



Installing and Logging Into ISC

Use the information described in this chapter in the following order:



Note

See [Chapter 1, “System Recommendations,”](#) before installing ISC.

- [Packages Included with ISC, page 2-1](#)
- [Initial Configuration—Creating the ISC Owner, page 2-2](#)
- [Installing ISC, page 2-2](#)
- [Configuring HTTPS, page 2-21](#)
- [Logging In for the First Time, page 2-22](#)
- [Remote Installing and Uninstalling of Processing Server, Collection Server, or Interface Server from GUI, page 2-23](#)
- [Installing License Keys, page 2-24](#)
- [Migrating VPNSC 1.x or 2.x Repository to ISC 4.1, page 2-25](#)
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- [Launching Topology Tool, page 2-27](#)
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Packages Included with ISC

The ISC installer includes the following third party software:

- ADCi® World Map Version 3.1
- AdventNet® SNMP Version 3.3.2
- Apache® Tomcat Version 4.1.27
- ILOG® CPLEX Version 7.5
- Macrovision® FlexLM Version 7.2e
- Sun Microsystems® Java JRE Version 1.4.2_08
- Sybase® Adaptive Server Anywhere (ASA) Version 8.0.1
- TIBCO® Rendezvous Version 7.1.15

Initial Configuration—Creating the ISC Owner



Note

If you are planning to use an Oracle database, understand that ISC 4.1 has been tested with Oracle Database 10g, Enterprise Edition Release 10.1.0.2.0 - 64bit Production. If you would like to use another version of Oracle 10g, see Oracle's compatibility information. If you are upgrading ISC and were using a version of Oracle other than 10g, you must transfer your Repository to Oracle 10g. This can be done using Oracle import/export utilities or other methods. Proceed to [Appendix A, "Setting Up Oracle for ISC"](#) before continuing with the ISC installation. After you complete the Oracle set up, return here.

The first time you install ISC, create a UNIX user to own the software. This user is the default username when you log into ISC. Create the user and group using Solaris commands or the Solaris Admintool. This user must have a valid group ID and read and write permissions to the install directory.

To add a user to your server using the standard Solaris commands, follow these steps:

Step 1 At the Solaris prompt, log in as **root**.

Step 2 To create the user, enter:

```
useradd -d /users/<username> -m -s /bin/<shell_type> <username>
passwd <username>
```

where:

-m creates the directory specified in **-d**

<shell_type> is **sh** for the Bourne Shell, **ksh** for the Korn Shell, or **csh** for the C Shell

iscadm is recommended as the **<username>**.

Step 3 At the prompt, enter a password.

Installing ISC

To add ISC to your system, either as a new ISC customer, a customer migrating from a Cisco VPNSC release, or a customer upgrading from a previous ISC release, follow these steps. The ISC GUI installer checks that the required Solaris packages and patches are installed. The installer has you acknowledge the missing patches and you can then continue the installation. You can install the specified missing packages or patches later.

Contact isc-mktg@cisco.com for migration information.

The installer also checks for two kinds of disk space:

- In the intended install location, you need 1.2 GB free for the binaries plus an extra 250 MB for log file growth and the installation of the Cisco CNS Configuration Engine 1.3.x, 1.4, or 1.5 software.
- In the database directory, you need 1 GB free. For large systems, you should have 4 to 5 GB of space. If the directory has less than 1.2 GB free, you can still install ISC, but you might run out of space.

See [Chapter 1, "System Recommendations"](#) for more information about disk space and planning.

The complete installation for the ISC software requires 1.2 GB of free disk.

To install the ISC software, follow these steps.

**Note**

If a previous installation is running, enter the **stopall** command. See [Cisco IP Solution Center Infrastructure Reference, 4.1](#) for information about all WatchDog commands.

Step 1

Insert the ISC installation CD-ROM.

**Caution**

When you insert the CD-ROM, the File Manager is invoked automatically. Do *not* use the File Manager to install the ISC product. Run the installation script from a terminal window.

**Note**

If you choose to remotely install over a wide area network, you must add two spaces at the end of each field for which you modify the entry. This is to work around a potential problem that occurs when you have two or more SSH tunnels between your location and your installation machine's location.

Step 2

Open a terminal window and log in as **root**.

Step 3

Change to the CD ROM directory:

```
$ cd /cdrom/cdrom0
```

Step 4

If you have a previous ISC installation with a database, you *must* back up your current database. See the instructions to backup and restore an ISC repository or create a standby system, as explained in [Appendix C, "Backup and Restore of ISC Repository and Standby System"](#).

Step 5

Execute the ISC product installation script:

```
cdrom> ./install.sh
```

The ISC software is installed by default in the **/opt/isc-4.1** directory or a directory set up as follows.

If you are upgrading ISC from a previous version, make sure the existing ISC is shut down completely. Then do one of the following:

- a. Install ISC 4.1 in the same directory with the same directory name as the existing ISC product, as follows:

- Save the ISC installation for possible uninstall purposes, as follows:

```
tar cvf <directory_name>.tar /opt/<directory_name>
```

- Select this directory name in [Step 12, Figure 2-6, "Specify Directory Location"](#).

-or-

- b. Install ISC 4.1 in the same directory with a new name.

For example, if you are upgrading from ISC 4.0 to ISC 4.1 and the ISC installation is under the directory **/opt/isc-4.0**, then install ISC 4.1 in the same directory and rename it to **/opt/isc-4.1**, with steps like the following:

- Save the ISC 4.0 installation for possible uninstall purposes, as follows:

```
tar cvf isc-4.0.tar /opt/isc-4.0
```

- Rename the directory, as follows:

```
mv /opt/isc-4.0 /opt/isc-4.1
```

- Select the directory **/opt/isc-4.1** in [Step 12, Figure 2-6, "Specify Directory Location"](#).

-or-

- c. Install ISC 4.1 in a separate directory.

For example, if you are upgrading from ISC 4.0 to ISC 4.1 and the ISC installation is under the directory **/opt/isc-4.0**, then install ISC 4.1 in a new directory **/opt/isc-4.1**, with steps like the following.

- Create the new ISC 4.1 directory, as follows:

```
mkdir /opt/isc-4.1
```

- Copy the Repository from the ISC 4.0 directory to the new ISC 4.1 directory, as follows:

```
cp -r /opt/isc-4.0/Repository /opt/isc-4.1
```

- Select the directory **/opt/isc-4.1** in [Step 12, Figure 2-6, “Specify Directory Location.”](#)

Step 6 On your terminal window, you will see a list of the required patches. A warning message appears for each missing patch.

After the list, you receive a message indicating either that all patches are up-to-date, **All necessary patches are installed**, or a Warning message indicating the number of missing patches. If missing patches are detected, you are asked whether you want to continue or abort.

The recommended patches are: Solaris 8 with at least 108528-29 for the kernel level of the patch cluster and JDK 1.4.2_08 patches found at: <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/J2SE>. As a minimum, you must get your system up to the 108528-29 Kernel patch level. For installation instructions, see the README file which is at the same location as the patch bundle.



Tip

If you begin the ISC installation and are informed that required patches are missing on your Sun workstation, follow the instructions in [Chapter 1, “System Recommendations.”](#) You can safely exit this install script and run it again after you have installed the required patches. If required patches are missing, the ISC software lists the missing patches in the **/tmp/PatchReport.dat** file.

After you install the latest patch cluster, the ISC installation script might still report that there are missing patches. The number of missing patches should be small, in the range of 1-3. You can search the Sun™ website to verify that the missing patches are indeed included in the latest patch upgrade, but with different numbers. If a patch is missing and not included in another patch, the missing patch was probably deemed not needed. In these cases, you can safely ignore the warning message about missing patches. It is recommended you only install patch clusters and not individual patches.

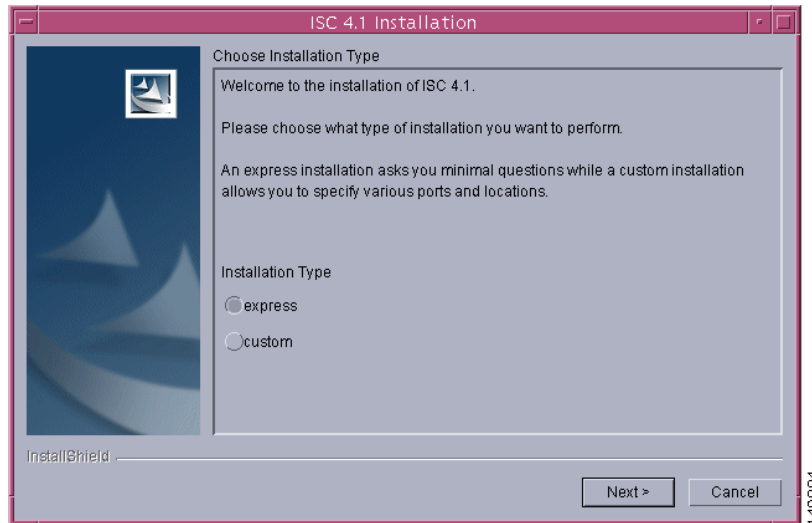
Step 7 In the next window, as shown in [Figure 2-1, “Choose Installation Type,”](#) choose either the default **express** option or the **custom** option, then click **Next**.

