

Cadence Sigrity 2017 Release Installation Guide

**Product Version Sigrity 2017
December 2016**

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Introduction

This document lists the hardware and software that support Cadence® Sigrity™ 2017 and describes how to install Cadence Sigrity 2017 products on supported Windows and Linux operating systems. It also describes how to install and configure the license server to run the products.

To Know about

Read

Installation Requirements

- [“Hardware and Software Requirements”](#) on page 7

Compatibility Matrix for
Integrated Applications

- [Compatibility Matrix](#) on page 6

Windows Installation

- [“Installing License Manager on Windows”](#) on page 11
- [“Installing Cadence Sigrity Products on Windows”](#) on page 17
- [“Installing Client on a Remote Computer on Windows”](#) on page 21
- [“Configuring and Using Service Manager for PowerSI Distributed Computing”](#) on page 25
- [“Performing Silent Installations on Windows”](#) on page 27

Linux Installation

- [“Installing and Configuring License Manager on Linux Systems”](#) on page 33
- [“Installing Cadence Sigrity Products on Linux”](#) on page 37

Compatibility Matrix

The compatibility matrix is recommended for the benefit of the users of integrated applications, such as Allegro® Sigrity™ PI, Allegro® Sigrity™ SI, and APD–XtractIM. This will ensure that the latest database features are fully supported by the Sigrity™ applications..

Sigrity Release	Compatible SPB Release
Sigrity2017	SPB 17.2
	SPB 17.20.004 (Hotfix 4)
	SPB 17.20.009 (Hotfix 9)
Sigrity 2016	SPB 16.60.069 or later
	SPB 17.2
	SPB 17.20.004 (Hotfix 4)

Hardware and Software Requirements

This manual is designed to help you quickly find the information required to install Cadence® Sigrity™ 2017 products.

The following sections describe the system requirements for Windows and Linux.

Windows Requirements

Because Cadence Sigrity products are integrated directly with Windows, hardware and peripherals supported by Windows are also supported by the Cadence Sigrity products. A list of hardware and peripherals officially supported by Windows can be obtained from the Microsoft web page.

Operating System	Microsoft® Windows® 7 all versions (64-bit); Windows 8 (64-bit) (All service packs); Windows 10 (64-bit); Windows 2008 Server R2; Windows 2012 Server (All service packs).
Recommended Software	Microsoft® Internet Explorer® 9.0 or later
Minimum Hardware	Intel IA-64 Compatible (includes P4 EMT and AMD Opteron™) 8 GB RAM Virtual memory at least twice physical memory 50 GB free disk space 1,024 x 768 display resolution with true color (16bit color) Broadband Internet connection for some service Ethernet card (for network communications and security hostID) Three-button Microsoft-compatible mouse
Recommended Hardware	Intel® 4th Generation Core™ (Haswell) or AMD Kaveri 64 GB RAM or higher; 192 GB of RAM or higher is recommended for 3D-EM

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Hardware and Software Requirements

500 GB free disk space

SSD is recommended for primary operating system (OS) and simulation working directory

Dedicated graphics card with 1 GB video memory or higher

Large monitor (or two) with Full HD resolution or higher

Broadband Internet connection for some services

Three button mouse with scroll wheel

Full size keyboard

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Hardware and Software Requirements

Linux Requirements

This section describes the system requirements for Linux.

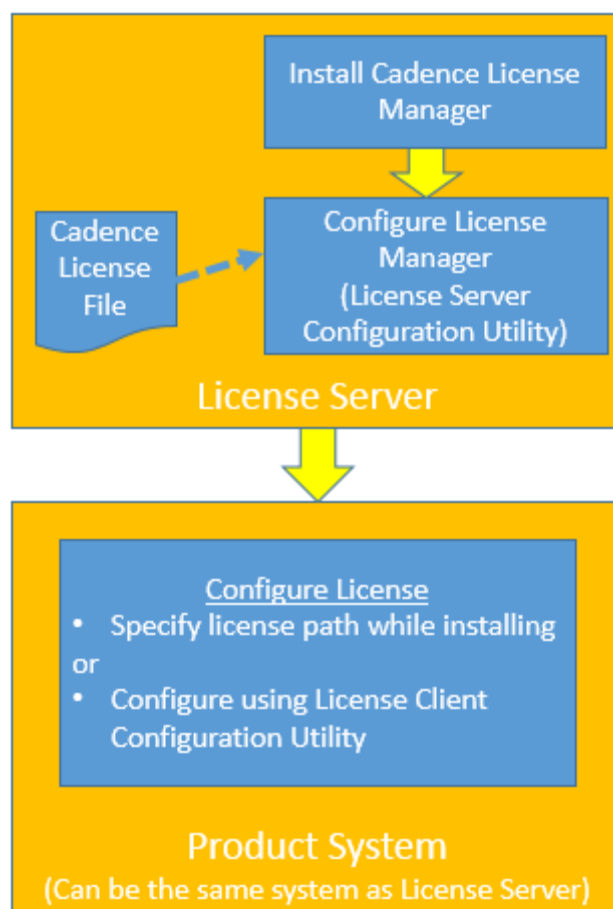
Operating System	RHEL 5.10 (64-bit); RHEL 6.5 (64-bit); RHEL 7.1 (64-bit); SLES 11 SP2/SP3 (64-bit); Ubuntu 14.04 (64-bit)
Hardware	Intel P4 compatibles (includes AMD Opteron™), Intel P4 EMT and AMD Athlon™ 8 GB (or greater) system memory 12 GB swap space 10 GB (or greater) available disk space TrueColor required
Window Manager	Gnome

