

Cadence Installation Guide

Product Version 3.3
February 2006

© 1990-2006 Cadence Design Systems, Inc. All rights reserved.
Printed in the United States of America.

Cadence Design Systems, Inc., 555 River Oaks Parkway, San Jose, CA 95134, USA

Trademarks: Trademarks and service marks of Cadence Design Systems, Inc. (Cadence) contained in this document are attributed to Cadence with the appropriate symbol. For queries regarding Cadence's trademarks, contact the corporate legal department at the address shown above or call 1-800-862-4522.

All other trademarks are the property of their respective holders.

Restricted Print Permission: This publication is protected by copyright and any unauthorized use of this publication may violate copyright, trademark, and other laws. Except as specified in this permission statement, this publication may not be copied, reproduced, modified, published, uploaded, posted, transmitted, or distributed in any way, without prior written permission from Cadence. This statement grants you permission to print one (1) hard copy of this publication subject to the following conditions:

1. The publication may be used solely for personal, informational, and noncommercial purposes;
2. The publication may not be modified in any way;
3. Any copy of the publication or portion thereof must include all original copyright, trademark, and other proprietary notices and this permission statement; and
4. Cadence reserves the right to revoke this authorization at any time, and any such use shall be discontinued immediately upon written notice from Cadence.

Disclaimer: Information in this publication is subject to change without notice and does not represent a commitment on the part of Cadence. The information contained herein is the proprietary and confidential information of Cadence or its licensors, and is supplied subject to, and may be used only by Cadence's customer in accordance with, a written agreement between Cadence and its customer. Except as may be explicitly set forth in such agreement, Cadence does not make, and expressly disclaims, any representations or warranties as to the completeness, accuracy or usefulness of the information contained in this document. Cadence does not warrant that use of such information will not infringe any third party rights, nor does Cadence assume any liability for damages or costs of any kind that may result from use of such information.

Restricted Rights: Use, duplication, or disclosure by the Government is subject to restrictions as set forth in FAR52.227-14 and DFAR252.227-7013 et seq. or its successor.

Contents

1

<u>About This Guide</u>	5
<u>Additional Information</u>	5
<u>Cadence Installation Quick Reference</u>	5
<u>InstallScape User Guide</u>	5
<u>Release-Specific Information</u>	5
<u>Customer Support Contact Information</u>	6
<u>Online Technical Support</u>	6
<u>Customer Training</u>	6
<u>General Information</u>	6

2

<u>About Cadence Installation Software</u>	7
<u>Software Delivery</u>	7
<u>Installing Software Online</u>	8
<u>Important Reminders</u>	8

3

<u>Before You Begin the Installation</u>	9
------------------------------------------	---

4

<u>Installing Products into a New Hierarchy</u>	13
<u>Creating the Tools Link</u>	16

5

<u>Installing Additional Products into an Existing Hierarchy</u>	17
<u>Protecting Your Production Environment</u>	17
<u>Creating the Tools Link</u>	19

6

<u>Updating an Existing Hierarchy</u>	21
<u>Protect Your Production Environment</u>	21
<u>Updating the Existing Hierarchy</u>	21
<u>Creating the Tools Link</u>	24

7

<u>Advanced Installation Topics</u>	25
<u>Automating an InstallScape Installation</u>	25

A

<u>Overview of Software Configuration</u>	27
<u>About License Servers</u>	28
<u>About Your Work Order and License File</u>	28
<u>Installing and Configuring Licensing with InstallScape</u>	28
<u>Default and Customized Licensing</u>	29
<u>Licensing Tips</u>	30
<u>Overview of User Environment Configuration</u>	31
<u>Overview of Client Workstation Configuration</u>	31

B

<u>Troubleshooting</u>	33
<u>Cannot locate device</u>	33
<u>Inconsistent encryption code for feature</u>	33
<u>Incompatible installation information in filename (cdsInstPlat)</u>	34
<u>Parameter list is too long</u>	34
<u>Device busy</u>	34
<u>Cannot locate /usr/lib/X11</u>	34
<u>Problems with tar</u>	34
<u>cds_root: Command not found.</u>	35
<u>Product fails to install properly</u>	35
<u>Solaris does not mount the CD-ROM automatically</u>	35
<u>Troubleshooting Cadence documentation</u>	36

About This Guide

The *Cadence Installation Guide* provides the basic information and procedures required to install Cadence® products. Though [Appendix A, “Overview of Software Configuration”](#) provides a brief summary of software configuration, refer to your product documentation for detailed configuration information.

The most effective way to use this guide is for you to determine your level of experience with system administration and Cadence product installation. Users who have little experience with system administration and have not installed Cadence products should read the entire guide. Users who have experience with system administration might want to use the *Cadence Installation Quick Reference* that is provided as a CD-ROM insert.

Additional Information

Cadence Installation Quick Reference

The *Cadence Installation Quick Reference* is a printed document included in the CD-ROM case. It briefly outlines how to install Cadence products. It contains no details on licensing, configuration, or testing.

