



iSeries

IBM Telephone Directory V5.2

Version 5 Release 3





@server

iSeries

IBM Telephone Directory V5.2

Version 5 Release 3

Note

Before using this information and the product it supports, be sure to read the information in "Notices," on page 39.

Second Edition (August 2005)

This edition applies to version 5, release 3, modification 0 of IBM Telephone Directory Version 5.2 (product number 5722-BZ1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CISC models.

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Contents

| | |
|--|----------|
| IBM Telephone Directory V5.2 | 1 |
| What's new for Version 5.2 | 2 |
| Print this topic. | 3 |
| Overview of IBM Telephone Directory V5.2 | 4 |
| Interaction with WebSphere Application Server | 6 |
| Interaction with HTTP Server for iSeries | 6 |
| Interaction with iSeries Directory Server (LDAP) | 7 |
| Interaction with LDAP on Domino 6.0 for iSeries | 8 |
| Interaction with a Lotus Sametime server. | 9 |
| Interaction with an Enterprise Identity Mapping server | 10 |
| Using the same directory for IBM Telephone Directory V5.2 and Lotus Sametime | 11 |
| Install IBM Telephone Directory V5.2. | 13 |
| Administer IBM Telephone Directory V5.2 | 14 |
| Add an entry using the IBM Telephone Directory V5.2 administrator pages | 15 |
| Add multiple entries from an OS/400 system registry. | 16 |
| Add multiple entries using an .ldif file | 17 |
| Update an entry using the IBM Telephone Directory V5.2 administrator pages | 18 |
| Delete an entry using the IBM Telephone Directory V5.2 administrator pages | 18 |
| Change password of an entry using the IBM Telephone Directory V5.2 administrator pages | 18 |
| Modify directory access | 19 |
| Modify enrollment properties of the application | 20 |
| Allow users to update and delete entries | 20 |

| | |
|---|----|
| Modify maximum search size of entries | 21 |
| Modify maximum search time | 21 |
| Modify maximum photo size | 21 |
| Set up EIM registration and identity mapping. | 22 |
| Set up Sametime chat links (STLinks) support | 22 |
| Set up Sametime presence list support | 23 |
| Use IBM Telephone Directory V5.2 | 23 |
| Search for an entry | 25 |
| Add an entry using the IBM Telephone Directory V5.2 application | 26 |
| Update an entry using the IBM Telephone Directory V5.2 application | 28 |
| Delete an entry using the IBM Telephone Directory V5.2 application | 28 |
| Change your password using the IBM Telephone Directory V5.2 application | 28 |
| Add an entry to your Sametime presence list | 29 |
| Start a Sametime chat with an entry | 30 |
| Manage your EIM registries | 30 |
| Work with additional functions. | 31 |
| Troubleshoot IBM Telephone Directory V5.2 | 31 |
| Notices and limitations | 36 |

| | |
|--|-----------|
| Appendix. Notices | 39 |
| Trademarks | 41 |
| Terms and conditions for downloading and printing publications | 41 |

IBM Telephone Directory V5.2

The IBM^(R) Telephone Directory V5.2 application is a part of *IBM Business Solutions Version 1.0 (5722-BZ1)* and is a Web-based application that provides the ability to search, view, and manage entries in an LDAP directory. IBM Telephone Directory can be used with a directory you may have already set up for your existing applications. Optionally, you can use the Web Administration GUI or the IBM Welcome Page V1.1 application to set up a new directory.

The following functions are provided:

- Ability to search by name, job responsibilities, e-mail address, telephone number, department, and division.
- Ability to see organizational structure (report to chart and department listings).
- Ability to store personalized information (pictures).
- Ability to initiate chat sessions with colleagues using Lotus^(R) Sametime.
- Ability to add entries to Lotus Sametime contact lists (also known as buddy lists).
- Ability to view and manage Enterprise Identity Mapping (EIM) registries.

See the following topics for more information about IBM Telephone Directory:

“What’s new for Version 5.2” on page 2

See this topic to learn more about functional, graphical, and packaging enhancements made to IBM Telephone Directory V5.2.

“Print this topic” on page 3

See this topic to download the documentation in a printable PDF format.

“Overview of IBM Telephone Directory V5.2” on page 4

This topic provides an overview of the IBM Telephone Directory V5.2 application and how it interacts with different iSeries server components and various software components.

“Install IBM Telephone Directory V5.2” on page 13

This topic provides information on how to install the application on your server, deploy the application into an application server run time, and configure the application.

“Administer IBM Telephone Directory V5.2” on page 14

See this topic if you are an administrator of the IBM Telephone Directory V5.2 application. Information includes how to administer application entries and application properties.

“Use IBM Telephone Directory V5.2” on page 23

This topic provides information on how to use the IBM Telephone Directory V5.2 application, including how to search, how to change your password, how to update and delete entries, and how to use Sametime^(R) and EIM integration in your application.

“Troubleshoot IBM Telephone Directory V5.2” on page 31

This topic provides troubleshooting information on the IBM Telephone Directory V5.2 application.

“Notices and limitations” on page 36

This topic provides a list of known issues and limitations in the IBM Telephone Directory V5.2 application.

Related information

See the following topics for related information to the IBM Telephone Directory V5.2 application:

IBM Business Solutions



(<http://www.ibm.com/servers/eserver/series/software/bizapps/>)

IBM HTTP server for iSeries

View documentation for the IBM HTTP Server for iSeries product, which includes information about the HTTP server Web administration GUI.

IBM Welcome Page V1.1

View documentation for the IBM Welcome Page V1.1 application, which provides the installation and configuration interface for IBM Telephone Directory V5.2.

“IBM Telephone Directory V5.2,” on page 1

View documentation for the IBM Telephone Directory V5.1 application. IBM Telephone Directory V5.1 is a previous version of the business application described in this topic and may be preconfigured on certain OS/400^(R) V5R2 servers.

IBM Survey Creator V1.0

View documentation for the IBM Survey Creator application, which is part of *IBM Business Solutions V1.0 (5722-BZ1)*. The IBM Welcome Page application provides the installation and configuration interface for the IBM Survey Creator application.

What's new for Version 5.2

The IBM Telephone Directory V5.2 application is now packaged as part of *IBM Business Solutions Version 1.0 (5722-BZ1)*:

IBM Business Solutions

IBM Business Solutions provides a set of enterprise Web applications available for iSeries servers. Each application is an integrated solution to a common business need that works in conjunction with your existing applications, server components, and enterprise data. The Web applications demonstrate the value of integrated e-business solutions, increase worker productivity, provide services that virtually any business may find useful, and are easy to understand and use.

Enterprise Web applications must be deployed into an application server run time before they can be used. Deployment of such applications can be complex, which is why deployment wizards for the applications provided by IBM Business Solutions have been added to the new Web Administration GUI provided by IBM HTTP Server (5722-DG1). The new Web Administration GUI includes setup and deployment wizards that make the enterprise Web applications provided by IBM Business Solutions ready to use immediately. You can deploy the enterprise Web applications into application servers that already exist, or you can create new application servers.

IBM Telephone Directory V5.2

IBM Telephone Directory Version 5.2 is a Web-based business application that provides an online telephone directory (or “white pages”) with the ability to search, view, and manage information in a directory. Personnel information is managed securely by the lightweight directory access protocol (LDAP) server. Either IBM Directory Server (LDAP) or Lotus Domino (LDAP) Server may be used.

IBM Telephone Directory can be used with a directory you may have already set up for your existing applications. Optionally, you can use the Web Administration GUI (described previously) or the IBM Welcome Page application (described below) to set up a new directory.

Version 5.2 of the IBM Telephone Directory application now includes integration with Lotus Sametime servers and Enterprise Identity Mapping domain servers.

The following functions are now provided:

- Ability to initiate chat sessions with colleagues using Lotus Sametime (new for V5.2)
- Ability to add entries to Lotus Sametime contact lists (also known as buddy lists) (new for V5.2)
- Ability to view and manage Enterprise Identity Mapping (EIM) registries (new for V5.2)

IBM Welcome Page V1.1

IBM Welcome Page Version 1.1 is a Web-based business application with several purposes. It provides a starting point for non-administrators, possibly you and your colleagues, to go and find links to the other business applications provided by IBM Business Solutions - a simple welcome page specifically for business applications. It also provides administrative interfaces used for set up and configuration of the other business applications, including IBM Telephone Directory V5.2.

See IBM Welcome Page V1.1 for more information.


IBM Survey Creator V1.0 IBM Survey Creator V1.0 is a Web-based business application that allows you to create, configure, and manage online surveys and survey information. IBM Welcome Page V1.1 works in conjunction with IBM Survey Creator by providing the administrative interface and configurations for the application.

