IBM Tivoli Directory Server

White Pages

Version 6.1

IBM

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This edition applies to version 6, release 1, of IBM Tivoli Directory Server and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

About this book

IBM® Tivoli® Directory Server is the IBM implementation of Lightweight Directory Access Protocol for supported Windows®, AIX®, Linux® (xSeries®, zSeries®, pSeries®, and iSeries™), Solaris, and Hewlett-Packard UNIX® (HP-UX) operating systems.

IBM Tivoli Directory Server version 6.1 Installation and Configuration Guide describes how to install, configure, and uninstall IBM Tivoli Directory Server version 6.1, and how to upgrade to the 6.1 version from previous releases of the product. For detailed information about supported operating system versions, as well as other required software and hardware, see *IBM Tivoli Directory Server version 6.1 System Requirements*.

Intended audience for this book

This book is for administrators who will install and configure IBM Tivoli Directory Server version 6.1.

Readers need to know how to use the operating system on which IBM Tivoli Directory Server will be installed.

Publications

This section lists publications in the IBM Tivoli Directory Server version 6.1 library and related documents. The section also describes how to access Tivoli publications online and how to order Tivoli publications.

IBM Tivoli Directory Server version 6.1 library

The following documents are available in the IBM Tivoli Directory Server version 6.1 library:

* *IBM Tivoli Directory Server Version 6.1 What's New for This Release*, SC23-6539-00

  Provides information about the new features in the IBM Tivoli Directory Server Version 6.1 release.
* *IBM Tivoli Directory Server Version 6.1 Quick Start Guide*, GI11-8172-00

  Provides help for getting started with IBM Tivoli Directory Server 6.1. Includes a short product description and architecture diagram, as well as a pointer to the product Information Center and installation instructions.
* *IBM Tivoli Directory Server Version 6.1 System Requirements*, SC23-7835-00

  Contains the minimum hardware and software requirements for installing and using IBM Tivoli Directory Server 6.1 and its related software. Also lists the supported versions of corequisite products such as DB2® and GSKit.
* *IBM Tivoli Directory Server Version 6.1 Installation and Configuration Guide*, GC32-1560-00

  Contains complete information for installing, configuring, and uninstalling IBM Tivoli Directory Server. Includes information about upgrading from a previous version of IBM Tivoli Directory Server.
* *IBM Tivoli Directory Server Version 6.1 Administration Guide*, GC32-1564-00

  Contains instructions for performing administrator tasks through the Web Administration Tool and the command line.

- *IBM Tivoli Directory Server Version 6.1 Command Reference*, SC23-7834-00

  Describes the syntax and usage of the command-line utilities included with IBM Tivoli Directory Server.
- *IBM Tivoli Directory Server Version 6.1 Server Plug-ins Reference*, GC32-1565-00

  Contains information about writing server plug-ins.
- *IBM Tivoli Directory Server Version 6.1 Programming Reference*, SC23-7836-00

  Contains information about writing Lightweight Directory Access Protocol (LDAP) client applications in C and Java™.
- *IBM Tivoli Directory Server Version 6.1 Performance Tuning and Capacity Planning Guide*, SC23-7836-00

  Contains information about tuning the directory server for better performance. Describes disk requirements and other hardware needs for directories of different sizes and with various read and write rates. Describes known working scenarios for each of these levels of directory and the disk and memory used; also suggests rough rules of thumb.
- *IBM Tivoli Directory Server Version 6.1 Problem Determination Guide*, GC32-1568-00

  Contains information about possible problems and corrective actions that can be tried before contacting IBM Software Support.
- *IBM Tivoli Directory Server Version 6.1 Messages Guide*, GC32-1567-00

  Contains a list of all informational, warning, and error messages associated with IBM Tivoli Directory Server 6.1.
- *IBM Tivoli Directory Server Version 6.1 White Pages*, SC23-7837-00

  Describes the Directory White Pages application, which is provided with IBM Tivoli Directory Server 6.1. Contains information about installing, configuring, and using the application for both administrators and users.

Related publications

The following documents also provide useful information:
- *Java Naming and Directory Interface™ 1.2.1 Specification* on the Sun Microsystems Web site at http://java.sun.com/products/jndi/1.2/javadoc/index.html.

  IBM Tivoli Directory Server Version 6.1 uses the Java Naming and Directory Interface (JNDI) client from Sun Microsystems. See this document for information about the JNDI client.

Accessing terminology online

The *Tivoli Software Glossary* includes definitions for many of the technical terms related to Tivoli software. The *Tivoli Software Glossary* is available at the following Tivoli software library Web site:

http://publib.boulder.ibm.com/tividd/glossary/tivoliglossarymst.htm

The IBM Terminology Web site consolidates the terminology from IBM product libraries in one convenient location. You can access the Terminology Web site at the following Web address:

http://www.ibm.com/software/globalization/terminology

Accessing publications online

IBM posts publications for this and all other Tivoli products, as they become available and whenever they are updated, to the Tivoli Information Center Web site at http://publib.boulder.ibm.com/tividd/td/link/tdprodlist.html.

In the Tivoli Information Center window, click **Tivoli product manuals**. Click the letter that matches the first letter of your product name to access your product library. For example, click **M** to access the IBM Tivoli Monitoring library or click **O** to access the IBM Tivoli OMEGAMON® library.

Note: If you print PDF documents on other than letter-sized paper, set the option in the **File → Print** window that allows Adobe® Reader to print letter-sized pages on your local paper.

Ordering publications

You can order many Tivoli publications online at http://www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi.

You can also order by telephone by calling one of these numbers:
* In the United States: 800-879-2755
* In Canada: 800-426-4968

In other countries, contact your software account representative to order Tivoli publications. To locate the telephone number of your local representative, perform the following steps:
1. Go to http://www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi.
2. Select your country from the list and click **Go**.
3. Click **About this site** in the main panel to see an information page that includes the telephone number of your local representative.

Accessibility

Accessibility features help users with a physical disability, such as restricted mobility or limited vision, to use software products successfully. With this product, you can use assistive technologies to hear and navigate the interface. You can also use the keyboard instead of the mouse to operate all features of the graphical user interface.

For additional information, see the *IBM Tivoli Directory Server Version 6.1 Installation and Configuration Guide*.

Tivoli technical training

For Tivoli technical training information, refer to the following IBM Tivoli Education Web site at http://www.ibm.com/software/tivoli/education.

Support information

If you have a problem with your IBM software, you want to resolve it quickly. IBM provides the following ways for you to obtain the support you need:
* IBM Support Assistant: You can search across a large collection of known problems and workarounds, Technotes, and other information at http://www.ibm.com/software/support/isa.
* Obtaining fixes: You can locate the latest fixes that are already available for your product.

- Contacting IBM Software Support: If you still cannot solve your problem, and you need to work with someone from IBM, you can use a variety of ways to contact IBM Software Support.

For more information about resolving problems, see the *IBM Tivoli Directory Server Version 6.1 Problem Determination Guide*.

Conventions used in this book

This book uses several conventions for special terms and actions, operating system-dependent commands and paths, and margin graphics.

