RapidPLUS Installation Guide

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RapidPLUS Installation Guide

RapidPLUS is a comprehensive software package for the generation of simulations and prototypes of embedded systems.

This installation guide presents the following:

- Installation instructions for a single (node-locked) license.
- Installation instructions for a floating (network) license for a Windowsbased server and for a UNIX system server.
- Instructions for merging more than one FLEXIm license on the server.

INSTALLING A NODE-LOCKED LICENSE

This section gives instructions for installing RapidPLUS on a single computer running on a Windows operating system, and for obtaining and installing a node-locked license. You must have administrative privileges on your computer.

NOTE: To request an upgrade, see the procedure "To obtain and install your node-locked license file," below.

To install RapidPLUS on your computer:

- 1 From the RapidPLUS CD-ROM, run *Setup.exe*. Follow the on-screen prompts and when prompted, enter the installation code supplied on the back of the CD-ROM case.
- **2** Start RapidPLUS from the desktop shortcut. It will be in evaluation mode until you add the license file. To obtain the license file, see the following procedure.
- **3** Be sure to read *Readme.wri*. It contains tips, new-feature overviews, and documentation notes.

To obtain and install your node-locked license file:

- 1 Run *lmtools.exe*, located in the RapidPLUS FLEXlm folder (by default, Rapidxx\FLEXlm). The LMTOOLS dialog box opens.
- 2 Click the **System Settings** tab:

LMTOOLS by Macrovision Corporation http://www.globetrotter.com					
File	File Edit Mode Help				
Ser	Service/License File System Settings Utilities Stop/Reread Switch Report Log Server St				
	Hostid Settings			- Time Settings	
	Computer/Hostname		System Time Zone		
	Username	Sara		0.07.7	
	CPU ID		-	GMIIme	
	IP Address 222.222.2.22			Difference From UCT	
	Ethernet Address	0000aaa0000a	_	MSDOS Time	
	Disk Volume Serial Number	a0000000		Local Time	

- **3** Copy the following Hostid settings, which you will need for step 5:
 - Computer/Hostname.
 - Ethernet address.
 - Disk volume serial number.
- **4** Close the LMTOOLS dialog box.
- **5** Send an e-mail message to the e-SIM Orders Department (see the contact information below) with the following information:
 - The three items from step 3.
 - Your company's name and contact information.
 - For a new license: the purchase order number for RapidPLUS.

For an upgrade: details from the previous license.

- For HASP, locate the number on the HASP dongle. You can also see the license number by choosing Help|About Rapid.
- For FLEXIm, locate the license number in *license.dat*.

Contacting e-SIM by e-mail

Orders Department: orders@e-sim.com

Address questions and problems to e-SIM Customer Support:

International address: support@e-sim.com United States and Canada: us_support@e-sim.com Japan: support_jp@e-sim.co.jp

The e-SIM Orders Department will generate your license file and send it to you by a return e-mail message. The license file is named *license.dat*.

- **6** Copy the license file, *license.dat*, to the RapidPLUS FLEXIm folder (by default, Rapidxx\FLEXIm).
- **7** Start RapidPLUS from the desktop shortcut to verify that the evaluation mode alert no longer appears.

Installation is complete!

INSTALLING A FLOATING LICENSE (WINDOWS-BASED SERVER)

The installation of floating (network) licenses should be handled by the system administrator.

This section gives instructions for:

- Installing RapidPLUS on client computers.
- Obtaining and installing floating license files.
- Configuring and starting the license manager daemon.
- NOTE: To request an upgrade, see "Obtaining and Installing Floating License Files" on p. 5.

Installing RapidPLUS on Client Computers

You can install RapidPLUS on client computers running on a Windows operating system. You must have administrative privileges on each client computer.

To install RapidPLUS on client computers:

- **1 On each client computer**, run *Setup.exe* from the RapidPLUS CD-ROM. Follow the on-screen prompts and when prompted, enter the installation code supplied on the back of the CD-ROM case.
- **2** Start RapidPLUS from the desktop shortcut. It will be in evaluation mode until you add the floating license file. To obtain the license file, see the following section.
- **3** Be sure to read *Readme.wri*. It contains tips, new-feature overviews, and documentation notes.

