IBM

@server

iSeries

IBM Welcome Page V1.1

Version 5 Release 3

IBM

@server

iSeries

IBM Welcome Page V1.1

Version 5 Release 3

IBM

> **Note**
>
> Before using this information and the product it supports, be sure to read the information in "Notices," on page 33.

Contents

IBM Welcome Page V1.1

IBM[(R)] 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 access links to other business applications provided by *IBM Business Solutions Version 1.0* - a simple welcome page specifically for business applications. It also provides administrative interfaces used for setup and configuration of other business applications, including IBM Telephone Directory V5.2 and IBM Survey Creator V1.0.

See the following topics for more information about IBM Welcome Page V1.1:

"What's new for Version 1.1" on page 2
See this topic to learn more about functional, graphical, and packaging enhancements made to IBM Welcome Page V1.1.

"Print this topic" on page 3
See this page to download the documentation in a printable PDF format.

"Overview of IBM Welcome Page V1.1" on page 4
This topic provides an overview of the IBM Welcome Page V1.1 application and how it interacts with different iSeries[(TM)] server components and various software components.

"Install IBM Business Solutions" on page 11
This topic provides information on how to install IBM Business Solutions (which includes the installation of IBM Welcome Page V1.1 and IBM Telephone Directory V5.2) on your server, deploy the applications into an application server run time, and configure the applications.

"Administer IBM Welcome Page V1.1" on page 16
This topic provides administrative information for administrators of the IBM Welcome Page V1.1 application. Information includes how to administer application entries and application properties.

"Use IBM Welcome Page V1.1" on page 28
This topic provides information on how to use the IBM Welcome Page V1.1 application, including how to access other associated business applications (such as IBM Telephone Directory V5.2).

"Troubleshoot IBM Welcome Page V1.1" on page 28
This topic provides troubleshooting information on the IBM Welcome Page V1.1 application.

Related information

See the following topics for related information to the IBM Welcome Page V1.1 application:

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

IBM Telephone Directory V5.1
View documentation for the IBM Telephone Directory V5.1 application. The previous version of IBM Welcome Page is integrated into this application.

IBM Survey Creator V1.0
View documentation for the IBM Survey Creator V1.0 application, which is an application that IBM Welcome Page V1.1 provides the installation and configuration interface for. This application is required.

What's new for Version 1.1

The IBM[R] Welcome Page V1.1 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[TM] 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 businesses 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 may be complex, which is why deployment wizards for the applications provided by IBM Business Solutions have been added to the Web Administration graphical user interface (GUI), which is provided as a part of IBM HTTP Server for iSeries (5722-DG1). The 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 Welcome Page V1.1

IBM Welcome Page V1.1 is a Web-based business application with several purposes. It is a simple welcome page designed as a starting point for non-administrators, possibly you and your colleagues, to access links for other business applications provided by IBM Business Solutions. It also provides administrative interfaces used for setup and configuration of other business applications, including IBM Telephone Directory V5.2.

Administrative interfaces, called "Administrator Pages", provide a GUI to set up and manage new or existing LDAP directories as well as manage SSL communication, Sametime[R], and EIM configuration properties used by other business applications. The Administrator Pages also provide links to administrative interfaces provided specifically by other business applications.

Non-administrative interfaces include a welcome page with links to other Web-based business applications.

The following functions are provided:

Administrative interfaces:
- Ability to set up new or existing LDAP directories for business application data
- Ability to manage LDAP, SSL, Sametime, and EIM configuration properties for all business applications
- Ability to link to administrator pages provided specifically by the other business applications (if applicable)

Non-administrative interfaces:
- Ability to view a menu of available business applications. Hyperlinks are shown for those applications that are installed, configured, and deployed.

IBM Telephone Directory V5.2

IBM Telephone Directory V5.2 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 an LDAP directory. Personnel information is managed securely by a Lightweight Directory Access Protocol (LDAP) server. Either IBM Directory Server (LDAP), or Lotus^(R) Domino^(R) (LDAP) Server may be used.

IBM Telephone Directory V5.2 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 (described above) to set up a new directory.

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

See IBM Telephone Directory V5.2 in the *IBM Telephone Directory V5.2* topic for more information.

IBM Survey Creator V1.0

IBM Survey Creator is a Web-based application that provides the ability to create, configure, and manage surveys. This application provides you with a product that you can use to help create your own web based applications. IBM Survey Creator uses an LDAP directory server to retrieve survey information and can be used with a directory that is already set up for your existing applications. You can use an existing LDAP directory for IBM Survey Creator, or you can create a new directory with the Web administration graphical user interface (GUI) or the IBM Welcome Page V1.1 application.

IBM Survey Creator provides these functions:
- Ability to create new surveys as well as delete, update, and preview existing surveys.
- Search for users, create questions, and view survey results.
- Ability to create and maintain multiple surveys.

See IBM Survey Creator V1.0 in the *IBM Survey Creator V1.0* topic for more information.

Print this topic

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

Topic	PDF Download size
IBM Welcome Page V1.1	376 KB

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

Related Topic	PDF Download size
IBM Telephone Directory V5.2	495 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**.

Downloading Adobe Acrobat Reader

If you need Adobe Acrobat Reader to view or print this PDF, you can download a copy from the Adobe Web site (www.adobe.com/products/acrobat/readstep.html).

Overview of IBM Welcome Page V1.1

IBM[R] Welcome Page V1.1 is a Web-based business application with several purposes. It provides a starting point for non-administrators, possibly you and your colleagues, to access links to 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 other business applications, including IBM Telephone Directory V5.2 and IBM Survey Creator V1.0.

Two types of directory servers are supported by the IBM Welcome Page V1.1 application: iSeries[TM] Directory Server (LDAP), and LDAP on Domino[R] 6.0 for iSeries (Domino Directory services).

An overview of the application is as follows:

iSeries server

IBM HTTP Server (powered by Apache)

| HTTP Server plugin for LDAP (mod_ibm_ldap) | HTTP Server plugin for WebSphere |

