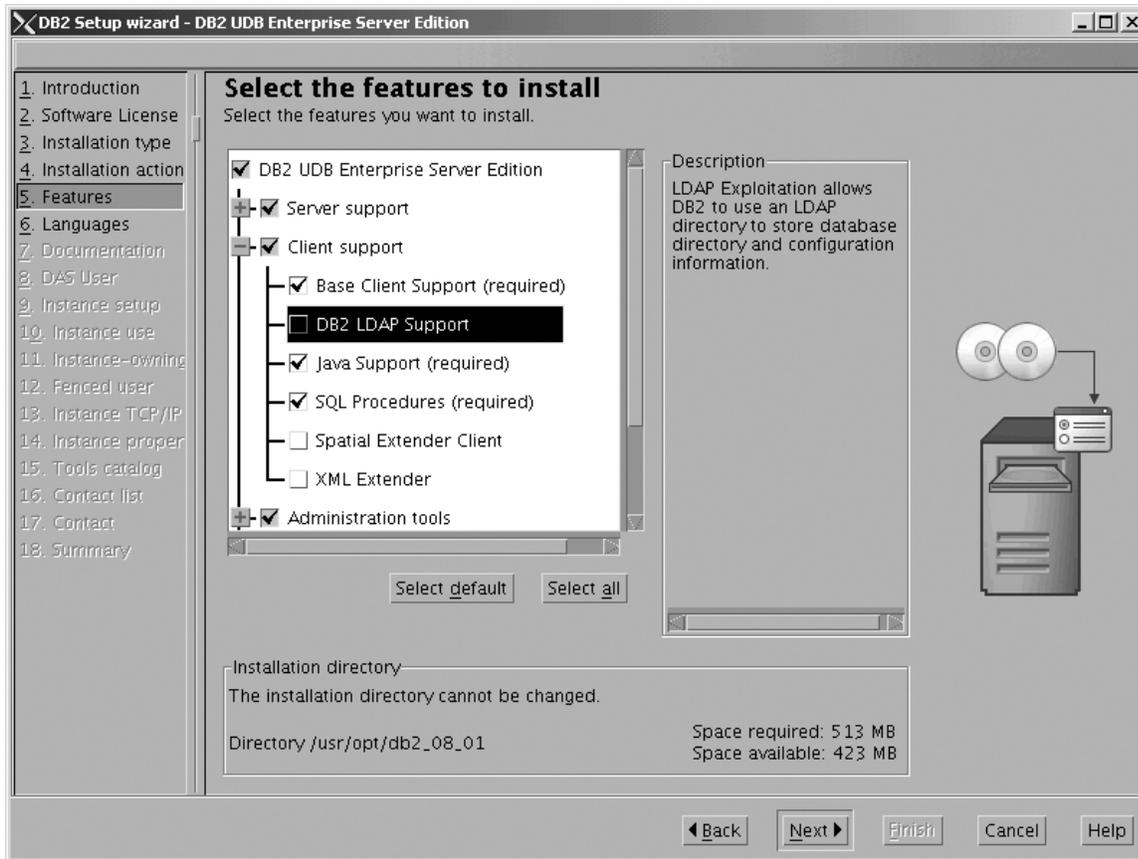


Figure 89. DB2 Setup wizard - Select the features to install page; DB2 LDAP Support option deselected for installation

- c. Open the + beside **Administration tools**, then deselect all the checked options to remove them from the list of options being installed. Note that you must deselect the **Configuration Assistant** option last.

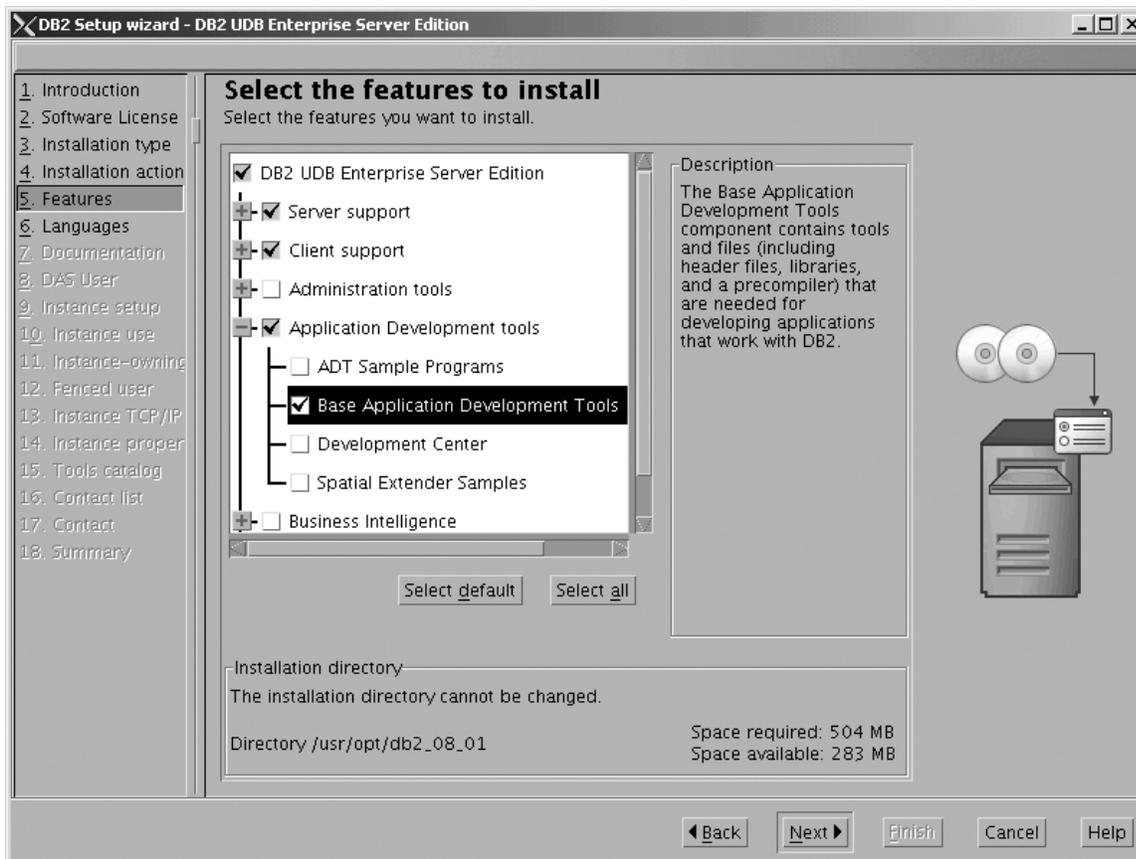


Figure 91. DB2 Setup wizard - Select the features to install page; Base Application Development Tools option selected for installation

- e. Open the + beside **Getting started**, then deselect the **First Steps** option so that this option does not get installed.

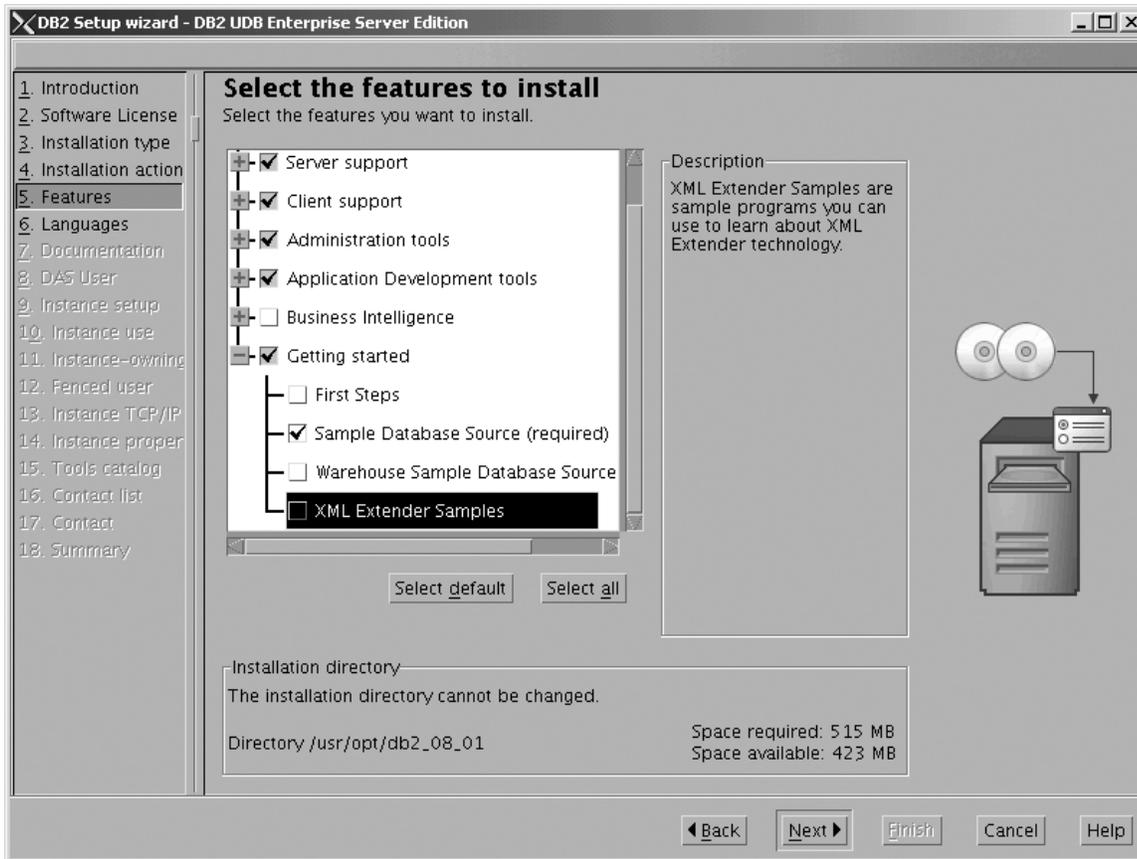


Figure 92. DB2 Setup wizard - Select the features to install page; First Steps option deselected for installation

- f. Click **Next**. The "Languages" page opens.
7. On the "Languages" page, English is the only language support that is installed by default.

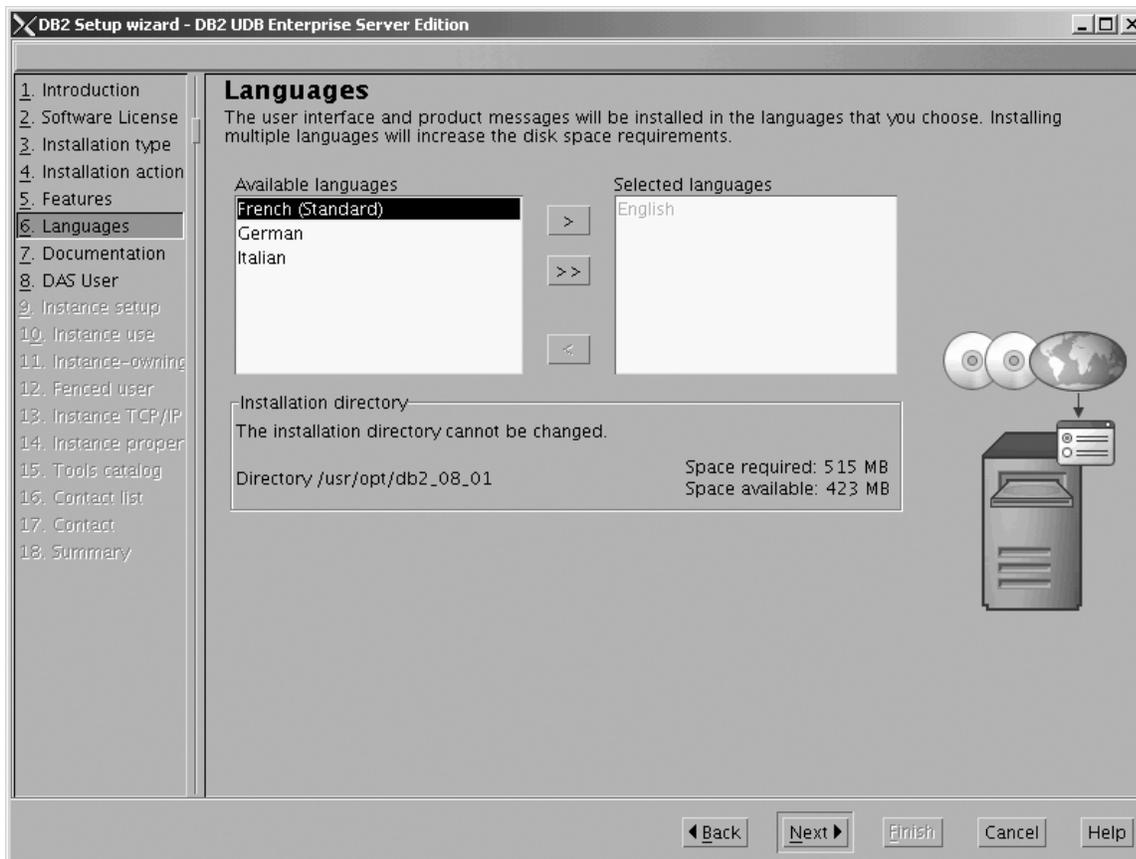


Figure 93. DB2 Setup wizard - Languages page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
8. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

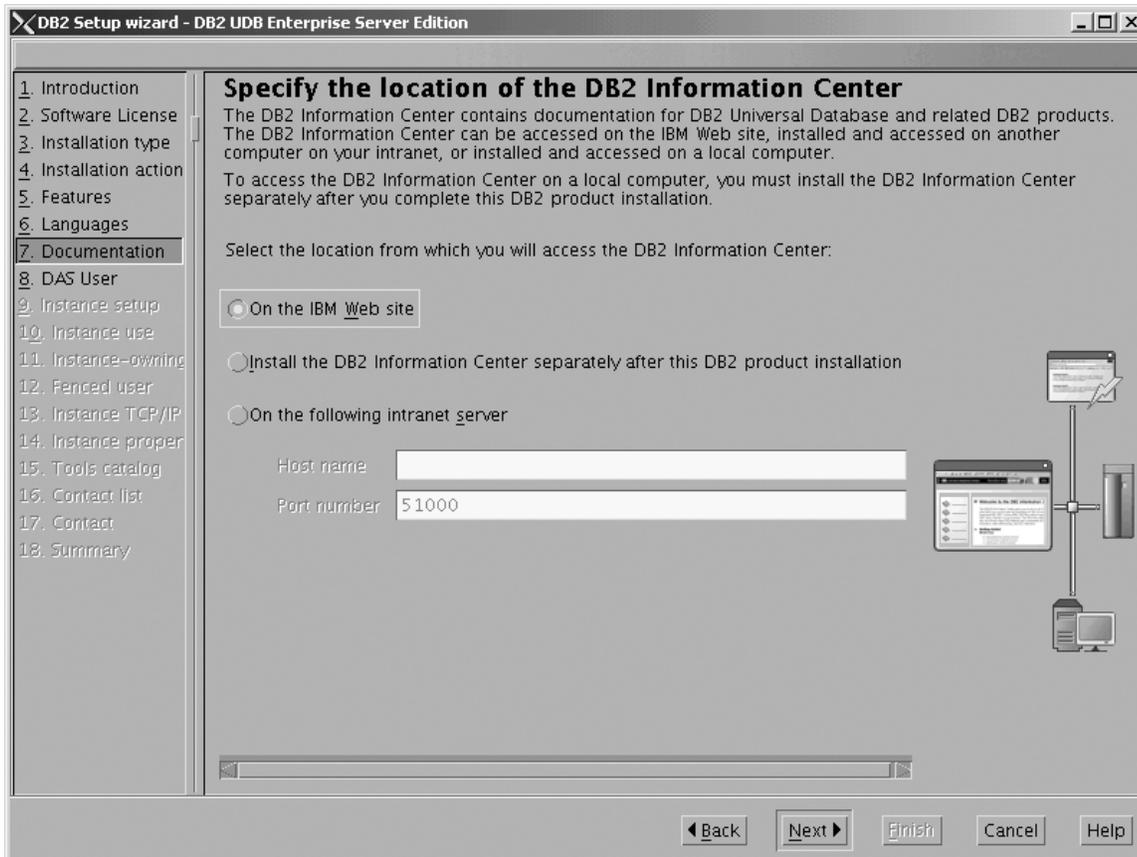


Figure 94. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
9. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

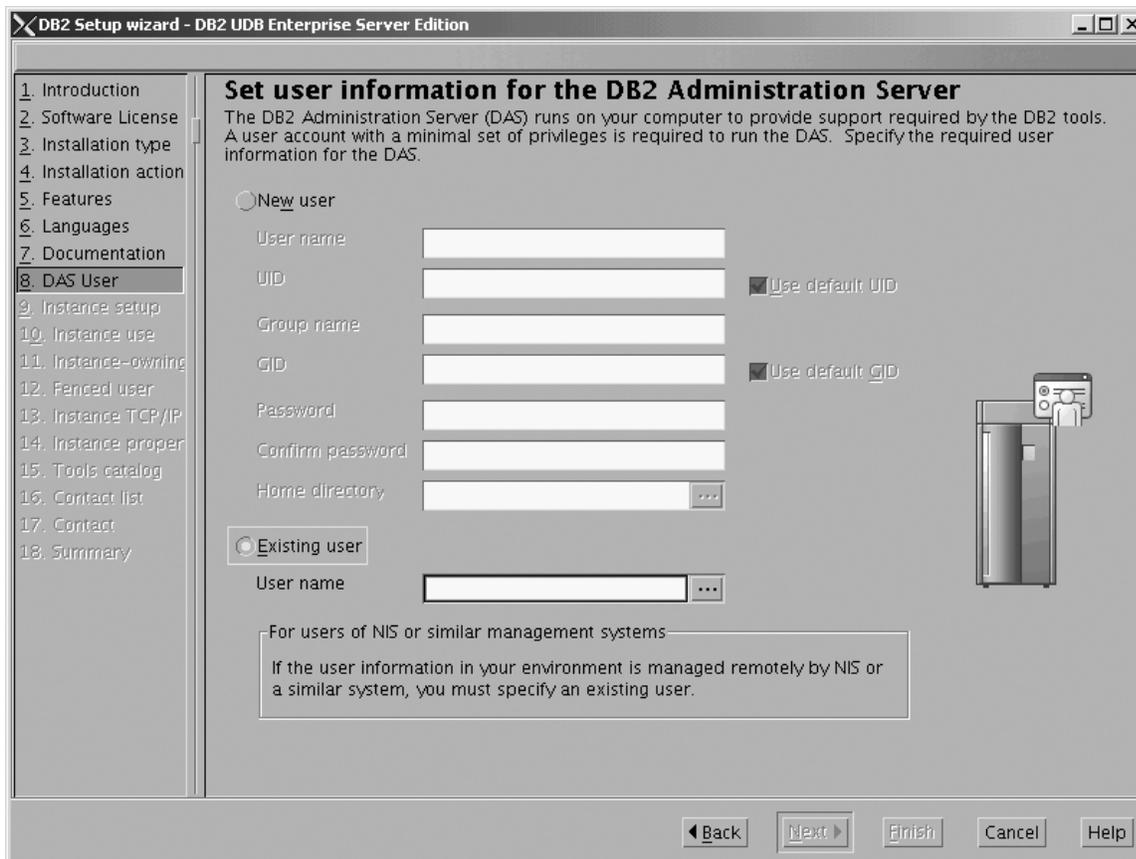


Figure 95. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- c. Click **Next**. The "Set up a DB2 instance" page opens.
10. On the "Set up a DB2 instance" page:
 - a. Select the **Create a DB2 instance - 64 bit** radio button.

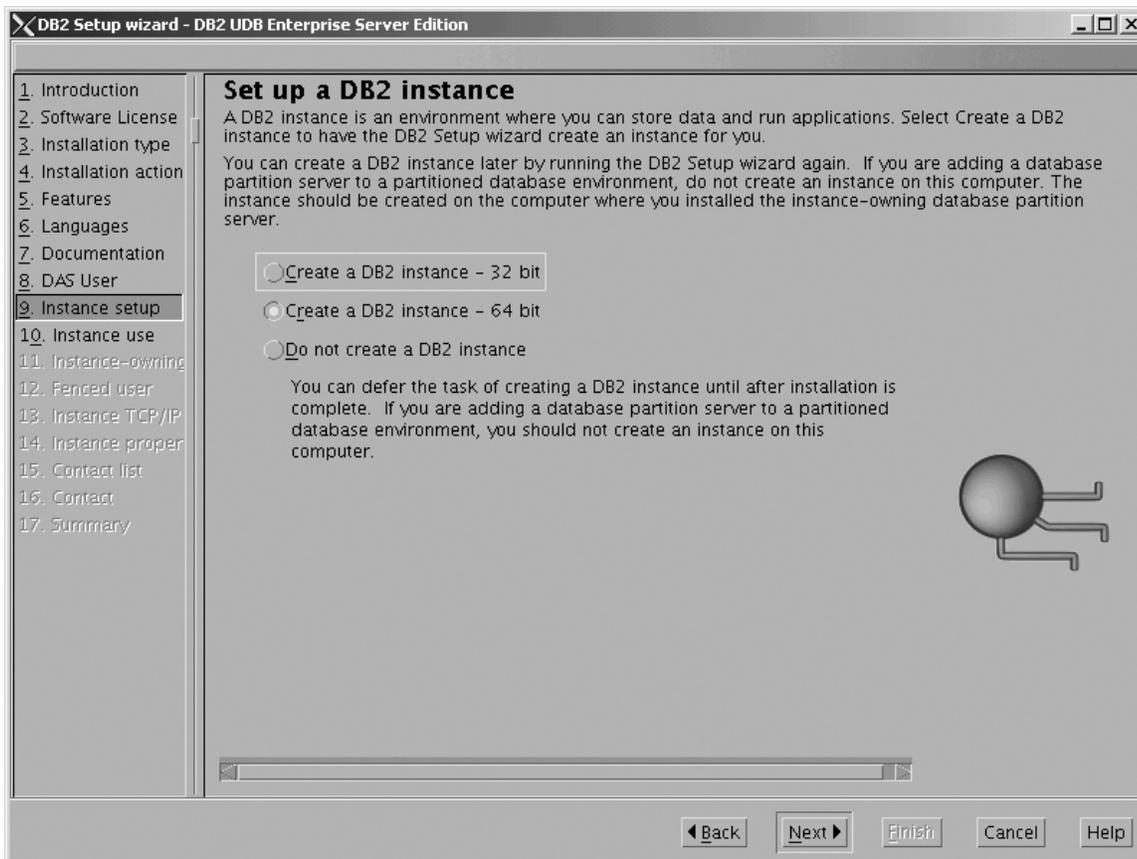


Figure 96. DB2 Setup wizard - Set up a DB2 instance page; Create a DB2 instance - 64 bit selected

b. Click **Next**. The following warning is displayed:

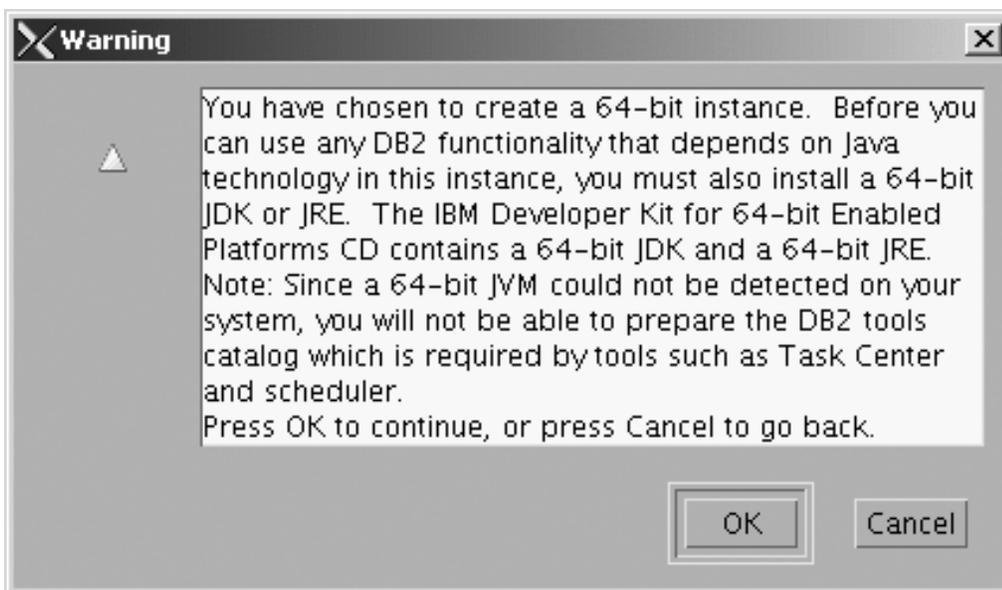


Figure 97. Warning message box

c. Click **OK**. The "Select how the instance will be used" page opens.

11. On the "Select how the instance will be used" page:

- a. Ensure that the **Single-partition instance** radio button is selected.

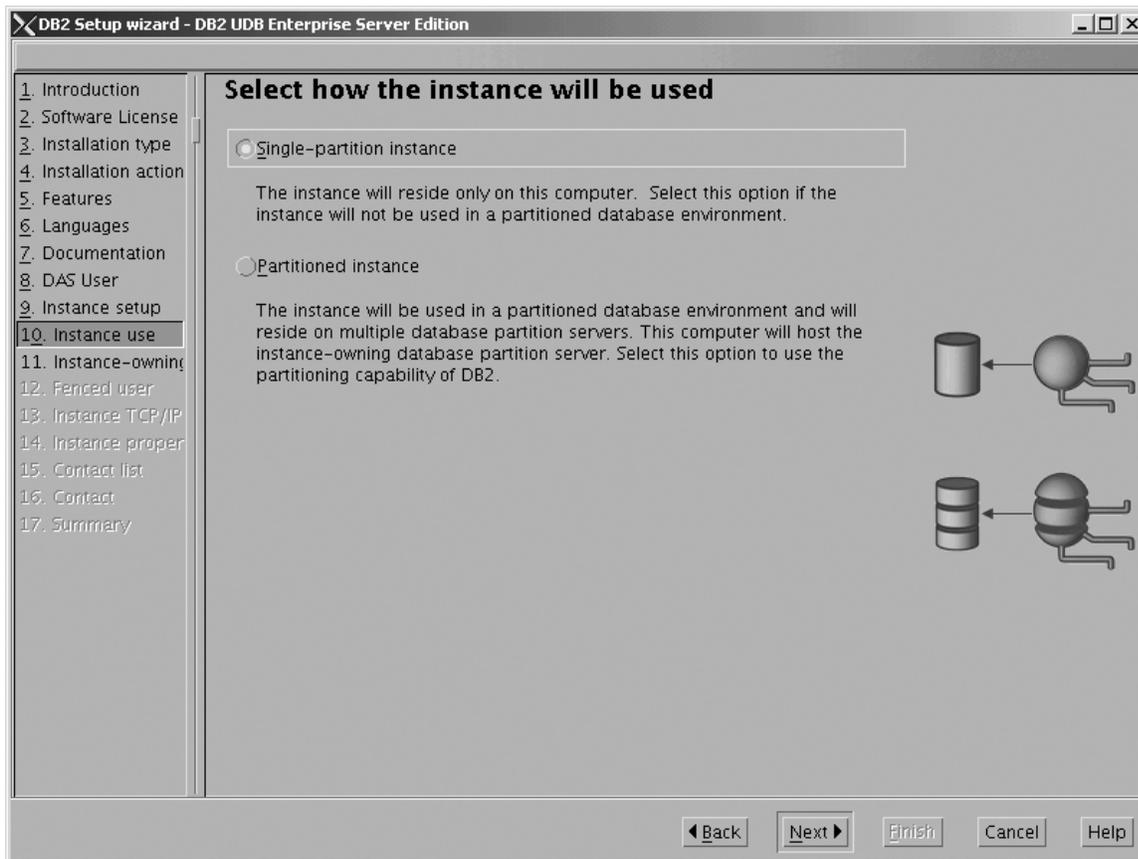


Figure 98. DB2 Setup wizard - Select how the instance will be used page; Single-partition instance selected

- b. Click **Next**. The "Set user information for the DB2 instance owner" page opens.
12. On the "Set user information for the DB2 instance owner" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

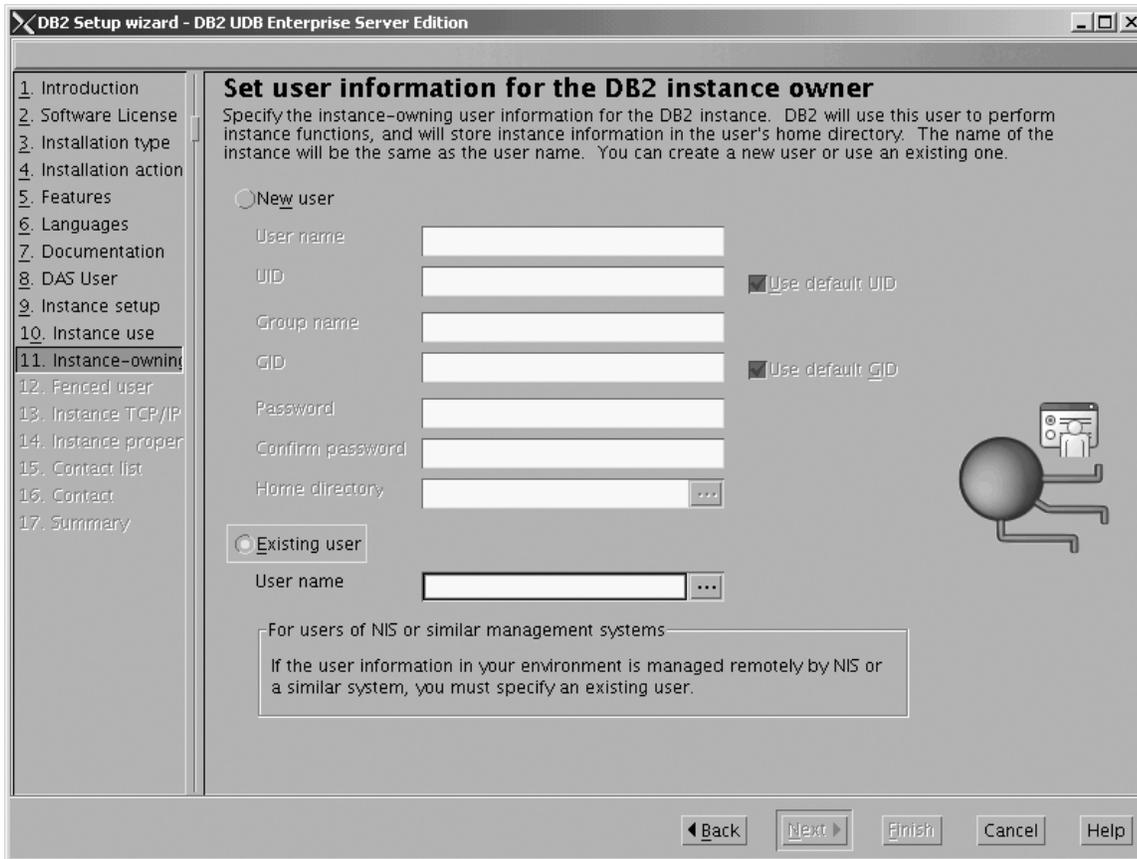


Figure 99. DB2 Setup wizard - Set user information for the DB2 instance owner page

- c. Click **Next**. The "Set user information for the fenced user" page opens.
13. On the "Set user information for the fenced user" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

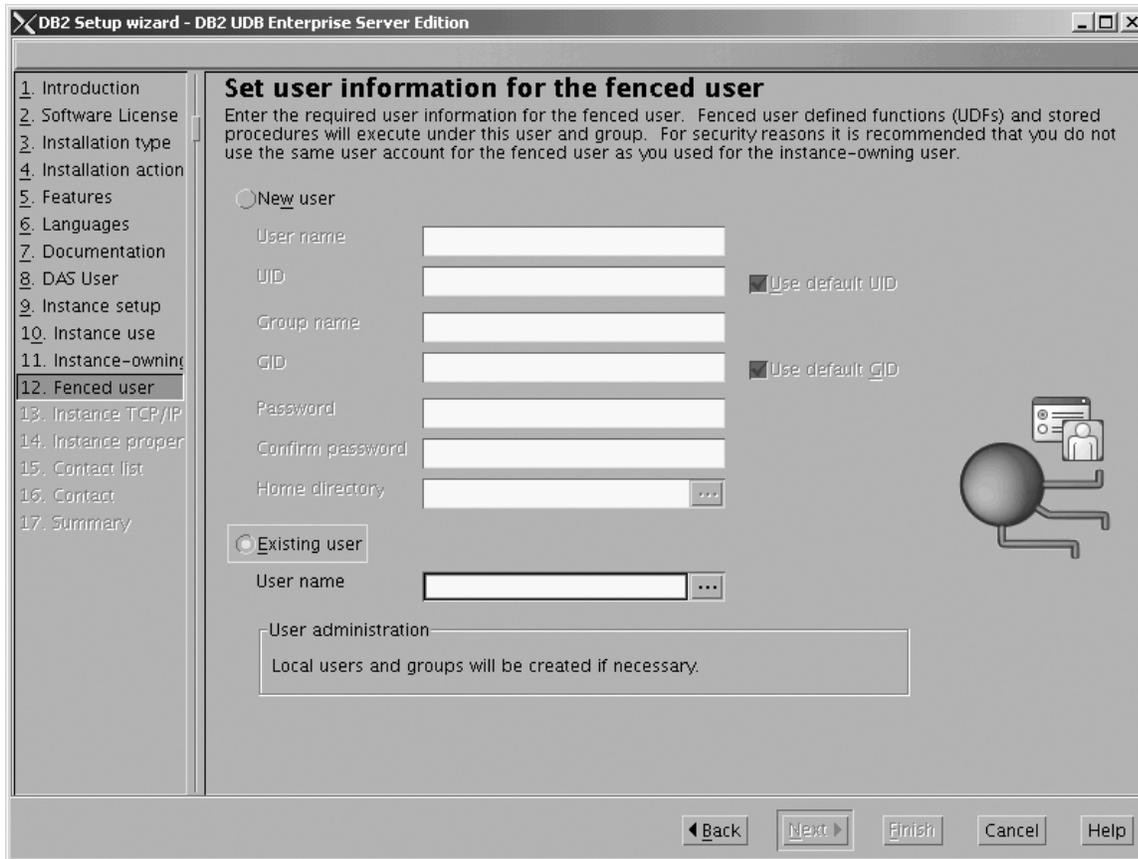


Figure 100. DB2 Setup wizard - Set user information for the fenced user page

- c. Click **Next**. The "Configure DB2 instance TCP/IP communication" page opens.
14. On the "Configure DB2 instance TCP/IP communication" page:
 - a. Select the **Configure** radio button.

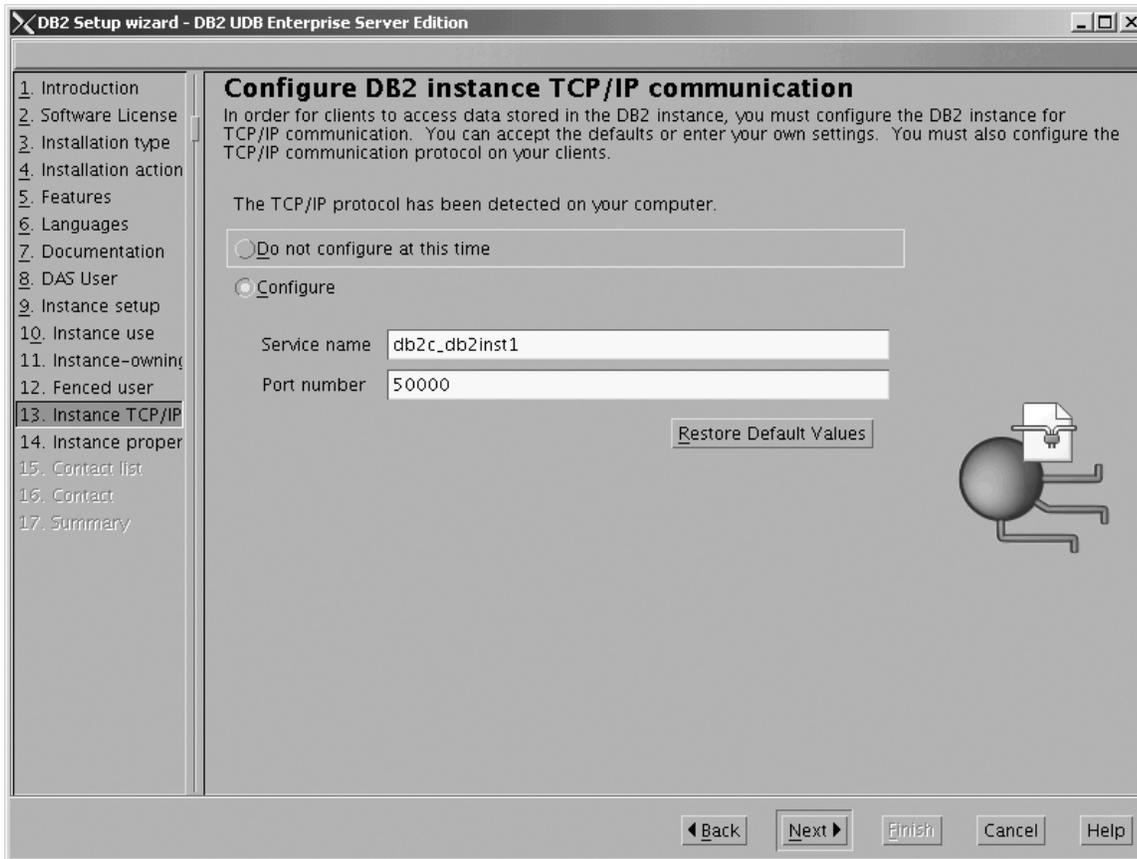


Figure 101. DB2 Setup wizard - Configure DB2 instance TCP/IP communication page

- b. Click **Next**. The "Set instance properties" page opens.
15. On the "Set instance properties" page:
 - a. Deselect the **Autostart the instance at system startup** check box.

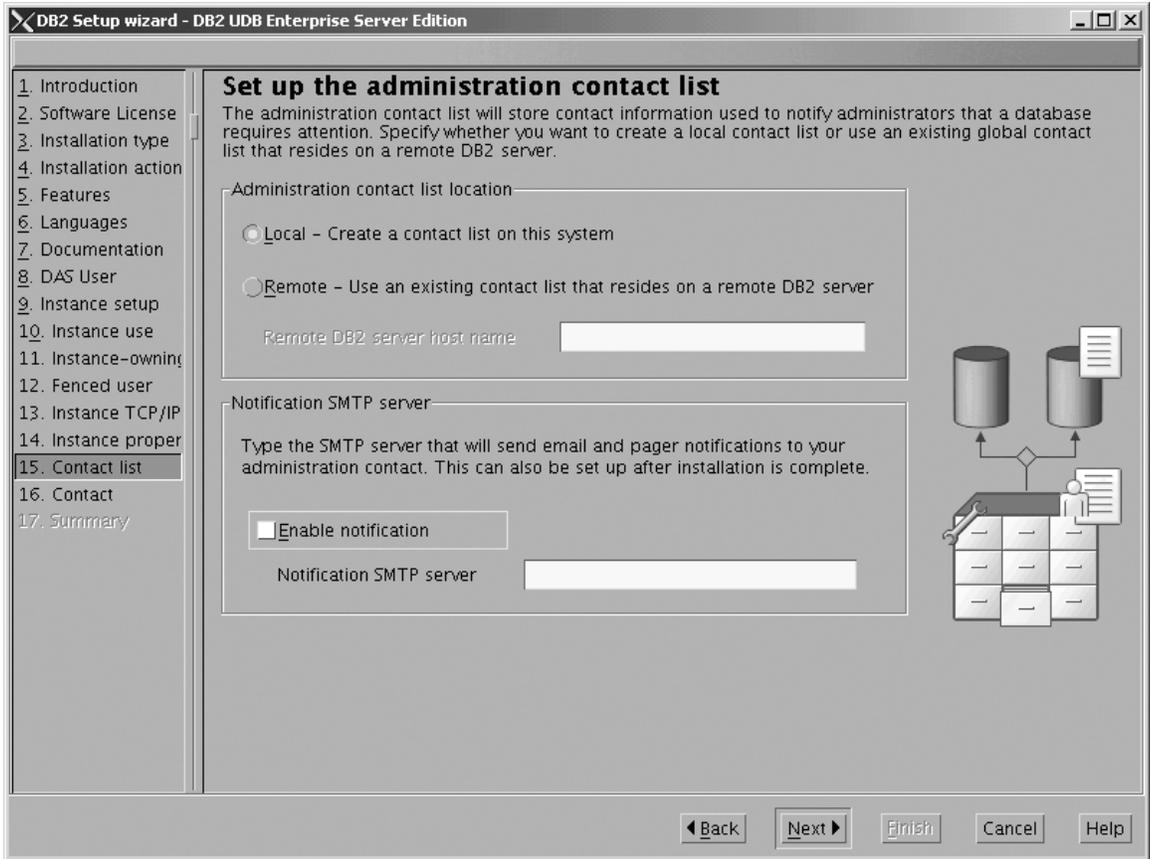


Figure 103. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the "Set up the administration contact list" page, the following warning message is displayed:

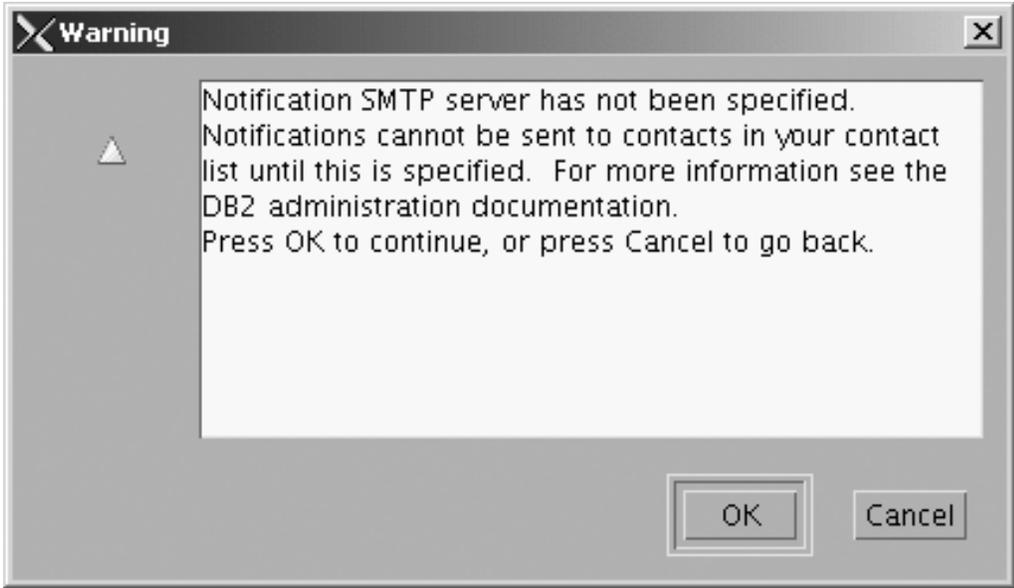


Figure 104. DB2 Setup wizard - Warning message

Click **OK**. The "Specify a contact for health monitor notification" page opens.

17. On the "Specify a contact for health monitor notification" page:
 - a. Select the **Defer this task until after installation is complete** radio button.



Figure 105. DB2 Setup wizard - Set up the administration contact list page

- b. Click **Next**. The "Start copying files" page opens.
18. On the "Start copying files" page, click **Finish** to begin installing DB2 UDB Enterprise Server Edition on your computer.

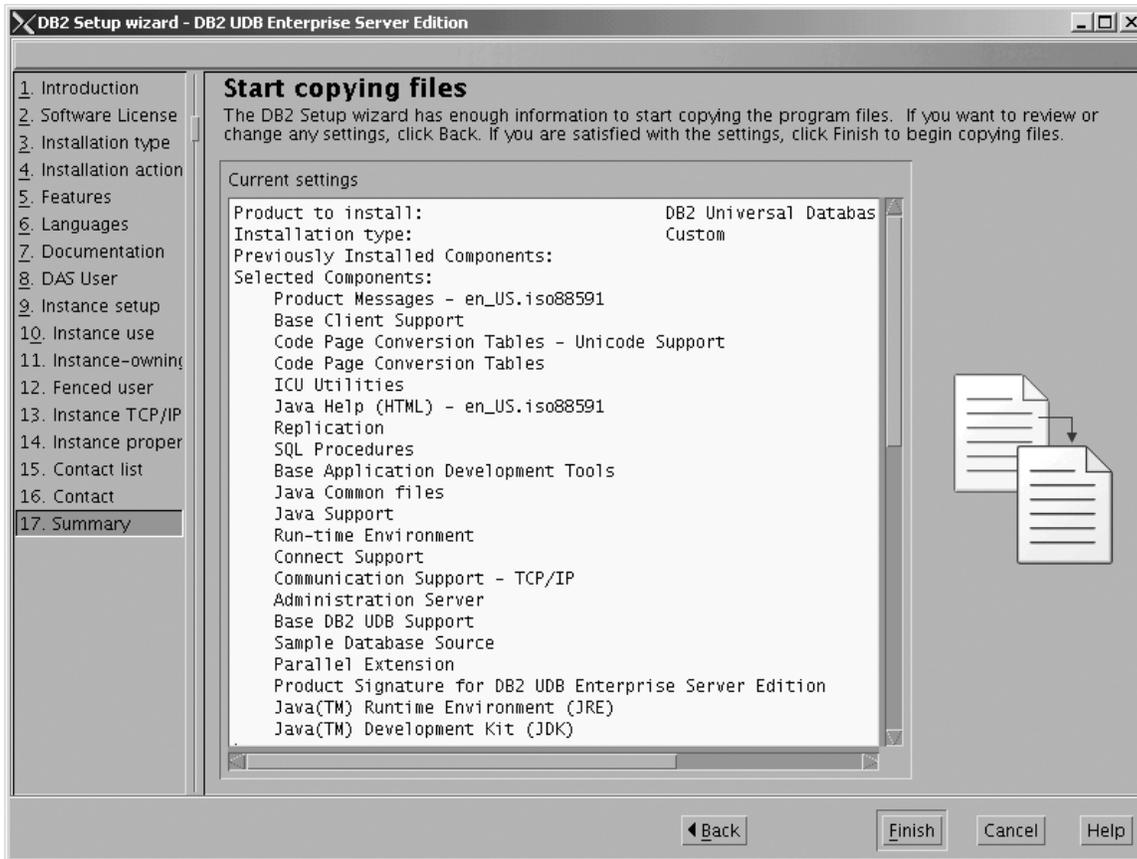


Figure 106. DB2 Setup wizard - Start copying files page

The "Installing DB2 UDB Enterprise Server Edition" page opens.

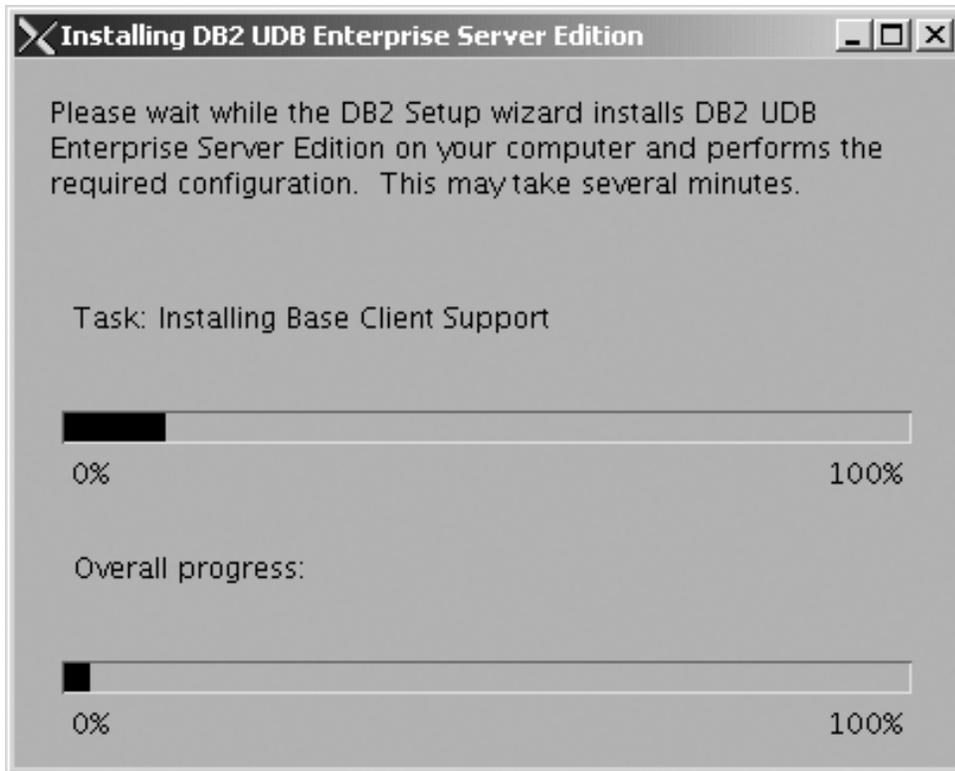


Figure 107. DB2 Setup wizard - Installing DB2 UDB Enterprise Server Edition page

When the installation completes, the "Setup is complete" page opens.

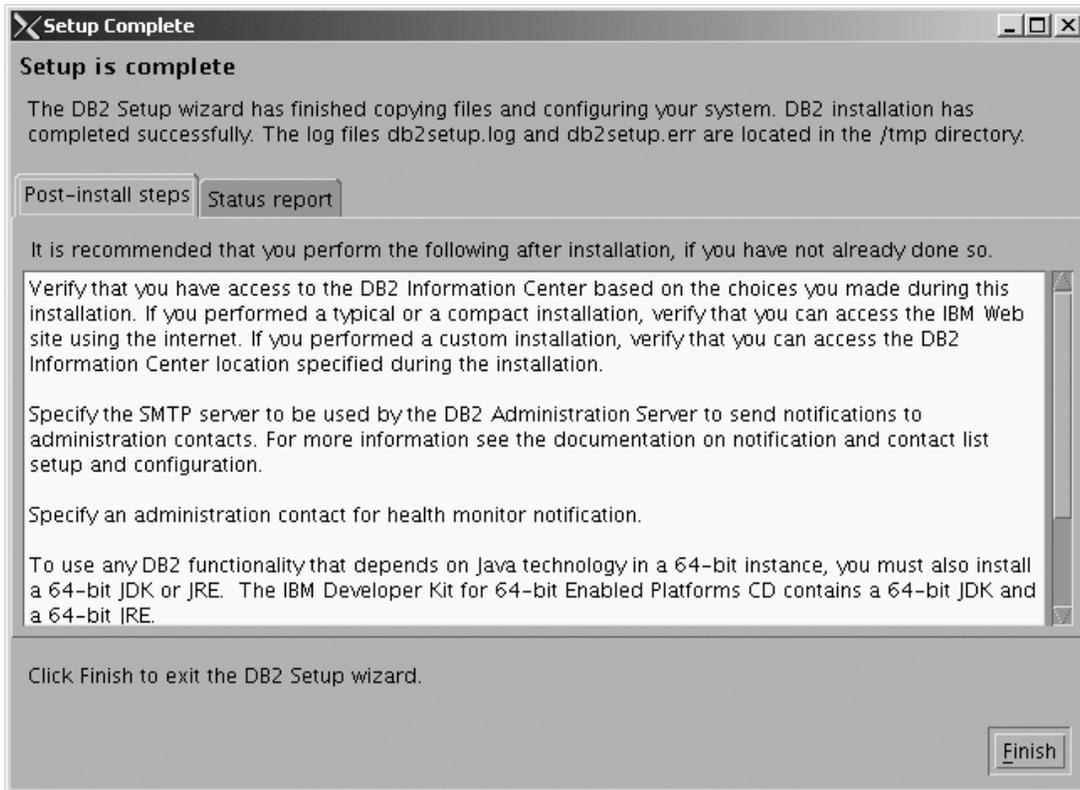


Figure 108. DB2 Setup wizard - Setup is complete page

Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Enterprise Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Installing DB2 UDB Enterprise Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Enterprise Server Edition on the Solaris Operating Environment 8 for a Common Criteria compliant installation.

Prerequisites:

- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- Solaris Operating Environment 8 must be installed on the computer.
- You must have the installation CD mounted.
- The user names to be used for the following:
 - The DB2 instance owner
 - The DB2 Administration Server
 - The fenced user

If you do not have these user names, obtain them from your system administrator. For more information about these users, see "DB2 users and

group (UNIX)” on page 14. For information about creating these users, see “Creating group and user IDs for a DB2 UDB installation (UNIX)” on page 38.

Procedure:

Use the following steps to install DB2 UDB Enterprise Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant environment.