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Hardware and Software Requirements

Installing License Manager on Windows

You must install and configure Cadence® License Manager to be able to use installed products. You can set up licensing locally or over a network.



To set up licensing:

1. Install the License Manager, locally or in a server.

Note: Ensure that you install the latest Cadence License Manager. For Sigrity 2017, upgrade to Cadence License Manager 12.07 (FLEXnet License Manager version 11.13.1.3 or later). You can check the version of FLEXnet by choosing *Cadence–License Manager–LmTools* from the Windows Start menu. Then choose *Help–About*.

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Installing License manager

2. Configure the license server using the License Server Configuration Utility and the license file provided by Cadence.

To be able to run the products, ensure that license is configured in the system where products are installed. You can configure license by either specifying the License Path while installing the products or by using the License Client Configuration Utility.

The remaining sections in this chapter describes how to install License Manager and configure license.

Installing License manager

Two types of installations are possible for the license manager:

- [Standalone Installation](#)
- [Network Installation](#)

The sections below describe the two installation types and explains the installation procedure.

Standalone Installation

To install the licensing for a single user on an isolated computer that will not depend on access to a network, install the License Manager directly on that computer.

Network Installation

In a network installation, you install the License Manager on a computer that is accessible over a network, referred to as a *license server*. In this configuration, multiple users can run the Cadence products at the same time across the network by accessing the license and file server.

You may have up to three license servers running simultaneously. These are referred to as *redundant license servers*. The licensing system remains operational as long as any two of the three License Managers are functioning properly.

To install the License Manager

Note: To learn about silent or unattended installation of the license manager, refer to [Installing License Manager in the Silent Mode](#) on page 30.

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Installing License Manager on Windows

1. Click on `setup.exe` in the top-level of the Windows DVD images (above the Disk 1 folder).

The Cadence Product Components menu appears.

2. Click *License Manager*.

The Welcome window of the InstallShield Wizard dialog box appears.

3. Click *Next* to proceed.

The License Agreement dialog box appears.

4. Enable the *I accept the terms of the license agreement* checkbox to accept the License Agreement.

5. Click *Next* to proceed with the installation process.

The Choose Destination Location dialog box appears.

6. Accept the default location or click the *Change* button to designate another location, where you want to install, and then click *Next* to continue.

The Select Features dialog box appears.

7. Check the *Licensing* checkbox (if not checked) and then click *Next*.

The Ready to Install the Program dialog box appears.

8. Click *Install* to start the installation.

The Setup Status dialog box appears to monitor the install progress. When complete, the License File Location dialog box appears.

9. Specify a location to the Cadence license file or browse to it, and then click *Next*.

The License Server Data dialog box appears.

Note: You can click *Cancel* to configure the License Manager at a later time. You need to run *Start – Cadence – License Manager – License Server Configuration Utility* to configure licensing.

10. Review the license server information and modify the host name, if necessary, and then click *Next*.

The Configuration Status dialog box appears informing you that the license file installation was successful.

11. Click *Finish*.

The InstallShield Wizard Complete dialog box appears.

12. Click *Finish* to end the license manager installation.

Uninstalling the License Manager

To Uninstall the License Manager

1. Open *Programs – Programs and Features* from the Control Panel of Windows.
2. Navigate to *Cadence License Manager* and click *Uninstall*.

The License Server Configuration Utility

The License Server Configuration Utility (*Start – Cadence – License Manager – License Server Configuration Utility*) lets you configure licensing on a license server without having to reinstall the License Manager.

Use the License Server Configuration utility if:

- You received a replacement license file from Cadence
 - your current license file is about to expire
 - you purchase additional licenses for products that you have already installed
- You receive a new license file from Cadence.

To Use the License Server Configuration Utility

1. From the *Start* menu, choose *All Programs – Cadence – License Manager – License Server Configuration Utility*.

The License File Location dialog box appears.

