



# Sun Java Enterprise System 2005Q1 Deployment Example Series: Evaluation Scenario

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# Preface

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*Java Enterprise System Deployment Example Series: Evaluation Scenario* describes how to install Sun Java™ Enterprise System (Java ES) on one system, establish a set of core, shared, network services, and set up user accounts that can access the services that you establish.

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## Who Should Use This Book

This guide is intended for any evaluator, system administrator, or installation technician who wants to install and evaluate Java Enterprise System.

This guide assumes you are familiar with the following:

- UNIX® operating system
- Internet protocol (IP) computer networks
- Installing enterprise-level software products

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## Before You Read This Book

Before performing any of the tasks described in this guide, you should read *Java Enterprise System Release Notes*. Refer to [“Related Documentation”](#) on page 14 for descriptions and links to the Java Enterprise System documents.

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## How This Book Is Organized

This book contains background information on designing the evaluation solution and detailed procedures for installing and configuring the evaluation solution. This book is organized in the following chapters:

**Chapter 1** describes the goals of the Java ES evaluation and the use cases that are the basis of the evaluation solution.

**Chapter 2** is a high-level technical description of a Java ES solution that implements the evaluation use cases and demonstrates Java ES product features.

**Chapter 3** comprise a detailed technical description of the of the evaluation solution.

**Chapter 4** lists the values that you use to install and configure the evaluation solution.

**Chapter 5** contains detailed procedures for installing the evaluation solution.

**Chapter 6** contains detailed procedures for continuing the configuration of the evaluation solution and verifying the configuration.

**Chapter 7** contains detailed procedures for completing the configuration of the LDAP directory used in the evaluation solution and creating an end user account for testing.

**Chapter 8** contains detailed procedures for configuring the evaluation solution for single sign-on and verifying that the entire solution is functioning correctly.

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## Typographic Conventions

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

**TABLE P-1** Typographic Conventions

Typeface or Symbol	Meaning	Example
AaBbCc123	The names of commands, files, and directories, and onscreen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. <code>machine_name% you have mail.</code>

**TABLE P-1** Typographic Conventions (Continued)

Typeface or Symbol	Meaning	Example
<b>AaBbCc123</b>	What you type, contrasted with onscreen computer output	machine_name% <b>su</b> Password:
<i>AaBbCc123</i>	Command-line placeholder: replace with a real name or value	The command to remove a file is <i>rm filename</i> .
<i>AaBbCc123</i>	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the <i>User's Guide</i> . Perform a <i>patch analysis</i> . Do <i>not</i> save the file. [Note that some emphasized items appear bold online.]

---

## Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

**TABLE P-2** Shell Prompts

Shell	Prompt
C shell prompt	machine_name%
C shell superuser prompt	machine_name#
Bourne shell and Korn shell prompt	\$
Bourne shell and Korn shell superuser prompt	#

---

## Symbol Conventions

The following tables describes the symbols that are used in this book.

**TABLE P-3** Symbol Conventions

Symbol	Description	Example	Meaning
[ ]	Contains optional command options.	ls [-l]	The -l option is not required.
{   }	Contains a set of choices for a required command option.	-d {y n}	The -d option requires that you use either the y argument or the n argument.
-	Joins simultaneous multiple keystrokes.	Control-A	Press the Control key while you press the A key.
+	Joins consecutive multiple keystrokes.	Ctrl+A+N	Press the Control key, release it, and then press the subsequent keys.
>	Indicates menu item selection in a graphical user interface.	File > New > Templates	From the File menu, choose New. From the New submenu, choose Templates.

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## Related Documentation

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The Java Enterprise System documentation includes information about the system as a whole and information about its components. The URL for the Java ES documentation set is <http://docs.sun.com/prod/entsys.05q4>. The *Java Enterprise System Documentation Roadmap* describes the documentation of the individual system components. Documentation for each component is also available at <http://docs.sun.com>.

The following table lists the system manuals in the Java ES documentation set. The left column provides the title and part number URL of each document and the right column describes the general contents of the document.

**TABLE P-4** Java Enterprise System Documentation

Document	Contents
<p><i>Java Enterprise System Release Notes</i>  <a href="http://docs.sun.com/doc/819-2329">http://docs.sun.com/doc/819-2329</a></p>	<p>Contains the latest information about Java Enterprise System, including known problems. In addition, components have their own release notes.</p>
<p><i>Java Enterprise System Documentation Roadmap</i>  <a href="http://docs.sun.com/doc/819-2327">http://docs.sun.com/doc/819-2327</a></p>	<p>Provides descriptions of all documentation related to Java Enterprise System, both as a system and for the individual components.</p>
<p><i>Java Enterprise System Technical Overview</i>  <a href="http://docs.sun.com/doc/819-2330">http://docs.sun.com/doc/819-2330</a></p>	<p>Introduces the technical and conceptual foundations of Java Enterprise System. Describes components, architecture, processes, and features.</p>
<p><i>Java Enterprise System Deployment Planning Guide</i>  <a href="http://docs.sun.com/doc/819-2326">http://docs.sun.com/doc/819-2326</a></p>	<p>Provides an introduction to planning and designing enterprise deployment solutions based on Java Enterprise System. Presents basic concepts and principles of deployment planning and design, discusses the solution life cycle, and provides high-level examples and strategies to use when planning solutions based on Java Enterprise System.</p>
<p><i>Java Enterprise System User Management Guide</i>  <a href="http://docs.sun.com/doc/819-2332">http://docs.sun.com/doc/819-2332</a></p>	<p>Helps you plan, deploy, and manage information about the users of your Java Enterprise System solution. Complements the <i>Java Enterprise System Deployment Planning Guide</i> by describing user management issues in each phase of the solution life cycle.</p>
<p><i>Java Enterprise System Deployment Example Series: Evaluation Scenario</i>  <a href="http://docs.sun.com/doc/819-0059">http://docs.sun.com/doc/819-0059</a></p>	<p>Describes how to install Java Enterprise System on one system, establish a set of core, shared, and networked services, and set up user accounts that can access the services that you establish.</p>
<p><i>Java Enterprise System Installation Guide</i>  <a href="http://docs.sun.com/doc/819-2328">http://docs.sun.com/doc/819-2328</a></p>	<p>Guides you through the process of installing Java Enterprise System for the Solaris Operating System or the Linux operating system. Shows how to select components to install, how to configure those components after installation, and how to verify that the configured components function properly.</p>
<p><i>Java Enterprise System Upgrade and Migration Guide</i>  <a href="http://docs.sun.com/doc/819-2331">http://docs.sun.com/doc/819-2331</a></p>	<p>Provides the information and instructions to upgrade Java Enterprise System for the Solaris Operating System or the Linux operating environment.</p>

**TABLE P-4** Java Enterprise System Documentation (Continued)

Document	Contents
<i>Java Enterprise System Glossary</i> <a href="http://docs.sun.com/doc/816-6873">http://docs.sun.com/doc/816-6873</a>	Defines terms that are used in Java Enterprise System documentation.

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## Accessing Sun Resources Online

For information about purchasing Java Enterprise System, go to <http://www.sun.com/software/javaenterprisesystem/index.html>.

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

- 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>)
- Download Center (<http://www.sun.com/software/download/>)

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## 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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## Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.



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## Evaluation Scenario Overview

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This chapter describes the goals of the evaluation and lists the use cases on which the evaluation solution is based.

This chapter introduces the evaluation in the following sections:

- [“About Java Enterprise System” on page 19](#)
- [“Goals of the Evaluation” on page 20](#)
- [“The Evaluation Use Cases” on page 20](#)

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## About Java Enterprise System

Sun Java™ Enterprise System (Java ES) is infrastructure software that supports a wide range of enterprise computing needs, such as creating a secure intranet portal that provides the employees of an enterprise with secure access to email, calendar, and in-house business applications.

Java ES provides many end-user services without custom programming, and it also supports custom, distributed, enterprise applications.

Java ES is composed of software components, such as Sun Java System Directory Server and Access Manager. To meet the computing needs of different enterprises, Java ES components can be combined and configured in many different ways.

Each enterprise assesses its own needs and designs its own Java ES solution. The optimal solution for an enterprise depends on the Java ES services that are needed, the number of users that must be served, the kind of hardware that is available, and similar considerations.

For more information on Java ES technical concepts and terminology see *Java Enterprise System Technical Overview* (<http://docs.sun.com/doc/817-5764>). For more information on designing a Java ES solution, see *Java Enterprise System Deployment Planning Guide* (<http://docs.sun.com/doc/817-5759>).

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## Goals of the Evaluation

This document describes how to install a basic set of Java ES components and configure them to provide networked messaging, calendar, and portal services without any custom application programming. This document also describes how to set up LDAP user accounts so you can access these services through their web-based interfaces.

The set of components you install for evaluation also supports single sign-on and proxy authentication, so that you can evaluate these Java ES features. This document describes how to configure single sign-on and proxy authentication.

By following the procedures in this document, you learn how Java ES components provide core, shared, networked services for an organization's employees and customers. You learn how to access these core services through built-in, web-based interfaces. You also learn enough about the capabilities of Java ES to imagine how a Java ES solution could deliver services to your organization's employees and customers.

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## The Evaluation Use Cases

This document describes a product evaluation that demonstrates a number of Java ES features. The evaluation features are identified in the following set of use cases:

- Installation and configuration use case: install the Java Enterprise System components on one system.
- Installation and configuration use case: use Java Enterprise System configuration tools to configure component instances.
- Installation and configuration use case: verify the mail, calendar, portal, and instant messaging services, using the administrator accounts.
- Administrator use case: configure the evaluation solution's directory tree and establish a single end user account.
- Administrator use case: configure Access Manager single sign-on (SSO) for the mail and calendar services.

- End user use case: use the Communications Express interface and the single sign-on feature to access mail and calendar services through a single interface.
- Administrator use case: configure Portal Server proxy authentication.
- End user use case: log in to the portal desktop and use the single sign-on feature to access mail and calendar services.

This document shows you how to design, install, configure and use a Java Enterprise System solution that implements these use cases and demonstrates these features.

Although the evaluation solution use cases are relatively simple, this document uses the standard deployment planning methodology to describe how the evaluation solution is designed and the installation procedures are developed. [Chapter 2](#), [Chapter 3](#), and [Chapter 4](#), describe how the components for the evaluation solution are selected, how the architecture for the solution is developed, and how the values you use to install and configure the solution are developed. The description follows the deployment planning methodology outlined in *Java Enterprise System Deployment Planning Guide*.



## The Architecture

---

A Java ES architecture is a high-level technical description of a Java ES solution. You develop an architecture to identify the combination Java ES components and other technologies that will deliver the services described in the use cases.

Developing an architecture is a two-step process. You do the following:

1. You prepare a deployment scenario. In the deployment scenario, you identify the Java ES components that provide the services described in the use cases, and, separately, you specify the quality of service requirements for the solution.
2. You prepare a deployment architecture. In the deployment architecture, you integrate the information you developed in the deployment scenario. You determine how many instances of each component must be installed and configured, with what redundancy strategies, on what kind of hardware, and how the instances are distributed across your network, in order to provide the services you need and the quality of service you specify.

This chapter describes both steps of developing the architecture for the evaluation solution. Although the evaluation architecture is relatively simple, the description helps you understand the process of installing and configuring the evaluation solution. For more information on the deployment planning methodology, see *Java Enterprise System Deployment Planning Guide*.

This chapter describes the process of developing the architecture for the evaluation solution in the following sections:

- “The Deployment Scenario” on page 24
- “The Deployment Architecture” on page 26

---

## The Deployment Scenario

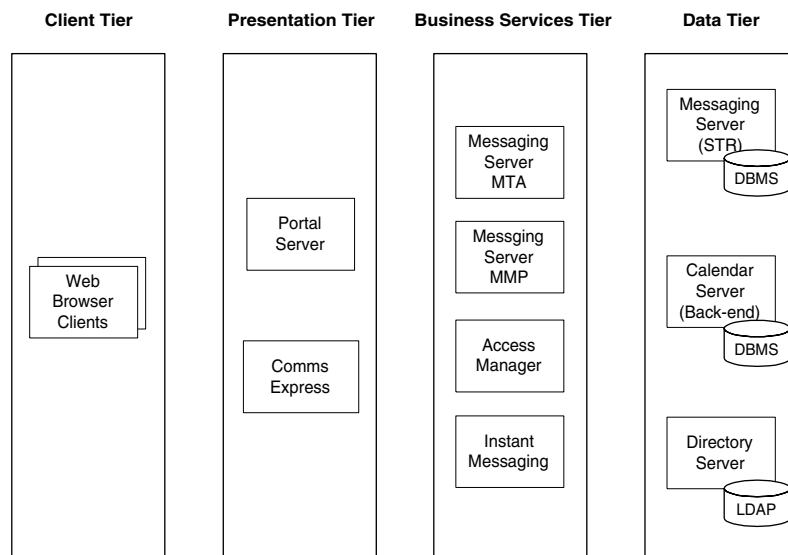
The first step in developing an architecture for a solution is preparing a deployment scenario. A deployment scenario comprises the following:

- A logical architecture, which identifies the components that are needed to implement the use cases
- A set of quality of service requirements, which specify the performance that you require from the solution

This section describes how to develop a deployment scenario based on the use cases described in “The Evaluation Use Cases” on page 20.

## The Logical Architecture

A logical architecture identifies the Java Enterprise System components that provide the services described in a set of use cases. A logical architecture is typically represented graphically. The components needed for the evaluation use cases are illustrated in Figure 2-1.



**FIGURE 2-1** Evaluation Deployment Logical Architecture

The components in Figure 2-1 are included in the logical architecture for the following reasons:



- The portal services described in the use cases are provided by Portal Server. End users access the portal services through a web-based portal desktop. The web browser clients that appear at the far left, in the client tier, represent end users viewing the portal desktop in their web browsers. For the evaluation solution, you install a sample portal desktop.
- Portal Server and several other web-based components must run in a web container. For the evaluation solution, you choose to install Web Server to provide the needed web container. Although Web Server does not directly provide any service, and is not shown in [Figure 2-1](#), you do install it to provide web container support for Portal Server, Access Manager, Communications Express, and Instant Messaging.
- End users access the mail and calendar services described in the use cases through the web-based Communications Express interface. The web browser clients that appear at the far left, in the client tier, represent end users accessing Communications Express in their web browsers.
- The mail services described in the use cases are provided by Messaging Server. Messaging Server has its own web container.
- The calendar services described in the use cases are provided by Calendar Server. Calendar Server has its own web container.
- The instant messaging services described in the use cases are provided by Instant Messaging.
- The authentication and authorization services described in the use cases, including single sign-on and portal proxy authentication, are provided by Access Manager.
- LDAP directory services are required to support the services described in the use cases. The LDAP services are provided by Directory Server. The LDAP directory stores configuration data about the other components, entries for administrative users, and entries for end users.

In [Figure 2-1](#), the components are arranged in several tiers. The tiers represent the different roles that components play in the solution. In the evaluation solution, all of the tiers will be combined on a single computer system.

In a production solution, the roles that components play help you determine how to distribute your components and sub-components across your network, and how to configure them to interoperate with other software, such as stand-alone mail clients. For more information on the Java ES multi-tiered architecture, see *Java Enterprise System Technical Overview* <http://docs.sun.com/doc/817-5764>.

## The Quality of Service Requirements

The logical architecture identifies the Java ES components that provide the services described in the use cases, but does not tell you how to install the components on your network. In a typical production solution, quality of service requirements such as response time, service availability, and service reliability are satisfied by installing and

configuring multiple instances of the components and distributing the instances among several computer systems. For example, installing two instances of Messaging Server on two different computer systems and configuring them together with load balancing hardware will provide fail-over capability and high availability for your messaging services.

To determine the quality of service requirements for a solution, you analyze your business needs and develop a set of requirements. The quality of service requirements are based on important characteristics of your business needs, such as the number of users that must be supported, the response time that your users must experience, and the amount of down time that is permitted.

The evaluation solution described in this document only needs to support a handful of users, and there is no need for continuous availability or the other features of a production solution. Therefore, the system requirements for the evaluation solution are minimal. These requirements are listed below:

- Load and performance requirements: None
- Availability requirements: None
- Security requirements: LDAP authentication, single sign-on
- Serviceability requirements: None
- Scalability requirements: None

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## The Deployment Architecture

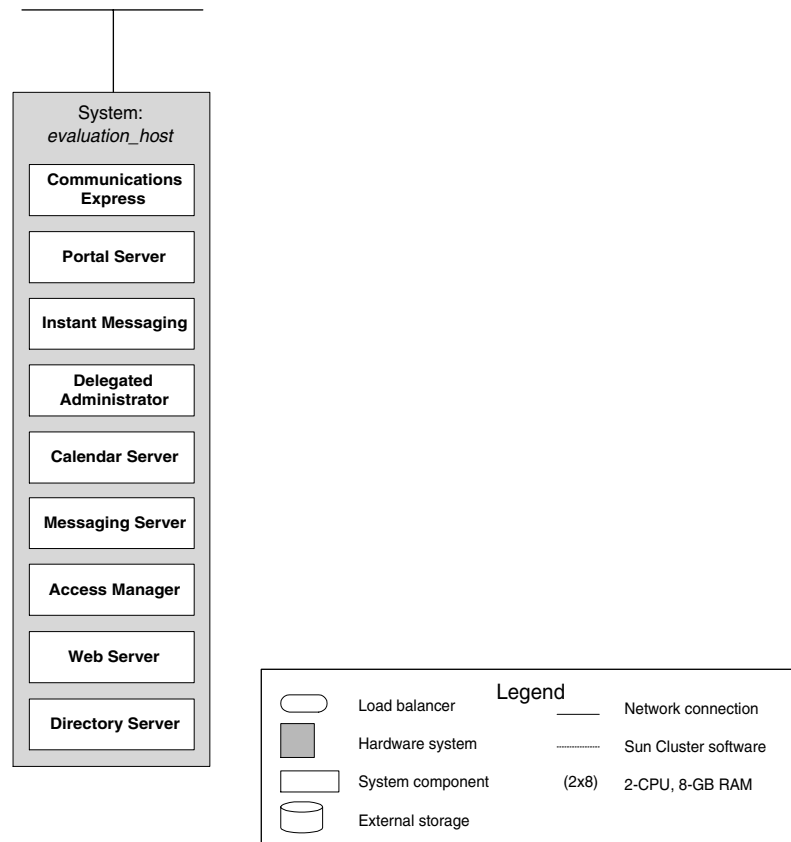
The second step in developing an architecture for a solution is preparing a deployment architecture. The deployment architecture integrates the logical architecture and the quality of service requirements. When you develop a deployment architecture you answer such questions as the following:

- Which redundancy strategies are you using to meet your availability and reliability requirements? (Some of the redundancy strategies available to you are installing and configuring multiple instance of a component and load balancing the instances to achieve availability and reliability, installing and configuring multiple instances of a component and using Sun clustering technology to achieve availability and reliability, and using multiple instances of Directory Server that are synchronized through the multi-mastering and replication features to achieve availability and reliability.)
- How many instances of each component must be installed and configured in order to implement the redundancy strategies you use in your solution?
- How are your component instances combined on computer hardware systems? For example, in a medium-sized solution, you could install and configure instances of both Messaging Server and Calendar Server on two computer systems. You utilize Sun Cluster technology to cluster the two computer systems, and this architecture

achieves availability and reliability for your messaging and calendar services.

- How many CPUs are needed on each computer system to achieve the performance specified in your quality of service requirements?

The answers to these questions lead to a deployment architecture for your solution. A deployment architecture is typically represented graphically, with a set of boxes that represent the computer systems in the solution. Each box is labeled with the components that are installed on that computer system. The deployment architecture for the evaluation solution is illustrated in [Figure 2-2](#).



**FIGURE 2-2** Evaluation Solution Deployment Architecture

[Figure 2-2](#) shows that the minimal quality of service requirements for the evaluation use cases are easily satisfied by installing all of the components used in the evaluation solution on one system. The system is represented by the box labeled *evaluation\_host*. The rest of this document describes how to install, configure, and use the evaluation solution on one system.

The deployment architecture for a production solution would represent a number of computer systems, with different combinations of components installed on each system. For an example of a large scale deployment architecture suitable for a production solution, see Java ES solution, see *Java Enterprise System Deployment Planning Guide* (<http://docs.sun.com/doc/817-5759>)

## The Deployment Specifications

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A set of deployment specifications comprise a detailed technical description of a Java ES solution. The deployment specifications are based on an architecture. You develop a set of deployment specifications to identify the technical details that are needed to implement the architecture.

This chapter covers the deployment specifications for the evaluation solution in the following sections:

- “The Computer Hardware and Operating System Specification” on page 29
- “The Network and Connectivity Specification” on page 30
- “The User Management Specification” on page 30

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## The Computer Hardware and Operating System Specification

The computer hardware and operating system specification describes the operating system and hardware configuration required for each system used in the deployment. The hardware requirements depend on the components installed on the system and the level of performance required from the system.

Since the level of performance required for the evaluation solution is low, any computer system meeting the minimum requirements described in *Java Enterprise System Release Notes* is satisfactory.

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## The Network and Connectivity Specification

The network and connectivity specification describes all of the network connections needed to implement the architecture.

Since the evaluation solution is designed for installation on one computer system, there is no need for a network and connectivity specification.

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## The User Management Specification

Installing and configuring a Java ES solution establishes the basic structure of the LDAP directory tree for the solution. The installation and configuration process also adds data to the directory. The user management specification describes the directory for a Java ES solution.

## The Directory Tree Structure

The main points to consider when you develop an LDAP directory structure for your solution are the following:

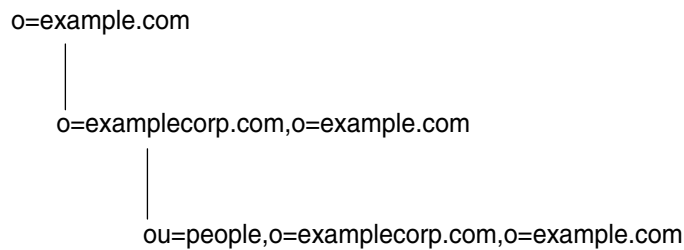
- The directory can be distributed among several instances of Directory Server. The appropriate arrangement for your solution depends on your quality of service requirements and your security requirements. For example, you can create separate Directory Server instances for configuration data and user and group data. You can also create several directory branches for user and group data, such as a branch for employee data and a branch for web-based customers, with each branch established in a separate Directory Server instance.
- For each Directory Server instance that holds user and group data, you must specify a base DN suffix. You specify this value when you run the Java ES installer.
- For each Directory Server instance that holds user and group data for Java ES communications services (Messaging Server, Calendar Server, and Instant Messaging), you must create a directory tree branch that is configured to support single-sign on access to these services. You create this branch when you run the Messaging Server configuration wizard. You complete the configuration of this branch with the Directory Server Preparation Tool and the Delegated Administrator tool.

The evaluation solution has minimal quality of service and security requirements, and a single Directory Server instance for both configuration data and user and group data satisfies those requirements. The Directory Server instance for the evaluation solution runs on one computer system with the other components.