When you click **express**, you have a minimal number of choices to make. When you click **custom**, you can specify various ports and locations and you can change the watermark level for available disk space.



Note

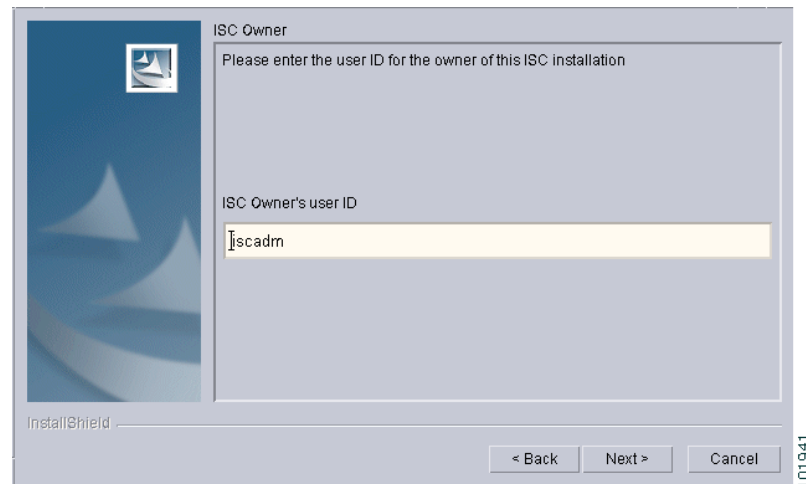
If during a **custom** install, you choose an HTTP port number other than the default (8030) for any server, you cannot use an **express** install for any other server. This is because the **express** install assigns the default port number (8030) and the same HTTP port number must be used for all ISC servers.

Figure 2-1 Choose Installation Type

Step 8 In the next window, shown in [Figure 2-2](#), “Choose ISC Owner,” enter the username you created in [Step 2](#) of the “Initial Configuration—Creating the ISC Owner” section on page 2-2.

**Note**

This field is only used when you are installing as **root**.

Figure 2-2 Choose ISC Owner**Note**

If you enter an invalid name, you will receive a message indicating the name is invalid.

Step 9 Independent of whether you chose **express** or **custom** in [Step 7](#), next you must choose the Server Role, either **Master**, **Processing Server**, **Collection Server**, or **Interface Server**, as shown in [Figure 2-3](#), “Choose Server Role,” then click **Next**. The servers are as follows:

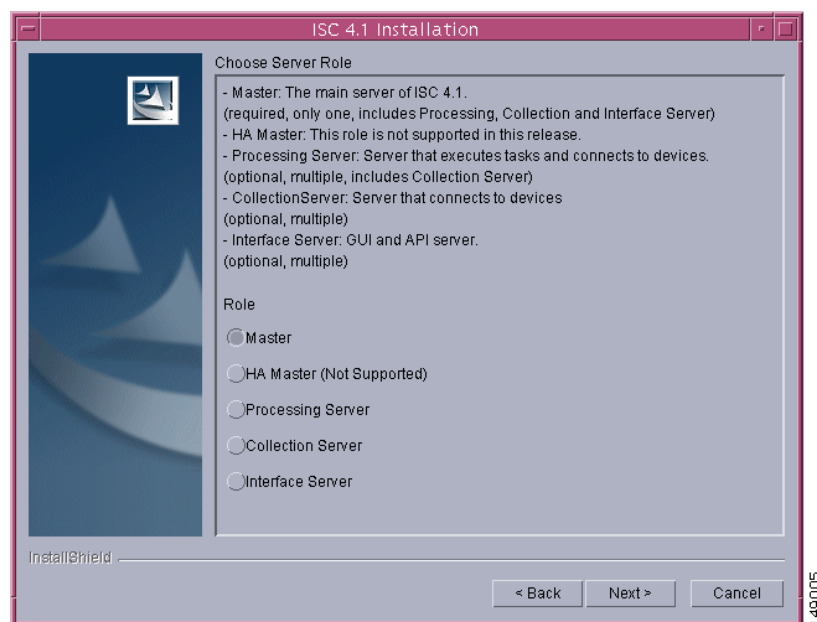
- **Master** is the main server of ISC. Only one **Master** is possible and it is required. It includes all the other servers: the **Processing Server**, **Collection Server**, and **Interface Server**.

- **Processing Server** is the server that executes tasks and connects to devices. This server is optional and *can* be installed on a host separate from any of the other servers. Multiple **Processing Servers** can be installed. The **Processing Server** includes the **Collection Server**.
- **Collection Server** is the server that connects to devices. This server is optional and *can* be installed on a host separate from any of the other servers. Multiple **Collection Servers** can be installed.
- **Interface Server** is the web server for the Graphical User Interface (GUI) and the Application Program Interface (API). This server is optional and *can* be installed on a host separate from any of the other servers. Multiple **Interface Servers** can be installed.

**Note**

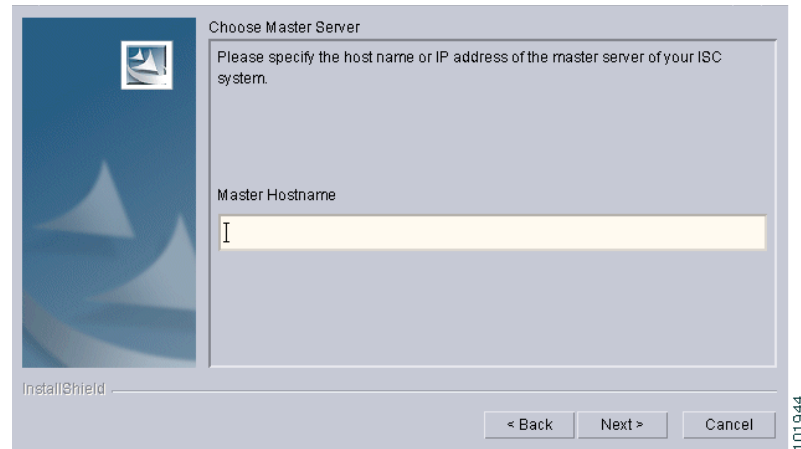
For the first installation, you *must* click the **Master Role**.

Figure 2-3 Choose Server Role



Step 10 Because you *must* click the **Master Role** for the first installation, this step is only required when you click **Processing Server**, **Collection Server**, or **Interface Server**. If you are installing a **Master Role**, proceed to [Step 12](#).

Enter the hostname or IP address of the Master server, in the field shown in [Figure 2-4](#), “[Master Hostname](#).”

Figure 2-4 Master Hostname

- Step 11** If the host name entered in [Step 10](#) is not valid, you receive a message as shown in [Figure 2-5](#), “Invalid Host.” Click **Ok** and return to [Step 10](#). Otherwise, continue to [Step 12](#).

Figure 2-5 Invalid Host

- Step 12** Independent of the Server Role you chose in [Step 9](#), next you must specify the location of the directory where you want to install, as shown in [Figure 2-6](#), “Specify Directory Location,” and then click **Next**. You can click **Browse** as an aid to finding an appropriate directory.

**Note**

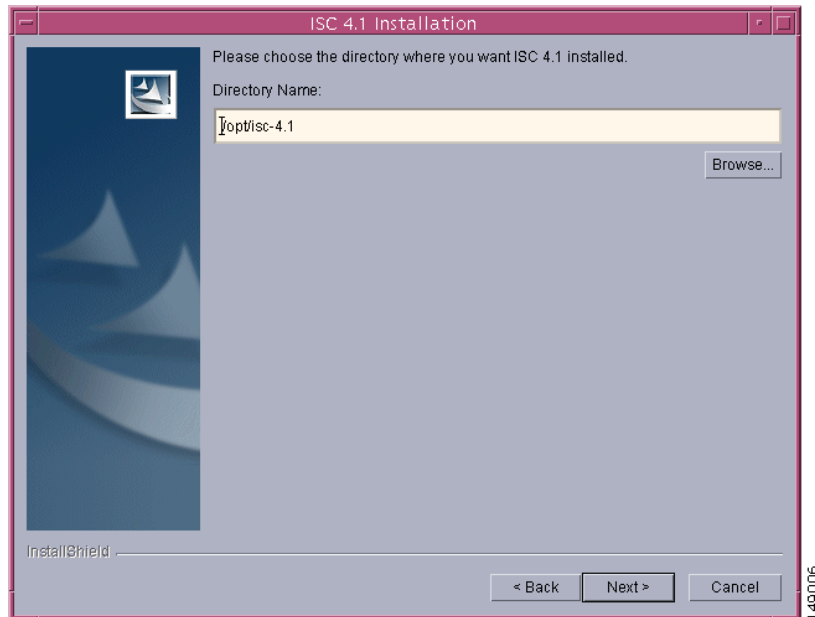
If you are not installing as **root**, you must have write permission for this directory.