Typeface conventions

This book uses the following typeface conventions:

Bold

- Lowercase commands and mixed case commands that are otherwise difficult to distinguish from surrounding text
- Interface controls (check boxes, push buttons, radio buttons, spin buttons, fields, folders, icons, list boxes, items inside list boxes, multicolumn lists, containers, menu choices, menu names, tabs, property sheets), labels (such as **Tip:**, and **Operating system considerations**:)
- Keywords and parameters in text

Italic

- Citations (examples: titles of books, diskettes, and CDs)
- Words defined in text (example: a nonswitched line is called a *point-to-point line*)
- Emphasis of words and letters (words as words example: "Use the word *that* to introduce a restrictive clause."; letters as letters example: "The LUN address must start with the letter *L*.")
- New terms in text (except in a definition list): a *view* is a frame in a workspace that contains data.
- Variables and values you must provide: ... where *myname* represents....

Monospace

- Examples and code examples
- File names, programming keywords, and other elements that are difficult to distinguish from surrounding text
- Message text and prompts addressed to the user
- Text that the user must type
- Values for arguments or command options

Operating system-dependent variables and paths

This book uses the UNIX convention for specifying environment variables and for directory notation.

When using the Windows command line, replace $*variable* with **%** *variable*% for environment variables and replace each forward slash (/) with a backslash (\) in directory paths. The names of environment variables are not always the same in the Windows and UNIX environments. For example, %TEMP% in Windows environments is equivalent to $TMPDIR in UNIX environments.

Note: If you are using the bash shell on a Windows system, you can use the UNIX conventions.

Chapter 1. Tivoli Directory Applications

Read this information to understand the applications that are available on the server. These business applications work in conjunction with your existing enterprise applications and server components to increase productivity in an easy-to-use environment. Tivoli Directory Applications is available on Embedded WebSphere® Application Server only.

Application Console

Application Console is an integral starting point for IBM Tivoli Directory Applications. Application Console helps you configure business application components, such as Directory White Pages. The Application Console also provides the initial configuration for the location of the IBM Tivoli Directory Server instance that is used by the IBM Tivoli Directory Applications.

For more information about Application Console, see Chapter 3, "Application Console," on page 9.

Tivoli Directory White Pages

The Directory White Pages application works like an online telephone directory and provides the ability to search, view, and manage entries in a Lightweight Directory Access Protocol (LDAP) directory. The application is designed to work with IBM Tivoli Directory Server 6.1, which is an implementation of LDAP. You can use Directory White Pages to manage users and passwords in a directory that is used to secure access to various Web applications through LDAP. The application can also be used to provide address and contact information for an organization.

For more information about Directory White Pages, see Chapter 4, "Directory White Pages," on page 17.

Notes:

1. If you downloaded IBM Tivoli Directory Server 6.1 from Passport Advantage, you are entitled to use Directory White Pages. If you obtained IBM Tivoli Directory Server 6.1 from another Web site, you are entitled to use Directory White Pages for evaluation purposes only. To be entitled to full use of Directory White Pages, download IBM Tivoli Directory Server 6.1 from the Passport Advantage Web site.

2. Application Console and Tivoli Directory White Pages are not available on Solaris X64 or HP-UX Integrity systems.

Chapter 2. Installing and configuring Tivoli Directory Applications

Application Console is part of the IBM Tivoli Directory Applications package. This package provides a set of enterprise Web applications that are available for servers. Each application is an integrated solution to a common business need that works with your existing applications, server components, and enterprise data.

As part of Tivoli Directory Applications, the Application Console and Directory White Pages applications are installed and must be configured. During or after installation, the applications are deployed into an application server runtime environment.

You must install and configure Tivoli Directory Applications before you can use the Application Console and Directory White Pages.

At a high level, the steps for installation and configuration are:

1. Install IBM Tivoli Directory Server 6.1 and create a directory server instance for Directory White Pages. See the *IBM Tivoli Directory Server version 6.1 Installation and Configuration Guide* for information. IBM Tivoli Directory Server can be on the same computer as the one where you install Tivoli Directory Applications or on a different computer. If the directory server instance you want to use is already set up, you do not need to install IBM Tivoli Directory Server.

2. If you plan to use the sample user data for a quick evaluation of the Directory White Pages application, use the **idscfgsuf** command to add the "o=ibm,c=us" suffix into the directory. See the *IBM Tivoli Directory Server version 6.1 Command Reference* for information about the **idscfgsuf** command.

3. Install Tivoli Directory Applications and Embedded WebSphere Application Server. Tivoli Directory Applications is automatically deployed into Embedded WebSphere Application Server. See "Installing Tivoli Directory Applications" on page 4 for instructions.

4. Configure Tivoli Directory Applications. See "Configuring Directory White Pages to work with IBM Tivoli Directory Server" on page 5 for instructions.

   If you plan to use the sample user data for a quick evaluation of the Directory White Pages application, the user and group properties settings must match the data in the sample LDIF file.

   - In the "User entry properties" section, set the **Search base DN** field to "ou=users,o=ibm,c=us" and create a location mapping for the search base DN. Leave the default values for the remaining settings in the "User entry properties" section.

   - In the "Group entry properties" section, set the **Parent DN** field to "ou=groups,o=ibm,c=us". Leave the default values for the remaining settings in the "Group entry properties" section.

5. If you plan to use the sample user data for a quick evaluation of the Directory White Pages application, load the sample data from the DWPSampleData.ldif file using the **idsldapadd** or **idsldif2db** command. The LDIF file is in *<TDS_install_path>*/idsapps/DWPSampleData.ldif. (*<TDS_install_path>* is the path where IBM Tivoli Directory Server is installed.) See the *IBM Tivoli Directory Server version 6.1 Command Reference* for information about the **idsldapadd** and **idsldif2db** commands.

Installing Tivoli Directory Applications

Use this information to install Tivoli Directory Applications. The installation consists of installing IBM Tivoli Directory Server 6.1, Embedded WebSphere Application Server v6.1, and the two application .ear files: Application Console and Directory White Pages. Application Console and Directory White Pages are then deployed into Embedded WebSphere Application Server.

To install Tivoli Directory Applications:

1. Do one of the following:

   On Windows systems:

   a. Be sure that you are logged on as any member of the Administrators group.

   b. If you are installing from a CD, insert CD 4 in the CD-ROM drive. Go to the drive for your CD-ROM, and then change to the \whitepages folder.

      If you downloaded .zip files, go to the directory where you unzipped the downloaded .zip files, and then to the tdsV6.1\whitepages folder.

   c. If you are using Intel 32-bit Windows, double-click the **install_tdsWpWin32.exe** icon, or type `install_tdsWpWin32.exe` at the command prompt.

      If you are using AMD/EM64T Windows, double-click the **install_tdsWpWin64.exe** icon, or type `install_tdsWpWin64.exe` at the command prompt.

   On AIX, Linux, Solaris, and HP-UX systems:

   a. Log in as root.

   b. If you are installing from a CD, insert CD 4 in the CD-ROM drive and mount the CD, and then change to the /whitepages directory of the CD.

      If you downloaded .tar files, go to the directory where you untarred the files, and then change to the tdsV6.1/whitepages subdirectory.

   c. Type one of the following:
      - On AIX systems: `install_AixWp.bin`
      - On xSeries Linux systems: `install_Linux386Wp.bin`
      - On iSeries and pSeries Linux systems: `install_LinuxPPCWp.bin`
      - On zSeries Linux systems: `install_Linuxs390Wp.bin`
      - On AMD64/EM64T Linux systems: `install_LinuxAMD64Wp.bin`
      - On Solaris SPARC systems: `install_SolarisWp.bin`. (Tivoli Directory Applications is not available for Solaris X64 systems.)
      - On HP-UX PA-RISC systems: `install_HP11xWp.bin`. (Tivoli Directory Applications is not available for HP-UX Integrity systems.)