2. Specify a location to the Cadence license file or browse to it, and then click *Next*

The License Server Data dialog box appears.

3. Review the license server information and modify the host name, if necessary, and then click *Next*.

The Restart License Server dialog box appears informing you that the license server is running and will restart.

4. Click *Next*.

The Configuration Status dialog box appears.

5. Click *Finish* to exit the License Server Configuration utility.

Configuring the license file is complete.

The License Client Configuration Utility

The License Client Configuration Utility (*Start – Cadence – License Manager – License Client Configuration Utility*) lets you change the setting of your `CDS_LIC_FILE` variable to point to a different or an additional license server. After remote client product installations, either interactive or unattended, you must use the License Client Configuration Utility to set up the client machine to find the license server.

To Use the License Client Configuration Utility

1. From the *Start* menu, choose *All Programs – Cadence – License Manager – License Client Configuration Utility*.

The License Path dialog box appears.

2. Specify the port and hostname of the license server(s) you want to use, and then click *Next*.

Note: You can use semicolon to specify multiple license servers, such as `port1@host1;port1@host2`. You can also specify a fault tolerant or triad license server, you can use the comma to separate the hosts, such as `port1@host1,port1@host2,port1@host3`.

The Configuration Status dialog box appears to confirm that the `CDS_LIC_FILE` variable updated.

3. Click *Finish* to exit the License Client Configuration utility

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The License Client Configuration Utility

Installing Cadence Sigrity Products on Windows

You can use the Cadence® Sigrity™ installer to install products in two modes, interactive and unattended. The interactive mode uses a installation wizard to guide you through the installation steps. The unattended mode lets you edit a template in the installation CD and run the installation process without intervention.

You can also run the installer to maintain installed products. Maintenance allows you to modify or repair the current installation.

You can remove the installation from the Programs and Features tool of Windows Control Panel by clicking the *Uninstall* button.

Interactive installation flow depends upon the option, either Complete or Custom, which you select in the Setup Type page of the installer.

Note: This chapter discusses interactive installation. To learn about silent or unattended installation, refer to [Performing Silent Installations on Windows](#) on page 27.

Important

In order to install the Cadence Sigrity products, you must be logged on as a user with administrative privileges.

This chapter describes:

- [Performing Interactive Product Installation](#)
- [Running Allegro–Sigrity Flow on Windows](#)
- [Uninstalling the products](#)

Performing Interactive Product Installation

Interactive installation flow depends upon the option, either *Complete* or *Custom*, which you select in the Setup Type page of the installer. The Complete option requires the maximum disk space but reduces the number of installation steps. The Custom option provides more flexibility to advanced users by allowing customized installation for specific needs.

The first few steps of installation, till accepting the license agreement, are similar for all installation types. However, depending upon the option selected in the Setup Type page, the remaining steps will change.

1. Double-click *setup.exe* in the top-level of the Windows DVD images (above the Disk 1 folder).

The Cadence Product Components menu appears.

2. Click *Products* from the list.

The InstallShield Wizard prepares for setup.

Note: Running anti-virus software while performing installation might significantly increase the install time or even lead to unsuccessful installation.

3. In the Welcome page of the installer, click *Next* to open the License Agreement page.
4. Check *I accept the terms of the license agreement* to accept the License Agreement and click *Next*.

The Setup Type page appears.

5. Select the setup type. Select *Complete* if you want to install all the Cadence Sigrity products. Select *Custom* if you want to install specific products. Click *Next*.

If you chose *Complete*, go to step 9.

6. In the text field of the Control File Location page, specify the path to the control file you received from Cadence, including the name of the control file.

If you do not have a control file, leave it blank.

Note: For each version of a release, the Control File page only appears the first time you perform an installation. For later installations, you must select products from the remaining product list displayed in the Select Products page.

7. Click *Next*.
8. In the Choose Destination Location page of the installation wizard, specify the installation directory.

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Installing Cadence Sigrity Products on Windows

By default, the tools are installed at the location `C:\Cadence\Sigrity2017`. If required, you can change the install directory.

9. Ensure that the License Path box points to an existing license server in the form of `<port_number>@<host_name>`, such as `5280@corporatelicenseserver`. The value is updated in the `CDS_LIC_FILE` environment variable.

10. Click *Next*.

For Custom mode, the Select Features dialog box appears. If you chose Complete, go to step 14.

11. Select the specific products you want to install by checking the boxes next to the product names.

12. Click *Next*.

The Installation Summary dialog box appears.

13. Click *Install* to install the Cadence Sigrity products or click *Back* to review settings.

Note: The installer also installs Microsoft Visual C++ 2012 Redistributable (32-bit and 64-bit).

