

Sun Java™ System

Communications Express 6 Administration Guide

2005Q1

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Preface

This manual describes how to administer Sun Java™ System Communications Express 6 2005Q1 and its accompanying software components.

This preface contains the following sections:

- Who Should Read This Book
- Before You Read This Book
- How This Book is Organized
- Conventions Used in This Manual
- Related Documentation
- Where to Find This Manual Online
- Accessing Sun Resources Online
- Contacting Sun Technical Support
- Related Third-Party Web Site References
- Sun Welcomes Your Comments

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 (also known as Sun Java[™] System Identity Server)
- Sun Java[™] System Directory Server

How This Book is Organized

This manual contains the following chapters:

Table 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 configurator tool and configure Sun Java System 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.

Table 1 Organization of the Sun Java System Communications Express Administration Guide

auluc	
Chapter	Description
Chapter 5, "Troubleshooting"	Describes the common problems you may encounter during installation and deployment of Communications Express and outlines the steps to create and enable error logs.
Chapter 6, "Configuring the Hosted Domains"	Describes the changes to be made to Communications Express to enable hosted domains.
Chapter 7, "Migrating PAB Data to Addressbook Server"	Provides a high level overview of the data migration process and the steps to migrate PAB data to address book server.
Chapter 8, "Tuning and Performance Information"	Describes the tuning you can perform on Directory Server, Calendar Server, Web Server, and Communications Express to enhance performance.
Appendix A, "Enabling or Disabling Identity Server Post Deployment"	Describes the steps to enable or disable Identity Server post deployment
Appendix B, "Configuration Panel Sequence"	Lists the panel sequence depending on the schema and web container selected
Appendix C, "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 D, "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.
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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 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 1s -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	A placeholder in a command or path name that you should replace with a real name or value (for example, a variable). Also can be a book title, new term, or word to be emphasized.	The file is located in the
(Italic)		<pre>msg_svr_base/bin directory.</pre>
		Read Chapter 6 in the <i>User's</i>
		Guide.
		These are called <i>class</i> options.
		Do <i>not</i> save the file.

Symbols

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

 Table 3
 Symbol Conventions

Symbol	Description	Example	Meaning
[]	Contains optional command options.	ls [-1]	The -1 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 \mathbf{y} argument or the \mathbf{n} argument.
-	Joins simultaneous multiple keystrokes.	Control-A	Press the Control key while you press the A key.
+	Joins consecutive multiple keystrokes.	Ctrl+A+N	Press the Control key, release it, and then press the subsequent keys.

Symbol Conventions (Continued) Table 3

Symbol	Description	Example	Meaning
>	Indicates menu item selection in a graphical user interface.	File > New > Templates	From the File menu, choose New. From the New submenu, choose Templates.

Default Paths and File Names

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

Table 4 Default Paths and File Names

Term	Description		
msg_svr_base	Represents the base installation directory for Messaging Server. The default value of the <i>msg_svr_base</i> 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 <i>cal_svr_base</i> 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 path is var/opt/SUNWuwc.		
<pre>uwc-deployed-path/web-I NF/config</pre>	Represents the directory under which all the Communications Express configuration files are located.		
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 configurator tool.		
<pre>uwc-deployed-path/WEB -INF/domain</pre>	Represents the directory that contains domain specific configuration files.		

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 http://docs.sun.com web site enables you to access Sun technical documentation online. You can browse the archive or search for a specific book title or subject.

Messaging Server Documents

Use the following URL to see all the Messaging Server documentation:

http://docs.sun.com/coll/MessagingServer_05q1

The following documents are available:

- Sun JavaTM System Messaging Server Release Notes
- Sun Java™ System Messaging Server Deployment Planning Guide
- Sun Java™ System Messaging Server Administration Guide
- Sun Java™ System Messaging Server Administration Reference
- Sun Java™ System Messaging Server Developer's Reference
- Sun JavaTM System Messenger Express Customization Guide
- Sun Java™ System Delegated Administrator Guide

The Messaging Server product suite contains other products such as Sun Java TM System Console, Directory Server, and Administration Server. Documentation for these and other products can be found at the following URL:

http://docs.sun.com/db/prod/sunone

In addition to the software documentation, see the Messaging Server Software Forum for technical help on specific Messaging Server product questions. The forum can be found at the following URL:

Calendar Server Documents

Use the following URL to see all the Calendar Server documentation:

http://docs.sun.com/coll/CalendarServer_05q1

The following documents are available:

- Sun Java™ System Calendar Server Release Notes
- Sun Java™ System Calendar Server Administration Guide
- Sun Java[™] System Calendar Server Developer's Guide

Communications Services Documents

Use either one of the following URLs to see the documentation that applies to all Communications Services products:

http://docs.sun.com/coll/MessagingServer_05q1

or

http://docs.sun.com/coll/CalendarServer_05q1

The following documents are available:

- Sun JavaTM System Communications Services User Management Utility Administration Guide
- Sun Java System Communications Services Deployment Planning Guide
- Sun Java™ System Communications Services Schema Migration Guide
- Sun Java™ System Communications Services Schema Reference
- Sun Java™ System Communications Services Event Notification Service Guide
- Sun Java™ System Communications Express Administration Guide
- Sun Java™ System Communications Express Customization Guide

Where to Find This Manual Online

You can find the *Sun Java System Communications Express Administration Guide* online in PDF and HTML formats. This book can be found at the following URL:

http://docs.sun.com/app/docs/doc/819-0115

Accessing Sun Resources Online

For product downloads, professional services, patches and support, and additional developer information, go to the following:

• Download Center http://wwws.sun.com/software/download/

Professional Services

http://www.sun.com/service/sunps/sunone/index.html

- Sun Enterprise Services, Solaris Patches, and Support http://sunsolve.sun.com/
- Developer Information
 http://developers.sun.com/prodtech/index.html

Contacting Sun Technical Support

If you have technical questions about this product that are not answered in the product documentation, go to http://www.sun.com/service/contacting.

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Sun Welcomes Your Comments

Overview of Communications Express

Sun Java™ System Communications Express 6 2005Q1 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 - Calendar, Address Book, and Mail of Communications Express depends on a browser for presentation.

This chapter contains the following sections:

- System Requirements
- Product Features
- High-Level Architecture
- FAQ's on Deployment

System Requirements

This section describes the following:

- Platforms
- Software Dependencies

Platforms

The product is supported on following platforms:

- Solaris 9 on Sparc with Webserver 6.1 SP4 and Application Server 8.1
- Solaris 9 on X86 with Webserver 6.1 SP4 and Application Server 8.1.
- Linux Red Hat 2.1 with Webserver 6.1 SP4 and Application Server 8.1

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

Table 1-1 Browser Platform Recommendations

Browsers	Windows XP	Windows 2000	Solaris	RH Linux	Macintosh OS X
Netscape [™] Communicator	7.2	7.2	7.2	N/A	N/A
Internet Explorer	6.0 sp1+	6.0 sp1+	N/A	N/A	N/A
Mozilla™	1.4+	1.4+	1.4	1.4+	N/A

Software Dependencies

The following should be installed before installing Communications Express:

- Directory Server 5.2
- Calendar Sever 6.2
- Messaging Server 6.2
- Access Manager 6.2 (formerly known as Identity Server) if you are using Schema 2
- Web Server 6.1 SP4 with JDK version 1.5

or

Application Server 8.1

Product Features

- Communications Express has an integrated user interface for calendar, mail, and address book.
- Communications Express supports Identity Single Sign-On and Messaging Single Sign-On.

- Both calendar and mail applications share the same address book.
- Calendar, mail, and address book modules share the common user preferences specified in the Options tab of Communications Express.
- Communications Express supports virtual domain.

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.

Messenger Express or MEM should be deployed on the same system where Communications Express is deployed.

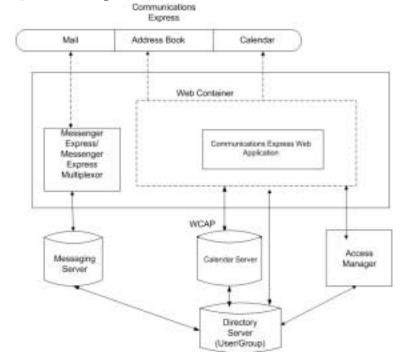


Figure 1-1 High Level Architecture

FAQ's on Deployment

This section provides answers to some frequently asked questions.

- What is the purpose of Single Sign-on?
- When should I use Messaging Single Sign-On?
- When should I use Identity Server Single Sign-On?
- What are the deployment requirements for Communications Express?
- Can I point my Communications Express to a remote Messaging Server?
- Can PAB entries from an existing Messaging Server, for example, Messaging Server 5.2 or Messaging Server 6.0, be migrated to Communications Express?
- Can any of the application in Communications Express be disabled?

What is the purpose of Single Sign-on?

Single Sign-on is required to seemlessly interoperate between calendar, address book, and mail.

When should I use Messaging Single Sign-On?

If the Messaging Server has already been setup to use Sun Java System LDAP Schema1 without Access Manager support, enable Messaging Single Sign-On to authenticate.

To enable Single Sign-on in Communications Express using Messaging Single Sign-On, refer to the section on "Setting up Messaging Single Sign-On," in Chapter 4 of this guide.

When should I use Identity Server Single Sign-On?

If you have an existing setup with Sun Java System LDAP Schema 2 configured, enable the Identity Server Single Sign-on.

To enable Single Sign-on in Communications Express using Identity Server Single Sign-On, refer to the section "Setting up Identity Server Single Sign-On," in Chapter 4 of this guide.

What are the deployment requirements for Communications Express?

- If mail is enabled, Messenger Express should be installed and configured on the same host.
 - a. Can I point my Communications Express to a remote Messaging Server?

You can. For this you need to install the Messaging Server on the same host as the Communications Express, configure this messaging installation as MEM and point it to the remote Messaging Server.

2. If Access Manager is enabled, Install Access Manager on the same machine as Communications Express, or install Access Manager SDK and configure it to point to the remote Access Manager.

To configure remote Access Manager SDK, refer to the steps mentioned under the procedure To Deploy Identity Server and Communications Express in Different Web Container Instance in Chapter 4 of this guide.

Can PAB entries from an existing Messaging Server, for example, Messaging Server 5.2 or Messaging Server 6.0, be migrated to Communications Express?

Yes. Refer to Chapter 7, "Migrating PAB Data to Addressbook Server," for migration details.

Can any of the application in Communications Express be disabled?

You can disable Calendar and Mail application, but cannot disable the Address book Application.

FAQ's on Deployment

Installing and Configuring **Communications Express**

This chapter describes how to install and configure Communications Express.

The following topics are covered in this chapter:

- **Installing Communications Express from Java Enterprise System Installer**
- **Prerequisites for Configuring Communications Express**
- **Schema Choices**
- **Upgrading Communications Express**
- **Invoking Configuration Tool**
- **Configuring Communications Express**
- **Post Configuration Instructions**
- **Unconfiguring Communications Express**
- Communications Express File Directory Layout

NOTE

- Ensure Messaging Server 6.2 and Calendar Server 6.2 are installed and configured and that Messenger Express is configured on the same machine.
- To use Sun Java System LDAP Schema, v.2, ensure that the latest Access Manager 6.2, formerly known as Identity Server is installed and configured.
- Install Directory Preparation Script (comm_dssetup.p1) from the Java Enterprise System Installer.

Installing Communications Express from Java Enterprise System Installer

To install Communications Express follow the steps mentioned below:

NOTE

Uninstall any previous installation of Communications Express.

You need to uninstall Communications Express using Java Enterprise System Uninstaller if you have installed it from an earlier build of the Java Enterprise System Installer. On Solaris, Sun Java™ Enterprise System Uninstaller is available at:

/var/sadm/prod/entsys/uninstall

 Select Sun Java[™] System Communications Express from the list of components displayed in Sun Java[™] Enterprise System Install Wizard.

