Sun Java System Communications Express 6.3 Administration Guide

Sun microsystems

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Preface

This guide describes how to administer, configure, and deploy Sun Java™ System Communications Express 6.3 and its accompanying software components.

This preface contains the following sections:

Who Should Read This Book

You should read this book if you are responsible for administering, configuring, and deploying Communications Express.

Before You Read This Book

This book assumes that you are responsible for configuring, administering, and maintaining Communications Express, and you have an understanding of the following:

- JavaScript ™

- HTML

- Sun Java System Calendar Server

- Sun Java System Web Server Enterprise Edition or Sun Java System Application Server Enterprise Edition

- Sun Java System Messaging Server

- Sun Java System Access Manager (formerly known as Sun Java ™ System Identity Server)

- Sun Java System Directory Server

How This Book is Organized

This manual contains the following chapters.

TABLE P–1 Organization of the Sun Java System Communications Express Administration Guide

Chapter	Description
This chapter	Describes the audience, requirements, organization, document conventions, and related information.
Chapter 1, "Overview of Communications Express"	Provides a high-level overview of Communications Express, including the components, architecture, and interfaces.
Chapter 2, "Installing and Configuring Communications Express"	Describes how to invoke the configuration wizard and configure Communications Express.
Chapter 3, "Configuration Details"	Describes the configuration details for Communications Express.
Chapter 4, "Implementing Single Sign-On"	Provides an overview of the single sign-on process and its implementation.
Chapter 5, "Troubleshooting"	Describes the common problems you might encounter during installation and deployment of Communications Express and outlines the steps to create and enable error logs.
Chapter 6, "Configuring Hosted Domains"	Describes the changes to be made to Communications Express to enable hosted domains.
Chapter 7, "Migrating Personal Address Book Data to Address Book Server"	Provides a high-level overview of the data migration process and the steps to migrate the PAB data to the address book server.
Chapter 8, "Performance Tuning and Load Balancing Mechanisms in Communications Express"	Describes the tuning you can perform on Directory Server, Calendar Server, Web Server, and Communications Express to enhance performance.
Appendix A, "Configuration Panel Sequence"	Lists the panel sequence depending on the schema and web container selected.
Appendix B, "Installing Communications Express Without Messaging Server and Using a Single Tree Structure"	Describes how Communications Express uses the two Directory Information Tree mechanism and how an existing single tree namespace structure maps to the dual tree namespace.
Appendix C, "Configuration Parameters Reference"	Describes the configuration parameters for Communications Express present in `db_config.properties` file, `uwcconfig.properties` file, `uwcauth.properties` file, `uwclogging.properties` file, `uwcdomainconfig.properties` file, and `personalstore.properties` file.
Appendix D, "Password Encryption in Communications Express"	Communications Express is shipped with a tool that can be used to manage passwords. This appendix describes how administrators can use the password encryption tool to manage their passwords.

Conventions Used in This Manual

The tables in this section describe the conventions used in this book.

Typographic Conventions

The following table describes the typographic changes used in this book.

TABLE P–2   Typographic Conventions

Typeface	Meaning	Examples
AaBbCc123 (Monospace)	Any text that appears on the computer screen or text that you should type. Can be API and language elements, HTML tags, web site URLs, command names, file names, directory path names, onscreen computer output, sample code.	Edit your `.login` file. Use `ls -a` to list all files. `% You have mail.`
AaBbCc123 (Monospace bold)	Text you should type when it appears within a code example or other onscreen computer output.	`% `**`su`**` Password:`
AaBbCc123 (Italic)	A placeholder in a command or path name that you should replace with a real name or value (for example, a variable). This also can be a book title, new term, or word to be emphasized.	The file is located in the *msg-svr-base*/`bin` directory. Read Chapter 6 in the *User's Guide*. These are called *class* options. Do *not* save the file.

Symbols

The following table describes the symbol conventions used in this book.

TABLE P–3   Symbol Conventions

Symbol	Description	Example	Meaning
[ ]	Contains optional command options.	`ls [-l]`	The `-l` option is not required.
{ | }	Contains a set of choices for a required command option.	`-d {y|n}`	The `-d` option requires that you use either the y argument or the n argument.
-	Joins simultaneous multiple keystrokes.	Control-A	Press the Control key while you press the A key.

TABLE P–3 Symbol Conventions   *(Continued)*

Symbol	Description	Example	Meaning
+	Joins consecutive multiple keystrokes.	Ctrl+A+N	Press the Control key, release it, and then press the subsequent keys.
\>	Indicates menu item selection in a graphical user interface.	File \> New \> Templates	From the File menu, choose New. From the New submenu, choose Templates.

Command Line Prompts

Command line prompts (for example, % for a C-Shell, or $ for a Korn or Bourne shell) are not displayed in the examples. Depending on which operating system you are using, you will see a variety of different command line prompts. However, you should enter the command as it appears in the document unless specifically noted otherwise.

Related Documentation

The following is a list of related documentation for Communications Express.

- Sun Java System Communications Suite 5 Release Notes
- Sun Java System Messaging Server 6.3 Administration Guide
- Sun Java System Messaging Server 6.3 Administration Reference
- Sun Java System Calendar Server 6.3 Administration Guide
- Sun Java System Calendar Server 6.3 Developer's Guide
- Sun Java System Communications Services 6.4 Delegated Administrator Guide
- Sun Java System Communications Express 6.3 Administration Guide (This guide.)
- Sun Java System Communications Express 6.3 Customization Guide
- Sun Java Enterprise System Technical Note: Sun Java System Calendar Frequently Asked Questions
- Sun Java Enterprise System Glossary

Where to Find Related Information

In addition to this guide, Sun Java System Communications Express comes with supplementary information for administrators as well as documentation for end users and developers. Use the following URL to see all the Communications Express documentation:

http://docs.sun.com/app/docs/prod/sunjava.comm#hic

Where to Find this Book Online

You can view this documentation online in PDF and HTML formats by pointing your browser to the following URL:

http://docs.sun.com/app/docs/coll/1631.1

Related Third-Party Web Site References

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1

Overview of Communications Express

Sun Java System Communications Express 6.3 provides a 508 compliant integrated web-based communication and collaboration client that caters to the needs of Internet Service Providers, Enterprises, and Original Equipment Manufacturers.

As a web-based client, the three client modules of Communications Express, which are Calendar, Address Book, and Mail depend on a browser for presentation.

This chapter contains the following sections:

System Requirements

This section describes the following:

Platforms Supported

The product is supported on the following platforms:

- Solaris 9 and Solaris 10 on SPARC®
- Solaris 9 and Solaris 10 on x86
- Linux Red Hat 4.0 Advance Server

You can also upgrade Communications Express from previous releases of Java Enterprise System:

- Solaris 9 and Solaris 10 on SPARC with Sun Java Web Server 6.x and Sun Java™ Application Server 8.1

- Solaris 9 and Solaris 10 on x86 with Sun Java Web Server 6.x and Sun Java Application Server 8.1

- Linux Red Hat 4.0 Advance Server with Sun Java Web Server 6.x and Sun Java Application Server 8.1

For optimal performance, use the browser and platform combinations listed below.

TABLE 1–1 Browser Platform

Browsers	Windows XP	Windows 2000	Solaris	RH Linux	Macintosh OS X
Netscape™ Communicator	7.2	7.2	7.2	7.2	N/A
Internet Explorer	6.0 sp2 and later	6.0 sp1+	N/A	N/A	N/A
Mozilla	1.7+	1.74	1.74	1.74	N/A
Safari	N/A	N/A	N/A	N/A	2.0.3
Firefox	1.0.7	1.0.7	1.0.7	1.0.7	N/A

Software Dependencies

The following software should be installed before installing Communications Express:

- Directory Server 5.2 and 6.0
- Calendar Sever 6.3
- Messaging Server 6.3
- Web Server 7.0 or Application Server 8.2

Product Features

- Communications Express has an integrated user interface for calendar, mail, and address book.

- Communications Express supports Identity Single Sign-On .

- Both calendar and mail applications share the same address book.

- Calendar, mail, and address book modules share common user preferences .

- Communications Express supports virtual domains.
- LDAP failover mechanism.

High-Level Architecture

The Calendar and Address Book client modules are deployed as a single web application in any web container. The mail module is rendered by the Messenger Express. Messenger Express is the standalone web interface mail application that uses the HTTP service of the Messaging Server.
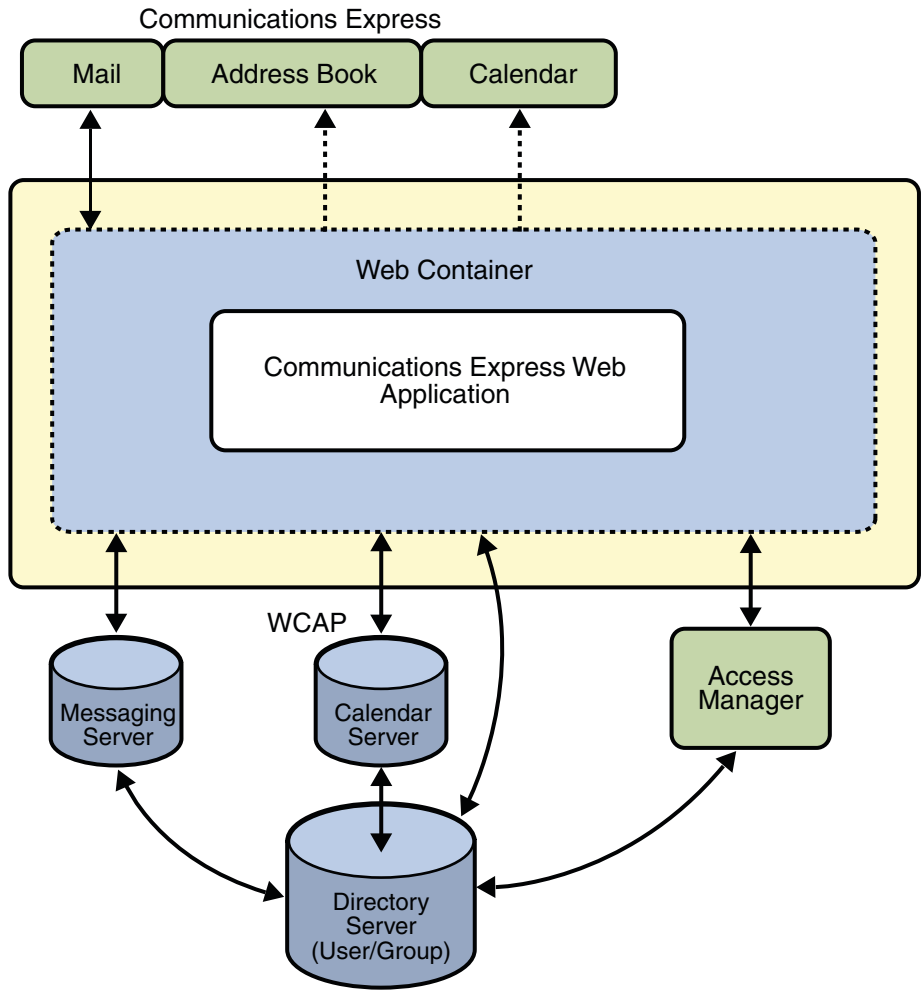
FIGURE 1–1   High Level Architecture

Default Paths and File Names

The following table describes the default paths and file names used in this book.

TABLE 1–2 Default Paths and File Names

Term	Description
msg-svr-base	Represents the base installation directory for Messaging Server. The default value of the `msg-svr-base` installation is as follows: Solaris™ systems: `/opt/SUNWmsgsr` Linux systems: `/opt/sun/messaging`
cal-svr-base	Represents the base installation directory for Calendar Server. The default value of the `cal-svr-base` installation is as follows: Solaris systems: `/opt/SUNWics5` Linux systems: `/opt/sun/calendar`
uwc-basedir	Represents install directory. The directory path is entered for Communications Express in the panel "Install Directories" of the JES installer. The default value of the `uwc-basedir` is: Solaris systems`/opt/SUNWuwc` Linux systems `/opt/sun/uwc`
uwc-deployed-path	Represents the directory where Communications Express is deployed. The directory path is entered in the panel "Select Directory to Store Configuration and Data files" of the configuration wizard. The default path is: Solaris systems: `/var/opt/SUNWuwc` Linux systems: `/var/opt/sun/uwc`
uwc-deloyed-path/WEB-INF/config	Represents the directory under which all the Communications Express Configuration files are located.
uwc-deployed-path/WEB-INF/domain	Represents the directory that contains domain specific configuration files.

2

Installing and Configuring Communications Express

This chapter describes how to install and configure Communications Express.

The following topics are covered in this chapter:

Before You Begin

Before you configure Communications Express make sure you have the following dependent components installed:

- Ensure Messaging Server and Calendar Server are installed and configured. Make sure you have relevant details about the installation set ups. For example, the hostname, port number, administrator username and password. These details are required when you configure Communications Express.

- Install the directory preparation tool : `comm_dssetup.pl` from the Sun Java™ Communications Suite Install wizard.

Communications Express File Directory Layout

After you install and configure Communications Express, the related files and directories are arranged in the organization as shown in Table 2–1. The table is not exhaustive. It shows only the required directories and files for typical server administration tasks.

TABLE 2–1 Communications Express Directories and Files

Directory and Legends	Default Location and Description
Communications Express Base `uwc-basedir`	Default location: Solaris™: `/opt/SUNWuwc/` Linux: `/opt/sun/uwc/` Communications Express is installed in this directory. Note: Only one Communications Express Base directory per machine is permitted.
Deployed Directory `uwc-deployed-dir`	Default location: Solaris: `/var/opt/SUNWuwc/` Linux: `/var/opt/sun/uwc/` Communications Express is deployed in this directory. The web container takes the files from this location while loading Communications Express.
Web Applications Root Directory `WEB-INF`	*uwc-deployed-dir*/`WEB-INF` `WEB-INF` directory of Communications Express web application
Webmail directory	`uwc-deployed-dir/webmail` Contains all the webmail related files that Communications Express uses.
Configuration `config`	*uwc-deployed-dir*/`WEB-INF/config/` Contains all the Communications Express configuration files
Domain `domain`	*uwc-deployed-dir*/`WEB-INF/domain/` Contains per domain localization and Customization files
Skin `skin`	*uwc-deployed-dir*/`WEB-INF/skin/` Contains per domain themes
Logs `logs`	*uwc-deployed-dir*/`logs/` Contains the Communications Express log files
System Administrator Programs `sbin`	*uwc-basedir*/`sbin/` Contains the Communications Express system administrator executable programs and scripts

TABLE 2–1 Communications Express Directories and Files   *(Continued)*

Directory and Legends	Default Location and Description
Help	*uwc-deployed-dir*/help
help	Contains Communications Express help files

Installing Communications Express from the Sun Java Communications Suite Install Wizard

To install Communications Expressafresh, uninstall any previous installation of Communications Express. You need to uninstall Communications Express by using Sun Java Communications Suite Uninstaller if you have installed it from an earlier build of the Sun Java Communications Suite installer. On Solaris, Sun Java Communications Suite Uninstaller is available at the following path: `/var/sadm/prod/SUNWcomm-entsys5`.

▼ To Install Communications Express

1   **Select Sun Java System Communications Express from the list of components displayed in Sun Java Communications Suite Install Wizard.**

Note – When Sun Java System Communications Express is selected, the products which Communications Express depends on gets automatically selected. However, if any of these products are already installed in the system, the dependent product that is already installed is disabled.

If Messaging Server, Calendar Server, and Directory Server are installed on remote hosts, you can choose not to install these components on the same machine.

Click Next. The Install Directories screen is displayed.

2   **Browse to specify the name of the target installation directory for each component product and Click Next.**
    After a couple of screens the Configuration Type screen is displayed.

3   **Select the type of configuration you want.**

The options available are:

- **Configure Now**: Allows you to configure component products that permit configuration at installation time.
- **Configure Later**: Allows you to install the packages in the specified directory paths and proceed without configuring them. For more details, refer *Sun Java Communications Suite 5 Installation Guide*.

Note – Communications Express cannot be configured from the Sun Java Enterprise System Install Wizard. You need to run the Communications Express configuration wizard to configure Communications Express.

Select a configuration type and click Next. The Custom Configuration screen appears.

4   **Click Next to configure any other component products to complete the installation process.**

Prerequisites for Configuring Communications Express

Before running the Communications Express configuration wizard, make sure you :

- Choose your schema. Refer to the section on "Schema Choices" on page 29 for information on the available schema.
- Ensure that you have the following entry in the /etc/hosts file on your Solaris system:

  ip-of system Fully-Qualified-Hostname

  For example,

  ```
  129.158.230.64 budgie.siroe.varrius.com budgie
  ```

- Ensure that the following components are up and running before you configure Communications Express. Make sure that the configuration of the products for Communications Express is done in the following order:
  - Directory Server
  - Application Server or Web Server

> **Note –** After this step, run the Directory Preparation Script `comm_dssetup.pl` to update the schema details in the User/Group Directory Server.
>
> To run Directory Preparation Script (`comm_dssetup.pl`) type:
>
> `cd` */root -of -the -directory -preparatory-script* `/SUNWcomds/sbin`. By default, the directory preparation script can be found at the following path:
>
> - **Solaris**: `/opt/SUNWcomds/sbin`
> - **Linux**: `/opt/sun/comms/dssetup/sbin`
>
> `perl comm_dssetup.pl`

- Access Manager, if Communications Express wants to participate in SSO (Single Sign On) with other products (For example, Portal Server).

> **Note –** The Web Server that is hosting Communications Express should be running as `root` when configuring for Remote AM SDK deployment.

- Messaging Server
- Calendar Server
- Delegated Administrator if you have chosen Sun Java System LDAP Schema, v.2
- Verify whether users are able to log in to the following servers correctly:
  - Messaging Server
  - Calendar Server
  - Access Manager (formerly known as Identity Server), if you want Communications Express to participate in SSO with other products

Schema Choices

Prior to installing and configuring, you will need to decide on the schema model you wish to adopt. You have two schema and web container options available when deploying Communications Express.

- Sun Java System LDAP Schema, v.1
- Sun Java System LDAP Schema, v.2

The configurator screen displayed for each schema and web container combination varies depending on your schema and web container selection. Appendix A, "Configuration Panel Sequence" , lists the screens that are displayed for each schema and web container combination.

Invoking Configuration Wizard

This section describes how to invoke the configuration tool

▼ To Invoke the Configuration Wizard

1   **Login as Administrator (**`root` **for UNIX or Linux).**

2   **Before invoking the configuration wizard set the display settings.**

3   **Go to** *uwc-basedir*/`sbin/` **directory.**

4   **Type the following at the command prompt to invoke the configuration wizard:**
    `./config-uwc` to invoke the configuration tool in the GUI mode.

    `./config-uwc -nodisplay` to invoke the configuration tool in the console mode.

    Note – This chapter discusses configuration of Communications Express in GUI mode.

    Note – This version does not support the silent installation mode.

Configuring Communications Express

The following steps walk you through configuring Communications Express.

Note – If you are invoking the configuration wizard in a language other than English, resize the configuration screen to view its contents properly.

▼ To Configure Communications Express

1   **Run the configuration wizard by following the steps in "Invoking Configuration Wizard" on page 30.**
    The Welcome screen appears. Click Next. The Select the Directory to Store Configuration and Data Files screen appears.

2   **Select the directory in which the configuration and data files for Communications Express should be deployed.**

For example, /var/opt/SUNWuwc. This directory is referred as *uwc-deployed-path* throughout this guide.

Click Next. The Select Components to be Configured screen appears.

.

3   **Select the components you want to configure and deselect those components you do not wish to configure.**

The following components are available:

- Mail Component
- Calendar Component

Note – You have to select at least one component from the Select Components to be Configured screen.

Although the component size is displayed as zero, the Mail and Calendar components are installed.

Click Next. The Network Connection screen appears. The configuration program tries to establish network connection by using the host name and the DNS domain name displayed in this screen.

Host Name: Displays the host name on which Communications Express is being configured

DNS Domain Name: Displays the DNS domain name maintained by the DNS Server

Click Next. The Select a Web Container screen appears.

4   **Select the web container you want to use.**

The options available are:

- Web Server
- Application Server

Click Next.

If you have selected Web Server as your web container, the following screens appear.

- **Configure the Web Server by performing the following steps.**

  The Web Server Configuration Details screen appears first.

  a.   **Specify the local Web Server instance details.**
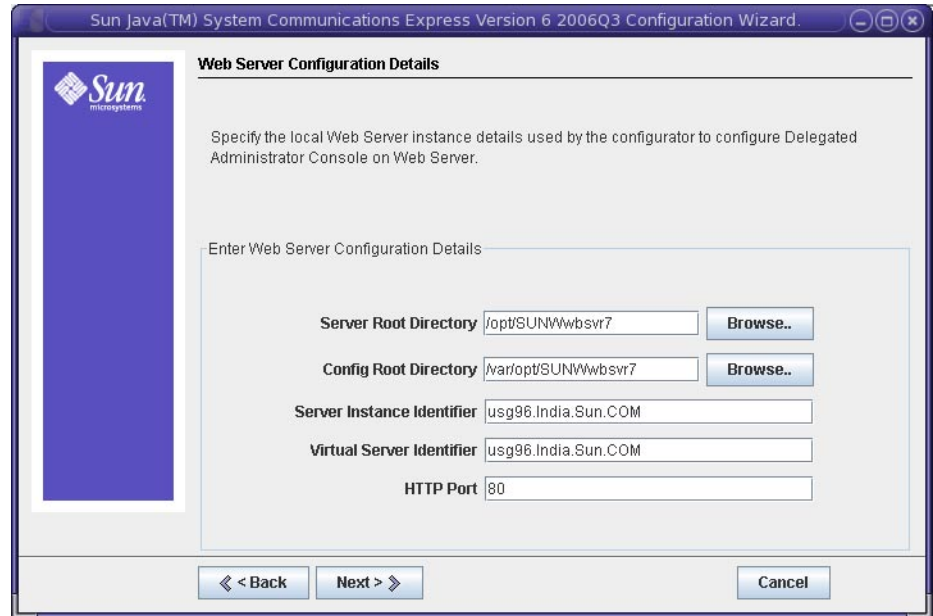
- **Server Root Directory**: Browse to select the installation root of the Web Server. Default location is /opt/SUNWwbsvr7/.

- **Server Instance Identifier**: Enter the Web Server instance on which Communications Express is to be deployed. For example, budgie.siroe.varrius.com.

