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# **CD-ROM Content**

## **Esterel Studio Distribution**

The following applications are delivered on your Esterel Studio CD-ROM.

Applications for	Description	
Windows and UNIX		
Esterel Studio modules	The Esterel Studio application modules, as described below.	
Esterel Technologies	Esterel Technologies products use the FLEXnet license manager from	
License Server	Macrovision Corporation for product license administration. The FLEXnet	
	license server must be installed on your Local Area Network. Refer to	
	"Managing License Files and Tokens".	
Adobe Acrobat Reader	Allows you to read the PDF files included on your CD-ROM. See	
	http://www.adobe.com/products/acrobat/readstep2.html for more	
	information on Acrobat Reader.	

## **Esterel Studio Modules**

- · Esterel Studio Editor
- Esterel Studio Simulator
- · Esterel Studio Source Code Coverage

- · Esterel Studio Design Verifier
- · Esterel Studio Sequential Equivalence Checker
- Esterel Studio Testbench Generators
- · Esterel Studio VHDL Code Generator
- · Esterel Studio Verilog Code Generator
- Esterel Studio C/C++ Code Generator
- · Esterel Studio SystemC Code Generator
- · Esterel Studio SPIRIT exporter
- Esterel Studio Executable Specification Exporter
- · Esterel Studio Parametric IP package Exporter & Generator
- · Esterel Studio Model Reporter
- · Esterel Studio ECO and Traceability Module

**NB**: if you don't have the required license to use a specific module its features are disabled: menu items are greyed out or an error message pops up each time you try using the module.

## **Esterel Studio Documentation**

The documentation is available in PDF format (in the /doc directory) and in HTML format through the Help menu of Esterel Studio.

Open <u>MANUALS.htm</u> to get the list of all manuals.

If you are upgrading from a previous version of Esterel Studio you should read the <u>Release Notes</u> first.

# **Installation for Windows and UNIX**

Installing Esterel Studio requires installing a license server either on a network server (preferred) or on your local computer. More details in "<u>Managing License Files and Tokens</u>". To increase performance, install Esterel Studio on your local computer, even if your license server is on a remote server.

#### Hardware devices required to install Esterel Studio

CPU	1 GHz or faster
Processor	
RAM	256 Mb minimum, 512 Mb recommended
Disk Space	120 Mb minimum on Windows, 250 Mb minimum on UNIX
Peripherals	CD-ROM drive for installation
<b>OS</b> (*)	Windows 2000 SP4, Windows XP SP2,
	SUN Sparc Solaris 8, Solaris 9 (with latest patches: run es_check_system),
	Redhat Linux Enterprise 3 Update 2, Enterprise 4
Protocol	Network adapter and TCP/IP installed and configured for license management
Display	65000 colors, 17-inch recommended
PC	No X-server is supported to run Esterel Studio for Unix/Linux on a PC.
X-Server	

(\*) Bold characters indicate the OS on which Esterel Studio has been compiled. Tests have been performed on the other ones to make sure all Esterel Studio tools supports them.

## **Installing, Configuring and Starting on Windows**

Before installing Esterel Studio you should make sure that **Microsoft Visual C++ NET 2005** is already installed, if you plan to use the simulator.

#### **Installing on Windows**

- 1. Login as administrator.
- 2. From the CD-ROM, run <u>es\_setup.exe</u>, the Esterel Studio installation program.

**NB:** If you encounter problems during setup, uninstall and re-install your application.

#### **Configuring on Windows**

1. Set your ESTERELD\_LICENSE\_FILE environment variable. The FLEXnet License Server can be installed either on a network server (preferred) or locally on your own computer. See the table below for instructions.

FLEXnet License Server installed on			
Your computer	A network server		
The installation sets	Change your environment variable ESTERELD_LICENSE_FILE to		
ESTERELD_LICENSE_FILE	this value: <portnumber>@<serverhost></serverhost></portnumber>		
to the path of your	<portnumber> is the free TCP port number specified in the license</portnumber>		
ESTERELD.lic file.	file, e.g. 29030		
	<serverhost> is the name of the computer where the FLEXnet License</serverhost>		
	Server is installed.		

To set ESTERELD\_LICENSE\_FILE environment variable, you can:

#### • Click on Start>Settings>Control Panel,

- Double-click on System icon,
- Select Advanced panel and click on Environment Variables button,
- Create or edit ESTERELD\_LICENSE\_FILE and write correct value (see table above).
- 2. Restart your computer at the end of the installation process.

ESHOME and ESTEREL are set automatically to the installation directory. If you have a previous installation of Esterel Studio you will need to reset these variables by hand to switch to the previous installation.

#### **Starting Esterel Studio on Windows**

To start the application you can either:

- Click on Start>Programs>Esterel Studio>Esterel Studio.
- Double-click on one of the Esterel Studio project files (.etp file).