The installation might take several minutes.

The Setup Complete dialog box appears.

14. Check *View Product Notes* to view the release notes for different Cadence Sigrity products. Check *Open cadence Web Page* to open the Cadence Web page in a browser.

15. Click *Finish* to complete installation.

At the end of installation a standard shortcut is added for easy access of installed products as *Start – All Programs – Cadence Sigrity <version>*; for example, *Start – All Programs – Cadence Sigrity 2017*.

Note: If you use PowerSI Distributed Computing, you might need to configure the Service Manager as described in [Configuring and Using Service Manager for PowerSI Distributed Computing](#) on page 25.

Important

To use OpenPOWER Compliance Kit, download the models for OpenPower compliance kits from the *Library* section of the Sigrity release of downloads.cadence.com and extract to the `<installation_location>/shared` folder. Refer *OpenPOWER_readme.pdf* for more information.

Running Allegro–Sigrity Flow on Windows

You can run the Allegro–Sigrity flow tools from either the Cadence® Sigrity™ 2017 hierarchy or from the Cadence Allegro® and OrCAD® 16.6 or later hierarchies. For the tools to run in the flow, the location of the Allegro and OrCAD hierarchy must be known to Sigrity 2017, if you are calling the tool from the Sigrity hierarchy, and vice versa.

If the location of the hierarchy being called is not known, such as if the installation hierarchies are not on the same system or if the hierarchy being called is installed as a client, you are prompted to specify the location of the called hierarchy on running for the first time. The specified location information is then updated and used in subsequent runs.

Before prompting you for a location, Allegro and products check the `SIGRITY_EDA_DIR` variable in the `/share/pcb/text/env` file to locate Sigrity 2017 hierarchy if an installed Sigrity 2017 is not found.

Similarly, Sigrity 2017 checks the `CDSROOT` environment variable to determine the location of the Allegro and OrCAD hierarchy if an installed hierarchy is not found.

Uninstalling the products

1. Open *Programs and Features* from Control Panel of Windows.
2. Select *Cadence Sigrity <version>* from the list of currently installed programs.
3. Click *Uninstall* to launch the installation wizard.

The wizard prepares to remove the installation and then displays a message asking if you want to completely remove the selected application and all its product.

4. Click *Yes* to uninstall the products.
5. Click *Finish* in the Uninstall Complete page.

Installing Client on a Remote Computer on Windows

After installing the License Manager software and products on a file server, you can set up remote client computers. The file server can be any computer on which you have installed Cadence® Sigrity™ products.

Note: The system that has Cadence Sigrity products installed acts as a file server. You can also run all installed products from the file server and Start menu entries are created in the file server along with the creation of all environment variables required to run the installed products.

You can install the client either interactively using the Installation Wizard or unattended in the silent mode. Both types of installations will add a standard shortcut to the start menu as *Start – All Programs – Cadence Sigrity <version>*. For example, *Start – All Programs – Cadence Sigrity 2017*.

Note: This chapter discusses interactive installation of the client. To learn about silent or unattended installation, refer to [Performing Silent Installations on Windows](#) on page 27.

Remote client computers access the license server and the products (on the file server) over a network. The remote client computer itself does not have the License Manager software or any of the products installed on it. Instead, a minimum of files are installed (system DLLs, registry entries, and environment variables) and icons that point to the products on the file server are put into the Start menu on the remote client computer. In addition, the remote client installation creates a Start menu command (*Start–All Programs–Cadence–License Manager–License Client Configuration Utility*) that updates the `CDS_LIC_FILE` environment variable on the remote client computer with the licensing information on the file server.

Note: You can use a UNC path or a mapped drive to specify the file server location. If you use a mapped drive and UAC (User Account Control) is on, browse to the location instead of typing the path to the server location. Specifying a UNC path is recommended as mapped drive might not be accessible due to company specific IT policies.

Installing a Client Interactively on a Remote Computer

1. Double-click *setup.exe* in the `Disk1` folder of the Windows DVD image

Note: You can also launch the client installer by opening command prompt and entering the command `<path_to_Disk1>\setup.exe -client`.

2. Click *Client Installation*.

The Welcome window of the InstallShield Wizard dialog box appears.

3. Click *Next* to proceed.

The License Agreement dialog page appears.

4. Enable the *I accept the terms of the license agreement* checkbox to accept the License Agreement. Click *Next*.

The Complete Product Installation Directory page appears.

Note: Avoid spaces and special characters in the installation path.

5. Specify the location of a compatible server.

The server location can either be a mapped drive or an UNC path.

6. Click *Next*.

The Installation Summary page appears.

7. Click *Back* to review your settings or click *Install* to install the products.

This will install the files necessary to run Cadence Sigrity products.