- **Virtual Server Identifier**: Enter the virtual server identifier on which Communications Express is to be deployed. For example, https-budgie.siroe.varrius.com.

- **HTTP Port**: Enter the HTTP port number Web Server listens to. The Web Server listens to this HTTP port number when Communications Express is accessed.

   Note – If you want to configure a secure HTTP port number, specify it after configuring Communications Express. To configure a secure port number see "Configuring Secure Socket Layer" on page 57.

Click Next. The configuration wizard checks if the Web Server connection instance is alive. If the Web Server instance is not up and running, an error message appears. Refer to "Prerequisites for Configuring Communications Express" on page 28 to know more about the prerequisites required before configuring Communications Express. The Web Server Administration Instance Details screen appears.

b. **Specify the Administration Instance Details.**

The following options are available

- **Administration Server Port**: Enter the Web Server administration server port number.

- **Administration Server User ID**: Enter the Web Server administrator user ID.

- **Administration Server Password**: Enter the Web Server administrator password.

You will see a small popup window indicating that the Web Server Instance is being verified. This may take a few minutes.

If the configuration wizard is unable to connect to the Web Server Instance, an error message is displayed. Click Accept, to continue with the installation process, or click Choose New, to specify different Web Server configuration details.

Click Next. The Web Container User and Group screen appears.

c. **Specify the identity, the web container uses to run the services.**

- **Web Container User ID**: Displays the web container user identifier from the user database.
- **Web Container Group ID**: Displays the web container group identifier from the group database.

Click Next. The configuration wizard installs some files and directories containing sensitive data, such as passwords. The ownership of these files and directories are given to web container user and group mentioned in this screen. Only the web container user is given read and write permissions to the files and directories containing sensitive data.

Note – Ensure you enter the correct web container User ID and Group ID values in this screen. Entering wrong values may result in startup failure of the Communications Express.

Click Next.

- **If you have selected Application Server to be your web container, the following screens appear:**

Configure Application Server by performing the following steps. The Application Server Configuration Details screen appears first.

a. **Specify the Application Server Configuration Details that the configuration wizard can use to configure Communications Express with Application Server.**

- **Install Directory**: Browse to select the local directory in which Application Server is installed.

- **Domain Directory**: Browse to select the domain directory of the Application Server.

- **Document Root Directory**: Browse to select the document root directory of the Application Server.

- **Server Target Name**: Enter a name for the Application Server target, for which Communications Express is to be configured. The Communications Express configuration wizard supports only the Domain Administration Server (DAS) deployment for Application Server .

- **Virtual Server Identifier**: Enter the virtual server identifier for which Communications Express is to be configured.

- **Server Instance HTTP Port**: Enter the Application Server port number where an HTTP service is available. This is the HTTP port from which Communications Express application will be accessed.

Note – Specify the HTTP Port number here. If you want to configure a secure HTTP port number, specify it after configuring Communications Express. To configure a secure port number, refer to the post configuration steps provided in the section "Configuring Secure Socket Layer" on page 57 .

Click Next. You will see a popup window indicating that the Application Server Instance is being verified. This may take a few minutes. An Error message is displayed if the configure tool is unable to connect to the Application Server Instance. Click Accept, to continue with the installation process, or click Choose New, to specify the Application Server Configuration Details again. When the configuration wizard successfully verifies the Application Server instance, the Application Server instance Details screen is displayed.

b. Specify the administration instance details of the Application Server.

The administration instance details are used by the configuration wizard to deploy Communications Express on Application Server:

- **Administration Server Port**: Enter the Administration Server port number.

Note – The administration port of the Application Server that you specify must be available for configuring Communications Express on Application Server.

- **Administrator User ID**: Enter the administrator's user identifier.
- **Administrator Password**: Enter the administrator's user password.

■ **Secure Administration Server Instance**: Select this option to specify that the Application Server's administration instance is running in the secure mode. Deselect the checkbox, to specify that the Application Server's administration instance is running in the normal mode.

Depending on the selection, a popup window confirming the mode in which the Application Server's administration instance is running appears. Click OK to exit the popup window.

Note – When deploying Communications Express on the Application Server, two files, `server.xml` and `server.policy`, are modified. Before modifying the `server.xml` and `server.policy` files, a backup of these files is maintained by the configuration wizard. The backup files are stored in the directory: *DOMAIN-DIRECTORY/SERVER-INSTANCE-NAME*/config/.CommsExpress_YYYYMMDDhhmmss

Here:

- DOMAIN-DIRECTORY is the Application Server's domain directory.
- SERVER-INSTANCE-NAME is the Application Server Instance Name for which Communications Express is being configured.
- YYYYMMDDhhmmss is the time stamp of the backup directory.

Click Next. The Module Name for this Web Application screen appears.

c. Enter the module name with which Communications Express should be deployed on Application Server.

The configuration wizard has now collected the required parameters to configure Communications Express with the web container of your choice.

Click Next. The Web Container User and Group screen appears.

5 Specify the identity, the web container uses to run the services.

- **Web Container User ID**: Displays the web container user identifier from the user database.
- **Web Container Group ID**: Displays the web container group identifier from the group database.

Click Next. The configuration wizard installs some files and directories containing sensitive data, such as passwords. The ownership of these files and directories are given to web container user and group mentioned in this screen. Only the web container user is given read and write permissions to the files and directories containing sensitive data.

Note – Ensure you enter the correct web container User ID and Group ID values in this screen. Entering wrong values may result in startup failure of the Communications Express.

Click Next. The URI Path Setting screen appears.

6   **Enter the URI where Communications Express should be deployed.**

For example, /uwc.

⚠️ **Caution** – If you are using an existing URI to deploy Communications Express, the configuration tool first removes any previous application data before deploying Communications Express on that URI. For example, if you are deploying Communications Express on a URI such as /uwc that has a web application deployed in it, Communications Express configurator first removes the existing web-application from /uwc before deploying Communications Express. This could result in the loss of the previous application's data and accessibility of the application.

Click Next. The Do you want Hosted Domain Support? screen appears.

7 **Select the option to enable hosted domain support for Communications Express.**

Select this option only if you have enabled hosted domain support in Calendar Server.

Click Next. The User/Group Directory (LDAP) Server Details screen appears.

8 **Enter the following details:**

LdapURL: Specify the user or group LDAP URL in the format ldap://*UG-LDAP-HOST*:*UG-LDAP-PORT*, where :

- *UG-LDAP-HOST* is the LDAP hostname for the user or group
- *UG-LDAP-PORT* is the LDAP port number

Bind DN: Enter the LDAP distinguished name of the User/Group administrator.

Bind Password: Enter the bind password for User/Group administrator.

Click Next. The DC Tree Suffix screen appears.

9 **Enter the base distinguished name for the DC tree suffix.**

This suffix is used by the Communications Express to search for domain lookup.

Click Next. The Default Domain Name screen appears.

10 **Enter the default domain name.**

Each domain has certain properties. When a user logs into a domain that does not have the required properties, the properties are picked up from the default domain name.

Click Next. The Enable Access Manager for Single Sign-on screen appears.

11 **Select Enable Identity Support for Communications Express if you want to enable Access Manager for Single Sign-on.**

Only if you have enabled Identity Support for Communications Express, the Access Manager Preferences screen is displayed.

Enter the Access Manager Preferences such as the login URL, Access Manager Administrator DN and Password in this screen.

- **Admin DN**: Enter the complete LDAP DN (distinguished name) of the Access Manager Administrator, such as `DN=uid=amAdmin, ou=people,` *Access Manager- root suffix.*

- **Admin Password**: Enter the password for the Access Manager administrator.

Click Next. The Messaging Express Port screen appears.

12   Specify the Messaging Server related parameters.

This screen appears only when the mail component is selected in the Select Components to be Configured screen.

The following options are available:

- **Webmail Server Hostname**: Specify the hostname where the webmail server is installed.

- **Webmail Server Port Number**: Specify the port number to which the webmail server listens to.

- **Enable login in secure mode**: Select this option if you want users to log in secure mode.

- **Webmail Server SSL Port Number**: If you have configured Webmail Server to run in SSL mode, enter the SSL port number.

- **Webmail Admin User ID**: Specify the administrator user ID for the Webmail Server.

- **Admin Password**: Enter the administrator password for webmail.

Click Next. The Calendar Server Host and Port Configuration screen appears.

13   **Specify the Calendar Server host and port .**

This screen appears only when calendar component is selected in the Select Components to be Configured screen.

The options available are:

- **Calendar Server Host Name**: Enter the Calendar Server's host name.
- **Calendar Server HTTP Port Number**: Enter the Calendar Server's HTTP port number.

Click Next. The Calendar Server Administration Details screen appears.

14   **Enter the Calendar Server user ID and password.**
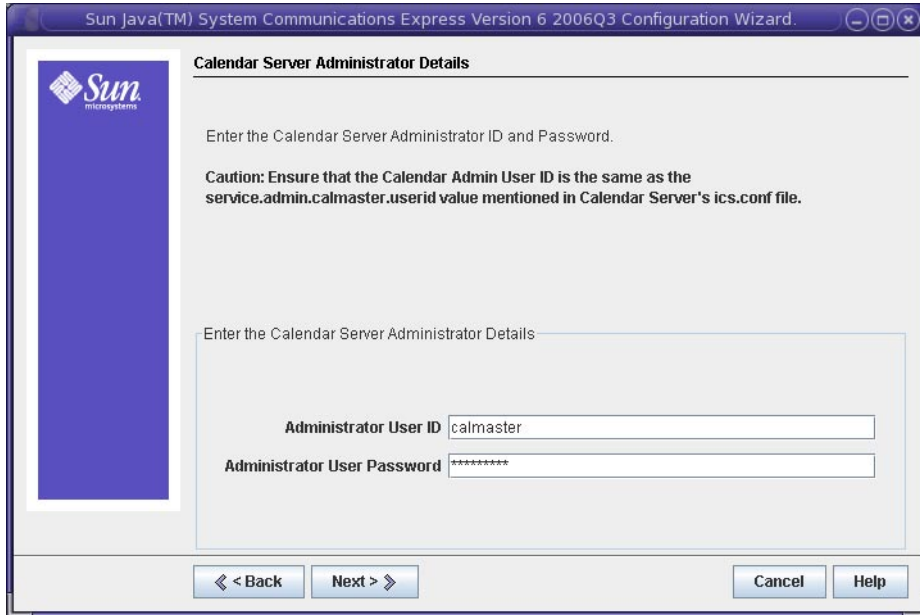
- **Administrator User ID**: Enter the Calendar Server's administrator's name. For example, calmaster.

- **Administrator User Password**: Enter the Calendar Server's administrator's password.

Note – Ensure that the Calendar Admin User ID value you have entered here is the same as the `service.admin.calmaster.userid` value mentioned in Calendar Server's `ics.conf` file.

Click Next. The PAB Directory Server Details screen appears.

15 Specify the details where the PAB entries are stored in the LDAP server.
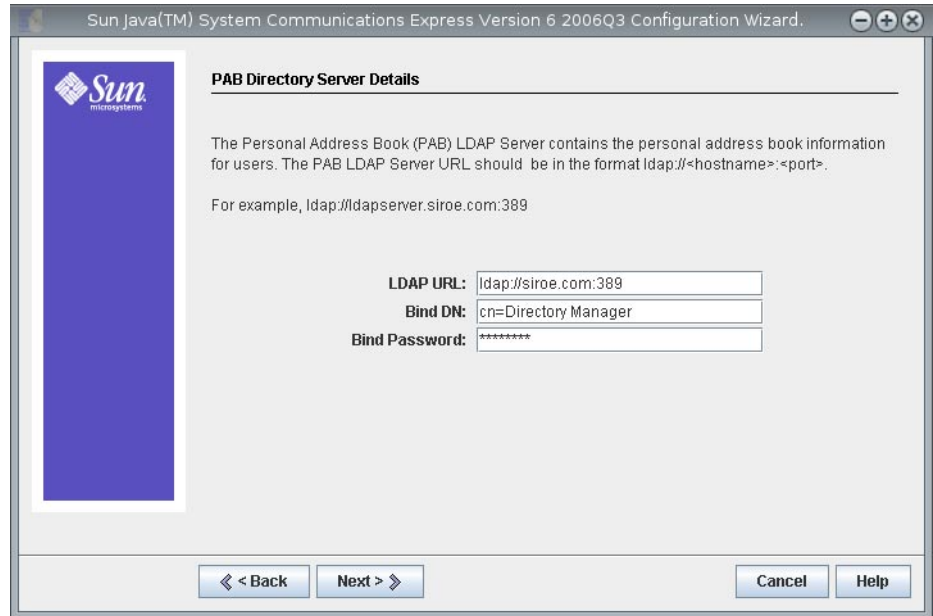
The Personal Address Book LDAP Server is the store where users personal address books are located. Enter the following details in this screen:

- **LDAP URL**: Specify the LDAP host and port for the PAB Store. The URL should be in the format: `ldap://PAB-ldap-hostname:PAB-ldap-portnumber`
- **Bind DN**: Enter the LDAP DN to be used to bind to the PAB Store. The Bind DN specified here should have appropriate privileges to manage the data under root suffix `o=PiServerDB`.
- **Password**: Enter the bind password.

Click Next. The Ready to Configure screen appears.

The configuration program checks for enough disk space on your machine and then lists the components it is ready to configure.

- Click Configure Now, to configure Communications Express.
- Click Back, to change any of your configuration variables.
- Click Cancel, to exit from the configuration program.

If you clicked Configure Now, a summary of tasks and the sequence status is displayed. Click Next. The Configuration Summary screen lists the status of the configuration program. Click Details button to view the log.

The Post Configuration Instructions screen appears only when the configuration is successful. This screen may display warning messages when the required shared components are not installed. In order to complete the configuration process, follow the post-configuration instructions provided here.

Post Configuration Instructions

To complete the configuration process, follow the post configuration steps.

Note – Make sure you are familiar with the location of the Communications Express files. Refer to the section on "Default Paths and File Names" on page 22.

Refer to Chapter 3, "Configuration Details," for more details on the configuration parameters.

▼ To Configure Communications Express After Installation

After installing Communications Express, ensure that for a setup using Access Manager single sign-on, the Core and LDAP services are added. For more information, refer to the section on "Tuning LDAP Related Configuration Parameters" on page 113 in Chapter 8 of this guide.

After you have configured Communications Express, perform the following steps:

1 Enable the Mail component in Communications Express by configuring Single Sign-On.

Refer to Chapter 1, "Overview of Communications Express," for information on configuring Messenger Express and Communications Express.

Set the following parameters:

- *local.webmail.sso.uwccontexturi = context-uri-for-communications-express-installation*
- *local.webmail.sso.uwcport = uwc-port-for-communications-express-installation*
- *local.webmail.sso.uwcsslport = uwc—ssl-port-for-communications-express-installation*
- *local.webmail.sso.uwcenabled* =1

2 Go to *calendar-server-install-directory*/SUNWics5/cal/bin/config **(For example,** /opt/SUNWics5/cal/bin/config**).**

Edit the ics.conf file and set the following:

- *service.http.allowadminproxy* = "yes"
- *service.http.admins* = *proxy-admin-for-calendar-http-service*
- *service.admin.calmaster.userid* = the-value-specified-for-calendar.wcap.adminid-in-uwcconfig.properties
- *service.admin.calmaster.cred* = the-value-specified-for-calendar.wcap.passwd-in-uwcconfig.properties
- *service.wcap.anonymous.allowpubliccalendarwrite* = "yes"
- *service.http.allowanonymouslogin* = "yes"

- *service.calendarsearch.ldap* = "no"
- *service.http.ui.enabled* = "yes"

If you have edited the `ics.conf` file, restart Calendar Server for the changes to take effect.

3 Type the following commands to restart the Messaging Server.

<msg-svr-base>/sbin/stop-msg

<msg-svr-base>/sbin/start-msg

4 Type the following commands to restart the Calendar Server.

<cal-svr-base>/cal/sbin/stop-cal

<cal-svr-base>/cal/sbin/start-cal

5 Restart the web container.

Communications Express is now ready and you can access the application from:

http://*Web-Container-host*: *Web-Container-port*/URI path

where:

- *Web-Container-host* is the host name of the web container instance in which the Communications Express application is configured.
- *Web-Container-port* is port number of the web container instance in which the Communications Express is configured.
- URI path is the path specified in the URI Path Setting screen.

Undeploying Communications Express

To undeploy Communications Express from Web Server or Application Server, you need to undeploy the Communications Express web application. Please refer to the relevant documentation for Web Server and Application Server on how to undeploy an application.

3

Configuration Details

This chapter describes the configuration details for Communications Express.

Communications Express Configuration Files

Communications Express maintains the configuration parameters in the following configuration files:

- The uwcauth.properties file maintains the authentication, user or group access, and single sign-on related parameters. The uwcauth.properties file is located at : *uwc-deployed-path*/WEB-INF/config/.

- The uwcconfig.properties file maintains the calendar, mail, and address book related configuration parameters. The uwcconfig.properties file is located at:*uwc-deployed-path*/WEB-INF/config/.

- The db_config.properties file defines the address book store configuration details. By default, Communications Express deploys two types of db_config.properties file.

  - **Personal address book store**. The personal address book store configuration file resides at *uwc-deployed-path* /WEB-INF/config/ ldappstore/db_config.properties.

  - **Corporate address book store**. The Corporate address book store configuration file resides at *uwc-deployed-path* /WEB-INF/config/corp-dir/db_config.properties.

▼ To Edit the Configuration File

Before You Begin All configuration files are ASCII text files, with each line defining a parameter and its associated value in the following format:

parameter =value

The parameters are initialized when configuring Communications Express. You can use a text editor to edit the file. Here are some conventions for setting parameters in the configuration files:

- All parameters and their associated one or more values must be separated by an equal sign (=). Spaces or tabs are allowed before or after the equal sign.

  For example:

  uwc-user-attr-sunUCDefaultApplication=calendar

- A comment line begins with an exclamation mark.

  By default some of the configuration parameters are commented out using exclamation mark. To use these parameters, remove the exclamation mark and change the parameter value.

1 **Log in as a user having modify permissions.**

2 **Change to the directory where the** `.properties` **file is located.**

3 **Edit the parameters using a text editor.**

4 **Restart the web container for the new configuration values to take effect.**

Configuration Parameter Details

You can modify calendar, mail, and address book configuration parameters as explained in the following tables.

- "Configuring Messenger Express Parameters in the `uwcconfig.properties` File" on page 49
- "Configuring Directory Server Related Parameters for Sun Java System LDAP Schema V.1 in the `uwcauth.properties` File" on page 49
- "Configuring Access Manager Parameters in the `uwcauth.properties` File" on page 51
- "Configuring User Lookup Parameters for User or Group in the `uwcauth.properties` File" on page 51
- "Configuring Calendar Server Parameters in the `uwcconfig.properties` File" on page 52
- "Configuring the Address Book Personal Store Parameters in the `db_config.properties` File" on page 53
- "Configuring Corporate Directory Parameters in the `db_config.properties` File" on page 54
- "Configuring Secure Socket Layer" on page 57

Configuring Messenger Express Parameters in the uwcconfig.properties **File**

Table 3–1 lists all the messenger express related parameters

TABLE 3–1 Mail Parameters

Parameter	Default Value	Description
mail.deployed		This parameter is set to true if Mail is deployed. The parameter is set when you run the configuration wizard.
webmail.host		Specifies the host on which the Messaging Server's HTTP service is running. The host name of Messenger Express should correspond to the machine name on which Web Server is deployed.
webmail.port		Specifies the port number that the Messenger Express HTTP uses on the "MSG/HTTP" host.
webmail.securedproxyauth		Specifies whether authentication is in SSL mode or non-SSL mode. If set to true, authentication is done in SSL mode
webmail.proxyadmin		Specifies the proxy administration user ID
webmail.ssl.port		Specifies the mail (HTTPS) server port.
webmail.proxyadminpass		Specifies the encrypted proxy administrator's password in encrypted format.

Configuring Directory Server Related Parameters for Sun Java System LDAP Schema V.1 in the uwcauth.properties **File**

You edit the parameters mentioned in Table 3–2 when the Authentication LDAP Server is different from the User or Group LDAP.

TABLE 3–2 LDAP Authentication Filter Parameters

Parameter	Default Value	Description
ldapauth.ldaphost		Specifies the LDAP host value. Normally the *ldapauth.ldaphost* value is the same as the *ldapusersession* value. You can set it to a different value, if required.

TABLE 3–2 LDAP Authentication Filter Parameters *(Continued)*

Parameter	Default Value	Description
ldapauth.ldapport		Specifies the LDAP port number
ldapauth.dcroot		Specifies the DC root for the authentication tree
ldapauth.domainattr	*inetDomainBaseDN, inetDomainStatus, inetDomainSearchFilter, domainUidSeparator, preferredLanguage*	Specifies the list of attributes to be retrieved from the domain entry in which the user is authenticated.
ldapauth.domainfilter	*(|(objectclass=inetDomain) (objectclass=inetDomainAlias))*	Specifies the filter based on which the domain entry is retrieved.
ldapauth.ldapbinddn		Specifies the User domain name of the user binding to the authentication LDAP.
ldapauth.ldapbindcred		Specifies the password of the user binding to the authentication LDAP.
ldapauth.enablessl	*false*	Specifies whether the directory against which authentication is to be performed is in SSL mode. Change the default value to true to set up a secure LDAP connection.

TABLE 3–3 LDAP User Group Parameters

Parameters	Default Value	Description
ldapusersession.ldaphost		Specifies the hostname of the user group directory server.
ldapusersession.ldapport		Specifies the port number of the user/group directory server.
ldapusersession.ldapbinddn		Specifies the UserDN of the administrator binding to the user or group directory server.
ldapusersession.ldapbindcred		Specifies the password of the *admin* binding to the user tree.
ldapusersession.dcroot		Specifies the Domain Component (DC) tree in the user or group LDAP that is used to resolve a user entry in Sun Java System LDAP Schema v.1.
ldapusersessionl.daploadbalancingstrategy	1	Specifies the LDAP load balancing strategy to be used. Valid values are *1*, *2*, or *3*.

TABLE 3–3 LDAP User Group Parameters *(Continued)*

Parameters	Default Value	Description
`ldapusersession.basedn`		This property is assigned a value during configuration of Communications Express. It specifies the `basedn` of the user group.

