Sun Java™ System

Sun Java Enterprise System 2003Q4 Deployment Example Series: Evaluation Scenario

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Preface

Sun Java Enterprise System Deployment Example Series: Evaluation Scenario describes how to install Sun Java™ Enterprise System on one computer, establish a set of core shared network services, and use the services that you set up.

This preface contains the following sections:

- "Who Should Read This Guide"
- "Using the Documentation" on page 14
- "Conventions" on page 15
- "Resources on the Web" on page 16
- "How to Report Problems" on page 17
- "Sun Welcomes Your Comments" on page 17

Before performing any of the tasks described in this guide, you should read *Java Enterprise System Release Notes*. Refer to "Using the Documentation" on page 14 for descriptions and links to the Java Enterprise System documents.

Who Should Read This Guide

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

Using the Documentation

The Java Enterprise System manuals are available as online files in Portable Document Format (PDF) and Hypertext Markup Language (HTML) formats. Both formats are readable by assistive technologies for users with disabilities. The Sun documentation web site can be accessed here:

http://docs.sun.com

The Java Enterprise System documentation can be accessed here:

http://docs.sun.com/prod/entsys.03q4#hic

The following table lists tasks and concepts described in the Java Enterprise System documentation. The left column mentions the type of information you might be seeking, the right column indicates the location of the information.

Table 1 Documentation About the System as a Whole

Document	Contents
Java Enterprise System Release Notes http://docs.sun.com/doc/816-6876	Contains the latest information about the Java Enterprise System, including known problems. In addition, component products have their own release notes.
Java Enterprise System Roadmap http://docs.sun.com/doc/817-4715	Provides descriptions of the documentation related to Java Enterprise System. Includes links to the documentation associated with the component products.
Java Enterprise System Technical Overview http://docs.sun.com/doc/817-5085	Introduces technical concepts and terminology used in Java Enterprise System documentation. Describes the Java Enterprise System, its components, and role in supporting distributed enterprise applications. Also covers life-cycle concepts, including an introduction to system deployment.
Java Enterprise System Installation Guide http://docs.sun.com/doc/816-6874	Guides you through the process of installing your Java Enterprise System. Shows you how to select the component products that you want to install, how to configure the component products that you install, and how to verify that the software you install functions properly. Describes how to perform basic administration tasks, including provisioning users and setting up single sign-on.
Java Enterprise System Glossary http://docs.sun.com/doc/816-6873	Defines terms that are used in Java Enterprise System documentation.

Conventions

The following table describes the typeface conventions used in this guide.

Table 2 Typeface Conventions

Typeface	Meaning	Examples
`AaBbCc123` (Monospace)	API and language elements, HTML tags, web site URLs, command names, file names, directory path names, on-screen computer output, sample code.	Edit your `.login` file. Use `ls -a` to list all files. `% You have mail.`
`AaBbCc123` (Monospace bold)	What you type, as contrasted with on-screen computer output.	`% su` `Password:`
AaBbCc123 (Italic)	Book titles.	Read Chapter 6 in the *User's Guide*.
	New words or terms.	These are called *class* options.
	Words to be emphasized.	You *must* be superuser to do this.
	Command-line variables to be replaced by real names or values.	The file is located in the *is_svr_base*`/bin` directory.

The following table describes placeholder conventions used in this guide.

Table 3 Placeholder Conventions

Item	Meaning	Examples
product_base	Placeholder for the directory where the product is installed.	The *is_svr_base*`/bin` directory might be `/opt/SUNWam/bin`.

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

Table 4 Symbol Conventions

Symbol	Meaning	Notation	Example
`[ ]`	Contain optional command options.	`O[`*n*`]`	`-O4, -O`
`{ }`	Contain a set of choices for a required command option.	`d{y|n}`	`-dy`
`|`	Separates command option choices.		

Table 4 Symbol Conventions *(Continued)*

Symbol	Meaning	Notation	Example
+	Joins simultaneous keystrokes in keyboard shortcuts that are used in a graphical user interface.		Ctrl+A
-	Joins consecutive keystrokes in keyboard shortcuts that are used in a graphical user interface.		Esc-S
>	Indicates menu selection in a graphical user interface.		File > New File > New > Templates

Resources on the Web

The following location contains information about Java Enterprise System and its component products:

`http://wwws.sun.com/software/learnabout/enterprisesystem/index.html`

Third-party URLs are included in this document to provide additional, related information.

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How to Report Problems

If you have problems with Java Enterprise System, contact Sun customer support using one of the following mechanisms:

- Sun Software Support services online at

  `http://www.sun.com/service/sunone/software`

  This site has links to the Knowledge Base, Online Support Center, and ProductTracker, as well as to maintenance programs and support contact numbers.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

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`http://www.sun.com/hwdocs/feedback/`

Please provide the full document title and part number in the appropriate fields. The part number is a seven-digit or nine-digit number that can be found on the title page of the book or at the top of the document. For example, the part number of this *Deployment Example Series: Evaluation Scenario* is 817-5419-10.

Chapter 1

Evaluation Scenario Overview

This chapter covers the goals of this deployment scenario, the architecture used in this deployment scenario, and the procedures you follow in this deployment scenario to install, configure, and use Sun Java™ Enterprise System.

This chapter contains the following sections:

- "About Java Enterprise System"
- "About the Evaluation Deployment Scenario" on page 20
- "Evaluation Scenario Procedure Summary" on page 25
- "Goals of the Evaluation Deployment Example" on page 26

About Java Enterprise System

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

Java Enterprise System is composed of software components, such as Sun™ ONE Directory Server and Sun ONE Identity Server. To meet the computing needs of different enterprises, Java Enterprise System components can be combined in many different ways.

Each enterprise assesses its own needs and plans its own deployment of Java Enterprise System components. The optimal deployment for an enterprise depends on the types of applications that Java Enterprise System is supporting, the number of users, the kind of hardware that is available, and similar considerations.

Java Enterprise System supports custom, distributed, enterprise applications, but it also provides many end-user services without custom programming. This deployment example describes how to configure a set of core shared network services without custom application programming.

For more information on Java Enterprise System technical concepts and terminology see *Java Enterprise System Technical Overview* (http://docs.sun.com/doc/816-6871).

About the Evaluation Deployment Scenario

This deployment example describes how to install Java Enterprise System components on a single computer in order to evaluate the system. In addition to installing Java Enterprise System, this deployment example describes how to configure system components to work together and provide basic enterprise services.

This section describes how the deployment architecture for the evaluation deployment example was developed.

Evaluation Use Cases

The system evaluation described in this deployment example includes the following use cases:

- Installer use case: install the Java Enterprise System components on one machine using default values.
- Component instance configuration use case: use Java Enterprise System administrative interfaces to configure component instances.
- Administrator use case: provision a single end user.
- End user use case: interact with mail, calendar, and portal services to demonstrate successful installation and configuration of system components.
- Administrator use case: configure Identity Server single sign-on (SSO).

- End user use case: interact with mail, calender, and portal services to demonstrate successful configuration of SSO.
- Administrator use case: configure proxy authentication.
- End user use case: use the portal desktop to interact with the mail and calendar services to demonstrate successful configuration of proxy authentication.

These use cases show you how to set up a working Java Enterprise System, with messaging and calendar services, and end users who can access these services.

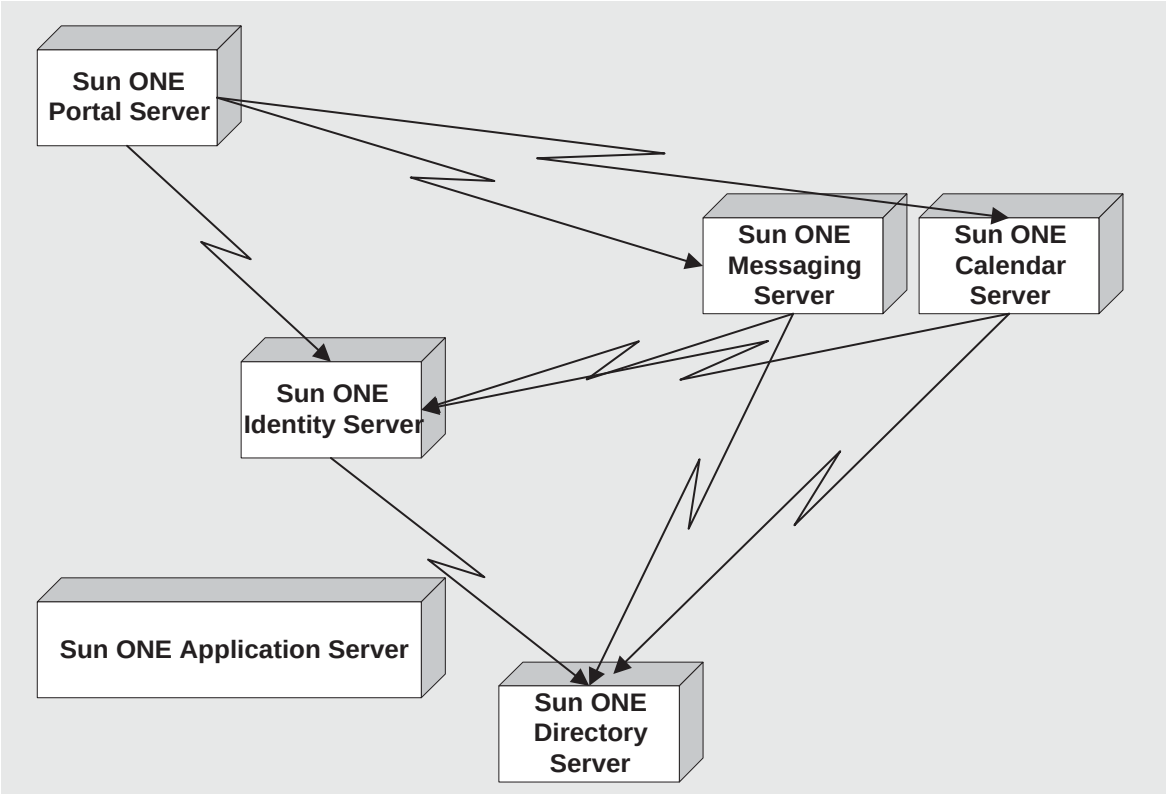
Deployment Scenario

This section describes the deployment scenario developed for the evaluation use cases listed in "Evaluation Use Cases" on page 20. The deployment scenario consists of two pieces, the logical architecture and the system requirements.

Logical Architecture

The logical architecture identifies the Java Enterprise System components that provide the services described in the use cases. The logical architecture developed for the evaluation use cases is illustrated in Figure 1-1.

Figure 1-1 Evaluation Deployment Example Logical Architecture



The arrangement of the components in Figure 1-2 represents the following characteristics of this logical architecture:

- Application Server and Directory Server support the other components. For this reason, these servers are placed below the other servers.
- Portal Server and Identity Server run in Application Server's web container. For this reason, these servers are placed directly above Application Server.
- Portal Server is accessed directly by end users. For this reason, this server is placed at the top.
- Messaging Server and Calendar Server do not depend on Application Server's web container. These servers run in their own web containers. Messaging Server and Calendar Server do depend on services provided by Directory Server. For this reason, these servers are placed higher than Application Server and Directory Server, but not directly above any other server.

System Requirements

The system requirements specify important characteristics of the deployment that are not specified in the logical architecture. The system requirements for the evaluation deployment example are listed below:

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

These requirements are appropriate for evaluating Java Enterprise System. The deployment scenario for a production deployment typically includes specifications for all of these requirements.

Evaluation Deployment Example Deployment Architecture

The deployment architecture is a plan for deploying the logical architecture in such a way as to meet the system requirements. Figure 1-2 shows the deployment architecture for the evaluation deployment example. This deployment architecture combines the logical architecture that is shown in Figure 1-1 and the system requirements that are specified in "System Requirements" on page 23.

Figure 1-2 Evaluation Deployment Example Deployment Architecture

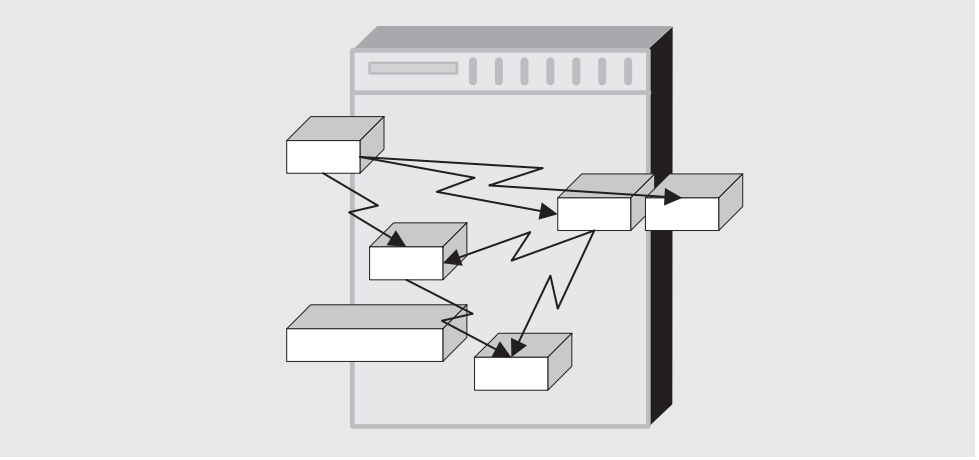


Figure 1-2 shows the same set of components as Figure 1-1. The components are all installed on a single computer. The relationships among the components are unchanged.

The deployment architecture used for the evaluation deployment scenario is not a production architecture. This architecture does not address many of the considerations you face in designing and configuring a production deployment, such as security considerations, scalability, and high availability.

Evaluation Scenario Procedure Summary

This deployment example describes how to set up a Java Enterprise System environment that supports the use cases listed in"Evaluation Use Cases" on page 20. The major steps covered in this document are as follows:

1. Implementing the deployment architecture by installing the components one computer. This step uses the Java Enterprise System installer. The installer configures many of the components. This step is covered in Chapter 2, "Installing the Java Enterprise System Evaluation Deployment."
2. Configuring the Java Enterprise System components that the installer does not configure. The configuration sequence includes steps for starting and verifying the component instances that are configured by the installer. This step is covered in Chapter 3, "Configuring Java Enterprise System."
3. Configuring Identity Server as a general-purpose user provisioning tool. This step is covered in Chapter 4, "Provisioning a Java Enterprise System User."
4. Provisioning a Java Enterprise System end user and giving this user access to Java Enterprise System messaging and calendar services. This step is covered in Chapter 4, "Provisioning a Java Enterprise System User."
5. Logging in as a Java Enterprise System end user and separately accessing the portal desktop, messaging, and calendar services. This step is covered in Chapter 5, "Verifying End User Access to Java Enterprise System Services."
6. Configuring Identity Server single sign-on (SSO). This step is covered in Chapter 6, "Configuring Single Sign-On."
7. Logging in as a Java Enterprise System end user and verifying SSO. This step is covered in Chapter 6, "Configuring Single Sign-On."
8. Configuring proxy authentication, which allows the portal desktop direct access to the messaging and calendar services. This step is covered in Chapter 7, "Configuring Proxy Authentication."
9. Logging in to the portal desktop as a Java Enterprise System end user and verifying that you can use the messaging and calendar services directly from the portal desktop. This step is covered in Chapter 7, "Configuring Proxy Authentication."

Goals of the Evaluation Deployment Example

By following the procedures in this deployment example, you discover how Java Enterprise System supports an organization. You learn how to configure Java Enterprise System components to deliver services to the organization's users. More specifically, you will become familiar with these tasks:

- Installing Java Enterprise System components
- Using Java Enterprise System administration tools
- Configuring Java Enterprise System components to work together as a system
- Specifying the Directory Server Lightweight Directory Access Protocol (LDAP) organization that is supported by a Java Enterprise System deployment
- Starting and stopping Java Enterprise System components in correct sequence
- Provisioning a Java Enterprise System user
- Configuring system-wide single sign-on (SSO)
- Accessing end-user services such as the portal desktop, Messaging Server's web interface (known as Messenger Express), and Calendar Server's web interface (known as Calendar Express).

For more information on installing and configuring Java Enterprise System, see the *Java Enterprise System Installation Guide*.

Chapter 2

Installing the Java Enterprise System Evaluation Deployment

This chapter shows you how to install the Java Enterprise System components on a single machine for evaluation purposes. You run the Java Enterprise System installer in custom mode, and the installer prompts you for information about many of the system components. The installer uses the values you supply to configure the components.

The other components are configured after installation, using component configuration tools.

This chapter contains the following sections:

- "Checking Installation Requirements" on page 28
- "Installing the Components" on page 29
- "Uninstalling the Components" on page 49

For more information about the information you supply in the installer, see Chapter 4, "Gathering Installation and Configuration Information," and Appendix A, "Worksheets for Gathering Information," in the *Java Enterprise System Installation Guide* (`http://docs.sun.com/doc/816-6874`).

NOTE Throughout this chapter you see commands and screen images containing the host name `allinone` in the domain `example.com`. You should be aware that when you run the Java Enterprise System installer, the installer uses the host name of the computer on which you are installing as the default host name, and the network domain of the computer as the default Administration Server domain name.

As you follow the procedure steps in this deployment example, you must substitute the host name and domain name you are using for those that appear in the sample commands and screen images.

Checking Installation Requirements

Before you install Java Enterprise System, make sure the computer on which you are installing is ready. The computer should meet the following requirements:

- This deployment example assumes that the computer on which you are installing is running a fresh installation of the Solaris™ 9 Operating System with the necessary patches. Patches are available at `http://sunsolve.sun.com`. If you install on the Solaris 8 Operating System, some path names will vary slightly from those shown in the example.
- Before you install Java Enterprise System, ensure that you have met the minimum hardware and operating system requirements, as well as patch requirements. For the latest information on the supported platforms, software and hardware requirements, and patches, see the Java Enterprise System Release Notes at `http://docs.sun.com/doc/816-6876`
- Installing all of the Java Enterprise System components on a one computer requires two gigabytes of free disk space and one gigabyte of system memory. If you have less than one gigabyte of memory, you can install the components, but you may have difficulty starting all of the processes without excessive swapping. In particular, you may not be able to perform the Calendar Server configuration described in "Configuring a Calendar Server Instance" on page 77.
- You must run the installer as `root`. Ensure you have `root` access to the computer on which you are installing Java Enterprise System.

Installing the Components

You install Java Enterprise System components by running the Java Enterprise System installer.

➤ **To Start the Installer**

1. Obtain the Java Enterprise System software by one of the following means:
   - Download and unpack the software.
   - Put a CD or DVD in the appropriate drive.
2. Log in as `root` to the machine on which you are installing Java Enterprise System.
3. Change to the correct directory.
   - If you downloaded the software, change to the directory to which you downloaded it. `cd` *installer-directory/platform-directory*
   - If you are using a CD, type `cd /cdrom/`*platform-directory*
   - If you are using a DVD, navigate to the platform directory.

   The platform directory is either `Solaris_sparc` or `Solaris_X86`.
4. Start the Java Enterprise System installer in graphical mode.

   ```
   ./installer
   ```

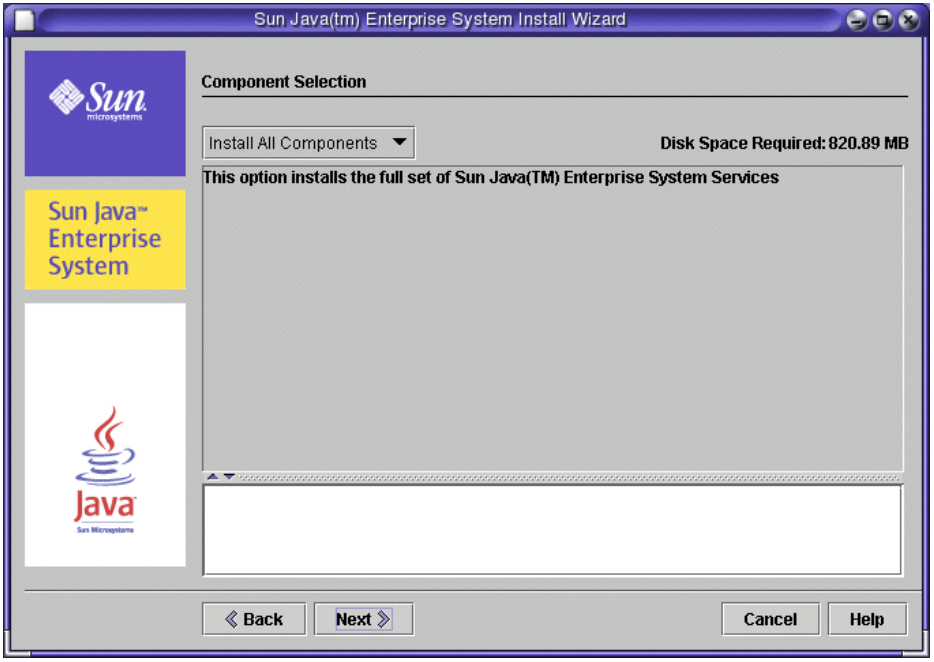
   The Java Enterprise System Welcome page opens.
5. In the Welcome page, click Next to continue.

   The Software License Agreement page opens.
6. In the Software License Agreement page, click Yes, Accept License and continue.

   The Language Support page opens.
7. In the Language Support page, select the languages you want your installation of Java Enterprise System to support. English is always supported. If you need support for additional languages, select them. Click Next.

   The Component Selection page opens. Proceed to "To Select Components for Installation" on page 30.

Figure 2-1 Component Selection Page



➤ **To Select Components for Installation**

1. In the Component Selection page, select the components to install. For this evaluation deployment example, you install all Java Enterprise System components.