WebSphere Application Server

| IBM Telephone Directory | IBM Welcome Page |

| Directory Server (LDAP) | EIM | Lotus Sametime |

Workstation2
http://your.server.name:port/ibm-bizApps/welcome/admin.do

Workstation1
http://your.server.name:port/ibm-bizApps/welcome/home.do
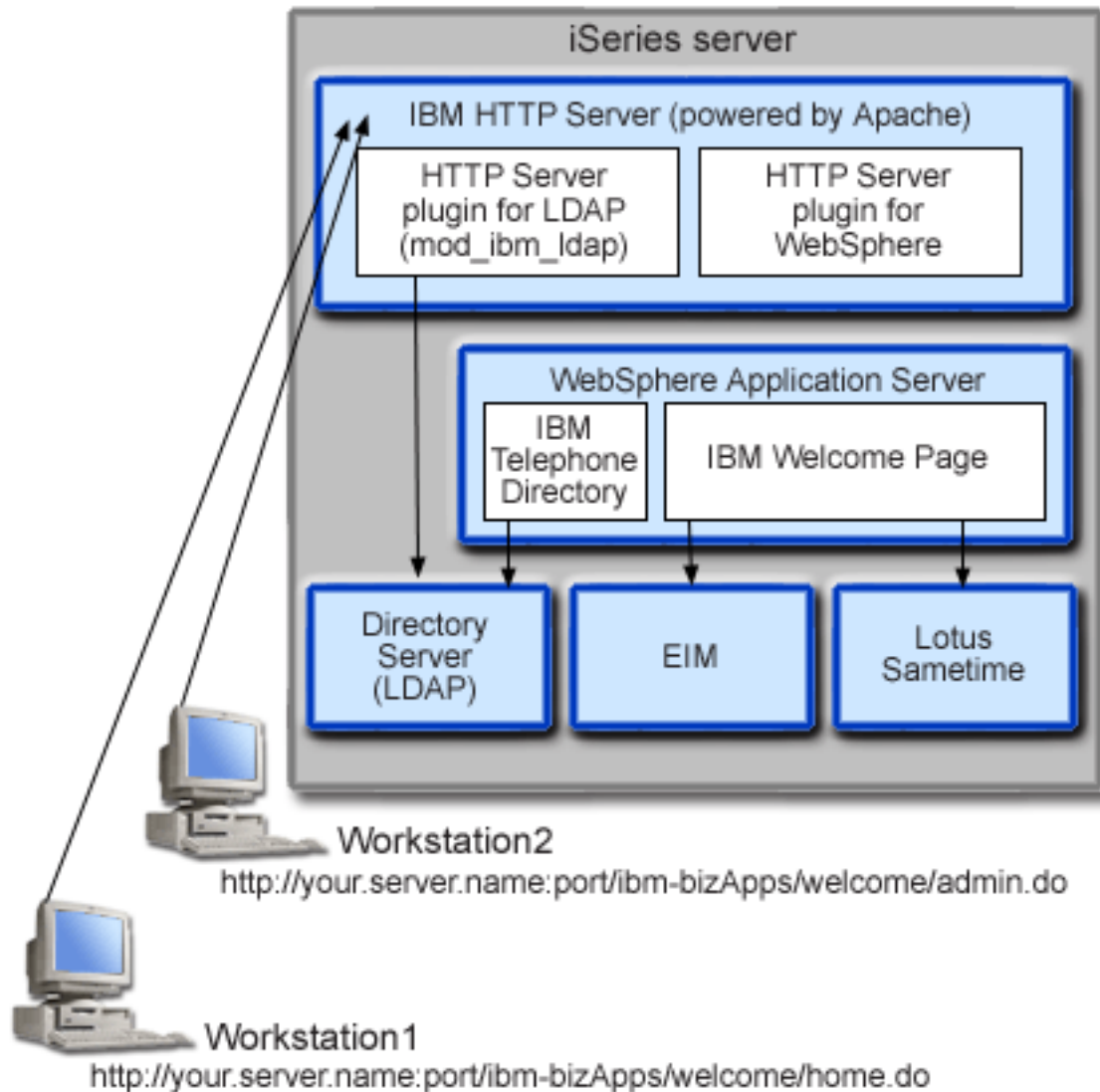
The IBM Welcome Page V1.1 application is installed on your iSeries server when you install IBM Telephone Directory V5.2 and IBM Survey Creator V1.0. It can be deployed into the runtime of the following editions of WebSphere[(R)] Application Server for iSeries:

- 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

The Web Administration GUI (part of the HTTP server administration GUI) performs many underlying configuration tasks for you if you deploy into the WebSphere Application Server for iSeries (Base) or WebSphere Application Server - Express for iSeries run time.

For detailed information on how the IBM Welcome Page V1.1 application uses various iSeries server and software components, see the following topics:

- "Interaction with WebSphere Application Server for iSeries" on page 6

Interaction with WebSphere Application Server for iSeries

IBM[R] Welcome Page V1.1 contains a Web application packaged in an Enterprise Archive (.ear) file that is deployed into a WebSphere[R] Application Server run time environment when the IBM Telephone Directory V5.2 application is deployed. Once the IBM Welcome Page V1.1 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 Welcome Page V1.1 application. Once requests reach the application, the application handles the required LDAP interactions, and, optionally, configured Enterprise Identity Mapping (EIM) or Sametime[R] operations.

The application is written and packaged to Java[TM] standards. WebSphere Application Server for iSeries[TM] provides the runtime environment for the application, which includes support for Java runtime APIs. The following describes what the application uses:

- In WebSphere Application Server for iSeries 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.
- In WebSphere Application Server for iSeries 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 sites 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).
>
> WebSphere Application Server - Express V5.1
>
>
>
> (http://www.ibm.com/servers/eserver/iseries/software/websphere/
> wsappserver/express/indexexp51.html).
>
> WebSphere Application Server - Express V5
>
>
>
> (http://www.ibm.com/servers/eserver/iseries/software/websphere/
> wsappserver/express/indexexp50.html).

Interaction with HTTP Server for iSeries

IBM[R] Welcome Page V1.1 requires the following production level HTTP server: IBM HTTP Server for iSeries[TM] (powered by Apache 2.0, 5722-DG1). IBM Welcome Page V1.1 provides the ability to set up and manage the configuration needed for an Apache 2.0 HTTP server in support of itself, as well as the IBM Telephone Directory V5.2 application. The application sets up a separate configuration file that contains the required directives for an Apache 2.0 HTTP server. Once complete, the Apache 2.0 HTTP server must be reconfigured to include the additional directives.

The location of the Apache 2.0 configuration file varies depending on the name of your WebSphere[R] Application Server and what edition is used. The following is an example of the location of the configuration files set up by the IBM Welcome Page V1.1 application when it is deployed:

`/QIBM/UserData/WebASE/ASE5/`*yourserver*`/ibs/`*yourserver*`/apache20.inc`

where *yourserver* is the name of your WebSphere Application Server - Express for iSeries V5 server. Once the IBM Welcome Page V1.1 application creates the Apache 2.0 configuration file listed above, the HTTP server must be reconfigured to include the new directives. The following is an example of the directives that are required:

1. LoadModule ibm_ldap_module /QSYS.LIB/QHTTPSVR.LIB/QZSRVLDAP.SRVPGM
2. Include /QIBM/UserData/WebASE/ASE5/*yourserver*/ibs/*yourserver*/apache20.inc

    where *yourserver* is the name of your WebSphere Application Server - Express for iSeries V5 server.

The server must be configured to allow the application to benefit from additional functionality provided by the HTTP server.

Once the configuration is set up and the HTTP server is restarted, the plugin module for LDAP is used to authenticate users that route requests to the IBM Telephone Directory V5.2 application. These include requests to create, update, and delete entries in the directory, requests to the IBM Telephone Directory V5.2 application administrative interfaces, and requests to manage identity mappings for Enterprise Identity Mapping (EIM), if configured.

After users are authenticated, their credentials (IDs and passwords) are allowed to pass with the requests routed to the application through the HTTP server plugin for WebSphere and can be used by the application as necessary. Requests that do not require authentication are routed to the application (through the plugin) without credentials.

Other features of the HTTP server can be used to support and protect access to the application. For example, the HTTP server can be configured to require the use of Secure Sockets Layer (SSL) ports to ensure information is sent confidentially. It can be configured to log user activity or to prevent certain users (or systems) from accessing the application.

See the HTTP Server for iSeries Web page for more details on setting up HTTP servers:

>   IBM HTTP Server for iSeries

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

See "Administer IBM Welcome Page V1.1" on page 16 for additional information on the entries used to create the apache20.inc file, including name, port, location of users and groups, naming, object classes, and administrator names and groups.

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. 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.

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

(http://www.ibm.com/servers/eserver/iseries/ldap).
The **Articles and Publications** section has links to articles, redbooks and other related LDAP books.

LDAP configuration

When you configure the LDAP server, you must specify the suffixes you want to be provided on the LDAP server. For example, the suffix dc=myhost,dc=mycompany,dc=com is the default suffix that is set up when the LDAP server is automatically configured for the server that has the TCP/IP host name of myhost.mycompany.com. Objects in a directory are referenced by a distinguished name (DN) attribute. You must specify a path (parent DN) where you want your IBM[R] Telephone Directory information to exist. The default parent DN that is used is cn=users prepended to the TCP/IP hostname. For example: cn=users,dc=myhost,dc=mycompany,dc=com.

Certain applications use IBM Welcome Page V1.1 for configuration.For example, the LDAP server is configured for use with the IBM Telephone Directory V5.2 but set up in the IBM Welcome Page V1.1 application during installation. When the application is installed, it uses the default value cn=users and prepends it to the host name. You can override the default value by specifying which parent DN value you want to use during installation. IBM Telephone Directory information can reside in an existing location where organizational information is already kept. It also can exist in a new location. For example, if you have an existing organization o=company that has existing inetOrgPerson entries, you can configure IBM Telephone Directory to use this parent DN, and it will access your existing information. The inetOrgPerson 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. Installation of the application also creates additional entries in the parent DN for IBM Telephone Directory to use. The entries created are:
* **cn=Administrators**
  This is a group that has authority to create, update, search, and delete entries in the directory."
* **cn=Administrator**
  This is a user that is a member of the cn=Administrators group and has authority to create, update, search, and delete entries in the directory. The user name you specify when authenticating in the application is Administrator and the password is the password specified during installation.
* **cn=itdCreateAdministrator**
  This user is created when open enrollment is specified during installation. It allows users to only be added to the application and is used when registering users in the application for open enrollment.