Configuring Access Manager Parameters in the `uwcauth.properties` **File**

TABLE 3–4 Access Manager Parameters

Parameter	Default Value	Description
uwcauth.identity.enabled		Specifies whether Identity Server is enabled. The attribute is set to `true` if Access Manager's single sign-on mechanism is used for authentication.
uwcauth.identity.binddn		Specifies the complete Distinguished Name (DN) of the *amAdmin* user. For example, *uid=amadmin, ou=People, o=siroe.com*
uwcauth.identity.bindcred		Specifies the *amAdmin* password.

Configuring User Lookup Parameters for User or Group in the `uwcauth.properties` **File**

TABLE 3–5 User Lookup Parameters

Parameter	Default Value	Description
ldapusersession.defaultugfilter	*uid@domain*	Specifies the default filter syntax to be used when retrieving the user entry.
ldapusersession.ldappoolmin	30	Specifies the minimum number of LDAP user connections to be created for a user or group LDAP.
ldapusersession.ldappoolmax	100	Specifies the maximum number of LDAP user connections to be created for a user or group LDAP. Enter an optimum value to suit your deployment's requirement.

Configuring Calendar Server Parameters in the uwcconfig.properties **File**

Note – Ensure that the Proxy Authentication and Anonymous Access is enabled in Sun Java™ System Calendar Server.

To enable Proxy Authentication and Anonymous Access, configure the following Calendar Server parameters in the calendar configuration file ics.config:

- *service.http.allowadminproxy* = "yes"
- *service.wcap.anonymous.allowpubliccalendarwrite* = "yes"
- *service.http.allowanonymouslogin* = "yes"
- *service.calendarsearch.ldap* = "no"

For more information about enabling Proxy Authentication and instructions on configuring the Calendar Server parameters, refer to *Sun Java System Calendar Server 6.3 Administration Guide*.

TABLE 3–6 Calendar Server Parameters

Parameter	Default Value	Description
calendar.deployed		Is set to true if Calendar is deployed. The parameter is set when you run the configuration wizard.
calendar.wcap.host		Specifies the host name of the WCAP server.
calendar.wcap.port		Specifies the port number WCAP listens to.
calendar.wcap.adminid		Specifies the administrator user ID for the WCAP Server.
calendar.wcap.passwd		Specifies the administrator password in encrypted form for the WCAP Server.

Note –

- Ensure that the Calendar Administrator User ID value you have assigned to *calendar.wcap.adminid* is the same as the *service.admin.calmaster.userid* value mentioned in the Calendar Server's ics.conf file.

- Ensure that the corresponding user entry for Calendar Administrator User ID exists on LDAP server.

Configuring the Address Book Personal Store Parameters in the `db_config.properties` File

Table 3–7 lists the default Address Book personal store configuration parameters in the `db_config.properties` file.

The file can be accessed from: *uwc-deployed-path*/`WEB-INF/config/ldappstore/`

TABLE 3–7   Personal Address Book Personal Store Parameters

Parameter	Default Value	Description
defaultserver.ldaphost		Specifies the LDAP host for the Personal Address Book (PAB) store.
defaultserver.ldapport		Specifies the port for the store.
defaultserver.ldapbinddn		Specifies the DN used to bind to the Personal Address Book Store.
		This value depends on the `login_type` value if the `login_type` is set to `restricted` or `proxy`.
		If the login type is `anonymous` you need not enter a value for this parameter.
defaultserver.ldapbindcred		Specifies the password for the DN used to bind to the Personal Address Book store.
login_type	restricted	Specifies the method through which the connection to the LDAP store is maintained.
		You can assign the following three values to this parameter:
		anon - Enables the user to connect to the LDAP as an anonymous user
		restricted - Enables the user to connect as a user who has the rights to perform operations on the Address Book Store.
		proxy - Enables the user to masquerade as a user who can perform operations on the Address Book Store. Assigning this value enhances performance as it bypasses the LDAP bind on each operation.
		Note – It is recommended that the user masquerading here have administration level Access Control Lists (ACLs).
defaultserver.ldappoolmin	4	Specifies the minimum number of LDAP client connections maintained for Personal Address Book Store.
defaultserver.ldappoolmax	12	Specifies the maximum number of LDAP client connections maintained for Personal Address Book Store.

TABLE 3–7 Personal Address Book Personal Store Parameters   *(Continued)*

Parameter	Default Value	Description
defaultserver.ldappooltimeout	10	Specifies the number of seconds before timing out an LDAP connection. Increase this value to accommodate large search results.
lookthru_limit	1000	Specifies the search query limit for a search.
delete_perm	true	Enables contact or group entries to be marked for deletion or deleted permanently.
		Set the parameter to `false` to mark the contacts or groups for deletion.
		Set the parameter to `true` to permanently delete the contacts and groups.
allow_duplicate_entries		Allows personal address book entries/groups to have the same name.

Configuring Corporate Directory Parameters in the `db_config.properties` File

Table 3–8 lists the default corporate directory parameters in the `db_config.properties` file. By default, all the LDAP related information is set based on the values mentioned for the user or group directory.

The `db_config.properties` file can be accessed from:`WEB-INF/config/corp-dir/`

TABLE 3–8 Corporate Directory Parameters

Parameter	Default Value	Description
defaultserver.ldaphost		Specifies the LDAP host for the Corporate Directory.
defaultserver.ldapport		Specifies the port for the Corporate Directory.
defaultserver.ldapbinddn		Specifies the DN used to bind to the Corporate Directory.
		If the login type is `restricted` or `proxy` it is mandatory to assign a value to *defaultserver.ldapbinddn*.
		If the login type is `anonymous` you need not enter a value for this parameter.
defaultserver.ldapbindcred		Specifies the bind password.

TABLE 3–8 Corporate Directory Parameters   *(Continued)*

Parameter	Default Value	Description
entry_id	uid	Specifies the key in the corporate directory used to identify a contact or group entry.
		You can set the *entry_id* to the UID or a key used to fetch the contact or group information, such as, *empid* or principal ID.
		In the xlate-inetorgperson.xml file replace "*uid*" in <*entry entryID= "db:uid"\>* with the *entry_id* value specified here.
login_type	restricted	Specifies the method using which the connection to the LDAP store is maintained.
		You can assign the following three values to this parameter:
		anon - Enables users to connect to the LDAP as an anonymous user.
		restricted - Enables users to connect as a user who has the rights to perform operations on the Address Book Store.
		proxy - Enables users to masquerade as a user who can perform operations on the Address Book Store. Assigning this value enhances performance as it bypasses the LDAP bind on each operation.
		NOTE: A Read only access is given to a masquerading user.
defaultserver.ldappoolmin	1	Specifies the minimum number of LDAP client connections maintained for Corporate Directory.
defaultserver.ldappoolmax	4	Specifies the maximum number of LDAP client connections maintained for Corporate Directory.
defaultserver.ldappooltimeout	60	Specifies the number of seconds before timing out an LDAP connection. Increase this value to accommodate large search results.
lookthru_limit	3000	Specifies the search query limit for a search.

Corporate Directory maintains the following two *xlate* files in the format *xlate-objectclass-name*.xml.

- xlate-inetorgperson.xml for contacts
- xlate-groupofuniquemembers.xml for groups

In *xlate-objectclass-name .xml*, *objectclass-name* represents the object class identifying a particular LDAP entry type. For example, xlate-inetorgperson.xml is an object class used to identify a contact, and *groupofuniquemembers* is an object class used to identify a group in Sun Java System Directory Server.

The *xlate* files contain the field mappings between an LDAP schema and the address book XML schema for a contact or group. The mapping is defined in terms of XML nodes. For example,

ab-xml-schema-keydb:LDAPField /ab-xml-schema-key

In this example:

- *ab-xml-schema-field* is the value that the address book uses in the code.
- *LDAPField* is the corresponding field name in LDAP.

You need to provide an appropriate field name for *LDAPField*. The value assigned to *LDAPField* should correspond to the value of *LDAPField* existing in your corporate directory LDAP schema.

Example 3–1 is an example of the `xlate-inetorgperson.xml` file.

EXAMPLE 3–1 Default Contents of xlate-inetorgperson.xml

```
<abperson uid="db:uid">
  <entry entryID="db:uid">
    <displayname>db:cn</displayname>
    <description>db:multilineDescription</description>
    <creationdate>db:createtimestamp</creationdate>
    <lastmodifieddate>db:modifytimestamp</lastmodifieddate>
  </entry>
  <person>
    <givenname>db:givenname</givenname>
    <surname>db:sn</surname>
  </person>
  <organization>
    <company>db:company</company>
    <organizationalunit>db:ou</organizationalunit>
    <location>db:expr: db:iplanetbuildingnum+' '+db:iplanetbuildinglev+' '+db:roomNumber</location>
    <title>db:title</title>
    <manager>db:manager</manager>
    <secretary>db:secretary</secretary>
  </organization>
  <phone priority="1" type="work">db:telephoneNumber</phone>
  <phone priority="2" type="fax">db:facsimileTelephoneNumber</phone>
  <phone priority="3" type="mobile">db:mobile</phone>
  <phone priority="4" type="home">db:homePhone</phone>
  <phone priority="5" type="pager">db:pager</phone>
  <email priority="1" type="work">db:mail</email>
  <im priority="1" service="SunONE">db:uid</im>
  <im priority="2" service="AIM">db:aimscreenname</im>
  <im priority="3" service="ICQ">db:icqnumber</im>
  <postaladdress type="home">
    <street>db:homePostalAddress</street>
  </postaladdress>
```

```
<postaladdress type="work">
  <street>db:postaladdress</street>
</postaladdress>
<weburl priority="1">
  <urladdr>db:labeleduri</urladdr>
  <description>URL</description>
</weburl>
<weburl priority="2">
  <urladdr>db:homepage</urladdr>
  <description>Home URL</description>
</weburl>
<calendar type="calendar">
  <urladdr>db:caluri</urladdr>
</calendar>
</abperson>
```

Configuring Secure Socket Layer

You can configure the Web Server or Application Server on which Communications Express is deployed in the SSL mode.

For information about how to configure the Web Server on which Communications Express is deployed in the SSL mode, refer to *Sun Java System Web Server 7.0 Administrator's Configuration File Reference* guide.

For information about how to configure the Application Server on which Communications Express is deployed in the SSL mode, refer to Sun Java System Application Server Administration Guide.

▼ To Use Communications Express in SSL Mode

1. **Set the following configuration parameters in the** *uwc-deployed-path* /WEB-INF/config/uwcauth.properties **file:**

   - *uwcauth.ssl.enabled=true*. If set to true, the entire authentication process and access of the application is done in SSL mode.
   - *uwcauth.https.port=SSL-port-number-of -the webcontainer-in which-uwc-is-deployed*
   - *webmail.ssl.port=SSL port for the Messaging Server*

2 **Set the** *local.webmail.sso.uwcsslport* **Messenger Express parameter value to the SSL port-number of the Web Server in which Communications Express is deployed.**

This parameter is required to instruct Messenger Server to get Communications Express integration services. For example, if this parameter is set, then time out event of webmail will take the user to Communications Express' login page.

For example,
local.webmail.sso.uwcsslport=SSL port-number of the webserver in which communications express is deployed

3 **Set the** `webmail.ssl.port` **parameter for Messaging Server.**

Set the parameter to the SSL port that Messaging Server listens to.

▼ **To Configure Communications Express for SSLAuthentication Only**

Communications Express can be configured for SSL authentication only, which implies that authentication can be performed over SSL, but access of the application thereafter is over non-SSL mode.

1 **Set** *uwcauth.ssl.enabled* **to** `false` **in the** `uwcauth.properties` **file.**

2 **Set** *uwcauth.https.port* **to the SSL port number of the Web Server in which Communications Express is deployed.**

3 **Set** *uwcauth.ssl.authonly* **to** `true`**.**

Note – The two parameters, *uwcauth.ssl.authonly* and *uwcauth.ssl.enabled* in the `uwcauth.properties` file are mutually exclusive .

Supporting Horizontal Scalability of Address Book Server

In the previous release of the Sun Java System Communications Express, the Personal Address Book entries for a particular domain was stored in a single LDAP location that was represented by the *defaultserver* instance defined in the `db_config.properties` file. The `db_config.properties` file existed in the directory pointed by the `personalstore.properties` file for the domain. For example, *uwc-install*/`WEB-INF/config/ldappstore`.

This setup was unable to scale to support large number of users and contacts per Personal Address Book. To overcome this limitation, the *psRoot* attribute in Communications Express 6.3 enables the administrator to provision users so that PAB data for different users is spread across different LDAP locations.

For example, `ldap://mydir.com:389/piPStoreOwner=jsmith,o=siroe.com,o=PiServerDb`

Figure 3–1 provides a high level overview of the architecture used to scale the Address Book Server horizontally.

The following are the key components of the Address Book Horizontal Scalability architecture:

- Personal Store
- DB
- DBMap

A Personal Store maintains the address book information of a user. It contains the definition of all the address books a user has created along with all the entries in those address books. Personal Stores are expressed as URLs, which describe the directory instance in which they are located and the DN within that particular directory instance.

A DB (DataBase) contains a collection of Personal Stores and as shown in Figure 3–1. . The address book can access any number of DBs. Every DB is defined by a DB-ID that defines the connection parameters for that DB. A DB of different type points to different DB locations.

A DBMap is a collection of DBs of the same type. Each DBMap has an ID which refers to the configuration information for that DBMap.
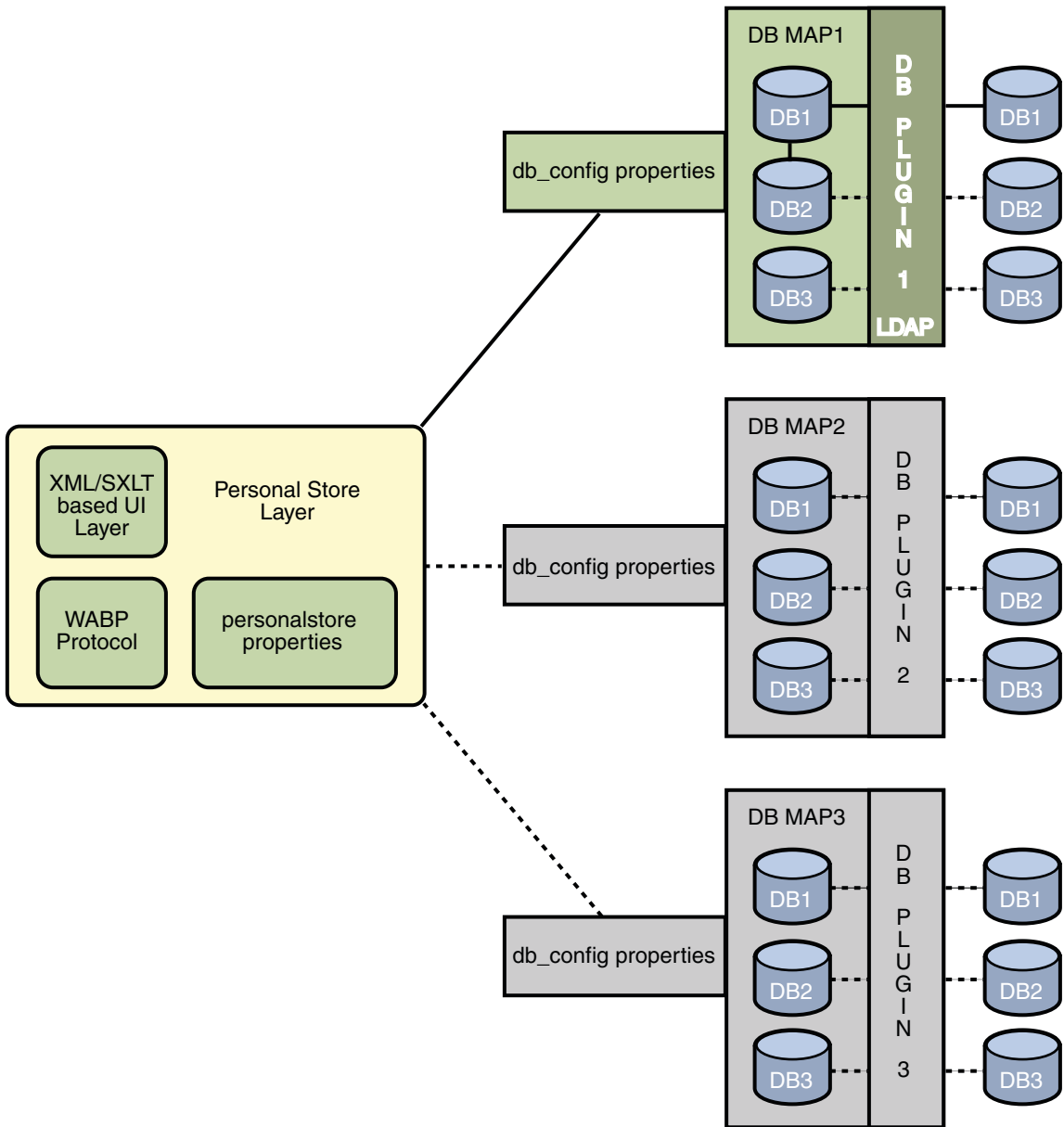
FIGURE 3–1 Horizontal Scalability of Address Book

The psRoot is an attribute in the user's LDAP that specifies the host, port of the directory instance and the DN where the Address Book entries for the user is stored. psRoot is in the form: ldap://ldap_host:ldap_port/DN.

The value of psRoot attribute determines the DB type and DB location.

In the following psRoot example,
ldap://mydir.com:389/piPStoreOwner=jsmith,o=siroe.com,o=PiServerDb

ldap:// indicates that the Address Book Personal Store for the user is accessed through the LDAP DB plug-in.

mydir.com:389 specifies the LDAP Host and Port.

piPStoreOwner=jsmith,o=siroe.com,o=PiServerDb specifies the DN of the Personal Store.

Note – The Address Book Server does not provide any utility to distribute psRoot values for users, according to any scalability policy. Administrators need to set a specific policy suited best for the organization and use custom scripts to set the psRoot value for that policy.

The psRoot attribute can be turned on or off using the *db.UserPsRoot* parameter present in the domain specific personalstore.properties file. Set the parameter to "false" to use the *defaultserver* parameters in the db_config.properties file. Set the parameter to "true" to use the user's *psRoot* value. The Personal Store parameters listed in "Configuring the Address Book Personal Store Parameters in the db_config.properties File" on page 53 must be provided for each unique directory server instance used in *psRoot*. At runtime, the value of *psRoot* attribute is resolved to a directory instance using *db-key.ldaphost* and *db-key.ldapport*, where *db-key* is an arbitrary string that distinguishes one instance from the other. When no match is found for the *db-key.ldaphost* and *db-key.ldapport*, the *defaultserver* instance is used.

Additional Configuration Required for Horizontal Scalability Support

The *psRoot* attribute in the user's LDAP entry is an Address Book Server compliant URL that defines the LDAP location from which the user's Personal Address book entries are stored and retrieved. The *psRoot* attribute enables the administrator to provision users so that PAB data for all users is spread across multiple directory locations.

For existing Messenger Express users, if PAB Migration is enabled, the psRoot attribute is constructed using the existing pabURI attribute and a mapping table is defined in *uwc-deploy-dir*/WEB-INF/config/migrate.properties.

The lookup table in the migrate.properties file consists of the pabhost and pabport entries in the following format:

pabhost.pabport.abhostport = *abldaphost*:*abldapport*

where *pabhost.pabport* refers to the source directory instance and *abldaphost* and *abldaport* is the target directory instance to which the PAB data should be migrated.

For example, if you want to migrate the PAB data from the directory running at
`pab.example.com:389` to the address book directory running at `abs.example.com:389`, the
should exist in the `migrate.properties` as:

```
pab.example.com.389.abhostport = abs.example.com:389
```

You may have as many lookups as found necessary in the `migrate.properties` file. If the
`pabURI` attribute for a user uses *pabhost* and *pabport*, the `psRoot` constructed using the default
`psRoot` pattern will be in the format:

```
ldap://abldaphost: abldapport/piPStoreOwner=%U,o=%D,o=PiServerDb
```

If the lookup is not defined for a `pabURI` value, that is, no entry is provided in the mapping table
that matches the `pabURI`, the *pabhost* and *pabport* values are used as the default values for
abldaphost and *abport*. Implying that in the absence of a mapping table, the PAB entries from
Messaging Server is migrated to another root in the same directory instance as per the Address
Book Schema. In this scenario, the target directory instance will be the same as the source
directory instance.

Note – The lookup table is not defined by the patch installer. You need to define the lookup table
after a patch install, and restart the web server.

Ensure that *abldaphost*: *abldapport* directory Server instance is defined in the
`db_config.properties` file pointed to by the `personalstore.properties` of that domain.

Setting the *psRoot* **Value Automatically**

When a new user logs in, default values are set for the *psRoot* attribute in the user's entry.

For new users, a *psRoot* value is constructed by using the *psRoot* pattern defined in the
`personalstore.properties` file, and the *defaultserverhost* and *defaultserverPort* values in the
`db_config.properties` file. For example, when you use the default *psRoot* pattern, the default
psRoot value is in the format:

```
ldap://default-server-host : default-server-port/piPStoreOwner=%U,o=%D,o=PiServerDb
```

where:

%U = login ID of the user. For example, jsmith.

%D = domain of the user. For example siroe.com.

Creating Additional Remote Address Books

You can configure Communications Express to add more than one remote address books. For example, you can have more than one corporate directories for users in different domains.

▼ To Add a Remote Address Book

For remote address books a corresponding instance should exist in the `personalstore.properties` file. The value of *db.xxx.urlmatch* in the `personalstore.properties` file should be assigned the value of *bookremoteurl* attribute present in the `defaultps.xml` file.

