

# **Cadabra Installation Guide**

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## Contents

# Installing Cadabra

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*Describes how to install Cadabra and perform initial configuration tasks.*

This section covers the following topics:

**Important:** To view and print Cadabra documentation in Portable Document Format (PDF), you must have Adobe Acrobat Reader installed on your machine.

- [Media Availability and Supported Platforms](#)
- [Installing the Software](#)
- [Setting Up the User Environment](#)
- [Verifying the Cadabra Installation](#)

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## Media Availability and Supported Platforms

Cadabra is available by electronic software transfer (EST) download or as tangible media (DVD or CD, depending on the image size). Obtain the appropriate binary executable files based on the operating system (OS) you need.

[Table 1](#) lists the supported compute platforms, operating systems, corresponding Synopsys platform keywords, and window environments for this release. Many platforms require operating system patches.

For detailed information, see the Supported Platforms Guide page on the Synopsys Web site. Go to <http://www.synopsys.com/qsc> and select the appropriate foundation for your release. This Web page provides information about supported hardware, operating systems, and required OS patches. If the

## Chapter : Installing Cadabra

### Installing the Software

required patch described on this page is not available from the platform vendor, install the most recent patch instead.

Table 1 Supported Platforms and Keywords

Platform	Operating system	Synopsys platform keyword
AMD Opteron	Red Hat Enterprise Linux v4, v5 <sup>1</sup>	linux (32-bit mode) <sup>2</sup>
IA-32 (X86)	Red Hat Enterprise Linux v4, v5 <sup>1</sup>	linux (32-bit mode) <sup>2</sup>
Sun SPARC	Solaris 9, 10 <sup>1</sup>	sparcOS5 (32-bit mode)
Intel EM64T	SUSE Linux Enterprise Server v10, 11 <sup>1</sup>	suse32 (32-bit mode) <sup>2</sup>

1. Binary-compatible hardware platform or operating system. Note, however, that binary compatibility is not guaranteed. See <http://www.synopsys.com/qsc> for the latest information on supported platforms.

2. The 32-bit (x86) Linux software is binary compatible with Intel EM64T or AMD Opteron running Red Hat Enterprise Linux. See <http://www.synopsys.com/qsc> for the latest information on supported platforms.

## Installing the Software

Cadabra uses the Synopsys Installer tool, which allows you to use a graphical user interface (GUI) or a text script. For information about downloading Synopsys Installer and Cadabra, see [Installing Synopsys Tools](#).

To install Cadabra by EST or from the CD, follow the procedures described in [Installing Synopsys Tools](#).

[Installing Synopsys Tools](#) shows an example Synopsys media installation script for the synthesis tools. Cadabra is installed in a similar manner.

Cadabra is a stand-alone product and cannot be installed over an existing Synopsys product, including a prior version of Cadabra. You must create a new directory for Cadabra.

## Setting Up the User Environment

A platform-independent wrapper script is provided for Cadabra. This script automatically determines the OS platform at runtime, which simplifies the setup required to use Cadabra.

The platform-independent wrapper script is located at *install-dir/bin* and includes `-32bit` and `-64bit` options.

**Note:** If you select a platform executable file that is not available, an automatic switch is made to an available platform based on your current environment. No warning message is issued.

To set up the user environment, follow these procedures:

- [Specifying the Executable File Location](#)
- [Setting the SNPSLMD\\_LICENSE\\_FILE Environment Variable](#)

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## Specifying the Executable File Location

Follow these steps.

1. Set the `$CADABRAHOME` environment variable to point to your Cadabra installation subdirectory.

- If you are using the C shell, add the following line:

```
% setenv CADABRAHOME /u/edatools/cadabra-version
```

- If you are using the Bourne shell, add these lines:

```
% CADABRAHOME=/u/edatools/cadabra-version  
export CADABRAHOME
```

2. Add `$CADABRAHOME/bin` to your search path:

- If you are using the C shell, enter

```
set path=($CADABRAHOME/bin $path)
```

- If you are using the Bourne shell, enter

```
PATH=$CADABRAHOME/bin:$PATH
export PATH
```

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## Setting the SNPSLMD\_LICENSE\_FILE Environment Variable

You must install the Synopsys Common Licensing (SCL) software, retrieve your license key file, and define the `SNPSLMD_LICENSE_FILE` environment variable before you can verify the Cadabra installation.

For information about downloading and installing SCL and on setting the license variable, see the *Synopsys Licensing QuickStart Guide*, which is available from <http://www.synopsys.com/Support/Licensing/Licensing/Pages/default.aspx>.

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## Verifying the Cadabra Installation

To verify the Cadabra installation,

1. Make sure you are in a directory where you have read/write privileges.  

```
% cd $HOME
```
2. If you are using a display that is not local, set the `DISPLAY` environment variable.  

```
% setenv DISPLAY my_display:0.0
```
3. Invoke the tool by entering:  

```
% cadabra
```

If the product GUI appears, the installation was successful.

4. Exit the GUI by choosing File > Exit in any GUI window.