**Note**

In the intended install location, you need 1.2 GB free for the binaries plus an extra 250 MB for log file growth and the installation of the Cisco CNS Configuration Engine 1.3.x, 1.4, or 1.5 software.

In the database directory, you need 1 GB free. For large systems, you should have 4 to 5 GB of space. If the directory has less than 1.2 GB free, you can still install ISC, but you might run out of space.

Figure 2-6 Specify Directory Location

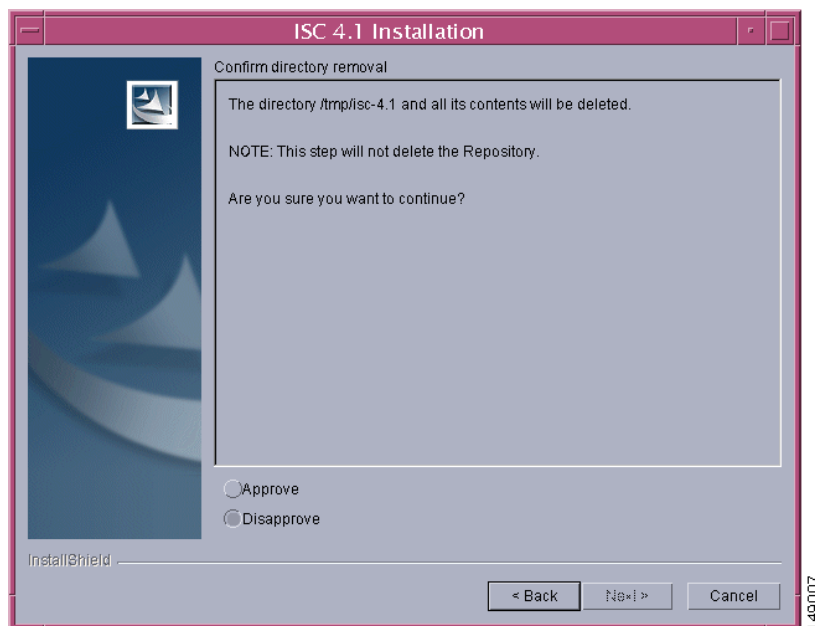


- Step 13** If in [Step 12](#) you chose a directory that already exists, you proceed as follows. If you chose a new directory to be created, you proceed to [Step 14](#).

In [Figure 2-7](#), “[Confirm Directory Removal](#),” if the directory you chose already exists and you must click the default radio button **Disapprove**, you cannot proceed. You must click **Back** and return to [Step 12](#).

Be *very* careful. If you click the radio button **Approve**, you will overwrite the contents in the existing directory. Click **Next**.

Figure 2-7 Confirm Directory Removal



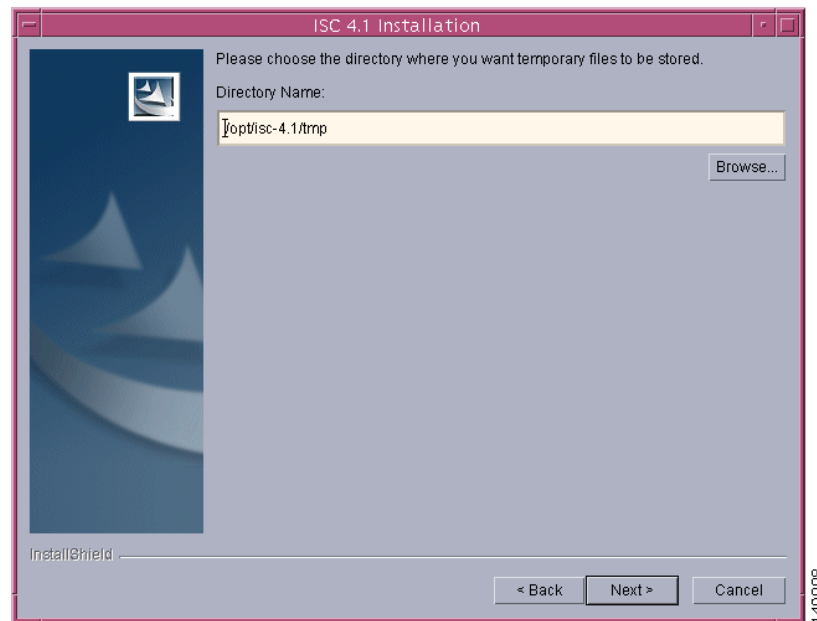
- Step 14** If in [Step 7](#) you chose **express**, proceed to [Step 33](#). If you chose **custom**, then for any Role specified, you must enter the location where you want temporary files stored, as shown in [Figure 2-8](#), “[Choosing the Directory for Temporary Files](#).”

**Note**

In the intended install location, you need 1.2 GB free for the binaries plus an extra 250 MB for log file growth and the installation of the Cisco CNS Configuration Engine 1.3.x, 1.4, or 1.5 software.

In the database directory, you need 1 GB free. For large systems, you should have 4 to 5 GB of space. If the directory has less than 1.2 GB free, you can still install ISC, but you might run out of space.

Figure 2-8 *Choosing the Directory for Temporary Files*

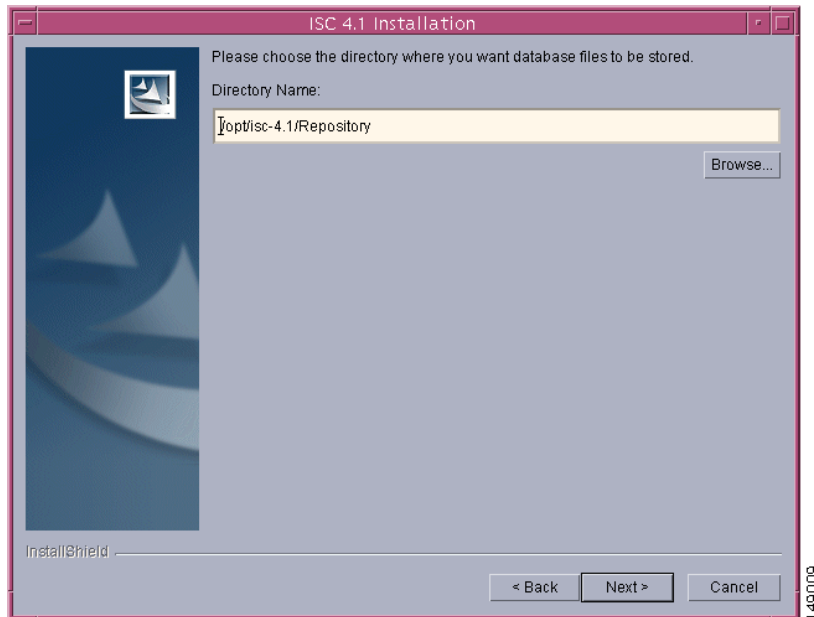


- Step 15** If you chose any Role, except the Interface Server Role, in [Step 9](#), you must specify the Directory Name where you want database files to be stored, as shown in [Figure 2-9](#), “[Where to Store Database Files](#),” and then click **Next**. If you chose **Interface Server** Role, you automatically proceed to [Step 16](#).

**Note**

In the intended install location, you need 1.2 GB free for the binaries plus an extra 250 MB for log file growth and the installation of the Cisco CNS Configuration Engine 1.3.x, 1.4, or 1.5 software.

In the database directory, you need 1 GB free. For large systems, you should have 4 to 5 GB of space. If the directory has less than 1.2 GB free, you can still install ISC, but you might run out of space.

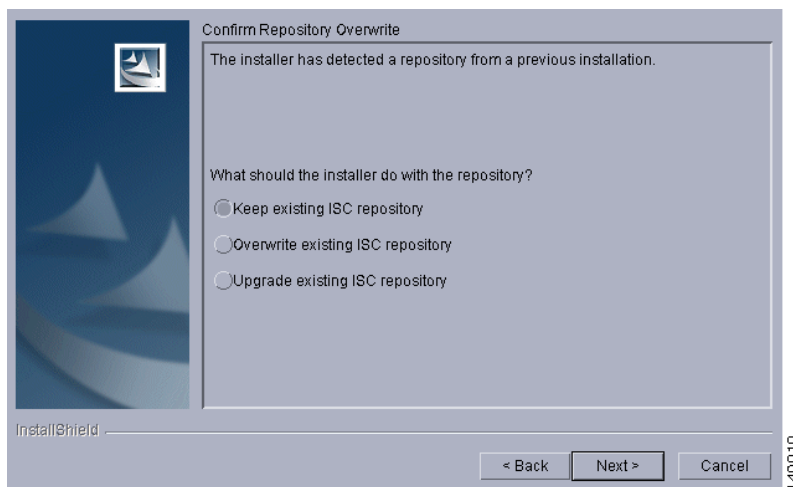
Figure 2-9 *Where to Store Database Files*

- Step 16** If in [Step 15](#) you chose a directory that already contains a repository, you have three options, as shown in [Figure 2-10](#), “[Repository Choices](#),”: **Keep existing ISC repository**, **Overwrite existing ISC repository**, or **Upgrade existing ISC repository**. Then click **Next** to proceed. Otherwise proceed to [Step 22](#).

