

StarRC™ Installation Notes

Version D-2009.12

December 7, 2009

These installation notes present information about installing StarRC version D-2009.12 in the following sections:

- [Media Availability and Supported Platforms](#)
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Note:

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

See also <http://www.synopsys.com/Support/Licensing/Installation/Pages/default.aspx> for additional installation and licensing information.

Media Availability and Supported Platforms

StarRC is available by electronic software transfer (EST) download upon initial software release, and at a later date on DVD (or CD depending on image size).

[Table 1](#) shows the supported compute platforms, operating systems, Synopsys platform keywords, and windowing environments for this release.

Table 1 Supported Platforms, Operating Systems, and Keywords

Compute platform	Operating system	Synopsys platform keyword	Desktop windowing environment
x86_64	Red Hat Enterprise Linux v4, 5 ¹	amd64 (64-bit mode) linux (32-bit mode) ²	GNOME
x86_64	SUSE Enterprise Linux v9, 10 ¹	suse64 (64-bit mode) suse32 (32-bit mode)	KDE
x86_64	Solaris 10	x86sol64 (64-bit mode) x86sol32 (32-bit mode)	CDE
x86	Red Hat Enterprise Linux v4, 5 ¹	linux (32-bit mode) ²	GNOME
x86	SUSE Enterprise Linux v9,10 ¹	suse32 (32-bit mode)	KDE
Sun SPARC	Solaris 9, 10 ¹	sparc64 (64-bit mode) sparcOS5 (32-bit mode)	CDE
IBM RS6000	AIX 5.3	aix64 (64-bit mode)	CDE

1. Binary-compatible hardware platform or operating system. Note, however, that binary compatibility is not guaranteed. See <http://www.synopsys.com/Support/Licensing/SupportPlatform/ReleaseSupport/Pages/default.aspx> for the latest on supported platforms, including required OS patches.

2. The 32-bit (x86) and 64-bit (x86_64) Linux software is binary compatible with the Intel EM64T or AMD Opteron processors running Red Hat Enterprise Linux.

Disk Space and Memory Requirements

The disk space requirement depends on the platform. [Table 2](#) shows the minimum space required for installing StarRC on a particular platform.

Table 2 Disk Space Requirements (in Megabytes)

Synopsys platform keyword	Megabytes
common (platform-independent files)	20
amd64	300
linux	290
suse64	300
suse32	290
x86sol64	430
x86sol32	500
sparc64	380
sparcOS5	340
aix64	160

The minimum physical memory required is 150 MB. The recommended minimum physical memory is 1 GB. The minimum swap space required is 256 MB. The recommended minimum swap space is 2 GB. For large designs, the expected amount of required memory is approximately 1 million bytes per 2,000 gates.

Accessing Memory Beyond 2 GB With 32-Bit Tools

StarRC can extend memory beyond 2 GB.

Note:

The available memory is calculated as space not used by the operating system (OS), the windowing system, or other applications.

To access memory beyond 2 GB,

1. Make sure your server has at least 4 GB of memory (physical and swap space) available.

Note:

Physical memory equals data size plus stack size. Stack size is used before data size. Therefore, setting stack size to a large value causes problems for designs that are larger than 2 GB. If you set the stack size too high, you cannot get enough memory for your data. To check the settings, enter the `limit` command at the system prompt.

2. Make sure the system you are using does not have restrictions that prevent you from using more than 2 GB of memory.
3. Create unlimited data size using the C, Bourne, Korn, or Bash shell. If there are system-wide limits on the data size you can create, you can remove them or override them.

- Enter one of the following commands based on the shell you are using:

For the C shell,

```
% limit datasize 3800000
```

For the Bourne, Korn, or Bash shell,

```
# ulimit -s -d 3800000
```

- Modify the kernel of your server. This approach allows everyone using your server to extend memory beyond 2 GB.

Installing the Software

StarRC uses the Synopsys Installer, which allows you to use a text script or a graphical user interface (GUI). For information about downloading the Synopsys Installer, see *Installing Synopsys Tools*, which is available at the following address:

<http://www.synopsys.com/Support/Licensing/Installation/Pages/default.aspx>

To install StarRC, follow the procedures described in *Installing Synopsys Tools*. StarRC is a standalone product and must be installed in an empty directory, using the latest version of the Synopsys Installer. Do not install StarRC over an existing Synopsys product, including prior versions of StarRC.

Setting Up the User Environment

To set up the user environment, you must specify the location of the executable file and set the license file environment variable.

Specifying the Executable File Location

Add the StarRC bin directory to the `PATH` environment variable.

- To set up the environment using the C shell, add the following line to the `.cshrc` file:

```
set path=(install_dir/platform_starrc/bin $path)
```

- To set up the environment using the Bourne, Korn, or Bash shell, add the following line to the `.profile`, `.kshrc`, or `.bashrc` file:

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

Replace `install_dir` with the StarRC installation directory and `platform` with the appropriate Synopsys platform keyword (see [Table 1 on page 1-2](#)).

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 StarRC installation.

For information about downloading SCL, installing SCL, or setting the license file variable, see the *Synopsys Licensing Quickstart Guide*, which is available at the following address:

<http://www.synopsys.com/Support/Licensing/Licensing/Pages/default.aspx>

Verifying the StarRC Installation

To verify the StarRC installation,

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

```
% cd $HOME
```

2. Invoke the tool by entering one of the following commands on a licensed machine.

- To run StarRC in batch mode, enter

```
% install_dir/platform_starrc/bin/StarXtract -v
```

The version of StarRC will be print on the screen.

- To run StarRC in GUI mode, enter

```
% install_dir/platform_starrc/bin/StarXtract -gui
```

Replace *install_dir* with the StarRC installation directory and *platform* with the appropriate Synopsys platform keyword (see [Table 1 on page 1-2](#)).

If you see the version information or if the GUI appears, the installation was successful.