Raphael™ NXT Installation Notes Version D-2009.12

December 7, 2009

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

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

Raphael NXT 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

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 Raphael NXT on a particular platform.

Table 2 Disk Space Requirements (in Megabytes)

Synopsys platform keyword	Megabytes
common (platform-independent files)	10
amd64	50
linux	40
suse64	50
suse32	40
x86sol64	50
x86sol32	40
sparc64	50
sparcOS5	40

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.

Installing the Software

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

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

A platform-independent wrapper script is provided for Raphael NXT. This script automatically determines the operating system platform at runtime, which simplifies the setup required to use Raphael NXT.

The platform-independent wrapper script is located at *install_dir*/bin and includes the following options:

```
-32bit | -64bit
```

Note:

If you select a platform executable file that is unavailable, an automatic switch is made to an available platform based on your current environment. No warning message is issued.

To set up the environment by using the platform-independent wrapper script, add the Raphael NXT 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*/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*/bin:$PATH
  export PATH

Replace *install_dir* with the Raphael NXT installation directory.

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 Raphael NXT 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 Raphael NXT Installation

To verify the Raphael NXT 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 start Raphael NXT in shell mode, enter

     ```
     % install_dir/bin/ranxt
     ```

     Replace *install_dir* with the Raphael NXT installation directory.

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