



Sun GlassFish Web Space Server 10.0 Call Add-On Guide



Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054
U.S.A.

Part No: 820-7282
August 2009

Copyright 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more U.S. patents or pending patent applications in the U.S. and in other countries.

U.S. Government Rights – Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

This distribution may include materials developed by third parties.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, the Solaris logo, the Java Coffee Cup logo, docs.sun.com, Java, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. or its subsidiaries in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and SunTM Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Products covered by and information contained in this publication are controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical or biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. Tous droits réservés.

Sun Microsystems, Inc. détient les droits de propriété intellectuelle relatifs à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et ce sans limitation, ces droits de propriété intellectuelle peuvent inclure un ou plusieurs brevets américains ou des applications de brevet en attente aux Etats-Unis et dans d'autres pays.

Cette distribution peut comprendre des composants développés par des tierces personnes.

Certains composants de ce produit peuvent être dérivées du logiciel Berkeley BSD, licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays; elle est licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, le logo Solaris, le logo Java Coffee Cup, docs.sun.com, Java et Solaris sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc., ou ses filiales, aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui, en outre, se conforment aux licences écrites de Sun.

Les produits qui font l'objet de cette publication et les informations qu'il contient sont régis par la législation américaine en matière de contrôle des exportations et peuvent être soumis au droit d'autres pays dans le domaine des exportations et importations. Les utilisations finales, ou utilisateurs finaux, pour des armes nucléaires, des missiles, des armes chimiques ou biologiques ou pour le nucléaire maritime, directement ou indirectement, sont strictement interdites. Les exportations ou réexportations vers des pays sous embargo des Etats-Unis, ou vers des entités figurant sur les listes d'exclusion d'exportation américaines, y compris, mais de manière non exclusive, la liste de personnes qui font objet d'un ordre de ne pas participer, d'une façon directe ou indirecte, aux exportations des produits ou des services qui sont régis par la législation américaine en matière de contrôle des exportations et la liste de ressortissants spécifiquement désignés, sont rigoureusement interdites.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFACON.

Contents

1 Overview	5
Who Should Read This Guide?	5
About Sun GlassFish Web Space Server Add-Ons	5
Additional Sun GlassFish Web Space Server Documentation	6
 2 Installation and Configuration	 7
Before You Begin	7
System Requirements	7
Installation Directories	8
Platform-Specific Path Separators	8
Overview of Installing the Call Add-On	9
The call Component	9
The call-registrar Component	9
Overview of Using the Call Add-On	10
Downloading call-registrar Using the Update Tool	10
▼ To Download call-registrar Using the GUI-Based Update Tool	10
▼ To Download the Call Add-On Using the CLI-Based pkg Tool	13
Deploying call-registrar on SailFin	13
▼ To Deploy call-registrar on SailFin	13
Installing call on Web Space Server	14
▼ To Install call on Web Space Server	14
Verifying the Functioning of call-web and RUON	15
▼ To Verify Whether the call-web Component is Successfully Installed on Web Space Server	15
▼ To Verify Whether the RUON API for Web Space Server is Working	16
Configuring Web Space Server to Use the Call Feature	17
▼ To verify the Working of call-registrar and to Configure the Portal	17

- 3 Using the Call Feature 19**
 - Configuring SIP Client for a Web Space Server User 19
 - ▼ To Configure X-Lite for a Web Space Server User 20
 - ▼ To Make Configuration Changes for Authentication Mode 21
- Making Calls Using the Call Feature 26
 - ▼ To Setup and Use the Call Feature 26

Overview

The Sun™ GlassFish™ Web Space Server 10.0 Call Add-On is shipped as part of the Web Space Server 10.0 Update 6 release. It enables voice conferencing through Web Space Server.

This chapter includes the following topics:

- “Who Should Read This Guide?” on page 5
- “About Sun GlassFish Web Space Server Add-Ons” on page 5
- “Additional Sun GlassFish Web Space Server Documentation” on page 6

Who Should Read This Guide?

This guide is intended for registered Web Space Server users who want to enhance the power of Web Space Server software with voice conference features.

Note – This guide does not provide detailed instructions for using Web Space Server in general. For such information, refer to the [Sun GlassFish Web Space Server Document Collection](#).

About Sun GlassFish Web Space Server Add-Ons

The Sharepoint Add-On for Sun GlassFish Web Space Server is one of several add-on packages available for the Sun GlassFish Web Space Server software. These add-ons, also sometimes called *accelerators*, are an evolving set of stand-alone feature packages that provide performance enhancements and easier integration with third-party software tools. See the [Sun GlassFish Web Space Server](#) product page for the most current list of add-on packages.

The Sun GlassFish Web Space Server add-on packages are available for free to registered Web Space Server users through the Sun GlassFish Update Tool. The specific add-on packages that are available to you depend on how your Web Space Server software is registered:

- Registered users with a paid Web Space Server service contract have unlimited access to the full set of Web Space Server add-ons.
- Registered users who do not have a paid Web Space Server service contract have access to a limited subset of the Web Space Server add-on collection.

Although the Sun GlassFish Web Space Server software is a free, open source product, the Web Space Server add-ons are proprietary components developed and licensed by [Sun Microsystems, Inc.](#)

To learn more about Web Space Server, add-on products for Web Space Server, and Web Space Server service contracts, go to the [Sun GlassFish Web Space Server](#) product page.

Additional Sun GlassFish Web Space Server Documentation

Each Web Space Server add-on package has its own user's guide. See the [Sun GlassFish Web Space Server Add-On Document Collection](#) for links to documentation for the currently available add-on products. Be sure to check back often, as the list of available add-ons is updated frequently.

For complete documentation for the core Sun GlassFish Web Space Server 10.0 software product, see the [Sun GlassFish Web Space Server Document Collection](#). You can also refer to the [Open Portal](#) documentation site.