The evaluation solution uses Java ES communications services, so an LDAP tree branch that supports communications services and single sign-on is needed.

The LDAP directory for the evaluation solution is set up for an imaginary company named Examplecorp. The LDAP base DN for the evaluation solution is `o=examplecorp`. You specify this base DN when you run the Java ES installer. The branch you create with the Messaging Server configuration wizard to support communications services is named `o=examplecorp.com,o=examplecorp`. The branch has a People container (the LDAP DN is `ou=people,o=examplecorp.com,o=examplecorp`). You add the end user accounts to this People container.

A simplified diagram of the evaluation solution’s directory tree is illustrated in [Figure 3-1](#).



**FIGURE 3-1** Evaluation Solution Directory Tree

## The Administrator Accounts

In addition to setting up the basic structure of the LDAP directory, installing and configuring a Java ES solution establishes a number of administrator accounts. For each component that you install and configure, the installer or the component configuration wizard creates one or more administrator accounts.

The evaluation solution, for simplicity, creates the minimum number of administrator accounts, and uses the value “password” for most administrator passwords. The administrator accounts created for the evaluation solution are as follows:

- **Directory Server** — The administrator account name is `admin`, and administrator password is `password`. The LDAP DN for the account is `uid=admin,ou=People,o=examplecorp`. You also create a directory manager account. The account name for the directory manager is `dn=Directory Manager`

and the password is password. Other components use the directory manager account to access the directory.

- Administration Server — The evaluation solution uses the same administrator account for Directory Server and Administration Server. The account name is admin, and the administrator password is password. The LDAP DN for the account is uid=admin,ou=People,o=examplecorp.
- Access Manager— The administrator user ID is amadmin, and the administrator password is password. The LDAP DN for the account is uid=amadmin,ou=People,o=examplecorp. You use this account to access the Access Manager console and perform some configuration.
- Web Server — The evaluation solution uses the same administrator account for Administration Server, Directory Server and Web Server. The administrator account name is admin, and the administrator password is password. The LDAP DN for the account is uid=admin,ou=People,o=examplecorp.
- Messaging Server — The administrator user ID is admin, and the administrator password is password. The LDAP DN for the account is uid=admin,ou=People,o=examplecorp.com,o=examplecorp. Communications Express uses this account to access messaging services.
- Calendar Server — The administrator user name is calmaster, and the administrator password is password. The LDAP DN for the account is uid=calmaster,ou=People,o=examplecorp.com,o=examplecorp. Communications Express uses this account to access calendar services.
- Instant Messaging — The administrator account name is admin, and the administrator password is password. The LDAP DN for the account is uid=admin,ou=People,o=examplecorp.com,o=examplecorp.
- Communications Express — The administrator account name is admin, and the administrator password is password. The LDAP DN for the account is uid=admin,ou=People,o=examplecorp.com,o=examplecorp.

In a production solution, you would consider your security requirements and develop a plan for separate and secure administrator accounts.

## The Delegated Administrator Instance

Delegated Administrator is the Java ES tool you use to create and manage user accounts. You run the Delegated Administration configuration wizard to configure an instance of Delegated Administrator. You configure the instance to operate on the o=examplecorp.com,o=examplecorp branch of the evaluation solution's directory tree.

Delegated Administrator is a versatile user management tool. Among other features, it allows you to set up a number of administrator accounts, each with administrator privileges to a specific segment of the user and group directory. For the evaluation solution you use only basic command line features of Delegated Administrator.



## The LDAP Schema Extensions

The LDAP directory tree branch that you create for use with the Sun Java™ Enterprise System (the o=examplecorp.com,o=examplecorp branch) must be configured so that user accounts you create in the branch are authorized to use the mail and calendar services. You perform this configuration with the Delegated Administrator command line interface.



# The Installation and Configuration Plan

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An installation and configuration plan contains the information you need to install and configure a Java ES solution. You develop an installation and configuration plan in order to run the installer and the configuration wizards to implement a Java ES solution.

The installation and configuration plan is based on the technical information in the deployment specifications. When you develop an installation and configuration plan, you organize the information in the deployment specifications according to the order in which the installer and the configuration wizards prompt you for the information. For example, the user management specification shows you the complete directory tree for the solution. But, when you install and configure the solution, you input some of the information that establishes the directory tree in the installer and some in the Messaging Server configuration wizard. Therefore, when you develop the installation and configuration plan, you sort the user management information into installer input values and Messaging Server configuration wizard input values, resulting in a list with the correct input values for each tool.

This chapter explains how the installation and configuration plan for the evaluation solution is developed, and then describes the plan in detail. This chapter covers the installation and configuration plan in the following sections:

- [“Developing the Installation and Configuration Plan”](#) on page 36
- [“Installation and Configuration Plan Details”](#) on page 38

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# Developing the Installation and Configuration Plan

Installing and configuring a Java ES solution is an extended process that uses the Java ES installer along with separate configuration wizards for a number of components. For trouble-free installation and configuration of your solution, a plan is essential.

This section describes how the installation and configuration plan for the evaluation solution is developed. The two main issues you address to develop an installation and configuration plan are the following:

- Components have configuration dependencies, so you must install and configure your components in the correct sequence. For example, most components store configuration data in Directory Server's LDAP directory and make directory entries for their administrator accounts. Therefore, Directory Server must be installed and running before you configure the other components. Your installation and configuration plan must identify the correct sequence for the components in your solution.
- Components in a solution must interoperate as a system, and you must supply configuration values that "glue" the components together. These configuration values are specific to your solution. For example, when you configure Directory Server you establish a URL for accessing the directory and a directory manager account and password for logging in to the directory. Later, when you configure Access Manager, you supply the Directory Server URL, the directory manager account, and the directory manager password. This configuration makes it possible for Access Manager to interoperate with Directory Server. Developing an installation and configuration plan ensures that your configuration input values are consistent and that you will configure a system of interoperating components.

The basic steps for installing and configuring any Java Enterprise System solution are the following:

1. Run the installer to copy all of the component files to the computer systems used in your solution. The installer configures instances of some components based on values you input. You supply values that implement the directory tree described in your User Management specification and configure the component instances for interoperation.
2. Start and verify correct functioning of the component instances that are configured by the installer.
3. Run the configuration wizards to configure instances of the components not configured by the installer. The order in which you run the configuration wizards is determined by the components' configuration dependencies.

When the installation and configuration plan is complete, it lists the values to input in the installer, the correct sequence for running the configuration wizards, and the values to input in the configuration wizard pages.

Applying this approach to the set of components identified in the architecture for the evaluation solution gives the following specific installation and configuration steps for the evaluation solution:

1. You run the installer only once, on one computer system. The installer copies all component files to the computer system and registers the components with the operating system. The installer also configures instances of the following components:
  - Directory Server.
  - Web Server
  - Access Manager
  - Portal Server

When you run the installer, you establish the base DN for the LDAP directory. You also supply configuration values, such as the Directory Server URL, that configure the components to interoperate. You also use the installer to install a sample portal desktop.

2. You start and verify Directory Server. You start the Directory Server instance first because all the other components use directory services.
3. You start Web Server. Starting Web Server starts the components that run in Web Server's web container, which are Access Manager and Portal Server.
4. You verify that Access Manager is running. Access Manager must be running because the other components use Access Manager's authentication services.
5. You verify that Portal Server is running.
6. You configure Directory Server for use with the communications components.
7. You create, configure, and start an instance of Messaging Server. You configure your Messaging Server instance to interoperate with Directory Server and Access Manager. You must configure Messaging Server before the remaining components, because configuring Messaging Server creates a branch of the LDAP tree that corresponds to the mail domain. You then configure the remaining components to use the new branch for their user and group data.
8. You verify your Messaging Server instance.
9. You create, configure, and start an instance of Calendar Server. You configure your Calendar Server instance to interoperate with Messaging Server, Directory Server, and Access Manager.
10. You verify your Calendar Server instance.
11. You create, configure, and start an instance of Communications Express. You configure your Communications Express instance to interoperate with Calendar Server, Messaging Server, Directory Server, and Access Manager.
12. You create, configure, and start an instance of Instant Messaging.

13. You verify your Instant Messaging instance.
14. You create, configure, and start an instance of Delegated Administrator.
15. You use Delegated Administrator to extend you LDAP schema for mail and calendar services.
16. You use Delegated Administrator to create a test end user account.
17. You configure Messaging Server, Calendar Server, and Portal Server for single sign-on.
18. You verify that your test user account can use single sign-on log in to Communications Express and access mail and calendar services.
19. You verify that your test user account can use single sign-on log in to access mail and calendar services through the portal desktop.

The configuration dependencies for the evaluation solution are the same for as they would be for a multiple-system production solution, therefore the sequence of configuration tasks is similar to the sequence you use for a larger solution.

In a larger, multi-system solution, the sequence often becomes more complex. For example, you might need to run the installer on several systems to install several instances of Directory Server, and then start all the Directory Server instances. You next run the installer on another set of systems to install several instances Messaging Server, and follow that by configuring the Messaging Server instances, and so on.

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## Installation and Configuration Plan Details

A complete installation and configuration lists the installer and the configuration wizards in the correct order for your Java ES solution. For each installer or configuration wizard, the plan lists the values you supply when you run the installer or configuration wizard. The completed plan guides you through the installation and configuration process.

The plan does not tell you how to run the installer and the configuration wizards. It simply lists the configuration that must be performed, in the correct order, and specifies the significant values that you must supply for each configuration task.

The installation and configuration plan is organized by the tools used to install and configure the solution. For the evaluation solution, the installation plan is presented in the following sections.

## Java ES Installer Details

This section lists the values you input to install the evaluation solution with the Java ES installer. For the evaluation solution, you use the installer to install all the components used in the solution and configure Directory Server, Web Server, Access Manager, and Portal Server. The other components are configured later with individual component configuration wizards.

The input values are listed in [Table 4-1](#). Detailed procedures for running the installer are in [Chapter 5](#).

**TABLE 4-1** Input Values for Java ES Installer

Installer Page	Field Names and Input Values	Significance of Input
Language Support	Select any languages you want to support. English is always supported.	You specify the languages supported in your evaluation solution.
Component Selection	Select the components identified in the architecture: <ul style="list-style-type: none"> <li>■ Messaging Server</li> <li>■ Calendar Server</li> <li>■ Instant Messaging</li> <li>■ Portal Server</li> <li>■ Communications Express</li> <li>■ Web Server</li> <li>■ Access Manager</li> <li>■ Directory Server</li> <li>■ Administration Server</li> </ul>	You select the components for installation.
Installation Directories	Accept the default values.	You choose to accept the default directories for the component files.
Configuration Type	Select Configure Now.	You specify that installer will configure some components.
Common Server Settings	Administrator password: password	You set up default values that appear on the pages that follow.
Web Server Administration (1 of 2)	Accept the default values.	You create the Web Server administrator account.

**TABLE 4-1** Input Values for Java ES Installer (Continued)

Installer Page	Field Names and Input Values	Significance of Input
Web Server Default Web Server Instance (2 of 2)	Runtime User ID: root Runtime Group: other Automatically Start Web Server When System Restarts: select Web Server User and Group permissions must match permissions of the components that run in Web Server	You configure Web Server to interoperate with Access Manager and Portal Server.
Directory Server: Administration (1 of 5)	Accept the default values.	You configure the administrator account and the directory manager account.
Directory Server: Server Settings (2 of 5)	Server Identifier: default ( <i>evaluation_host</i> ) Server Port: default (389) Suffix: o=examplecorp Administrative Domain: example.com System User: root System Group: other	You specify the base DN for the evaluation solution.
Directory Server: Configuration Directory Server Settings (3 of 5)	Accept the default values.	You specify that the Directory Server instance will be used for configuration data.
Directory Server: Server Settings (4 of 5)	Accept the default values.	You specify that the Directory Server instance will be used for user and group data.
Directory Server: Server Settings (5 of 5)	Accept the default values.	You specify that the installer puts sample data in the directory.
Administration Server: Server Settings (1 of 2)	Accept the default values.	You configure Administration Server to interoperate with Directory Server.
Administration Server: Server Settings (2 of 2)	Accept the default values.	You configure Administration Server to interoperate with Directory Server.



**TABLE 4-1** Input Values for Java ES Installer (Continued)

Installer Page	Field Names and Input Values	Significance of Input
Access Manager: Administration (1 of 6)	Password: password LDAP Password: ldappassword	You configure the administrator accounts.
Access Manager: Web Container (2 of 6)	Accept the default values.	You specify that Access Manager runs inside a Web Server web container.
Access Manager: Sun Java System Web Server (3 of 6)	Accept the default values.	You configure Access Manager to interoperate with Web Server
Access Manager: Web Container for Running Identify Server Services (4 of 6)	Accept the default values.	You configure Access Manager for deployment to Web Server
Access Manager: Directory Server Information (5 of 6)	Accept the default values.	You configure Access Manager to interoperate with Directory Server
Access Manager: Directory Server Information (6 of 6)	Accept the default values.	You specify that the Directory Server instance does not currently contain user and group data.
Portal Server: Web Container (1 of )	Accept the default values.	You specify that the Portal Server instance runs in Web Server's web container.
Portal Server: Sun Java System Web Server (2 of )	Accept the default values.	You configure the Portal Server instance for deployment in Web Server's web container.
Portal Server: Web Container Deployment (3 of )	Accept the default values.	You specify the Web Server instance for Portal Server deployment.

## Directory Server Preparation Tool Details

The Directory Server Preparation Tool configures a Directory Server instance for use with the communications components. For the evaluation solution, you input values that specify the Directory Server instance you created with the Java ES installer. The input values are listed in [Table 4-2](#). Detailed procedures for running the preparation tool are in “[Configuring the Directory for Communications Services](#)” on page 78.

**TABLE 4-2** Input Values for the Directory Server Preparation Tool

Prompt	Input Value	Significance of Input
Enter the Full Path to the Directory Where the Sun ONE Directory Server Was Installed:	Accept the default value: <code>/var/opt/mps/serverroot</code>	You identify the directory where you installed Directory Server.
Which Instance Do You Want?	Choose the instance you created with the installer, <code>slapd_evaluation_host</code> . This is normally the default value.	You identify the Directory Server instance that you created with the installer.
Please Enter the Directory Manager DN:	Accept the default value ( <code>cn=Directory Manager</code> )	You supply the directory manager DN you established with the installer.
Please Enter the Directory Manager password:	Type: password	You supply the directory manager password you established with the installer.
Will This Directory Server Be Used For Users and Groups?	Accept the default value (Yes).	You indicate that the directory is used for user and group data.
Please Enter the User/Groups Base Suffix:	Accept the default value ( <code>o=examplecorp</code> ).	You supply the directory base suffix you established with the installer.
Please Enter the Schema Type:	Accept the default value (2).	You indicate that the directory is using schema 2. The directory is configured for Schema 2 when you install Access Manager.

## Messaging Server Configuration Wizard Details

The Messaging Server Configuration wizard creates instances of the Messaging Server server software you installed with the Java ES installer. For the evaluation solution, you need to create a Messaging Server instance that interoperates with the Directory Server instance. The input values for the Messaging Server Configuration wizard are listed in Table 4-3. Detailed procedures for running the wizard are in “Configuring Messaging Server” on page 81.

**TABLE 4-3** Input Values for the Messaging Server Configuration Wizard

Wizard Page	Field Names and Input Values	Significance of Input
Fully Qualified Host Name	Fully qualified domain name of your <i>evaluation_host</i> .	You specify the computer system on which the Messaging Server instance is created.
Select Directory to Store Configuration and Data Files	Accept the default value (/var/opt/SUNWmsgsr).	You accept the default directory for instance configuration data.
Select Components to Configure	Accept default values (Message Transfer Agent, Message Store, and Messenger Express are selected).	You specify which Messaging Server subcomponents are configured on the specified computer system. For the evaluation solution, the three subcomponents required for basic messaging services are selected.
Messaging Server User and Group	Username: mailsrv Group: mail	You specify the user and group used to administer the Messaging Server instance.
Configuration Directory Server	Config Server LDAP URL: ldap:// <i>evaluation_host</i> :389 Bind: cn=Directory Manager Password: password	You specify the Directory Server instance for the configuration data generated by the Messaging Server instance.

**TABLE 4-3** Input Values for the Messaging Server Configuration Wizard (Continued)

Wizard Page	Field Names and Input Values	Significance of Input
User/Group Directory Server Panel	User/Group Server LDAP URL: ldap://evaluation_host:389  Bind: cn=Directory Manager  Password: password	You specify the Directory Server instance where the Messaging Server instance locates user and group data. For the evaluation solution, this Directory Server instance is also used as the configuration directory.
Postmaster Email Address	Enter Email Address: admin@examplecorp.com	You specify the email account for postmaster notification.
Password for All Admin Accounts	Enter Password: password  Re-enter Password: password	You specify the password for Messaging Server administration accounts.
Default Email Domain	Enter Email Domain: examplecorp.com	You specify the default email domain managed by the Messaging Server instance.
Organization DN for the Default Email Domain	Enter Email Domain: o=examplecorp.com,o=examplecorp	You specify the LDAP organization used for user and group data for the default email domain. The configuration wizard creates this LDAP organization.

## Calendar Server Configuration Wizard Details

The Calendar Server Configuration wizard creates runnable instances of the Calendar Server server software you installed with the Java ES installer. For the evaluation solution, you need to create a Calendar Server instance that interoperates with the Directory Server instance. The input values for the Calendar Server Configuration wizard are listed in [Table 4-4](#). Detailed procedures for running the configuration wizard are in [“Configuring a Calendar Server Instance”](#) on page 89.

**TABLE 4-4** Input Values for Calendar Server Configuration Wizard

Wizard Page	Field Names and Input Values	Significance of Input
Administration, User Preferences, and Authentication	LDAP Server Host Name: <i>evaluation_host</i> LDAP Server Port: 389 Directory Manager DN: cn=Directory Manager Directory Manager Password: password Base DN: o=examplecorp.com,o=examplecorp Administrator User ID: calmaster Administrator Password: password	You configure the Calendar Server instance to interoperate with Directory Server. You also specify the administrator account.
Email and Email Alarms	Email Alarms: Enabled Administrator Email Address: calmaster@examplecorp.com SMTP Host Name: <i>evaluation_host</i>	You configure the Calendar Server instance to send email alarms to the calmaster account.
Runtime Configuration Page	Service Port: 89 Maximum Sessions: 5000 Maximum Threads: 20 Number of Server Processes: 1 Runtime User ID: icsuser Runtime Group: icsgroup Start After Successful Configuration: selected Start on System Startup: selected	You configure the runtime characteristics of the Calendar Server instance.
Directories to Store Configuration and Data Files	Accept the default values.	You specify the directories for files generated by the configuration wizard's configuration process.
Archive and Hot Backup Configuration	Accept the default values.	You specify the directories for the archive and hot backup features.

## Instant Messaging Configuration Wizard Details

The Instant Messaging Configuration wizard creates runnable instances of the Instant Messaging server software you installed with the Java ES installer. For the evaluation solution, you need to create an Instant Messaging instance that interoperates with the Directory Server instance. The input values for the Instant Messaging Configuration wizard are listed in Table 4-5. Detailed procedures for running the configuration wizard are in “Configuring an Instant Messaging Instance” on page 94.

**TABLE 4-5** Input Values for the Instant Messaging Configuration Wizard

Wizard Page	Field Names and Input Values	Significance of Input
Select Components	Accept default values (all three components are selected).	You specify the Instant Messaging subcomponents installed on the computer system. For the evaluation solution, all subcomponents are installed on the same system.
Network Connection	Confirm that the default values identify your evaluation system. Host Name: <i>evaluation_host</i> DNS Domain Name: <i>evaluation_domain</i>	You identify the network connection for Instant Messaging.
IM Server/ Identity Server Options	Single Sign-on: selected Policy Agent: selected	You configure Instant Messaging to interoperate with Access Manager.
Instant Messaging Server Runtime Files Directory	Accept the default values.	You specify the directory used for runtime files.
Instant Messaging Server Configuration	Domain Name: <i>examplecorp.com</i> IM Server Port: 45222 Multiplexor Port: 5222	You configure the Instant Messaging instance to use the <i>examplecorp.com</i> LDAP organization for user and group data.

**TABLE 4-5** Input Values for the Instant Messaging Configuration Wizard (Continued)

Wizard Page	Field Names and Input Values	Significance of Input
Instant Messaging LDAP Configuration	LDAP Host Name: <i>evaluation_host</i> LDAP Port Number: 389 Base DN: o=examplecorp.com,o=examplecorp Bind DN: cn=Directory Manager Password: password	You configure Instant Messaging to interoperate with Directory Server. You specify that user data for Instant Messaging is found in examplecorp.com LDAP organization.
Select the Codebase for Instant Messaging	Codebase: <i>http://evaluation_host:80/im</i>	You configure the URL from which users download Instant Messaging resources.
Select Identity Options	Accept the default values.	You choose not to authorize existing users for the Instant Messaging service.
Instant Messaging Services Startup	Accept the default values (both services are selected).	You configure the Instant Messaging service to start when configuration is complete and whenever the computer system is restarted.

## Communications Express Configuration Wizard Details

The Communications Express Configuration wizard creates runnable instances of the Communications Express software you installed with the Java ES installer. For the evaluation solution, you need to create a Communications Express instance that interoperates with the Directory Server instance. The input values for the Communications Express Configuration wizard are listed in [Table 4-6](#). Detailed procedures for running the configuration wizard are in [“Configuring a Communications Express Instance” on page 99](#).

**TABLE 4-6** Input Values for the Communications Express Configuration Wizard

Wizard Page	Field Names and Input Values	Significance of Input
Select Directory to Store Configuration and Data File	Accept the default values.	You accept the default directories for storing instance data.
Install Mail and Calendar Components	Accept the default values (both Mail and Calendar are selected).	You configure the instance to provide both mail and calendar interfaces.
Network Connection	Hostname: <i>evaluation_host</i> DNS Domain Name: <i>evaluation_domain</i>	You confirm the network connection for Communications Express.
Select a Web Container	Accept the default value (Web Server is selected).	You specify Web Server as the web container (the web server) for the instance.
Web Server Configuration Details	Server Root Directory: 1 Server Instance Identifier: <i>evaluation_host</i> Virtual Server Identifier: <i>https-evaluation_host</i> HTTP Port field: 80	You specify the Web Server instance to which Communications Express is deployed.
Web Container User and Group	Web Container User ID: root Web Container Group: other	You specify the user account that runs Communications Express in Web Server
URI Path	Accept the default value ( <i>http://evaluation_host:80/uwc</i> ).	You specify the URL for Communications Express deployed in Web Server.
Do You Want Hosted Domain Support?	Accept the default value (hosted domain support is not selected).	You indicate that hosted domain support is not needed in the evaluation solution.
User/Group Directory Server Details	LDAP URL: <i>ldap://evaluation_host:389</i> Bind DN: <i>cn=Directory Manager</i> Administrator Password: <i>password</i>	You configure Communications Express to interoperate with Directory Server.