To add a new remote address book, you need to add the following items:

1   Add a new book node in the `defaultps.xml` **file.**

This file contains the default definitions for personal and corporate address books that are created in the LDAP store when a user logs in for the first time. that contain the definitions of Personal Address Book and a Corporate Address Book. Following are examples of the XML sections in the `defaultps.xml` that contain the definitions for multiple remote address books:

```
<book booktype="abook" bookremoteurl="ldap://corpdirectory/o=org1,o=isp";>
     <bookoc>piRemoteBook</bookoc>
   <entry entryID="corpdir1">
          <displayname>_Corporate Directory 1</displayname>
          <description>This is Corporate Directory 1</description>
       </entry>
</book>
<book booktype="abook" bookremoteurl="ldap://corpdirectory/o=org2,o=isp";>
     <bookoc>piRemoteBook</bookoc>
   <entry entryID="corpdir2">
          <displayname>_Corporate Directory 2</displayname>
          <description>This is Corporate Directory 2</description>
       </entry>
</book>
```

2   Add a new instance in the `personalstore.properties` **file.**

The following is a sample entry in the `personalstore.properties` file configured for two remote address books.

```
db.idir.class = com.iplanet.iabs.ldapplug.iLDAP
db.idir.urlmatch = ldap://corpdirectory/o=org1,o=isp
db.idir.configpath = ../config/corp-dir
db.idir.wildcardsearch = 0
db.idir.randompaging = false
db.idir.corporatedir = true
```

```
db.idir2.class = com.iplanet.iabs.ldapplug.iLDAP
db.idir2.urlmatch = ldap://corpdirectory/o=org2,o=isp
db.idir2.configpath = ../config/corp-dir
db.idir2.wildcardsearch = 0
db.idir2.randompaging = false
db.idir2.corporatedir = true
```

4

Implementing Single Sign-On

Single sign-On allows an end user to authenticate once and use multiple applications without re-authenticating. For example, you can log in to Communications Express and use the calendar and mail applications without authenticating again, provided single sign-on is enabled in the calendar and mail applications.

- "Enabling or Disabling Access Manager Post Deployment" on page 65
- "Setting up Access Manager Single sign-on" on page 66

Enabling or Disabling Access Manager Post Deployment

While configuring Communications Express, you have the option of selecting Identity Support in the Enable Access Manager for Single Sign-on panel.

▼ To Enable Access Manager Post Deployment

If you have not selected Identity Support for Communications Express in the Enable Access Manager for Single Sign-on panel, and you want to enable identity support later, follow these steps:

1 Install and configure the Access Manager Remote SDK.

2 Update the Communications Express Web Container Class path with the location of the Access Manager's remote SDK JAR files.

For example, add the following lines to the *classpathsuffix* in the server.xml file for web container.

/opt/SUNWam/lib/am_sdk.jar

/opt/SUNWam/lib/am_services.jar

/opt/SUNWam/lib/am_logging.jar

In this example, it is assumed that IS Remote SDK is installed in /opt/SUNWam.

Refer to "Setting up Access Manager Single sign-on" on page 66 for parameters that enable Access Manager SSO.

3 **Take a backup of the existing** web.xml **file from** *uwc-deploydir*/ SUNWuwc/WEB-INF/web.xml**.**

Copy the web_IS.xml file from *uwc-basedir*/SUNWuwc/lib/config-templates/WEB-INF to *uwc-deploydir*/SUNWuwc/WEB-INF/.

⚠️ **Caution –** Remember to merge any additional configuration data you have included in the backed up web.xml file to web_IS.xml.

4 **Rename** web_IS.xml **to** web.xml**.**

▼ To Disable Access Manager Post Deployment

If you have selected Identity Support for Communications Express in Enable Access Manager for Single Sign-on panel, and you want to disable identity support later, follow these steps:

1 **Set** *uwcauth.identity.enabled* **to** false **in the** uwcauth.properties **file to disable Identity SSO.**

2 **Take a backup of the existing** web.xml **file from** *uwc-deploydir*/ SUNWuwc/WEB-INF/web.xml**.**

3 **Copy the** web.xml **file from** *uwc-basedir* /SUNWuwc/lib/config-templates/WEB-INF **to** uwc-deploydir/ SUNWuwc/WEB-INF/**.**

⚠️ **Caution –** Remember to merge any additional configuration data you have included in the backed up web.xml file to web.xml

Setting up Access Manager Single sign-on

This section provides information about how to set up Communications Express and Messenger Express to communicate with each other by using Access Manager Single sign-on.

If you have chosen to adopt Sun Java System LDAP Schema, v.2 as the schema model, you need to enable Access Manager in Communications Express to use Access Manager's Single sign-on mechanism to obtain valid user sessions.

To enable Communications Express users to use Access Manager Single sign-on to access the mail module rendered by Messaging Express, you need to modify the Messaging Express specific parameters by using the configutil tool located at msg-svr_install_root/sbin/configutil. It is important to explicitly set the Messenger

Express specific parameters after install, as the installer does not set these parameters. For more information about how to use the configutil tool, refer to Chapter 4, Configuring General Messaging Capabilities, of the *Sun Java System Messaging Server Administration Guide*.

When setting up Access Manager Single Sign-on, Communications Express and Access Manager can be deployed in both SSL and non-SSL modes in the same web container instance or in different web container instances. When Access Manager and Communications Express are deployed in different Web Container instances, you need to configure Access Manager Remote SDK on the system where Communications Express is deployed. The following is the list of the different deployment scenarios for Access Manager and Communications Express deployed in different web container instances in both SSL and non SSL modes:

- Access Manager and Communications Express deployed in different web container instance in non-SSL mode.
- Access Manager and Communications Express deployed in different web container instance in SSL mode.
- Access Manager and Communications Express deployed in different web container instances with Access Manager deployed in SSL mode and Communications Express in non-SSL mode.
- Access Manager and Communications Express deployed in different web containers that are running on the same system, in non-SSL mode
- Access Manager and Communications Express deployed in different web containers on the same system in SSL mode.

Setting the Properties to Enable Single Sign-on in Communications Express With Access Manager

Open the *uwc-deployed-path*/WEB-INF/config/ uwcauth.properties file.

Modify the following Communications Express parameters in uwcauth.properties file to enable Access Manager Single Sign-on.

Parameter	Purpose
uwcauth.identity.enabled	Specifies whether Access Manager is enabled.
	Initially the value is set by the configuration wizard.
	Set the attribute to *true* to enable Access Manager.
	Set the attribute to *false* to disable Access Manager.

Parameter	Purpose
uwcauth.identity.cookiename	Specifies the cookie name used by Access Manager.
	The value of *uwcauth.identity.cookiename* should correspond to the value specified in Access Manager configurator.
	The default cookie name used by Access Manager is *iPlanetDirectoryPro*
uwcauth.identity.binddn	Specifies the complete DN of *amadmin*.
	For example:
	`uid=amAdmin, ou=People, o=siroe.example.com, o=example.com`
	Note: The *uwcauth.identity.binddn* and *uwcauth.identity.bindcred* values should correspond to the values entered when you install Access Manager.
	For example, *uwcauth.identity.binddn=uid=amAdmin, ou=People, o=siroe.example.com, o=example.com* and `uwcauth.identity.bindcred=password`.
uwcauth.identity.bindcred	Specifies the password of *amadmin*.
uwcauth.http.port	Specifies the port number that Communications Express listens to when Communications Express is configured on a non SSL port.
	The default port number is *80*.
uwcauth.https.port	Specifies the HTTPS port number that Communications Express listens to when Communications Express is configured on an SSL port.
	The default HTTPS port number is *443*
identitysso.singlesignoff	Specifies the single sign-off status.
	If set to *true* the logout destroys the Access Manager session completely and all applications participating in this Access Manager session are signed out.
	If set to *false*, only the Communications Express session is destroyed and the user is taken to the URL configured in *identitysso.portalurl*.
	The default status is *true*.

Parameter	Purpose
identitysso.portalurl	Specifies the URL to which Communications Express must be redirected.
	If Access Manager is enabled and single sign-off is set to *false*, Communications Express is redirected to the URL assigned in *identitysso.portalurl*.
	By default Communications Express is redirected to *http://www.sun.com*.

Set the value of the parameter *uwcauth.messagingsso.enable* to *false* when you set up Communications Express for Access Manager Single sign-on.

Communications Express will now use the Access Manager's Single sign-on mechanism for obtaining valid user sessions.

▼ To Deploy Access Manager and Communications Express in the Same Web Container Instance

1 Open the *IS-SDK-BASEDIR* /lib/AMConfig.properties **file.**

2 Make sure the following property is set in the AMConfig.properties **file:**

com.iplanet.am.jssproxy.trustAllServerCerts=true

AMConfig.properties is present in *IS-SDK-BASEDIR/lib*.

3 Restart the web container for the changes to take effect.

Access Manager and Communications Express deployed in the same web container instance in the SSL mode can now use the Access Manager's Single sign-on mechanism for obtaining valid user sessions.

▼ To Deploy Access Manager and Communications Express in a Different Web Container Instance

1 Change directory to *IS-INSTALL-DIR/ bin*.

2 Copy the Access Manager *IS-INSTALL-DIR /bin/amsamplesilent* **file.**

```
$ cp amsamplesilent amsamplesilent.uwc
```

3   **Edit the copy of** *amsamplesilent* **created in the previous step.**

Set the parameters to correspond to the deployment details as discussed in the next steps.

If you are deploying Access Manager SDK in a web container, such as Sun Java System Web Server or Sun Java System Application Server, set the *DEPLOY_LEVEL* to value *4* That is, select the option "SDK only with container config."

4   **Set the** *AM_ENC_PWD* **to the value of the password encryption key used during the installation of Access Manager.**

The encryption key is stored in the parameter *am.encryption.pwd* under:

IS-INSTALL-DIR/lib/AMConfig.properties

5   **Set the** *NEW_INSTANCE* **to** *true***.**

6   **If you are deploying Access Manager SDK in Sun Java System Web Server, set** *WEB_CONTAINER* **to** *WS6***.**

If you are deploying Access Manager SDK in Sun Java System Application Server, set the *WEB_CONTAINER* to *AS7* or *AS8*.

For a more detailed description on the other parameters in the *amsamplesilent* file and to help you configure the Access Manager Remote SDK parameters refer to Chapter 1, Identity Server 2004Q2 Configuration Scripts, in the *Sun Java System Identity Server Administration Guide*.

7   **Configure Access Manager SDK in the web container.**

Make sure directory server that is used by Access Manager is running.

8   **Start the web container instance in which the Access Manager SDK is deployed.**

9   **Change directory to** *IS-INSTALL-DIR***/** bin **.**

10   **Type the following command:**

./amconfig -s amsamplesilent.uwc

Restart the web container instance for the configurations to take effect.

Access Manager and Communications Express deployed in the different web container instances in SSL and non-SSL mode will now use the Access Manager's Single sign-on mechanism for obtaining valid user sessions.

Refer to "Compressing Server Response for Communications Express" on page 112, for instructions on enabling or disabling Access Manager after deploying Communications Express.

Enabling Single Sign-on in Messaging Express with Access Manager

Use the `configutil` command provided by Messaging Server to edit the Messaging Express related parameters.

Set the following Messenger Express parameters to enable Communications Express users access Messenger Express by using Access Manager Single Sign-on.

Parameters	Purpose
local.webmail.sso.amnamingurl	Enables SSO from Access Manager.
	The parameter should point to the URL that Access Manager uses to run the naming service.
	For example:
	`configutil -o local.webmail.sso.amnamingurl -v` `http://siroe.example.com:85/amserver/namingservice`
local.webmail.sso.uwcenabled	Enables Communications Express access Messenger Express.
	To disable, set the parameter to `0`.
local.webmail.sso.uwclogouturl	Specifies the URL that Messenger Express uses to invalidate the Communications Express session.
	If you have configured *local.webmail.sso.uwclogouturl* explicitly in Messenger Express, this value is used to log out. Otherwise, Messenger Express constructs the logout URL based on the HTTP host in the request header.
	For example:
	http://siroe.example.com:85/base/UWCmain?op=logout
	When Communications Express is not deployed under /, such as /*uwc*, the value of this parameter might be as follows::
	`http://siroe.example.com:85/uwc/base/UWCmain?op=logout`
local.webmail.sso.uwcport	Specifies the Communications Express port.
	For example, 85.

Parameters	Purpose
local.webmail.sso.uwccontexturi	Specifies the URI path in which Communications Express is deployed.
	Specify this parameter only when Communications Express is not deployed under /.
	For example, if Communications Express is deployed in */uwc*, then the URI path is *local.webmail.sso.uwccontexturi=uwc*
local.webmail.sso.amcookiename	Specifies the Access Manager session cookie name.
	Ensure that in the `uwcauth.properties` file, the value of *uwcauth.identity.cookiename* is set to the value of *local.webmail.sso.amcookiename.*
	For example, *iPlanetDirectoryPro*
`local.webmail.sso.uwchome`	Specifies the URL required to access home link.

Once Messenger Express specific parameters are set, Communications Express users can access Messenger Express by using the Access Manager Single sign-on.

If you have deployed Messenger Express as MEM, ensure that the value of the following parameters in Messaging Server are the same on the `mshttpd`, a component of messaging server, at the back-end and MEM in the front end:

- *local.service.http.proxy*. The value of this parameter should be set to 1.
- *local.service.http.proxy.admin*. The value of this parameter should be set to the administrator user id of the front end Messaging Server.
- *local.service.http.proxy.admin.<hostname-of-backend-server>*. The value of this parameter should be set to the administrator user id of the back end Messaging Server.
- *local.service.http.proxy.adminpass*. The value of this parameter should be set to the administration password of the front end Messaging Server.
- l*ocal.service.http.proxy.adminpass.<hostname-of-backend-server>*. The value of this parameter should be set to the administrator password of the back end Messaging Server.

After setting the above values, restart the Messaging Server and the Web Container for the changes to take effect.

5

Troubleshooting

This chapter lists the solutions and troubleshooting tips to common problems you may encounter while installing and configuring Communications Express.

This chapter contains the following sections:

- "Identifying and Troubleshooting the Problem" on page 73
- "Log Files" on page 84

Identifying and Troubleshooting the Problem

Communications Express provides an integrated web-based communications client that depends on many disassociated products. This may sometimes cause problems during usage that requires troubleshooting.

To establish the cause of the problem, use the following common troubleshooting methods first before addressing the problem:

▼ To Troubleshoot Communications Express

1 Verify whether the steps mentioned in Chapter 2, "Installing and Configuring Communications Express," have been followed when configuring the product.

2 Enable Communications Express logs to view the detailed error logs and determine the cause for failure.

Refer to the section on "Log Files" on page 84 for steps to enable logging.

3 Check the component logs for errors and exceptions reported.

The log file maintains the list of errors encountered during installation, configuration, and running of Communications Express.

Troubleshooting Commonly Encountered Problems

This section provides an overview of problems that you might encounter during installation, configuration, startup, or while accessing Communications Express user interface client components.

Listed below are some commonly identified problems in Communications Express components and their possible causes.

Configuring Communications Express

Configuration changes are not reflected, even after restarting the web container.

Make sure the configuration changes have been applied to the files in the appropriate configuration path.

The following directories are created once Communications Express configuration is completed:

- *uwc-deployed-path*/WEB-INF/config
- *uwc-deployed-path*/staging/WEB-INF/config
- *uwc-basedir*/SUNWuwc/WEB-INF/config

To ensure that the changes are reflected in your application, make configuration changes to *uwc-deployed-path*/WEB-INF/config.

The other two directories such as *uwc-deployed-path*/ staging/WEB-INF/config and *uwc-basedir* /SUNWuwc/WEB-INF/config are temporary place holders created and used internally by the configuration wizard during configuration. Changes made in them will not get reflected in the application.

Configuration tasks have failed.

To locate the problem, use the log file located at *uwc-basedir* /SUNWuwc/install/uwc-config _*TIME-STAMP*.log

where, *TIME-STAMP* is the time stamp of the configuration in the form YYYYMMDDhhmmss.

Configuration program is not working properly.

To identify the problem, invoke the configuration program with debug options enabled, using the following debug modes:

`-debug` : Use this option to generate general debug information

`-debugMessage` : Use this option to generate a log of errors and warnings

`-debugWarning` : Use this option to generate a log of warning messages and error messages

`-debugError` : Use this option to generate a log of error messages. By default this option is enabled.

Communications Express applications startup failed and web container logs show exceptions.

This error might have occurred due to an incomplete or incorrect configuration.

Workaround.

- Make sure you have completed all the post configuration steps. For the post configuration steps, refer to the "Post Configuration Instructions" on page 44 in Chapter 1, "Overview of Communications Express."

- Make sure you have specified correct values to all the configuration questions asked by the configuration wizard.

- Check whether the web container user and group specified in the configuration wizard are correct.

The "chown" commands have failed during configuration.

Workaround.

Run the configuration program and enter the correct web container user and group values in the "Web Container User and Group" panel of the configuration program.

The message, "An error occurred during this operation" appears when you access Communications Express with Access Manager enabled after authentication.

Workaround.

Ensure that the *uwcauth.identity.binddn* and *uwcauth.identity.bindcred* properties in the *uwc-deployed-path* `/WEB_INF/config/uwcauth.properties` are set to that of the *amAdmin* DN which was provided when installing Access Manager SDK. Refer to the section on "Configuring Access Manager Parameters in the `uwcauth.properties` File" on page 51.

Although the directory manager credentials might be provided to *uwcauth.identity.binddn* and *uwcauth.indentity.bindcred* for Access Manager SSO, the directory manager does not have the ACLs required to obtain certain domain specific attributes that Communications Express depends on to function properly.

No support to modify web container configuration for Access Manager SDK integration.

The configuration wizard does not support modification of the web container configuration for Access Manager SDK integration.

Workaround.

Manually invoke tools provided with Access Manager to modify web container configuration for Access Manager.

Accessing Calendar

The message, "An error occurred during this operation" appears when you access Calendar from Communications Express.

This error appears because of one or more of the following reasons.

- The Calendar Server configurations in the *uwc-deployed-path* /WEB_INF/config/uwcconfig.properties are incorrect.

- The Calendar Server *calmaster* information in the uwcconfig.properties file in Communications Express is not the same as the value in Calendar Server's *cal deploy path*/bin/config/ics.conf file.

  Refer to "Configuring Calendar Server Parameters in the uwcconfig.properties File" on page 52

- Both Communications Express and Calendar Server are not enabled for hosted domains.

  Make sure that both Communications Express and Calendar Server are both enabled for Virtual Domains or both disabled for Virtual Domains. Refer to "Enabling Hosted Domain Support in Calendar" on page 88 for details on enabling Communications Express and Calendar Server for virtual domains.

- Calendar Server is not started.

- Calendar service is not enabled for this user.

The message, "Calendar Not Available. Could Not Display View. The selected calendar was either deleted, or does not exist, or you do not have permissions to view it. Select another calendar(s)" appears when you access Calendar from Communications Express.

This error occurs when users are provisioned using *commcli*, which is used for Schema 2, in a non-hosted domain setup scenario. The error message is displayed because commcli incorrectly appends @*domain* to the value of *icsCalendar* attribute in the user's LDAP entry.

Workaround

To provision users using *commcli* in a non-hosted domain environment, use the -k legacy option in the commadmin command. For a hosted domain environment, use the -k hosted option. If the -k option is not specified a hosted domain setup is assumed.

For example,

EXAMPLE 5–1 Commcli provisioning

```
./commadmin user create -D admin -w password -X
siroe .varrius .com -n siroe.varrius.com -p 85 -d
siroe.varrius.com-F test -L user2 -l user2
-Wuser2 -S mail,cal -k legacy
ok
```

or

If the entry corresponding to an already provisioned user cannot be removed, manually remove the '@*domain* ' part from icsCalendar, icsSubscribed and icsOwned attributes from the user's LDAP entry.

The messages, "Calendars across the domain cannot be searched," "Calendars across the domain cannot be invited," "Calendars across the domain cannot be subscribed," or "Check Availability for Calendars across the domain cannot be done," appears when you search, invite, subscribe, or check the availability of Calendars across domains from Communications Express.

Workaround

To search, invite, subscribe, or check the availability of calendars, Cross Domain search needs to be enabled. Refer to the section on "Enabling Cross Domain Searches" in *Sun Java System Calendar Server 6.3 Administration Guide*.

Issues with Default Event Status Filter.

The Default Event Status Filter in the Options Calendar window specifies the events to be displayed in the day, week, and month calendar views. The options available are: .

- Accepted
- Tentative
- Declined
- No Response

When the "Accepted" option is selected as the event status, only those invitations you have accepted are displayed in the day, week or month calendar views. However, all events created by you are always displayed in day, week, or month calendar views.

Communications Express displays "Server Error" while uploading files greater than 2 MB.

This error occurs while importing events and tasks to a calendar or importing contacts to an address book when the uploaded file size is greater than 2 MB.

By default, Communications Express enables you to import data up to 2 MB . However, the upload file size limit is configurable.

Workaround

Configure a greater upload file size limit.

To configure a greater upload file size limit, configure the following *init* parameters for the filter, *MultipartFormServletFilter* in the web.xml :

- **fileSizeHardLimit** Specifies the maximum byte size of the uploaded file content before an error occurs and the request processing is stopped. For example, if a user uploads three files in one request, and if one or more of the files exceeds the *fileSizeHardLimit* limit, all files will be discarded and the filter will signal an error condition.

- **requestSizeLimit** Specifies the maximum byte size of the entire incoming request. If a request violates this limit, request processing stops and the input stream will be discarded. The filter will then handle the violation as it would for a content size hard limit violation. This limit defaults to 4 MB

- **fileSizeLimit**Specifies the maximum byte size of uploaded file content. For example, if a user uploads three files in one request, each one of the files may not be larger than this limit. Note that this limit is a *softlimit*, which means that if you upload content exceeds this limit, the content will be discarded but the request will still proceed normally, allowing for handling of the size violation by the application. The default soft limit is 1 MB.

- **failureRedirectURL**.(Optional). Specifies the redirect URL the request is forwarded to, when an error occurs. The redirect URL can be configured using the *failureRedirectURL* init parameter. If no redirect URL has been specified, the filter will throw an exception to immediately end the request. This limit defaults to 2 MB.

For example, to increase the upload file size to 10MB, follow the configuration steps mentioned below:

▼ To Increase the Upload File Size

1 **Take a backup of the existing** web.xml **file from** *uwc-deployed-path*/ WEB-INF/**.**

2 **Edit the** web.xml **file at** *uwc-deployed-path*/WEB-INF/web.xml**.**

3 **Provide the configuration for** *MultipartFormServletFilter* **in the** web.xml **as indicated in bold in code example 5-2.**

```
<web-app\>
..
..
  <filter\>
    <filter-name\>MultipartFormServletFilter</filter-name\>
    <filter-class\>com.sun.uwc.calclient.MultipartFormServletFilter</filter-class\>
    ..
    ..
    <init-param\>
      <param-name\>fileSizeHardLimit</param-name\>
```

```
      <param-value\>10485760</param-value\>
      <description\>Ten mega bytes</description\>
   </init-param\>
   <init-param\>
      <param-name\>requestSizeLimit</param-name\>
      <param-value\>10485760</param-value\>
      <description\>Ten mega bytes</description\>
   </init-param\>
   <init-param\>
      <param-name\>fileSizeLimit</param-name\>
      <param-value\>10485760</param-value\>
      <description\>Ten mega bytes</description\>
   </init-param\>
   <init-param\>
      <param-name\>failureRedirectURL</param-name\>
      <param-value\>put your url here</param-value\>
      <description\>Request is redirected to this url when
uploaded file size crosses
fileSizeHardLimit value</description\>
   </init-param\>
   ..
   ..
  </filter\>
..
..
..
..
</web-app\>
```

4 Restart web container to have the changes take effect.

Accessing Address Book

A "Server Error" occurs when Address Book is accessed. The Web Server log records an exception "org.apache.xml.utils.WrappedRuntimeException: The output format must have a '{http://xml.apache.org/xslt}content-handler' property!"