Interaction with LDAP on Domino 6.0 for iSeries

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

Domino LDAP uses the inetOrgPerson object class, which 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 class, 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(R) Welcome Page V1.1 application must be configured specifically to use a Domino LDAP server.

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

Interaction with a Lotus Sametime server

Lotus(R) Sametime(R) 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(R) Welcome Page V1.1 application and 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(TM) 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 lists) 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 Welcome Page V1.1 is the Sametime presence list support (also known as a buddy list). The IBM Welcome Page V1.1 application is used to configure Sametime buddy list support. When configured, an Add to Buddy List icon is displayed in the navigation bar of the IBM Telephone Directory V5.2 application. 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 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 Welcome Page V1.1 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 "Administer IBM Welcome Page V1.1" on page 16 for more information on how to set up and use Sametime integration in the business applications:

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(TM)

- Lotus Instant Messaging and Web Conferencing Toolkits

Interaction with an Enterprise Identity Mapping server

Enterprise Identity Mapping (EIM) for iSeries(TM) 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(R) 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, non-administrators (users) can manage their own identities in an EIM domain when EIM is configured by the IBM(R) Welcome Page V1.1 application. Once configured, users can 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.

Not all associations can be set up by IBM Welcome Page V1.1 and managed by IBM Telephone Directory V5.2. The applications are 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 applications 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.

See Enterprise Identity Mapping (EIM) in the *Security and Directory server* topic for more information.

Install IBM Business Solutions

IBM[(R)] Welcome Page V1.1 is part of the *IBM Business Solutions Version 1.0* package. This package provides a set of enterprise Web applications available for iSeries[(TM)] 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.

As part of *IBM Business Solutions Version 1.0*, the IBM Welcome Page V1.1, IBM Telephone Directory V5.2, and IBM Survey Creator V1.0 applications are installed and configured in the IBM HTTP Server for iSeries Web administration GUI. After installation and configuration, the applications are deployed into an application server runtime environment. You must deploy IBM Telephone Directory V5.2 and IBM Survey Creator V1.0 to deploy IBM Welcome Page V1.1.

Generally, you must install, configure, and deploy *IBM Business Solutions Version 1.0* before you can use the IBM Welcome Page V1.1, IBM Telephone Directory V5.2, and IBM Survey Creator V1.0 applications:

Perform the following steps to install IBM Business Solutions:

1. **"Verify the prerequisites"**
   This step provides information about hardware and software prerequisites that must be verified before you install *IBM Business Solutions Version 1.0*.
2. **"Install the applications" on page 12**
   This step installs *IBM Business Solutions Version 1.0* on your iSeries server. This installs both the IBM Welcome Page V1.1 and IBM Telephone Directory V5.2 applications.
3. **"Configure and deploy the applications" on page 13**
   This step uses 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 runs the IBM Welcome Page V1.1 and IBM Telephone Directory V5.2 applications.
4. **"Verify installation and setup" on page 14**
   This step shows you how to access the IBM Welcome Page V1.1 and IBM Telephone Directory V5.2 applications and verify a successful installation.

"Verify the prerequisites"

Verify the prerequisites

Before you install the IBM[(R)] Welcome Page V1.1 and IBM Telephone Directory V5.2 applications, verify that your iSeries[(TM)] software meets the minimum requirements.

Product software

- **IBM Business Solutions Version 1.0 (5722-BZ1)**
  IBM Business Solutions are a collection of business applications that work in conjunction with your existing enterprise applications and server components. The business applications include IBM Welcome Page 1.1 and IBM Telephone Directory V5.2.

iSeries required software

- **OS/400[(R)] Version 5 Release 1 (V5R1), Version 5 Release 2 (V5R2), or Version 5 Release 3 (V5R3)**
  Your user profile must have *SECADM, *ALLOBJ, and *IOSYSCFG authorities.

- **WebSphere Application Server**
  The IBM Welcome Page V1.1 and IBM Telephone Directory V5.2 applications can run on the following versions of WebSphere[(R)] 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
- **iSeries Directory Server (LDAP) or Domino LDAP directory server**
  An iSeries Directory Server (LDAP) directory server needs to be available for the IBM Welcome Page V1.1 and IBM Telephone Directory V5.2 applications to use. The applications and the directory server can reside on the same iSeries server, or the directory server can reside on a remote iSeries server.

  As an alternative to iSeries Directory Services (LDAP), you can use LDAP on Domino[(R)] 6.0 for iSeries (Domino Directory services) as your directory server.
- **IBM HTTP Server for iSeries (5722-DG1)**
  IBM HTTP Server provides the authentication necessary to update and add entries in the IBM Telephone Directory V5.2 application.
- **iSeries Navigator**
  The graphical user interface (GUI) to the iSeries server, iSeries Navigator, may be required to do LDAP directory server configuration and setup.
- All necessary WebSphere Application Server or WebSphere Application Server - Express fixes. For a list of current fixes, see WebSphere Application Server PTFs

  (http://www.ibm.com/servers/eserver/iseries/software/websphere/wsappserver/services/service.htm).
- All necessary IBM Business Solutions fixes. For a list of current fixes, see IBM Business Solutions

  (http://www.ibm.com/servers/eserver/iseries/software/bizapps/ptfs.html).

iSeries optional software
- **OS/400 Digital Certificate Manager (5722-SS1 option 34)**
  Required if you plan to use Secure Sockets Layer (SSL) protocol. See the Enable SSL on the LDAP directory server topic for more information.
- **A Cryptographic Access Provider**
  Required if you plan to use SSL. You can choose one of these options: 5722-AC2 (56-bit), 5722-AC3 (128-bit).

"Install the applications"

Install the applications

After you have checked for prerequisite applications and options, use these steps to install IBM[(R)] Business Solutions, which includes IBM Welcome Page V1.1 and IBM Telephone Directory V5.2:

1. Ensure that you user profile has *ALLOBJ and *SECADM authority.
2. Place the *IBM Business Solutions Version 1.0* CD-ROM in the CD-ROM drive of your iSeries(TM) server.
3. On an OS/400(R) command line, enter this command:

   ```
   RSTLICPGM LICPGM(5722BZ1) DEV(OPT01)
   ```

   where *OPT01* is your CD-ROM drive. A confirmation message appears when the product is successfully restored.

The install of the product creates the following directories:

- **/QIBM/ProdData/IBS**
  This is the product root directory. Files under this directory structure should not be modified.
- **/QIBM/ProdData/IBS/installable/**
  This is where the Enterprise archive (EAR) files for the applications are stored. This directory is important only if you need to manually configure and deploy the applications (such as if you are going to deploy into WebSphere(R) Application Server for iSeries, Network Deployment).

To verify that the product was successfully installed, perform the following steps:

1. Enter this command on an OS/400 command line:

   ```
   go licpgm
   ```

2. Enter 10 on the OS/400 command line to select option 10.
3. The following product should be installed:

   ```
   5722BZ1    *BASE    IBM Business Solutions
   ```


"Configure and deploy the applications"

Configure and deploy the applications

IBM(R) Business Solutions is configured and deployed using the IBM HTTP server Web administration GUI. Use these steps to configure IBM Business Solutions, which includes the IBM Welcome Page V1.1 and IBM Telephone Directory V5.2 applications:

Note: Before you begin, make sure know your server's LDAP directory server distinguished name (DN) and password.

There are several ways to configure and deploy IBM Business Solutions. Using the HTTP Web administration GUI and associated wizards, you can deploy the applications into either a new or existing application server runtime environment. Use these options if you are deploying into WebSphere(R) Application Server (Base) or WebSphere Application Server - Express. However, if you are deploying into WebSphere Application Server, Network Deployment (ND), you **must** manually deploy the applications into the application server runtime.