   The language window is displayed.

2. Select the language you want to use during installation. Click **OK**.

   Note: This is the language used in the installation program, not in Directory White Pages.

3. On the Welcome window, click **Next**.

4. After reading the Software license agreement, select **I accept both the IBM and the non-IBM terms**. Click **Next**.

5. To install in the default directory, click **Next**. You can specify a different directory by clicking **Browse** or typing the directory path you want. The directory will be created if it does not exist. The default installation directory is:
   - On Windows systems: C:\Program Files\IBM\LDAP\V6.1\idsapps
   - On AIX, Solaris, and HP-UX systems: /opt/IBM/ldap/V6.1/idsapps
   - On Linux systems: /opt/ibm/ldap/V6.1/idsapps

6. A window showing the following components for installation is displayed:
   - Directory White Pages 6.1
   - Embedded WebSphere Application Server

   This window also indicates the amount of disk space required and available on the selected drive.

   Select both components, and click **Next**.

7. The installation program now has enough information to begin installing. A summary window displays the components you selected and the locations where the selected components will be installed. Click **Back** to change your selections. Click **Install** to begin installation.

8. When the installation program has finished, click **Finish** to exit.

Configuring Directory White Pages to work with IBM Tivoli Directory Server

To initially configure Directory White Pages to work with an IBM Tivoli Directory Server directory server instance, use the following information. Later, you can modify the properties you set up during initial configuration if necessary. See "Administering the Application Console" on page 9 for information.

To configure Directory White pages to work with an IBM Tivoli Directory Server directory server instance:

1. Start the application server. Type one of the following at a command prompt.
   - *EWASPath*\bin\startServer.bat server1 for Windows systems
   - *EWASPath*/bin/startServer.sh server1 for AIX, Linux, Solaris, or HP-UX systems

   where *EWASPath* is the path where you installed Embedded WebSphere Application Server. This path is:
   - By default on Windows: c:\Program Files\IBM\LDAP\V6.1\idsapps\appsrv
   - On AIX, Solaris, and HP-UX: /opt/IBM/ldap/V6.1/idsapps/appsrv
   - On Linux: /opt/ibm/ldap/V6.1/idsapps/appsrv

2. Type the following Web address in your Web browser:

   http://*server.name:port*/ibm-bizApps/welcome/admin.do

   where *server.name* is the name of your server (or localhost if you are working on the same computer) and *port* is your external HTTP port number. (The port is 12301 for unsecure HTTP or 12302 for secure HTTP.) The Web address is case sensitive. The Application Console Administrator Pages is the entry point for administration of Directory White Pages.

3. On the Administrator Pages window, complete the following fields:

   Hostname
   > Type the hostname or IP address of the computer that contains the

directory server instance you will use for your directory. (If you are working on the computer that contains the directory server instance, you can use `localhost`.)

LDAP port

Click one of the following:

- **Unsecure** and type the port number that the directory server instance uses for non-SSL connections.

- **SSL** and type the port number that the directory server instance uses for SSL connections.

Administrator DN

Type the administrator DN for the directory server instance.

Password

Type the password for the administrator DN on the directory server instance.

4. Click **Login**. The Administrator Pages (Directory Properties) window is displayed.

5. Configure the server properties by completing the following fields:

LDAP ports allowed

Select either **Unsecure** or **SSL port**, or both, and specify a port number for each selection. **Unsecure** is the standard TCP/IP port number used by the directory server. **SSL port** is the secure port number used by the directory server.

Authentication realm

Specify the realm name used on login prompts to inform users what name and password to provide. The value must be different than the one that is specified for administrators.

Authentication port

Select either **Unsecure** or **SSL** as the authentication port.

6. Configure the user entry properties by completing the following fields:

Search base DN

Specify the distinguished name (DN) value of the search base DN for user entries. To be recognized by Directory White Pages, all pre-existing user and administrative entries must reside under this search base DN in the IBM Tivoli Directory Server directory.

Location mapping

Location mappings associate a parent DN (relative to the search base DN) with an alias (a user-friendly name) to simplify the addition of user entries to the directory topology. For example: with a search base DN of "ou=users,o=ibm,c=us", adding a parent DN of "ou=dept5" and an alias of "Dept5" will create a location mapping of "ou=dept5,ou=users,o=ibm,c=us" represented by the "Dept5" alias.

You can add new location mappings or remove existing ones.

- To add a location mapping:

  a. In the empty field below **Parent DN**, type the distinguished name value of the parent directory for user entries. If an entry does not exist in the directory for the DN specified, one will be created. If you leave this field blank, the associated alias will represent the DN specified in the **Search base DN** field.

b. In the empty field below **Alias**, type a name that will be associated with the DN specified in the **Parent DN** field (for example, `Department 901`). This alias will be selectable by users when they add entries.

c. Click **Add**.

- To remove a location mapping:
  a. Click the location mapping in either the **Parent DN** or the **Alias** list.
  b. Click **Remove**.

Naming attribute

Specify the naming attribute used in the directory server. You can use any attribute that is listed in the **Directory Attribute Mapping** list.

Primary object class

Specify the object class name that is used to identify user entries in the directory. The default is **ibm-itdPerson**. To locate Directory White Pages user entries, the application performs a search from the DN specified in the **Search base DN** field for entries that contain this object class.

Secondary object class

Specify a list of object classes (if any) that are used to support attributes in the Directory Attributes Mappings list that are not supported by the primary object class. By default, the list contains **person**, **organizationalPerson**, and **inetOrgPerson**.

Use the **Add** and **Remove** buttons to update the list.

- To add an object class to the list, type the name of the object class in the field on the right, and click **Add**.
- To remove an object class from the list, select the object class on the left, and click **Remove**.

All attributes shown on the right side of the **Directory Attribute Mappings** list must be supported by one of the object classes shown in the **Primary object class** or **Secondary object class** field for the directory server instance you are using.

7. Configure the group entry properties by completing the following fields:

Parent DN

Specify the distinguished name value of the parent directory for group entries. If an entry does not exist in the directory for the DN specified, one will be created.

Naming attribute

Specify the naming attribute used in the directory server. You can use any attribute that is listed in the **Directory Attribute Mappings** list.

Object class

Select the object class name (**groupOfNames** or **groupOfUniqueNames**) used to identify group entries in the directory.

8. Configure the administrator properties by completing the following fields:

Name Specify the name of an administrator for business applications. If an entry does not exist in the directory for the user specified, one will be created.

Password

Specify the password for the administrator.

Confirm Password

Type the password again for confirmation.

Group Specify the name of the group that is used to identify administrators for business applications. If an entry does not exist in the directory for this group, one will be created.

Authentication realm

Specify the realm name used on application login prompts for administrators. The value must be different than the one specified for general users.

Contact information

Specify a message that is displayed to users when problems occur. For example, the message might provide an administrator's name, telephone number, or e-mail address.

