Installing Trailhead on Sun Solaris 2.7 (SPARC)

Cisco Trailhead, Version 4.0

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Conventions

This section describes directory conventions used in this document.

Installation Directories

You can install the Java Web Server (JWS) and Cisco Trailhead (CTH) in any directory of your choice. You can install Trailhead on the same machine as the Cisco Collaboration Server (CCS), or on a separate machine. The examples used in this document install these products in the following directories:

Software	**Installation directories used in this document**
Java Web Server	`/usr/local/JavaWebServer1.1.3.`
Trailhead	`/usr/local/trailhead`

CD-ROM Drive Specification

To install Trailhead from the CD, you must specify the directory of your CD-ROM drive. This document refers to the directory name as `<cdrom>`.

System Requirements

This section describes the software and hardware required to install Cisco Trailhead on the Sun Solaris Server.

Server Operating System

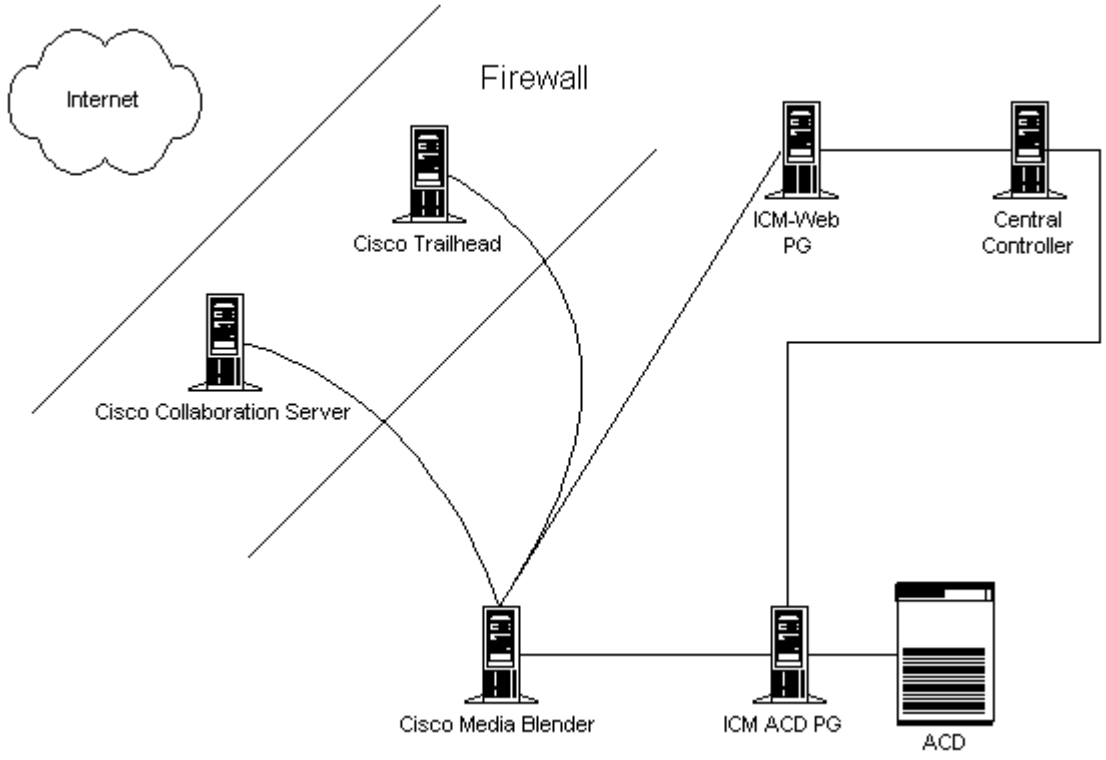
- Sun Microsystems Solaris 2.7 Server
- Java Web Server 1.1.3 (Supplied with Trailhead)
- Java Runtime Environment (JRE) 1.1.8 (Supplied with Trailhead)

Server Hardware Requirements

- Minimum Enterprise configuration
- Dual 400 MHz Sun Enterprise 450
- 512 MB RAM, 4 GB disk

Other Hardware and Software Requirements

The following figure shows the components of the ICM Web Option product:



The Cisco Trailhead server must be configured as an Interactive Voice Response (IVR) system on the Web Peripheral Gateway (PG).

The Cisco Media Blender (CMB), Version 4.0, must be running on Windows NT with the Internet Information Server (IIS).

The Cisco Collaboration Server (CCS), Version 3.01, must be installed on either the Windows NT platform running the Internet Information Server (IIS) or the Solaris platform running the Java Web Server (JWS).

The Intelligent Contact Management (ICM) Web PG must be configured as an IVR PG. The PG number must be enabled on the router, and the PG must be configured for Post-Routing on the ICM. The ICM Web PG, the ICM ACD PG, and the ICM Central Controller must be running ICM, Version 4.1.4, (including all appropriate hot fixes).