> **Configure and deploy into a new application server**
> Use this option if you want to deploy IBM Business Solutions into a new application server runtime environment.

> **Configure and deploy into an existing application server**
> Use this option if you want to deploy IBM Business Solutions into an existing application server runtime environment.

Manually configure and deploy into WebSphere Application Server, Network Deployment (ND)
Use this option if you want to deploy IBM Business Solutions into a WebSphere Application Server, Network Deployment (ND) runtime environment. This option involves manual setup and does not use wizards associated with the HTTP server Web administration GUI.

Next: Configure and deploy into a new application server
or

Next: Configure and deploy into an existing application server
or

Next: Manually configure and deploy into WebSphere Application Server, Network Deployment (ND)

Verify installation and setup

You are now ready to verify that you have successfully installed and deployed the IBM[(R)] Welcome Page V1.1 application and the IBM Telephone Directory V5.2 application:

Administrative interface

In your Web browser, enter the following URL:

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

where *your.server.name* is the name of your iSeries[(TM)] server and *port* is your external HTTP port number. The URL is case-sensitive. The IBM Welcome Page administrator pages is the entry point for administration of IBM-supplied business applications for WebSphere[(R)] Application Server for iSeries and WebSphere Application Server - Express for iSeries. As more become available, they will be listed here.
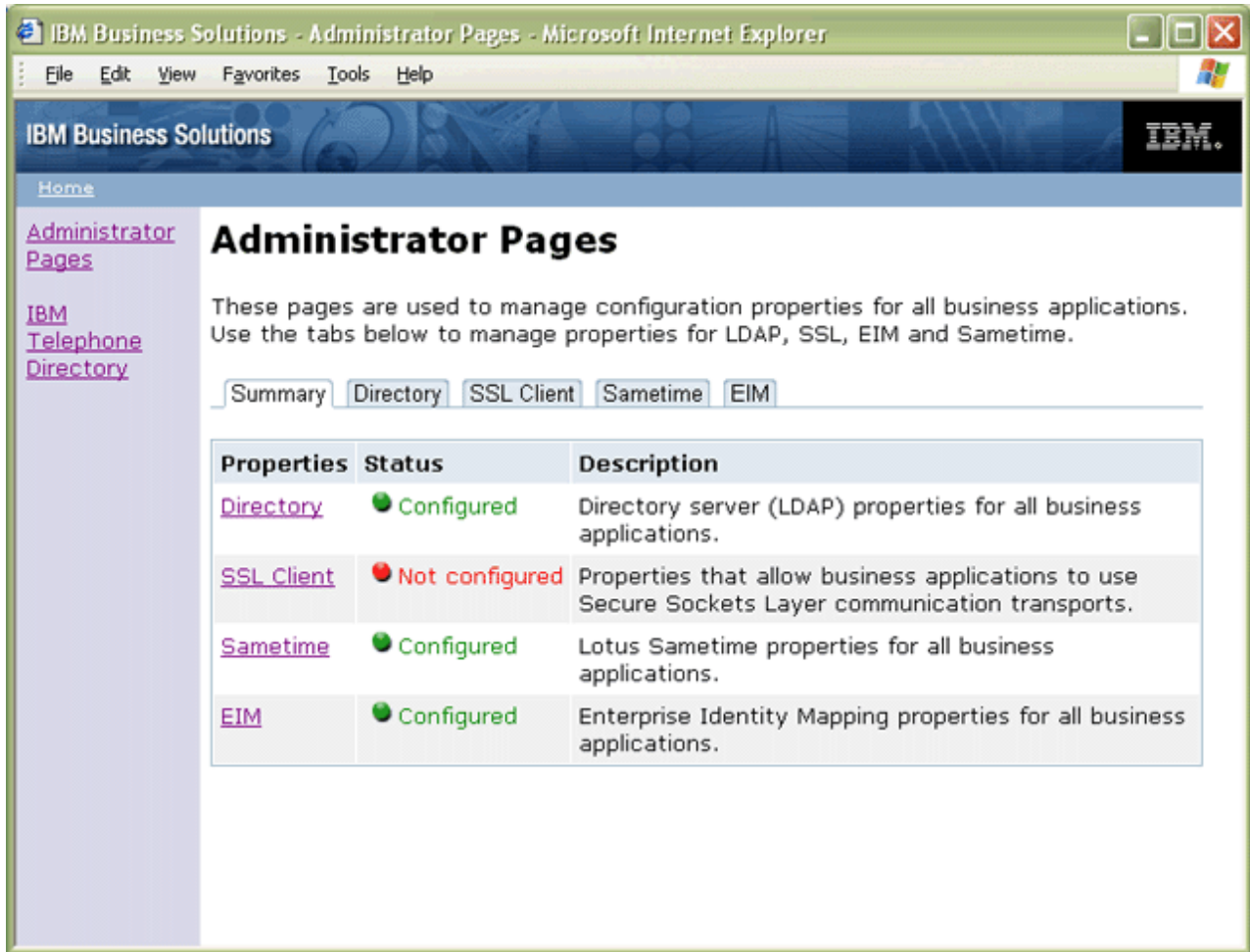
If you are unable to view the IBM Welcome Page V1.1 administrator pages, see "Troubleshoot IBM Welcome Page V1.1" on page 28.

Non-administrative interface

In your Web browser, enter the following URL:

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

where *your.server.name* is the name of your iSeries server and *port* is your external HTTP port number. The URL is case-sensitive. The IBM Welcome Page application is the entry point for IBM-supplied and Web-based business applications for WebSphere Application Server for iSeries and WebSphere Application Server - Express for iSeries. As more become available, they will be listed here.
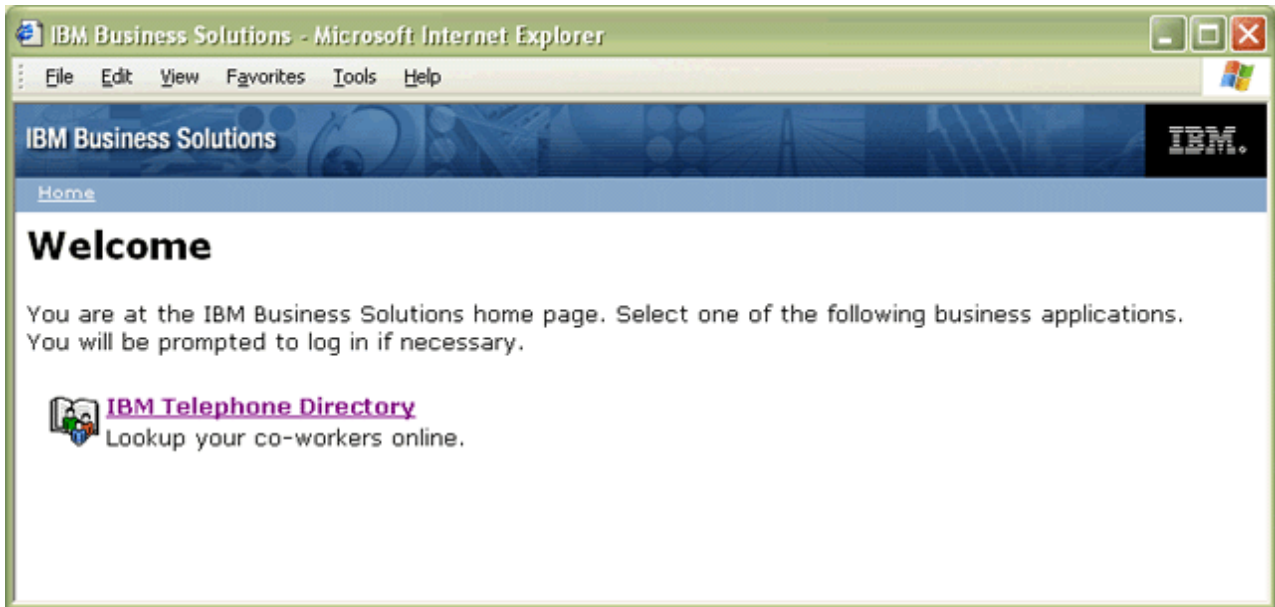
If you are unable to view the IBM Welcome Page V1.1 non-administrator pages, see "Troubleshoot IBM Welcome Page V1.1" on page 28.