InstallScape User Guide

The InstallScape User Guide containing information on how to configure and use InstallScape is available at the top level of your CD. It is strongly recommended that you go through this document and familiarise yourself with InstallScape before starting installation of Cadence software.

Release-Specific Information

A README file containing release- (or product-) specific information might exist for your product. If this file exists, you will find it in the top level of your CD.

Customer Support Contact Information

For customer support contact information, go to

www.cadence.com/support

Online Technical Support

For online technical support, go to the SourceLink online customer support web site:

sourcelink.cadence.com

The SourceLink web site provides important product-related documents. This service is available to all Cadence customers who have a software support services agreement.

In the left column, scroll down to “Installation,” and click on *Installation, Licensing & System Configuration Information*. The page that appears contains links to versions of this installation guide, a list of frequently asked questions (FAQ), the *Cadence License Manager*, and other installation-related documents.

Customer Training

For information about customer training, go to

www.cadence.com/education

General Information

For general information on Cadence Design Systems or Cadence products, go to

www.cadence.com

About Cadence Installation Software

Cadence uses the following installation programs for various delivery and platform options:

- **InstallShield** installs on Windows platforms from CD-ROM.
- **InstallScape** installs on UNIX and Linux platforms from the web.

These two installation programs are different; however, they follow the same basic format:

1. Mount or locate your installation media.
2. Run the installation program.
3. Follow the on-screen instructions to install the Cadence software.
4. Perform any post-installation tasks described in your product documentation.

Software Delivery

Cadence uses the following software delivery methodology:

- Individual files are grouped into larger collections called *kits*. These kits contain additional information used for configuration control, file integrity checking, and so on.
- Kits are combined in various ways to create products and allow products to share functionality.
- Each kit might contain special configuration code supplied by the product team.

Cadence has developed utilities to manage these kits and the relationships of these kits between the different products.

The Cadence® installation software applies updates to the software using the Update/Hot Fix process (for information regarding Update and Hot Fix , see [step 2](#) on page 11). By managing the inter- and intra-product dependencies, the installation software updates all products in a coordinated fashion.

Installing Software Online

If you are authorized for electronic software distribution, you can download a CD-ROM image using either FTP or HTTP. Alternatively, you can install over the web using InstallScape. See download.cadence.com for more information.

If you are installing Cadence software online using a downloaded CD-ROM image, each CD downloaded is a tarfile, which must be unpacked with the `tar` (or equivalent compatible) command. The tarfile is not compressed. Once you have unpacked the files, use InstallScape or InstallShield to install the Cadence software on UNIX or Windows systems, respectively. See [step 7](#) on page 16 for more information.

If you are installing Cadence software over the web using the InstallScape program, refer to the InstallScape documentation located at download.cadence.com.

You should still read any recommended pre- and post-installation tasks documented here in this manual.

Important Reminders

- Always use the provided Cadence installation software to install and update your Cadence application software. If you modify or install application software without using the supported installation software, the data files used to determine the status of each product can be made obsolete.
- Always use the installation software shipped with the application software you are installing. Older versions might not properly understand the current control files being used.
- Always install products from different releases into separate directories. To ensure that different releases do not corrupt the installation data files, the Cadence installation software does not let you install products from different releases into the same directory.

Before You Begin the Installation

Before installing any Cadence® products,

1. Check the Cadence software shipment and its contents.

This package contains

- ❑ A *Software Shipment Report* received as an e-mail message (containing a copy of the license file) or on a CD.
- ❑ One or more `Installation Control` e-mail files (UNIX only) received as an e-mail message or on a CD.

These files include the software installation control file.

Note: Not all orders will necessarily contain an `Installation Control` file. This is because Cadence has been using a new order entry/tracking system over the past few years which no longer generates an installation control file.

Note: The subject of the e-mail containing the `Installation Control` file has the following format:

```
#INSTALLSCAPE PRODUCT "product details"  
#INSTALLSCAPE SOURCE "product source"
```

For example, a partial entry of `InstallScape` control file for `ICOA5251` is shown below

```
#INSTALLSCAPE PRODUCT "P111" "111: Cadence(R) Design Framework II"  
#INSTALLSCAPE SOURCE "is/ICOA5251/hppa/Base" "Base ICOA5251 HPPARISC 11.0  
Release" "Version Base ICOA5251 HPPARISC 11.0 Release"
```

- ❑ One or more e-mail files with attachment containing the licenses in ASCII format.
- ❑ One or more sets of CDs for Cadence products or, if you have purchased the electronic distribution option, FTP scripts (Bourne shell) that let you download CD images from Cadence

2. Determine the type of release received by looking on the CD label below the words "electronic design software."

Cadence Installation Guide

Before You Begin the Installation

There are four different types of releases. Different product families have different release schedules and your product may use a combination of these release types:

☐ **Base**

A complete software release.

☐ **Update**

A periodic update of a base software release.