Obtaining and Installing Floating License Files

In order to obtain a floating license, you install the FLEXIm utility on your Windows-based server, and send server information to the e-SIM Orders Department. You must have administrative privileges.

To obtain and install your floating license files:

1 On the server computer, run the FLEXIm setup file, *Setup.exe*, located on the RapidPLUS CD-ROM in the Util\FLEXIm\Lic_Mngr\Windows folder.

By default, the RapidPLUS-FLEXIm setup creates the folder Program Files\e-SIM\FLEXIm with the following contents:

- esim.exe lmgrd.exe ٠
- installs.exe ٠
- Imtools.exe

license.dat

- lmutil.exe
- **2** When the RapidPLUS–FLEXIm setup is complete, select the check box to launch FLEXIm tools.

•



The LMTOOLS dialog box opens.

NOTE: If you want to open the FLEXIm utility at a later time, from the Windows Start menu, choose Programs|RapidPLUS-FLEXIm Utilities FLEXIm Tools.

3 Click the **System Settings** tab.

LMTOOLS by Macrovision Corporation http://www.globetrotter.com				
File	Edit Mode Help			
Service/License File System Settings Utilities Stop/Reread Switch Report Log Server				
	Hostid Settings		Time Settings	
	Computer/Hostname	Sara-pc	System Time Zone	
	Username	Sara	OUT T	
	CPU ID		GMI Ime	
	IP Address	222.222.2.22	Difference From UC	
	Ethernet Address	0000aaa0000a	MSDOS Time	
	Disk Volume Serial Number	a0000000	Local Time	
	FLEXID	<u> </u>	Windows Directory	

- **4** Copy the following Hostid settings, which you will need for step 6:
 - Computer/Hostname.
 - Ethernet address.
 - Disk volume serial number.
- **5** Close the LMTOOLS dialog box.
- **6** Send an e-mail message to the e-SIM Orders Department (see the contact information on the following page) with the following information:
 - The three items from step 3.
 - Your company's name and contact information.
 - For a new license: the purchase order number for RapidPLUS.

For an upgrade: details from the previous license.

- For NetHASP, locate the number on the HASP dongle. You can also see the license number by choosing Help|About Rapid.
- For FLEXIm, locate the license number in *license.dat*.
- RapidPLUS type and number of users.

Contacting e-SIM by e-mail

Orders Department: orders@e-sim.com

Address questions and problems to e-SIM Customer Support:

International address: support@e-sim.com United States and Canada: us_support@e-sim.com Japan: support_jp@e-sim.co.jp

The e-SIM Orders Department will generate your license files and send them to you by return e-mail. The license files are named *license.dat* and *license.server*.

- **7** On each client computer, copy the floating license file, *license.dat*, to the RapidPLUS FLEXIm folder (by default, Rapidxx\FLEXIm).
- **8** On the server computer, copy the server license file, *license.server*, to the e-SIM\FLEXIm folder, then rename *license.server* to *"license.dat"*.

Using the License Manager Daemon on the Server

When you run RapidPLUS on networked client computers, you will use the FLEXIm license manager on the server computer to handle the floating (network) license. The license management requires the following four components:

- RapidPLUS with a floating license file, *license.dat*, received from the e-SIM Orders Department (residing on the client computer).
- 2 The license manager daemon, *lmgrd.exe*.
- **3** The vendor daemon, *esim.exe*.
- The server license file, *license.server* (renamed *license.dat*), received from the e-SIM Orders Department (residing on the server computer).



The following diagram shows how these components work together:

The following section describes how to configure these components and start the license manager daemon.

Starting the License Manager Daemon

From the server computer, you can use the FLEXIm utility to start the license manager daemon, check its setup, and stop and restart the daemon, if necessary.