If you are unable to view the link to the IBM Telephone Directory V5.2 application, see Troubleshoot IBM Telephone Directory V5.2 in the *IBM Telephone Directory V5.2* topic for more information.

Administer IBM Welcome Page V1.1

To access the IBM$^{(R)}$ Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.
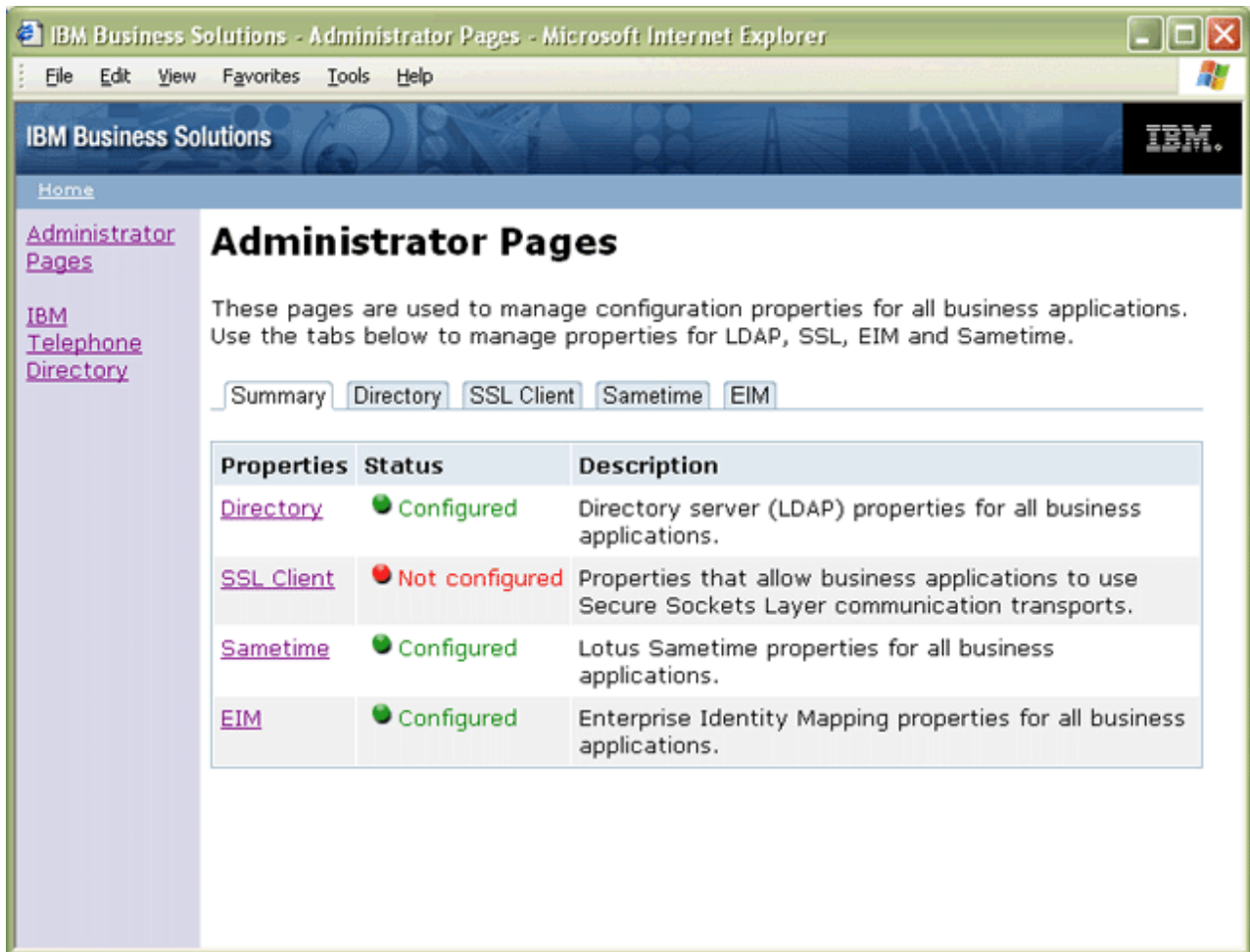
You can use the IBM Welcome Page V1.1 application to manage the following properties that are used by other IBM Business Solution applications:

Manage directory server (LDAP) properties
Use the following tasks to set up and manage directory server properties:
- "Manage server properties" on page 18
- "Manage user entry properties" on page 18
- "Manage group entry properties" on page 19
- "Manage administrator properties" on page 19

Manage SSL Client properties
Use the following tasks to manage SSL Client properties:
- "Manage client certificates" on page 20
- "Manage CA certificates" on page 20

Manage Enterprise Identity Mapping (EIM) properties
Use the following tasks to manage EIM server and domain properties:
- "Manage EIM server properties" on page 21
- "Manage EIM domain properties" on page 24

Note: EIM is not available on iSeries servers that run OS/400 V5R1. If EIM is not available on your iSeries server, a tab for EIM administration does not appear in the IBM Welcome Page V1.1 application.

Manage Lotus Sametime properties

Use the following tasks to manage Lotus[(R)] Sametime[(R)] and STLinks properties:

- "Manage Sametime server properties" on page 27
- "Manage STLinks properties" on page 27

See "Use IBM Welcome Page V1.1" on page 28 for more information on how to perform common user tasks for the application.

Manage server properties

To manage directory server properties, use the IBM[(R)] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **Directory** tab.
3. To set up and change directory properties, you must log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your LDAP distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following server properties:

   - **LDAP ports allowed:** Select either Standard port or SSL port. Standard port is the standard TCP/IP port number used by the directory server. SSL port is the secure port number used by the directory server.
   - **Authentication realm:** Specify the realm name used on login prompts to inform users what name and password to provide. The value must be different than the one that is specified for administrators.
   - **Authentication port:** Select either Standard or SSL as the authentication port.

6. Click **Save Changes**.

Manage user entry properties

To manage directory server user entry properties, use the IBM[(R)] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **Directory** tab.
3. To set up and change directory properties, you must log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your LDAP distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following user entry properties:

- **Parent DN:** Specify the distinguished name (DN) value of the parent directory for user entries.
- **Naming attribute:** Select the naming attribute used in the directory server. Values include cn, mail, serialNumber, or uid.
- **Object class:** Specify the object class name that is used to identify user entries in the directory.

6. Click **Save Changes**.

Manage group entry properties

To manage directory server group entry properties, use the IBM[(R)] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **Directory** tab.
3. To set up and change directory properties, you must log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your LDAP distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following group entry properties:
   - **Parent DN:** Specify the distinguished name (DN) value of the parent directory for group entries.
   - **Naming attribute:** Select the naming attribute used in the directory server.
   - **Object class:** Specify the object class name used to identify group entries in the directory.
   - **Member attribute:** Select the member attribute used for group entries. Values include uniqueMember and member.
6. Click **Save Changes**.

Manage administrator properties

To manage directory server administrator properties, use the IBM[(R)] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **Directory** tab.
3. To set up and change directory properties, you must log in as the directory server administrator. Click **set up and change directory properties**.
4. Enter your LDAP distinguished name (DN) and password. By default, the Administrator DN is cn=Administrator. Click **Login**.
5. You can modify the following directory server administrator properties:
   - **Name:** Specify the name of an administrator for business applications. If an entry does not exist in the directory for the user specified, one will be created.
   - **Password:** Specify the password for the administrator. This value is only used if the administrator entry does not exist and must be created.
   - **Confirm Password:** Specify the password entered in the **Password** field.

- **Group:** Specify the name of the group that is used to identify administrators for business applications. If an entry does not exist in the directory for this group, one will be created.
- **Authentication realm:** Specify the realm name used on login prompts for administrators. The value must be different than the one specified for general users.
- **Contact information:** Specify a message that is displayed to users when problems occur. For example, the message may provide an administrator's name, telephone number, or e-mail address.