1. On the “IBM DB2 Setup Launchpad”, click **Install Products**.

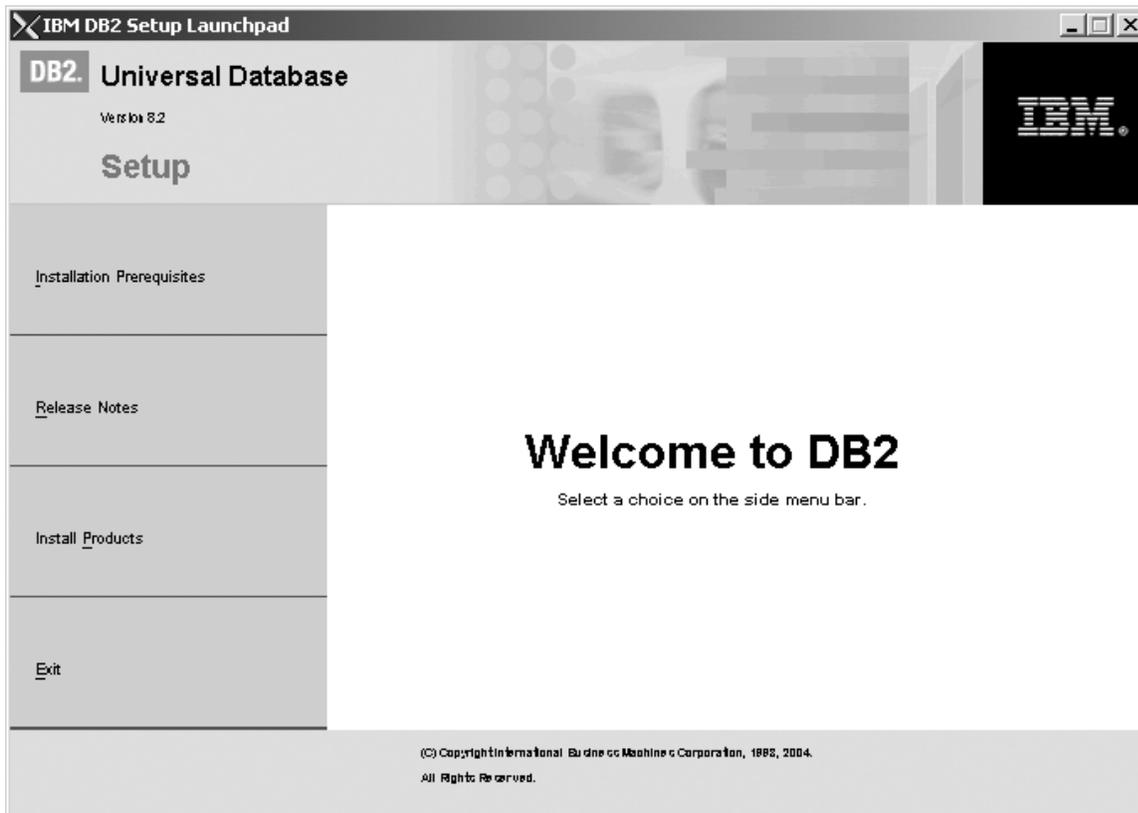


Figure 109. IBM DB2 Setup Launchpad

2. On the second page of the “IBM DB2 Setup Launchpad”:
 - a. In the **Select the product you would like to install box**, select **DB2 UDB Enterprise Server Edition**, as follows:

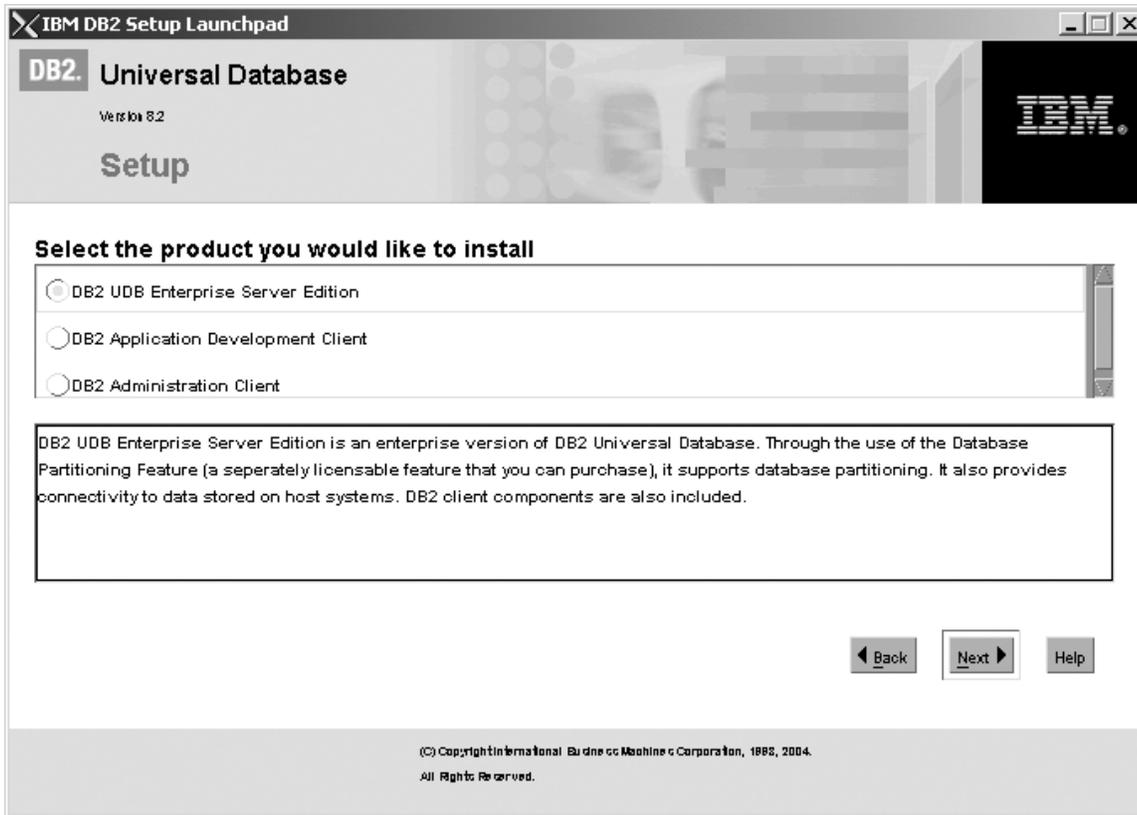


Figure 110. IBM DB2 Setup Launchpad with DB2 UDB Enterprise Server Edition selected

- b. Click **Next**. In a few moments, the "DB2 Setup wizard" opens, as follows:

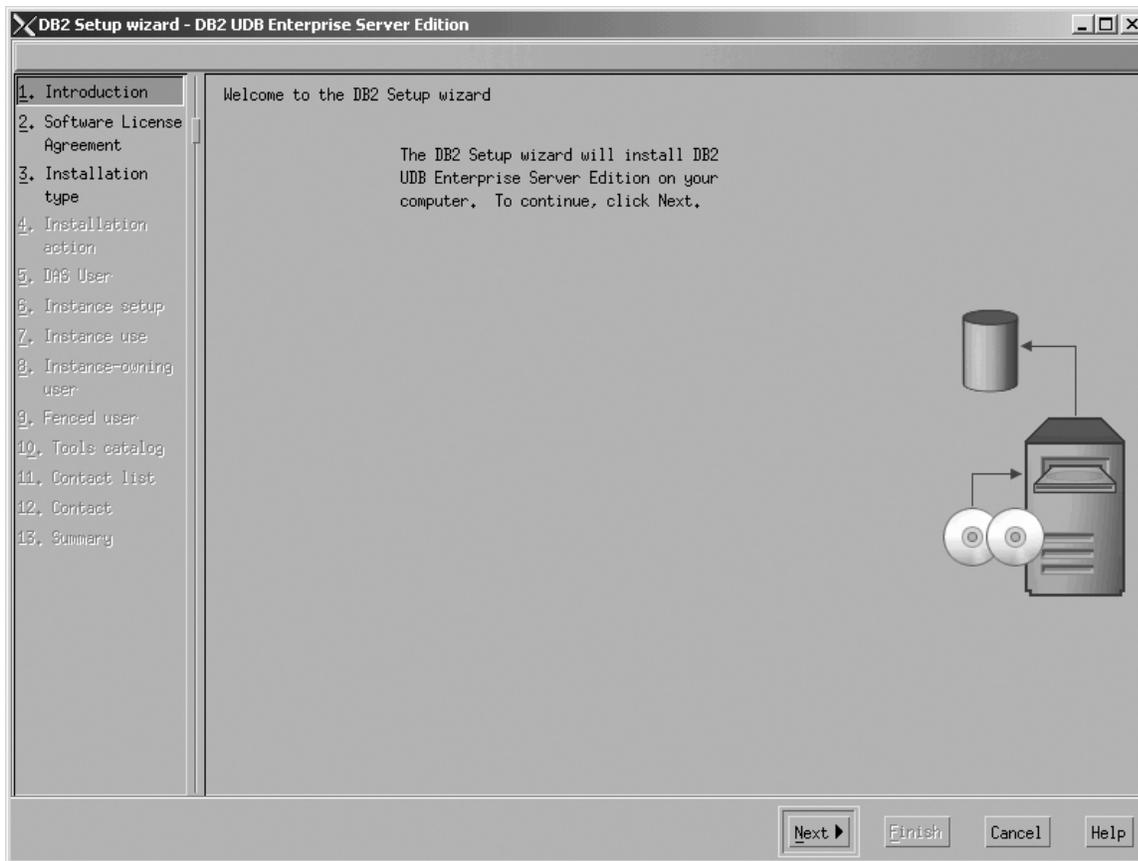


Figure 111. DB2 Setup wizard

- c. Click **Next**. The "Software License Agreement" page opens.
3. On the "Software License Agreement" page:
 - a. Click the **Accept** radio button.

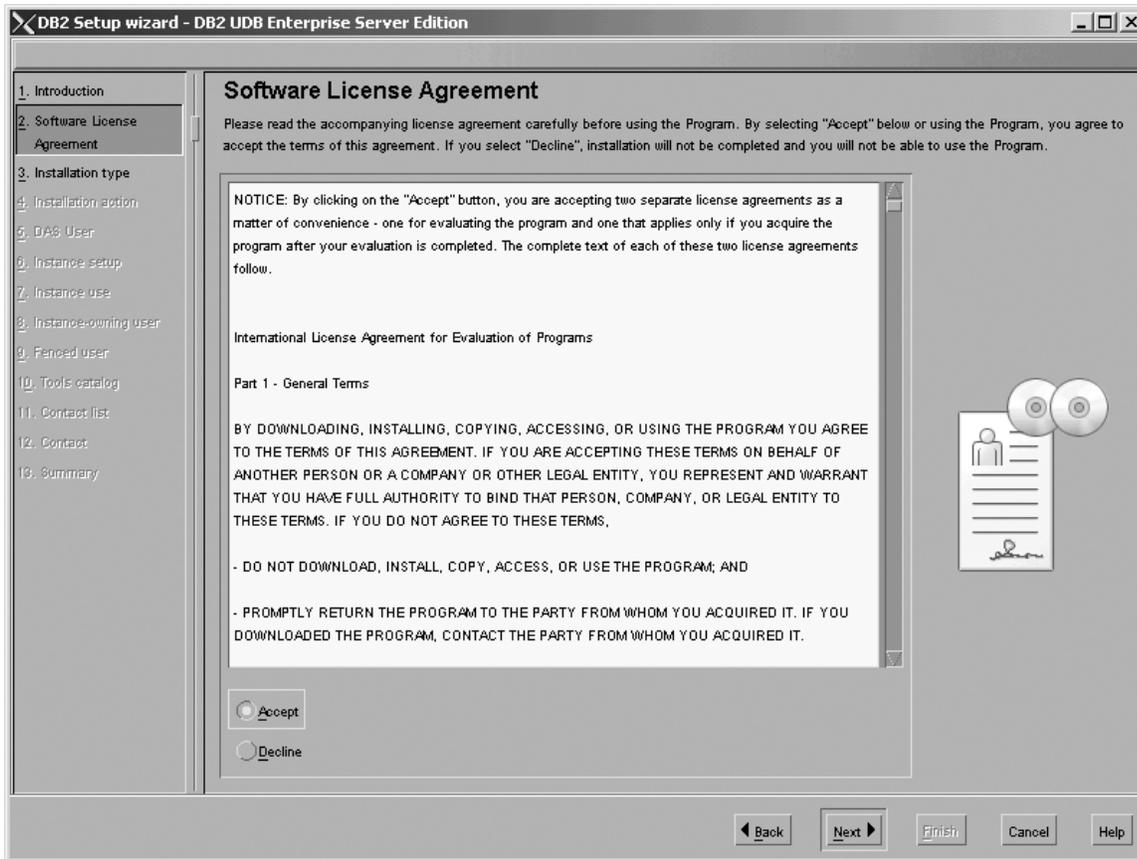


Figure 112. DB2 Setup wizard - Software License Agreement page

- b. Click **Next**. The "Select the installation type" page opens.
4. On the "Select the installation type" page:
 - a. Select the **Custom** radio button:

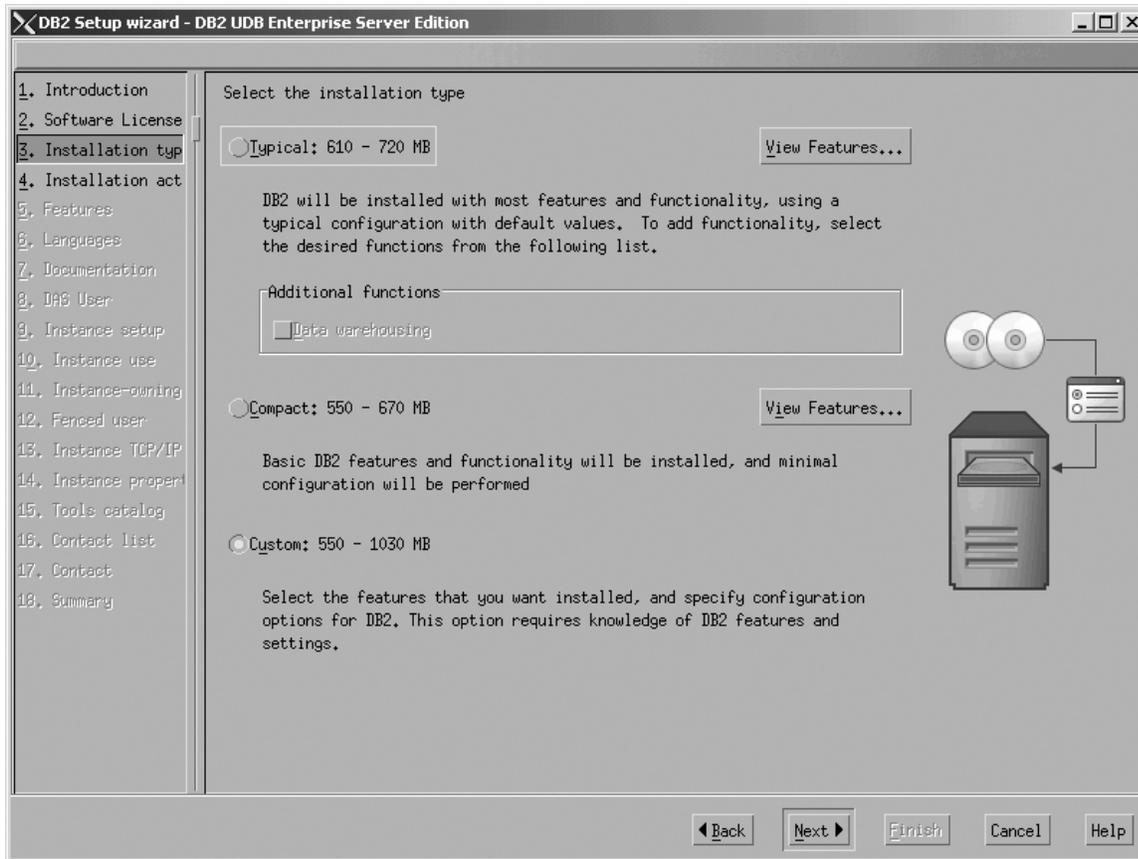


Figure 113. DB2 Setup wizard - Select the installation type page

- b. Click **Next**. The "Select the installation action" page opens.
5. On the "Select the installation action" page:
 - a. Select the **Install DB2 UDB Enterprise Server Edition on this computer** check box.

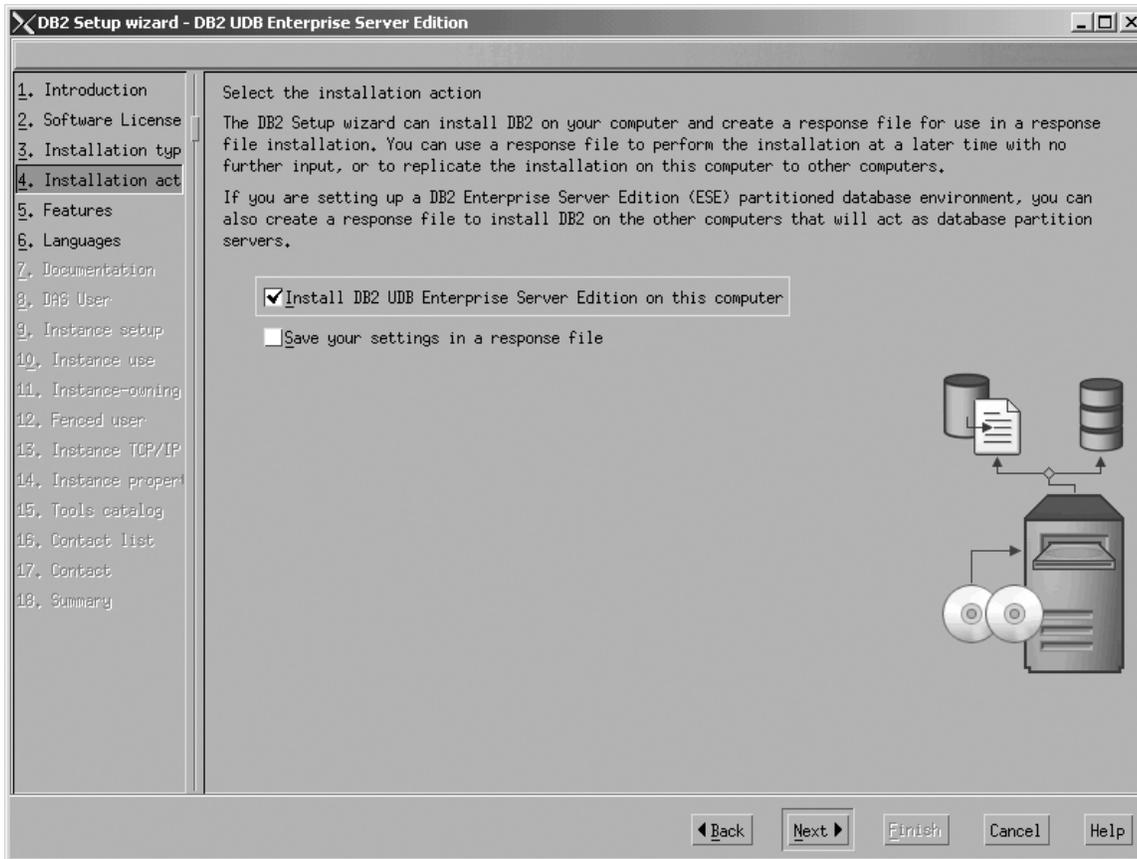


Figure 114. DB2 Setup wizard - Select the installation action page

- b. Click **Next**. The "Select the features to install" page opens.
6. On the "Select the features to install" page:
 - a. Open the + beside **Server support**, then select the check box beside **DB2 Data Source Support** (so that the check mark is removed). This action prevents the **DB2 Data Source Support** option from being installed.

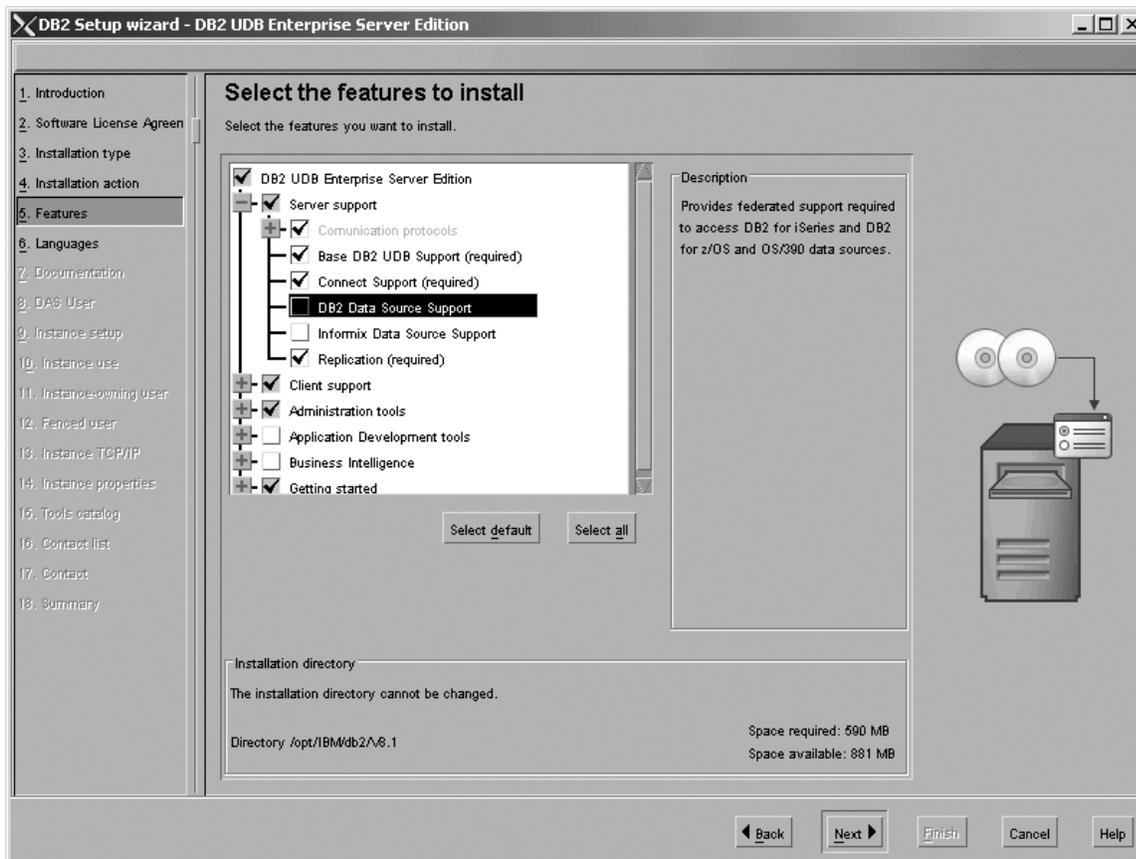


Figure 115. DB2 Setup wizard - Select the features to install page; DB2 Data Source Support option deselected for installation

- b. Open the + beside **Client support**, then select the check box beside **DB2 LDAP Support**. This action prevents the **DB2 LDAP Support** option from being installed.

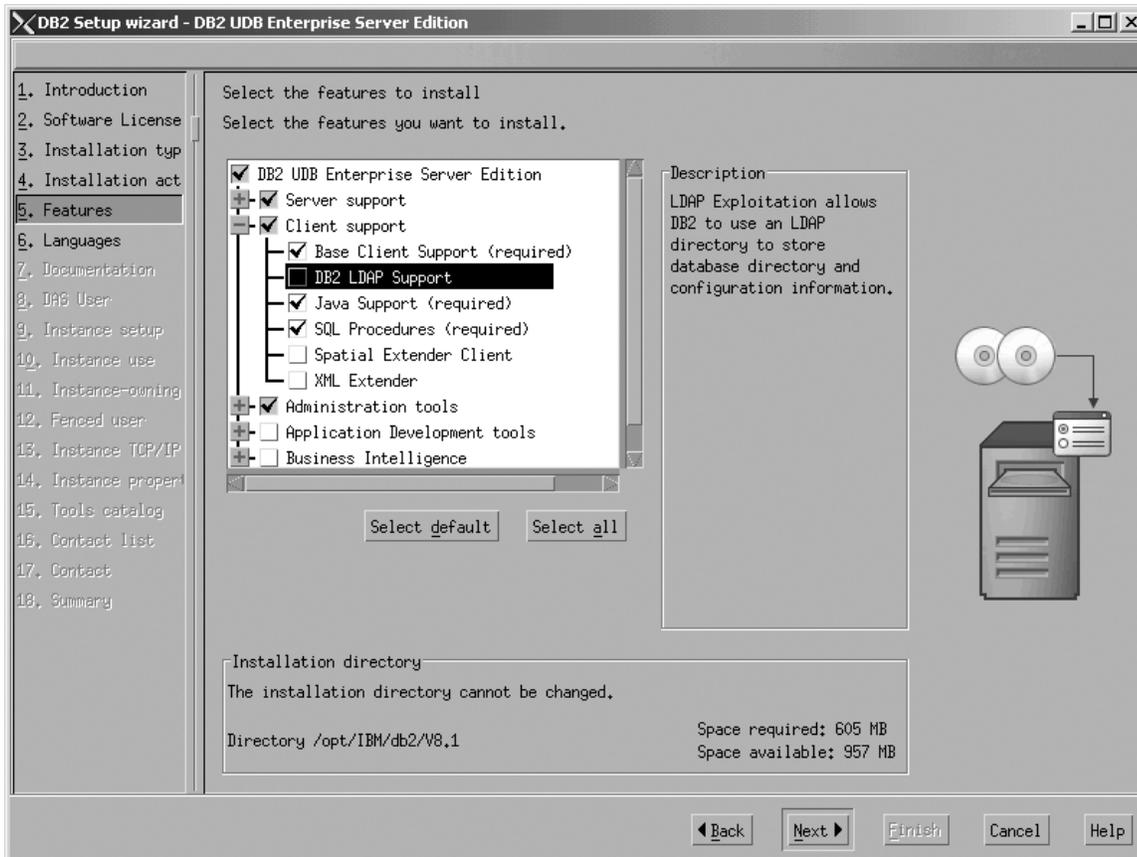


Figure 116. DB2 Setup wizard - Select the features to install page; DB2 LDAP Support option deselected for installation

- c. Open the + beside **Administration tools**, then deselect all the checked options to remove them from the list of options being installed. Note that you must deselect the **Configuration Assistant** option last.

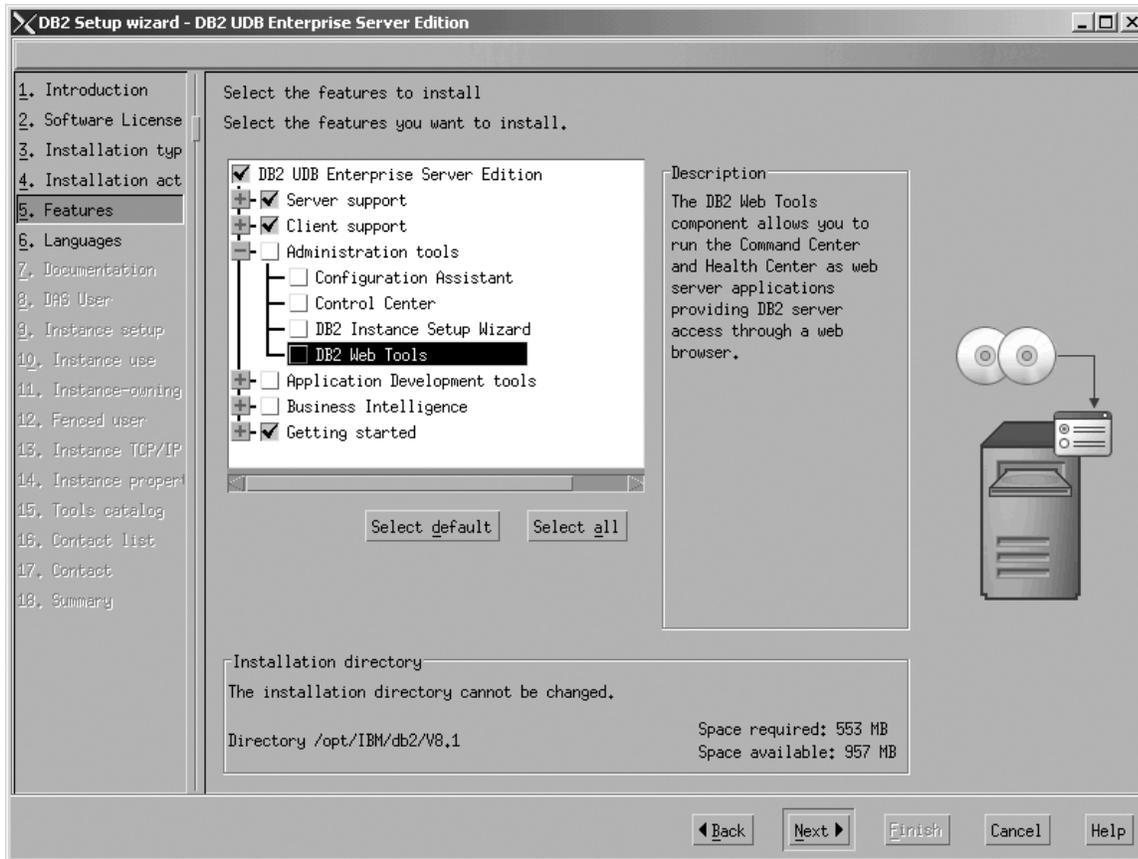


Figure 117. DB2 Setup wizard - Select the features to install page; all Administration tools options deselected for installation

- d. Open the + beside **Application Development Tools**, then select the **Base Application Development Tools** option so that this option gets installed.

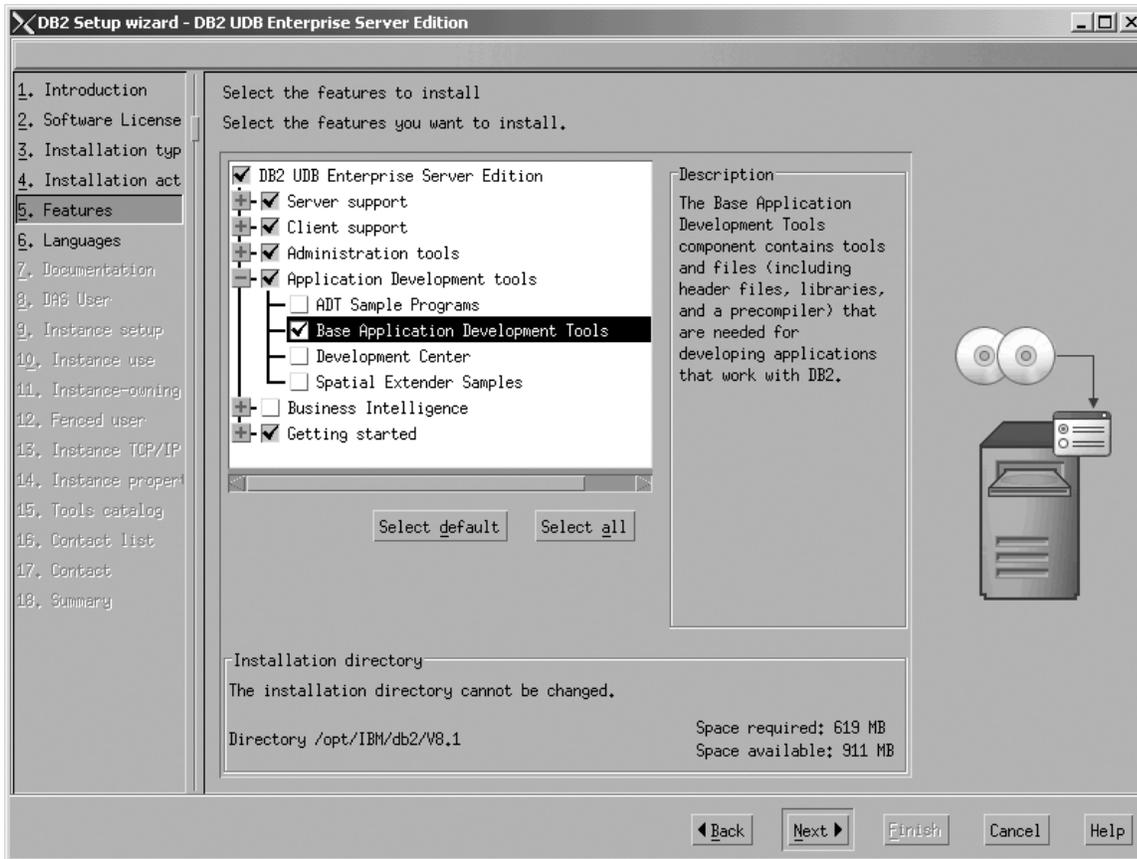


Figure 118. DB2 Setup wizard - Select the features to install page; Base Application Development Tools option selected for installation

- e. Open the + beside **Getting started**, then deselect the **First Steps** option so that this option does not get installed.

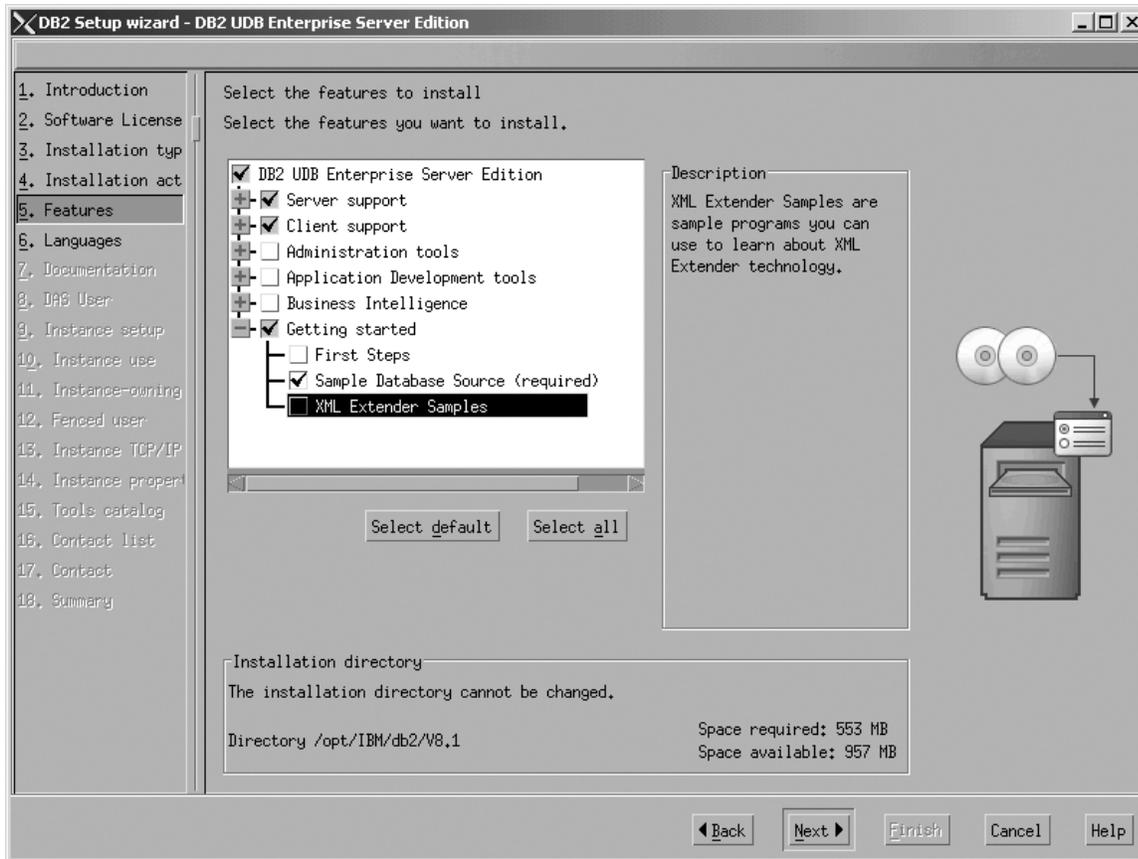


Figure 119. DB2 Setup wizard - Select the features to install page; First Steps option deselected for installation

- f. Click **Next**. The "Languages" page opens.
7. On the "Languages" page, English is the only language support that is installed by default.

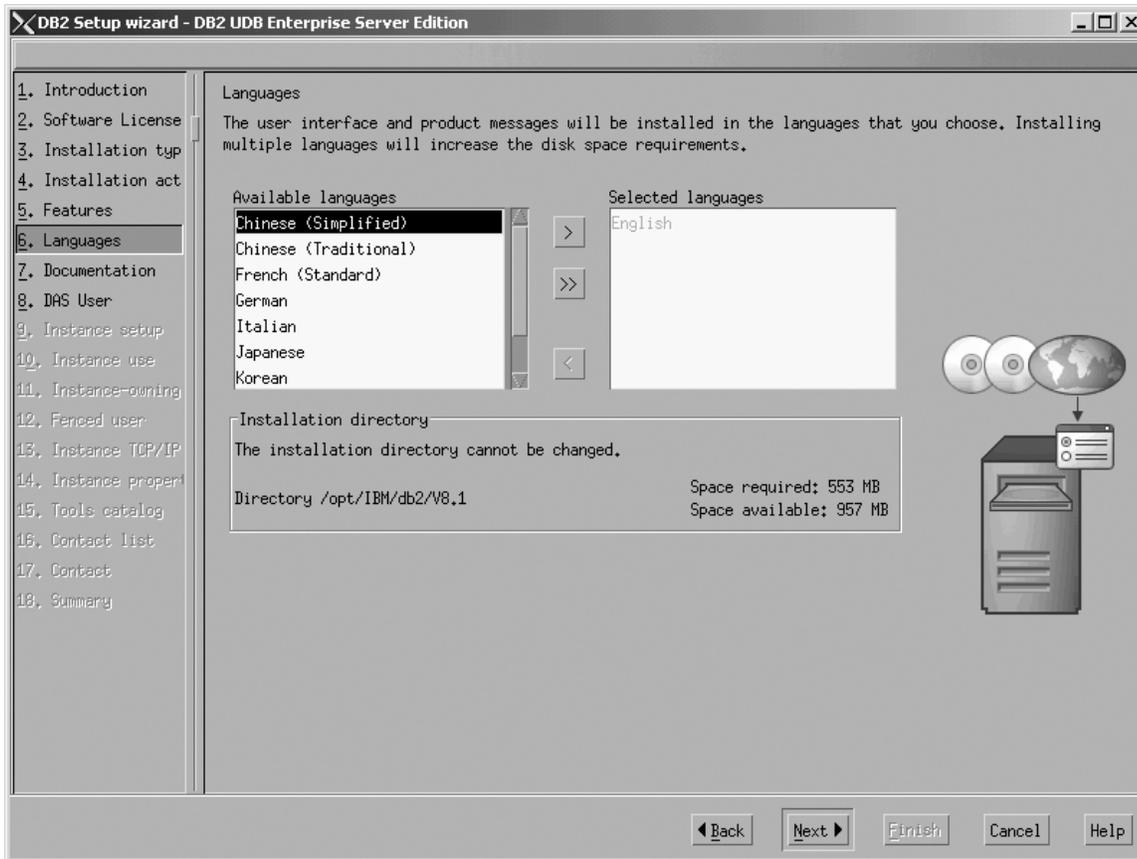


Figure 120. DB2 Setup wizard - Languages page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
8. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

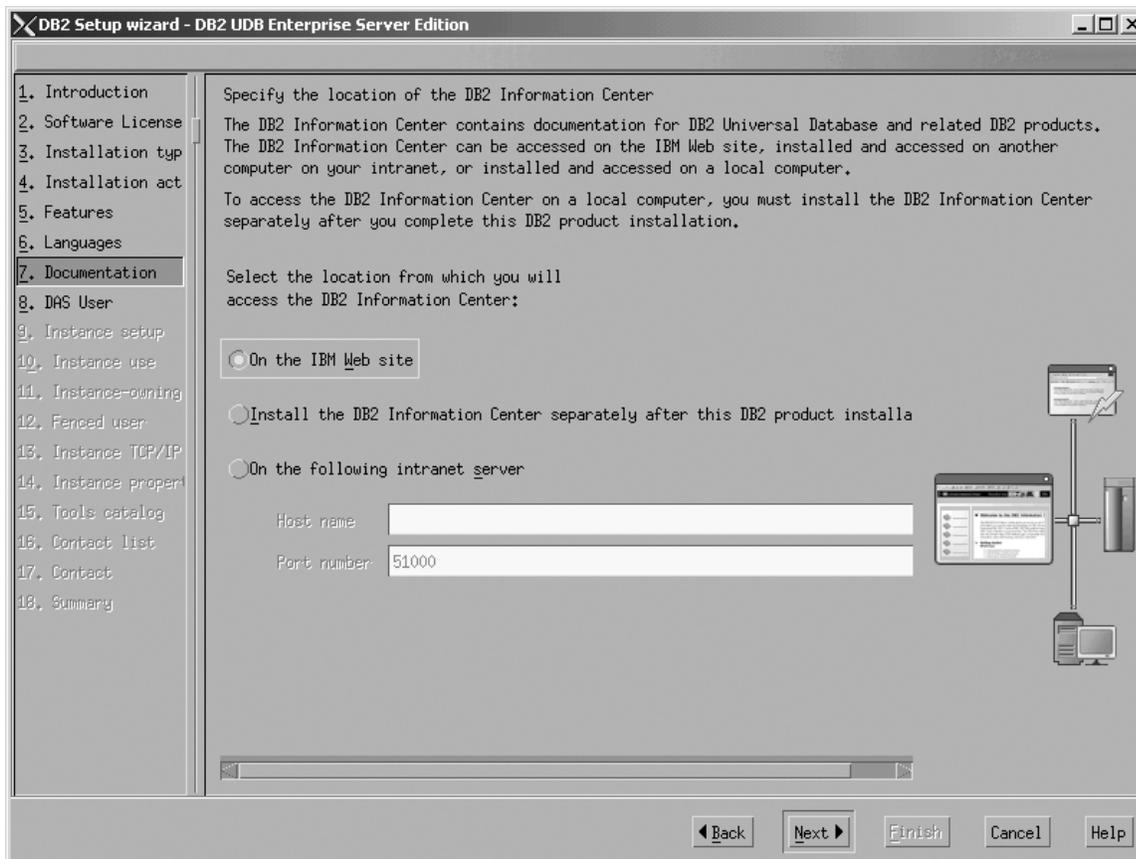


Figure 121. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
9. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

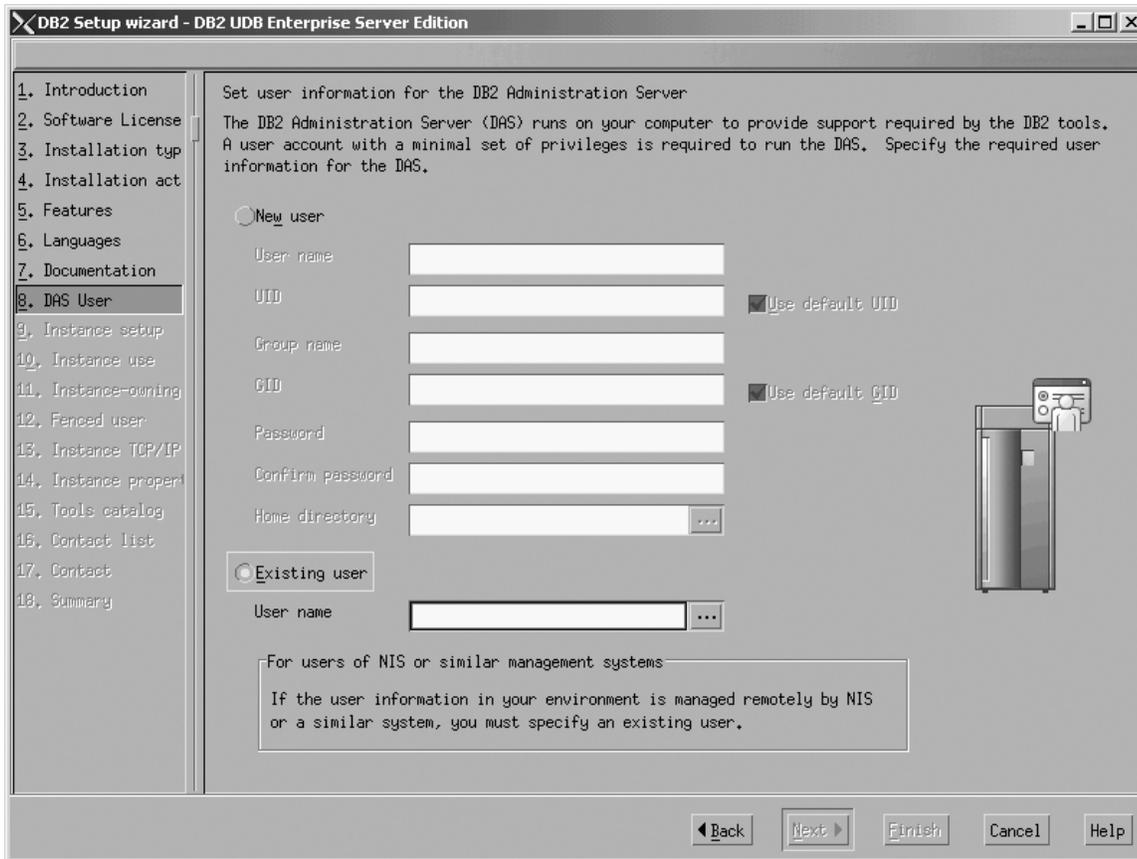


Figure 122. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- c. Click **Next**. The "Set up a DB2 instance" page opens.
- 10. On the "Set up a DB2 instance" page:
 - a. Select the **Create a DB2 instance - 64 bit** radio button.

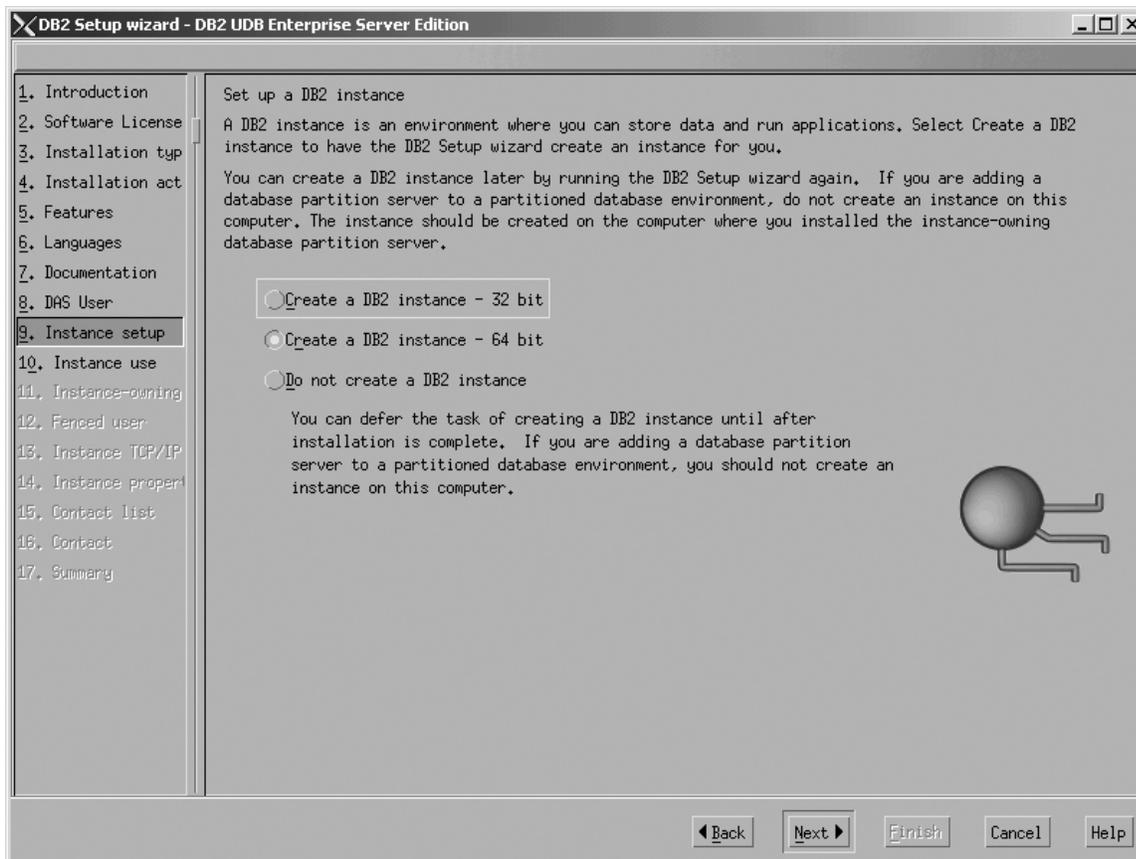


Figure 123. DB2 Setup wizard - Set up a DB2 instance page; Create a DB2 instance - 64 bit selected

b. Click **Next**. The following warning is displayed:



Figure 124. Warning message box

c. Click **OK**. The "Select how the instance will be used" page opens.