NOTE

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

2. The Install Directories panel is displayed. Browse to specify the name of the target installation directory for each component product.

Click Next.

- **3.** After a couple of panels the Configuration Type panel is displayed.
 - **a.** Decide on the configuration type you want. The options available are:
 - **Configure Now**. Allows you to configure component products that permit configuration at installation time.
 - Configure Later. The installer installs the packages in the specified directory paths and proceeds without configuring them. For more details, refer to the section on Choosing a Configuration Type in Chapter 2 of the Sun Java Enterprise System Installation Guide at:

http://docs.sun.com/db/doc/819-0056

NOTE Communications Express cannot be configured from the Sun Java™ Enterprise System Install Wizard. You need to run the

Communications Express configurator program to configure Communications Express.

- **b.** Select a configuration type and click Next.
- **4.** The Custom Configuration panel appears.
 - Click Next to configure other component products (if any).
- **5.** Complete the installation process.

Prerequisites for Configuring Communications Express

Before running the Communications Express configurator program, make sure you perform the following:

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

ip-of system FQHN hostname

For Example,

129.158.230.64 budgie.siroe.varrius.com budgie

- 3. 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 order mentioned here:
 - I. Directory Server
 - II. Administrative Console for Directory Server

III. Application Server (if chosen) or Web Server (if chosen)

NOTE

After this step, run Directory Preparation Script (comm_dssetup.pl) to update the schema details in the User/Group Directory Server.

Skip this step if you have already configured Messaging Server and Calendar Server successfully.

To run Directory Preparation Script (comm_dssetup.pl) type:

cd /root-of-the-directory-preparatory-script/SUNWcomds/sbin

perl comm_dssetup.pl

- IV. Access Manager, if you have chosen Sun Java System LDAP Schema, v.2.
- V. Messaging Server
- VI. Calendar Server
- VII. Delegated Administrator if you have chosen Sun Java System LDAP Schema, v.2.

For details on the product configuration process, refer to Chapter 10 of the *Sun Java Enterprise System Installation Guide* at:

http://docs.sun.com/db/doc/819-0056

- **4.** Verify whether users are able to login to the following servers correctly.
 - Messaging Server
 - Calendar Server
 - Access Manager (formerly known as Identity Server), if you have chosen
 Sun Java System LDAP Schema, v.2

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.

Web Server with Sun Java System LDAP Schema, v.1

or

Web Server with Sun Java System LDAP Schema, v.2 (with Access Manager)

Application Server with Sun Java System LDAP Schema, v.1

or

Application Server with Sun Java System LDAP Schema, v.2 (with Access Manager)

The configurator panel displayed for each schema and web container combination varies depending on your schema and web container selection. Table B-1 in Appendix B, lists the panels that are displayed for each schema and web container combination.

Upgrading Communications Express

Prior to installing and configuring, you have the option of upgrading from Communications Express 6 2004Q2 to Communications Express 6 2005Q1. Refer to the Sun Java Enterprise System 2005Q1 Upgrade and Migration Guide for more information on how to upgrade from Communications Express 6 2004Q2 to Communications Express 6 2005Q1.

http://docs.sun.com/app/docs/doc/819-0062

Invoking Configuration Tool

This section describes how to invoke the configuration tool

- 1. Login as Administrator (root for UNIX or Linux).
- 2. Before invoking the configuration wizard set the display settings.
- **3.** Go to *uwc-basedir*/SUNWuwc/sbin directory.

4. Then type,

- ./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 version does not support the silent installation mode.

5. The configuration wizard appears.

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 panel to view its contents properly.

1. The Welcome panel.

The first panel in the configure program is a copyright page. Select Next to continue or Cancel to exit.

2. The Select the Directory to Store Configuration and Data Files panel appears.

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.

3. The Select Components to be Configured panel appears.

Select the components you want to configure and unselect those components you do not wish to configure.

Mail Component

Calendar Component

NOTE You have to select atleast one component from the Select Components to be Configured panel.

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

Click Next.

4. The Network Connection panel appears.

The configuration program tries to establish network connection using the host name and DNS domain name displayed in this panel.

Host Name. The host name on which Communication Express is being configured is displayed.

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

Click Next.

5. The Select a Web Container panel appears.

Select the web container you want to use from the options displayed. The options available are:

- Web Server. For Web Server panel details, see Web Server.
- o App Server. For App Server panel details, see Application Server.

Click Next.

Web Server

If you have selected Web Server to be your web container, the following panels appear:

a. The Web Server Configuration Details panel.

Specify the local Web Server instance details. The web server details specified here is used by the installer to deploy Communications Express on Web Server.

Server Root Directory. Browse to select the installation root of the Web Server. Default location is, /opt/SUNWwbsvr/

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. This is the HTTP port from which 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 refer to the post configuration steps provided in the section, "To Use Communications Express in the SSL mode," in Chapter 3 of this guide.

Click Next.

You will see a small pop-up window indicating that the Web 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 Web Server Instance. Click Accept, to continue with the installation process, or click Choose New, to specify different Web Server configuration details. b. The Web Container User and Group panel.

Specifies the identity, the web container uses to run the services.

Web Container User ID. The web container user identifier from the user database is displayed.

Web Container Group ID. The web container group identifier from the group database is displayed.

Click Next.

The configurator program 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 panel. 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 panel. Entering wrong values may result in startup failure of the Communications Express.

Go to Step 6 after you have configured the Web Server as your web container.

Application Server

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

a. The Application Server Configuration Details panel.

In the Application Server Configuration Details panel, specify the following details:

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 Configurator supports only the Domain Administration Server (DAS) deployment for Application Server 8.1.

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.

Click Next.

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 "To Use Communications Express in the SSL mode," in Chapter 3 of this guide.

You will see a small pop-up 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.

b. The Application Server Administration Instance Details panel.

Specify the administration instance details of the Application Server. The administration instance details is used by the configurator to deploy Communications Express on Application Server.

Administration Server Port. Enter the Administration Server port number.

NOTE

The administration port of the Application Server 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 check box, 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.

Click Next.

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

NOTE

When deploying Communications Express on Application Server, two files, server.xml and server.policy, are modified.

Before modifying server.xml and server.policy files, a backup of these files is maintained by the configurator program. The backup files are stored in the directory

 $DOMAIN-DIRECTORY/SERVER-INSTANCE-NAME/{\verb|config|.com|} \\ {\tt msExpress_YYYYMMDDhhmmss}$

Where,

DOMAIN-DIRECTORY is 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.

c. The Module Name for this Web Application panel.

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

Click Next.

Go to Step 6 after you have configured the Application Server as your web container.

6. The URI Path Setting panel appears.

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.

7. The Do you want Hosted Domain Support? panel appears.

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.

3. The User/Group Directory (LDAP) Server Details panel appears.

Enter the following details:

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

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

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

Click Next.

9. The DC Tree Suffix panel appears.

Enter the base distinguished name for the DC tree suffix. This suffix will be used by the Communications Express to search for domain lookup.

Click Next.

10. The Default Domain Name panel appears.

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.

11. The Enable Identity Server for Single Sign-on panel appears.

To setup single sign-on with Identity Server, select Enable Identity Support for Sun Java System Communications Express.

Only if you have enabled Identity Support for Sun Java System Communications Express, the Identity Server Preferences panel is displayed.

Enter the Identity Server Preferences such as the login URL, Identity Server Administrator DN and Password in this panel.

Login URL. Specify the Identity Server Login URL in the format protocol://Identity server hostname:Identity Server port/context -path-of-amserver/UI/Login.

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

Admin Password. Enter the Password for the Identity Server administrator.

Click Next.

12. The Messaging Express Port panel appears.

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

Enter the port number where the Messenger Express service is available.

NOTE Ensure Communications Express is deployed on the same machine on which Messenger Express is deployed.

Click Next.

13. The Calendar Server Host and Port Configuration panel appears.

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

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.

14. The Calendar Server Administration Details panel appears.

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

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.

15. The PAB Directory Server Details panel appears.

The Personal Address Book LDAP Server is the store where users personal address books are located. Enter the following details in this panel:

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

16. The Ready to Configure panel appears.

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

Click Configure Now, to configure the Communications Express.

Click Back, to change any of your configuration variables.

Click Cancel, to exit from the configuration program.

17. A summary of tasks and the sequence status is displayed.

Click Next.

- **18.** The Configuration Summary panel lists the status of the configuration program. Click Details button to view the log.
- **19.** The Post Configuration Instructions panel appears only when the configuration is successful. This panel 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

NOTE

Make sure you are familiar with the location of the Communications Express files.

Refer to the section on Default Paths and File Names in the Preface of this guide.

Refer to Chapter 3, "Configuration Details," and Chapter 6, "Configuring the Hosted Domains," of this guide for details on the configuration parameters.

Before performing the post configuration steps make sure you have performed the following steps:

 Assuming that the Communications Express package has already been installed, ensure that for a setup using Identity Server single sign-on, the Core and LDAP services are added. For more information, refer to the section on "Tuning Directory Server," in Chapter 8 of this guide.

- **2.** After you have configured Communications Express, perform the following steps
 - a. To enable the Mail component in Communications Express, configure Single Sign-On. Refer to Chapter 4, "Implementing Single Sign-On," for information on configuring Messenger Express and Communications Express.
 - **b.** Go to calendar-server-install-directory/SUNWics5/cal/bin/config (e.g. /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-forcalendar.wcap.adminid-in-uwcconfig.properties
- service.admin.calmaster.cred = the-value-specified-forcalendar.wcap.passwd-in-uwcconfig.properties
- service.wcap.anonymous.allowpubliccalendarwrite = "yes"
- service.http.allowanonymouslogin = "yes"
- service.calendarsearch.ldap = "no"

If you have edited the <code>ics.conf</code> file, restart Calendar Server for the changes to take effect.

- **3.** Restart Web Server or the Application Server, depending on which you have selected as the web container.
- **4.** 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 panel.

Unconfiguring Communications Express

Perform the following steps if you have configured Communications Express on Web Server or Application Server and feel the need to unconfigure Communications Express:

- To unconfigure Communications Express from Web Server, use the wdeploy tool of the Web Server. Refer to the Web Server Administration Guide for steps on how to run the wdeploy tool.
- To unconfigure Communications Express from Application Server, use the asadmin tool of the Application Server. Refer to the Application Server Administration Guide for steps on how to run the asadmin tool.

Communications Express File Directory Layout

After you install and configure Communications Express, its directories and files are arranged in the organization as shown in Table 2-1. The table is not exhaustive; it shows only those directories and files of most interest for typical server administration tasks.

Table 2-1 Communications Express Directories and Files

Directory and Legends	Default Location and Description
Communications Express	Default location:
Base	Solaris: /opt/SUNWuwc/
uwc-basedir	Linux: /opt/sun/uwc/
	This directory is where communications express is installed.
	Note: Only one Communications Express Base directory per machine is permitted.
Deployed Directory	Default location:
uwc-deployed-dir	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	uwc-deployed-dir/web-inf
Directory	WEB-INF directory of Communications Express web application.
web-inf	

Table 2-1 Communications Express Directories and Files

Directory and Legends	Default Location and Description
Web Applications Root	uwc-deployed-dir/WEB-INF
Directory	WEB-INF directory of Communications Express web application.
web-inf	
Configuration	<pre>uwc-deployed-dir/WEB-INF/config/</pre>
config	Contains all the Communication Express configuration files.
Domain	<pre>uwc-deployed-dir/WEB-INF/domain/</pre>
domain	Contains per domain localization and Customization files.
Skin	<pre>uwc-deployed-dir/WEB-INF/skin/</pre>
skin	Contains per domain themes.
Logs	uwc-deployed-dir/logs/
logs	Contains the Communications Express log files.
System Administrator	uwc-basedir/sbin/
Programs	Contains the Communications Express system administrator
sbin	executable programs and scripts.
Help	<pre>uwc-deployed-dir/help</pre>
help	Contains Communications Express help files.