**TABLE 4-6** Input Values for the Communications Express Configuration Wizard  
(Continued)

Wizard Page	Field Names and Input Values	Significance of Input
DC Tree Suffix	Confirm the default value (o=examplecorp).	You configure Communications Express to use the LDAP directory base suffix you established with the Java ES installer.
Default Domain Name	Enter the domain name: examplecorp.com	You configure Communications Express to use the examplecorp.com organization in your LDAP directory for user and group data.
Identity Server Preferences	Login URL: http:// <i>evaluation_host</i> :80/amserver/UI/login  Administrator DN: uid=amAdmin,ou=People,o=examplecorp.	You configure Communications Express to interoperate with Access Manager.
Messenger Express Port	Messenger Express Port: 88.	You configure Communications Express to interoperate with Messaging Server.
Calendar Server Host and Port	Calendar Server Host Name: <i>evaluation_host</i>  Calendar Server Port Number: 89	You configure Communications Express to interoperate with Calendar Server.
Calendar Server Administration Details	Administrator User ID: calmaster  Administrator Password: password	You configure Communications Express to interoperate with Calendar Server.
Postmaster Email Address	admin@examplecorp.com	You specify the postmaster account for the evaluation solution.

**TABLE 4-6** Input Values for the Communications Express Configuration Wizard  
(Continued)

Wizard Page	Field Names and Input Values	Significance of Input
PAB Directory Server Details	Login URL: ldap://evaluation_host:389 Administrator DN: cn=Directory Manager Administrator Password: password	You configure Communications Express to use the Directory Server instance you created with the Java ES installer as the personal address book directory.

## Delegated Administrator Configuration Wizard Details

The Delegated Administrator Configuration wizard creates runnable instances of the Delegated Administrator software that you installed with the Java ES installer. For the evaluation solution, you need to create a Delegated Administrator instance that interoperates with the Directory Server instance. The input values for the Delegated Administrator Configuration wizard are listed in [Table 4-7](#). Procedures for running the configuration wizard are in [“Configuring the Delegated Administration Utility” on page 109](#).

**TABLE 4-7** Input Values for the Delegated Administrator Configuration Wizard

Wizard Page	Field Names and Input Values	Significance of Input
Directory to Store Configuration and Data Files	Accept the default values	You accept the default directory for storing instance data.
Select Components to Configure	Accept the default values (all three components are selected).	You specify that all three sub-components will be configured.
Access Manager Host and Port	Hostname: <i>evaluation_host</i> Port: 80	You configure Delegated Administrator to interoperate with Access Manager.

**TABLE 4-7** Input Values for the Delegated Administrator Configuration Wizard  
(Continued)

Wizard Page	Field Names and Input Values	Significance of Input
Default Domain	Enter Domain: examplecorp.com	You configure Delegated Administrator to use the examplecorp.com organization as of the default location for user management operations.
Default SSL Port for Delegated Administration Client	Accept the default value.	You accept the default port for SSL communication with Delegated Administrator.
Web Container	Accept the default value (Web Server is selected).	You specify that Delegated Administrator uses Web Server for web container services.
Web Server Configuration Details	Server Root Directory: /opt/SUNWwbsvr Server Instance Identifier: <i>evaluation_host</i> Virtual Server Identifier: <i>https-evaluation_host</i> Server HTTP Port: 80	You specify that Delegated Administrator is deployed to the Web Server instance you created with the Java ES installer.
Access Manager Base Directory	Accept the default value.	You specify the directory for Access Manager instance data.
Directory (LDAP) Server	LDAP URL: <i>http://evaluation_host:389</i> Bind As: cn=Directory Manager Password: password	You configure Delegated Administrator to interoperate with Directory Server.
Access Manager Top Level Administrator	Username: amadmin Password: password	You configure Delegated Administrator with log in information for Access Manager.

**TABLE 4-7** Input Values for the Delegated Administrator Configuration Wizard  
(Continued)

Wizard Page	Field Names and Input Values	Significance of Input
Access Manager Internal LDAP Authentication Password	Username: amldapuser Password: ldappassword	You configure Delegated Administrator with the LDAP authentication password for Access Manager.
Organization DN for the Default Domain	Enter Org DN: o=examplecorp.com,o=examplecorp	You specify the LDAP distinguished name for the default domain you specified on the Default Domain page.
Top Level Administrator for the Default Organization	Username: admin Password: password	You define Delegated Administrator's top level administrator account for the default domain. (Delegated Administrator can divide administration privileges between different level administrators. This feature is not used in the evaluation solution.)
Service Package and Organization Sample	Load Sample Service Packages: selected Load Sample Organizations: selected Preferred Mailhost: <i>evaluation_host</i>	You specify that the configuration wizard will configure the default domain with sample service data.

## Delegated Administrator Command Line Details

This section summarizes the commands that are used to configure the examplecorp.com organization for authentication of messaging and calendar service users, and to create a test end user account. The commands are summarized in [Table 4-8](#). Procedures for running the commands are in [“Configuring Your LDAP Organization for Mail and Calendar Services”](#) on page 116 and [“Provisioning an End User Account”](#) on page 117.

**TABLE 4-8** Summary of Delegated Administrator Commands

Delegated Administrator Command	Command Syntax	Significance of Input
commadmin domain modify	<p>-D <b>admin</b> (administrator user account)</p> <p>-w <b>password</b> (administrator account password)</p> <p>-d <b>examplecorp.com</b> (domain to modify)</p> <p>-S <b>mail</b> (add mail service)</p> <p>-H <i>evaluation_host</i> (system running mail service)</p> <p>-S <b>cal</b> (add calendar service)</p> <p>-B <i>evaluation_host</i> (system running calendar service)</p> <p>-P <b>allowProxyLogin:yes</b> (permit proxy login)</p> <p>-T <b>America/Los_Angeles</b> (set time zone)</p>	<p>You add object classes to the examplecorp.com organization that are used to authenticate users for mail and calendar services.</p>
commadmin user create	<p>-D <b>admin</b> (administrator user account)</p> <p>-w <b>password</b> (administrator account password)</p> <p>-l <b>TestUser</b> (user account name)</p> <p>-F <b>Test</b> (user's first name)</p> <p>-L <b>User</b> (user's last name)</p> <p>-W <b>password</b> (user account password)</p> <p>-S <b>mail</b> (authorize user for mail service)</p> <p>-H <i>evaluation_host</i> (system running mail service)</p> <p>-E <b>test.user@examplecorp.com</b> (user email)</p> <p>-S <b>cal</b> (authorize user for calendar service)</p> <p>-B <i>evaluation_host</i> (system running calendar service)</p> <p>-J <b>0</b></p> <p>-T <b>America/Los_Angeles</b> (user's time zone)</p> <p>-k <b>legacy</b></p>	<p>You create a user account to use your evaluation services.</p>

**TABLE 4-8** Summary of Delegated Administrator Commands *(Continued)*

Delegated Administrator Command	Command Syntax	Significance of Input
commadmin user modify	-D <b>admin</b> (administrator user account) -w <b>password</b> (administrator account password) -l <b>TestUser</b> (user account to modify) -A + <b>objectclass:sunssoadapterperson</b> (authorize user for portal service) -A + <b>objectclass:sunportaldesktopperson</b> (authorize user to access portal desktop)	You add object classes to the test user account that identify the account as an authorized portal user.

## Installing the Components

---

This chapter describes how to install the components used in the evaluation solution. It covers copying the software distribution to the system on which you are installing, performing some necessary preliminary steps, and running the Java ES installer. When you run the installer you input the values you developed in the installation and configuration plan. (For a summary of the input values, see “[Java ES Installer Details](#)” on page 39.)

This chapter covers the installation process in the following sections:

- “[Checking Installation Requirements](#)” on page 55
- “[Preliminary Steps](#)” on page 56
- “[Installing the Components](#)” on page 57
- “[Reviewing the Installation Log Files](#)” on page 69

---

## Checking Installation Requirements

Before you run the installer, make sure the system on which you are installing meets the following requirements:

- The system must meet the Java ES hardware, operating system, and patch requirements, which are listed in the *Java Enterprise System Release Notes* at <http://docs.sun.com/doc/817-5503>. Patches are available at <http://sunsolve.sun.com>. The Java ES installer checks the system for these requirements, but you might find it easier to check the system before you begin.
- You must run the installer as `root`. Ensure that you have `root` access to the system on which you are installing Java ES.
- The installation procedures are for a system that is running a the Solaris™ 9 Operating System. If you install on the Solaris 8 Operating System, some path names will vary slightly from those shown in the instructions.

---

## Preliminary Steps

This section describes two tasks you must perform before you run the installer. These tasks prepare your system for a successful installation.

### ▼ To Check the Internet Host Table

The system's Internet host table must contain the system's fully qualified host name.

- Steps**
1. **Log in as root to the system on which you are installing Java Enterprise System.**
  2. **Open the `/etc/hosts` file in a text editor.**
  3. **Confirm that the `/etc/hosts` file contains the system's fully qualified host name.**

For example, on a system named `evaluation.example.com`, the `/etc/hosts` file includes the following lines:

```
#
# Internet host table
#
127.0.0.1          localhost
192.18.78.28      evaluation.example.com      evaluation
```

The fully qualified version of the host name must precede the unqualified name. Your `/etc/hosts` file must include similar information for your system.

### ▼ To Disable the `sendmail` Process

The `sendmail` process can conflict with Java Enterprise System communications services. Disable it before you install Java Enterprise System.

- Steps**
1. **Run the command to stop the `sendmail` process:**

```
/etc/init.d/sendmail stop
```

2. **Run the command to disable `sendmail` startup:**

```
mv /etc/init.d/sendmail /etc/init.d/sendmail.disabled
```



---

## Installing the Components

This section describes the procedures for running the Java ES installer. You use the installer input values developed in the evaluation installation and configuration plan. (For a summary of the values and explanations of why they were chosen, see “Java ES Installer Details” on page 39)

---

**Note** – Throughout this document you see commands that contain the variables *evaluation\_host* and *evaluation\_domain*. When you execute the commands you must substitute the host name or domain name of the computer system that you are using. These variables are defined as follows:

- *evaluation\_host*: The fully-qualified domain name of the system on which you are installing Java Enterprise System components. For example, if you are installing on a system named *evaluation.example.com*, your *evaluation\_host* is *evaluation.example.com*. You use *evaluation\_host* to configure communication between components. For example, you configure components to connect to Directory Server at *evaluation\_host*:389. You also use *evaluation\_host* in the URLs for web-based interfaces to Access Manager, Messaging Server, Calendar Server, and Portal Server.
  - *evaluation\_domain*: The name of the DNS domain for the system on which you are installing components. For example, if you are installing on a system named *evaluation.example.com*, your *evaluation\_domain* is *example.com*.
- 

### ▼ To Begin the Installation Process

- Steps**
1. **Log in as root to the machine on which you are installing Java Enterprise System.**
  2. **Obtain the Java ES 2005Q1 software by one of the following means:**
    - **Download the software from the Java Enterprise System site at `http://www.sun.com`.** Create a directory for the software (*download-directory*). Download and unpack the software. Unpacking the software will create subdirectories of *download-directory*.
    - **Run the installer from a CD or DVD.** Put the CD or DVD in the appropriate drive.
  3. **Change directory to the *platform-directory* for the platform on which you are installing. The *platform-directory* is either `Solaris_sparc` or `Solaris_x86`.**
    - **If you downloaded and unpacked the software, the *platform-directory* is a sub directory of your *download-directory*:**

```
cd download-directory/platform-directory
```

- **If you are running the installer from a CD**, the *platform-directory* is a sub directory of your cdrom directory:

```
cd cdrom/platform-directory
```

- **If you are running the installer from a DVD**, locate *platform-directory* on the DVD.

**4. Run the command to start the Java Enterprise System installer.**

```
./installer
```

The Welcome page is displayed.

**5. Click Next.**

The Software License Agreement page is displayed.

**6. Click Yes, Accept License.**

The Language Support page is displayed.

**7. Select the languages other than English that you want to support in your evaluation solution. English is always supported.**

Click Next. The Component Selection page is displayed.

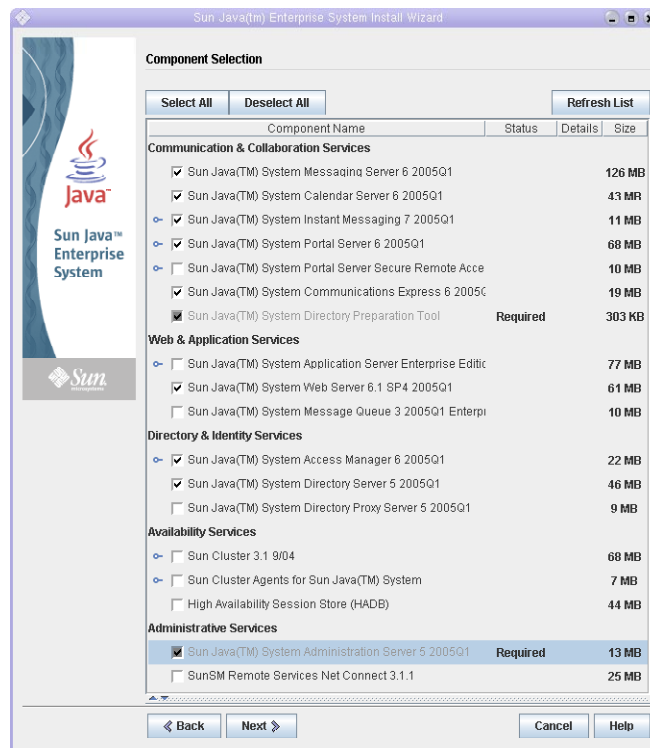


FIGURE 5-1 Component Selection Page

## ▼ To Select Components for Installation

**Steps** 1. Select the components that are used in the evaluation solution. Do the following:

- Select Sun Java System Messaging Server 6 2005Q1
- Select Sun Java System Calendar Server 6 2005Q1
- Select Sun Java System Instant Messaging 7 2005Q1
- Select Sun Java System Portal Server 6 2005Q1
- Select Sun Java System Communications Express 6 2005Q1
- Sun Java System Directory Preparation Tool is automatically selected
- Select Sun Java System Web Server 6.1 SP4 2005Q1
- Sun Java System Access Manager 6 2005Q1 is automatically selected
- Sun Java System Directory Server 5 2005Q1 is automatically selected
- Sun Java System Administration Server 5 2005Q1 is automatically selected

These selections are shown in Figure 5-1. Click Next. The installer validates your selections and checks for compatibility between the components you select and the

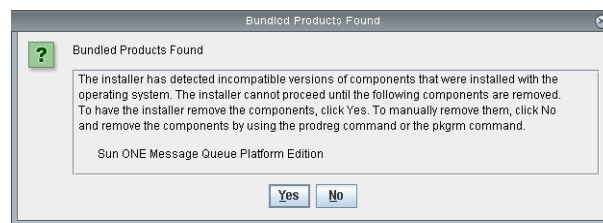
software that is already installed on the system. You see a page that describes the result of the compatibility checks.

**2. Evaluate the installer's response to your selections.**

The installer checks for three types of compatibility. Depending on your system, you see none, one, two, or three of the following pages that report incompatibilities.

**a. The installer might determine that the components you selected are not compatible with components already on the system.**

You see the Product Dependency Checks dialog box shown in [Figure 5-2](#).



**FIGURE 5-2** Product Dependency Checks Dialog Box

You must resolve the incompatibility described in the dialog box before you can continue. In some cases, you must exit the installer, upgrade or remove the incompatible software, and then restart the installer from the beginning.

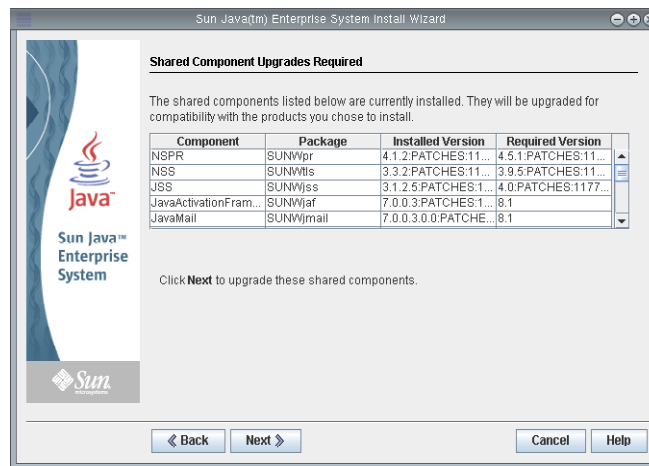
**b. The installer might determine that the Java™ 2 Software Development Kit, Standard Edition (J2SE™ SDK) that is already installed on the system is not compatible with the components that you selected for installation.**

You see the J2SE Software Development Kit Upgrade Required page.

Click OK to accept the default value (Install a Second J2SE SDK for Sun Java(TM) Enterprise System Components).

**c. The installer might determine that the shared components already installed on the system are not compatible with the components that you selected for installation.**

You see the Shared Components Upgrades Required page shown in [Figure 5-3](#).



**FIGURE 5-3** Shared Components Upgrades Required Page

Click **Next** to upgrade the shared components.

---

**Note** – Shared components provide local services and technology support for Java ES components. When you install Java ES, the installer automatically installs the shared components that are required by the Java ES components you selected.

---

- d. **The installer might determine that your system is fully compatible with the components you selected. The Installation Directories page is displayed.**
3. **Click Next to accept the default installation directories.**  
The Verify System Requirements page is displayed.
  4. **Wait while the Verify System Requirements page checks your system against the following system requirements:**
    - Disk space
    - Memory
    - Operating system patches
    - Operating system resources
  5. **Evaluate the result of the system requirements checks.**
    - Ignore a low memory warning. The evaluation solution requires less memory than a production solution.
    - If you receive a patch warning you must close the installer, install the patch, and then restart the installer from the beginning.

When the system check is satisfactory, click Next. The Configuration Type Panel page is displayed.

## ▼ To Select a Configuration Type

### Steps 1. Select Configure Now.

Configure Now lets you supply configuration values for most of the components you install. The installer configures the components according to the values that you supply in the installer pages.

Click Next. The Custom Configuration page is displayed.

### 2. Review the list of components that the installer cannot configure.

The message explains that the Java ES installer does not configure Directory Preparation Tool, Instant Messaging, Calendar Server, Messaging Server, or Communications Express. [Chapter 6](#) describes how to configure Calendar Server, Messaging Server, and Instant Messaging and Communications Express.

Click Next. The Common Server Settings page is displayed.

Sun Java(TM) Enterprise System Install Wizard

### Common Server Settings

The following settings will be the default values for all installed component products as needed. The values can be overridden when you configure the products.

Host Name:

DNS Domain Name:

Host IP Address:

Administrator User ID:

Administrator Password:  At least 8 characters long

Retype Password:

System User:

System Group:

The values you enter above will appear as default values on the pages that follow. Fields that include these default values will be marked with this note: \*Shared default value

<< Back    Next >>    Cancel    Help

FIGURE 5-4 Common Server Settings Page

## ▼ To Supply Common Server Settings

- Step**
- Supply values that are used to configure all the components that are configured by the installer. Do the following:
    - For Host Name, accept the default value.

- For DNS Domain Name, accept the default value.
- For Host IP Address, accept the default value.
- For Administrator User ID, accept the default value.
- In the Administrator Password text field type **password**.
- In the Retype Password text field, type **password**.
- For System User, accept the default value.
- For System Group, accept the default value.

---

**Note** – The default values for Host Name, DNS Domain Name, and Host IP Address are derived from the system on which you are installing.

Figure 5–4 shows the default values for a system named `evaluation.example.com`. The Host Name field is the system name, `evaluation`, and the DNS Domain Name field is `example.com`. You see similar values for the system on which you are installing.

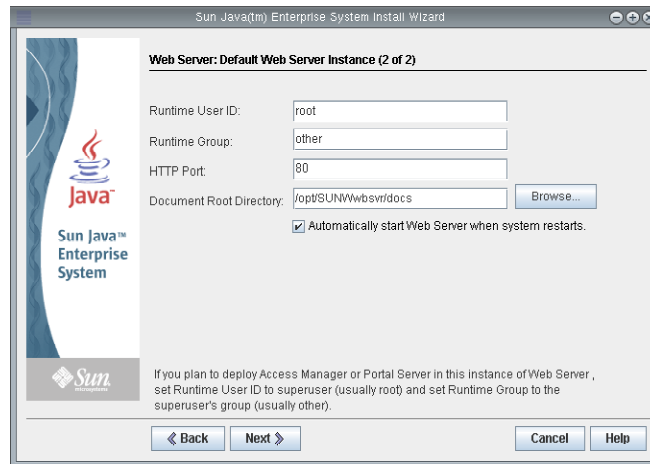
---

Click Next. The Web Server: Administration (1 of 2) page is displayed.

## ▼ To Supply Web Server Configuration Values

- Steps** 1. Click next to accept the default values.

The Web Server: Default Web Server Instance (2 of 2) page is displayed.



**FIGURE 5–5** Web Server: Default Web Server Instance (2 of 2)

2. Do the following:

- In the Runtime User ID text field, type **root**.
- In the Runtime Group text field, type **other**.
- Select Automatically Start Web Server When System Restarts.

Click Next. The Directory Server: Administration (1 of 5) page is displayed.

---

**Tip** – The user and group that you specify for Web Server must be the same user and group you are using for the components that run in Web Server.

---

## ▼ To Supply Directory Server Configuration Values

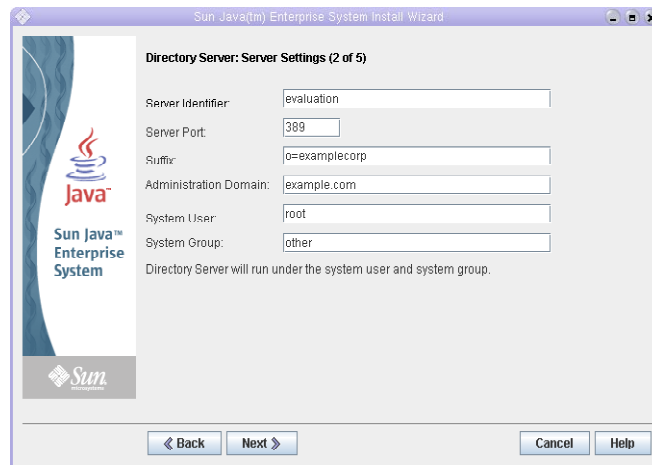
- Steps** 1. Click Next to accept the default values.

---

**Tip** – The Administrator Password and Directory Manager Password text fields display asterisks. The values in these text fields are the default password you specified on the Common Server Settings page, which is `password`.

---

The Directory Server: Server Settings (2 of 5) page is displayed.



**FIGURE 5-6** Directory Server: Server Settings (2 of 5)

2. Do the following to establish your directory tree's base suffix.
- In the Server Identifier text field, confirm that default value is the unqualified form of your `evaluation_host`. For example, if you are installing on a system named `evaluation.example.com`, the default Server Identifier is `evaluation`.