11. On the "Select how the instance will be used" page:
 - a. Select the **Single-partition instance** radio button.

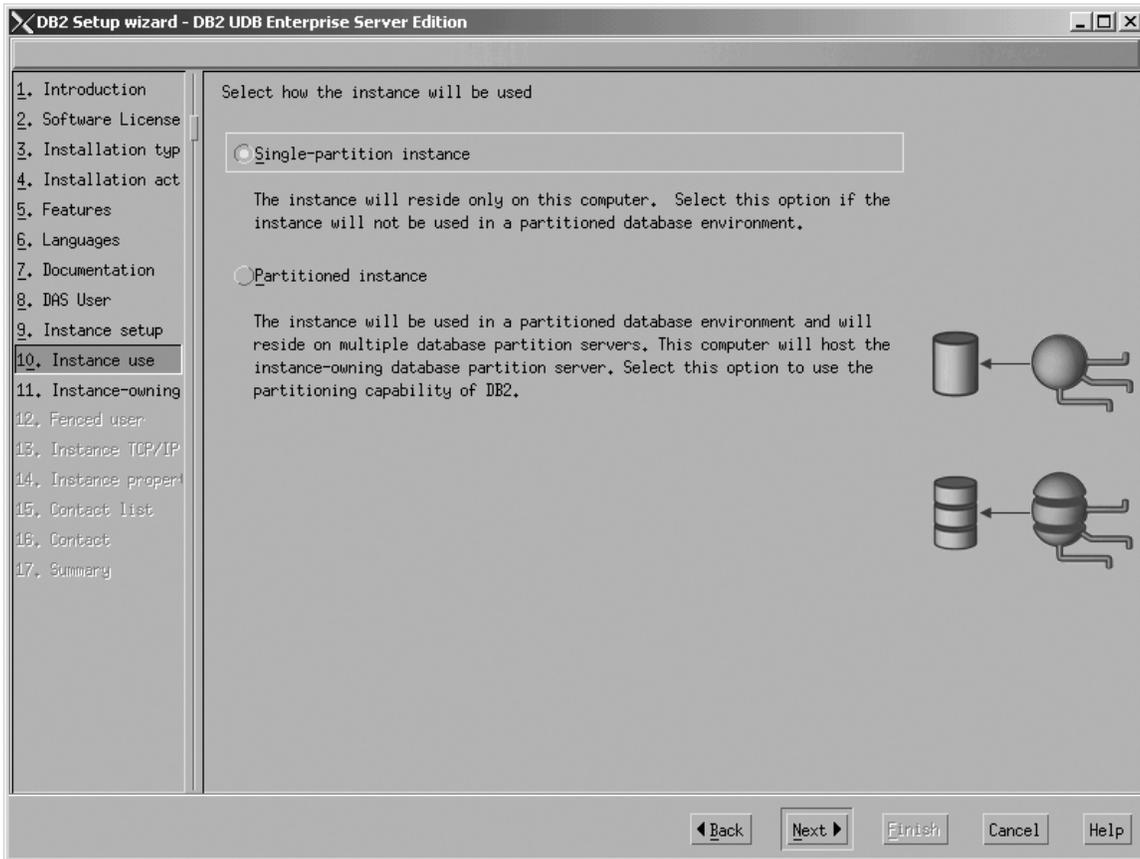


Figure 125. DB2 Setup wizard - Select how the instance will be used page; Single-partition instance selected

- b. Click **Next**. The "Set user information for the DB2 instance owner" page opens.
12. On the "Set user information for the DB2 instance owner" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

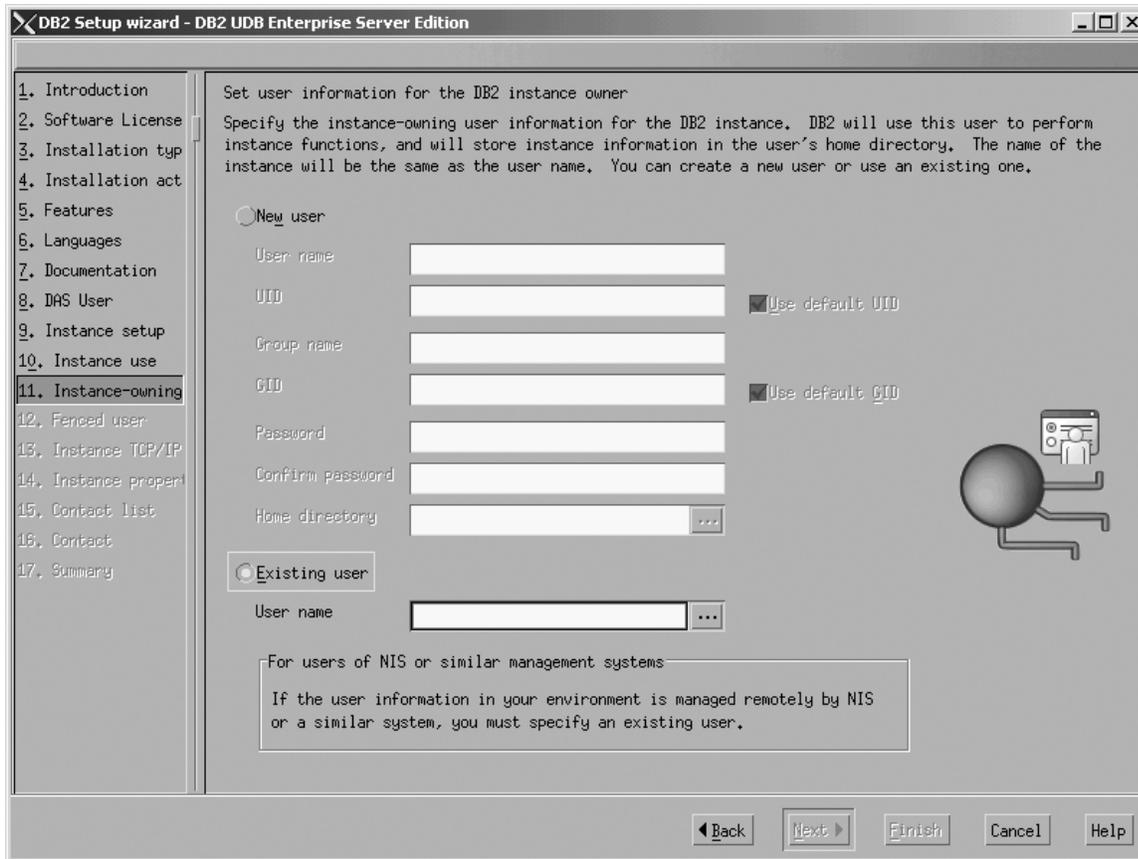


Figure 126. DB2 Setup wizard - Set user information for the DB2 instance owner page

- |
- | c. Click **Next**. The "Set user information for the fenced user" page opens.
- | 13. On the "Set user information for the fenced user" page:
- | a. Select the **Existing user** radio button.
- | b. Use the ... of the **User name** field to select the user that you want.
- |

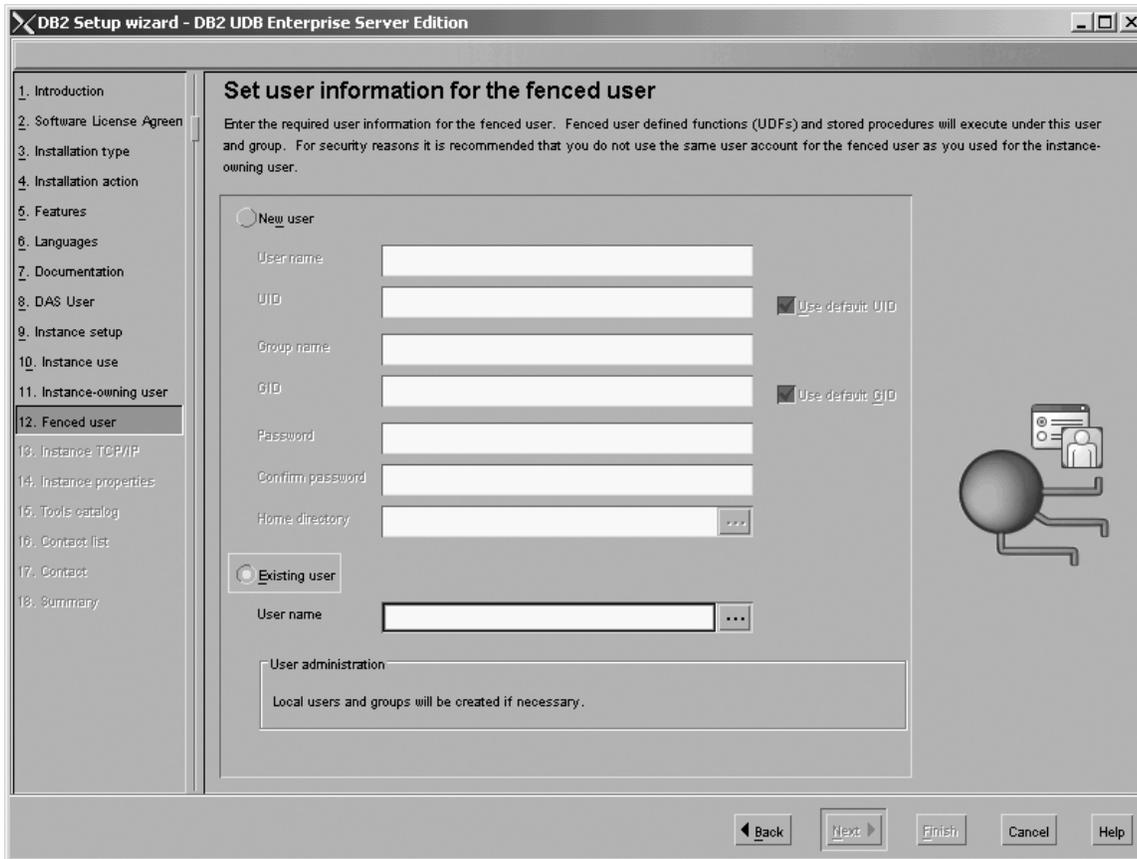


Figure 127. DB2 Setup wizard - Set user information for the fenced user page

- | c. Click **Next**. The "Configure DB2 instance TCP/IP communication" page opens.
- | 14. On the "Configure DB2 instance TCP/IP communication" page:
 - a. Select the **Configure** radio button.

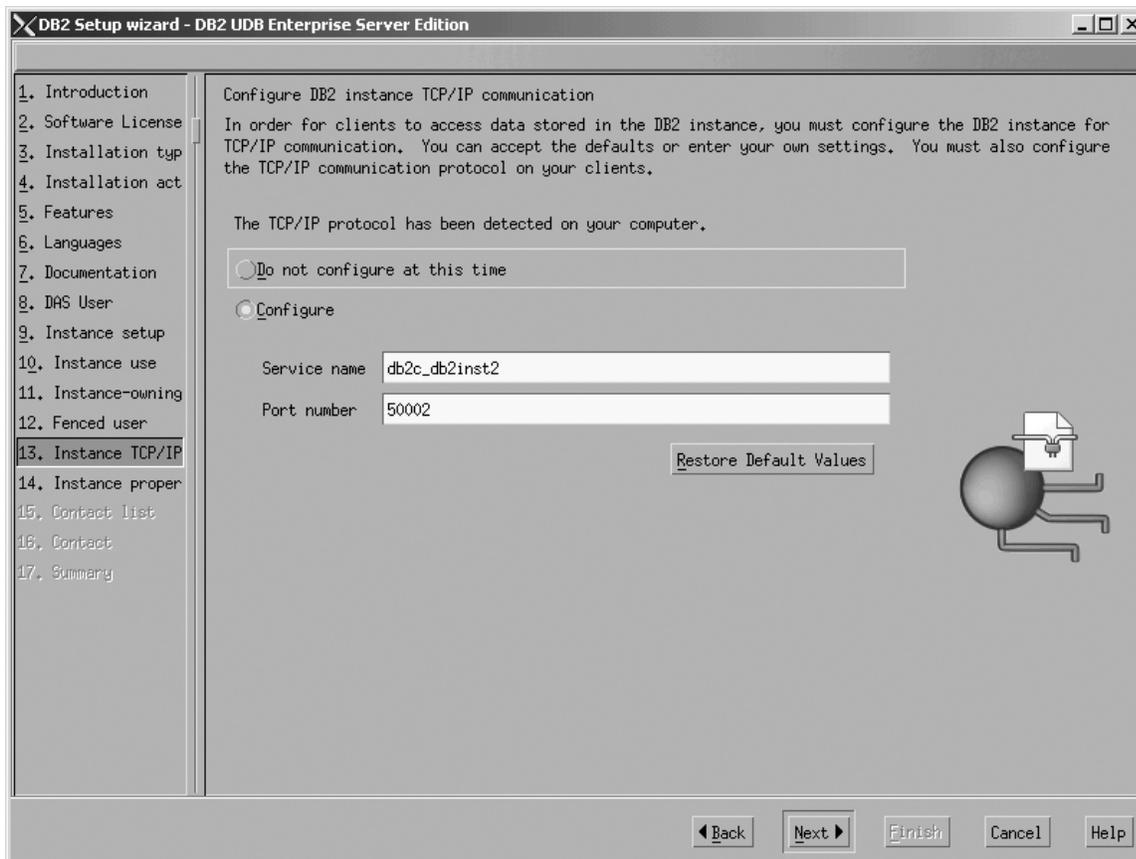


Figure 128. DB2 Setup wizard - Configure DB2 instance TCP/IP communication page

- b. Click **Next**. The "Set instance properties" page opens.
15. On the "Set instance properties" page:
 - a. Deselect the **Autostart the instance at system startup** check box.

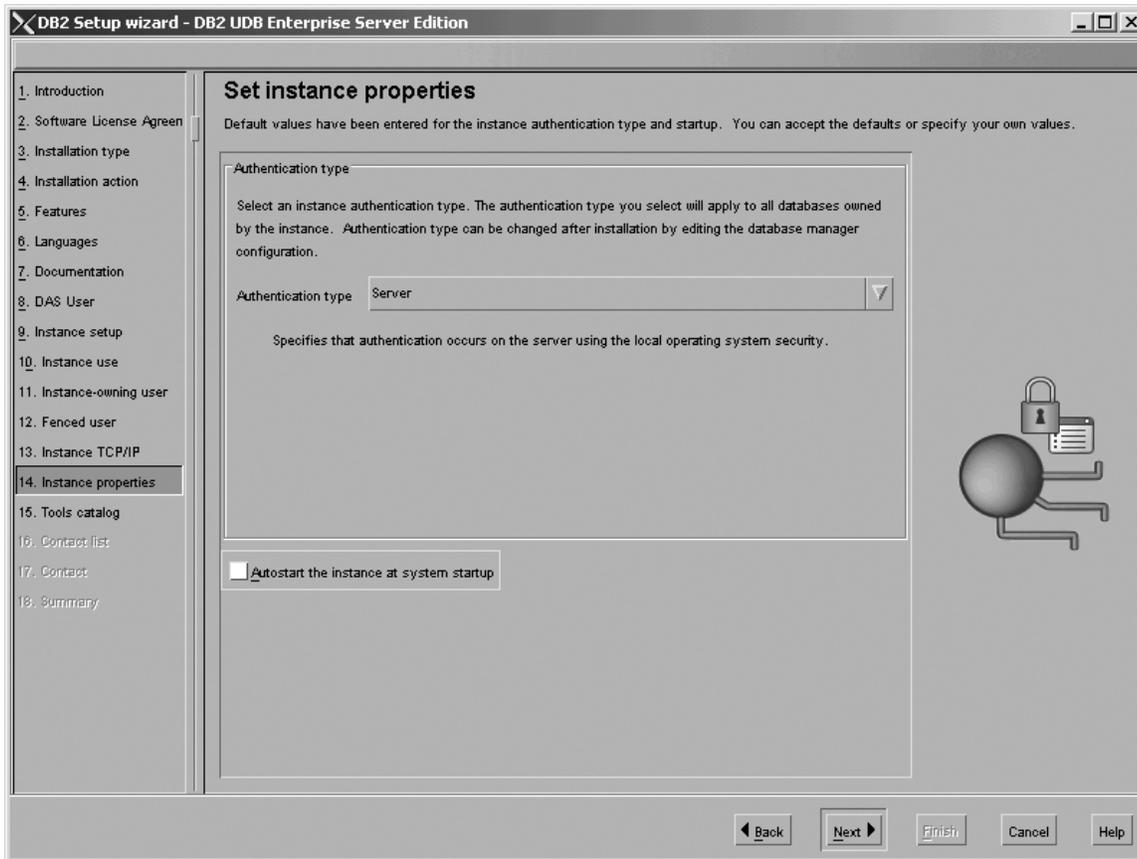


Figure 129. DB2 Setup wizard - Set instance properties page

- b. Click **Next**. The "Set up the administration contact list" page opens.
16. On the "Set up the administration contact list" page:
 - a. Select the **Local - Create a contact list on this system** radio button.
 - b. Ensure that the **Enable notification** check box is deselected.

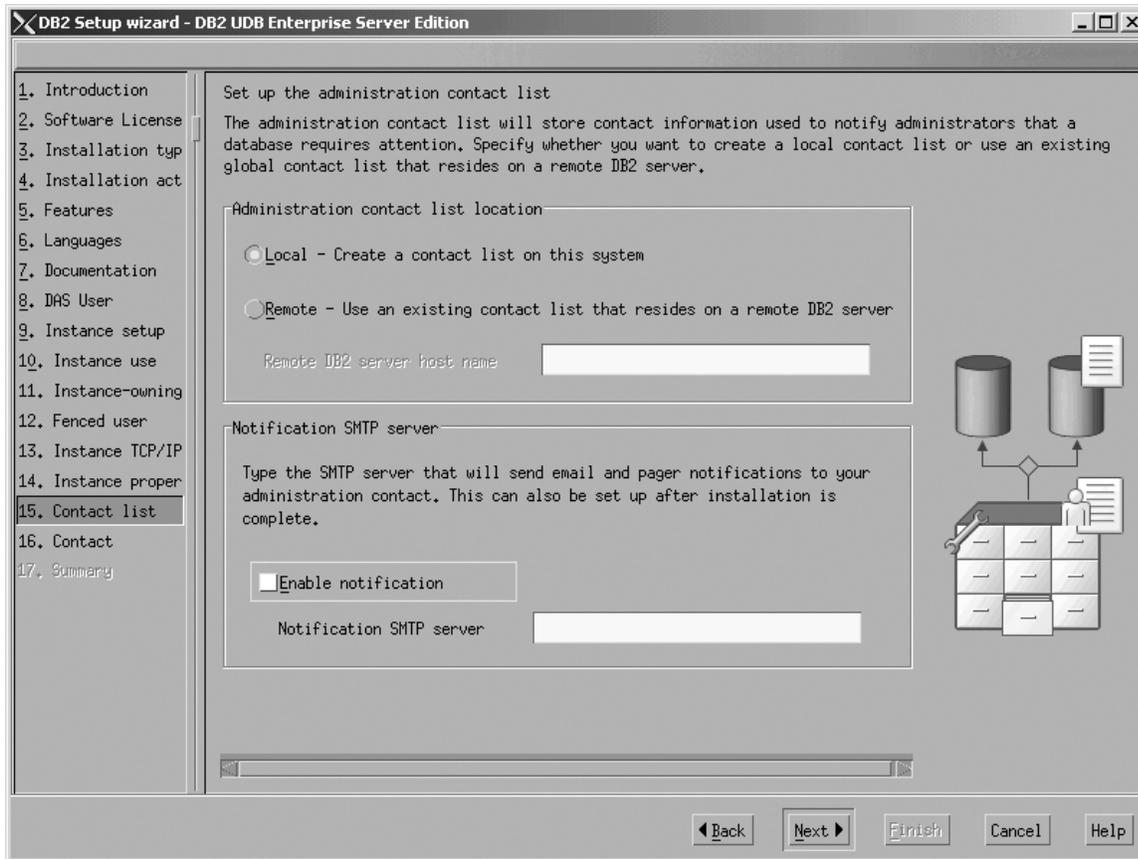


Figure 130. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the "Set up the administration contact list" page, the following warning message is displayed:



Figure 131. DB2 Setup wizard - Warning message

Click **OK**. The "Specify a contact for health monitor notification" page opens.

17. On the "Specify a contact for health monitor notification" page:
 - a. Select the **Defer this task until after installation is complete** radio button.

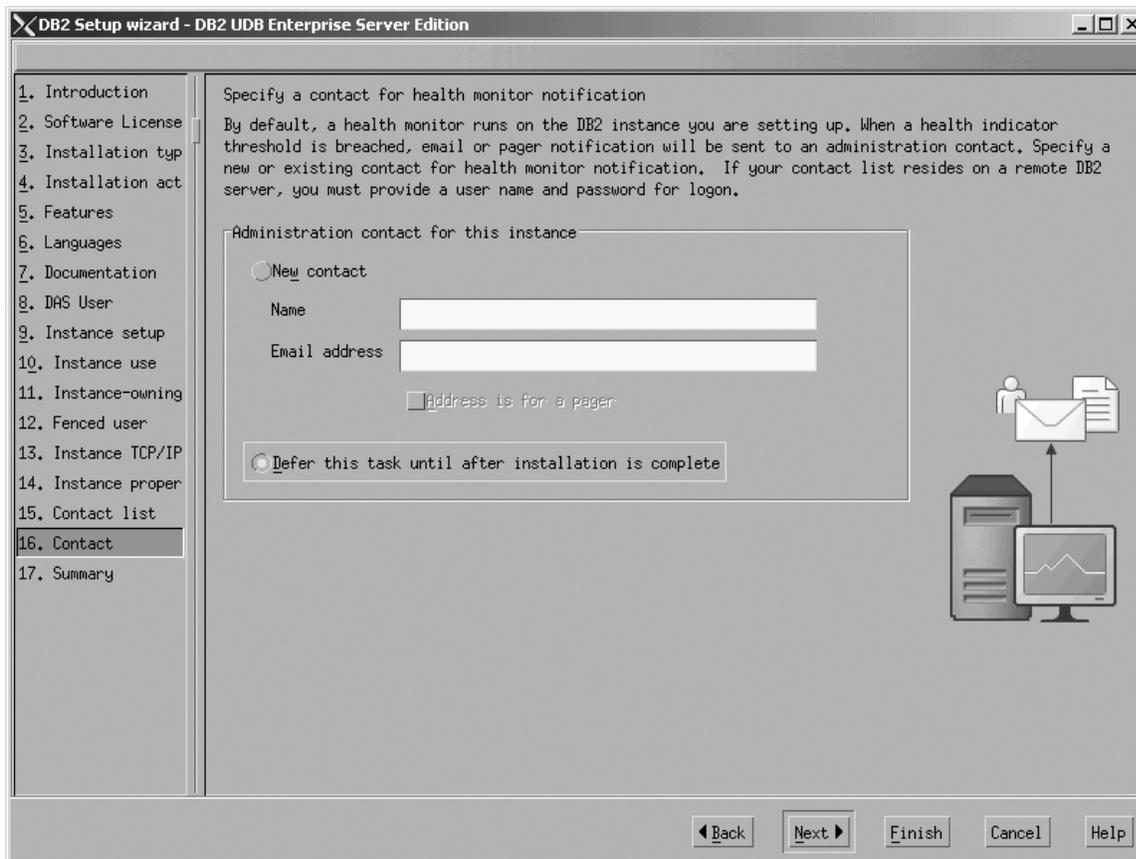


Figure 132. DB2 Setup wizard - Specify a contact for health monitor notification page

- b. Click **Next**. The "Start copying files" page opens.
18. On the "Start copying files" page, click **Finish** to begin installing DB2 UDB Enterprise Server Edition on your computer.

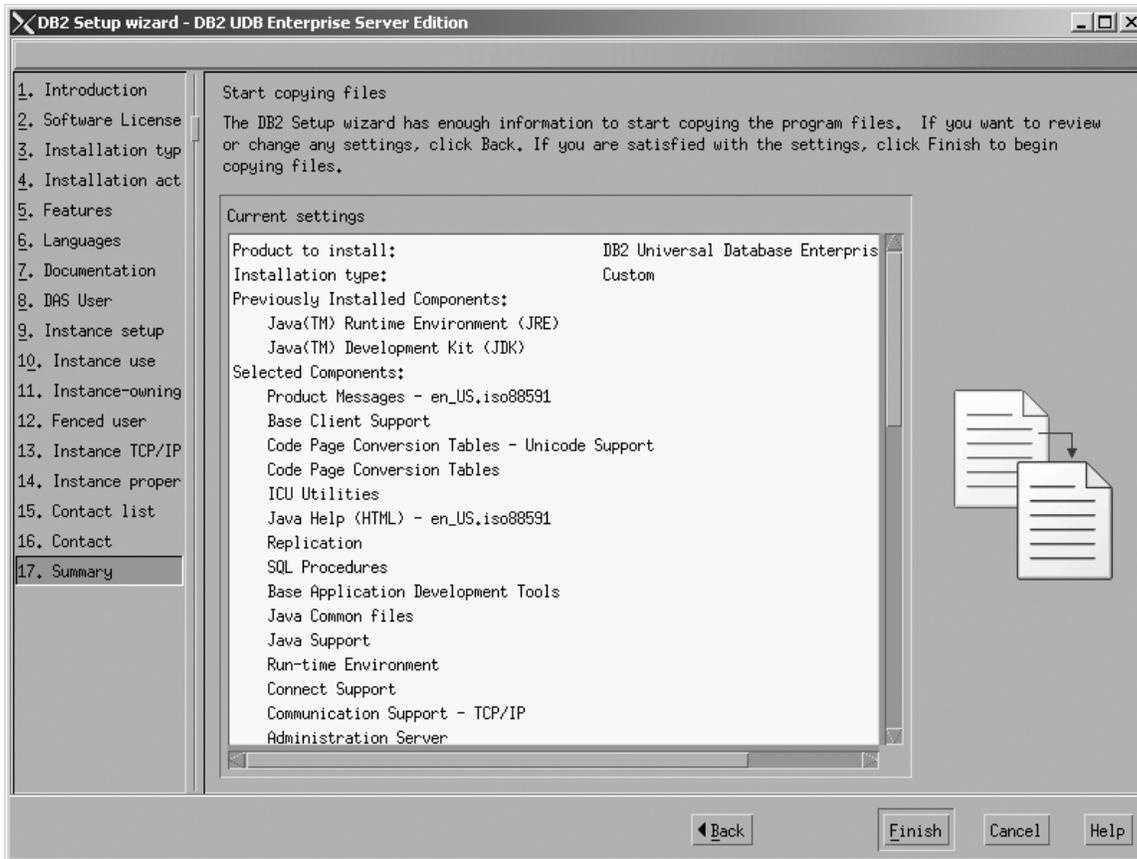


Figure 133. DB2 Setup wizard - Start copying files page

The "Installing DB2 UDB Enterprise Server Edition" page opens.

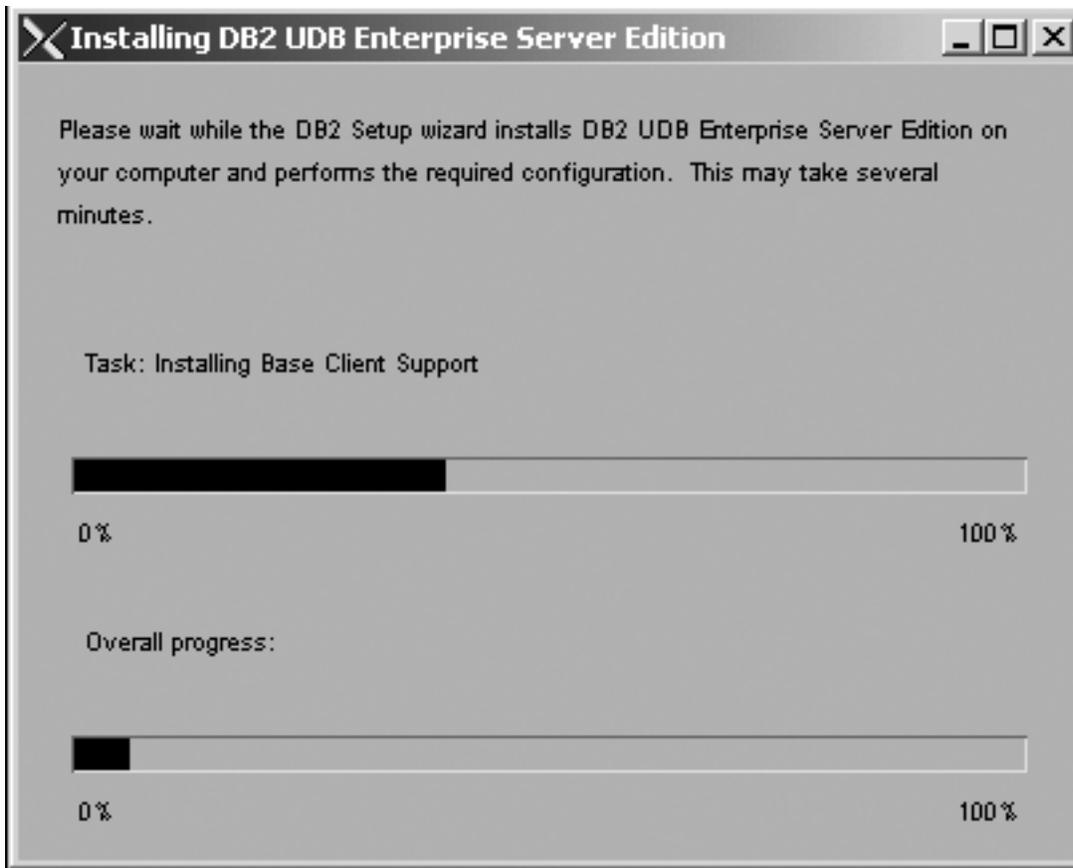


Figure 134. DB2 Setup wizard - Installing DB2 UDB Enterprise Server Edition page

When the installation completes, the "Setup is complete" page opens.

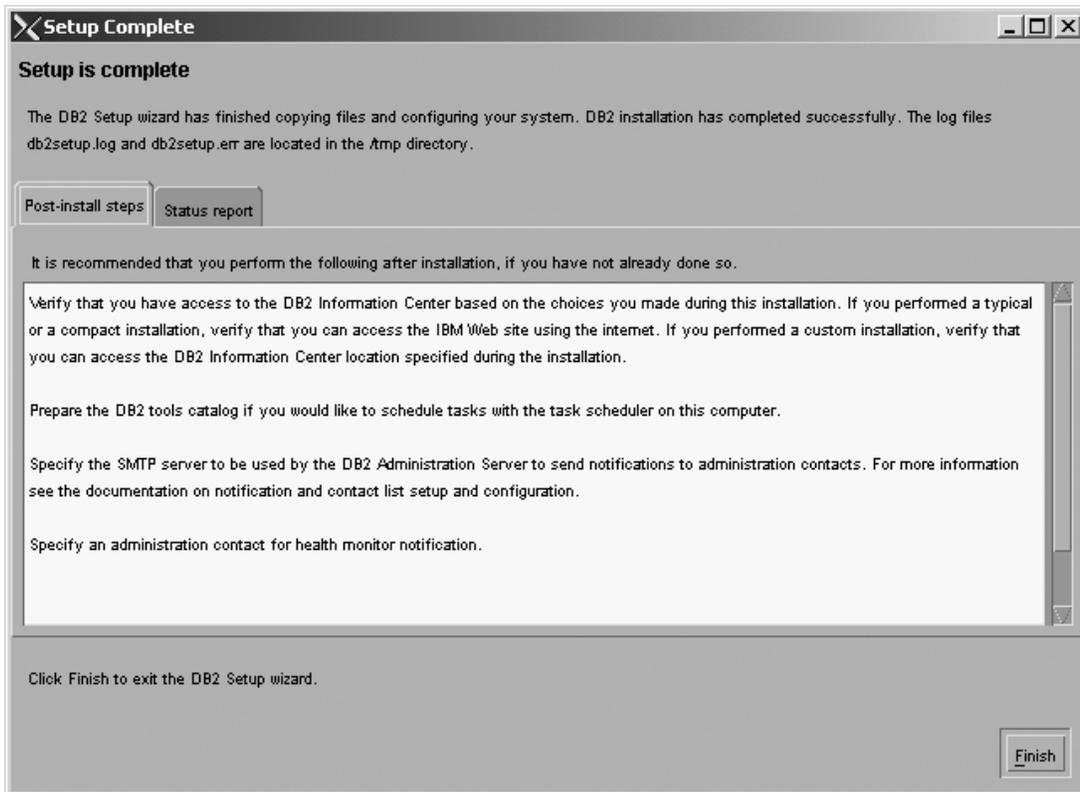


Figure 135. DB2 Setup wizard - Setup is complete page

Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Enterprise Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Installing DB2 UDB Workgroup Server Edition on Linux SuSE for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Workgroup Server Edition on Linux SuSE for a Common Criteria compliant installation.

Prerequisites:

- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- Linux SuSE must be installed on the computer.
- You must have the installation CD mounted.
- The user names to be used for the following:
 - The DB2 instance owner
 - The DB2 Administration Server
 - The fenced user

If you do not have these user names, obtain them from your system administrator. For more information about these users, see "DB2 users and group (UNIX)" on page 14. For information about creating these users, see "Creating group and user IDs for a DB2 UDB installation (UNIX)" on page 38.

Procedure:

Use the following steps to install DB2 UDB Workgroup Server Edition on Linux SuSe for a Common Criteria compliant environment.

1. On the "IBM DB2 Setup Launchpad", click **Install Products**.

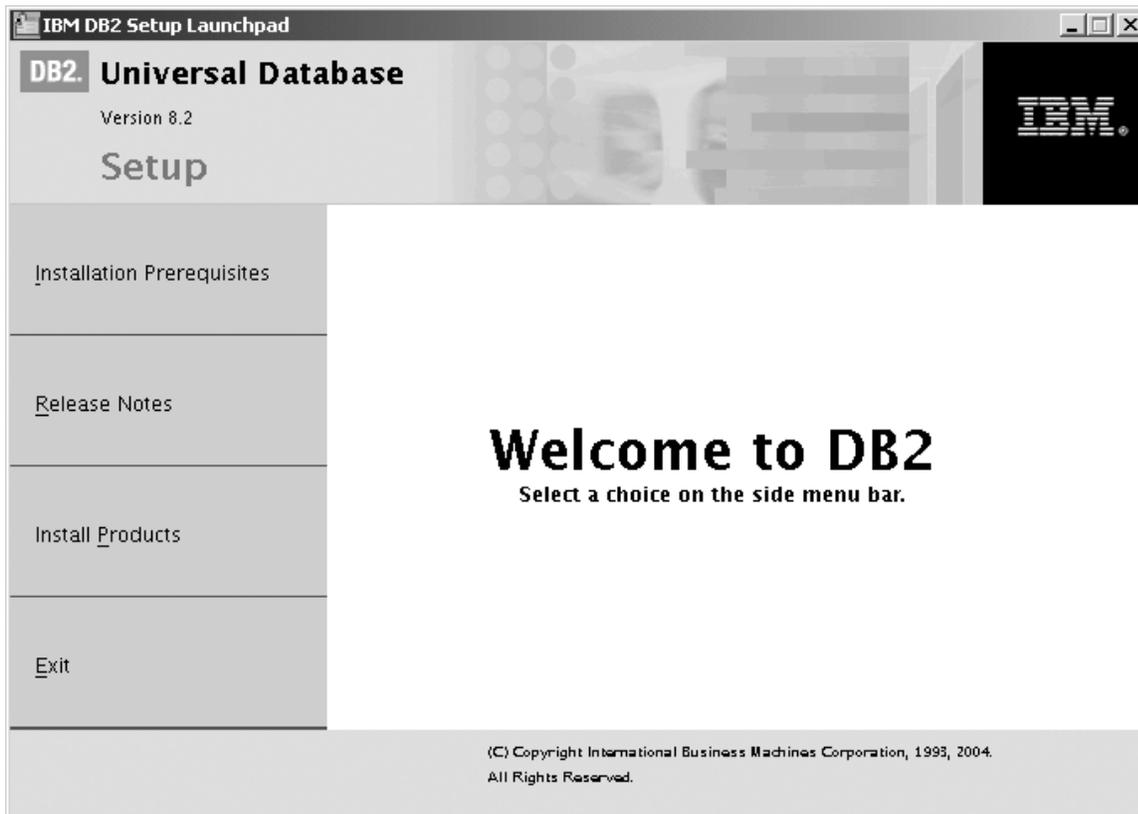


Figure 136. IBM DB2 Setup Launchpad

2. On the second page of the "IBM DB2 Setup Launchpad":
 - a. In the **Select the product you would like to install box**, select **DB2 UDB Workgroup Server Edition**, as follows:

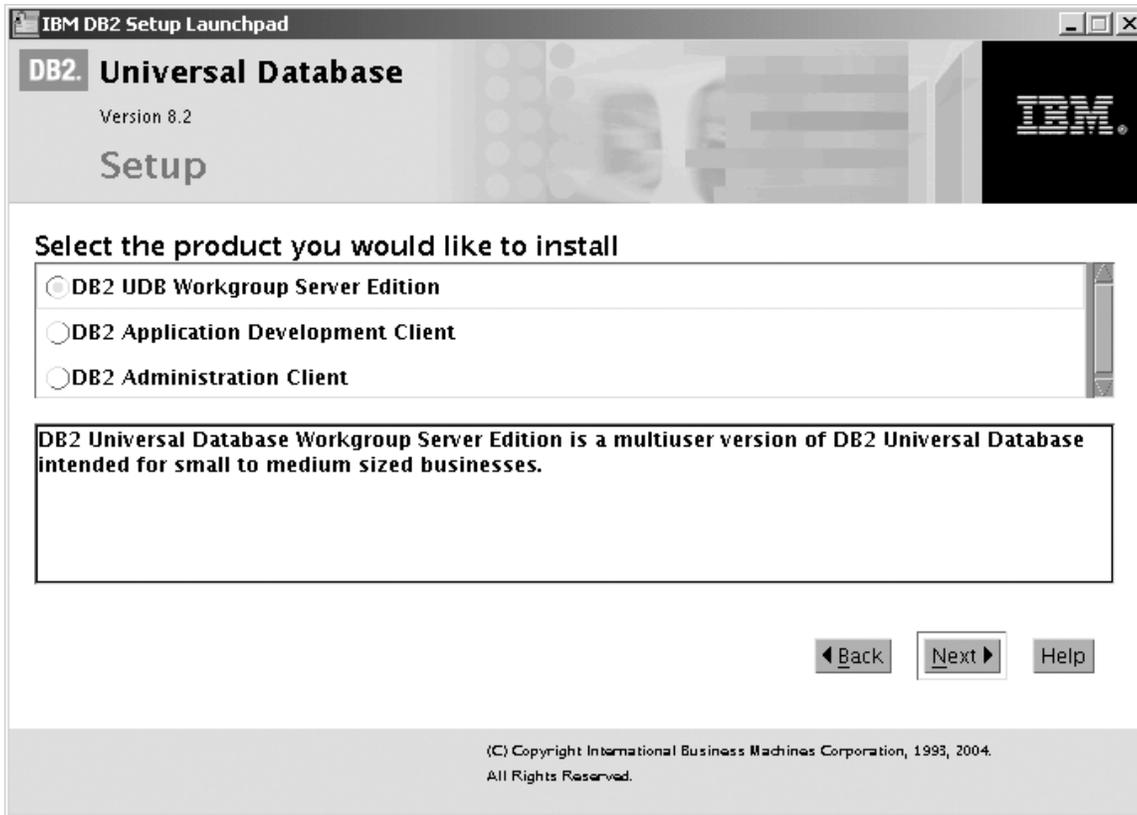


Figure 137. IBM DB2 Setup Launchpad with DB2 UDB Workgroup Server Edition selected

- b. Click **Next**. In a moment, the "DB2 Setup wizard" opens, as follows:

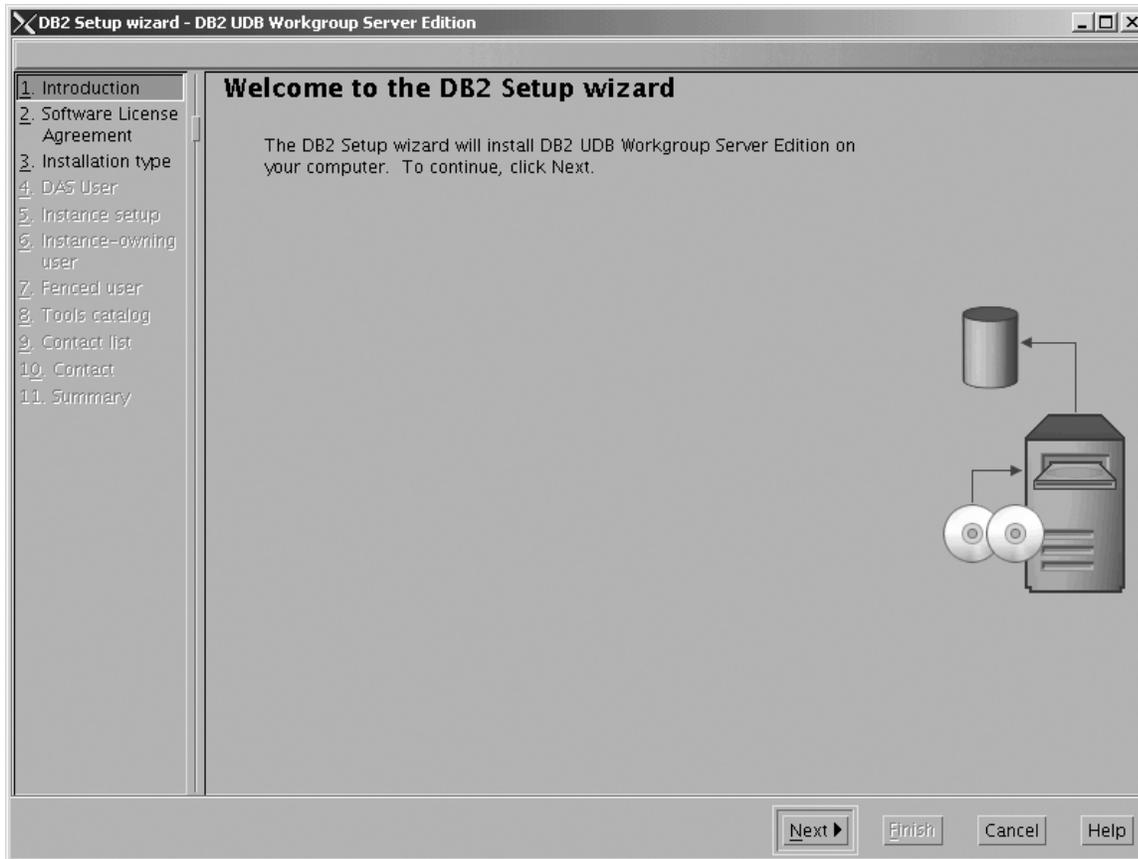


Figure 138. DB2 Setup wizard

- c. Click **Next**. The "Software License Agreement" page opens.
3. On the "Software License Agreement" page:
 - a. Click the **Accept** radio button.

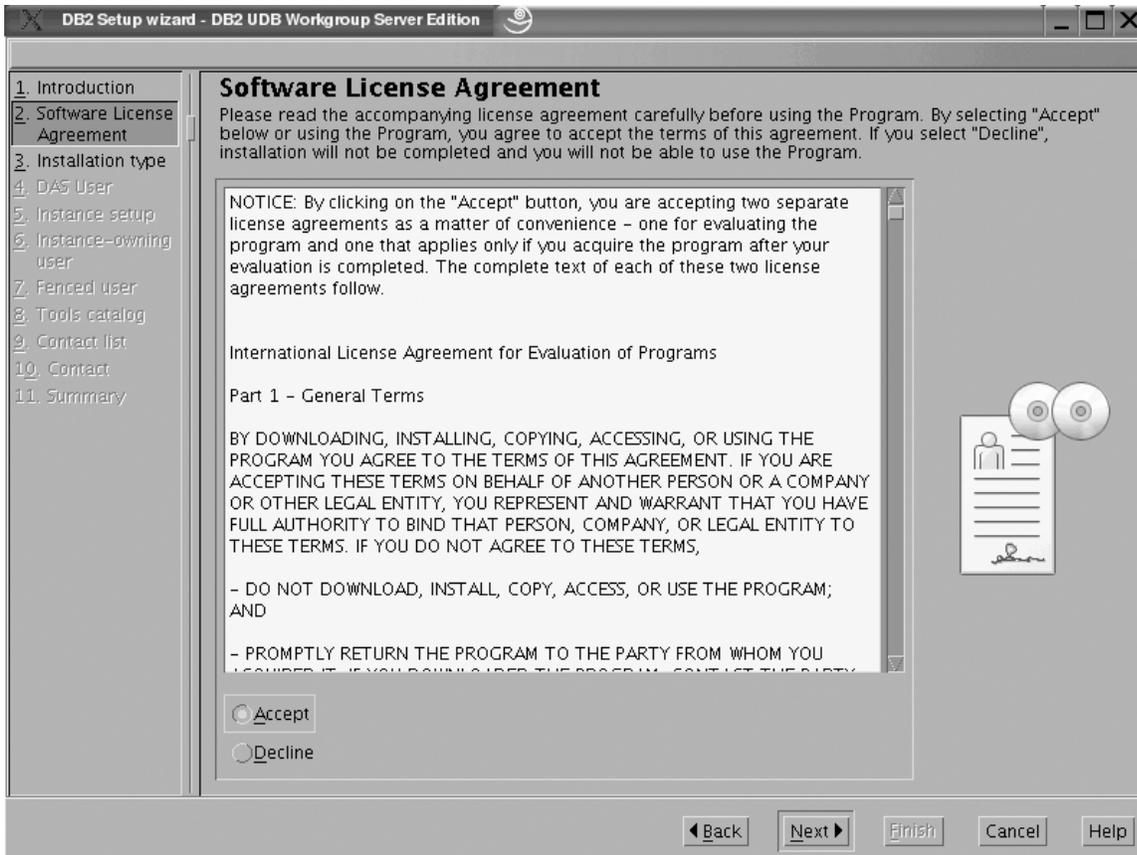


Figure 139. DB2 Setup wizard - Software License Agreement page

- b. Click **Next**. The "Select the installation type" page opens.
4. On the "Select the installation type" page:
 - a. Select the **Custom** radio button:

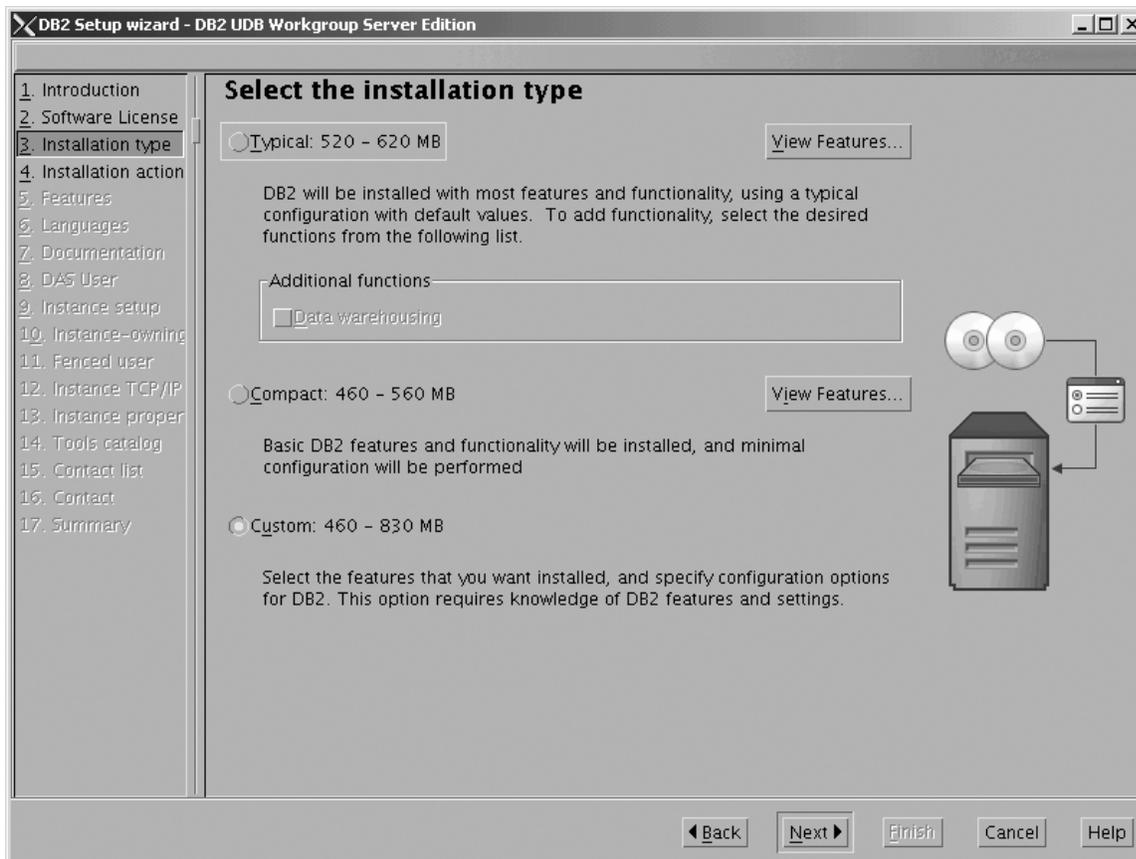


Figure 140. DB2 Setup wizard - Select the installation type page

- b. Click **Next**. The "Select the installation action" page opens.
5. On the "Select the installation action" page:
 - a. Select the **Install DB2 UDB Workgroup Server Edition on this computer** check box.

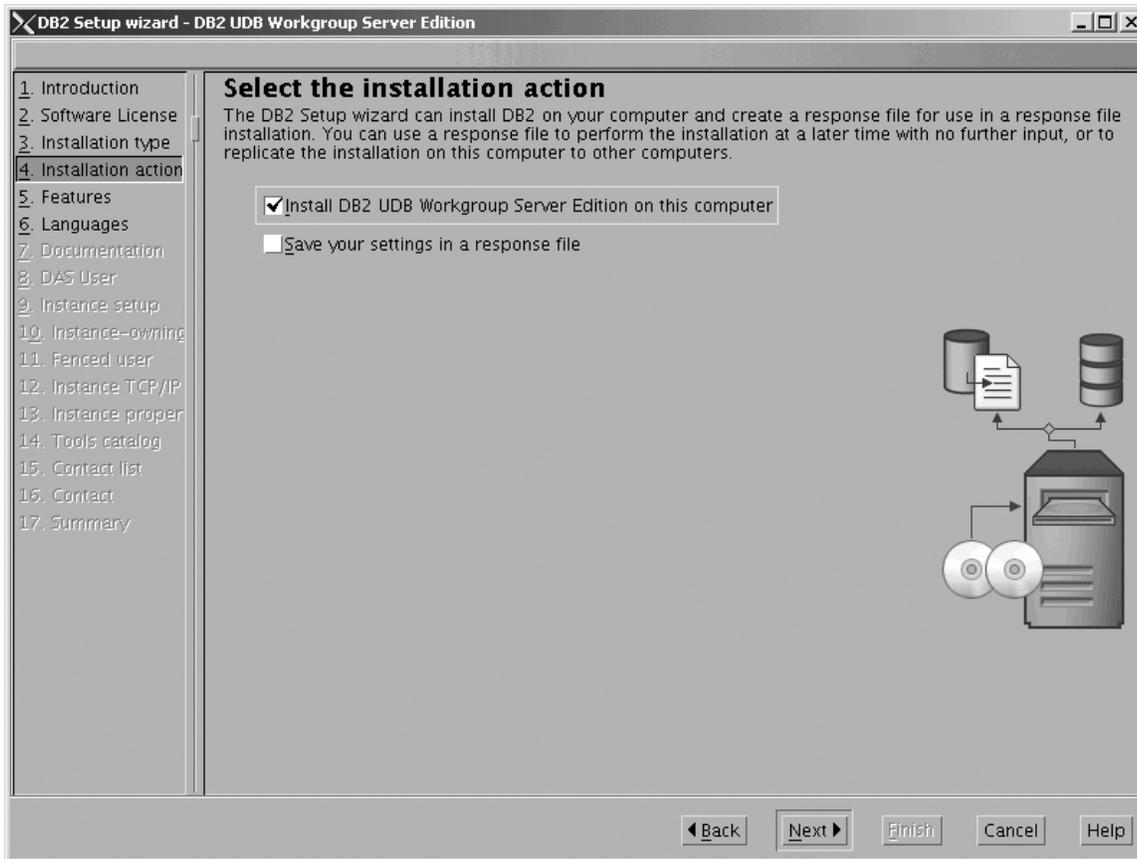


Figure 141. DB2 Setup wizard - Select the installation action page

- b. Click **Next**. The "Select the features to install" page opens.
6. On the "Select the features to install" page:
 - a. Open the + beside **Server support**, then select the check box beside **DB2 Data Source Support** (so that the check mark is removed). This action prevents the **DB2 Data Source Support** option from being installed.

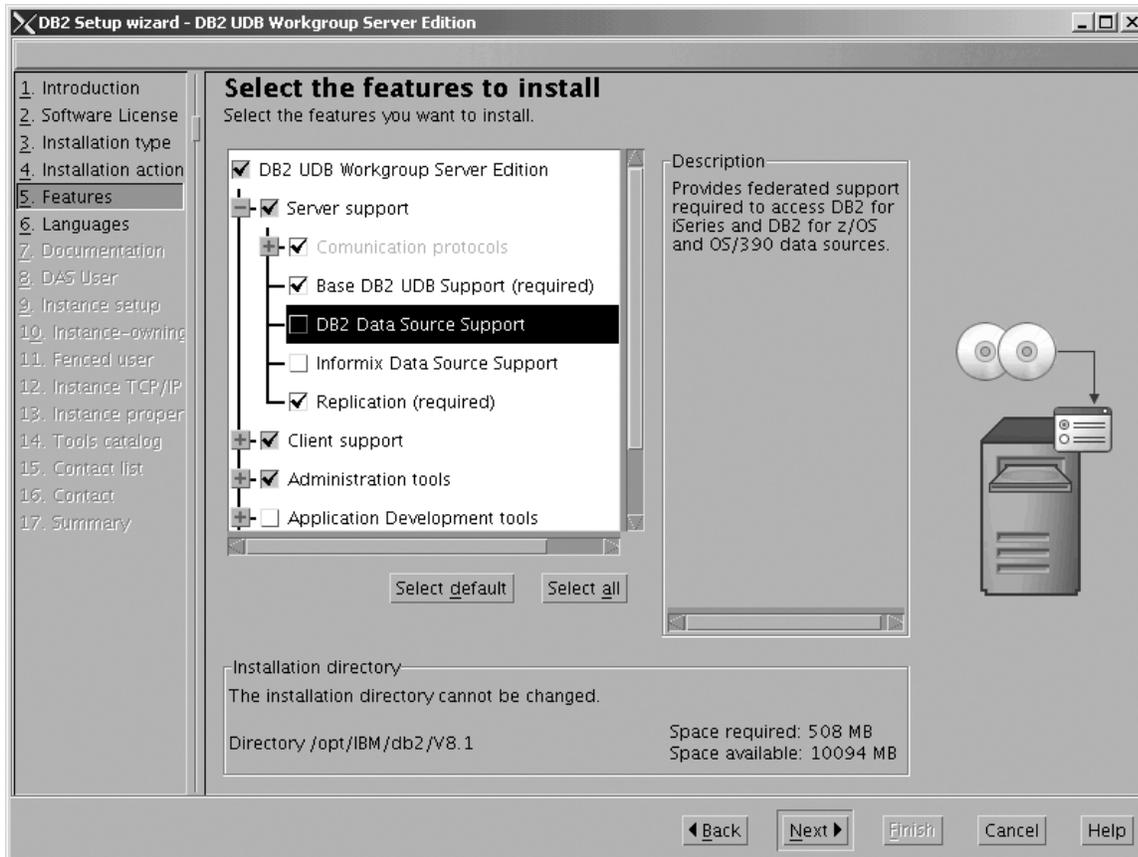


Figure 142. DB2 Setup wizard - Select the features to install page; DB2 Data Source Support option deselected for installation

- b. Open the + beside **Client support**, then select the check box beside **DB2 LDAP Support**. This action prevents the **DB2 LDAP Support** option from being installed.

