



CHAPTER 3

Installing Cisco Secure ACS Remote Agent for Solaris

This chapter provides information about installing Cisco Secure Access Control Server (ACS) Remote Agent for Solaris.

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System Requirements

The computer running ACS Remote Agent for Solaris must meet the minimum requirements detailed in the following sections:

- [ACS Requirements, page 3-1](#)
- [Hardware Requirements, page 3-1](#)
- [Operating System Requirements, page 3-2](#)
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ACS Requirements

You must use ACS Remote Agent for Solaris, version 4.1, with ACS Solution Engine (ACS SE), version 4.1. Other releases of ACS are not supported.

Hardware Requirements

The computer running ACS Remote Agent for Solaris must meet these requirements:

- SPARC architecture
- 256 MB of RAM

- 250 MB of free disk space

For the most recent information about tested hardware, see the *Release Notes for Cisco Secure ACS Solution Engine*. The current version of the release notes are posted on Cisco.com.

Operating System Requirements

The computer running ACS Remote Agent for Solaris must use Solaris 2.8 or Solaris 2.9.

For the most recent information about tested operating systems, see the *Release Notes for Cisco Secure ACS Solution Engine*. The current version of the release notes are posted on Cisco.com.

Environment Variable Settings

The environment variable `LD_LIBRARY_PATH` must be set with the path for the file `libstdc++.so*`.

Example:

If `libstdc++.so` is in directory `/router/lib`, then root must have the following settings in the `.profile`:

```
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/router/lib
export LD_LIBRARY_PATH
```

Network Requirements

Before you install ACS Remote Agent, ensure that:

- The computer running ACS Remote Agent for Solaris can ping the ACS Solution Engines that it is to support.
- The gateway devices permit traffic between the computer running ACS Remote Agent for Windows and the ACS SE. Specifically, the remote agent must receive TCP communication on TCP ports you configure in `CSAgent.ini`. The default TCP ports, if all services are used, are 2004, 2006, and 2007. The appliance must receive TCP communication on TCP port 2003.



Note

By using the `CSAgent.ini` file, you can configure the ports that the remote agent uses to communicate with ACS. If you change the ports used, configure intervening gateway devices to permit TCP traffic on the ports that you configure the remote agent to use. For more information about changing the ports that a remote agent uses, see [Configuring a Remote Agent, page 4-1](#).

Installing a Remote Agent for Solaris

Before You Begin

Determine the IP address of the ACS Solution Engine that will be the configuration provider for this remote agent. For more information about configuration providers, see [Configuration Provider, page 1-2](#).

For information about what must be completed before installing ACS Remote Agent for Solaris, see [System Requirements, page 3-1](#).

If a previous version of ACS Remote Agent for Solaris is installed on the machine, you must uninstall it before you install ACS Remote Agent for Solaris 4.1. See [Upgrading ACS Remote Agent for Solaris, page 3-6](#).

To install ACS Remote Agent for Solaris:

- Step 1** On the ACS Software Migration CD, find the installation file for ACS Remote Agent for Solaris. The file name is typically `CSCOacsag.version.platform.tar`.



Note You can also download the installation file from [Cisco.com](#). Log in to [Cisco.com](#), choose **Technical Support > Downloads**, and then locate the software download page for ACS Solution Engine. Remote agent software is located on the Strong Cryptographic 3DES Software page for ACS Solution Engine software.

- Step 2** Place the Solaris remote agent file in a location accessible from the Solaris server on which you want to install the remote agent.

- Step 3** On the Solaris server on which you want to install the Solaris remote agent, log in as root.



Note If you cannot access the server as root, log in to the server as any user that has permission to use the `sudo` command.

- Step 4** Access a shell command prompt and change directories to the directory in which you saved the downloaded Solaris remote agent file.

- Step 5** Copy the remote agent installation package to the `/tmp` directory. For example, type:

```
cp CSCOacsag.version.platform.tar /tmp
```

where *version* is the version of the remote agent and *platform* is the platform identifier string.

- Step 6** Change directories to the `/tmp` directory. Type:

```
cd /tmp
```

Press **Enter**.