Installation and Configuration

This chapter explains how to install and use the Call Add-On for Sun GlassFish Web Space Server software. The Call feature makes use of the [RUON](#) API. The Call Add-On enables portal users to establish voice communication based on the SIP protocol.

RUON enables presence functionality in Web Space Server. The Presence infrastructure shows the presence of a user on a network. The infrastructure is always present in portal, but the network need to push data and inform RUON that the user is present in that particular network. Web Space Server includes `ruon-web.war` by default, and RUON is deployed on Web Space Server by default. For more information, see the RUON home page at <https://ruon.dev.java.net/>.

This chapter includes the following sections:

- “Before You Begin” on page 7
- “Overview of Installing the Call Add-On” on page 9
- “Downloading `call-registrar` Using the Update Tool” on page 10
- “Deploying `call-registrar` on SailFin” on page 13
- “Installing `call` on Web Space Server” on page 14
- “Verifying the Functioning of `call-web` and RUON” on page 15
- “Configuring Web Space Server to Use the Call Feature” on page 17

Before You Begin

This section explains the basic requirements and concepts you should review before proceeding with the installation of the Call Add-On for Web Space Server.

System Requirements

The Web Space Server software should be installed as described in [Chapter 2, “Web Space Server Installation Instructions,”](#) in *Sun GlassFish Web Space Server 10.0 Administration Guide*.

Note that the requirements listed in “[Software and Hardware Requirements](#)” in *Sun GlassFish Web Space Server 10.0 Installation Guide* also apply to the Call Add-On.

If you are installing the Call Add-On on a Web Space Server 10.0 update version, make sure that you are using a compatible version. For example, the Call Add-On for Web Space Server 10.0 Update 6 should be installed only on a Web Space Server 10.0 Update 6 installation.

In addition, the following software is required:

SailFin

The [JSR 289](#) compliant scalable SIP (Session Initiation Protocol) servlets technology on top of a deployment-quality, Java EE based [GlassFish](#). SailFin is an open-source implementation of Sun GlassFish Communications Server. This distribution is available as a JAR file from <https://sailfin.dev.java.net>.

**CounterPath
X-Lite for
Windows**

Windows-compatible version of X-Lite from [CounterPath](#) is the preferred SIP client for making calls using the Call feature.

You should install SailFin on a machine separate from the machine on which Web Space Server is installed. Default port numbers for the admin port, instance port, and many other ports on SailFin are the same as the corresponding ports for GlassFish. If Web Space Server is running on GlassFish on the same machine, while trying to install SailFin, you see a message saying “port 4848 is in use”, and the installation fails. As a workaround for installing SailFin on the same machine on which Web Space Server is running, you can change the port numbers for SailFin in the `setup.xml` file.

Installation Directories

The name of the core Web Space Server bundle is `webpace-version-for-glassfish.zip`. When you unzip this file, a `webpace-for-glassfish` directory is created. Throughout the installation instructions, this directory is referred to as *webpace-dir*. You can install and configure Web Space Server from this directory.

Similarly, the directory that contains the unzipped bundle of GlassFish is referred to as *glassfish-root*.

Platform-Specific Path Separators

The instructions and examples in this document use UNIX-style forward slash (/) path separators in file and command names. If Web Space Server and Sun GlassFish Enterprise Server are installed on a Windows system, be sure to use backslashes (\) instead of forward slashes. For example:

- **UNIX systems or Linux systems:** `glassfish/bin/asadmin`
- **Windows systems:** `glassfish\bin\asadmin`

Overview of Installing the Call Add-On

The Call add-on is available with Sun GlassFish Web Space Server 10.0 Update 6 release. Call add-on allows portal users to call each other depending on their presence status on the portal. Call functionality is based on SIP (Session Initiation Protocol). The current version of Call add-on is tested for Windows version of X-Lite, and it is the recommended SIP client. For a Web Space Server user to use the Call feature, his/her user account need to be configured with the SIP client.

The Call Add-On includes two components, i.e., when you download the Call Add-On, it includes the following two components:

- `call`
- `call-registrar`

The `call` Component

Install `call` on Web Space Server. When you run the install script for `call`, it generates the `call-web.war` file.

In the example discussed in this guide, Web Space Server is installed on the machine `example113.com`. This machine is used for installing `call`.

The `call-registrar` Component

You need to deploy `call-registrar` on SailFin. When you run the install script for `call-registrar`, it generates the `call-registrar.war` file.

You need to register Web Space Server with `call-registrar`. After deploying `call-registrar` on SailFin, access the SailFin `call-registrar` at

`http://machine-name:8080/callregistrar/`, where *machine-name* is the machine on which SailFin is installed. Here you need to specify the host name of the machine running Web Space Server.

As a first step in deploying `call-registrar` on SailFin, you need to install SailFin. Download SailFin compatible with your OS from <https://sailfin.dev.java.net/>. For the instructions to install SailFin, refer [Sun GlassFish Communications Server documentation](#). Navigate to SailFin/bin folder and run `asadmin start-domain` command to start SailFin.

For installing SailFin, use a machine separate from the machine on which Web Space Server is installed. In the example discussed in this guide, the machine `example132.com` is used for this. Download a FCS bundle of Sun GlassFish Web Space Server 10.0 on the same machine, from <https://webpace.dev.java.net/download.html>. Use the Update Tool to upgrade the downloaded bundle from Web Space Server 10.0 to Web Space Server 10.0 Update 6, along with

downloading call - registrar shipped with Update 6. After the download, call - registrar is placed inside the *webpace-dir/webpace* folder. You do not need to install Web Space Server here, but you need this for deploying call - registrar on SailFin.

Overview of Using the Call Add-On

Install the SIP client, and configure the SIP client with the SIP address of your Web Space Server user account. Some of the collaboration portlets such as, Recent Bloggers and Message Boards that show the user profile can be used to initiate the call. A *call* link that appears next to the users who are online, provided they are logged into a SIP client on their machine. You can make calls by clicking the call link against a user. Call link appears only when the user who is being called is logged into his/her SIP client.