☐ **Hot Fix**

A collection of critical fixes, released intermittently between regularly scheduled releases.

Note: A CD containing InstallScape for all ports is also shipped with the product CDs. By default, the product CD contains InstallScape of the same platform as the products, such as sun4v InstallScape for sun4v products. However, if you want to use InstallScape for a platform other than the one in the product CD, you will need to install it. See the README file in the top level of the CD for the installation instructions.

3. Go to sourcelink.cadence.com.

a. Log in to SourceLink.

- ☐ If you do not have a SourceLink account, click *Sign up as a new user*, and follow the instructions.
- ☐ If you already have a SourceLink account, click *Login*, type your login name and password, and click *Login*.

The SourceLink window appears.

b. Scroll to “Installation” and click on *Installation, Licensing & System Configuration Information*.

The page that appears has important information about configuration, system patches, and other requirements that relate to all Cadence products.

c. Click *Platform Requirements*.

d. Click *Supported Hardware Platforms*.

Check your system hardware and software configuration to make sure it is properly set up before you attempt to load the Cadence software onto your system. The Cadence family of products runs on a variety of UNIX- and PC-based systems.

Cadence Installation Guide

Before You Begin the Installation

- e. Go back to the SourceLink window, scroll to "Installation" and click *Recommended OS patches*.

You can also contact the manufacturer of your platform or Cadence Customer Support at www.cadence.com/support.

- f. Go back to the SourceLink window, scroll to "Releases" and click *Manuals & Release Information (KP&S, Release Alerts ...)*.

- g. Click on a release.

A product documentation window appears, listing all the documentation for the release. You can read the full documentation before installing the products to learn what is new in this release. This library also includes the CDSDoc reference and configuration manuals.

If the release you are interested in is not listed, go back to the SourceLink window, click on the *Search All* tab, and, in the *Search for* field, type "Release Documentation Index Page".

- 4. Set the default compiler to the standard ANSI C compiler if you have other compilers on your system.

Some Cadence products use the ANSI C compilers to link in customer C code or libraries.

For information on the compilers required for your operating system, contact the manufacturer of your platform or search in SourceLink.

- 5. Verify that your system has enough free disk space for the products you are installing.

See your product documentation for more information about memory, disk, and swap requirements for design databases of various sizes.

- 6. Determine the type of installation.

- ☐ If your shipment contains only Baseline or both Baseline, Update, and Hot Fix CDs, follow the instructions in Chapter 4, "Installing Products into a New Hierarchy."
- ☐ If you have previously installed products from this release and now want to install additional products from these CDs, follow the instructions in Chapter 5, "Installing Additional Products into an Existing Hierarchy."
- ☐ If you have previously installed products from this release and now want to update those products using Update and Hot Fix CDs, follow the instructions in Chapter 6, "Updating an Existing Hierarchy."

Note: The type of CD you mount first (Baseline, Update, and Hot Fix CD#1) determines the resulting installation type. That is, if you start with Baseline CD#1, you will install the

Cadence Installation Guide

Before You Begin the Installation

baseline version of the selected products. If you start with an Hot Fix CD#1, you will install the Hot Fix version of the products as they existed on the date that the Hot Fix CD set was created. To complete the installation, you may need to mount and install additional products from the baseline version after installing from the Update and Hot Fix CDs disk.

Installing Products into a New Hierarchy

To install, configure, and test your Cadence® products and licensing for a new release,

1. Do one of the following:

- ☐ If you received an `Installation Control` file for this release via e-mail, save it to a known location.
- ☐ If you received an `Installation Control` file on CD, mount the CD and access the file. Then save the file to a known location.

2. Verify that you have read permission for the `Installation Control` file.

3. Save the ASCII license file that you received as an email attachment in a known location and ensure that you have read permission.

4. Identify the CD to use for installation.

If you have received only a set of Baseline CDs, use the Baseline CD#1 first. The disk should be labeled `Disk # of n for platform`.

If you have received both a set of Base, Update, and Hot Fix CDs (and the `Installation Control` e-mail file), use the Update and Hot Fix CD#1 first. After installing the Update or Hot Fix CDs, InstallScape may ask you to then mount the baseline CD to complete the installation in a new hierarchy.

Note: For Windows users, the Update/Hot Fix CDs contains the full release. The baseline CD will not be required to complete the installation in a new hierarchy.

Note: The type of CD you mount first (Baseline, Update, and Hot Fix CD#1) determines the resulting installation type. That is, if you start with Baseline CD#1, you will install the baseline version of the selected products. If you start with an Hot Fix CD#1, you will install the Hot Fix version of the products as they existed on the date that the Hot Fix CD set was created.

5. Mount the CD.

Note: The installation starts automatically when you insert the CD on a Microsoft Windows system. If you are using a dongle, attach it to your computer before inserting

Cadence Installation Guide

Installing Products into a New Hierarchy

the CD.

- a. Log in as `root`.

Note: You do not normally need root permission to mount a CD-ROM on Solaris.