Note: The installer also installs Microsoft Visual C++ 2012 Redistributable (32-bit and 64-bit).

Note: See [Running Allegro–Sigrity Flow on Windows](#) on page 20 for information on running Allegro–Sigrity flow tools.

Uninstalling the Client

1. Open Programs and Features from Control Panel of Windows.
2. Select *Cadence Sigrity <Release>*, such as *Cadence Sigrity 2017*, from the list of currently installed programs.
3. Click *Uninstall*, depending on the version of the operating system, to launch the installation wizard.

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Installing Client on a Remote Computer on Windows

The wizard prepares to remove the installation and then displays a message asking if you want to completely remove the selected application and all its product.

4. Click *Yes* to uninstall the client.
5. Click *Finish* in the Uninstall Complete page.

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Installing Client on a Remote Computer on Windows

Configuring and Using Service Manager for PowerSI Distributed Computing

Configuring the Service Manager for PowerSI

Follow these steps to configure the Service Manager:

1. To start the manager, double-click
<installation_location>\tools\bin\SigrityServiceManager.exe.
PowerSI® Service Manager is launched.

Important

If you use Windows 7, right-click on `SigrityServiceManager.exe` and choose *Run as administrator*.

2. Click *Find PowerSI* to locate `PowerSI.exe` and then click *Open* to set the path.
3. Click *Work Path* to set a location where PowerSI can store temporary files.

Note: Ensure users have write permission to:

- the folders containing the `PowerSI.exe` and `.spd` files on all machines used as servers
- the registry `HKEY_LOCAL_MACHINE > SOFTWARE > Sigrity > SiRemote.exe`

Starting and Stopping PowerSI Remote Service

To start the PowerSI® remote service, click *Start Service*. You can verify if the service is running by opening Windows Task Manager and checking that `SiRemoteExe.exe` is listed in the Processes tab.

You can stop the remote service by clicking *Stop Service*.

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Configuring and Using Service Manager for PowerSI Distributed Computing



Tip

If *SIRemoteExe.exe* is not listed in Windows Task Manager, click *Stop Service* and then click *Start Service* to restart the service.

Performing Silent Installations on Windows

Cadence® Sigrity™ 2017 silent or unattended installation does not require user intervention. You start silent installation from the command line using a simple text file called the silent installation file. You can find a template of the silent installation file in the installation CD (`Disk1\documents\silentinstall-asi.ini`).

Note: The `Disk1\Documents\silentinstall-licensing.inifile` can similarly be used to install the license manager.

To perform silent installation, modify the `Disk1\documents\silentinstall-asi.ini` file and at the Windows command prompt, enter the relevant command.

The following sections provide details about silent or unattended installation:

- [The silentinstall-asi.ini file](#)
- [Installing License Manager in the Silent Mode](#)
- [Installing Products in the Silent Mode](#)
- [Installing Client in the Silent Mode](#)
- [Performing Maintenance in the Silent Mode](#)

The silentinstall-asi.ini file

The template `.ini` files in the `Disk1\documents\` for silent installation contains various variables to set the different installation parameters. The files have three sections; *State*, *Features*, and *Data*. Most variables are commented using the semicolon (;). You can edit the files using any text editor and remove the comments, if needed, to use the variables. The following table describes the different variables.

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The silentinstall-asi.ini file

Variable	Description
State	
TargetDir	<p>Specify the location where you want to install the products. This variable is in the <code>State</code> section of the template. For example, to install the products at the location <code>D:\Cadence\Sigrity2017</code> edit the template to read <code>TargetDir=D:\Cadence\Sigrity2017</code>.</p> <p>If you use a mapped drive for the path and UAC is on, ensure that the mapped drive is accessible from your system by using the Windows command prompt or any other shell.</p>
RebootIfReqd	<p>Specify <code>RebootIfReqd=Y</code> if you want the computer to reboot when installation is completed. The default value is <code>N</code>.</p>
FileServerLocationDir	<p>Specify the server location. This is the shared location where products are installed. This variable is required for client installation.</p> <p>If you use a mapped drive for the location and UAC is on, ensure that the mapped drive is accessible from your system by using the Windows command prompt or any other shell.</p>
OnMaintenance	<p>You can specify whether you want to modify, repair, or remove installation. The possible values are <code>MODIFY</code>, <code>REPAIR</code>, and <code>REMOVEALL</code>. <code>MODIFY</code> allows you to add new products by editing the <code>Feature</code> section of the silent installation file. <code>REPAIR</code> will update the environment variables and the registry settings. <code>REMOVEALL</code> will uninstall the current installation.</p>

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Performing Silent Installations on Windows

MODE

Specify if you want to install all the products or a selected list of products. This variable is in the State section. To install all products, edit the file to `MODE=COMPLETE`. To install specific product, edit to `MODE=CUSTOM`.