For the details of using the Call Add-On, see, [Chapter 3, “Using the Call Feature.”](#)

Downloading call - registrar Using the Update Tool

The version of Update Tool included with some versions of GlassFish Enterprise Server is not compatible with the Web Space Server add-on package repositories. You must use the version of Update Tool that comes with the Web Space Server 10.0 software.

Update Tool also includes a command-line (CLI) Image Packaging System (IPS) utility called *pkg*, which provides the same core functionality as its GUI-based counterpart.

▼ To Download call - registrar Using the GUI-Based Update Tool

If you are running Update Tool for the first time, you will have to install the interface before proceeding.

- 1 **Start Update Tool by changing to the *webpace-dir/bin* directory and typing *updatetool*.**
 - **If the Update Tool main window appears, proceed to Step 2.**
 - **If a prompt appears asking whether to allow the installation of Update Tool to proceed:**
 - a. **Type *y* to proceed.**
The installer downloads and installs Update Tool and then exits. This process takes approximately 10 - 15 minutes.
 - b. **Type the *updatetool* command again to start Update Tool.**
The Update Tool main window appears.

2 Expand Web Space under the Application Images pane, and choose Available Updates.

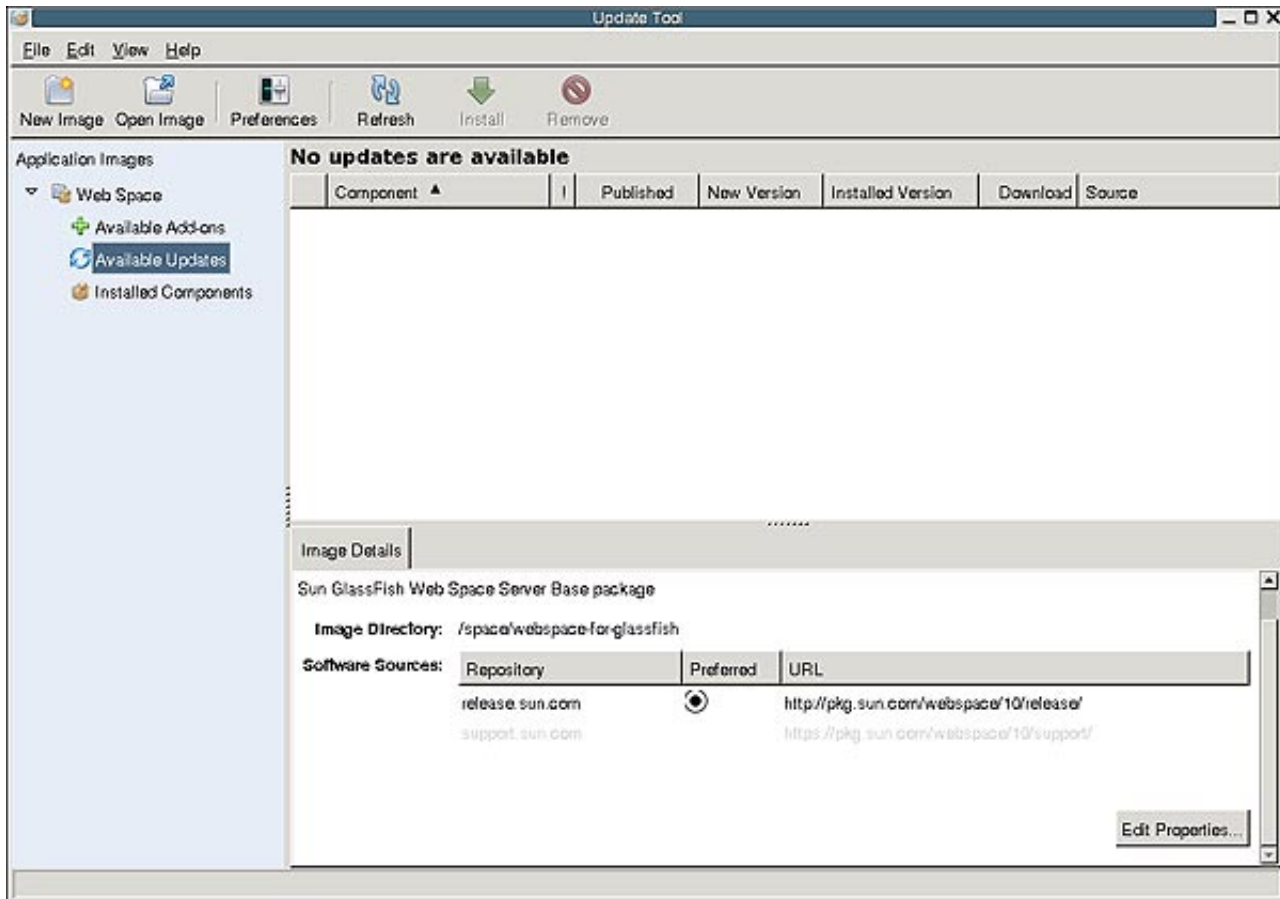


FIGURE 2-1 Update Tool

- 3 Click the **Edit Properties** button.
The Image Properties window is displayed.
- 4 Select the option **support . sun . com repository**, and choose **Preferred**.
The Repository Properties window appears.
- 5 Provide the appropriate repository URL provided by Sun support, and click **OK**.
The **support . sun . com repository** is highlighted.