When you click **Keep existing ISC repository**, you will proceed to [Step 17](#).

When you click **Overwrite existing ISC repository**, you will proceed to [Step 18](#).

When you click **Upgrade existing ISC repository**, you will proceed to [Step 19](#).

Figure 2-10 *Repository Choices*

- Step 17** After choosing **Keep existing ISC repository** in Figure 2-10, “Repository Choices,” you will be given the opportunity in Figure 2-11, “Confirmation of Keeping Existing ISC Repository,” to **Disapprove** (the default). If you choose **Approve**, you will keep your existing ISC repository, which could be incompatible with this version of ISC.

**Note**

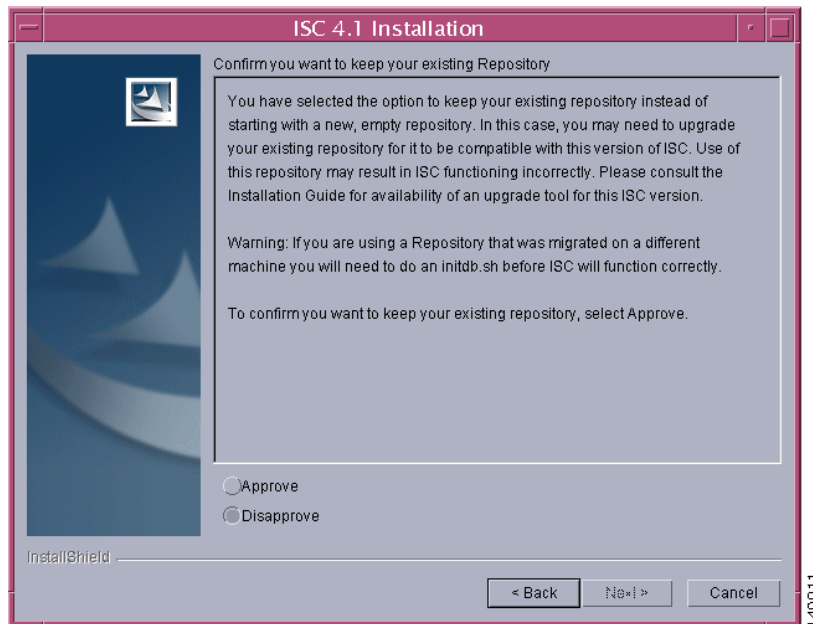
After you complete your installation and before you use ISC, to upgrade your down-level ISC 3.2 or later repository, you *must* follow the steps in the “Upgrading ISC Repositories to ISC 4.1” section on page 2-25.

**Note**

There is no direct way to upgrade from ISC 3.0 or ISC 3.1 to ISC 4.1. To upgrade from ISC 3.0 or ISC 3.1 to ISC 4.1, you *must* contact ISC Marketing, e-mail: isc-mktg@cisco.com.

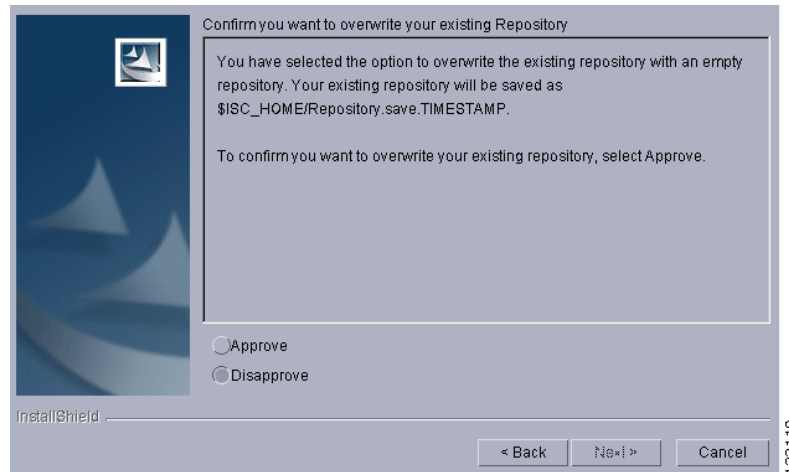
Click **Next** and you will proceed to [Step 22](#).

Figure 2-11 Confirmation of Keeping Existing ISC Repository



- Step 18** After choosing **Overwrite existing ISC repository** in Figure 2-10, “Repository Choices,” you will be given the opportunity in Figure 2-12, “Confirmation of Overwriting Existing ISC Repository,” to **Disapprove** (the default). If you choose **Approve**, you will overwrite the existing repository with an empty repository and your existing repository will be saved as **\$ISC_HOME/Repository.save.<timestamp>**.

Click **Next** and you will proceed to [Step 22](#).

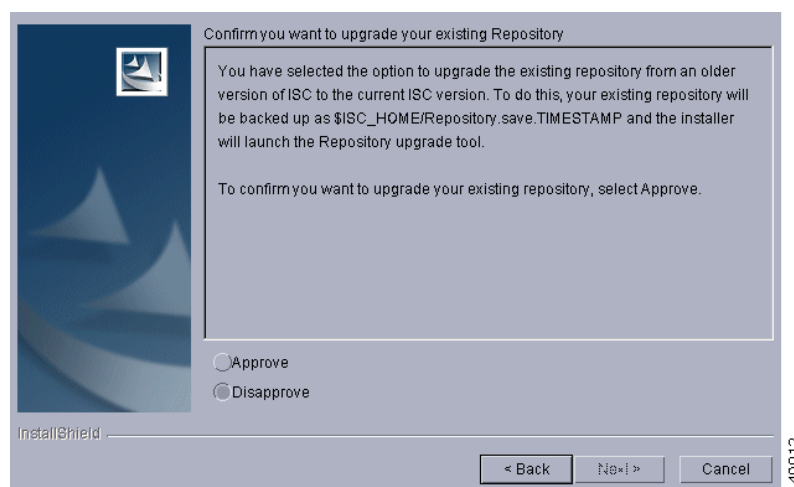
Figure 2-12 Confirmation of Overwriting Existing ISC Repository

- Step 19** After choosing **Upgrade existing ISC repository** in [Figure 2-10, “Repository Choices,”](#) you will be given the opportunity in [Figure 2-13, “Confirmation of Upgrading Your ISC Repository After Installation,”](#) to **Disapprove** (the default). If you choose **Approve**, you will overwrite the existing repository with an empty repository and your existing repository will be saved as **\$ISC_HOME/Repository.save.<timestamp>**. Then your installation will proceed with a new empty repository.

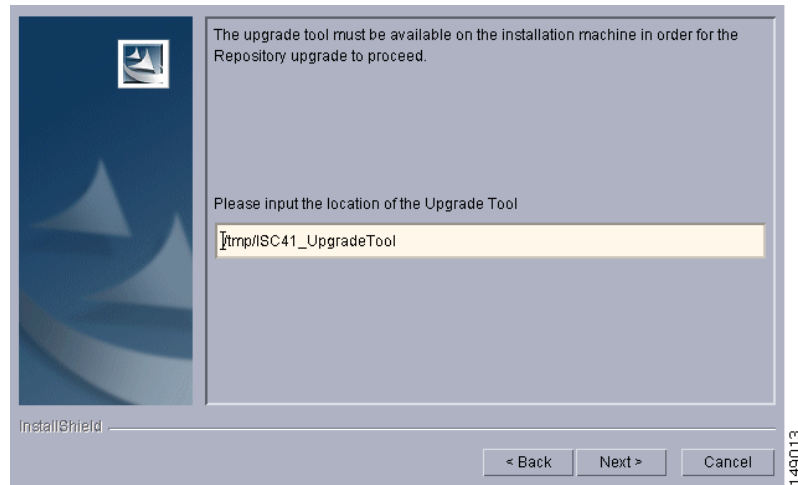
**Note**

After you complete your installation and before you use ISC, you must follow the steps in the [“Migrating VPNSC 1.x or 2.x Repository to ISC 4.1”](#) section on [page 2-25](#), to upgrade your down-level VPNSC 1.x or 2.x repository.

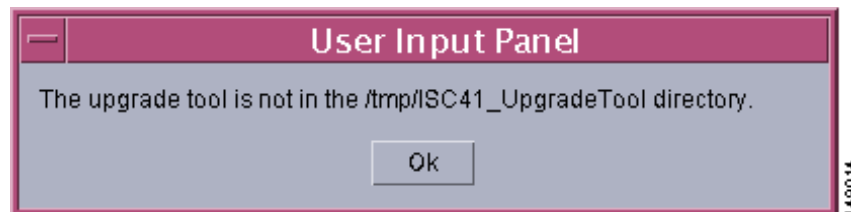
Click **Next** and you will proceed to [Step 22](#).