Print this topic

You can view or download a PDF version of this topic:

| Topic | PDF Download size |
|---|-------------------|
| IBM Telephone Directory V5.2  | 495 KB |

You can view or download a PDF version of these related topics:

| Related Topic | PDF Download size |
|---|-------------------|
| IBM Welcome Page V1.1  | 376 KB |
| IBM Telephone Directory V5.1  | 536 KB |
| IBM Survey Creator V1.0  | 316 KB |

Saving PDF files

To save a PDF on your workstation for viewing or printing:

1. Right-click the PDF in your browser (right-click the link above).
2. Click **Save Target As...**

3. Navigate to the directory in which you would like to save the PDF.
4. Click **Save**.

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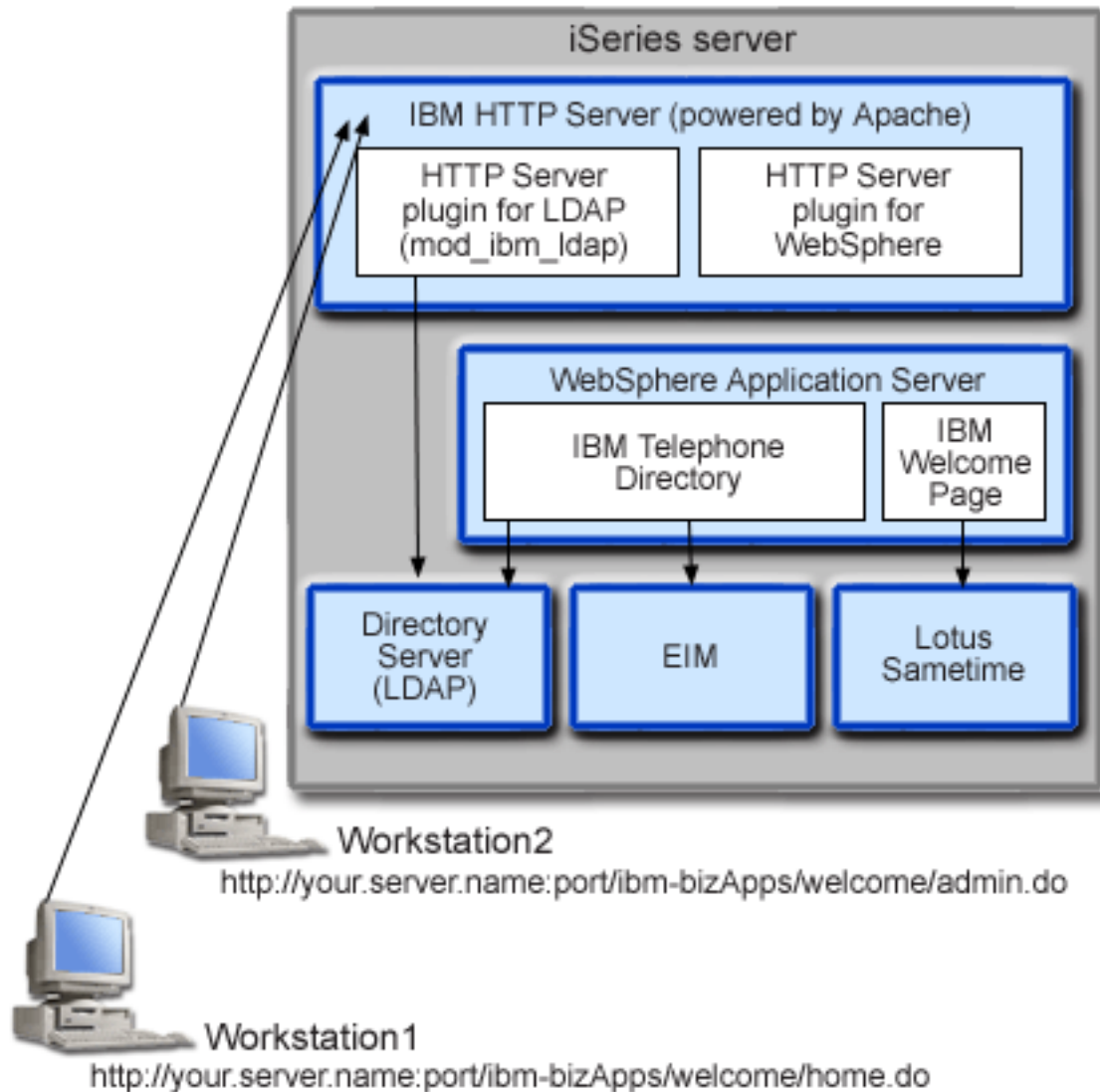


Overview of IBM Telephone Directory V5.2

IBM Telephone Directory V5.2 provides the ability to search, view, and manage entries in an LDAP directory. The directory can be used as a simple address book with entries containing personal information about people in your organization or, possibly, your organization's business contacts. It can also be used to centrally define and control users and passwords for all of your organization's Web applications and computer systems. iSeries Directory Server Lightweight Directory Access Protocol (LDAP) is used to securely store your information, and the IBM Telephone Directory V5.2 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. You can also take advantage of Lotus Sametime and Enterprise Identity Mapping integration.

Two types of directory servers are supported by the IBM Telephone Directory V5.2 application: iSeries Directory Server (LDAP), and LDAP on Domino 6.0 for iSeries (Domino Directory services).

An overview of the application is as follows:



The IBM Telephone Directory V5.2 application is installed on your iSeries server and can be deployed into the runtime of the following editions of WebSphere Application Server:

- WebSphere Application Server for iSeries V5 (Base)
- WebSphere Application Server for iSeries V5.1 (Base)
- WebSphere Application Server for iSeries V5 (ND)
- WebSphere Application Server for iSeries V5.1 (ND)
- WebSphere Application Server - Express for iSeries V5
- WebSphere Application Server - Express for iSeries V5.1

A Web administration GUI is integrated with the HTTP server administration GUI and performs many underlying configuration tasks for you if you deploy into the WebSphere Application Server (Base) or WebSphere Application Server - Express run time.

For detailed information on how the IBM Telephone Directory V5.2 application uses various iSeries server and software components, see the following topics:

- “Interaction with WebSphere Application Server” on page 6
- “Interaction with HTTP Server for iSeries” on page 6

- “Interaction with iSeries Directory Server (LDAP)” on page 7
- “Interaction with LDAP on Domino 6.0 for iSeries” on page 8
- “Interaction with a Lotus Sametime server” on page 9
- “Interaction with an Enterprise Identity Mapping server” on page 10
- “Using the same directory for IBM Telephone Directory V5.2 and Lotus Sametime” on page 11

Interaction with WebSphere Application Server

IBM Telephone Directory V5.2 contains a Web application packaged in an Enterprise Archive (.ear) file that is deployed into a WebSphere Application Server run time environment. Once the application is deployed, it handles requests routed to it through the application server. The application server can provide various access paths and have various security features enabled for the server as a whole or specifically for the application. Requests must pass through the server to be routed to and handled by the IBM Telephone Directory V5.2 application. Once requests reach the application, the application handles the required LDAP interactions, and, optionally, configured Enterprise Identity Mapping (EIM) or Sametime operations.

The application is written and packaged to Java ^(R) standards. WebSphere Application Server provides the runtime environment for the application, which includes support for Java runtime APIs. The following describes what the application uses:

- For WebSphere Application Server V5, standard Java runtime environment APIs (J2SE version 1.3) are provided. J2SE 1.3 provides basic Java utility functions, context, and socket factories used to communicate with LDAP servers, and Java locale support for internationalization.
- For WebSphere Application Server V5.1, standard Java runtime environment APIs (J2SE version 1.4) are provided. J2SE 1.4 provides basic Java utility functions, context, and socket factories used to communicate with LDAP servers, and Java locale support for internationalization.
- Enterprise application runtime environment APIs (J2EE version 1.3), which provide Web application support for HTTP servlets (HTTP Servlet Specification Level 2.3) and Java Server Pages (JSP Specification Level 1.2).
- Web application deployment utilities (J2EE version 1.3), which provide deployment of the application using Enterprise Archive (.ear) files, Web Archive (.war) files, and Java Archive (.jar) files.

See the following Web site for more details on the application deployment environment and Web application packaging tools and services:

WebSphere Application Server



(<http://www.ibm.com/servers/eserver/iseries/software/websphere/wsappserver>).

Interaction with HTTP Server for iSeries

IBM Telephone Directory V5.2 requires the following production level HTTP server: IBM HTTP Server for iSeries (5722-DG1). You cannot use the internal HTTP server provided by WebSphere Application Server. WebSphere Application Server’s internal HTTP server is not intended for production use and does not provide the level of security, function, and performance required for production applications. IBM Telephone Directory does not work with the internal HTTP server. It requires IBM HTTP Server for iSeries (powered by Apache 2.0).

The IBM HTTP Server must be configured to use an IBM HTTP Server plugin module (for WebSphere) before it can route requests to the application. This plugin allows the application server to hook into IBM HTTP Server and benefit from any services IBM HTTP Server provides. Once this association is set up, you can send application requests to IBM HTTP Server. The plugin recognizes application requests and routes them to the application server, which routes them to the application. IBM HTTP Server must also be configured to use an IBM HTTP Server plugin module for LDAP (mod_ibm_ldap). This plugin module

allows the requestor to be authenticated before certain application requests are routed to the application server. LDAP authentication is performed by the plugin module and uses the same directory server as the application. The application server benefits from this association by having a production level HTTP server available to process requests and by having additional functionality provided by IBM HTTP Server. The IBM Telephone Directory application takes advantage of the additional server function by using LDAP authentication services provided by the IBM HTTP server plugin for LDAP.

Interaction with iSeries Directory Server (LDAP)

An LDAP directory is a listing of information about objects arranged in a particular order that gives details about each object. LDAP is a specialized database that has characteristics that set it apart from general purpose relational databases. One special characteristic of directories is that they are accessed (read or searched) much more often than they are updated (written). Hundreds of people might look up an individual's phone number, but the phone number rarely changes.

IBM Telephone Directory V5.2 is used to search, view, and manage entries in an existing directory, or it is used to set up a new directory. The application uses an LDAP directory server to store and retrieve data. By default, the LDAP server is automatically configured on your iSeries server unless another LDAP server already exists in your network. The LDAP server is not required to reside on the same iSeries server as the application server. In addition, you can also use a Domino LDAP server with IBM Telephone Directory. For more information, see the Redpaper WebSphere Application Server Express on iSeries.



The LDAP server is accessible through TCP/IP. You perform most LDAP server setup and administration tasks using iSeries Navigator. You must have iSeries Navigator installed on a workstation that is connected to your server.

LDAP entries

The only default setting of IBM Telephone Directory V5.2 installation is to allow users to anonymously search the directory.

When you use IBM Telephone Directory V5.2 application to add an entry to the directory, an entry is created in the user's parent DN and uses the user ID value. For example, if you register John Jones in the `cn=users,dc=myhost,dc=mycompany,dc=com` parent DN, his LDAP entry is `cn=John Jones,cn=users,dc=myhost,dc=mycompany,dc=com`. The parent DN update is hidden from the user and from the IBM Telephone Directory V5.2 administrator. Objects in a directory are referenced by a distinguished name (DN) attribute. During authentication, John is prompted for his user ID. He must enter the user ID that was specified during registration. In this example, his user name is John Jones.

Existing directory entries can be searched, viewed, and managed if they are based on the standard `inetOrgPerson` object class. This object class is an industry standard class that is commonly used to represent and store information about people, such as first and last name, telephone numbers, and email addresses. The directory can contain entries for other object classes, such as those object classes used by the application to search the directory; however, the default object class is `inetOrgPerson`.