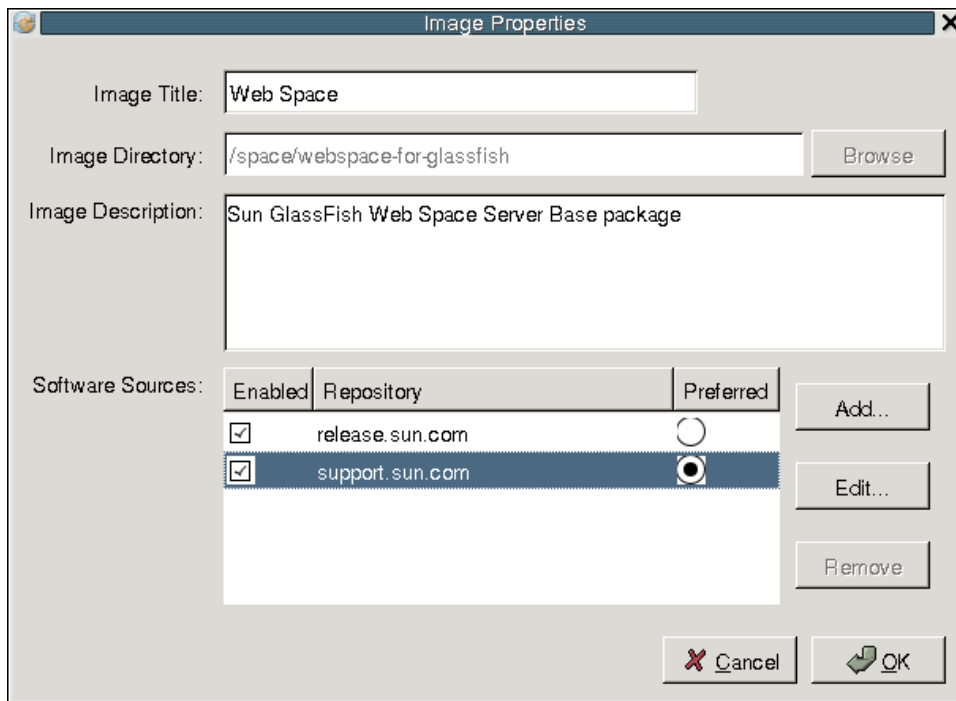


FIGURE 2-2 Selecting the support.sun.com Repository

- 6 **Click OK again to enable the support.sun.com repository.**
The Update Tool main window is displayed.
- 7 **Expand Web Space under the Application Images pane, and choose Available add-ons.**
- 8 **Select the Web Space for GlassFish V2 component, and click Install.**
- 9 **Select the call-registrar component.**

Next Steps Proceed to [“Deploying call-registrar on SailFin” on page 13](#) for the remaining installation instructions.

▼ To Download the Call Add-On Using the CLI-Based pkg Tool

- 1 **Start Update Tool by changing to the *webpace-dir/bin* directory and typing `updatetool`.**
 - If the Update Tool main window appears, proceed to Step 2.
 - If a prompt appears asking whether to allow the installation of Update Tool to proceed:
 - a. **Type `y` to proceed.**
The installer downloads and installs Update Tool and then exits. This process takes approximately 10 - 15 minutes.
 - b. **Type the `updatetool` command again to start Update Tool.**
The Update Tool main window appears.
- 2 **Change to the *webpace-dir/pkg/bin* directory.**
- 3 **Type the following command to download the Call Add-On:**
`pkg set-authority -P --enable -O http://pkg.sun.com/webpace/10/ repository-name`
 Ask your [SunSolve](#) service representative for the correct repository name to use.
- 4 **Type the following command to install the base Call Add-On.**
`pkg install Call-registrar-addon`

Next Steps Proceed to “[Deploying call-registrar on SailFin](#)” on page 13 for the remaining installation instructions.

Deploying call-registrar on SailFin

When you download call-registrar using the Update Tool, it is placed inside the *webpace-dir/webpace* directory.

▼ To Deploy call-registrar on SailFin

You need to have SailFin installed and running before you run the script for deploying call-registrar on SailFin. You need to specify the path for the SailFin directory, and the SailFin Administrator Password file. In this example, `space/SailFin` is the path for the SailFin directory and `sfpasswd` is the SailFin Administrator Password file. If you do not have a SailFin

administrator password file, you need to create a SailFin administrator password file in plain text format, with the SailFin administrator password. The default SailFin administrator password is adminadmin.

1 In a terminal window, change to the *webpace-dir/webpace/call-registrar* directory.

2 Run `ant -f install-SailFin.xml`.

```
Buildfile: install-SailFin.xml
```

```
check-ant:
```

```
check-last-install:
```

```
set-last-install:
```

```
set-SailFin-properties:
```

```
  [input] Enter SailFin Directory  [/opt/SailFin]
```

```
/space/SailFin
```

```
  [input] Enter SailFin Domain (include full path to domain)  [/space/SailFin/domains/domain1]
```

```
  [input] Enter SailFin Target  [server]
```

```
  [input] Enter SailFin Administrator [admin]
```

```
  [input] Enter SailFin Administrator Password File (include full path to file)  [//asadmin-password]
/sfpasswd
```

```
  [input] Enter SailFin Administration Port  [4848]
```

```
  [input] Can installer deploy wars?  [true]
```

Installing call on Web Space Server

If you have Web Space Server installed and running, you need to upgrade it to Web Space Server 10.0 Update 6 using the Update Tool. See, [“Downloading call-registrar Using the Update Tool” on page 10](#) for the instructions on downloading updates from the Update Tool. Download the call folder. When you install call, it deploys call-web.war on Web Space Server.

▼ To Install call on Web Space Server

You need to specify the GlassFish directory and the GlassFish Administrator Password file while installing the call-web.war file. In this example, space/glassfish is the path for the GlassFish directory and gfpasswd is the GlassFish Administrator Password file. If you do not have a GlassFish administrator password file, you need to create a GlassFish administrator

password file in plain text format, with the GlassFish administrator password. The default GlassFish administrator password is adminadmin.