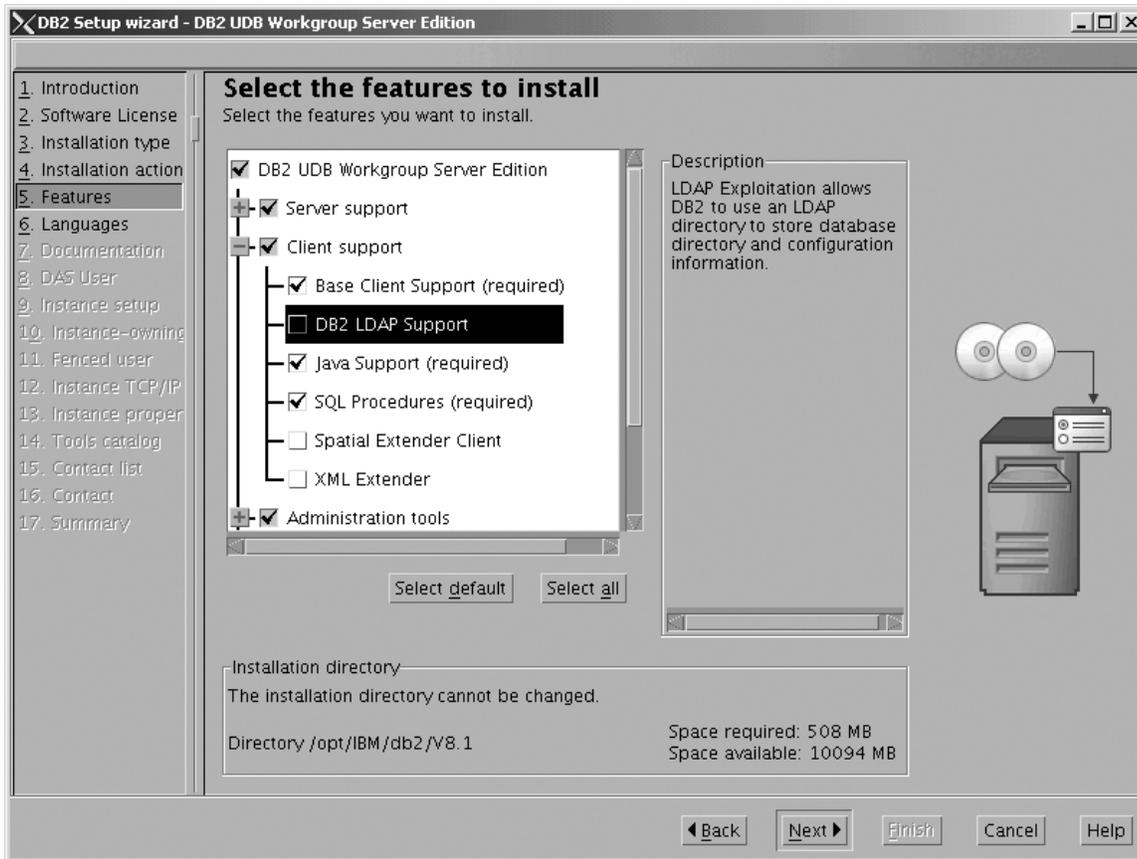


Figure 143. DB2 Setup wizard - Select the features to install page; DB2 LDAP Support option deselected for installation

- c. Open the + beside **Administration tools**, then deselect all the checked options to remove them from the list of options being installed. Note that you must deselect the **Configuration Assistant** option last.

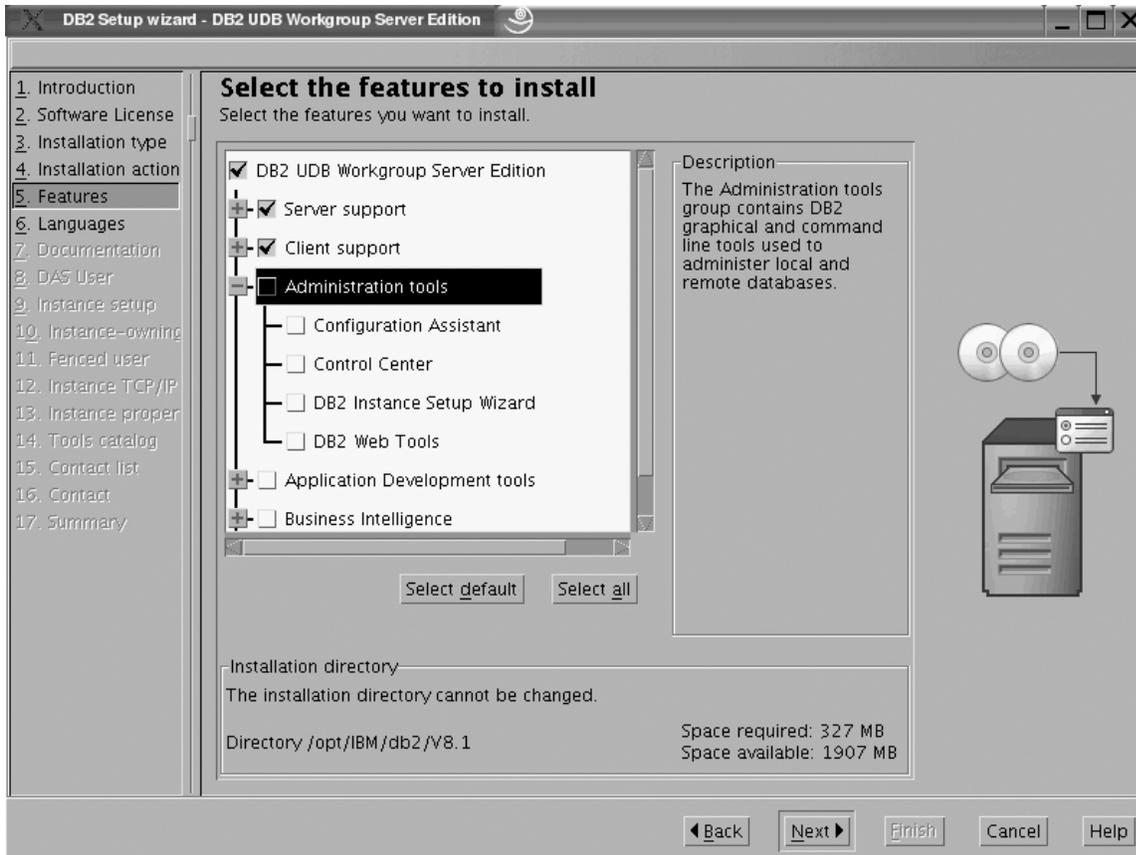


Figure 144. DB2 Setup wizard - Select the features to install page; all Administration tools options deselected for installation

- d. Open the + beside **Application Development Tools**, then select the **Base Application Development Tools** option so that this option gets installed.

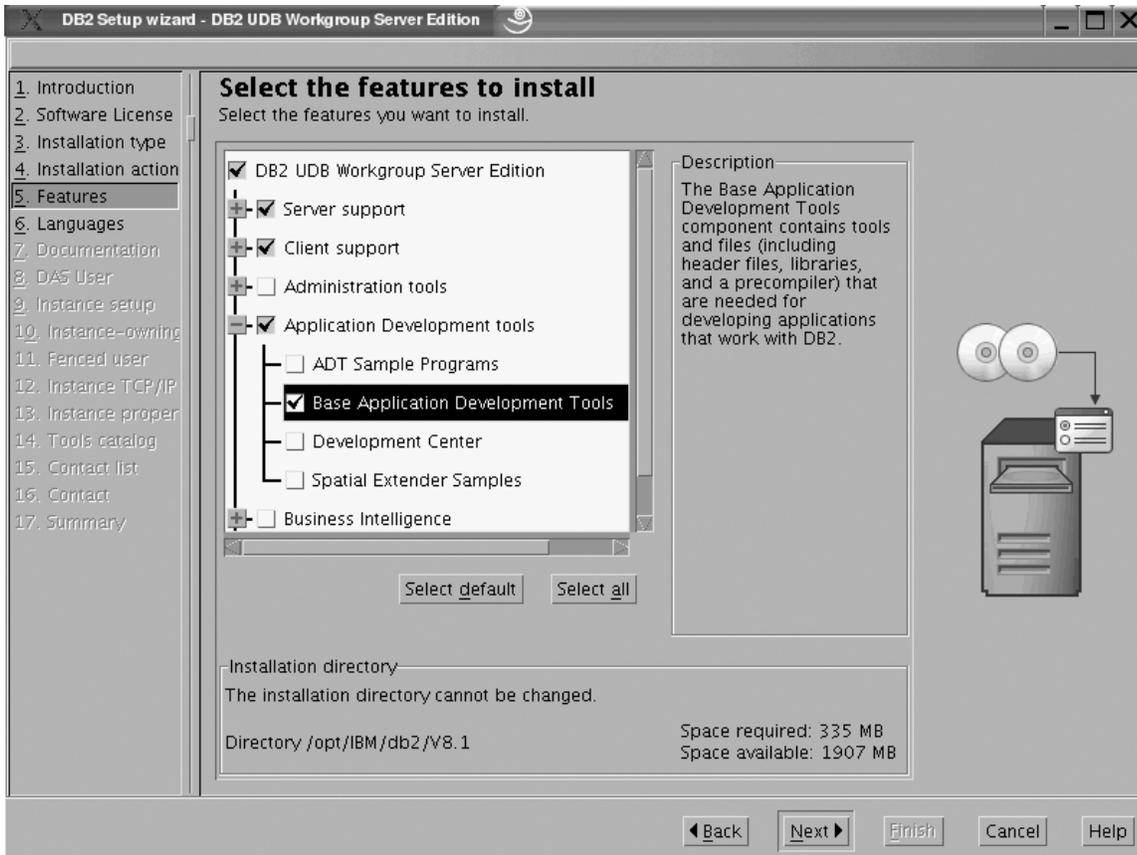


Figure 145. DB2 Setup wizard - Select the features to install page; Base Application Development Tools option selected for installation

- e. Open the + beside **Getting started**, then deselect the **First Steps** option so that this option does not get installed.

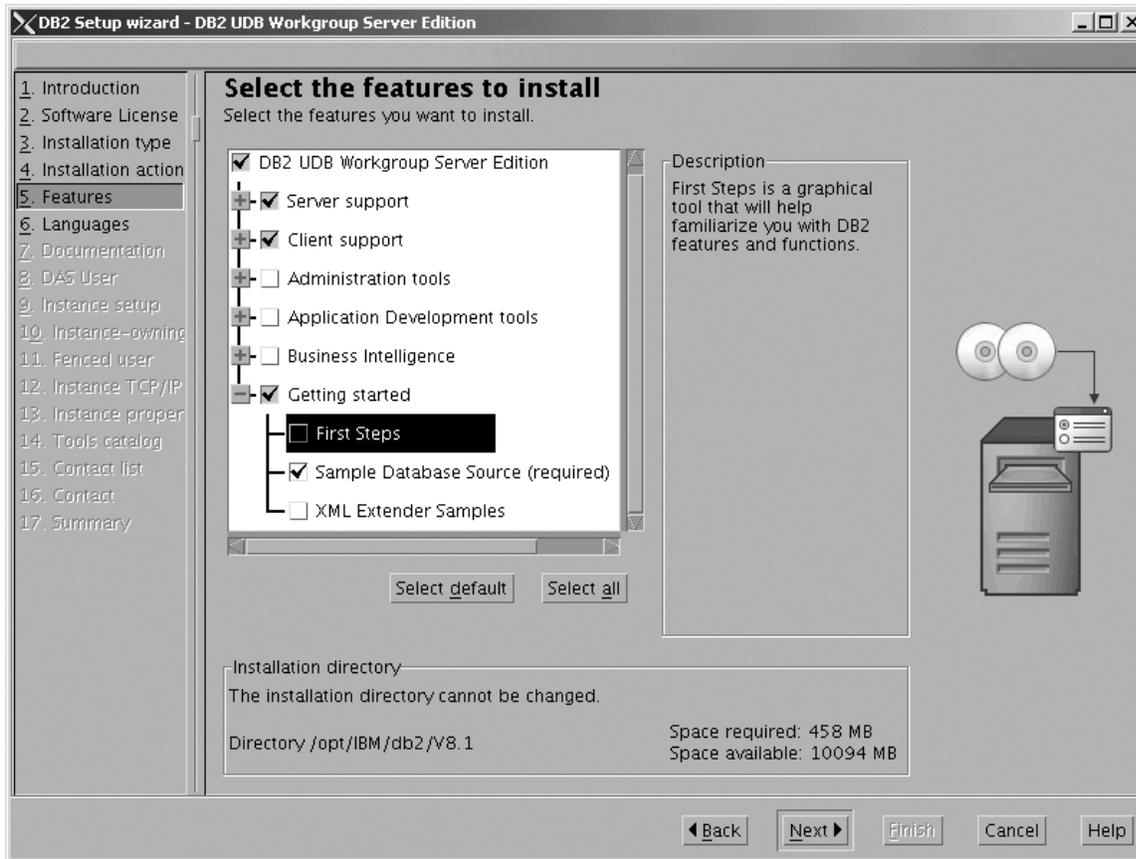


Figure 146. DB2 Setup wizard - Select the features to install page; First Steps option deselected for installation

- f. Click **Next**. The "Languages" page opens.
- 7. On the "Languages" page, English is the only language support that is installed by default.

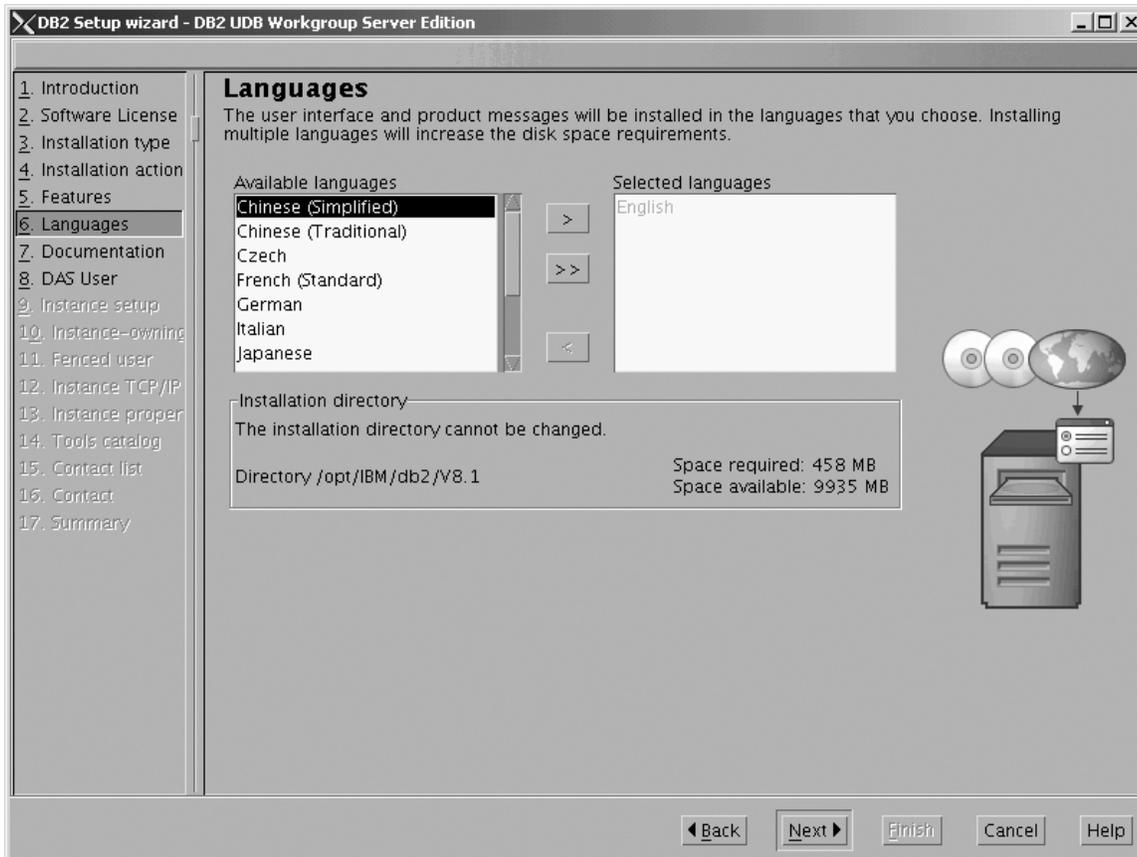


Figure 147. DB2 Setup wizard - Languages page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
8. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

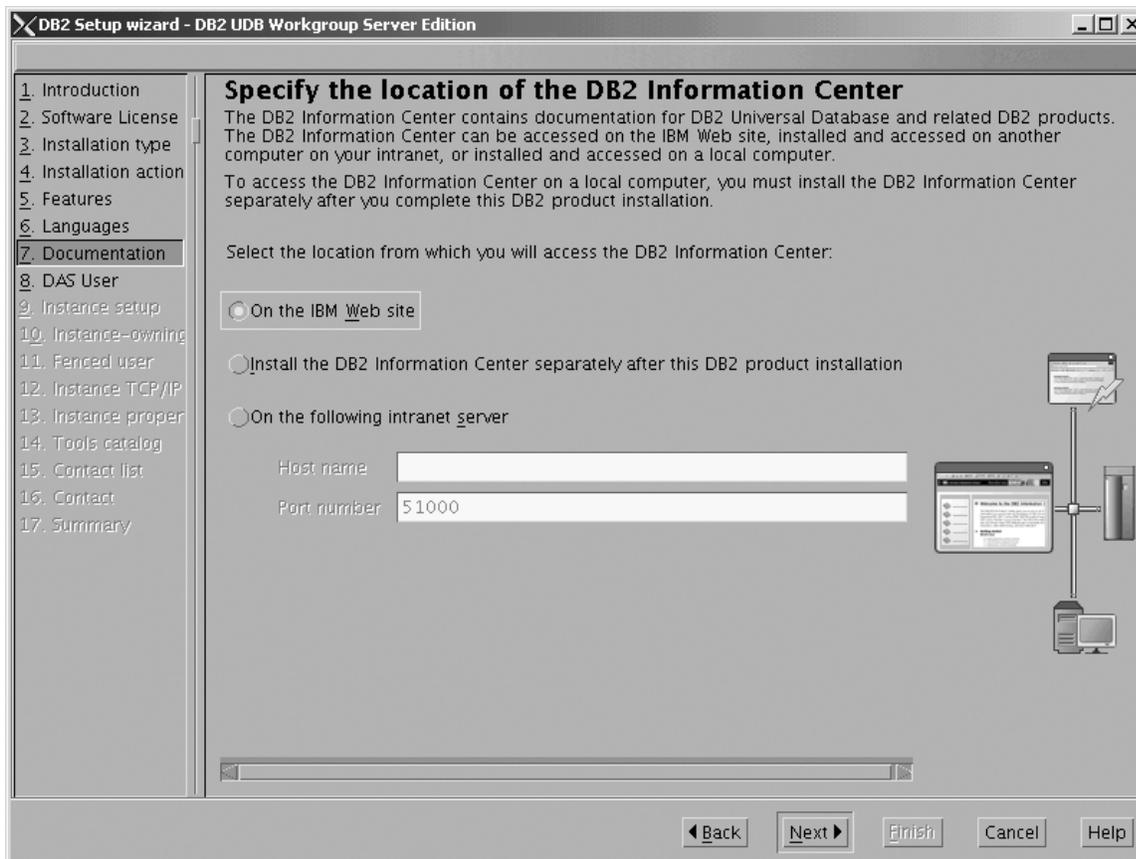


Figure 148. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
9. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

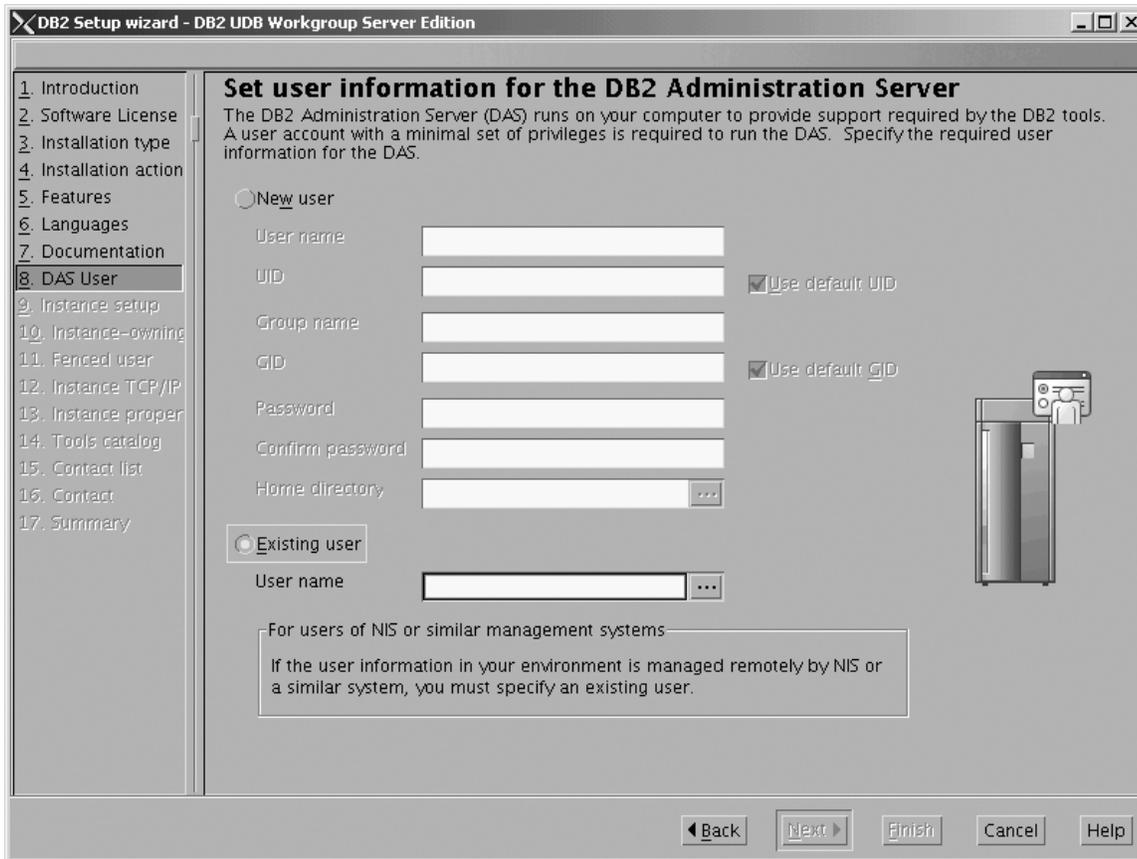


Figure 149. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- c. Click **Next**. The "Set up a DB2 instance" page opens.
10. On the "Set up a DB2 instance" page:
 - a. Select the **Create a DB2 instance** radio button.

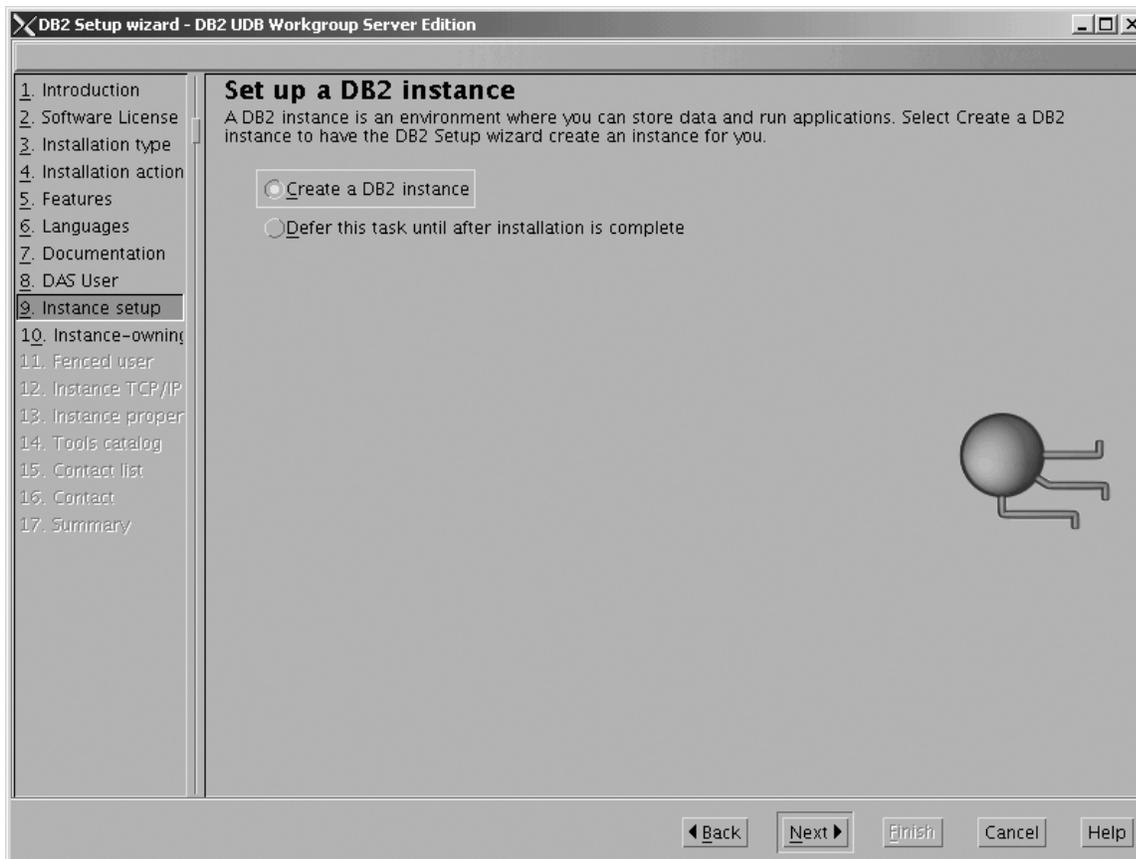


Figure 150. DB2 Setup wizard - Set up a DB2 instance page; Create a DB2 instance selected

- b. Click **Next**. The "Set user information for the DB2 instance owner" page opens.
11. On the "Set user information for the DB2 instance owner" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

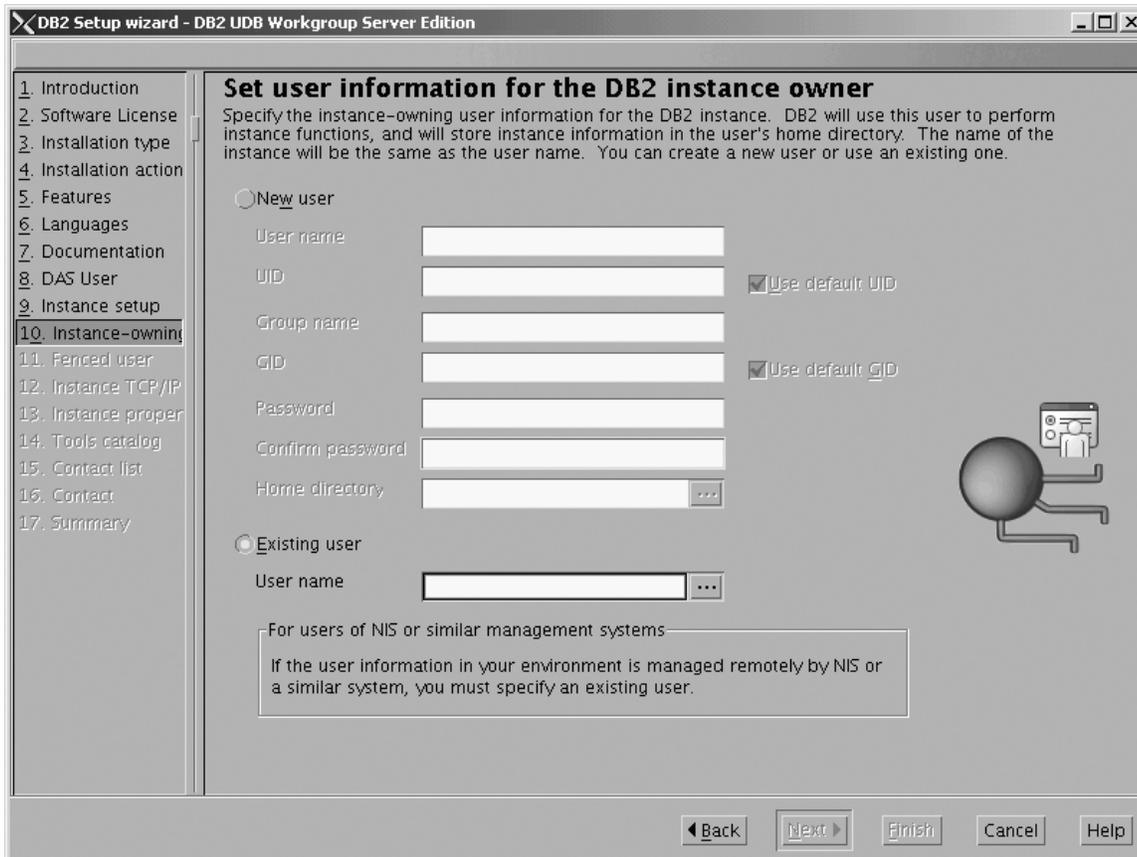


Figure 151. DB2 Setup wizard - Set user information for the DB2 instance owner page

- c. Click **Next**. The "Set user information for the fenced user" page opens.
12. On the "Set user information for the fenced user" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

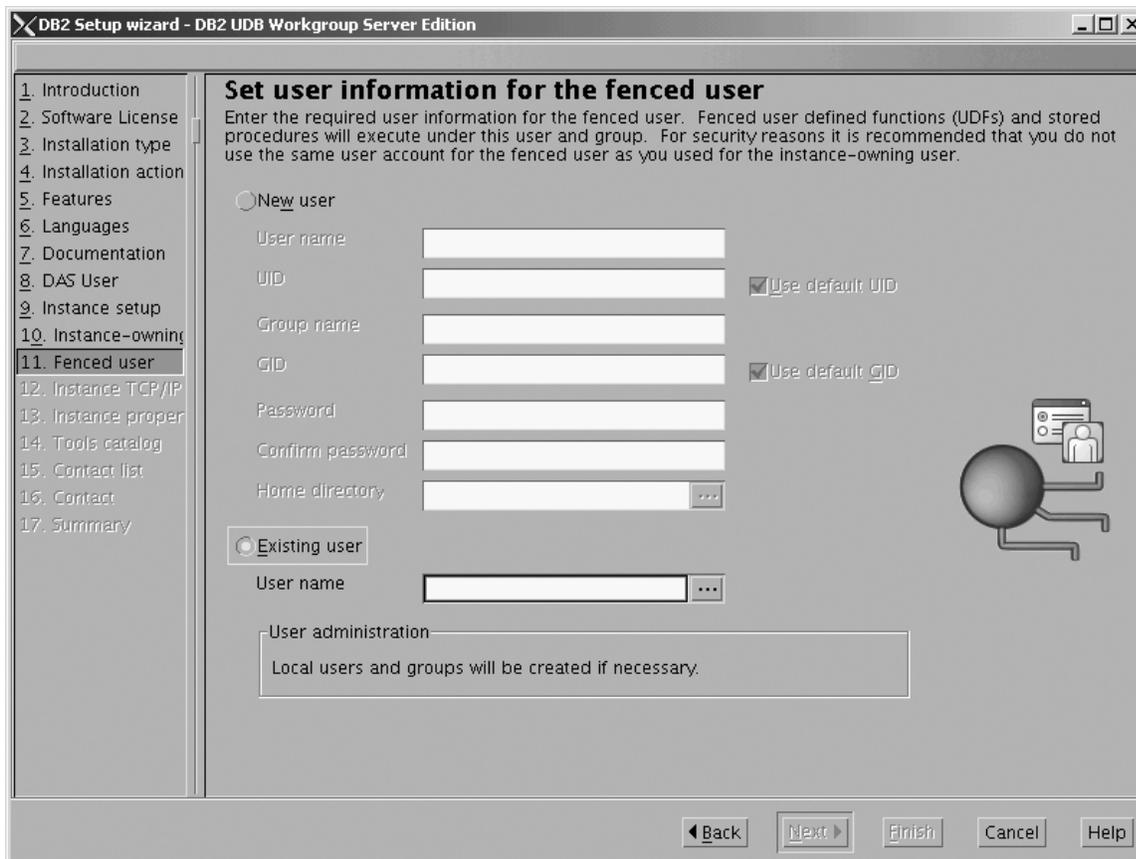


Figure 152. DB2 Setup wizard - Set user information for the fenced user page

- c. Click **Next**. The "Configure DB2 instance TCP/IP communication" page opens.
13. On the "Configure DB2 instance TCP/IP communication" page:
 - a. Select the **Configure** radio button.

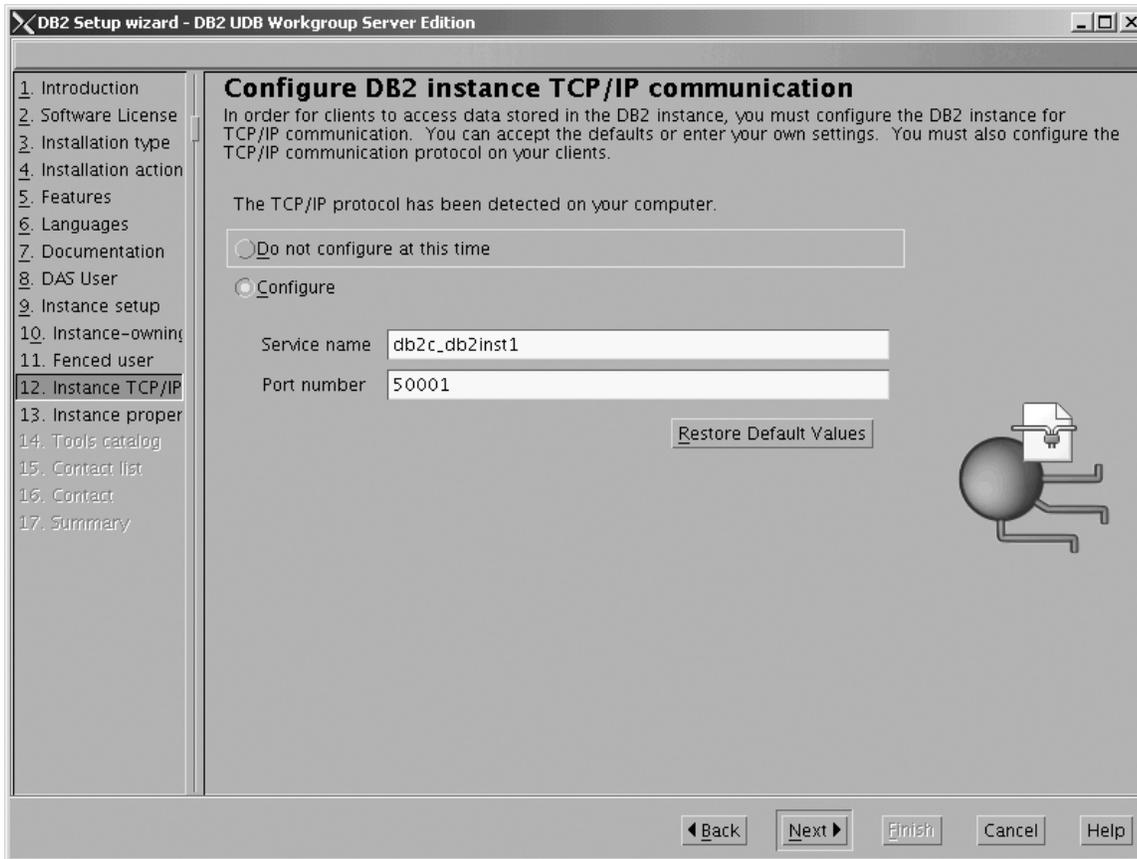


Figure 153. DB2 Setup wizard - Configure DB2 instance TCP/IP communication page

- b. Click **Next**. The "Set instance properties" page opens.
14. On the "Set instance properties" page:
 - a. Deselect the **Autostart the instance at system startup** check box.

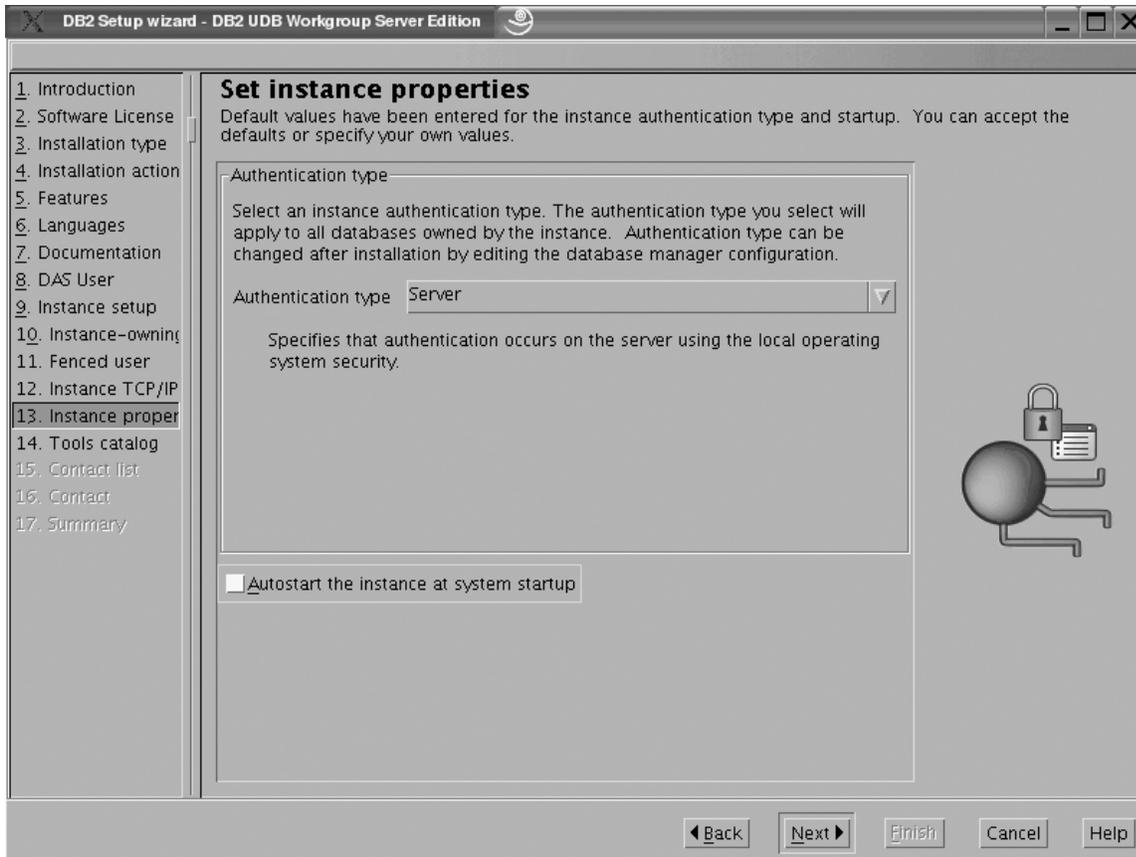


Figure 154. DB2 Setup wizard - Set instance properties page

- b. Click **Next**. The "Prepare the DB2 tools catalog" page opens.
15. On the "Prepare the DB2 tools catalog" page:
 - a. Select the **Do not prepare the DB2 tools catalog on this computer** radio button.

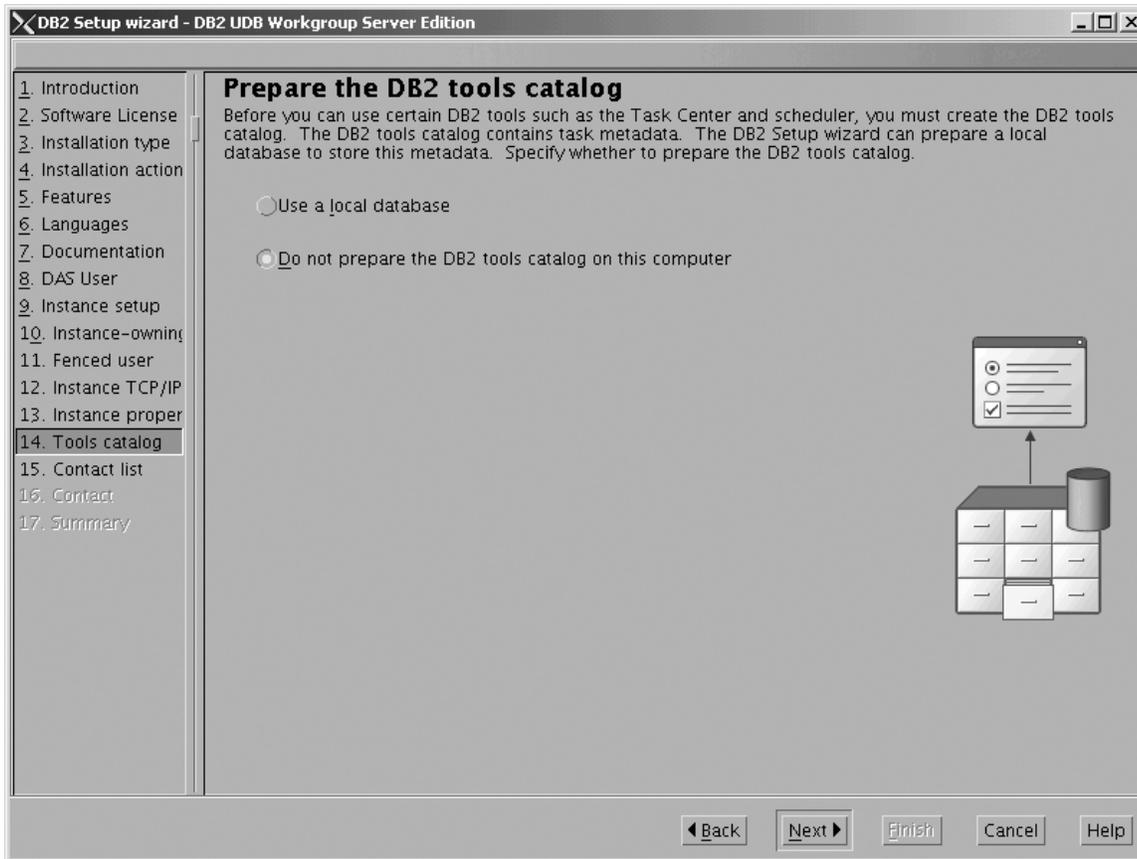


Figure 155. DB2 Setup wizard - Prepare the DB2 tools catalog page

- b. Click **Next**. The "Set up the administration contact list" page opens.
16. On the "Set up the administration contact list" page:
 - a. Select the **Local - Create a contact list on this system** radio button.
 - b. Ensure that the **Enable notification** check box is deselected.

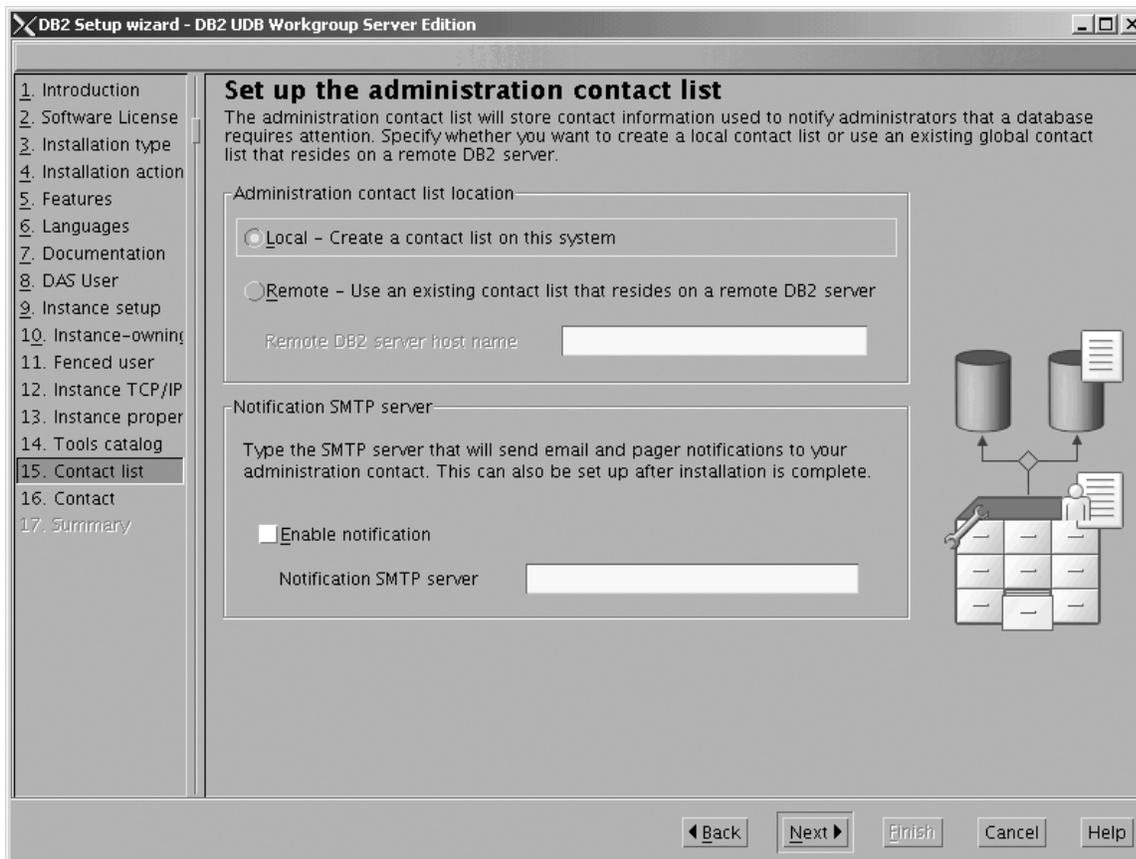


Figure 156. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the "Set up the administration contact list" page, the following warning message is displayed:



Figure 157. DB2 Setup wizard - Warning message

Click **OK**. The "Specify a contact for health monitor notification" page opens.

17. On the "Specify a contact for health monitor notification" page:
 - a. Select the **Defer this task until after installation is complete** radio button.

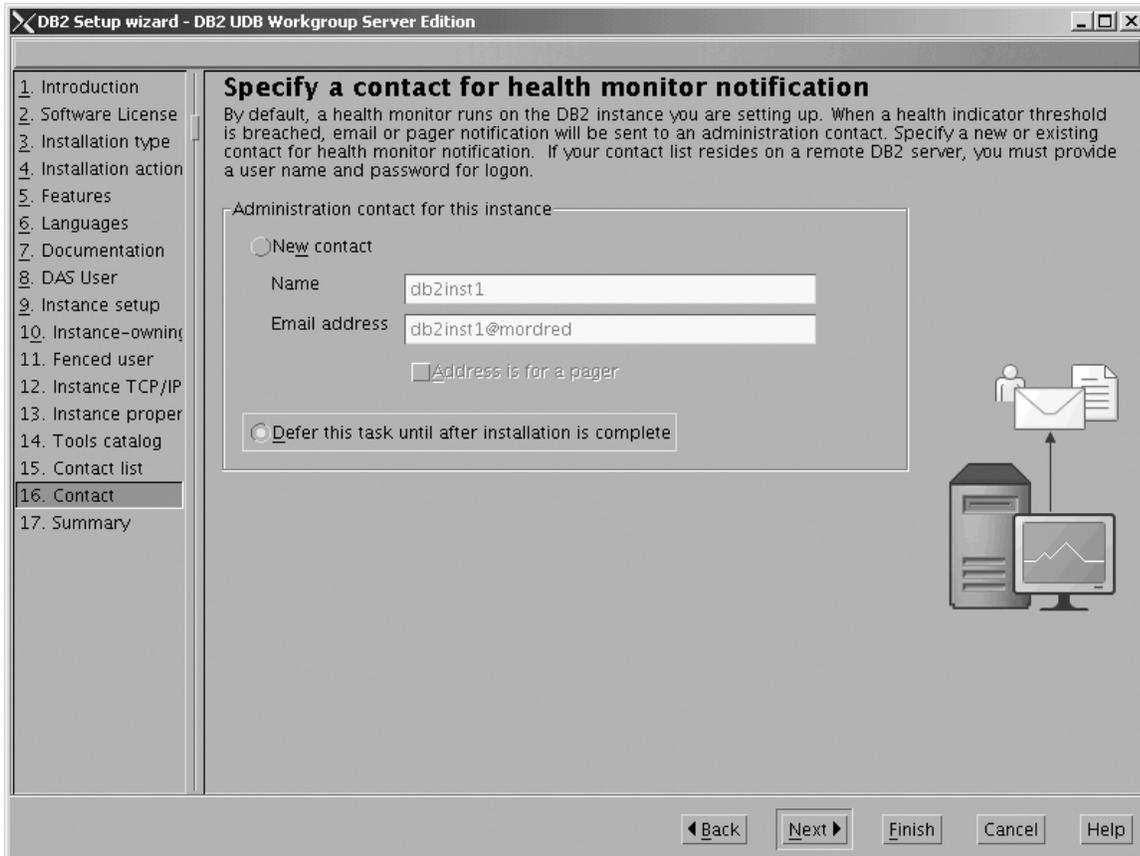


Figure 158. DB2 Setup wizard - Set up the administration contact list page

- b. Click **Next**. The "Start copying files" page opens.
18. On the "Start copying files" page, click **Finish** to begin installing DB2 UDB Workgroup Server Edition on your computer.

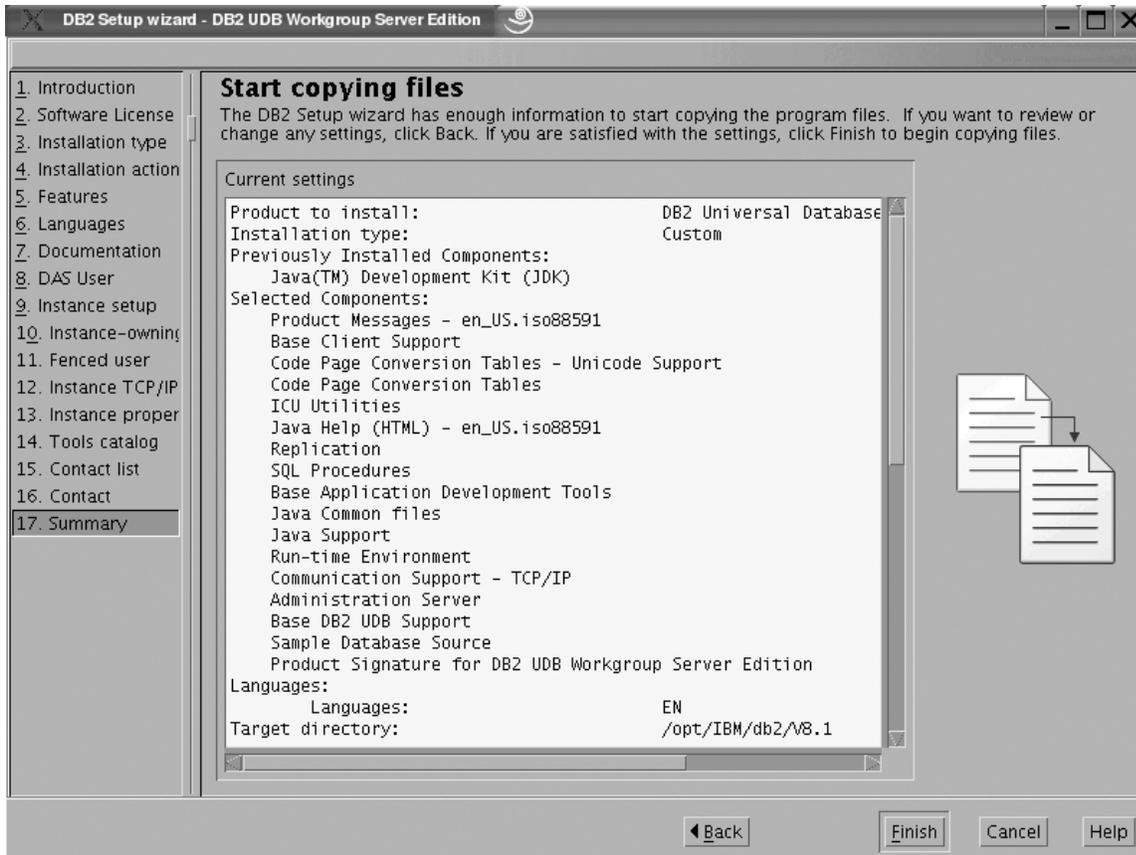


Figure 159. DB2 Setup wizard - Start copying files page

The "Installing DB2 UDB Workgroup Server Edition" page opens.

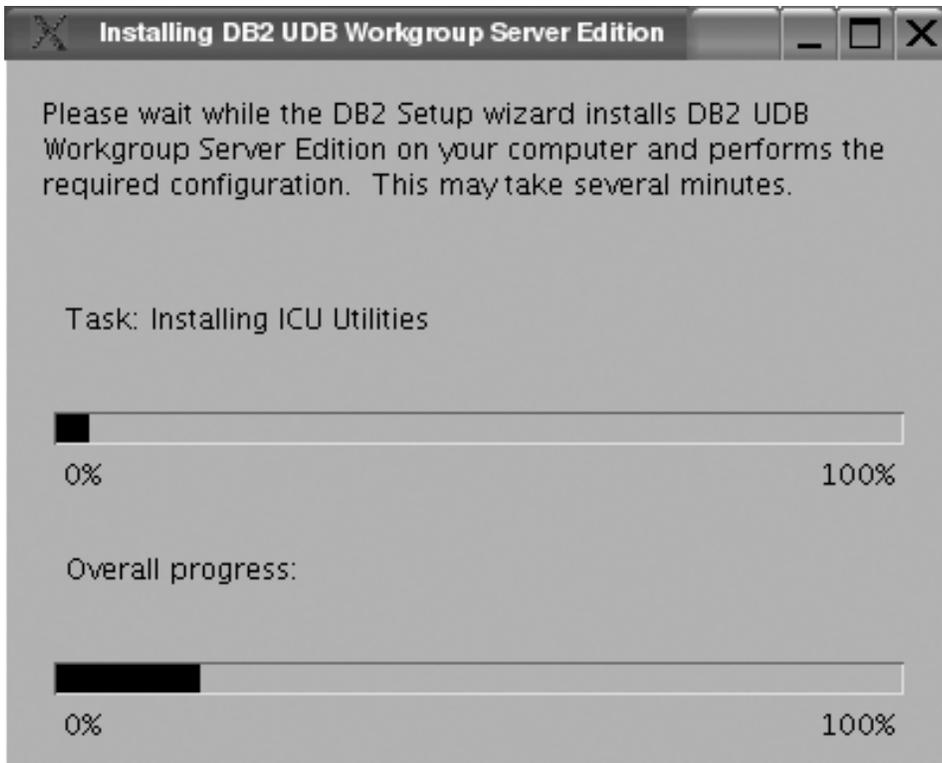


Figure 160. DB2 Setup wizard - Installing DB2 UDB Workgroup Server Edition page

When the installation completes, the "Setup is complete" page opens.