Directory entries modified by the application have an auxiliary object class added to them called `ibm-itdPerson`. The `ibm-itdPerson` object class allows the IBM Telephone Directory V5.2 application to use additional attributes not available with standard object classes. Additional attributes include alternate phone numbers, alternate addresses, DN values for assistants and backups, as well as work location information including job responsibility, marketing territory, and trade area. All attributes in the auxiliary `ibm-itdPerson` object class are optional. The class is added to provide a way to store additional information about a person that is not included in the `inetOrgPerson` object class.

Once the application receives a request, it must connect to the LDAP server to act on it. Requests are carried out under the authority of the user that is specified. The application uses credentials passed on HTTP requests to connect to the LDAP server, if necessary. The application requires credentials for some requests, such as a request to create, update, or delete directory entries. Credentials required to add new entries are provided by the administrator when open enrollment is enabled.

If credentials are not required to do search requests, the application connects to the LDAP server using anonymous bind to search the directory. For anonymous search access, the **Directory access** configuration property must be set to **Anonymous (no login)**. If credentials are required to do search requests, the application connects to the LDAP server using the user credentials that are passed on the HTTP requests. The request fails if credentials are not provided. For authenticated search access, the **Directory access** configuration property must be set to **Login Required**. See “Modify directory access” on page 19 for more information.

The LDAP server controls what users are authorized to do and whether their requests succeed or fail. This includes anonymous user requests. All authorization settings for the directory are specified and controlled by the LDAP server. The application transforms HTTP requests into LDAP requests, ensures credentials are securely handled and supplied to the LDAP sever, and formats the LDAP results (success or failure) into HTML pages that resemble a simple address book.

Users provide the credentials that the application uses to connect to the LDAP server. User credentials are not used to connect to the LDAP server when open enrollment is specified. For open enrollment, credentials are read from the application’s configuration file. The HTTP server is required to authenticate the user when necessary. The application uses the credentials supplied on each request (when necessary) to connect to the LDAP server. The application does not cache credentials or reuse LDAP connections to handle multiple HTTP requests. LDAP connections are disconnected after each request, which prevents the application from connecting using a user’s credentials to fulfill the request of another user. If the HTTP server does not provide the credentials needed to connect to the LDAP server, the application fails.

For more information about iSeries Directory Server (LDAP), see the following topics:

- Directory Server (LDAP)
- iSeries Directory Server (LDAP)



(<http://www.ibm.com/servers/eserver/series/ldap>).

The **Articles and Publications** section has links to articles, redbooks and other related LDAP books.

Interaction with LDAP on Domino 6.0 for iSeries

As an alternative to iSeries Directory Server (LDAP), you can use LDAP on Domino 6.0 for iSeries (Domino Directory services).

Existing directory entries may be searched, viewed, and managed if they are based on the standard inetOrgPerson object class. This object class is an industry standard class that is commonly used to represent and store information about people, such as first and last name, telephone numbers, and email addresses. This requirement is the same one imposed on LDAP servers provided by iSeries Directory Server (LDAP). Also, directory entries modified by the application have an ibm-itdPerson auxiliary object class added to them. For details on the inetOrgPerson and the ibm-itdPerson classes, see “Interaction with iSeries Directory Server (LDAP)” on page 7.

The application interacts with a Domino LDAP server the same way it interacts with an iSeries LDAP server. However, directory entries are set up and maintained differently using a Domino LDAP server. The difference involves Domino’s use of the dominoPerson object class. In order for entries to be visible by all versions of Domino, entries must include the dominoPerson object class. Otherwise Domino ignores them. The IBM Telephone Directory V5.2 application must be configured specifically to use a Domino LDAP server.

In the process of setting up Directory Services, a suffix and base DN is established for the Domino LDAP server. This DN must be known and provided through the Parent DN field in the setup wizard. You need to use the Parent DN field in the setup wizard to specify the correct base DN that establishes your Domino LDAP server. Typically, the base DN is generated using the Domino domain name. Examples are as follows:

- **Example 1:** If the administrator's Lotus^(R) Notes ID is DomAdmin/IBM, then DomAdmin is the administrator's name, and IBM is the domain. The base DN used by Domino Directory Services is likely to be o=IBM and the administrator's full DN is cn=DomAdmin,o=IBM.
- **Example 2:** If the administrator's Lotus Notes ID is DomAdmin/Rochester/IBM, then DomAdmin is the administrator's name, and Rochester/IBM is the domain. The base DN used by Domino Directory Services is likely to be ou=Rochester,o=IBM and the administrator's full DN is cn=DomAdmin,ou=Rochester,o=IBM.

Note: To use a Domino Directory server, you must use Lotus Notes to set the server's LDAP schema to be extended to support the `ibm-itdPerson` object class. The access control list settings must also be properly set. Settings vary depending on whether you want open enrollment or closed enrollment.

For detailed information on how to set up a Domino LDAP server for use with the IBM Telephone Directory application, see the Redpaper WebSphere^(R) Application Server Express on iSeries.



For detailed information on how to set up and use LDAP servers on Domino 6.0, see the Lotus Domino on iSeries Web site: <http://www.ibm.com/servers/eserver/series/domino>.



Interaction with a Lotus Sametime server

Lotus Sametime is real-time collaboration software — with online awareness, instant messaging, application sharing and virtual meetings. Sametime consists of client and server applications that enable a community of users to collaborate in real-time online meetings over an intranet or the Internet. Members of the Sametime community use collaborative activities such as presence, chat, screen sharing, a shared whiteboard, and real-time audio/video capabilities to meet, converse, and work together in instant or scheduled meetings.

Sametime “presence” technology enables members who have logged in to the Sametime server to see all other members who are online (logged in). The names of online users display in presence lists (also known as buddy lists) in Sametime applications. From these presence lists, members of the community can converse through instant messaging sessions or start instant meetings that include chat, screen-sharing, whiteboard, question and answer polls, the ability to send Web pages, and audio/video collaborative activities.

To allow the IBM Telephone Directory V5.2 application to integrate Sametime functions, it uses the Sametime Links optional toolkit for Lotus Sametime. The Sametime Links toolkit is used for enabling Web applications and with Sametime awareness and instant messaging using an HTML or JavaScript^(R) API.

Note: The IBM Welcome Page V1.1 application is used to configure the location of the online Sametime Links (STLinks) package, such as server name and URL, in the user's environment. When configured, the Sametime chat links and Sametime presence list support (also known as buddy list support) features can be enabled. These features use the Sametime Links toolkit APIs on HTML screens in the IBM Telephone Directory V5.2 application.

When a user logs in to search for directory entries, results are returned on HTML pages. The pages display information obtained from the directory for each matching entry. Results always contain the name of each entry and may also contain email addresses, telephone numbers, and a list of job responsibilities. When Sametime chat links are enabled, results also include awareness icons for each entry (provided by the Sametime Links toolkit). Awareness icons are used to indicate whether the other users are online (logged into Sametime). If they are logged in, users can click on the awareness icons to initiate chat sessions with other users using Sametime technology.

Another feature of IBM Telephone Directory V5.2 is the Sametime presence list support (also known as a buddy list). When the Sametime buddy list support is enabled for the application, an Add to Buddy List icon is displayed in the navigation bar of a search result page. When this icon is clicked, the directory entry that is displayed is added to the user's Sametime buddy list. IBM Telephone Directory V5.2 only provides the ability to add listings to a buddy list. Sametime client software, or other Sametime software, must be used in order to use and manage the buddy list.

Interaction with the Sametime server for chat sessions and buddy list support is handled by the Sametime Links toolkit APIs that runs in the client browser. IBM Telephone Directory does not provide the toolkit, rather, it adds what is needed on the HTML pages for the toolkit package to be downloaded from the Sametime server.

See the following IBM Telephone Directory V5.2 topics for more information on how to set up and use Sametime integration in the application:

- "Set up Sametime chat links (STLinks) support" on page 22
- "Set up Sametime presence list support" on page 23
- "Add an entry to your Sametime presence list" on page 29
- "Start a Sametime chat with an entry" on page 30

Related information

You can also set up your Sametime server and configure it to use the same LDAP directory as IBM Telephone Directory V5.2. By doing so, you can enable all users to have real-time collaboration without any additional user administration. See "Using the same directory for IBM Telephone Directory V5.2 and Lotus Sametime" on page 11 for more information.

See the following Web sites for more information on Sametime technology and the optional Sametime Links toolkit (**Note:** Lotus Sametime is also known as Lotus Instant Messaging and Web Conferencing and the Sametime Toolkit is also known as the Instant Messaging and Web Conferencing Toolkit):

- Lotus Instant Messaging and Web Conferencing for iSeries



- Lotus Instant Messaging and Web Conferencing Toolkits



Interaction with an Enterprise Identity Mapping server

Enterprise Identity Mapping (EIM) for iSeries allows administrators and application developers to solve the problem of managing multiple user registries across their enterprise. Most network enterprises face the problem of multiple user registries, which require each person or entity within the enterprise to have a user identity in each registry. The need for multiple user registries quickly grows into a large administrative problem that affects users, administrators, and application developers. Enterprise Identity Mapping (EIM) enables inexpensive solutions for easier management of multiple user registries and user identities in your enterprise.

EIM allows you to create a system of identity mappings, called associations, between the various user identities in various user registries for a person in your enterprise. EIM also provides a common set of APIs that can be used across platforms to develop applications that can use the identity mappings that you create to look up the relationships between user identities.

If you are a system administrator, you can configure and manage EIM through iSeries Navigator, the iSeries graphical user interface. The iSeries server uses EIM to enable OS/400 interfaces to authenticate users by means of network authentication service.

While iSeries Navigator provides an interface for administrators to manage all user EIM identity mappings, it does not provide a secure interface for non-administrative users to manage their own identities. However, the IBM Telephone Directory V5.2 application can be used by non-administrators (users) to manage their own identities in an EIM domain. When configured, users sign into the IBM Telephone Directory V5.2 application to update their directory entry and EIM identity mappings. The application only displays EIM identity mappings if a user logs in to update his or her own directory entry. By allowing users to manage their own EIM identity mappings, it helps ease the workload of the EIM domain administrator.