- Step 7** Unpack the remote agent software package. Type:

```
tar xf CSCOacsag.version.platform.tar
```

Press **Enter**.

- Step 8** Install the remote agent software package. Type:

```
pkgadd -d . CSCOacsag
```

Press **Enter**.



Tip If you are not logged in as root, use the `sudo` command, for example, `sudo pkgadd -d . CSCOacsag`.

The software installation begins. The `Enter Appliance name/IP:` prompt appears. The appliance referred to is the configuration provider for the remote agent.

- Step 9** Type the hostname or IP address of the ACS Solution Engine that is the configuration provider for this remote agent. Press **Enter**.



Note If you type a hostname, be sure that DNS is operating correctly or that the appliance hostname is in the local hosts file.



Tip You can edit the IP address or hostname of the configuration provider after completing the installation. For more information, see [Configuring a Remote Agent, page 4-1](#).

The installation script verifies the IP address or hostname specified, records the validated information in the *CSAgent.ini* file, and continues the installation. The following message and prompt appear:

```
Do you like to use CSUnix output format? [n] [y,n,?]
```

Step 10 Do one of the following, depending on what format you want to use:

- For the CSUnix log format, type **Y**, and press **Enter**.
- For the CSV log format, type **N**, and press **Enter**.

For more information about CSUnix log format, see the discussion of the CSUnixOutput option in [CSAgent.ini Settings, page 4-2](#).



Tip You can edit the setting for the CSUnixOutput option after completing the installation. For more information, see [Configuring a Remote Agent, page 4-1](#).

The installation script records your log format selection in the *CSAgent.ini* file and continues the installation. The following message and prompt appear:

```
This package contains scripts which will be executed with super-user permission during the process of installing this package.
```

```
Do you want to continue with the installation of <CSCOacsag> [y,n,?]
```

Step 11 To continue with the installation, type **Y**, and press **Enter**.



Note If you type **N**, the installation exits and the remote agent software is not installed.

The Solaris remote agent software is installed on the Solaris server.

Where to go next

- If you want to configure the remote agent, see [Configuring a Remote Agent, page 4-1](#).



Note The installation provides a default configuration, including specifying the configuration provider; however, you may want to configure the ports on which the remote agent communicates with the configuration provider and with other ACS Solution Engines.

- To start remote agent services, see [Stopping and Starting Remote Agent Services, page 4-7](#).

Uninstalling ACS Remote Agent for Solaris

**Note**

If you do not intend to reinstall ACS Remote Agent for Solaris on this computer, remove the applicable remote agent configurations from all ACS Solution Engines.

Before You Begin**Note**

Uninstalling a Solaris remote agent requires root privileges or permission to use the **sudo** command.

To uninstall ACS Remote Agent for Solaris:

Step 1 On the Solaris server running the remote agent, log in as root.

**Note**

If you cannot access the server as root, log in to the server as any user that has permission to use the **sudo** command.

Step 2 Access a shell command prompt.

Step 3 Type:

```
pkgrm CSCOacsag
```

Press **Enter**.

**Tip**

If you are not logged in as root, use the **sudo** command, for example, **sudo pkgrm CSCOacsag**.

The following prompt appears:

```
Do you want to remove this package?
```

Step 4 Type **Y**, and press **Enter**.

The following prompt appears:

```
This package contains scripts which will be executed  
with super-user permission during the process of removing  
this package.
```

```
Do you want to continue with the removal of this package  
[y,n,?,q] ?
```

Step 5 Type **Y**, and press **Enter**.

The Solaris remote agent software is removed from the Solaris server.

Upgrading ACS Remote Agent for Solaris

The upgrade process entails uninstalling the old version of the remote agent and installing the new version.

To upgrade ACS Remote Agent for Solaris:

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- Step 1** Remove the old version of the remote agent by performing the steps in [Uninstalling ACS Remote Agent for Solaris, page 3-5](#).
 - Step 2** Using the version of ACS Remote Agent for Solaris to which you want to upgrade, perform the steps in [Installing a Remote Agent for Solaris, page 3-2](#).
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