1 In a terminal window, change to the *webpace-dir/webpace/call* directory.

2 Run `ant -f install-glassfish.xml`.

```
Buildfile: install-glassfish.xml
```

```
check-ant:
```

```
check-last-install:
```

```
set-last-install:
```

```
show-user-warning:
```

```
[input] JAVA_HOME must be set to JDK 1.5 or greater and java must be available in the execution path. GlassF
```

```
set-glassfish-properties:
```

```
[input] Enter GlassFish Directory [/opt/glassfish]
```

```
/space/glassfish
```

```
[input] Enter GlassFish Domain (include full path to domain) [/space/glassfish/domains/domain1]
```

```
[input] Enter GlassFish Target [server]
```

```
[input] Enter GlassFish Administrator [admin]
```

```
[input] Enter GlassFish Administrator Password File (include full path to file) [/root/asadmin-password]  
/gfpasswd
```

```
[input] Enter GlassFish Administration Port [4848]
```

```
[input] Can installer deploy wars? [true]
```

3 Restart GlassFish.

Verifying the Functioning of call-web and RUON

This section details the tasks for verifying the functioning of presence feature.

▼ To Verify Whether the call-web Component is Successfully Installed on Web Space Server

You need to verify the functioning of call-web after installing call-web.war on Web Space Server.

- 1 **To verify whether the call WAR is successfully installed on Web Space Server, type `http://machine-name:8080/call-web/` in a browser, where *machine-name* is the machine on which you installed the call WAR on Web Space Server.**
In this example, `example113.com` is the machine name.
- 2 **On successful installation of the call WAR, the *Directory Listing For* page is displayed.**

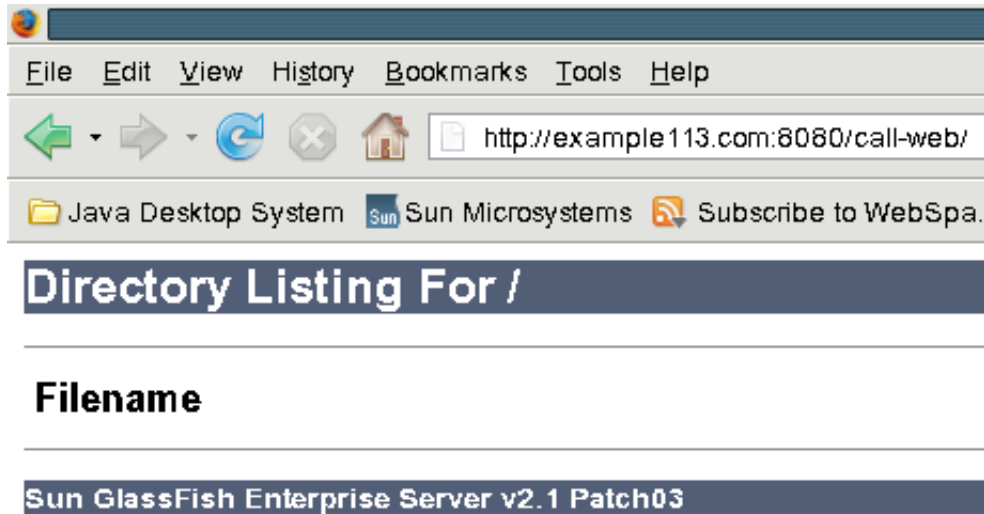


FIGURE 2-3 Verifying if the call WAR is deployed successfully

▼ To Verify Whether the RUON API for Web Space Server is Working

RUON API enables the presence functionality in Web Space Server. It is a part of Web Space Server by default. However, it is desirable to check its functionality.

- **To verify whether the RUON API for Web Space Server is working, type `http://machine-name:8080/ruon-web/` in a browser. If the RUON API is functioning, the *Directory Listing For* page is displayed.**

Configuring Web Space Server to Use the Call Feature

This section provides the procedure to verify the working of call-registrar, and to register Web Space Server with it.

▼ To verify the Working of call-registrar and to Configure the Portal

- 1 **To verify whether SailFin is successfully deployed on call-registrar, type**
`http://machine-name:8080/callregistrar/` **in a browser, where machine-name is the machine on which SailFin is installed.**
 In this example, `example132.com` is the machine name.
- 2 **Login to the call-register. By default, the username and password for the call-register are the same as the username and password of SailFin admin console, which are admin and adminadmin respectively.**
 On successful login, the browser page displays fields for the portal host name and port.
- 3 **Specify the Portal Host Name and Portal Host Port. Portal Host Name is the same as the IP address of the machine on which the portal (Web Space Server) is installed.**
 In this example, `10.12.154.113` is the Portal Host Name, `8080` is the default Portal Host Port.

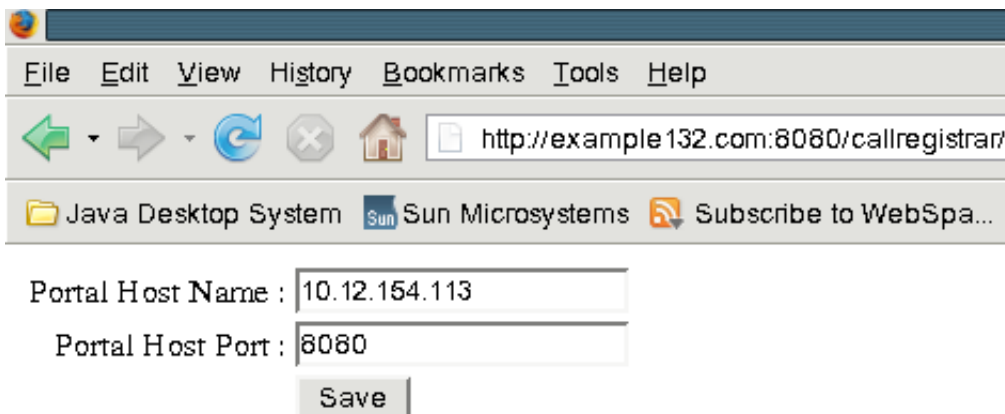


FIGURE 2-4 Specifying the portal host name and the port number in the call-registrar

- 4 **Click Save to save the configuration. A message saying *Successfully Saved the properties* is displayed.**

5 Check if the tables USER and SUPERGROUP exist in the lportal database.

Using the Call Feature

You can use the Call feature after installing and configuring the Call add-on as described in [Chapter 2, “Installation and Configuration.”](#) For a user to access the Call feature, client machines need to have SIP client installed on them and configured for the client user. This chapter provides an example of making a call using the Call feature, along with the instructions to configure SIP client.