- In the Server Port text field, accept the default value of 389.
- In the Suffix text field, type `o=examplecorp`. This value specifies the base suffix of the evaluation solution's directory tree.
- In the Administration Domain text field, accept the default value of `evaluation_domain`.
- In the System User text field, accept the default value of `root`.
- In the System Group text field, accept the default value of `other`.

---

**Tip** – The Server Identifier identifies your server instance in the Directory Server console.

---

Click Next. The Directory Server: Configuration Directory Server (3 of 5) page is displayed.

**3. Click Next to accept the default value.**

The Directory Server: Data Storage Location (4 of 5) page is displayed.

**4. Click Next to accept the default value.**

The Directory Server: Populate Data (5 of 5) page is displayed.

**5. Click Next to accept the default value.**

---

**Tip** – The default selection in this page (the Sample Data radio button under the Populate With Data checkbox) ensures that the installer will populate your LDAP database with sample data.

---

The Administration Server: Server Settings (1 of 2) page is displayed.

## ▼ To Supply Administration Server Configuration Values

**Steps** 1. **Click Next to accept the default values.**

The Administration Server: Configuration Directory Settings (2 of 2) page is displayed.

**2. Click Next to accept the default values.**

The Access Manager: Administration (1 of 6) page is displayed.

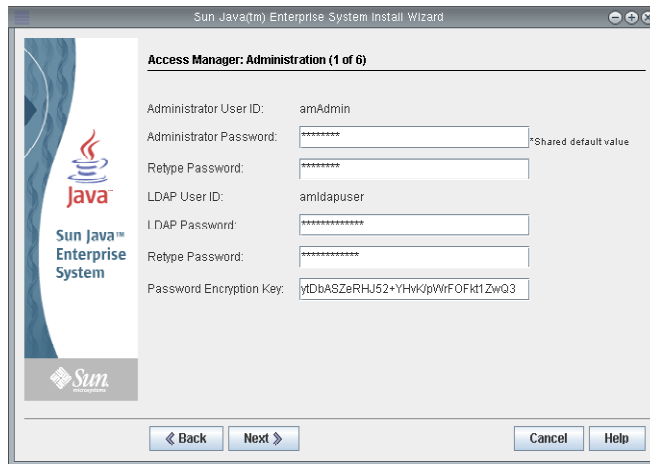


FIGURE 5-7 Access Manager: Administration Page

## ▼ To Supply Access Manager Configuration Values

### Steps 1. Do the following:

- In the Administrator Password and Retype Password text fields, accept the default value.

---

**Tip** – The Administrator Password displays asterisks. The value in this text field is the default password, `password`.

---

- In the LDAP Password and Retype Password text fields, type `ldappassword`.

---

**Tip** – The LDAP password cannot be the same as the Administrator password.

---

Click Next. The Access Manager: Web Container (2 of 6) page is displayed.

### 2. Click Next to accept the default value.

The Access Manager: Sun Java System Web Server (3 of 6) page is displayed.

### 3. Click Next to accept the default values.

The Access Manager: Web Container for Running Identity Server Services (4 of 6) page is displayed.

4. **Click Next to accept the default values.**  
The Access Manager: Directory Server Information (5 of 6) page is displayed.
5. **Click Next to accept the default values.**  
The Access Manager: Directory Server Information (6 of 6) page is displayed.
6. **Click Next to accept the default value.**  
The Portal Server: Web Container page is displayed.

## ▼ To Supply Portal Server Configuration Values

- Steps**
1. **Click Next to accept the default value.**  
The Portal Server: Sun Java System Web Server page is displayed.
  2. **Click next to accept the default values.**  
The Portal Server Web Container Deployment page is displayed.
  3. **Click Next to accept the default values.**

---

**Tip** – Install Sample Portal is selected by default. Installing the sample portal provides a portal desktop that you can use without developing your own portal desktop.

---

The Ready to Install page is displayed.

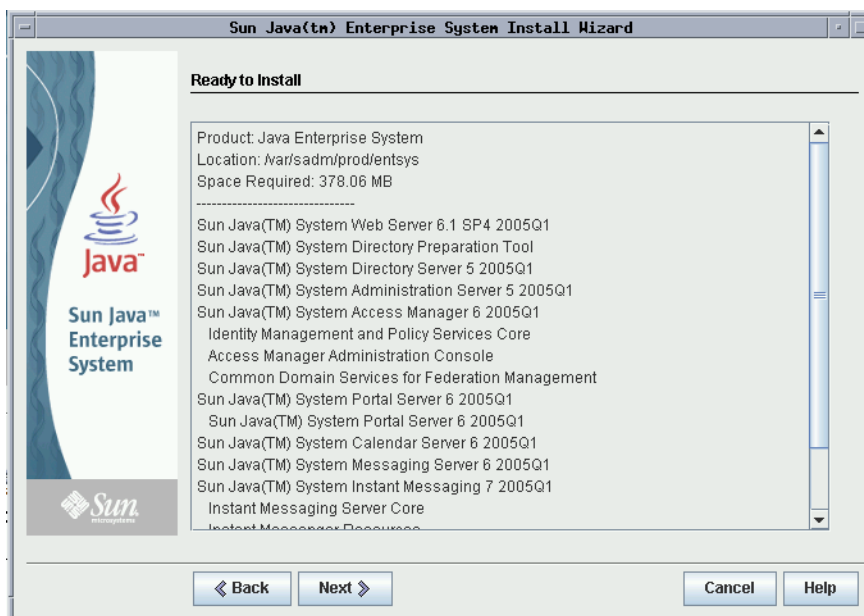


FIGURE 5-8 Ready to Install Page

## ▼ To Complete the Installation

- Steps**
1. **Review the list of components to be installed. The list should match Figure 5-8.**
    - If you want to review your input or make changes, click Back. You can go back to any installer page and change any value.
    - If you are ready to install, click Next. The installer upgrades the shared components. This process takes a few minutes. When the installer finishes upgrading shared components, the Product Registration page is displayed.
  2. **In the Product Registration page, clear Open Registration Window During Installation, and then click Install.**  
The Installing page is displayed. The installation process takes a few minutes. When the installation is finished, the Installation Complete page is displayed.
  3. **Click View Summary and confirm that all components were installed correctly.**  
The installation process is complete.
  4. **Click Close to exit from the installer.**

---

**Tip** – After you complete the evaluation, you can uninstall the components. For uninstallation procedures, see “Uninstalling the Components” on page 140.

---

---

## Reviewing the Installation Log Files

If you are interested in the details of the installation, you can review the installation log files. This section describes how to locate the log files.

### ▼ To Review the Installation Log Files

**Steps** 1. **Change directory to the log file directory:**

```
cd /var/sadm/install/logs
```

2. **Run the `ls` command to list the contents of the directory:**

```
ls
```

You see a list of installation log files for the components you installed.

3. **Open any of the installation log files you are interested in.**

For example, the installation log file for Directory Server has a file name that includes a date stamp. It resembles `Directory_Server_install.B mmd9999`.

---

**Tip** – The following log file contains information about the dependency checking performed by the installer:

```
/var/sadm/install/log/installdependencies.txt
```

---



## Configuring and Verifying the Components

---

This chapter describes the steps you take after running the installer. As described in the installation and configuration plan, you begin by starting and verifying the components configured by the installer, and continue by configuring and starting the components that were not configured by the installer.

This chapter describes the configuration and verification steps in the following sections:

- [“Starting and Verifying the Directory Server Default Instance” on page 71](#)
- [“Verifying the Access Manager and Portal Server Default Instances” on page 75](#)
- [“Configuring the Directory for Communications Services” on page 78](#)
- [“Configuring Messaging Server” on page 81](#)
- [“Configuring a Calendar Server Instance” on page 89](#)
- [“Configuring an Instant Messaging Instance” on page 94](#)
- [“Configuring a Communications Express Instance” on page 99](#)

For an overview of the configuration and verification steps, see [“Developing the Installation and Configuration Plan” on page 36](#). For an explanation of the values you input in the configuration wizards, see [“Installation and Configuration Plan Details” on page 38](#).

---

## Starting and Verifying the Directory Server Default Instance

Directory Server provides directory services that support login and authentication for the portal, messaging, and calendar services. You begin verifying your evaluation solution by verifying that you can start and administer the default Directory Server instance.

In this section you learn the following:

- How to start and stop the Administration Server.
- How to start and stop Directory Server.
- How to use the Administration Server console to view the contents of the LDAP directory and verify that Directory Server is correctly configured.

## ▼ To Start Administration Server

Before starting the Directory Server default instance, start Administration Server. Administration Server is the administration tool for Directory Server.

### Steps 1. Change directory to the server root directory:

```
cd /var/opt/mps/serverroot
```

### 2. Run the command to start Administration Server:

```
./start-admin
```

Administration Server starts and displays a series of start-up messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
startup:server started successfully
```

## ▼ To Start the Directory Server Default Instance

After you start Administration Server, start the default Directory Server instance.

### Steps 1. Change directory to the directory for the default Directory Server instance. The directory name includes the unqualified name of the host system.

```
cd /var/opt/mps/serverroot/slaped-unqualified_evaluation_host
```

### 2. Run the command to start Directory Server:

```
./start-slaped
```

Directory Server starts without a message.

## ▼ To Verify the LDAP Directory Configuration

After you start Directory Server, start Server Console and verify the LDAP directory configuration.

### Steps 1. Change directory to the `serverroot` directory:

```
cd /var/opt/mps/serverroot
```



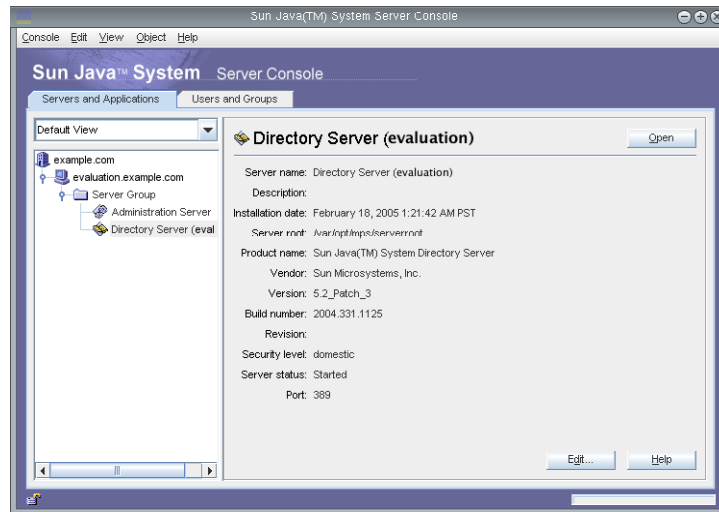
**2. Run the command to start Server Console:**

```
./startconsole &
```

The Sun Java System Server Console Login dialog box is displayed.

**3. Type your administrator ID (admin) and password (password) and click OK.**

The Server Console is displayed, displaying information about the servers and applications in your Administration Server domain. [Figure 6–1](#) shows information for the example.com domain. You see similar information for your domain.



**FIGURE 6–1** Server Console’s Servers and Applications Tab

**4. Expand the nodes on the Servers and Applications tab and locate the node that represents the default Directory Server instance.**

- a. **The top-level node represents your default Administration Server domain. In [Figure 6–1](#) this is the node labeled example.com.**

In your console window, it will be labeled with your *evaluation\_domain*.

- b. **On the next level, the nodes represent the systems in your Administration Server domain.**

In [Figure 6–1](#), the example.com domain includes one system, named *evaluation.example.com*. In your console window, it will be labeled with your *evaluation\_host*.

- c. **On the next level is a node labeled Server Group.**

This node groups the component instances that are running on your *evaluation\_host*. In [Figure 6–1](#), the Server Group node groups the component instances that are running on *evaluation.example.com*.

- d. On the next level, the nodes represent the individual component instances in your Server Group.

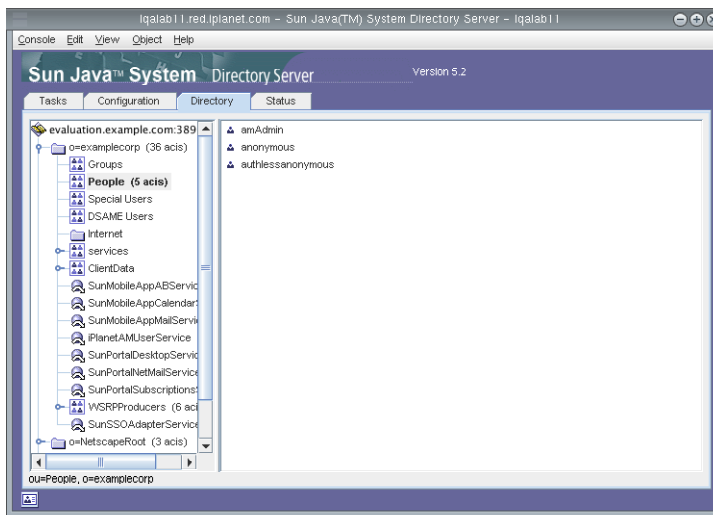
One of these nodes represents the default Directory Server instance. In [Figure 6-1](#), this is the node labeled Directory Server (evaluation.example.com). In your console window it will be labeled Directory Server (*evaluation\_host*).

5. Double-click the node that represents your default Directory Server instance.

The Sun Java System Directory Server window is displayed.

6. Click the Directory tab.

The LDAP directory tree is displayed.



**FIGURE 6-2** Default LDAP Directory Tree

7. Verify the LDAP base suffix set up by the installer.  
Your LDAP base suffix is `o=examplecorp`. You see a display similar to [Figure 6-2](#).
8. Locate the sample LDAP directory entries set up by the installer.
  - a. Expand the base suffix node (`o=examplecorp`).
  - b. Click the People container node.  
The right pane displays the contents of the People container. [Figure 6-2](#) shows the People container for the default Directory Server instance on `evaluation.example.com`. You see a similar display for your Directory Server instance.
9. Verify that the People container contains entries for `amAdmin`, `anonymous`, and `authlessanonymous`.

These entries confirm that the Java Enterprise System installer populated the LDAP directory with the sample data you requested during installation.

#### 10. Leave the Server Console running.

---

## Verifying the Access Manager and Portal Server Default Instances

After you start Directory Server, you restart the Web Server default instance. Restarting Web Server also starts Access Manager and Portal Server.

In this section, you learn the following:

- How to restart Web Server .
- How to start and stop the Access Manager Administration Console.
- How use the Access Manager Administration Console to confirm that Access Manager can access your LDAP directory.
- How to open the sample portal desktop.

### ▼ To Restart the Web Server Default Instance

Restarting the Web Server default instance starts two components that run in Web Server's web container, Access Manager and Portal Server.

- Steps**
1. **Change directory to the Web Server default instance directory. The directory name includes the fully qualified name of the system on which you installed Web Server.**

```
cd /opt/SUNWwbsvr/https-evaluation_host
```

2. **Run the command to restart Web Server:**

```
./stop; ./start
```

The Web Server displays a sequence of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
startup: server started successfully
```

## ▼ To Log In to Access Manager Administration Console and Verify Access Manager

Logging in to the Access Manager Administration Console confirms that Access Manager is running and verifies that you successfully configured Access Manager to work with your Directory Server instance.

**Steps** 1. **In a web browser, open the following URL:**

`http://evaluation_host/amconsole/index.html`

The Login page is displayed.

2. **Type your administration user ID (`amadmin`) and password (`password`). Click **Log in**.**

The console displays information about the default Access Manager domain.

3. **To confirm that your Access Manager is configured correctly, check the Access Manager domain name.**

The Access Manager domain name is displayed in the left panel, just below the Identity Management tab. In [Figure 6–3](#) `examplecorp` is displayed. You see a similar display on your Access Manager console.

---

**Tip** – `Examplecorp` is the base suffix you established in your LDAP directory tree. When you see it displayed in your Access Manager console, you confirm that Access Manager is communicating with your Directory Server default instance.

---

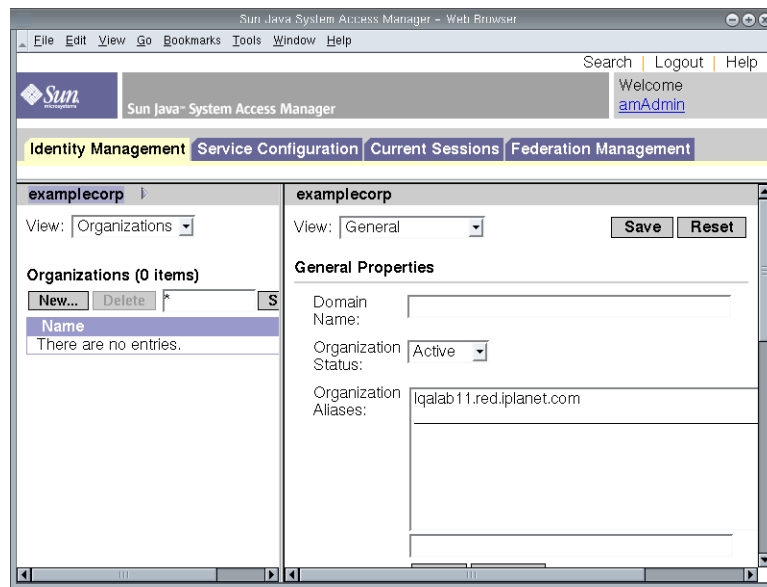


FIGURE 6-3 Access Manager Administration Console

4. Log out of the Administration Console. Click **Logout** in the upper right corner of the page.

## ▼ To View the Sample Portal Desktop and Verify the Default Portal Server Instance

The installation procedure in [Chapter 5](#) creates a sample portal desktop. In this section you open the sample portal desktop to verify that Portal Server is running.

- Steps** 1. In your web browser, open the following URL:

```
http://evaluation_host/portal/dt
```

The Portal Server sample desktop is displayed. [Figure 6-4](#) shows the sample desktop. Opening the sample desktop verifies that your default Portal Server instance is running.

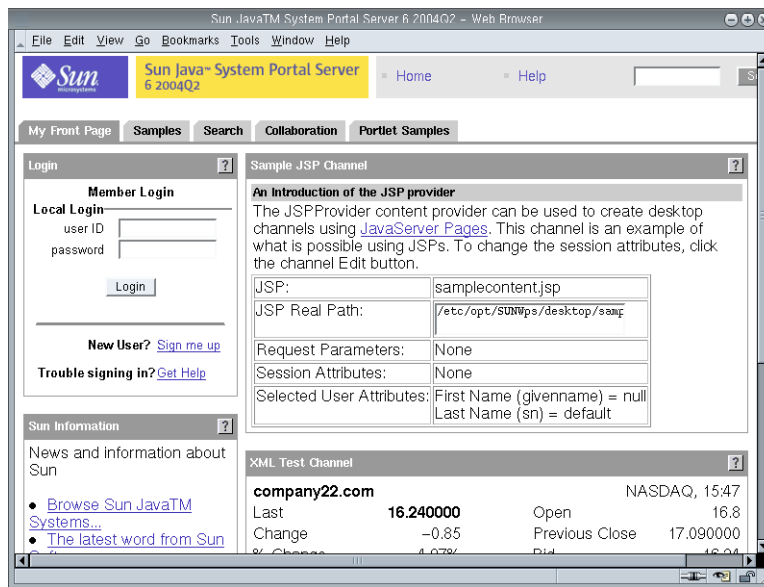


FIGURE 6-4 Sample Portal Desktop

2. Leave the portal desktop open in your browser.

## Configuring the Directory for Communications Services

The installation procedure in [Chapter 5](#) creates a directory with a default LDAP schema. Before you configure Messaging Server and Calendar Server instances, you must configure the directory for Java ES communications services. This configuration procedure adds LDAP attributes that support shared user entries. After you complete this configuration, the user accounts in the directory can authenticate through Access Manager and log in to any service provided by a Java ES component.

In this section you learn the following:

- How to use the Directory Server Preparation Tool to configure your directory tree for communications services.
- How to use the Administration Console to verify the changes to your directory tree.

## ▼ To Configure Your Directory Tree for Communications Services

This procedure runs the Directory Server Preparation Tool (a Perl script named `comm_dssetup.pl`) and configures the evaluation directory for use with Java ES communications services. For a summary of the input values, see “[Directory Server Preparation Tool Details](#)” on page 42.

---

**Tip** – The script displays a series of prompts. You answer most of the prompts by pressing Enter to accept the default value. The default values identify your default Directory Server instance.

---

### Steps 1. Change directory to the preparation tool directory:

```
cd /opt/SUNWcomds/lib
```

### 2. Run the command that unzips the preparation tool:

```
unzip dssetup.zip
```

### 3. Change directory to the unzipped preparation tool:

```
cd dssetup
```

### 4. Run the command that starts the preparation tool:

```
perl comm_dssetup.pl
```

The preparation tool displays a series of messages and then prompts you: Do You Want To Continue? [Y].

### 5. Press Enter to accept the default value.

The preparation tool prompts you: Enter the Full Path to the Directory Where The Sun ONE Directory Server was Installed.

### 6. Press Enter to accept the default value (`/var/opt/mps/serverroot`).

The preparation tool displays a numbered list of directory server instances and prompts you: Which Instance Do You Want? [1].

### 7. Choose the default Directory Server instance created by the Java Enterprise System installer. For the evaluation solution there is normally only one instance on your *evaluation\_host*.

- If the default value for this prompt (1) specifies the correct instance (the instance name ends with your *evaluation\_host*), press Enter to accept the default value.
- If there is more than one Directory Server instance, type in the number that specifies the default Directory Server instance and press Enter.

The preparation tool prompts you: Please Enter The Directory Manager DN [cn=Directory Manager].

**8. Press Enter to accept the default value (cn=Directory Manager).**

The preparation tool prompts you for the Directory Manager password.

**9. Type password and press Enter.**

The preparation tool prompts you: Will This Directory Server Be Used For Users/Groups? [Yes].

**10. Press Enter to accept the default value.**

The preparation tool prompts you: Please Enter The Users/Groups Base Suffix [o=examplecorp].

**11. Confirm that the default value specifies examplecorp, the base suffix you established for your directory tree. Press Enter to accept the default value.**

The preparation tool displays a list of Sun ONE LDAP schemas and prompts you: Please Enter The Schema Type (1, 1.5, 2) [2].

**12. Confirm that the default value is 2. Press Enter.**

The preparation tool prompts you: Do You Want To Update The Schema Files? [Yes].

**13. Press Enter to accept the default value (Yes).**

The preparation tool prompts you: Do You Want To Configure New Indexes? [Yes].

**14. Press Enter to accept the default value (Yes).**

The preparation tool prompts you: Do You Want To Reindex The New Indexes Now? [yes].

**15. Press Enter to accept the default value (yes).**

The preparation tool displays a summary of the values that you entered and prompts you: Do You Want To Continue? [Y].

**16. Review the values you entered. Press Enter to accept the default value (y).**

The preparation tool displays a series of informational messages, beginning with "generating files." This might take a few moments.

The preparation tool generates script files and then prompts you: Ready to execute the script now. Do you want to continue? [Y].

**17. Press Enter to accept the default value (Y).**

The preparation tool executes the generated scripts to configure the Directory Server instance. This may take a few moments.