This exception is thrown by Web Server when JDK Web Server points to a version lower than JDK 1.4.2. The Communications Express uses the latest version of *xalan* and xerces for XML/XSL parsing. This error can appear when:

- You are using Web Server 6.1 not deployed using JES installer. JDK 1.4.1 is usually bundled with Web Server 6.1.
- The version of the shared xalan and xerces components shipped with Java Enterprise System, are not the latest.

  Workaround

- If the error appears because you have not installed Web Server from the JES installer, manually upgrade the JDK version of the web container that is defined as java_home attribute of *java* tag in the server.xml Web Server configuration file.

  or

  Reinstall Web Server from Java Enterprise System, and have the install process upgrade JDK automatically.

  Note – If this step is performed, all the other web-applications must be redeployed. As a precaution, take a backup of the server.xml file.

- If the error appears because the version of the shared xalan and xerces components are not the latest, remove the symbolic links for the xalan.jar and xerces.jar files from *uwc-deployed-path*/WEB-INF/lib.

  For example:

  # cd /var/opt/SUNWuwc/WEB-INF/lib

  # rm xalan.jar xercesImpl.jar

  Then, restart the Web Server.

The message "An error occurred during this operation" appears when Address Book is accessed from Communications Express.

This error occurs when the LDAP configuration for Personal Address Book (PAB) is not correct. When the Address Book tab is accessed, Communications Express connects to the personal address book store, that is, the LDAP configured for PAB. If the personal address book store is unable to establish a connection, the error is displayed.

Workaround

1. Check the LDAP configuration in the WEB-INF/config/ldappstore/db_config.properties.

   Edit the incorrect configuration settings in this file.

2. Restart the Web Server where Communications Express is deployed.

   For more information, refer to the section "Configuring Corporate Directory Parameters in the db_config.properties File" on page 54

Corporate Directory shows an inline error when search is performed.

This could happen if the LDAP configuration for Corporate Directory is not configured properly.

Workaround.

Check the LDAP configuration in the `WEB-INF/config/corp-dir/db_config.properties` for any misconfiguration. Correct them and then restart the web container on which Communications Express is deployed.

For more information, refer to the section "Configuring Corporate Directory Parameters in the `db_config.properties` File" on page 54

Viewing contacts of Corporate Directory shows error in View window

This error is displayed when the key to access a contact entry in Corporate Directory is not `uid`.

`uid` is the default value set by Communications Express.

Workaround

1. To access the contacts from Corporate Directory the key value should be set to the desired value in the `db_config.properties` and `xlate-inetorgperson.xml` configuration files in the *uwc-deployed-path*/`WEB-INF/config`.

   Make the following changes in the files:

   Set the appropriate key value in the *uwc-deployed-path* /`WEB-INF/config/WEB-INF/config/corp-dir/db_config.properties` .

   Set the appropriate key in place of *uid* in *entry entryID="db:uid"* in the *uwc-deployed-path* /`WEB-INF/config/WEB-INF/config/corp-dir/xlate-inetorgperson.xml` .

2. Restart the Web Server where Communications Express is deployed.

   For more information, refer to the section "Configuring Corporate Directory Parameters in the `db_config.properties` File" on page 54

The value of psRoot cannot be set.

The LDAP attribute *psRoot* in User Preferences is used for Address Book Server Horizontal Scalability. For more details, see the section, "Supporting Horizontal Scalability of Address Book Server" on page 58 deployment does not require Address Book Server Horizontal Scalability, you might ignore this error.

When a user logs in to Communications Express for the first time, *psRoot* is attempted to be set automatically, but sometimes the value may not be automatically set. This typically happens when the Java Enterprise System Directory Server has not been installed and `comm_dssetup.pl` for Java Enterprise System has not be run after installing Java Enterprise System Directory Server. This results in the LDAP Schema not being updated.

Since the schema is not updated, the `psRoot` attribute cannot be manually set even when the attribute is required for a horizontally scalable Address Book Server deployment.

Workaround

To enable the setting of the `psRoot` attribute, update the Directory Server to include the `psRoot` attribute. To do this, include the attribute `psRoot` in the definition of `ipUser` object class in

Directory ServerInstance/ `config/schema/99user.ldif`

Note – You need to update the Directory Server to include the `psRoot` attribute only if in the current deployment, the Java Enterprise System Directory Server has not been installed and you have not run `comm_dssetup.pl` for Java Enterprise System after installing Java Enterprise System Directory Server.

Accessing Mail

Login page appears when Mail tab is clicked.

Workaround

This problem is noticed when the configuration between Communications Express and Messaging Server is not done properly. For Messaging Server and Communications Express to work seamlessly, Messaging or Access Manager Single Sign-On should be enabled. Before starting Communications Express, follow the instructions outlined for Single Sign-on configuration in Chapter 1, "Overview of Communications Express."

The message "An error occurred during this operation" appears when Mail is accessed from Communications Express.

This error appears when the mail component of Communications Express is not deployed or enabled, but the user logging into Communications Express has set Mail to be the default application.

Workaround

The Administrator needs to change the value of the attribute `sunUCDefaultApplication` in the user's LDAP entry to "calendar" or "addressbook."

The user remains logged in even after logging out of Communications Express.

This problem is encountered when Access Manager (formerly known as Identity Server) and Communications Express are installed on different machines and Access Manager Remote SDK is installed in the machine where Communications Express is installed.

Workaround

In the machine on which Communications Express is installed, specify the following configuration parameter in the `AMConfig.properties` file:

com.iplanet.am.notification.url=url-to-access-web-container-of-CommunicationsExpress
/servlet/com.iplanet.services.comm.server.PLLRequestServlet

> **Note –** The `AMConfig.properties` file can be found under *IS-SDK-BASEDIR*/SUNWam/lib

You might encounter the following problems when accessing Address book features from Mail:

- **Calendar, Address book, and the Options page cannot be accessed from the Mail tab page.**
- **Clicking 'To' in the compose window or 'Send Mail' from Address Book displays a JavaScript error.**
- **Mail options are not saved.**

Mail tab does not appear after upgrade from JES4 to Communications Suite Release 5

Check if the Messaging Server configuration utility parameter *local.webmail.sso.uwcenabled* is set to 1. You can use the `configutil` tool provided by Messaging Server to check the value of this parameter by executing the following command:

```
<msg-svr-base>/sbin/configutil | grep local.webmail.sso.uwcenabled
```

Authenticating Using Access Manager

Unable to authenticate after entering valid userid and password.

Authentication could fail for the following reasons:

- The user is not provisioned using `commcli` or Access Manager (formerly known as Identity Server) and Sun Java System LDAP Schema v.2 is used.

  Workaround

  If Sun Java System LDAP Schema v.2 is used, ensure that users have been added by using `commcli` utility or through Access Manager UI console.

- The User attempting to login does not exist in the organization.

  The *defaultdomain* property defined in *uwc-deployed-path* /WEB_INF/config/uwcauth.properties is used to authenticate a userid in the absence of domain information in the format *user@domain*. If the user does not exist in the organization tree for the corresponding domain, authentication fails.

- Administrator credentials are not correct in *uwc-deployed-path* /WEB_INF/config/ uwcauth.properties .

  Refer to "Configuring Access Manager Parameters in the `uwcauth.properties` File" on page 51 details.

Log Files

The log information generated by the various system components on their operation can be extremely useful when trying to isolate or troubleshoot a problem.

TABLE 5–1 Logging Information Maintained by Various Modules in Communications Express

Module/Log Control File	Parameter	Default Value	Description
Configuration			Logs are maintained in a time-stamped file at /opt/SUNWuwc/install/ uwc-config_*TIME-STAMP.log*
Communications Express *uwc-deployed-path* /WEB-INF/config/ uwclogging.properties	*uwc.logging.enable*	*no*	Enables or disables logging. To enable logging change the property value of *uwc.logging.enable* to "yes." For example, *uwc.logging.enable=yes*
Communications Express *uwc-deployed-path* /WEB-INF/config/ *uwclogging.properties*	*uwc.log.file*	*uwc-deployed-path /logs/uwc.log* For example: */var/opt/SUNWuwc/ logs/uwc.log*	Specifies the location of the log file. Change the location of the log file, if required. Ensure Web Server can write to this file.
Communications Express *uwc-deployed-path* /WEB-INF/config/ uwclogging.properties	*uwc.log.level*	*INFO*	Specifies the log level for the application. Change the log level for the application to the desired level. The log level values available are: WARNING, INFO, and FINE, SEVERE, and FINEST.

TABLE 5–1 Logging Information Maintained by Various Modules in Communications Express *(Continued)*

Address Book *uwc-deployed-path /WEB-INF/config/ uwcconfig.properties*	*log.file*	`/tmp/trace.log`	Specifies the location of the log file. Change the location of the log file, if required. Ensure Web Server can write into this file.
Address Book *uwc-deployed-path /WEB-INF/config/ uwcconfig.properties*	*uwc.log.level*	*3*	Specifies the log level for the application. To disable logging for this module, set the value to 0.
Mail			Refer to Chapter 20, Logging and Log Analysis, of Sun Java System Messaging Server Administration Guide

Log Rotation

Communications Express creates a single log file whose size is unbounded. You can specify a maximum file size after which a new log file will be created.

▼ To Enable Log Rotation

1 **Set** *uwc.log.maxsize* **in megabytes in** `uwclogging.properties` **file to specify the maximum log file size.**

The value that `uwc.log.maxsize` takes is an integer. Communications Express will create a new log file when the current file reaches this size. Default value is none, which means that the log file size is unbounded.

2 **Specify a maximum count of files to keep on the file system.**

Set *uwc.log.maxfiles* in `uwclogging.properties` file to specify maximum number of log files to retain when rollover is enabled. The default value is 5. The log file names created would be `uwc.log.0`, `uwc.log.1`, `uwc.log.2`, and so on. After all the log files are exhausted, Communications Express over write the previously created log files starting with `uwc.log.0`.

Configuring Hosted Domains

Communications Express supports the hosted domain structure for an organization. This chapter describes the changes to be made to Communications Express to enable hosted domains.

Before you Begin

In order for Communications Express to support hosted domains, you should first enable this support in the following dependent components.

- Mail Server
- Calendar Server
- Address Book Server

This section describes the changes to be made in the dependent components ofCommunications Express to enable hosted domain (also known as virtual domains) support.

Enabling Hosted Domain Support in Mail

To provision a domain and to learn about creating a hosted domain entry in the organizational tree for Sun Java System LDAP Schema v.1, refer to Chapter 2, Provisioning Domains, in the *iPlanet Messaging Server 5.2 Provisioning Guide*.

For information on how to customize the mail client interface for each domain, refer to Chapter 8, "Customizing Domains," in *Sun Java System Communications Express 6.3 Customization Guide* in *Sun Java System Communications Express 6.3 Customization Guide*.

Enabling Hosted Domain Support in Calendar

To enable hosted domain configuration in Calendar Server, you must configure Calendar Server for hosted domains. For Information on how to configure Calendar Server for hosted domains, see Chapter 10, "Setting Up a Multiple Domain Calendar Server 6.3 Environment," in *Sun Java System Calendar Server 6.3 Administration Guide*.

Enabling Hosted Domain Configuration in Address Book

To enable hosted domain configuration in Address Book, set the *virtualdomain.mode* parameter to *y* in the *uwc-deployed-path* /WEB_INF/config/uwcauth.properties file

Modify the following files to enable hosted domains.

- *uwc-deployed-path* /WEB-INF/domain/personalstore.properties file. For more information on the changes required, see "Configuration Parameters in the personalstore.properties File" on page 96.
- *uwc-deployed-path* /WEB-INF/domain/defaultps/defaultps.xml file. For more information on the changes required, see "Creating Additional Remote Address Books" on page 63.

Creating and Configuring a Hosted Domain

This section describes the steps you need to perform to create and configure hosted domains.

▼ To Configure Communications Express for Hosted Domain Support

1 **Create a directory with the domain name under** *uwc-deployed-path* /WEB-INF/domain**.**
For example: *uwc-deployed-path*/WEB-INF/domain/*domain-name*

2 **Copy the following domain related configuration files under** *uwc-deployed-path* /WEB-INF/domain **directory to this directory.**
The domain related configurable parameters are stored in the following files:

- uwcdomainconfig.properties
- personalstore.properties
- defaultps/defaultps.xml
- *lang*/ i18n.properties. For example, en/i18n.properties

3 Customize the property files in the *uwc-deployed-path* `/WEB-INF/domain/` *domain-name* **directory .**

When Communications Express is deployed, the following files are by default copied to *uwc-deployed-path*`/WEB-INF/domain` directory.

For a particular user's session, the domain related property files are searched in the following order:

- *uwc-deployed-path*`/WEB-INF/domain/` *user's domain/property-files*
- *uwc-deployed-path*`/WEB-INF/domain/` *property-files*

Refer to "Configuration Parameters for Hosted Domain" on page 89 for setting domain specific properties for your set up.

Configuration Parameters for Hosted Domain

- "Configuration Parameters in the `uwcdomainconfig.properties` File" on page 89
- "Configuration Parameters in the `personalstore.properties` File" on page 96
- "Customizing the Global GUI" on page 98
- "Configuring Languages in `uwcdomainconfig.properties` File" on page 98

Configuration Parameters in the `uwcdomainconfig.properties` **File**

The `uwcdomainconfig.properties` file maintains the default values of the calendar and address book-related user preferences that can be configured according to each domain. These default user preference values are dynamically assigned to new users, when they access calendar and address book in Communications Express for the first time.

Table 6–1 lists the default user preferences.

TABLE 6–1 Default User Preferences in the `uwcdomainconfig.properties` File

Parameter	Default Value	Description
uwc-user-attr-sunUCDefaultApplication		Specifies the page to be displayed after you log in.
		When Messenger Express is deployed, the Mail page by default appears as the login page. Otherwise, the Calendar page is displayed. If Calendar is not deployed, the user is taken to the Address Book page.

TABLE 6–1 Default User Preferences in the `uwcdomainconfig.properties` File   *(Continued)*

Parameter	Default Value	Description
uwc-user-attr-sunUCDefaultEmailHandler	uc	Specifies the default email client that is used to send email messages from the application. You can set the default email client to Messenger Express or to a browser mail client.
uwc-user-attr-sunUCDateFormat	M/D/Y	Specifies the order in which the date, month, and year should appear in a date. The available options are: ■ M/D/Y ■ D/M/Y ■ Y/M/D
uwc-user-attr-sunUCDateDelimiter	/	Specifies the delimiter used in dates. Delimiter is the character that separates the date, month, and year in the date. You can specify the delimiter as a comma (,), forward slash (/), or hyphen (-).
uwc-user-attr-sunUCTimeZone	America/Los_Angeles	Specifies the time zone in which your calendar is created. You can choose any valid time zone from the following areas: ■ North and South America ■ Europe and Africa ■ Asia and Pacific Rim

Table 6–2 lists the user preferences related to Calendar application.

TABLE 6–2 Default Calendar Preferences in the `uwcdomainconfig.properties` File

Parameter	Default Value	Description
uwc-user-attr-icsExtendedUserPrefs-ceDefaultView	*dayview*	Specifies the view your default calendar should display after you login. The available options are: ■ `dayview` ■ `weekview` ■ `monthview` ■ `yearview`

TABLE 6–2 Default Calendar Preferences in the `uwcdomainconfig.properties` File   *(Continued)*

Parameter	Default Value	Description
uwc-user-attr-icsExtendedUserPrefs-ceShowCompletedTasks	*false*	Specifies whether the completed tasks will appear in the Tasks pane of the calendar. Change the value to `true` if you want the completed tasks to appear in the Tasks pane of the calendar.
uwc-user-attr-icsExtendedUserPrefs-ceDefaultCategory	*Business*	Specifies the default category in which the new events or tasks should be created. The categories available are: ■ `Anniversary` ■ `Appointment` ■ `Birthday` ■ `Business` ■ `Breakfast` ■ `Class` ■ `Conference Call` ■ `Dinner, Holiday` ■ `Lunch` ■ `Meeting` ■ `Other` ■ `Personal` ■ `Seminar` ■ `Training` ■ `Travel` ■ `Vacation` ■ `Interview`
uwc-user-attr-icsExtendedUserPrefs-ceDayHead	*9*	Specifies the day start time in hours
uwc-user-attr-icsExtendedUserPrefs-ceDayTail	*18*	Specifies the day end time in hours
uwc-user-attr-icsExtendedUserPrefs-ceInterval	*PT1H0M* *(One hour)*	Specifies the interval the day is split into. In the day and week view, the day is split into half an hour or one hour time period. You can change the default split value to PT0H30M (half hour).

TABLE 6–2 Default Calendar Preferences in the `uwcdomainconfig.properties` File *(Continued)*

Parameter	Default Value	Description
uwc-user-attr-icsFirstDay	*1*	Specifies the day of the week to be considered as the first day of the week in the calendar. By default, Sunday (1) is considered to be first day of the week and Saturday (7) is considered the last day of the week.
uwc-user-icsExtendedUserPrefs-ceWeekEndDays	*1,7*	Specifies the days of the week in the calendar views to be considered as weekend days. By default, Sunday (1) is the first day of the week and Saturday (7) the last day of the week. Comma separated list of numbers represents the days of the week to be considered as weekend days.
uwc-user-attr-icsExtendedUserPrefs-ceIncludeWeekendInViews	*false*	Enables or disables the display of weekend days in the Week and Month views of your calendar. Set the default value to `true` if the weekend days should be displayed in the Week and Month views of the calendar.
uwc-user-attr-icsExtendedUserPrefs-ceSingleCalendarTZISD	*true*	Specifies whether the calendar should be displayed in the calendar's time zone. Change the default value to "false" if you do not want to view calendars in the calendar's time zone. In this case, all calendars are displayed in the time-zone specified in Global Options tab.
uwc-usr-attr-icsExtendedUserPrefs-ceDefaultAlarmStart	*PT0H30M*	Specifies the default number of hours and minutes before an event or task a reminder should be sent.
uwc-user-attr-icsExtendedUserPrefs-ceNotifyEnable	*false*	Specifies whether to send email messages to internal invitees when new events are created. By default, this value is set to "1" that is `true`. Valid values are: `false`, `true`.

TABLE 6–2   Default Calendar Preferences in the `uwcdomainconfig.properties` File   *(Continued)*

Parameter	Default Value	Description
uwc-user-attr-hideCalId	`false`	Specifies whether to allow domain users of Communications Express the option of not seeing the `calid` in their calendars. If `calid` needs to be hidden, this value should be set to `true`.

Table 6–3 lists the Configurable Address Book default user preferences.

TABLE 6–3   Default Address Book Preferences in the `uwcdomainconfig.properties` File

Parameter	Default Value	Description
uwc-user-sunAbExtendedUserPrefs-abName	Personal Address Book	Specifies the name of the default address book.
uwc-user-attr-sunAbExtendedUserPrefs-abDescription	This is the personal address book	Specifies a short description for the default address book.
uwc-user-attr-sunAbExtendedUserPrefs-abEntriesPerPage	*25*	Specifies the maximum number of address book entries to be displayed on a page. The available options are: 25, `50`, and 75.
uwc-user-attr-sunAbExtendedUserPrefs-abSearchDisplayColumn1	*displayname*	Specifies the value to be displayed in the first column. By default, the first column displays name of contacts or group.

TABLE 6–3 Default Address Book Preferences in the `uwcdomainconfig.properties` File *(Continued)*

Parameter	Default Value	Description
uwc-user-attr-sunAbExtendedUserPrefs-abSerchDisplayColumn2	*primaryemail*	Specifies the value to be displayed in the second column of your address book. You can set the display column name to: ■ `displayname` ■ `company` ■ `title` ■ `primaryphone` ■ `workphone` ■ `homephone` ■ `faxphone` ■ `pagerphone` ■ `primaryemail` ■ `email2` ■ `email3` ■ `homeaddress` ■ `workaddress` ■ `weburl1` ■ `weburl2` ■ `calendarurl` ■ `freebusyurl` ■ `birthday` ■ `anniversary` ■ `ou` ■ `editviewcalendar`

TABLE 6–3 Default Address Book Preferences in the `uwcdomainconfig.properties` File   *(Continued)*

Parameter	Default Value	Description
uwc-user-attr-sunAbExtendedUserPrefs-abSearchDisplayColumn3		Specifies the value to be displayed in the third column of your address book. You can set the display column name to: `displayname` `company` `title` `primaryphone` `workphone` `homephone` `faxphone` `pagerphone` `primaryemail` `email2` `email3,` `homeaddress` `workaddress` `weburl1` `weburl2` `calendarurl` `freebusyurl` `birthday,` `anniversary` `ou` `edit,` `viewcalendar.`

TABLE 6–3 Default Address Book Preferences in the `uwcdomainconfig.properties` File   *(Continued)*

Parameter	Default Value	Description
uwc-user-attr-sunAbExtendedUserPrefs-abSearchDisplayColumn4	*edit*	Specifies the value to be displayed in the fourth column of your address book.
		You can set the display column name to: ■ `displayname` ■ `company` ■ `title`. ■ `primaryphone` ■ `workphone` ■ `homephone` ■ `faxphone` ■ `pagerphone` ■ `primaryemail` ■ `email2`, ■ `email3` ■ `homeaddress` ■ `workaddress` ■ `weburl1` ■ `weburl2` ■ `calendarurl` ■ `freebusyurl` ■ `birthday` ■ `anniversary`, ■ `ou` ■ `edit` ■ `viewcalendar`

Configuration Parameters in the `personalstore.properties` **File**

Modify the parameters in the `personalstore.properties` file to configure address book store, corporate directory and any remote directories.