- b. If it does not already exist, create the CD-ROM directory by typing

```
mkdir /cd_dir
```

- c. Insert the CD into the CD-ROM drive.

- d. Mount the CD-ROM drive on the CD-ROM directory, using the appropriate command:

Solaris `/etc/mount -F hsfs -o ro /dev/device /cd_dir`

Note: Normally, the Solaris OS automounts the CD-ROM. In case the automount fails, see [Solaris does not mount the CD-ROM automatically](#) on page 35 for troubleshooting tips.

HP-UX `/etc/mount -F cdfs -o ro /dev/dsk/device /cd_dir`

Note: Typically, the device name to represent CD-ROM in HP-UX is `c0t0d0`.

AIX `/etc/mount -v cdrfs -o ro /dev/device /cd_dir`

Note: Typically, the device name to represent CD-ROM in HP-UX is `cd0`.

Linux `/bin/mount -o ro /dev/device /cd_dir`

Note: Typically, the device name to represent CD-ROM in Linux is `cdrom`.

- e. Log out as `root`.

6. Check the top level of your CD for `README` file.

If this file exists, it contains information that might be necessary for the installation of your product.

7. Start the interactive setup utility, `SETUP.SH`.

On a UNIX system, type

```
cdrom_mount_point/SETUP.SH
```

For example, if `cd_dir` is the CD-ROM mount point, then the command to run `SETUP.SH` will be

Cadence Installation Guide

Installing Products into a New Hierarchy

`/cd_dir/SETUP.SH`

On a Microsoft Windows system, the installation should start automatically. If it does not, go to the top-level directory of the CD-ROM and run the `setup.exe` program.

8. When `SETUP.SH` asks you to specify the path to *your_install_dir*, do one of the following:

- ☐ Type the path to an empty existing directory.
- ☐ Type a name for a directory (`SETUP.SH` will create the path for you).

9. Answer the prompts, and proceed as directed.

The appropriate installation utility, `InstallScape` or `InstallShield`, should start automatically.

On Windows, double-click on `setup.exe` at the top level of the CD-ROM.

10. Do one of the following:

- ☐ Load the products and licensing using `InstallShield`.

`InstallShield` is a GUI-based installation wizard. Each screen includes instructions.

`InstallShield` allows you to install the license manager, install products, and update your license file.

The installation is customized for each product family: see the `README` file at the top level of your CD-ROM for appropriate information.

- ☐ Load the products using `InstallScape`. See the `InstallScape User Guide` for details on how to use `InstallScape` for installing products.

You will need to configure the license file before you can start using it. For more information, see the *Cadence License Manager*. This document is available on SourceLink in the Installation Library and with the product manuals. Or, if you have a previously licensed Cadence hierarchy available, you can read this document using the Cadence online documentation system, `CDSDoc`.

- a. If your installation consists of more than one CD-ROM, either because the release is on two volumes or because you began the installation with a Update and Hot Fix CDs CD-ROM, `InstallScape` installs the selected products from the first disk and then prompts you to dismount that CD-ROM and continue the installation using the next disk. For Update and Hot Fix installations, you finish by installing the non-updated products from the baseline CD-ROM.

Creating the Tools Link

Cadence tools require a tools directory to be present in the installation hierarchy. This tools directory should be a symbolic link to the `tools.<platform>` directory that is created at the time of installation. Typically, this link is created automatically when you run product configuration scripts such as licensing configuration.

If this link does not exist, do the following:

1. Change to the installation directory by specifying the following command at the command prompt:

```
cd <install_dir>
```

2. Create the tools link by specifying the following command at the command prompt:

```
ln -s tools.<platform> tools
```

Installing Additional Products into an Existing Hierarchy

You can install software from only a single release in a given installation directory. InstallScape does not let you install products from different releases in the same hierarchy.

You can add products using Update and Hot Fix CD-ROMs or Baseline CD-ROMs. You can add products using a CD-ROM set that was the same release identified as the release in the hierarchy.

Note: If you are adding products using Update and Hot Fix CD-ROMs, you will also need the corresponding Baseline CD-ROM set.

Protecting Your Production Environment

To protect your production environment during the installation process,

- Do not install your software in a directory that is your current production hierarchy. Install your software in a new hierarchy or a copy of your production hierarchy.
- Do not install software from more than one baseline release into the same hierarchy.
- Test the installation fully before making it your production hierarchy.

To add products into an existing hierarchy,

1. Log in to the proper account.
2. Create a duplicate hierarchy from the original Baseline CD-ROM using the same method you used to install the production hierarchy.

Alternatively, you can create a duplicate of the Cadence hierarchy you want to update by using operating system commands such as the UNIX `tar` command.

Do not use the `cp` command because it does not preserve file system links.

3. Identify the CD to use first.

Cadence Installation Guide

Installing Additional Products into an Existing Hierarchy

If you have received only a set of Baseline CDs, use the Baseline CD#1 first.

If you have received only a set of Update and Hot Fix CDs (and the `Installation Control` e-mail file), use the Update and Hot Fix CD#1 first.