6. Click **Save Changes**.

Manage client certificates

To manage client certificates, use the IBM[(R)] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **SSL Client** tab.
3. You can modify the following client certificate properties:
   - **Keyring file:** Specify the path name of the keyring file containing client certificates for SSL communication.
   - **Keyring file password:** Specify the password for the keyring file. If specified, the value is stored and replaces any previously stored password for the specified keyring file.
4. Click **Save Properties**.

You can also delete SSL client properties from this administrator page.

See the Secure Sockets Layer (SSL in the *Networking Security* topic for more information about SSL.

Manage CA certificates

To modify Certificate Authority (CA) certificate properties, use the IBM[(R)] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **SSL Client** tab.
3. You can modify the following CA certificate properties:
   - **Keyring file:** Specify the path name of the keyring file containing CA certificates for SSL communication.
   - **Keyring file password:** Specify the password for the keyring file. If specified, the value is stored and replaces any previously stored password for the specified keyring file.
4. Click **Save Properties**.

You can also delete SSL client properties from this administrator page.

See the Secure Sockets Layer (SSL in the *Networking Security* topic for more information about SSL.

Manage EIM server properties

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

Applications may use the configuration properties to communicate with an EIM domain server. Once connected, applications may search the domain for the required aliases added by an EIM administrator, which provide the means to map user registries to the physical system.

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(R) Welcome Page V1.1 application uses EIM and any limitations of EIM integration in the application. EIM is not available on iSeries(TM) servers that run OS/400(R) V5R1. If EIM is not available on your iSeries server, a tab for EIM administration does not appear in the IBM Welcome Page V1.1 application. Additionally, make sure that you have all the necessary PTFs applied to your server to use EIM in V5R2. See "Verify the prerequisites" on page 11 for more information.

For more information on EIM properties and adding aliases, see the following topics:
- Manage EIM properties (page 21)
- Add an alias to set up the system user registry for business application users. (page 21)
- Add an alias to set up other system or application user registries. (page 22)

Manage EIM properties

To manage EIM properties for all business applications, use the IBM Welcome Page V1.1 administrator pages. Perform the following steps:
1. Make sure that EIM is set up and started on your iSeries(TM) server.
2. Access the IBM Survey Creator application 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 Welcome Page is installed and *port* is the port number that was specified during installation.
3. Click the **EIM** tab. If EIM is not available on your iSeries server, this tab is not available in the IBM Welcome Page V1.1 interface.
4. To modify EIM server properties, you must log in as the application administrator.
5. You can modify the following EIM server properties:
   - **Host name:** Specify the IP host name or address of the EIM repository server you want business applications to use.
   - **LDAP ports allowed:** Select either Standard port or SSL port. Standard port is the standard TCP/IP port number used by the EIM server. SSL port is the secure port number used by the EIM server.
6. Click **Save Properties** or **Delete Properties**, depending on what you want to modify.

Add your aliases to user registries

After the EIM properties have been modified, you must use iSeries Navigator to set up and administer EIM domain servers. You must add aliases to user registries that are defined for the EIM domain. Aliases provide the information that applications need to map an abstract user registry to a system host name, port, and authentication method.

Perform the following steps to add an alias to set up the system user registry for business application users:
1. Start iSeries Navigator.
2. Expand **Domain Management**.
3. Expand the name of the EIM domain you want to manage.

4. If necessary, enter the DN and password for your domain's administrator, and click **OK**.
5. Click **User Registries**. A list of registries appear in the right panel.
6. In the **Enterprise Identity Mapping tasks** panel, click **Add a new system registry**.

   Note: If the task panel is not visible, go to the top menu, click **View**, and select **Taskpad**. There should now be a check mark next to Taskpad, and the task area should be visible.
7. In the **Add System Registry** window, perform the following steps:
   a. In the **Registry** field, specify a name for the new registry.
   b. In the **Type** field, select **LDAP**.
   c. In the **Alias** field, specify the hostname and TCP/IP port number that the directory server uses and that the applications are configured to use. For example, if they are configured to use the directory server at server.rchland.ibm.com port 388, enter `host=server.rchland.ibm.com, port=388` as the alias.

      There are several properties that business applications observe in a user registry alias:
      - **host** - This is the TCP/IP host name or IP address for this user registry. Business applications may use this value if they need to communicate with the system. For example, IBM Telephone Directory uses this value to validate user requests to add identity mappings (or associations) to their EIM identifier. There is no default value for this setting.For example, `host=server.rchland.ibm.com`.
      - **protocol** - This is the protocol used to communicate with the system. Valid values are ldap and ftp where the default value is ldap. See **host** for details.For example, `protocol=ftp`.
      - **port** - This is the TCP/IP port number used to communicate with the system. Valid values range between 1 and 65535. The default value is 389 if the ldap protocol is used, or 20 if the ftp protocol is used. See **host** for details. For example, `port=388`
      - **os400-sys** - This is the os400-sys attribute value used to access OS/400 objects as entries within an LDAP-accessible directory tree. Business applications may use this value to access OS/400 user profiles that are projected as entries within a directory tree. This value is only used if the ldap protocol is used to communicate with an OS/400 system. The default value is the same as that specified for host (required).For example, `os400-sys=system-A.rchland.ibm.com`
      - **readonly** - This indicates that the user registry is only to be used to read or obtain information. If specified, business applications may use or display identity mappings (or association) mapped to this user registry, but they may not add new identity mappings or remove/modify any existing identity mapping. This setting is disabled by default.For example, `readonly`
      - **Notes:**
        – Property names and values are not case sensitive.
        – If multiple properties are specified, they must be separated by a comma (',').
        – Properties may only be specified once, per alias. (No duplicates.)
        – Only one type IBS alias is allowed, per user registry.
        – Business applications look specifically for user registries with a type IBS alias. Those without a type IBS alias are ignored.
        – Alias types are case sensitive. IBS must be specified with all upper case letters.
   d. Under the **Address aliases** heading, in the **Type** field, specify **IBS** (and overwrite anything that may already be shown or selected).
   e. Click **Add**.
   f. Click **OK**.

Add aliases to other system or application user registries

Perform the following steps to add an alias to set up other system or application user registries:
1. Start iSeries Navigator.
2. Expand **Domain Management**.

3. Expand the name of the EIM domain you want to manage.

4. If necessary, enter the DN and password for your domain's administrator, and click **OK**.

5. Click **User Registries**. A list of registries appear in the right panel.

6. In the **Enterprise Identity Mapping tasks panel**, click **Add a new system registry** to add a new system user registry, or **Add a new application registry** to add a new application user registry.

   Note: If the task panel is not visible, go to the top menu, click View, and select Taskpad. There should now be a check mark next to Taskpad, and the task area should be visible.

7. In the **Add System Registry** window or **Add Application Registry** window, perform the following steps:

   a. In the **Registry** field, specify a name for the new registry.

   b. If you are using the **Add System Registry wizard**, skip to step c. If you are using the **Add Application Registry wizard**, in the **Parent registry** field, specify the name of the system user registry of which this application user registry is a subset..

   c. In the **Type** field, select the type of user registry definition that you want to add. You may choose a predefined type, or enter a value that meets your needs.

   d. In the **Alias** field, specify the properties that business applications must use in the event they need to communicate with the system. See explanation of alias properties for details.

      There are several properties that applications observe in a user registry alias:

      - **host** - This is the TCP/IP host name or IP address for this user registry. Business applications may use this value if they need to communicate with the system. For example, IBM Telephone Directory uses this value to validate user requests to add identity mappings (or associations) to their EIM identifier. There is no default value for this setting. For example, `host=server.rchland.ibm.com`.