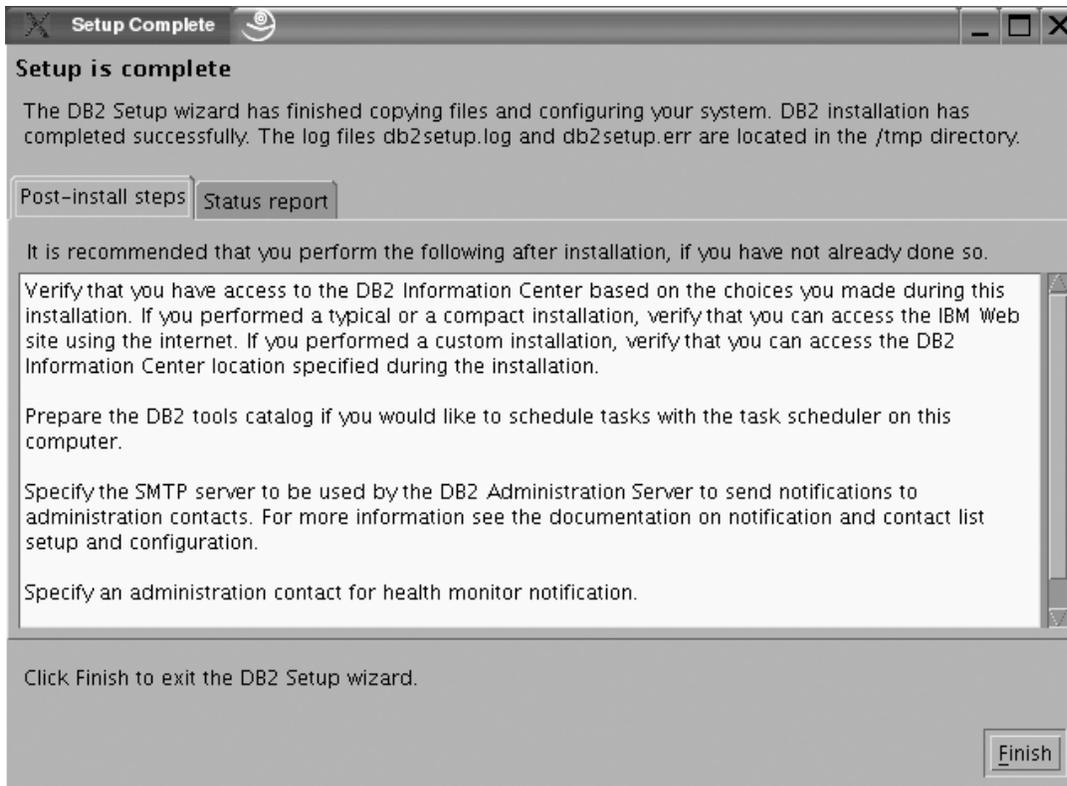


Figure 161. DB2 Setup wizard - Setup is complete page

Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Workgroup Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Installing DB2 UDB Workgroup Server Edition on AIX 5.2 for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Workgroup Server Edition on AIX 5.2 for a Common Criteria compliant installation.

Prerequisites:

- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- AIX 5.2 must be installed on the computer.
- You must have the installation CD mounted.
- The user names to be used for the following:
 - The DB2 instance owner
 - The DB2 Administration Server
 - The fenced user

If you do not have these user names, obtain them from your system administrator. For more information about these users, see "DB2 users and group (UNIX)" on page 14. For information about creating these users, see "Creating group and user IDs for a DB2 UDB installation (UNIX)" on page 38.

Procedure:

Use the following steps to install DB2 UDB Workgroup Server Edition on AIX 5.2 for a Common Criteria compliant environment.

1. On the "IBM DB2 Setup Launchpad", click **Install Products**.

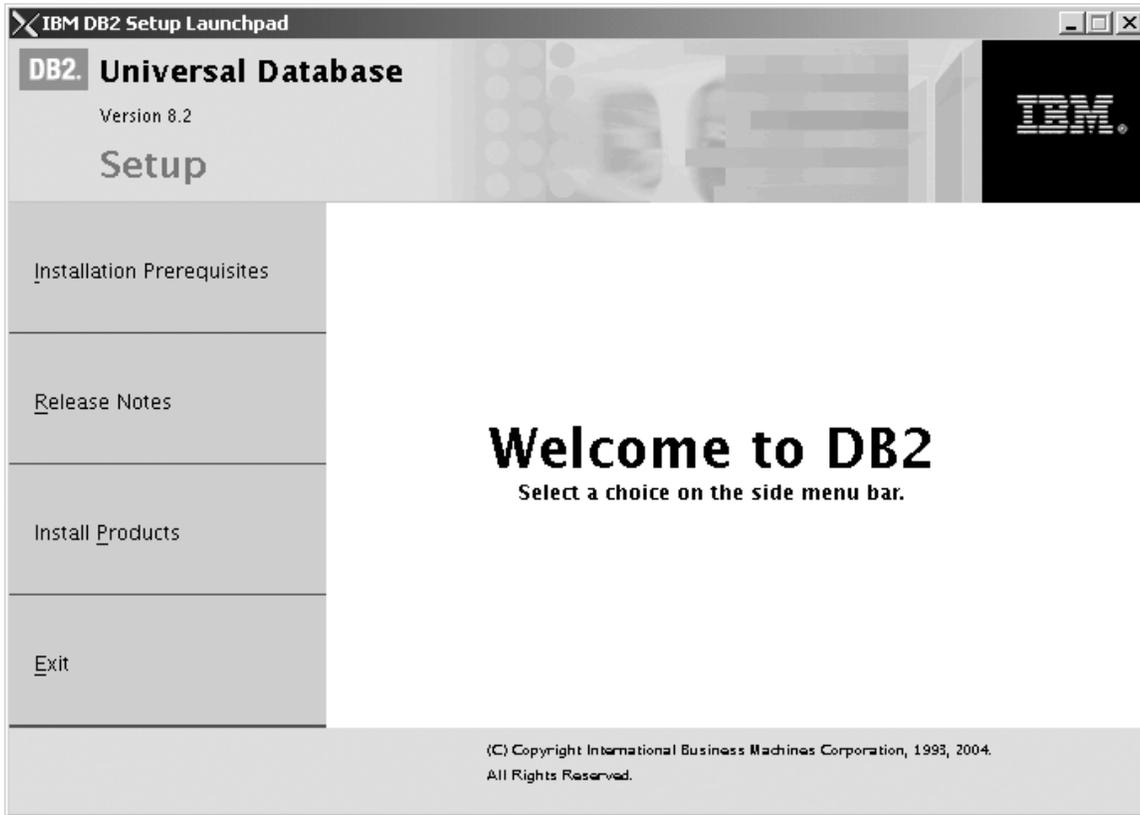


Figure 162. IBM DB2 Setup Launchpad

2. On the second page of the "IBM DB2 Setup Launchpad":
 - a. In the **Select the product you would like to install box**, select **DB2 UDB Workgroup Server Edition**, as follows:

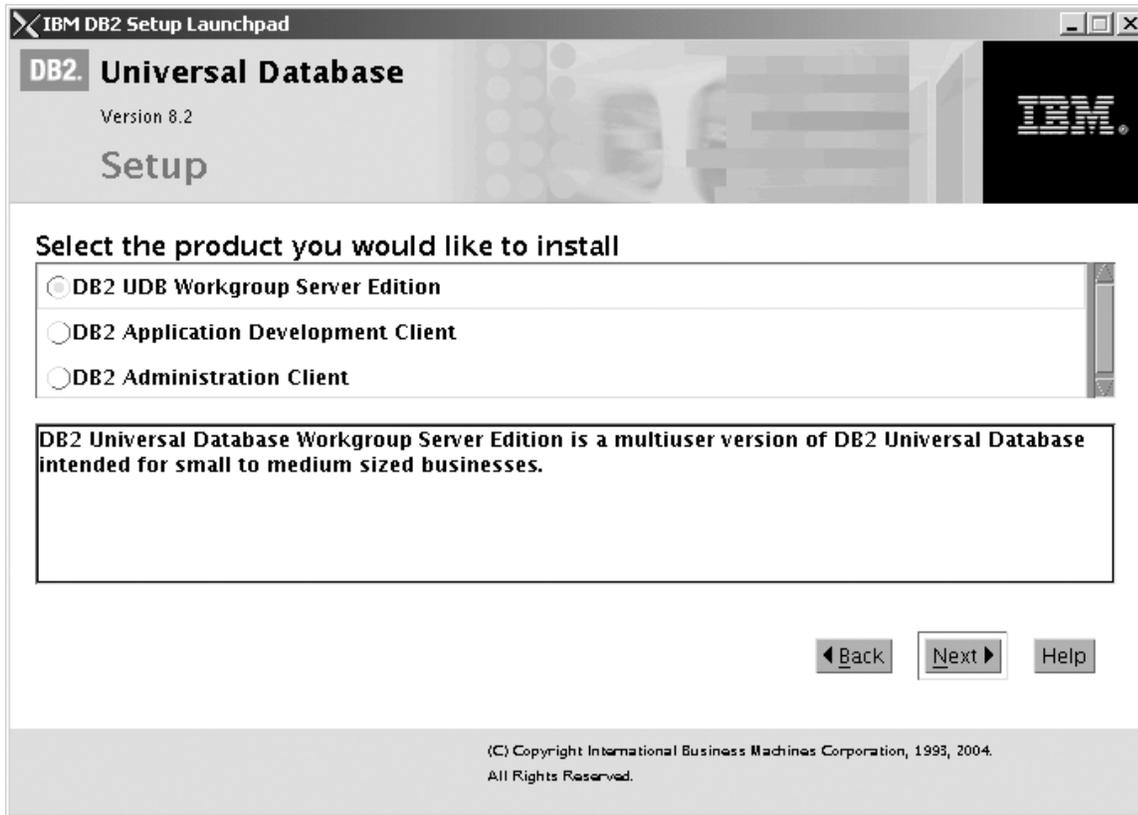


Figure 163. IBM DB2 Setup Launchpad with DB2 UDB Workgroup Server Edition selected

- b. Click **Next**. In a moment, the "DB2 Setup wizard" opens, as follows:



Figure 164. DB2 Setup wizard

- c. Click **Next**. The "Software License Agreement" page opens.
3. On the "Software License Agreement" page:
 - a. Click the **Accept** radio button.

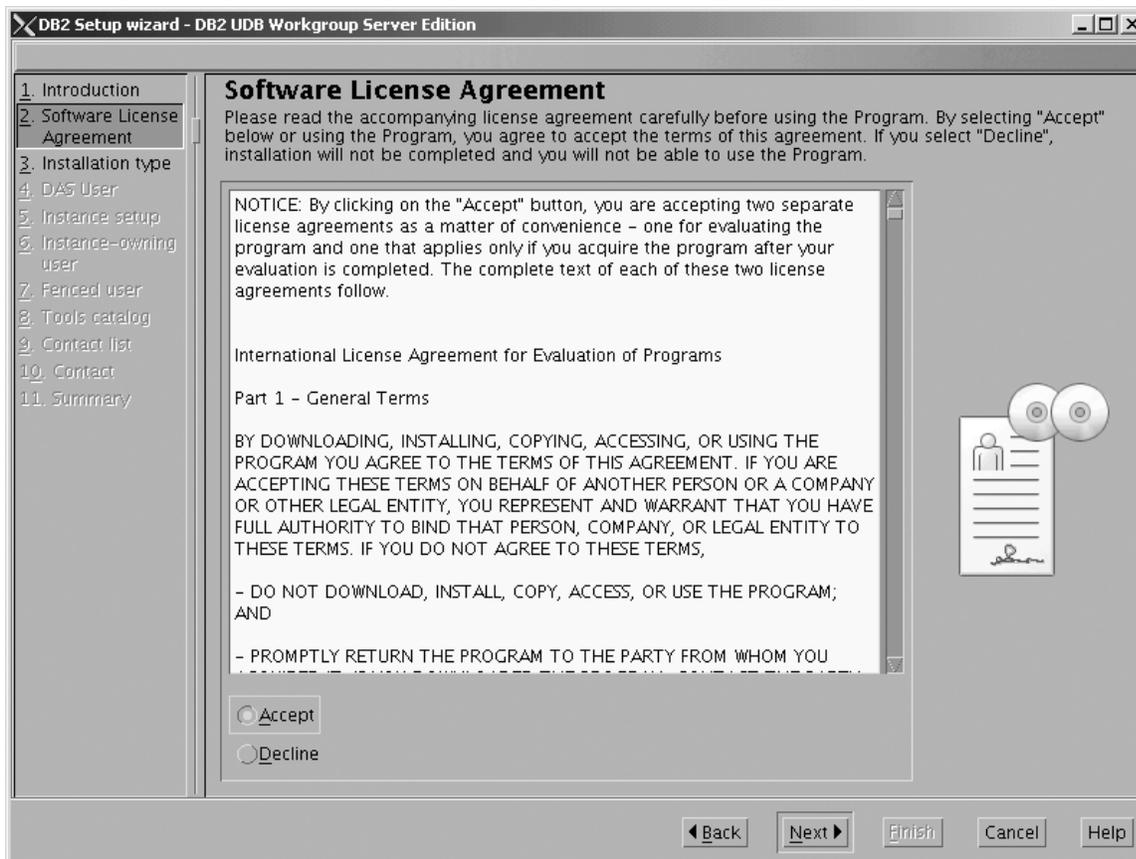


Figure 165. DB2 Setup wizard - Software License Agreement page

- b. Click **Next**. The "Select the installation type" page opens.
4. On the "Select the installation type" page:
 - a. Select the **Custom** radio button:

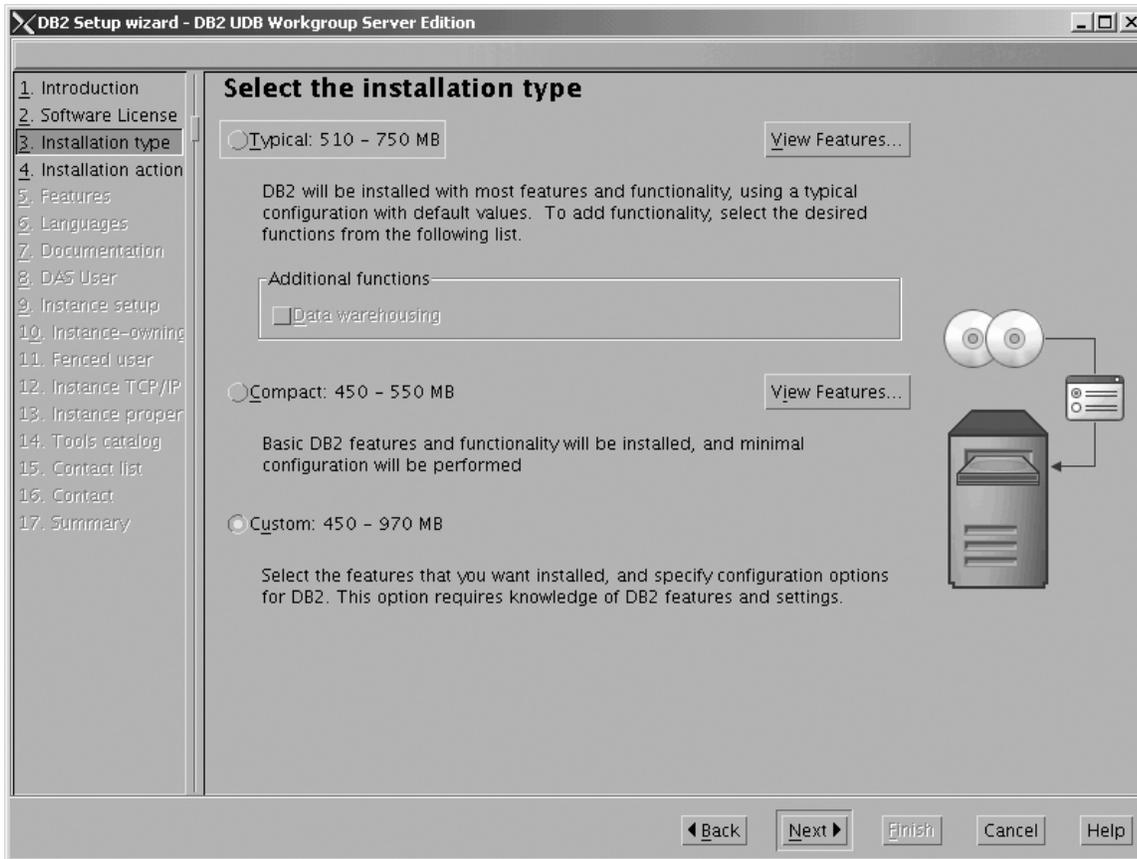


Figure 166. DB2 Setup wizard - Select the installation type page

- b. Click **Next**. The "Select the installation action" page opens.
5. On the "Select the installation action" page:
 - a. Select the **Install DB2 UDB Workgroup Server Edition on this computer** check box.

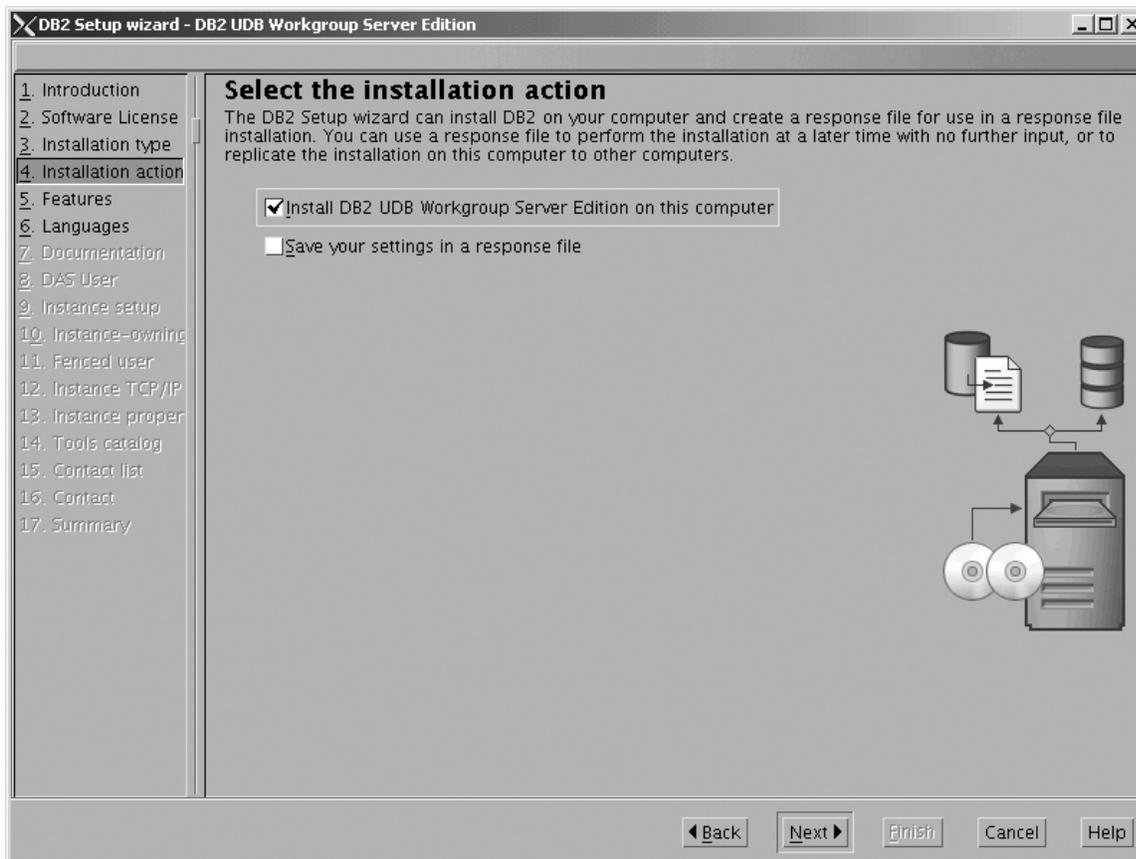


Figure 167. DB2 Setup wizard - Select the installation action page

- b. Click **Next**. The "Select the features to install" page opens.
6. On the "Select the features to install" page:
 - a. Open the + beside **Server support**, then select the check box beside **DB2 Data Source Support** (so that the check mark is removed). This action prevents the **DB2 Data Source Support** option from being installed.

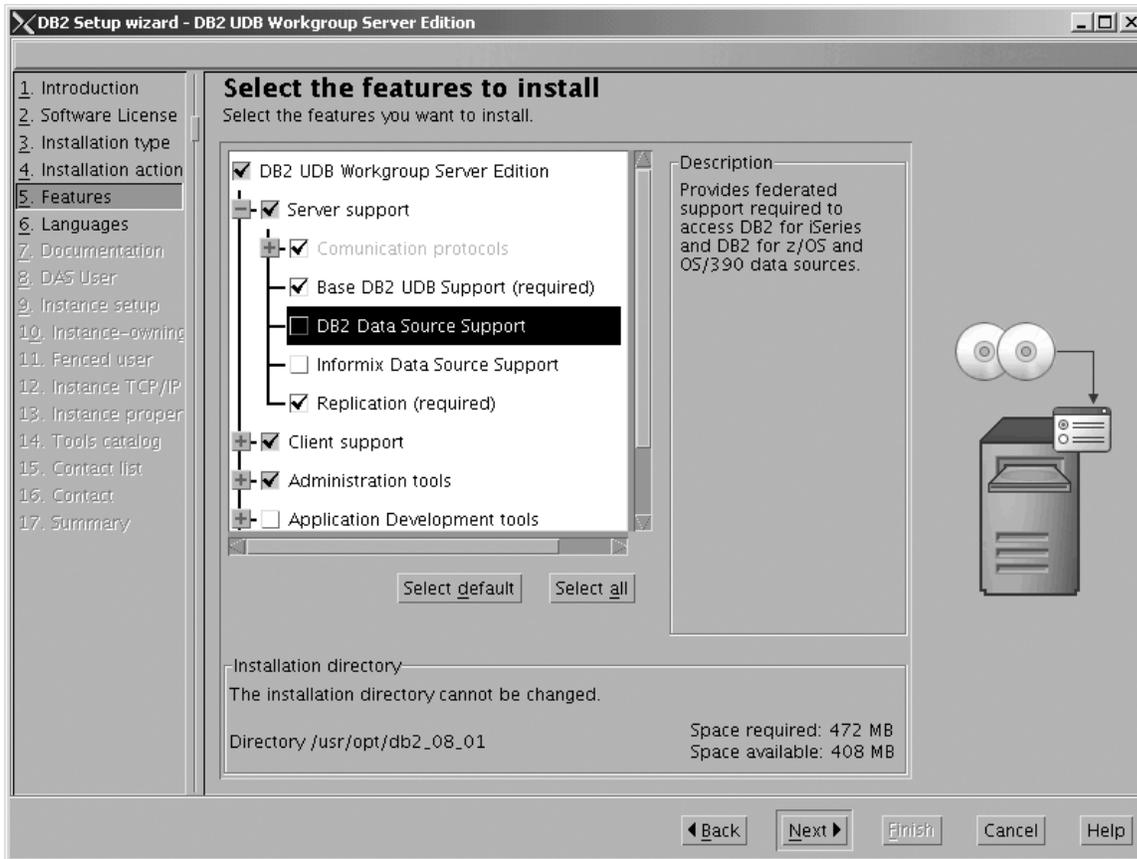


Figure 168. DB2 Setup wizard - Select the features to install page; DB2 Data Source Support option deselected for installation

- b. Open the + beside **Client support**, then select the check box beside **DB2 LDAP Support** (so that the check mark is removed). This action prevents the **DB2 LDAP Support** option from being installed.

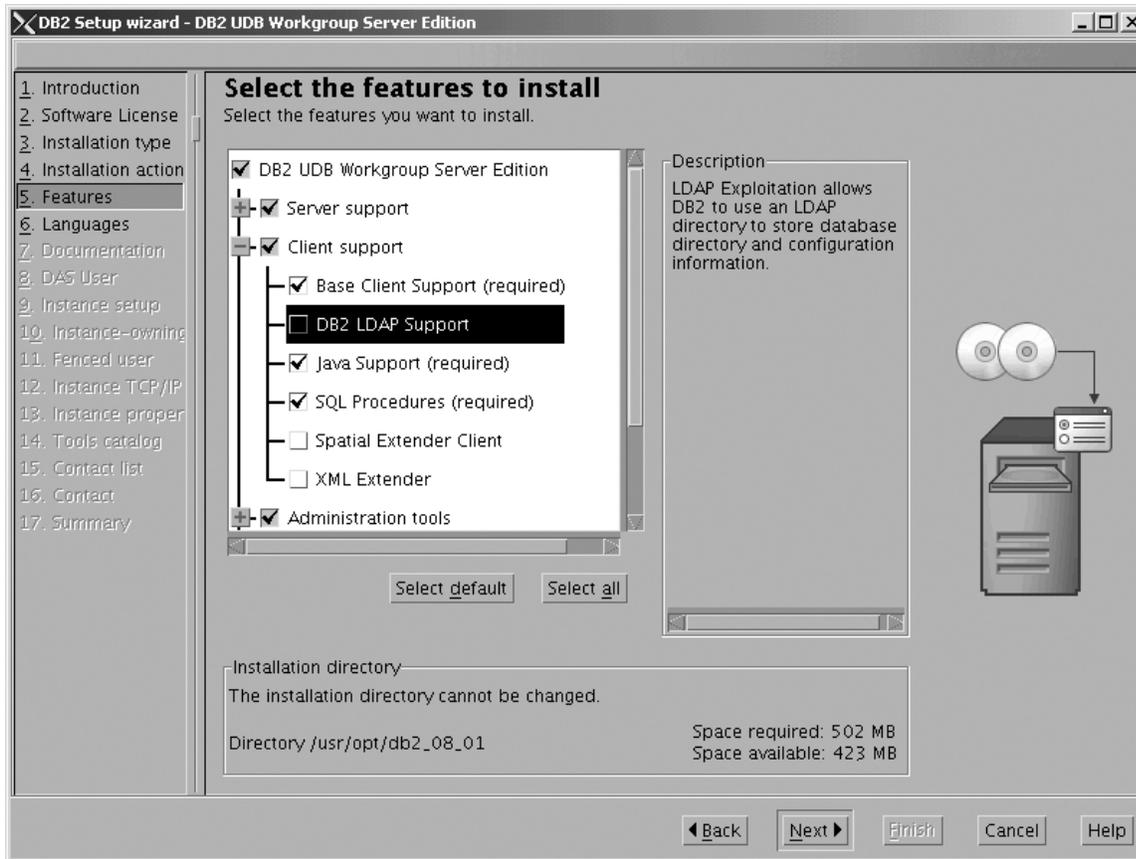


Figure 169. DB2 Setup wizard - Select the features to install page; DB2 LDAP Support option deselected for installation

- c. Open the + beside **Administration tools**, then deselect all the checked options to remove them from the list of options being installed. Note that you must deselect the **Configuration Assistant** option last.

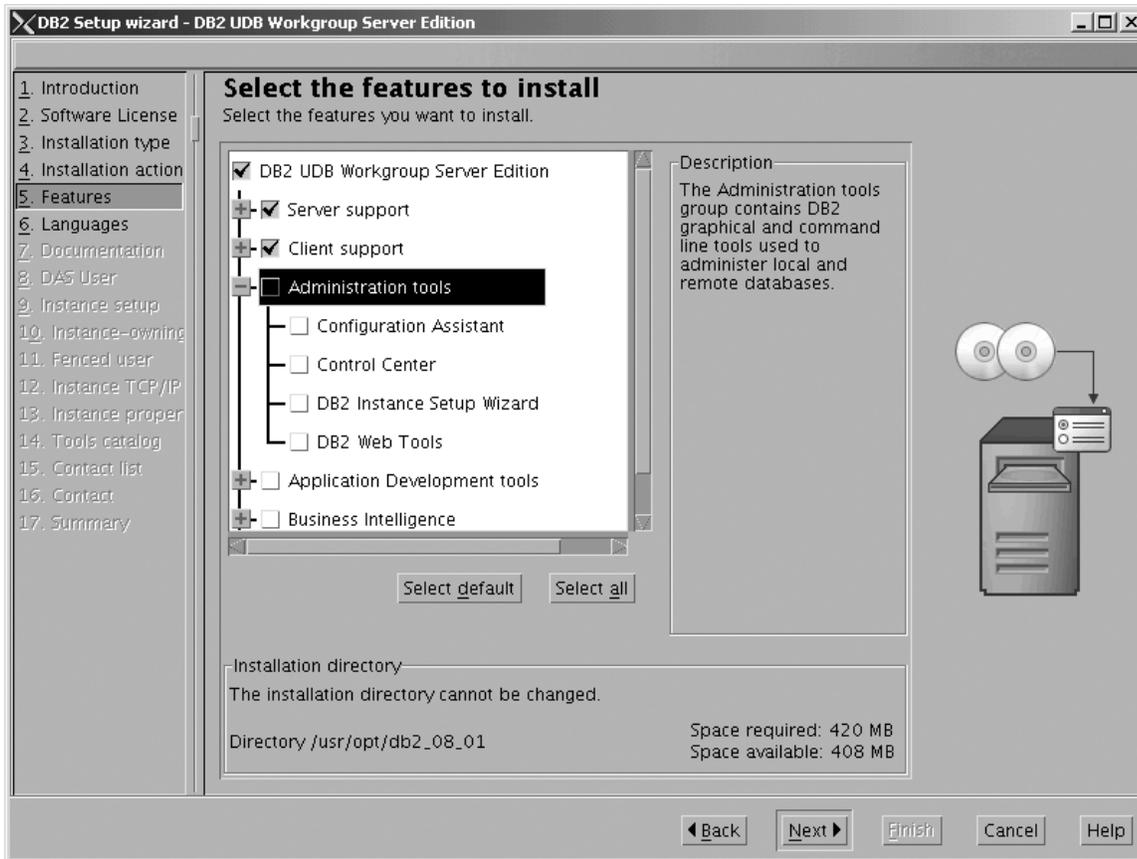


Figure 170. DB2 Setup wizard - Select the features to install page; all Administration tools options deselected for installation

- d. Open the + beside **Application Development Tools**, then select the **Base Application Development Tools** option so that this option gets installed.

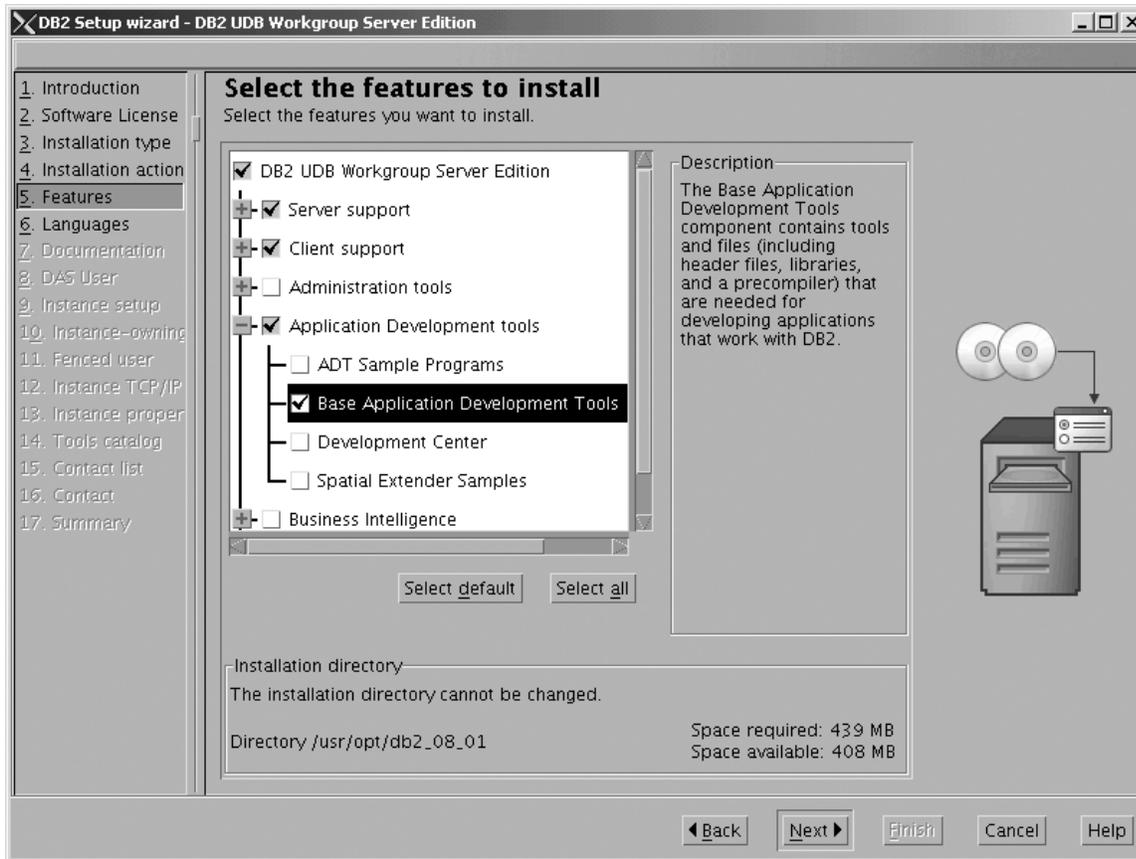


Figure 171. DB2 Setup wizard - Select the features to install page; Base Application Development Tools option selected for installation

- e. Open the + beside **Getting started**, then deselect the **First Steps** option so that this option does not get installed.

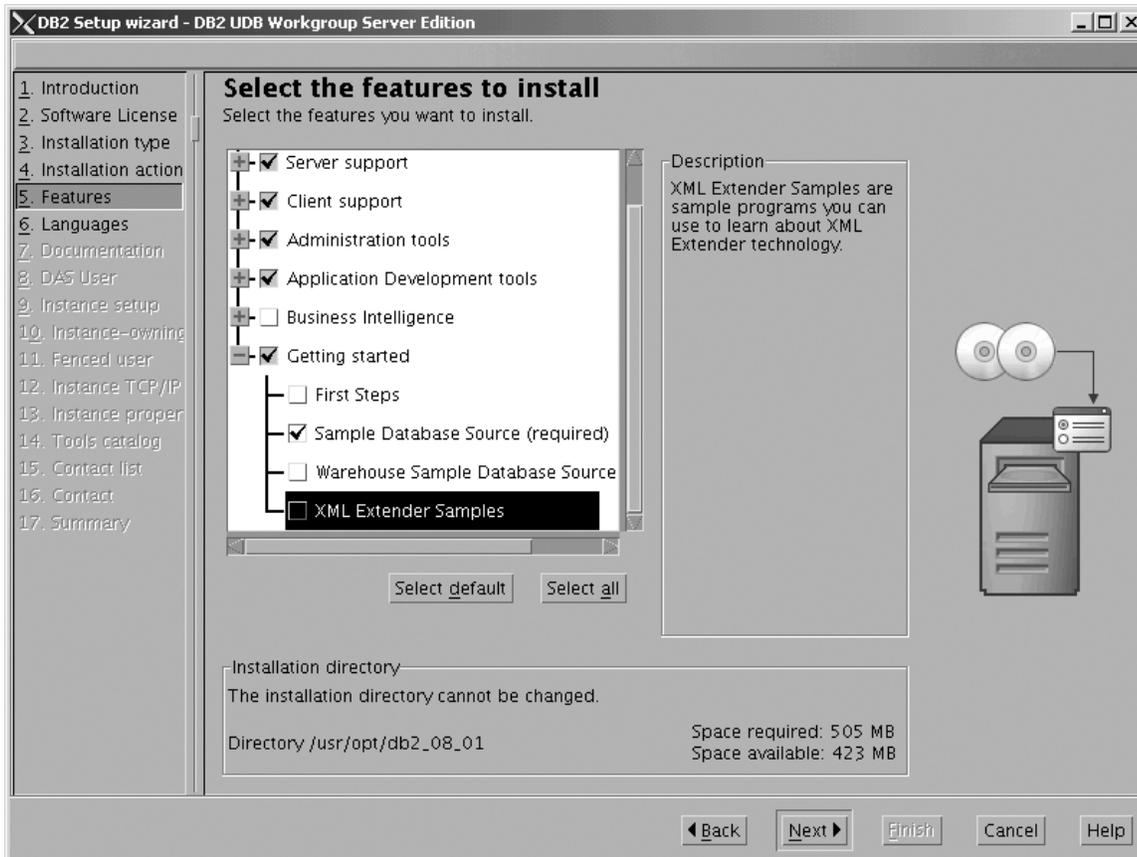


Figure 172. DB2 Setup wizard - Select the features to install page; First Steps option deselected for installation

- f. Click **Next**. The "Languages" page opens.
7. On the "Languages" page, English is the only language support that is installed by default.

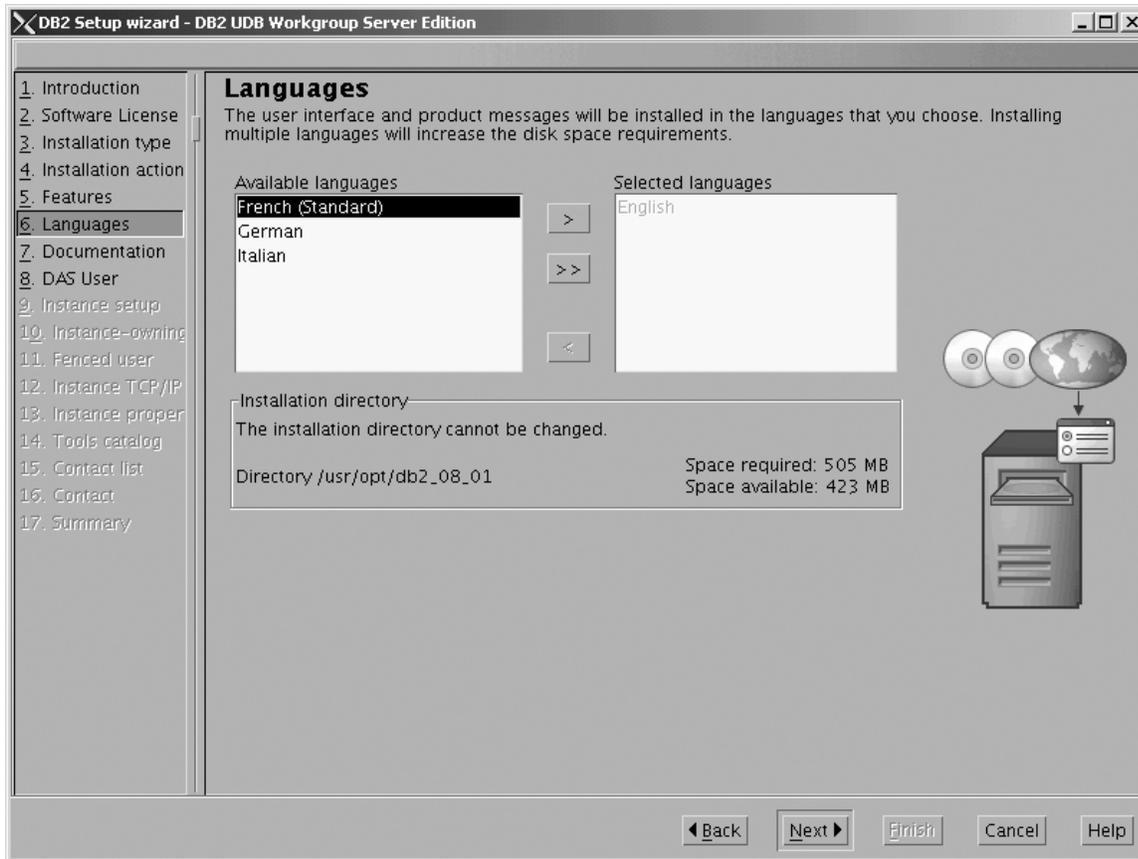


Figure 173. DB2 Setup wizard - Languages page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
8. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

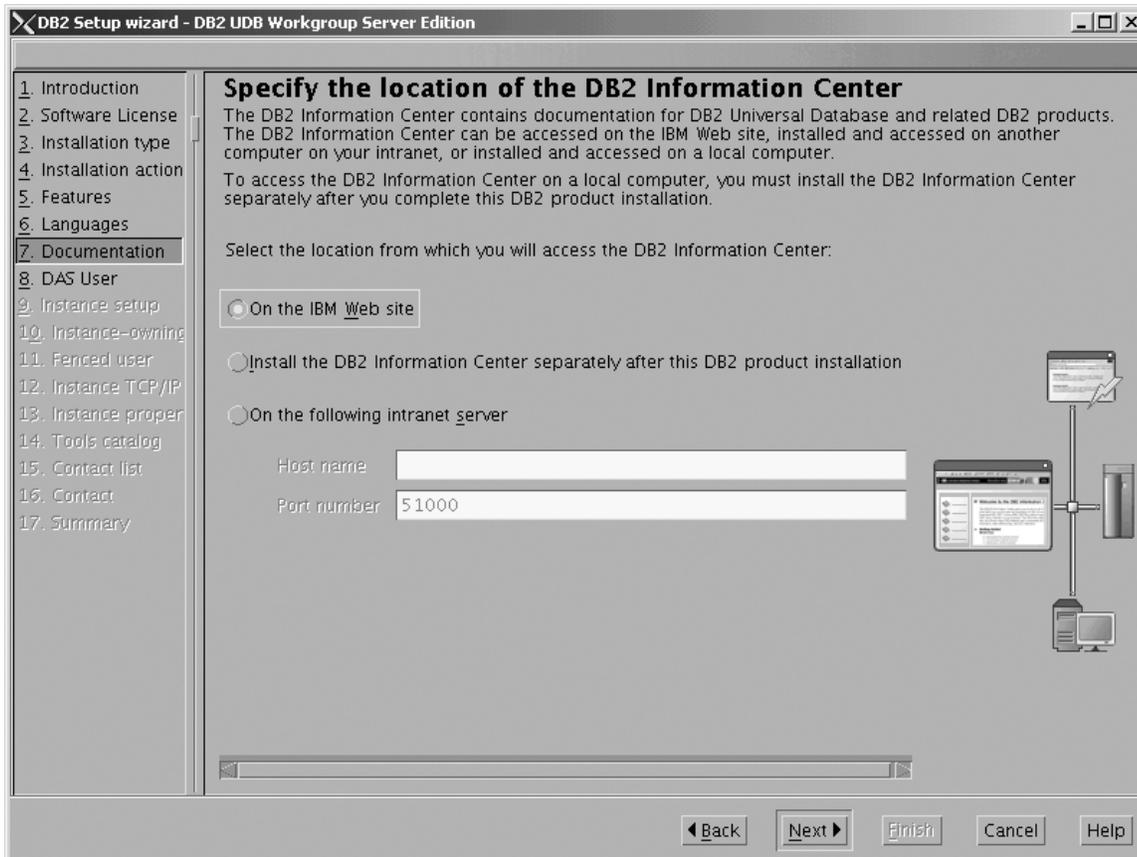


Figure 174. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
9. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

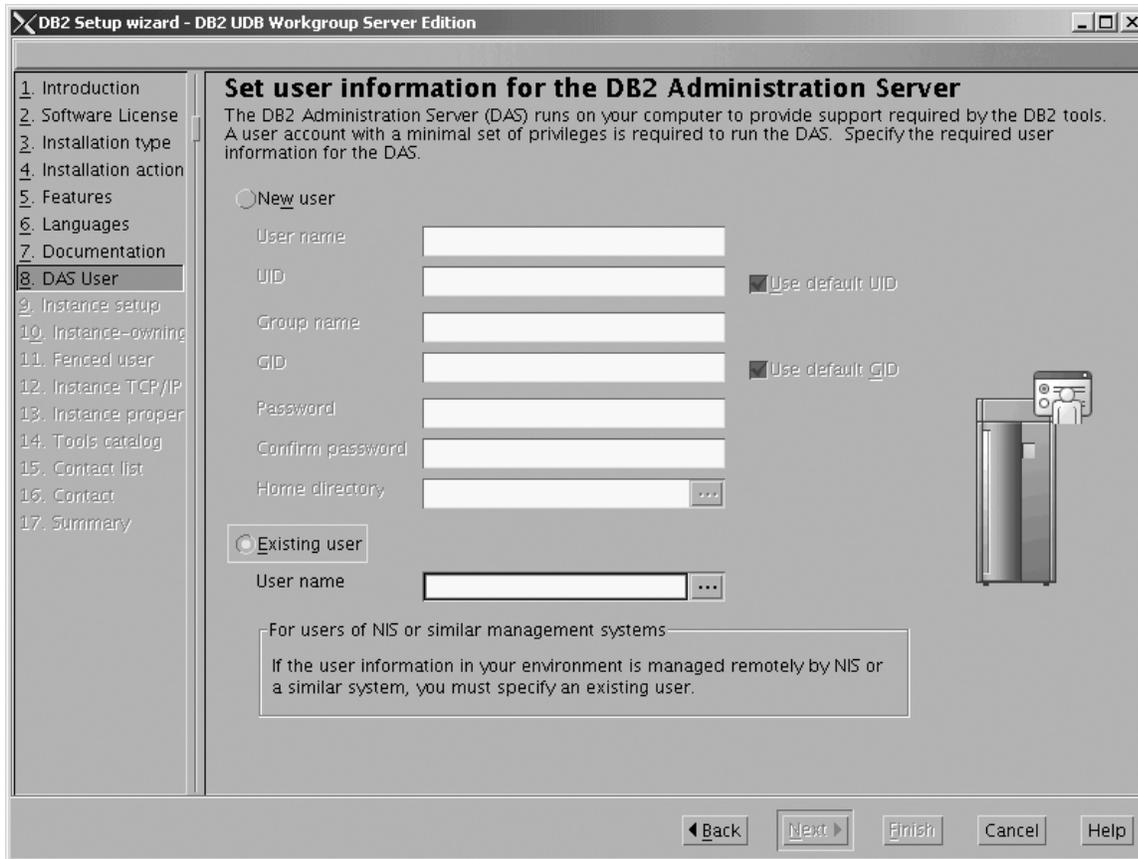


Figure 175. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- c. Click **Next**. The "Set up a DB2 instance" page opens.
10. On the "Set up a DB2 instance" page:
 - a. Select the **Create a DB2 instance - 64 bit** radio button.

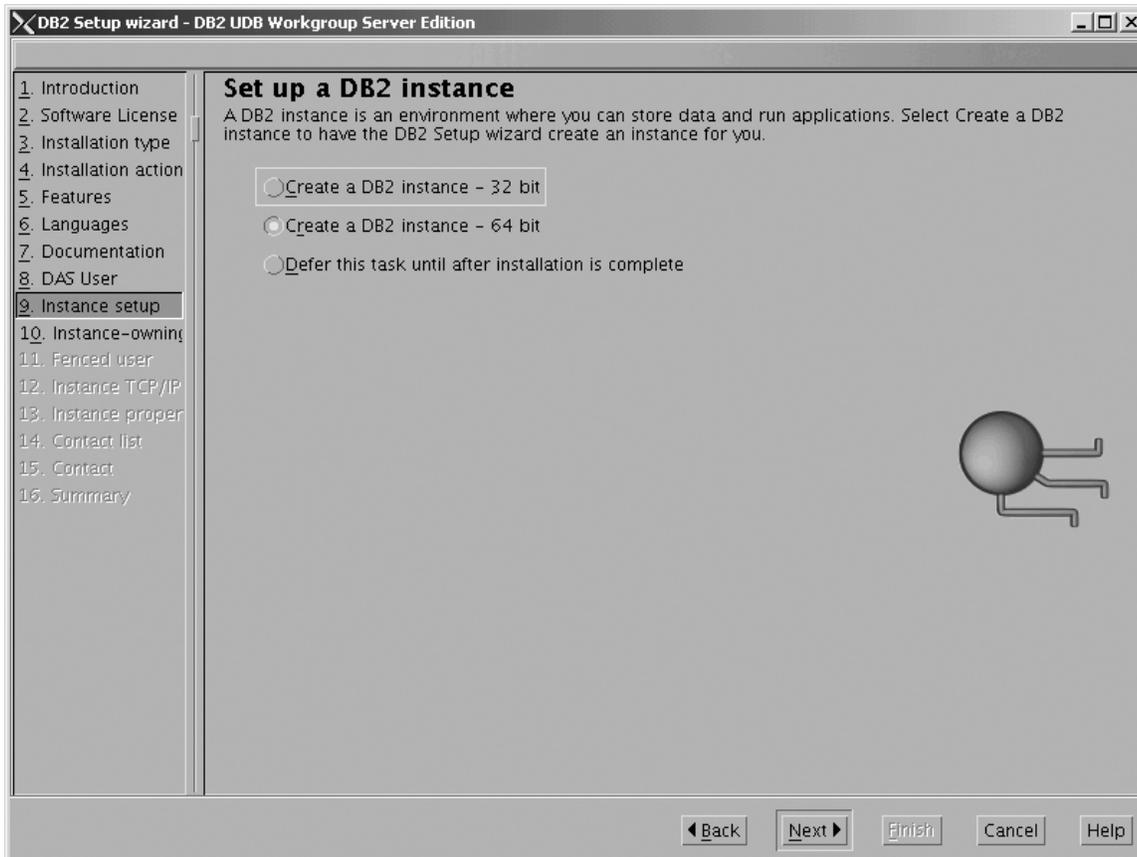


Figure 176. DB2 Setup wizard - Set up a DB2 instance page; Create a DB2 instance - 64 bit selected

b. Click **Next**. The following warning is displayed:

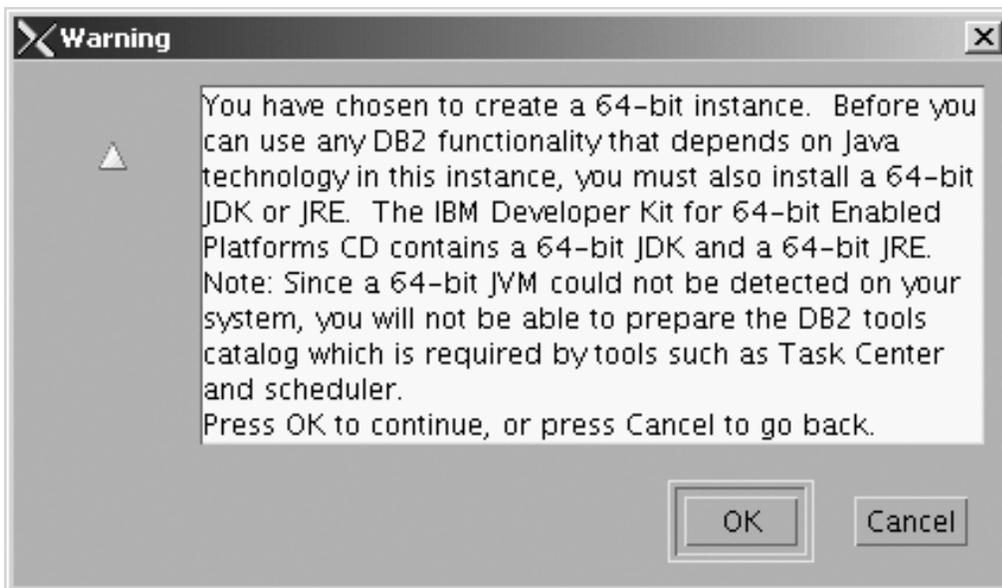


Figure 177. Warning message box

c. Click **OK**. The "Set user information for the DB2 instance owner" page opens.