Note: You will need the corresponding Baseline CD set to complete installation. The `InstallScape` utility asks you to mount the baseline CD after installing the Update and Hot Fix CD.

If you have received both a set of Baseline and Update or Hot Fix CDs (and the `Installation Control` e-mail file), use the Update or Hot Fix CD#1 first.

Note: The type of CD you mount first (Baseline, Update or Hot Fix CD#1) determines the resulting installation type. That is, if you start with Baseline CD#1, you will install the baseline version of the selected products. If you start with an Hot Fix CD#1, you will install the Hot Fix version of the products as they existed on the date that the Hot Fix CD set was created.

4. Mount the CD.

Note: The installation starts automatically when you insert the CD on a Microsoft Windows system.

- a. Log in as `root`.

Note: You do not normally need root permission to mount a CD-ROM on Solaris.

- b. If it does not already exist, create the CD-ROM directory by typing

```
mkdir /cd_dir
```

- c. Insert the CD into the CD-ROM drive.

- d. Mount the CD-ROM drive on the CD-ROM directory, using the appropriate command:

```
Solaris      /etc/mount -F hsfs -o ro /dev/device /cd_dir
```

```
HP-UX        /etc/mount -F cdfs -o ro /dev/dsk/device /cd_dir
```

```
AIX          /etc/mount -v cdrfs -o ro /dev/device /cd_dir
```

- e. Log out as `root`.

5. Start the interactive setup utility, `SETUP.SH`.

On a UNIX system, type

```
cdrom_mount_point/SETUP.SH
```

Cadence Installation Guide

Installing Additional Products into an Existing Hierarchy

On a Microsoft Windows system, the installation should start automatically. If it does not, go to the top-level directory of the CD and run the `setup.exe` program.

6. When `SETUP.SH` asks you to specify the path to *your_install_dir*, type the path to an existing Cadence installation directory (this could be the duplicate hierarchy you created previously).
7. Answer the prompts, and proceed as directed.

The appropriate installation utilities, InstallScape or InstallShield, should start automatically. If it does not start, do one of the following:

- ☐ On UNIX, type

```
./iscape/bin/iscape.sh&
```
- ☐ On Windows, double-click on `setup.exe` at the top level of the CD-ROM.

8. Do one of the following:

- ☐ Load the Products and Licensing Using InstallShield.

InstallShield is a GUI-based installation wizard. Each screen includes instructions.

InstallShield allows you to install the license manager, install products, and update your license file.

The installation is customized for each product family: see the `README` file at the top level of your CD-ROM for appropriate information.

- ☐ Load the Products Using InstallScape.

If InstallScape has not started, type

```
./iscape/bin/iscape.sh&
```

- a. See the InstallScape User Guide for more details on how to use InstallScape for installing Cadence products.

Creating the Tools Link

Cadence tools require a tools directory to be present in the installation hierarchy. This tools directory should be a symbolic link to the `tools.<platform>` directory that is created at the time of installation. Typically, this link is created automatically when you run product configuration scripts such as licensing configuration.

If this link does not exist, do the following:

Cadence Installation Guide

Installing Additional Products into an Existing Hierarchy

1. Change to the installation directory by specifying the following command at the command prompt:

```
cd <install_dir>
```

2. Create the tools link by specifying the following command at the command prompt:

```
ln -s tools.<platform> tools
```

Updating an Existing Hierarchy

You can install software from only a single release in a given installation directory. InstallScape does not let you install products from different releases in the same hierarchy.

You can update a hierarchy using a Baseline CD-ROM or an Update or Hot Fix CD-ROM. You can update a hierarchy with a CD-ROM set that has the same release identifier as the release identifier of the release installed in the hierarchy.

Protect Your Production Environment

To protect your production environment during the installation process,

- Do not install your software in a directory that is your current production hierarchy. Install your software in a new hierarchy or a copy of your production hierarchy.
- Do not install software from more than one baseline release into the same hierarchy.
- Test the installation fully before making it your production hierarchy.

Updating the Existing Hierarchy

To install the release into an existing hierarchy,

1. Log in to the proper account.
2. Create a duplicate hierarchy from the original Baseline CD-ROM using the same method you used to install the production hierarchy.

Alternatively, you can create a duplicate of the Cadence hierarchy you want to update by using operating system commands such as the UNIX `tar` command.

Do not use the `cp` command because it does not preserve file system links.

3. Identify the CD to use first.

If you have received only a set of Baseline CDs, use the Baseline CD#1 first.

Cadence Installation Guide

Updating an Existing Hierarchy

If you have received only a set of Update or Hot Fix CDs (and the `Installation Control` e-mail file), use the Update or Hot Fix CD#1 first.

Note: You will need the corresponding Baseline CD set to complete the installation.

If you have received both a set of Baseline and Update or Hot Fix CDs (and the `Installation Control` e-mail file), use the Update or Hot Fix CD#1 first.