      - **protocol** - This is the protocol used to communicate with the system. Valid values are ldap and ftp where the default value is ldap. See **host** for details. For example, `protocol=ftp`

      - **port** - This is the TCP/IP port number used to communicate with the system. Valid values range between 1 and 65535. The default value is 389 if the ldap protocol is used, or 20 if the ftp protocol is used. See **host** for details. For example, `port=388`

      - **os400-sys** - This is the os400-sys attribute value used to access OS/400 objects as entries within an LDAP-accessible directory tree. Business applications may use this value to access OS/400 user profiles that are projected as entries within a directory tree. This value is only used if the ldap protocol is used to communicate with an OS/400 system. The default value is the same as that specified for host (required). For example, `os400-sys=system-A.rchland.ibm.com`

      - **readonly** - This indicates that the user registry is only to be used to read or obtain information. If specified, business applications may use or display identity mappings (or association) mapped to this user registry, but they may not add new identity mappings or remove/modify any existing identity mapping. This setting is disabled by default. For example, `readonly`.

      - **Notes:**
        - Property names and values are not case sensitive.
        - If multiple properties are specified, they must be separated by a comma (',').
        - Properties may only be specified once, per alias. (No duplicates.)
        - Only one type IBS alias is allowed, per user registry.
        - Business applications look specifically for user registries with a type IBS alias. Those without a type IBS alias are ignored.
        - Alias types are case sensitive. IBS must be specified with all upper case letters.

   e. Under the **Address aliases** heading, in the **Type** field, specify **IBS** (and overwrite anything that may already be shown or selected).

   f. Click **Add**.

   g. Click **OK**.

You should now see your new registry in the list of system registries. This registry represents the directory server used by the applications. The alias you added to it allows the Web applications to identify it.

You may now add other registries that represent other servers. If you add a similar alias, the IBM Telephone Directory V5.2 application recognizes it and allows users to self-register their personal identities for those servers.

Currently, the IBM Telephone Directory V5.2 application is the only business application that uses EIM properties. It uses EIM properties to provide automatic EIM registration and self-management of user identities. See Set up EIM registration and identity mapping in the *IBM Telephone Directory V5.2* topic for more information.

Manage EIM domain properties

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[(R)] Welcome Page V1.1 application uses EIM and any limitations of EIM integration in the application. EIM is not available on iSeries servers that run OS/400[(R)] V5R1. If EIM is not available on your iSeries server, a tab for EIM administration does not appear in the IBM Welcome Page V1.1 application. Additionally, make sure that you have all the necessary PTFs applied to your server to use EIM in V5R2. See "Verify the prerequisites" on page 11 for more information.

For more information on EIM properties and adding aliases see:
- Modify EIM domain properties (page 24)
- Add an alias to set up the system user registry for business application users. (page 24)
- Add an alias to set up other system or application user registries. (page 26)

Modify EIM domain properties

To modify EIM domain properties, use the IBM Welcome Page V1.1 administrator pages. Perform the following steps:
1. Make sure that EIM is set up and started on your iSeries[(TM)] server.
2. Access the IBM Survey Creator application 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 Welcome Page is installed and *port* is the port number that was specified during installation.
3. To modify EIM domain properties, you must log in as the application administrator.
4. You can modify the following EIM domain properties:
    - **Name**
    - **Parent DN**
    - **Administrator DN:** Specify the distinguished name (DN) value of an administrator to the EIM repository.
    - **Administrator password:** Specify the password for the EIM administrator.
5. Click **Save Properties** or **Delete Properties**, depending on what you want to modify.

Add your aliases to user registries

After the EIM properties have been modified, you must use iSeries Navigator to set up and administer EIM domain servers. You must add aliases to user registries that are defined for the EIM domain. Aliases provide the information that applications need to map an abstract user registry to a system host name, port, and authentication method.

Perform the following steps to add an alias to set up the system user registry for business application users:

1. Start iSeries Navigator.
2. Expand **Domain Management**.
3. Expand the name of the EIM domain you want to manage.
4. If necessary, enter the DN and password for your domain's administrator, and click **OK**.
5. Click **User Registries**. A list of registries appear in the right panel.
6. In the **Enterprise Identity Mapping tasks** panel, click **Add a new system registry**.

   Note: If the task panel is not visible, go to the top menu, click **View**, and select **Taskpad**. There should now be a check mark next to Taskpad, and the task area should be visible.

7. In the **Add System Registry** window, perform the following steps:

   a. In the **Registry** field, specify a name for the new registry.

   b. In the **Type** field, select **LDAP**.

   c. In the **Alias** field, specify the hostname and TCP/IP port number that the directory server uses and that the applications are configured to use. For example, if they are configured to use the directory server at server.rchland.ibm.com port 388, enter `host=server.rchland.ibm.com, port=388` as the alias.

      There are several properties that business applications observe in a user registry alias:

      -
      - **host** - This is the TCP/IP host name or IP address for this user registry. Business applications may use this value if they need to communicate with the system. For example, IBM Telephone Directory uses this value to validate user requests to add identity mappings (or associations) to their EIM identifier. There is no default value for this setting.For example, `host=server.rchland.ibm.com`.
      - **protocol** - This is the protocol used to communicate with the system. Valid values are ldap and ftp where the default value is ldap. See **host** for details.For example, `protocol=ftp`.
      - **port** - This is the TCP/IP port number used to communicate with the system. Valid values range between 1 and 65535. The default value is 389 if the ldap protocol is used, or 20 if the ftp protocol is used. See **host** for details. For example, `port=388`
      - **os400-sys** - This is the os400-sys attribute value used to access OS/400 objects as entries within an LDAP-accessible directory tree. Business applications may use this value to access OS/400 user profiles that are projected as entries within a directory tree. This value is only used if the ldap protocol is used to communicate with an OS/400 system. The default value is the same as that specified for host (required).For example, `os400-sys=system-A.rchland.ibm.com`
      - **readonly** - This indicates that the user registry is only to be used to read or obtain information. If specified, business applications may use or display identity mappings (or association) mapped to this user registry, but they may not add new identity mappings or remove/modify any existing identity mapping. This setting is disabled by default.For example, `readonly`

         Notes:
         - Property names and values are not case sensitive.
         - If multiple properties are specified, they must be separated by a comma (',').
         - Properties may only be specified once, per alias. (No duplicates.)
         - Only one type IBS alias is allowed, per user registry.
         - Business applications look specifically for user registries with a type IBS alias. Those without a type IBS alias are ignored.

– Alias types are case sensitive. IBS must be specified with all upper case letters.

   d. Under the **Address aliases** heading, in the **Type** field, specify **IBS** (and overwrite anything that may already be shown or selected).

   e. Click **Add**.

   f. Click **OK**.

Add aliases to other system or application user registries

Perform the following steps to add an alias to set up other system or application user registries:

1. Start iSeries Navigator.
2. Expand **Domain Management**.
3. Expand the name of the EIM domain you want to manage.
4. If necessary, enter the DN and password for your domain's administrator, and click **OK**.
5. Click **User Registries**. A list of registries appear in the right panel.
6. In the **Enterprise Identity Mapping tasks panel**, click **Add a new system registry** to add a new system user registry, or **Add a new application registry** to add a new application user registry.

   Note: If the task panel is not visible, go to the top menu, click View, and select Taskpad. There should now be a check mark next to Taskpad, and the task area should be visible.

7. In the **Add System Registry** window or **Add Application Registry** window, perform the following steps:

   a. In the **Registry** field, specify a name for the new registry.

   b. If you are using the **Add System Registry wizard**, skip to step c. If you are using the **Add Application Registry wizard**, in the **Parent registry** field, specify the name of the system user registry of which this application user registry is a subset..

   c. In the **Type** field, select the type of user registry definition that you want to add. You may choose a predefined type, or enter a value that meets your needs.

   d. In the **Alias** field, specify the properties that business applications must use in the event they need to communicate with the system. See explanation of alias properties for details.

   There are several properties that applications observe in a user registry alias:

   - **host** - This is the TCP/IP host name or IP address for this user registry. Business applications may use this value if they need to communicate with the system. For example, IBM Telephone Directory uses this value to validate user requests to add identity mappings (or associations) to their EIM identifier. There is no default value for this setting. For example, `host=server.rchland.ibm.com`.