9. Configure the directory attribute mappings in the Directory Attribute Mappings list.

The names on the left are the labels that are presented when an entry is viewed. The attribute names on the right show the directory attribute in the directory server instance to which the labels on the left are mapped. For each label-attribute pair, select the **Read-only** check box if you want the administrator, but no users, to be able to modify the value of the attribute. Define your own attribute mappings using this list. For example, if the **First name** field maps to the firstname attribute in your directory server schema, type firstname in the box to the right of the **First name** field.

Change any of the directory attributes in the list to match the schema for your directory server instance, if necessary.

All of the attributes specified must be correctly defined in the IBM Tivoli Directory Server directory schema. The default list of attributes is defined in the schema provided with IBM Tivoli Directory Server. For information about the schema, see the *IBM Tivoli Directory Server version 6.1 Administration Guide.*

10. Click **Save Properties** to save your changes.

Chapter 3. Application Console

The Application Console is a Web-based business application with several purposes. It provides a starting point for non-administrators to link to other business applications provided by IBM Tivoli Directory Applications; it functions as a welcome page specifically for business applications. This application also provides administrative interfaces used for setup and configuration of the Directory White Pages application.

The Application Console application supports IBM Tivoli Directory Server 6.1.

A diagram of the application follows:
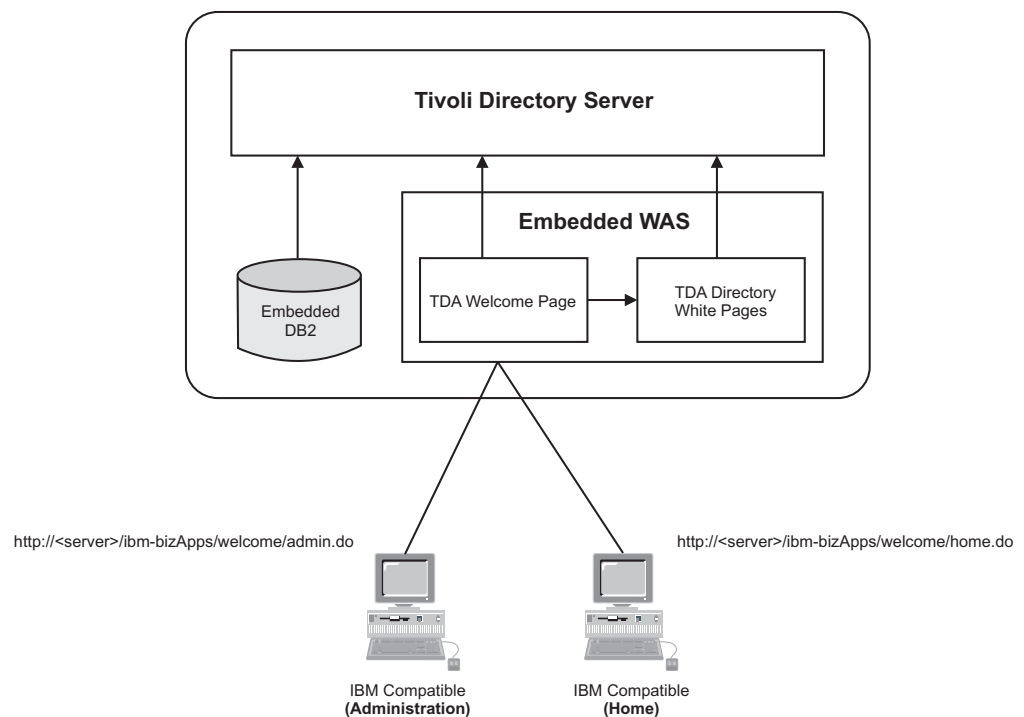
The Application Console application is installed on your server when you install Directory White Pages. It can be deployed into Embedded WebSphere Application Server.

The Web administration GUI performs many underlying configuration tasks for you if you deploy into Embedded WebSphere Application Server.

Administering the Application Console

You can use the Application Console to manage the following properties that are used by Directory White Pages.

Directory Server (LDAP) properties

Use the following sections to set up and manage directory server properties:

- "Managing Directory Server properties" on page 10
- "Managing Directory Server user entry properties" on page 10

- "Managing Directory Server group entry properties" on page 12
- "Managing administrator properties" on page 12

SSL Client properties
> Use the following section to manage SSL Client properties:
> - "Managing client and CA certificates" on page 13

Accessing the Application Console administrator pages

To access the Application Console administrator pages, type the following Web address in your Web browser:

```
http://your.server.name:port/ibm-bizApps/welcome/admin.do
```

where *your.server.name* is the name of the application server where Application Console is installed and *port* is 12301 for unsecure HTTP or 12302 for secure HTTP.

Managing Directory Server properties

To manage Directory Server properties:

1. Access the Application Console administrator pages. (See "Accessing the Application Console administrator pages.")
2. Click the **Directory** tab.
3. Log in as the directory server administrator. Click **set up and change directory properties**.
4. Type your Directory Server Administrator distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following server properties:

   LDAP ports allowed
   > Select either **Unsecure** or **SSL port**, or both, and specify a port number for each selection. **Unsecure** is the standard TCP/IP port number used by the directory server. **SSL port** is the secure port number used by the directory server.

   Authentication realm
   > Specify the realm name used on login prompts to inform users what name and password to provide. The value must be different than the one that is specified for administrators.

   Authentication port
   > Select either **Unsecure** or **SSL** as the authentication port.
6. Click **Save Properties**.

Managing Directory Server user entry properties

To manage Directory Server user entry properties:

1. Access the Application Console administrator pages. (See "Accessing the Application Console administrator pages.")
2. Click the **Directory** tab.
3. Log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your Directory Server Administrator distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following user entry properties:

   Search base DN
   > Specify the distinguished name (DN) value of the parent directory for

user entries. To be recognized by Directory White Pages, all pre-existing user and administrative entries must reside under this search base DN in the IBM Tivoli Directory Server directory.

Location mapping

Location mappings associate a parent DN (relative to the search base DN) with an alias (a user-friendly name) to simplify the addition of user entries to the directory topology. For example: with a search base DN of "ou=users,o=ibm,c=us", adding a parent DN of "ou=dept5" and an alias of "Dept5" will create a location mapping of "ou=dept5,ou=users,o=ibm,c=us" represented by the "Dept5" alias. You can add new location mappings or remove existing ones.

You can add new location mappings or remove existing ones.

- To add a location mapping:

    a. In the empty field below **Parent DN**, type the distinguished name value of the parent directory for user entries. If an entry does not exist in the directory for the DN specified, one will be created. If you leave this field blank, the alias associated with it will represent the DN specified in the **Search base DN** field.

    b. In the empty field below **Alias**, type a name that will be associated with the DN specified in the **Parent DN** field (for example, `Department 901`). This alias will be selectable by users when they add entries.

    c. Click **Add**.

- To remove a location mapping:

    a. Click the location mapping in either the **Parent DN** or the **Alias** list.

    b. Click **Remove**.

Naming attribute

Specify the naming attribute used in the directory server. You can use any attribute that is listed in the **Directory Attribute Mappings** list.

Primary object class

Specify the object class name that is used to identify user entries in the directory. The default is **ibm-itdPerson**. To locate Directory White Pages user entries, the application performs a search from the DN specified in the Search base DN field for entries that contain this object class.