If you specify the value of `MODE` as `CUSTOM`, you need to modify the `Features` section. In the `Features` section of the template, add the semicolon (;) to the lines that contain the product not to be installed. For example, to ensure 3D-EM is not installed, add a semicolon (;) to the beginning of the line `Feature1=Standalone Sigrity SI and PI Products\3D-EM`, as shown below.

```
[Features]
```

```
;Feature1=Standalone Sigrity SI and PI Products\3D-EM
```

```
Feature2=Standalone Sigrity SI and PI  
Products\Broadband_SPICE
```

```
Feature3=Standalone Sigrity SI and PI  
Products\CAD_Translators
```

```
Feature4=Standalone Sigrity SI and PI  
Products\OptimizePI
```

```
Feature5=Standalone Sigrity SI and PI Products\PowerDC
```

Features

Specify the products that you want to install in this section, if you had specified the `MODE=CUSTOM`. Refer to the description of `MODE` in this table for more information.

Installing License Manager in the Silent Mode

1. Navigate to the `Disk1\documents\silentinstall-licensing.ini` file template on the Windows DVD images.
2. Update the `Targetdir` in the `.ini` file to reflect the location where you want to install License Manager or use the default location.
3. Save the `.ini` file.
4. In the *Run* dialog box, type the following and click *OK*:

```
<path_to_DVD_image>\Disk1\LM\setup.exe !quiet=<path_to_your  
silentinstall-licensing.ini file>\silentinstall-licensing.ini
```

The installation process runs.



You need to run *Start – Cadence – License Manager – License Server Configuration Utility* after an unattended installation to configure licensing.

Installing Products in the Silent Mode

1. Modify the `Disk1\documents\silentinstall-asi.ini` file. Change the following variables:
 - `TargetDir`: Specify the location where you want to install the products.
 - `MODE`: Specify if you want to install all the products (`MODE=COMPLETE`) or a selected list of products (`MODE=CUSTOM`). Edit the *Features* section for the `CUSTOM` mode.
2. Save the `.ini` file.
3. In the *Run* dialog box, type the following and then click *OK*:

```
<path_to_DVD_image>\Disk1\setup.exe !quiet=<path_to_your silentinstall-asi.ini  
file>\silentinstall-asi.ini
```

Installing Client in the Silent Mode

1. Modify the `Disk1\documents\silentClientinstall-asi.ini` file. You need to modify following variable:
 - `FileServerLocation`: Specify the server location.

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Performing Silent Installations on Windows

2. Run the setup by using the command:

```
<path_to_Disk1>\setup.exe -client !quiet=<path to silentClientinstall-asi.ini  
file>\silentClientinstall-asi.ini.
```

For example, if you saved the modified `silentclientinstall-asi.ini` to `C:\temp`, then the command will be:

```
<path_to_Disk1>\setup.exe -client !quiet=C:\temp\silentclientinstall-asi.ini
```

Performing Maintenance in the Silent Mode

You might perform maintenance installation:

- To incrementally add new products: In this, the specified products are added to the existing installation.

To perform unattended maintenance installation:

1. Navigate to the `silentinstall-asi.ini` file template from the `Disk1\Documents` folder in the Windows DVD image.
2. Edit the following in the template:
 - `OnMaintenance`: Specify whether you want to modify (`OnMaintenance=MODIFY`), repair (`OnMaintenance=REPAIR`), or remove (`OnMaintenance=REMOVEALL`) the existing installation.
3. Update the `Features` section by removing the comments (`;`) if you want to incrementally add new products.
4. Save the `.ini` file.
5. In the Run dialog box, type the following and then click *OK*:

```
<path_to_DVD_image>\Disk1\setup.exe !quiet=<path_to_your silentinstall-asi.ini  
file>/silentinstall-asi.ini
```

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Performing Maintenance in the Silent Mode

Installing and Configuring License Manager on Linux Systems

This chapter explains how to install and configure a license manager on LINUX:

- [Installing License Manager on Linux](#) on page 34
- [Configuring the License Manager on Linux](#) on page 35

Installing License Manager on Linux

Download the license manager from Cadence® [Downloads](#) using the following steps.

1. Log in with valid credentials, and select the LINUX tab.
2. To download license manager, click the link *Lic+Config_Utils*.
3. Download the tar file.