#### **Troubleshooting incorrect settings for Visual C++ NET 2005 on Windows**

Symptoms of incorrect settings are:

- Warning messages during installation (for example: "C++ was not detected")
- Compilation failure (MS compiler not found).
- 1. Start the Microsoft Visual C++ GUI to update the Windows registry then close it.
- 2. Go to the Environment Variables area from Start>Settings>Control Panel>System>Advanced

tab in order to check the variables listed in the following tables.

System variable	Value for MSVC++ NET 2005		
DevEnvDir	C:\Program Files\Microsoft Visual Studio 8\Common7\IDE		
Path	C:\Program Files\Microsoft Visual Studio 8\Common7\IDE;C:\Program		
	Files\Microsoft Visual Studio 8\VC\BIN; C:\Program Files\Microsoft Visual		
	Studio 8\Common7\Tools;C:\Program Files\Microsoft Visual Studio		
	8\Common7\Tools\bin; C:\Program Files\Microsoft Visual Studio		
	8\VC\PlatformSDK\bin;C:\Program Files\Microsoft Visual Studio		
	8\SDK\v2.0\bin;		
	C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727;C:\Program		
	Files\Microsoft Visual Studio 8\VC\VCPackages;		
INCLUDE	C:\Program Files\Microsoft Visual Studio 8\VC\ATLMFC\INCLUDE;C:\Program		
	Files\Microsoft Visual Studio 8\VC\INCLUDE; C:\Program Files\Microsoft		
	Visual Studio 8\VC\PlatformSDK\include;C:\Program Files\Microsoft Visual		
	Studio 8\SDK\v2.0\include		
LIB	C:\Program Files\Microsoft Visual Studio 8\VC\ATLMFC\LIB;C:\Program		
	Files\Microsoft Visual Studio 8\VC\LIB; C:\Program Files\Microsoft Visual		
	Studio 8\VC\PlatformSDK\lib;C:\Program Files\Microsoft Visual Studio		
	8\SDK\v2.0\lib		
LIBPATH	C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727;C:\Program		
	Files\Microsoft Visual Studio 8\VC\ATLMFC\LIB		

## **Installing, Configuring and Starting on UNIX**

Installation procedure must be performed entirely before running your application.

#### Mounting the CD-ROM (adm. task)

Mount the CD-ROM into the drive.

#### **Creating the installation directory (adm. task)**

The following applies for first time installation only.

- In order to remove write permission for the group and others, set the umask (read/write/execute permission management) as follows: umask 022
- 2. Go to a disk directory for which you have write access by using a cd command. Make sure you have enough space available on this disk partition to install all products. No file will be created outside this directory.
- 3. Create a sub-directory as follows: mkdir <prod\_install\_dir>
- Switch to the installation directory cd <prod\_install\_dir>

#### **Extracting the Esterel Studio archive**

Extract the Esterel Studio archives: (<cdrom> depends on the network and system configuration e.g. /cdrom/solaris)

gzip -dc <cdrom>/es\_setup.tgz | tar xvfo -

#### Unmounting the CD-ROM (adm. task)

Unmount the CD-ROM and eject it.

#### Configuring your environment (user task) on UNIX

Set the environment variables in each user's "start-up" file (.profile or .login). To do so, refer to the following tables.

Variable	Bourne-like shell: sh, ksh, zsh or bash	Com
ESTERELD_LICENSE_FILE	ESTERELD_LICENSE_FILE= <portnumber>@<serverhost>;</serverhost></portnumber>	<port< td=""></port<>
	export ESTERELD_LICENSE_FILE	is the
		port n
		specif
		licens
		e.g. 2
		<serv< td=""></serv<>
		is the
		the cc
		where
		FLEX
		Licen
		is inst
ESHOME and ESTEREL	ESHOME= <prod_install_dir>; ESTEREL=\$ESHOME;export</prod_install_dir>	These
	ESHOME ESTEREL	variał
		requii
		UNIX
PATH	PATH=:\$ESHOME/bin:\$PATH; export PATH	Put th
		comp
		your I
		order
		simul
LD_LIBRARY_PATH	LD_LIBRARY_PATH=\$ESHOME/bin:\$LD_LIBRARY_PATH;	Requi
	export LD_LIBRARY_PATH	call b
		other
		estudi
		estere

Variable	csh-like shell: csh or tcsh	Comment
ESTERELD_LICENSE_FILE	setenv ESTERELD_LICENSE_FILE	<portnumber> is the free</portnumber>
	<portnumber>@<serverhost></serverhost></portnumber>	TCP port number specified
		in the license file, e.g.
		29030
		<serverhost> is the name</serverhost>
		of the computer where the
		FLEXnet License Server is
		installed.
ESHOME and ESTEREL	<pre>setenv ESHOME <prod_install_dir>;</prod_install_dir></pre>	These variables are required
	setenv ESTEREL \$ESHOME	on UNIX.
РАТН	setenv PATH	Put the C compiler in your
	:\$ESHOME/bin:\$PATH	path in order to run
		simulations.
LD_LIBRARY_PATH	setenv LD_LIBRARY_PATH	Required to call binaries
	\$ESHOME/bin:\$LD_LIBRARY_PATH	other than estudio and
		esterelv7.

