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The following third-party libraries are used by the NlogN Momentum solver:

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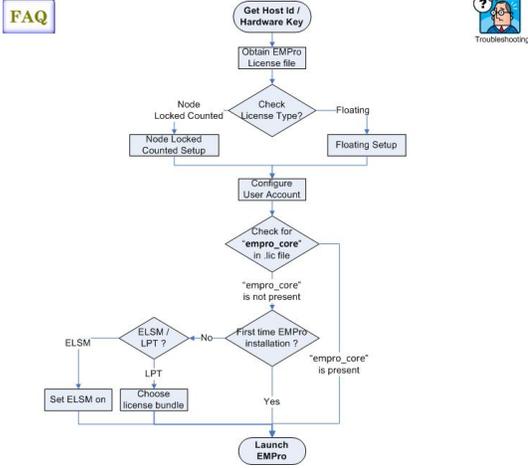
EMPro 2011.01 - Licensing EMPro

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EMPro License Setup for Linux

Click on the respective box in the flowchart below for further details on the selected topic.

EMPro License Setup Flowchart



- 1. ELSM - Extended License Search Mechanism
- 2. LPT - License Preference Tool

Get Host Id / Hardware Key

Host Id (License ID) is the unique machine ID of the license server machine running Solaris. On Linux, it is either the unique machine ID of the license server machine or the LAN card's Ethernet ID.

- If EMPro is already installed on your machine, you can obtain the Host Id (Ethernet Address / License Id) from `license_info.html` which is available in the EMPro installation directory, for example, `<EMPro installation folder> where <EMPro installation folder>` is the destination folder you specified during EMPro installation.

Note
Agilent recommends the usage of Host Id highlighted with green color.

- If EMPro is not installed, you can obtain the Host Id (Ethernet Address / License Id) by using the below command (as per your operating system):

| Operating System | Command |
|----------------------|-------------------------------------|
| Red Hat Linux & Suse | <code>/sbin/ifconfig -a eth0</code> |
| Solaris | <code>/sbin/ifconfig -a</code> |

- Notes**
1. The 12-digit Host Id / Physical Address should be used without dashes, for example, **00805E1A8DF**.
 2. This example applies to LAN card users. Wireless Network Card users should locate their network card in the text file and use that Physical Address.
 3. To obtain Host Id of a Solaris machine, you must have the administrator permissions.

[Back to Licensing Flowchart](#)

Obtain EMPro License File

You can place the EMPro license request for:

1. New Sale License Request
2. New Release License Request
3. Renew Expired License Early Access
4. License Request Change / Transfer
5. Evaluation License / Token Redemption / Renewal Request

[Click here](#) to order EMPro evaluation / trial version

[Back to Licensing Flowchart](#)

Check License Type

EMPro supports the following license types on Linux machines:

1. **Node Locked Counted:** The license file must follow the format shown in the following example. This example is from a node-locked file where the quantity, displayed on the first line after the date, is typically "1":

```
SERVER 2CE9225ZQD.agilent.com 0025B3A05D81 VENDOR agilesofd INCREMENT
b_amds_trans_1 agilesofd 2.8 23-nov-2010 1 \
VENDOR_STRING="0025B3A05D81 : UBHHWR WSUODMS OIWBOF2 DXQHJUZ \
JTEZRXX CT2EWF7 FOEQJY N" HOSTID=0025B3A05D81 \
START=24-nov-2009 SIGN="0054 4181 C5D1 342D 3761 1D8F 1B69 \
FC97 F638 B92C CF03 C8A9 7F50 044A F9DE 8D33 A73A 50A8 82F1 \
BFD9 225F"
```

1. **Floating:** The license file for a floating license is the same as the node-locked file example, with following exceptions:
 - There is no HOSTID identifier in a floating license.
 - The quantity can be any number, one or more, depending upon the number of EMPro licenses you own.
 Below is a sample of a section of a floating-license file:

```
SERVER 2CE9225ZQD.agilent.com 0025B3A05D81 VENDOR agilesofd
INCREMENT b_cct_l_mom_3dem_sys_wl agilesofd 2.8 11-dec-2010 1 \
VENDOR_STRING="0025B3A05D81P=#1,2,3,4,7,8,9,10,11,13,14,15,18,
19,20,22,23,24,25,26,27,29,30,31,32,33,34,35,36,39,40,41,42,43,44,45,
46,47,48,53,55,62,63,65,66,67,68,69,105,106,107,108,109,110,111,113,
115,116,123,128,131,132,133,135,138,141,142,154,155,156,157,313D=#W2209BP,
ADS_Core+CircuitSim+Layout+MomentumG2+Ptolemy+VerilogA+Mature_Wireless_Libraries+
EMDS_G2;e_core,e_phys_layout,e_sim_harmonic,e_sim_trans_conv,e_sim_momentum,
e_sim_sys,e_sim_envelope,e_sim_verilog_a,e_mdl_wireless_mature,e_sim_fem
\
: FUHWLVB SKEBWVY HGDVZUW CEOVZBP XJENKUL XIX2ACY PBHAHR \
CR22DVF TRFBQGY GOEYQGA" START=11-dec-2009 SIGN="0374 8450 \
D68E C3AC AD4D E274 DFA2 6BB5 91A1 CDA9 F201 BDAB 52B7 14B3 \
F488 D780 E5A2 719B 7893 0A8D 96CE"
```

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Floating License Setup

The `license.lic` file that implements FLEXnet security must be obtained from Agilent Business Support to run EMPro. For any licensing setup, EMPro must be installed on your machine / server. If your licenses will be served by a central server, use the following sections to install your EMPro floating licenses.

Place License File

Save the EMPro license file `license.lic` file on your system that you received from the Agilent EEs of Business Support. Most licenses are distributed by e-mail.