The scripts display a long series of informational messages that ends with the following:

```
Successful Completion
```



You have configured your directory tree for use with Java ES communications services.

---

## Configuring Messaging Server

In this section you learn the following:

- How to use the Messaging Server configuration wizard to create and configure a Messaging Server instance.
- How to start and stop the Messaging Server instance.
- How to verify the directory tree configuration performed by the Messaging Server configuration wizard.

### ▼ To Create and Configure a Messaging Server Instance

This procedure runs the Messaging Server configuration wizard to create and configure a Messaging Server instance. For a summary of the input values, see [“Messaging Server Configuration Wizard Details” on page 43](#).

**Steps** 1. **Change directory to the Messaging Server directory:**

```
cd /opt/SUNWmsgsr/sbin
```

2. **Run the command that starts the configuration wizard:**

```
./configure
```

The configuration wizard’s Welcome page is displayed.

3. **Click Next.**

The Fully Qualified Host Name page is displayed.

4. **Confirm that the default value specifies your *evaluation\_host*.**

Click Next. The Select Directory to Store Configuration and Data Files page is displayed.

5. **Click Next to accept the default value of `/var/opt/SUNWmsgsr`.**

The Create New Directory? dialog box is displayed.

6. **Click Create Directory.**

---

**Tip** – If you previously installed and uninstalled Java ES, a different dialog box appears, stating that `/var/opt/SUNWmsgsr` is not empty. Click Accept Anyway to overwrite the existing instance directory.

---

The Select Components to Configure page is displayed.

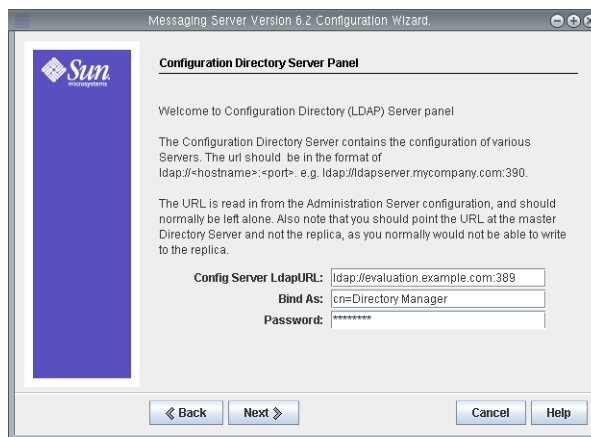
7. Click Next to accept the default values (Message Transfer Agent, Message Store, and Messenger Express are selected).

The Messaging Server User and Group page is displayed.

8. Do the following:

- In the Enter Username text field, confirm that the default value is `mailsrv`.
- In the Enter Group text field, confirm that the default value is `mail`.

Click Next. The Configuration Directory Server Panel page is displayed.



**FIGURE 6–5** Configuration Directory Server Page

9. Do the following:

- In the Config Server LdapURL text field, confirm that the default value is `ldap://evaluation_host:389`.
- In the Bind text field, confirm that the default value is `cn=Directory Manager`. There must be a space between Directory and Manager.
- In the Password text field, type **password**.

---

**Tip** – Supplying these values specifies your default Directory Server instance and administrator account.

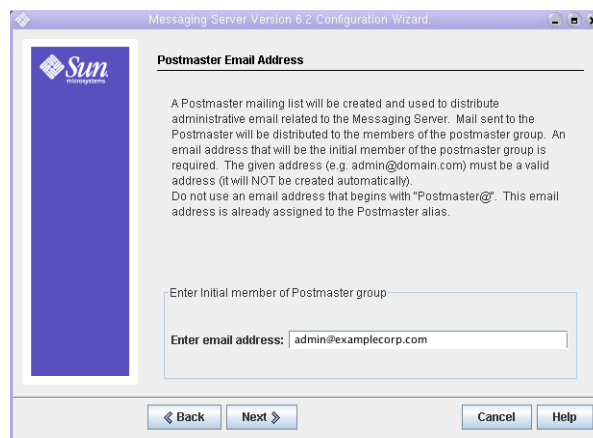
---

Click Next. The User/Group Directory Server Panel page is displayed.

**10. Confirm the following default values:**

- In the User/Group Server LdapURL text field, confirm that the default value is `ldap://evaluation_host:389`.
- In the Bind text field, confirm that the default value is `cn=Directory Manager`. There must be a space between `Directory` and `Manager`.
- In the Password text field, confirm that the default value is `password`.

Click Next. The Postmaster Email Address page is displayed.



**FIGURE 6-6** Postmaster Email Address Page

**11. Do the following:**

- In the Enter Email Address text field, type `admin@examplecorp.com`.

Click Next. The Password For All Admin Accounts page is displayed.

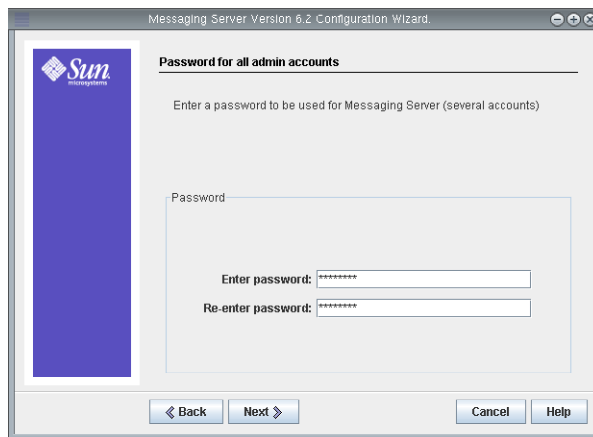


FIGURE 6-7 Password for All Admin Accounts Page

**12. Type the following values to establish an administrative password for Messaging Server:**

- In the Enter Password text field, type **password**.
- In the Re-enter Password to Verify text field, type **password**.

Click Next. The Default Email Domain page is displayed.

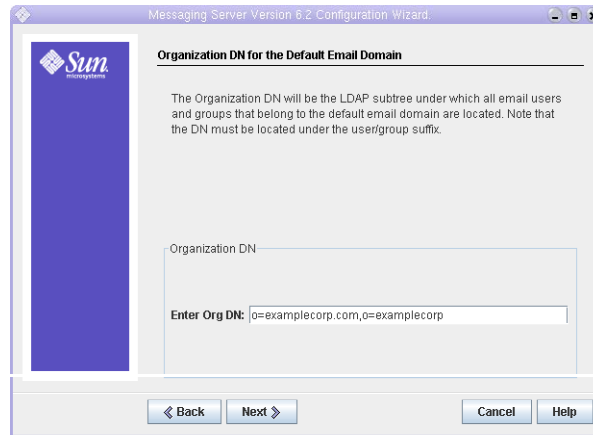


FIGURE 6-8 Default Email Domain Page

**13. Do the following:**

- In the Enter Email Domain text field, type **examplecorp.com**.

Click Next. The Organization DN for the Default Email Domain page is displayed.



**FIGURE 6-9** Organization DN for the Default Email Domain Page

- 14. Confirm that the default Organization DN is `o=examplecorp.com,o=examplecorp`.**

---

**Tip** – The Messaging Server configuration wizard will create a new branch in your LDAP tree, with the name you supply in the Enter Organization DN text field. You add your Java ES users in this branch.

---

Click Next. The Ready to Configure page is displayed.

- 15. Review the information. Click Configure Now.**

The Ports in Use dialog box is displayed.

---

**Tip** – You specify the ports for your Messaging Server instance later in this procedure.

---

- 16. Click OK.**

The configuration process continues. When the configuration process is complete, the Sequence Completed page is displayed.

- 17. Click Next.**

The Installation Summary page is displayed.

- 18. Review the installation summary, and then click Close.**

**19. Change directory to the Messaging Server directory:**

```
cd /opt/SUNWmsgsr/sbin
```

**20. Run the command that specifies the ports for communicating with Messaging Server:**

```
./configutil -o service.http.port -v 88  
./configutil -o service.http.sslport -v 448
```

**21. Run the command that starts Messaging Server:**

```
./start-msg
```

The startup process displays a series of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
starting job-controller server
```

You have created and started a Messaging Server instance.

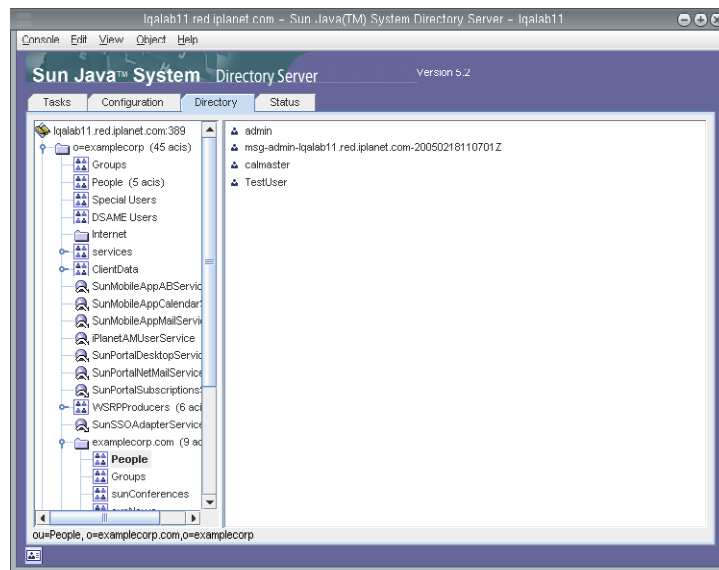
## ▼ To Verify that Messaging Server Configuration Modified the Directory Tree

This procedure describes how to use the Sun Java System Server Console to verify that the Messaging Server added the o=examplecorp.com,o=examplecorp organization to the directory tree.

**Steps** 1. **Return to the Server Console's Directory Server Window.**

2. **In the View menu, choose Refresh.**

The directory tree display is refreshed.



**FIGURE 6–10** Schema 2 Directory Tree Modified by Messaging Server Configuration

**3. Review the modified directory tree.**

Confirm that there is a new node for examplecorp.com. Your display should resemble [Figure 6–10](#). The examplecorp.com node represents the LDAP organization created by the Messaging Server configuration tool. The full LDAP DN for the organization is o=examplecorp.com,o=examplecorp.

---

**Tip** – Your new LDAP organization supports single sign-on and proxy authentication. When you create LDAP entries for Java ES users, you add them to this LDAP organization.

---

**4. Click the examplecorp.com node.**

The right pane displays the contents of the organization.

**5. Confirm that the organization has the iplanet-am-managed-people-container object class. Do the following:**

- a. In the right pane, right-click the People container, and then choose Edit with Generic Editor from the menu.

The generic editor is displayed.

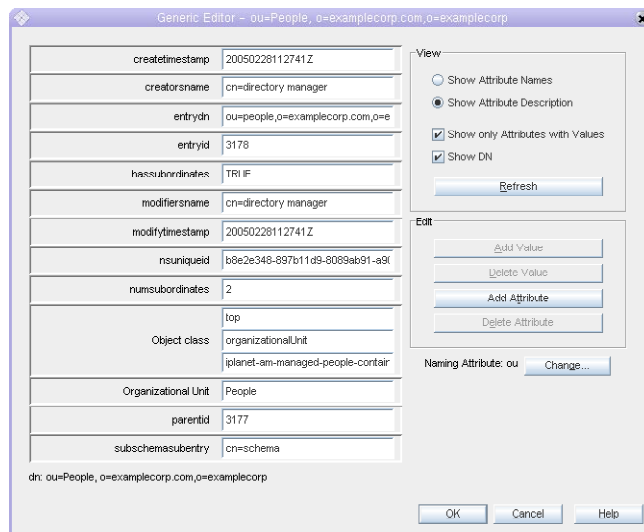


FIGURE 6-11 Generic Editor

- b. In the generic editor, confirm that the object class text field contains **iplanet-am-managed-people-container**.  
This verifies that you have successfully configured your directory tree for Java Enterprise System messaging services.
  - c. Click OK to close the generic editor.
6. Exit the console.

## ▼ To Verify Your Messaging Server Instance

This procedure shows you how to log in to your Messaging Server instance, using the administrator account and the default web interface.

- Steps** 1. In your web browser, open this URL:

`http://evaluation_host:88`

The Messenger Express login page is displayed.

2. Type these values:

- User ID: **admin**
- Password: **password**

Click Log in. The Messenger Express main window is displayed. You see a display similar to Figure 6-12. This confirms that your Messaging Server instance is configured and running.



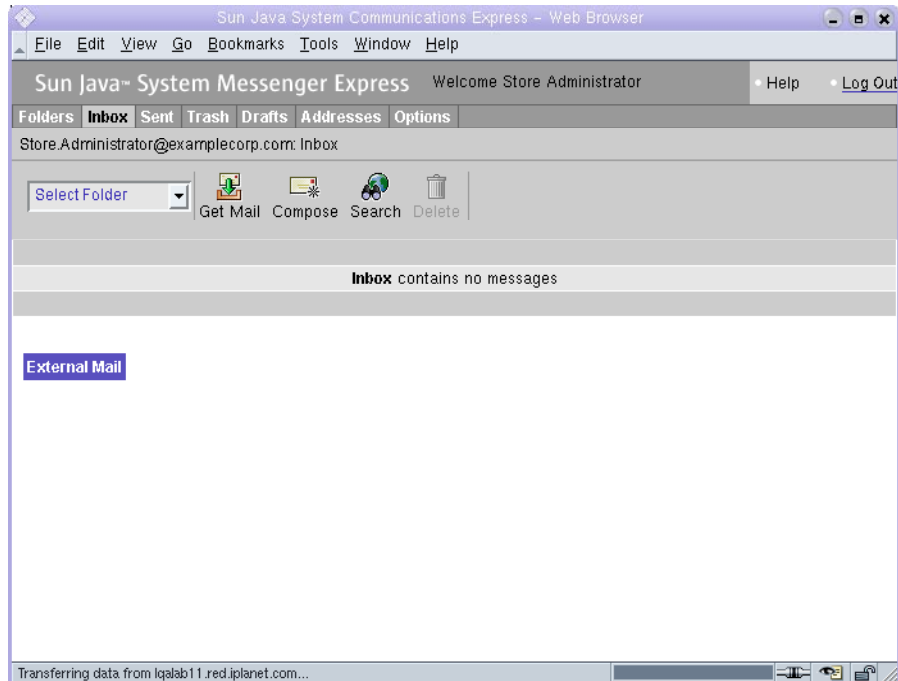


FIGURE 6–12 Messenger Express Main Window

3. Click **Logout**, in the upper right corner of the **Messenger Express** main window. This verifies that you successfully configured and started your Messaging Server instance.

---

## Configuring a Calendar Server Instance

In this section you learn the following:

- How to use the Calendar Server Configuration wizard to create a Calendar Server instance.
- How to start and stop the Calendar Server instance.

## ▼ To Create and Configure a Calendar Server Instance

This procedure runs the Calendar Server configuration wizard to create and configure a Calendar Server instance. For a summary of the input values, see “Calendar Server Configuration Wizard Details” on page 44.

### Steps 1. Change directory to the Calendar Server directory:

```
cd /opt/SUNWics5/cal/sbin
```

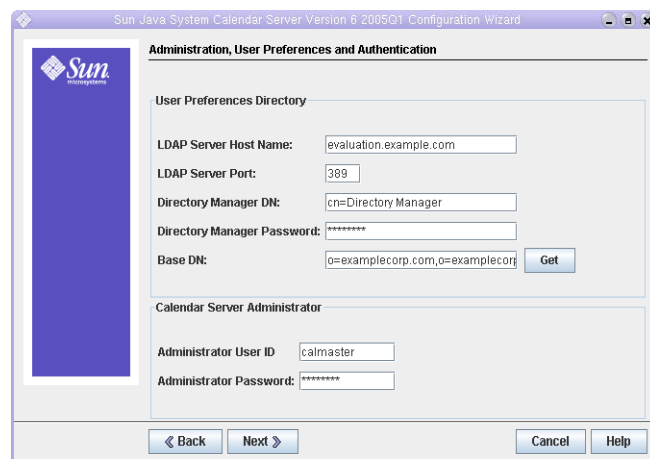
### 2. Run the command that starts the configuration wizard:

```
./csconfigurator.sh
```

The configuration wizard’s Welcome page is displayed.

### 3. Click Next to continue.

The Administration, User Preferences and Authentication page is displayed.



The screenshot shows a window titled "Sun Java System Calendar Server Version 6 2005Q1 Configuration Wizard". The main content area is titled "Administration, User Preferences and Authentication". It contains two sections: "User Preferences Directory" and "Calendar Server Administrator".

**User Preferences Directory:**

- LDAP Server Host Name:
- LDAP Server Port:
- Directory Manager DN:
- Directory Manager Password:
- Base DN:

**Calendar Server Administrator:**

- Administrator User ID:
- Administrator Password:

At the bottom, there are navigation buttons: "Back", "Next", "Cancel", and "Help".

FIGURE 6–13 Administration, User Preferences and Authentication Page

### 4. Do the following:

- In the LDAP Server Host Name text field, confirm that the default value is *evaluation\_host*.
- In the LDAP Server Port text field, confirm that the default value is 389.
- In the Directory Manager DN text field, confirm that the default value is **cn=Directory Manager**. There must be a space between Directory and Manager.
- In the Directory Manager Password text field, type **password**.

- In the Base DN text field, type `o=examplecorp.com,o=examplecorp`.

---

**Tip** – Your Calendar Server Base DN specifies the LDAP organization (`o=examplecorp.com,o=examplecorp`) that you created with the Messaging Server configuration wizard.

---

- In the Administrator User ID text field, confirm that the default value is `calmaster`.
- In the Administrator Password text field, type `password`.

Click Next. The wizard verifies the connection to the default Directory Server instance. A Question dialog box is displayed.

5. **Click Create It to create the `calmaster` user.**

The Email and Email Alarms page is displayed.

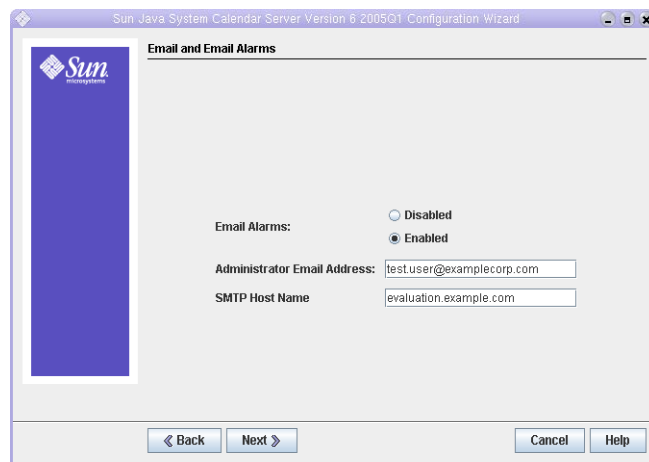


FIGURE 6-14 Email and Email Alarms Page

6. **Do the following:**

- In Email Alarms, confirm that the default selection is Enabled.
- In the Administrator Email Address text field, type `calmaster@examplecorp.com`.
- In the SMTP Host Name text field, confirm that the default value is `evaluation_host`.

Click Next. The Problem Connecting to SMTP Host dialog box might be displayed.

7. **In the Problem Connecting to SMTP Host dialog box, click Accept.**

The Runtime Configuration page is displayed.

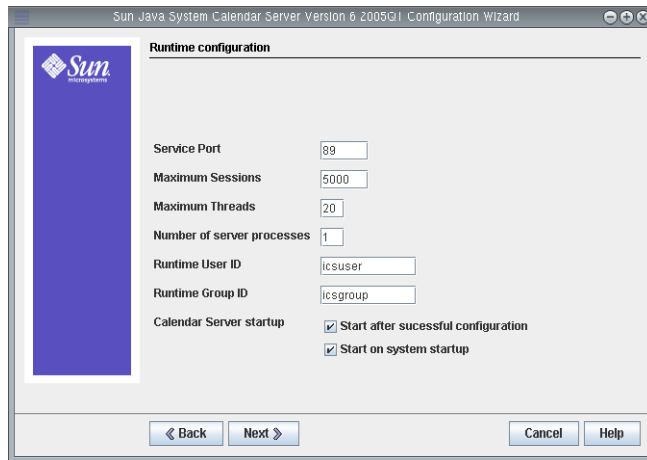


FIGURE 6–15 Runtime Configuration Page

**8. Do the following:**

- In the Service Port text field, type **89**.
- In the Maximum Sessions text field, confirm that the default value is 5000.
- In the Maximum Threads text field, confirm that the default value is 20.
- In the Number of Server Processes text field, confirm that the default value is 1.
- In the Runtime User ID text field, confirm that the default value is `icsuser`.
- In the Runtime Group ID text field, confirm that the default value is `icsgroup`.
- Confirm that Start After Successful Configuration is selected.
- Confirm that Start on System Startup is selected.

Click Next. The Create New User ID dialog box is displayed.

**9. Click Create User ID to create the icsuser account.**

The Directories to Store Configuration and Data Files page is displayed.

**10. Click Next to accept the default values.**

The Create New Directory? dialog box is displayed.

---

**Tip** – If you previously installed and uninstalled Java Enterprise System, a different message will appear, stating that `/var/opt/SUNWmsgsr` is not empty. Click to overwrite the existing directory. Do this for each directory.

---

**11. Click Create Directory. Do this for each new directory.**

The Archive and Hot Backup Configuration page is displayed.

**12. Click Next to accept the default values.**

The Create New Directory? dialog box is displayed.

**13. Click Create Directory. Do this for each new directory.**

The Ready to Configure page is displayed.

**14. Click Configure Now.**

When configuration is complete, the Configuration Summary page is displayed.

**15. Review the details and click Close.**

---

**Tip** – In the Runtime Configuration page, you selected the Start after successful configuration option. Calendar Server now starts automatically.

---

## ▼ To Verify Your Calendar Server Instance

This procedure shows you how to verify your Calendar Server instance, using the administrator account and the default web interface.

**Steps** 1. **In your web browser, open the following URL:**

`http://evaluation_host:89`

The Calendar Express Login page is displayed.

2. **Type these values:**

- User ID: **calmaster**
- Password: **password**

Click Login. The Calendar Express main window is displayed. You see a display similar to [Figure 6-16](#). This verifies that your Calendar Server instance is correctly configured and running.

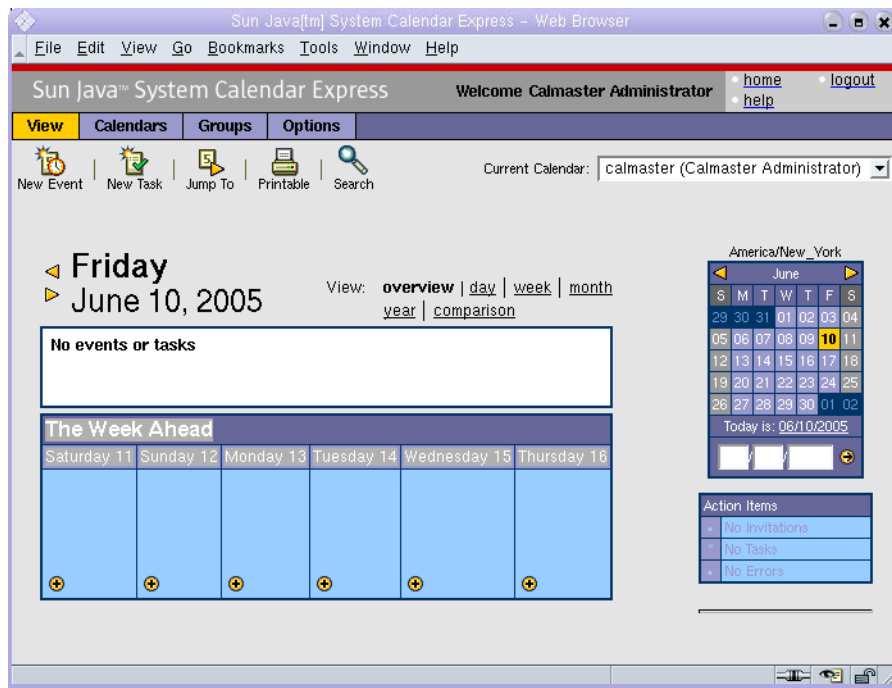


FIGURE 6-16 Calendar Express Main Window

3. Click **Logout**, in the upper right corner of the main window.  
This verifies that you successfully configured and started your Calendar Server instance.

---

## Configuring an Instant Messaging Instance

In this section you learn the following:

- How to use the Instant Messaging Configuration wizard to create an Instant Messaging instance.
- How to start the Instant Messaging instance.

## ▼ To Create and Configure an Instant Messaging Instance

This procedure runs the Instant Messaging configuration wizard to create and configure an Instant Messaging instance. For a summary of the input values, see [“Instant Messaging Configuration Wizard Details”](#) on page 46.

**Steps** 1. **Change directory to the Instant Messaging directory:**