Figure 2-13 Confirmation of Upgrading Your ISC Repository After Installation

- Step 20** After you Approve to upgrade your existing Repository, enter the location of the Upgrade Tool, as shown in [Figure 2-14, “Location of Upgrade Tool.”](#)

Figure 2-14 Location of Upgrade Tool

- Step 21** If you inaccurately entered the location of the Upgrade Tool, you will receive a message as shown in [Figure 2-15](#), “Invalid location of Upgrade Tool,” and you must return to [Step 20](#) and enter the correct Upgrade Tool location.

Figure 2-15 Invalid location of Upgrade Tool

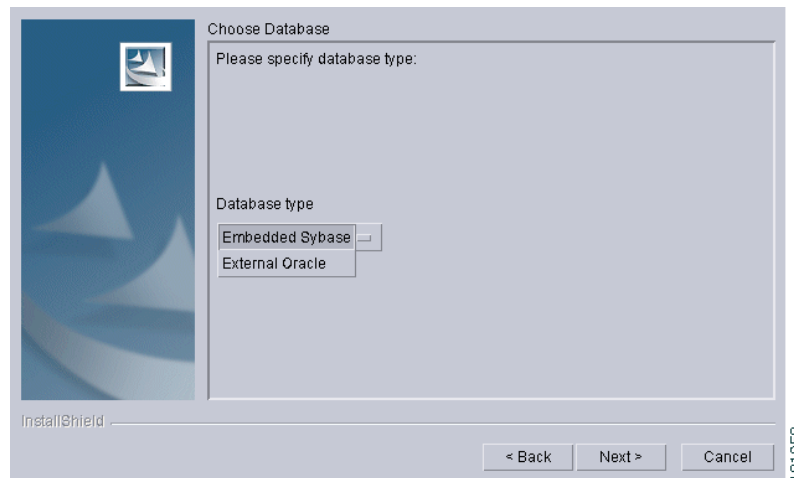
- Step 22** Independent of the Server Role you chose in [Step 9](#), you must choose the database you will use, as shown in [Figure 2-16](#), “Choosing a Database”. From the drop-down menu, choose either **Embedded Sybase** (Sybase ASA, 8.0.1 is embedded) or **External Oracle**. (Testing of ISC 4.1 has been done with Oracle Database 10g, Enterprise Edition Release 10.1.0.2.0 - 64bit Production.) If you would like to use another version of Oracle 10g, see Oracle’s compatibility information.) Then click **Next**.

**Note**

If you are upgrading from ISC 3.2.2, 3.2.2.3, 4.0, or 4.0.1, make sure your ISC Repository has been imported to the Oracle Database 10g, Enterprise Edition Release 10.1.0.2.0 - 64bit Production, as indicated in the [“Initial Configuration—Creating the ISC Owner”](#) section on [page 2](#).

**Note**

The embedded Sybase database is used for service-level agreement (SLA), independent of whether you are using Oracle as your database.

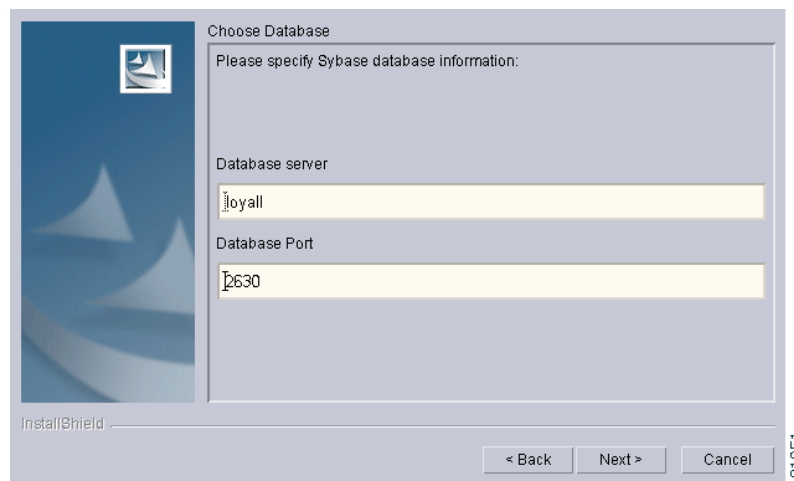
Figure 2-16 *Choosing a Database*

Step 23 If you chose **Embedded Sybase** in [Step 22](#), enter the **Database server** name, as shown in [Figure 2-17](#), “[Choosing a Database—Sybase](#).” The **Database Port** number is automatically updated. If you choose to change the database port number, enter your choice in the **Database Port** field. Click **Next**, and then proceed directly to [Step 26](#).

If you chose **External Oracle** in [Step 17](#), proceed to [Step 24](#).

**Note**

If you enter a Database Port value other than the default, be sure you specify the same port for all Server Roles you install.

Figure 2-17 *Choosing a Database—Sybase*

Step 24 If you chose **External Oracle** in [Step 22](#), you must enter the **Database server** name, the **Database Port** number, and the Oracle server instance identifier (**SID**), as shown in [Figure 2-18](#), “[Choosing a Database—Oracle](#).” Otherwise, proceed directly to [Step 26](#).

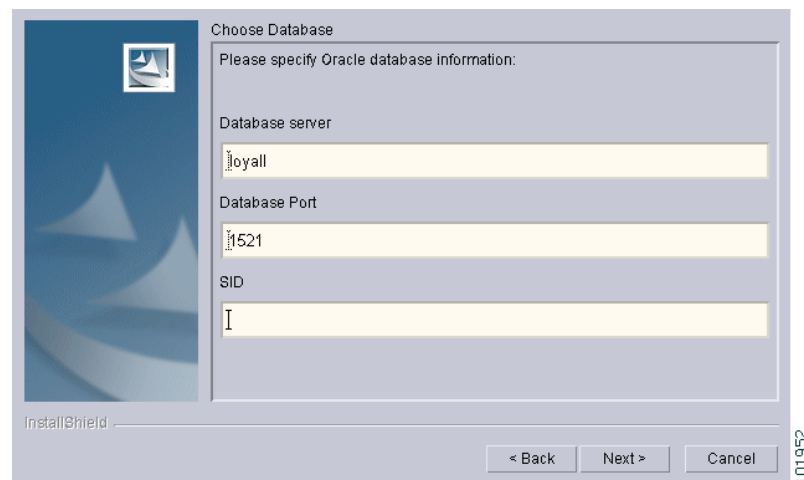
**Note**

If you are upgrading from ISC 3.2.2, 3.2.2.3, 4.0, or 4.0.1, make sure the Database Server, Database Port, and SID you enter in this window identify the Oracle 10g database that contains your ISC Repository.

**Note**

If you enter a Database Port value other than the default, be sure you specify the same port for all Server Roles you install.

Figure 2-18 Choosing a Database—Oracle

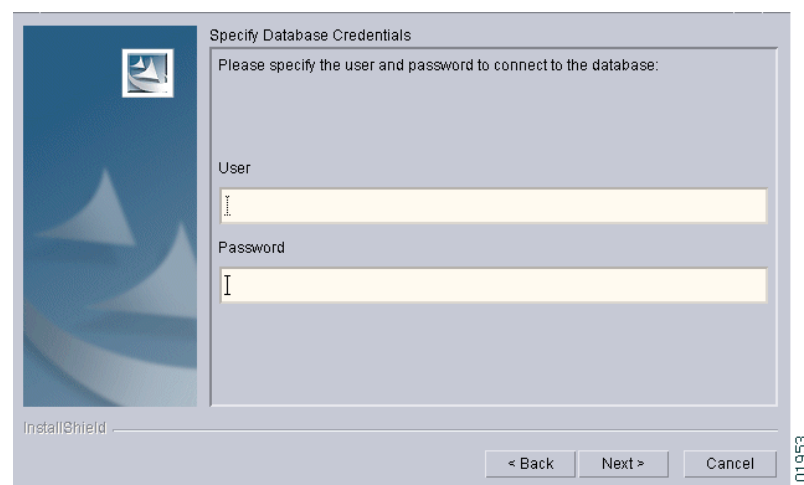


Step 25 Because you chose **External Oracle** in [Step 22](#), you must set the Oracle database **User** and **Password** values, as shown in [Figure 2-19](#), “[Specifying Database Credentials](#).”

**Note**

If you are setting up a distributed architecture environment, the Oracle **User** and **Password** *must* be the same for all servers.

Figure 2-19 Specifying Database Credentials



- Step 26** Independent of the Server Role you chose in [Step 9](#), you must specify the port used by the Naming Server, as shown in [Figure 2-20](#), “Specify the Port Used by the Naming Server,” then click **Next**.