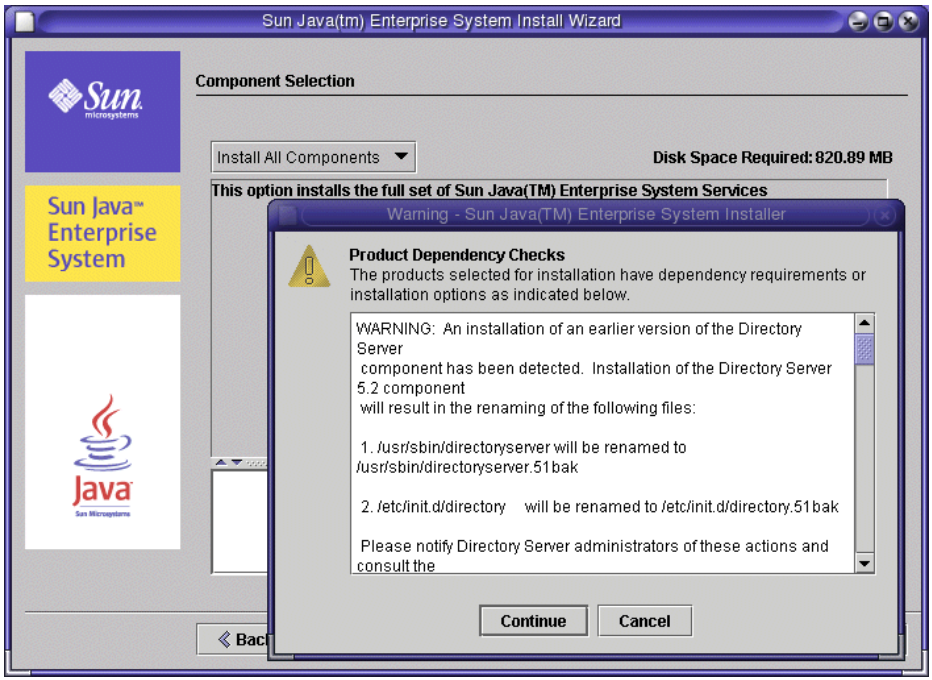
   - If no components are currently installed on the machine, the Install All Components option is available. Choose this option. Click Next and proceed to Step 2 on page 32.
   - If any components are already installed on your machine, you cannot choose Install All Components. Instead, you must select components individually from the list that appears on the Component Selection page. Notice that components and their sub-components are arranged in a tree structure. The components that are already installed on the machine are dimmed.

     To select components, you need to expand the tree nodes to see the sub-components. Ensure that you select all components and sub-components. Click Next and proceed to Step 2 on page 32.

NOTE In the evaluation deployment example, use the list to select the following Java Enterprise System components and their sub-components:

- Sun ONE Messaging Server 6.0
- Sun ONE Calendar Server 6.0
- Sun ONE Instant Messaging 6.1
- Sun ONE Portal Server 6.2
- Sun ONE Portal Server, Secure Remote Access 6.2
- Sun ONE Application Server 7.0
- Sun ONE Web Server
- Sun ONE Identity Server 6.1
- Sun ONE Directory Server 5.2
- Sun ONE Directory Proxy Server 5.2
- Sun ONE Message Queue 3.0.1 Service Pack 2
- Sun ONE Administration Server 5.2
- Sun Cluster 3.1

Figure 2-2 Component Product Dependency Warning Message



2. The installer validates your selections. The following results are possible:

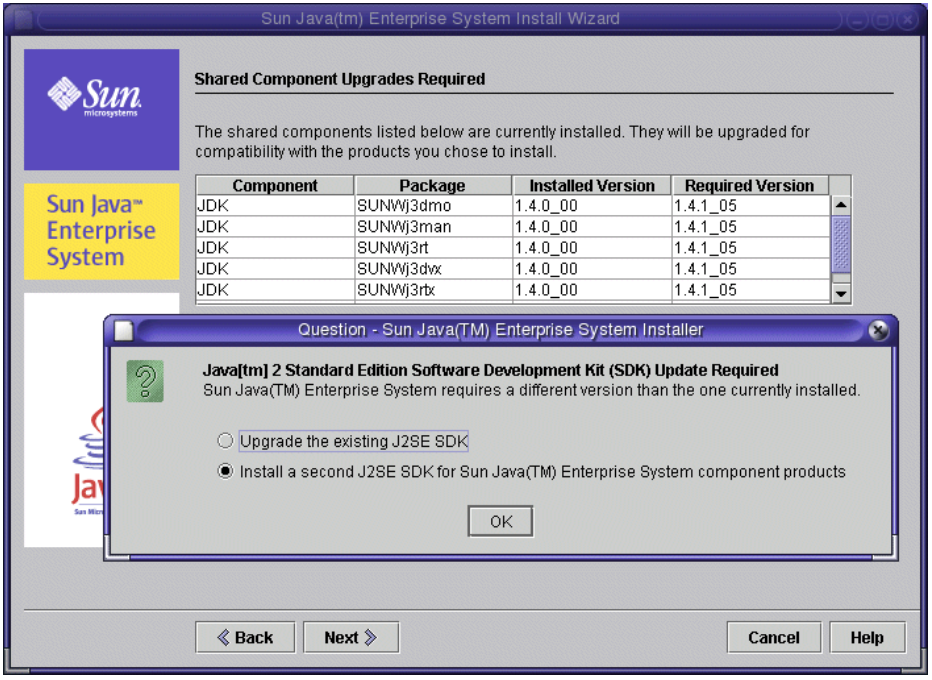
   - If the components that you selected are compatible with each other and with the components that are detected on the system, the installer opens the Shared Components Upgrade Required page. Proceed to Step 3 on page 34.
   - If the components that you selected are not compatible with components that are detected on the system, the installer displays a message that describes the problem. You must resolve the problem described in the message before proceeding. In some cases, you must upgrade or remove the incompatible components that are detected by the installer.

     Figure 2-2 shows a common situation. The installer detects an installed version of Directory Server that was included in the default installation of Solaris OS. In this case, the installer prompts you to back up the existing Directory Server and install a new, compatible, Directory Server. If you receive this type of message, click Continue, and then proceed to Step 3 on page 34.

- If the components you select require other components that you did not select, but for which a remote copy would be acceptable, you can proceed but you receive a warning. For this deployment example you do not want to use remote copies of any components. Ensure all of the necessary components are installed on the same machine, and then proceed to Step 3 on page 34.

The Shared Components Upgrade Required page opens, showing the list of installed shared components.

Figure 2-3 Question Dialog



TIP The following file contains information about the dependencies found during these checks:

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

3. If an incompatible version of J2SE is installed, a Question message opens above the Shared Components Upgrade Required page and prompts you for how to proceed. This situation is illustrated in Figure 2-3. For the evaluation deployment example, accept the default value (Install a second J2SE SDK for Sun Java(TM) Enterprise system components), and then click OK.

4. In the Shared Components Upgrade Required page, review the list of shared components that must be upgraded. The list varies from one Solaris installation to another. Click Next to continue.

   The Installation Directories page opens.

   NOTE Shared components provide local services and technology support for Java Enterprise System components. When you install Java Enterprise System, the installer automatically installs the shared components that are required by the Java Enterprise System components you select.

5. In the Installation Directories page, accept the default directories. Click Next to continue.

   The Checking System Requirements page opens.

   TIP For a complete list of component default installation directories, see Chapter 4, "Gathering Installation and Configuration Information," in the *Java Enterprise System Installation Guide*.

6. The Checking System Requirements page checks your machine against the following system requirements:

   - Disk space
   - Memory
   - Operating system patches

   If you receive a low memory warning you can probably ignore it. The evaluation deployment will function adequately with considerably less memory than a production deployment.

   When the system check is complete, click Next to continue.

   The Configuration Type page opens.

➤ **To Select a Configuration Type**

1. In the Configuration Type page, select Custom Configuration and click Next to continue.

   Custom configuration lets you specify configuration values for most of the Java Enterprise System components. The installer configures the components according to the values you specify on the installer pages.

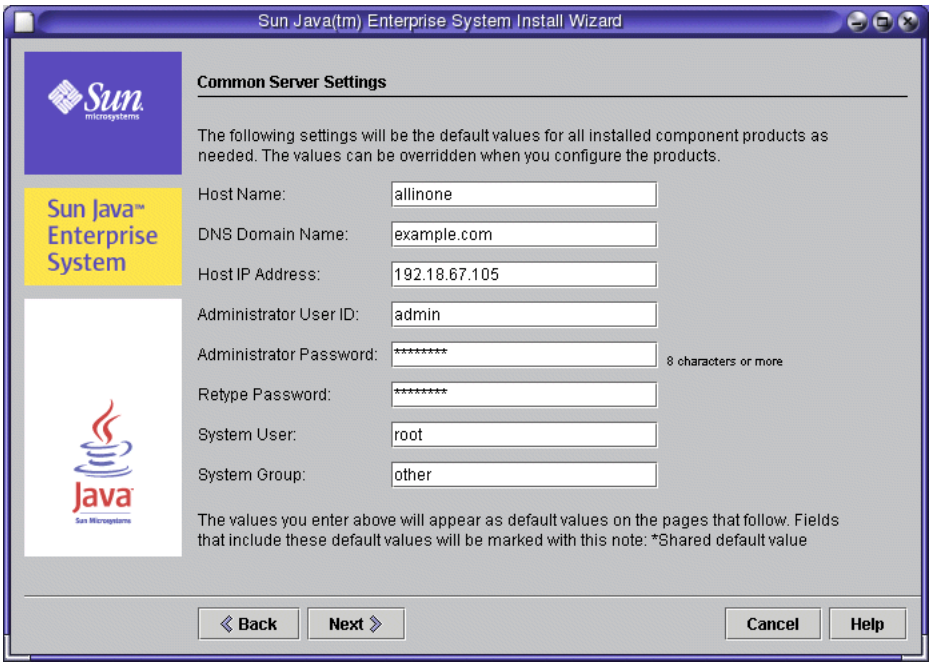
   The Custom Configuration page opens.

2. The Custom Configuration page displays a message explaining that the Java Enterprise System installer does not configure Instant Messaging, Messaging Server, Calendar Server, or Sun Cluster software. Chapter 3 explains how to configure Calendar Server and Messaging Server.

   Click Next. The Common Server Settings page opens.

NOTE	Beginning with the Common Server Settings page, the Java Enterprise System installer opens a sequence of pages that prompt you for information that is used to configure the Java Enterprise System components.

Figure 2-4 Common Server Settings Page



➤ To Supply Common Server Settings

1. In the Common Server Settings page:

   a. Review the default values. The default values are derived from your current session:

      - The Host Name field is filled with the name of the machine you are currently logged in to.
      - the DNS Domain Name field is filled with the domain that the machine belongs to.

      Figure 2-4 shows the default values for a machine named allinone.example.com. The Host Name field is filled with the machine name, allinone, and the DNS Domain Name field is filled with example.com. Your installer should display similar values, derived from the machine on which you are installing.

   b. Type a password in the Administrator Password and Retype Password fields. For this deployment example, the value `password` is recommended.

   c. Click Next. The Web Server: Administration (1 of 2) page opens.

NOTE The Common Server Settings page establishes values that appear as default values on the pages that follow. For example, the common server setting for Administrator User ID appears as the default Administrator User ID in the configuration pages that follow.

This deployment example uses the default values on the Common Server Settings page.

➤ **To Supply Web Server Information**

1. In the Web Server: Administration page, accept the default value and click Next.

   The Web Server: Administration (2 of 2) page opens.

2. In the Web Server: Default Web Server Instance page, accept the default values. Do not select Automatically start Web Server when system restarts. Click Next.

   The Application Server: Administration page opens.

➤ **To Supply Application Server Information**

- In the Application Server: Administration page, accept the default values and click Next.

  The Directory Server: Administration page opens.

➤ **To Supply Directory Server Information**

1. In the Directory Server: Administration (1 of 5) page, accept the default values and click Next.

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

2. In the Directory Server: Server Settings (2 of 5) page, accept the default values and click Next.

   The Directory Server: Configuration Directory Server (3 of 5) page opens.

3. In the Directory Server: Configuration Directory Server (3 of 5) page, accept the default value (Store configuration data on this server) and click Next.

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

4. In the Directory Server: Data Storage Location (4 of 5) page, accept the default value (Store user data and group data on this server) and click Next.

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

5. In the Directory Server: Populate Data (5 of 5) page, accept the default value (the Sample data radio button under the Populate with data checkbox is selected) and click Next.

   The Administration Server: Server Settings page opens.

➤ **To Supply Administration Server Information**

1. In the Administration Server: Server Settings (1 of 2) page, accept the default values and click Next.

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

2. In the The Administration Server: Configuration Directory Settings (2 of 2) page, accept the default values and click Next.

   The Directory Proxy Server: Port Selection page opens.

➤ **To Supply Directory Proxy Server Information**

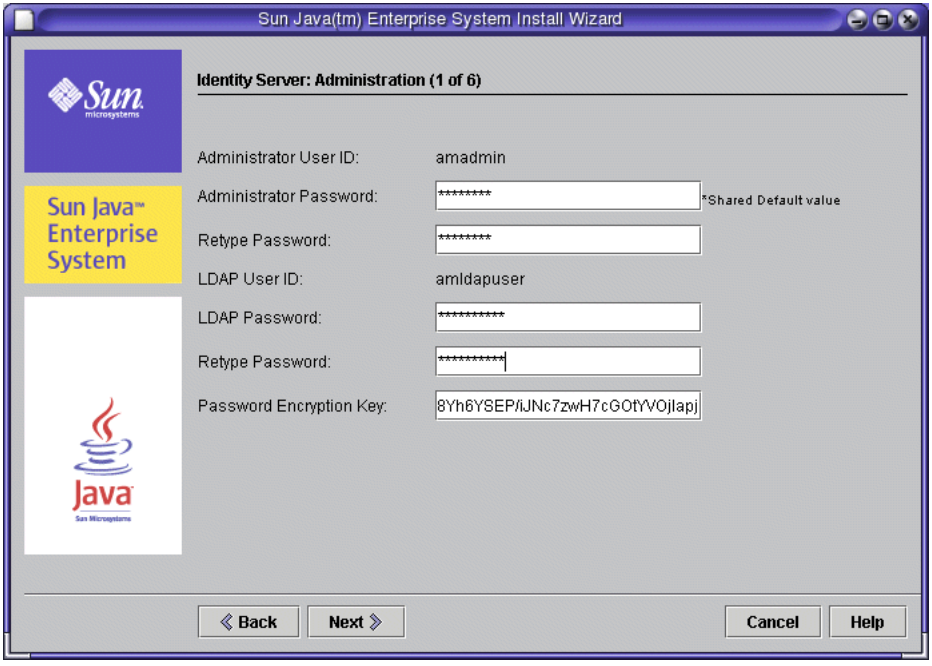
1. In the Directory Proxy Server: Port Selection page, accept the default values and click Next.

   The Directory Proxy Server: Configuration Directory Server Administrator page opens.

2. In the Directory Proxy Server: Configuration Directory Server Administrator page, accept the default values and click Next.

   The Identity Server: Administration (1 of 6) page opens.

Figure 2-5 Identity Server: Administration Page



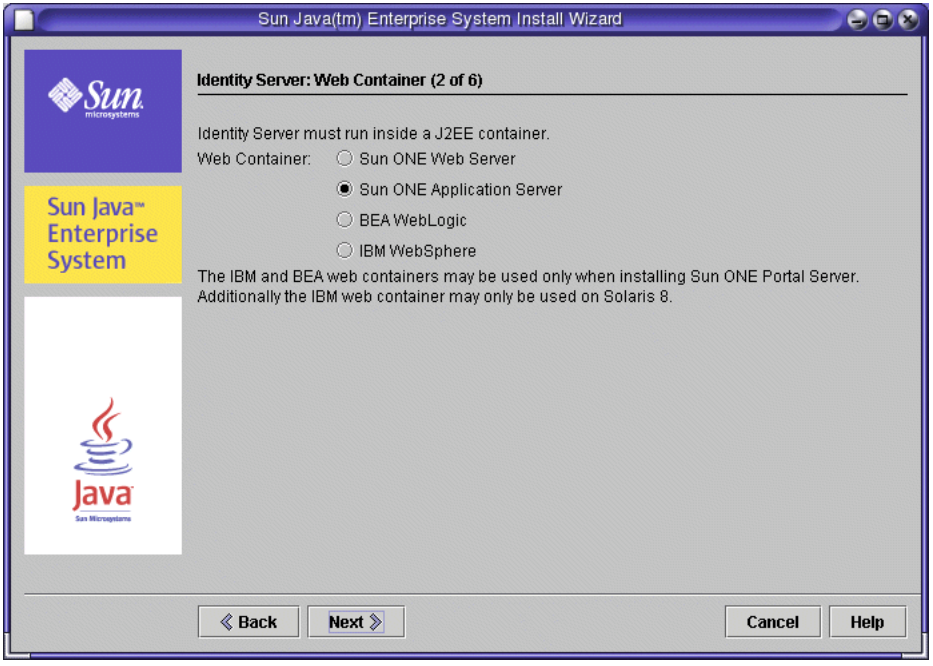
➤ **To Supply Identity Server Information**

1. In the Identity Server: Administration (1 of 6) page, supply an LDAP password. Notice that the Administrator Password field is filled with the default password you supplied on the Common Server Settings page (See "To Supply Common Server Settings" on page 36.) Click Next.

NOTE The LDAP password cannot be the same as the Administrator password. For this deployment example, the value `ldappassword` is recommended.

The Identity Server: Web Container page opens.

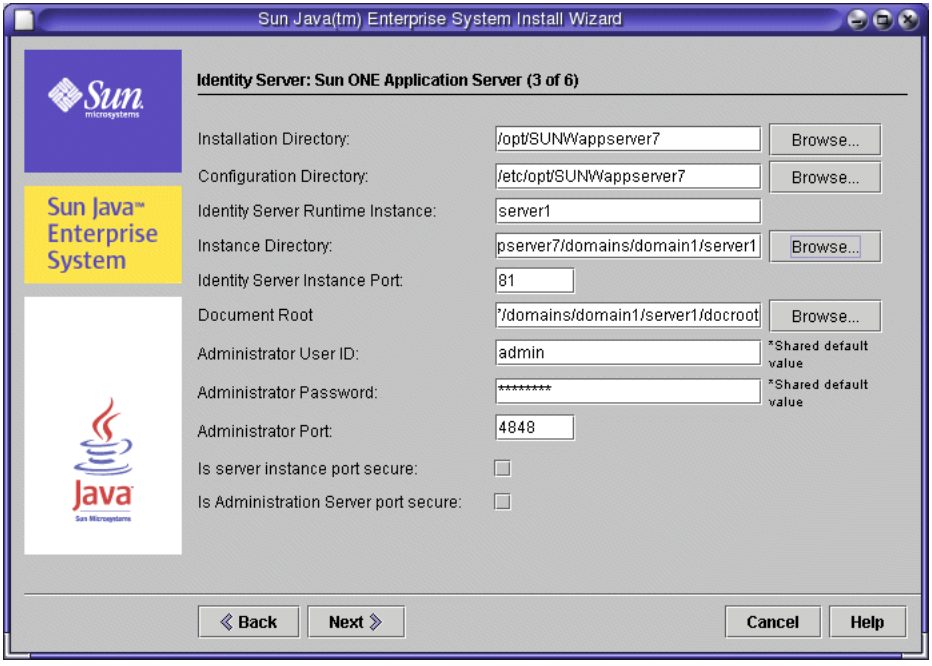
Figure 2-6 The Identity Server: Web Container page



2. In the Identity Server: Web Container (2 of 6) page Select Sun ONE Application Server and click Next.

   The Identity Server: Sun ONE Application Server (3 of 6) page opens.

Figure 2-7 Identity Server: Sun ONE Application Server Page



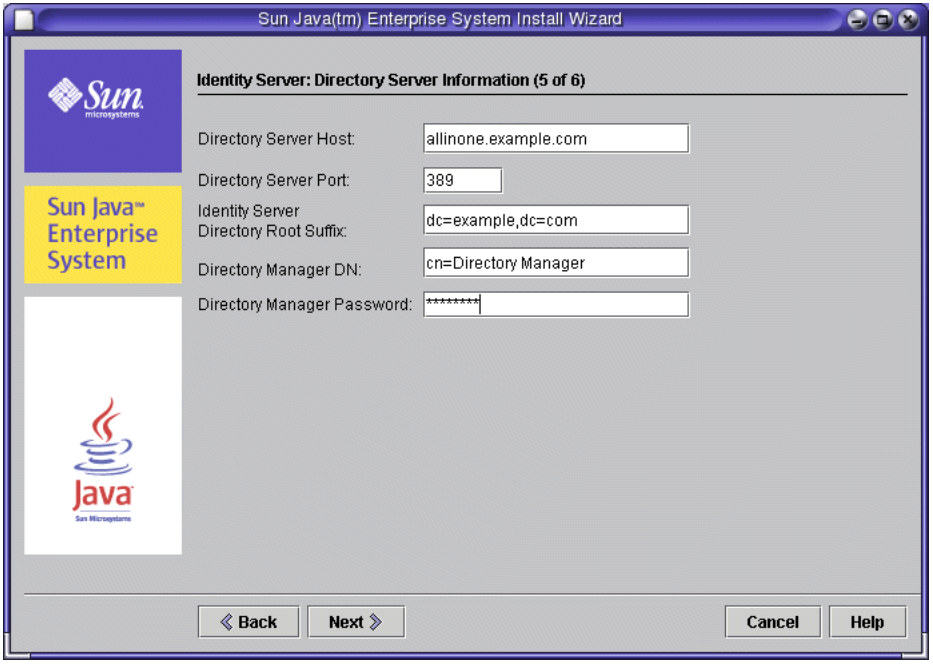
3. In the Identity Server: Sun ONE Application Server (3 of 6) page, accept the default values and click Next.

   The Identity Server: Web Container for running Sun ONE Identity Server Services (4 of 6) page opens.

4. In the Identity Server: Web Container for running Sun ONE Identity Server Services (4 of 6) page, accept the default values and click Next.

   The Identity Server: Directory Server Information (5 of 6) page opens.