Untar the downloaded files and perform the following steps in a Linux system:

1. From CDR0M1, start the interactive utility `SETUP.SH`.
A shell is started.
2. In the shell:
 - a. Read the license agreement (press Space bar).
 - b. Enter the installation location when prompted with the text: *Specify path of install directory*.
 - c. If you do not have InstallScape installed, type `n` for the prompt *Do you have InstallScape for Inx86 platform installed somewhere?*
 - d. To install InstallScape, type `y` for the prompt *Do you want to install InstallScape for Inx86*.
 - e. Enter the location where you want InstallScape installed for the prompt *Type the path to InstallScape installation directory*.

3. In the InstallScape Classic View window, click *Local directory/Media install*

Note: The Select the Source Local Directory or Media page appears if InstallScape preference is Original GUI.

4. In the Select location of media page, browse to select CDR0M1
5. Click *Continue* or *Next* depending on the InstallScape preference.
6. Select the listed release and click *Next*.

Note: If preference is set for Original GUI, select *Select Products manually* and then click *Next*. Ensure that the Select Install Directory specifies the correct directory and click *Next*.

7. Select all the products under *PCLU*. By default, all product IDs are selected.

Deselect *PLCU* to deselect all IDs. You can then select individual IDs.

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Installing and Configuring License Manager on Linux Systems

Note: Ensure that the correct installation directory is selected under Choose Install Options.

8. Click *Start*. If preference is set for Original GUI, click *Install*.
9. Accept the license agreement.
10. Type *y* to configure licensing or *n* to quit.

Note: If preference is set for Original GUI, a window appears for configuration. Click *Yes*.

Configuring the License Manager on Linux

Before you proceed:

- Copy the license file (`.txt`) that you received from Cadence to the `<install_dir>/share/license` directory with the name `license.dat`.
- If you copied the file from a Windows system, run a DOS to UNIX converter on the license file

Perform the following steps in the configuration screen:

1. When prompted with `Enter the top installation directory`, press `Enter` if the correct directory is listed or specify the directory.
2. When prompted with `Edit the license file or the startup script now?`, press `y`
3. When prompted with `Override the defaults?`, press `y`
4. When prompted with `Configure license file license.dat?`, press `y`
5. When prompted with `Enter the hostname of the computer with hostid <host_id>`, enter the correct host name, if required.
6. When prompted with `Enter the TCP port number`, press `Enter` if the correct port number is listed or specify the correct number. The default value is 5280.

Note: If the port number is not shown as 5280 by default, you can use a DOS to UNIX converter and reconfigure the license file.

7. When prompted with `Enter the path to the cds1md daemon for <hostname>`, press `Enter` if the correct path is listed or specify the path. By default the daemon is available in the `tools/bin` directory.
8. When prompted with `Enter the path to cds1md's OPTIONS file for <hostname>`, press `Enter` if you do not want any options (default).

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Configuring the License Manager on Linux

Note: For details about the Options file see *How to Configure Licensing* in the *Cadence License Manager* guide available in the `<install_dir>/doc` directory of the license manager.

9. When prompted with `Enter the license file the license daemons should use`, press `Enter` if the correct file is listed or specify the file.
10. When prompted with `Enter the licensing debug log file the license daemons should use`, press `Enter` to accept the default file or specify the file.
11. When prompted with `Enter the lmgrd daemon options`, press `Enter` if you do not want any options (default).
12. When prompted with `Configure the clients file`, press `y`.
13. When prompted with `Override the default?`, press `y`.
14. When prompted with `Enter the path to the license file from all workstations`, enter `y`.
15. When prompted with `Edit <hostnames>'s boot script?`, enter the `y`.

Note: You must know the root password to be able to perform this. You can enter `n` to skip this step.

16. When prompted with `Start the license server daemons?`, enter `y` to start the daemon.

Note: You can start the configuration again anytime by running `InstallScape` and then clicking *Configure releases*.

Installing Cadence Sigrity Products on Linux

- [Downloading and Installing Cadence Sigrity on Linux](#) on page 38
- [Running Cadence Sigrity Point Tools](#) on page 39
- [Running the Allegro–Sigrity Flow on Linux](#) on page 40
- [Linux Installation: Frequently Asked Questions](#) on page 41

Downloading and Installing Cadence Sigrity on Linux

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 the Cadence Downloads page (downloads.cadence.com) for more information.

In the Cadence® Downloads page, after you log in with valid credentials, activate the LINUX tab and click the link for Cadence Sigrity™ 2017.

You can edit the *My Download Preferences* section on the right pane of the page to change your preferences for download, such as the Server Location, Download Method, and Default OS. You will perform one of the following depending on the Download Method:

- InstallScape using either HTTP or FTP: You need to download and install InstallScape to use this method. Click *Download by InstallScape* under Base Release to download the control file (`.sdl`) file.
- Complete CD Images: Under Base Release, click `Download`. Untar the downloaded files in your system.

Using the InstallScape with either HTTP or FTP Options

Start InstallScape as a standalone utility by running the `iscape/bin/iscape.sh` script.