Secondary object class

Specify a list of object classes (if any) that are used to support attributes in the Directory Attributes Mappings list that are not supported by the primary object class. All attributes in the Directory Attributes Mappings list must be supported by either the primary object class or one of the secondary object classes. By default, the list contains **person**, **organizationalPerson**, and **inetOrgPerson**.

Use the **Add** and **Remove** buttons to update the list.

- To add an object class to the list, type the name of the object class in the field on the right, and click **Add**.

- To remove an object class from the list, select the object class on the left, and click **Remove**.

All attributes shown on the right side of the Directory Attribute Mappings list must be supported by one of the object classes shown in

the **Primary object class** or **Secondary object class** field for the directory server instance you are using.

6. Click **Save Properties**.

Managing Directory Server group entry properties

To manage directory server group entry properties:

1. Access the Application Console administrator pages. (See "Accessing the Application Console administrator pages" on page 10.)
2. Click the **Directory** tab.
3. Log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your LDAP distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following group entry properties:

   Parent DN
   > Specify the distinguished name (DN) value of the parent directory for group entries.

   Naming attribute
   > Specify the naming attribute used in the directory server. You can use any attribute that is listed in the **Directory Attribute Mapping** list.

   Object class
   > Select the object class name (**groupOfNames** or **groupOfUniqueNames**) used to identify group entries in the directory.

6. Click **Save Properties**.

Managing administrator properties

To manage directory server administrator properties:

1. Access the Application Console administrator pages. (See "Accessing the Application Console administrator pages" on page 10.)
2. Click the **Directory** tab.
3. Log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your LDAP distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following directory server administrator properties:

   Name Specify the name of an administrator for business applications. If an entry does not exist in the directory for the user specified, one will be created.

   Password
   > Specify the password for the administrator. This value is only used if the administrator entry does not exist and must be created.

   Confirm Password
   > Type the password again for confirmation.

   Group Specify the name of the group that is used to identify administrators for business applications. If an entry does not exist in the directory for this group, one will be created.

Authentication realm
> Specify the realm name used on login prompts for administrators. The value must be different than the one specified for general users.

Contact information
> Specify a message that is displayed to users when problems occur. For example, the message may provide an administrator's name, telephone number, or e-mail address.

6. Click **Save Properties**.

Managing directory attribute mappings

To modify the directory attribute mappings:

1. Access the Application Console administrator pages. (See "Accessing the Application Console administrator pages" on page 10.)
2. Click the **Directory** tab.
3. Log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your LDAP distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. Configure the directory attribute mappings in the Directory Attribute Mappings list.

   The names on the left are the labels that are presented when an entry is viewed. The attribute names on the right show the directory attribute in the directory server instance to which the labels on the left are mapped. For each label-attribute pair, select the **Read-only** check box if you want the administrator, but no users, to be able to modify the value of the attribute. Define your own attribute mappings using this list. For example, if the **First name** field maps to the firstname attribute in your directory server schema, type firstname in the box to the right of the **First name** field.

   Change any of the directory attributes in the list to match the schema for your directory server instance, if necessary.

   All of the attributes specified must be correctly defined in the IBM Tivoli Directory Server directory schema. The default list of attributes is defined in the schema provided with IBM Tivoli Directory Server. For information about the schema, see the *IBM Tivoli Directory Server version 6.1 Administration Guide.*

Managing client and CA certificates

To modify client and Certificate Authority (CA) certificate properties:

1. Access the Application Console administrator pages. (See "Accessing the Application Console administrator pages" on page 10.)
2. Click the **SSL Client** tab.
3. You can modify the following certificate properties:
   - Client certificates:

     Keystore file
     > Specify the path name of the keyring file containing client certificates for SSL communication.

     Keystore file password
     > Specify the password for the keyring file. If specified, the value is stored and replaces any previously stored password for the specified keyring file.
   - CA certificates:

> **Keystore file**
>> Specify the path name of the keyring file containing CA certificates for SSL communication.

> **Keystore file password**
>> Specify the password for the keyring file. If specified, the value is stored and replaces any previously stored password for the specified keyring file.

4. Click **Save Properties**.

You can also delete SSL client properties from this page. To delete SSL client properties, click **Delete Properties**.

See the *IBM Tivoli Directory Server version 6.1 Administration Guide* for more information about SSL.

Managing the appearance of the Application Console

The Application Console banner is composed from a set of individual image files. The background image is centered and overlaid with both the application title image, which is left justified, and the business logo image, which is right justified. You can substitute your own background, title, and logo files for the default files provided. The image sizes must measure the same as the default images. Incorrectly sized images generate an error message associated with each entry field.

To change the appearance of the Application Console by changing the banner at the top:

1. Access the Application Console administrator pages. (See "Accessing the Application Console administrator pages" on page 10.)
2. Click the **Appearance** tab.
3. You can modify the following image files:

> **Background image file:**
>> Type the path and file name of the background image file you want to use. This image is centered and overlaid with the title image and the logo image to create the composite Application Console banner. The default file is IBSMastheadBG.jpeg. The file can be a .gif or .jpeg file.

> **Title image file:**
>> Type the path and file name of the background image file you want to use. This image is left justified and overlays the background image. The default file is IBSMasthead.jpeg. The file can be a .gif or .jpeg file.

> **Logo image file:**
>> Type the path and file name of the background image file you want to use. This image is right justified and overlays the background image. The default file is IBMLogo.gif. The file can be a .gif or .jpeg file.

4. Click **Save Properties**.

   Click **Reset** if you want to reset the values to the values present when you entered this page.

Accessing the Application Console pages as a user

To access the Application Console application as a non-administrative user, enter the following Web address in your Web browser:

```
http://your.server.name:port/ibm-bizApps/welcome/home.do
```

where *your.server.name* is the name of the application server where Application Console is installed and *port* is 12301 for unsecure HTTP or 12302 for secure HTTP.

Click a business application (**Directory White Pages**) that is configured for use with the Application Console.

Chapter 4. Directory White Pages

The Directory White Pages application is part of Tivoli Directory Applications and is a Web-based application with which you can search, view, and manage entries in an LDAP directory. Directory White Pages can be used with a directory that you have already set up for your existing applications. Optionally, you can use the Web administration GUI or the Application Console application to set up a new directory.

The following functions are provided:

- The ability to search by name, job responsibilities, e-mail address, telephone number, department, division, or other fields.
- The ability to see organizational structure (report to chart and department listings).
- The ability to store personalized information (pictures).

Use Directory White Pages to search, view, and manage entries in an LDAP directory. The directory can be used as an address book with entries that contain personal information about people in your organization or, your business contacts. This directory can also be used to centrally define and control users and passwords for all of the Web applications and computer systems of your organization. The Directory Server is used to securely store your information, and the Directory White Pages application is used to view and manage your information. The application can use an existing directory if you already have one, or you can set up a new directory.

Directory White Pages requires IBM Tivoli Directory Server 6.1.

The Directory White Pages application is installed on your server and is deployed into Embedded WebSphere Application Server.

Administering Directory White Pages

As an administrator, you can perform two types of tasks:

- Configure entries in the Directory White Pages application. You can do the following:

    Add entries

    See "Adding an entry using the Directory White Pages administrator pages" on page 18.