Figure 2-8 Identity Server: Directory Server Information Page

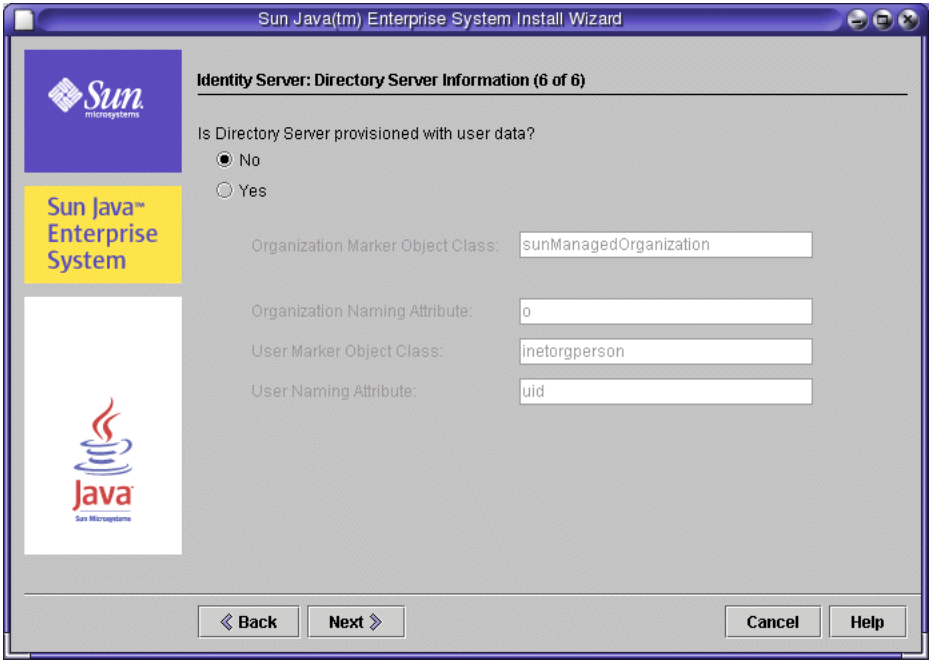


5. In the Identity Server: Directory Server Information (5 of 6) page, type a Directory Manager password. For this deployment example, the value `password` is recommended. Click Next.

   The Identity Server: Directory Server Information (6 of 6) page opens.

NOTE The password you supply must match the Directory Manager password you establish for Directory Server on the Directory Server Administration page. (See "To Supply Directory Server Information" on page 37.)

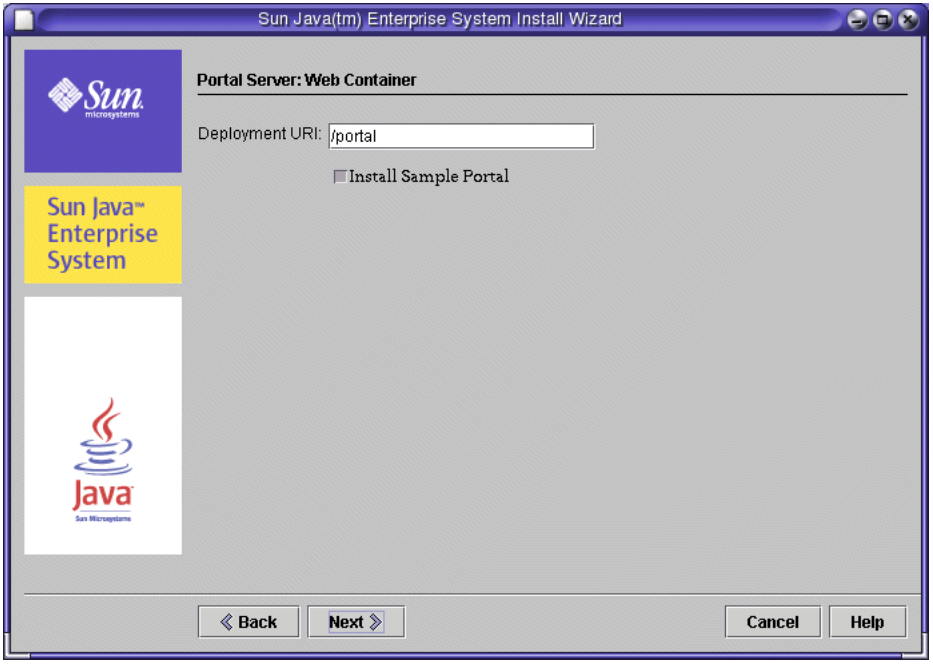
Figure 2-9 Identity Server: Directory Server Information Page



6. In the Identity Server: Directory Server Information (6 of 6) page, accept the default value (No), and click Next.

   The Portal Server: Web Container page opens.

Figure 2-10 Portal Server: Web Container Page



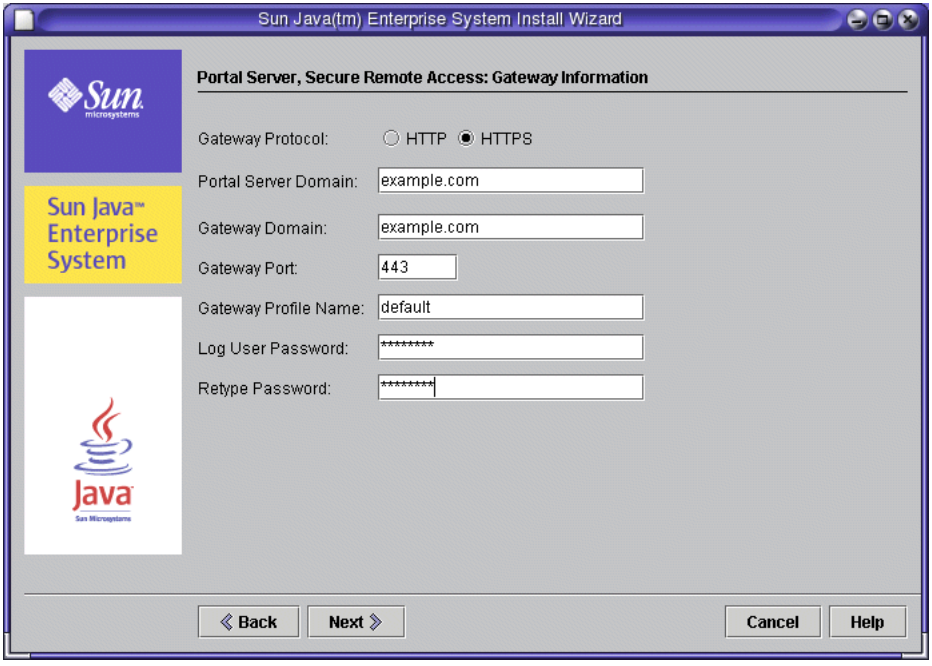
➤ **To Supply Portal Server Information**

- In the Portal Server: Web Container page, accept the default value (`/portal`) for Deployment URI. Accept the default state (selected) for the Install Sample Portal checkbox. Click Next.

TIP	Ensure that you select Install Sample Portal. You use the sample portal to verify the messaging and calendar services.

The Portal Server, Secure Remote Access: Gateway Information page opens.

Figure 2-11 Portal Server, Secure Remote Access: Gateway Information Page



➤ **To Supply Portal Server, Secure Remote Access Information**

1. In the Portal Server, Secure Remote Access: Gateway Information page, supply a log user password. For the evaluation deployment example, `password` is recommended. Click Next.

   The Portal Server, Secure Remote Access: Gateway page opens.

2. In the Portal Server, Secure Remote Access: Gateway page, accept the default values and click Next.

   The Portal Server, Secure Remote Access: Netlet Proxy page opens.

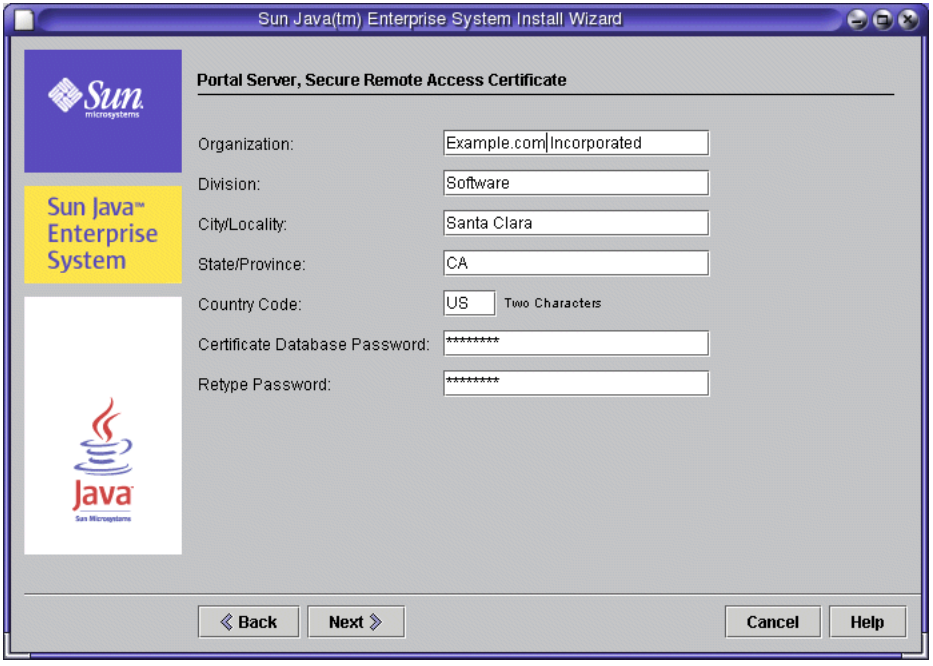
3. In the Portal Server, Secure Remote Access: Netlet Proxy page, accept the defaults and click Next.

   The Portal Server, Secure Remote Access: Rewriter Proxy page opens.

4. In the Portal Server, Secure Remote Access: Rewriter Proxy page, accept the defaults and click Next.

   The Portal Server, Secure Remote Access Certificate page opens.

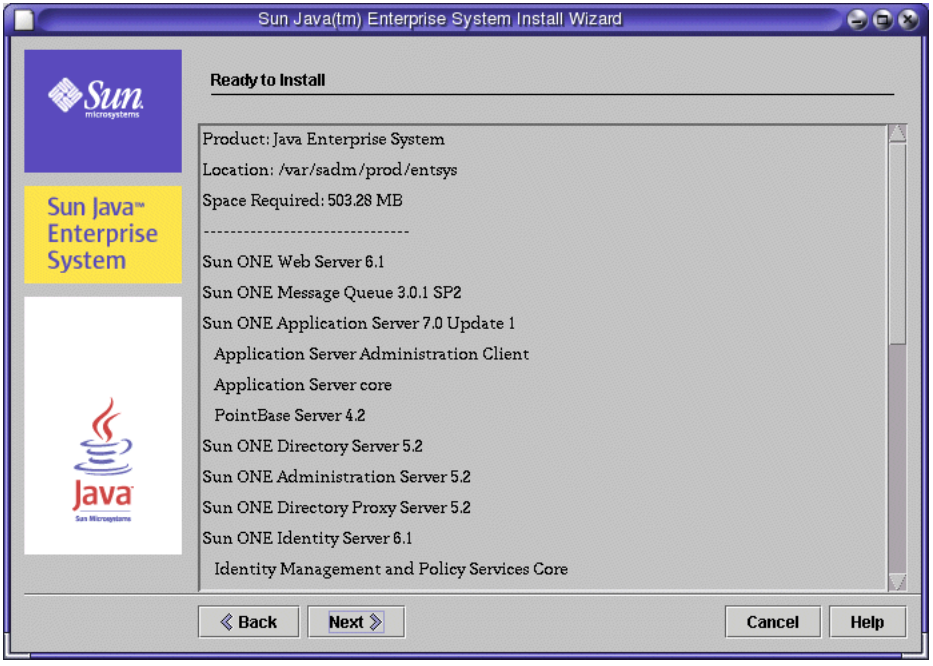
Figure 2-12 Portal Server, Secure Remote Access Certificate Page



5. In the Portal Server, Secure Remote Access Certificate page, type a Certificate Database Password. For the evaluation deployment example, `password` is recommended. Click Next.

   The Ready to Install page opens.

Figure 2-13 Ready to Install Page

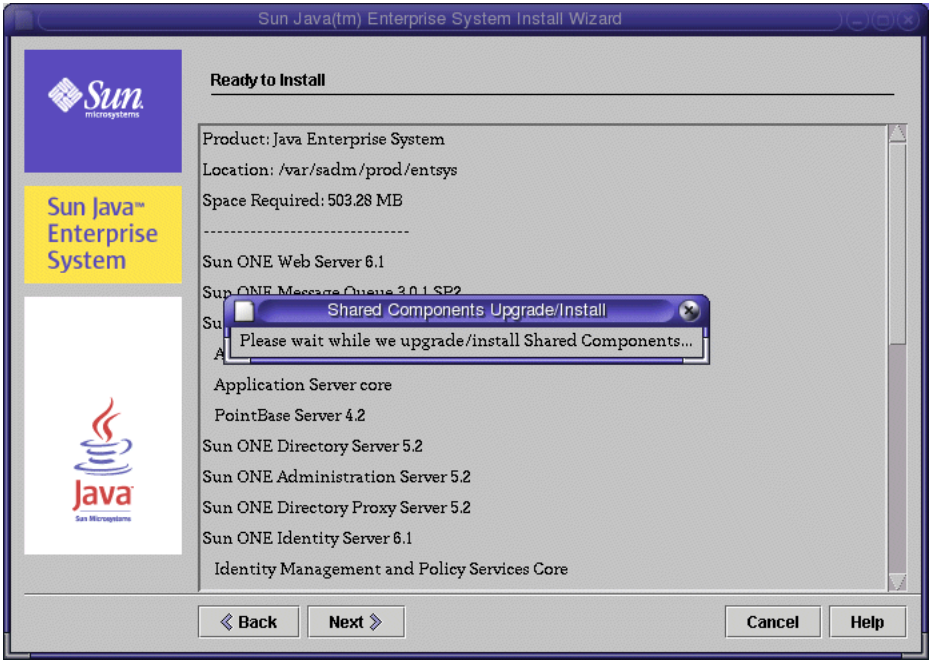


➤ **To Complete the Installation**

1. In the Ready to Install page, review the information. Click Next.

   The shared components are upgraded.

Figure 2-14 Shared Components Upgrade Message

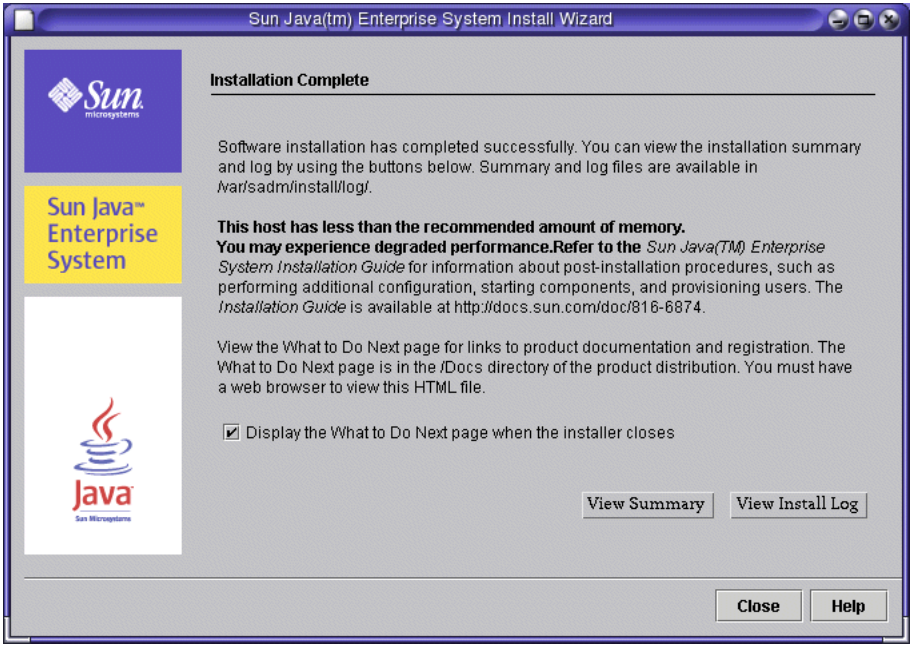


TIP To see what is being installed, review log files in the `/var/sadm/install/logs` directory.

2. When the installer finishes upgrading shared components, it displays the Product Registration page.
3. In the Product Registration page, deselect Open Registration Window, and then click Next.

   The Installing page opens.
4. When the installation is finished, the Installation Complete page opens.

Figure 2-15 Installation Complete Page



5. View the installation summary and log, and then click Close.

   The What to Do Next page opens.

6. Review this page, and then close the web browser.

Uninstalling the Components

Java Enterprise System provides an uninstallation program for removing component products that you installed. The uninstaller checks component dependencies for the system on which it is running and issues warnings when it discovers a dependency.

You can find the uninstaller in `/var/sadm/prod/entsys`.

Full instructions for using the installer are contained in *Java Enterprise System Installation Guide*, which you can find online at the following URL:

`http://docs.sun.com/doc/816-6874`

Chapter 3

Configuring Java Enterprise System

This chapter describes how to configure and start the components that you use in this Java Enterprise System evaluation. You start the components one after the other, in a specific sequence, until the Java Enterprise System is functioning as a whole. You first start Application Server and Directory Server, because these components provide services that are required by other components.

The Java Enterprise System installation program created runnable instances of Directory Server, Application Server, Identity Server, and Portal Server. You start these instances and verify that they are running properly.

The installer does not create runnable instances of Messaging Server and Calendar Server. This chapter describes how to use the configuration wizards for these products to create instances and then start the instances.

This chapter contains the following sections:

- "About the Configuration Process" on page 52
- "Verifying the Directory Server Default Instance" on page 52
- "Verifying the Application Server Default Instance" on page 57
- "Verifying the Identity Server Default Instance" on page 60
- "Verifying the Portal Server Default Instance" on page 62
- "Configuring a Messaging Server Instance" on page 64
- "Configuring a Calendar Server Instance" on page 77

About the Configuration Process

Running the Java Enterprise System installer accomplished the following:

- The installer copied all of the application files to your computer and registered the components with the operating system.
- The installer created default instances of Directory Server, Application Server, Identity Server, and Portal Server.

This chapter describes how to start and use the default instances that the installer created. It also describes how to create and start instances of Messaging Server and Calendar Server.

NOTE In a production system, you typically install the components only once. You may create additional instances as a system administration task when your enterprise's scalability needs increase.

Verifying the Directory Server Default Instance

The services provided by Directory Server and Application Server support many of the other Java Enterprise System components. The evaluation begins by verifying that you can start and administer the default Directory Server and Application Server instances.

In this section you start the Directory Server default instance and then use Administration Server to verify that the default instance is configured correctly.

You learn the following:

- How to start and stop Directory Server
- How to use the Administration Server to administer Directory Server

Verifying the Directory Server Installation

Before starting the Directory Server default instance, verify the Directory Server installation.

➤ **To Review the Installation Log File and Verify the Installation**

1. Navigate to the log file directory:

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

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

   ```
   ls
   ```

   You see a list of log files for Java Enterprise System components.

3. Open the install log for Directory Server. The file name includes a date stamp. It resembles `Directory_Server_install.Bmmddxxxx`.

   In the log file, you should see messages indicating that Sun ONE Directory Server, Sun ONE Directory Console Support, and Sun ONE Basic Libraries were installed, and that the overall installation completed successfully.

Starting Administration Server

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

➤ **To Start Administration Server**

1. Navigate to the server root directory:

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

2. Run the `start-admin` command:

   ```
   ./start-admin
   ```

   Administration Server starts and displays a series of start-up messages that end with:

   ```
   startup:server started successfully
   ```

Starting the Directory Server Default Instance

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

➤ **To Start the Directory Server Default Instance**

1. Navigate to the directory for the Directory Server instance you created with the installer. The instance directory name includes the name of the host computer. The following example uses the directory name for the Directory Server installed on host allinone:

   ```
   cd /var/opt/mps/serverroot/slapd-allinone
   ```

   TIP Remember to substitute the host name that you are using.

2. Run the `start-slapd` command:

   ```
   ./start-slapd
   ```

3. Directory Server starts and displays the following message:

   ```
   node not a cluster member
   ```

   The message indicates that the computer on which you started Directory Server is not part of a Sun Cluster. The evaluation example does not use Sun Cluster, so this message is expected.

Using Sun ONE Server Console to Verify the Directory Server Instance

After starting Directory Server, start the Sun ONE Server Console. Server Console is the interface for Administration Server. You use it to administer Directory Server and other servers.

In this section you use the console to verify the default Directory Server instance and its contents.

➤ To Start and Use the Sun ONE Server Console

1. Navigate to the `serverroot` directory:

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

2. Run the `startconsole` command:

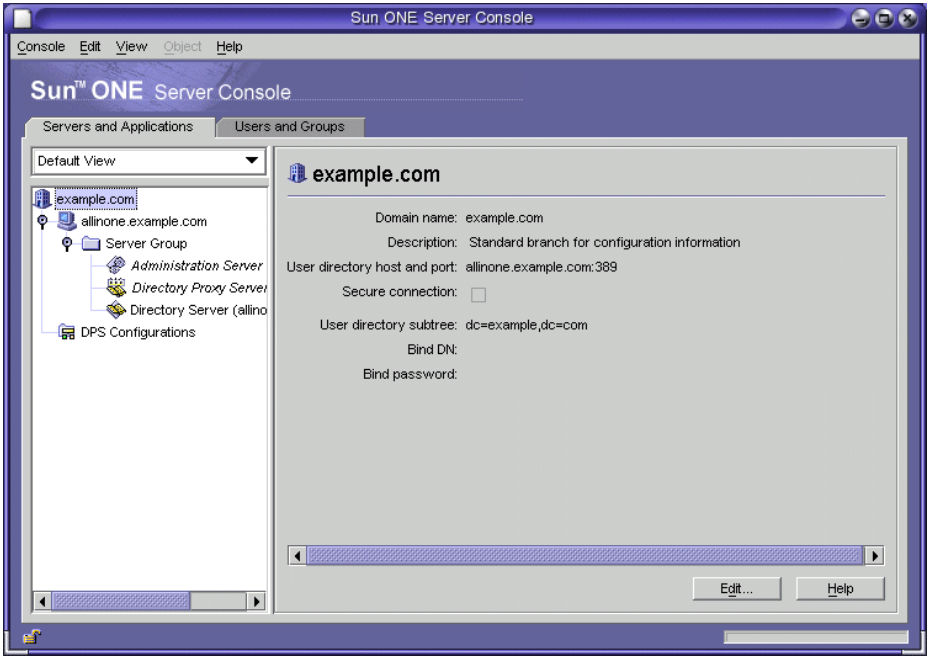
   ```
   ./startconsole
   ```

   The Sun ONE Server Console Login dialog opens.

3. Type your administrator user ID and password and click OK.

   The Sun One Server Console opens, displaying information about the servers and applications in your Administration Server domain. Figure 3-1 shows the information displayed for the example.com domain. You should see similar information for your domain.