The following topics are covered in this chapter:

- [“Configuring SIP Client for a Web Space Server User” on page 19](#)
- [“Making Calls Using the Call Feature” on page 26](#)

Configuring SIP Client for a Web Space Server User

For Web Space Server users to see each others online, and to make calls to each other, they need to install SIP client on their respective machines and need to configure it with their user details. Users are recommended to use Windows compatible version of [X-Lite](#) as the SIP client. Download and install SIP client on a machine from which you want to access an instance of Web Space Server. In this case, you are recommended to use X-Lite as the SIP client on a Windows machine. Download X-Lite to a preferred location on your machine, and run the executable to install it in a few self instructive steps.

Call functionality works in two modes:

Authentication mode	In authentication mode, the credentials (username, password) entered in X-Lite client are validated against the actual username and password of the user present in the <code>lportal</code> database.
Non-authentication (default) mode	This is the simple authentication mode, in which the password is not validated. Call functionality uses this authentication mode by default.

▼ To Configure X-Lite for a Web Space Server User

This task assumes a scenario in which Web Space Server is installed on a server, and it is accessed by two Windows machines, *Machine A* and *Machine B*. Perform this task on each machine to configure the X-Lite client.

- 1 **Right-click the SIP softphone and select *SIP Account Settings*.**
- 2 **Click the Add button on the SIP Accounts page.**
- 3 **Add the account details.**

You need to specify the User Details and Domain Proxy details. In the *User Details* section; you need to specify the Display Name, User Name, Password, and Domain. In the *Domain Proxy* section; select the *proxy* button, and specify the proxy address. The proxy address is specified in the format of *machine-name:5060*, where machine-name is the machine on which SailFin is deployed on call-registrar. In this example, *example132.com:5060* is the proxy address.

Note – System port 5060 is the default gateway commonly associated with the Session Initiation Protocol.

In this example, we have two users; Paul and James with username and email id as paul and paul@example.com, and james and james@example.com respectively, with the domain name example.com.

Default configuration for X-Lite client do not require password authentication. The following table lists the values you need to specify for user details in the SIP account properties window in case of the default configuration:

User Details	Value Required on Machine A	Value Required on Machine B
Display Name	<i>display name</i>	<i>display name</i>
User Name	paul@example.com	james@example.com
Password	not required	not required
Authorization user name	not required	not required
Domain	example.com	example.com

You can make the configuration changes which makes the X-Lite client to work in the authentication mode. For the instruction to make these configuration changes, see [“To Make Configuration Changes for Authentication Mode” on page 21](#). The following table lists the values you need to specify for user details in the SIP account properties window if you are making configuration changes which makes the X-Lite client to require password authentication:

User Details	Value Required on Machine A	Value Required on Machine B
Display Name	<i>display name</i>	<i>display name</i>
User Name	paul@example.com	james@example.com
Password	<i>password</i>	<i>password</i>
Authorization user name	paul@example.com	james@example.com
Domain	example.com	example.com

4 Click Apply and OK buttons.

5 Close the SIP Accounts window.

You can see the Registering . . . message on the SIP softphone display, which turns to Ready after the machine is authenticated.

Along with that, your SIP account information is displayed on the softphone display in the format Your user name is: *SIP user name*.

If any of the user details and the proxy address is not specified

▼ To Make Configuration Changes for Authentication Mode

- 1 **Navigate to *glassfish-dir*\domains\domain1\applications\j2ee-modules\webpace\WEB-INF\classes folder on the machine on which Web Space Server is installed, and open the portal-ext.properties file using any text editor. The portal-ext.properties file contains the following lines:**

```
login.events.post=com.liferay.portal.events.LoginPostAction,com.liferay.portal.events.DefaultLandingPageAction
#login.events.post=com.liferay.portal.events.LoginPostAction,com.liferay.portal.events.DefaultLandingPageAction,
com.sun.portal.events.CallUserLoginAction
```

Comment the first line, and uncomment the second line. The changed contents of the portal-ext.properties file look as follows:

```
#login.events.post=com.liferay.portal.events.LoginPostAction,com.liferay.portal.events.DefaultLandingPageAction
login.events.post=com.liferay.portal.events.LoginPostAction,com.liferay.portal.events.DefaultLandingPageAction,
com.sun.portal.events.CallUserLoginAction
```

Save the portal-ext.properties file.

- 2 **Restart GlassFish.**

- 3 On the machine on which call-registrar is deployed on SailFin, navigate to *webpace-dir/webpace/call-registrar/distribution/deploy/call-registrar/WEB-INF* folder. Open the *sip.xml* file, and uncomment the following lines:**

```
<!-- <security-constraint>

    <display-name>UserConstraint</display-name>
    <resource-collection>
        <servlet-name>RegistrarServlet</servlet-name>
        <sip-method>REGISTER</sip-method>
    </resource-collection>
    <auth-constraint>
        <description>authentication-configuration</description>
        <role-name>1234</role-name>
    </auth-constraint>
</security-constraint>
<login-config>
    <auth-method>DIGEST</auth-method>
    <realm-name>PortalRealm</realm-name>
</login-config>
<security-role>
    <description/>
    <role-name>1234</role-name>
</security-role> -->
```

- 4 Open the *sun-sip.xml* file, and uncomment the following lines.**

```
<!-- <security-role-mapping>
    <role-name>1234</role-name>
    <group-name>1234</group-name>
</security-role-mapping> -->
```

- 5 Login to Sailfin admin console.**
- 6 Navigate to Configuration → Security → Realms, and create PortalRealm.**

