

Synopsys Common Licensing Installation Notes Version 10.9.3

These installation notes describe how to install Synopsys Common Licensing (SCL) on UNIX and Windows platforms. For additional information about using SCL 10.9.3, see the *Synopsys Common Licensing Administration User Guide*. For troubleshooting assistance, see the Licensing QuickStart Guide at <http://www.synopsys.com/support/keys>.

SCL 10.9.3 is based on FLEXnet 10.8.5.3, the standard licensing software provided by Acreso Software (formerly Macrovision, Inc.). For the sparcOS5, x86sol32, hp32, aix64, and rs6000 platforms, SCL 10.9.3 is based on FLEXnet 10.8.5.0. For a list of OS platforms, FLEXnet versions, and license daemon support in SCL 10.9.3, see [Table 1-1](#).

This chapter includes the following sections:

- [Legacy Daemons](#)
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- [Disk Space and Memory Requirements](#)
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- [Installing the Software on UNIX Platforms](#)
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To install SCL, you must have write and execute permissions in the installation directory.

Note:

Installation of Synopsys tools and SCL is not order dependent. You can install SCL before or after you install your Synopsys tools. However, you cannot use your Synopsys tools until you have installed, configured, and started SCL.

See <http://www.synopsys.com/install> for additional installation and licensing information.

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Legacy Daemons

SCL 10.9.3 includes updated versions of `snpslmd` and the FLEXnet 10.8.5.x `lmgrd` license manager daemon and `lmutil` utilities.

Unlike previous versions of SCL, which included many vendor daemons, SCL 10.9.3 includes only one vendor daemon, `snpslmd`. The `snpslmd` vendor daemon enables you to run tools based on any Synopsys vendor daemon, including `avantd`, `tmald`, CADABRA, `innologd`, `numeritchd`, `TE_CATS`, `sandwork`, `archprod`, and so on.

[Table 1-1](#) shows the legacy vendor daemons incorporated into SCL 10.9.3. Other vendor daemons are not supported. Tools based on such daemons are not compatible with SCL 10.9.3.

Table 1-1 Legacy Daemons Incorporated Into SCL 10.9.3

Acquired company	Daemons
Analog Design Automation	<code>adalmd</code>
Avant! Corporation	<code>anagram</code> , <code>avantd</code> , <code>chrysalisd</code> , <code>hscd</code> , <code>metasoftd</code> , <code>saber_dmn</code> , <code>tmald</code>
Innologic Systems, Inc.	<code>innologd</code>
Integrated Systems Engineering	ISE-TCADd
Legacy and other daemons	EPIC, <code>everest</code> , <code>la_damon</code> , <code>leda</code> , <code>ssilmd</code> , <code>synopsysd</code> , <code>vcsd</code>
Nassda Corporation	<code>nassd</code>
Numerical Technologies	<code>numeritchd</code> , <code>TE_CATS</code> , CADABRA
Placeholder for future OEM partners	<code>snpsOEM2</code> - <code>snpsOEM3</code>
SIGMA-C	<code>sigmacd</code>
Zenpire Corporation	<code>snpsOEM1</code>
Sandwork Design	<code>sandwork</code>
ArchPro Design Automation	<code>archprod</code>

Media Availability and Supported Platforms

SCL runs on various OS platforms. For information about supported platforms, operating systems, and keywords for the SCL server, see the *Synopsys Common Licensing Release Notes* in SolvNet or the Synopsys Licensing QuickStart Web page at

http://www.synopsys.com/support/keys/supported_os.html

SCL is platform-independent. This means that you can run any combination of SCL clients and servers, providing the client platform is supported by the Synopsys tools. Each client requires network access to a server through the Transmission Control Protocol (TCP).

For a list of platforms supported by the Synopsys tools (SCL clients), see http://www.synopsys.com/products/platforms/sw_platform.html (Any exceptions will be in the tool release notes.)

Table 1-2 shows a list of supported platforms.