To start the license manager daemon:

- 1 Open the LMTOOLS dialog box: from the Windows Start menu, choose Programs|RapidPLUS-FLEXIm Utilities|FLEXIm Tools.
- 2 On the Service/License File tabbed page, be sure the option "Configuration using Services" is selected.

Serv	ice/License File	System Sett	ings Utilities	Start/Stop/Reread	Server Status	Server Diags	Config Services	Borrowing
	Configure Service	e					Cours Co	uico I
	Servic	e Name	e-SIM Licens	e Service	•		Remove S	ervice
	Path to the Imgr	d.exe file	C:\Program F	iles\e-SIM\FlexLM\In	ngrd.exe	Browse]	
	Path to the lic	ense file	C:\Program F	iles\e-SIM\FlexLM\lic	cense.dat	Browse]	
	Path to the debu	ıg log file				Browse	View Log	Close Log
	V	Start Server	at Power Up	🔽 Use Se	ervices			

3 Click the **Config Services** tab; the following page is displayed:

If necessary, fill in or update the following information:

- "Service Name": Use the default name, or change the name as needed.
- "Path to the lmgrd.exe file" and "Path to the license file": The default path and file names appear. If you changed the default program folder during installation, browse to the new folder or type the new path.
- ***** *NOTE: The file lmgrd.exe must be in the same folder as esim.exe.*
- 4 Click the Save Service button.
- 5 Click the **Start/Stop/Reread** tab, and click the **Start Server** button. Then close the dialog box.

The license manager daemon is started and you can now run RapidPLUS on the client computers.

Checking the Setup

You can check the setup a few minutes after starting the license manager daemon.

To ensure that the license manager daemon setup is correct:

1 Open the LMTOOLS dialog box: from the Windows Start menu, choose Programs|RapidPLUS-FLEXIm Utilities|FLEXIm Tools.

2 Click the **Server Status** tab; the following page is displayed:

Service/License File System Settings Utilities Start/Stop/Re	read Server Status Server Diags Config Services Bo
Helps to monitor the status of network licensing activities	Options Individual Daemon Individual Feature Server Name

3 Click the **Perform Status Enquiry** button; the server status information is displayed.

Stopping and Restarting the License Manager Daemon

Whenever you receive a RapidPLUS upgrade, it is advisable to stop and then restart the license manager daemon.

To stop the license manager daemon:

- 1 Open the LMTOOLS dialog box: from the Windows Start menu, choose Programs|RapidPLUS-FLEXIm Utilities|FLEXIm Tools.
- 2 On the Service/License File tabbed page, be sure the option "Configuration using Services" is selected.
- **3** Click the **Start/Stop/Reread** tab, and click the **Stop Server** button. Then close the dialog box.

To restart the license manager daemon:

- **1** Open the LMTOOLS dialog box.
- 2 On the Service/License File tabbed page, be sure the option "Configuration using Services" is selected.
- **3** Click the **Start/Stop/Reread** tab, and click the **Start Server** button. Then close the dialog box.

INSTALLING A FLOATING LICENSE (UNIX SYSTEM SERVER)

The installation of floating (network) licenses should be handled by the system administrator.

This section gives instructions for:

- Installing RapidPLUS on client computers.
- Obtaining and installing floating license files.
- Configuring and starting the license manager daemon.
- NOTE: To request an upgrade, see "Obtaining and Installing Floating License Files" on p. 12.

Installing RapidPLUS on Client Computers

You can install RapidPLUS on client computers running on a Windows operating system. You must have administrative privileges on each client computer.

To install RapidPLUS on client computers:

- **1 On each client computer**, run *Setup.exe* from the RapidPLUS CD-ROM. Follow the on-screen prompts and when prompted, enter the installation code supplied on the back of the CD-ROM case.
- **2** Start RapidPLUS from the desktop shortcut. It will be in evaluation mode until you add the floating license file. To obtain the license file, see the following section.
- **3** Be sure to read *Readme.wri*. It contains tips, new-feature overviews, and documentation notes.