The following environment variables are optional and should be set to overwrite the defaults:

Variable	SunOS Default Command	Linux Default Command	Comment
CC	сс	gcc	To compile C files for simulation
LPR	lp	lp	To print files
EDITOR	emacs	emacs	To edit text files
PDFVIEWER	acroread	acroread	To view PDF files
RTFVIEWER	abiword	abiword	To view RTF files
NAVIGATOR	netscape	mozilla	To view HTML files

#### **Checking your system on UNIX**

- 1. You can check your system with the es\_check\_system command line.
- 2. Check that no package is missing for Esterel Studio.

#### **Starting Esterel Studio on UNIX**

- 1. Start Esterel Studio with the estudio command line.
- 2. Browse the online documentation.

# **Managing License Files and Tokens**

## **Introduction:** A Token License System

Esterel Technologies uses the FLEXnet token license manager from Macrovision Corporation for product license administration.

License tokens control simultaneous executions of a given product (SCADE, Esterel Studio or both) installed on a network of UNIX and /or Windows machines (see picture below). When there are not enough license tokens available, access to the application is denied.

To purchase new licenses or request a demo license, please contact our customer representatives at sales@esterel-technologies.com.

A FLEXnet End User Manual is included on your CD-ROM in PDF format.

Esterel Technologies products are controlled by a software daemon (ESTERELD). This vendor daemon runs under the control of a main FLEXnet software daemon (lmgrd), on one-single or three-redundant physical server(s).



FLEXIm daemon (Imgrd), company's daemon (ESTERELD) and license file A: Token request B: License token allocation

## Asking for and Installing License keys on Windows (adm. task)

#### Asking for license keys on Windows

- 1. Login as administrator.
- 2. From the CD-ROM, run the install program **flexIm.exe**.
- 3. Select the entry **request.txt** from **Start>Programs>Esterel Technologies License Server**. This pops up a "request.txt" file.
- 4. Send this "request.txt" file to support@esterel-technologies.com or fax it to: +33 4 92 02 54 56.

**NB:** Don't forget to indicate where, on the IP subnetwork (e.g. 192.10.\*.\*) licenses will be floating. Client machines (on which Esterel Technologies applications run) should have an IP address included in that range.

#### Installing license keys on Windows

- 1. Login as administrator.
- 2. Copy and paste the license keys you received to the ESTERELD.lic file in Start>Programs>Esterel Technologies License Server>ESTERELD.lic.
- 3. Save the license keys.
- 4. Launch the FLEXnet LMTOOLS from Start>Programs>Esterel Technologies License Server.
- 5. Select Configuration using Services and Esterel Technologies License Server from Service/License File tab.
- 6. In the **Config Services** tab, make sure both **Start Server at Power Up** and **Use Services** options are checked.

You can also start or stop the FLEXnet server manually from the Start/Stop/Reread tab.

7. Restart your computer after installing your application and FLEXnet.

NB: The Server Diags tab helps you diagnose problems quicker.

## Asking for and Installing License Keys on UNIX (adm. task)

#### Asking for license keys on UNIX

- 1. Choose the directory where you will store Esterel Technologies Licenses Server.
- 2. Example: /usr/local/ET\_FLEXnet. We name it: <ET\_FLEXnet>
- 3. Extract the Esterel Technologies License Server archives: (<cdrom> depends on the network and system configuration e.g. /cdrom/solaris)

cd <ET\_FLEXnet>

#### gzip -dc <cdrom>/estereld.tgz | tar xvfo -

4. Prepare the license request:

#### cd <ET\_FLEXnet>/estereld

#### ./install.sh

- 5. Accept the default choice for installation directory ('pwd')
- 6. Type in your name, fax number, e-mail address, company name and your contract number
- 7. Send the "request.txt" file to <u>support@esterel-technologies.com</u> or fax it to: +33 4 92 02 54 56.

**NB:** Don't forget to indicate where, on the IP subnetwork (e.g. 192.10.\*.\*) licenses will be floating. Client machines (on which Esterel Technologies applications run) should have an IP address included in that

range.

#### Installing license keys on UNIX

- 1. Insert the license keys you received in the file: <<u>ET\_FLEXnet>/estereld/ESTERELD.lic</u>
- Start your license server: cd <ET\_FLEXnet>/estereld ./esterel.sh start

**NB:** The **./esterel.sh diag** command line helps you diagnose problems quicker.

# **Configuring User's Environment on Windows and UNIX (user task)**

In each user environment, the **ESTERELD\_LICENSE\_FILE** variable must be set. This variable refers either to a license file on a user machine or to a TCP port on a license server. Refer to "<u>Installing, Configuring and Starting on Windows</u>" or "<u>Installing, Configuring and Starting on UNIX</u>".

The use of Esterel Studio software is governed by the conditions defined on delivery of the license agreement.

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