Communications Express File Directory Layout

Configuration Details

This chapter describes the configuration details for Communications Express.

- **Communications Express Configuration Files**
- **Configuration Parameter Details**
- Supporting Horizontal Scalability of Addressbook Server

Communications Express Configuration Files

Communication Express maintains the configuration parameters in the following files:

- The uwcauth.properties file maintains the authentication, user/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 is used to define 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 under $uwc\text{-}deployed\text{-}path\text{/WEB-INF/config/ldappstore/db_config.properties.}$
 - **Corporate address book store**. The Corporate address book store configuration file resides under uwc-deployed-path/WEB-INF/config/corp-dir/db_config.properties

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. After installation, you can edit the file using a text editor.

➤ To Edit the Configuration file

- 1. Login 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.

Conventions for parameters are:

 All parameters and their associated value(s) 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 point(!).
 - Some of the configuration parameters are commented out using exclamation points by default. To use these parameters, you must remove the exclamation point, change the value (if required).
- **4.** Restart the Web Server or the App Server 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 the Messenger Express Parameters in uwcconfig.properties File
- Configuring Directory Server Related Parameters for Sun Java System LDAP Schema v.1 in uwcauth.properties File
- o Configuring Identity Server Parameters in uwcauth.properties File
- Configuring User Lookup Parameters for User/Group in uwcauth.properties File

- Configuring the Calendar Server Parameters in uwcconfig.properties File
- Configuring the Address Book Personal Store Parameters in db_config.properties file
- Configuring Corporate Directory Parameters db_config.properties File
- Supporting Horizontal Scalability of Addressbook Server
- **Configuring Secure Socket Layer (SSL)**

Refer to Chapter 4, "Implementing Single Sign-On," for more mail, calendar, and address book configurable parameters.

Configuring the Messenger Express Parameters in uwcconfig.properties File

Table 3-1 Mail Parameters

Parameter	Default Value	Description
mail.deployed		Specifies whether Messenger Express is deployed. The parameter is set when you run the configuration wizard.
		The attribute is set to "true" if Messenger Express is deployed.
webmail.host		Specifies the host name of the machine on which Messenger Express is deployed.
		The host name of Messenger Express should correspond to the machine name on which Web Server is deployed.
webmail.port		Specifies the port number Messenger Express HTTP Server listens to.

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

You may edit the parameters mentioned in Table 3-2 when the Authentication LDAP Server is different from the User/Group LDAP.

 Table 3-2
 LDAP Auth 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.
ldapauth.ldapport		Specifies the ldap port number.
ldapauth.dcroot		Specifies the DC root for the authentication tree.
ldapauth.domainattr	inetDomainBas eDN,inetDoma inStatus,inetDo mainSearchFilt er,domainUidS eparator,prefer redLanguage	Specifies the list of attributes to be retrieved from the domain entry in which the user is authenticated.
ldapauth.domainfilter	((objectclass=i netDomain)(ob jectclass=inetD omainAlias))	Specifies the filter based on which the domain entry is retrieved.
ldapauth.ldapbinddn		Specifies the User DN 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 setup 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 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.

Configuring Identity Server Parameters in uwcauth.properties File

Table 3-4 **Identity Server Parameters**

Parameter	Default Value	Description
uwcauth.identity.enabled		Specifies whether Identity Sever is enabled.
		The attribute is set to "true" if Identity Server's single sign-on mechanism is used for authentication.
uwcauth.identity.naming.url		Specifies the Identity Server naming URL.
		For Example, uwcauth.identity.nami ng.url= protocol://hostname:port Context URI

 Table 3-4
 Identity Server Parameters (Continued)

Parameter	Default Value	Description
uwcauth.identity.binddn		Specifies the complete Distinguished Name (DN) of the amAdmin user.
		For example,
		<pre>uid=amadmin, ou=People, o=siroe.com</pre>
uwcauth.identity.bindcred		Specifies the amAdmin password.

NOTE	It is mandatory to configure uwcauth.identity.naming.url,
	uwcauth.identity.binddn,uwcauth.identity.bindcred, when
	uwcauth.identity.enabled value is set to "true."

Configuring User Lookup Parameters for User/Group in 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/group LDAP.
ldapusersession.ldappoolmax	100	Specifies the maximum number of LDAP user connections to be created for a user/group LDAP.
		Enter an optimum value to suit your deployment's requirement.

Table 3-5 User Lookup Parameters (Continued)

Parameter	Default Value	Description
ldapusersession.lookthru_limit	1000	Specifies the search query limit for a search.

Configuring the Calendar Server Parameters in 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, ics.config, file:

- service.http.allowadminproxy = "yes"
- service.http.admins = includes-the-value-specified-forcalendar.wcap.adminid-in-uwcconfig.properties.
- service.admin.calmaster.userid = the-value-specified-forcalendar.wcap.adminid-in-uwcconfig.properties
- service.admin.calmaster.cred = the-value-specified-forcalendar.wcap.passwd-in-uwcconfig.properties
- service.wcap.anonymous.allowpubliccalendarwrite = "yes"
- service.http.allowanonymouslogin = "yes"
- service.calendarsearch.ldap = "no"

For more information on enabling Proxy Authentication and instructions on configuring the Calendar Server parameters, refer to *Sun Java System Calendar Server Administration Guide* at http://docs.sun.com/doc/817-5697

Table 3-6 Calendar Server Parameters

Parameter	Default Value	Description
calendar.deployed	true	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		Specifies the Admin ID for the WCAP Sever.
calendar.wcap.passwd		Specifies the Admin Password for the WCAP Server.

NOTE

- Ensure that the Calendar Admin User ID value you have assigned to calendar.wcap.adminid is the same as the service.admin.calmaster.userid value mentioned in Calendar Server's ics.conf file.
- Ensure that the corresponding user entry for Calendar Admin User ID exists on LDAP server.

Configuring the Address Book Personal Store Parameters in db_config.properties file

Table 3-7 lists the default Address Book personal store configuration parameters in 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.
		It is mandatory to enter this value if the login type is "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 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 bypasses the LDAP bind on each operation.
		NOTE: It is recommended that the user masquerading here have admin level 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.
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.

Table 3-7 Personal Address Book Personal Store Parameters (Continued)

Danamatan	Default	Paradiation.
Parameter	Value	Description
delete_perm	true	Enables contact/group entries to be marked for deletion or 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.

Configuring Corporate Directory Parameters db_config.properties File

Table 3-8 lists the default corporate directory parameters in db_config.properties file. By default, all the LDAP related information is set based on the values mentioned for user/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 corporate directory used to identify a contact/group entry.
		You can set the entry_id to the UID or a 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.</entry>
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 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.ldappooltimeo ut	10	Specifies the number of seconds before timing out an LDAP connection. Increase this value to accommodate large search results.

Table 3-8 Corporate Directory Parameters (Continued)

Parameter	Default Value	Description
lookthru_limit	1000	Specifies the search query limit for a search.

Corporate Directory maintains two xlate files in the format xlate-object class-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 contains 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

Where,

ab-xml-schema-field is the value, 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.

Code Example 3-1 is an example of xlate-inetorgperson.xml file:

Code Example 3-1 Default Contents of xlate-introgperson

```
<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>
    <building>db:buildingnum</building>
    <floor>db:iplanetbuildinglev</floor>
    <office>db:roomNumber</office>
   </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 (SSL)

You can configure the Web Server on which Communications Express is deployed in SSL mode. For information on how to configure the Web Server on which Communications Express is deployed in SSL mode, refer to Sun ONE Web Server Administrator's Configuration File Reference at

http://docs.sun.com/db/coll/S1 websvr61 en

➤ To Use Communications Express in the SSL mode

- 1. Edit the following configuration parameters in uwc-deployed-path/WEB-INF/config/uwcauth.properties:
 - uwcauth.ssl.enabled=true
 - uwcauth.https.port=*SSL*-port-number-of -the webserver-in which-uwc-is-deployed

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

You need to set the local.webmail.sso.uwcport Messenger Express parameter value to the SSL port-number of the Web Server in which Communications Express is deployed.

For example,

local.webmail.sso.uwcport=SSL port-number of the webserver in which communications express is deployed

➤ To Configure Communications Express for SSL, for Authentication Only

- 1. Set uwcauth.ssl.enabled to "false" in 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 are mutually exclusive parameters.

Messaging SSO is not supported in SSL.

Supporting Horizontal Scalability of Addressbook 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 personal store.properties for the domain. For example, uwc-install/WEB-INF/config/ldappstore.

This deployment was unable to scale to support large number of users and contacts per Personal Address Book. To overcome this limitation, the psRoot attribute in Sun Java System Communications Express 6.2, enables the administrator provision users so that PAB data for different users can be 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 Addressbook Server horizontally.

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

- 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 contains a collection of Personal Stores and as shown in Figure 3-1, any number of DB's can be accessed by the Address Book Server. Every DB is defined by a DB-ID that defines the connection parameters for that DB. A DB can be of different types and can point 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.

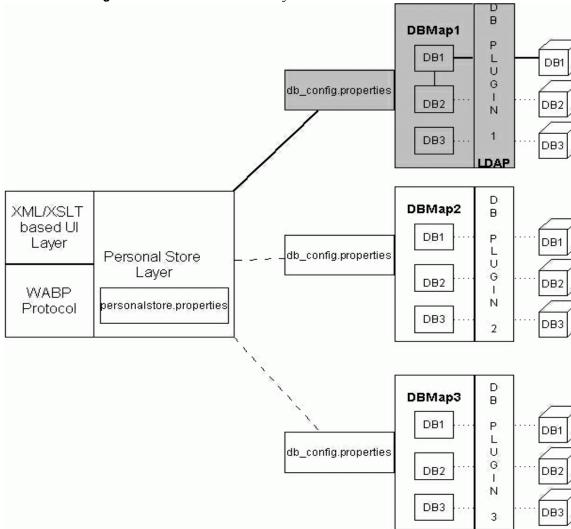


Figure 3-1 Horizontal Scalability of Address Book

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. The 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 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 using LDAP DB Plugin.

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 Addressbook Server does not provide any utility to distribute psRoot values for users, per 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 db_config.properties file. Set the parameter to "true" to use the user's psRoot value. The Personal Store parameters listed in Table 3-7 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 <code>db-key.ldaphost</code> and <code>db-key.ldapport</code>, where <code>db-key</code> is an arbitrary string that distinguishes one instance from the other. When no match is found for the <code>db-key.ldaphost</code> and <code>db-key.ldapport</code>, the defaultserver instance is used.

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 using the psRoot pattern defined in personalstore.properties file, and the defaultserverhost and defaultserverPort values, in the db_config.properties file. For example, using the default psRoot pattern, the default psRoot value will be in the format:

ldap://defaultserver_host: defaultserver_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.

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 login to Communications Express and use the calendar and mail applications without authenticating again, provided single sign-on is enabled in calendar and mail applications. In Communications Express you can perform the following types of Single Sign-On:

- Identity Server Single Sign-On. Single Sign-On is performed when Identity Server, also known as Access Manager, is enabled in Communications Express. Here, Messenger Express and Communications Express communicate with each other using Identity Server Single Sign-On.
- Messaging Single Sign-On. In the absence of Identity Server, Messenger Express and Communications Express communicate with each other using Messaging Single Sign-On.

This chapter contains the following sections:

- Setting up Identity Server Single Sign-On
- Setting up Messaging Single Sign-On

Setting up Identity Server Single Sign-On

This section provides information on how to set up Communications Express and Messenger Express to communicate with each other using Identity Server Single Sign-On.

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

To enable Communication Express users access the mail module rendered by the Messenger Express using the Identity Server Single sign-on, you need to modify the Messenger Express specific parameters 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 on using the configutil tool, refer to Chapter 3, Configuring General Messaging Capabilities, of the Sun Java System Messaging Server Administration Guide at

http://docs.sun.com/doc/817-6266-10.

When setting up Identity Server Single Sign-on, Communications Express and Identity Server can be deployed in both SSL and non-SSL modes in the same web container instance or in different web container instances. When Identity Server and Communications Express are deployed in different Web Container Instances you need to Configure Identity Server Remote SDK on the system where Communications Express is deployed. Listed below are the deployment scenarios for Identity Server and Communications Express deployed in different web container instances in both SSL and non SSL modes.

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

➤ To Enable Single Sign-On in Communications Express With Identity Server

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

2. Modify the following Communications Express parameters in uwcauth.properties file to enable Identity Server SSO.

Parameter	Purpose
uwcauth.identity.enabled	Specifies whether identity server is enabled.
	Initially the value is set in the configurator.
	Set the attribute to true to enable Identity Server.
	Set the attribute to false to disable Identity Server.
uwcauth.identity.login.url	Specifies the parameter of Identity Server login URL.
	For example, uwcauth.identity.login.url=http://siroe.example.com:85/amserver/UI/login
uwcauth.identity.cookiename	Specifies the cookie name used by Identity Server.
	The value of uwcauth.identity.cookiename should correspond to the value specified in Identity Server configurator.
	Default cookie name used by Identity Server is iPlanetDirectoryPro
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 Identity Server.
	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.
uwcauth.http.port	Specifies the port number that Communications Express listens to when Communications Express is configured on a non SSL port.
	Default port number is 80.

Parameter	Purpose
uwcauth.https.port	Specifies the https port number that Communications Express listens to when Communications Express is configured on an SSL port.
	Default https port number is 443
identitysso.singlesignoff	Specifies the single sign-off status.
	If set to true the logout destroys the Identity Server session completely and all applications participating in this Identity Server 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.
	Default status is true.
identitysso.portalurl	Specifies the URL to which Communications Express is to be redirected.
	If Identity Server is enabled and single sign-off is set to false, Communications Express is redirected to the URL assigned to identitysso.portalurl.
	By default Communications Express is redirected to http://www.sun.com

3. Set the value of the parameter uwcauth.messagingsso.enable to false when setting up Communications Express for Identity Server Single Sign-On.

Communications Express will now use the Identity Server's Single Sign-On mechanism for obtaining valid user sessions.

➤ To Deploy Identity Server and Communications Express in the Same Web Container Instance

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

An example of *IS-SDK-BASEDIR* is /opt/SUNWam/lib.

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

com.iplanet.am.jssproxy.trustAllServerCerts=true

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

For example, /opt/SUNWam/lib

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

Identity Server and Communications Express deployed in the same web container instance in SSL mode can now use the Identity Server's Single Sign-On mechanism for obtaining valid user sessions.

➤ To Deploy Identity Server and Communications Express in Different Web Container Instance

- 1. Change to IS-INSTALL-DIR/bin
- **2.** Copy the Identity Server *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.

If you are deploying Identity Server 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 AM_ENC_PWD to the value of the password encryption key used during the installation of Identity Server.

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

\${IS_INSTALL_DIR}/lib/AMConfig.properties

- 5. Set NEW INSTANCE to true.
- **6.** If you are deploying Identity Server SDK in Sun Java System Web Server, set WEB_CONTAINER to WS6.

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

7. For a more detailed description on the other parameters in the amsamplesilent file and to help you configure the Identity Server Remote SDK parameters refer to the Sun Java System Identity Server Administration Guide at:

http://docs.sun.com/source/817-5709/ConfigScripts.html

8. Configure Identity Server SDK in the web container.

Make sure directory server that is used by Identity Server is running.

9. Start the web container instance in which the Identity Server SDK will be deployed.

- 10. Change directory to IS-INSTALL-DIR/bin.
- **11.** Run the following command:

```
./amconfig -s amsamplesilent.uwc
```

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

Identity Server and Communications Express deployed in the different web container instances in SSL and non-SSL mode will now use the Identity Server's Single Sign-On mechanism for obtaining valid user sessions.

NOTE

Refer to Appendix A, for instructions on enabling or disabling Identity Server after deploying Communications Express.

- ➤ To Enable Single Sign-On in Messenger Express With Identity Server
 - 1. Run the configutil tool.

msg-svr_install_root/sbin/configutil

Set the following Messenger Express parameters to enable Communication Express users access Messenger Express using the Identity Server Single Sign-on.

Parameters	Purpose		
local.webmail.sso.amnamingurl	This configuration enables SSO from Identity Server.		
	The parameter should point to the URL Identity Server runs the naming service.		
	For example,		
	<pre>configutil -o local.webmail.sso.amnamingurl -v</pre>		
	http://siroe.example.com:85/amserver/naming service		
local.webmail.sso.uwcenabled	Enables Communications Express access Messenger Express.		
	To disable, set the parameter to 0.		
local.webmail.sso.uwclogouturl	Specifies the URL Messenger Express uses to invalidate the Communications Express session.		
	If you have configured local.webmail.sso.uwclogouturl explicitly in Messenger Express, then this value is used to logout. 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 may look like:		
	http://siroe.example.com:85/uwc/base/UWCmain?op=logout		
local.webmail.sso.uwcport	Specifies the Communications Express port.		
	For example, 85.		
local.webmail.sso.uwccontexturi	Specifies the 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, local.webmail.sso.uwccontexturi=uwc		

Parameters	Purpose		
local.webmail.sso.amcookiename	Specifies the Identity Server 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 the home link.		

Once the Messenger Express specific parameters are set, Communication Express users can access Messenger Express using the Identity Server Single sign-on.

Setting up Messaging Single Sign-On

This section explains how to set up Communications Express with Messaging Single Sign-On. If you have chosen to adopt Sun Java System LDAP Schema, v.1 as the schema model, you need to enable Messaging SSO in Communications Express to use the Messaging Single Sign-On mechanism for authentication.

When configuring Communications Express, the configuration wizard does not set any of the mandatory SSO related parameters. You need to manually set the required parameters as explained below. Also, note that Messaging SSO does not support virtual domains and Messenger Express will not run in SSL mode when Messaging SSO is enabled.

If you have deployed Messenger Express as MEM, ensure that the value of the following parameters in Messaging Server are the same at the backend and frontend:

- local.webmail.sso.id
- local.webmail.sso.uwclogouturl
- local.webmail.sso.uwchome
- local.webmail.sso.ims.verifyurl
- local.webmail.sso.prefix
- local.sso.uwc.verifyurl

- local.webmail.sso.cookiedomain
- local.webmail.sso.enable
- local.webmail.sso.uwcenabled
- local.webmail.sso.uwcport
- local. we bmail. sso. single sign of f
- local.webmail.sso.uwccontexturi

➤ To Enable Communications Express Using Messaging SSO

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

2. Modify the following mail specific parameters in uwcauth.properties file to enable Communications Express access Messenger Express.

Parameters	Purpose		
uwcauth.appprefix	Specifies the prefix used to find cookies generated by other trusted applications for SSO.		
	The prefix is used to find cookies generated by other trusted applications during single sign-on.		
	If the deployment uses Messaging SSO, this attribute should be assigned the value of local.webmail.sso.prefix set during messaging configuration.		
	The default value is iPlanetDirectoryPro		
uwcauth.appid	Specifies the application ID for Communications Express.		
	The default value is uwc.		
uwcauth.cookiedomain	Specifies the domain name saved as part of the single sign-on cookie.		
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.		
	Also, make sure that uwcauth.messagingsso.enable is set to false when setting up Communications Express for Identity Server Single Sign-On.		
	The default value is true.		
uwcauth.messagingsso.cookiepath	Specifies the URI path for which the single sign-on cookie is saved.		
	The default value is /.		

Parameters	Purpose		
messagingsso.xxx.url	Specifies the URL used to verify the SSO cookie.		
	The value of xxx should be replaced by the application ID of the server.		
	For example, if you want to enable SSO with Messaging Server whose application ID is "msg60", you need to add the following configuration parameter:		
	<pre>mesagingsso.msg60.url=http://servername/VerifySS 0?</pre>		
	The value of xxx mentioned here should be identical to the value assigned in Messenger Express local.webmail.sso.id.		
	The default value is http://servername/VerifySSO?		
messagingsso.uwc.url	When Communications Express is not deployed under $/$, such as $/\mathrm{uwc},$ the value of the parameter may look like:		
	http://servername:85/uwc/VerifySSO?		
messagingsso.appid	Specifies the Messaging Server application ID.		
	The value of messagingsso.appid should be same as the local.webmail.sso.id set during messaging server configuration.		
	The default value is ims.		
messagingsso.ipsecurity	Determines whether or not to restrict session access login IP address.		
	If set to true when the user logs in, the server remembers which IP address the user used to log in. Then it only allows that IP address to use the session cookie it issues to the user while establishing sso with messaging server.		
	If set to false, Communications Express does not perform this IP address check and restricts the access to the session.		
	The default value is true.		

Once the parameters in are set in uwc-deployed-path/WEB-INF/config/uwcauth.properties file, Communication Express users will be able to access Messenger Express using the Messaging Single Sign-on mechanism for authentication.

➤ To enable Messenger Express Using Messaging SSO

1. Run the configutil tool.

msg-svr_install_root/sbin/configutil

2. Set the following mail specific parameters using the configutil tool.

Parameter	Purpose	
local.sso. <uwc-appid>.verifyurl</uwc-appid>	When Communications Express is not deployed under /, such as /uwc, the default value of the parameter may look like:	
	http://siroe.example.com:85/uwc/VerifySSO?	
local.webmail.sso.id	Specifies the value that is used to identify Messenger Express to other applications.	
local.webmail.sso.cookiedomain	The string value of this parameter is used to set the cookie domain value of SSO cookie by the Messenger Express HTTP server.	
	The value must begin with a period (.), for example, ".example.com" when the fully qualified hostname is siroe.example.com.	
	Ensure that the value specified for this parameter is the same as that entered for uwcauth.cookiedomain.	
	For example, .example.com	
local.webmail.sso.enable	Enables or disables Messaging single sign-on functionality.	
	Set the value to 0 to disable Messaging single sign-on functionality.	
local.webmail.sso.prefix	Specifies the prefix used to find cookies generated by other trusted applications for SSO.	
	Ensure this value corresponds to the value entered for uwcauth.appprefix.	
local.webmail.sso.singlesignoff	If set to 1, when the user logs out, the server removes all single sign-on cookies for the user matching the value of local.webmail.sso.apprefix.	
	If set to $\mbox{0}$, the server removes only its single sign-on user cookie.	

Parameter	Purpose		
local.webmail.sso.uwcenabled	Enables or disables Messenger Express access from Communications Express.		
	Set to 1, to enable Messenger Express access from Communications Express.		
	Set to 0, to disable Messenger Express access from Communications Express.		
local.webmail.sso.uwclogouturl	Specifies the URL used by Messenger Express to invalidate the Communications Express session.		
	f you have configured local.webmail.sso.uwclogouturl explicitly in Messenger Express then this value is used to logout. 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 default value of the parameter may look like:		
	http://siroe.example.com:85/uwc/base/UWCMain?op=logout		
local.webmail.sso.uwcport	Specifies the Communications Express port.		
	For example, 85.		
local.webmail.sso.uwccontexturi	Specifies the 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, local.webmail.sso.uwccontexturi=uwc		
	For example, uwc.		
local.webmail.sso.uwchome	Specifies the url required to access the home link.		
	For example, http://www.sun.com		
local.webmail.sso.ims.verifyurl	Specifies the URL used to verify the SSO cookie.		
	For example, http://siroe.example.com/VerifySSO?		
	Here it is assumed that webmail is deployed on port 80.		

Communications Express users will now be able to access Messenger Express using Messaging Single Sign-on mechanism for authentication.

Setting up Messaging Single Sign-On

Troubleshooting

This chapter lists the common problems you may encounter and the steps to create and enable error logs.

The following sections are contained in this chapter:

- Identifying and Troubleshooting the Problem
- Log Files

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:

- 1. Verify whether the steps mentioned in *Sun Java System Messaging Server Release Notes* and *Sun Java System Communications Express Administration Guide* 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 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 Identified Problems

This section provides an overview of problems that can be encountered during installation, configuration, start-up, 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
- Accessing Calendar
- Accessing Address Book
- Accessing Mail
- Restart the Web Server where Communications Express is deployed.
- Authenticating using Identity Server

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 config path.

Once Communications Express configuration is completed, the following configuration directories are created in your system:

- 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 <code>uwc-deployed-path/staging/WEB-INF/config</code> and <code>uwc-basedir/SUNWuwc/WEB-INF/config</code> are temporary place holders created and used internally by the configurator 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 YYYYMDDhhmmss.

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 defaut this option is enabled.

UWC applications startup failed and web container logs shows exceptions.

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

Work around.

- Make sure you have completed all the post configuration steps. For the post configuration steps, refer to the "Post Configuration Instructions," in Chapter 2, "Installing and Configuring 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.

Work around.

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 Identity Server enabled after authentication.

Work around.

Ensure that uwcauth.identity.binddn and uwcauth.identity.bindcred properties in *uwc-deployed-path*/WEB_INF/config/uwcauth.properties are set to that of the amAdmin DN that was provided when installing Identity Server SDK. Refer to the section on Configuring Identity Server Parameters in uwcauth.properties File in Chapter 3, "Configuration Details."

Although the directory manager credentials may be provided to uwcauth.identity.binddn and uwcauth.indentity.bindcred for Identity Server SSO, the directory manager does not have the ACLs required to obtain certain domain specific attributes that Communication Express depends on to function properly.

No support to modify web-container configuration for IS SDK integration.

The configurator does not support modification of web-container configuration for Identity Server SDK integration.

Work around.

Manually invoke tools provided with Identity Server to modify web container configuration for Identity Server.

Messaging SSO is not supported in SSL.

Work around

To support Messaging SSO with SSL perform the following steps:

- 1. Configure Web Server in SSL mode.
- 2. Configure Communications Express for SSL port of Web Server.
- 3. Set uwcauth.ssl.enabled=true.
- **4.** Set uwcauth.https.port to SSL port of Web Server.
- **5.** Enable Messaging Server in SSL mode.
- Set the webmail.port in uwcconfig.properties to SSL port of Messaging Server.
- 7. Provide messagingsso.ims.url to Non SSL port of Messaging Server
- **8.** Install the Certificate Management Server root Certificate Authority (CMS root CA) on both Web Server and Messaging Server.
- 9. Restart Web Server.
- **10.** Provide a value to local.webmail.sso.ims.verifyurl pointing to Non SSL port of Messaging Server.

11. Restart Messaging Server.

Accessing Calendar

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

This error can appear because of either one or more of the following reasons.

- The Calendar Server configurations in *uwc-deployed-path* /WEB_INF/config/uwcconfig.properties are incorrect.
- The Calendar Server calmaster information in 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 the Calendar Server Parameters in uwcconfig.properties File," for calendar server related parameters.
- Both Communications Express and Calendar Server are not enabled for hosted domains.

Make sure either Communications Express and Calendar Server are both enabled for Virtual Domains or both disabled for Virtual Domains. Refer to "Enabling Hosted Domain Configuration in Calendar" 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(s) 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 can occur 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.

Work around

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 -k hosted option. If the -k option is not specified a hosted domain setup is assumed.

For example,

Code 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 -W user2 -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.

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.

Work around

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 Chapter 13 of the Calendar Server 6 2005Q1 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.

In the Options Calendar Window, by default only "Accepted" and "Tentative" are selected, which means as a user, you will not see events you have declined or to which you have not responded as yet.

Work around

To view all the events in the Day, Week, Month, and Year views, you should select all the options, that is, Accepted, Tentative, Declined, No Response in the Options Calendar window.

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 allows import of upto 2 MB file data. However, upload file size limit is configurable.

Work around

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 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 will stop 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 <code>softlimit</code>, meaning that if uploaded 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. This limit defaults to 1 MB
- failureRedirectURL .(Optional). Specifies the redirect URL the request is forwarded to, when an error occurs. The redirect URL can be configured via 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:

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

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

Code Example 5-2 Configuring init Parameters for MultipartFormServletFilter in web.xml