Obtaining and Installing Floating License Files

In order to obtain a floating license, you install the FLEXIm utility on your UNIX system server, and send server information to the e-SIM Orders Department. **You must have root-user privileges.**

NOTE: Directory and file names are case sensitive in a UNIX system.

To install the FLEXIm utility:

- **1** On the server computer, log in as a user with root permissions (i.e., a super-user).
- **2** Create a subdirectory, called flexlm, preferably in the directory where users have their directories, for example:

/home/flexlm

- **3** From the RapidPLUS CD-ROM, copy the file *sparc.zip*, located in Util/FLEXlm/Lic_Mngr/unix/solaris/sparc, to the flexlm directory.
- **4** At the command prompt, type:

unzip sparc.zip

This command unzips four files:

- lmgrd esim
- *lmutil* S81esim_lmgrd
- **5** For the three files *lmgrd*, *lmutil*, and *esim*; set the permissions to:

```
rwxr--r-- (execute permissions)
```

These files do not require root permissions.

NOTE: The file, S81esim_Imgrd, will be used later when you install the floating license.

To obtain and install your floating license files:

1 Retrieve the **hostid** and **full qualified domain name** (FQDN) of the system.

To retrieve the hostid and FQDN, at the command line type:

hostid

- **2** Send the following items via e-mail to **e-SIM Orders Department** (see the contact information below):
 - The hostid and FQDN (retrieved in step 1).
 - Your company's name and contact information.
 - For a new license: the purchase order number for RapidPLUS.

For an upgrade: details from the previous license.

- For NetHASP, locate the number on the HASP dongle. You can also see the license number by choosing Help|About Rapid.
- For FLEXIm, locate the license number in *license.dat*.
- RapidPLUS type and number of users.

Contacting e-SIM by e-mail

Orders Department: orders@e-sim.com

Address questions and problems to e-SIM Customer Support:

International address: support@e-sim.com United States and Canada: us_support@e-sim.com Japan: support_jp@e-sim.co.jp

The e-SIM Orders Department will generate your license files and send them to you by return e-mail. The license files are named *license.dat* and *license.server*.

- **3** On each client computer, copy the floating license file, *license.dat*, to the RapidPLUS FLEXIm folder (by default, Rapidxx\FLEXIm).
- **4 On the server computer**, copy the server license file, *license.server*, to the flexIm directory.

Rename license.server to "license.dat".

Using the License Manager Daemon on the Server

When you run RapidPLUS on networked client computers, you will use the FLEXIm license manager on the server computer to handle the floating (network) license. The license management requires the following four components:

- RapidPLUS with a floating license file, *license.dat*, received from the e-SIM Orders Department (residing on the client computer).
- **2** The license manager daemon, *lmgrd*.
- 3 The vendor daemon, esim.
- The server license file, *license.server* (renamed *license.dat*), received from the e-SIM Orders Department (residing on the server computer).

The following diagram shows how these components work together:



The following section describes how to configure these components and start the license manager daemon.

Starting the License Manager Daemon

From the server computer, you can use the FLEXIm utility to start the license manager daemon, check its setup, and stop and restart the daemon, if necessary.

To start the license manager daemon automatically as the system starts:

1 Copy the file, *S81esim_lmgrd*, from the flexIm directory to the /etc/rc3.d directory. This file contains the following code:

```
#!/sbin/sh
#
# start the lmgrd license server for flexlm
#ident"@(#)init.lmgrd1.1597/12/08 SMI"
case "$1" in
'start')
 if [ -f /home/flexlm/lmgrd ]; then
   /home/flexlm/lmgrd -c /home/flexlm/license.dat
 fi
 ;;
'stop')
 /usr/bin/pkill -9 -x -u 0 'lmgrd'
 ;;
*)
 echo "Usage: $0 { start | stop }"
 exit 1
 ;;
esac
exit 0
```

If your path is different from the default path (/home/flexlm), edit this file accordingly.

2 Set the file's permissions to:

```
rwxr--r-- (execute permissions).
```

This script will be run in runlevel 3 when the system boots.