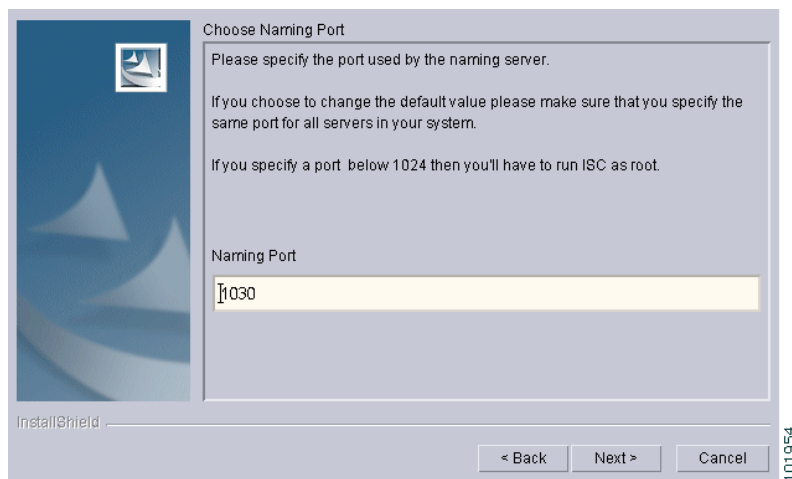
**Note**

If you choose a Naming Port other than the default, be sure you specify the same port for all the Server Roles you install.

**Note**

If you enter a Naming Port value less than 1024, the owner of the installation must be **root**. The owner of the installation is the user identified in [Figure 2-2 on page 2-5](#).

Figure 2-20 Specify the Port Used by the Naming Server



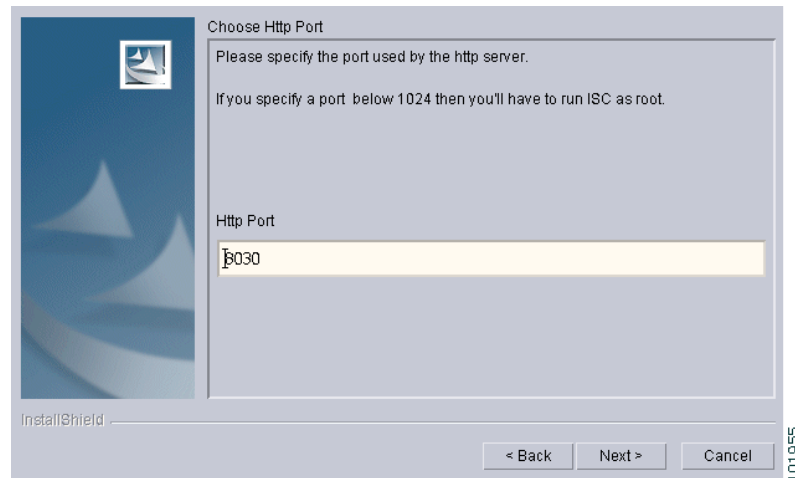
- Step 27** Independent of the Server Role you chose in [Step 9](#), you must specify the port used by the HTTP server, as shown in [Figure 2-21](#), “Choose HTTP Port,” then click **Next**.

**Note**

If you enter an HTTP Port value less than 1024, the owner of the installation must be **root**. The owner of the installation is the user identified in [Figure 2-2](#).

**Note**

If you choose an HTTP port number other than the default (8030) for any server, you cannot use an **express** install for any other server. This is because the **express** install assigns the default port number (8030) and the same HTTP port number must be used for all ISC servers.

Figure 2-21 Choose HTTP Port

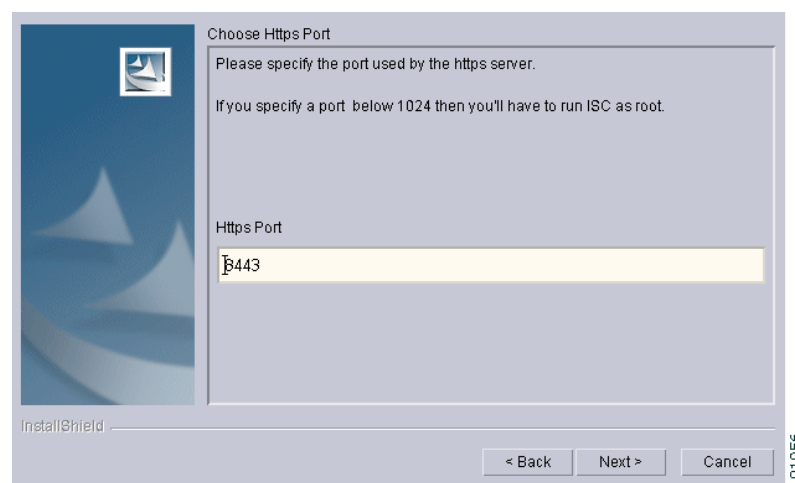
Step 28 Independent of the Server Role you chose in [Step 9](#), you must specify the port used by the HTTPS server, as shown in [Figure 2-22](#), “[Choose HTTPS Port](#),” then click **Next**.

**Note**

If you enter an HTTPS Port value less than 1024, the owner of the installation must be **root**. The owner of the installation is the user identified in [Figure 2-2](#).

**Note**

To configure the web access to ISC, you must set up the HTTPS port as explained in [Step 39](#) and the “[Configuring HTTPS](#)” section on page 2-21.

Figure 2-22 Choose HTTPS Port

Step 29 Independent of the Server Role you chose in [Step 9](#), you must specify the port used by the Rendezvous™ Agent (RVA). You must specify the RVA HTTP Port server, a TIBCO™ bus port used by ISC processes to communicate with each other. You must also specify the RVA Client Port, as shown in [Figure 2-23](#), “[Choose RVA Ports](#),” then click **Next**.

**Note**

If you enter an RVA HTTP Port or RVA Client Port value less than 1024, the owner of the installation must be **root**. The owner of the installation is the user identified in [Figure 2-2](#).

Figure 2-23 Choose RVA Ports

Choose RVA ports

Please enter RVA http port and the RVA port.

If you specify a port below 1024 then you'll have to run ISC as root.

RVA Http Port

7630

RVA Port

7600

InstallShield

< Back Next > Cancel

101957

Step 30 Independent of the Server Role you chose in [Step 9](#), you must specify the port used by TIBCO, as shown in [Figure 2-24](#), “Choose TIBCO Port,” then click **Next**.

**Note**

If you enter a TIBCO Port value less than 1024, you *must* run ISC as **root**, the specification in [Figure 2-2](#).

Figure 2-24 Choose TIBCO Port

Choose TIBCO Port

Please specify the port used by TIBCO.

If you specify a port below 1024 then you'll have to run ISC as root.

Tibco Port

7530

InstallShield

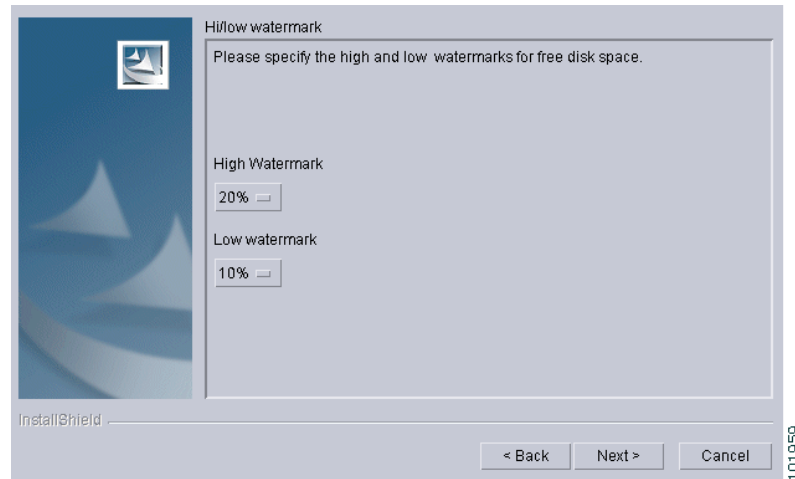
< Back Next > Cancel

101958

Step 31 When you click **Next**, the system checks whether any of the ports entered are duplicate port numbers. If duplicate port numbers are found, an error message indicates the two ports that have duplicate entries.

- Step 32** You can reset the High and Low watermarks for available disk space, as shown in [Figure 2-25](#), “[Setting Watermarks for Available Disk Space](#).” The defaults are 20% and 10% for High and Low respectively. Be sure the High watermark is a larger percentage than the Low watermark. When the High and Low watermarks are reached, you receive an e-mail indicating this, based upon setting your e-mail address correctly in [Step 33](#).

Figure 2-25 *Setting Watermarks for Available Disk Space*



- Step 33** In [Figure 2-26](#), “[Setting E-mail Address for Receiving Watermark Information](#),” to receive e-mail you must specify the following:
- In the first text field, specify the hostname of the Simple Mail Transfer Protocol (SMTP).
 - In the second text field, specify the username to display in the “From” field.
 - In the third text field, specify the e-mail address to be notified when High and Low watermarks are reached, which indicates the specified disk space availability has been reached.
 - In the fourth text field, specify the e-mail address to be notified when ISC Servers restart.

Then click **Next**.



Note

If incorrect information is provided, you receive an “[Invalid Host](#)” message, as shown in [Figure 2-5 on page 2-7](#).