Table 6–4 lists the settings stored in `personalstore.properties` file.

TABLE 6–4 Configuration Settings Stored in `personalstore.properties` File

Parameters	Default Value	Description
db.defaultpsrootpattern	*ldap://piPStoreOwner=%U,o=%D,o=PiServerDb*	Specifies the pattern used to dynamically construct the psRoot value for a user. *psroot* identifies the location where a user entry resides. %U = uid of the user ("*jsmith*") %D = domain of the user ("*siroe.com*") %O = most significant part of the domain ("*siroe*")
db.ldapplut.class	*com.iplanet.iabs.ldap.plug.iLDAP*	Specifies the name of the Java class implementing the plug-in. For example, LDAP plug-in.
db.ldapplug.urlmatch		Specifies the URL in the format: *ldap://host:port/DN* Based on this parameter the xxx instance is identified. This value should correspond to the "*bookremoteurl*" attribute stored in `defaultps.xml` file.
db.ldapplug.configpath		Specifies the path to the configuration directory containing the LDAP information for a particular instance. This path is relative to the location of this file.
db.ldapplug.wildcardsearch	0	Specifies the minimum number of characters to be provided in a wild card search.
db.ldpaplug.randompaging	false	Specifies whether the plug-in supports random access and whether each page must be accessed from the first page. If false, the search process continues until it gets the right page.
db.ldapplug.corporatedir	false	For a corporate directory this value should be `true`.

TABLE 6–4 Configuration Settings Stored in `personalstore.properties` File   *(Continued)*

Parameters	Default Value	Description
db.useUserPsRoot	`false`	Set the value to `true` to use the user's `psRoot` value. If set to `false`, the `defaultserver` values are used.

Customizing the Global GUI

The default `themes.properties` file is located under `uwc-deployed-path/WEB-INF/skin`. The theme file contains the logical names of the icons appearing in Communications Express and their default location. You can change the location of the images by changing the path specified in this file.

Configuring Languages in `uwcdomainconfig.properties` File

The `uwcdomainconfig.properties` files contains the list of supported languages for a domain. Each language in the list is separated by a semi colon. You can define the list of languages Communications Express will support for a domain.

For example, if you are planning to support en (English), de (German), fr (French), and ja (Japanese) languages in a domain called `siroe.com`, then set *supportedLanguages* in `uwcdomainconfig.properties` file for that domain to *supportedLanguages=en;fr;de;ja*.

The `uwcdomainconfig.properties` file *siroe.com* should be located at:

`WEB-INF/domain/siroe.com/uwcdomainconfig.properties`

You will also have to define the localizable strings in the corresponding `i18n.properties` files. For example,

- *uwc-common-options-preferredLanguage-en=English*
- *uwc-common-options-preferredLanguage-de=German*
- *uwc-common-options-preferredLanguage-fr=French*
- *uwc-common-options-preferredLanguage-ja=Japanese*

The `i18n.properties` file for *siroe.com* will be located at:

`WEB-INF/domain/siroe.com/`*locale*`/ i18n.properties`

In the absence of a *preferredLanguage* attribute in the User's LDAP entry, the domain *preferredLanguage* attribute, the browser provided header values and the availability of `i18.properties` file determines the language used in the users session.

◆ ◆ ◆ C H A P T E R **7**

7

Migrating Personal Address Book Data to Address Book Server

Previously, Personal Address Book (PAB) was used to store the user's contacts in Sun Java System Messaging Server and PAB could be accessed only by web-based clients deployed on Messaging Server. The Messaging Server for Communications Express uses Address Book server instead of PAB to store users' contact details. Because of this, users accessing Communications Express using the existing Messaging Server installations must migrate their PAB data to the Address Book Server.

Migration Deployment Scenarios

Migration can be performed from:

1. A single Messenger Express instance pointing to the default single PAB host.

2. A single Messenger Express instance pointing to multiple PAB hosts.

3. A single Messenger Express instance pointing to multiple PAB hosts with the default PAB host set.

4. Multiple Messenger Express instances pointing to single PAB host.

5. Multiple Messenger Express instances pointing to multiple PAB hosts.

Migration Scenarios

Data Migration takes place in two ways:

Dynamic Migration

Dynamic Migration takes place when an existing Messenger Express user logs in to Communications Express. The Users receive an email after the migration is completed.

In the dynamic migration process:

1. The application checks if migration has been enabled in the uwcuath.properties file by checking the *pab_mig_required* parameter.

   If the *pab_mig_required* parameter is set to true, the migration process is initiated.

2. The login logic then compares the *nswmextendedprefs* attribute in the user's LDAP entry. It checks for the value of the *mepabmigration* parameter to determine whether the user's data has been previously migrated.

3. Once PAB migration is completed, the Address Book Server sets the *nswmextendedprefs*, *mepabmigration* properties to 1 in the logged in user entry, to indicate the completion of the migration process.

4. The user receives a mail after the PAB data is successfully migrated to the Address Book Server.

To receive a mail, you are required to set the parameters in the migrate.properties file.

TABLE 7–1   PAB Migration Email Parameters

Parameters	Default Value	Description
emailReqd	True	Enables mail to be sent after the PAB data has been migrated successfully. Accepted values are "True" and "False".
smtphost	local mail host For example: *budgie.siroe.com*	Specifies the SMTP relay host name.
smtpport	25	Specifies the SMTP relay port.
mailsubject	PAB Migration Status	Specifies the subject of the mail.
from	*admin@hostname*	Specifies the sender's name.

Tip – It is recommended that the administrator sends an email to all users informing them that PAB data migration will be triggered during the first login and as a consequence they will not see the Address Book data during the initial sessions. Users should contact the administrator if they are unable to see their data after 2 or 3 days.

Batch Migration

In the batch migration process, migration takes place at the server level without end user interaction. The administrator executes the runMigrate.sh batch script to migrate the mail users PAB data present in a given domain. For mail users present in multiple domains, the administrator will have to invoke the runMigrate.sh script for each domain to migrate users PAB data from the given *inetDomainBaseDN* to the Address Book Server.

To Perform Batch Migration

Set the following parameters in the runMigrate.sh script. This script is available at *uwc-deployed-path*/*WEB-INF*/*classes* directory.

- *BASE_DIR*: Set this parameter to the *uwc-deployed-path* of the Communications Express installation.

- *JAVA_HOME*: Set this parameter to the directory where Java is installed.

- *o=siroe.com, o=isp*: Replace the values for siroe.com and isp to the inetDomainBaseDN for your configured domain.

Execute the batch migration script.

```
# ./runMigrate.sh
```

If the batch migration fails, exceptions are displayed at the command line prompt.

Migrating a Single User and a Set of Users

Using the migration script, administrators can migrate all the users, a single user, or a set of users. Running the batch migration script without any options migrates the entire set of users. To migrate a single user, you can specify the userid of the user. To migrate a set of users, you should provide the list of users in a text file. The runMigrate.sh command has the following syntax:

```
./runMigrate.sh{ [-u < [uid] |  [-f <uids-file]} [-h]
```

where:

- -u option tells the runMigrate script that you want to migrate a single user. The –u option should be followed by the userid of the user who you want to migrate. Here is an example:

```
./runMigrate.sh -u user1
```

- -f option tells the `runMigrate` script that you want to migrate a set of users that have been specified in a file. The –f option should be followed by the name of the file that contains the userids of the selected set of users who you want to migrate. Here is an example:

```
./runMigrate.sh -f usersToMigrate.txt
```

The `usersToMigrate.txt` file should contain one userid on a single line. For example:

```
user1
user2
user3
...
....
and so on..
```

Data Migration Process

Communications Express uses a migration script to migrates user's Messenger Express address book data to the Address Book Server that is part of Communications Express.
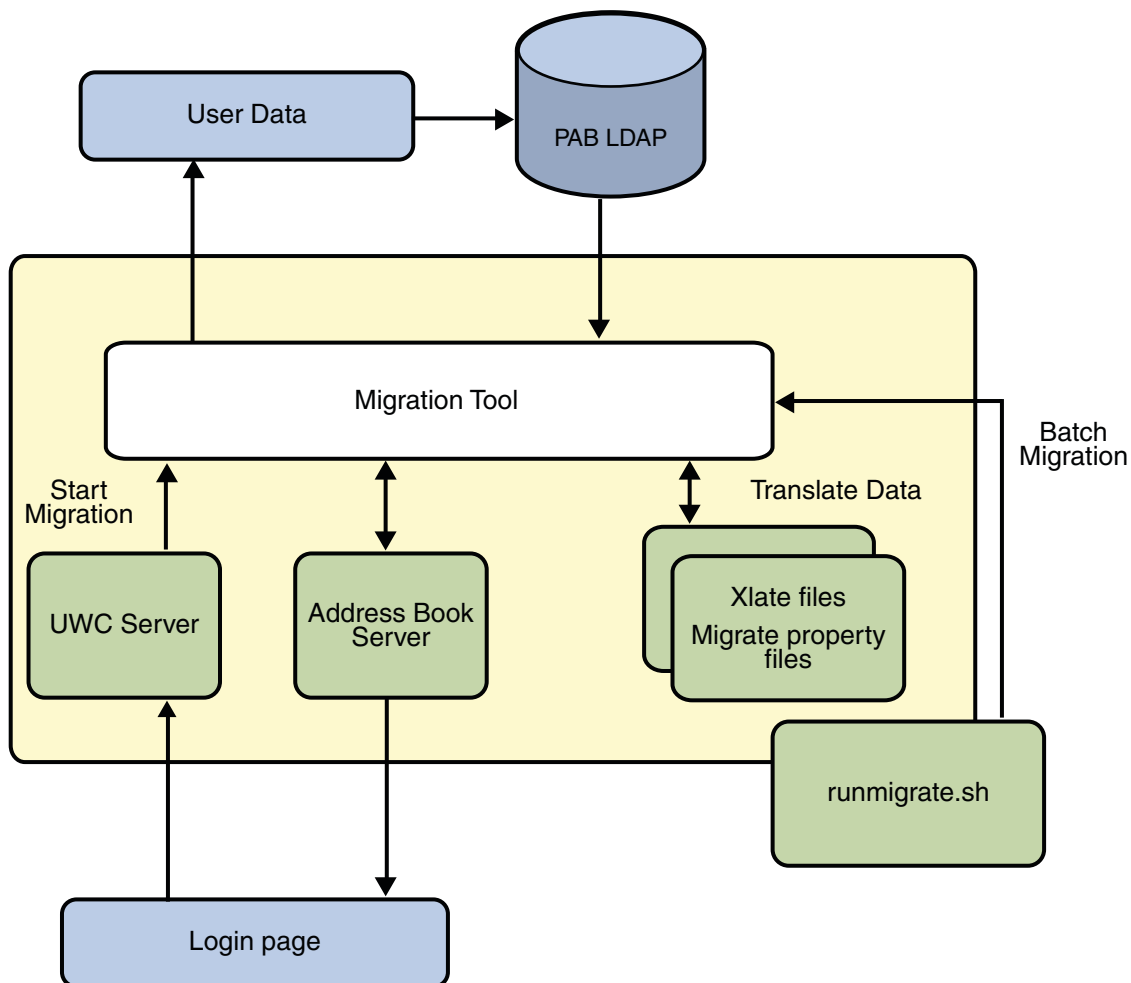
FIGURE 7–1   Overview of the Data Migration Process

Data residing in the LDAP PAB tree of Messenger Express is migrated to the address book Server LDAP PAB tree. The example below illustrates the migration process.

When *User1* in the domain *siroe.com* has an entry in PAB, such as *Entry1* that needs to be migrated, the entry is located in the PAB tree under *ou=User1* as shown in .
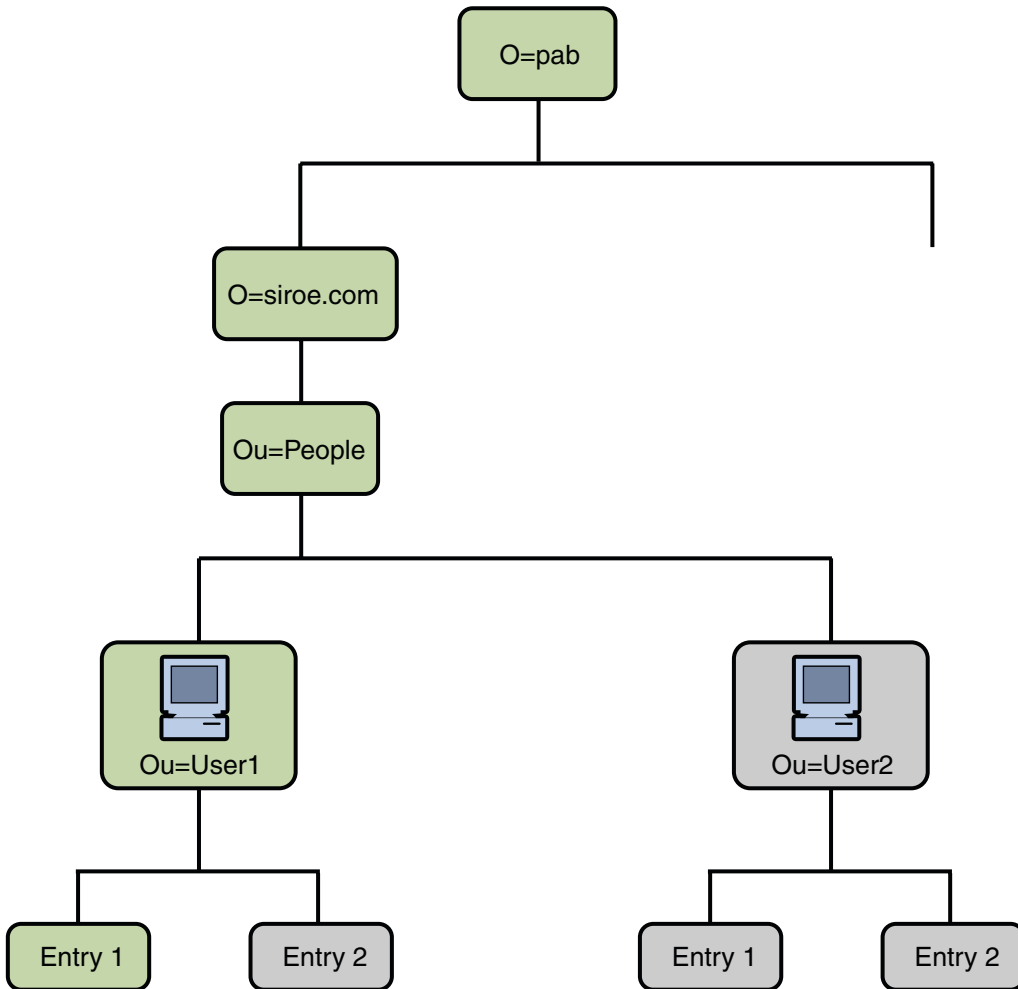
FIGURE 7–2   Location of Entry1 in the PAB tree

After migration, the newly created Address Book Server Entry is added to the Address Book Server tree under *o=siroe.com, piEntryID=Entry 1* as shown Figure 7–3.
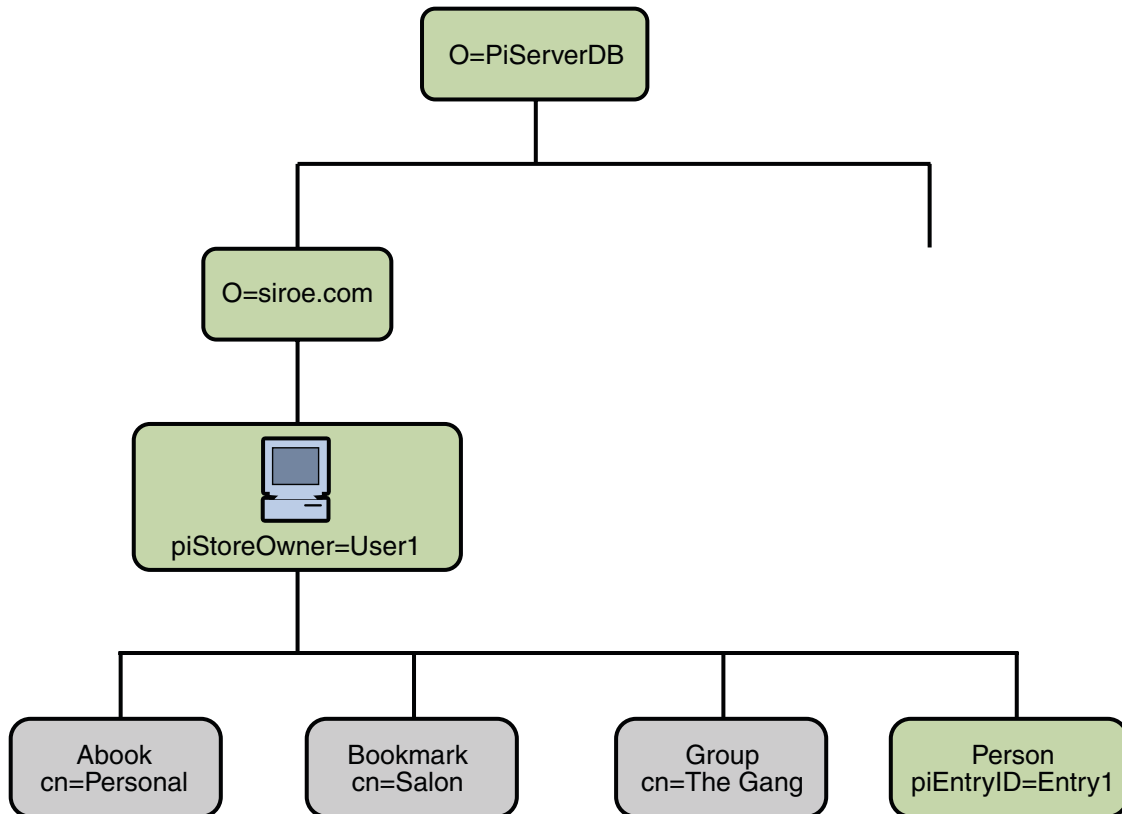
FIGURE 7–3   Location of Entry 1 in the Address Book Server tree.

Note – The migration utility migrates all the data from PAB of Messenger Express to Address Book of Communications Express when the user logs in for the first time. However, once data is migrated to Address Book, new contacts or groups created using Messenger Express will not be shown in the Address Book of Communications Express. The reverse is also true.

Post Configuration Steps

You need to configure Communications Express to enable migration.

Note – The configuration parameters required for migration must be manually provided by the administrator.

The following table lists the configuration files that the migration script depends on.

TABLE 7–2 Configuration Files and their Purpose

File Name	Description
`migrate.properties`	Contains the parameters required to migrate data from PAB to Address Book Server.
`uwcauth.properties`	Referred by the migration utility to decide whether migration is required.
	Migration tool checks for the value of `pab_mig_required` If the value is `true`, dynamic migration takes place
`uwcconfig.properties`	Administrators can provide the log level and enable logging for trouble shooting purposes. By default the log level parameter `log.level` is disabled and set to `0`.
`runMigrate.sh` (applicable only for Batch migration)	The script is used to perform batch migration. It sets the required variables and invokes the Java program `MigratePab`, with following three arguments.
	# Absolute path of `migrate.properties` file. The Default path is set to: `../WEB-INF/config/migrate.properties`
	# Absolute path of configuration directory in which `uwcauth.properties` and other configuration files are located. The default path is set to: `../WEBINF/config`
	# `inetDomainBaseDN` of the users
	This file needs to be edited appropriately to provide the necessary paths and arguments.

`xlate-pabperson.xml ()`
 	
`xlate-pabgroup.xml ()`
	Migration utility internally uses the address book APIs of Communications Express to load the data from the PAB of Messenger Express.

	The `xlate` files are required to map LDAP attributes of the PAB to the address Book attributes of Address Book Server. These files are available at *uwc-deloyed-path/WEB-INF/config//*`ldapstore/migrate`.

Based on the user's mail host, the PAB configuration entries listed in the table below are retrieved and the connection to the PAB server established.

TABLE 7–3 Parameters Configurable for PAB Migration in `migrate.properties`

Parameter	Default Value	Description
hostname.pabldappoolmin	4	Specifies the minimum number of LDAP user connections to be created for PAB LDAP
hostname.pabldappoolmax	20	Specifies the maximum number of LDAP user connections to be created for PAB LDAP
hostname.pabldappooltimeout	50	Specifies the number of seconds before timing out an LDAP connection

TABLE 7–3 Parameters Configurable for PAB Migration in `migrate.properties` *(Continued)*

Parameter	Default Value	Description
hostname.alwaysusedefaulthost	1	Specifies whether to use the user's PAB host mentioned in the PAB URI or to use the first fully qualified PAB hostname from the list maintained.
		When set to 1, the first fully qualified PAB host is used to retrieve the PAB entries
delete_pabentry	0	Enables the deletion of PAB entries and PABURI after a successful migration
maxthreads	10	Specifies the number of migration threads
mailhost.pabhosts	The mail host name is assigned to the list of PAB hosts in which the PAB entries are located.	Specifies the list of PAB hosts
mailhost.pabports		Specifies the port number of the PAB hosts
mailhost.pabbinddns		Specifies the bind DN for PAB
mailhost.pabpasswds		Specifies the password of the user binding to the PAB
<pabhost.pabport>.abhostport=< abldaphost>:<abldapport>		Specifies the *pabhost* and *pabport* entries available in the lookup table in the `migrate.properties` file.
		In this parameter *<pabhost.pabport>* refers to the source directory instance and *<abldaphost>* and *<abldaport>* the target directory instance to which the PAB data is required to be migrated

TABLE 7–4 Field Mapping for Contacts

PAB	Address Book
cn	*DisplayName*
sn	*sn*
givenName	*givenName*
telephonenumber	*piPhone1Type:work*
	piPhone1:
homephone	*piPhone2Type:home*
	piPhone2;

TABLE 7–4 Field Mapping for Contacts   *(Continued)*

PAB	Address Book
pager	*piPhone4Type:pager*
	piPhone4:
mobile	*piPhone3Type:mobile*
	piPhone3:
facsimiletelephonenumber	*piPhone5Type:fax*
	piPhone5:
mail	*piEmail1Type:work*
	piEmail1:
postoffice+street	*homePostalAddress*
l	*homecity*
st	*homeState*
postalcode	*homePostalCode*
co	*homeCountry*
labeleduri	*piWebsite1*
description	*description*
memberofpabgroup	*memberOfOIGroup*
dateOfBirth	*dateOfBirth*
	Caution – Due to a limitation in Messenger Express, the migration of this property may be erroneous if you have specified date of birth in a format other than MM/DD/YY. You can however edit this property after the migration and set it to the correct date. Refer to the Online Help for instructions on how to set this.