   - **protocol** - This is the protocol used to communicate with the system. Valid values are ldap and ftp where the default value is ldap. See **host** for details. For example, `protocol=ftp`

   - **port** - This is the TCP/IP port number used to communicate with the system. Valid values range between 1 and 65535. The default value is 389 if the ldap protocol is used, or 20 if the ftp protocol is used. See **host** for details. For example, `port=388`

   - **os400-sys** - This is the os400-sys attribute value used to access OS/400 objects as entries within an LDAP-accessible directory tree. Business applications may use this value to access OS/400 user profiles that are projected as entries within a directory tree. This value is only used if the ldap protocol is used to communicate with an OS/400 system. The default value is the same as that specified for host (required). For example, `os400-sys=system-A.rchland.ibm.com`

   - **readonly** - This indicates that the user registry is only to be used to read or obtain information. If specified, business applications may use or display identity mappings (or association) mapped to this user registry, but they may not add new identity mappings or remove/modify any existing identity mapping. This setting is disabled by default. For example, `readonly`.

     Notes:

     – Property names and values are not case sensitive.

- If multiple properties are specified, they must be separated by a comma (',').
- Properties may only be specified once, per alias. (No duplicates.)
- Only one type IBS alias is allowed, per user registry.
- Business applications look specifically for user registries with a type IBS alias. Those without a type IBS alias are ignored.
- Alias types are case sensitive. IBS must be specified with all upper case letters.

e. Under the **Address aliases** heading, in the **Type** field, specify **IBS** (and overwrite anything that may already be shown or selected).

f. Click **Add**.

g. Click **OK**.

You should now see your new registry in the list of system registries. This registry represents the directory server used by the applications. The alias you added to it allows the Web applications to identify it.

You may now add other registries that represent other servers. If you add a similar alias, the IBM Telephone Directory V5.2 application recognizes it and allows users to self-register their personal identities for those servers.

Currently, the IBM Telephone Directory V5.2 application is the only business application that uses EIM properties. It uses EIM properties to provide automatic EIM registration and self-management of user identities. See Set up EIM registration and identity mapping in the *IBM Telephone Directory V5.2* topic for more information.

Manage Sametime server properties

To modify Sametime[R] server properties, use the IBM[R] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **Sametime** tab.

3. You can modify the following Sametime server property:

   - **Host name:** Specify the host name or address of the Sametime server.

4. Click **Save Properties**.

You can also delete Sametime properties from this administrator page.

Manage STLinks properties

To modify Sametime[R] links (STLinks) properties, use the IBM[R] Welcome Page V1.1 administrator pages. Perform the following steps:

1. Access the IBM Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.

2. Click the **Sametime** tab.

3. You can modify the following STLinks properties:

- **HTTP ports allowed:** Select either standard or SSL. Standard port is the standard TCP/IP port number that is used by the Sametime server. SSL port is the secure TCP/IP port number that is used by the Sametime server.
- **Runtime package URL:** Specify the URL to the STLinks runtime package directory on the Sametime server.

4. Click **Save Properties**.

You can also delete Sametime properties from this administrator page.

Use IBM Welcome Page V1.1

To access the IBM[(R)] Welcome Page V1.1 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 application server where IBM Welcome Page V1.1 is installed and *port* is the port number that was specified during installation.
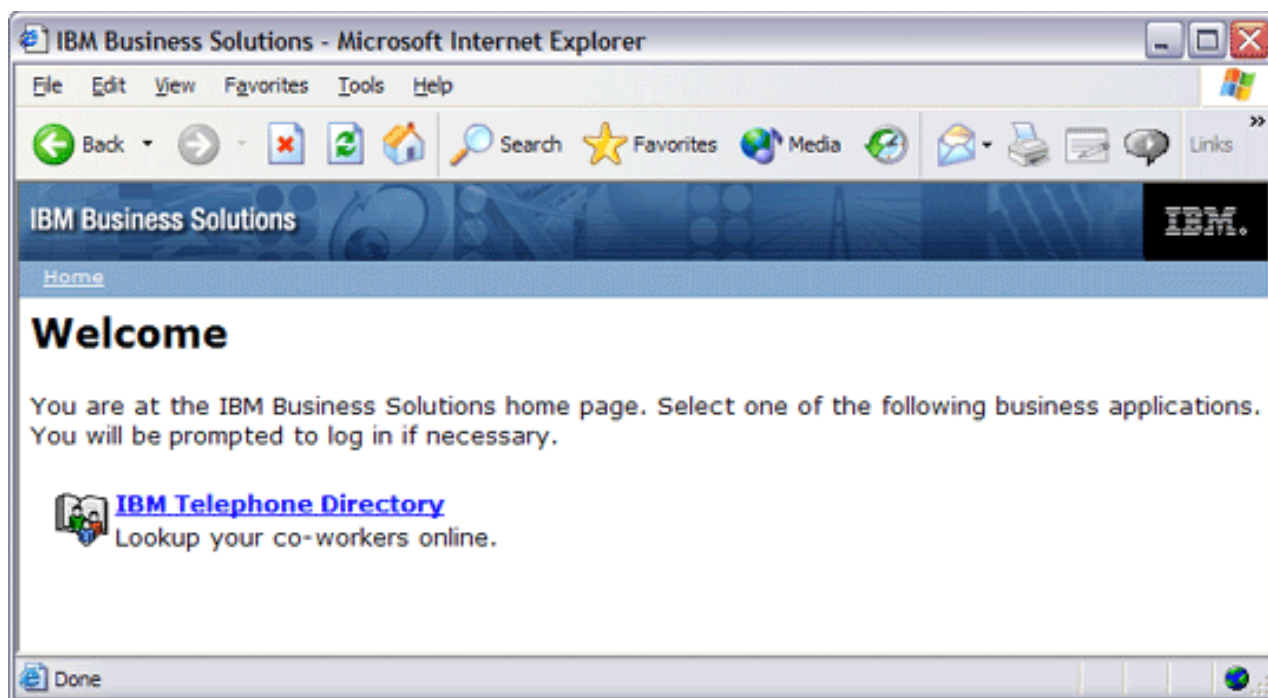
Click on the business applications that are configured for use with the IBM Welcome Page V1.1 application.

See "Administer IBM Welcome Page V1.1" on page 16 for more information on how to perform common administrator tasks for the application.

Troubleshoot IBM Welcome Page V1.1

Before you begin to troubleshoot problems with the IBM[(R)] Welcome Page V1.1 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" on page 11 for more information.
- Is your LDAP server started?

- Is your IBM Welcome Page 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
Your installation failed with the following message: ldap_search: Insufficient access	You entered the wrong LDAP server administrator password.	Obtain the correct password or reset the password.
Your setup script failed with the following messages: `ldap_search: No such object Error 32 verifying LDAP settings`	There might be a problem with the base DN not existing on the LDAP server.	There is a problem with the base LDAP server configuration. See Troubleshoot Directory Server in the *Directory Server (LDAP)* topic for more information.
IBM Business Solutions (5722-BZ1) is not listed when the RSTLICPGM command is run for a preinstalled and preconfigured iSeries(TM) server	IBM Business Solutions is not installed on your server.	Reinstall both the IBM Telephone Directory V5.2 application and the IBM Welcome Page V1.1 application.

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. For more information, see Notices and limitations in the *IBM Telephone Directory V5.2* topic.
URL fails or the application does not appear	If you did not start the IBM Welcome Page application, the URL fails (*http://your.server.name:port/ibm-bizApps/welcome/home.do* or *http://your.server.name:port/ibm-bizApps/welcome/admin.do*).	Start the IBM Welcome Page application.

Troubleshoot usage

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.

| Special characters (such as ", &, <, or >) not handled correctly | The IBM Welcome Page V1.1 application has been written to accept and handle all characters correctly, even those identified as special characters (or metacharacters) for HTML, JavaScript[TM], and LDAP filters and attribute values. | There are known cases when the IBM Welcome Page V1.1 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.

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. |
|---|---|---|

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 have to 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[R] Application Server - Express V5, see the associated Troubleshooting topic.
- For WebSphere Application Server - Express for iSeries V5.1, see the associated Troubleshooting topic.
- For WebSphere Application Server for iSeries V5, see the associated Troubleshooting topic.
- For WebSphere Application Server for iSeries 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

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