Table 1-2 List of OS Platforms, FLEXnet Version and License Daemon Support in SCL 10.9.3

Platform	Keyword	FLEXnet Version	Support for sandwork	Support for archpro	** All other Synopsys License Daemons
Red Hat Linux Intel x86 - 32-bit	linux	10.8.5.3	Yes	Yes	Yes
Red Hat Linux AMD Opteron - 64-bit	amd64	10.8.5.3	Yes	Yes	Yes
Sun Solaris SPARC - 64-bit	sparc64	10.8.5.3	Yes	Yes	Yes
Sun Solaris SPARC - 32-bit	sparcOS5	10.8.5.0	No	No	Yes
Solaris AMD64 -64-bit	x86sol64	10.8.5.3	Yes	No	Yes
Solaris AMD64 -32-bit	x86sol32	10.8.5.0	No	No	Yes
HP-UX 11.0 - 64-bit	hp64	10.8.5.3	Yes	No	Yes
HP-UX 11.0 - 32-bit	hp32	10.8.5.0	No	No	Yes
Window XP - 32-bit	windows	10.8.5.3	Yes	No	Yes
IBM RS/6000 AIX - 64-bit	aix64	10.8.5.0	No	No	Yes
IBM RS/6000 AIX - 32-bit	rs6000	10.8.5.0	No	No	Yes
SUSE 9.0 - 64-bit	suse64	10.8.5.3	Yes	Yes	Yes
SUSE 9.0 - 32-bit	suse32	10.8.5.3	Yes	Yes	Yes

** All other Synopsys license daemons (excluding archpro and sandwork): adalmd, anagram, avantd, chrysalisd, hscd, metasoftd, saber_dmn, tmalld, innologd, ISE-TCADd, EPIC, everest, la_damon, leda, ssilmd, synopsysd, vcsd, nassd, numeritchd, TE_CATS, CADABRA, snpsOEM1, snpsOEM2, snpsOEM3, and sigmacd.

Important: Note that if you receive license keys for sandwork or archprod license daemons on one of the unsupported OS platforms, then the license keys will not work. The server will display an encryption error on the unsupported platforms. Contact your Account Manager to regenerate the license keys and migrate to one of the supported OS platforms.

Note that linuxipf and RedHat 7.2 platforms will no longer be supported from this release.

Disk Space and Memory Requirements

The disk space requirement varies, depending on the platform and tool selected for installation. During the installation process, Synopsys Installer displays the required disk space. However, for a full installation on all platforms, 950 MB is recommended. For a single platform installation, approximately 250 MB is recommended.

Downloading Synopsys Common Licensing Software

To download SCL via Electronic Software Transfer (HTTPS), follow the instructions below:

1. Point your web browser to <http://www.synopsys.com/download>.
2. Click "HTTPS Authenticated Access."
3. Enter your Synopsys SolvNet username.
4. Enter your Synopsys SolvNet password.
5. Click the "Sign In" button.
6. After reading the legal page, Click "Yes I agree to the above terms."
7. Choose the product name "Synopsys Common Licensing" from the pull-down list of available products."
8. Choose the latest product version (rev 10.9.x) from the pull-down list of available versions."
9. Click the download buttons next to the file names of the files you want to download.

For instructions on the alternate FTP method of downloading Synopsys Common Licensing, you can see the SolvNet Release Library at <http://solvnet.synopsys.com/ReleaseLibrary>.

Note:

Authenticated access is required to download SCL. Before attempting to download the software, ensure that you have a SolvNet user name and password.

For UNIX, make sure to download both the platform-specific file (for example, `scl_v10.9.x_sparc64.tar`) and the common file (for example, `scl_v10.9.x_common.tar`). Also download the `scl_INSTALL_README.txt` file.

For Windows, download a single `.exe` or `.zip` file.

Installing the Software on UNIX Platforms

You must install, configure, and start a single copy of SCL software for all Synopsys tools, and have your latest license key file.

To install the SCL software from EST or from the CD, follow the installation procedures described in *Installing Synopsys Tools*, available at <http://www.synopsys.com/install>.