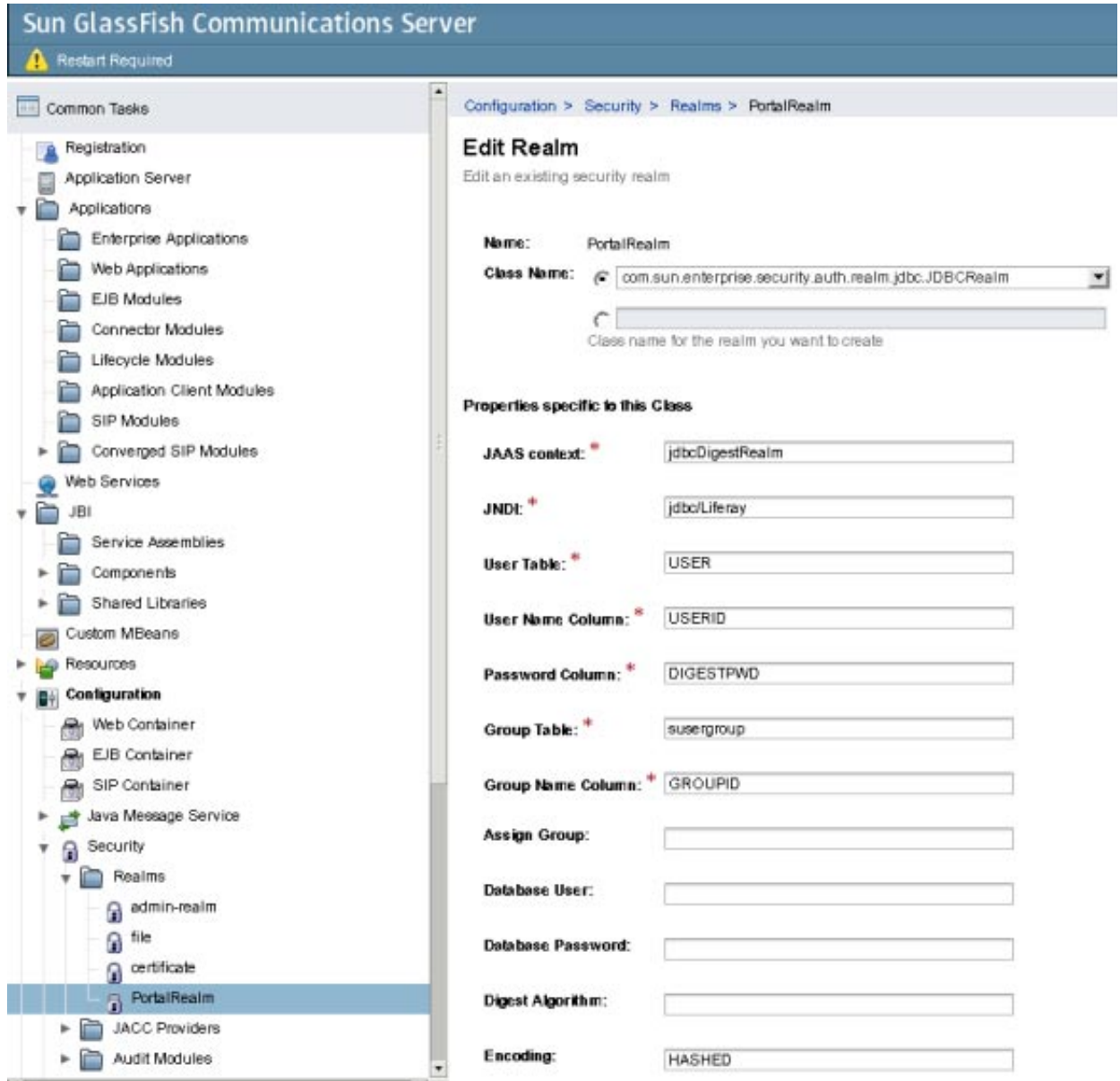


FIGURE 3-1 Creating PortalRealm

You need to select `com.sun.enterprise.security.auth.realm.jdbc.JDBCRealm` as the *Class Name*. In the *Properties specific to this Class*, *Encoding* need to be set to *HASHED*.

7 Save the changes.**8 Create a JDBC connection pool. To create the JDBC connection pool, navigate to Resources → JDBC → Connection Pools, and click New.**

You are prompted to create a new JDBC connection pool.

9 Select `Javax.sql.DataSource` as the Resource Type, and MySQL as the Database Vendor. Specify a name for the connection pool, and click Next.

For example, we are creating a connection pool named *webSPACE*.

10 Click Finish to complete creating the new JDBC connection pool.**11 Select the JDBC connection pool, and navigate to the Additional Properties tab.**

Add properties with the following values, and remove all the remaining properties:

Property Name	Value	Description
User	root	Database username
Port	3306	MySQL port
Url	<code>jdbc:mysql://machine ip address/lportal</code>	IP address of the machine on which the portal is running
Password	abc123	Database password

12 Save the changes.**13 Navigate to the General tab, and click the Ping button to test the connection.****14 Navigate to Resources → JDBC → JDBC Resources, and click New to create a new jdbc resource.**