    Modify entries

    Use the following tasks to modify individual entry properties using the Directory White Pages administrator pages:

    - Update an entry. See "Updating an entry using the Directory White Pages administrator pages" on page 19.
    - Remove an entry. See "Removing an entry using the Directory White Pages administrator pages" on page 20.
    - Change the password for an entry. See "Changing the password of an entry using the Directory White Pages administrator pages" on page 20.

- Administer the directory. You can do the following:

Modify application properties

Use the following task to modify the properties of the Directory White Pages application:

– Modify the enrollment properties of Directory White Pages. See "Modifying directory access and enrollment properties for Directory White Pages" on page 21.

Modify performance properties

See "Modifying performance properties" on page 22 to modify the performance properties of the Directory White Pages application:

– Maximum number of entries that are displayed in search results
– Maximum search time that the application searches for an entry
– Maximum displayable photo size

Accessing the Directory White Pages administrator pages

To access the Directory White Pages administrator pages, enter the following Web address in your Web browser:

```
http://your.server.name:port/ibm-bizApps/welcome/admin.do
```

where *your.server.name* is the name of the application server where Directory White Pages is installed and *port* is 12301 for unsecure HTTP or 12302 for secure HTTP.

Adding an entry using the Directory White Pages administrator pages

With the **Add an Entry** tab, an administrator can add entries to the directory. Entries that are added using the Add an Entry page can contain information such as name, location, and contact information. When an entry is created, users can search for and view the listing information for the entry.

To add an entry using the Directory White Pages administrator pages, perform the following steps:

1. Access the Directory White Pages administrator pages. (See "Accessing the Directory White Pages administrator pages.")
2. Click **Directory White Pages**.
3. Click the **Add an Entry** tab.
4. On the Add an Entry page, enter the appropriate criteria. Two sections of entry criteria exist: New entry information and Listing information.
   - New entry information is used to create the entry. After the entry is created, this information cannot be updated, except for the entry password.

     This section of the page collects information for the entry name and password. The information you supply for the name fields at the top is used to pre-fill some of the fields below. However, you can change the pre-filled values if desired. If your request does not succeed because the naming attribute value you specified already exists, return to the Add an Entry page, change the required field, and try again.

     When you provide the password, you must type it twice to be sure you entered it correctly. Make note of the password so that it is not forgotten.
   - Listing information is collected and stored with the new entry after it is created, and is displayed when users look up the directory information.

Listing information can be updated after the entry is created, if the administrator allows users to update existing directory entries.

This section of the page collects additional information such as job, e-mail address, phone number(s), and location. Fill out as much information as is useful to your co-workers when they view the directory listing.

For **Manager Name**, **Assistant Name**, and **Backup Name**, entries for these people must already be added before you can find them. If any of them are not found, you can update the entry later to add them. When you click **Find** next to these fields, you are presented with another window where you can search for the person you want. You can select the person you want and that person's name is saved in the Add an Entry page automatically. If you want to remove a name from one of these fields, click **Delete** next to the field.

You can also upload a photo from your computer to be displayed when someone views the listing. The photo must be a .jpeg image file. To select a file to upload, click **Browse**, and navigate on your computer to the file you want to upload. Double-click the file, and the location on your computer is entered in the **Photo** field. If you decide you do not want to upload the file, delete the file information from the **Photo** field.

5. Click **Add**. You are notified if the entry was added successfully.

Note: While specifying information, if at any point you want to start over, click **Reset**. You will be given a chance to cancel the reset before it continues. If you proceed, the page will be reset, all information will be cleared, and you can proceed to start over.

Updating an entry using the Directory White Pages administrator pages

To update an entry using the Directory White Pages administrator pages, perform the following steps:

1. Access the Directory White Pages administrator pages. (See "Accessing the Directory White Pages administrator pages" on page 18.)
2. Click **Directory White Pages**.
3. Click the **Directory Management** tab.
4. Select the field you want to search on in the **Search on** field.
5. In the **Search for** field, specify your search criteria. (The asterisk (*) is a wildcard character.)
6. Click **Search**.
7. If more than one entry is displayed, click the entry you want to update.

   Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.

8. In the entry, click **Update Entry**.
9. Update the appropriate fields as necessary, and click **Update** to save your changes.

   See "Adding an entry using the Directory White Pages administrator pages" on page 18 for more information about the fields that you can specify.

Removing an entry using the Directory White Pages administrator pages

To delete an entry using the Directory White Pages administrator pages, perform the following steps:

1. Access the Directory White Pages administrator pages. (See "Accessing the Directory White Pages administrator pages" on page 18.)
2. Click **Directory White Pages**.
3. Click the **Directory Management** tab.
4. Select the field you want to search on in the **Search on** field.
5. In the **Search for** field, specify your search criteria. (The asterisk (*) is a wildcard character.)
6. Click **Search**.
7. If more than one entry is displayed, click the entry you want to update.

   Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.

8. In the entry, click **Remove Entry**.
9. Click **OK** to confirm the entry deletion.

Changing the password of an entry using the Directory White Pages administrator pages

To change or set the password of an entry using the Directory White Pages administrator pages, perform the following steps:

1. Access the Directory White Pages administrator pages. (See "Accessing the Directory White Pages administrator pages" on page 18.)
2. Click **Directory White Pages**.
3. Click the **Directory Management** tab.
4. Select the field you want to search on in the **Search on** field.
5. In the **Search for** field, specify your search criteria. (The asterisk (*) is a wildcard character.)
6. Click **Search**.
7. If more than one entry is displayed, click the entry you want to update.

   Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.

8. In the entry, click **Update Entry**.
9. Click **Change Password**.
10. Type the new password in the **New password** and **Confirm password** fields, and click **Change Password**.

When setting the password for an entry for the first time, you only have to provide the new password and the confirmation password. You do not need to provide a current password. The Directory White Pages application uses the administrator credentials (the user ID and the password you specify to log in) to set the entry's new password. If the administrator is not authorized to set the password field for the entry, this operation fails.

When changing the password for an entry that already has a password, you do not need to provide the current password even if the entry already has a password set. You only have to provide the new password and the confirmation password. The Directory White Pages application uses your credentials to set the entry password. If you are not authorized to set the password field for the entry, this operation fails.

Note: Authority settings are defined and controlled by Directory Server Access Control Lists (ACLs), not by the Directory White Pages application.

Modifying directory access and enrollment properties for Directory White Pages

When open enrollment is configured, users can update and delete their own entries, including password changes and those entries to which they have access. Users can use the Directory White Pages application, rather than the Directory White Pages administrator pages, to make their changes.

To modify how the Directory White Pages application is accessed by users and the enrollment properties of the Directory White Pages application, use the Directory White Pages administrator pages. Perform the following steps:

1. Access the Directory White Pages administrator pages. (See "Accessing the Directory White Pages administrator pages" on page 18.)
2. Click **Directory White Pages**.
3. Click the **Application Properties** tab.
4. In the **Directory access** field, select the appropriate option in the list.

   Anonymous (no login)
   > Select this option if you want any user to be able to search the directory, but also want to prevent the user from logging in to the application. When this option is selected, directory search requests are always performed under anonymous user authority, and users cannot log in to the application to update or delete entries. The **Allow users to update and delete entries** check box is **not** available when this option is selected.

   Login Enabled
   > Select this option if you want any user to search the directory, and to log in to the application using the user ID and password for other application options. When this option is chosen, directory search requests are performed under anonymous user authority, like the **Anonymous** option, but users can log in to the application to update or delete entries, if enabled. The **Allow users to update and delete entries** check box is available when this option is selected. (Select this check box if you want to allow users to update and delete entries in the Directory White Pages application.)