Note the following requirements:

- SCL is a stand-alone product and cannot be installed over an existing Synopsys product, including a prior version of SCL. You must create a new directory for SCL.
- You must download a platform file, a platform-independent (common) file, and the Synopsys Installer.
- If you are installing multiple platforms, install the platform-independent package only once for each product. The platform-independent package contains files that are common to all the supported platforms.
- Before running the installer, ensure that you set the `DISPLAY` environment variable correctly. For example,

```
% setenv DISPLAY my_display:0.0
```
- If you are upgrading to SCL 10.9.3, you must stop your license server and then restart it using the updated `lmgrd` and `snpslmd` versions. If you are not upgrading the SCL version but are moving to your latest license file, you must reread your license file.

Installing the Software on Windows Platforms

SCL uses the InstallShield installation setup program for Windows platforms. To install SCL on Windows 2000 and Windows XP, download the single `scl_10.9.3_windows.exe` file.

1. Double-click `scl_10.9.3_windows.exe` to start the setup. The program starts automatically and the InstallShield appears. Click Next to continue.
2. View the Welcome Screen. Respond as necessary to each screen.
3. If you agree to the licensing terms, select "I accept the terms of the license agreement," and click Next to continue.
4. Enter your site information. Enter your name, your site ID, and the e-mail address of your system administrator. For information about locating your site ID, see *Installing Synopsys Tools*.

5. Choose the destination location. By default, this folder is C:\synopsys\SCL 10.9.3. Click Next to install in this folder, or click Change to install in a different folder.

Note:

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

6. Verify your settings. Click Install to proceed or Back to change your settings.
7. Wait while the product is installing. During the installation process, you can exit the installation at any time by clicking Cancel.
8. Click Finish to complete the setup.

Setting Up the Licensing Environment

Setup information is given in the following sections:

- [Obtaining the Latest License File](#)
- [Customizing the License File](#)
- [Verifying New Keys Obtained From Synopsys](#)
- [Starting Synopsys Common Licensing](#)
- [Verifying Existing Keys \(After Starting SCL\)](#)
- [Setting Up the Environment for UNIX Users](#)
- [Setting Up the Environment for Windows Users](#)

For more information about licensing setup, see the following documents:

- Synopsys Licensing QuickStart Guide Web page (at <http://www.synopsys.com/keys>)
- *Synopsys Common Licensing Installation and Administration Guide*

You can obtain a soft copy of the *Synopsys Common Licensing Installation and Administration Guide* in Portable Document Format (PDF) from <http://www.synopsys.com/support/keys/docs/sclug.pdf>

Obtaining the Latest License File

Before starting SCL 10.9.3, you must first obtain the license file.

Note:

SCL 10.9.3 requires that on a given server, all license files for all supported Synopsys daemons be aggregated into a single license file and a single 10.9.3 `snpslmd` vendor daemon.

To obtain your site's latest license key file, follow the steps below:

1. Go to SmartKeys at <http://www.synopsys.com/smartkeys>, and click Key Retrieval. A Synopsys user name and password are required.
2. Ensure that the correct site ID is specified under Key Retrieval (See *Installing Synopsys Tools*).

Customizing the License File

To customize the license file, follow the steps below:

1. Modify the `SERVER` line so that the `hostname1` field contains the correct system host name. For example,

```
SERVER my_server 87654321 27000
```

2. Modify the `VENDOR` (or `DAEMON`) line so that it contains the full path to `snpslmd`. For example,

```
VENDOR snpslmd /usr/synopsys/scl/sparc64/bin/snpslmd
```

Note:

SCL 10.9.3 requires only the `snpslmd` vendor daemon. Remove any `DAEMON` lines that refer to `avantd`, `tmald`, `CADABRA`, `innologd`, `ISE_TCAD`, `numeritechd`, `TE_CATS`, `sandwork`, `archprod`, or any other Synopsys vendor daemons incorporated into (supported by) SCL 10.9.3. For a list of vendor daemons incorporated into SCL 10.9.3, see [Table 1-1 on page 1-2](#).