On the InstallScape Wizard page, choose *File – Open SDL File* and then provide the path to the downloaded control file.

Follow the instructions in the Wizard to install the Cadence Sigrity products.

Using the Complete CD Images Option

Untar the downloaded files and from `CDROM1`, start the interactive utility `SETUP.SH`.

1. Specify the path of the installation directory for Cadence Sigrity products.
2. Install InstallScape (if not done already), and specify the path for its installation directory.

The installation wizard is displayed.

3. Click *Local directory/Media install*.

You are prompted for the path of the installation source.

4. Click *Browse* to specify the location of the installation files.

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Installing Cadence Sigrity Products on Linux

5. Click *Continue*.

6. Specify the product release number, *2017*, to be installed.

7. Click *Next*.

8. Choose the product(s) to install, and specify the destination folder for the installation.

Note: You can use a control file or choose individual products that you want to install.

9. Click *Start*.

The installation starts and its progress is reported.

When the process is complete, a report of the installation is displayed.

10. Click *Done*.

11. Choose *File – Exit* in the InstallScape wizard window.

Running Cadence Sigrity Point Tools

After installing and configuring Cadence® Sigrity™ 2017, before you can launch the point tools, you need to update tool information.

To run point tools, first, you can either:

- Run the wrapper script of each individual product.

or

- Source the `setenv.csh` file located at `<install_directory>/tools/bin/` and then run the binary (`.exe`) for each product.

Note: You need to source the `setenv.csh` file only once; therefore, you do not need to source the file in the `.cshrc` file.

The wrapper scripts and binaries are available at `<install_directory>/tools/bin/`.

You can then run any of the Cadence Sigrity tools by entering the tool name at the command line.

For example, to run PowerSI, you can either run the wrapper `<install_directory>/tools/bin/powersi`, or run `<install_directory>/tools/bin/powersi.exe` after sourcing `<install_directory>/tools/bin/setenv.csh`. Then, you can enter `powersi` at the command line to run the tool.

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Installing Cadence Sigrity Products on Linux

Note: Run `spdgen` before running any of the Co-Design tools. You can start SPDGEN and then exit it.

Running the Allegro–Sigrity Flow on Linux

To run the Allegro–Sigrity SI flow, perform the following steps:

- In the SPB 16.6 or later installed hierarchy, update `SIGRITY_EDA_DIR` environment variable in the `tools/pcb/bin/cshrc` file to point to the Cadence Sigrity installation hierarchy.
- Source `cshrc` from the SPB 16.6 or Allegro and orCAD 17.2-2016 release hierarchy.

Note: On sourcing the `cshrc` file, all Allegro-Sigrity tools, except XcitePI are registered and available for use.

Linux Installation: Frequently Asked Questions

How do I check my Linux version and architecture to see if my system meets the requirement?

Use this command to check the Linux name and version:

```
cat /etc/issue
```

Verify that the result contains the versions specified in the section [Linux Requirements](#) on page 9.

What should I do if I get the information `libstdc++.so.6: can not open shared object file: no such file or directory`?

If your system meets the system requirement mentioned in the section [Linux Requirements](#) on page 9, it means it is missing the C++ runtime library. Contact your system administrator or install it from your distribution CDs.

What should I do if I get `libcomdlg32.so: can not open shared object file: no such file or directory`?

The MainWin environment is not set up properly. Ensure you have sourced `setenv.sh/.csh`. If there are still problems, contact your system administrator or Cadence Support for help.

What should I do if I see distribution plots with wrong colors in PowerDC through VNC?

You need to set up 24-bit pixel depth for `vncserver`.

For example:

```
vncserver -depth 24 :88
```

What should I do if the system complains GLX is missing through VNC?

If GLX is missing and a Sigrity dialog opens displaying the message `choosePixelFormat failed`. Also the Linux console displays the message `Xlib: extension GLX missing on display`.

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Installing Cadence Sigrity Products on Linux

This means that the default VNC server does not support OpenGL. One solution could be XF4VNC (<http://xf4vnc.sourceforge.net/>). Contact your system administrator for further help.

If you have to operate your Linux server through Windows, another solution is to use a commercial Windows X server.

For example:

HummingBird Exceed, X Win32, ...

What should I do if the system is unable to resolve GLX?

A Sigrity dialog opens displaying the message `choose PixelFormat failed` and the Linux console displays the message `Unable to resolve function glXQueryExtension` or `Unable to resolve function glXMakerCurrent`.

Your X server may not support GLX (OpenGL Extension to the X Window System).

Run `xdpyinfo | grep GLX` to check your system.

If the result is empty, it confirms that your X server does not support GLX. Contact your system administrator for help.