To start the license manager daemon manually:

At the command prompt, type:

/home/flexlm/lmgrd -c /home/flexlm/license.dat

NOTE: If you do not want to use the file, S81esim_Imgrd, just place the line in a boot script. This will start the server automatically as the system boots. For example, you can place the line in either of these files: /etc/rc.boot or /etc/rc.local.

Checking the Setup

You can check the setup a few minutes after starting the license manager daemon.

To ensure that the license manager daemon setup is correct:

• At the command prompt, type:

/home/flexlm/lmutil lmdiag -c /home/flexlm/license.dat

NOTE: The command lmutil lmdiag is used as a diagnostic tool to verify that the server is running and serving licenses.

Stopping and Restarting the License Manager Daemon

Whenever you receive a RapidPLUS upgrade, it is advisable to stop and then restart the license manager daemon.

To stop the license manager daemon:

• At the command prompt, type:

/home/flexlm/lmutil lmdown -c /home/flexlm/license.dat

To start the license manager daemon:

• At the command prompt, type:

/home/flexlm/lmgrd -c /home/flexlm/license.dat

MERGING FLEXLM LICENSES

If you are already running a FLEXIm-licensed product on a single server computer, you can merge the e-SIM license file, *license.server*, with an existing license file. Merged licenses can prevent licensing conflicts.

The following criteria are required to successfully merge FLEXIm licenses:

• The *lmgrd* file must be version 9.2 or higher. If the existing file is a lower version, you must replace it with the one supplied on the RapidPLUS CD-ROM (see instructions below).

The *lmgrd* file is backward compatible and the new version will work with your existing software (i.e., the existing clients who use the license server).

- The number of SERVER lines in the existing license file must be the same as in the license file that you received from the e-SIM Orders Department.
- The server name and hostid in the SERVER lines must be *exactly* the same as in the license file that you received from the e-SIM Orders Department.

The multiple vendor daemons will use the same license manager daemon and the same license file, as shown in the following illustration:



Updating the License Manager Daemon

If the existing license manager daemon is not version 9.2 or higher, you will need to replace it with the one supplied on the RapidPLUS CD-ROM.

To update the license manager daemon:

For instructions on how to stop and restart the FLEXIm license manager daemon, see p. 10 for Windows or p. 16 for UNIX.

- 1 Stop the FLEXIm license manager daemon.
- **2** Locate the existing (older) *lmgrd* file and replace it with the newer version from the RapidPLUS CD-ROM.
- **3** Restart the license manager daemon.

Combining the License Files

When you merge license files, the new merged file, *license.dat*, should be in the same directory as the license manager daemon, *lmgrd*.

Likewise, the e-SIM vendor daemon, *esim*, should be in the same location as *lmgrd*. If the *esim* file is not in the same location, a relative path must be specified in the license file (see example).

To merge the license files:

1 Windows: Copy the e-SIM vendor daemon file, *esim.exe*, from the server's RapidPLUS FLEXIm folder (by default Program Files\e-SIM\FLEXIm) to the folder with the license manager daemon, *lmgrd.exe*.

UNIX: Copy the e-SIM vendor daemon file, *esim*, from the server's RapidPLUS FLEXIm directory (by default /home/flexIm) to the directory with the license manager daemon, *lmgrd*.

- **2** Open the *license.server* file that you received from the e-SIM Orders Department and copy the lines that begin with VENDOR and with FEATURE.
- **3** Paste the lines in the existing *license.dat* file under the line that starts with the word SERVER.

Example of combined server license file

In the following sample of a merged *license.dat* file, the content from the e-SIM *license.server* file is in **bold**.

```
SERVER AAA_server12345bc12345
DAEMON abc /aaa/bbb/ccc/abc
FEATURE abc1...
FEATURE abc2...
FEATURE abc3...
VENDOR esim
FEATURE CODE esim 8.0...
FEATURE Commercial esim 8.0...
```

NOTE: If the e-SIM vendor daemon is not in the same location as the license manager daemon, then you must include the relative path in the merged license file. For example:

VENDOR esim /local/adm/flexlm/rapid/esim