```
cd /opt/SUNWiim
```

2. **Run the command that starts the configuration wizard:**

```
./configure
```

The configuration wizard’s Welcome page is displayed.

3. **Click Next.**

The Software Requirements page is displayed.

4. **Click Next.**

The Select Components page is displayed.

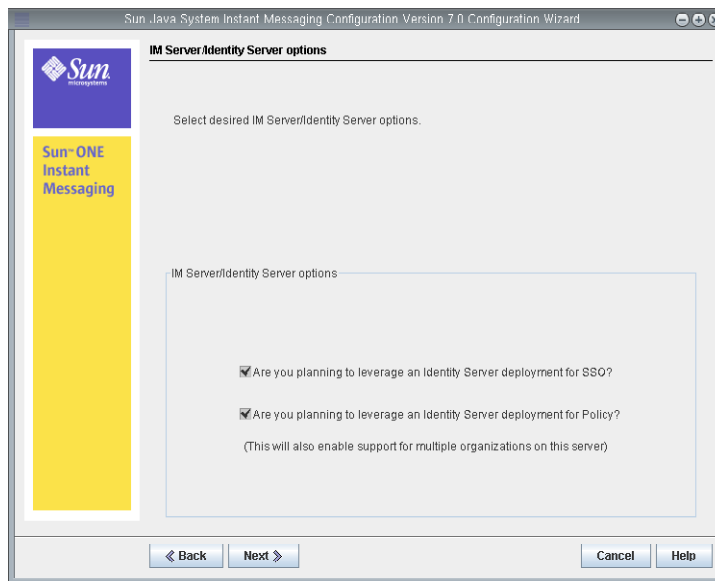
5. **Confirm that all three components are selected. Click Next to accept the default selections.**

The Network Connection page is displayed.

6. **Confirm that the default values identify your evaluation system:**

- In the Host Name text field, confirm that the default value is *evaluation\_host*.
- In the DNS Domain Name text field, confirm that the default value is *evaluation\_domain*.

Click Next. The IM Server/Identity Server Options page is displayed.



**FIGURE 6-17** IM Server/Identity Server Options Page

- 7. Select the Single Sign-on (SSO) and Policy Agent options.**  
Click Next. The Instant Messaging Server Runtime Files Directory page is displayed.
- 8. Click Next to accept the default value.**  
A Create Directory dialog box is displayed.
- 9. Click Create Directory.**  
The Instant Messaging Server Configuration Page is displayed.



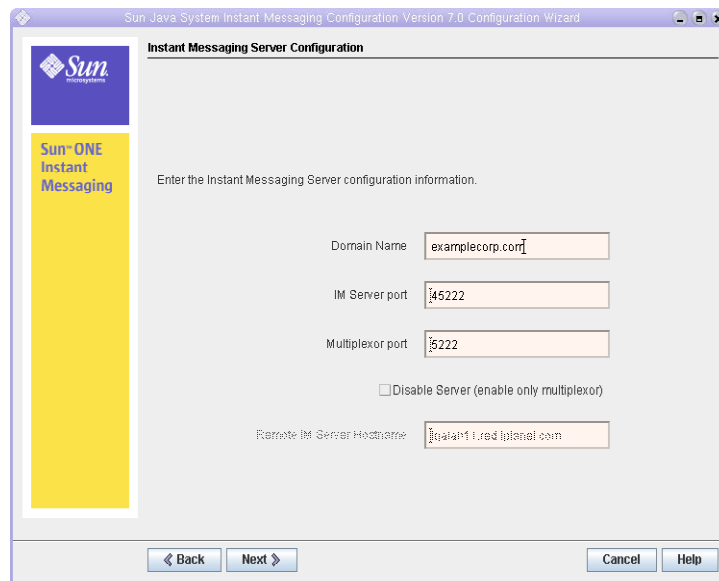


FIGURE 6-18 Instant Messaging Server Configuration Page

10. Do the following:

- In the Domain Name text field, type **examplecorp.com**.
- In the IM Server Port text field, confirm that the default value is **45222**.
- In the Multiplexor Port text field, confirm that the default value is **5222**.

Click Next. The Instant Messaging LDAP Configuration page is displayed.

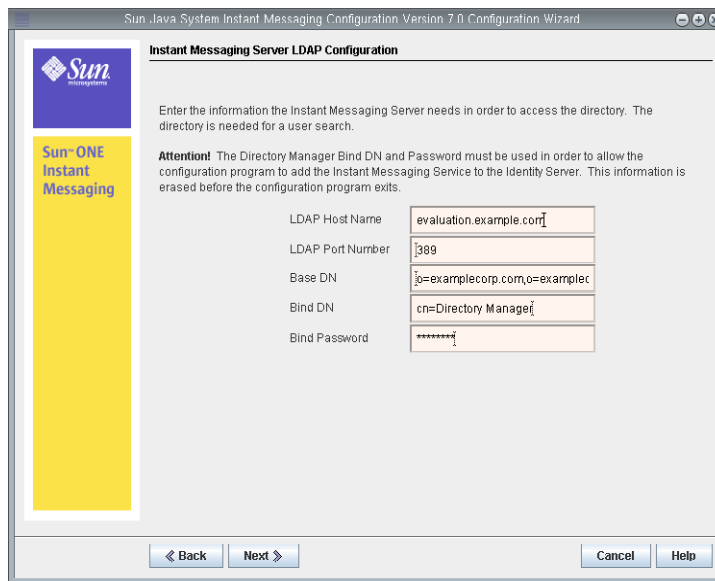


FIGURE 6-19 Instant Messaging Server LDAP Configuration Page

**11. Do the following:**

- In the LDAP Host Name text field, confirm that the default value is *evaluation\_host*.
- In the LDAP Port Number text field, confirm that the default value is 389.
- In the Base DN text field, type **o=examplecorp.com,o=examplecorp**.
- In the Bind DN text field, type **cn=Directory Manager**. You must put a space between **Directory** and **Manager**.
- In the Password text field, type **password**.

Click Next. The wizard verifies the connection to the default Directory Server instance and the existence of the base DN. The SMTP Service Configuration page is displayed.

**12. Confirm that the default value in the SMTP Server text field specifies your *evaluation\_host*.**

Click Next. The Problem Connecting to SMTP Host dialog box might be displayed.

**13. In the Problem Connecting to SMTP Host dialog box, click Accept, and then click Next to continue.**

The Select the Codebase for Instant Messaging Services page is displayed.

**14. Confirm that the default value in the Codebase text field is `http://evaluation_host:80/im`.**

Click next to accept the default value. The Select Identity Options page is displayed.

**15. Click next to accept the default values.**

The Instant Messaging Services Startup page is displayed.

**16. Confirm that both services are selected.**

Click Next. The configuration process begins. The configuration process might take a few moments. When configuration is complete, the Configuration Summary page is displayed.

**17. Review the details and click Close.**

**18. Change directory to the Web Server default instance directory. The directory name includes the fully qualified name of the system on which you installed Web Server.**

```
cd /opt/SUNWwbsvr/https-evaluation_host
```

**19. Run the command to restart Web Server:**

```
./stop; ./start
```

The Web Server displays a sequence of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
startup: server started successfully
```

You have created an Instant Messaging instance.

---

**Tip** – You use Instant Messaging after you have completed configuration of the LDAP directory tree. For more information, see [“To Verify Your Test End User Account”](#) on page 118.

---

---

## Configuring a Communications Express Instance

In this section you learn the following:

- How to use the Communications Express Configuration wizard to create a Communications Express instance.
- How to start the Communications Express instance.

## ▼ To Configure a Communications Express Instance

This procedure runs the Communications Express configuration wizard to create and configure a Communications Express instance. For a summary of the input values, see “Communications Express Configuration Wizard Details” on page 47.

### Steps 1. Change directory to the Communications Express directory:

```
cd /opt/SUNWuwc/sbin
```

### 2. Run the command that starts the configuration wizard:

```
./config-uwc
```

The configuration wizard’s Welcome page is displayed.

### 3. Click Next.

The Select the Directory to Store Configuration and Data Files page is displayed.

### 4. Click Next to accept the default value of `/var/opt/SUNWuwc`.

The Create New Directory? dialog box is displayed.

### 5. Click Create Directory.

---

**Tip** – If you previously installed and uninstalled Java ES, a different dialog box appears, stating that `/var/opt/SUNWmsgsr` is not empty. Click Accept Anyway to overwrite the existing directory.

---

The Select Components to Install page is displayed.

### 6. Click Next to accept the default values (Mail Component and Calendar Component are both selected).

The Network Connection page is displayed.

### 7. Confirm the following default values:

- In the Hostname text field, confirm that the default value is the unqualified form of your *evaluation\_host*. For example, if you are installing on a system named *evaluation.example.com*, your default Hostname is *evaluation*.
- In the DNS Domain Name text field, confirm that the default value is your *evaluation\_domain*.

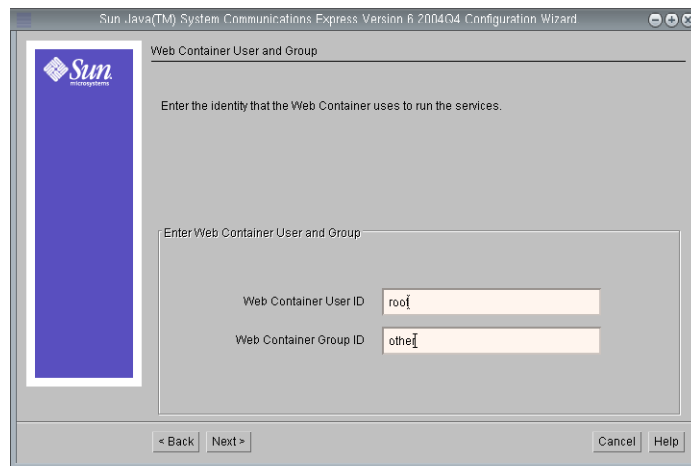
Click Next. The Select a Web Container page is displayed.

### 8. Click Next to accept the default values (Web Server is selected).

Click Next. The Web Server Configuration Details page is displayed.

### 9. Confirm the following default values:

- In the Server Root Directory text field, confirm that the default value is `/opt/SUNWwbsvr`.
  - In the Server Instance Identifier text field, confirm that the default value is `evaluation_host`.
  - In the Virtual Server Identifier text field, confirm that the default value is `https-evaluation_host`.
  - In the HTTP Port text field, confirm that the default value is 80.
- Click Next. The Web Container User and Group page is displayed.



**FIGURE 6–20** Web Container User and Group Page

**10. Do the following:**

- In the Web Container User ID text field, type **root**.
- In the Web Container Group ID text field, type **other**.

Click Next. The URI Path page is displayed.

**11. Click Next to accept the default value (/uwc).**

---

**Tip** – Accepting the default value assigns the following URL to your Communications Express instance: `http://evaluation_host:80/uwc`.

---

The Do You Want Hosted Domain Support? page is displayed.

**12. Click Next to accept the default value (hosted domain support is not selected).**

The User/Group Directory Server Details page is displayed.

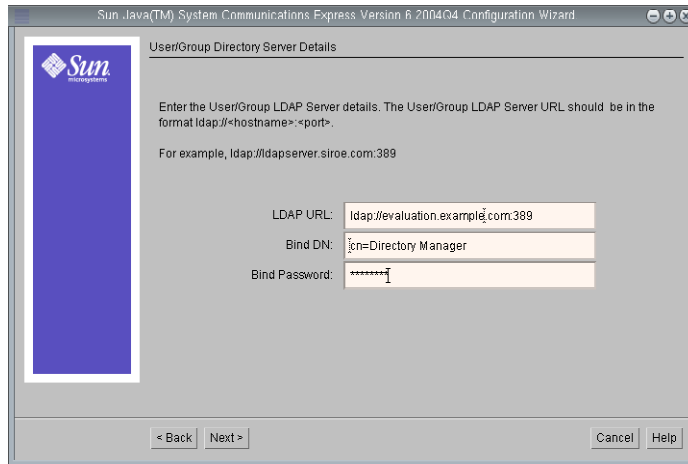


FIGURE 6–21 User/Group Directory Server Details Page

**13. Do the following:**

- In the LDAP URL text field, confirm that the default value is `ldap://evaluation_host:389`.
- In the Bind DN text field, confirm that the default value is `cn=Directory Manager`. There must be a space between `Directory` and `Manager`.
- In the Administrator Password text field, type **password**.

---

**Tip** – The values on this page specify your default Directory Server instance.

---

Click Next. The DC Tree Suffix page is displayed.

**14. Confirm that the default value is `o=examplecorp`.**

---

**Tip** – `o=examplecorp` is the base suffix you established for the evaluation solution when you installed Directory Server.

---

Click Next. The Default Domain Name page is displayed.

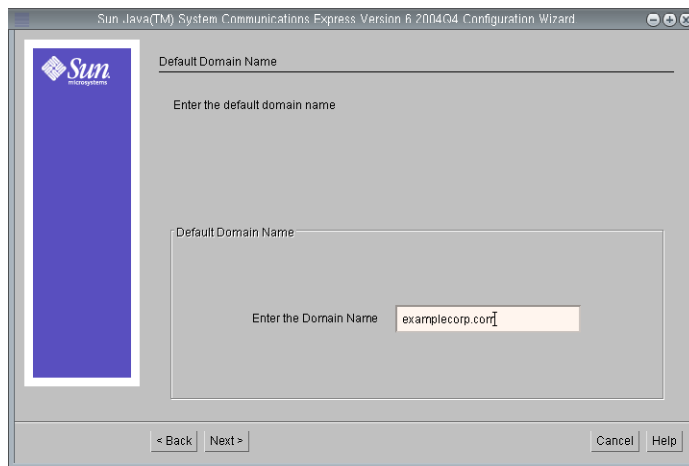


FIGURE 6–22 Default Domain Name Page

15. In the Enter the Domain Name text field, type examplecorp.com.

---

**Tip** – Examplecorp.com is the name of the mail domain you created when you configured your Messaging Server instance.

---

Click Next. The Identity Server Preferences page is displayed.

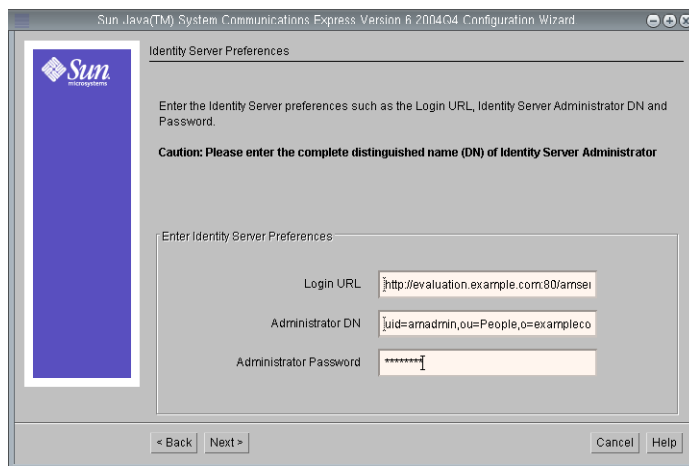


FIGURE 6–23 Identity Server Preferences Page

**16. Do the following to supply the information needed to identify and connect to your Access Manager instance:**

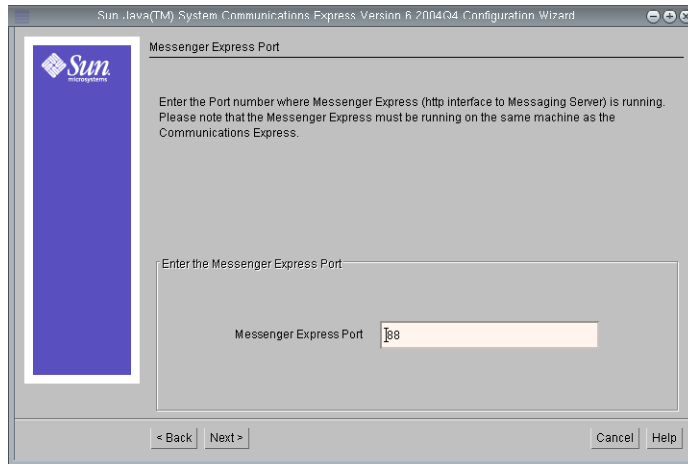
- In the Login URL text field, confirm that the default value is `http://evaluation_host:80/amserver/UI/login`.
- In the Administrator DN text field, type `uid=amAdmin,ou=People,o=examplecorp`.
- In the Administrator Password text field, type `password`.

---

**Tip** – The values on this page specify the Access Manager administrator account.

---

Click Next. The Messenger Express Port page is displayed.



**FIGURE 6–24** Messenger Express Port Page

**17. Do the following:**

- In the Messenger Express Port text field, type `88`.

Click Next. The Calendar Server Host and Port Configuration page is displayed.



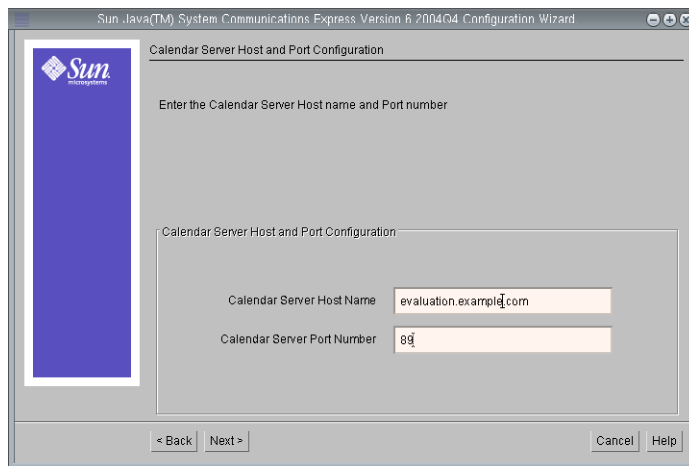


FIGURE 6–25 Calendar Server Host and Port Configuration Page

**18. Type the following values:**

- In the Calendar Server Host Name text field, confirm that the default value is the name of your *evaluation\_host*.
- In the Calendar Server Port Number text field, type **89**.

Click Next. The Calendar Server Administration Details page is displayed.

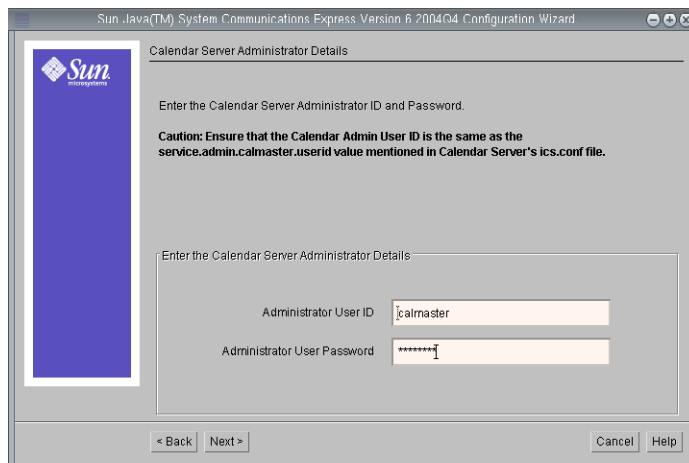


FIGURE 6–26 Calendar Administration Details Page

**19. Do the following:**

- In the Administrator User ID text field, confirm that the default value is *calmaster*.

- In the Administrator User Password text field, type **password**.  
Click Next. The PAB Directory Server Details page is displayed.

**20. Confirm the following values:**

- In the Login URL text field, confirm that the default value is `ldap://evaluation_host:389`.
- In the Administrator DN text field, confirm that the default value is `cn=Directory Manager`. There must be a space between `Directory` and `Manager`.
- In the Administrator Password text field, confirm the default value is `password`.

---

**Tip** – The values on the PAB Directory Server Details page specify your default Directory Server instance.

---

Click Next. The Ready to Configure page is displayed.

**21. Review the information. Click Configure Now.**

The Starting Task Sequence page displays messages about the configuration process. When the configuration process is complete, the Sequence Completed page is displayed.

**22. Click Next.**

The Web Server Restart dialog box is displayed.

**23. Click OK.**

The Configuration Summary page is displayed.

**24. Review the configuration summary, and then click Next.**

The Post Configuration Instructions page is displayed.