Figure 3-1 Sun ONE Server Console's Servers and Applications Tab



4. Work with the nodes on the Servers and Applications tab.

a. The top-level node represents the Administration Server domain. In Figure 3-1 this is the node labeled example.com. If necessary, expand the tree by double-clicking the top-level node.

b. On the next level there are nodes representing the machines in the domain. In Figure 3-1, the example.com domain includes one machine, named allinone.example.com. If necessary, expand the tree by double-clicking the node that represents the machine on which you installed Java Enterprise System.

c. On the next level is a node labeled Server Group. This node represents the Java Enterprise System servers running on the machine. In Figure 3-1, the Server Group node contains the Java Enterprise System servers that are running on allinone.example.com.

d. On the next level are nodes representing the individual Java Enterprise System server instances currently running on the selected machine. In Figure 3-1, there are nodes for Sun ONE Administration Server, Sun ONE Directory Proxy Server, and Sun ONE Directory Server (allinone). You should see a similar display for your Administration Server domain.

e. Double-click the Directory Server (allinone) icon in Server Group.

The Sun ONE Directory Server window opens.

5. In the Sun ONE Directory Server window:

a. Click the Directory tab.

The display refreshes and shows the contents of the directory server.

b. Expand the dc=example,dc=com folder node.

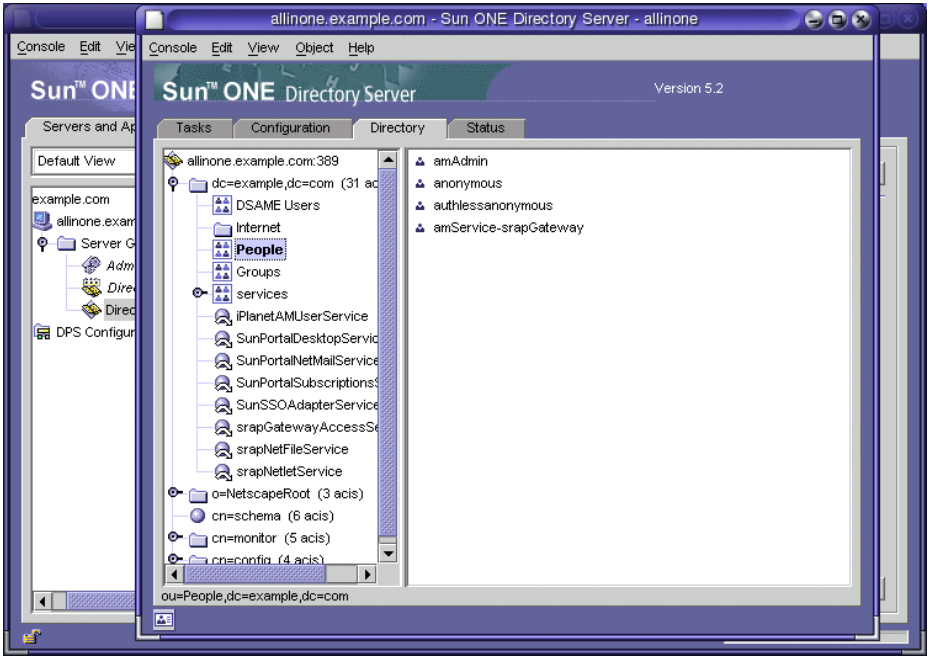
c. Click the People container.

The window refreshes, and the contents of the People container are displayed in the right pane. Figure 3-2 shows the display for the Sun ONE Directory Server (allinone) instance. You should see a similar display for the host and domain names you are using.

Verify that the People container contains entries for `amAdmin`, `anonymous`, `authlessanonymous`, and `amService-srapGateway`.

TIP Remember to substitute the host and domain that you are using.

Figure 3-2 Sun ONE Server Console's Sun ONE Directory Server Window



These entries confirm that the Java Enterprise System installer populated the Sun ONE Directory Server with the sample data entries. (You requested the sample data entries on the installer's Directory Server: Populate Data page. To review this, see "To Supply Directory Server Information" on page 37.)

6. Exit the console.

Verifying the Application Server Default Instance

In this section you start the Application Server default instance and then use Application Server's administrative console to verify that the default instance is configured correctly.

You learn the following:

- How to use the Application Server's Administration Server and Administration Console
- How to start and stop Application Server

Starting the Application Server Administration Server

➤ **To Start the Application Server Administration Server Process**

1. Navigate to the directory for the Application Server Administration Server. This directory name includes the default application server domain, `domain1`. (Do not confuse this domain name with the Administration Server domain name.) The following example shows the directory name:

   ```
   cd /var/opt/SUNWappserver7/domains/domain1/admin-server/bin
   ```

2. Run the `startserv` command:

   ```
   ./startserv
   ```

   The Application Server administration console starts up, displaying a sequence of startup messages that ends with:

   ```
   startup: server started successfully
   ```

Starting the Default Application Server Instance

This section shows you how to open the Application Server administration console and start the Application Server instance. To open the Application Server administration console:

1. Using a web browser, open this URL:

   ```
   http://allinone.example.com:4848
   ```

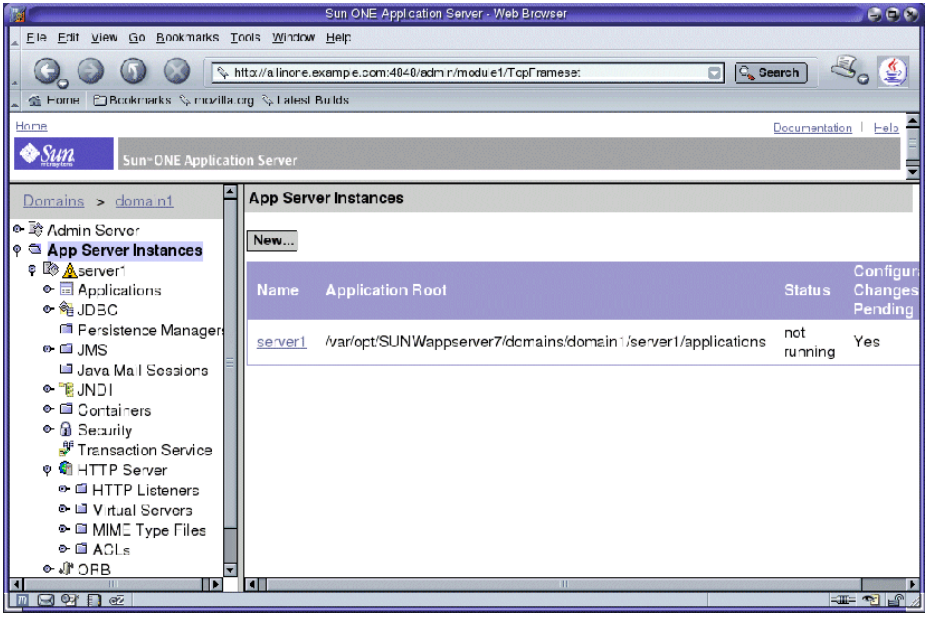
   This opens the Prompt dialog.

   TIP Remember to substitute the host and domain that you are using.

2. In the Prompt dialog, type your Application Server administrator user ID and password. Click OK.

   The main administration console window opens. It displays information about the server, including the available Application Server domains and instances. Figure 3-3 shows the console window for the example.com domain. It shows a Application Server domain named domain1 that contains an instance named server1. Domain1 and server1 were created by the Java Enterprise System installer.

Figure 3-3 Sun ONE Application Server Console Window



3. In the console window, start the server1 instance.

   a. In the App Server Instances pane, click server1.

      The console displays a message: Apply Changes Required

      This tells you that configuration information that you specified with the Java Enterprise System installer has not yet been applied to the server1 instance.

   b. Click the Apply Changes button.

      The console displays a message: Changes applied to instance.

   c. Click Restart.

      The server1 instance is started and the window displays a message: Instance Started.

The default Application Server instance is now running.

Using Application Server Online Documentation

This section shows you where to find the Application Server online documentation.

1. In your web browser, type the URL `http://allinone.example.com:81/`.

   This opens the *Application Server Getting Started* documentation page.

   TIP Remember to substitute the host and domain that you are using.

2. Familiarize yourself with Application Server online documentation by clicking the links on this page.

Verifying the Identity Server Default Instance

The Java Enterprise System installer configured a default instance of Identity Server that runs in the web container provided by Application Server. When you start the Application Server default instance, you also start the Identity Server default instance. (You specified this behavior in the installer's Identity Server: Sun ONE Application Server page. To review, see Figure 2-7.)

In this section you use the Identity Server administration tool to verify that Identity Server is running.

You learn the following:

- How to use the Identity Server Administration Console
- How to view the Identity Server organizations, domains, user, groups, and so on that you created with the Java Enterprise System installer.

➤ To Log In to Identity Server Administration Console and Verify Identity Server

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

   `http://allinone.example.com:81/amconsole`

   Notice that you specified the URI amconsole on the installer's Identity Server: Web Container for Running the Sun ONE Identity Services page.)

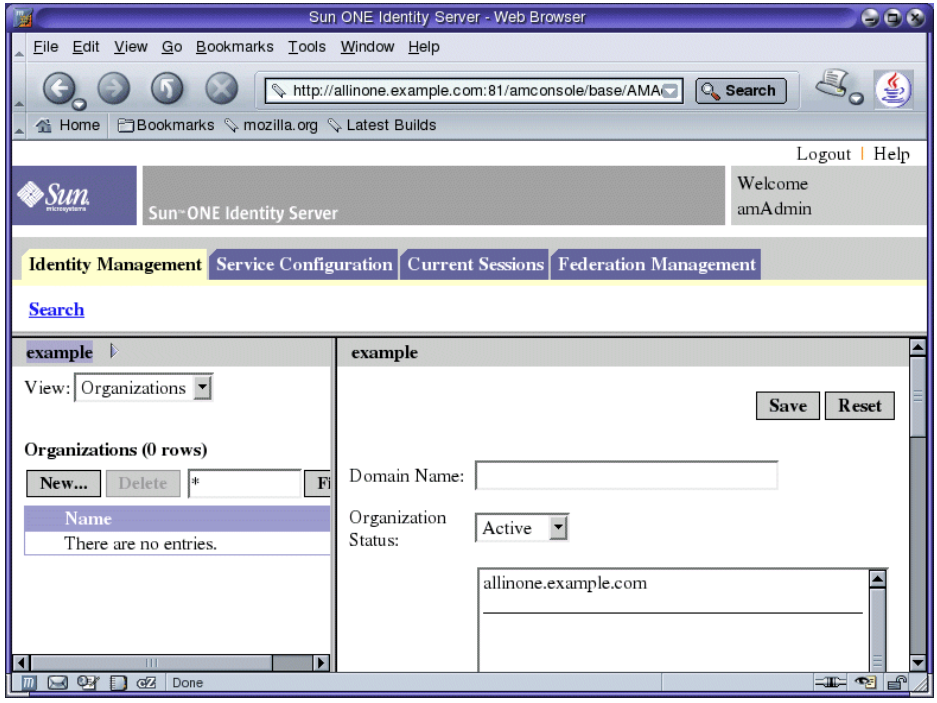
   The Login dialog opens.

   TIP Remember to substitute the host and domain that you are using.

2. In the login dialog, type the Administration User ID (the default value is `amadmin`) and password. (You defined this ID and password on the installer's Identity Server: Sun ONE Application Server page. To review, see Figure 2-7.) Click OK.

   The Sun ONE Identity Server administration console opens in the browser. Figure 3-4 shows the administration console displaying information about the example organization. Notice that the organization name is displayed and highlighted in the left panel, just below the word "Search."

Figure 3-4 Sun ONE Identity Server Administration Console



3. Review the information displayed on the console.

   a. Notice that the Identity Management tab is selected by default.

   b. Both panes display the organization name in their title bars. In Figure 3-4, both panes display the name example.

   This confirms that Identity Server is running and configured for the example organization.

4. Log out of the Identity Server console by clicking Logout in the upper right corner of the page.

   The Logout page opens.

Verifying the Portal Server Default Instance

When you installed Java Enterprise System, you chose to have the installer create a default instance of Portal Server. (You made this choice in the installer's Portal Server: Web Container page. To review this, see Figure 2-10.)

The default Portal Server instance runs in the web container provided by Application Server. When you start the Application Server default instance, you also start the Portal Server default instance.

In this section you open the sample portal desktop to verify that Portal Server is running.

➤ **To View the Sample Portal and Verify the Default Portal Server Instance**

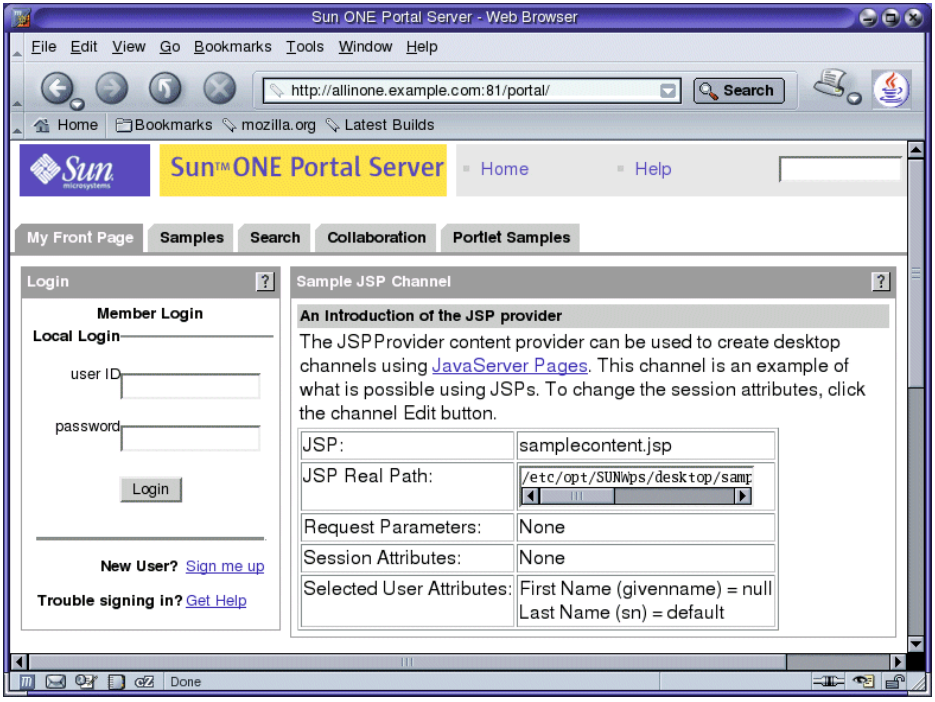
1. In your web browser, open the following URL:

   `http://allinone.example.com:81/portal/`

   The Sun ONE Portal Server sample Desktop opens. Figure 3-5 shows the sample desktop.

TIP	Remember to substitute the host and domain that you are using.

Figure 3-5 Sun ONE Portal Server Sample Portal Desktop



2. Explore the sample portal Desktop by clicking links and tabs.

   The sample portal desktop consists of sample Portal Server desktop containers, such as the Sample JSP Channel. Each desktop container holds and displays content provided by a channel. For more information on the sample portal used in the evaluation deployment example, see the *Sun ONE Portal Server 6.2 Desktop Customization Guide*.

Proceed to "Configuring a Messaging Server Instance."

NOTE If you are configuring a multiple-machine deployment of Java Enterprise System you must create an Administration Server instance at this stage of the configuration process, before you create Messaging Server and Calendar Server instances.This procedure is described in the deployment examples that cover multiple-machine deployments.

For single-machine deployments, like this example, you do not need to create the Administration Server instance. The procedure is omitted from this deployment example.

Configuring a Messaging Server Instance

After you start Directory Server and Application Server and verify Identity Server and Portal Server, you create instances of Messaging Server and Calendar Server and start these components.

This section describes how to create and start a Messaging Server instance. You learn the following:

- How to set up Directory Server to work with Messaging Server and Calendar Server
- How to use the Server Console to verify the changes to Directory Server
- How to use the Messaging Server Configuration Wizard to create a Messaging Server instance.
- How to start and stop the Messaging Server instance.

TIP See Chapter 8, "Postinstallation and Configuration Startup," in the *Java Enterprise System Installation Guide*, for more information on configuring components.

Running the Directory Server Preparation Tool

Before configuring Messaging Server and Calendar Server instances you use the Sun ONE Directory Server Preparation Tool to apply one of the Sun ONE LDAP schemas and other configuration to your Directory Server instance. This configuration step prepares Directory Server to interoperate with Messaging Server and Calendar Server.

This procedure provides instructions on how to run the Directory Server Preparation Tool (a Perl script named `comm_dssetup.pl`) and configure your LDAP Directory Server to work with your Messaging Server, Calendar Server, and the User Management Utility (`commadmin`).

➤ **To Run the Directory Server Preparation Tool**

1. Navigate to the preparation tool directory:

   ```
   cd /opt/SUNWmsgsr/lib
   ```

2. Run the command that starts the preparation tool:

   ```
   perl comm_dssetup.pl
   ```

3. The preparation tool displays a series of messages and then prompts you, Do you want to continue?

   Type Y and press Enter to continue.

   NOTE When you respond to the prompts, be sure to supply the values that you supplied when you ran the Java Enterprise System installer. You want the preparation tool to operate on the Sun ONE Directory Server instance that you created with the installer.

   For more information on these values, see Table 3-1.

4. The preparation tool prompts you, Enter the full path to the directory where the Sun ONE Directory server was installed.

   Accept the default value (`/var/opt/mps/serverroot`) and press Enter to continue.

5. The preparation tool displays a numbered list of directory server instances and prompts you, Which instance do you want? [1]

   You must choose the instance you created with the Java Enterprise System installer. The name of this instance ends with the name of the machine on which you installed Java Enterprise System. For the evaluation deployment example there is normally only one instance on the machine.

   Confirm that the default value for this prompt (1) specifies the correct instance, and press Enter to accept the default and continue. If there is more than one instance, type in the number of correct instance you want and press Enter to continue.

6. The preparation tool prompts you, Please enter the directory manager DN [cn=Directory Manager]:

   Verify that the default value is cn=Directory Manager and press Enter to continue.

7. The preparation tool prompts you for the Directory Manager password. Type "password" and press Enter to continue.

   NOTE You must use the Directory Manager password you set up on the Java Enterprise System installer's Directory Server: Administration page. For more information, see "To Supply Administration Server Information" on page 38.

8. The preparation tool prompts you, Will this directory server be used for users/groups? [Yes]

   Press Enter to accept the default value of Yes and continue.

9. The preparation tool prompts you, Please enter the Users/Groups base suffix [o=usergroup].

   You must type in the values that identify your domain. For example, the domain name used in this document is example.com and you type `dc=example,dc=com`.

   NOTE If your domain name includes a subdomain, you must specify each element of the name separately. For example, if your domain name is my.example.com, you must type `dc=my,dc=example,dc=com`.

10. The preparation tool displays a list of Sun ONE LDAP schemas and prompts you, Please enter the Schema Type (1, 1.5, 2).

    Type 2, and press Enter to continue.

11. The preparation tool prompts you, Do you want to update the schema files? [Yes]

    Press Enter to accept the default value (Yes) and continue.

12. The preparation tool prompts you, Do you want to configure new indexes? [Yes]

    Press Enter to accept the default value (Yes) and continue.

13. The preparation tool displays a summary of the values that you entered and prompts you, Do you want to continue? [Y]

    Review the values you entered. Press Enter to accept the default value (Y) and continue.

    The preparation tool displays a series of informational messages, beginning with "generating files."

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

    Press Enter to accept the default value (Y) and continue.

15. The preparation tool executes the generated scripts to configure the Sun ONE Directory Server instance.

    The scripts display a series of informational messages that ends with "Successful Completion."

Table 3-1 Directory Server Preparation Tool Input Values

Item	Description
Directory server root	Specifies the location of the installation root of the Directory Server on the Directory Server machine. In this deployment, the server root is `/var/opt/mps/serverroot`.
Directory server instance	If multiple instances of Directory Server reside on the machine, choose the one to be configured with Messaging Server. In this deployment, there is only one instance.

Table 3-1 Directory Server Preparation Tool Input Values

Item	Description
Directory Manager (DN)	The Directory Manager DN (`cn=Directory Manager`) is the administrator who is responsible for the user and group data in the Organization Tree. Be sure that the Directory Manager DN you specify in this script is the same DN that you set up in your Directory Server installation as well as your Messaging Server installation. This deployment uses `cn=Directory Manager`.
Will this directory server be used for users/groups?	For this deployment, answer `Yes`. You then answer questions on selecting a DC Tree base suffix and a User and Group base suffix for your Organization Tree.
Users/Groups base suffix	The User and Group base suffix is the top entry in the Organization Tree which holds the namespace for user and group entries. Be sure that the User and Group base suffix you select is the same as what you specified during your Directory Server installation and in your Messaging Server installation. If you installed Identity Server, be sure the suffix specified in Identity Server installation is the same as what you specify for this question. If you do not use the same suffix, Messaging Server does not recognize your Identity Server installation. In this deployment, use `dc=example,dc=com`.
Schema type	Because this deployment is using Sun ONE LDAP v.2, choose option 2.
Update schema files?	For this deployment, answer `Yes`. New elements are added to your schema.
Configure new indexes?	For this deployment, answer `Yes`. New indexes are used to create caches to improve efficiency of directory searches.

Verifying Directory Server Configuration

This procedure describes how to use the Sun ONE Server Console to verify the configuration performed by the Directory Server Preparation Tool. In "Running the Directory Server Preparation Tool" on page 65, you ran the Directory Server Preparation Tool and configured Directory Server for use as a shared user directory for all of the Java Enterprise System components.