Note: The type of CD you mount first (Baseline, Update, or Hot Fix CD#1) determines the resulting installation type. That is, if you start with Baseline CD#1, you will install the baseline version of the selected products. If you start with an Hot Fix CD#1, you will install the Hot Fix version of the products as they existed on the date that the Hot Fix CD set was created.

4. Mount the CD.

Note: The installation starts automatically when you insert the CD on a Microsoft Windows system.

- a. Log in as `root`.

Note: You do not normally need root permission to mount a CD-ROM on Solaris.

- b. If it does not already exist, create the CD-ROM directory by typing

```
mkdir /cd_dir
```

- c. Insert the CD into the CD-ROM drive.

- d. Mount the CD-ROM drive on the CD-ROM directory, using the appropriate command:

Solaris `/etc/mount -F hsfs -o ro /dev/<device> /cd_dir`

Note: Normally, the Solaris OS automounts the CD-ROM. In case the automount fails, see [Solaris does not mount the CD-ROM automatically](#) on page 35 for troubleshooting tips.

HP-UX `/etc/mount -F cdfs -o ro /dev/dsk/<device> /cd_dir`

Note: Typically, the device name to represent CD-ROM in HP-UX is `c0t0d0`.

AIX `/etc/mount -v cdrfs -o ro /dev/<device> /cd_dir`

Note: Typically, the device name to represent CD-ROM in HP-UX is `cd0`.

Cadence Installation Guide

Updating an Existing Hierarchy

Linux `/bin/mount -o ro /dev/<device> /cd_dir`

Note: Typically, the device name to represent CD-ROM in Linux is `cdrom`.

e. Log out as `root`.

5. Start the interactive setup utility.

On a UNIX or Linux system, type

`cdrom_mount_point/SETUP.SH`

On a Microsoft Windows system, the installation should start automatically. If it does not, go to the top-level directory of the CD and run the `setup.exe` program.

6. When `SETUP.SH` asks you to specify the path to *your_install_dir*, type the path to an existing Cadence installation directory (this could be the duplicate hierarchy you created previously).

7. Answer the prompts, and proceed as directed.

The appropriate installation utilities, `InstallScape` or `InstallShield`, should start automatically. If it does not start, do one of the following:

- ☐ On UNIX, type

`./iscape/bin/iscape.sh&`

- ☐ On Windows, double-click on `setup.exe` at the top level of the CD-ROM.

8. Do one of the following:

- ☐ Load the Products and Licensing Using `InstallShield`.

`InstallShield` is a GUI-based installation wizard. Each screen includes instructions.

`InstallShield` allows you to install the license manager, install products, and update your license file.

The installation is customized for each product family: see the `README` file at the top level of your CD-ROM for appropriate information.

- ☐ Load the Products Using `InstallScape`.

If `InstallScape` has not started, type

`./iscape/bin/iscape.sh&`

- a. See the `InstallScape User Guide` for more details on how to use `InstallScape` for installing Cadence products.

Creating the Tools Link

Cadence tools require a tools directory to be present in the installation hierarchy. This tools directory should be a symbolic link to the `tools.<platform>` directory that is created at the time of installation. Typically, this link is created automatically when you run product configuration scripts such as licensing configuration.

If this link does not exist, do the following:

1. Change to the installation directory by specifying the following command at the command prompt:
2. Create the tools link by specifying the following command at the command prompt:

```
cd <install_dir>
```

```
ln -s tools.<platform> tools
```

Advanced Installation Topics

- [Automating an InstallScape Installation](#) on page 25

Automating an InstallScape Installation

See the InstallScape User Guide for details on how to automate product installation using InstallScape command line options.

Cadence Installation Guide

Advanced Installation Topics

Overview of Software Configuration

Before you can run or configure Cadence® products, you must install and configure licensing.

This section covers the following topics:

- [About License Servers](#) on page 28
- [About Your Work Order and License File](#) on page 28
- [Installing and Configuring Licensing with InstallScape](#) on page 28
- [Default and Customized Licensing](#) on page 29
- [Licensing Tips](#) on page 30

About License Servers

A license server or standalone workstation must

- Be a supported platform and operating system (it cannot be a clone)
- Have a host ID that matches the host ID in the license file
- Have a local disk that contains the UNIX operating system and UNIX file systems, such as `/usr/tmp` (a license server cannot be diskless)
- Have TCP/IP running
- Have license daemons running

About Your Work Order and License File

Your work order includes a license file for your license server's host ID. Depending on the hardware platform, the host ID is the PROM ID, Ethernet address, or another unique identifier for the workstation.

Host IDs are case-insensitive, but host IDs in the license file must match the host IDs of the license servers. In fault-tolerant licensing, the three host IDs in the license file must match the host IDs of the three license servers.

Installing and Configuring Licensing with InstallScape

The *Cadence License Manager Guide* fully describes the licensing environment and includes instructions on configuring licensing. The guide is available in CDSDoc and in SourceLink (under "Installation," click *Installation, Licensing & System Configuration information*).