When you (as a non-administrator) log in to the IBM Telephone Directory V5.2 application to update your directory entry, a list of identity mappings currently associated with your EIM identifier is also shown. The application shows your identity associations in the **EIM registries** table. You can then use the application to add and remove any identity associations you have. The application interacts with the EIM domain server to add and remove identity associations as you request them. You can only manage your own associations.

The IBM Telephone Directory V5.2 application queries the EIM domain for user registries of the IBM Telephone Directory V5.2 application to find identity mappings associated with application users. If a user registry is found, the identity that the user provided when he or she logged into the application is used to find his or her EIM identifier. The EIM identifier is used to display all identity associations for the user, and they are displayed in the **EIM registries** table. If the EIM identifier cannot be found (because user login identity has not been associated with the IBM Telephone Directory application's user registry), an identifier is automatically created for the user in the EIM domain, and an association to the IBM Telephone Directory V5.2 application's user registry is added.

You can remove any identity associations that are currently mapped to your EIM identifier, but to add an EIM association, you must first specify your credentials to the IBM Telephone Directory V5.2 application. When you add an EIM association, you must select a system name and enter your user ID and password associated with that system. The IBM Telephone Directory V5.2 application authenticates these credentials before it will add an association to the EIM domain. If authentication fails, the association is not added.

Not all associations may be managed by IBM Telephone Directory V5.2. The application is only capable of authenticating identities that use LDAP or FTP protocols. If user registries are found that do not accept LDAP or FTP authentication, associations with that user registry cannot be added. The application must be able to authenticate a user's identity using LDAP or FTP before an association for that identity can be added to the user's EIM identifier.

Using the same directory for IBM Telephone Directory V5.2 and Lotus Sametime

Lotus Sametime is real-time collaboration software — with online awareness, instant messaging, application sharing and virtual meetings. The Sametime server can be configured to access a Lightweight Directory Access Protocol (LDAP) directory on an LDAP server. Using LDAP in this manner enables you to integrate Sametime into an environment in which LDAP-compliant servers and directories are already deployed. Because the IBM Telephone Directory V5.2 application also uses an LDAP directory to publish user information, you can configure your Sametime server to access the same LDAP server.

If you use IBM Telephone Directory V5.2, you are already administering a directory for all your users. By setting up your Sametime server and configuring it to use the same directory, you can enable all users to have real-time collaboration without any additional user administration.

Note: It is not a requirement to use the same directory for both IBM Telephone Directory V5.2 and Lotus Sametime. See “Interaction with a Lotus Sametime server” on page 9 for more information on other ways to take advantage of Lotus Sametime collaboration in the IBM Telephone Directory V5.2 application.

Requirements

- **Sametime 3.0, 3.1, or 3.1 for iSeries (5733-LST)**
You must have Sametime 3.0, 3.1 or 3.1 installed on your iSeries server.
- **Domino for iSeries (5769-LNT) 6.0.1 CF1**
You must have Domino for iSeries 6.0.1 CF1 installed on your iSeries server. When viewing the release of the software, 6.0.1 is displayed as V5R1M0. Sametime is not supported on Domino for iSeries 6.0.0.

If you already have a Domino server configured on the iSeries server, and you want to install Sametime, you must set up a new Domino server in a new Domino domain, and add Sametime to that server. After you set up Sametime and IBM Telephone Directory to use the same LDAP directory, you can add new users to the directory using IBM Telephone Directory.

Installation tips

- In order for Sametime and IBM Telephone Directory to use the same LDAP directory, you must specify **LDAP directory** in the **Directory type** field during Sametime installation. You must specify the fully qualified name of the LDAP server that Sametime will use in the **Name** field.
- The Sametime installation creates a Directory Assistance database (da.nsf) on the Sametime server. This database contains a Directory Assistance document that enables Sametime to connect to the LDAP server to authenticate Web browser users.
- You must ensure that the Sametime directory (specified in the Directory Assistance document) and IBM Telephone Directory are both set up to use the same base DN for search.

Entries

To access Lotus Sametime, log on to Sametime with any LDAP server user ID and password that can be authenticated. Alternatively, you can log on with the IBM Telephone Directory administrator ID and password. The default administrator ID is Administrator. The password was specified during installation.

Perform the following steps to add LDAP entries to be used by both IBM Telephone Directory and your Sametime application:

1. In the main menu, click **People** → **Add**.
2. Click **Directory**.
3. Your LDAP directory should be listed in the **Directory** field. Highlight the names that you want to add to your Sametime application. You can use the Ctrl key to make multiple selections. Note that there are up and down arrows above the main dialog if your directory has many entries.
4. Click **Add**.
5. Click **Close** when you are finished.

Note: Configuring Sametime to use the LDAP server requires prior knowledge of Domino and Sametime administration. The IBM Telephone Directory V5.2 documentation assumes basic Domino administrator knowledge, including how to start and stop Domino servers, how to use the Lotus Notes client, and how to add new server connections.

For additional information on Sametime and using LDAP with Domino, see the following topics:

- Lotus Sametime Installation Guide



(<http://www.lotus.com/ldd/doc/sametime/3.0/Stinstallis.nsf>)

- Lotus Sametime Administrator's Guide



(<http://www.lotus.com/ldd/doc/sametime/3.0/sthelpad.nsf>)

For complete information on requirements, see the following Web sites:

- Downloads



(http://www.software.ibm.com/webapp/download/search.jsp?q=&cat=&pf=&k=&dt=&go=y&rs=ESD-DMNTRSVRi&S_TACT=&S_CMP=&sb=r)

- Lotus Sametime



(<http://www.ibm.com/eserver/series/sametime>)

Install IBM Telephone Directory V5.2

IBM Telephone Directory V5.2 is part of the *IBM Business Solutions Version 1.0* package. This package provides a set of enterprise Web applications available for iSeries servers. Each application is an integrated solution to a common business need that works in conjunction with your existing applications, server components, and enterprise data. The Web applications demonstrate the value of integrated e-business solutions, increase worker productivity, provide services that virtually any business may find useful, and are easy to understand and use.

As part of IBM Business Solutions, the IBM Telephone Directory V5.2 application is installed and configured with the IBM Welcome Page V1.1 application. Both applications are installed and configured using the IBM HTTP Server for iSeries Web administration GUI. After installation and configuration, the IBM Telephone Directory V5.2 application is deployed into an application server run time.

Note: Certain OS/400 operating systems may have preinstallation and initial preconfiguration of the application already set up on new iSeries servers.

IBM Business Solutions must be installed and configured to use the IBM Telephone Directory V5.2 application. When you install IBM Telephone Directory V5.2, the IBM Welcome Page V1.1 application is automatically installed.

1. Install the application

Use the *IBM Business Solutions Version 1.0* CD-ROM to install the applications on your iSeries server.

2. Configure the application

Use the HTTP server Web administration GUI to create a new application server and HTTP server (or use an existing application server and HTTP server, if you prefer) that will run IBM Telephone Directory V5.2.

3. Deploy the application into the application server run time

Select the option on the HTTP server Web administration GUI to deploy IBM Telephone Directory V5.2 into the application server and HTTP server. When the application server and HTTP server are started, the application is automatically deployed into the application server run time environment.

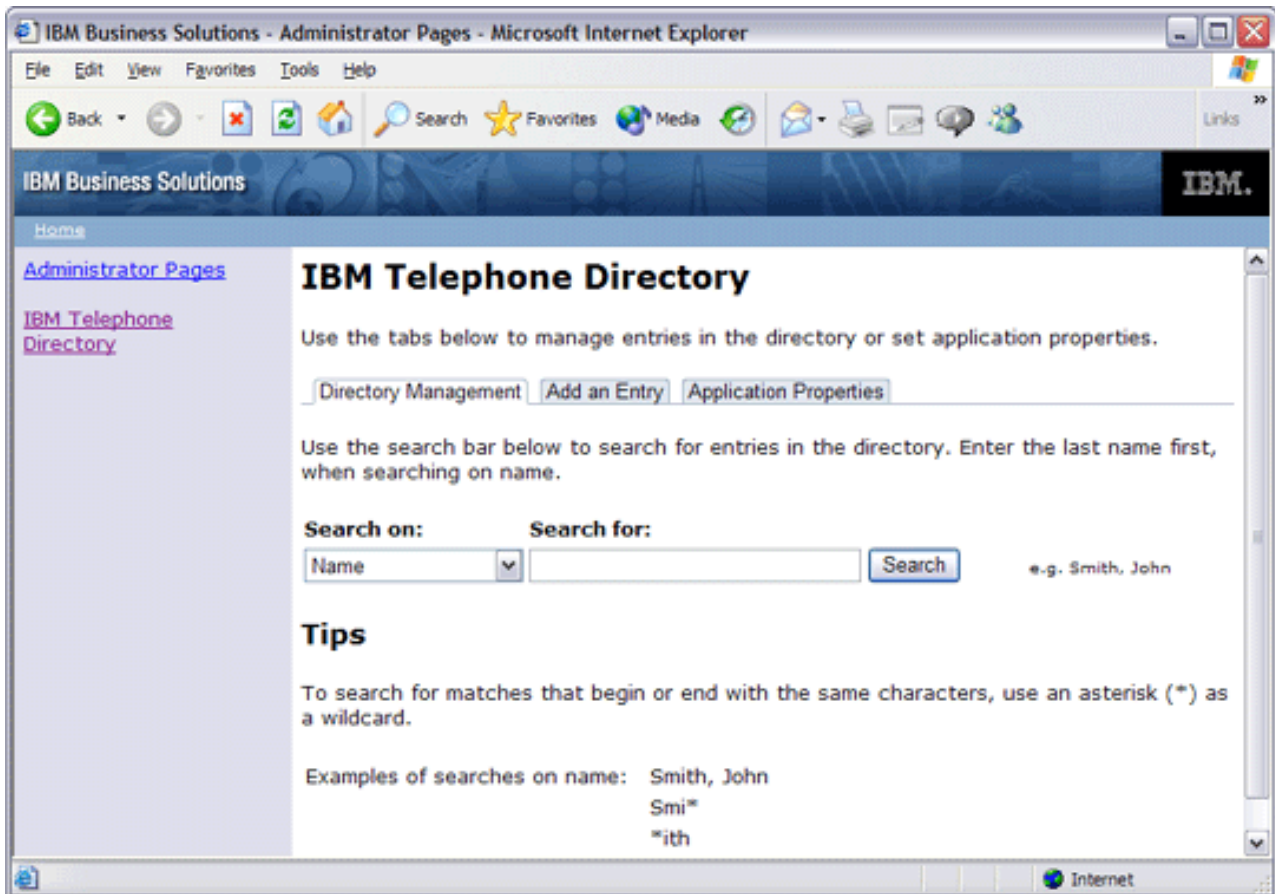
See Install IBM Business Solutions in the *IBM Welcome Page V1.1* topic for detailed information on how to install, configure, and deploy both the IBM Welcome Page V1.1 and the IBM Telephone Directory V5.2 applications.