   Login Required
   > Select this option if you want to require users to log in before they can use the application. When this option is selected, directory search requests are always performed under the user's authority. Users that do not provide a valid user ID and password cannot search the directory and cannot use any of the other optional functions in the application. The **Allow users to update and delete entries** check box is available when this option is selected. (Select this check box if you want to allow users to update and delete entries in the Directory White Pages application.)

5. Select the **Open enrollment** check box.

6. In the **User** field, type the user ID that is used to create new directory entries. In the **Password** and **Confirm Password** fields, type the password of that user ID.

7. Select the **Allow users to update and delete entries** check box if you want to allow users to update and delete entries. This check box is available only if the **Directory access** field contains **Login Enabled** or **Login Required**.

8. Click **Save Properties**.

Modifying performance properties

You can modify the following performance properties of the Directory White Pages by using the Directory White Pages administrator pages:

- Maximum number of entries that are displayed in search results
- Maximum search time that the application searches for an entry
- Maximum displayable photo size

Perform the following steps:

1. Access the Directory White Pages administrator pages. (See "Accessing the Directory White Pages administrator pages" on page 18.)

2. Click **Directory White Pages**.

3. Click the **Application Properties** tab.

4. In the **Maximum search size** field, specify the maximum number of entries displayed in a search.

5. In the **Maximum search time** field, specify the maximum search time that the application searches for an entry, in seconds.

6. In the **Maximum photo size** field, specify the maximum displayable size of a photo supported in the application, in bytes.

7. Click **Save Properties**.

Using Directory White Pages

As a user, you can use Directory White Pages to do the following:

- Perform basic and advanced searches. See "Searching for an entry" on page 23.
- Add entries in the application and learn rules for certain fields. See "Adding an entry using Directory White Pages" on page 25.
- Update entries. See "Updating an entry using Directory White Pages" on page 26.
- Delete entries. See "Deleting an entry using Directory White Pages" on page 26.
- Change your password. See "Changing your password using the Directory White Pages application" on page 27.
- View additional information about an entry's department members, management chain, or direct reports. See "Viewing additional information about an entry" on page 28.

Accessing Directory White Pages as a user

To access the Directory White Pages application as a user, enter the following Web address in your Web browser:

```
http://your.server.name:port/ibm-bizApps/welcome/home.do
```

where *your.server.name* is the name of the server where Directory White Pages is installed and *port* is 12301 for unsecure HTTP or 12302 for secure HTTP.

Searching for an entry

For simple searches, you can use the search bar to look up directory listings by name, job responsibilities, e-mail address, telephone number, or other fields. There is also an advanced search form that provides a few more search options.

Using simple search

To perform a simple search, follow these steps:

1. Access the Directory White Pages application as a user. See "Accessing Directory White Pages as a user" on page 22 for instructions.
2. Click **Directory White Pages**.
3. Specify your user ID and password, if applicable.
4. Click **Search**.
5. Select the field you want to search on in the **Search on** field.
6. In the **Search for** field, specify your search criteria.

   You can use an asterisk (*) as a wildcard character anywhere in your search text (for example Dund*,C). The wildcard character represents a substring of zero or more characters. Using the wildcard character at the beginning of search text (for example, *dee,C) can cause longer response times.
7. Click **Search**.

The following list shows examples of simple searches. Remember that search text for name searches must always be entered with the last name first. Also, searches are not case sensitive, so you can enter text in uppercase or lowercase characters.

- Search on: Name
  - Search for: van damme,jean
  - Search for: van damme,j
  - Search for: van d*m*,j
  - Search for: van damme
  - Search for: van
- Search on: Job Responsibilities
  - Search for: DB2 Support
- Search on: Email Address
  - Search for: johndoe@us.ibm.com
  - Search for: johndoe*
- Search on: Telephone Number
  - Search for: 1-845-894-1234
  - Search for: *894-1234
  - Search for: *1234

When searching by name, the last name must be specified first, optionally followed by a first name. If you use a comma (,) to separate the last name from the first name, the last name is assumed to be the full last name (for example, McDonald,R). If you want to specify only part of the last name, either use a blank space to separate the last name from the first name (for example, McDon R), or use a wildcard character in the last name before specifying the comma (for example, McDon*,R).

For example, suppose you want to search for an employee by the name of Frank Santiago.

- Any of the following entries will find him:
  - santiago,f
  - santiago
  - sant
  - sant F
  - sant*,F
- The following entry does not find him:
  - sant,f

Using Advanced search

Advanced search provides you with more options to search on and allows you to search on multiple fields simultaneously. However, what you type is used explicitly for an exact match. If you want to do a wildcard search, you must add an asterisk (*) as a wildcard character. For example, if you type only a "D" in the "Last name" field, it will not find anyone named John Doe. This result is different from the search bar where "D" would have found John Doe. With an advanced search, you must explicitly type "D*" to find someone named John Doe.

To perform an advanced search, follow these steps:

1. Access the Directory White Pages application as a user. See "Accessing Directory White Pages as a user" on page 22 for instructions.
2. Click **Directory White Pages**.
3. Specify your user ID and password, if applicable.
4. Click **Advanced Search**.
5. Specify your search criteria for any of the fields you want to search on. For example:
   - **Last name**: doe
   - **First name**: j*
   - **Email**: jdoe@us.ibm.com
6. Click **Search**.

Viewing the results and sending e-mail

Directory White Pages returns a listing of all the matches for your search, as long as the list does not exceed the maximum search size set up by the application administrator. If a search returns more than one match, select the one that most closely matches the listing that you are looking for. Click the person's name to look up all of that individual's directory information. You can send the individual a note by clicking the e-mail address, assuming that your browser is properly configured to send e-mail. Some browsers do not have an e-mail client; this function does not work on such browsers.

Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.

For more information about search entries, see "Viewing additional information about an entry" on page 28.

Adding an entry using Directory White Pages

Users can add entries to the directory using the Add an Entry page. Links to this page are displayed only if an administrator has previously set up the application with open enrollment. If open enrollment is not set up, links are not provided and non-administrative users cannot use the Add an Entry page. Entries added using the Add an Entry page can contain information such as name, location, and contact information. After an entry is created, users can search for and view the listing information for the entry.

To add an entry to the Directory White Pages application, perform the following steps:

1. Access the Directory White Pages application as a user. See "Accessing Directory White Pages as a user" on page 22 for instructions.
2. Click **Directory White Pages**.
3. Click **Add an Entry**.
4. On the Add an Entry page, enter the appropriate criteria. There are two sections of entry criteria: New entry information and Listing information.

   - New entry information is used to create the entry. After the entry is created, this information cannot be updated except for the entry password.

     This section of the page collects name and password information for the entry. The information that you supply for the name fields is used to prefill some of the later fields. However, you can change the prefilled values. If your request does not succeed because the naming attribute value that you specified already exists, return to the Add an Entry page, change the required field, and try again.

     When you provide the password, you must type it twice to be sure that you entered it correctly. Make note of the password so that you do not forget it.

   - Listing information is collected and stored with the new entry after it is created, and is displayed when users look up the directory information. Listing information can be updated after the entry is created, if the administrator allows users to update existing directory entries.