➤ **To Verify that Directory Server is Configured as a Shared User Directory**

1. Navigate to the `serverroot` directory:

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

2. Run the `startconsole` command:

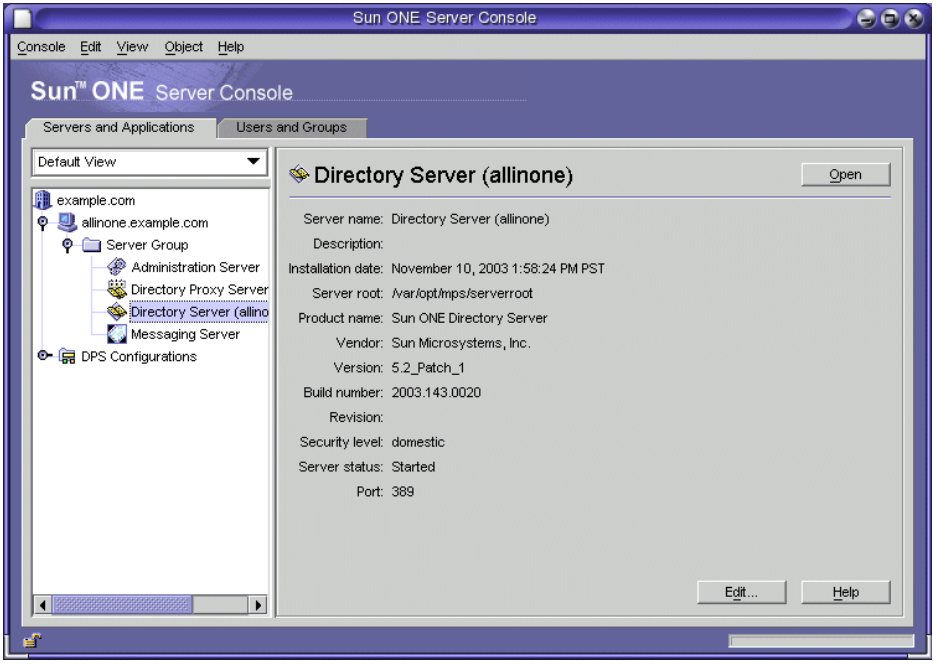
   ```
   ./startconsole
   ```

   The Sun ONE Server Console Login dialog opens.

3. In the Sun ONE Server Console Login dialog, type your administrator ID and password, and then click OK.

   The Sun ONE Server Console opens.

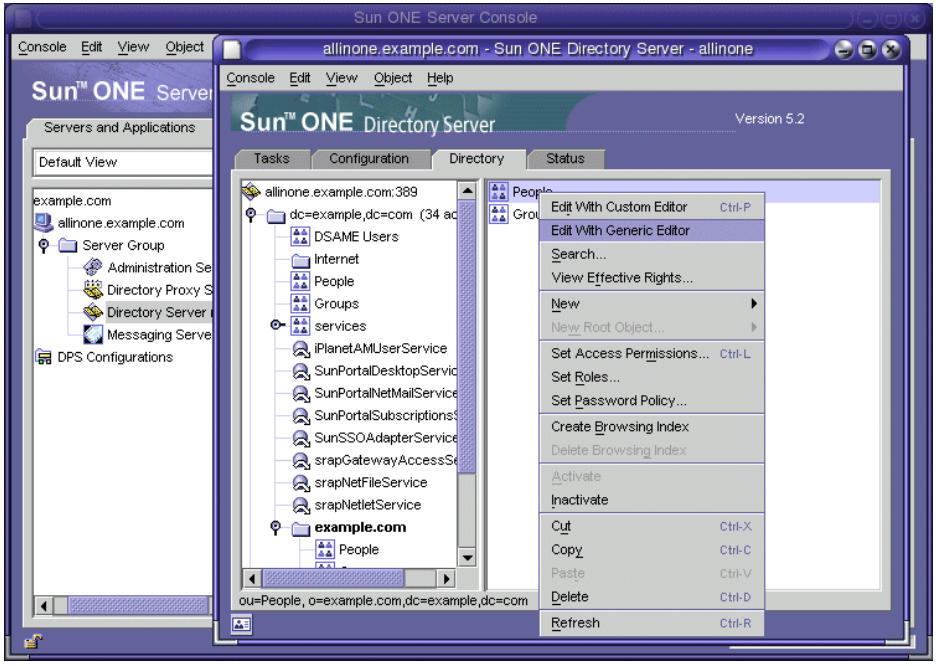
Figure 3-6 Sun ONE Server Console



4. Expand the nodes on the Servers and Applications tab until the Directory Server node is visible. Figure 3-6 shows the display for the example.com domain. The nodes have been expanded to display the Directory Server (allinone) node. You should see a similar display for the Administration Server domain and host name you are using.

   Double-click the Directory Server node. The Sun ONE Directory Server window opens.

Figure 3-7 Sun ONE Directory Server Window



5. In the Sun ONE Directory Server window:

   a. Click the Directory tab.

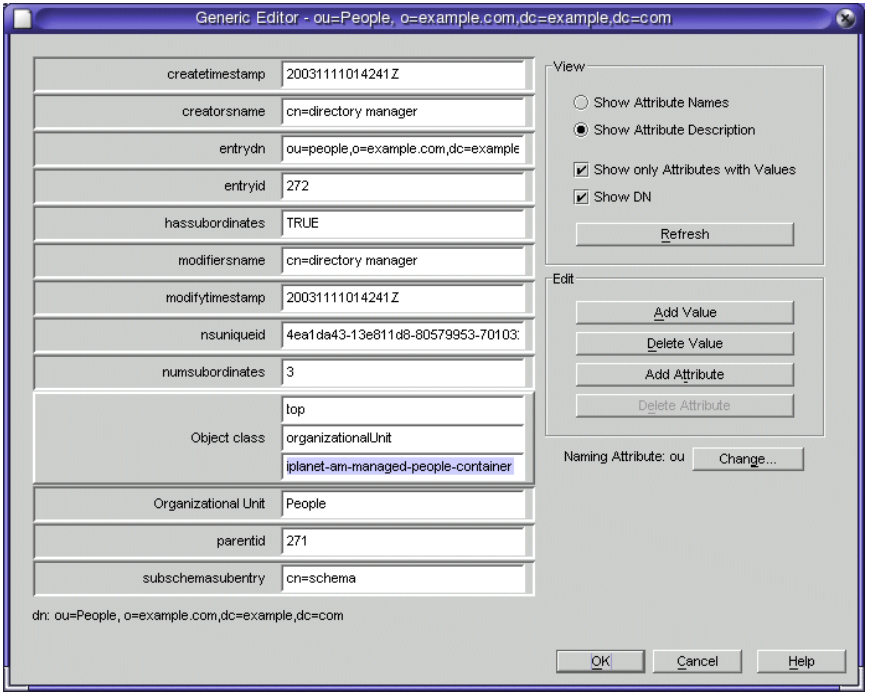
   b. Expand the nodes and review the new two-level, shared, directory structure. Compare Figure 3-7 with Figure 3-2. Notice the new node for the example.com organization. You should see a similar node for the organization name you are using.

      Click the organization name folder node. The display is refreshed. The right pane displays the contents of the organization name folder.

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

      The Generic Editor opens.

Figure 3-8 Generic Editor



6. In the Generic Editor, verify that the object class is `iplanet-am-managed-people-container`. This verifies that you have successfully configured Directory Server with Sun ONE LDAP Schema, version 2. Click OK to close the editor.
7. Exit the console.

Creating a Messaging Server Instance

This procedure shows you how to run the Sun ONE Messaging Server Configuration Wizard to create and start an instance of Messaging Server.

➤ **To Run the Messaging Server Configuration Wizard**

1. Navigate to the Sun ONE Messaging Server directory:

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

2. Run the `configure` command:

   ```
   ./configure
   ```

   The configuration wizard's welcome page opens.

3. In the Welcome page, click Next.

   The configuration wizard's Software License Agreement page opens.

4. In the Software License Agreement page, click Accept.

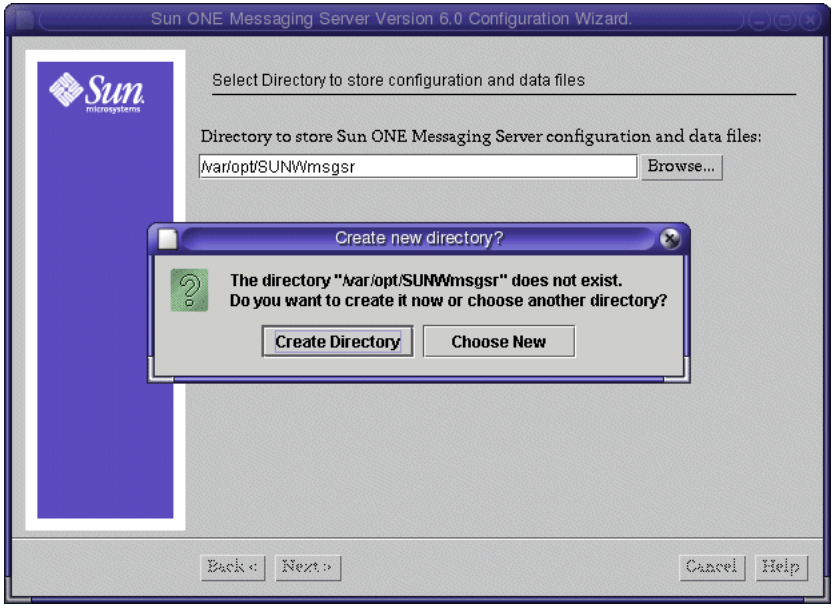
   The Select Directory to Store Configuration and Data Files page opens.

5. In the Select Directory to Store Configuration and Data Files page, accept the default value of `/var/opt/SUNWmsgsr`. Click Next.

   The Create new directory? message opens, as shown in Figure 3-9.

NOTE 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.

Figure 3-9 Create New Directory Message



6. In the Create new directory? message, click Create Directory.

   The Select Components to Configure page opens.

7. In the Select Components to Configure page, verify that Message Transfer Agent, Message Store, and Messenger Express are selected as default values.

   - **Message Transfer Agent.** Handles routing, delivering user mail, and handling SMTP authentication. The MTA provides support for hosted domains, domain aliases, and server-side filters.
   - **Message Store.** Provides the foundation for unified messaging services through its universal Message Store. Access to the message store is available through multiple protocols (HTTP, POP, IMAP). If you are only configuring a Message Store, you must also select the MTA.
   - **Messenger Express.** Handles the HTTP protocol retrieval of messages from the Message Store. If you are only configuring Messenger Express, you must also select the Message Store and the MTA.

   Click Next to accept the default values and continue. The Sun ONE Messaging Server User and Group page opens.

8. In the Sun ONE Messaging Server User and Group page, confirm the following default values:

   - Enter Unix username: `mailserv`
   - Enter Unix group: `mail`

   Click Next to accept the default values. The Configuration Directory Server Panel page opens.

9. In the Configuration Directory Server Panel page confirm the following default values:

   - Config Server LdapURL: `ldap://allinone.example.com:389`
   - Bind as: `cn=Directory Manager`

   Enter the following value:

   - Password: `password`

   Click Next. The User/Group Directory Server Panel page opens.

NOTE The password you supply must match the Directory Manager password you established for Directory Server on the Directory Server Administration page. This allows Messaging Server to access Sun ONE Directory Server. (See "To Supply Directory Server Information" on page 37.)

10. In the User/Group Directory Server Panel page confirm the following default values:
    - User/Group Server LdapURL: `ldap://allinone.example.com:389`
    - Bind as: `cn=Directory Manager`
    - Password: `password`

    Click Next to accept the default values. The Postmaster Email Address page opens.

NOTE The password you supply must match the Directory Manager password you established for Directory Server on the Directory Server Administration page.

11. In the Postmaster Email Address page enter the following values:
    - Enter email address: `scott@example.com`

    Click Next.The Password for all admin accounts page opens.

TIP Remember to substitute the domain that you are using.

12. In the Password for all Admin Accounts page, enter the following values to establish an administrative password for Messaging Server:
    - Enter password: `password` is recommended.
    - Re-enter password to verify: `password`

    Click Next. The Default Email Domain page opens.

13. In the Default Email Domain page, confirm the following default value:

    - Enter Email Domain: `example.com`

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

14. In the Organization DN for the Default Email Domain page, confirm the following default value:

    - Enter Organization DN: `o=example.com, dc=example.com`

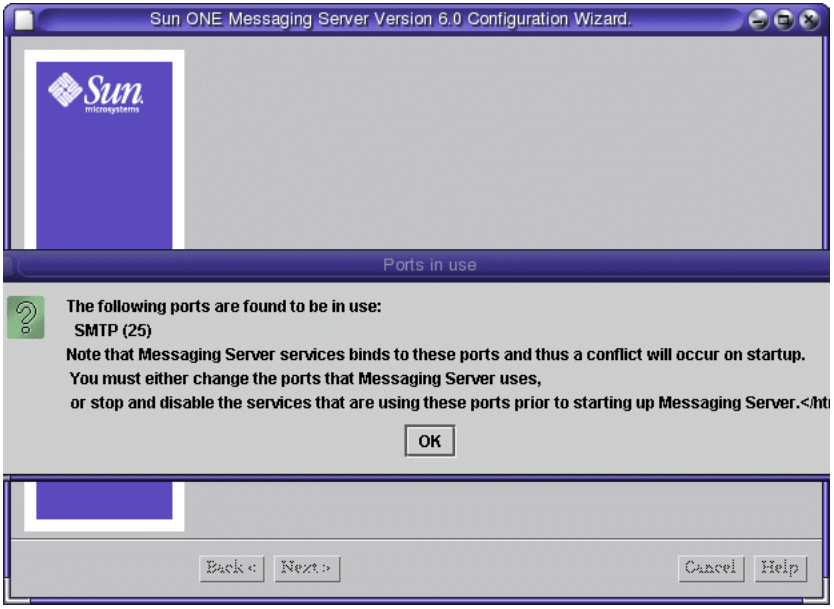
    Click Next. The Ready to Configure page opens.

TIP	Remember to substitute the host and domain that you are using.

15. In the Ready to Configure page, review the information. Click Configure Now.

    You might receive the Ports in Use message shown in Figure 3-10.

Figure 3-10 Ports In Use Message



16. If you receive the Ports in Use message:
    a. Click OK.
    b. Open a terminal window. Do not stop the configuration wizard.
    c. In the terminal window, use the `grep` command to locate the `sendmail` process:

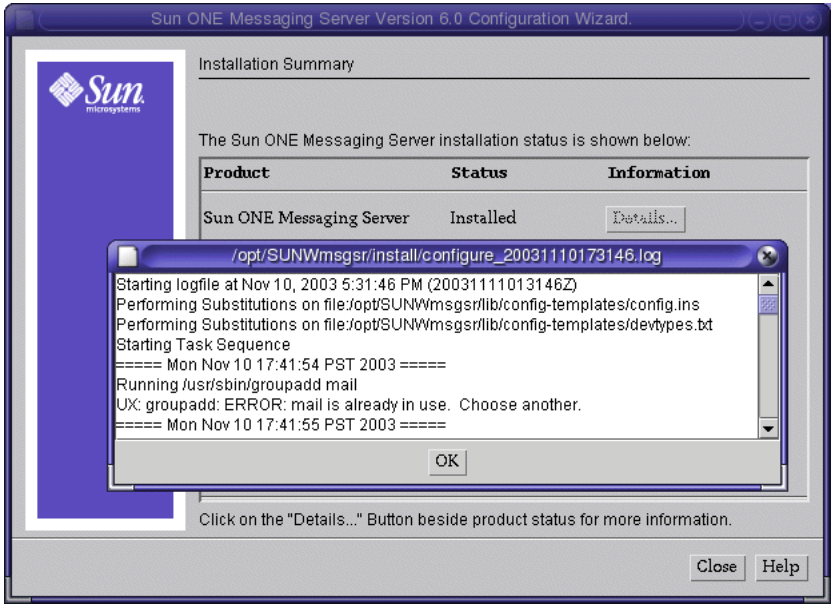
       ```
       ps -ef | grep sendmail
       ```

    d. Use the `pkill` command to terminate the `sendmail` process:

       ```
       pkill sendmail
       ```

    e. Return to the Ready to Configure page.
17. When the configuration process is complete, the Installation Summary page opens.

Figure 3-11 Installation Summary Page



18. In the Installation Summary page, view the details, and then click Close.

19. Perform the following commands to set the listening ports for the Messaging Server's WebMail web interface.

    a. `cd /opt/SUNWmsgsr/sbin`

    b. `./configutil -o service.http.port -v 88`

    c. `./configutil -o service.http.sslport -v 448`

20. Stop and restart the Messaging Server processes to enable the configuration changes you just made.

    a. `cd /opt/SUNWmsgsr/sbin`

    b. `./stop-msg`

    c. `./start-msg`

Configuring a Calendar Server Instance

This procedure shows you how to run the Sun ONE Calendar Server Configuration Wizard to create and start an instance of Calendar Server. To run the configuration wizard:

1. Navigate to the Calendar Server directory:

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

2. Run the `csconfigurator` command:

   ```
   ./csconfigurator.sh
   ```

   TIP The Calendar Server configuration program configures your site's specific requirements and creates a new `ics.conf` configuration file. For more information on configuring Calendar Server, refer to the *Sun ONE Calendar Server Installation Guide for Solaris Operating Systems* (http://docs.sun.com/doc/816-6707-10).

   The configuration wizard's Welcome page opens.

3. In the Welcome page, click Next to continue.

   The Administration, User Preferences and Authentication page opens.

4. In the Administration, User Preferences and Authentication page, enter the following values:

   - LDAP Server Host Name: `allinone.example.com`
   - LDAP Server Port: `389`
   - Directory Manager DN: `cn=Directory Manager`
   - Directory Manager Password: `password`
   - Base DN: `o=example.com,dc=example,dc=com`

   Confirm the following default values:

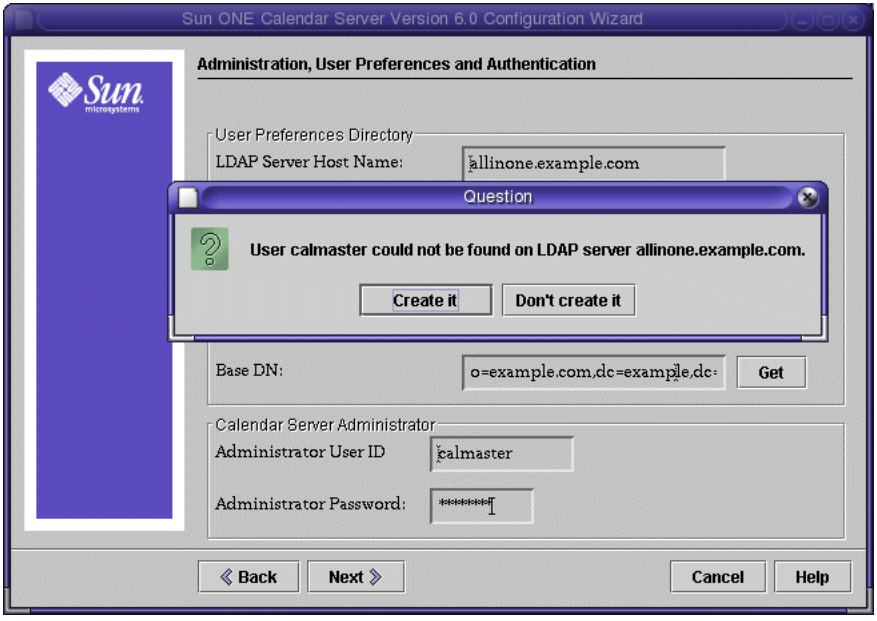
   - Administrator User ID: `calmaster`
   - Administrator Password: `password`

   Click Next. A Question dialog opens.

TIP	Remember to substitute the host and domain that you are using.

NOTE	The Directory Manager password you supply must match the Directory Manager password you established for Directory Server on the Directory Server Administration page. This allows Calendar Server to access Directory Server. (See "To Supply Directory Server Information" on page 37.)

Figure 3-12 Question Dialog



5. In the Question Dialog, click Create it to create the `calmaster` user.

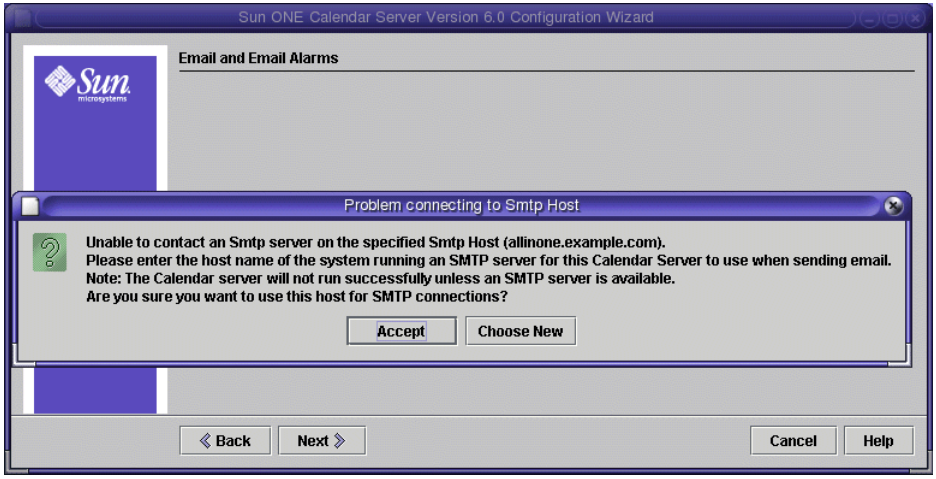
   The Email and Email Alarms page opens.

6. In the Email and Email Alarms page, enter the following values:

   - Email alarms: `Enabled`
   - Administrator Email Address: `scott@example.com`
   - SMTP Host Name: `allinone.example.com`

   Click Next. The Problem connecting to SMTP Host dialog may appear, as shown in Figure 3-13.

Figure 3-13 The Problem Connection to SMTP Host Dialog



7. In the Problem connecting to SMTP Host dialog, click Accept, and then click Next to continue. For the purposes of this deployment, you use this host as the SMTP server.