Administer IBM Telephone Directory V5.2

To access the IBM Telephone Directory V5.2 administrator pages, enter the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation. Click **IBM Telephone Directory** in the navigation bar.



Add entries

Use the following tasks to add entries to the IBM Telephone Directory V5.2 application:

- "Add an entry using the IBM Telephone Directory V5.2 administrator pages" on page 15
- "Add multiple entries from an OS/400 system registry" on page 16
- "Add multiple entries using an .ldif file" on page 17

Modify entries

Use the following tasks to modify individual entry properties using the IBM Telephone Directory V5.2 administrator pages:

- "Update an entry using the IBM Telephone Directory V5.2 administrator pages" on page 18
- "Delete an entry using the IBM Telephone Directory V5.2 administrator pages" on page 18

- “Change password of an entry using the IBM Telephone Directory V5.2 administrator pages” on page 18

Modify application properties

Use the following tasks to modify application properties:

- “Modify directory access” on page 19
- “Modify enrollment properties of the application” on page 20
- “Allow users to update and delete entries” on page 20

Modify performance properties

Use the following tasks to modify performance properties of the application:

- “Modify maximum search size of entries” on page 21
- “Modify maximum search time” on page 21
- “Modify maximum photo size” on page 21

Set up EIM

Use the following tasks to set up Enterprise Identity Mapping (EIM) in your application:

- “Set up EIM registration and identity mapping” on page 22

Set up Sametime

Use the following tasks to set up Lotus Sametime integration in your application:

- “Set up Sametime chat links (STLinks) support” on page 22
- “Set up Sametime presence list support” on page 23

See “Use IBM Telephone Directory V5.2” on page 23 for more information on how to perform common user tasks in the application.

Add an entry using the IBM Telephone Directory V5.2 administrator pages

The **Add an Entry** tab allows the administrator to add entries to the directory. Entries added using the Add an Entry page can contain information such as name, location, and contact information. Once an entry has been created, users can search for and view the listing information for the entry.

To add an entry using the IBM Telephone Directory V5.2 administrator pages, perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Add an Entry** tab.
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). See How to enter new entry information (page 16) for more information.
- Listing information is collected and stored with the new entry after it is created, and is displayed when users lookup the directory information. Listing information may be updated after the entry is created, if the administrator allows users to update existing directory entries. If users are not allowed to update existing directory entries, only administrators may update listing information. See How to enter listing information (page 16) for more information.

5. Click **Submit**. You will be notified if the entry was added successfully.

Note: While specifying information, if at any point you wish 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.

How to enter new entry information

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 prefill some of the fields farther below. However, you may change the prefilled values if desired. If your request does not succeed because the naming attribute value you specified already exists, return to the **Add and Entry** page, change the required field, and try again.

If you provide a password, you need to type it in twice to be sure you entered it correctly. Take note of the password so that it is not forgotten.

Note: You can create an entry without a password associated with it. For example, you can create an entry for “Jane Jones” that does not specify a password. After the entry is created, users are able to search and display listing information for Jane Jones, but Jane Jones is not able to sign in to the application because she has no password. These types of directory listings are used to only provide information. They cannot be used for authenticating users.

How to enter listing information

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 afterwards. 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 back into 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 wish to upload. Double-click the file, and the location on your computer is automatically filled into the **Photo** field. If you decide you do not want to upload the file, delete the file information from the **Photo** field.

Add multiple entries from an OS/400 system registry

After the installation of IBM Telephone Directory V5.2, you may want the application to use certain information from the OS/400 operating system. For example, OS/400 provides a way to publish the system distribution directory to your LDAP directory server. Once the information is in your LDAP server, IBM Telephone Directory V5.2 has access to it.

OS/400 automatically publishes the system distribution directory to your LDAP directory server when you use iSeries Navigator to change the information on OS/400. If the parent DN where the data is being published does not exist, the LDAP directory server automatically creates it.

Note: These steps are not applicable for a Domino LDAP server.

To configure your server to publish OS/400 information into your LDAP directory server, perform the following steps:

1. In iSeries Navigator, right-click on your server name and select **Properties**.
2. Click the **Directory Services** tab.
3. Select **Users**.
4. Click **Details**.
5. Select **Publish user information**.
6. Specify the **Directory server** in which you want to publish.
7. In the **Under DN** field, enter the parent distinguished name (DN) where you want information added on the directory server.
8. Specify the **Authentication method** that you want the server to use, as well as the appropriate authentication information.
9. If your directory server does not use the default port, enter the correct port number in the **Port** field.
10. Click **Verify** to ensure that the parent DN exists on the server and that the connection information is correct. If the directory path does not exist, a dialog will prompt you to create it.
11. Click **OK**.

Note: When you publish users from the system distribution directory, there is not a password value associated with the user entry that is created. For an entry to have a password, the IBM Telephone Directory V5.2 administrator must update each user entry.

For more information on how to publish information from OS/400 to the LDAP directory, see Publish information to the directory server in the *Directory Server (LDAP)* topic.

Add multiple entries using an .ldif file

After the installation of IBM Telephone Directory V5.2, you may want the application to use certain information from another LDAP directory server. You can export existing LDAP information from another server to an LDAP data interchange format (.ldif) file and import it into your LDAP directory server. Once the information is in your LDAP directory server, IBM Telephone Directory V5.2 has access to it.

Note: These steps are not applicable for a Domino ^(R) LDAP server.

To import an .ldif file to the LDAP directory server, follow these steps:

1. Determine the server that is exporting LDAP information.
2. In iSeries Navigator, expand **Network** on the server that is exporting LDAP information.
3. Expand **Servers**.
4. Click **TCP/IP**.
5. Right-click **Directory** and select **Tools**, then **Export File**.

Note: If you do not specify a location for the .ldif file to be exported to, it will be saved to the default directory specified in your OS/400 user profile. If you have not changed your default directory, the default directory is the root directory.

6. Determine the server that is importing the LDAP information.
7. If that server's directory server is started, stop it.
8. In iSeries Navigator, expand **Network** on the server that is importing LDAP information.

9. Expand **Servers**.
10. Click **TCP/IP**.
11. Right-click **Directory** and select **Tools**, then **Import File**.

Update an entry using the IBM Telephone Directory V5.2 administrator pages

To update an entry using the IBM Telephone Directory V5.2 administrator pages, perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Directory Management** tab.
4. In the **Search for** field, specify your search criteria.
5. In the entry, click **Update Entry**.
6. Update the appropriate fields as necessary, and click **Update** to save your changes.
See “Add an entry using the IBM Telephone Directory V5.2 administrator pages” on page 15 for more information on the fields you can specify.

Delete an entry using the IBM Telephone Directory V5.2 administrator pages

To delete an entry using the IBM Telephone Directory V5.2 administrator pages, perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Directory Management** tab.
4. In the **Search for** field, specify your search criteria.
5. In the entry, click **Delete Entry**.
6. Click **OK** to confirm the entry deletion.

Change password of an entry using the IBM Telephone Directory V5.2 administrator pages

To change or set the password of an entry using the IBM Telephone Directory V5.2 administrator pages, perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.

3. Click the **Directory Management** tab.
4. In the **Search for** field, specify your search criteria.
5. In the entry, click **Update Entry**.
6. Click **Change Password**.
7. Change or set the password, and click **Submit**.

Setting passwords

When you (the administrator) set the password for an entry that does not currently have a password, you only have to provide the new password and the confirm password. You do not need to provide the current password (because there isn't one). The IBM Telephone Directory V5.2 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.

Changing passwords

When you (the administrator) change 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 confirm password. The IBM Telephone Directory V5.2 application uses your credentials to set the entry's 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 IBM Telephone Directory V5.2 application.

Modify directory access

To modify how the IBM Telephone Directory V5.2 application is accessed by users, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Application Properties** tab.
4. In the **Directory access** field, select the appropriate option in the drop-down 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 into the application. When this option is chosen, directory search requests are always performed under anonymous user authority, and users are not able to log into the application to update or delete entries, manage their EIM identity associations, or use Sametime functions. The "Allow users to update and delete entries" on page 20, "Set up EIM registration and identity mapping" on page 22, "Set up Sametime chat links (STLinks) support" on page 22, and "Set up Sametime presence list support" on page 23 options are **not** available when this option is selected.
 - **Login Enabled** - Select this option if you want any user to be able to search the directory, and allow them to log into the application using their 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 are able to log into the application to update or delete entries, manage their EIM identity associations, or use Sametime functions (if enabled). The "Allow users to update and delete entries" on page 20, "Set up EIM registration and identity mapping" on page 22, "Set up Sametime chat links (STLinks) support" on page 22, and "Set up Sametime presence list support" on page 23 options are available when this option is selected.

- **Login Required** - Select this option if you want to require users to log in before they can use the application. When this option is chosen, directory search requests are always performed under the user's authority. Users that do not provide a valid user ID and password are not able to search the directory and cannot use any of the other optional functions in the application. The "Allow users to update and delete entries," "Set up EIM registration and identity mapping" on page 22, "Set up Sametime chat links (STLinks) support" on page 22, and "Set up Sametime presence list support" on page 23 options are available when this option is selected.