The supported Automatic Call Distributors (ACDs) for this release are:

- Lucent Definity G3, Version 6.3
- Aspect CallCenter, Versions 6.2 and 7.2
- Nortel Meridian 1, R24, SCCS 1.5
- Nortel Symposium, Versions 1.5 and 3.0
- NEC NEAX 2400, R4.12

Before You Install Trailhead

Before you install Trailhead, you must install the gzip compress/uncompression utility and the Java Web Server 1.1.3.

Note: This step is required only if you are not installing on the same machine as the Cisco Collaboration Server (CCS). If you are installing on the same machine, go to Install and Configure Trailhead.

Installing gzip and JWS requires that you do the following:

1. Obtain root privilege
2. Install gzip
3. Install Java Web Server
4. Test Java Web Server

Obtain root privilege

To install these products, you need root privilege. Type this command:

```
su root
```

Install gzip

Check to see if gzip is already installed on your system. If it is not, follow these steps:

1. Copy the gzip media from the CD:
   `cp /cdrom/ciscoth/gzip124/ /usr/local/`
2. Enter these commands:
   `cd /usr/local`
   `pkgadd -d gzip124`
3. Press **Enter** to accept the default to install gzip.

Install Java Web Server 1.1.3

Check to see if the Java Web Server is already installed on your system. If it is not, follow these steps to install the Sun Java Web Server (JWS) version 1.1.3 for Solaris:

1. Copy the JWS media from the CD to /usr/local/:
   `cp /cdrom/ciscoth/jws113.tgz /usr/local/`
2. Go to `/usr/local`
   `cd /usr/local/`
3. Unzip the JWS media:
   `bin/gunzip -c jws113.tgz | tar xf -`
4. Set the ownership of the JavaWebServer directory to nobody.
   `chown -R nobody /usr/local/JavaWebServer1.1.3`

Test Java Web Server 1.1.3

1. Go to the JWS bin directory:
   `cd /usr/local/JavaWebServer1.1.3/bin`
2. Start the Java Web Server:
   `./httpd &`
3. Open a browser and connect to the web server by going to this URL:
   `http://<servername>:8080`
   A JWS1.1.3 Congratulations page displays indicating that Java Web Server is installed and running successfully.

Install and Configure Trailhead

Installing and configuring Trailhead requires the following steps:

1. Stop the Collaboration Server or shut down the JWS
2. Install the Trailhead software
3. Change the JWS Port (optional)
4. Configure Trailhead
5. Start Trailhead
6. Configure the Trailhead medium on Media Blender
7. Verify communication between Trailhead and Media Blender

Step 1: Stop the Collaboration Server OR Shut down the JWS

If you are installing Trailhead on the same machine as the Collaboration Server, stop the Collaboration Server.

1. Log in as root
2. Shut down the Java Web Server using these commands:
   `cd /usr/local/JavaWebServer1.1.3/bin`
   `./jsadmin admin/admin -stop`

Step 2: Install the Trailhead software

1. Enter the following command:
   `cd /usr/local/`
2. Copy the file `trailh.tar.Z` from the CD to the directory in which you want to install the Trailhead directory.
   Example:
   `cp /cdrom/ciscoth/trailh/trailh.tar.Z /usr/local/`
3. Unpack the file using the following commands:
   `bin/zcat trailh.tar.Z| tar xf -`
   This unpacks the software into the trailhead directory. (If the trailhead directory doesn't yet exist, this command creates it.)
4. Change ownership of all files in the `<trailheaddir>/servlet/properties` directory to nobody:
   `chown -R nobody`
   `/usr/local/trailhead/CiscoTH/servlet/properties`
5. Run the installation script:
   a. Log in as root (using the **su** command)
   b. Type this command:
   `chmod a+x`
   `/usr/local/trailhead/CiscoTH/bin/installTrailhead`
   c. Type this command:
   `/usr/local/trailhead/CiscoTH/bin/installTrailhead`
   d. When prompted, enter these values:
   --the Java WebServer installation directory of the (`/usr/local/JavaWebServer1.1.3`)
   --the Trailhead installation directory (`/usr/local/trailhead/CiscoTH`)

Step 3: Change the Java Web Server Port (optional)

If you have another Web server running on the same machine as Trailhead, that Web server and the Java Web Server (JWS) may both attempt to use port 80. You can either choose to run the other Web server on another port or change the port used by the JWS.

Note: This step is necessary ONLY if you are running another web server on the same machine as JWS.

To change the JWS Port, edit the following file:

`<JWSdir>/properties/server/javawebserver/webpageservice/endpoint.properties`

by setting the `endpoint.main.port` property to a port other than 80 (e.g. 8080).