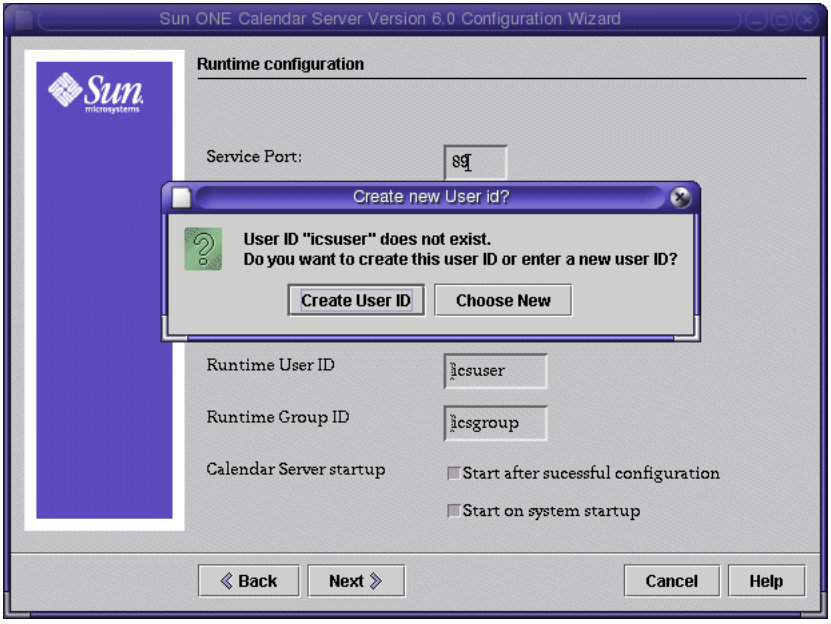
   The Runtime configuration page opens.

8. In the Runtime Configuration page enter the following values:

   - Service Port: `89`
   - Maximum Sessions: `5000`
   - Maximum Threads: `20`
   - Number of server processes: `1`
   - Runtime User ID: `icsuser`
   - Runtime Group ID: `icsgroup`
   - Calendar Server Startup: select both `Start after successful configuration` and `Start on System Startup`

   Click Next. The Create New User ID dialog opens.

Figure 3-14 Create New User ID Dialog



9. In the Create New User ID dialog, click Create User ID.
10. In the Runtime configuration page, click Next.

    The Select Directory to store configuration and data files page opens.
11. In the Select Directory to Store Configuration and Data Files page, accept the default values. Click Next to continue.

    The Ready to Configure page opens.
12. In the Ready to Configure page, click Configure Now.

    When configuration is complete, the Configuration Summary page opens.

NOTE In the Runtime Configuration page you selected the Start after successful configuration option. Calendar Server now starts automatically.

13. In the Configuration Summary page, review the details, and then click Close.

You have verified, configured, and started all of the servers you use in this deployment example. You can proceed to Chapter 4, "Provisioning a Java Enterprise System User."

Chapter 4

Provisioning a Java Enterprise System User

This chapter shows you how to set up Identity Server as a general purpose provisioning tool and how to provision a Java Enterprise System user with Identity Server. This chapter contains the following sections:

- "About Java Enterprise System User Provisioning"
- "Using Identity Server as a Provisioning Tool" on page 84
- "Provisioning a Sample End User" on page 93

About Java Enterprise System User Provisioning

A Java Enterprise System user is an account that has access to one or more services provided by Java Enterprise System components. (Some services may be provided by several Java Enterprise System components working together.)

The idea of a Java Enterprise System user encompasses:

- An end user who can use services provided by any of the following Java Enterprise System components: Identity Server, Portal Server, Messaging Server, Calendar Server, or Instant Messaging Server.
- A user account, consisting of end-user data that is stored as a Directory Server LDAP database entry. The data in the user account includes information that identifies the services the user is authorized to access. In the simplest scenarios, all Java Enterprise System services write their entries for a user to a single user account.

User provisioning is creating the user's account and enabling the user's access to Java Enterprise System services.

Java Enterprise System has the following interfaces for user provisioning and working with LDAP directory entries:

- Identity Server Console
- Identity Server command line utilities (for Sun ONE LDAP Schema v.2)

The procedures in this chapter show you how to provision a user with the Sun ONE Identity Server Console.

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

Using Identity Server as a Provisioning Tool

This section describes how to set up the LDAP attributes necessary for using Identity Server as a general purpose provisioning tool. You set up the LDAP attributes with Identity Server Services. Identity Server Services are a mechanism for grouping and managing LDAP attributes.

Identity Server Services are not end-user services. The Sample Mail Server Service and Sample Calendar Server Service described in this section add Identity Server LDAP attributes that enable you to provision users with end-user mail and calendar services.

Importing the Identity Server Services into Identity Server

The Java Enterprise System installer supplies definitions for two Identity Server Services that add LDAP attributes for managing end-user mail and calendar services. These definitions are supplied as two Extensible Markup Language (XML) files. These XML files describe Identity Server Services named Sample Mail Server Service and Sample Calendar Server Service.

Sample Mail Server Service and Sample Calendar Server Service are not intended for production use. User provisioning in a production environment is typically performed by batch processing operations, which these sample services do not support. For information on production user provisioning, and the command line tools used in production user provisioning, see *Sun ONE Identity Server 6.1 Administration Guide* and *Sun ONE Messaging and Collaboration 6.0 User Management Utility Installation and Reference Guide*.

➤ **To Import the Identity Server Services into Identity Server**

1. Navigate to the samples directory:

   ```
   cd /opt/SUNWam/samples/integration
   ```

2. Run the `amadin` command for the Sample Mail Server Service:

   ```
   /opt/SUNWam/bin/amadmin --runasdn
   "uid=amadmin,ou=people,dc=example,dc=com" --password password --schema
   sampleMailServerService.xml
   ```

   NOTE If your domain name includes a subdomain, you must specify each element of the name separately. For example, if you use my.example.com, you must type `dc=my,dc=example,dc=com`.

3. Run the `amadin` command for the Sample Calendar Server Service:

   ```
   /opt/SUNWam/bin/amadmin --runasdn
   "uid=amadmin,ou=people,dc=example,dc=com" --password password --schema
   sampleCalendarServerService.xml
   ```

4. Use the `cp` command to copy the associated property files, which enable localization, to the `locale` directory:

   ```
   cp sampleMailServerService.properties /opt/SUNWam/locale
   ```

   ```
   cp sampleCalendarServerService.properties /opt/SUNWam/locale
   ```

5. Stop Identity Server:

   ```
   /opt/SUNWam/bin/amserver stop
   ```

6. Stop and restart Application Server:

   ```
   cd /var/opt/SUNWappserver7/domains/domain1/server1/bin
   ```

   ```
   ./stopserv
   ```

   ```
   ./startserv
   ```

   Restarting Application Server also restarts Identity Server.

Registering the Identity Server Services

In this section, you use the Identity Server console to register Sample Mail Server Service and Sample Calendar Server Service with your Administration Server domain and LDAP organization.

➤ **To Register the Sample Services With Your Administration Server Domain**

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

   `http://example.com:81/amconsole`

   The Login dialog opens.

   TIP Remember to substitute the host and domain that you are using.

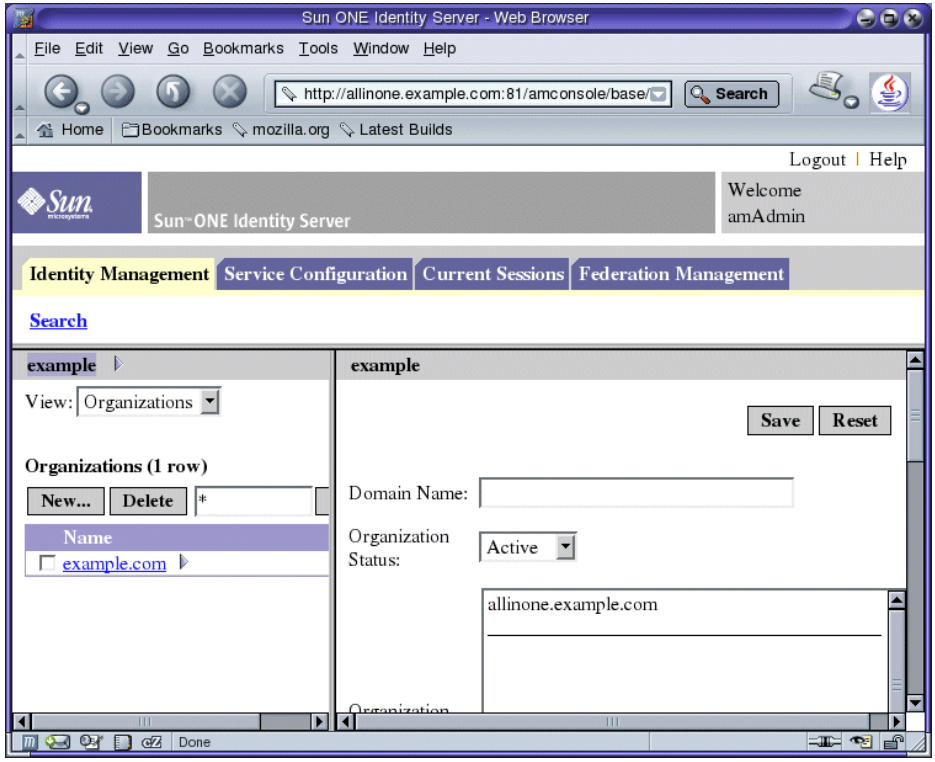
   The URL includes the URI `amconsole`. You specified this URI on the installer's Identity Server: Web Container for Running the Sun ONE Identity Services page. See "To Supply Identity Server Information" on page 39.

2. In the login dialog, type the Administration User ID (the default value is `amadmin`) and password. Click OK.

   The Identity Server administration console opens in the browser. Figure 4-1 shows the administration console displaying information about the example domain. The domain name is displayed and highlighted in the left panel, just below the word Search.

   NOTE You defined the Administration User ID and password on the installer's Identity Server: Sun ONE Application Server page. See "To Supply Identity Server Information" on page 39.

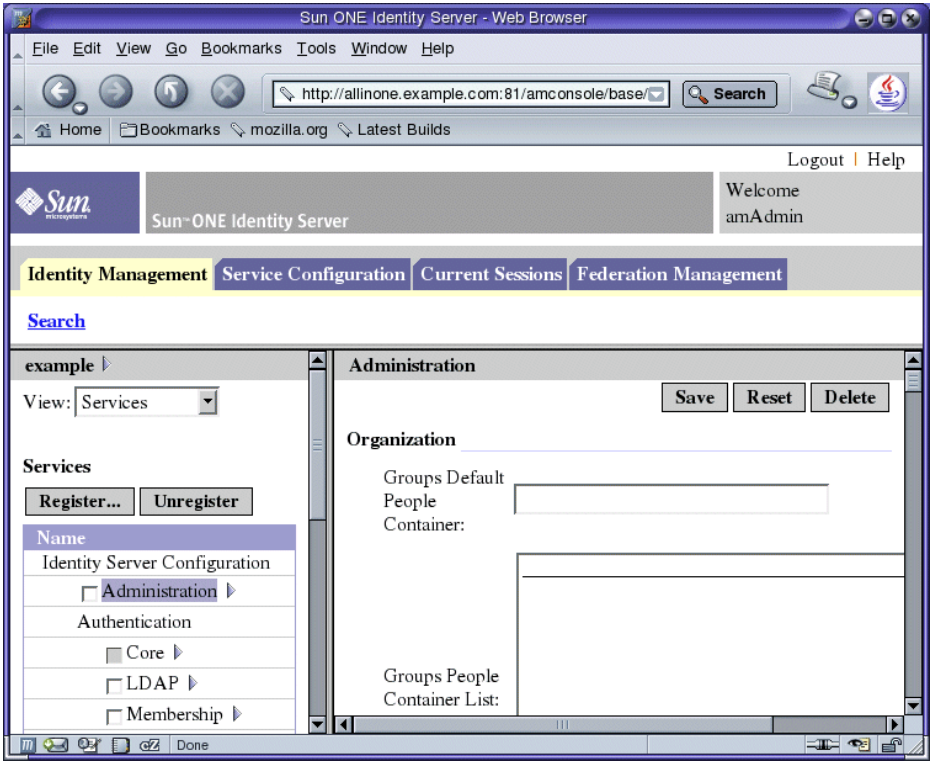
Figure 4-1 Sun ONE Identity Server Console



3. In the left pane, open the View drop-down menu and choose Services.

   The window refreshes, and the left pane displays a list of services in the domain. Figure 4-2 shows the console window displaying a list of services. Notice that the View menu is displaying "Services."

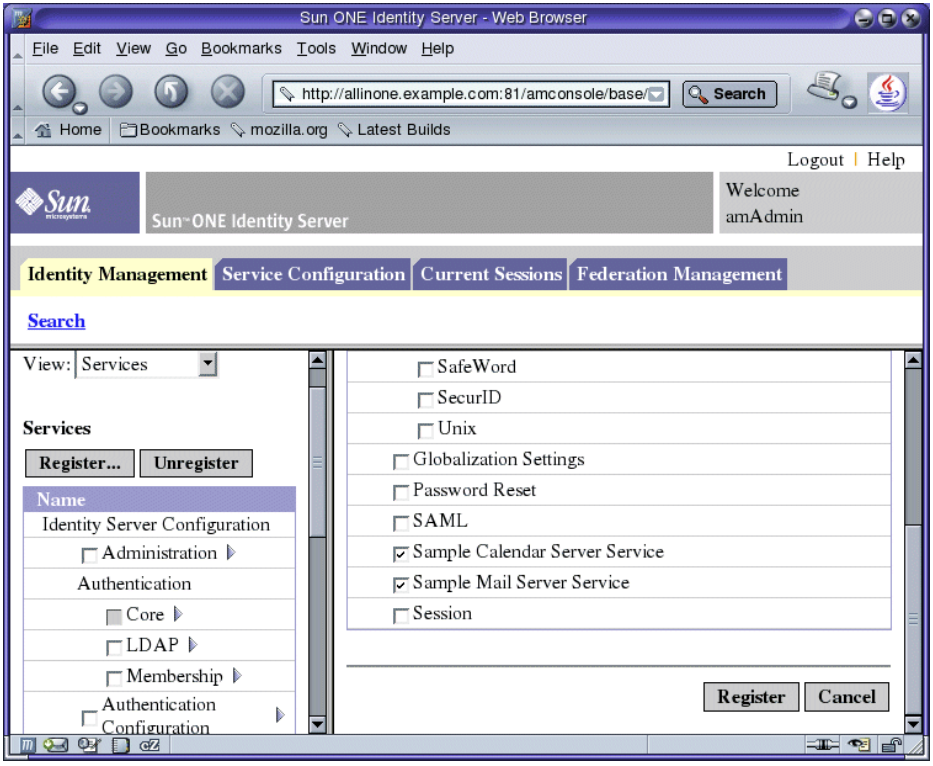
Figure 4-2 Displaying a List of Services



4. In the left pane, click Register.

   A list of services that can be registered is displayed in the right pane. Your display should resemble Figure 4-3.

Figure 4-3 Registering Services With a Domain



5. Select and register the Sample Calendar Server Service and Sample Mail Server Service.

   a. Scroll to the bottom of the list.

   b. Select Sample Calendar Server Service and Sample Mail Server Service.

   c. Click the Register button that appears at the end of the list.

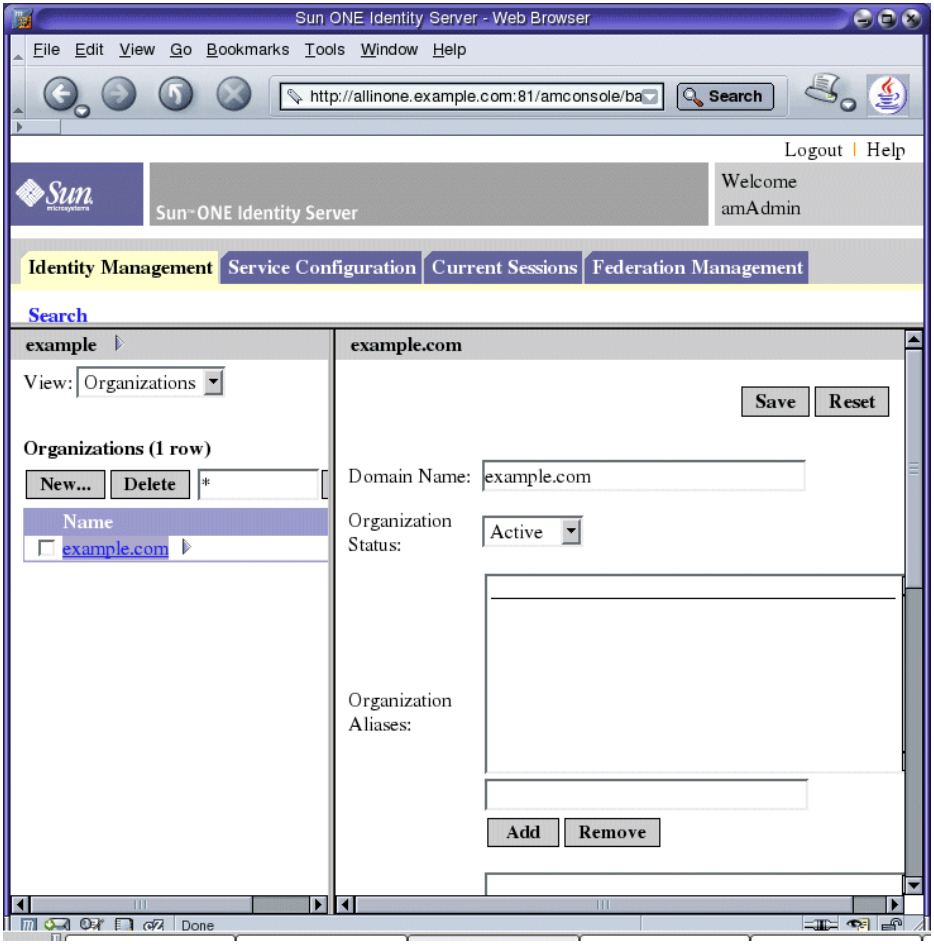
   The display refreshes. In the left pane, the Sample Calendar Server Service and Sample Mail Server Service are added to the list of registered services.

➤ To Register the Sample Services With Your Organization

1. In the left pane, open the View menu and choose Organizations.

   The window refreshes, and the left pane displays a list of organizations in the domain. Figure 4-4 shows the list of organizations in the example domain.

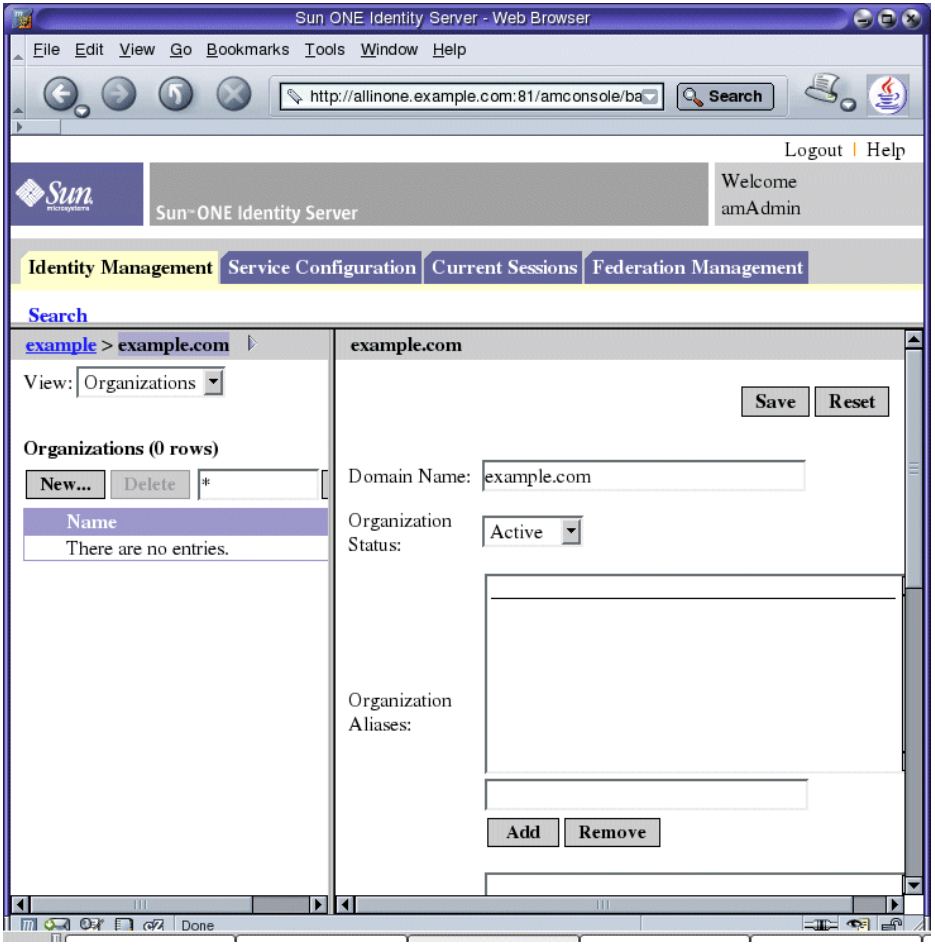
Figure 4-4 Listing Organizations in the Example Domain



2. Click the name of your organization.

   The window refreshes. The left pane's title bar now shows your domain and your organization. Your display should be similar to Figure 4-5.

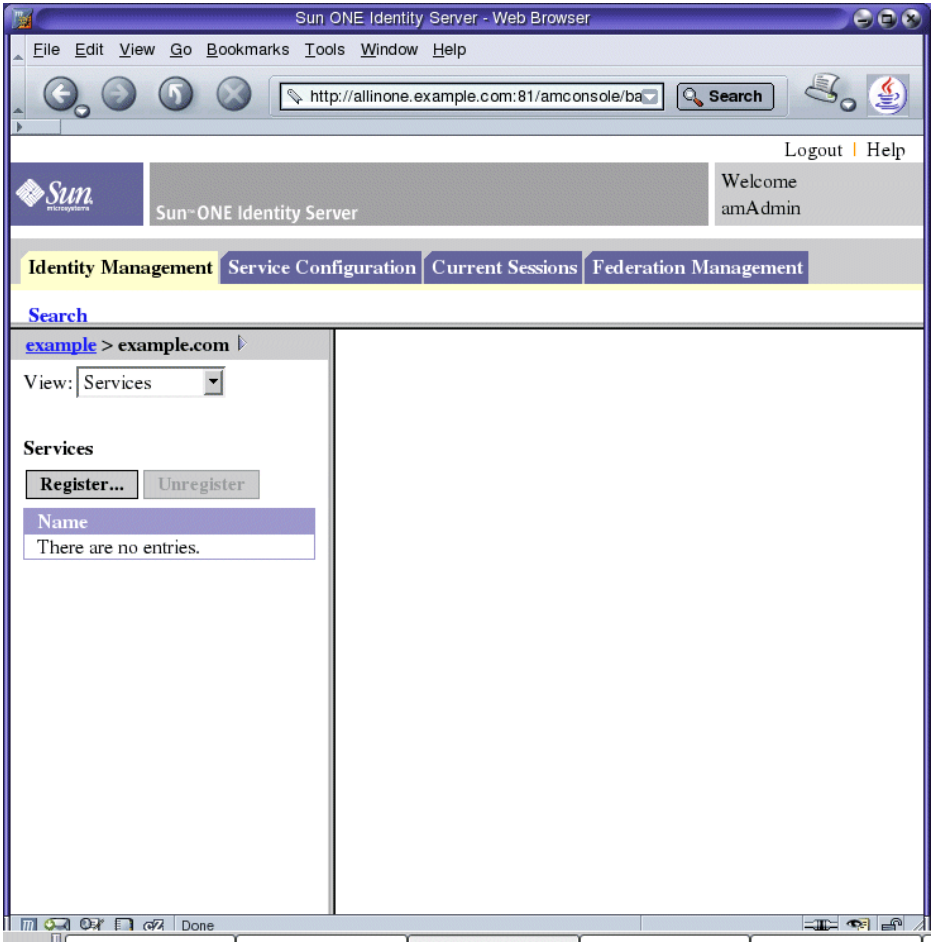
Figure 4-5 Selecting an Organization



3. In the left pane, open the View drop-down menu and choose Services.

   The window refreshes. Your display should be similar to Figure 4-6.