5. Click **Save Changes**.

Note: Entries are not required to have passwords. Entries that do not have passwords cannot be used to log in and cannot be used to search, update, or delete entries, or use any of the other optional functions that require a log in. Set a password for those entries that you want to be able to log in. Omit a password for those entries that you want to prevent the ability to log in. Entries that do not have a password may be searched to display information about particular individuals, without giving those individuals the ability to log in.

When **Login Enabled** or **Login Required** is configured, consider setting up the following options:

- "Allow users to update and delete entries"
- "Set up EIM registration and identity mapping" on page 22
- "Set up Sametime chat links (STLinks) support" on page 22
- "Set up Sametime presence list support" on page 23

Modify enrollment properties of the application

To modify the enrollment properties of the IBM Telephone Directory V5.2 application, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Application Properties** tab.
4. Select the check box next to the **Open enrollment** field.
5. In the **User** field, enter the user ID that is used to create new directory entries. In the **Password** field, enter the password of that user ID. Confirm the password in the **Confirm Password** field.
6. Click **Submit Changes**.

When open enrollment is configured, users can update and delete their own entries (including password changes) and those entries they have access to. Users can use the IBM Telephone Directory V5.2 application to make their changes, not the IBM Telephone Directory V5.2 administrator pages.

Allow users to update and delete entries

To allow users to update and delete entries, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Application Properties** tab.
4. In the **Directory access** field, make sure **Login Enabled** or **Login Required** is selected. See “Modify directory access” on page 19 for more information.
5. Select the check box next to the **Allow users to update and delete entries (requires login)** field.
6. Click **Save Changes**.

Users will now be able to update and delete entries in the IBM Telephone Directory V5.2 application.

Modify maximum search size of entries

To modify the maximum number of entries that are displayed in search results, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Application Properties** tab.
4. In the **Maximum search size** field, specify the maximum number of entries displayed in a search (in entries).
5. Click **Save Changes**.

Modify maximum search time

To modify the maximum search time that the application searches for an entry, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Application Properties** tab.
4. In the **Maximum search time** field, specify the maximum search time allowed (in seconds).
5. Click **Save Changes**.

Modify maximum photo size

To modify the maximum displayable photo size allowed in the application, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click the **Application Properties** tab.

4. In the **Maximum photo size** field, specify the maximum photo size allowed in the application (in bytes).
5. Click **Save Changes**.

Set up EIM registration and identity mapping

Enterprise Identity Mapping (EIM) registration and identity mapping allows users to register with the EIM domain server and manage their identity mappings online.

Note: Before you enable EIM registration and identity mapping, see “Interaction with an Enterprise Identity Mapping server” on page 10 for information on how the IBM Telephone Directory V5.2 application uses EIM and any limitations of EIM integration in the application.

To set up EIM registration and identity mapping, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Make sure that Enterprise Identity Mapping is set up on your iSeries (™) server. See “Interaction with an Enterprise Identity Mapping server” on page 10 for more information.
2. Make sure EIM properties are configured in the IBM Welcome Page V1.1 application. See Manage Enterprise Identity Mapping (EIM) properties in the *IBM Welcome Page V1.1* topic for more information.
3. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

4. Click **IBM Telephone Directory**.
5. Click the **Application Properties** tab.
6. In the **Directory access** field, make sure **Login Enabled** or **Login Required** is selected. See “Modify directory access” on page 19 for more information.
7. Make sure the **Allow users to update and delete entries (requires login)** field is checked. See “Allow users to update and delete entries” on page 20 for more information.
8. Select the check box next to the **EIM registration and identity mapping** field.
9. Click **Save Changes**.

Users will now be able to register with the EIM domain server and manage their identity mappings online.

Set up Sametime chat links (STLinks) support

To allow users to send instant messages to each other using Lotus Sametime, use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Make sure that Lotus Sametime is installed and configured on your iSeries server. See “Interaction with a Lotus Sametime server” on page 9 for more information.
2. Make sure Sametime properties are configured in the IBM Welcome Page V1.1 application. See Modify Sametime properties in the *IBM Welcome Page V1.1* topic for more information.
3. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

4. Click **IBM Telephone Directory**.

5. Click the **Application Properties** tab.
6. In the **Directory access** field, make sure **Login Enabled** or **Login Required** is selected. See “Modify directory access” on page 19 for more information.
7. Select the check box next to the **Sametime chat links (STLinks)** field.
8. Click **Save Changes**.

Users will now be able to send instant messages to each other using Lotus Sametime in the IBM Telephone Directory V5.2 application.

Set up Sametime presence list support

To allow users to add entries to their Lotus Sametime presence list (also known as a buddy list), use the IBM Telephone Directory V5.2 administrator pages. Perform the following steps:

1. Make sure that Lotus Sametime is installed and configured on your iSeries server. See “Interaction with a Lotus Sametime server” on page 9 for more information.
2. Make sure Sametime properties are configured in the IBM Welcome Page V1.1 application. See Modify Sametime properties in the *IBM Welcome Page V1.1* topic for more information.
3. Access the IBM Telephone Directory V5.2 administrator pages by entering the following URL in your Web browser:

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

where *your.server.name* is the name of the server where IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

4. Click **IBM Telephone Directory**.
5. Click the **Application Properties** tab.
6. In the **Directory access** field, make sure **Login Enabled** or **Login Required** is selected. See “Modify directory access” on page 19 for more information.
7. Select the check box next to the **Sametime buddy list support** field.
8. Click **Save Changes**.

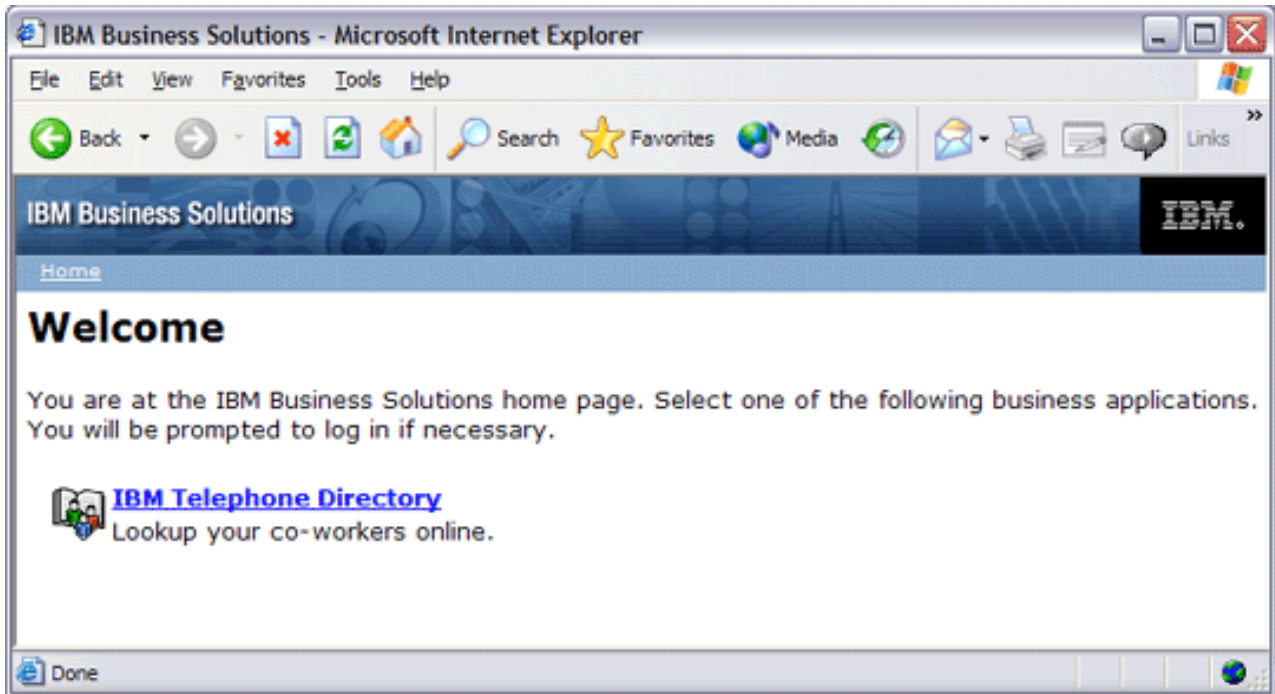
Users will now be able to add entries to their Lotus Sametime contact list in the IBM Telephone Directory V5.2 application.

Use IBM Telephone Directory V5.2

To access the IBM Telephone Directory V5.2 application, enter the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.



See the following topics for more information on how to use the IBM Telephone Directory V5.2 application:

“Search for an entry” on page 25

Find information on how to perform basic and advanced searches in the application.

“Add an entry using the IBM Telephone Directory V5.2 application” on page 26

Find information on how to add entries in the application and learn rules for certain fields.

“Update an entry using the IBM Telephone Directory V5.2 application” on page 28

Find information on how to update entries in the application.

“Delete an entry using the IBM Telephone Directory V5.2 application” on page 28

Find information on how to delete entries in the application.

“Change your password using the IBM Telephone Directory V5.2 application” on page 28

Find information on how to change your password in the application.

“Add an entry to your Sametime presence list” on page 29

Find information on how to add an entry to your Sametime presence list (also known as a buddy list).

“Start a Sametime chat with an entry” on page 30

Find information on how to start a Sametime chat with another person using their search entry page.

“Manage your EIM registries” on page 30

Find information on how to manage EIM registries that you set up in the application.

“Work with additional functions” on page 31

Find information on these additional functions provided by the application: Have Same Manager, View Management Chain, and View Direct Report Members.

See “Administer IBM Telephone Directory V5.2” on page 14 for more information on how to perform common administrator tasks for the application.

Search for an entry

The search bar is appropriate to use in most cases, to lookup directory listings by name, job responsibilities, e-mail address, or telephone number. There is also an advanced search form described later, however, that provides a few more search options.

To perform a simple search, perform the following steps:

1. Access the IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Specify your user ID and password, if applicable.
4. Click **Search**.
5. Enter criteria to search for in the **Search on** and **Search for** fields.
6. Click **Search**.

