

# Installing ProGen

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# Installing ProGen

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This document contains specific information to prepare for and verify installation of ProGen, as well as links to installation instructions.

**Note:** The installation instructions in this document are the most up-to-date instructions available at the time of production. However, changes might have occurred. For the latest installation information, see the product release notes or documentation.

This document contains the following sections:

- [Media Availability and Supported Platforms](#)
- [Memory and Disk Space Requirements](#)
- [Installing the Software](#)
- [Setting Up the User Environment](#)
- [Verifying the ProGen Installation](#)
- [Accessing ProGen Documentation](#)

To install Synopsys tools, it is recommended that you have system administrator privileges. You need write permission for the installation directory.

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## Media Availability and Supported Platforms

The ProGen tool 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.

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### Media Availability and Supported Platforms

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

Table 1 Supported Platforms, Operating Systems, and Keywords

Platform	Operating system	Synopsys platform keyword	Window environment
X86_64	Red Hat Enterprise Linux v4, 5 <sup>1</sup>	amd64 (64-bit mode)	GNOME
X86_64	SUSE Linux Enterprise Server v9, 10 <sup>1</sup>	suse64 (64-bit mode)	KDE

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.

**Note:** The ProGen software is configured so that multiple platforms of this version can be installed in a single installation directory (*install\_dir*).

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## Memory and Disk Space Requirements

Make sure you have enough memory and disk space for the ProGen installation. The minimum memory requirements for ProGen are:

Physical memory	512 MB Recommended: 2+ GB
Swap space	1 GB Recommended: 2+ GB

The disk space requirement varies depending on the platform. [Table 2](#) shows the minimum space required for installing ProGen.

*Table 2 ProGen Disk Space Requirements*

Synopsys Platform Keyword	Megabytes
amd64	3545
suse64	3545
All Platforms	3665

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## Installing the Software

ProGen 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 ProGen, see *Installing Synopsys Tools*, available at [http://www.synopsys.com/support/installation/install\\_guide.html](http://www.synopsys.com/support/installation/install_guide.html).

To install ProGen by EST or from the DVD or CD, follow the procedures described in *Installing Synopsys Tools*.

**Note:** You must install ProGen from the same platform as at least one of the target platforms; that is you must minimally install the platform on which the installation program is running (see [Media Availability and Supported Platforms on page 1](#)). For example, if you're installing ProGen onto a SUSE Enterprise Linux (suse64) system and a Red Hat Enterprise Linux (linux) system, you must

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### Setting Up the User Environment

be initiating the installation from one of those systems. If you attempt to install the software from an unsupported platform, the install will fail.

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

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

**Note:** During the ProGen installation, creating basis files can take up to one hour.

If you use the MASK3D object in ProGen modeling templates, you must also install Sentaurus Lithography.

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## Setting Up the User Environment

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

The platform-independent wrapper script is located at *install-dir/bin*.

**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.

Setting up the user environment is described in these sections:

- [Specifying the Executable File Location](#)
- [Setting the License File Environment Variable](#)
- [Setting the DISPLAY Environment Variable](#)
- [Loading libProteus.so](#)
- [Setting Up Distributed Processing](#)

## Specifying the Executable File Location

Add the ProGen directory containing the executable file to the `PATH` environment variable.

- If you use the C shell, add the following line to the `.cshrc` file:

```
setenv PATH install_dir/bin:${PATH}
```

- If you use the Bourne, Korn, or Bash shell, add the following line to the `.profile`, `.kshrc`, or `.bashrc` file:

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

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## Setting the 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 ProGen 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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## Setting the DISPLAY Environment Variable

Set the `$DISPLAY` environment variable for your workstation.

For C shell users:

```
setenv DISPLAY my_display:0.0
```

For Bourne, Korn, or Bash shell users:

```
DISPLAY = my_display:0.0  
export DISPLAY
```

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## Loading libProteus.so

If you are installing ProGen without Proteus WorkBench, load `libProteus.so` in IC WorkBench Plus.

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### Verifying the ProGen Installation

IC WorkBench Plus may release with a version of the Proteus libraries that is not the latest shipping version. To use new ProGen modeling functionality in ICWB Plus, you need to ensure that the latest version of libProteus.so is loaded into ICWB Plus.

**Note:** You do not need to load libProteus.so if you have installed Proteus WorkBench. It automatically loads the correct version of libProteus.so into ICWB Plus.

For information on how to load libProteus.so into ICWB Plus, see the “Proteus Shared Libraries” section in the *IC WorkBench Plus User Guide*.

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## Setting Up Distributed Processing

ProGen is able to use multiple compute resources to calibrate models. The following needs to be set up for each of the resources used for distributed processing:

- Set up remote shell (`rsh` or `remsh`) or secure shell (`ssh`) so that no password is required. System administrator assistance may be required to set this up. Users can also add hosts or a plus sign (+) to a `.rhosts` file to allow access without a password if the administrator has already enabled remote shell processes.
- Ensure the number of allowed remote or secure shell processes is sufficient for the number of hosts in a DP regression. The UNIX administrator assistance may be required to set this up.
- Mount the drives with ProGen data and executables (`progen`, `remote_worker`, `progendp`, `syscheck`, `system_tests.sh`) using the same directory path name on every system. The user’s working directory (the directory containing the input files and where ProGen is run) must exist on all hosts with the same absolute path name.

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## Verifying the ProGen Installation

To verify the ProGen installation,

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

```
% cd $HOME/bin
```

2. Invoke ProGen by entering

```
% progen -v
```

If you see information about the product version, production date, and copyright, the installation was successful.

**Note:** If you did not add the path to the executable to your \$PATH environment variable, you need to specify the full path.

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## Accessing ProGen Documentation

The documentation for ProGen is available as PDF files and from the product's Help window.

In order for the user to view the release notes in Adobe Reader from the product's help menu, you must put the release note PDF in `install_dir/docs/rel_notes`.

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## Viewing and Printing ProGen Documentation in Portable Document Format

To view and print ProGen documentation in PDF, you must have Adobe Acrobat Reader installed on your machine.

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Accessing ProGen Documentation