Figure 4-6 Viewing Services for the Example.Com Organization



4. Click Register.

   The window refreshes, and the right pane displays a list of services that can be registered.

5. Select Sample Calendar Server Service, Sample Mail Server Service, Portal Desktop, and SSO Adapter. Click the Register button at the end of the list.

   The window refreshes. In the left pane, the four services you selected are added to the list of registered services.

Provisioning a Sample End User

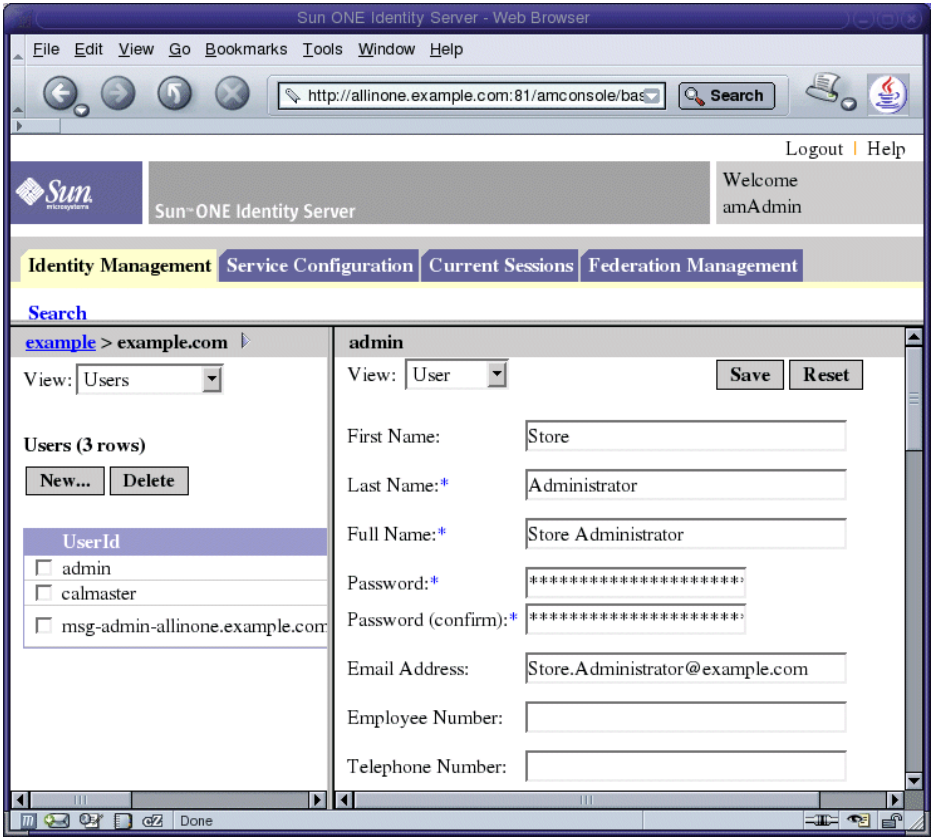
This section describes how to use Identity Server to provision an end user. You set up a user name and password, and you use Sample Mail Server Service and Sample Calender Server Service to give the user access to the end-user services Mail Express and Calendar Express.

➤ **To Provision a Sample End User**

1. In the left pane, open the View drop-down menu and choose Users.

   The window refreshes, and the left pane displays a list of users in your organization. Your display should resemble Figure 4-7, which shows the list of users in the example domain organization. In particular, the list of users should include `admin`, `calmaster`, and `msg-admin-allinone.example.com`.

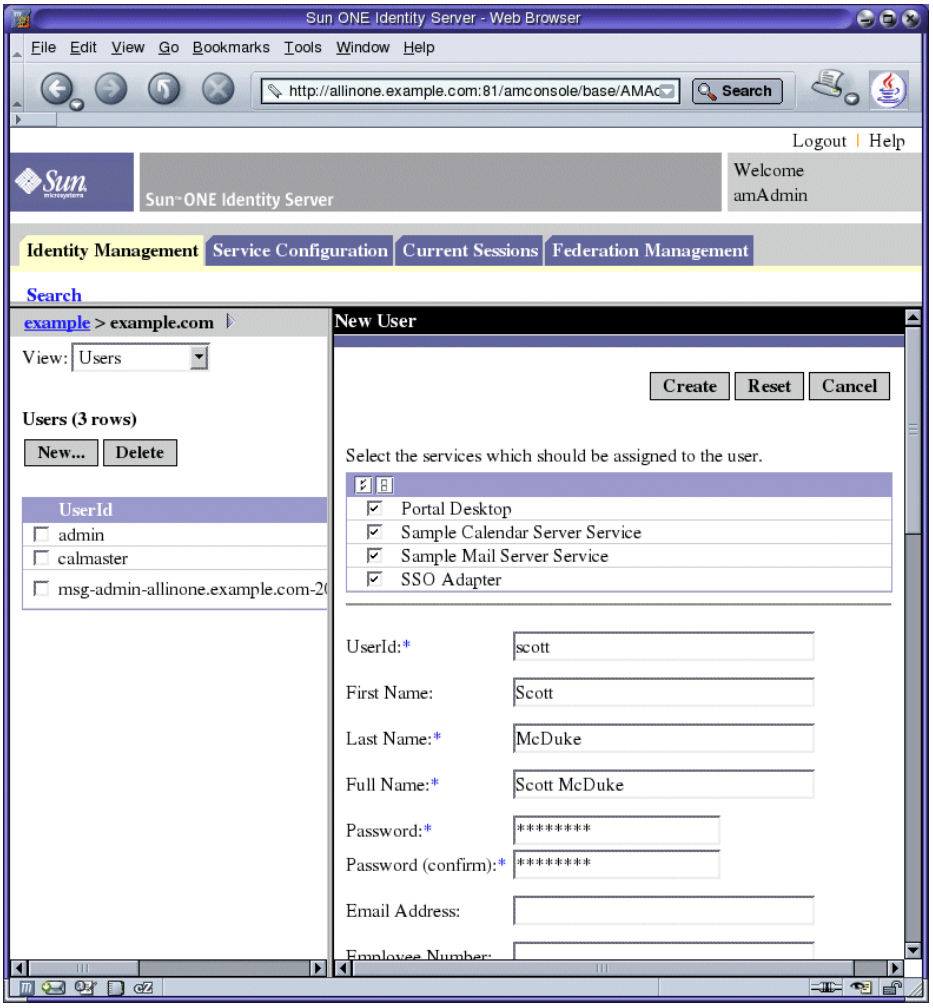
Figure 4-7 Sun ONE Identity Server Console Window



2. In the left pane, click New.

   The window refreshes, and the right pane displays input fields.

Figure 4-8 New User Fields



3. Define your Java Enterprise System user.

   a. Select Portal Desktop, Sample Calendar Server Service, Sample Mail Server Service, and SSO Adapter.

   b. Fill in the user information with the following values:

   - Userid: scott
   - First Name: Scott
   - Last Name: McDuke
   - Full Name: Scott McDuke
   - Password: password
   - Password (confirm): password

   Click Create.

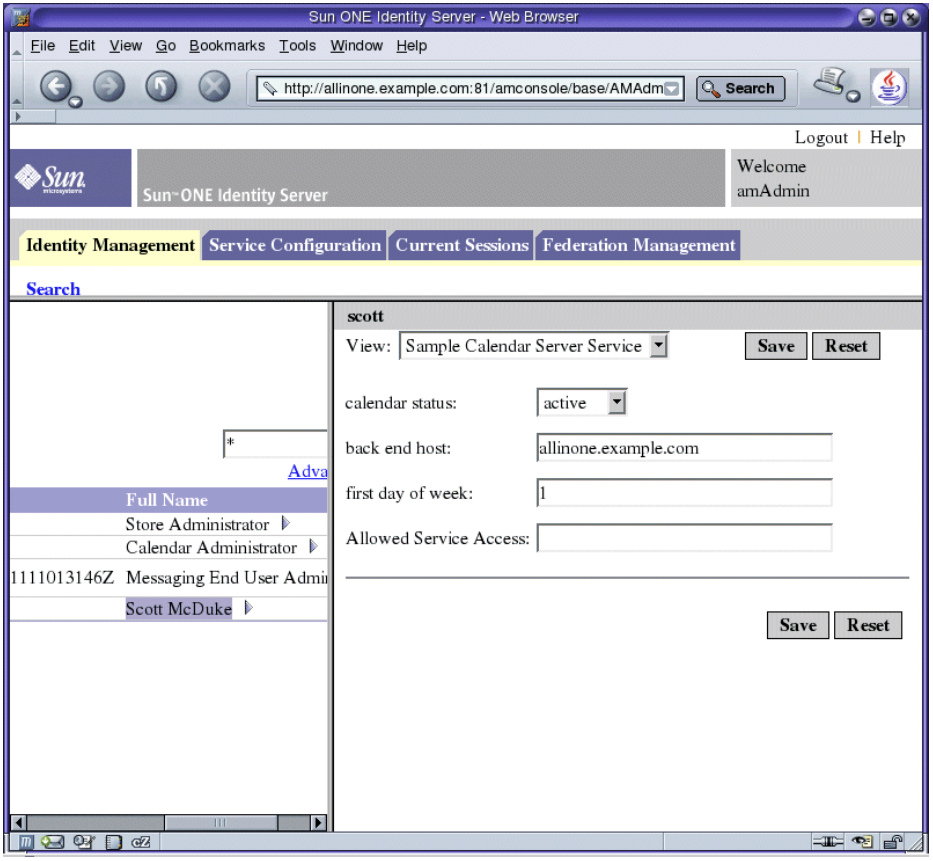
4. Scroll the left pane all the way to the left, until the View menu is visible. Open the View menu and choose Users.

   The window refreshes. The left pane displays a list of users for the organization, including the user that you just created.

5. Scroll the left pane to the right and click the arrow symbol (>) that follows the new user's Full Name.

   In Figure 4-9, the left pane displays the new user's Full Name (Scott McDuke) and the > symbol.

Figure 4-9 Sample Calendar Server Service Properties



6. In the right pane, open the View menu and choose Sample Calendar Server Service. The window refreshes and displays the user's Sample Calendar Service properties.

7. Type the following values:

   - calendar status: active
   - back end host: allinone.example.com
   - first day of week: 1

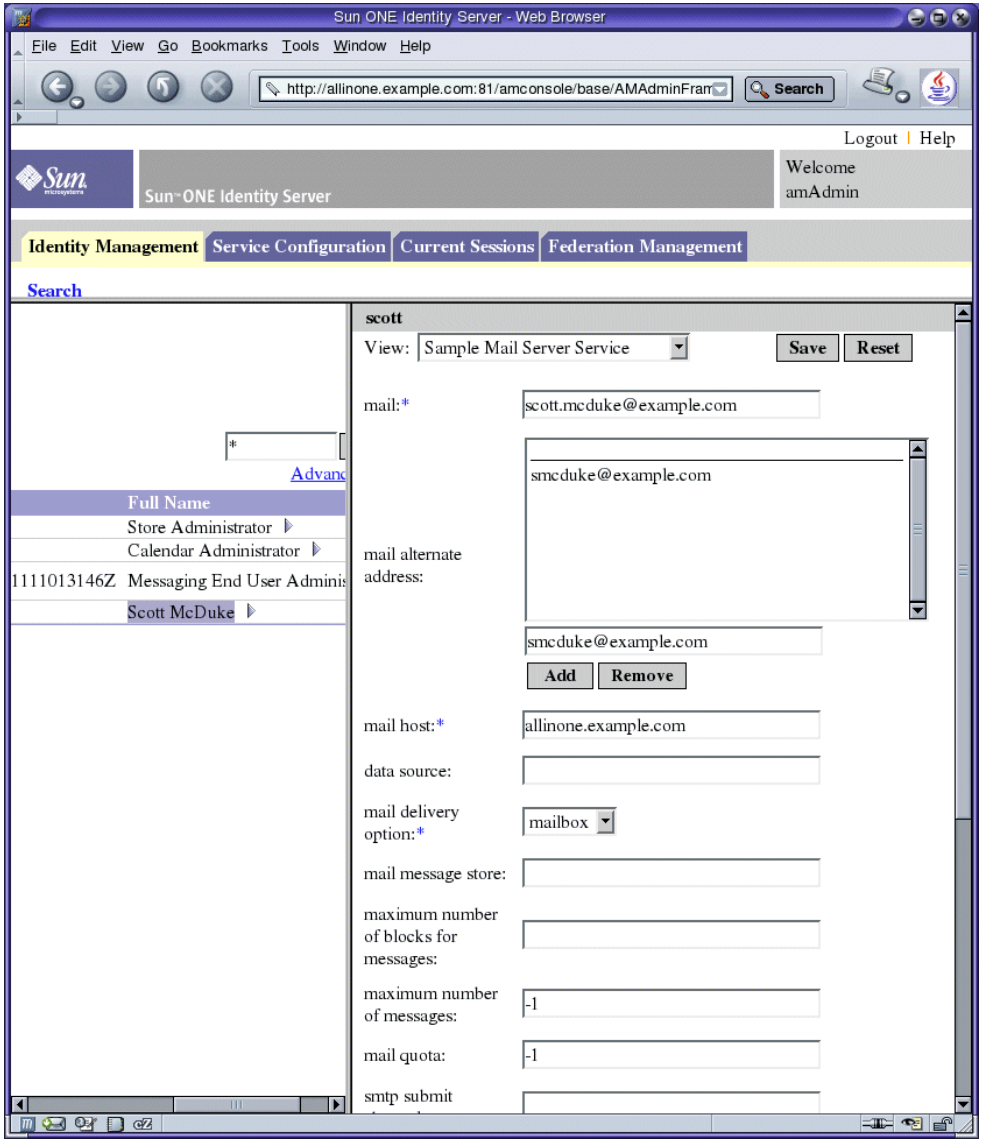
   Click the Save button.

   The window refreshes and displays a message indicating the user properties have been saved.

8. In the right pane, open the View menu and choose Sample Mail Server Service.

   The window refreshes and displays the user's Sample Mail Server Service properties.

Figure 4-10 Sample Mail Server Service Properties



9. In the Sample Mail Server Service property fields, type the following values:
   - mail: scott.mcduke@example.com
   - mail alternate address: smcduke@example.com
   - mailhost: allinone.example.com
   - mail delivery option: mailbox
   - maximum number of messages: -1
   - mail quota: -1

   Click Save.

   The window refreshes and displays a message indicating the user properties have been saved.
10. Click Logout (in the upper right corner of the page).

Verifying End User Access to Java Enterprise System Services

This chapter describes how to verify that the end user account that you created in Chapter 4 can access the Java Enterprise System services you installed and configured. These services include the sample portal Desktop, Messenger Express, and Calendar Express.

This chapter contains the following sections:

- "Verifying End User Access to Portal Server"
- "Verifying User Access to Messenger Express" on page 100
- "Verifying User Access to Calendar Express" on page 102

Verifying End User Access to Portal Server

➤ **To Verify End User Access to Portal Server**

1. In your web browser, open this URL:

   `http://allinone.example.com:81/portal/`

   TIP Remember to substitute the host and domain that you are using.

   The Portal Server sample desktop opens.

2. Using the Member Login fields, log in as the end user you created in Chapter 4. Use the following values:

   - User ID: scott
   - Password: password

   Click Login. The desktop is refreshed, and it displays information about the user. This verifies that you created and configured the user correctly.

Verifying User Access to Messenger Express

In this section, you log in to Messenger Express as a Java Enterprise System end user and send email.

Sun ONE Messenger Express is a Java Enterprise System service that you selected when you created and configured a Sun ONE Messaging Server instance. (You selected it on the Messaging Server Configurator Wizard's Select Components to Configure page. See"Creating a Messaging Server Instance" on page 71.)

➤ **To Verify End User Access to Messenger Express**

1. In your web browser, open this URL:

   `http://allinone.example.com:88`

   The Sun ONE Messenger Express log in page opens.

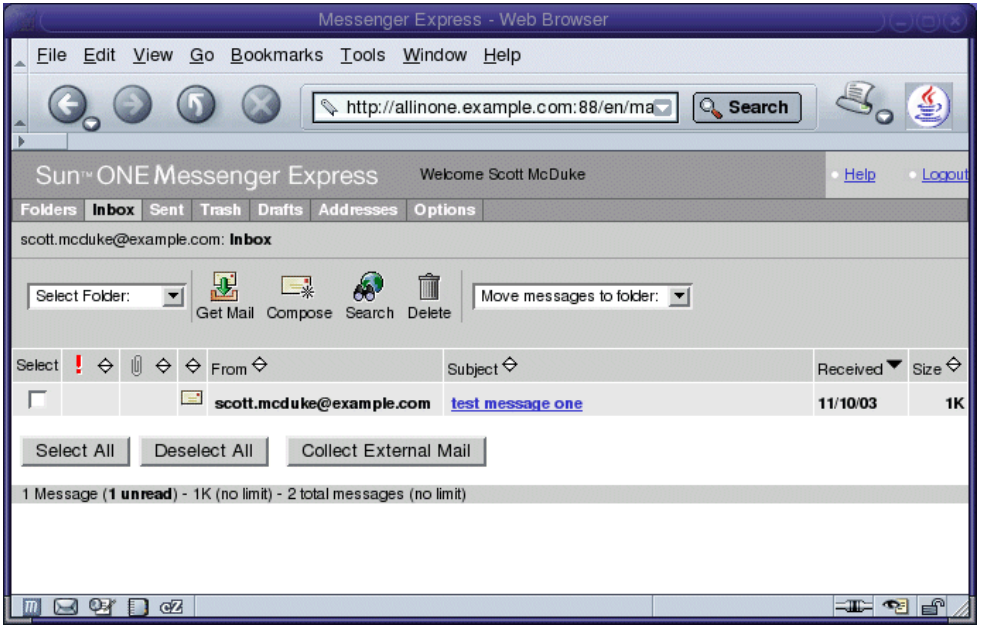
   TIP Remember to substitute the host and domain that you are using.

2. In the Sun ONE Messenger Express log in page, type these values:

   - User ID: scott
   - Password: password

   Click Login. The Messenger Express main window opens. Your display should resemble Figure 5-1.

Figure 5-1 Sun ONE Messenger Express Main Window



3. Click the Compose button.

   The Compose Mail window opens.

4. Compose a test message.

   a. For the To field, use `scott@example.com`. Remember to substitute the domain name you are using.

   b. In the Title field type `test`.

   c. Click Send. The Compose Mail window closes.

5. In the main window, click the Get Mail icon. The main window should show the delivered mail.

   a. Click on the subject line to open the test message in the message window.

   b. Close the message window.

6. Click Logout, in the upper right corner of the Messenger Express main window.

Verifying User Access to Calendar Express

➤ **To Verify End User Access to Calendar Express**

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

   `http://allinone.example.com:89`

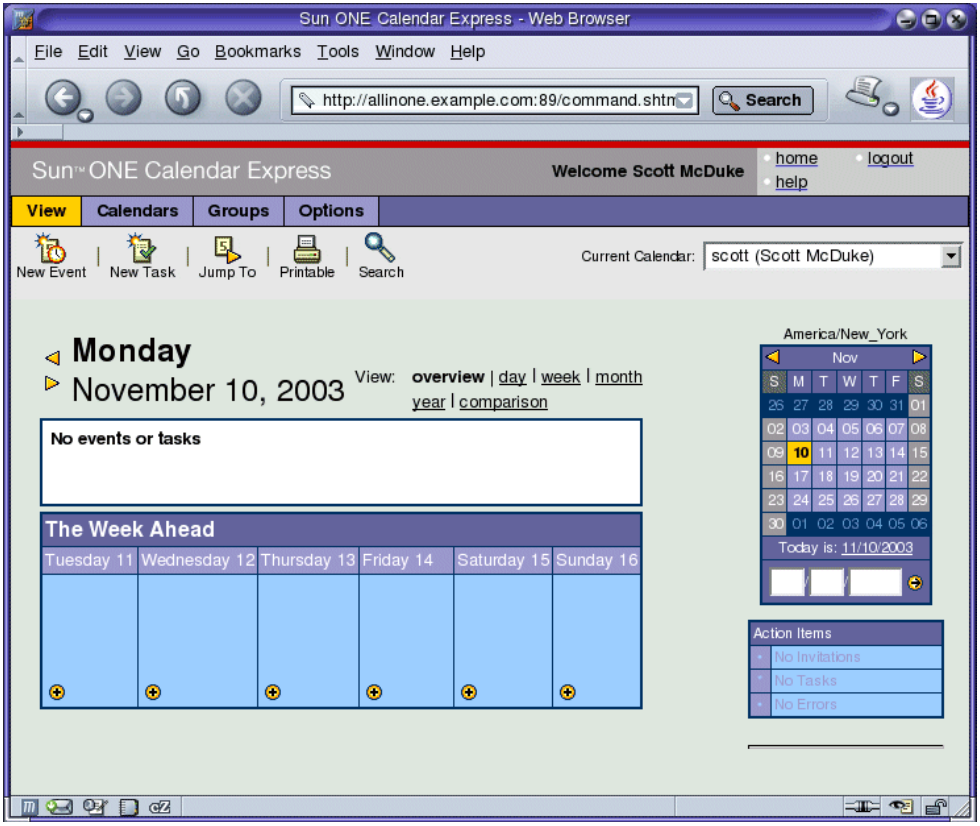
   The Sun ONE Calendar Express Log In page opens.