3. If not already present, add a `USE_SERVER` keyword to the key file after the `SERVER` line but before any `INCREMENT` lines.
4. Ensure that all lines wrap correctly. Comment lines must start with a pound sign (`#`) and not wrap. Every line must start with either a `#` or one of the following keywords: `SERVER`, `VENDOR`, `INCREMENT`, or `PACKAGE`. Lines can wrap only after a continuation (`\`) character.
5. After modifications, the license file should look like the following example:

```
SERVER my_server 87654321 27000
VENDOR snpslmd /usr/synopsys/scl/sparc64/bin/snpslmd
USE_SERVER
```

```
INCREMENT 1...
INCREMENT 2...
```

6. Save any changes in ASCII (.txt) format only.

Verifying New Keys Obtained From Synopsys

Validate any new license keyfiles received from Synopsys. Before using any new keyfile received from Synopsys, run the `sssverify` utility on the license file to identify any errors before starting the server. (`sssverify` is included with SCL 10.9.x.) For example:

```
% scl_root/sparc64/bin> sssverify -v
```

```
Synopsys Corporate Licensing (SCL) Release: version SCL_10.9.3, Build 1; Label:
SCL_10.9.3; Built on May 5 2008 at 22:58:50
```

(The SCL version must be SCL 10.9.3 or later; ignore the Build number.)

```
% scl_root/sparc64/bin> sssverify /path/to/synopsys.lic
```

The `sssverify` utility verifies the integrity of the license file and detects any formatting errors in the file. If there are no errors in the license file, you will see a message like the one below:

```
% sssverify synopsys.lic
```

```
Integrity check report for license file "license_file".
Report generated on 24-Apr-2008 (SCL_10.9.3)
-----
Checking the integrity of the license file....
Valid SSS feature found.
License file integrity check PASSED.
-----
You may now USE this license file to start your license server.
Please do not edit or manipulate the contents of this license file.
```

For additional information, please review the information mentioned in the CVD License Verification Checklist at

http://www.synopsys.com/support/keys/docs/cvd_license_verification.pdf

As indicated in this message, it is safe to use the license file if there are no SSS errors.

If the license file is corrupt, you will receive one of the following errors:

- If the SSS (or SSST) key is missing or corrupt, you will receive this message:

```
Integrity check report for license file "synopsys.lic".
```

Report generated on 24-Jan-2008

```
-----  
Checking the integrity of the license file...  
No SSS or SSST features were found in the license file.  
All revenue keys ("SN=RK:..." on feature line) have been excluded.  
License file integrity check FAILED!  
-----
```

```
This is an INVALID license file. You SHOULD NOT use this license file.  
Please use the license file as received from Synopsys, Inc.
```

- If you have removed any features from the license file, you will see this message:

```
-----  
Integrity check report for license file "synopsys.lic".  
Report generated on 24-Jan-2008  
-----
```

```
Checking the integrity of the license file...  
Valid SSS feature found. Invalid license file fingerprint.  
3 features are missing from this file.  
License file integrity check FAILED!  
-----
```

```
This is an invalid license file. You should not use this license file.  
Please use the license file as received from Synopsys, Inc.
```

- If you have added any features to the license file, you will see the message below:

```
-----  
Integrity check report for license file "synopsys.lic".  
Report generated on 24-Jan-2008  
-----
```

```
Checking the integrity of the license file...  
Valid SSS feature found. Invalid license file fingerprint.  
You have added 2 new features to this file  
Feature Name Expiry Date Serial Number  
-----
```

```
1) Design-Compiler 31-may-2008 SN=RK:2661-0:696294:763456  
2) Formality 31-may-2008 SN=RK:2661-0:696294:344556  
License file integrity check FAILED!!  
-----
```

```
This is an invalid license file. Do not use this license file. Use the  
license file as received from Synopsys, Inc.
```

As indicated in the above error messages, if the integrity check fails, the license files *should not* be used to start the license server.