To configure licensing from Cadence InstallScape,

1. If you have already been using Cadence products, copy to your new `your_install_dir/share/license` directory any files you customized for your older software, such as a clients file or a license file containing valid temporary licenses.

Your current temporary licenses are merged into your new license file if

- ☐ Your temporary licenses are for the same license server
- ☐ Your temporary licenses are still valid
- ☐ You configure licensing from InstallScape or with `configure` or `lic_config`

Cadence Installation Guide

Overview of Software Configuration

As the utilities proceed, you see several different types of license files depending on any previous licensing.

2. From the InstallScape Main Menu, click *Configure*, then click *System Environment*.
3. Choose the *SoftShare Licensing Server* (*host_id*) to configure.

Respond to the prompts.

If you are setting up fault-tolerant licensing, do not start the license daemons when prompted.

4. Back up the *your_install_dir/share/license* files you customized.
5. If you are setting up fault-tolerant licensing, follow the steps in the *Cadence License Manager Guide*.
6. If the license file is in ASCII,
 - a. Copy the license file to *your_install_dir/share/license*.
 - b. Configure the license file (*your_install_dir/share/license/configure*)

Default and Customized Licensing

If you are installing Cadence products for the first time in this hierarchy, use InstallScape to configure Cadence SoftShare licensing. InstallScape configures SoftShare licensing and work orders by

- Creating a link between the *your_install_dir/tools.platform* and *your_install_dir/tools* directories
- Editing the `SERVER` and `DAEMON` lines in the license file
- Creating a script to start the license daemons
- Editing your workstation's boot script to run the license daemon start-up script
- Editing a Cadence-specific file that is used to locate the license files client workstations use

InstallScape runs the licensing configuration script, which lets you choose a default licensing configuration or override any of the defaults. The *Cadence License Manager Guide* describes your options. You can use the default licensing configuration when

- The user workstation is the license server
- The licensing log file is `/usr/tmp/license.log`

Cadence Installation Guide

Overview of Software Configuration

- The license server does not use an options file (described in the *Cadence License Manage Guide*)

- Applications use a `clients` file to locate their license server

The default `clients` file lets all workstations use the software controlled by the license file.

- You want to start the `lmgrd` daemon without options using the following command:

```
your_install_dir/tools/bin/lmgrd -c license_file > /usr/tmp/license.log
```

You can minimize the chance of users inadvertently shutting down the license daemons by starting the `lmgrd` daemon with one of these methods instead of using the default options:

- ☐ `lmgrd -2 -p`

When you use this command, only members of the `lmadmin` group can run `lmdown`, `lmremove`, and `lmreread`. If `root` should be able to use `lmdown`, `root` must be in the `lmadmin` group. If no `lmadmin` group exists, only a user belonging to the `wheel` group can use these utilities. (Typically, `root` is in `wheel`.)

- ☐ `lmgrd -x lmdown`

When you use this command, no one, not even `root`, can run `lmdown`. The license daemons can only be stopped with `kill`. Do not use `kill -9`.

Note: Do not kill the license daemons while licenses are in use because of possible loss of data.

- ☐ `lmgrd -x lmremove`

When you use this command, no one, not even `root`, can run `lmremove` to return licenses to the license pool.

Licensing Tips

Here are some tips on setting up and configuring licensing:

- InstallScape can configure licensing only from work orders or e-mail files.
- You can choose the license file in `your_install_dir/share/license` that you want to configure.
- You must configure SoftShare licensing before you configure your products and libraries and before you use Cadence software.

- If you need more information about a particular screen, click *Help* or see the *Cadence License Manager Guide*.
- If you are setting up fault-tolerant licensing, do not start the license daemons when prompted.
- To start the license daemons, you must have write permission for the licensing debug log file.
- Some Cadence products use the `clients` file to locate the correct license file. If you did not override the `clients` file defaults when configuring licensing, all workstations can access the `license` file. The online *Cadence License Manager* guide describes other methods of locating license files and modifying the `clients` file.

Overview of User Environment Configuration

All users must include the path to the Cadence software in their search paths.

To set up user environments,

- For the C shell
 - In the user's `.cshrc` file, set the search path as follows:

```
set path = (your_install_dir/tools/bin $path)
```

Note: Do not set the `DISPLAY` variable in the `.cshrc` file. Doing so can cause licensing and other problems when running remote applications.
 - Source the user's `.cshrc` file.
- For the Bourne or Korn shell
 - Add the following lines to the `.profile` file:

```
PATH=your_install_dir/tools/bin:$PATH  
export PATH
```
 - Force the new lines to be read by typing

```
.. ./profile
```

Overview of Client Workstation Configuration

If the Cadence software does not reside on user workstations, you must set up the user workstations because client workstations must access the software on the file server.

- Check for adequate memory and swap space.

Cadence Installation Guide

Overview of Software Configuration

To enhance performance, verify that each client workstation has enough memory (RAM) and swap space. For memory and swap space requirements, see your product documentation.