```
<web-app>
  <filter>
    <filter-name>MultipartFormServletFilter</filter-name>
<filter-class>com.sun.uwc.calclient.MultipartFormServletFilter</filter-clas</pre>
    <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:

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

Work around

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 server.xml Web Server configuration file.

or

Re-install webserver 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 xalan.jar and xerces.jar 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.

Work around

- Check the LDAP configuration in WEB-INF/config/ldappstore/db_config.properties.
- **2.** Edit the incorrect configuration settings.
- **3.** Restart the Web Server where Communications Express is deployed.

For more information, refer to the section "Configuring Corporate Directory Parameters db_config.properties File," in Chapter 3, "Configuration Details."

Corporate Directory shows an inline error when search is performed.

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

Work around.

Check the LDAP configuration in

WEB-INF/config/corp-dir/db_config.properties for any misconfigurations, correct them and then restart Communications Express.

For more information, refer to the section "Configuring Corporate Directory Parameters db_config.properties File," in Chapter 3, "Configuration Details."

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.

Work around

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

Make the following changes in the files:

 Set the appropriate key value in uwc-deployed-path/WEB-INF/config/WEB-INF/config/corp-dir/db_config.pr operties.

- Set the appropriate key in place of "uid" in entry entryID="db:uid" in uwc-deployed-path/WEB-INF/config/WEB-INF/config/corp-dir/xlate-inetor sperson.xml.
- **3.** Restart the Web Server where Communications Express is deployed.

For more information, refer to the section "Configuring Corporate Directory Parameters db_config.properties File," in Chapter 3, "Configuration Details."

The value of psRoot cannot be set.

The LDAP attribute psroot in User Preferences is used for Addressbook Server Horizontal Scalability. For more details, see the section, "Supporting Horizontal Scalability of Addressbook Server," in Chapter 3, "Configuration Details." If your deployment does not require Addressbook Server Horizontal Scalability, you may ignore this error.

When a user logs into Communications Express for the first time, the 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 Addressbook Server deployment.

Work around

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.

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 seemlessly, Messaging or Identity Server Single Sign-On should be enabled. Before starting Communications Express, follow the instructions outlined for Single Sign-on configuration in Chapter 4, "Implementing Single Sign-On."

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.

Work around

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

Work around

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

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

NOTE AMConfig.properties file can be found under IS-SDK-BASEDIR/SUNWam/lib

You may 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.

It is mandatory to deploy Communications Express and Messenger Express (MEM) on the same host to enable them interoperate using Javascript in the browser.

Authenticating using Identity Server

Unable to authenticate after entering valid userid and password.

Authentication could fail for the following reasons:

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

Work around

If Sun Java System LDAP Schema v.2 is used, ensure that users have been added using commcli utility or through Identity Server 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.

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

Refer to "Configuring Identity Server Parameters in uwcauth.properties File," in Chapter 3, "Configuration Details," for the configuration parameter 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.

➤ To Enable Logging

1. Edit the file uwclogging.properties in uwc-deployed-path/WEB-INF/config directory

The uwclogging.properties file stores the following parameters:

 Table 5-1
 Configurable Parameters in uwclogging.properties
 File

Module/Log Control File	Parameter	Default Value	Description
Configuration			Logs are maintained in a time-stamped file at /opt/SUNWuwc/install/u wc-config _TIME-STAMP.log
Communications Express	uwc.logging. enable	no	Enables or disables logging.
<pre>uwc-deployed-path/WEB -INF/config/uwclog ging.properties</pre>			To enable logging change the property value of uwc.logging.enable to "yes." For example, uwc.logging.enable=yes
Communications Express	uwc.log.file	<pre>uwc-deployed- path/logs/uw</pre>	Specifies the location of the log file.
<pre>uwc-deployed-path/WEB -INF/config/uwclog</pre>	3	c.log For example:	Change the location of the log file, if required.
ging.properties		/var/opt/SU NWuwc/logs/ uwc.log	Ensure Web Server can write to this file.
Communications Express	uwc.log.level	INFO	Specifies the log level for the application.
<pre>uwc-deployed-path/WEB -INF/config/uwclog ging.properties</pre>			Change the log level for the application to the desired level.
			The log level values available are:
			WARNING, INFO, and FINE, SEVERE.

Table 5-2 Configurable Parameters in uwcconfig.properties File

Module/Log Control File	Parameter	Default Value	Description
Address Book uwc-deployed-path/WEB	log.file	/tmp/trace. log	Specifies the location of the log file.
-INF/config/uwccon fig.properties			Change the location of the log file, if required.
			Ensure Web Server can write into this file.
Address Book	uwc.log.level	3	Specifies the log level for the application.
<pre>uwc-deployed-path/WEB -INF/config/uwccon fig.properties</pre>			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 at http://docs.sun.com/s ource/817-62266

2. After you set the default values in uwclogging.properties and uwcconfig.properties file, restart the Web Server.

CAUTION Enabling logging will impact the performance of the system.

Log Files

Configuring the 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.

- Enabling Hosted Domains
- Setting Hosted Domains

Enabling Hosted Domains

This section describes the changes to be made in Communications Express to enable hosted domains (also known as virtual domains).

Enabling Hosted Domain Configuration in Calendar

To enable hosted domain configuration in calendar, you must set the virtual domain.mode parameter to "y" in uwc-deployed-path/WEB_INF/config/uwcauth. properties file and configure Calendar Server for hosted domains. For Information on how to configure Calendar Server for hosted domain refer to the Calendar Server Administration Guide at:

http://docs.sun.com/source/817-5697/csagCreatingHostedDomains.html

Provisioning Hosted Domain in Mail

To provision a domain and to learn about creating a hosted domain entry in the organizational tree, refer to the *iPlanet Messaging Server 5.2 Provisioning Guide* for Sun Java System LDAP Schema v.1 at: http://docs.sun.com/source/816-6018-10

For information on how to customize the mail client interface for each domain, refer to the *Sun Java System Communications Express Customization Guide* at:

http://docs.sun.com/source/819-0116/perdomaincust.html

Enabling Hosted Domain Configuration in Address Book

The following files can be modified to enable hosted domains.

- uwc-deployed-path/WEB-INF/domain/personalstore.properties file
- uwc-deployed-path/WEB-INF/domain/defaultps/defaultps.xml file

Setting Hosted Domains

The domain related configurable parameters are stored in the following files:

- uwcdomainconfig.properties
- personalstore.properties
- defaultps/defaultps.xml
- lang/il8n.properties. For example, en/il8n.properties.

When Communications Express is deployed, these 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:

- 1. uwc-deployed-path/WEB-INF/domain/user's domain/property-files
- 2. uwc-deployed-path/WEB-INF/domain/property-files

Creating Hosted Domain

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

➤ To specify the domain related properties for a particular domain:

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 domain related configuration files under uwc-deployed-path/WEB-INF/domain directory to this directory. Refer to the section, Setting Hosted Domains for a list of domain related parameters.
- 3. Customize the property files in the uwc-deployed-path/WEB-INF/domain/domain-name directory as explained in the sections below.