Note:

Do not run `sssverify` on a license file that has only uncounted nodelocked licenses. (Uncounted nodelocked licenses have a quantity of "0" or "Uncounted.")

Starting Synopsys Common Licensing

SCL 10.9.3 requires that you use FLEXnet 10.8.5.x tools (`lmgrd` or `LMTOOLS`) to start the license daemon. To start SCL on UNIX and Windows systems, log on as the license server administrator and follow the steps below:

1. For the SCL 10.9.3 license server, stop all Synopsys daemons, including `avantd`, `snpslmd`, `tmald`, `CADABRA`, `innologd`, `ISE_TCAD`, `numeritechd`, `TE_CATS`, `sandwork`, `archprod`, and so on (see [Table 1-1 on page 1-2](#)). If these daemons are running, SCL 10.9.3 will not start. For example, enter the code shown below for the given platforms:

For UNIX:

```
% lmdown -c /path/to/synopsys.lic
```

or

```
% lmdown -c port@host
```

For Windows:

```
c: > lmdown -c \path\to\synopsys.lic
```

or

```
c: > lmdown -c port@host
```

2. Unset all Synopsys license environment variables that are set in the license administrator environment. For example, in C shell enter the following lines:

```
% unsetenv AVANTD_LICENSE_FILE  
% unsetenv LM_LICENSE_FILE  
% unsetenv NASSD_LICENSE_FILE  
% unsetenv SNPSLMD_LICENSE_FILE  
% unsetenv TMALD_LICENSE_FILE  
% unsetenv SANDWORK_LICENSE_FILE
```

Note:

If you use a script to start SCL, modify the script to unset the variables listed above.

3. Start SCL 10.9.3 by using the following command:

UNIX:

```
% scl_root/platform/bin/lmgrd -c scl_root/admin/ \  
license/synopsys.lic -l scl_root/admin/logs/debug.log
```

Note:

A sample SCL startup script (*scl_start.sh*) is available in the *scl_root/examples* directory.

Windows:

Use LMTOOLS to start SCL 10.9.3. Choose Start > Programs > Synopsys > SCL 10.9.3 > Launch lmttools.exe.

Note:

For more information on using LMTOOLS, see the *Synopsys Common Licensing Administration Guide*, version 10.9.3.

4. Verify that the FLEXnet *lmgrd* utility started correctly by viewing the debug log file. This file shows that *lmgrd* and *snpslmd* started and includes a list of available features. If SCL did not start correctly, you will see an error message. (For details, see “[Specifying a Debug License Log File](#)” on page 1-12.)

Note:

Use the error message to debug the problem, or send the license file and debug log information to your local Synopsys support center (go to <http://www.solvnet.synopsys.com> and click “Enter a Call to the Support Center”).

Specifying a Debug License Log File

When you start the *lmgrd* daemon, you can specify a debug license log file to which diagnostic configuration information is directed. The debug license log file receives the output from the *lmgrd* daemon and the *snpslmd* daemon.

You can specify any name for the log file (for example, *license.log*). Note that you must have write access to the directory containing the debug license log file.

[Example 1-1](#) shows an example of debug log file output after the SCL 10.9.3 vendor daemon is started.