     This section of the page collects additional information such as job, e-mail address, phone number, and location. Fill out as much information as is useful to your co-workers when they view the directory listing.

     For Manager Name, Assistant Name, and Backup Name, entries for these names must already be added to the directory before you can find them. If any of them are not found, you can update the entry later. When you click **Find** next to these fields, another window is displayed where you can search for the person that you want. You can select the person that you want, and that person's name is saved in the **Add an Entry** page automatically. If you want to remove a name from one of these fields, click **Delete** next to the field.

     You can also upload a photo from your computer to be displayed when someone views the listing. The photo must be a .jpeg image file. To select a file to upload, click **Browse**, and navigate to the file on your computer you want to upload. Double-click the file, and the location on your computer is automatically entered in the **Photo** field. If you decide that you do not want to upload the file, delete the file information from the **Photo** field.

5. Click **Add**. You are notified if the entry was added successfully.

   Note: If you want to start over when specifying information, click **Reset**. (You can cancel the reset action before it continues.) If you proceed, the page is reset, all the information is cleared, and you can start over.

Updating an entry using Directory White Pages

In the Directory White Pages application, you can update search entries if the application administrator allows users to update directory entries. If visible, the link allows you to update the directory entry if you are authorized to the entry. Most values that were specified when the entry was initially created can be updated.

To update an entry, perform the following steps:

1. Access the Directory White Pages application as a user. See "Accessing Directory White Pages as a user" on page 22 for instructions.
2. Click **Directory White Pages**.
3. Click **Search**.
4. Select the field you want to search on in the **Search on** field.
5. In the **Search for** field, specify your search criteria.

   You can use an asterisk (*) as a wildcard character anywhere in your search text (for example Dund*,C). The wildcard character represents a substring of zero or more characters. Using the wildcard character at the beginning of search text (for example, *dee,C) can cause longer response times.
6. Click **Search**.
7. If more than one entry is displayed, click the entry you want to update.

   Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.
8. In the search result listing, click **Update Entry**. Enter your user ID and password if necessary.
9. Specify the changes to the entry, and click **Update**.

Note: Typically, only application administrators are allowed to update and delete entries in the directory.

Deleting an entry using Directory White Pages

In the Directory White Pages application, you can delete entries found during a search if the application administrator allows users to delete directory entries. If visible, the link allows you to delete the directory entry and remove all associated listing information from the directory if you are authorized to delete the entry.

To delete an entry, perform the following steps:

1. Access the Directory White Pages application as a user. See "Accessing Directory White Pages as a user" on page 22 for instructions.
2. Click **Directory White Pages**.
3. Click **Search**.
4. Select the field you want to search on in the **Search on** field.
5. In the **Search for** field, specify your search criteria.

   You can use an asterisk (*) as a wildcard character anywhere in your search text (for example Dund*,C). The wildcard character represents a substring of zero or more characters. Using the wildcard character at the beginning of search text (for example, *dee,C) can cause longer response times.
6. Click **Search**.
7. If more than one entry is displayed, click the entry you want to delete.

Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.

8. Click **Delete Entry**. Enter your user ID and password, if necessary.

Note: If you deleted the user you were logged on as, you are no longer logged on with valid credentials and you must log on again with valid credentials (as a user that still exists).

9. Click **OK**.

Note: Typically, only application administrators are allowed to update and delete entries in the directory.

Changing your password using the Directory White Pages application

In the Directory White Pages application, you can change your password if the application administrator allows users to update their own directory entries.

To change your password, perform the following steps:

1. Access the Directory White Pages application as a user. See "Accessing Directory White Pages as a user" on page 22 for instructions.
2. Click **Directory White Pages**.
3. Click **Search**.
4. Specify criteria to search for (such as your last name), and click **Search**.
5. If more than one entry is displayed, click the entry for which you want to change the password.

   Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.

6. In your entry, click **Update Entry**. Type your user ID and password if necessary.
7. Click **Change Password**.
8. Change the password, and click **Submit**.

When you (the user) set the password for an entry that does not currently have a password, you are required only to provide the new password and the confirm password. You are not required to provide the current password because there is not one. The Directory White Pages application uses your credentials (the user ID and password you specify to log in) to set the entry's new password. If you are not authorized to set the password field for the entry, this operation fails.

When you (the user) change the password for an entry that already has a password, you must provide the current password, the new password, and the confirm password. The Directory White Pages application uses the credentials you supply (the current password) to change the entry's password. You use the entry's authority, not your own, to change the password (unless you are changing your own password). If you do not provide the current password, this operation fails.

Note: Authority settings are defined and controlled by directory server Access Control Lists (ACLs), not by the Directory White Pages application. See the *IBM Tivoli Directory Server version 6.1 Administration Guide* for information about ACLs.

Viewing additional information about an entry

In the Directory White Pages application, you can view additional information about an entry's department members, management chain, or direct report members. To view additional entry information, perform the following steps:

1. Access the Directory White Pages application as a user. See "Accessing Directory White Pages as a user" on page 22 for instructions.
2. Click **Directory White Pages**.
3. Click **Search**.
4. Select the field you want to search on in the **Search on** field.
5. In the **Search for** field, specify your search criteria.

   You can use an asterisk (*) as a wildcard character anywhere in your search text (for example Dund*,C). The wildcard character represents a substring of zero or more characters. Using the wildcard character at the beginning of search text (for example, *dee,C) can cause longer response times.
6. Click **Search**.
7. If more than one entry is displayed, click the entry for which you want display additional information.

   Note: To sort the entries by column, click the column heading. For example, to sort entries by telephone number, click the **Telephone Number** column heading.

8. In the search result listing, click one of the following:

   View Department Members
   Shows a listing of all members in the same department as the entry. If this link is not available, the currently displayed listing does not have a department number or code specified.

   View Management Chain
   Shows a listing of the management reporting structure for the individual. The listing displays in ascending order, starting with the individual's listing as the bottom-most entry. If this link is not available), the currently displayed listing does not have a manager specified.

   View Direct Report Members
   Shows a listing of all individuals who report directly to the one currently displayed. If the link is not available, the currently displayed listing is not for a manager.

Chapter 5. Uninstalling Directory White Pages

To uninstall Directory White Pages:

1. Start the InstallShield GUI uninstallation program:
   - On Windows systems:
     a. In the Control Panel, click **Add or Remove Programs**.
     b. Select **Directory White Pages 6.1.**. Click **Change/Remove**.
   - On AIX, Linux, Solaris, and HP-UX systems:
     a. At a command prompt, go to the following directory.
        <DWP_install_path>/_uninst. *<DWP_install_path>* is the directory where you installed White Pages. By default:
        - On AIX, Solaris, and HP-UX systems, this directory is:
          /opt/IBM/ldap/V6.1/idsapps/_uninst
        - On Linux systems, this directory is:
          /opt/ibm/ldap/V6.1/idsapps/_uninst
     b. Run the uninstall command:
        `./uninstaller.bin`
2. Select the language you want to use during the uninstallation procedure. Click **OK**.
3. On the Welcome window, click **Next**.
4. Select the features you want to uninstall. Click **Next**. You can select:
   - Directory White Pages 6.1
   - Embedded WebSphere Application Server
5. On the confirmation window, to uninstall the selected features, click **Uninstall**.
6. Click **Finish**.

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