Figure 2-26 Setting E-mail Address for Receiving Watermark Information

Step 34 The installation continues and the files are installed. The list of installation processes appears.

Step 35 If the installation failed, you receive a failed message.

To review the log message, click **Back**.

If there was truncation of data, reinstall and add two spaces at the end of each field for which you have modified the entry.

Step 36 If the installation was successful, you receive an Install Complete message. Even if you have a successful install, click **Back** to review the log to be sure there were no exceptions or failures. If data was truncated, reinstall and add two spaces at the end of each field for which you have modified the entry.

Step 37 The ISC server is started automatically after the installation is successful.

Step 38 Verify that ISC is properly installed, as follows:

- a. Source the ISC environment file in the \$ISC_HOME/bin directory:

If **sh** or **ksh** shell: `. $ISC_HOME/bin/vpnenv.sh`

If **csh** shell: `source $ISC_HOME/bin/vpnenv.csh`

- b. Before logging in, repeat the following command until all servers are in the **started** mode. If any server is reported as **disabled**, ISC is not installed or configured correctly:

wdclient status

For more information about WatchDog commands, see [Cisco IP Solution Center Infrastructure Reference, 4.1](#).

Step 39 If you want to set up secure web access by using HTTPS, see the “Configuring HTTPS” section on [page 2-21](#). Then, proceed to [Step 40](#).

Step 40 If you are logging in for the first time, proceed to the “Logging In for the First Time” section on [page 2-22](#). Then, proceed to [Step 41](#).

Step 41 If you want to remotely install or uninstall the **Processing Server**, **Collection Server**, or **Interface Server**, proceed to the “Remote Installing and Uninstalling of Processing Server, Collection Server, or Interface Server from GUI” section on [page 2-23](#). Then, proceed to [Step 42](#).

Step 42 Before you can use any of the licensed services, proceed to the “Installing License Keys” section on [page 2-24](#). Then, proceed to [Step 43](#).

**Note**

To enable Traffic Engineering Management (TEM), you must install a permanent license file. You must replace the `<install_directory>/thirdparty/parc/installed/data/system.properties` file with the `<distribution_directory>/permLic_system.properties` file. For example:

```
cp permLic_system.properties <install_directory>/thirdparty/parc/installed/data/system.properties
```

- Step 43** If you have a VPNSC 1.x or 2.x repository, you *must* migrate your repository to have access to it, as explained in the [“Migrating VPNSC 1.x or 2.x Repository to ISC 4.1”](#) section on page 2-25.”
- If you have an ISC repository, you *must* upgrade your repository to have access to it, as explained in the [“Upgrading ISC Repositories to ISC 4.1”](#) section on page 2-25.

**Note**

There is no direct way to upgrade from ISC 3.0 or ISC 3.1 to ISC 4.1. To upgrade from ISC 3.0 or ISC 3.1 to ISC 4.1, you *must* contact ISC Marketing, e-mail: isc-mktg@cisco.com. Then, proceed to [Step 44](#).

- Step 44** If you want to eventually use the Inventory Manager or the Topology Tool, your client machine *must* be set up properly. Proceed to the [“Launching Topology Tool”](#) section on page 2-27. This section explains what occurs and leads you to the launching explanations in [Cisco IP Solution Center Infrastructure Reference, 4.1](#). Then, proceed to [Step 45](#).
- Step 45** To uninstall ISC, proceed to the [“Uninstalling ISC”](#) section on page 2-27.

**Note**

To determine if servers are installed correctly, use the WatchDog commands explained in [Cisco IP Solution Center Infrastructure Reference, 4.1](#).

Configuring HTTPS

To configure the secure web access to ISC, set up the HTTPS port, as follows:

- Step 1** Source the environment file, as follows:
- For K shell: `. $ISC_HOME/bin/vpnenv.sh`
- For C shell: `source $ISC_HOME/bin/vpnenv.csh`
- Step 2** Run the command: `configSecurePort.sh <isc_home> <https_port> <hostname>`
- where:
- `<isc_home>` is the home directory for ISC, for example: `/opt/isc-4.1`
- `<https_port>` is the secure HTTPS port you want to use, for example: `8443`.
- `<hostname>` is the name of the machine that ISC is installed on, for example: `machinename.cisco.com`

Logging In for the First Time

To log into ISC for the first time, follow these steps:

- Step 1** In your browser, enter the following URL:

`http://server:port/isc/`



Note

If you are using secure HTTPS access, as explained in the “[Configuring HTTPS](#)” section on page 2-21, enter `https://server:port/isc/` instead.

See the “[Installing ISC](#)” section on page 2-2 for information about setting the port number.

- Step 2** Enter the default administrative login name, **admin**, and password, **cisco**, then click **Login**.

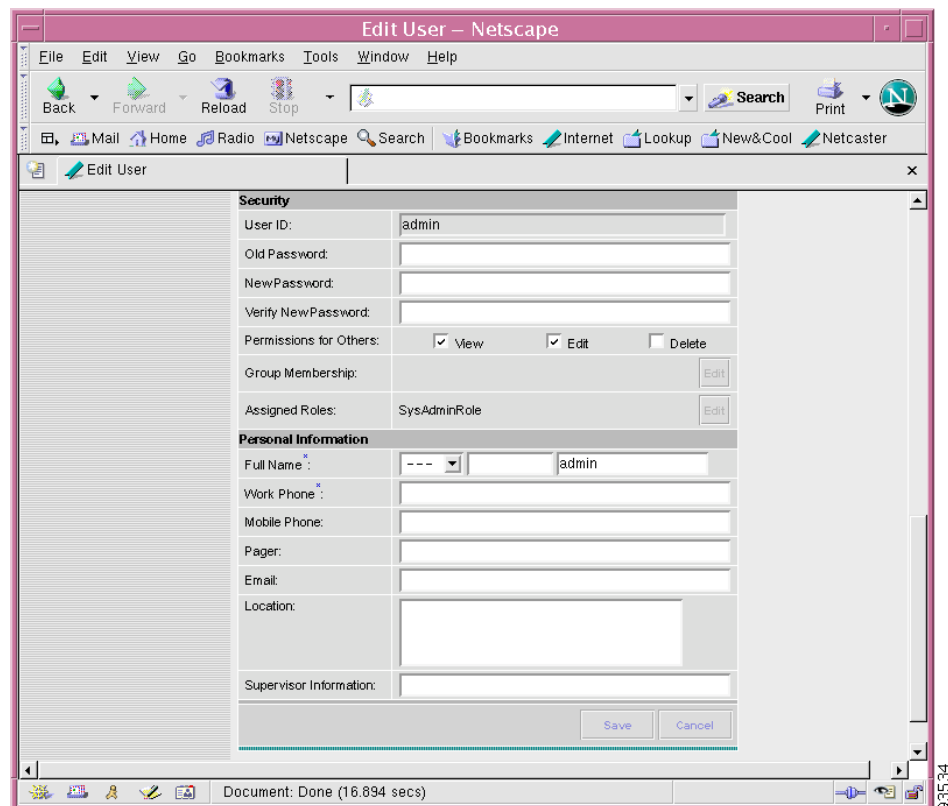
This default user provides administrative access to ISC. You cannot delete this user.

- Step 3** We highly recommend you change the password for **admin** from **cisco** to something secure for you. To do this, click the **Administration** tab, then click **Security**, then click **Users**. Select the **admin** check box and then click **Edit**.

The window, as shown in [Figure 2-27](#), “[Changing the Password for Security Reasons](#)” appears.

- Step 4** Enter the **Security** and **Personal Information**, then click **Save**.

Figure 2-27 *Changing the Password for Security Reasons*



Remote Installing and Uninstalling of Processing Server, Collection Server, or Interface Server from GUI

After you have installed a **Master** Server and have logged into the ISC system, you can remotely install and uninstall the **Processing Server**, **Collection Server**, or **Interface Server** from the GUI.

Remotely Installing

After you have installed a **Master** server and have logged into the ISC system, you can remotely install the **Processing Server**, **Collection Server**, or **Interface Server**, as follows.



Note

Telnet and ftp *must* be available on the machine on which you will perform the remote installation.



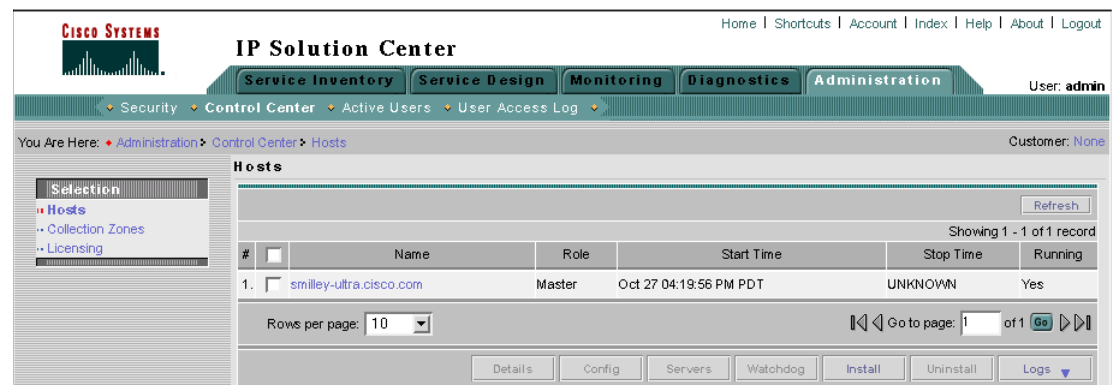
Note

In this Remote Install, you *must* accept the default values, similar to the **express** install. If you want to do a **custom** install, this is only available through the Installation procedure explained in the [“Installing ISC” section on page 2-2](#).