2. In the Sun ONE Calendar Express Log In page, type these values:

   - User ID: scott
   - Password: password

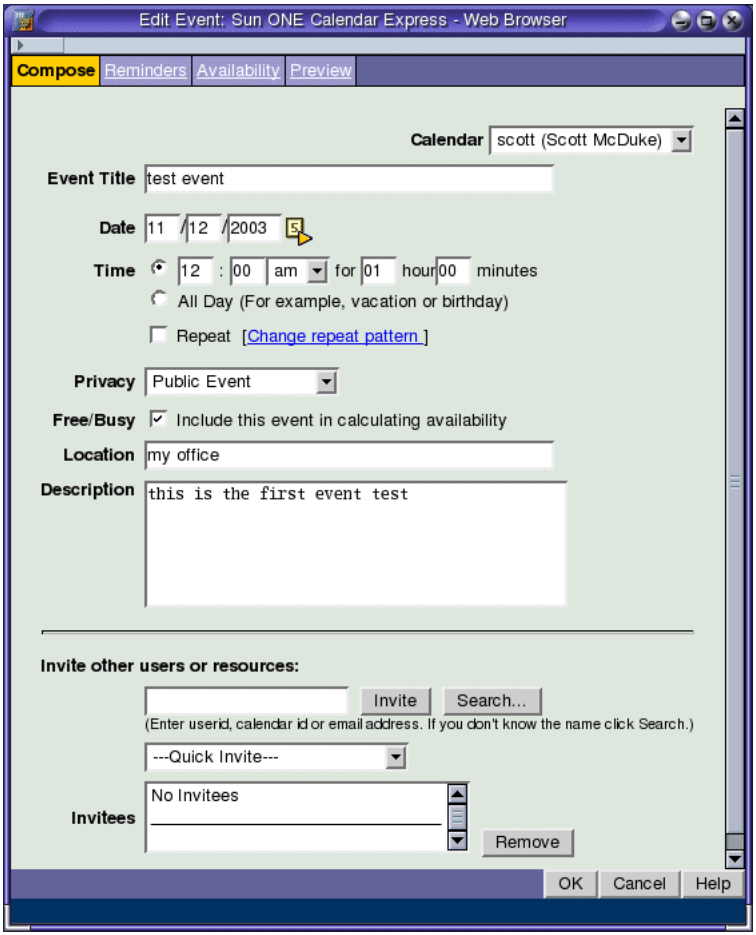
   Click Login. The Sun ONE Calendar Express main window opens. Your display should resemble Figure 5-2.

Figure 5-2 Sun ONE Calendar Express Main Window



3. Click New Event. The Edit Event window opens.

Figure 5-3 Edit Event Window



4. In the New Event window, type in the following values to define an event:
   - Event Title: Test Event
   - Date: Use today's date
   - Time: 12:00 am for 1:00 hour
   - Privacy: Public Event
   - Location: My Office
   - Description: This is my first event test

   Click OK.

   The New Event window closes and you return to the Sun ONE Calendar Express main window.
5. Verify that the event you created appears in the main window.
6. Click Logout, in the upper right corner of the main window.

Chapter 6

Configuring Single Sign-On

This chapter describes how to set up Identity Server single sign-on (SSO) for the portal, messaging, and calendar services.

This chapter contains the following sections:

- "Single Sign-On Overview"
- "Configuring Messaging Server for Single Sign-On" on page 106
- "Configuring Calendar Server for Single Sign-On" on page 106
- "Verifying Single Sign-on Configuration" on page 107

Single Sign-On Overview

When single sign-on is enabled, Java Enterprise System users log on once, with a user ID and a system password. Users log on to the first service they access. After that, they can navigate to any other Java Enterprise System service without logging in again.

The gateway for accessing Java Enterprise System services is Identity Server. When a user first accesses a Java Enterprise System service, he or she is authenticated by Identity Server. When the user navigates to another Java Enterprise System service, Identity Server confirms that the user has already been authenticated. The user is able to access the next service without logging in again.

Configuring Messaging Server for Single Sign-On

This section describes how to configure Messaging Server for SSO.

➤ **To Configure Messaging Server for SSO**

1. Navigate to the Messaging Server directory:

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

2. Run the following variations of the `configutil` command:

   a.
   ```
   ./configutil -o local.webmail.sso.amnamingurl
   -v http:allinone.example.com:81/amserver/namingservice
   ```

   TIP Remember to substitute the host and domain that you are using.

   b.
   ```
   ./configutil -o local.webmail.sso.amcookie
   -v iPlanetDirectoryPro
   ```

   c.
   ```
   ./configutil -o local.webmail.sso.singlesignoff -v 1
   ```

   d.
   ```
   ./configutil -o service.http.ipsecurity -v no
   ```

3. Stop Messaging Server:

   ```
   ./stop-msg
   ```

4. Restart Messaging Server:

   ```
   ./start-msg
   ```

Configuring Calendar Server for Single Sign-On

This section describes how to configure Calendar Server for SSO.

➤ **To Configure Calendar Server for SSO**

1. Navigate to the Sun ONE Calendar Server directory:

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

2. Edit the `ics.conf` file. Find each of the following parameters and make the following changes. In some cases this means changing the value and uncommenting the line. In other cases, it simply means uncommenting the line.

a. Find `local.calendar.sso.amcoookiename`. Uncomment the item. Leave its value set to `iPlanetDirectoryPro`.

b. Find `local.calendar.sso.amnamingurl`. Uncomment the item and set its value to `http://allinone.example.com:81/amserver/namingservice`.

c. Find `local.calendar.sso.singlesignoff`. Uncomment the item. Leave its value set to `yes`.

d. Find `local.calendar.sso.logname`. Uncomment the item. Leave its value set to `am_sso.log`.

e. Find `service.http.ipsecurity`. Uncomment the item. Change its value to `no`.

f. Find `render.xslonclient.enable`. Change its value to `no`.

3. Save the `ics.conf` file and exit.

4. Navigate to the Sun ONE Calendar Server directory:

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

5. Stop Sun ONE Calendar Server:

```
./stop-cal
```

6. Restart Sun ONE Calendar Server:

```
./start-cal
```

Verifying Single Sign-on Configuration

This section describes how to verify the single sign-on configuration.

➤ **To Verify End User Access to Services With SSO**

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

```
http://allinone.example.com:81/portal/
```

TIP	Remember to substitute the host and domain that you are using.

The Portal Server sample desktop opens.

2. Using the Member Login fields, log in as the end user you created in Chapter 4. Use the following values:

   - User ID: scott
   - Password: password

   Click the Login button. The Desktop is refreshed, and displays information about the user. This verifies that you created and configured the user correctly.

   NOTE Logging in to Portal Server sets SSO cookies, which enable the user to access messaging and calendar services without logging in again.

3. In your web browser open the following URL:

   `http://allinone.example.com:88`

   The Messenger Express main window opens, but you are not prompted to log in a second time. This verifies that you configured SSO correctly.

4. In your web browser, open the following URL:

   `http://allinone.example.com:89`

   The Sun ONE Calender Express main window opens, but you are not prompted to log in a second time. This verifies that you configured single sign-on correctly.

   TIP Remember to substitute the host and domain that you are using.

5. In the Sun ONE Calendar Express main window, click Logout in the upper right corner of the window.

   The Calendar Express Login page is displayed.

6. In your web browser, open this URL:

   `http://allinone.example.com:81/portal/`

   The sample portal Desktop page opens. It displays the Member Login channel and prompts you to log in. This verifies that logging out of Calendar Express logged you out of all Java Enterprise System services.

Chapter 7

Configuring Proxy Authentication

This chapter describes how to configure proxy authentication for the portal desktop, the messaging service, and the calendar service.

This chapter contains the following sections:

- "Configuring the Portal Calendar Channel for Proxy Authentication"
- "Configuring the Portal Mail Channel for Proxy Authentication" on page 113
- "Configuring Messaging Server for Proxy Authentication" on page 114
- "Configuring Calendar Server for Proxy Authentication" on page 115
- "Verifying Proxy Authentication" on page 116

About Proxy Authentication

The default portal desktop has mail and calendar channels that connect to services provided by Messaging Server and Calendar Server. Each time a user refreshes the portal desktop, the mail and calendar channels connect to their respective back-end services and retrieve mail and calendar information.

Configuring proxy authentication for these channels enables a fuller display of mail and calendar information in the portal desktop. It also enables users to launch Messenger Express and Calender Express directly from the portal desktop.

To enable proxy authentication you must perform the following configuration:

- Configure both portal channels to use the SSO Adapter service, and define proxy users for both channels.
- Configure Messaging Server and Calendar Server to accept requests from the proxy users.

The proxy user account acts as a trusted agent on behalf of end users. The proxy user accounts in Messaging Server and Calendar Server exist to provide end-user authentication without the need for authentication of end-user passwords.

When you register the proxy user's name and password with the Portal Server Mail and Calendar channel SSO Adapter templates, end users who access the portal desktop can launch the mail and calendar services from the desktop without logging in again.

Configuring the Portal Calendar Channel for Proxy Authentication

To enable proxy authentication for the sample portal Calendar channel, configure the SSO Adapter Service through the Identity Server console.

➤ **To Configure the Portal Calendar Channel for the SSO Adapter Service**

1. In your web browser, open this URL:

   `http://allinone.example.com:81/portal/`

   The Identity Server login page opens.

2. In the Identity Server login page, enter the following values:

   - User Name: amadmin
   - Password: password

   Click Log In. The Identity Server console window opens.

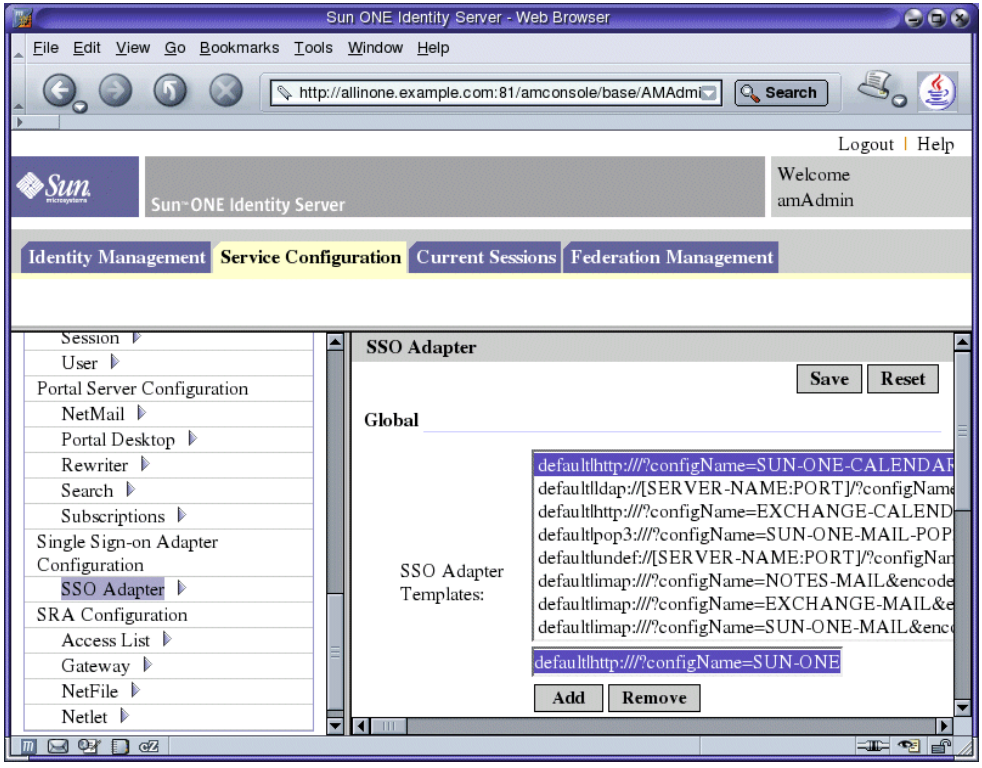
3. Click the Service Configuration tab.

   The Identity Server Services are displayed.

4. Scroll down in the left pane. Locate the SSO Adapter, and then click the arrow symbol that follows the name SSO Adapter.

   The display refreshes. The right pane displays the SSO Adapter Service properties. Your display should resemble Figure 7-1.

Figure 7-1 SSO Adapter Properties



5. Edit the `SUN-ONE-CALENDAR` configuration properties. In the Global Properties section, find the SSO Adapter Templates field. Click the line that contains the `SUN-ONE-CALENDAR` configuration properties. This line is selected in Figure 7-1.

   An editable copy of the line is displayed in the editable field below the list of Global Properties. Use this editable field to edit the text:

TIP Use a text editor to make the changes. Go to the editable field below the list of properties and select the entire properties string. Right-click the selected properties string and choose Copy.

Paste the text into a text editor window and make the changes described in Step 5.

a. Find `merge=host&`. Change the value to `default=host&`.

b. Find `merge=port&`. Change the value to `default=port&`.

c. Find `merge=clientPort&`. Change the value to `default=clientPort&`.

d. Find `enableProxyAuth=false&`. Change the value to `enableProxyAuth=true&`.

e. Find `proxyAdminUid=[PROXY-ADMIN-UID]&`. Change the value to `proxyAdminUid=calmaster&`.

f. Find `proxyAdminPassword=[PROXY-ADMIN_PASSWORD]&`. Change the value to `proxyAdminPassword=password&`.

g. Find `userAttribute=uid`. Change the value to `userAttribute=uid&`.

   Add the & at the end.

h. Add the following name/value pair entries to the end of the properties string:

```
host=allinone.example.com&
clientPort=89&
port=89
```

   There is no & at the end of the last entry.

TIP After you use a text editor make the changes described in Step 5, select the text in the editor and copy it. Paste the text back into the Identity Server console window's editable field.

6. After you edit the text in the editable field, click Add.

   A new line is added to the Adapter SSO Templates field. Notice that the original line is not changed or deleted.

7. Locate the original parameter line and click Remove.

   The original line is deleted.

8. Click Save to apply your changes.

Configuring the Portal Mail Channel for Proxy Authentication

To enable proxy authentication for the sample portal Mail channel, you configure the SSO Adapter Service through the Identity Server console.

➤ **To Configure the Portal Mail Channel for the SSO Adapter Service**

1. Edit the `SUN-ONE-MAIL` IMAP configuration properties. In the Global Properties section, click the entry that contains the `default|imap:///?configName=SUN-ONE-MAIL` configuration properties.

   An editable copy of the entry is displayed in the editable field below the list of Global Properties. Edit the text in the editable field:

   TIP Use a text editor to make the changes. Go to the editable field below the list of properties and select the entire properties string. Right-click the selected properties string and choose Copy.

   Paste the text into a text editor window and make the changes described in Step 1.

   a. Find `merge=host&`. Change the value to `default=host&`.

   b. Find `merge=clientPort&`. Change the value to `default=clientPort&`.

   c. Find `enableProxyAuth=false&`. Change the value to `enableProxyAuth=true&`.

   d. Find `proxyAdminUid=[PROXY-ADMIN-UID]&`. Change the value to `proxyAdminUid=admin&`.

   e. Find `proxyAdminPassword=[PROXY-ADMIN_PASSWORD]&`. Change the value to `proxyAdminPassword=password&`.

   f. Find `default=domain`. Change the value to `default=domain&`.

      Add the & at the end.

g. Add the following name/value pair entries to the end of the properties string:

```
host=allinone.example.com&
clientPort=88
```

There is no & at the end of the last entry.

TIP	After you use a text editor make the changes described in Step 1, select the text in the editor and copy it. Paste the text back into the Identity Server console window's editable field.

2. After you edit the text in the editable field, click Add.

   A new line is added to the Adapter SSO Templates field. Notice that the original line is not changed or deleted.

3. Locate the original parameter line and click Remove.

   The original line is deleted.

4. Click Save to apply your changes.

5. Navigate to the Sun ONE Application Server directory:

   ```
   cd /var/opt/SUNWappserver7/domains/domain1/server1/bin
   ```

6. Stop and restart Application Server:

   ```
   ./stopserv
   ```

   ```
   ./startserv
   ```

   Restarting Application Server also restarts Portal Server.

Configuring Messaging Server for Proxy Authentication

➤ **To Configure Messaging Server for Proxy Authentication**

1. Navigate to the Sun ONE Messaging Server directory:

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

2. Run the following `configutil` commands for the mail configuration.

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

su mailsrv

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

The first `configutil` command permits the admin user ID to be able to manage the Messaging Server message store. The message store contains the user mailboxes for a particular Messaging Server instance. The second `configutil` command enables admin proxy authentication.

3. Stop Sun ONE Messaging Server.

   ```
   ./stop-msg
   ```

4. Restart Sun ONE Messaging Server.

   ```
   ./start-msg
   ```

Configuring Calendar Server for Proxy Authentication

➤ **To Configure Calendar Server for Proxy Authentication**

1. Cd to the Calendar Server directory:

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

2. Edit the `/ics.conf` file as follows:

   a. Find the `service.http.allowadminproxy` parameter. Make sure it is uncommented. Make sure its value is set to yes:

      ```
      service.http.allowadminproxy="yes"
      ```

   b. Find the `service.admin.calmaster.userid` parameter. Make sure it is uncommented. Make sure its value is set to `calmaster`:

      ```
      service.admin.calmaster.userid="calmaster"
      ```

   c. Find the `service.admin.calmaster.cred` parameter. Make sure it is uncommented. Make sure its value is set to `password`. If you are using a different password, remember to substitute your password value.

      ```
      service.admin.calmaster.cred="password"
      ```

3. Cd to the Sun ONE Calendar Server directory.

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

4. Stop Sun ONE Calendar Server.

   ```
   ./stop-cal
   ```

5. Restart Sun ONE Calendar Server.

   ```
   ./start-cal
   ```

Verifying Proxy Authentication

In this section, you log in to the portal desktop and verify that you can access Messenger Express and Calendar Express.

➤ **To Verify Proxy Authentication**

1. In your web browser, open this URL:

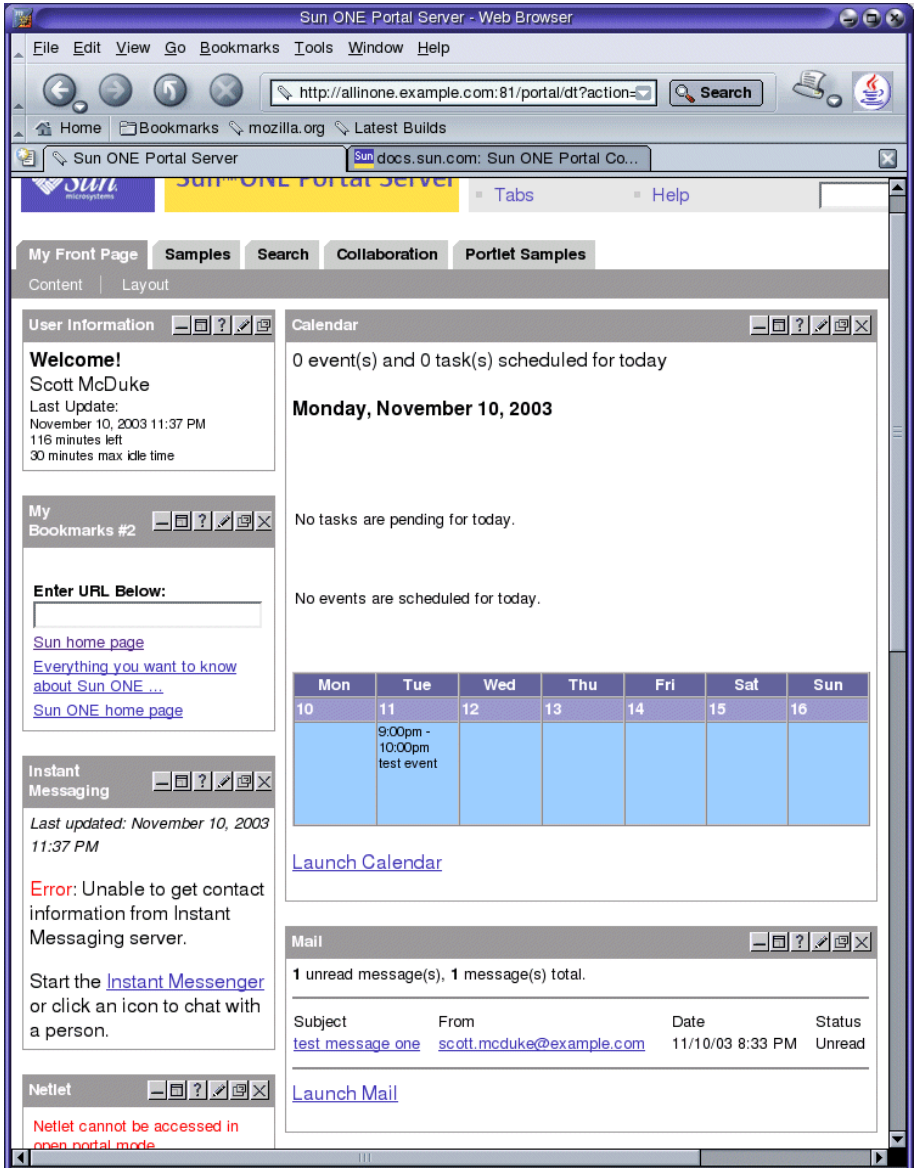
   ```
   http://allinone.example.com:81/portal
   ```

   This opens the sample portal desktop.

TIP	Remember to substitute the host and domain that you are using.

2. In the sample portal desktop, use the Member Login fields to log in. Type the following values:
   - User Name: scott
   - Password: password
3. The sample desktop refreshes. The Calendar and Mail channels display the appropriate information for your Java Enterprise System user. Your display should resemble Figure 7-2.

Figure 7-2 Sample Portal Desktop



4. Click Launch Calendar.

   The Calender Express main window opens. This verifies that proxy authentication is configured correctly for Sun ONE Calendar Server.

5. Click Launch Mail.

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

6. Click Log out.

You have completed the evaluation deployment example.

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