---

**Tip** – This document contains the specific post configuration instructions for the evaluation solution.

---

**25. Click Close.**

**26. Change directory to the Web Server directory:**

```
cd /opt/SUNWwbsvr/https-<evaluation_host\>
```

**27. Run the command that restarts the Web Server:**

```
./stop; ./start
```

The Web Server displays a sequence of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
startup: server started successfully
```

You have created and started a Communications Express instance.

---

**Tip** – You use Communications Express after you configure the evaluation solution for single sign-on. For more information, see [“Using Communications Express with Access Manager Single Sign-on”](#) on page 125

---



## User Management for the Evaluation Solution

---

This chapter describes the steps you take to complete the configuration of your LDAP directory and to add a test user account that is authorized to use the messaging, calendar, and portal services. As described in the installation and configuration plan, you begin by configuring an instance of Delegated Administrator, after which you use Delegated Administrator to add the test end user account. This chapter covers the user management steps in the following sections:

- [“Configuring the Delegated Administration Utility” on page 109](#)
- [“Configuring Your LDAP Organization for Mail and Calendar Services” on page 116](#)
- [“Provisioning an End User Account” on page 117](#)

For a summary of the configuration and verification steps, see [“Developing the Installation and Configuration Plan” on page 36](#). For an explanation of the configuration values you input and the commands you run, see [“Delegated Administrator Configuration Wizard Details” on page 50](#), and [“Delegated Administrator Command Line Details” on page 52](#).

---

## Configuring the Delegated Administration Utility

This section describes configuring the Delegated Administration Utility. Configuring the Delegated Administration Utility does the following:

- Specifies the Directory Server instance that you want Delegated Administrator to use. For the evaluation solution, you configure Delegated Administrator to use your default Directory Server instance.
- Specifies the location for user and group data created by Delegated Administrator. For the evaluation solution, you configure Delegated Administrator to add user and group data to the `o=examplecorp.com,o=examplecorp` organization.

- Supplies the administrator ID and password that Delegated Administrator needs to interoperate with your default Directory Server instance.

## ▼ To Configure the Delegated Administration Utility

This procedure describes how to configure a Delegated Administrator instance for the evaluation solution. For a summary of the input values, see [“Delegated Administrator Configuration Wizard Details”](#) on page 50.

### **Steps** 1. **Change directory to the Delegated Administration Utility directory:**

```
cd /opt/SUNWcomm/sbin
```

### 2. **Run the command that starts the configuration wizard:**

```
./config-commda
```

The configuration wizard’s Welcome page is displayed.

### 3. **Click Next.**

The Select Directory to Store Configuration and Data Files page is displayed.

### 4. **Click Next to accept the default directory.**

The Create New Directory dialog box is displayed.

### 5. **Click Create Directory.**

The Select Components to Configure page is displayed.

### 6. **Confirm that all three components, Delegated Administrator Client, Delegated Administration Server, and Delegated Administration Console, are selected. Click Next.**

The Access Manager Host and Port page is displayed.

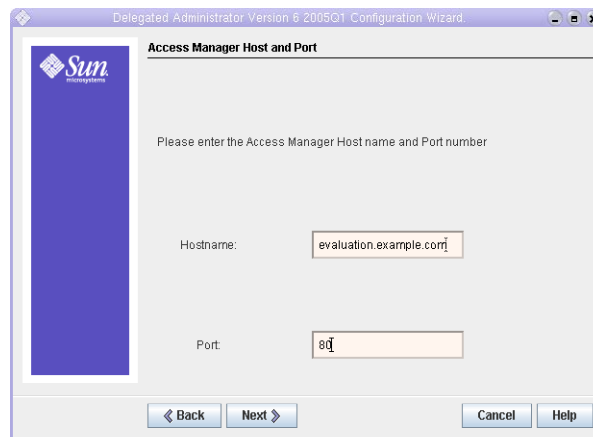


FIGURE 7-1 Access Manager Host and Port Page

7. Do the following to specify the Access Manager instance on your *evaluation\_host*.
  - In the Hostname text field, confirm that the default value is *evaluation\_host*.
  - In the Port text field, type **80**.

Click Next. The Default Domain page is displayed.

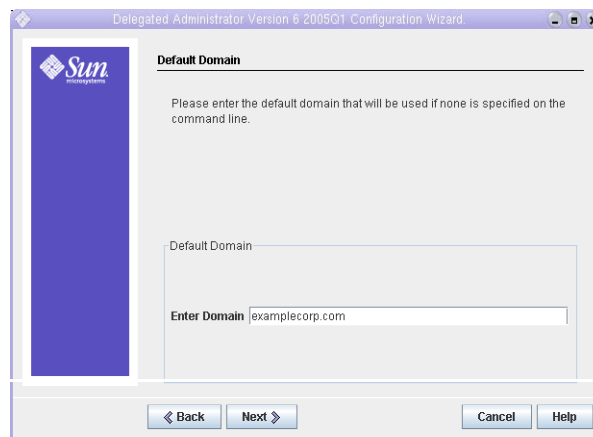


FIGURE 7-2 Default Domain Page

8. In the Enter Domain text field, type **examplecorp.com**.  
Click Next. The Default SSL Port for Delegated Administration Client page is displayed.
9. Click Next to accept the default value (443).  
The Web Container page is displayed.

**10. Confirm that the default value is Web Server. Click Next.**

The Web Server Configuration Details page is displayed.

**11. Confirm that the default values identify your default Web Server instance:**

- In the Server Root Directory text field, confirm that the default value is `/opt/SUNWwbsvr`.
- In the Server Instance Identifier text field confirm that the default value is `evaluation_host`.
- In the Virtual Server Identifier text field confirm that the default value is `https-evaluation_host`.
- In the Server HTTP Port text field, confirm that the default value is **80**.  
Click Next. The Default Domain Separator page is displayed.

**12. Click Next to accept the default value (@).**

The Access Manager Base Directory page is displayed.

**13. Click Next to accept the default value.**

The Web Server Configuration Details page is displayed.

**14. Confirm that the default values identify your default Web Server instance:**

- In the Server Root Directory text field, confirm that the default value is `/opt/SUNWwbsvr`.
- In the Server Instance Identifier text field confirm that the default value is `evaluation_host`.
- In the Virtual Server Identifier text field confirm that the default value is `https-evaluation_host`.
- In the Server HTTP Port text field, confirm that the default value is **80**.  
Click Next. The Directory (LDAP) Server page is displayed.



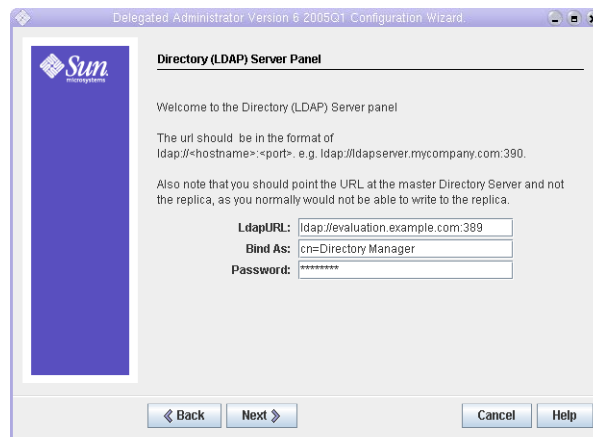


FIGURE 7-3 Directory (LDAP) Server Panel Page

**15. Do the following to specify your default Directory Server instance:**

- In the LdapURL text field accept the default value of `ldap://evaluation_host:389`.
- In the Bind As text field accept the default value of `cn=Directory Manager`. There must be a space between `Directory` and `Manager`.
- In the Password text field, type **password**.

Click Next. The Access Manager Top Level Administrator page is displayed.

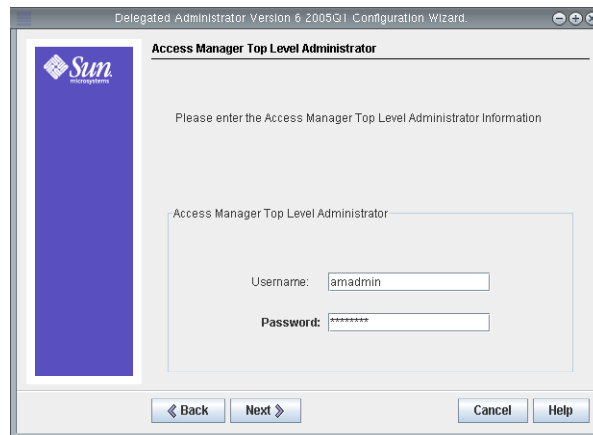
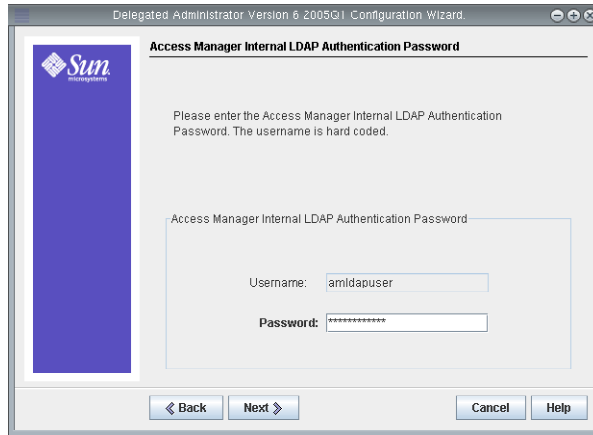


FIGURE 7-4 Access Manager Top Level Administrator Page

**16. Do the following to identify the top level administrator for your Access Manager instance:**

- In User Name text field, accept the default value of amadmin.
- In the Password text field, type **password**.

Click Next. The Access Manager Internal LDAP Authentication Password page is displayed.



**FIGURE 7-5** Access Manager Internal LDAP Authentication Password Page

**17. Do the following to specify the internal user for your Access Manager instance:**

- In the Username text field, accept the default value of amldapuser.
- In the Password text field, type **ldappassword**.

Click Next. The Organization DN for the Default Domain page is displayed.

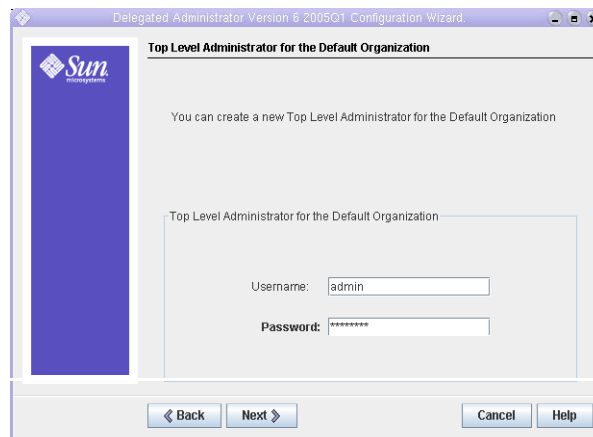
**18. Confirm that the default organization DN specifies o=examplecorp.com,o=examplecorp.**

---

**Tip** – The organization DN specifies the LDAP organization (and the associated mail domain) you created with the Messaging Server configuration wizard.

---

Click Next. The Top Level Administrator for the Default Organization page is displayed.



**FIGURE 7-6** Top Level Administrator for the Default Organization Page

**19. Do the following to create a top level administrator for the Delegated Administrator utility:**

- Accept the default admin user ID.
- Type **password** for the admin password.

Click Next. The Service Package and Organization Sample page is displayed.

**20. Do the following:**

- Confirm that Load Sample Service Packages is selected.
- Confirm that Load Sample Organizations is selected.
- In the Preferred Mailhost for Sample text field, confirm that the default value is *evaluation\_host*.

Click Next. The Ready to Configure page is displayed.

**21. Review the configuration summary.**

Click Configure Now. The Starting Task Sequence page is displayed. When configuration is complete, the Sequence Complete page is displayed.

**22. Review the messages and confirm that the Delegated Administration Utility is successfully configured. You see the following message:**

All Tasks Passed

Click Next. A Web Server Restart dialog box is displayed.

**23. Click OK.**

The Default Domain Post Configuration Task dialog box is displayed.

---

**Tip** – This document contains the post configuration tasks for the evaluation example.

---

**24. Click OK.**

The Installation Summary page is displayed.

**25. Review the installation summary.**

Click Close. The configuration wizard closes.

**26. Change directory to the Web Server default instance directory.**

The directory name includes the fully qualified name of the system on which you installed Web Server.

```
cd /opt/SUNWwbsvr/https-evaluation_host
```

**27. Run the command to restart Web Server:**

```
./stop; ./start
```

The Web Server displays a sequence of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
startup: server started successfully
```

Delegated Administrator is now configured to interoperate with your default Directory Server instance.

---

## Configuring Your LDAP Organization for Mail and Calendar Services

When a user attempts to log in to a Java ES service, the service performs LDAP authentication to determine whether the user is authorized to use the service. LDAP authentication examines the user's LDAP data for the specific object classes and attributes that indicate that the user is authorized to access the service.

- If the user's LDAP data contains those specific object classes and attributes the user is logged in.
- If the user's LDAP data does not contain those object classes and attributes, the user's login is rejected.

Each Java ES service has its own set of object classes and attributes for authentication.

Adding attributes and object classes is known as extending the schema. For the evaluation solution, the LDAP object classes and attributes used to authenticate mail and calendar services are added to the o=examplecorp.com,o=examplecorp organization before a test user account is created in the organization.

This section describes how to extend your LDAP organization's schema with the object classes and attributes used to authenticate messaging, calendar, and portal services.

## ▼ To Extend Your LDAP Organization's Schema for Messaging and Calendar Services

This procedure shows you how to add the LDAP attributes and object classes needed for mail and calendar authentication to the o=examplecorp.com,o=examplecorp organization. For a summary of the command syntax, see ["Delegated Administrator Command Line Details"](#) on page 52.

### Steps 1. Change directory to the Delegated Administration Utility directory:

```
cd /opt/SUNWcomm/bin
```

### 2. Use the `comadmin domain modify` command to extend your LDAP organization:

```
./comadmin domain modify -D admin -w password -d examplecorp.com  
-S mail -H evaluation_host -S cal -B evaluation_host -P allowProxyLogin:yes  
-T America/Los_Angeles
```

### 3. You might be prompted to Enter DNS Domain Name. If this happens, type your *evaluation\_domain* and press Enter.

---

## Provisioning an End User Account

This section describes how to use the Delegated Administration Utility console to provision a test user account. You give the test account access to the evaluation solution's portal, mail, and calendar services. For a summary of the command syntax, see ["Delegated Administrator Command Line Details"](#) on page 52.

In a production system, Java ES administrators manage users. User management tasks not demonstrated in this chapter include LDAP organizational planning, LDAP database management, and delegated administration.

## ▼ To Create a Test End User Account

**Steps** 1. **Change directory to the Delegated Administration Utility directory:**

```
cd /opt/SUNWcomm/bin
```

2. **Run the command that creates the test user account and provisions it for messaging and calendar services:**

```
./commadmin user create -D admin -w password -l TestUser -F Test -L User  
-W password -S mail -H evaluation_host -E test.user@examplecorp.com -S cal  
-B evaluation_host -J 0 -T America/Los_Angeles -k legacy
```

3. **Run the command that additionally provisions your new account for portal services:**

```
./commadmin user modify -D admin -w password -l TestUser  
-A +objectclass:sunsooadapterperson  
-A +objectclass:sunportaldesktopperson
```

You have created a user account and provisioned it for the messaging, calendar, and portal services.

## ▼ To Verify Your Test End User Account

This procedure shows you how to verify your test end user account by logging in to Instant Messaging.

**Steps** 1. **In your web browser, open the following URL:**

```
http://evaluation\_host/im/en/im.jnlp
```

The Java Web Start dialog box is briefly displayed. The Instant Messaging Login page is displayed.

2. **Type these values:**

- User ID: **TestUser**
- Password: **password**

Click Login. The Instant Messaging main window is displayed. This confirms that your test account is correctly provisioned.

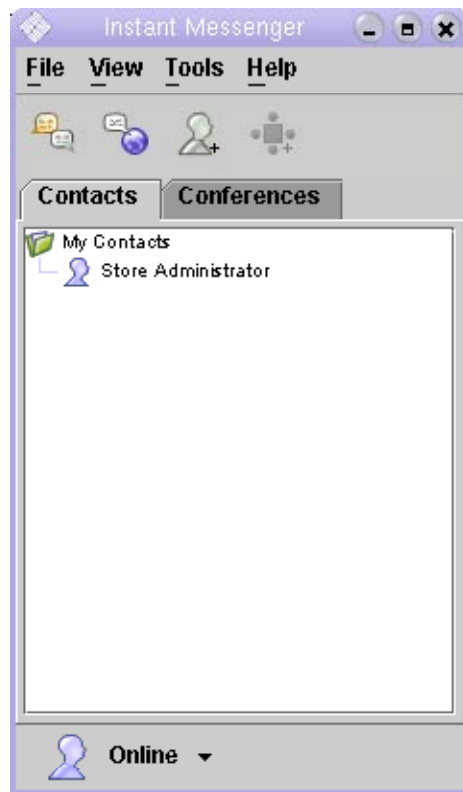


FIGURE 7-7 Instant Messaging Main Window

3. Click **Logout**, in the upper right corner of the main window.

---

**Tip** – To evaluate the features of Instant Messaging, create additional test user accounts. Log in to several test accounts at the same time and send messages between the test accounts.

---





## Configuring and Using Single Sign-On

---

When single sign-on (SSO) is enabled, Java ES users log in to the first service they access. After that, they can use any other single sign-on enabled service without logging in again. In the evaluation solution you enable SSO for your messaging and calendar services. Your test account can log in to the Communications Express web-based interface and access both mail and calendar services. Your test account can also log in to the portal desktop and access both mail and calendar services through the portal desktop. In a production solution, Access Manager also supports single sign-on for other kinds of services, including your custom applications.

This chapter describes how to set up and use single sign-on, in the following sections:

- [“About Single Sign-On” on page 121](#)
- [“Configuring for Access Manager Single Sign-On” on page 122](#)
- [“Using Communications Express with Access Manager Single Sign-on” on page 125](#)
- [“Configuring for Portal Server Proxy Authentication” on page 127](#)
- [“Using the Portal Desktop with Proxy Authentication” on page 138](#)
- [“Uninstalling the Components” on page 140](#)

---

### About Single Sign-On

Java ES provides two related mechanisms for implementing SSO. This section describes both.

### About Access Manager Single Sign-On

Access Manager SSO supports SSO access to all web-based interfaces. When a user first accesses an SSO-enabled service through a web browser, Access Manager authenticates the user and then sends a SSO cookie to the user’s web browser. When

the user accesses another SSO-enabled service, the user's web browser first confirms with Access Manager that the user's session is still open and then returns the SSO cookie, which confirms authentication, to Access Manager. The user is able to access the next service without logging in again.

To set up Access Manager SSO for the evaluation solution, you configure your Messaging Server and Calendar Server instances to use SSO instead of their default authentication mechanisms. Access Manager and Communications Express are configured by default for Access Manager SSO.

## About Portal Server Proxy Authentication

Portal Server Proxy authentication substitutes a proxy user ID for the individual user's ID. When the user logs in to the portal service, the portal service authenticates the user's own ID for accessing the portal service. If any channels in the portal desktop are configured for proxy authentication, the portal service uses the proxy user ID to authenticate the channel services, and the user's information appears in the channel sections of the portal desktop.

To set up portal service proxy authentication, you use the Access Manager console to configure a portal SSO adaptor for each service. You must also provision each user account with the LDAP attributes required for proxy authentication.

For the evaluation solution, you set up proxy authentication for the sample portal desktops's mail and calendar channels. For the proxy accounts, you use the administrator accounts for the services: the admin account for the mail service, and the calmaster account for the calendar service. Your test user account is already provisioned for these services.

---

## Configuring for Access Manager Single Sign-On

This section describes how to configure the evaluation solution's mail and calendar services for Access Manager SSO.

### ▼ To Configure Messaging Server for SSO

**Steps** 1. **Change directory to the Messaging Server directory:**

```
cd /opt/SUNWmsgsr/sbin
```

**2. Run the following variations of the Messaging Server configuration command:**

- a. `./configutil -o local.webmail.sso.amnamingurl -v http://evaluation_host/amserver/namingservice`
- b. `./configutil -o local.webmail.sso.uwccenabled -v 1`
- c. `./configutil -o local.webmail.sso.uwclogouturl -v http://evaluation_host:80/uwc/base/UWCMain\?op=logout`
- d. `./configutil -o local.webmail.sso.uwcport -v 80`
- e. `./configutil -o local.webmail.sso.uwccontexturi -v "uwc"`
- f. `./configutil -o local.webmail.sso.amcookieName -v iPlanetDirectoryPro`
- g. `./configutil -o local.webmail.sso.uwchome -v http://evaluation_host/uwc`
- h. `./configutil -o service.http.allowadminproxy -v yes`
- i. `./configutil -o service.http.ipsecurity -v no`

**3. Run the command to stop Messaging Server:**

```
./stop-msg
```

**4. Run the command to restart Messaging Server:**

```
./start-msg
```

The startup process displays a series of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
starting job-controller server
```

You have configured Messaging Server for SSO.

## ▼ To Configure Calendar Server for SSO

This section describes configuring Calendar Server for SSO.

**Steps** **1. Change directory to the Calendar Server configuration directory:**

```
cd /opt/SUNWics5/cal/config
```

**2. Edit the `ics.conf` file.**

Find each of the following parameters and make the described changes. In some cases you change the value and uncomment the line. In other cases, you simply means uncomment the line.

- a. Find `service.http.allowadminproxy`. Set its value to `yes`.
  - b. Find `local.calendar.sso.amnamingurl`. Uncomment the item and set its value to `http://evaluation_host:80/amserver/namingservice`.
  - c. Find `local.calendar.sso.singlesignoff`. Uncomment the item. Leave its value set to `yes`.
  - d. Find `local.calendar.sso.amcookiename`. Uncomment the item. Leave its value set to `iPlanetDirectoryPro`.
  - e. Find `local.calendar.sso.logname`. Uncomment the item. Leave its value set to `am_sso.log`.
  - f. Find `service.calendarsearch.ldap`. Set its value to `no`.
  - g. Find `service.http.ipsecurity`. Uncomment the item. Change its value to `n`.
  - h. Find `caldb.serveralarms`. Confirm that its value is `1`.
  - i. Find `caldb.serveralarms.dispatch`. Confirm that its value is `yes`.
  - j. Find `caldb.serveralarms.url`. Uncomment the item and confirm that its value is `isnp:///ics/customalarm`.
  - k. Find `caldb.serveralarms.contenttype`. Uncomment the item and set its value to `text/calendar`.
  - l. Find `caldb.serveralarms.dispatchtype`. Confirm that its value is `ens`.
3. Save and close the `ics.conf` file.

4. Change directory to the Calendar Server directory:

```
cd /opt/SUNWics5/cal/sbin
```

5. Run the command to stop Calendar Server:

```
./stop-cal
```

6. Run the command to restart Calendar Server:

```
./start-cal
```

The startup process displays a series of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
Calendar services were started.
```

You have configured Calendar Server for SSO.

---

# Using Communications Express with Access Manager Single Sign-on

This section describes how to log in to Communications Express and use single sign-on authentication to access mail and calendar services with a single log in.

## ▼ To Log In to Communications Express with SSO.

- Steps**
1. **In your web browser, log in to Communications Express. Open the following URL:**

`http://evaluation_host/uwc`

The Communications Express authorization page is displayed.

2. **Log in as Test User. Type the following values:**

- User Name: **TestUser**
- Password: **password**

Click the Log In button. The Communications Express main window is displayed. The mail tab is selected. Test User's name and email address (test.user@examplecorp.com) are displayed. This verifies that you are logged in as Test User.

3. **Click Compose.**

The New Message window opens.