Step 1 Click the **Administration** tab.

Step 2 Click **Control Center** and you receive a window as shown in [Figure 2-28](#), “[Administration > Control Center > Hosts](#).”

Figure 2-28 *Administration > Control Center > Hosts*



Step 3 From the bottom of the **Hosts** menu, click **Install**.

Step 4 From the **Remote Install** menu, provide the following information:

- a. Enter the **Host name** (required)
- b. Enter the **ISC User** (required)



Note

Be sure you have 1 GB of disk space available in the ISC User's home directory.

- c. Enter the **ISC User Password** (required).

- d. For the **Role**, accept the default of **Processing Server** or choose the **Collection Server** or **Interface Server** option.
 - e. Enter the **Install Location** (required).
 - f. Enter the **Root Password** (optional).
- Step 5** Click **Install**.
- Step 6** The installation continues and the files are installed. The list of installation processes appears.
- Step 7** Review the log message for failures or no failures.
-

Remotely Uninstalling

After you have installed a **Master Server** and **Processing Server**, **Collection Server**, or **Interface Server** and have logged into the ISC system, you can remotely uninstall the **Processing Server**, **Collection Server**, or **Interface Server**, as follows:

-
- Step 1** Click the **Administration** tab.
- Step 2** Click **Control Center**.
- Step 3** From the **Hosts** menu, select the check box next to the host name that you want to uninstall.
- Step 4** Click **Uninstall**.
- Step 5** From the **Uninstall ISC Host** menu, provide the following information:
- a. Enter the **ISC User** (required).
 - b. Enter the **ISC User Password** (required).
- Step 6** Click **Uninstall**.
-

Installing License Keys

To install license keys, do the following:



Note

For detailed instructions, see the Licensing section in [Cisco IP Solution Center Infrastructure Reference, 4.1](#).



Note

To enable Traffic Engineering Management (TEM), you must install a permanent license file. You must replace the `<install_directory>/thirdparty/parc/installed/data/system.properties` file with the `<distribution_directory>/permLic_system.properties` file. For example:

```
cp permLic_system.properties <install_directory>/thirdparty/parc/installed/data/system.properties
```

- Step 1** From the **Home** page of the installed ISC product, navigate as follows: **Administration** > **Control Center** > from the **TOC**, click **Licensing**.

- Step 2** From the **Installed Licenses** table, click **Install**.
- Step 3** In the resulting window, enter a **License Key** that you received on your *Right to Use* paperwork with your product.
- Step 4** Click **Save**. Your newly installed license appears in an updated version of the Installed Licenses table.
- Step 5** Repeat [Step 2](#), [Step 3](#), and [Step 4](#) for each of the *Right to Use* documents shipped with your product.

Migrating VPNSC 1.x or 2.x Repository to ISC 4.1

If you have an existing VPNSC 1.x or 2.x repository, you *must* migrate it to be able to use it with ISC 4.1. You can migrate to ISC 4.0 and then you must upgrade to ISC 4.1 as explained in [Upgrading ISC 3.2.2 or Later Repositories to ISC 4.1](#), page 2-26.



Note

Before you migrate your Repository, you *must* have followed the steps in the “[Installing ISC](#)” section on [page 2-2](#). You *must* have followed all the steps and reached this section from [Step 43](#).

Contact isc-mktg@cisco.com for migration information.



Note

Understand that the only Sybase version to which you can migrate is the embedded Sybase ASA, 8.0.1. Also, understand that Oracle testing of ISC 4.1 has been done with Oracle Database 10g, Enterprise Edition Release 10.1.0.2.0 - 64bit Production. If you would like to use another version of Oracle 10g, see Oracle’s compatibility information.

Upgrading ISC Repositories to ISC 4.1

If you have an existing ISC repository, you *must* upgrade it to be able to use it with ISC 4.1, as follows:



Note

Understand that the only Sybase version to which you can upgrade is the embedded Sybase ASA, 8.0.1. Also, understand that Oracle testing of ISC 4.1 has been done with Oracle Database 10g, Enterprise Edition Release 10.1.0.2.0 - 64bit Production. If you would like to use another version of Oracle 10g, see Oracle’s compatibility information.

- If you have an existing ISC 3.0 or 3.1 repository, you *must* contact isc-mktg@cisco.com for upgrade instructions.



Note

There is no direct way to upgrade from ISC 3.0 or ISC 3.1 to ISC 4.1. To upgrade from ISC 3.0 or ISC 3.1 to ISC 4.1, you *must* contact ISC Marketing, e-mail: isc-mktg@cisco.com. Then, proceed to [Step 44](#).

- If you have an existing ISC 3.2.0.x repository, you *must* upgrade to ISC 3.2.2 before using the instructions in the “[Upgrading ISC 3.2.2 or Later Repositories to ISC 4.1](#)” section on page 2-26. To upgrade to ISC 3.2.2, you must choose the appropriate upgrade script for your Sybase or Oracle Repository and follow the instructions located at <http://www.cisco.com/cgi-bin/tablebuild.pl/isc>

- If you have an existing ISC 3.2.2 or later repository, you must upgrade it to be able to use it with ISC 4.1, as explained in the [“Upgrading ISC 3.2.2 or Later Repositories to ISC 4.1” section on page 2-26](#).

Upgrading ISC 3.2.2 or Later Repositories to ISC 4.1

If you have an ISC 3.2.2 or later Repository, you use the same upgrade procedure steps independent of whether your repository is a Sybase or Oracle repository.



Note

Before you upgrade your Repository, you *must* have followed the steps in the [“Installing ISC” section on page 2-2](#). You *must* have backed up your database, as explained in [Step 4](#), and you *must* have followed all the steps and reached this section from [Step 43](#). A Repository can be upgraded only once. If there is any problem during upgrade, a new copy of the backed up Repository is needed for subsequent upgrade attempts.



Note

See [Appendix C, “Backup and Restore of ISC Repository and Standby System,”](#) before upgrading your repository.

Upgrade your ISC 3.2.2 or later repository as follows:

-
- Step 1** Get the upgrade package **ISC41_UpgradeTool.tar.gz** from <http://www.cisco.com/cgi-bin/tablebuild.pl/isc> and place it on the ISC Master machine in a directory where you can access the ISC environment.
- Step 2** Untar the upgrade tool tar file.
- ```
tar xvf ISC41_UpgradeTool.tar.gz
```
- Step 3** Source the ISC environment files.
- If **sh** or **ksh** shell: **. \$ISC\_HOME/bin/vpnenv.sh**
- If **csh** shell: **source \$ISC\_HOME/bin/vpnenv.csh**
- Step 4** Stop ISC.
- ```
stopall
```
- Step 5** Run the upgrade script.
- ```
cd ISC41_UpgradeTool
./upgradeISCSchema.sh <ISC home>
```
- where: *<ISC home>* is the full pathname of the ISC home directory.
- Step 6** Check for a success or error message.
-

# Launching Topology Tool

ISC provides a downloadable version of Version 1.4.2\_04 of Java Runtime Environment (JRE) for various operating systems when you launch Topology Tool. If you choose to install JRE Version 1.4.2\_04, you must quit the browser, uninstall the existing JRE version, install the new 1.4.2\_04 version, and log in again.

Specific instructions to launch the Topology Tool are explained in [Cisco IP Solution Center Infrastructure Reference, 4.1](#).

## Uninstalling ISC

To uninstall ISC, we recommend that you first remotely uninstall all the servers other than the **Master** server: the **Processing Server**, **Collection Server**, and **Interface Server**. See the “[Remotely Uninstalling](#)” section on page 2-24. Then uninstall the **Master** server, as follows:

- 
- Step 1** Log into the server that you want to uninstall.
- Step 2** At the Solaris prompt, log in as the ISC owner.
- Step 3** Go to the ISC installation directory.
- Step 4** Source the environment, as follows:
- For a sh or ksh shell:
- ```
. bin/vpnenv.sh
```
- For a csh shell:
- ```
source bin/vpnenv.csh
```
- Step 5** Remove ISC by entering the following command from a location outside the *<ISC\_HOME directory>*:
- ```
uninstall.sh
```

This command removes all files from the installation directory. This command also removes the database and its contents. Database backups are not removed if they reside in a different directory from the installation directory.