- Make sure users can access the license server from the their workstations.
- Make sure the user can access the Cadence software.
- Verify the correct operating system and patches are on the client workstation.

Troubleshooting

- When you run into problems using InstallScape, click *Help* in any InstallScape window.
- If you run into any problems or error messages when using a remote drive, verify that you have `remsh` permission (HP) or `rsh` permission (all other operating systems) on the workstation attached to the drive.
- If a hard disk appears locally on an HP but is NFS-mounted onto a Sun workstation, the installation utility cannot `tar` correctly onto the hard disk.
- Additional troubleshooting tips are located in the *Installation and Licensing FAQ* pages on SourceLink.

Cannot locate device

If you are loading a CD-ROM, click *Help* for information. If you are loading just the work order, specify the device name when prompted.

Inconsistent encryption code for feature

Depending on your mail system, this message appears when you start to use a new license file you installed without InstallScape. Some mail systems wrap lines, reformat the message, or add spaces, tabs, or other characters, such as `>` or `#` when forwarding e-mail. License files cannot have leading spaces. Remove these characters or spaces as described below before processing with InstallScape, then install the license file again.

- For Qualcomm's Eudora, if you still have the original Cadence e-mail message in a *Eudora* folder, turn off the `wordwrap + QP` options from the tool bar before forwarding it to a UNIX system or saving the e-mail message to a file.
- For ZMail from Network Computing Devices, Inc., from the Compose screen, disable *Autoformat* in your Options menu before forwarding mail.

Incompatible installation information in filename (cdsInstPlat)

This message indicates that the e-mail work order is missing the `./install/tmp/cdsInstPlat` file or the format of `cdsInstPlat` is wrong.

Contact Cadence Customer Support at sourcelink.cadence.com/supportcontacts.html

Parameter list is too long

This message indicates that the environment variables are probably using up available space. Unset your environment variables or use a limited `.profile` or `.cshrc` that does not set any unnecessary environment variables, and start InstallScape again. This leaves the maximum space for installation.

Device busy

You see this error when you try to unmount or eject a CD-ROM when one of your windows still has a prompt in the `/cdrom_dir` directory, such as `/cdrom`. Change to the `/` directory and retry the `umount` or `eject` command.

Cannot locate /usr/lib/X11

On a Sun workstation running OpenWindows, create an additional link (as `root`):

```
ln -s /usr/openwin/lib /usr/lib/X11
```

Problems with tar

If you mount a disk from another vendor's workstation using NFS, InstallScape can have problems when it attempts to use `tar`. For example, if a hard disk (or any other device) appears locally on an HP workstation but is NFS-mounted onto a Solaris workstation, you must use the SunOS version of InstallScape (on the Sun) to install the HP version.

IBM workstations require patch U44283 to successfully install Cadence products. To determine if the patch is installed in the Korn shell, type the following command:

```
lslpp -lcp bos.rte.archive
```

The third field of the one-line output should indicate 4.1.4.6 or higher:

```
/usr/lib/objrepos:bos.rte.archive:4.1.4.6::APPLIED:F:Archive Commands
```

cds_root: Command not found.

Verify that the proper *your_install_dir/tools/bin* is in your search path.

To create a link to this directory, type

```
cd your_install_dir  
ln -s tools.platform tools
```

Product fails to install properly

Error messages appear and product status is listed as *failed* when you choose *List Products* or *Remove Products*. Product status can be *failed* if

- Not all parts of a product are installed properly
- Only documentation for a product is installed
- A software update is available for a product, but the update is not installed

You do not need to remove a failed product before you install it again. Correct the problem and load it again.

Solaris does not mount the CD-ROM automatically

- See your operating system documentation for complete details.
- Run `volcheck`.

If the CD-ROM still does not mount,

1. Terminate the volume manager daemon, `vold`.
2. Restart the volume manager daemon.
3. Insert the CD-ROM.
4. Verify the mounting.
5. If the CD-ROM still does not mount, run `volcheck` again.

If the CD-ROM still does not mount,

a. Log in as `root`.

b. Mount the CD-ROM:

```
mount -r -t hsfs /dev/sr0 /cdrom
```

If the CD-ROM still does not mount, reboot or see your operating system documentation.

Troubleshooting Cadence documentation

If your installation was successful but you are unable to run the Cadence online documentation system, CDSDoc, you can directly open the *CDSDoc Configuration Guide* using your web browser or Acrobat Reader.

- To open the HTML version, set your web browser to open

```
release/doc/cdsdocconfig/cdsdocconfigTOC.html
```

- To open the PDF version, start Acrobat Reader and open

```
release/doc/cdsdocconfig/cdsdocconfig.pdf
```

The *CDSDoc Configuration Guide* has troubleshooting information. “Sending Debugging Information to Cadence” in Chapter 2 tells you how to forward details about your CDSDoc setup to Technical Publications.

For further questions regarding documentation, e-mail cdsdoc_feedback@cadence.com.