11. On the "Set user information for the DB2 instance owner" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

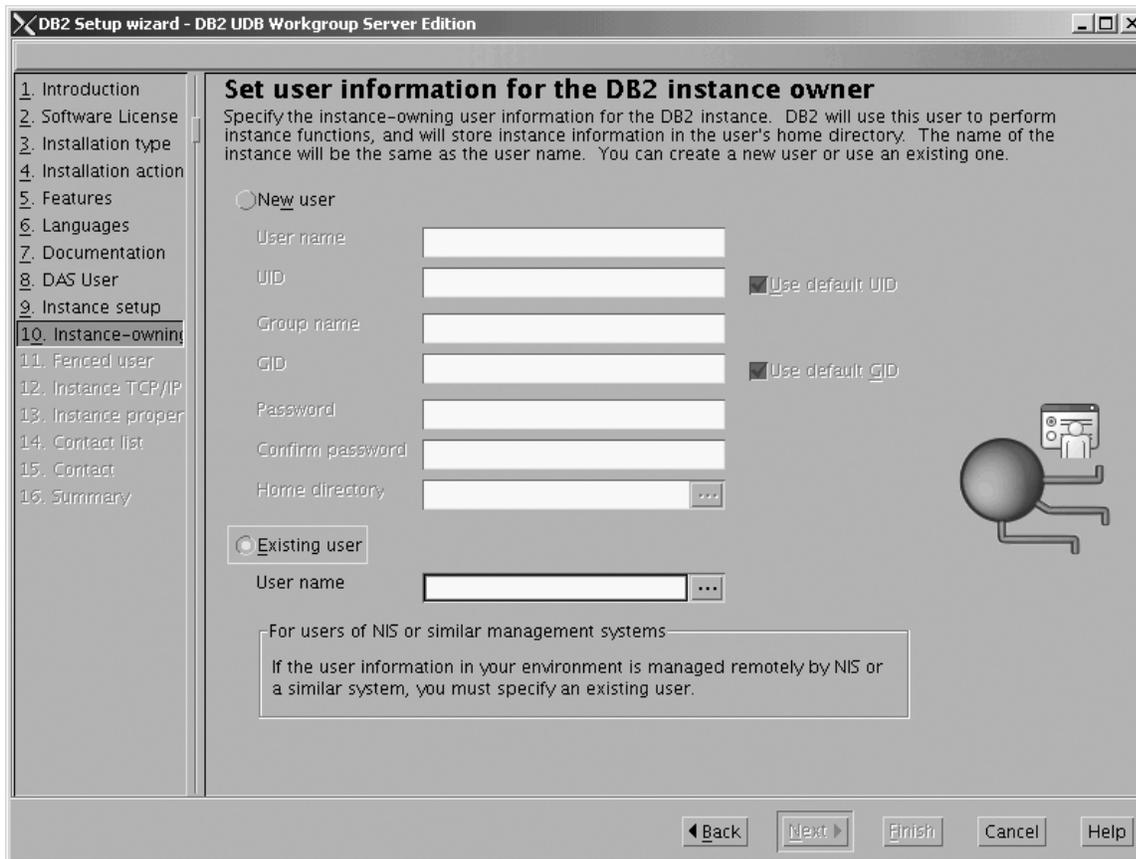


Figure 178. DB2 Setup wizard - Set user information for the DB2 instance owner page

- c. Click **Next**. The "Set user information for the fenced user" page opens.
12. On the "Set user information for the fenced user" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

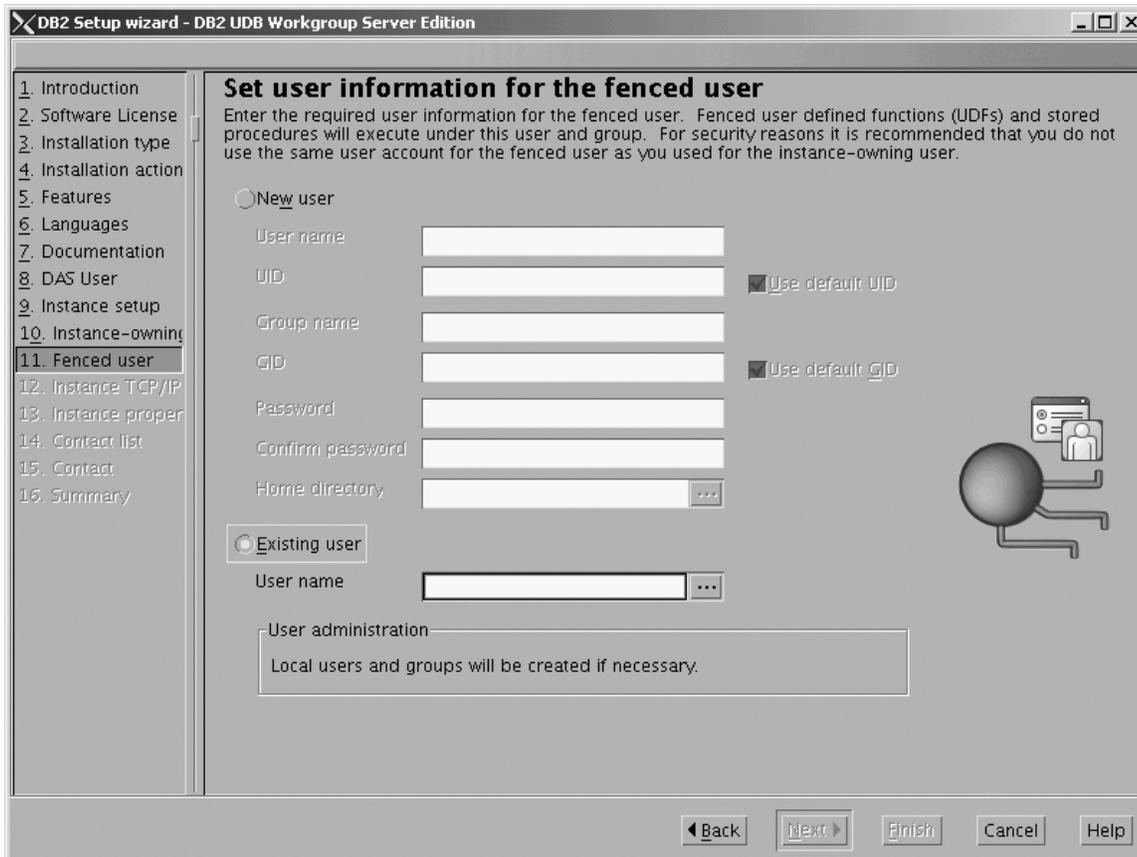


Figure 179. DB2 Setup wizard - Set user information for the fenced user page

- c. Click **Next**. The "Configure DB2 instance TCP/IP communication" page opens.
13. On the "Configure DB2 instance TCP/IP communication" page:
 - a. Select the **Configure** radio button.

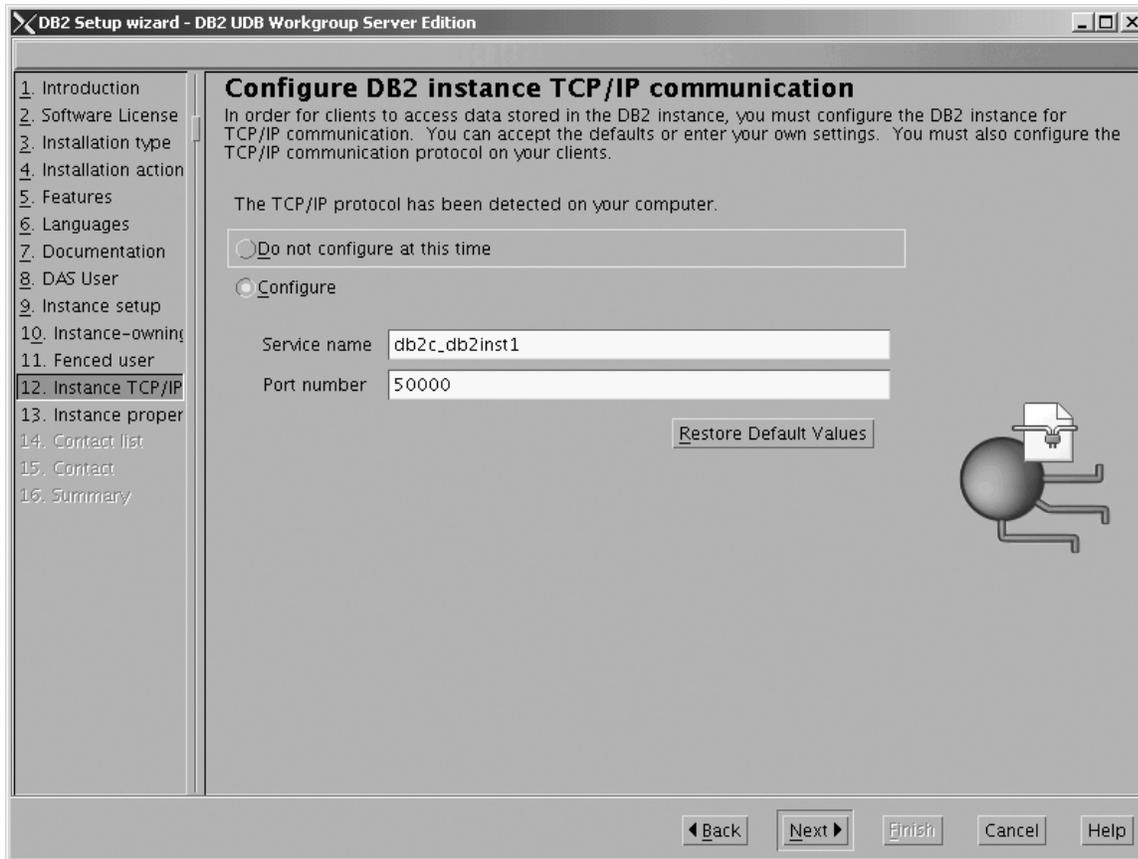


Figure 180. DB2 Setup wizard - Configure DB2 instance TCP/IP communication page

- b. Click **Next**. The "Set instance properties" page opens.
- 14. On the "Set instance properties" page:
 - a. Deselect the **Autostart the instance at system startup** check box.

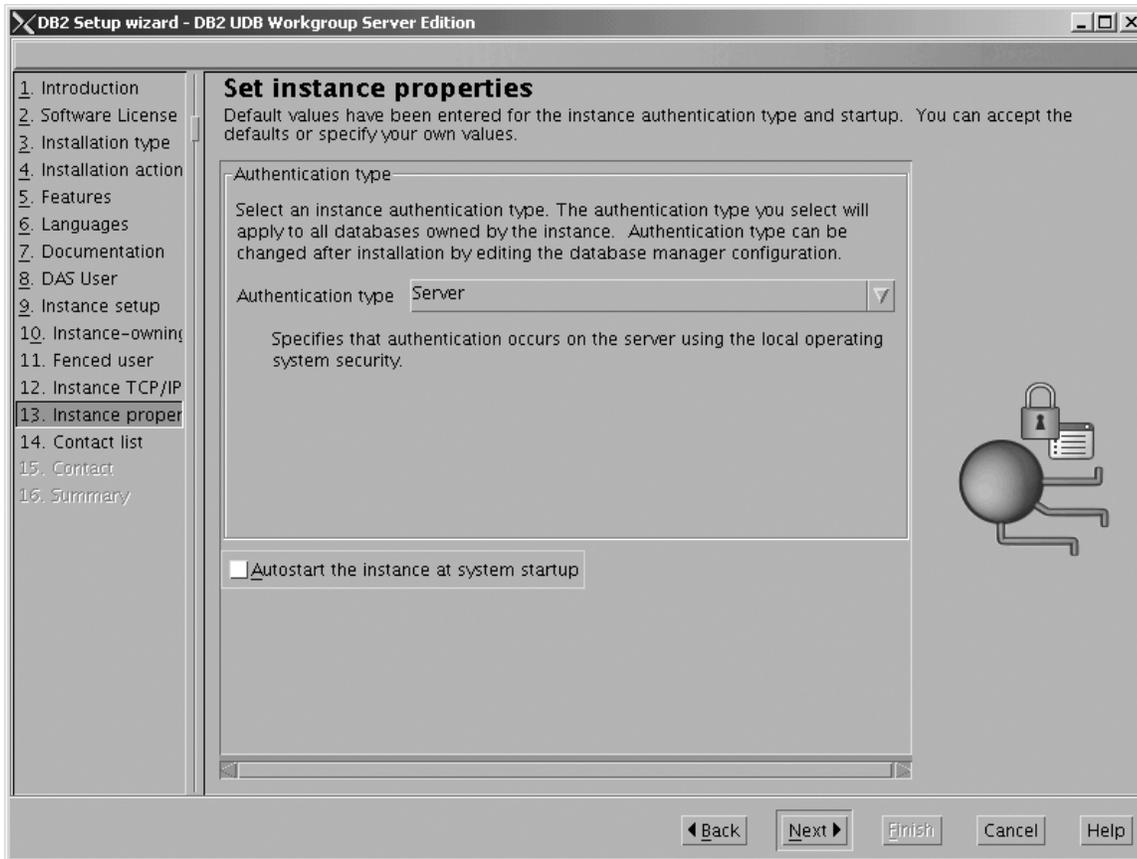


Figure 181. DB2 Setup wizard - Set instance properties page

- b. Click **Next**. The "Set up the administration contact list" page opens.
15. On the "Set up the administration contact list" page:
 - a. Select the **Local - Create a contact list on this system** radio button.
 - b. Ensure that the **Enable notification** check box is deselected.

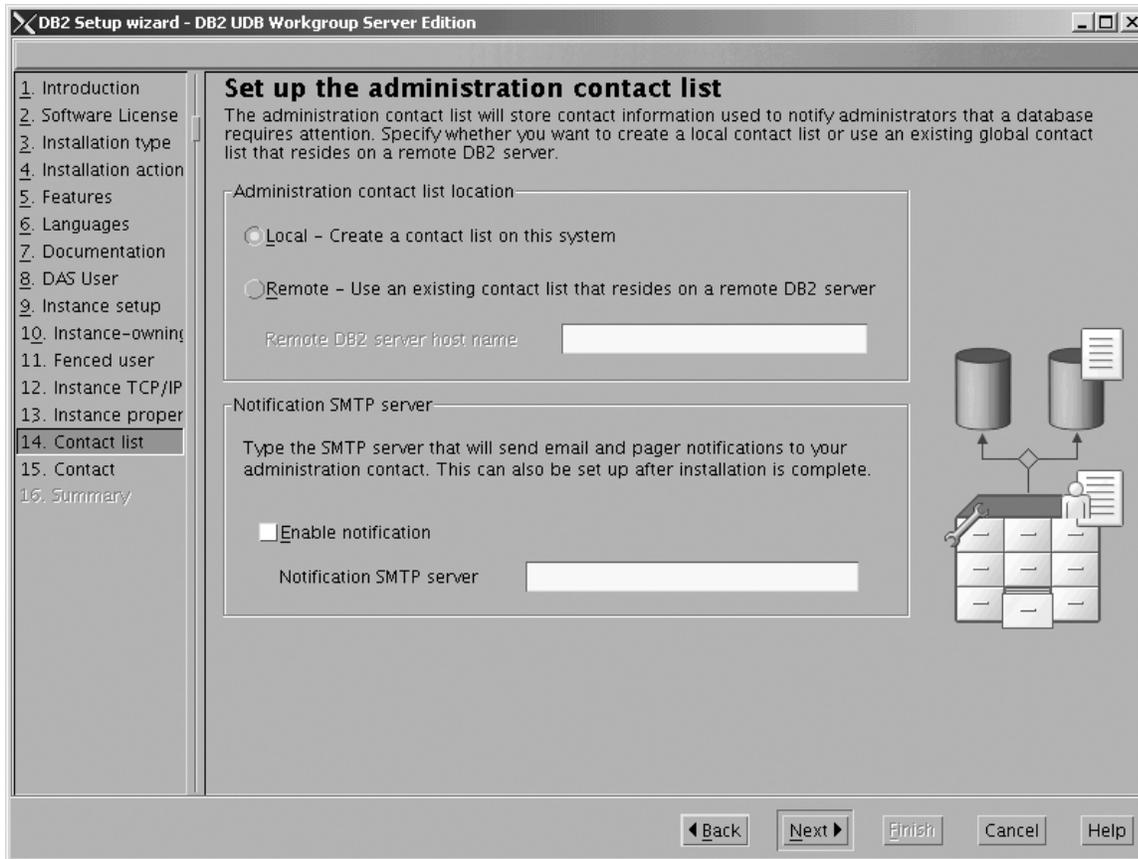


Figure 182. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the Set up the administration contact list page, the following warning message is displayed:

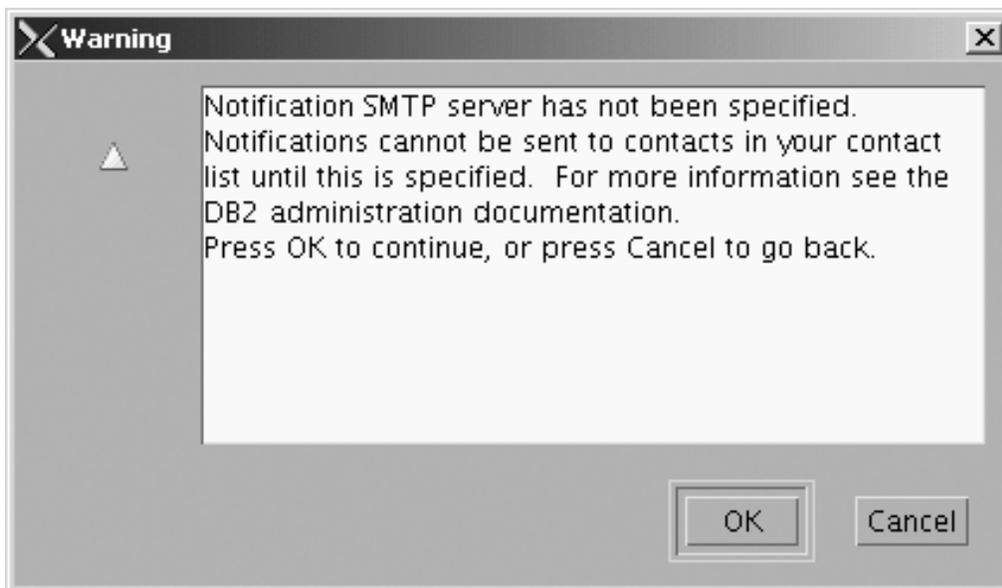


Figure 183. DB2 Setup wizard - Warning message

Click **OK**. The "Specify a contact for health monitor notification" page opens.

16. On the "Specify a contact for health monitor notification" page:
 - a. Select the **Defer this task until after installation is complete** radio button.

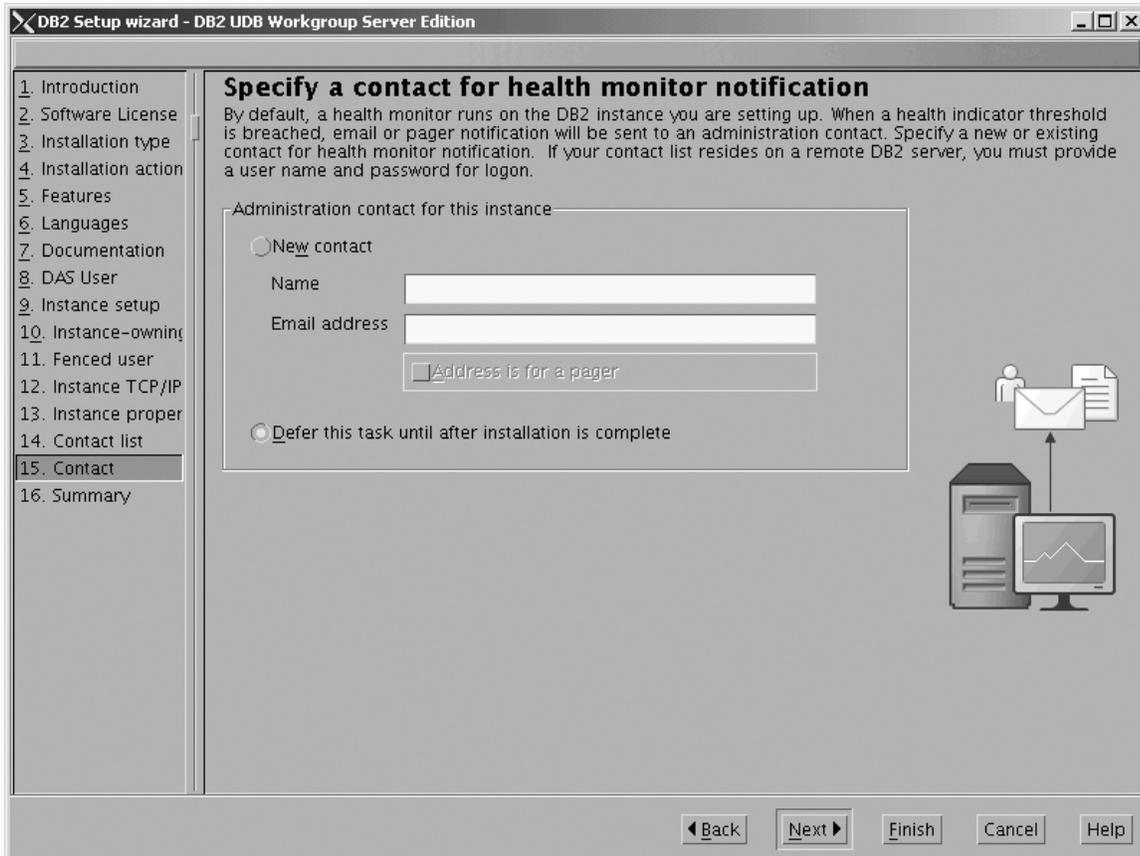


Figure 184. DB2 Setup wizard - Specify a contact for health monitor notification page

- b. Click **Next**. The "Start copying files" page opens.
17. On the "Start copying files" page, click **Finish** to begin installing DB2 UDB Workgroup Server Edition on your computer.

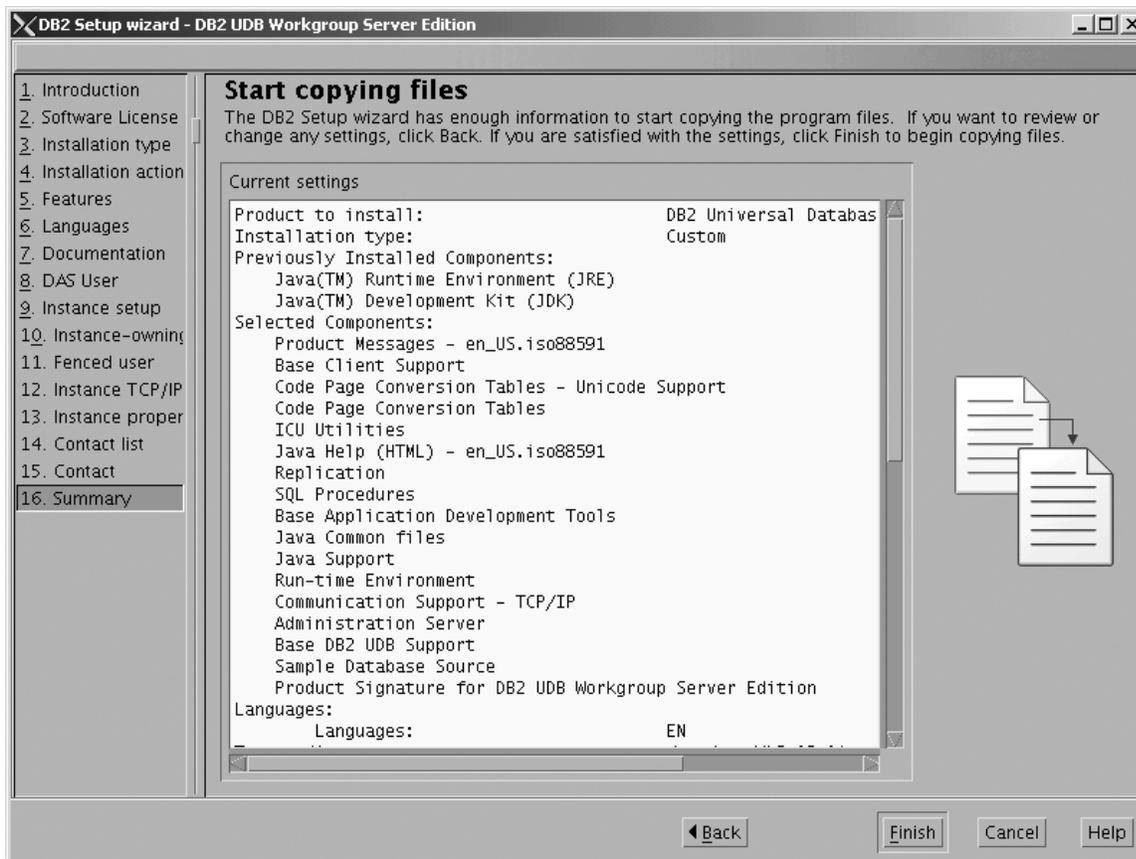


Figure 185. DB2 Setup wizard - Start copying files page

The "Installing DB2 UDB Workgroup Server Edition" page opens.

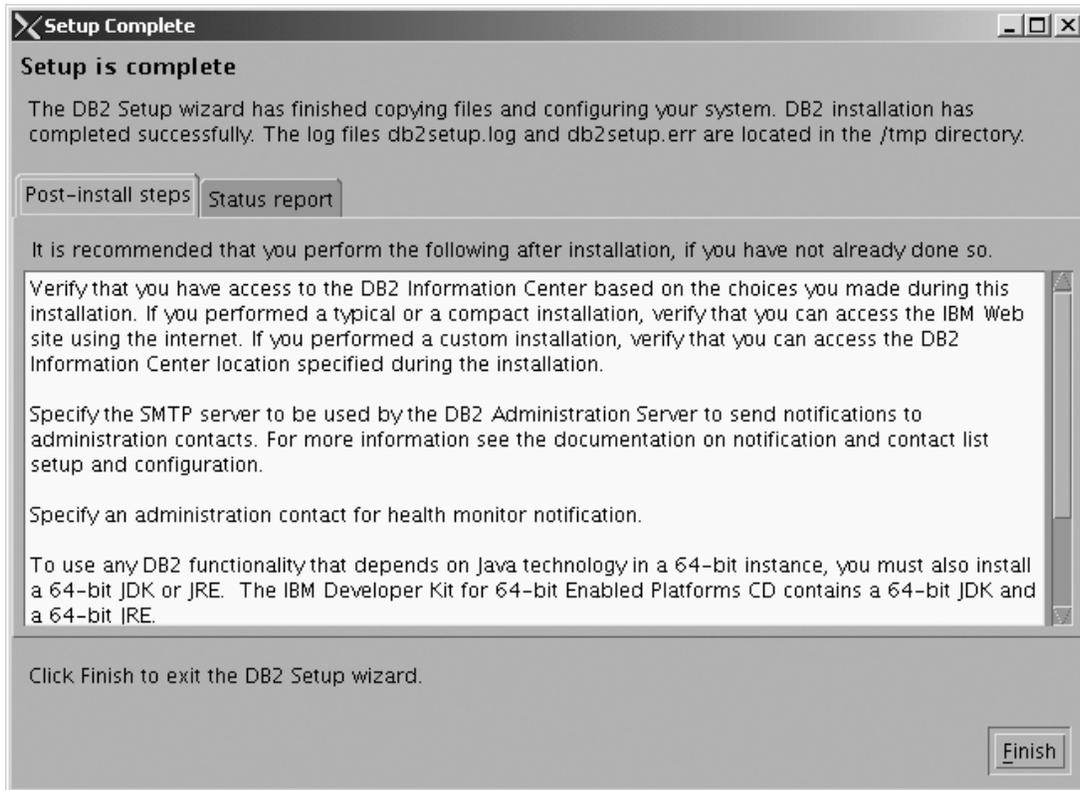


Figure 187. DB2 Setup wizard - Setup is complete page

Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Workgroup Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Installing DB2 UDB Workgroup Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant installation

This task provides detailed instructions on installing DB2 UDB Workgroup Server Edition on the Solaris Operating Environment 8 for a Common Criteria compliant installation.

Prerequisites:

- The computer on which you install DB2 Universal Database must be physically protected from untrusted users.
- Solaris Operating Environment 8 must be installed on the computer.
- You must have the installation CD mounted.
- The user names to be used for the following:
 - The DB2 instance owner
 - The DB2 Administration Server
 - The fenced user

If you do not have these user names, obtain them from your system administrator. For more information about these users, see "DB2 users and

group (UNIX)” on page 14. For information about creating these users, see “Creating group and user IDs for a DB2 UDB installation (UNIX)” on page 38.

Procedure:

Use the following steps to install DB2 UDB Workgroup Server Edition on Solaris Operating Environment 8 for a Common Criteria compliant environment.

1. On the “IBM DB2 Setup Launchpad”, click **Install Products**.

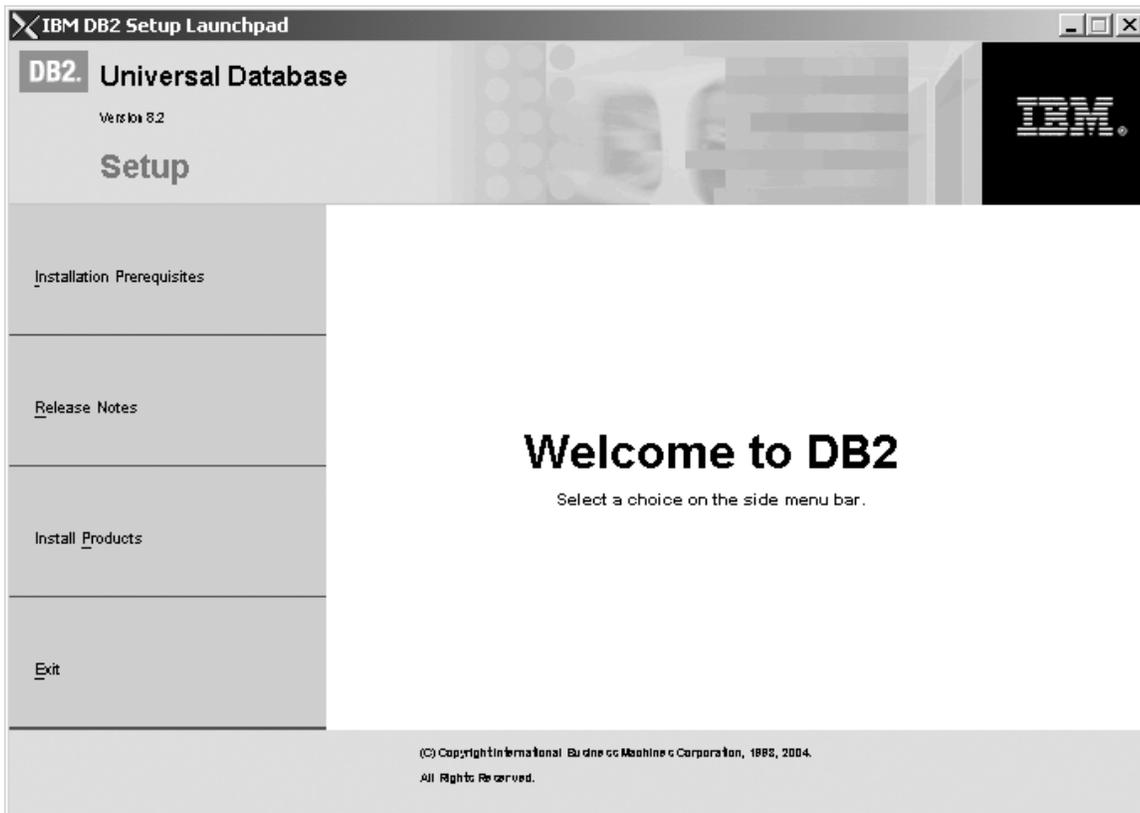


Figure 188. IBM DB2 Setup Launchpad

2. On the second page of the “IBM DB2 Setup Launchpad”:
 - a. In the **Select the product you would like to install box**, select **DB2 UDB Workgroup Server Edition**, as follows:

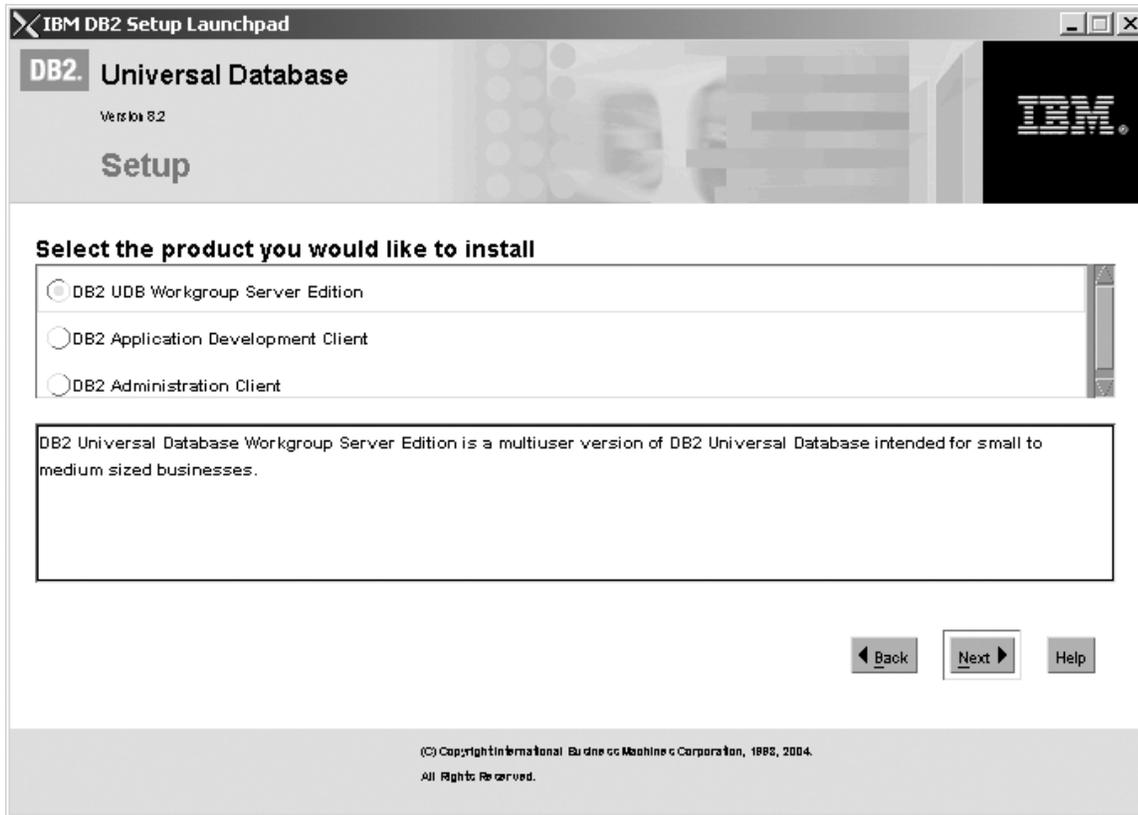


Figure 189. IBM DB2 Setup Launchpad with DB2 UDB Workgroup Server Edition selected

- b. Click **Next**. In a moment, the "DB2 Setup wizard" opens, as follows:

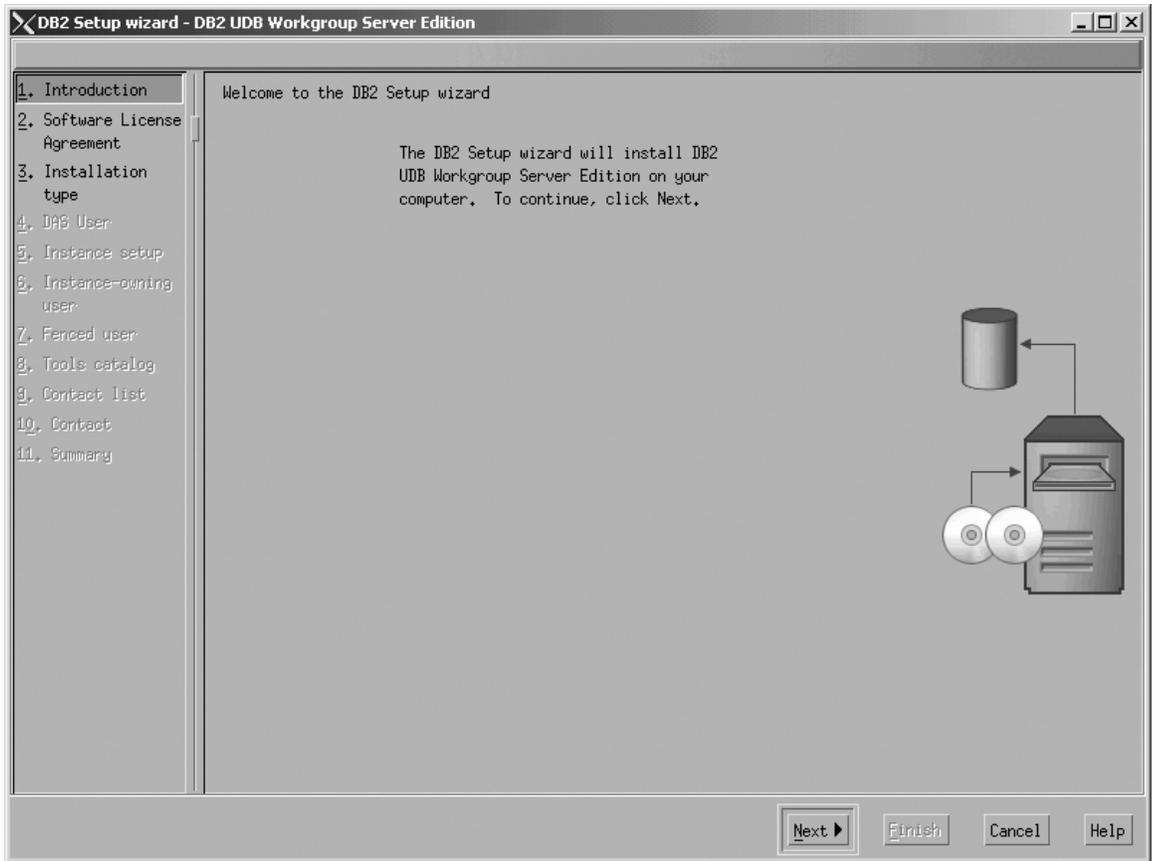


Figure 190. DB2 Setup wizard

- c. Click **Next**. The "Software License Agreement" page opens.
3. On the "Software License Agreement" page:
 - a. Click the **Accept** radio button.

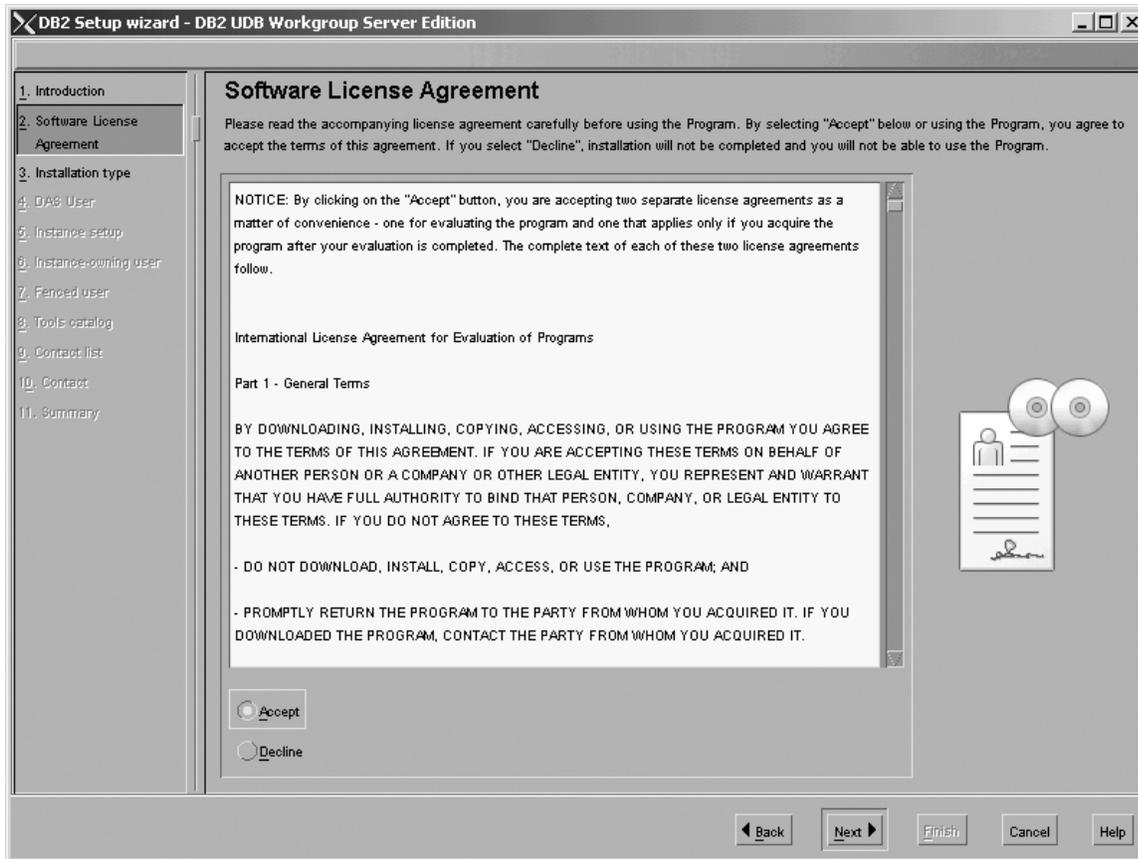


Figure 191. DB2 Setup wizard - Software License Agreement page

- b. Click **Next**. The "Select the installation type" page opens.
4. On the "Select the installation type" page:
 - a. Select the **Custom** radio button:

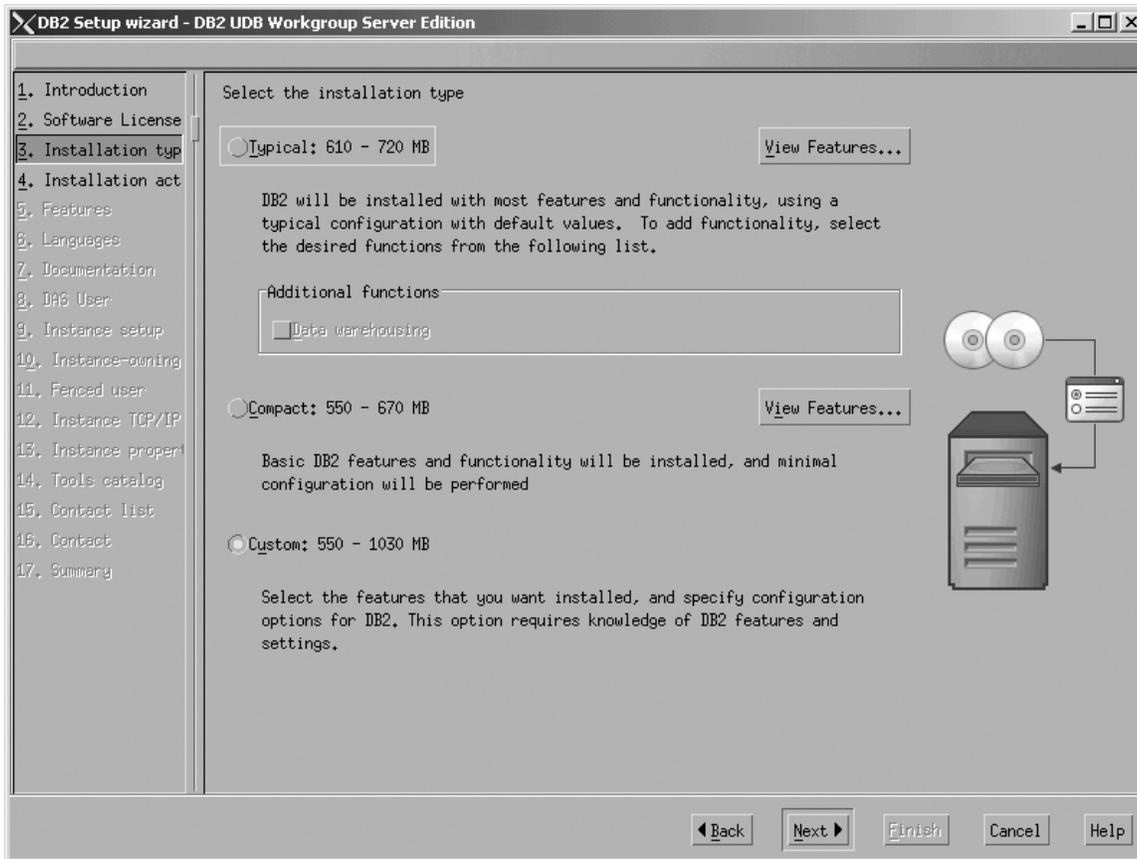


Figure 192. DB2 Setup wizard - Select the installation type page

- b. Click **Next**. The "Select the installation action" page opens.
5. On the "Select the installation action" page:
 - a. Select the **Install DB2 UDB Workgroup Server Edition on this computer** check box.

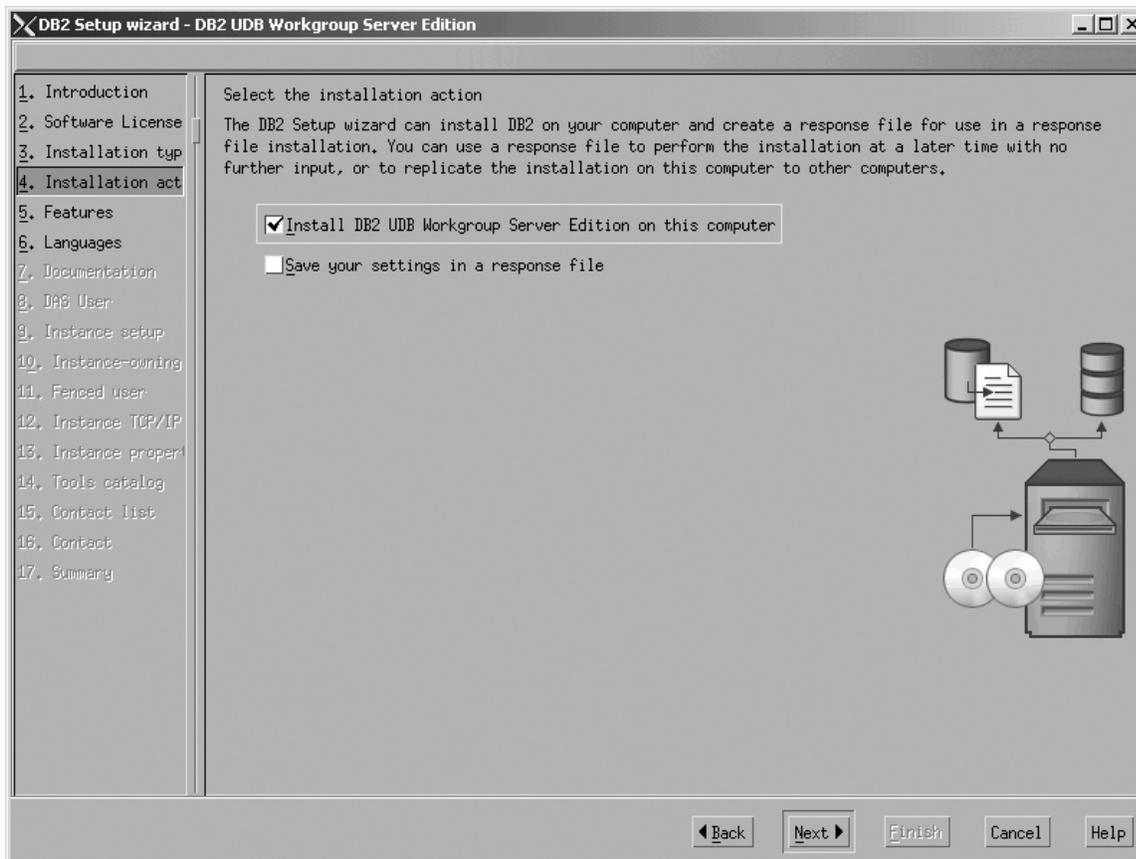


Figure 193. DB2 Setup wizard - Select the installation action page

- b. Click **Next**. The "Select the features to install" page opens.
6. On the "Select the features to install" page:
 - a. Open the + beside **Server support**, then select the check box beside **DB2 Data Source Support** (so that the check mark is removed). This action prevents the **DB2 Data Source Support** option from being installed.

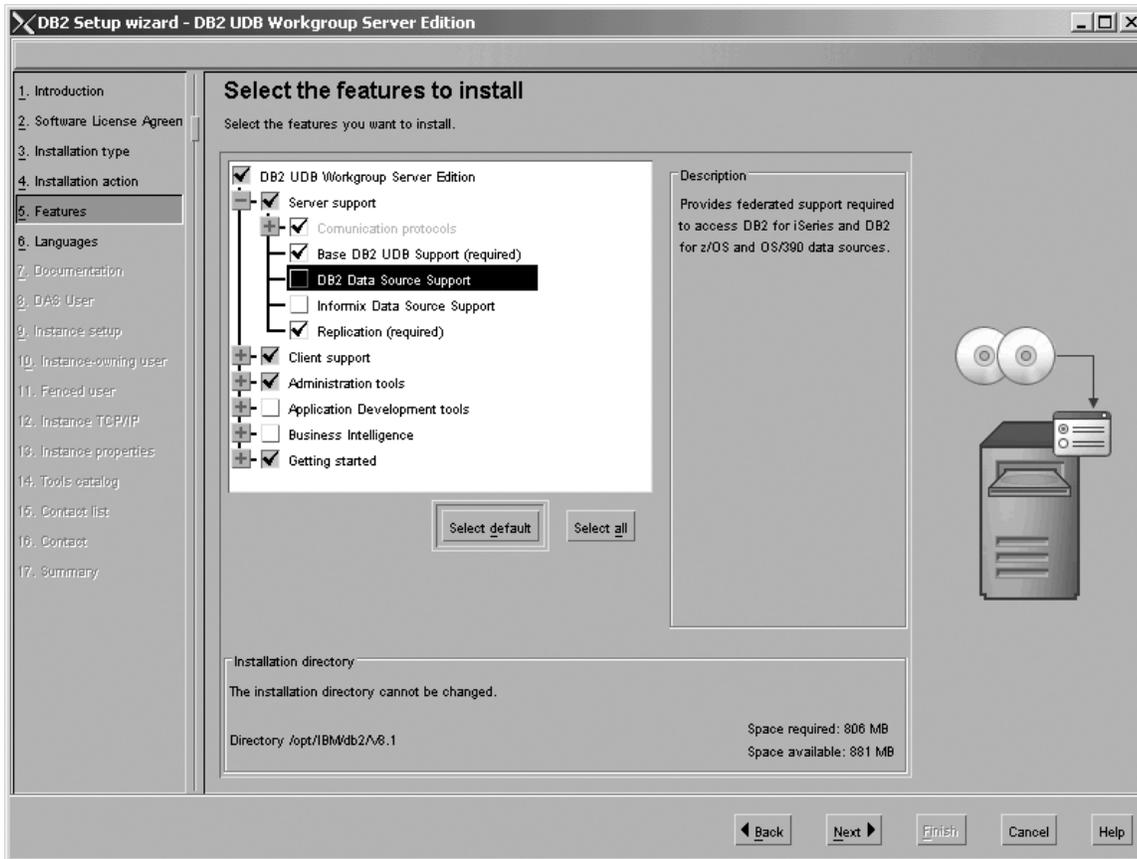


Figure 194. DB2 Setup wizard - Select the features to install page; DB2 Data Source Support option deselected for installation

- b. Open the + beside **Client support**, then select the check box beside **DB2 LDAP Support**. This action prevents the **DB2 LDAP Support** option from being installed.

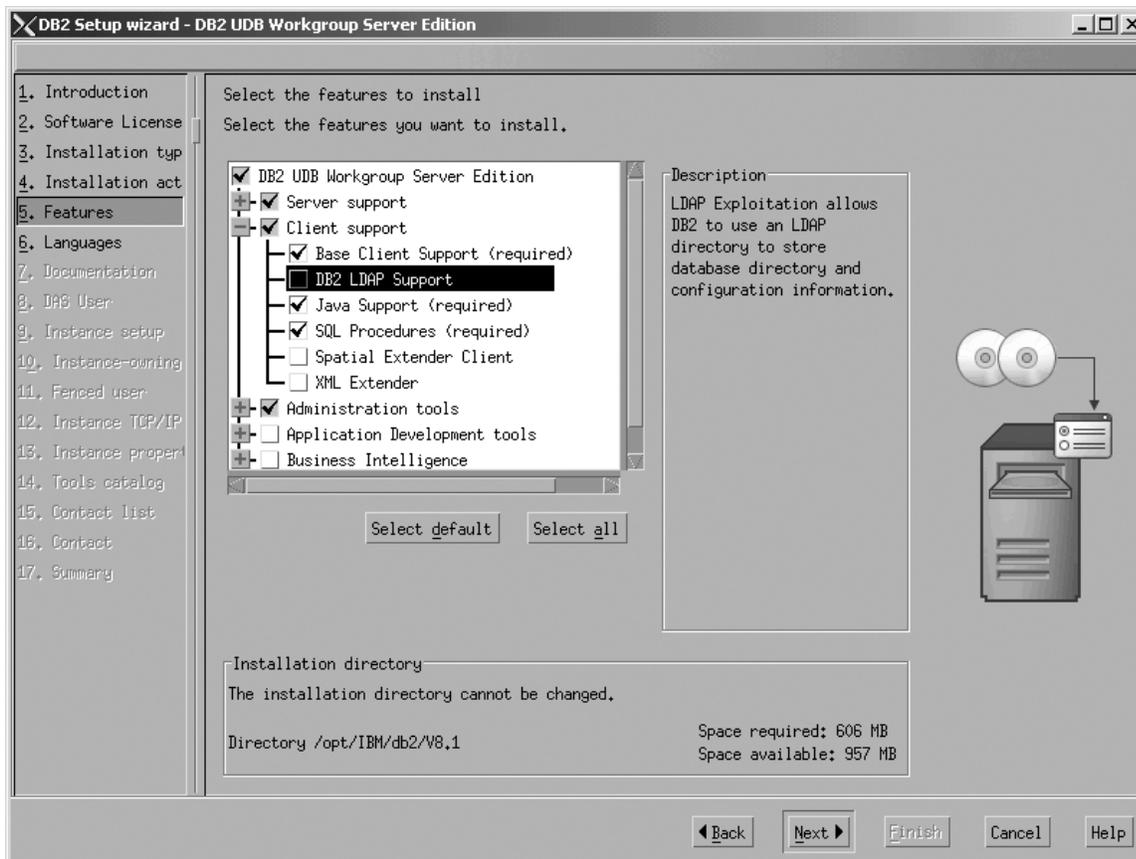


Figure 195. DB2 Setup wizard - Select the features to install page; DB2 LDAP Support option deselected for installation

- c. Open the + beside **Administration tools**, then deselect all the checked options to remove them from the list of options being installed. Note that you must deselect the **Configuration Assistant** option last.