TABLE 7–5 Field Mapping for Groups

PAB	Address Book
cn	*displayName*
description	*description*

Note – For more information, see Appendix D, "Password Encryption in Communications Express."

8

Performance Tuning and Load Balancing Mechanisms in Communications Express

This chapter describes the information you need to consider for improving the performance of Communications Express.

LDAP Failover Mechanism in Communications Express

This section describes how to set up and configure LDAP pools and set LDAP connections to improve the efficiency of Communications Express. Some components of Communications Express require connections to the LDAP server to retrieve and manage information. The amount of time required to establish a connection and retrieve information from the LDAP server can be huge if a large number of users are logged in. You can reduce the turnaround time to establish the connection and retrieve information if a pool of LDAP connections are already created which Communications Express can use.

In a typical production environment of Communications Express, an LDAP load balancing and failover mechanism is adopted. Here, one LDAP server (known as the master) is responsible for retrieving information and another set of servers (known as the failover servers) are used in case of a catastrophe (where the master server fails). This way, a single point of failure is avoided.

Communications Express contains an LDAP failover Manager module that is responsible to retrieve connections from the master or slave servers. Each load balancing server maintains a pool of available free connections. Whenever a Communications Express component requires a connection to the LDAP server, the LDAP failover manager provides the component with a connection from the pool of LDAP connections.

▼ To Configure Communications Express for LDAP Failover

To configure Communications Express to create a LDAP Failover Manager, you need to set a few parameters in the uwcauth.properties file.

1 Change directory to *uwc-deploy-path*/WEB-INF/config/**.**

2 Edit the uwcauth.properties **file and set the following parameters.**

- **ldapusersession.ldapport** : Set this parameter to the port on which the LDAP server is running.

- **ldapusersession.ldaphost**: Set this parameter to the LDAP host list of the LDAP server names. This can be a comma separated list. If the LDAP servers are running on a non-default port; this can be specified by a comma. For example, *host1, host2:1290, host3, host4:2546*. Here, *host1* and host3 are running on the default ports, whereas host2 and host4 are running on non-default ports.

3 Restart the web container on which Communications Express is deployed.

Compressing Server Response for Communications Express

In a network intensive production scenario where large amount of data is transferred, the performance can be enhanced by enabling compression of the server response. This way, data is compressed and sent across the network — thus improving the performance.

To enable compression of the server response, you should set the *uwc.gzip.compression* parameter in the uwcconfig.properties file.

Enable compression of the sever response in the uwcconfig.properties file, by setting the *uwc.gzip compression* parameter value to true.

For example, *uwc.gzipcompression = true* and restart the web container on which Communications Express is deployed.

Setting Session Time-out

When users log on to Communications Express, a session is created on the server side for that user. The session contains data about each user and is maintained on the server side. When a large number of concurrent users are logged in, managing the session data may need resources. By setting the session-timeout for a session to an optimal value and closing unused sessions that are open or inactive for a long time, the performance can be improved.

To customize the session-timeout for Communications Express, edit the web.xml file found in *uwc-deploy-dir*/ WEB-INF directory. This XML file contains the XML tag session-config which has the attribute session-timeout. This attribute defines the session time-out in minutes. Change the value of the session-timeout attribute to the desired value.

For example, the following defines session-time-out for 10 minutes:

```
<session-config>
    <session-timeout>10</session-timeout>
 </session-config>
```

Tuning LDAP Related Configuration Parameters

This section describes the tuning you can perform on Directory Server to enhance performance.

Setting the *nsSizeLimit* and *nsLookthroughLimit* Parameters for Users and Address Book

It is important that the *nsSizeLimit* and *nsLookthroughLimit* parameters in User or Group LDAP directory and Address Book server configuration is large enough for searches to be completed properly.

To determine if these parameters are set to appropriate values, type the following command:

```
ldapsearch -b /base/
(&(icscalendarowned=*/user/*)(objectclass=icsCalendarUser))
```

where

/base/ is the LDAP base DN of the directory server where the user and resource data for Calendar Server is located.

/user/ is the value that an end user can enter in the Calendar Search dialog under the Subscribe option in Communications Express.

The LDAP server returns an error, if the *nsSizeLimit* or the *nsLookthroughLimit* parameter is not large enough.

Follow these guidelines to reset *nsSizeLimit* or the *nsLookthroughLimit* parameters:

- Ensure that the value for *nsSizeLimit* parameter is large enough to return all the desired results, otherwise, data can get truncated, and no results will be displayed.

- Ensure that the value for *nsLookthroughLimit* parameter is large enough to complete a search of all the users and resources in the LDAP directory. If possible set *nsLookthroughLimit* to *-1*. By doing this, no search limit is set for *nsLookthroughLimit*.

Note – It is recommended that the User or Group and Address Book entries in LDAP are setup separately.

Tuning Web Server

To enhance the Web Server's performance, perform the steps described in this section.

Setting The Value of `acceptorthreads`

In `server.xml`, change the value of the attribute *acceptorthreads* present in *<vs\>* (virtual server) element to the number of CPUs on the machine hosting Web Server.

For example:

```
<VS id="https-siroe.com"
                connections="ls1"
                mime="mime1"aclids="acl1"
                urlhosts="<webserver hostname"
                        acceptorthreads="<noofcpus\>" \>
```

Setting JVM Options

Add or set the following JVM options in the `server.xml` file of Web Server.

The following parameters determine the heap size of JVM

- *<JVMOPTIONS>-Xms/JVMOPTIONS>* (approximate value according to the memory available)
- *<JVMOPTIONS>-Xmx /JVMOPTIONS>*(approximate value according to the memory available)
- *<JVMOPTIONS>—XX: NewSize = <1/3rd of the heap allocated></JVMOPTIONS>*
- *<JVMOPTIONS>-XXMaxNewSize =<1/3rd of the heap allocated></JVMOPTIONS>*

The first option indicates Maximum heap size and the second option indicates Minimum heap size

It is recommended to have the same values for both the options.

Add the following JVM option

*JVMOPTIONS -*server */JVMOPTIONS*

Set the following parameters for garbage Collection

- *JVMOPTIONS-XX:+UseParNewGC/ JVMOPTIONS*
- *JVMOPTIONS-XX:ParallelGCThreads= number-of-CPUs/JVMOPTIONS*
- *JVMOPTIONS-XX:+UseConcMarkSweepGC/ JVMOPTIONS*

Tuning Calendar Server

This section describes how load balancing across multiple CPU on Calendar Server can enhance performance.

Using Load Balancing Across Multiple CPU

If a server has multiple CPUs, by default Calendar Server distributes the HTTP Service such as `cshttpd` processes and Distributed Database Service such as `csdwpd` processes across CPUs.

The *service.http.numprocesses* and *service.dwp.numprocesses* parameters in the `ics.conf` file determine the actual number of processes that run for each service. By default, these parameters are set to the number of CPUs for the server during installation, but you can reset these values. For example, if a server has eight CPUs, but you want a *cshttpd* and *csdwpd* process to run in only 4 CPUs, set the parameters as:

service.http.numprocesses="4"

service.dwp.numprocesses="4"

▼ To Disable Load Balancing

1　**Add the** *service.loadbalancing* **parameter to the** `ics.conf` **file**

2　**Set** *service.loadbalancing* **to** **"***no.***"**

3　**Restart Calendar Server for the change to take effect.**

For information on load balancing refer to Appendix C, "Calendar Server Configuration Worksheet," in *Sun Java System Calendar Server 6.3 Administration Guide* in *Sun Java System Calendar Server 6.3 Administration Guide*

A

Configuration Panel Sequence

You can configure the web container for Communications Express using one of the following options:

- Sun Java System Web Server
- Sun Java System Application Server

The sequence in which the configurator panel is displayed for each web container varies depending on your web container selection. Table A–1 lists the panels that are displayed for different schema and web container combination.

TABLE A–1 Panel Sequence Depending on the Schema and Web Container Selection

Web Server	App Server
Welcome	Welcome
Select the Directory to Store Configuration and Data Files	Select the Directory to Store Configuration and Data Files
Select Components to be Configured	Select Components to be Configured
Network Connection	Network Connection
Select a Web Container	Select a Web Container
Web Server Configuration Details	Application Server Configuration Details
Web Server Administration Details	Application Server Administration Instance Details
Web container User and Group	Module Name for this Web Application
URI Path Setting	Web container User and Group
Do you want Hosted Domain Support?	URI Path Setting
User/Group Directory (LDAP) Server Details	Do you want Hosted Domain Support?
DC Tree Suffix	User/Group Directory (LDAP) Server Details

TABLE A–1   Panel Sequence Depending on the Schema and Web Container Selection   *(Continued)*

Default Domain Name	DC Tree Suffix
Enable Access Manager for Single Sign-On	Default Domain Name
Webmail Server Host and Port Configuration	Enable Access Manager for Single Sign-On
Calendar Server Host and Port Configuration	Messaging Express Port
Calendar Server Administration Details	Calendar Server Host and Port Configuration
PAB Directory Server Details	Calendar Server Administration Details
Ready to Configure	PAB Directory Server Details
	Ready to Configure

B

Installing Communications Express Without Messaging Server and Using a Single Tree Structure

An existing Directory Information Tree should be mapped to the dual tree namespace to retrieve user/group entries, when you are installing Communications Express on a machine on which:

- Messaging Server is not installed or configured
- Single tree namespace structure is used for retrieving user/group entries

  The sections below describes how Communications Express uses the two DIT tree mechanism and how an existing single tree namespace structure maps to the dual tree name space.

Two Tree Names Space Mechanism

The namespace of Directory should consist of two directory information trees (DIT), an Organization Tree and a Domain Component Tree (DC Tree). Organization Trees contain the user and group entries. The DC Tree mirrors the local DNS structure and is used by the system as an index to the Organization Tree containing the data entries. The DC Tree also contains the domain's operating parameters such as the service specific attributes.

How the Two-tree Namespace Mechanism Works

This section describes how Communications Express uses the two-DIT mechanism.

When Communications Express searches for user/group entries, it first looks at the user/group's domain node in the DC Tree and extracts the value of the *inetDomainBaseDN* attribute. This attribute holds a DN reference to the organization subtree containing the actual user/group entry.

Using this model, Communications Express can support entries stored in any type of directory Tree, provided that a domain component node in the DC Tree points to the node in the Organization Tree under which the users for that domain can be found.

Why Two Directory Information Trees?

This dual-tree mechanism provides the following enhancements:

- The partitioning of data for organization-specific access control. That is, each organization can have a separate subtree in the DIT where user and group entries are located. Access to that data can be limited to users in that part of the subtree.

- The ability to have a distinct namespace for sub domains. For example, `west.siroe.com` and `siroe.com` may be mapped to separate organization subtrees allowing the creation of user entries with the same UID in each one of them.

▼ To Map an Existing DIT to the Dual Tree Namespace

Assuming that the root suffix for Organization tree is: `o=isp`

Assuming that the Organization DN that is currently being used is `o=siroe.com,o=isp` and the user container is `ou=People,o=siroe.com,o=isp`

1 Create a root suffix, *o=internet* **for DC tree.**

The root suffix can be created using the Directory Server console.

2 Under this DC tree root suffix, create a domain entry with DN as

`dc=siroe,dc=com,o=internet.`

Use the following LDIFs to create the domain entry using the `ldapmodify` command:

Note – Please change the Organization root, Organization Name, Organization DN, Object Classes and Attribute values mentioned in the LDIF files to reflect your deployment details.

```
root suffix
Organization root suffix: o=isp
Organization name: siroe
DNS domain name: siroe.com
Origanization DN: o=siroe.com,o=isp
```

The following Object Classes and attributes are used by mail service:

```
ObjectClasses:
mailDomain, nsManagedDomain
Attributes:
mailDomainStatus, preferredMailHost, mailDomainDiskQuota, mailDomainMsgQuota
mailDomainReportAddress, nsMaxDomains, nsNumUsers, nsNumDomains, nsNumMailLists
```

Note – Remove mail service ObjectClasses and Attributes from the LDIFs if you do not wish to use them.

Ensure that the value of `inetDomainBaseDN` attribute in the LDIF is assigned the organization DN.

Examples of LDIF files

3 Use `ldapmodify` command to add the LDIF file entries to the DC tree.

Example B–1 LDIF File 1

```
dn: dc=com,o=internet
dc: com
objectclass: top
objectclass: domain
```

Example B–2 LDIF File 2

```
dn: dc=com,o=internet
dc: com
objectclass: top
objectclass: domain
dn: dc=siroe,dc=com,o=internet
objectClass: top
objectClass: domain
objectClass: inetDomain
objectClass: mailDomain
objectClass: nsManagedDomain
dc: siroe
aci: (targetattr="icsTimeZone||icsMandatorySubscribed||icsMandatoryView|
|icsDefaultAccess||icsRecurrenceBound||icsRecurrenceDate|
|icsAnonymousLogin||icsAnonymousAllowWrite||icsAnonymousCalendar|
|icsAnonymousSet||icsAnonymousDefaultSet||icsSessionTimeout|
|icsAllowRights||icsExtended||icsExtendedDomainPrefs")
(targetfilter=(objectClass=icsCalendarDomain))(version 3.0;
acl "Domain Adm calendar access - product=ims5.0,
class=nda,num=16,version=1"; allow (all)
groupdn="ldap:///cn=Domain Administrators,ou=Groups,o=siroe.com,o=isp";
description: DC node for siroe.com hosted domain
inetDomainBaseDN: o=siroe.com,o=isp
inetDomainStatus: active
mailDomainStatus: active
preferredMailHost: mailhost.siroe.com
mailDomainDiskQuota: -1
mailDomainMsgQuota: -1
```

```
mailDomainReportAddress: postmaster@siroe.com
nsMaxDomains: 1
nsNumUsers: 1
nsNumDomains: 1
nsNumMailLists: 0
```

C
Configuration Parameters Reference

The configuration parameters, default values, and their description are documented in this appendix.

Application-Wide Parameters in `uwcconfig.properties` and `uwcauth.properties` File

TABLE C–1   Parameters in the `uwcconfig.properties` file

Parameters	Default Value	Description
uwc.gzipcompression	true	Enables GZIP compression on the Communications Express HTTP response. Set this value to true to enable GZIP compression of the HTTP response. Enabling GZIP compression improves the throughput of the Communications Express page access.

TABLE C–1 Parameters in the `uwcconfig.properties` file *(Continued)*

Parameters	Default Value	Description
uwc.renderhtml	n	Specifies whether Calendar Server should to render data in HTML format.
		Set this value to y to render the calendar data in HTML format.
manual_purge_enabled	true	Enables a user with jsessionid to invoke the Address Book Server command, *purge_entries.wabp*, and permanently delete all entries marked for deletion.
auto_purge_enabled	false	Automatically purges contacts that are marked for deletion when *login.wabp* is invoked.
		Set this value to true to enable automatic purge of contacts when *login.wabp* is invoked.
expire_period	0	Specifies the purge period in days, after which entries marked for deletion are permanently deleted.
		This parameter is valid only when *auto_purge_enabled* is set to true.
purge_interval	30	Specifies the purge interval in days.
		The purge cycle is triggered at the interval specified here only when *auto_purge_enabled* is set to true.
addressbook.wabp.version	1.0	Specifies the address book protocol version.

TABLE C–2 Parameters in the `uwcauth.properties`

Parameters	Default Value	Description
defaultdomain		Specifies the default domain to be used when the domain does not have the required properties, the properties are picked up from the default domain name.
		The attribute default domain is assigned the value entered during configuration.
defaultlocale	en	Specifies the default locale to be used by the application.

TABLE C–2 Parameters in the uwcauth.properties *(Continued)*

Parameters	Default Value	Description
virtualdomain.mode		Specifies whether Communications Express is operating in virtual domain mode. Enable this option if you have enabled hosted domain support for Calendar Server. The *virtualdomain.mode* is assigned the value entered during configuration.
uwcauth.ssl.enabled	*false*	Specifies whether SSL should be enabled.
uwcauth.ssl.authonly	*false*	Specifies whether SSL is enabled for SSL only.
uwcauth.admins		Specifies a list of administrator user ids. Multiple administrators can be defined and should be comma separated. This parameter is commented out by default. The administrator user ids should be in the form of *uid@domain*. For the default domain, you can ignore the domain related information. For example, if your default domain is *siroe.com*, the administrator for this domain can be *admin*. For non-default domains, the administrator user ids should be completely specified. For example *admin@example.com*. Here, *admin* is the administrator for *example.com*.

The db_config.properties **File**

Table C–3 lists the parameters of db_config.properties file.

TABLE C–3 Corporate Directory Parameters

Parameters	Default Value	Description
defaultserver.ldappoolmin		Specifies the minimum number of LDAP client connections.
defaultserver.ldappoolmax		Specifies the maximum number of LDAP client connections.
defaultserver.ldappooltimeout		Specifies the number of seconds before timing out an LDAP connection. Increase this value to accommodate large search results.
defaultserver.ldaphost		Specifies the LDAP host.

TABLE C–3 Corporate Directory Parameters *(Continued)*

defaultserver.ldapport		Specifies the LDAP port.
defaultserver.ldapbinddn	*cn=Directory Manager*	Specifies the DN used to bind to the LDAP.
		If the login type is "restricted" or "proxy" it is mandatory to assign a value to *defaultserver.ldapbinddn*.
		If the login type is "anonymous" you need not enter a value for this parameter.
defaultserver.ldapbindcred		Specifies the bind password.
entry_id	*uid*	Specifies the key in LDAP used to identify a contact/group entry.
		You can set the *entry_id* to the UID or to the key used to fetch the contact/group information such as *empid* or principal ID.
		In the xlate-inetorgperson.xml file replace "*uid*" in <*entry entryID= "db:uid"*\> with the *entry_id* value specified here.
retrieve_db_attribs		Defines whether all the database attributes should be passed in the LDAP search. This parameter can be either True or False.
lookthru_limit	1000	Specifies the search query limit for a search.
delete_perm		Enables contact/group entries to be marked for deletion or to be deleted permanently.
		Set the parameter to false to mark the contacts/groups for deletion.
		Set the parameter to true to permanently delete the contacts and groups.
admin_group_dn		Specifies the DN of the *admin* group.
		A user belonging to this group can purge all contacts that are marked for deletion.

TABLE C–3 Corporate Directory Parameters   *(Continued)*

login_type	*restricted*	Specifies the method using which the connection to the LDAP store is maintained.
		You can assign the following three values to this parameter:
		anon - to connect to the LDAP as an anonymous user
		restricted - to connect as a user who has the rights to perform operations on the Address Book Store.
		proxy - to masquerade as a user who can perform operations on the Address Book Store. Assigning this value enhances performance as it by passes the LDAP bind on each operation.
		NOTE: A Read only access is given to a masquerading user.
collation_rule	*en-US*	Specifies the collation rule that should be used. This parameter is commented out by default in the property file.
search_fields	*entry/displayname*	Specifies the search fields for which the collation rule should be applied. This property is disabled by default. This property should be uncommented if the collation rules have to be applied.

The `uwcconfig.properties` **File**

Table C–4 lists the parameters of `uwcconfig.properties` file.

TABLE C–4 Parameters in the `uwcconfig.properties`

Parameters	Default Value	Description
mail.deployed		This parameter is set to true if Mail is deployed. The parameter is set when you run the configuration wizard.
webmail.cookiename		If *local.service.http.cookiename* is set in webmail then value of this parameter should be same as *local.service.http.cookiename*.
webmail.host		Specifies the host on which the Messaging Server's HTTP service is running.

TABLE C–4 Parameters in the uwcconfig.properties *(Continued)*

Parameters	Default Value	Description
webmail.port	80	Specifies the port number Communications Express HTTP Server listens to.
webmail.securedproxyauth		Specifies whether Communications Express should authenticate a user in web mail server over SSL mode. If set to true, the authentication is done in SSL mode, and non-SSL mode if set to false.
webmail.proxyadmin	*admin*	Specifies the proxy administration user id.
webmail.proxyadminpasswd		Specifies the encrypted proxy administrator's password in encrypted format.
webmail.ssl.port		Specifies the mail (HTTPS) server port.
calendar.deployed		Specifies whether the calendar module is deployed. The parameter is set when you run the configuration wizard. The attribute is set to "true" if Calendar is deployed.
calendar.wcap.host		Specifies the host name of the WCAP server.
calendar.wcap.port		Specifies the port number WCAP listens to.
calendar.wcap.adminid	*calmaster*	Specifies the administrator user idfor the WCAP Sever.
calendar.wcap.passwd		Specifies the administrator password for the WCAP Server.
calendar.jcapi.serviceclass *.socs*	*com.sun.comclient.calendar.* *socs.SOCSCalendarStore*	Specifies the name of Class implementing Java API for Calendar JCAPI, for Sun Java System Calendar Server. Note: Do not change this value.
uwc.gzipcompression		Enables GZIP compression on the Communications Express HTTP response. Set this value to true to enable GZIP compression of the HTTP response. This improves the throughput of the Communications Express page access.
uwc.renderhtml		Specifies whether calendar data needs to be rendered in HTML. The parameter is set to 'y' if calendar data is to be rendered in HTML. Valid values are 'y' or 'n'.
log.file This parameter is used by Address book module.	/tmp/trace.log	Species the location of the log file. By default messages go to the web container error log file.

TABLE C–4 Parameters in the `uwcconfig.properties`   *(Continued)*

Parameters	Default Value	Description
log.level This parameter is used by Address book module.	0	Specifies the log level for the application. To disable logging for this module, set the value to 0. The valid values are: !level = 0 (off), 1 (debug only), 2 (error only), 3 (all).
log.components This parameter is used by Address book module.	127	Specifies the component level for logging.
maxpostcontentlength	1000000	Specifies the maximum content-length of a POST command with a content-type of multipart/form-data (for file upload) in octets. -1 refers to no limit.
uwcloginpath	*/base/UWCMain*	Specifies the path to the Communications Express login page.
sessionobjfactory.pstore.class	*com.iplanet.iabs.coresrv.* *CorePersonalStoreFactory*	Defines the class implementing the *SessionObjectFactory*
loginpagetemplate	`login.xml`	This parameter is used by Communications Express to log on to the Address Book component of the user. The `login.xml` file is available in *uwc-deployed-path*/`ui/html/`
sessionobjfactory.pstore. *configpath*		Specifies the plug-in configuration path. The path is either relative to the path of the current file or absolute to the path of the current file.
sessionobjfactory.pstore. *sessionid*	*com.iplanet.iabs.pstore*	Specifies the name under which the object should be stored in the user's session.
addressbook.wabp.version		Specifies the address book protocol version.
manual_purge_enabled		Enables a user with jsessionid to invoke the Address Book Server command, *purge_entries.wabp* and permanently delete all entries marked for deletion.
auto_purge_enabled		Automatically purges contacts that are marked for deletion when *login.wabp* is invoked. Set this value to true to enable automatic purge of contacts when *login.wabp* is invoked.
expire_period		Specifies the purge period in days, after which entries marked for deletion are permanently deleted. This parameter is valid only when *auto_purge_enabled* is set to true.