Examples of simple search provided below. Remember that search text for name searches must always be entered with the last name first. Also, searches are never case sensitive, so it doesn't matter if uppercase or lowercase characters are used.

- Examples, 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
- Examples, Search on: Job Responsibilities
 - Search for: DB2^(R) Support
- Examples Search on: Email Address
 - Search for: johndoe@us.ibm.com
 - Search for: johndoe*
- Examples, Search on: Telephone Number
 - Search for: 1-845-894-1234
 - Search for: *894-1234
 - Search for: *1234

Using the wildcard character (*):

You may use an asterisk (*) as a wildcard character anywhere in your search text (IE. Dund*,C). The wildcard character represents a substring of zero or more characters. Note that using the wildcard character at the beginning of search text (IE. *dee,C) may cause longer response times.

More on 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, then the last name is assumed to be the full last name (e.g.

McDonald,R). If you want to specify only part of the last name, then either use a blank space to separate the last name from the first name (e.g. McDon R), or use a wildcard character in the last name before specifying the "," (e.g. McDon*,R).

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

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

Advanced search:

The advanced search form allows you more control, allows you more options to search by, and allows you to search on multiple fields simultaneously. However, note that what you type is used explicitly for an exact match. This means that if you want to do a wildcard search you must add the wildcards (*s). For example, if you just put a "D" in the "Last name" field, it will not find anyone named John Doe. This is different from the search bar where "D" would have found John Doe. With advanced search, you must explicitly type "D*" to find someone named John Doe.

Example of an advanced search:

- Last name: doe
- First name: j*
- Email: jdoe@us.ibm.com

Viewing the results:

IBM Telephone Directory will return a listing of all matches to your search, provided 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 you are looking for. Click on the person's name to lookup all of that individual's directory information. You can send the individual a note by clicking on their e-mail address, assuming your browser is properly configured to send e-mail. Some browsers do not have an e-mail client so this function will not work on such browsers.

For more information on search entries, see "Work with additional functions" on page 31.

Add an entry using the IBM Telephone Directory V5.2 application

The **Add an Entry** page allows users to add entries to the directory. Links to the page only appear to users 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 may not use the Add an Entry page. Entries added using the Add an Entry page can contain information such as name, location, and contact information. Once an entry has been created, users can search for and view the listing information for the entry.

To add an entry to the IBM Telephone Directory V5.2 application, perform the following steps:

1. Access the IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
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). See How to enter new entry information (page 27) for more information.
 - Listing information is collected and stored with the new entry after it is created, and is displayed when users lookup the directory information. Listing information may be updated after the entry is created, if the administrator allows users to update existing directory entries. If users are not allowed to update existing directory entries, only administrators may update listing information. See How to enter listing information (page 27) for more information.
5. Click **Submit**. You will be notified if the entry was added successfully.

Note: Passwords are not required. Entries that do not have a password may provide listing information but cannot be used to log in.

Note: While specifying information, if at any point you wish 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.

How to enter new entry information

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 prefill some of the fields farther below. However, you may change the prefilled values if desired. If your request does not succeed because the naming attribute value you specified already exists, return to the **Add and Entry** page, change the required field, and try again.

If you provide a password, you need to type it in twice to be sure you entered it correctly. Take note of the password so that it is not forgotten.

How to enter listing information

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 afterwards. 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 back into 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 wish to upload. Double-click the file, and the location on your computer is automatically filled into the **Photo** field. If you decide you do not want to upload the file, delete the file information from the **Photo** field.

Update an entry using the IBM Telephone Directory V5.2 application

In the IBM Telephone Directory V5.2 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 IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click **Search**.
4. Enter criteria to search for, and click **Search**.
5. In the search result listing, click **Update Entry**. Enter your user ID and password if necessary.
6. Specify the changes to the entry, and click **OK**.

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

Delete an entry using the IBM Telephone Directory V5.2 application

In the IBM Telephone Directory V5.2 application, you can delete search entries 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 IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click **Search**.
4. Enter criteria to search for, and click **Search**.
5. Click **Delete Entry**. Enter your user ID and password, if necessary.
6. Click **OK**.

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

Change your password using the IBM Telephone Directory V5.2 application

In the IBM Telephone Directory V5.2 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 IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click **Search**.
4. Enter criteria to search for (such as your last name), and click **Search**.
5. In your entry, click **Update Entry**. Enter your user ID and password if necessary.
6. Click **Change Password**.
7. Change the password, and click **Submit**.

Setting passwords

When you (the user) set the password for an entry that does not currently have a password, you only have to provide the new password and the confirm password. You do not need to provide the current password (because there isn't one). The IBM Telephone Directory V5.2 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.

Changing passwords

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 IBM Telephone Directory V5.2 application uses the credentials you supply (the current password) to change the entry's password. You use the entry's authority to change the password, not your own (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 IBM Telephone Directory V5.2 application.

Add an entry to your Sametime presence list

In the IBM Telephone Directory V5.2 application, you can add an entry to your Sametime presence list if the application administrator has enabled Sametime support in the application. See "Set up Sametime presence list support" on page 23 for more information. Only administrators can set up Sametime support.

To add an entry to your Sametime contact list (also known as a buddy list), perform the following steps:

1. Access the IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click **Search**.
4. Enter criteria to search for (such as a last name), and click **Search**.
5. In the entry, click **Add to Buddy List**.
6. Specify the Sametime group where you want to enter the person, and click **OK**.
7. Click **OK** to return to the IBM Telephone Directory V5.2 application.

The person's name is added to your Sametime buddy list.

Start a Sametime chat with an entry

In the IBM Telephone Directory V5.2 application, you can start a Sametime chat with an entry if the application administrator has enabled Sametime support in the application. See “Set up Sametime chat links (STLinks) support” on page 22 for more information. Only administrators can set up Sametime support.

To start a Sametime chat with an entry, perform the following steps:

1. Access the IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click **Search**.
4. Enter criteria to search for (such as a last name), and click **Search**.
5. In the entry, click on the name of the person with whom you want to start a Sametime chat.

Note: If the name of the person is not hyperlinked and does not have a Sametime status icon next to it, this means the person is not logged on to Sametime. You cannot start a Sametime chat with that person.

Manage your EIM registries

In the IBM Telephone Directory V5.2 application, you can manage your EIM registries if the application administrator has enabled EIM support in the application. See “Set up EIM registration and identity mapping” on page 22 for more information. Only administrators can set up EIM support.

You can only manage your own EIM registries. IBM Telephone Directory V5.2 only displays EIM registry information if you log in and update your own directory listing.

To manage your EIM registries, perform the following steps:

1. Access the IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click **Search**.
4. Enter criteria to search for (such as your last name), and click **Search**.
5. In your entry, click **Update Profile**. Enter your user ID and password if necessary.
6. On the **Update Profile** page, locate the **EIM registrations** table.
7. To add an identity mapping, click **Add**. Specify the following values on the **Add an EIM registry** page:
 - a. In the **System** field, select the system in which you want to add your identity mapping.
 - b. In the **User ID** field, enter your user ID on the system you selected.
 - c. In the **Password** field, enter the password associated with your user ID.
 - d. Click **Submit**.
 - e. Click **OK** to return to the **Add an EIM registry** page. Add additional EIM registries, if required. Click **Cancel** to return to the IBM Telephone Directory V5.2 application.
8. To remove a registry, select the registry to be removed, and click **Remove**. Click **OK** to confirm the deletion.

Work with additional functions

In the IBM Telephone Directory V5.2 application, you can view additional information for a search entry. To view additional search entry information, such as Have Same Manager, View Management Chain, and View Direct Report Members, perform the following steps:

1. Access the IBM Telephone Directory application by entering the following URL 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 IBM Telephone Directory V5.2 is installed and *port* is the port number that was specified during installation.

2. Click **IBM Telephone Directory**.
3. Click **Search**.
4. Enter criteria to search for, and click **Search**.
5. In the search result listing, you can perform these additional functions:

View Department Members

Shows a listing of all members in the same department as the entry. If this link is disabled (grayed out), 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 disabled (grayed out), 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 disabled (grayed out), the currently displayed listing is not for a manager.

Troubleshoot IBM Telephone Directory V5.2

Before you begin to troubleshoot problems with the IBM Telephone Directory V5.2 application, answer the following questions to help solve some common problems when using the application:

- Are all of the product prerequisites installed? See *Verify the prerequisites in the IBM Welcome Page V1.1* topic for more information.
- Is your LDAP server started?
- Is your IBM Welcome Page application started?
- Is your IBM Telephone Directory application started?
- Is your application server started?
- Is your HTTP server started?