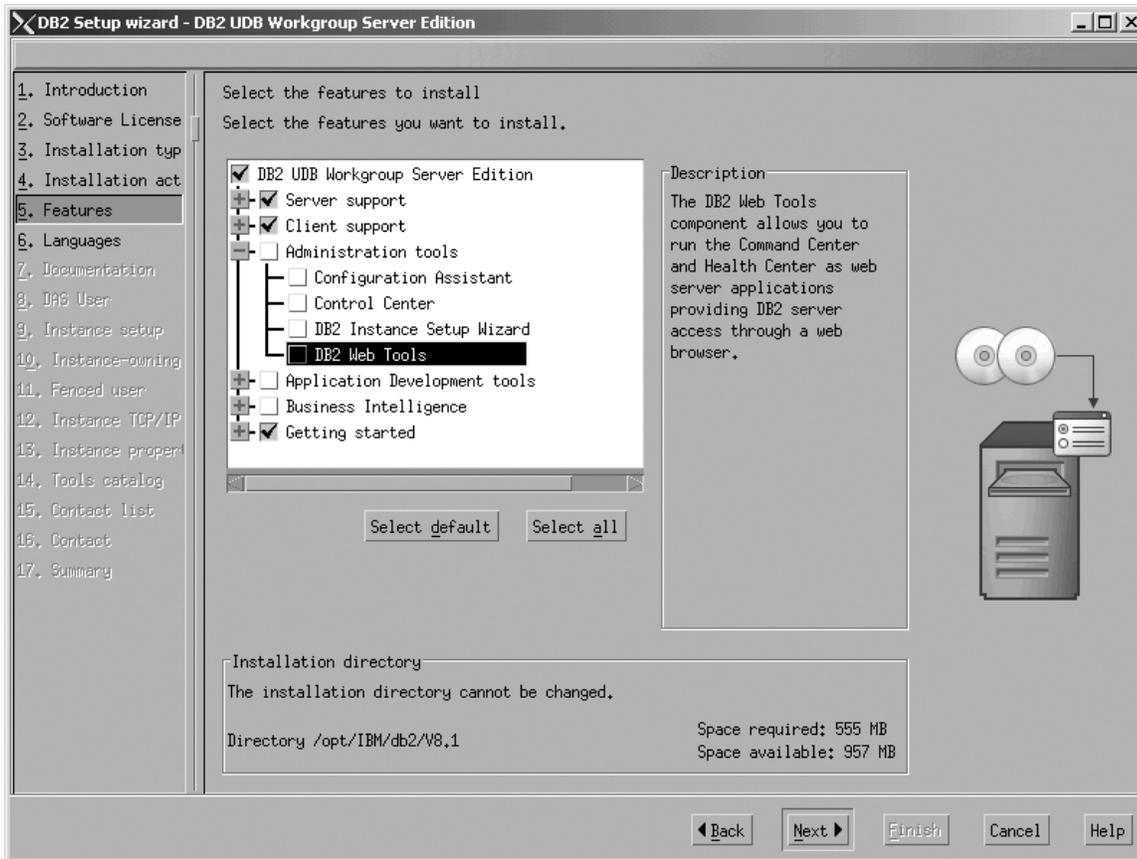


Figure 196. DB2 Setup wizard - Select the features to install page; all Administration tools options deselected for installation

- d. Open the + beside **Application Development Tools**, then select the **Base Application Development Tools** option so that this option gets installed.

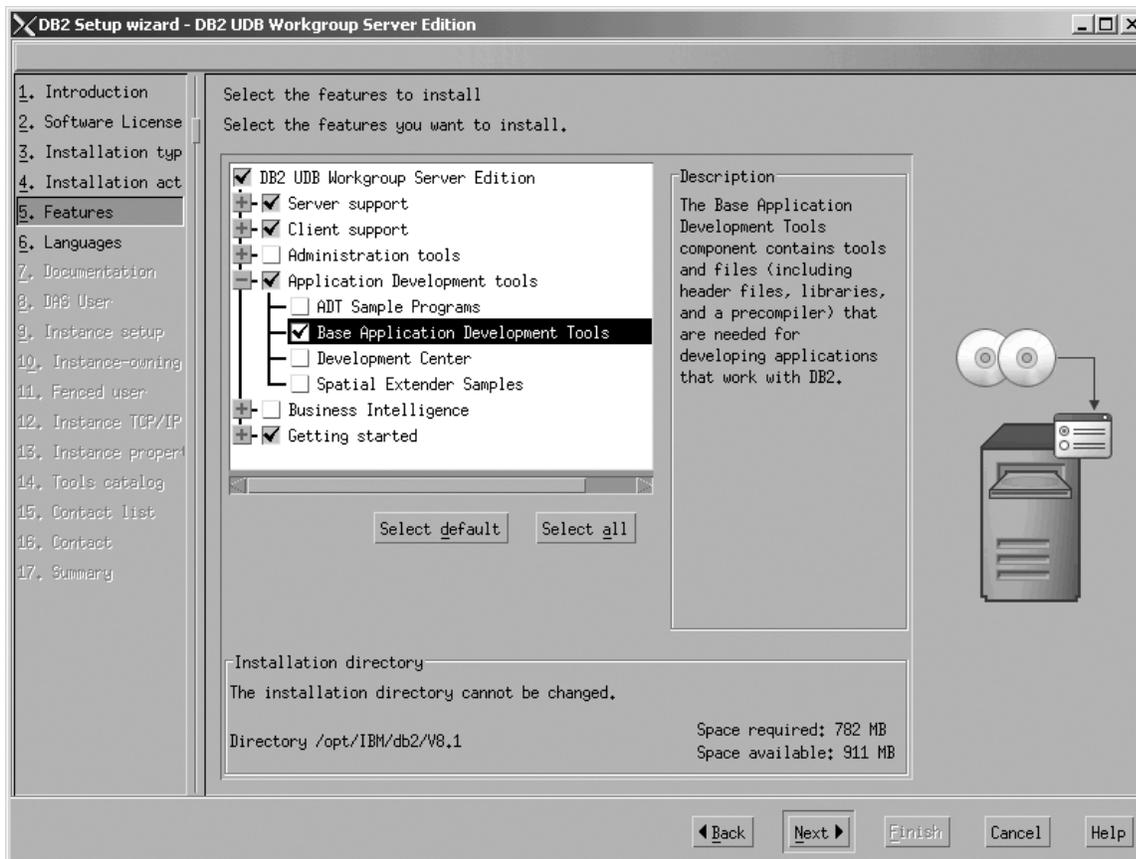


Figure 197. DB2 Setup wizard - Select the features to install page; Base Application Development Tools option selected for installation

- e. Open the + beside **Getting started**, then select the **First Steps** option so that this option does not get installed.

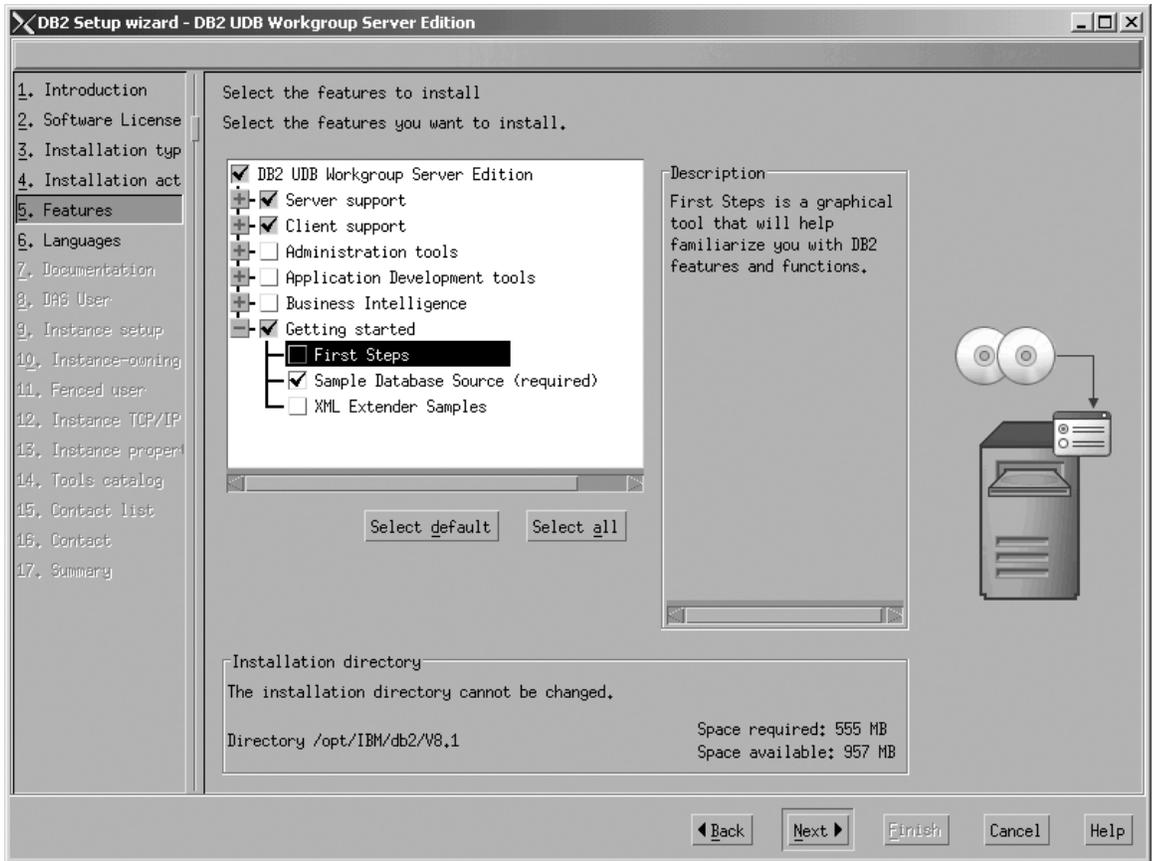


Figure 198. DB2 Setup wizard - Select the features to install page; First Steps option deselected for installation

- f. Click **Next**. The "Languages" page opens.
- 7. On the "Languages" page, English is the only language support that is installed by default.

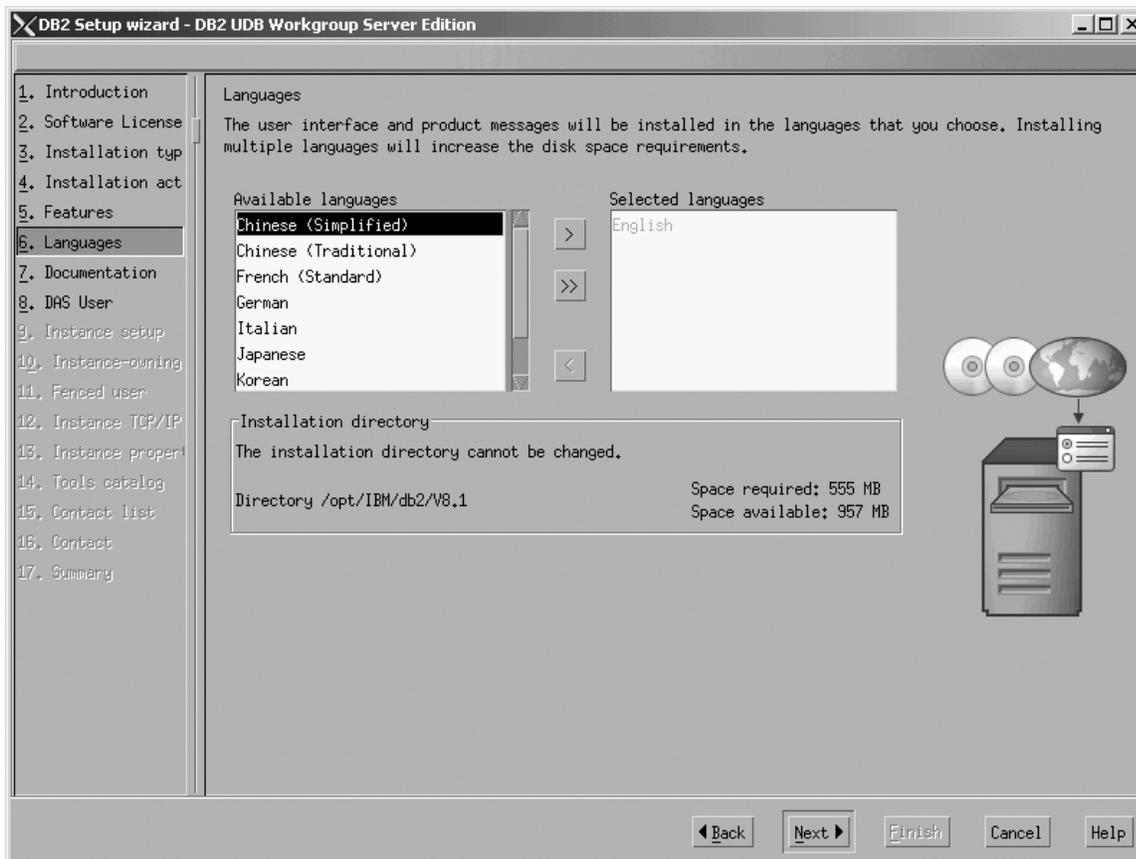


Figure 199. DB2 Setup wizard - Languages page; English language support selected for installation

Do one of the following:

- If you do not need to install any languages other than English, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
 - If you need to install language support other than English, select the language you want from the **Available languages** box, and click > to move it to the **Selected languages** box. Repeat this procedure for every language that you need to install. When you have selected all the languages that you require, click **Next**. The "Specify the location of the DB2 Information Center" page opens.
8. On the "Specify the location of the DB2 Information Center" page:
- a. Ensure that the **On the IBM Web site** radio button is selected.

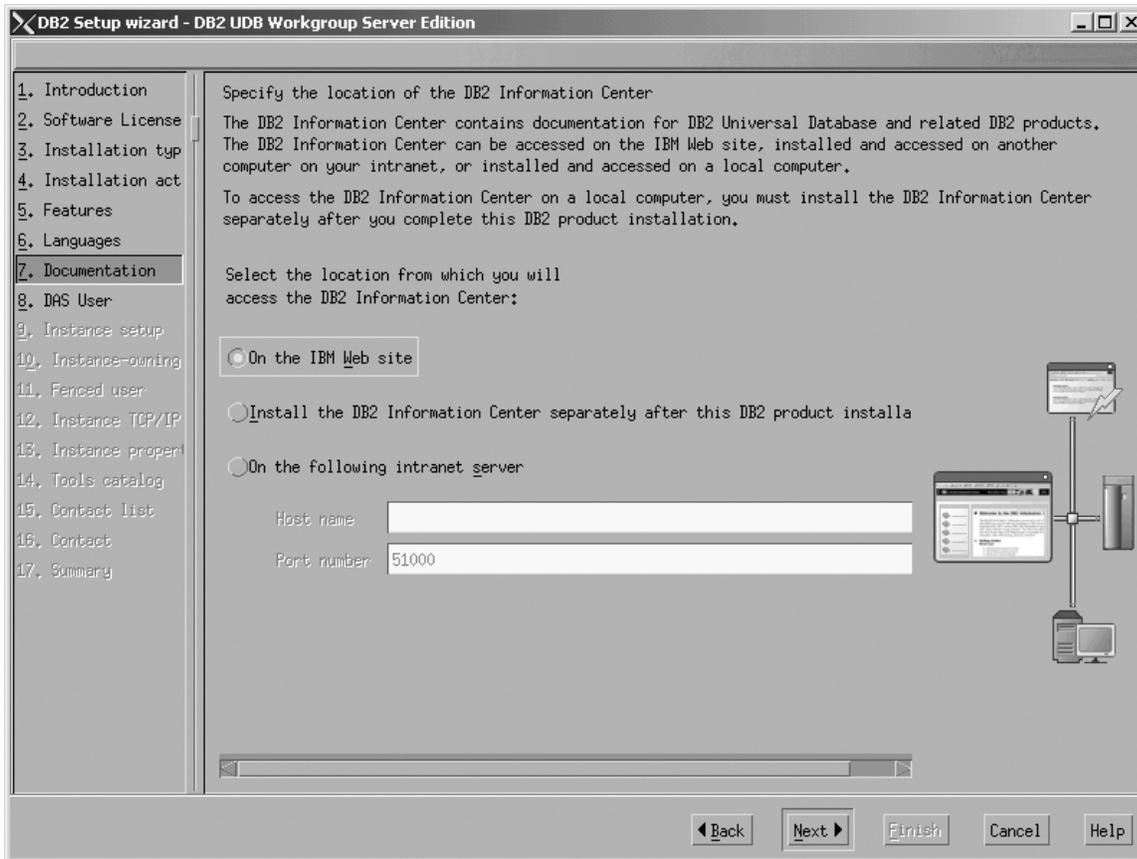


Figure 200. DB2 Setup wizard - Specify the location of the DB2 Information Center; On the IBM Web site option selected

- b. Click **Next**. The "Set user information for the DB2 Administration Server" page opens.
 9. On the "Set user information for the DB2 Administration Server" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

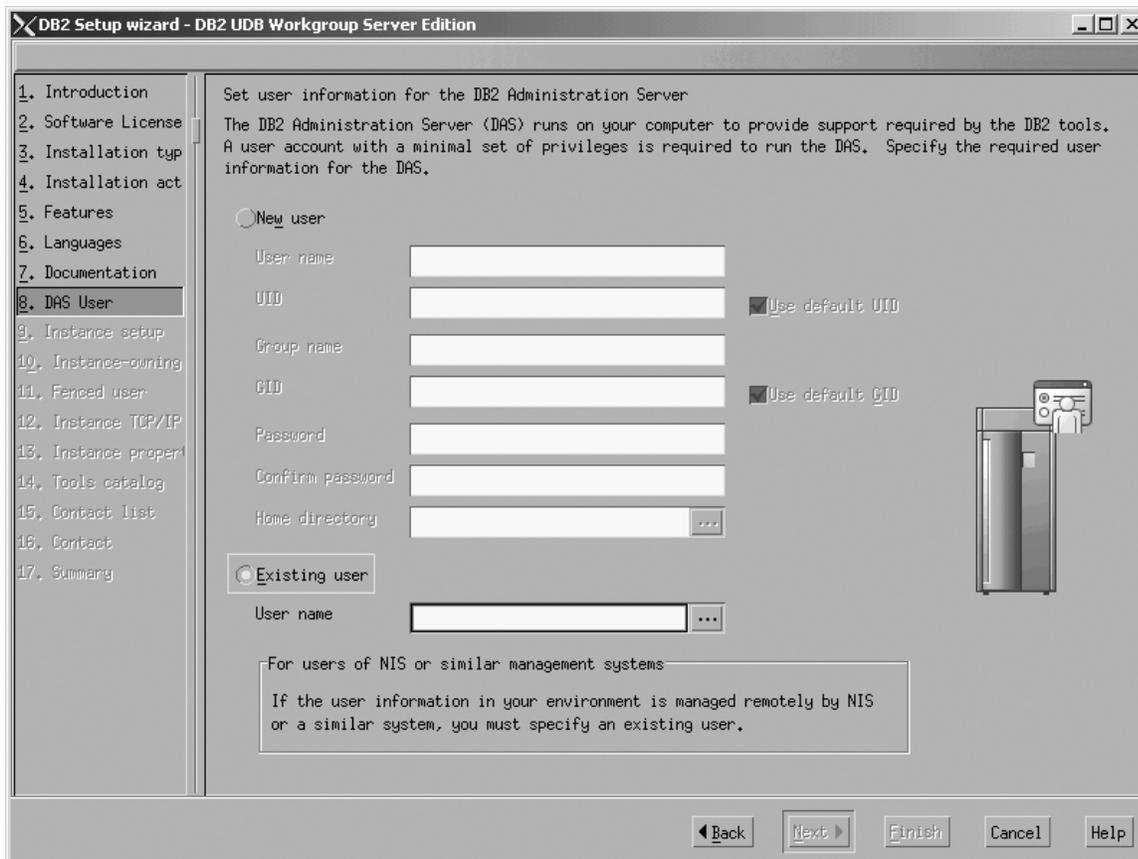


Figure 201. DB2 Setup wizard - Set user information for the DB2 Administration Server page

- c. Click **Next**. The "Set up a DB2 instance" page opens.
10. On the "Set up a DB2 instance" page:
 - a. Select the **Create a DB2 instance - 64 bit** radio button.

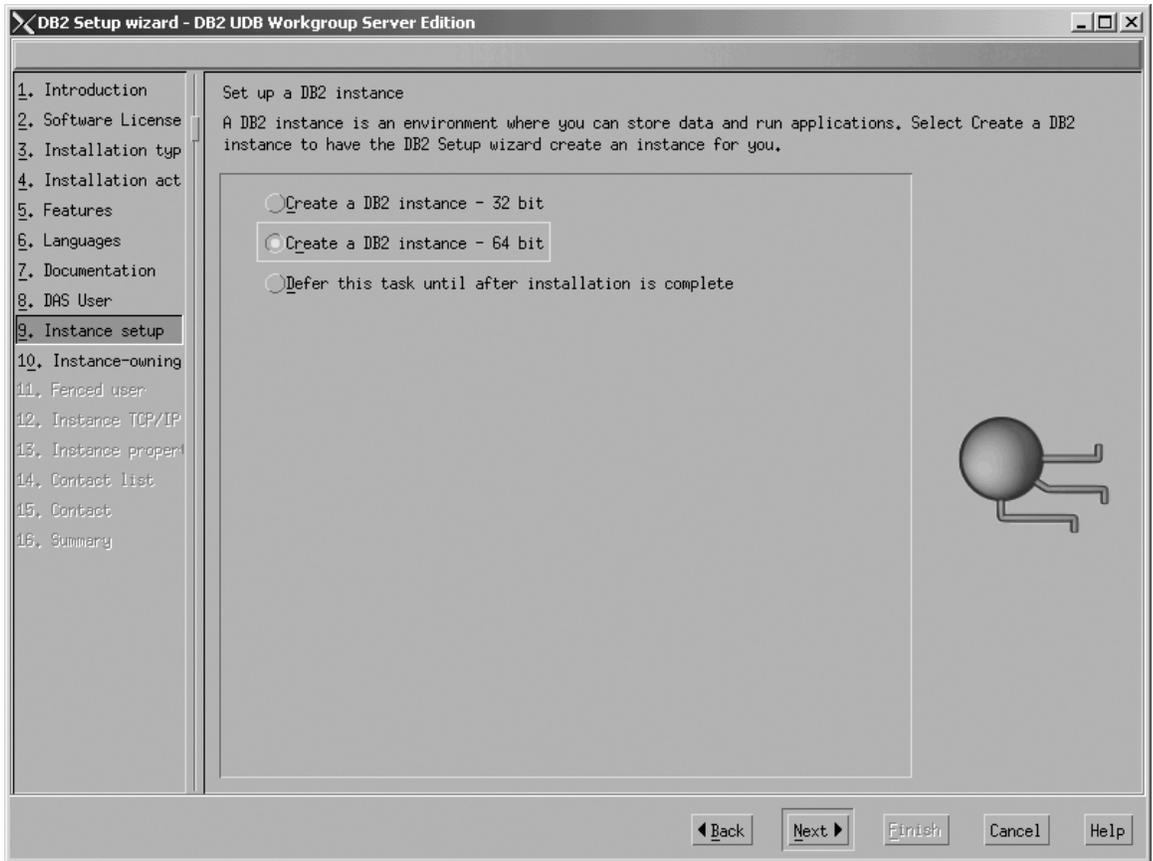


Figure 202. DB2 Setup wizard - Set up a DB2 instance page; Create a DB2 instance - 64 bit selected

|
|

b. Click **Next**. The following warning is displayed:

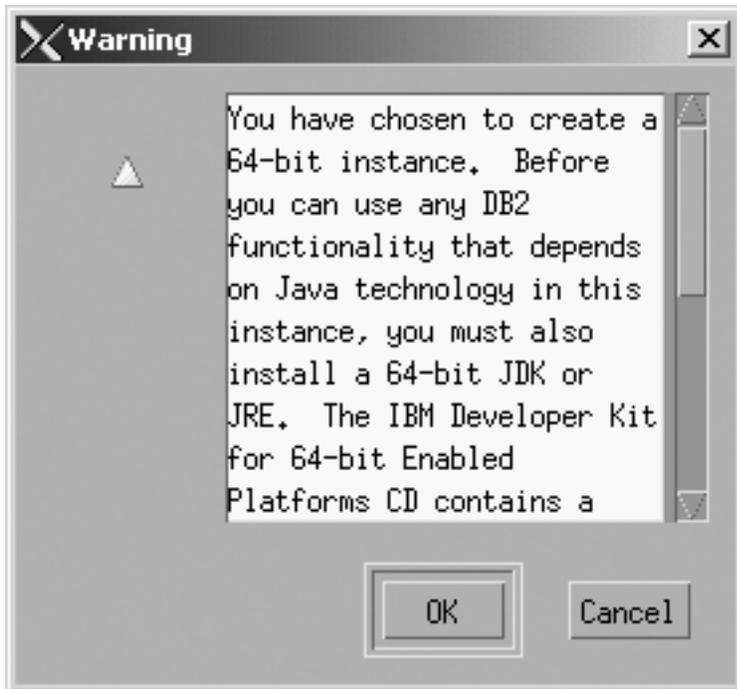


Figure 203. Warning message box

- |
- |
- c. Click **OK**. The "Set user information for the DB2 instance owner" page opens.
- 11. On the "Set user information for the DB2 instance owner" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

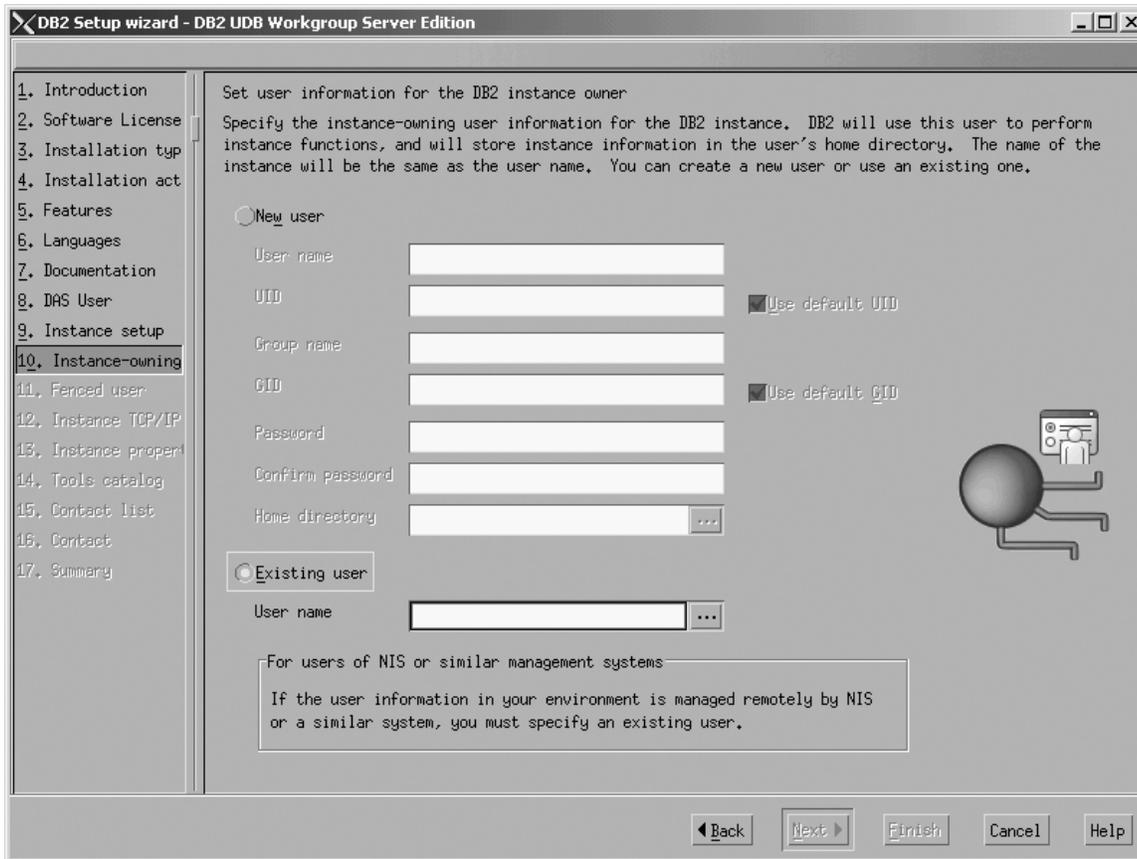


Figure 204. DB2 Setup wizard - Set user information for the DB2 instance owner page

- c. Click **Next**. The "Set user information for the fenced user" page opens.
12. On the "Set user information for the fenced user" page:
 - a. Select the **Existing user** radio button.
 - b. Use the ... of the **User name** field to select the user that you want.

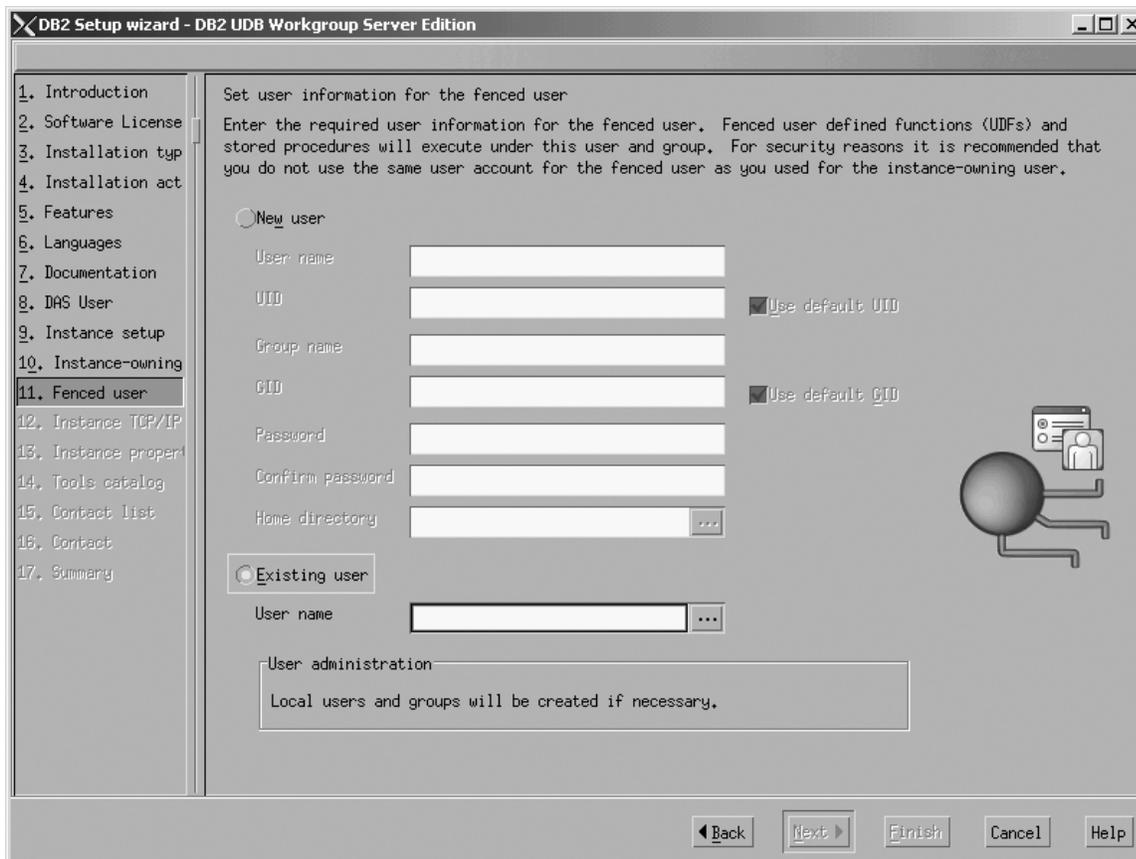


Figure 205. DB2 Setup wizard - Set user information for the DB2 instance owner page

- c. Click **Next**. The "Configure DB2 instance TCP/IP communication" page opens.
13. On the "Configure DB2 instance TCP/IP communication" page:
 - a. Select the **Configure** radio button.

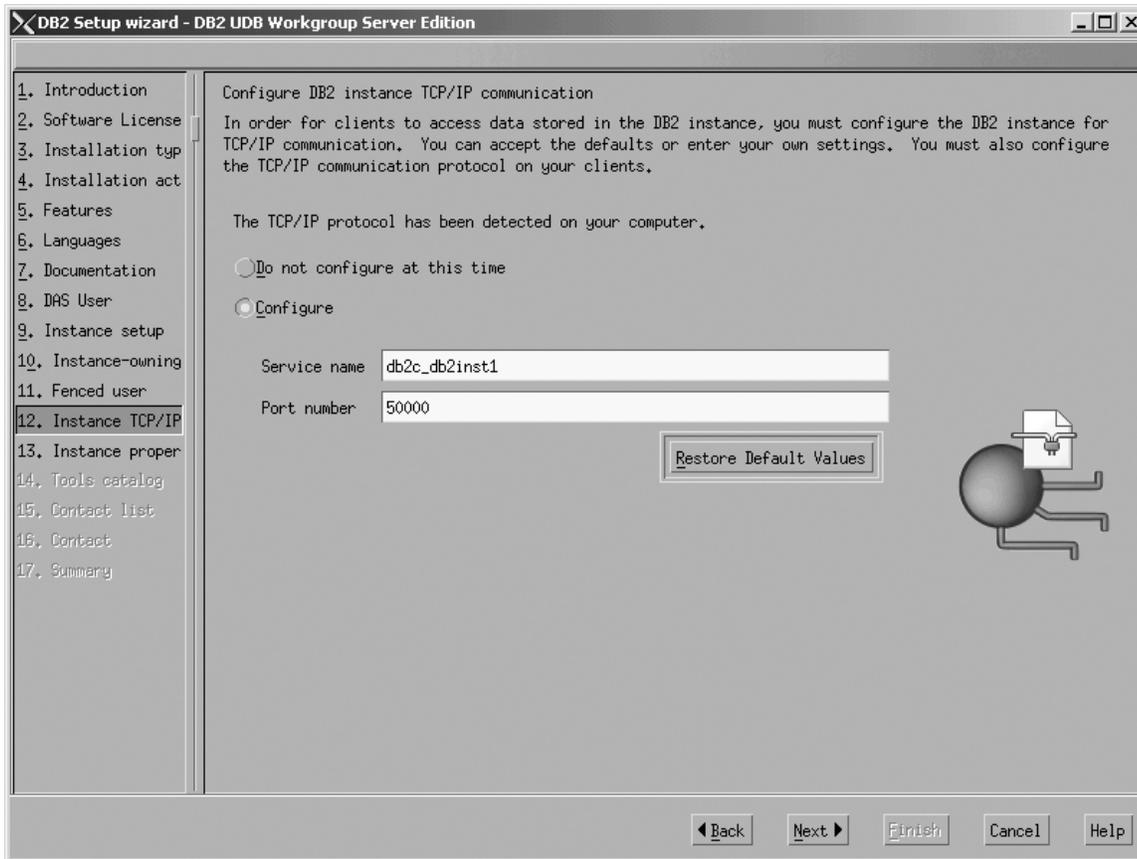


Figure 206. DB2 Setup wizard - Configure DB2 instance TCP/IP communication page

- b. Click **Next**. The "Set instance properties" page opens.
- 14. On the "Set instance properties" page:
 - a. Deselect the **Autostart the instance at system startup** check box.

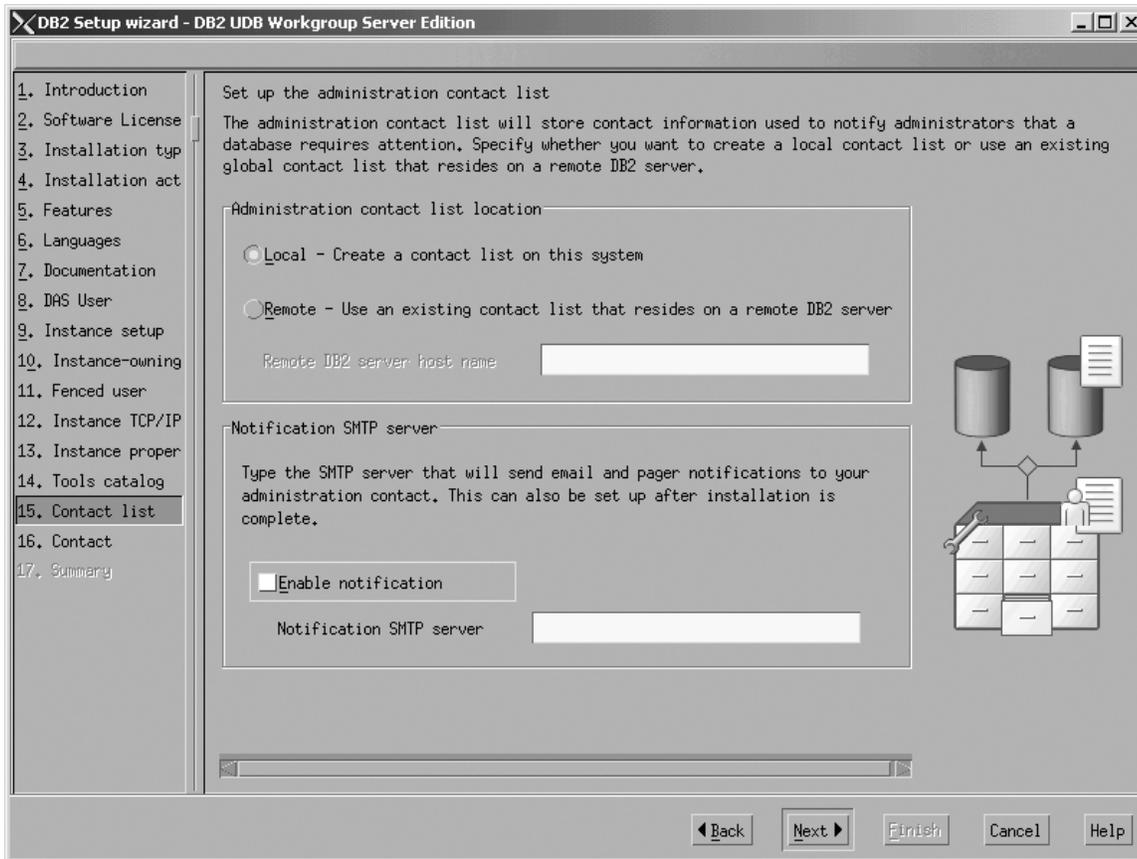


Figure 208. DB2 Setup wizard - Set up the administration contact list page

- c. Click **Next**. Because the **Enable notification** check box was not selected on the "Set up the administration contact list" page, the following warning message is displayed:



Figure 209. DB2 Setup wizard - Warning message

- Click **OK**. The "Specify a contact for health monitor notification" opens.
16. On the "Specify a contact for health monitor notification" page:
 - a. Select the **Defer this task until after installation is complete** radio button.

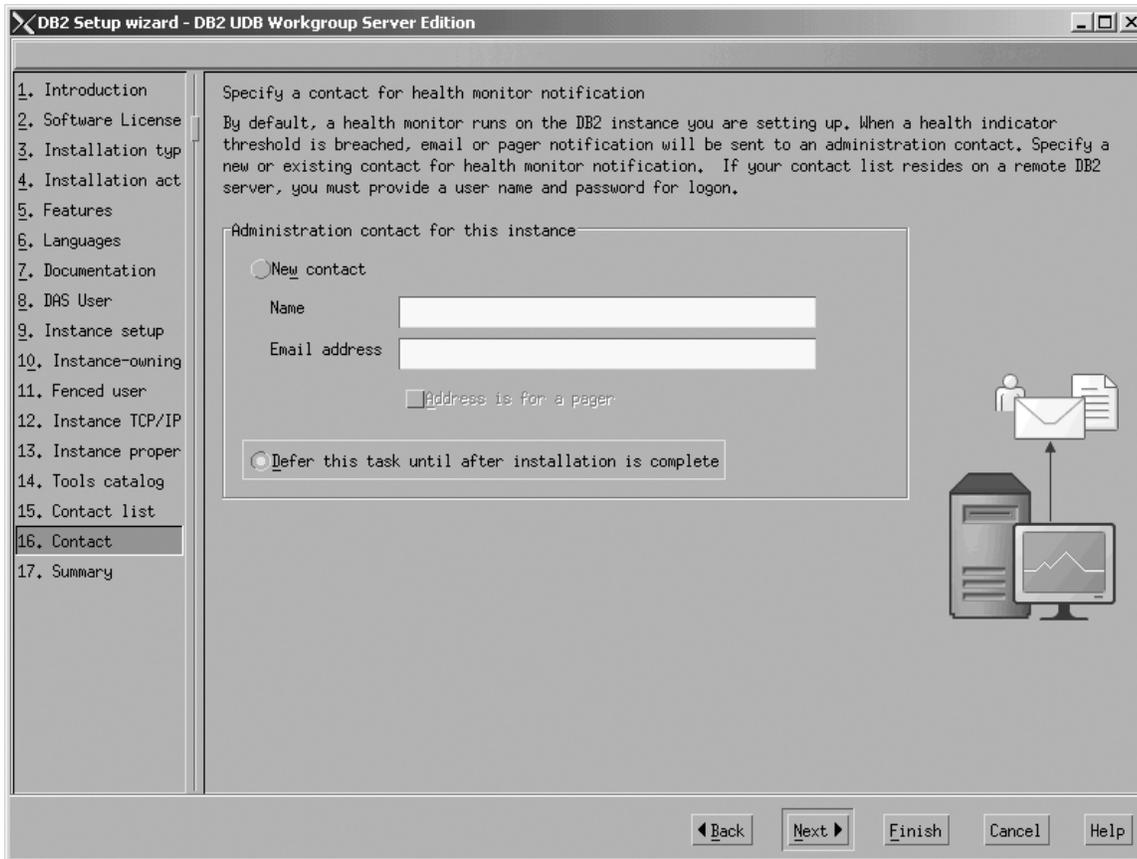


Figure 210. DB2 Setup wizard - Specify a contact for health monitor notification page

- b. Click **Next**. The "Start copying files" page opens.
17. On the "Start copying files" page, click **Finish** to begin installing DB2 UDB Workgroup Server Edition on your computer.

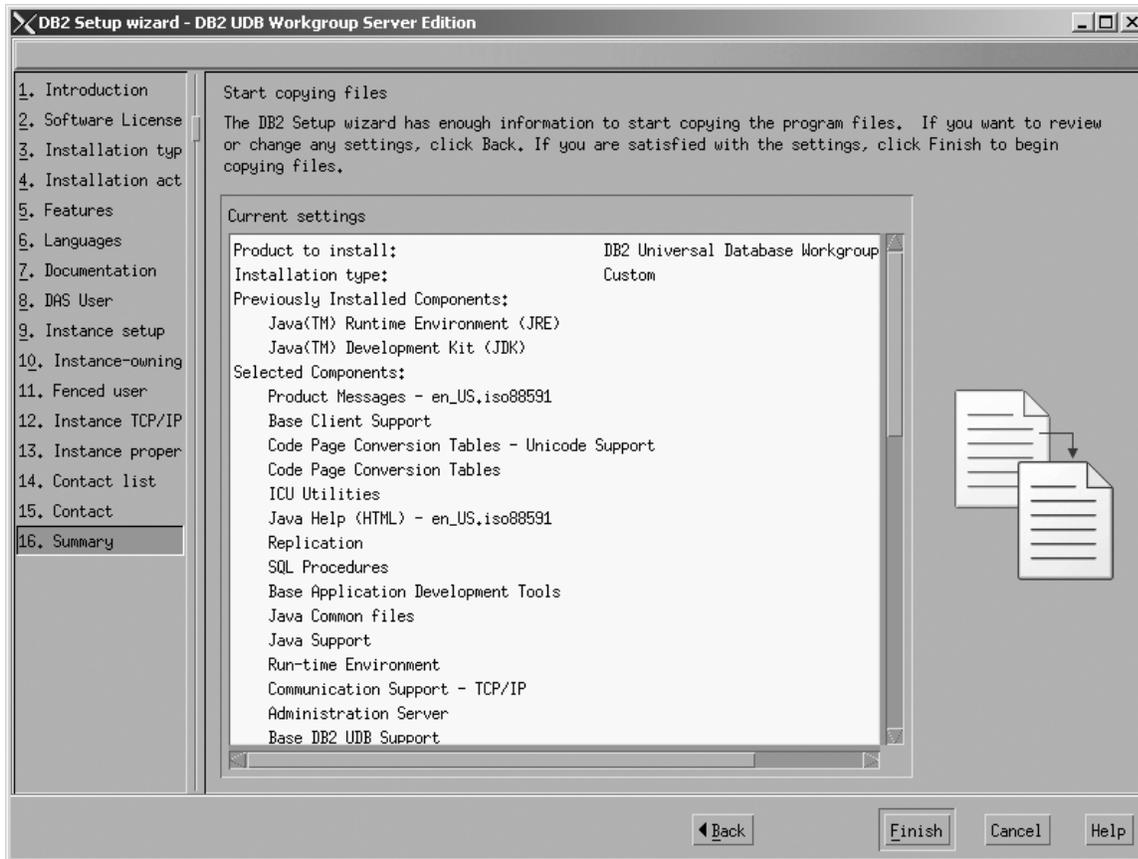


Figure 211. DB2 Setup wizard - Start copying files page

The "Installing DB2 UDB Workgroup Server Edition" page opens.

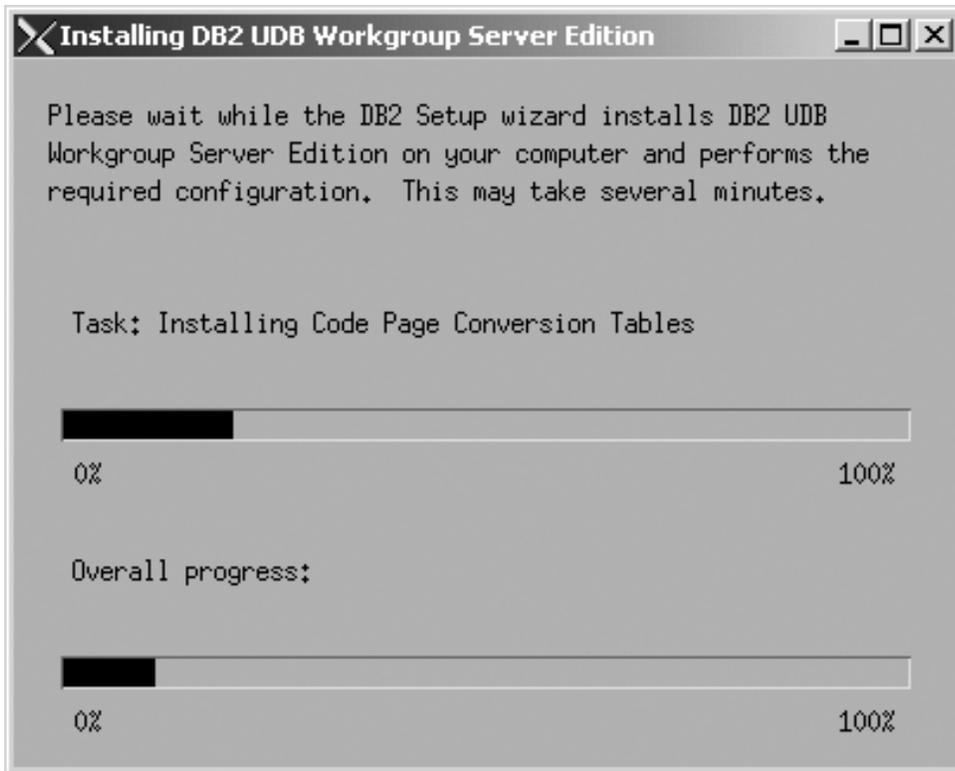


Figure 212. DB2 Setup wizard - Installing DB2 UDB Workgroup Server Edition page

| When the installation completes, the "Setup is complete" page opens.
|

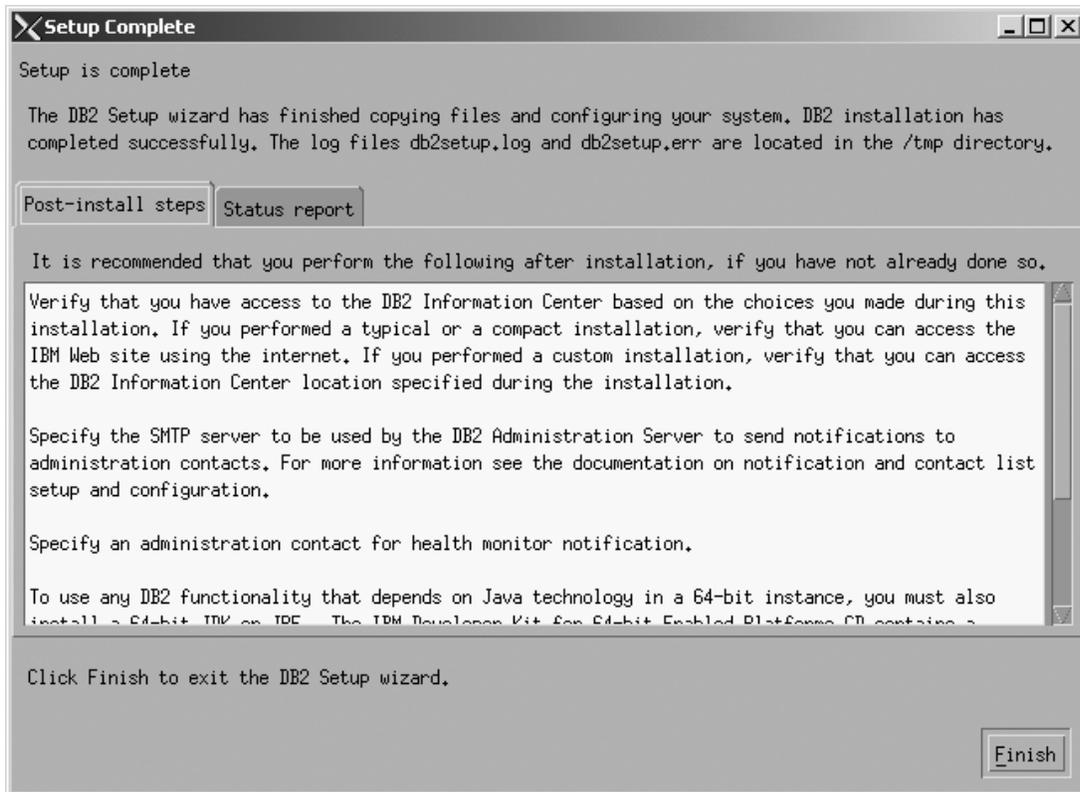


Figure 213. DB2 Setup wizard - Setup is complete page

1 Click **Finish** to exit from the "DB2 Setup wizard".

After DB2 Workgroup Server Edition is installed, see the topic on configuring DB2 to be Common Criteria compliant in the *DB2 Universal Database Common Criteria Certification: Administration and User Documentation* book.

Part 3. Postinstallation tasks

Chapter 7. After installing DB2 UDB

Password rules and maintenance

When choosing a password, be aware that:

- On UNIX[®], your password can be a maximum of eight (8) characters.
- On Windows[®], your password can be a maximum of fourteen (14) characters.

You might be required to perform password maintenance tasks. Since such tasks are required at the server and many users are not able or comfortable working with the server environment, performing these tasks can pose a significant challenge.

DB2[®] UDB provides a way to update and verify passwords without having to be at the server. For example, DB2 for OS/390[®] Version 5 supports the following method of changing a user's password. If an error message SQL1404N "Password expired" is received, use the CONNECT statement to change the password as follows:

```
CONNECT TO <database> USER <userid> USING <password>  
NEW <new_password> CONFIRM <new_password>
```

The "Change password" dialog of the DB2 Configuration Assistant (CA) can also be used to change the password.

Related concepts:

- "General naming rules" in the *Administration Guide: Implementation*

Enabling the execution of remote commands (UNIX)

You must update your .rhosts file in both a single-partition and partitioned database environment to execute remote commands.

In a partitioned database system, each database partition server must have the authority to perform remote commands on all the other database partition servers participating in an instance. This authority can be granted by updating the .rhosts file in the home directory for the instance. Because the home directory for the instance is on the shared DB2 home file system, only one .rhosts file is required.