TABLE C–4 Parameters in the `uwcconfig.properties`   *(Continued)*

Parameters	Default Value	Description
purge_interval		Specifies the purge interval in days. The purge cycle is triggered at the interval specified here only when *auto_purge_enabled* is set to true.
uwc.homepageurl		Specifies the Home Page URL. When the users click the home link, they are taken to this URL. In the absence of this parameter, home link will take the user to the user's default application.
mailfiltermaxmailcount	2	Specifies the number of mail filters you can have
is_passwd_encrypted	true	Specifies whether passwords are encrypted.

The `uwcauth.properties` **File**

Table C–5 lists the parameters in the `uwcauth.properties` file.

TABLE C–5 Parameters in the `uwcauth.properties` file

Parameters	Default Value	Description
defaultdomain		Specifies the default domain to be used when the domain does not have the required properties. The properties are picked up from the default domain name. The default domain is assigned the value entered during configuration.
defaultlocale		Defines the default locale of the application.
virtualdomain.mode		Defines the mode in which calendar server is operating. If the calendar server is operating in hosted (also known as virtual) domain mode, set the parameter value to 'y' otherwise to 'n'.

TABLE C–5 Parameters in the uwcauth.properties file *(Continued)*

Parameters	Default Value	Description
uwcauth.ssl.enabled		Defines if SSL is enabled.
uwcauth.ssl.authonly		Defines if SSL is enabled for authentication only.
ldapauth.ldaphost		Specifies the LDAP host value. Normally the *ldapauth.ldaphost* value is the same as the *ldapusersession* value. You can set it to a different value, if required.
ldapauth.ldapport		Specifies the LDAP port number.
ldapauth.dcroot		Specifies the DC root for the authentication tree.
ldapauth.domainattr	*inetDomainBaseDNinetDomainStatusinetDomainSearchFilter domainUidSeparator preferredLanguage*	Specifies the list of attributes to be retrieved from the domain entry in which the user is authenticated.
ldapauth.domainfilter	`(|(objectclass=inetDomain)` `(objectclass=inetDomainAlias))`	Specifies the filter based on which the domain entry is retrieved.
ldapauth.ldapbinddn	*<binddn\>*	Specifies User DN of the user binding to the authentication LDAP.
ldapauth.ldapbindcred	*<binddncredintials\>*	Specifies password of the user binding to the authentication LDAP.
ldapauth.enablessl	false	Specifies whether the directory against which authentication is to be performed is in SSL mode. Change the default value to "true" to setup a secure LDAP connection.

TABLE C–5 Parameters in the uwcauth.properties file *(Continued)*

Parameters	Default Value	Description
ldapusersession.defaultugfilter		Specifies the default filter syntax to be used when retrieving the user entry.
Parameters for the user lookup		
ldapauth.schema		Specifies the LDAP schema deployed during installation.
ldapusersession.ugattr	*uid,inetUserStatus,preferredLanguage,psRoot,pabURI, cn,mail,mailHost*	Specifies the set of attributes to be returned from LDAP during entry lookup.
ldapusersession.ldaphost		Specifies the Host name of the directory server used for users lookup. More than one host can be specified for fallback. The names of the servers are delimited by semicolon (;). !The name of fallback servers should be in the format: Host Name: PortNumber
ldapusersession.ldapport		Specifies the port number of the user/group directory server.
ldapusersession.ldapbinddn		Specifies the UserDN of the *admin* binding to the user group Directory Server.
ldapusersession.ldapbindcred		Specifies the password of the *admin* binding to the user tree.
ldapusersession.dcroot		Specifies the Domain Component (DC) tree in the user/group LDAP that is used to resolve a user entry in Sun Java System LDAP Schema v.1.

TABLE C–5 Parameters in the uwcauth.properties file   *(Continued)*

Parameters	Default Value	Description
ldapauth.basedn		Specifies the LDAP base domain name value.
ldapusersession.domainfilter	*(|(objectclass=inetDomain)(objectclass=inetDomainAlias))*	Defines the filter used to identify a domain entry.
ldapusersession.ldappoolmin		Specifies the minimum number of LDAP client connections maintained.
ldapusersession.ldappoolmax		Specifies the maximum number of LDAP client connections maintained.
ldapusersession.ldappooltimeout		Specifies the number of seconds before timing out an LDAP connection. Increase this value to accommodate large search results.
ldapusersession.enablessl		Specifies whether the directory against which authentication is to be performed is in SSL mode. Change the default value to "true" to setup a secure LDAP connection.
Common Auth Configuration		
uwcauth.sessioncookie	*JSESSIONID*	Specifies the name of the cookie used by the servlet container to monitor sessions. This value should not be changed.

TABLE C–5 Parameters in the uwcauth.properties file   *(Continued)*

Parameters	Default Value	Description
uwcauth.appprefix		Specifies the prefix for the host application used to find cookies generated by other trusted applications for single sign-on.
		If the deployment uses Messaging SSO, this attribute should be assigned the value of *local.webmail.sso.prefix* set during messaging server configuration.
uwcauth.appid	*uwc*	Specifies the cookie name containing the unique application ID for the host application.
messagingsso.appid	*ims*	Communications Express uses this cookie to determine whether to issue the logout request to Messenger Express.
		The value of *messagingsso.appid* should be same as the value of *local.webmail.sso.id* set during messaging configuration.
uwcauth.cookiedomain		Specifies the domain or path saved as part of the single sign-on cookie.
MessagingSSOAuth Filter Configuration		

TABLE C–5 Parameters in the uwcauth.properties file *(Continued)*

Parameters	Default Value	Description
uwcauth.messagingsso.enable		Enables or disables messaging single sign-on functionality.
		Set this parameter to "true" to enable single sign-on and "false" to disable single sign-on.
		Make sure that *uwcauth.messagingsso.enable* is set to "false" when setting up Communications Express for Access Manager Single Sign-On.
uwcauth.messagingsso.cookiepath	/	Specifies the URI for which the single sign-on cookie is saved.
messagingsso.ims.url	*http://servername:MessagingServerPort/VerifySSO?*	Specifies the URL used to verify the SSO cookie.
		The value of xxx should be replaced by the application ID of the server.
		The value of *xxx* mentioned here should be identical to the value assigned in Messenger Express to *local.webmail.sso.id*.
messagingsso.uwc.url	http://servername:85/uwc/VerifySSO?When Communications Express is not deployed under "/", such as /uwc, the value of the parameter may look like: http://servername:85/uwc/VerifySSO?	Specifies the verify URL of Communications Express.
		If you have edited the value of *uwcauth.appid* for this server, replace *uwc* in *messagingsso.uwc.url* with the new *uwcauth.appid*.
Identity SSO		

TABLE C–5 Parameters in the uwcauth.properties file   *(Continued)*

Parameters	Default Value	Description
uwcauth.identity.enabled		Specifies whether Access Manager is enabled.
		Set the attribute to "true" to enable Access Manager. Set the attribute to "false" to disable Access Manager. Initially the value is set in the configurator.
uwcauth.identity.login.url	*http://nicp160.india.sun.com:99/amserver/UI/Login*	Specifies the Login Page URL of the Indentity Server
uwcauth.identity.binddn		Specifies the complete DN of the *amadmin*.
		For example,
		uid=amAdmin, ou=People, o=siroe.example.com, o=example.com
		Note: The *uwcauth.identity.binddn* and *uwcauth.identity.bindcred* values should correspond to the values entered when installing Access Manager.
		For example, *uwcauth.identity.binddn=uid=amAdmin, ou=People, o=siroe.example.com, o=example.com* and *uwcauth.identity.bindcred=password.*
uwcauth.identity.bindcred		Specifies the password of the *amAdmin*.

TABLE C–5 Parameters in the uwcauth.properties file   *(Continued)*

Parameters	Default Value	Description
uwcauth.identity.cookiename	*iPlanetDirectoryPro*	Specifies the Access Manager session cookie name. Ensure that in the uwcauth.properties file, the value of *uwcauth.identity.cookiename* is set to the value of *local.webmail.sso.amcookiename.*
uwcauth.http.port	80	Specifies the port number that Communications Express listens to when Communications Express is configured on a non SSL port.
uwcauth.https.port	443	Specifies the HTTPS port number that Communications Express listens to when Communications Express is configured on Web Server.
uwcauth.identitysso.cookiepath	/	Specifies the Identity SSO Cookie Path
identitysso.singlesignoff		Enables or disables identity single sign-on functionality. If this attribute is set to true, all applications participating in this IS session are signed out when the users logs out. If this attribute is set to false, only Communications Express session is disabled and the user will be taken to the URL configured in *identitysso.portalurl.*

TABLE C–5   Parameters in the uwcauth.properties file   *(Continued)*

Parameters	Default Value	Description
identitysso.portalurl		Specifies the verify URL of Communications Express. If Access Manager is enabled and single sign-off is set to false, Communications Express displays the *identitysso.portalurl.*
pab_mig_required	*true*	Specifies whether the address book directories should to be migrated. Set the attribute to "true' if PAB migration is required otherwise set the parameter to 'false'.
[fully qualified virtual hostname of uwc]. isvirtualhostname		When Communications Express is configured with Access Manager SDK in a remote set up, you need to specify the fully qualified virtual hostname of the desired virtual host to the virtual hostname of the Access Manager server.

The uwclogging.properties **File**

Table C–6 lists the parameters of the uwclogging.properties file.

TABLE C–6   Default Logging Configuration File

Parameters	Default Value	Description
uwc.logging.enable	no	Enables or disables logging. To enable logging, change the default value to yes.
uwc.log.file	*/var/opt/SUNWuwc/logs/* uwc.log	Specifies the location of the log file. Change the location of the file if required.

TABLE C–6   Default Logging Configuration File   *(Continued)*

Parameters	Default Value	Description
uwc.log.level	*INFO*	Specifies the log level for the application. Change the log level for the application to the desired level. The log level values available are: WARNING, INFO, and FINE, SEVERE.
uwc.log.formatter	*SimpleFormatter*	Describes the configuration information for Handlers. By default, the formatter is the SimpleFormatter. You could also specify XMLFormatter
uwc.log.maxsize	0	Defines the maximum logfile size in megabytes. Communications Express will roll over to a new log file when the current file reaches this size, approximately. Default value is 0, that is, the log file size is unbounded.
uwc.log.maxfiles	5	Defines the maximum number of log files to retain, when rollover is enabled.

The uwcdomainconfig.properties **File**

The uwcdomainconfig.properties file contains all the options that can be configured on a per-domain basis. The following options are the default user preferences for the domain.

If values for these preferences are not set, the preferences will be created with the values mentioned in Table C–7.

TABLE C–7   Parameters in the uwcdomainconfig.properties file

Parameters	Default Value	Description
Global options		
uwc-user-attr-locale	*en*	Specifies the default locale used for the domain.
uwc-user-attr-sunUCDefault *Application*	*addressbook*	Specifies the default page to be displayed after you login. The available options are: mail, calendar, and addressbook.

TABLE C–7 Parameters in the `uwcdomainconfig.properties` file *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-sunUCTheme	*uwc*	Specifies the default display theme. Note: Currently Communications Express supports per domain theme, but do not support per user themes. Refer to *Sun Java System Communications Express Customization Guide* for more details.
uwc-user-attr-sunUCColorScheme	*2*	Specifies the default display color scheme.
uwc-user-attr-sunUCDefaultEmailHandler	*uc*	Specifies the default email client used to send email messages from the application. You can set the default email client to Messenger Express or to a browser mail client.
uwc-user-attr-sunUCDateFormat	*M/D/Y*	Specifies the order in which the date, month, and year should appear in a date. The available options are: ■ M/D/Y ■ D/M/Y ■ Y/M/D

TABLE C–7 Parameters in the `uwcdomainconfig.properties` file   *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-sunUCDateDelimiter	/	Specifies the delimiter used in dates. Delimiter is the character that separates the date, month, and year in the date. You can specify the delimiter as a comma (,), forward slash (/), or hyphen (-).
uwc-user-attr-sunUCTimeFormat	*12*	Specifies the time display format. The available formats are 12 or 24 hour formats.
uwc-user-attr-sunUCTimeZone	*America/Los_Angeles*	Specifies the time zone in which your calendar is created. You can choose any valid time zone from the following areas: North and South America, Europe and Africa, Asia and Pacific Rim.
supportedLanguages		Specifies the list of supported languages for a domain. Each language in the list is separated by a semi colon. You can define the list of languages Communications Express will support for a domain. For example, `en;es;de;fr;ja;ko;zh-CN;zh-TW`
User's Calendar Options		

TABLE C–7 Parameters in the uwcdomainconfig.properties file   *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-icsExtendedUserPrefs-ceDefaultView	*dayview*	Specifies the view your default calendar should display after you login. The available options are: ■ dayview ■ weekview ■ monthview ■ yearview
uwc-user-attr-icsExtendedUserPrefs-ceShowCompletedTasks	*false*	Specifies whether the completed tasks will appear in the Tasks pane of the calendar. Change the default value to "true" if you want the completed tasks to appear in the Tasks pane of the calendar.

TABLE C–7 Parameters in the uwcdomainconfig.properties file *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-icsExtendedUserPrefs-ceDefaultCategory	*Business*	Specifies the default category in which the new events or tasks should be created. The categories available are: ■ Anniversary ■ Appointment ■ Birthday ■ Business ■ Breakfast ■ Class ■ Conference Call ■ Dinner ■ Holiday ■ Lunch ■ Meeting ■ Other ■ Personal ■ Seminar ■ Training ■ Travel ■ Vacation ■ Interview
uwc-user-attr-icsExtendedUserPrefs-ceDayHead	*9*	Specifies the day start time in hours.
uwc-user-attr-icsExtendedUserPrefs-ceDayTail	*18*	Specifies the day end time in hours.
uwc-user-attr-icsExtendedUserPrefs-ceInterval	*PT1H0M*	Specifies the interval the day is split into. In the day and week view, the day is split into half an hour or one hour time period. You can change the default split value to PT0H30M(half hour)

TABLE C–7 Parameters in the `uwcdomainconfig.properties` file   *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-icsFirstDay	*1*	Specifies the day of the week to be considered as the first day of the week in the calendar. By default, Sunday (1) is considered to be first day of the week and Saturday (7) the last day of the week.
uwc-user-attr-icsExtendedUserPrefs-ceWeekEndDays	*1,7*	Specifies the days of the week in the calendar views to be considered as weekend days. By default, Sunday (1) is the first day of the week and Saturday (7) the last day of the week. Comma separated list of numbers represents the days of the week to be considered as weekend days.
uwc-user-attr-icsExtendedUserPrefs-ceIncludeWeekendInViews	*true*	Enables or disables the display of weekend days in the Week and Month views of your calendar. Set the default value to "true" if the weekend days should be displayed in the Week and Month views of the calendar.

TABLE C–7 Parameters in the uwcdomainconfig.properties file   *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-icsExtendedUserPrefs-ceSingleCalendarTZID	*0*	Specifies whether the calendar should be displayed in the calendar's time zone. Change the default value to 0 if you do not want to view calendars in the calendar's time zone. When the value is set to zero, all calendars will be displayed in the time zone specified in the Global Options tab.
uwc-user-attr-icsExtendedUserPrefs-ceAllCalendarTZIDs	*0*	Defines the boolean value, which specifies that the time zone of all the displayed calendar should be used instead of the user's time zone.
uwc-user-attr-icsExtendedUserPrefs-ceDefaultAlarmStart	*PT0H30M*	Specifies the default number of hours and minutes, before an event or task, a reminder should be sent.
uwc-user-attr-icsExtendedUserPrefs-ceNotifyEnable	*1*	Specifies whether to send email messages containing *ical* attachments, to internal invitees when new events are created.
uwc-user-attr-icsExtendedUserPrefs-sunCalEventfilter		Defines the default invitations to be viewed in the calendar. The options available are: accepted, tentative, declined, and needs-action.
Address Book Default Option Values		
uwc-user-attr-sunAbExtendedUserPrefs-abName	`Personal Address Book`	Specifies the name of the default address book.

TABLE C–7 Parameters in the `uwcdomainconfig.properties` file   *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-sunAbExtendedUserPrefs-abDescription	This is the personal address book	Specifies a short description of the default address book.
uwc-user-attr-sunAbExtendedUserPrefs-abEntriesPerPage	*25*	Specifies the maximum number of address book entries to be displayed on a page. The available options are: 25, 50, and 75.
uwc-user-attr-sunAbExtendedUserPrefs-abSearchDisplayColumn1	*displayname*	Specifies the value to be displayed in the first column. By default, the first column displays name of contacts or group.

TABLE C–7 Parameters in the `uwcdomainconfig.properties` file   *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-sunAbExtendedUserPrefs-abSearchDisplayColumn2	*primaryemail*	Specifies the value to be displayed in the second column of your address book. You can set the display column name to: ■ `displayname` ■ `company` ■ `title` ■ `primaryphone` ■ `workphone` ■ `homephone` ■ `faxphone` ■ `pagerphone` ■ `primaryemail` ■ `email2` ■ `email3` ■ `homeaddress` ■ `workaddress` ■ `weburl1` ■ `weburl2` ■ `calendarurl` ■ `freebusyurl` ■ `birthday` ■ `anniversary` ■ `ou` ■ `edit` ■ `viewcalendar`

TABLE C–7 Parameters in the `uwcdomainconfig.properties` file *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-sunAbExtendedUserPrefs-abSearchDisplayColumn3	*primaryphone*	Specifies the value to be displayed in the third column of your address book.

You can set the display column name to:
- `displayname`
- `company`
- `primaryphone`
- `workphone`
- `homephone`
- `faxphone`
- `pagerphone`
- `pagerphone`
- `primaryemail`
- `email2`
- `email3`
- `homeaddress`
- `workaddress`
- `weburl1`
- `weburl2`
- `calendarurl`
- `freebusyurl`
- `birthday`
- `anniversary`
- `ou`
- `edit`
- `viewcalendar`

TABLE C–7 Parameters in the uwcdomainconfig.properties file   *(Continued)*

Parameters	Default Value	Description
uwc-user-attr-sunAbExtendedUserPrefs-abSearchDisplayColumn4	edit	Specifies the value to be displayed in the fourth column of your address book.
		You can set the display column name to:
		▪ `displayname`
		▪ `company`
		▪ `title`
		▪ `primaryphone`
		▪ `workphone`
		▪ `homephone`
		▪ `faxphone`
		▪ `pagerphone`
		▪ `primaryemail`
		▪ `email2`
		▪ `email3`
		▪ `homeaddress`
		▪ `workaddress`
		▪ `weburl1`
		▪ `weburl2`
		▪ `calendarurl`
		▪ `freebusyurl`
		▪ `birthday`
		▪ `edit`
		▪ `viewcalendar`
uwc-user-attr-hideCalId	false	Specifies whether to allow domain users of Communications Express the option of not seeing the calid in their calendars. If calid needs to be hidden, this value should be set to true.

The `personalstore.properties` **File**

Table C–8 lists the parameters in the `personalstore.properties` file.

TABLE C–8   Parameters in the `personalstore.properties`

Parameters	Default Value	Description
db.psrootattribute	*psRoot*	Defines the `psRoot` Attribute name.
db.useUserPsRoot	*false*	Specifies whether value for each User `psRoot` should be used . Set the attribute to `true` to use the attribute. Otherwise set the attribute to `false`.
db.defaultpsrootpattern		Specifies the default `psRoot` pattern to be used when *db.useUserPsRoot* attribute is set to true. For example, *ldap:///piPStoreOwner=%U,o=%D,o=PiServerDb*
db.psurlprefix	*ps*	Defines the protocol prefix of `ps` URLs
db.defaultpspath	*defaultps*	Defines the path where the `defaultps` values are stored. There exists one path for each domain with dictionary files for each locale.
db.maxpagedsearch		Specifies the maximum number of simultaneously paged search for an instance of Personal Store.

D

Password Encryption in Communications Express

Communications Express uses a proxy user to communicate with the various dependent components such as Calendar Server, Messaging Server, and Directory Server.

The login and password details for the proxy user are stored in the following property files:

- `uwcconfig.properties`
- `uwcauth.properties`
- `migrate.properties`

> **Note** – The `migrate.properties` file can be copied from one front end to another. For each Communications Express front end, you must run the following command to get the correct encrypted value of the password for every additional setup:
>
> `/opt/SUNWuwc/sbin/manage-password -e -d /var/opt/SUNWuwc/`

- `db_config.properties`

Since the property files are plain text files, the passwords should be encrypted and stored for security reasons. The Communications Express configurator for JES 5 encrypts passwords during configuration. This is done transparently by the configuration tool. Communications Express is shipped with a tool that can be used to manage passwords. Administrators can encrypt passwords by running this script.

Managing Passwords

Communications Express provides a script that helps administrators to encrypt passwords.

▼ To Change Passwords

1 **Go to** *uwc-basedir*/SUNWuwc/sbin **directory.**

2 **Type the following at the command line prompt:**

```
./manage-password -e -d /var/opt/SUNWuwc/
```

3 **The following output is displayed. Type the password that you want to encrypt. To exit, type**
   quit**:**

```
Option -ep is selected
usr/jdk/entsys-j2se/bin/java -classpath /opt/SUNWuwc/lib/classes:/usr/jdk/entsys-
j2se/lib/classes.zip com.sun.msg.install.util.UWCEncryptionManager -ep    /var/opt/SUNWuwc/
Type quit to exit the program
Enter text to be encrypted:<text_to_be_enctypted>
Encrypted String is:- Ul/LlVF5eUUsWTeQyHbxwg==
Enter text to be encrypted:quit
```

4 **Copy the encrypted password and paste it in the appropriate property file.**

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