4. To enable Identity Server login url to be constructed according to the domain specific url of Communications Express, set the fully qualified virtual hostname, uwc.isvirtualhostname, to the virtual hostname of Identity Server.

For example, when

ce.virtualdomain.com.isvirtualhostname=is.virtualdomain.com

and if you are accessing Communications Express from http://ce.virtualdomain.com/uwc

then the Identity Server url will appear as

http://is.virtualdomain.com/amserver/UI/Login.

If the fully qualified virtual hostname is not mapped to the to the virtual hostname of the Identity Server, Communications Express constructs the Identity Server login URL based on the static Identity Server login URL configured in uwcauth.identity.login.url.

For example, if

uwcauth.identity.login.url=http://siroe.com:85/amserver/UI/Login and you access Communications Express from a domain specific URL such as http://ce.varrius.com:80/uwc , Communications Express will construct the IS login url as:

http://siroe.varrius.com:85/amserver/UI/Login

where the domain is, varrius.com.

If the domain is ce.varrius.com, Communications Express will construct the Identity Server login URL as:

http://siroe.ce.varrius.com:85/amserver/UI/Login.

- **5.** Make the following changes in the Identity Server configuration:
 - **a.** Define FQDN mapping in AMconfig.properties. The default location of AMconfig.properties file is:

/etc/opt/SUNWam/config/AMconfig.properties

For example, if Identity Server is accessed from the virtual host as is.virtualdomain.com, the FQDN mapping will appear as:

com.sun.identity.server.fqdnMap[is.virtualdomain.com]=is.virtual
domain.com

b. Add virtualdomain.com in the additional cookie domain field in cookie domains, under service configuration -> platform .

Configuring Parameters for Hosted Domain

The following sections describe the settings you can configure for a domain in Communications Express:

- Configuring Parameters in uwcdomainconfig.properties file
- Customizing the Global GUI
- Configuring Languages in uwcdomainconfig.properties File

Configuring Parameters in uwcdomainconfig.properties file

The uwcdomainconfig.properties files maintains the default values of the calendar and address book related user preferences that can be configured on a per domain basis. 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 in the application.

 Table 6-1
 Default User Preferences in uwcdomainconfig.properties File

Parameter	Default Value	Description
uwc-user-attr-sunUCDefaultApplication	calendar	Specifies the default page to be displayed after you login. The available options are: mail, calendar, addressbook.
uwc-user-attr-sunUCDefaultEmailHandler	uc, desktop	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 6-1
 Default User Preferences in uwcdomainconfig.properties File (Continued)

Parameter	Default Value	Description
uwc-user-attr-sunUCDateDelimiter	1	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_A ngeles	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 uwcdomainconfig.properties File

Parameter	Default Value	Description
uwc-user-attr-icsExtendedUser Prefs-ceDefaultView	dayview	Specifies the view your default calendar should display after you login. The available options are:
		dayview, weekview, monthview, and yearview.
uwc-user-attr-icsExtendedUser Prefs-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.
uwc-user-attr-icsExtendedUser Prefs-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 and Interview.

Table 6-2 Default Calendar Preferences in uwcdomainconfig.properties File (Continued)

Parameter	Default Value	Description
uwc-user-attr-icsExtendedUser Prefs-ceDayHead	9	Specifies the day start time in hours.
uwc-user-attr-icsExtendedUser Prefs-ceDayTail	18	Specifies the day end time in hours.
uwc-user-attr-icsExtendedUser	PT1H0M	Specifies the interval the day is split into.
Prefs-ceInterval	(One hour)	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)
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-icsExtendedUserPref s-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 week end days.
uwc-user-attr-icsExtendedUser Prefs-ceIncludeWeekendInVie ws	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-icsExtendedUser Prefs-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 will be displayed in the time-zone specified in Global Options tab.
uwc-usr-attr-icsExtendedUserP refs-ceDefaultAlarmStart	PT0H30M	Specifies the default number of hours and minutes before an event or task a reminder should be sent.

 Table 6-2
 Default Calendar Preferences in uwcdomainconfig.properties File (Continued)

Parameter	Default Value	Description
uwc-user-attr-icsExtendedUser Prefs-ceNotifyEnable	false	Specifies whether to send email messages (containing ical attachments) to internal invitees when new events are created.
		Valid values are: false, true.

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

 Table 6-3
 Default Address Book Preferences in uwcdomain.properties File

Parameter	Default Value	Description
uwc-user-sunAbExtendedUser Prefs-abName	Personal Address Book	Specifies the name of the default address book.
uwc-user-attr-sunAbExtendedU serPrefs-abDescription	This is the personal address book	Specifies a short description for the default address book.
uwc-user-attr-sunAbExtendedU serPrefs-abEntriesPerPage	25	Specifies the maximum number of address book entries to be displayed on a page. The available options are: 25, 50, 75.
uwc-user-attr-sunAbExtendedU serPrefs-abSearchDisplayColu mn1	displayname	Specifies the value to be displayed in the first column. By default, the first column displays name of contacts or group.
uwc-user-attr-sunAbExtendedU primaryem serPrefs-abSerchDisplayColum n2	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, calendarur1, freebusyur1, birthday, anniversary, ou, edit, viewcalendar.

 Table 6-3
 Default Address Book Preferences in uwcdomain.properties File (Continued)

Parameter	Default Value	Description
uwc-user-attr-sunAbExtendedU serPrefs-abSearchDisplayColu mn3		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, calendarur1, freebusyur1, birthday, anniversary, ou, edit, viewcalendar.
uwc-user-attr-sunAbExtendedU serPrefs-abSearchDisplayColu mn4	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, calendarur1, freebusyur1, birthday, anniversary, ou, edit, viewcalendar.

Configuring the personalstore.properties file

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

Table 6-4 lists the settings stored in personal store.properties file.

 $\textbf{Table 6-4} \qquad \text{Configuration Settings Stored in } \texttt{personalstore.properties File}$

Parameters	Default Value	Description
		<u> </u>
db.defaultpsrootpattern	Idap:///piPStoreO wner=%U,o=%D,o =PiServerDb	Specifies the pattern used to dynamically construct the psRoot value for a user. The 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.xxx.class	com.iplanet.iabs.ld ap.plug.iLDAP	Specifies the name of the java class implementing the plug-in. For example, LDAP plug-in.
db.xxx.urlmatch		Specifies the URL in the format:
		Idap://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.xxx.configpath		Specifies the path to the configuration directory containing the LDAP information for this instance.
		If the path is relative, it is relative to the location of this file.
db.xxx.wildcardsearch		Specifies the minimum number of characters to be provided in a wild card search.
db.xxx.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 will continue to search until it gets the right page.
db.xxx.corporatedir	false	For a corporate directory this value should be true.

Table 6-4 Configuration Settings Stored in personal store. properties File

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.

Configuring defaultps.xml file

The defaultps.xml 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.

Each book node contains a book definition that is created for users in the domain under which the defaultps.xml file resides.

Following are examples of the XML sections in defaultps.xml that contain the definitions of Personal Address Book and a Corporate Address Book.

Personal Address Book XML

Code Example 6-1 XML section containing Personal Address Book Definitions

```
<book booktype="abook">
  <bookoc>piLocalBook</bookoc>
  <entry entryID="pab">
    <displayname>_Personal Address Book</displayname>
    <description>_This is your Personal Address Book</description>
  </entry>
  </book>
```

Corporate Directory XML

Code Example 6-2 XML section containing Corporate Address Book Definitions

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

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

- 1. Add a new book node in defaultps.xml file
- **2.** Add a new xxx instance in personal store. properties file.
- 3. Create a directory under WEB-INF/config to store the db_config.properties and wlate files.

NOTE

The xlate files contains the field mappings between an LDAP schema and address book XML schema for a contact or group.

Customizing the Global GUI

Theme file contain 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. The default theme.properties file is located under uwc-deployed-path/WEB-INF/skin.

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 sirce.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 il8n.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.

Setting Hosted Domains

Migrating PAB Data to Addressbook Server

Previously Personal Address Book (PAB) was used to store 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 the Addressbook Server instead of PAB to store users' contact details. Because of this, users accessing Communications Express using existing Messaging Server installations must migrate their PAB data to the Address Book Server.

This chapter contains the following sections:

- Overview
- Migration Scenarios
- Post Configuration Steps
- Additional Configuration Required for Horizontal Scalability Support
- Migration Scenarios

Overview

The migration tool migrates user's Messenger Express address book data to the Addressbook Server that is part of Communications Express.

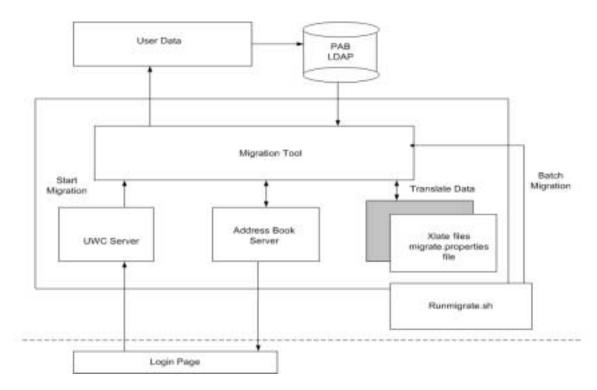
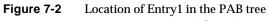
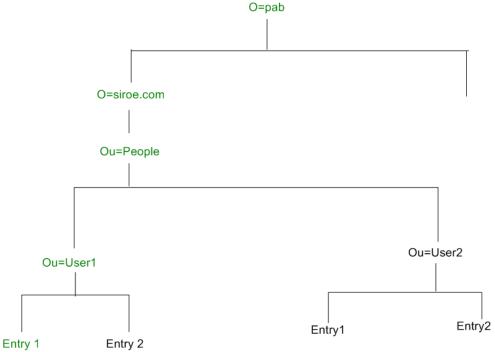


Figure 7-1 Overview of the Data Migration Process

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

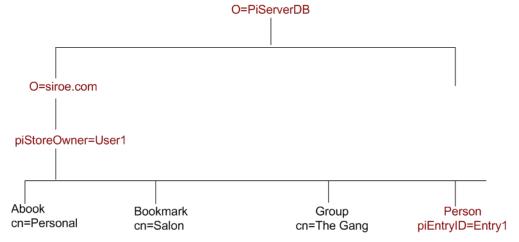
When User1 in the domain siroe.com has an entry in PAB, such as Entry1 that needs to be migrated, the entry is located in the PAB tree under ou=User1 as shown in green in Figure 7-2.





After migration, the newly created Addressbook Server Entry is added to the Addressbook Server tree under o=siroe.com, piEntryID=Entry 1 as shown in red in Figure 7-3.

Figure 7-3 Location of Entry 1 in the Addressbook Server tree.



NOTE

The migration utility migrates all the data from PAB of Messenger Express to Address Book of Communication 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.

Migration Scenarios

Data Migration takes place in two ways:

- Dynamic Migration
- Batch Migration

Dynamic Migration

Dynamic Migration takes place when an existing Messenger Express user logs into Communication Express. The users receive an email after the migration is completed.

In the dynamic migration process:

• The application checks if migration has been enabled in the uwcuath.properties file and then proceeds with the migration process.

- The login logic then compares the nswmextendedprefs attribute with mepabmigration value to determine whether the user's data has been previously migrated.
- Once PAB migration is completed, the Addressbook Server sets the nswmextendedprefs, mepabmigration to "1" in the logged in user entry, to indicate the completion of the migration process.
- 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 define the parameters mentioned in Table 7-2.