Step 4: Configure Trailhead

You configure the behavior of Trailhead in the `Trailhead.server.properties` property file that resides in the `/usr/local/trailhead/CiscoTH/servlet/properties/trailhead` directory. (You may need to change ownership of the `/usr/local/trailhead/servlet/properties/trailhead` directory).

Be sure the change the log path to reflect the path in which the logs will be created. Using the LogPath property, change the log path to `/usr/local/trailhead/Logs/`.

For complete information on the Trailhead property file, see the *Cisco ICM Web Option: Trailhead Configuration and Administration Guide.* You can access this guide on the Media Blender server using this URL: `<blenderserver>/help/`.

Trailhead Autostart

You can configure Trailhead to automatically start whenever the JWS is started using the autostart property in the Trailhead servlet properties file.

If you choose to do so, you must also ensure that the `checkurls` property is set to false until you have created all of the HTML pages used by Trailhead. See Post-Installation Tasks for more information.

Step 5: Start Trailhead

Start JWS using this command:

`<trailhead dir>/bin/trailhead -start`

Starting Trailhead from the Trailhead Administration menu

After you have started Trailhead for the first time, you can start it using the Trailhead Administration menu using these steps:

1. Open a browser and go to this URL: `http://<servername>/TrailheadAdmin`
   The Trailhead login page appears.
2. Type your username and password to log in to Trailhead Administration.
   The Trailhead control panel appears.
3. Click **Startup/Shutdown**.
   The Startup screen appears.
4. Click **Startup**.

If you are unable to get to the Trailhead administration menu, you may need to restart JWS. Use the following procedures:

1. Stop JWS using this command:
   `<trailhead dir>bin/trailhead -stop`
2. Then use this command to start Trailhead:
   `<trailhead dir>/bin/trailhead -start`

Once you have installed and configured your Trailhead server and it runs as expected, you can also remove the file `trailh.tar.Z`.

The following steps are required only if you are using Trailhead to provide callback-only in at least some instances.

Step 6: Configure the Trailhead medium

A Trailhead medium is installed automatically with Media Blender on the Media Blender server. You must configure this medium if you intend to use Trailhead in any kind of callback-only situation. You configure the Trailhead medium using the `/usr/local/trailhead/CiscoTH/servlet/properties/Trailhead.properties` file. For complete information on configuring the Trailhead medium, see the *Cisco ICM Web Option: Trailhead Configuration and Administration Guide*.

You must also identify Trailhead as a participating medium in the `blender.properties` file. Use the `medium(n)` property to define this medium.

Step 7: Verify communication between Trailhead and Media Blender

1. Start Media Blender. You must log in to the Media Blender Administration Control Panel, using your NT Administrator account.
2. Go to this URL: `http://<trailhead>/TrailheadAdmin`
3. Click **Summary**.
   Ensure that the destination that communicates with Media Blender has received a poll from the Media Blender. You set the time interval between Media Blender polls to the Trailhead server using the properties file for the Trailhead medium. See the *Cisco ICM Web Option: Trailhead Configuration and Administration Guide* for more information.

Post-Installation Tasks

After you have installed and tested Trailhead, you must complete several steps to ensure proper system function. You must:

- Change the Java Web Server admin password
- Configure Trailhead for autostart

Change the Java Web Server Admin Password

The Java Web Server installs with an administrator user name and password. We recommend that you change this default password. Instructions for changing this password follow.
Java Web Server installs with the following user name and password:

User name=**`admin`**
Password=**`admin`**

Change the password of the admin user:

1. Go to your browser and enter `http://<server-name>:9090`
2. Log in.
3. Highlight Web Service and click **Properties**.
4. Enter and verify a new password in the window that displays.
5. Click **OK**.

Configure Trailhead for AutoStart

Once installation is complete, you can ensure that Trailhead and all media automatically start when the Java Web Server is started. To ensure automatic start of Trailhead, you must set the autostart property to true in `Trailhead.server.properties` on the Trailhead server.

Important: Until you have created all of the HTML files referenced by the Trailhead system, ensure that the checkurls property in the `Trailhead.properties` file on the Media Blender server is set to false when using autostart. The checkurls property verifies that all HTML files referenced in `Trailhead.server.properties` exist at startup. Once you have created all of your Web pages, you can set this property to true.

Note: Do not set the autostart property to true until you are sure that all of your media have been properly configured.

How to Start JWS and Trailhead

Once Trailhead has been configured for autostart, use this command to start both the JWS and Trailhead automatically:

```
/usr/local/trailhead -start
```

When prompted, enter the JWS admin username and password.

How to Stop JWS and Trailhead

Use this command to stop both JWS and Trailhead automatically:

```
/usr/local/trailhead/ -stop
```

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