Example 1-1 Example Debug Log File Output

```
12:40:50 (lmgrd) FLEXnet Licensing (v10.8.5.3) started on hostname (Sun) (4/30/2008)  
12:40:50 (lmgrd) License file(s):/synopsys/scl/admin/license/synopsys.lic  
12:40:50 (lmgrd) lmgrd tcp-port 27000  
12:40:50 (lmgrd) Starting vendor daemons ...  
12:40:51 (lmgrd) Started snpslmd (internet tcp_port 62605 pid 8668)  
12:40:51 (snpslmd) FLEXnet Licensing version v10.8.5.3  
12:40:51 (snpslmd) Synopsys Corporate Licensing (SCL) Release: version 10.9.3  
12:40:53 (snpslmd) Started snpslmd on pluto for: SSS  
12:40:53 (snpslmd) DC-Expert DC-Ultra-Features DC-Ultra-Opt  
12:40:53 (snpslmd) Design-Compiler DesignWare HDL-Compiler
```

```

12:40:53 (snpslmd) Serving features for the following vendor names:
snpslmd CADABRA EPIC ISE-TCADd TE_CATS adalmd anagram archprod avantd
chrysalisd everest hscd innologd la_dmon leda metasoftd nassd numeritchd
saber_dmn sandwork sigmacd snpsOEM1 snpsOEM2 snpsOEM3 slat ssilmd synopsysd tmald vcsd
12:40:53 (snpslmd)-----
12:40:53 (snpslmd) Checking the integrity of the license file...
12:40:53 (snpslmd) Valid SSS feature found.
12:40:53 (snpslmd) The feature is needed to enable the other keys in your license file.
12:40:53 (snpslmd)-----
13:17:38 (snpslmd) OUT: "Design-Compiler" user@hostname2
19:17:46 (snpslmd) OUT: "Design-Expert" user@hostname2
19:20:40 (snpslmd) OUT: "HDL-Compiler" user@hostname2
19:39:04 (snpslmd) IN: "Design-Compiler" user@hostname2
1:13:24 (lmgrd) TIMESTAMP 5/01/2008

```

Verifying Existing Keys (After Starting SCL)

Note:

This must be performed after starting a license file for the first time. It should also be performed any time a modification is made to a license file.

Check the Debug Logfile

As a precaution, check your cvd-format license server debug logfiles for SSS error. For example, below is an SSS warning from a debug logfile without a valid SSS key:

```

-----
6:40:07 (snpslmd) WARNING: SSS errors.
6:40:07 (snpslmd) Use the sssverify utility to check the integrity of your license file.
6:40:07 (snpslmd) The license file should be used exactly as received from Synopsys, Inc.
-----

```

IMPORTANT:

A license server log file displaying the error message shown above indicates that the file is corrupt. If the problem is not corrected, you will see license denials. An example of a denial message is shown below:

```

-----
8:35:58 (snpslmd) ERROR: SSS feature is required!
8:35:58 (snpslmd) DENIED: hspice - excluded by SSS. Server is unstable.
-----

```

For additional information, please review the information mentioned in the CVD License Verification Checklist at http://www.synopsys.com/support/keys/docs/cvd_license_verification.pdf

Setting Up the Environment for UNIX Users

To reduce tool start-up time, it is recommended that you set the `SNPSLMD_LICENSE_FILE` variable rather than the `LM_LICENSE_FILE` or another legacy licensing variable.

Note:

`SNPSLMD_LICENSE_FILE` is supported only for tools based on the SCL `snpslmd` daemon. Earlier versions of Synopsys tools based on legacy daemons require that you set `LM_LICENSE_FILE` or another legacy licensing variable. If your environment has both earlier and more recent tool versions, consider setting both `SNPSLMD_LICENSE_FILE` and `LM_LICENSE_FILE` to point to the SCL license servers.

To set up a new user, create a Synopsys source file or modify each user's `$HOME` setup files.

1. Set `SNPSLMD_LICENSE_FILE`, `LM_LICENSE_FILE`, or a tool-specific license variable to specify the path to the Synopsys FLEXnet license server.

In the following example, it is assumed that the Synopsys license server is using TCP port 27000, the default. (However, you can specify another port by modifying the `SERVER` line of your site's key file, for example, `SERVER my_server 8308a297 26585`.)

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

```
setenv SNPSLMD_LICENSE_FILE 27000@my_server
```

or

```
setenv LM_LICENSE_FILE 27000@my_server
```

- If you are using the Bourne, Bash, or Korn shell, add these lines to the `.profile`, `.bashrc`, or `.kshrc` file:

```
SNPSLMD_LICENSE_FILE=27000@my_server  
export SNPSLMD_LICENSE_FILE
```

or

```
LM_LICENSE_FILE=27000@my_server  
export LM_LICENSE_FILE
```

Note:

Path syntax (`/path/to/synopsys.lic`) is not supported unless a `USE_SERVER` line is added to the top of the license file, before any `INCREMENT` lines.