Batch Migration

In the batch migration process, migration takes place at the server level without end user interaction. The administrator executes the <code>runMigrate.sh</code> 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 <code>runMigrate.sh</code> script for each domain to migrate users PAB data from the given <code>inetDomainBaseDN</code> to the Address Book Server.

Post Configuration Steps

You need to configure Communications Express to enable migration.

Table 7-1 lists the config files the migration utility depends on.

Table 7-1 Configuration Files and their Purpose

File Name	Description	
migrate.properties	Contains the parameters required to migrate data from PAB to Address Book Server. Refer to Table 7-2 for information on these parameters.	

Table 7-1 Configuration Files and their Purpose

File Name	Description	
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 this parameter is disabled.	
runMigrate.sh	The script sets the required variables and invokes the java program MigratePab, with following three arguments.	
(applicable only for Batch migration)	# Absolute path of migrate.properties file. The Default path is set to: ./WEB-INF/config/migrate.properties	
g,	# Absolute path of config directory in which uwcauth.properties and other config 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 (Table 7-3)	Migration utility internally uses the address Book API's of Communications Express to load the data from the PAB of the	
xlate-pabgroup.xml	Messenger Express.	
(Table 7-4)	The xlate files are required to map LDAP attributes of the PAB to the address Book attributes of the Addressbook Server.	

Based on the user's mail host, the PAB configuration entries listed in Table 7-2 are retrieved and the connection to the PAB Server established.

 Table 7-2
 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.

Table 7-2 Parameters Configurable for PAB Migration in migrate.properties (Continued)

Parameter	Default Value	Description
hostname.pabldappooltimeo ut	50	Specifies the number of seconds before timing out an LDAP connection.
hostname.alwaysusedefault host	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 delete 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.
<pre><pabhost.pabport>.abhostpo rt=<abldaphost>:<abldapport></abldapport></abldaphost></pabhost.pabport></pre>		Specifies the pabhost and pabport entries available in the lookup table in the migrate.properties file.
		In this parameter <pre><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.</abldaport></abldaphost></pabhost.pabport></pre>

Table 7-3 Field Mapping for Contacts

Address Book
DisplayName
sn
givenName
piPhone1Type:work
piPhone1:
piPhone2Type:home
piPhone2;
piPhone4Type:pager
piPhone4:
piPhone3Type:mobile
piPhone3:
piPhone5Type:fax
piPhone5:
piEmail2Type:home
piEmail1:
piEmail2Type:work
piEmail2:
homePostalAddress
homecity
homeState
homePostalCode
homeCountry
piWebsite1
description
memberOfPIBook
memberOfOlGroup

Table 7-4 Field Mapping for Groups

PAB	Address Book
cn	displayName
description	description

To receive a mail, you are required to define the parameters mentioned in Table 7-5.

Table 7-5 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	Specifies the SMTP relay host	
	For example: budgie.siroe.com	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.

Additional Configuration Required for Horizontal Scalability Support

The attribute psroot in the User's LDAP entry is an Addressbook 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 provision users so that PAB data for all users is spread across multiple directory locations.

For existing webmail users, if PAB Migration is enabled, the psRoot attribute is constructed using the existing pabURI attribute and a mapping table is defined in wwc-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* the target directory instance to which the PAB data is required to be migrated.

Thus, if you want to migrate the pab data from the directory running at pab.example.com:389 to address book directory running at abs.example.com:389 the entry in migrate.properties file should appear 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.

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.

Tuning and Performance Information

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

To improve performance consider the following tuning options:

- Tuning Directory Server
- Tuning Calendar Server
- Tuning Web Server
- Tuning Communications Express

Tuning Directory Server

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

- Indexing the LDAP Directory Server
- Setting the nsSizeLimit and nsLookthroughLimit Parameters

Indexing the LDAP Directory Server

To improve the performance of Communications Express when Calendar Server accesses the LDAP directory server, index the following LDAP attributes:

icsCalendar. The attribute is used to search default calendars for a calendar
user or resource. Specify the index type as presence (pres), equality (eq), or
substring (sub).

- **icsCalendarOwned.** The attribute is used to search for a subscribe operation when the LDAP CLD plug-in is enabled. Specify the index type as presence (pres), equality (eq), and substring (sub).
- **mail** and **mailAlternateAddress**. These two attributes specifies a user's primary and alternate email addresses.

NOTE

The comm_dssetup.pl script adds indexes for icsCalendar, icsCalendarOwned, mail, and mailAlternateAddress attributes.

Setting the nsSizeLimit and nsLookthroughLimit Parameters

It is important that the nsSizeLimit and nsLookthroughLimit parameters in User/Group LDAP directory 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 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.

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 ics.conf 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 8 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 the chapter on Calendar Server Performance Tuning in *Sun ONE Calendar Server 6.0 Administration Guide* at:

```
http://docs.sun.com/source/816-6708-10/
```

Tuning Web Server

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

- Setting the value of acceptorthreads
- Setting JVM Options

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 host
name"acceptorthreads="<noofcpus>" >
```

Setting JVM Options

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

The following two parameters determine the heap size of JVM

- JVMOPTIONS-Xms(approx value according to the memory available)/JVMOPTIONS
- JVMOPTIONS-Xmx(approx value according to the memory available)/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 Communications Express

➤ To enable compression of the server response

1. In the uwcconfig.properties file, enable compression of the sever response by setting the uwc.gzip compression parameter value to "true."

For example, uwc.gzipcompression = true

2. Then, restart the Web Server.

CAUTION Maintain a backup of your configuration files before making any changes.

➤ To customize the session time-out for Communications Express

1. Edit the web.xml file found in *deployed-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 seconds.

2. Change the value of the session-timeout attribute to the desired value.

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

Tuning Communications Express

Enabling or Disabling Identity Server Post Deployment

While configuring Communications Express, you are given the option of selecting Identity support in the Enable Identity Server for Single Sign-on panel.

- If you have not selected Identity Support for Communications Express in the Enable Identity Server for Single Sign-on panel, you need to perform the following steps to later enable Identity support:
 - **a.** Install and configure the Identity Server Remote SDK.
 - **b.** Update the Communications Express Web Container Class path with the location of the Identity Server's remote SDK jar files.

For example, add the following to the classpath suffix in the $\mbox{server.xml}$ 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.

c. Refer to in Chapter 4 for parameters that enable Identity Server SSO.

d. Take a backup of the existing web.xml 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

- e. Rename web IS.xml to web.xml
- If you have selected Identity Support for Communications Express in Enable Identity Server for Single Sign-on panel, you need to perform the following steps to disable identity support:
 - **a.** Set uwcauth.identity.enabled to "false" in uwcauth.properties file to disable Identity SSO.
 - **b.** Take a backup of the existing web.xml from uwc-deploydir/SUNWuwc/WEB-INF/web.xml
 - c. 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

Configuration Panel Sequence

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

Web Server with Sun Java System LDAP Schema, v.1

or

Web Server with Sun Java System LDAP Schema, v.2 (with Identity Server)

Application Server with Sun Java System LDAP Schema, v.1

or

Application Server with Sun Java System LDAP Schema, v.2 (with Identity Server)

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

Table B-1 Panel Sequence Depending on the Schema and Web Container Selection

Web Server+Schema 1	Web Server+Schema 2	App Server + Schema 1	App Server + Schema 2
Welcome	Welcome	Welcome	Welcome
Select the Directory to Store Configuration and Data Files			
Select Components to be Configured			
Network Connection	Network Connection	Network Connection	Network Connection
Select a Web Container			

 Table B-1
 Panel Sequence Depending on the Schema and Web Container Selection

	Selection		
Web Server Configuration Details	Web Server Configuration Details	Application Server Configuration Details	Application Server Configuration Details
Web container User and Group	Web container User and Group	Application Server Administration Instance Details	Application Server Administration Instance Details
URI Path Setting	URI Path Setting	Module Name for this Web Application	Module Name for this Web Application
Do you want Hosted Domain Support?	Do you want Hosted Domain Support?	Web container User and Group	Web container User and Group
User/Group Directory (LDAP) Server Details	User/Group Directory (LDAP) Server Details	URI Path Setting	URI Path Setting
DC Tree Suffix	Default Domain Name	Do you want Hosted Domain Support?	Do you want Hosted Domain Support?
Default Domain Name	Enable Identity Server for Single Sign-On	User/Group Directory (LDAP) Server Details	User/Group Directory (LDAP) Server Details
Enable Identity Server for Single Sign-On	Messaging Express Port	DC Tree Suffix	Default Domain Name
Messaging Express Port	Calendar Server Host and Port Configuration	Default Domain Name	Enable Identity Server for Single Sign-On
Calendar Server Host and Port Configuration	Calendar Server Administration Details	Enable Identity Server for Single Sign-On	Messaging Express Port
Calendar Server Administration Details	PAB Directory Server Details	Messaging Express Port	Calendar Server Host and Port Configuration
PAB Directory Server Details	Ready to Configure	Calendar Server Host and Port Configuration	Calendar Server Administration Details
Ready to Configure		Calendar Server Administration Details	PAB Directory Server Details
		PAB Directory Server Details	Ready to Configure
		Ready to Configure	

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(s) 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.
- o The ability to have a distinct namespace for subdomains. 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.

How 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,
mailDomainMsqQuota

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

Table C-1 LDIF File 1

dn: dc=com,o=internet

dc: com

objectclass: top

objectclass: domain

Table C-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||icsMandatoryVi
ew||icsDefaultAccess||icsRecurrenceBound||icsRecurrenceDate||ics
AnonymousLogin||icsAnonymousAllowWrite||icsAnonymousCalendar||ic
sAnonymousSet||icsAnonymousDefaultSet||icsSessionTimeout||icsAll
owRights||icsExtended||icsExtendedDomainPrefs")(targetfilter=(ob
jectClass=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
mailDomainDiskOuota: -1
mailDomainMsqQuota: -1
mailDomainReportAddress: postmaster@siroe.com
nsMaxDomains: 1
nsNumUsers: 1
```

LDIF File 2 Continued

nsNumDomains: 1
nsNumMailLists: 0

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

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
- db_config.properties file
- uwcconfig.properties
- uwcauth.properties file
- uwclogging.properties file
- uwcdomainconfig.properties
- personalstore.properties file

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

 Table D-1
 Parameters in uwcconfig.properties

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. This improves the throughput of the Communications Express page access.
uwc.renderhtml	n	Specifies whether calendar is required 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 Addressbook 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.

Table D-1 Parameters in uwcconfig.properties (Continued)

Parameters	Default Value	Description
addressbook.wabp.version	1.0	Specifies the address book protocol version.

 Table D-2
 Parameters in 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 defaultdomain is assigned the value entered during configuration.
defaultlocale	en	Specifies the default locale to be used by the application.
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.

db_config.properties file

Table D-3, list the parameters of db_config.properties file.

 Table D-3
 Corporate Directory Parameters

Parameters	Default Value	Description
defaultserver.ldappoolmin		Specifies the minimum number of LDAP client connections.

 Table D-3
 Corporate Directory Parameters (Continued)

defaultserver.ldappoolmax		Specifies the maximum number of LDAP client connections.
defaultserver.ldappooltime out		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.
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.ldapbindd n.
		If the login type is "anonymous" you need not enter a value for this parameter.
defaultserver.ldapbin dcred		Specifies the bind password.

Corporate Directory Parameters (Continued) Table D-3

1	3	
login_type		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 by passing the LDAP bind on each operation.
		NOTE: A Read only access is given to a masquerading user.
entry_id		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.</entry>
retrieve_db_attribs		Defines whether all the database attributes should be passed in the LDAP search.