Prerequisites:

- You must have root authority.
- You must know the host name of each participating computer
- You must know the instance owner's user name.

Procedure:

1. Log onto the primary computer as a user with root authority.
2. Create a .rhosts file in the instance home directory. For example, if your instance home directory is /db2home/db2inst1, you can use a text editor to create the .rhosts file by entering the following command:

```
vi /db2home/db2inst1/.rhosts
```

3. Add entries to the `.rhosts` file for each computer including the primary computer. The `.rhosts` file has the following format:

```
hostname instance_owner_user_name
```

Some systems might require a long host name to be specified, for example: `ServerA.yourdomain.com`. Before you add host name entries to the `.rhosts` file, make sure the host names in the `/etc/hosts` and the `/etc/resolv.conf` files can be resolved.

The `INSTHOME/.rhosts` file should contain entries similar to the following:

```
ServerA.yourdomain.com db2inst1
ServerB.yourdomain.com db2inst1
ServerC.yourdomain.com db2inst1
ServerD.yourdomain.com db2inst1
```

Rather than specifying each host name individually, you can specify the following entry in the `.rhosts` file, but this action may pose a security risk and should only be done in a test environment.

```
+ db2inst1
```

If you have specified a high speed switch (netname) in the `db2nodes.cfg` file, you should also add netname entries for each computer to the `.rhosts` file. The netname values are specified in the fourth column of the `db2nodes.cfg` file. A `.rhosts` file with high speed switch (netname) entries may look similar to the following:

```
ServerA.yourdomain.com db2inst1
ServerB.yourdomain.com db2inst1
ServerC.yourdomain.com db2inst1
ServerD.yourdomain.com db2inst1
Switch1.yourdomain.com db2inst1
Switch2.yourdomain.com db2inst1
Switch3.yourdomain.com db2inst1
Switch4.yourdomain.com db2inst1
```

An alternative to using a `.rhosts` file is to use `/etc/hosts.equiv` file. The `/etc/hosts.equiv` file would contain the exact same entries as the `.rhosts` file, but must be created on each computer.

For more information about the `.rhosts` file or the `/etc/hosts.equiv` file, see your operating system documentation.

Applying the latest FixPak (Windows and UNIX)

A DB2 FixPak contains updates and fixes for problems (Authorized Program Analysis Reports, or "APARs") found during testing at IBM, as well as fixes for problems reported by customers. Every FixPak is accompanied by a document, called `APARLIST.TXT`, that describes the fixes it contains.

FixPaks are cumulative. This means that the latest FixPak for any given version of DB2 contains all of the updates from previous FixPaks for the same version of DB2. It is recommended that you keep your DB2 environment running at the latest FixPak level to ensure problem-free operation.

When installing a FixPak on a partitioned ESE system, all participating computers must have the same FixPak installed while the system is offline.

Prerequisites:

Each FixPak has specific prerequisites. See the FixPak Readme that accompanies the FixPak for more information.

Restrictions:

If you are installing DB2 Universal Database to set up a Common Criteria certified configuration, do not install FixPaks. Because FixPaks are not evaluated for Common Criteria compliance, installing a FixPak makes the configuration no longer compliant.

Procedure:

1. Download the latest DB2 FixPak from the IBM DB2 UDB and DB2 Connect Online Support Web site at <http://www.ibm.com/software/data/db2/udb/winos2unix/support>. Each FixPak contains a set of Release Notes and a Readme. The Readme provides instructions for installing the FixPak.
2. Install the FixPak.
3. On UNIX systems, run the `db2iupdt` command to update the instance.

Related concepts:

- “Common Criteria certification of DB2 Universal Database products” in the *Infrastructure Topics (DB2 Common Files)*

Related tasks:

- “Verifying the installation using the command line processor (CLP)” on page 257

Verifying the installation (Windows and UNIX)

Verifying the installation using the command line processor (CLP)

You can verify the installation by creating a sample database and running SQL commands to retrieve sample data.

Prerequisites:

- The sample database component must be installed on your system and is included in a typical installation.
- You require a user with SYSADM authority.

Procedure:

To verify the installation:

1. Log on to the system as a user with SYSADM authority.
2. Start the database manager by entering the `db2start` command.
3. Enter the `db2samp1` command to create the SAMPLE database.

This command may take a few minutes to process. There is no completion message; when the command prompt returns, the process is complete.

The SAMPLE database is automatically cataloged with the database alias SAMPLE when it is created.

4. Enter the following DB2 commands from a DB2 command window to connect to the SAMPLE database, retrieve a list of all the employees that work in department 20, and reset the database connection:

```
db2 connect to sample
db2 "select * from staff where dept = 20"
db2 connect reset
```

After you have verified the installation, you can remove the SAMPLE database to free up disk space. Enter the db2 drop database sample command to drop the SAMPLE database.

Related tasks:

- “Verifying the installation of DB2 servers using First Steps” in the *Quick Beginnings for DB2 Servers*

Part 4. Installing DB2 clients

Chapter 8. Installing DB2 clients (Windows)

Client requirements

DB2 client installation requirements (Windows)

The following list provides operating system requirements, software requirements, and communication requirements for your DB2 client on Windows.

Operating system requirements

One of the following:

- Windows 98
- Windows ME
- Windows NT Version 4.0 with Service Pack 6a or later
- Windows NT Server 4.0, Terminal Server Edition (only supports the DB2 Run-Time Client) with Service Pack 6 or later for Terminal Server
- Windows 2000

Note: In a Common Criteria compliant environment, Windows-based clients must be on Windows 2000. Other Windows-based platforms are not certified.

- Windows XP (32-bit and 64-bit editions)
- Windows Server 2003 (32-bit and 64-bit editions)

Software requirements

For the most up-to-date operating system information, see <http://www.ibm.com/software/data/db2/udb/sysreqs.html>.

- You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.
- If you plan to use LDAP (Lightweight Directory Access Protocol), you require either a Microsoft LDAP client or an IBM SecureWay LDAP client V3.2.1 or later. Prior to installation, you will need to extend your directory schema using the db2schex utility, which can be found on the installation media.

The Microsoft LDAP client is included with the operating system for Windows ME, Windows 2000, Windows XP, and Windows Server 2003.

- If you plan to use the Tivoli Storage Manager facilities for the backup and restoration of your databases, you need the Tivoli Storage Manager Client Version 4.2.0 or later.
 - For 64-bit Windows NT operating systems, you require the TSM client API Version 5.1.
- If you have the IBM Antivirus program installed on your operating system, it must be disabled or uninstalled to complete a DB2 installation.
- If you are installing the Application Development Client, you must have a C compiler to build SQL Stored Procedures.

Communication requirements

- Named Pipes or TCP/IP.

Note: In a Common Criteria compliant environment, only TCP/IP is supported.

- The Windows base operating system provides Named Pipes and TCP/IP connectivity.

Note: In Version 8, DB2 UDB supports only TCP/IP for remotely administering a database.

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

Disk and memory requirements (Windows and UNIX)

This topic lists the memory and disk requirements for DB2.

Disk requirements:

The disk space required for your product depends on the type of installation you choose and the type of file system you have. The DB2 Setup wizard provides dynamic size estimates based on the component selected during a typical, compact, or custom installation.

On Windows, you may require significantly more space on FAT (File Allocation Table) drives with large cluster sizes than with NTFS (New Technology File System) drives.

Remember to include disk space for required software, communication products, and documentation.

Memory requirements:

At a minimum, DB2 requires 256 MB of RAM. 512M of RAM memory is recommended if you use the DB2 GUI tools. When determining memory requirements, be aware of the following:

- For DB2 client support, these memory requirements are for a base of 5 concurrent client connections. You will need an additional 16 MB of RAM per 5 client connections.
- Additional memory might be required for software other than DB2 that is running on your system.
- Additional memory may be required to improve the performance of the DB2 GUI tools.
- Specific performance requirements can determine the amount of memory needed.
- Memory requirements are affected by the size and complexity of your database system.
- Memory requirements are affected by the extent of database activity and the number of clients accessing your system.
- On Linux, ensure that your SWAP space is at least twice as much as your RAM.

Installing DB2 clients (Windows)

This task describes how to install a DB2 client on a Windows operating system.

Prerequisites:

Before you install your DB2 client, ensure that:

- Your system meets all of the memory, disk space, and installation requirements.
- You have a user account to perform the installation:

Windows 98, Windows ME

Any valid Windows 98 or Windows ME user account.

Windows Terminal Server, Windows NT, Windows 2000, Windows XP, and Windows Server 2003

A user account that belongs to a group with more authority than the Guests group, such as the Users group.

To perform an installation on Windows 2000 servers and Windows Server 2003 as part of the Users group, the registry permissions have to be modified to allow Users **write** access to the HKEY_LOCAL_MACHINE\Software registry branch. In the default Windows 2000 and Windows Server 2003 environment, members of the Users group only have **read** access to the HKEY_LOCAL_MACHINE\Software registry branch.

Restrictions:

In Version 8, DB2 UDB supports only TCP/IP for remotely administering a database.

In a Common Criteria compliant environment, Windows-based clients must be on Windows 2000. Other Windows-based platforms are not certified.

Procedure:

To install a DB2 client:

1. Log on to the system with the user account that you want to use to perform the installation.
2. Shut down any other programs so that the DB2 Setup wizard can update files as required.
3. Insert the appropriate CD-ROM into the drive. The auto-run feature starts the DB2 Setup wizard. The DB2 Setup wizard determines the system language, and starts the setup program for that language.

You can run the DB2 Setup wizard in a language other than the default system language by manually invoking the DB2 Setup wizard and specifying a language code. For example, the **setup -i fr** runs the DB2 Setup wizard in French. This example does not apply to the DB2 UDB Run-Time Client Lite.

4. If you are installing an Administration or Application Development client, choose **Install Product** when the DB2 Launchpad opens.
5. Proceed by following the DB2 Setup wizard's prompts. Online help is available to guide you through the remaining steps.

After installing your DB2 client, you should configure it to access a remote DB2 server.

If you want your DB2 product to have access to DB2 documentation either on your local computer or on another computer on your network, then you must install the DB2 Information Center. The DB2 Information Center contains documentation for DB2 Universal Database and DB2 related products. See *Installing the DB2 Information Center using the DB2 Setup wizard (Windows)*.

Note: The DB2 Information Center was not evaluated in the Common Criteria certification of DB2 Universal Database. If you are installing DB2 Universal Database to be Common Criteria compliant, do not install the DB2 Information Center.

Related concepts:

- “Response file installation basics” in the *Installation and Configuration Supplement*
- “DB2 Information Center” in the *Infrastructure Topics (DB2 Common Files)*
- “DB2 Information Center installation scenarios” in the *Infrastructure Topics (DB2 Common Files)*

Related tasks:

- “Installing the DB2 Information Center using the DB2 Setup wizard (Windows)” in the *Infrastructure Topics (DB2 Common Files)*
- “Configuring remote access to a server database” in the *Installation and Configuration Supplement*
- “Response file installation of DB2 overview (Windows)” in the *Installation and Configuration Supplement*
- “Installing DB2 servers in a single-partition database environment (Windows)” on page 43

Related reference:

- “Language identifiers for running the DB2 Setup wizard in another language” on page 285
- “setup - Install DB2 Command” in the *Command Reference*
- “DB2 Run-Time Client Lite command line options” in the *Quick Beginnings for DB2 Clients*

Chapter 9. Installing DB2 clients (UNIX)

DB2 client requirements

DB2 client installation requirements (AIX)

The following list provides hardware, operating system, software, and communication requirements for your DB2 client on AIX.

Hardware requirements

RISC System/6000

Operating system requirements

For the most up-to-date operating system information, see <http://www.ibm.com/software/data/db2/udb/sysreqs.html>.

One of the following:

Version 4.3.3 (32-bit)

- With maintenance level 11

Version 5.1.0 (32-bit or 64-bit)

- With maintenance level 5 and Recommended Maintenance Package AIX 5100-04 and APAR IY46667

Version 5.2.0 (32-bit or 64-bit)

Note: In Common Criteria compliant environments, AIX-based clients are certified on AIX Version 5.2.0, 32-bit only. Other configurations are not certified.

With Maintenance level 2, and:

For Concurrent I/O (CIO) and Direct I/O (DIO) mounted volume:

APARs IY49129 and IY49346

For JFS filesystems:

APAR IY48339

For JFS2 filesystems:

APAR IY49304

For Java:

Recommended Maintenance Package AIX 5200-01 and APAR IY46668

For running more than 1000 db2agents and using the 32-bit AIX kernel:

APAR IY49885, and specify "vmo -o pta_balance_threshold=0" before db2start or in AIX bootup

The following AIX file sets are required to install or run DB2 UDB in languages other than English:

- X11.fnt.ucs.ttf (AIX Windows Unicode TrueType Fonts)
- X11.fnt.ucs.com (AIX Windows Common Fonts)
- xIC.rte 5.0.2.x or 6.0.0.x

- For Asian languages, the following file sets are also required:
 - X11.fnt.ucs.ttf_CN (for zh_CN or Zh_CN)
 - X11.fnt.ucs.ttf_KR (for ko_KR)
 - X11.fnt.ucs.ttf_TW (for zh_TW or Zh_TW)
- On AIX Version 4.3.3 the following file set is required:
 - x1C.aix43.rte 5.0.2.x or 6.0.0.x
- On AIX Version 5.x the following file set is required:
 - x1C.aix50.rte 5.0.2.x or 6.0.0.x

AIX file sets can be downloaded from:

<http://techsupport.services.ibm.com/server/fixes>

Software requirements

- For Kerberos support, you require IBM Network Authentication Service client v1.3 or later, running on AIX V5.2 or higher.
- For LDAP (Lightweight Directory Access Protocol) support, you require an IBM SecureWay Directory Client V3.2.1 or later.
- You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.

Communication requirements

- TCP/IP is required. The AIX base operating system provides TCP/IP connectivity, if it is selected during installation.

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

DB2 client installation requirements (Linux)

The following list provides operating system, software, and communication requirements for your DB2 client on Linux.

You may be required to update your kernel configuration parameters. The kernel configuration parameters are set in `/etc/sysctl.conf`. Refer to your operating system manual for information on setting and activating these parameters using the `sysctl` command.

Operating system requirements

To check for the latest technical information on the supported levels of Linux, point your browser to <http://www.ibm.com/db2/linux/validate>

DB2 Connect Enterprise Edition is now supported on Linux zSeries 64-bit.

DB2 for Linux zSeries 31-bit is not supported on the Linux zSeries 64-bit operating system. You must use the “64-bit DB2 for Linux zSeries 64-bit OS” image on Linux zSeries 64-bit OS, and the “31-bit DB2 for Linux zSeries 31-bit OS” image on the Linux zSeries 31-bit operating system.

Note: In a Common Criteria compliant environment, Linux-based clients must be on Linux SuSE on 32-bit Intel-based hardware. Other Linux configurations are not certified.

Software requirements

You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.

If you plan to use Kerberos Authentication, you require Red Hat Enterprise Linux Advanced Server 2.1 (32-bit Intel only) with the following filesets:

- krb5-libs
- krb5-workstation

Communication requirements

- TCP/IP. The Linux base operating system provides TCP/IP connectivity, if it is selected during installation.

Related reference:

- “Java SDK levels for DB2 UDB” on page 37

DB2 client installation requirements (Solaris Operating Environment)

The following list provides hardware requirements, operating system requirements, software requirements, and communication requirements for your DB2 client on the Solaris Operating Environment.

Restrictions:

A system restart is required if you update the kernel configuration parameters. The kernel configuration parameters are set in `/etc/system` and if these parameters require modification to accommodate the DB2 client, a reboot is necessary to make the changes to `/etc/system` effective. These parameters must be set before you install a DB2 client.

Hardware requirements

Solaris SPARC-based computer

Operating system requirements

For the most up-to-date operating system information, see <http://www.ibm.com/software/data/db2/udb/sysreqs.html>.

- Solaris Version 7 or later
- The following patches are required for the Solaris Operating Environment Version 7:
 - Solaris 7 (32-bit) “Recommended & Security Patches” + 107226-17 + 107153-01 + 106327-10
 - Solaris 7 (64-bit) “Recommended & Security Patches” + 107226-17 + 107153-01 + 106300-11 + 106327-10
 - Solaris 8 (32-bit) “Recommended & Security Patches” + 108921-12 + 108940-24 + 108434-03 and 108528-12

Note: In a Common Criteria compliant environment, Solaris-based clients must be on Solaris Operating Environment, 8 (32-bit). Other configurations are not certified.

- Solaris 8 (64-bit) “Recommended & Security Patches” + 108921-12 + 108940-24 + 108435-03 + 108434-03 and 108528-12
- Solaris 9 (32-bit)
- Solaris 9 (64-bit)

"Recommended & Security Patches" can be obtained from the <http://sunsolve.sun.com> Web site. From the SunSolve Online Web site, click on the "Patches" menu item in the left panel.

The J2SE Solaris Operating Environment Patch Clusters are also required.

The following software is required to install a DB2 client on Solaris Operating Environment:

- SUNWlibC

Software requirements

- For Kerberos support, you require Solaris Operating Environment 8 or higher with SEAM v1.0.1, which is included in the Solaris Operating Environment 8 Admin Pack.
- You require the appropriate SDK to use Java-based tools like the DB2 Control Center, and to create and run Java applications, including stored procedures and user-defined functions.
- If you are installing the Application Development Client, you must have a C compiler to build SQL Stored Procedures.

Communication requirements

- TCP/IP is required. The Solaris Operating Environment provides TCP/IP connectivity.

Related reference:

- "Java SDK levels for DB2 UDB" on page 37

Disk and memory requirements (Windows and UNIX)

This topic lists the memory and disk requirements for DB2.

Disk requirements:

The disk space required for your product depends on the type of installation you choose and the type of file system you have. The DB2 Setup wizard provides dynamic size estimates based on the component selected during a typical, compact, or custom installation.

On Windows, you may require significantly more space on FAT (File Allocation Table) drives with large cluster sizes than with NTFS (New Technology File System) drives.

Remember to include disk space for required software, communication products, and documentation.

Memory requirements:

At a minimum, DB2 requires 256 MB of RAM. 512M of RAM memory is recommended if you use the DB2 GUI tools. When determining memory requirements, be aware of the following:

- For DB2 client support, these memory requirements are for a base of 5 concurrent client connections. You will need an additional 16 MB of RAM per 5 client connections.
- Additional memory might be required for software other than DB2 that is running on your system.

- Additional memory may be required to improve the performance of the DB2 GUI tools.
- Specific performance requirements can determine the amount of memory needed.
- Memory requirements are affected by the size and complexity of your database system.
- Memory requirements are affected by the extent of database activity and the number of clients accessing your system.
- On Linux, ensure that your SWAP space is at least twice as much as your RAM.

Installing DB2 clients (UNIX)

This task provides steps for installing a DB2 client on UNIX.

Prerequisites:

Before you begin installing a DB2 client on UNIX:

- Ensure that your system meets all of the memory, hardware, and software requirements to install your DB2 product.
- Installing a DB2 client in the Solaris Operating Environment or on HP-UX requires that you update your kernel configuration parameters and restart your system.

Restrictions:

In Version 8, DB2 UDB supports only TCP/IP for remotely administering a database.

Procedure:

After updating your kernel configuration parameters and starting your system (required for Solaris Operating Environment and HP-UX, and recommended for Linux), you can install your DB2 client.

To install a DB2 client on UNIX:

1. Log in as a user with root authority.
2. Insert and mount the appropriate CD-ROM.
3. Change to the directory where the CD-ROM is mounted by entering the `cd /cdrom` command where `/cdrom` is the CD-ROM mount point.
4. Enter the `./db2setup` command. The DB2 Setup Wizard starts.
5. Choose **Install Products** when the DB2 Launchpad opens.
6. Select the client you want to install.
7. Proceed by following the DB2 Setup wizard's prompts. Online help is available to guide you through the remaining steps.

When installation is complete, the DB2 client is installed in the `DB2DIR` directory, where `DB2DIR` is:

AIX `/usr/opt/db2_08_01`

Linux and other UNIX operating systems
`/opt/IBM/db2/V8.1`

After installing your DB2 client, you should configure it to access a remote DB2 server.

If you want your DB2 product to have access to DB2 documentation either on your local computer or on another computer on your network, then you must install the DB2 Information Center. The DB2 Information Center contains documentation for DB2 Universal Database and DB2 related products. See *Installing the DB2 Information Center using the DB2 Setup wizard (UNIX)*.

Note: The DB2 Information Center was not evaluated in the Common Criteria certification of DB2 Universal Database. If you are installing DB2 Universal Database to be Common Criteria compliant, do not install the DB2 Information Center.

Related concepts:

- “Response file installation basics” in the *Installation and Configuration Supplement*
- “DB2 Information Center” in the *Infrastructure Topics (DB2 Common Files)*
- “DB2 Information Center installation scenarios” in the *Infrastructure Topics (DB2 Common Files)*

Related tasks:

- “Installing the DB2 Information Center using the DB2 Setup wizard (UNIX)” in the *Infrastructure Topics (DB2 Common Files)*
- “Modifying kernel parameters (Solaris Operating Environment)” on page 41
- “Modifying kernel parameters (HP-UX)” in the *Quick Beginnings for DB2 Servers*
- “Configuring client-to-server connections using the Configuration Assistant (CA)” in the *Quick Beginnings for DB2 Servers*
- “Configuring remote access to a server database” in the *Installation and Configuration Supplement*
- “Response file installation of DB2 overview (UNIX)” in the *Installation and Configuration Supplement*
- “Modifying kernel parameters (Linux)” on page 40

Related reference:

- “db2setup - Install DB2 Command” in the *Command Reference*

Part 5. Configuring a client-to-server connection

Chapter 10. Client-to-server support

Supported and non-supported client configurations

This section describes both the supported and non-supported configuration scenarios for clients and servers.

DB2 Version 7 client local connections to a DB2 Version 8 server are not supported. You cannot use a DB2 Version 7 client to catalog a DB2 Version 8 instance on the same machine as a local node.

The following table describes the standard and gateway configuration support for DB2 clients. For example, if you have a DB2 Universal Database Version 8 32-bit client, you can connect to a DB2 Universal Database Version 8 64-bit server using a Version 8 32-bit gateway.

In the following table, references to Version 7 clients have an implied FixPak 7 or later level. DB2 clients without FixPak 7 installed are not supported.

Table 5. DB2 Version 7 and Version 8 client/server matrix

DB2 Clients	Version 7 32-bit Server UNIX®, Windows®, Linux	Version 7 64-bit Server UNIX	Version 8 32-bit Server UNIX, Windows, Linux	Version 8 64-bit Server UNIX, Windows, Linux
Version 7 (32-bit)	Yes	No	Yes (6)	Yes (2,5,8)
Version 7 (64-bit)	No	Yes	No	Yes (4,5)
Version 8 (32-bit)	Yes (1,7)	No	Yes	Yes
Version 8 (64-bit)	No	Yes (1,7)	Yes	Yes
AS/400™, iSeries™, OS/390, zSeries™, VSE, VM clients	Yes	Yes	Yes (3)	Yes (3)

In Common Criteria compliant environments:

- DB2 clients are only certified on the same platforms and hardware as certified DB2 Universal Database servers. Other configurations are not certified.
- Back-level clients are not supported.
- Clients that connect to midrange or mainframe computers are not supported.

Notes:

1. A DB2 Universal Database Version 7 server must be configured as a DRDA application server (AS). This is necessary when you have a Version 8 32-bit client working with a Version 7 32-bit server; or, when you have a Version 8 64-bit client working with a Version 7 64-bit server.
2. Direct support (without an intervening DB2 Connect™ gateway) exists from a DB2 Version 7 32-bit Windows client to a DB2 Version 8 64-bit Windows server. However, there is no direct support from DB2 Version 7 32-bit clients on other platforms.
3. Only TCP/IP is supported. There is no support for SNA. This support is available from AS/400, iSeries, OS/390, zSeries, VSE, and VM clients working with a Version 8 server.

4. A Version 7 64-bit client supports only DB2 Universal Database Version 8 64-bit servers on operating systems other than Windows.
5. Version 7 clients support only SQL requests on a Version 8 64-bit server. There is no support for utility or API requests.
6. When a Version 7 32-bit client works with a Version 8 32-bit server, there is no support for DB2 Universal Database utilities using the **AT NODE** facility, which is primarily used for administering a partitioned database environment.
7. When you have a Version 8 32-bit client working with a Version 7 32-bit server, or when you have a Version 8 64-bit client working with a Version 7 64-bit server, the DB2 Universal Database Version 7 server must be at a FixPak 8 or later level. The **db2updv7** utility must be run on the server in order for it to be accessible from a DB2 Universal Database Version 8 client. Once this utility is run on a database, this database cannot be used with an instance that is at an earlier FixPak level.
8. When you have a Version 7 32-bit client working with a Version 8 64-bit server, connectivity to a DB2 Universal Database Version 8 64-bit server on UNIX can only be accomplished using an intermediate DB2 Connect Version 8 32-bit gateway.

Related concepts:

- “DB2 clients” on page 5

Related reference:

- “Client-to-Server communication scenarios” in the *Quick Beginnings for DB2 Clients*
- “Version 8 incompatibilities with previous releases” in the *Administration Guide: Planning*

Chapter 11. Configuring a connection using the command line processor (CLP)

Configuring client-to-server connections using the command line processor (CLP)

This task describes how to configure a connection from a DB2 client to a remote database server using the command line processor (CLP).

You can also configure a client to server connection using the Configuration Assistant.

Prerequisites:

Before you configure a client to server connection:

- Communications must be configured on the DB2 server and the DB2 client. Depending on your operating system, communications can be Named Pipes, NetBIOS, or TCP/IP.

Note: For Common Criteria compliant configurations, only TCP/IP is supported.

- You must use one of the supported client to server connection scenarios. The connection scenarios outline which communication method or protocol can be used by which operating system.

Restrictions:

- DB2 UDB servers on Windows and UNIX no longer accept inbound client connections using APPC. DB2 clients can still connect to host systems using APPC if they have DB2 Connect installed.
- You cannot use NetBIOS to connect from a Windows client to a server running on a UNIX-based system.

Procedure:

To configure a client-to-server connection using the command line processor:

1. Identify and record the communication parameter values.
2. Configure the appropriate communication protocol on the client. No configuration is required for Named Pipes.
3. Catalog the database node from the DB2 client using one of the following methods. Your choice of method is based on the communications protocol setup on the system you want to catalog.
 - Catalog the TCP/IP node from the DB2 client.
 - Catalog the NetBIOS node from the DB2 client.
 - Catalog the Named Pipes node from the DB2 client.
4. Catalog the database on the DB2 client.
5. Test the client-to-server connection.

Related tasks:

- “Cataloging a TCP/IP node from the DB2 client” on page 276
- “Cataloging a NetBIOS node from the DB2 client” in the *Installation and Configuration Supplement*
- “Cataloging a Named Pipes node from the client” in the *Installation and Configuration Supplement*
- “Cataloging a database from a DB2 client using the CLP” on page 277
- “Testing the client-to-server connection using the CLP” on page 279
- “Configuring client-to-server connections using the Configuration Assistant (CA)” in the *Quick Beginnings for DB2 Servers*

Cataloging the node

Cataloging a TCP/IP node from the DB2 client

Cataloging a TCP/IP node adds an entry to the DB2 client’s node directory that describes the remote node. This entry specifies the chosen alias (*node_name*), the *hostname* (or *ip_address*), and the *svcname* (or *port_number*) that the client uses to access the remote host.

Prerequisites:

- You must have system administration (SYSADM) or system control (SYSCTRL) authority, or have the *catalog_noauth* database manager configuration parameter set to ON. You cannot catalog a node using root authority.

Procedure:

To catalog a TCP/IP node:

1. Log on to the system as a user with system administration (SYSADM) or system control (SYSCTRL) authority.
2. If you are using a UNIX client, set up the instance environment. Run the start-up script:

For bash, Bourne or Korn shell

```
. INSTHOME/sqllib/db2profile
```

For C shell

```
source INSTHOME/sqllib/db2cshrc
```

where *INSTHOME* represents the home directory of the instance.

3. Start the DB2 command line processor. On Windows, issue the `db2cmd` command from a command prompt. On UNIX, issue the `db2` command from a command prompt.
4. Catalog the node by entering the following commands in the command line processor:

```
db2 => catalog tcpip node node_name remote hostname|ip_address
server service_name|port_number [remote_instance instance_name]
[system system_name] [ostype os_type]
```

```
db2 => terminate
```

where:

- *node_name* represents a nickname you can set for the computer that has the database you want to catalog.

- `remote_instance` represents the name of the server instance on which the database resides.
- `system` represents the DB2 system name that is used to identify the server.
- `ostype` represents the operating system type of the server.

Notes:

- The `terminate` command is needed to refresh the directory cache.
- Although `remote_instance`, `system`, and `ostype` are optional, they are required for users who want to use the DB2 tools.
- The `service_name` used on the client does not have to be the same as the one on the server. However, the port numbers that they map to *must* match.

Example:

To catalog a node that you want to call `db2node` on a remote server `myserver.ibm.com` that is using port number `50000`, you would enter the following from a **db2** prompt:

```
db2 => catalog tcpip node db2node remote myserver server 50000
DB20000I The CATALOG TCPIP NODE command completed successfully.
DB21056W Directory changes may not be effective until the directory cache is
refreshed.
```

```
db2 => terminate
DB20000I The TERMINATE command completed successfully.
```

Related tasks:

- “Configuring TCP/IP communications on the client using the CLP” in the *Installation and Configuration Supplement*
- “Testing the client-to-server connection using the CLP” on page 279

Related reference:

- “CATALOG TCPIP NODE Command” in the *Command Reference*

Cataloging the database and testing the connection

Cataloging a database from a DB2 client using the CLP

This task describes how to catalog a database from a DB2 client using the DB2 command line processor (CLP).

Before a client application can access a remote database, the database must be cataloged on the client. When you create a database, the database is automatically cataloged on the server with a database alias that is the same as the database name, unless a different database alias was specified.

The information in the database directory, along with the information in the node directory (unless you are cataloging a local database where a node is not needed), is used on the DB2 client to establish a connection to the remote database.

Restrictions:

DB2 does not support using root authority to catalog a database.

Prerequisites:

- You require a valid DB2 user ID.
- You must have system administration (SYSADM) or system control (SYSCTRL) authority, or have the *catalog_noauth* database manager configuration parameter set to ON.
- The following parameter values are applicable when cataloging a *remote* database:
 - Database name
 - Database alias
 - Node name
 - Authentication type (optional)
 - Comment (optional)

Refer to the parameter values worksheet for cataloging a database for more information about these parameters and to record the values that you use.

- The following parameter values are applicable when cataloging a *local* database:
 - Database name
 - Drive
 - Database alias
 - Authentication type (optional)
 - Comment (optional)

Local databases can be uncataloged and recataloged at any time.

Procedure:

To catalog a database on the client:

1. Log on to the system with a valid DB2 user ID.
2. Optional. Update the Your Value column in the Parameter values worksheet for cataloging a database.
3. If you are using DB2 UDB on a UNIX platform, set up the instance environment. Run the start-up script:

For bash, Bourne or Korn shell

```
. INSTHOME/sql1lib/db2profile
```

For C shell

```
source INSTHOME/sql1lib/db2cshrc
```

where: *INSTHOME* represents the home directory of the instance.

4. Start the DB2 command line processor. On Windows, issue the *db2cmd* command from a command prompt. On UNIX, issue the *db2* command from a command prompt.
5. Catalog the database by entering the following commands in the command line processor:

```
db2 => catalog database database_name as database_alias at
      node node_name [ authentication auth_value ]
```

where:

- *database_name* represents the name of the database you want to catalog.
- *database_alias* represents a local nickname for the database you want to catalog.
- *node_name* represents a nickname you can set for the computer that has the database you want to catalog.

- `auth_value` specifies the type of authentication that will take place when connecting to the database. This parameter defaults to the authentication type specified on the server. Specifying an authentication type can result in a performance benefit. `SERVER`, `CLIENT`, `SERVER_ENCRYPT`, and `KERBEROS` are the authentication value options.

Note: For Common Criteria compliant configurations, only `SERVER` is supported.

Example:

To catalog a remote database called *sample* so that it has the local database alias *mysample*, on the node *db2node* using authentication *server*, enter the following commands:

```
db2 => catalog database sample as mysample at node db2node
        authentication server
```

```
db2 => terminate
```

Related tasks:

- “Testing the client-to-server connection using the CLP” on page 279

Related reference:

- “Parameter values worksheet for cataloging a database” in the *Installation and Configuration Supplement*
- “CATALOG DATABASE Command” in the *Command Reference*

Testing the client-to-server connection using the CLP

After cataloging the node and the database, you should connect to the database to test the connection.

Prerequisites:

- The database node and database must be cataloged before you can test the connection.
- The values for *userid* and *password* must be valid for the system on which they are authenticated. By default, authentication takes place on the server. Authentication is determined by the *authentication* parameter specified in the server’s database manager configuration file. If the authentication configured on the client doesn’t match or isn’t compatible with what is configured on the server, you will receive an error.

Note: For a Common Criteria compliant configuration, the *authentication* database manager configuration parameter must be set to `SERVER`.

- The database manager must be started with the correct protocol defined in `DB2COMM`. If it isn’t started, then you can start the database manager by entering the `db2start` command on the database server.

Procedure:

To test the client to server connection:

1. If you are using DB2 on a UNIX platform, set up the instance environment. Run the start-up script:

For bash, Bourne or Korn shell

```
. INSTHOME/sql1lib/db2profile
```

For C shell

```
source INSTHOME/sql1lib/db2cshrc
```

where: *INSTHOME* represents the home directory of the instance.

2. Start the DB2 command line processor. On Windows, issue the `db2cmd` command from a command prompt. On UNIX, issue the `db2` command from a command prompt.
3. Type the following command on the client to connect to the remote database:

```
db2 => connect to database_alias user userid
```

For example, enter the following command:

```
connect to mysample user jtris
```

You will be prompted to enter your password.

If the connection is successful, you receive a message showing the name of the database to which you have connected. A message similar to the following is given:

```
Database Connection Information
Database server = DB2/NT 8.1.0
SQL authorization ID = JTRIS
Local database alias = mysample
```

You can now work with the database. For example, to retrieve a list of all the table names listed in the system catalog table, enter the following SQL statement:

```
select tablename from syscat.tables
```

An implicit connection occurs when you issue an SQL statement followed by the `db2 terminate` command. To define a default database, run the `db2set db2dbdft = <dbname>` command. After running this command, you can, for example, run the `db2 select * from <table>` command without first connecting to a database. This command uses the value defined in **db2dbdft**. To connect to a database other than the default, you must use the `CONNECT` command to explicitly connect to the database of your choice.

When you are finished using the database connection, enter the `connect reset` command to end the database connection.

Related reference:

- “`db2start` - Start DB2 Command” in the *Command Reference*
- “`db2set` - DB2 Profile Registry Command” in the *Command Reference*

Part 6. Appendixes

Appendix A. Language support

Changing the DB2 interface language (Windows)

The interface language of DB2 is the language that appears in messages, help, and graphical tool interfaces. When installing DB2, you have the option of installing support for one or more languages. If, at some time after installation, you want to change the interface language for DB2 to one of the other installed interface languages, use the steps outlined in this task.

Do not confuse languages supported by DB2 with languages supported by the DB2 interface. Languages supported by DB2, that is, languages that *data* can exist in, are a superset of languages supported by the DB2 interface.

Prerequisites:

The DB2 interface language you want to use must be installed on your system. DB2 interface languages are selected and installed when you install DB2 using the DB2 Setup wizard. If you change the interface language of DB2 to a supported interface language that has not been installed, the DB2 interface language will default to the operating system language first, and if that is not supported, English.

Procedure:

Changing the interface language for DB2 on Windows requires that you change the default language setting for your Windows operating system.

To change the DB2 interface language on Windows:

1. Through the Control Panel on your Windows operating system, select **Regional Options**.
2. In the Regional Options dialog window, change the default language setting for the system to the language in which you want to interface with DB2.

Refer to your operating system help for additional information about changing the default system language.

Related reference:

- “Supported territory codes and code pages” in the *Administration Guide: Planning*
- “Supported DB2 interface languages” on page 284

Changing the DB2 interface language (UNIX)

The interface language of DB2 is the language that appears in messages, help, and graphical tool interfaces. When installing DB2, you have the option of installing support for one or more languages. If, at some time after installation, you want to change the interface language for DB2 to one of the other installed interface languages, use the steps outlined in this task.

Do not confuse languages supported by DB2 with languages supported by the DB2 interface. Languages supported by DB2, that is, languages that *data* can exist in, are a superset of languages supported by the DB2 interface.

Prerequisites:

Support for the DB2 interface language you want to use must be installed on your system. DB2 interface language support is selected and installed when you install DB2 using the DB2 Setup wizard. If you change the interface language of DB2 to a supported interface language that has not been installed, the DB2 interface language will default to the operating system language first, and if that is not supported, English.

Procedure:

To change the DB2 interface language on UNIX systems, set the LANG environment variable to the desired locale.

For example, to interface with DB2 in French using DB2 for AIX, you must have French language support installed and you must set the LANG environment variable to a French locale, for example, fr_FR.

Related reference:

- “Supported territory codes and code pages” in the *Administration Guide: Planning*
- “Supported DB2 interface languages” on page 284

Supported DB2 interface languages

DB2 language support for DB2 interfaces can be categorized into server group languages and client group languages. Server group languages will translate most messages, help, and DB2 graphical interface elements. Client group languages will translate the DB2 Run-Time Client component, which will include most messages and certain help documentation.

Server group languages include: Brazilian Portuguese, Czech, Danish, Finnish, French, German, Italian, Japanese, Korean, Norwegian, Polish, Russian, Simplified Chinese, Spanish, Swedish, and Traditional Chinese.

Client group languages include: Arabic, Bulgarian, Croatian, Dutch, Greek, Hebrew, Hungarian, Portuguese, Romanian, Slovak, Slovenian, and Turkish.

Do not confuse languages supported by DB2 with languages supported by the DB2 interface. Languages supported by DB2 that is, languages that *data* can exist in, are a superset of languages supported by the DB2 interface.

Related tasks:

- “Changing the diagnostic error level before DB2 migration” in the *Quick Beginnings for DB2 Servers*
- “Changing the DB2 interface language (Windows)” on page 283
- “Changing the DB2 interface language (UNIX)” on page 283

Related reference:

- “National language versions” in the *Administration Guide: Planning*
- “Supported territory codes and code pages” in the *Administration Guide: Planning*

- “Conversion tables for code pages 923 and 924” in the *Administration Guide: Planning*
- “Conversion table files for euro-enabled code pages” in the *Administration Guide: Planning*

Language identifiers for running the DB2 Setup wizard in another language

If you want to run the DB2 Setup wizard in a language different from the default language on your computer, you can start the DB2 Setup wizard manually, specifying a language identifier. The language must be available on the platform where you are running the installation.

Table 6. Language identifiers

Language	Language identifier
Arabic	ar
Brazilian Portuguese	br
Bulgarian	bg
Chinese, Simplified	cn
Chinese, Traditional	tw
Croatian	hr
Czech	cz
Danish	dk
Dutch	nl
English	en
Finnish	fi
French	fr
German	de
Greek	el
Hebrew	iw
Hungarian	hu
Italian	it
Japanese	jp
Korean	kr
Norwegian	no
Polish	pl
Portuguese	pt
Romanian	ro
Russian	ru
Slovak	sk
Slovenian	sl
Spanish	es
Swedish	se
Turkish	tr

Displaying the db2setup command in your national language

The db2setup command queries the operating system to determine the existing language settings. If the language setting of your operating system is supported by db2setup, then that language will be used.

If your system uses the same code pages but different locale names than those supported by the DB2 interface, you can still see the translated db2setup by setting your LANG environment variable to the appropriate value by entering the following command:

```
export LANG= <locale> where locale is a locale supported by the DB2 interface.
```

For example, if your Linux system's default locale is ja_JP.ujis and the codepage of ja_JP.ujis is 954, you can set your LANG environment variable to ja_JP.eucJP by issuing the following command, assuming you are using Bourne shell (or a variant):

```
export LANG=ja_JP.eucJP
```

The db2setup command will now be displayed in Japanese (in codepage 954).

Note: The db2setup command can be translated into a subset of the languages supported by the DB2 product you are installing.

Related reference:

- "Supported DB2 interface languages" on page 284
- "db2setup - Install DB2 Command" in the *Command Reference*
- "setup - Install DB2 Command" in the *Command Reference*

Appendix B. Mounting the DB2 product CD-ROM (UNIX)

Mounting the CD-ROM (AIX)

Prerequisites:

Root authority is required to perform this task.

Procedure:

To mount the CD-ROM on AIX using the System Management Interface Tool (SMIT), perform the following steps:

1. Log in as a user with root authority.
2. Insert the CD-ROM in the drive.
3. Create a CD-ROM mount point by entering the `mkdir -p /cdrom` command, where `cdrom` represents the CD-ROM mount point directory.
4. Allocate a CD-ROM file system using SMIT by entering the `smit storage` command.
5. After SMIT starts, select **File Systems** → **Add / Change / Show / Delete File Systems** → **CDROM File Systems** → **Add CDROM File System**.
6. In the Add a File System window:
 - Enter a device name for your CD-ROM file system in the **DEVICE Name** field. Device names for CD-ROM file systems must be unique. If there is a duplicate device name, you may need to delete a previously-defined CD-ROM file system or use another name for your directory. In our example, we will use `/dev/cd0` as the device name.
 - Enter the CD-ROM mount point directory in the **MOUNT POINT** window. In our example, the mount point directory is `/cdrom`.
 - In the **Mount AUTOMATICALLY at system restart** field, select yes to enable automatic mounting of the file system.
 - Click **OK** to close the window, then click **Cancel** three times to exit SMIT.
7. Next, mount the CD-ROM file system by entering the `smit mountfs` command.
8. In the Mount a File System window:
 - Enter the device name for this CD-ROM file system in the **FILE SYSTEM name** field. In our example, the device name is `/dev/cd0`.
 - Enter the CD-ROM mount point in the **Directory over which to mount** field. In our example, the mount point is `/cdrom`.
 - Enter `cdrfs` in the **Type of Filesystem** field. To view the other kinds of file systems you can mount, click **List**.
 - In the **Mount as READ-ONLY system** field, select yes.
 - Accept the remaining default values and click **OK** to close the window.

Your CD-ROM file system is now mounted. To view the contents of the CD-ROM, place the disk in the drive and enter the `cd /cdrom` command where `cdrom` is the CD-ROM mount point directory.

Mounting the CD-ROM (Linux)

Prerequisites:

Root authority is required to perform this task.

Procedure:

To mount the CD-ROM on Linux:

1. Log in as a user with root authority.
2. Insert the CD-ROM in the drive and enter the following command:

```
mount -t iso9660 -o ro /dev/cdrom /cdrom
```

where */cdrom* represents the mount point of the CD-ROM.

3. Log out.

Your CD-ROM file system is now mounted. To view the contents of the CD-ROM, place the disk in the drive and enter the `cd /cdrom` command where `cdrom` is the CD-ROM mount point directory.

Related concepts:

- “Multiple DB2 level installations” in the *Installation and Configuration Supplement*

Related reference:

- “DB2 product license files” in the *Installation and Configuration Supplement*

Mounting the CD-ROM (Solaris Operating Environment)

Prerequisites:

If you are mounting the CD-ROM drive from a remote system using NFS, the CD-ROM file system on the remote computer must be exported with root access. You must also mount that file system with root access on the local computer.

Procedure:

To mount the CD-ROM on Solaris Operating Environment:

1. Log in as a user with root authority.
2. Insert the CD-ROM into the drive.
3. If the Volume Manager (`vold`) is running on your system, the CD-ROM is automatically mounted as `/cdrom/cd_label` if the CD has a label or `/cdrom/unnamed_cdrom` if it is unlabeled.

If the Volume Manager is not running on your system, complete the following steps to mount the CD-ROM:

- a. Determine the name of the device by entering the following command:

```
ls -al /dev/sr* |awk '{print "/" $11}'
```

This command returns the name of the CD-ROM device. In this example, the command returns the string `/dev/dsk/c0t6d0s2`.

- b. Enter the following commands to mount the CD-ROM:

```
mkdir -p /cdrom/unnamed_cdrom  
mount -F hsfs -o ro /dev/dsk/c0t6d0s2 /cdrom/unnamed_cdrom
```

where `/dev/dsk/c0t6d0s2` represents the name of the device that was returned in the preceding step and `/cdrom/unnamed_cdrom` represents the CD-ROM mount directory.

Note: If you are mounting the CD-ROM drive from a remote system using NFS, the CD-ROM file system on the remote machine must be exported with root access. You must also mount that file system with root access on the local machine.

4. Log out.

Your CD-ROM file system is now mounted. To view the contents of the CD-ROM, place the disk in the drive and enter the `cd /cdrom` command where `cdrom` is the CD-ROM mount point directory.

Appendix C. Notices

IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country/region or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106, Japan

The following paragraph does not apply to the United Kingdom or any other country/region where such provisions are inconsistent with local law:
INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product, and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information that has been exchanged, should contact:

IBM Canada Limited
Office of the Lab Director
8200 Warden Avenue
Markham, Ontario
L6G 1C7
CANADA

Such information may be available, subject to appropriate terms and conditions, including in some cases payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems, and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements, or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information may contain examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious, and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information may contain sample application programs, in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

Each copy or any portion of these sample programs or any derivative work must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. *_enter the year or years_*. All rights reserved.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both, and have been used in at least one of the documents in the DB2 UDB documentation library.

ACF/VTAM	iSeries
AISPO	LAN Distance
AIX	MVS
AIXwindows	MVS/ESA
AnyNet	MVS/XA
APPN	Net.Data
AS/400	NetView
BookManager	OS/390
C Set++	OS/400
C/370	PowerPC
CICS	pSeries
Database 2	QBIC
DataHub	QMF
DataJoiner	RACF
DataPropagator	RISC System/6000
DataRefresher	RS/6000
DB2	S/370
DB2 Connect	SP
DB2 Extenders	SQL/400
DB2 OLAP Server	SQL/DS
DB2 Information Integrator	System/370
DB2 Query Patroller	System/390
DB2 Universal Database	SystemView
Distributed Relational Database Architecture	Tivoli
DRDA	VisualAge
eServer	VM/ESA
Extended Services	VSE/ESA
FFST	VTAM
First Failure Support Technology	WebExplorer
IBM	WebSphere
IMS	WIN-OS/2
IMS/ESA	z/OS
	zSeries

The following terms are trademarks or registered trademarks of other companies and have been used in at least one of the documents in the DB2 UDB documentation library:

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel and Pentium are trademarks of Intel Corporation in the United States, other countries, or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, or service names may be trademarks or service marks of others.

Index

A

- AIX
 - installation
 - requirements for DB2 servers 25
 - installing
 - DB2 clients 265
 - DB2 servers 13
 - mounting the CD-ROM 287
- Application Development client
 - overview 7

C

- cataloging
 - databases 277
 - host databases
 - DB2 Connect 277
 - TCP/IP node 276
- CD-ROM
 - mounting
 - AIX 287
 - Linux 288
 - Solaris Operating Environment 288
- client configurations
 - non-supported 273
 - supported 273
- client to server communication
 - connection, testing using the CLP 279
- clients
 - Application Development 7
 - overview 5
 - Run-Time client 6
 - Run-Time Lite 6
 - server connections 275
- code pages
 - supported 284
- command line processor (CLP)
 - cataloging a database 277
 - cataloging a node 276
 - configuring client to server connection 275
 - verifying the installation 257
- commands
 - catalog database 277
 - catalog tcpip 276
 - db2sampl 257
 - db2setup 269
 - db2start 16, 279
- configuring
 - client to server connection
 - command line processor (CLP) 275

D

- databases
 - cataloging 277

- DB2
 - code pages 284
 - installation methods 11
 - installing
 - applying the latest FixPak 256
 - UNIX 11
 - verifying the installation 257
 - Windows 11
 - interface languages 284
 - locales 284
- DB2 clients
 - cataloging
 - TCP/IP node 276
 - installation requirements
 - AIX 265
 - Linux 266
 - Solaris Operating Environment 267
 - Windows 261
 - installing
 - UNIX 269
 - Windows 261, 263
 - overview 5
 - user accounts 263
- DB2 Enterprise Server Edition
 - overview 3
- DB2 groups
 - UNIX 14
- DB2 servers
 - creating
 - group IDs 38
 - user IDs 38
 - installation requirements
 - AIX 25
 - Linux 29
 - Solaris Operating Environment 31
 - Windows 18
 - installing
 - Windows 12
 - installing on AIX 13
 - installing on Windows 43
- DB2 Setup wizard
 - installing DB2 servers
 - UNIX 96
 - language identifiers 285
- DB2 system administrator group 16
- DB2 users
 - UNIX 14
- DB2 Workgroup Server Edition
 - overview 4
- db2setup
 - displaying
 - national languages 286
- disk requirements
 - UNIX 17
 - Windows 17

E

- examples
 - connecting to a remote database 279

F

- fenced user
 - definition 38
- FixPaks
 - applying 256

G

- group IDs
 - creating 38
- groups
 - selecting 21

I

- installation
 - Java (UNIX) 35
 - JDK (UNIX) 35
 - methods
 - UNIX 11
 - Windows 11
- Installing
 - Java Development Kit 37
- interface languages 284
 - changing
 - UNIX 283
 - Windows 283

J

- Java
 - installation considerations (UNIX) 35
- Java Development Kit
 - installing 37
- JDK
 - installation considerations (UNIX) 35

K

- kernel configuration parameters
 - modifying
 - Linux 40
 - Solaris Operating Environment 41

L

- language identifiers
 - DB2 Setup wizard 285
- Linux
 - installation requirements
 - DB2 servers 29
 - installing
 - DB2 clients 266
 - modifying
 - kernel parameters 40
 - mounting the CD-ROM 288
 - locales
 - supported 284

M

- maintenance
 - password 255
- memory requirements
 - UNIX 17
 - Windows 17
- modifying
 - kernel parameters
 - Linux 40
 - Solaris Operating Environment 41
- mounting
 - CD-ROM
 - AIX 287
 - Linux 288
 - Solaris Operating Environment 288

N

- national languages
 - displaying db2setup 286
- network information service (NIS),
 - installation considerations 17
- NIS (network information service),
 - installation considerations 17

P

- password
 - maintenance 255
- passwords
 - rules 255
- product overview
 - DB2 UDB Enterprise Server Edition 3
 - DB2 Workgroup Server Edition 4

R

- remote
 - commands, enabling on UNIX 255
- rules
 - password 255
- Run-Time client
 - overview 6
- Run-Time Client Lite
 - overview 6

S

- security
 - NIS installation considerations 17
- servers
 - client connections 275
- Solaris Operating Environment
 - installation
 - requirements, DB2 servers 31
 - installing
 - DB2 clients 267
 - modifying kernel parameters 41
 - mounting the CD-ROM 288
- supported configurations
 - clients 273

- system administrator group
 - DB2
 - Windows 16

T

- testing connections
 - client-to-server 279

U

- UNIX
 - changing the DB2 interface
 - language 283
 - DB2 groups 14
 - DB2 users 14
 - enabling
 - remote commands 255
 - installing
 - DB2 clients 269
 - DB2 servers, using the DB2 Setup wizard 96
- user accounts
 - DB2 clients 263
 - required for installation 22
- user IDs
 - creating 38
 - selecting 21
- user privileges, Windows 15

W

- Windows
 - changing the DB2 interface
 - language 283
 - DB2 system administrator group 16
 - granting user rights 15
 - installation requirements
 - DB2 servers 18
 - installing
 - DB2 clients 261, 263
 - DB2 server 12
 - DB2 servers with the DB2 Setup wizard 43
 - installing DB2
 - user accounts 22

Contacting IBM

In the United States, call one of the following numbers to contact IBM:

- 1-800-IBM-SERV (1-800-426-7378) for customer service
- 1-888-426-4343 to learn about available service options
- 1-800-IBM-4YOU (426-4968) for DB2 marketing and sales

In Canada, call one of the following numbers to contact IBM:

- 1-800-IBM-SERV (1-800-426-7378) for customer service
- 1-800-465-9600 to learn about available service options
- 1-800-IBM-4YOU (1-800-426-4968) for DB2 marketing and sales

To locate an IBM office in your country or region, check IBM's Directory of Worldwide Contacts on the web at <http://www.ibm.com/planetwide>

Product information

Information regarding DB2 Universal Database products is available by telephone or by the World Wide Web at <http://www.ibm.com/software/data/db2/udb>

This site contains the latest information on the technical library, ordering books, product downloads, newsgroups, FixPaks, news, and links to web resources.

If you live in the U.S.A., then you can call one of the following numbers:

- 1-800-IBM-CALL (1-800-426-2255) to order products or to obtain general information.
- 1-800-879-2755 to order publications.

For information on how to contact IBM outside of the United States, go to the IBM Worldwide page at www.ibm.com/planetwide



Printed in USA

SC09-7978-00