Use the following information if you are still having problems with your application:

Troubleshoot setup

| Problem | Cause | Solution |
|---|---|-------------------------------|
| IBM Business Solutions (5722-BZ1) is not listed when the GO LICPGM command is run for a preinstalled and preconfigured iSeries server | IBM Telephone Directory V5.2 is not installed on your server. | Install the 5722-BZ1 product. |

Troubleshoot authentication

| Problem | Cause | Solution |
|---------|-------|----------|
|---------|-------|----------|

| | | |
|--|--|---|
| Log in fails | In the application, user IDs and passwords must contain characters that map to the job CCSID that is used by the HTTP server. Otherwise, authentication fails. | Make sure that your characters map to the job CCSID that is used by the HTTP server. To determine the job CCSID for the HTTP server, enter WRKACTJOB on an OS/400 command line and select Display job definition attributes . The HTTP server CCSID is determined by the HTTP server defaultFSCCSID directive. For more information, see "Notices and limitations" on page 36. |
| URL fails or the application does not appear | If you did not start the IBM Welcome Page application, the URL fails (<i>http://your.server.name:port/ibm-bizApps/welcome-home.do</i> or <i>http://your.server.name:port/ibm-bizApps/welcome-admin.do</i>). Problems also occur if you start the IBM Welcome Page application but do not start the IBM Telephone Directory application. If the IBM Telephone Directory application is not running, the Welcome Page application does not have links to it. | Start the IBM Welcome Page application and the IBM Telephone Directory application. |
| Requests to the application fail | If you used the internal HTTP server included with WebSphere Application Server to reference the IBM Telephone Directory V5.2 application, certain requests to the application fail. | You must use the associated IBM HTTP server to reference the application. Security directives for LDAP server authentication are set up and required by the IBM Telephone Directory application during the creation of a new application server instance. WebSphere Application Server's internal HTTP server is not set up with the necessary security directives, and certain requests to the application fail if the internal HTTP server is used. See "Interaction with HTTP Server for iSeries" on page 6 for more information. |

Troubleshoot usage

| Problem | Cause | Solution |
|---------------------------------|--|---|
| Missing link to the application | The URL <i>http://your.server.name:port/ibm-bizApps/welcome/home.do</i> takes you to the entry point for IBM Business Solutions, including the IBM Telephone Directory V5.2 application. | If the link to the IBM Telephone Directory V5.2 application is missing, check to ensure that both the IBM Welcome Page application and the IBM Telephone Directory application are started. |

| | | |
|--|--|--|
| Administration user ID confusion | It might be confusing as to which user ID you should input for authentication to the application when you (the administrator) need to update or register a user in a closed enrollment environment. | The default user ID is Administrator , and the password is set up during installation. Do not enter your personal user ID and password. Application user IDs are always viewable to everyone. If you do not know the user ID for an entry, use the application's search page to find the entry. The user ID is displayed under the picture. |
| Internal server error during search or registration | If you try to search on a user or register a user and get an HTTP 500 - Internal Server Error, this might mean that your setup files have been corrupted. The IBM Telephone Directory V5.2 application might not be able to find the associated configuration files for the application. | Reinstall the IBM Telephone Directory V5.2 application. |
| System error during search | If you try to search on a user and get the following error: <i>A system error has occurred! Try again later</i> , this generally means that your LDAP server has not been started. | Start the LDAP server, and try your search again. |
| Operation failed error during registration | If you try to register a user and get the following error: <i>ERROR: Operation failed. Contact your IBM Telephone Directory application administrator</i> , this generally means that your LDAP server has not been started. | Start the LDAP server, and try your registration again. |
| Operation failed error during entry updates or deletes | If you try to update or delete a profile and get the following error: <i>ERROR: Operation failed. Contact your IBM Telephone Directory application administrator</i> , you might not have the appropriate directives configured in the HTTP server. A symptom of this problem is the lack of the authentication dialog to input your user ID and password before making changes. | Manually add the missing LDAP configuration directives to the HTTP server configuration or reinstall the IBM Telephone Directory V5.2 application. |

| | | |
|----------------------------|--|---|
| Object not found error | If you receive a 404 - Object not found error in the IBM Telephone Directory application, it might be because your plugin-cfg.xml file is corrupt. | <p>Perform the following steps to check this file and fix it, if necessary:</p> <ol style="list-style-type: none"> 1. Open the plugin-cfg.xml file, which is located at: /QIBM/UserData/.../config/cells/plugin-cfg.xml 2. Check to see if the following virtual host specifications are in your file (assuming a virtual host of <i>default_host</i> and a port of 80: <pre><VirtualHostGroup Name="default_host"> <VirtualHost Name="80"/></pre> 3. Check to see if the following URI affinity cookies are in your file: <pre><URI AffinityCookie="JSESSIONID" Name="/bizApps/*"/> <URI AffinityCookie="JSESSIONID" Name="/itd/*"></pre> 4. If these specifications are not in your file, open the WebSphere Application Server administration console. 5. Expand Environment. 6. Click Update WebServer plugin. 7. Click OK. 8. Stop and restart the application server. 9. Stop and restart the HTTP server. |
| Some values were not saved | If you do not have the authority to add, change, or remove a particular field, and try to do so in the application, you will receive a message that states that some values were not saved because the directory does not allow you to add them to your profile, and to contact the application administrator for details. | If you receive this error, it means that authentication required has been configured on the IBM Telephone Directory V5.2 application. |

| | | |
|---|--|---|
| <p>Special characters (such as ", &, <, or >) not handled correctly</p> | <p>The IBM Telephone Directory V5.2 application has been written to accept and handle all characters correctly, even those identified as special characters (or metacharacters) for HTML, JavaScript, and LDAP filters and attribute values.</p> | <p>There are known cases when the IBM Telephone Directory application handles special characters for LDAP attribute values correctly, according to the RFC 2253 standard. However, the iSeries Directory Services (LDAP) directory server does not fully support the standard. For these cases, there is nothing that can be done other than to avoid the use of such characters.</p> <p>The quote (") character is an example of this problem. The RFC 2253 standard specifies that the character must be escaped by preceding it with a backslash (\) to be accepted as a literal character in an LDAP attribute value. Since the current version of iSeries Directory Services (LDAP) does not fully support RFC 2253, the server saves both the backslash character as well as the quote character.</p> |
|---|--|---|

Error logging and debugging

- **Error logs**

The application server has a variety of logs to which messages are written. For example, system message, which can be written by any application server component or application are written to general purpose logs such as the JAVA Virtual Machine (JVM) logs and the IBM Service logs. Other logs are very specific in nature and are scoped to a particular component or activity. For example, the HTTP Server plugin maintains a component-specific plugin log.

The general purpose logs, such as JVM and IBM Service, are used to monitor the health of the application server and assist in troubleshooting. Troubleshooting for specific components might require additional log analysis, such as component or product specific log files.

- **Trace statements**

Application trace statements can be enabled for the purpose of debugging problems. If problems persist, and you must call IBM Service for help, one of the first thing they might ask you for is a copy of the application's trace output. Trace statements are enabled by adding a line to the application's configuration file and restarting the application.

The application will read the new configuration when it is started. Application trace statement will be enabled at that time. When enabled, trace statements are written to the server's SystemOut.log file.

- **LDAP and HTTP server trace**

See the following information for details on LDAP and HTTP server trace:

- Troubleshoot Directory Server
- Troubleshoot HTTP server

General troubleshooting information

These resources provide general troubleshooting assistance.

- For WebSphere Application Server - Express V5, see the associated Troubleshooting topic.
- For WebSphere Application Server - Express V5.1, see the associated Troubleshooting topic.
- For WebSphere Application Server V5, see the associated Troubleshooting topic.
- For WebSphere Application Server V5.1, see the associated Troubleshooting topic.

- Read the WebSphere Application Server - Express V5.1 Release Notes



- Read the WebSphere Application Server - Express V5 Release Notes



- Read the WebSphere Application Server V5 Release Notes



- Read the WebSphere Application Server V5.1 Release Notes



Notices and limitations

While using IBM Telephone Directory V5.2, you should be aware of the following notices and limitations.

Setup

- The IBM Telephone Directory V5.2 application can be configured to use an existing base DN from your iSeries Directory Server (LDAP) server. If you publish your system directory to your LDAP server using the inetOrgPerson object class, you can use that directory for the application. This is done by specifying the base DN you want to use for the IBM Telephone Directory application during IBM Welcome Page V1.1 installation. However, the password field is optional in the inetOrgPerson object class. An authorized user needs to set the password value in the entries if they want the users to update their own entries.

If system directory publishing is left on/enabled on your system, periodic updates to the directory will cause changes made to be discarded through the IBM Telephone Directory application. This is a limitation of directory publishing. It is recommended to use directory publishing only to do the initial set up of a directory, then turn it off if directory updates are to be made.

General usage

- When searching on a telephone number, there are no implied wildcards. The IBM Telephone Directory V5.2 application searches for the exact value you enter. This means you **must** specify the wildcard character (*) if you want to search for part of a telephone number.

For example, you want to find all users that have the 507 area code. The following search criteria will do this:

507

Note: You might receive search results other than those containing a 507 area code (those users with 507 in the actual telephone number).

- When you are prompted for a user ID and password, the characters entered must map to the default job CCSID of the IBM HTTP server for iSeries. The HTTP server assumes the user ID and password you enter is encoded in the net CCSID (ASCII) configured for the server and converts them to the server's job CCSID (EBCDIC). If the characters don't map, sign on fails. For example, if your user ID or password contains Japanese characters, the HTTP server must be running with a Japanese net CCSID (such as 943) and a Japanese job CCSID (such as 5035). If it is not, you will not be able to sign on to the IBM Telephone Directory application, because the HTTP server is not able to authenticate your credentials. This limitation does not apply to form input or display, because all data is encoded in UTF-8. It only applies to sign on.

The following areas are affected:

- Registering users during closed enrollment
- Updating directory entries

- Changing entry passwords
- Deleting directory entries

The following areas are not affected:

- Registering users during open enrollment
- Basic search
- Advanced search
- Detailed entry display
- Online help and other forms

Registering

- Passwords are not required by default.
- If you want to insert a photo into a user entry, it has to be in .jpg format. The IBM Telephone Directory application does not support .gif format. The photo size must be less than the configured value size.
- A valid user entry must be created in order for other entries to specify **Manager Name**, **Assistant Name**, or **Backup Name** fields. This means you must create a directory using a top-down process if you want to fill all values in during the initial user entry creation. Alternatively, you can use the **Update entry** function to enter manager, assistant, or backup values after all user entries have been created. For example, a manager entry has to be created before his or her employees can enter Manager Name in their individual entries. If the manager entry does not exist during the employee entry creation, you must update the employee entry after the manager has been created.
- If you delete an entry (such as a manager) that is used in another entry (such as an employee having his or her manager listed), the IBM Telephone Directory application does not remove the manager name from the employee entry. The same scenario is applicable for the Backup Name and Assistant Name fields.
- If a manager, assistant, or backup entry is deleted, links to that entry are no longer displayed in an associated user entry. If the deleted entry is recreated (and uses the same CN and user ID values), the links to that entry automatically reappear. In addition, when a manager entry is deleted, the Reports-To Chain page (for entries linked to the deleted entry) no longer work until the manager entry is recreated. However, the Same-Department page still works, even though the manager's entry is has been deleted.

Data integrity

- You are responsible for data integrity in the IBM Telephone Directory application. The application comes with a limited set of validation rules; however, it is the administrator or the user who is responsible for the input of correct data.

Appendix. Notices

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