Table D-3 Corporate Directory Parameters (Continued)

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.
entry_id	uid	Specifies the key in the 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.</entry>

 Table D-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.

uwcconfig.properties

Table D-4, list the parameters of uwcconfig.properties file.

 Table D-4
 Parameters of uwcconfig.properties

Parameters	Default Value	Description
mail.deployed		Specifies whether Messenger Express is deployed. The parameter is set when you run the configuration wizard.
		The attribute is set to "true" if Messenger Express is deployed.

 Table D-4
 Parameters of uwcconfig.properties (Continued)

Parameters	Default Value	Description
webmail.host		Specifies the host name of the machine on which Messenger Express is deployed.
		The host name of Messenger Express should correspond to the machine name on which Web Server is deployed.
webmail.port	80	Specifies the port number Messenger Express HTTP Server listens to.
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 Admin ID for the WCAP Sever.
calendar.wcap.passwd		Specifies the Admin Password for the WCAP Server.
calendar.jcapi.serviceclass. socs	com.sun.comclient.calenda r.socs.SOCSCalendarStore	Specifies the name of Class implementing Java API for Calendar JCAPI, for Sun Java Systems 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.

Table D-4 Parameters of uwcconfig.properties (Continued)

Parameters	Default Value	Description
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	/tmp/trace.log	Species the location of the log file.
This parameter is used by Address book module.		By default messages go to the web container error log file.
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.
Address book module.		The valid values are:
		!evel = 0 (off), 1 (debug only), 2 (error only), 3 (all).
log.components	127	Specifies the component level for
This parameter is used by Address book module.		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.cl	com.iplanet.iabs.coresrv.C orePersonalStoreFactory	Defines the class implementing the SessionObjectFactory
sessionobjfactory.pstore.co nfigpath		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.se ssionid	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.

 Table D-4
 Parameters of uwcconfig.properties (Continued)

Parameters	Default Value	Description
manual_purge_enabled		Enables a user with jsessionid to invoke the Addressbook 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.
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.

uwcauth.properties file

Table D-5, list the parameters of the uwcauth.properties file.

Table D-5 Parameters of 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 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'.
uwcauth.ssl.enabled		Defines if SSL is enabled.
uwcauth.ssl.authonly		Defines if SSL is enabled for authentication only.
Idapauth.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 Idap port number.
ldapauth.dcroot		Specifies the DC root for the authentication tree.
ldapauth.domainattr	inetDomainBaseDN,inetDo mainStatus,inetDomainSea rchFilter,domainUidSeparat or,preferredLanguage	Specifies the list of attributes to be retrieved from the domain entry in which the user is authenticated.
ldapauth.domainfilter	((objectclass=inetDomain)(objectclass=inetDomainAlia s))	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	 	Specifies password of the user binding to the authentication LDAP.

 Table D-5
 Parameters of uwcauth.properties (Continued)

Parameters	Default Value	Description
Idapauth.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.
Idapusersession.defaultugfi Iter		Specifies the default filter syntax to be used when retrieving the user entry.
Parameters for the user look	up	
Idapusersession.ugattr	uid,inetUserStatus,preferre dLanguage,psRoot,pabURI ,cn,mail,mailHost	Specifies the set of attributes to be returned from LDAP during entry lookup.
Idapusersession.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 semi-colon (;).
		!The name of fallback servers should be in the format: Host Name: Port#
Idapusersession.Idapport		Specifies the port number of the user/group directory server.
ldapusersession.ldapbindd n		Specifies the UserDN of the admin binding to the user group Directory Server.
Idapusersession.Idapbindcr ed		Specifies the password of the admin binding to the user tree.
Idapusersession.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.
Idapusersession.domainfilt er	((objectclass=inetDomain)(objectclass=inetDomainAlia s))	Defines the filter used to identify a domain entry.
Idapusersession.Idappoolm in		Specifies the minimum number of LDAP client connections maintained.
Idapusersession.Idappoolm ax		Specifies the maximum number of LDAP client connections maintained.

Parameters of uwcauth.properties (Continued) Table D-5

Parameters	Default Value	Description
ldapusersession.ldappoolti meout		Specifies the number of seconds before timing out an LDAP connection.
		Increase this value to accommodate large search results.
Idapusersession.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.
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 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 C	onfiguration	

 Table D-5
 Parameters of uwcauth.properties (Continued)

Parameters	Default Value	Description
uwcauth.messagingsso.en able		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 Identity Server Single Sign-On.
uwcauth.messagingsso.co okiepath	/	Specifies the URI for which the single sign-on cookie is saved.
messagingsso.xxx.url	http://servername/VerifySS O?	Specifies the URL used to verify the SSO cookie.
		The value of xxx should be replaced by the application ID of the server.
		For example, if you want to enable SSO with Messaging Server whose application ID is "msg60", you need to add the following configuration parameter:
		<pre>mesagingsso.msg60.url=http://se rvername/VerifySSO?</pre>
		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?	Specifies the verify url of Communications Express.
	When Communications Express is not deployed under "/", such as /uwc, the value of the parameter may look like:	If you have edited the value of uwcauth.appid for this server, replace uwc in messagingsso.uwc.url with the new uwcauth.appid.
	http://servername:85/uwc/VerifySSO?	
Identity SSO		

Table D-5 Parameters of uwcauth.properties (Continued)

Parameters	Default Value	Description
uwcauth.identity.enabled		'Specifies whether identity server is enabled.
		Set the attribute to "true" to enable Identity Server. Set the attribute to "false" to disable Identity Server. Initially the value is set in the configurator.
uwcauth.identity.login.url	http://nicp160.india.sun.co m: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,
		<pre>uid=amAdmin, ou=People, o=siroe.example.com, o=example.com</pre>
		Note: The uwcauth.identity.binddn and uwcauth.identity.bindcred values should correspond to the values entered when installing Identity Server.
		For example, uwcauth.identity.binddn=uid= amAdmin, ou=People, o=siroe.example.com, o=example.com and uwcauth.identity.bindcred=pa ssword.
uwcauth.identity.bindcred		Specifies the password of the amadmin.
uwcauth.identity.cookiena me	iPlanetDirectoryPro	Specifies the Identity Server 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.

 Table D-5
 Parameters of uwcauth.properties (Continued)

Parameters	Default Value	Description
uwcauth.https.port	443	Specifies the https port number that Communications Express listens to when Communications Express is configured on Web Server.
uwcauth.identitysso.cookie path	1	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 Communication Express session is disabled and the user will be taken to the url configured in identitysso.portalurl.
identitysso.portalurl		Specifies the verify url of Communications Express.
		If Identity Server is enabled and single sign-off is set to false, Communication 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'.

uwclogging.properties file

 $Table\ D\text{-}6,\ lists\ the\ parameters\ of\ the\ uwclogging.properties\ file.$

 Table D-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.

Table D-6 Default Logging Configuration File (Continued)

Parameters	Default Value	Description
uwc.log.file	/var/opt/SUNWuwc/logs/uw	Specifies the location of the log file.
	c.log	Change the location of the file if required.
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

uwcdomainconfig.properties

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 D-7.

Parameters in uwcdomainconfig.properties Table D-7

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

 Table D-7
 Parameters in uwcdomainconfig.properties (Continued)

Parameters	Default Value	Description
uwc-user-attr-sunUCThem	uwc	Specifies the default display theme.
е		Note: Currently we support 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-sunUCColor Scheme	2	Specifies the default display color scheme.
uwc-user-attr-sunUCDefaul tEmailHandler	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-sunUCDateF ormat	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-sunUCDateD	1	Specifies the delimiter used in dates.
elimiter		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-sunUCTimeF ormat	12	Specifies the time display format. The available formats are 12 or 24 hour formats.
uwc-user-attr-sunUCTimeZ one	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 D-7 Parameters in uwcdomainconfig.properties (Continued)

Parameters	Default Value	Description
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		
uwc-user-attr-icsExtended UserPrefs-ceDefaultView	dayview	Specifies the view your default calendar should display after you login. The available options are:
		dayview, weekview, monthview, and yearview.
uwc-user-attr-icsExtended UserPrefs-ceShowComplet edTasks	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.
uwc-user-attr-icsExtended UserPrefs-ceDefaultCateg ory	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 and Interview.
uwc-user-attr-icsExtended UserPrefs-ceDayHead	9	Specifies the day start time in hours.
uwc-user-attr-icsExtended UserPrefs-ceDayTail	18	Specifies the day end time in hours.

 Table D-7
 Parameters in uwcdomainconfig.properties (Continued)

Parameters	Default Value	Description
uwc-user-attr-icsExtended UserPrefs-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)
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-icsExtended UserPrefs-ceWeekEndDay s	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-icsExtended UserPrefs-ceIncludeWeeke ndInViews	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.
uwc-user-attr-icsExtended UserPrefs-ceSingleCalend arTZID	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.

Parameters in uwcdomainconfig.properties (Continued) Table D-7

Parameters	Default Value	Description
uwc-user-attr-icsExtended UserPrefs-ceAllCalendarT ZIDs	0	Defines the boolean value, which specifies that the time zone of all the displayed calendar should be used instead of users time zone.
uwc-user-attr-icsExtended UserPrefs-ceDefaultAlarm Start	PT0H30M	Specifies the default number of hours and minutes, before an event or task, a reminder should be sent.
uwc-user-attr-icsExtended UserPrefs-ceNotifyEnable	1	Specifies whether to send email messages containing ical attachments, to internal invitees when new events are created.
uwc-user-attr-icsExtended UserPrefs-sunCalEventfilte		Defines the default invitations to be viewed in the calendar.
r		The options available are: accepted, tentative, declined, needs-action.
Address Book Default Option	n Values	
uwc-user-attr-sunAbExtend edUserPrefs-abName	Personal Address Book	Specifies the name of the default address book.
uwc-user-attr-sunAbExtend edUserPrefs-abDescription	This is the personal address book	Specifies a short description for the default address book.
uwc-user-attr-sunAbExtend edUserPrefs-abEntriesPer Page	25	Specifies the maximum number of address book entries to be displayed on a page.
		The available options are: 25, 50, 75.
uwc-user-attr-sunAbExtend edUserPrefs-abSearchDisp layColumn1	displayname	Specifies the value to be displayed in the first column. By default, the first column displays name of contacts or group.

 Table D-7
 Parameters in uwcdomainconfig.properties (Continued)

Parameters	Default Value	Description
uwc-user-attr-sunAbExtend edUserPrefs-abSearchDisp layColumn2	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.
uwc-user-attr-sunAbExtend edUserPrefs-abSearchDisp layColumn3	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, title, primaryphone, workphone, homephone, faxphone, pagerphone, primaryemail, email2, email3, homeaddress, workaddress, weburl1, weburl2, calendarurl, freebusyurl, birthday, anniversary, ou, edit, viewcalendar.
uwc-user-attr-sunAbExtend edUserPrefs-abSearchDisp layColumn4	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.

 Table D-7
 Parameters in uwcdomainconfig.properties (Continued)

Parameters	Default Value	Description
uwc-mail-options-isSpamD etectEnabled	false	Specifies whether the spam detection filters should be shown to the user or not.

personalstore.properties file

Table D-8, list the parameters of the personalstore.properties file.

 Table D-8
 Parameters in personalstore.properties

Parameters	Default Value	Description
db.psrootattribute	psRoot	Defines the psRoot Attribute name.
db.useUserPsRoot	false	Specifies whether the per User psRoot should be used or not. 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,
		<pre>ldap:///piPStoreOwner=%U,o=%D,o =PiServerDb</pre>
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 per domain with dictionary files for each locale.
db.maxpagedsearch		Specifies the max number of simultaneously paged search for an instance of PersonalStore

Glossary

Refer to the *Java Enterprise System Glossary* (http://docs.sun.com/doc/816-6873) for a complete list of terms that are used in this documentation set.

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