2. Add the `lm` utilities (`lmutil`, `lmstat`, and so on) executable files to the user path. For example,
 - Add the following line to the `.cshrc` file:

```
set path=(/usr/synopsys/scl/platform/bin $path)
```

- Add the following line to the `.profile`, `.kshrc`, or `.bashrc` file:

```
PATH=/usr/synopsys/scl/platform/bin:$PATH  
export PATH
```

Setting Up the Environment for Windows Users

To set up a new user for Windows platforms, you must set the `SNPSLMD_LICENSE_FILE`, `LM_LICENSE_FILE`, or a tool-specific license variable to specify the path to the Synopsys FLEXnet license server.

To set the variable, follow the steps below:

1. Choose Start > Settings > Control Panel > System > Advanced > Environment Variables.
2. In the System Variables section, click New. Add, for example,

```
Variable name: SNPSLMD_LICENSE_FILE  
Variable value: 27000@my_server
```

Note:

Path syntax (`\path\to\synopsys.lic`) is not supported unless a `USE_SERVER` line is added to the top of the license file, before any feature (`INCREMENT`) lines.

Verifying the Installation on UNIX and Windows Platforms

To verify that the installation and configuration were completed successfully, follow the steps below:

1. Change directories and enter the following command:

UNIX: Change to the `scl_root/plat_arch/bin` directory and enter

```
% cd scl_root/plat_arch/bin  
% ./lmstat -a -c license_file
```

Windows: Change to the `scl_root\msvc70\bin` directory and enter

```
C:\scl\msvc70\bin>lmstat -a -c license_file
```

2. The `-a` argument displays all available features. For the `-c license_file` argument, provide the path to the license key file you are using. For example,

```
% lmstat -a -c 27000@my_server
```

3. Check the output produced by the `lmstat` utility to ensure that the license server is up and running and the license key file is installed.

In [Example 1-2](#), the `lmstat` output identifies the status of all active licenses served by the `pluto` server and specified in the `synopsys.lic` file.

Example 1-2 Example `lmstat` Output

```
Flexible License Manager status on Mon 4/30/2008 13:45
License server status: 27000@pluto
License file(s) on pluto: /synopsys/scl/admin/license/synopsys.lic
pluto: license server UP (MASTER) v10.8
Vendor daemon status (on pluto): snpslmd: UP v10.8
Feature usage info:
Users of SSS: (Total of 1 license issued; Total of 0 licenses in use)
Users of DC-Expert: (Total of 30 license issued; Total of 0 licenses in use)
Users of DC-Ultra-Features: (Total of 10 license issued; Total of 0 licenses in use)
Users of DC-Ultra-Opt: (Total of 10 licenses issued; Total of 0 licenses in use)
Users of Design-Compiler: (Total of 30 licenses issued; Total of 0 licenses in use)
Users of DesignWare: (Total of 5 licenses issued; Total of 0 licenses in use)
Users of HDL-Compiler: (Total of 20 licenses issued; Total of 0 licenses in use)
```

Note:

The syntax for this command is `whatsclsn pslmd`.

The example shows that the license server called `pluto` at port 27000 is active and that the configuration is for a single server.

Look for the following conditions:

- The “License server” line identifies the server port and host name.

```
License server status: 27000@pluto
```

- The “License file” line shows the location of the license key file used by the server.

```
License file(s) on pluto: /synopsys/scl/admin/license/synopsys.lic
```

- The “license server Up” line indicates that the `pluto` server (the `lmgrd` daemon) is up and that the configuration is for a single server.

```
pluto: license server UP (MASTER) v10.8
```

For single-server configurations, `lmstat` identifies the single server as the master.

If your system uses three-server redundancy, ensure that all three servers are connected with only one of the three servers identified as the master server.

- The “Vendor daemon status” lines indicate that the `snpslmd` vendor daemon is up and running.

```
Vendor daemon status (on pluto): snpslmd: UP v10.8
```

- The remaining lines show the feature usage information.