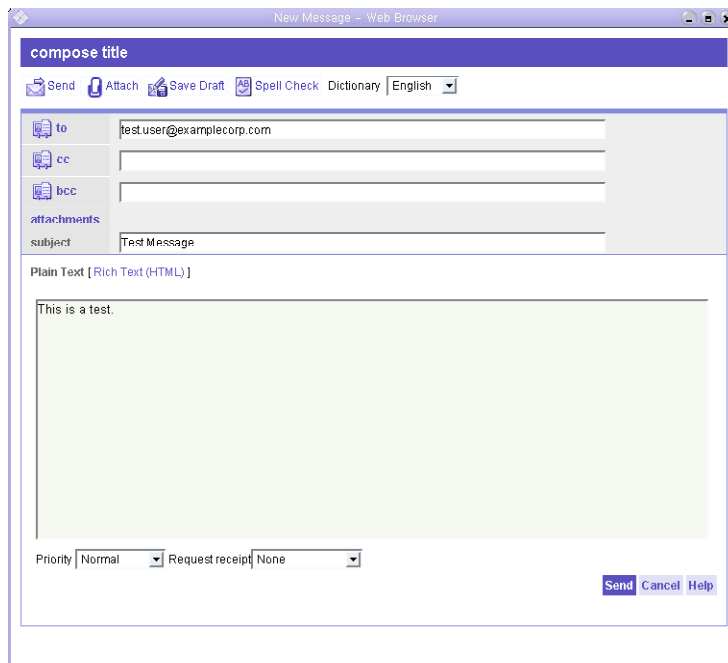


FIGURE 8-1 New Message Window

4. **Compose a test message. Do the following:**

- In the To text field, type **test.user@examplecorp.com**.
- In the Subject text field, type **Test Message**.
- Click Plain Text.
- In the message body, type **This is a test**.
- Click Send.

The New Message Window Closes.

5. **Click Get Mail.**

The test message is displayed in Test User's inbox.

6. **Click the Calendar tab.**

Test User's calendar is displayed.

7. **Click New Event.**

The New Event window is displayed.

8. **Add a test event. Do the following:**

- In the Title text field, type **Test Event**.
- In the Date, Time, and Duration fields, accept the default values.
- In the Location text field, type **Test User's Office**.
- Click Save.

The New Event Window closes. The test event is displayed in Test User's calendar.

**9. This confirms that SSO is working, because you are able to log in once and access both mail and calendar services.**

**10. Click Log Out.**

You have now configured your Java ES services for single sign-on and used single sign-on authentication and used single sign-on to access mail and calendar services.

---

## Configuring for Portal Server Proxy Authentication

This section describes how to configure the sample mail and calendar channels that appear in the sample portal desktop for proxy authentication.

### ▼ To Configure the Portal Calendar Channel for the SSO Adapter Service

To enable proxy authentication for the sample portal Calendar channel, you configure the SSO Adapter Service. You perform this configuration in the Identity Server console.

**Steps** 1. **In your web browser, open the following URL:**

`http://evaluation_host/amconsole/index.html`

The Access Manager login page is displayed.

2. **Type your user name (amadmin) and password (password).**

Click Log In. The Access Manager console window is displayed.

3. **Click the Service Configuration tab.**

The Access Manager Services are displayed.

4. **Scroll down in the left pane. Under Portal Server Configuration, locate SSO Adapter, and then click the arrow symbol that follows the name SSO Adapter.**

The right pane displays the SSO Adapter Service properties. You see a display similar to [Figure 8-2](#).

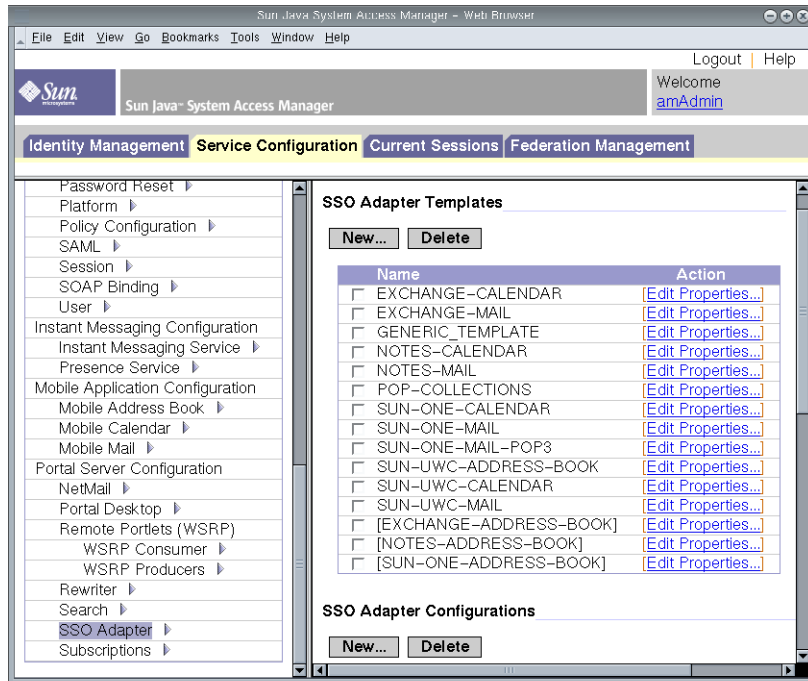


FIGURE 8-2 SSO Adapter Properties

5. **Edit the SUN-ONE-CALENDAR configuration properties. Do the following:**
  - a. **Locate the list of SSO Adapter Templates.**
  - b. **Locate the line for the SUN-ONE-CALENDAR adapter template. Click Edit Properties.**  
The right pane displays template property details.
6. **Locate the host property. Select it, and then click Change Type.**  
The right pane displays the Edit Property Types display.
7. **Change the value of several properties from Merge to Default. Do the following:**
  - a. **Select the host property. Click Move to Default.**
  - b. **Select the port property. Click Move to Default.**
  - c. **Select the clientPort property. Click Move to Default.**  
Click Save. The list of SUN-ONE-CALENDAR adapter properties is displayed.



8. Use the text fields to edit the values of the following properties:
  - a. Locate the `enableProxyAuth` property. Change the value to `true`.
  - b. Locate the `proxyAdminUid` property. Change the value to `calmaster`.
  - c. Locate the `proxyAdminPassword` property. Change the value to `password`.
  - d. Locate the `host` property. Change the value to `evaluation_host`.
  - e. Locate the `port` property. Change the value to `89`.
  - f. Locate the `clientPort` property. Change the value to `89`.  
Click Save to apply your changes.
9. In the left pane, click the arrow symbol that follows the name SSO Adapter.  
The right pane displays the SSO Adapter Service properties. You see a display similar to [Figure 8-2](#).
10. Edit the `SUN-UWC-CALENDAR` configuration properties. Do the following:
  - a. Locate the list of SSO Adapter Templates.
  - b. Locate the line for the `SUN-UWC-CALENDAR` template. Click Edit Properties.  
The right page displays the `SUN-UWC-CALENDAR` property details.
11. Locate the `host` property. Select it, and then click Change Type.  
The right pane displays the Edit Property Types display.
12. Change the value of several properties from `merge` to `default`:
  - a. Select the `host` property. Click Move to Default.
  - b. Select the `port` property. Click Move to Default.
  - c. Select the `clientHost` property. Click Move to Default.
  - d. Select the `clientPort` property. Click Move to Default.  
Click Save. The right pane redisplay the list of SSO Adapter properties.
13. Use the text fields to edit the values of the following properties:
  - a. Locate the `enableProxyAuth` property. Change the value to `true`.
  - b. Locate the `proxyAdminUid` property. Change the value to `calmaster`.
  - c. Locate the `proxyAdminPassword` property. Change the value to `password`.
  - d. Locate the `serverSSOEnabled` property. Change the value to `true`.
  - e. Locate the `host` property. Change the value to `evaluation_host`.

- f. Locate the `port` property. Change the value to 89.
- g. Locate the `clientHost` property. Change the value to *evaluation\_host*.
- h. Locate the `clientPort` property. Change the value to 80.

**14. Click Save to apply your changes.**

You have configured the portal calendar channel for proxy authentication. You continue working in the Access Manager console.

## ▼ To Configure the Portal Mail Channel for the SSO Adapter Service

To enable proxy authentication for the sample portal Mail channel, you configure the SSO Adapter Service. You perform this configuration in the Access Manager console.

**Steps** 1. In the left pane, click the arrow symbol that follows the name SSO Adapter.

The right pane displays the SSO Adapter Service properties. You see a display similar to [Figure 8-2](#).

2. Edit the `SUN-ONE-MAIL` configuration properties. Do the following:

- a. Locate the list of SSO Adapter Templates.
- b. Locate the line for `SUN-ONE-MAIL`. Click Edit Properties.  
The right page displays the `SUN-ONE-MAIL` template property details.

3. Locate the host property. Select it, and then click Change Type.

The right pane displays the Edit Property Types display.

4. Change the value of several properties from `merge` to `default`:

- a. Select the `host` property. Click Move to Default.
- b. Select the `port` property. Click Move to Default.
- c. Select the `smtpServer` property. Click Move to Default.
- d. Select the `clientPort` property. Click Move to Default.
- e. Select the `smtpPort` property. Click Move to Default.
- f. Select the `domain` property. Click Move to Default.  
Click Save. The right pane displays the list of SSO Adapter properties.

5. Use the text fields to edit the values of the following properties:

- a. Locate the `enableProxyAuth` property. Change the value to `true`.

- b. Locate the `proxyAdminUid` property. Change the value to `admin`.
  - c. Locate the `proxyAdminPassword` property. Change the value to `password`.
  - d. Locate the `host` property. Change the value to `evaluation_host`.
  - e. Locate the `port` property. Change the value to `143`.
  - f. Locate the `smtpServer` property. Change the value to `evaluation_host`.
  - g. Locate the `clientPort` property. Change the value to `88`.
  - h. Locate the `smtpPort` property. Change the value to `25`.
  - i. Locate the `domain` property. Confirm that it is blank.
  - j. Locate the `serverSSOEnabled` property. Change the value to `true`.
6. Click **Save** to apply your changes.
  7. In the left pane, click the arrow symbol that follows the name **SSO Adapter**.  
The right pane displays the SSO Adapter Service properties. You see a display similar to [Figure 8-2](#).
  8. Edit the **SUN-UWC-MAIL** configuration properties. Do the following:
    - a. Locate the list of SSO Adapter Templates.
    - b. Locate the line for the **SUN-UWC-MAIL** template. Click **Edit Properties**.  
The right page displays the **SUN-UWC-MAIL** template property details.
  9. Locate the **host** property. Select it, and then click **Change Type**.  
The right pane displays the Edit Property Types display.
  10. Change the value of several properties from **merge** to **default**:
    - a. Select the **host** property. Click **Move to Default**.
    - b. Select the **port** property. Click **Move to Default**.
    - c. Select the **smtpServer** property. Click **Move to Default**.
    - d. Select the **clientPort** property. Click **Move to Default**.
    - e. Select the **smtpPort** property. Click **Move to Default**.
    - f. Select the **domain** property. Click **Move to Default**.  
Click **Save**. The right pane redisplay the list of **SUNW-UWC-MAIL** adapter template properties.
  11. Use the text fields to edit the values of the following properties:

- a. Locate the `enableProxyAuth` property. Change the value to `true`.
- b. Locate the `proxyAdminUid` property. Change the value to `admin`.
- c. Locate the `proxyAdminPassword` property. Change the value to `password`.
- d. Locate the `host` property. Change the value to `evaluation_host`.
- e. Locate the `port` property. Change the value to `143`.
- f. Locate the `smtpServer` property. Change the value to `evaluation_host`.
- g. Locate the `clientPort` property. Change the value to `88`.
- h. Locate the `smtpPort` property. Change the value to `25`.
- i. Locate the `domain` property. Confirm that it is blank
- j. Locate the `serverSSOEnabled` property. Change the value to `true`.

12. Click **Save** to apply your changes.

13. At a command line, change directory to the Web Server directory:

```
cd /opt/SUNWwbsvr/https-evaluation_host
```

14. Run the command to restart Web Server:

```
./stop; ./start
```

The startup process displays a series of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
startup: server started successfully
```

Restarting Web Server restarts Portal Server and applies all of your configuration changes.

## ▼ To Configure the Portal Desktop for Proxy Authentication

- Steps**
1. Return to the Access Manager console. Click the Identity Management tab.
  2. In the View drop-down, select **Services**  
The left pane displays a list of services
  3. In the left pane, locate the **Portal Desktop** service. Click the arrow.  
The right pane display Portal Desktop settings.
  4. In the right pane, click **Manage Channels and Containers**.

The right pane displays a list of portal desktop channels.

5. **In the right pane, locate MyFrontPageTabPanelContainer. Click it. (Do not click Edit Properties.)**

The right pane displays the MyFrontPageTabPanelContainer channel properties.

6. **In the right pane, locate the Ready for Use list.**
7. **Move the UWCMail and UWCCalendar channels from the Ready to Use list to the Available to End Users on the Content Page Visible on Portal Desktop list.**
  - a. **Select UWCMail.**
  - b. **Click Add.**

UWCMail moves to the Available to End Users on the Content Page list.
  - c. **Select UWCCalendar.**
  - d. **Click Add.**

UWCCalendar moves to the Available to End Users on the Content Page list.
8. **Move the UWCMail and UWCCalendar channels from the Available to End Users on the Content Page list to the Visible on Portal Desktop list.**

- a. **Select UWCMail.**
- b. **Click Add.**

UWCMail moves to the Visible on Portal Desktop list.

- c. **Select UWCCalendar.**
- d. **Click Add.**

UWCCalendar moves to the Visible on Portal Desktop list.

9. **Move the Mail and Calendar channels from the Visible on Portal Desktop list to the Available to End Users on the Content Page list.**

- a. **Select Mail.**
- b. **Click Remove.**

UWCMail moves to the Available to End Users on the Content Page list.

- c. **Select Calendar.**
- d. **Click Remove.**

Calendar moves to the Available to End Users on the Content Page list.

10. **Move the Mail and Calendar channels from the Available to End Users on the Content Page list to the Ready For Use list.**

- a. **Select Mail.**

- b. **Click Remove.**  
Mail moves to the Ready For Use list.
  - c. **Select Calendar.**
  - d. **Click Remove.**  
Calendar moves to the Ready For Use list.
11. **Click Save.**
12. **In the right pane, click Top.**  
The list of container channels is redisplayed.
13. **In the right pane, locate JSPNativeContainer channel. Click it. (Do not click Edit Properties.)**  
The right pane displays the JSPNativeContainer channel properties.
14. **In the right pane, locate the Ready for Use list.**
15. **Move the UWCMail and UWCCalendar channels from the Ready for Use list to the Available to End Users on the Content Page list.**
- a. **Select UWCMail.**
  - b. **Click Add.**  
UWCMail moves to the Available to End Users on the Content Page list.
  - c. **Select UWCCalendar.**
  - d. **Click Add.**  
UWCCalendar moves to the Available to End Users on the Content Page list.
16. **Move the UWCMail and UWCCalendar channels from the Available to End Users on the Content Page list to the Visible on Portal Desktop list.**
- a. **Select UWCMail.**
  - b. **Click Add.**  
UWCMail moves to the Visible on Portal Desktop list.
  - c. **Select UWCCalendar.**
  - d. **Click Add.**  
UWCCalendar moves to the Visible on Portal Desktop list.
17. **Move the Mail and Calendar channels from the Visible on Portal Desktop list to the Available to End Users on the Content Page list.**
- a. **Select Mail.**

- b. **Click Remove.**  
UWCMail moves to the Available to End Users on the Content Page list.
  - c. **Select Calendar.**
  - d. **Click Remove.**  
Calendar moves to the Available to End Users on the Content Page list.
- 18. Move the Mail and Calendar channels from the Available to End Users on the Content Page list to the Ready For Use list.**
- a. **Select Mail.**
  - b. **Click Remove.**  
Mail moves to the Ready For Use list.
  - c. **Select Calendar.**
  - d. **Click Remove.**  
Calendar moves to the Ready For Use list.
- 19. Click Save.**
- 20. In the right pane, click Top.**  
The list of container channels is redisplayed.
- 21. In the right pane, locate JSPRenderingContainer channel. Click it. (Do not click Edit Properties.)**  
The right pane displays the JSPRenderingContainer channel properties.
- 22. In the right pane, locate the Ready for Use list.**
- 23. Move the UWCMail and UWCCalendar channels from the Ready for Use list to the Available to End Users on the Content Page Visible on Portal Desktop list.**
- a. **Select UWCMail.**
  - b. **Click Add.**  
UWCMail moves to the Available to End Users on the Content Page list.
  - c. **Select UWCCalendar.**
  - d. **Click Add.**  
UWCCalendar moves to the Available to End Users on the Content Page list.
- 24. Move the UWCMail and UWCCalendar channels from the Available to End Users on the Content Page list to the Visible on Portal Desktop list.**
- a. **Select UWCMail.**

- b. **Click Add.**  
UWCMail moves to the Visible on Portal Desktop list.
  - c. **Select UWCCalendar.**
  - d. **Click Add.**  
UWCCalendar moves to the Visible on Portal Desktop list.
25. **Move the Mail and Calendar channels from the Visible on Portal Desktop list to the Available to End Users on the Content Page list.**
- a. **Select Mail.**
  - b. **Click Remove.**  
UWCMail moves to the Available to End Users on the Content Page list.
  - c. **Select Calendar.**
  - d. **Click Remove.**  
Calendar moves to the Available to End Users on the Content Page list.
26. **Move the Mail and Calendar channels from the Available to End Users on the Content Page list to the Ready For Use list.**
- a. **Select Mail.**
  - b. **Click Remove.**  
Mail moves to the Ready For Use list.
  - c. **Select Calendar.**
  - d. **Click Remove.**  
Calendar moves to the Ready For Use list.
27. **Click Save.**
28. **Click Logout in the upper right corner of the window.**

## ▼ To Configure Messaging Server for Proxy Authentication

To configure Messaging Server for proxy authentication, you run configuration commands in the command line.

### **Steps** 1. **Change directory to the Messaging Server directory:**

```
cd /opt/SUNWmsgsr/sbin
```



**2. Run the command to configure Messaging Server:**

```
./configutil -o store.admins admin
```

This command permits the admin user ID to manage the Messaging Server message store and access the user mailboxes.

**3. Run the command to switch to the mail server root:**

```
su mailsrv
```

**4. Run the command to configure Messaging Server:**

```
./configutil -o service.http.allowadminproxy -v yes
```

This command permits Messaging Server to authenticate proxy accounts.

**5. Run the command to exit from the mail server root:**

```
exit
```

**6. Run the command to stop Messaging Server.**

```
./stop-msg
```

**7. Run the command to restart Messaging Server.**

```
./start-msg
```

The startup process displays a series of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
starting job-controller server
```

You have configured Messaging Server to accept proxy authentication.

## ▼ To Configure Calendar Server for Proxy Authentication

To configure Calendar Server to accept proxy authentication, you edit the Calendar Server configuration file with a text editor. You also run configuration commands in the command line.

**Steps** 1. **Change directory to the Calendar Server directory:**

```
cd /etc/opt/SUNWics5/config
```

**2. Open the `ics.conf` file in a text editor.**

Find each of the following properties and make the changes described. In some cases this means changing the value and uncommenting the line. In other cases, it simply means uncommenting the line.

- a. Locate the `service.http.allowadminproxy` property. Make sure it is uncommented. Make sure its value is set to `yes`:  
`service.http.allowadminproxy="yes"`
- b. Locate the `service.admin.calmaster.cred` property. Make sure it is uncommented. Make sure its value is set to `password`.  
`service.admin.calmaster.cred="password"`
- c. Locate the `service.admin.calmaster.userid` property. Make sure it is uncommented. Make sure its value is set to `calmaster`:  
`service.admin.calmaster.userid="calmaster"`
- d. Save and close the `ics.conf` file.

3. Change directory to the Calendar Server directory.

```
cd /opt/SUNWics5/cal/sbin
```

4. Run the command to stop Calendar Server.

```
./stop-cal
```

5. Run the command to restart Calendar Server.

```
./start-cal
```

The startup process displays a series of startup messages. The startup process might take a few moments. When startup is complete, the following message is displayed:

```
Calendar services were started.
```

```
You have configured Calendar Server for proxy authentication.
```

---

## Using the Portal Desktop with Proxy Authentication

In this section, you log in to the portal desktop and use proxy authentication to open the Messenger Express and Calendar Express interfaces directly from the portal desktop.

### ▼ To Use the Proxy Authentication Feature

- Steps** 1. In your web browser, open this URL:

```
http://evaluation_host/portal/dt
```

The sample portal desktop is displayed.

2. Use the Member Login fields to log in. Type the following values:

- User Name: **TestUser**
- Password: **password**

Click Login. The portal desktop calendar and mail channels display mail and calendar information for TestUser. You see a display similar to .

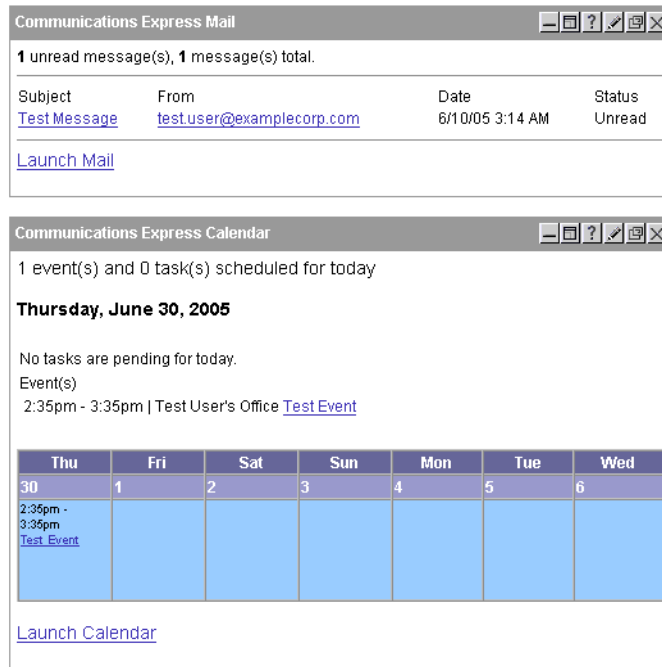


FIGURE 8-3 Portal Desktop Showing Mail and Calendar Channels

3. Notice that the calendar and mail channels now display information.

4. Click Launch Calendar.

The Calendar Express main window is displayed. This verifies that proxy authentication is configured correctly for Calendar Server.

5. Click Launch Mail.

The Messenger Express main window is displayed. This verifies that proxy authentication is configured correctly for Messaging Server.

6. Click Log out.

You have completed the evaluation scenario. You can continue to explore other features of your evaluation deployment.

---

## Uninstalling the Components

After you complete your evaluation, you can use the Java Enterprise System uninstaller to removing the components that you installed. You can find the uninstaller in `/var/sadm/prod/entsys`.

### ▼ To Uninstall the Java Enterprise System Components

**Steps** 1. **Change directory to the uninstaller directory:**

```
cd /var/sadm/prod/entsys
```

2. **Run the command that starts the uninstaller:**

```
./uninstall
```

3. **Answer the uninstaller prompts to specify the components to be uninstalled.**

Complete instructions for using the uninstaller are contained in *Java Enterprise System Installation Guide*, which you can find online at <http://docs.sun.com/doc/817-5760>.

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