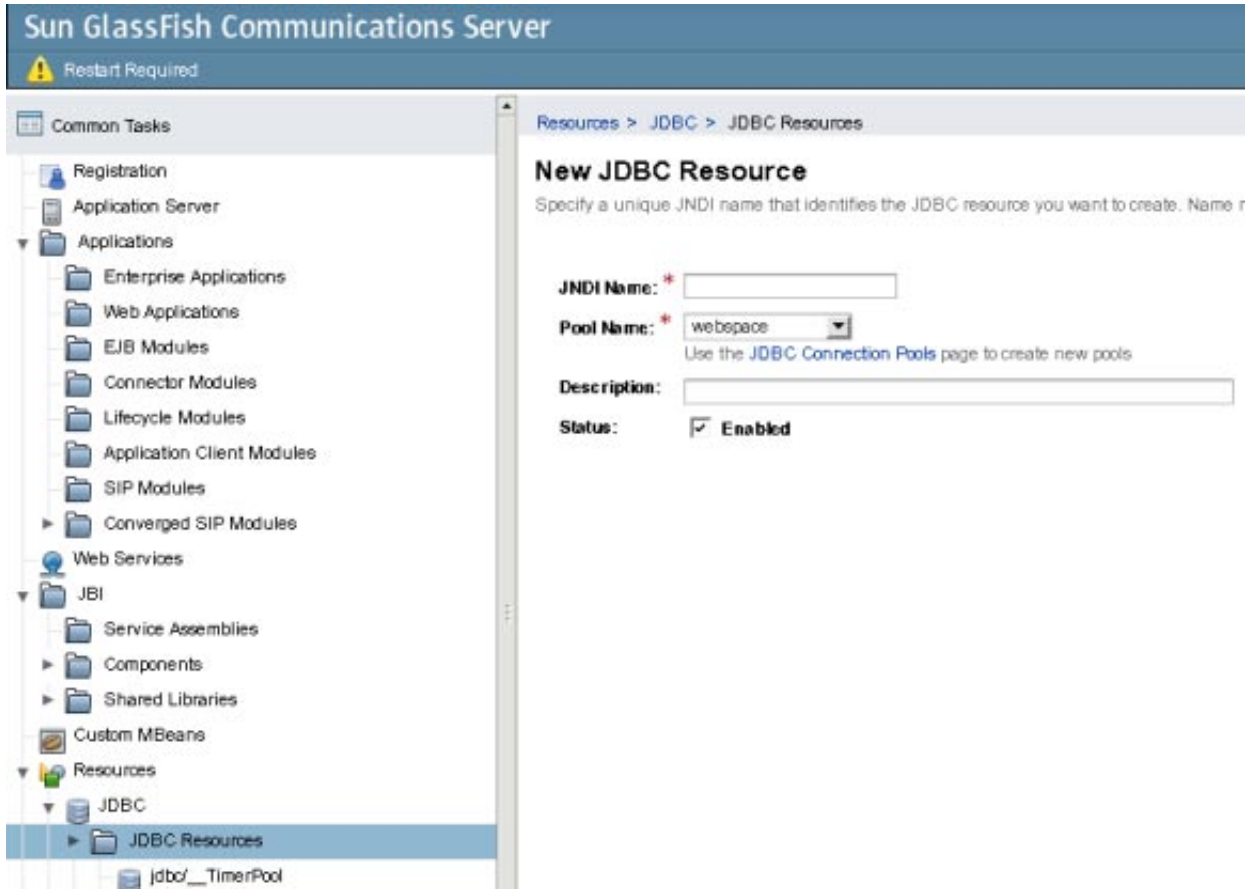


FIGURE 3-2 Creating a JDBC Resource

15 Specify a JNDI Name, and select a Pool Name.

In the earlier example, a connection pool named *webSPACE* is created. You can select that connection pool.

16 Click OK to create the JDBC resource.**17 Navigate to the General tab, and click the Ping button to test the connection.****18 Login to MySQL, and type `grant all privileges on *.* to root@machine-name identified 'abc123'`; in the command prompt, where *root* is the database username, and *abc123* is the password.****19 Restart GlassFish and Sailfin. Now the X-Lite client requires password authentication.**

- 20 **Configure the X-Lite client using the steps in “To Configure X-Lite for a Web Space Server User” on page 20.**

Making Calls Using the Call Feature

Web Space Server users who have configured a SIP client for their account can make calls to other users using the softphone interface of the SIP client.

Web Space Server users can use the Call feature through some of the collaboration portlets available on Web Space Server. For example, users can post a blog using the *Blogs* portlet, or can make a posting using the *Message Boards* portlet. Users who belong to the same Community can see the other users who are online on a blog or a message board, and a Call link appears next to their profile. On clicking the call link, the softphone associated with the SIP client displays, and users can make calls using the softphone.

This section provides an example that illustrates the use of Call feature.

▼ To Setup and Use the Call Feature

This task provides a simple scenario for making a call using the *Message Boards* portlet. Similarly, Web Space Server users can use the *Blogs* and *Recent Bloggers* portlets for making calls.

This scenario first creates two new users, and assigns them to a Community with *Community Member* and *Community Administrator* roles. In this setup, login and access instances of Web Space Server on two separate machines on which the SIP client is installed and configured for the respective Web Space Server user. The two users will be able to see each other online, and can click the *Call* link to make a call to each other.

- 1 **Login to Web Space Server as the admin user.**
- 2 **From the Welcome menu, navigate to Control Panel → Users under Portal category.**
- 3 **Add two new users.**
 - a. **Click Add to add a user.**
 - b. **Provide Paul as the username and paul@example.com as the email ID. Set password for the user.**
 - c. **Repeat steps a and b adding James as the username and james@example.com as the email ID.**

- 4 In the Control Panel, navigate to Communities under Portal, and add users to a Community.
In this example, add the users Paul and James to Guest Community, which is the default community.
 - a. Choose Actions → Assign Members.
 - b. Select the Available tab.
All users are listed.
 - c. Select the check boxes for Paul and James, and click the Update Associations button.
- 5 Navigate back to the Guest Community, and choose Assign User Roles from the Actions menu.
- 6 Select the Community Administrator role.
- 7 Select Available under Users.
- 8 Select the check boxes for Paul and James, and click the Update Associations button.
- 9 Configure new users for SIP client on two separate machines, say Machine A and Machine B. X-Lite (for Windows) is the recommended SIP client. For the instructions to configure X-Lite client, see [“Configuring SIP Client for a Web Space Server User” on page 19](#).
- 10 Login as Paul on Machine A, and as James on Machine B.
 - a. As Paul, add the Message Boards portlet to a public page.
 - b. Select Add Category, provide the name, add details for it, and click Save.
 - c. Click the category link, and click Post New Thread.
 - d. Add a message and click Save.
- 11 Reply to the thread as James from Machine B.
- 12 Now Paul can see a Call link on his page for the reply from James.
- 13 Click the Call link to start a conference with James.