Edit the License File

Edit your `license.lic` file to correct the SERVER line and add information to the VENDOR line. See [SERVER Line Guidelines](#) and [VENDOR Line Format](#) for more details. You can use the Agilent License Information Tool to check your environment variable settings, display your `license.lic` file, and show your license and server status.

Note
Each line in the `license.lic` file must be a single continuous line with each field separated by a single space. You may line wrap lines using the backslash (\) character, and ensure that no blank space is added after the backslash. You also have the option to remove the backslash and make each INCREMENT line one continuous line.
In the license file, # can be used to comment out the incremental codewords.

SERVER Line Format

The SERVER line, by default, has the following format:

```
SERVER hostname hostid [port]
```

where:

- `hostname` is the network name of the machine whose hostid appears in field 3 of the SERVER line.
- `hostid` (License ID) is the unique machine ID of the license server machine running Solaris. On Linux, it is either the unique machine ID of the license server machine or the LAN card's Ethernet ID.

Note
The evaluation form accepts these addresses as one continuous 12-digit number, without the colons. You can also obtain this by looking into the <EMPro installation folder>/license_info.htm file, if EMPro is already installed on the machine.

- `port` is an optional entry naming the TCP/IP port number that the license server will listen at for license requests. An example port number is 27000.

SERVER Line Guidelines

- Your license file should contain an odd number of SERVER lines; for example, 1, 3, 5, and so on. If you have 3 SERVER lines, the first SERVER is the primary license server and the other two are backup servers. All three SERVER lines must use the same port number.
- You may only change the hostname and the optional port number fields.
- Adding or removing SERVER lines requires a new `license.lic` file.
- By default, Agilent EEs of sets hostname to unknown. The SERVER line does not contain a port address. FLEXnet software assigns a port address in the range of 27000 to 27009. The examples in this documentation use a port address of 27000, but your license file may differ. If you do not want to use the port address assigned by FLEXnet, specify any other unused port number for your network.

Note
Enter a specific port address on the SERVER line for improved license check-out performance. You may enter a port address outside the range of 27000 to 27009, as long as the address is not used elsewhere. Also, set the environment variable `AGILEESOFD_LICENSE_FILE` as described in [Place License File](#).

- If the Host Id is wrong, or changes for some reason, you must request a new license file from Agilent EEs of business support. Here are examples of properly configured SERVER lines:

```
SERVER joshua 2072FE45 (default - FLEXnet assigns port address)
SERVER isiah 20472A3D3 27000 (optional - port address is specified)
```

VENDOR Line Format

The VENDOR line, by default, has the following format:

```
VENDOR daemon_name [daemon_path] [options_file_path] [port]
```

where:

- `daemon_name` is the name of the vendor daemon.
- `daemon_path` is an optional entry specifying a path to the vendor daemon.
- `options_file_path` is an optional entry specifying a path to the FLEXnet options file.
- `port` is an optional entry naming the daemon TCP/IP port number to use. A port number must be used when connecting to the daemon through a firewall.

VENDOR Line Guidelines

- During installation of EMPro, the vendor daemon is installed in the `$PPEESOF_DIR/licenses/vendor` and `$PPEESOF_DIR/licenses/bin` directories.
- The `daemon_name` must be `agileesofd`.
- The path to the options file is intentionally left blank. If you want to use FLEXnet options, you must add a full path to your option file. To learn about FLEXnet options, refer to [Using FLEXnet Options](#). If the file does not exist and this option is not blank, a warning message will appear in the `flex.log` file.
- Here is an example of a properly configured VENDOR line including the daemon path, options file path, and port number:

```
VENDOR agileesofd /my_install_dir/licenses/vendors/agileesofd \
/my_install_dir/licenses/agileesofd.opt 27000
```

- For client systems connecting to a license server through an Internet firewall set up on Windows PC, the port number the vendor daemon uses must be specified. If the port is not specified, the default is chosen by the operating system at run time. If this port number is specified, there may be a delay restarting the vendor daemon until all clients have closed their connections to the vendor daemon.

Note
Some clients may timeout before they can connect to a license server through a firewall set up on a Windows PC. The default timeout period is 0.1 second. If you need a longer timeout period, you can set the environment variable `FLEXLM_TIMEOUT` to a new value. Enter the value using microseconds. Agilent EEs of recommends trying one second. For example:
`FLEXLM_TIMEOUT=1000000` Depending on your network, you may need to adjust the period so it is long enough to allow connections without slowing down simulations excessively.

License Placement Guidelines

- The recommended location for the `license.lic` file is `$PPEESOF_DIR/licenses/license.lic`, where `$PPEESOF_DIR` is EMPro Installation location.
- You may require root permission to copy the `license.lic` file into the EMPro installation directory if EMPro was installed by a user logged in as root.
- You can choose to locate the `license.lic` file someplace else on the SERVER machine(s). If you choose to do this, make sure that EMPro users properly set `AGILEESOFD_LICENSE_FILE`.
- Make sure that the `license.lic` file has at least read permission for all users:

```
cd $PPEESOF_DIR/licenses
chmod 555 license.lic
```

This command provides only read/executable permissions.

- Place a copy of the `$PPEESOF_DIR/licenses` directory on all SERVER machines or custom install the FLEXnet license server on each machine.

Start the License Server (lmgrd)

Use the following procedure and guidelines to start the license server, `lmgrd`, on the SERVER machine.

Note
Be sure to use the following guidelines to update all existing license servers with the latest version of the FLEXnet software (e.g., lmgrd and lmutl). The software is installed with EMPro 2010. Using older versions may cause license-encryption errors, invalid hostid results, and unsupported feature errors. Verify that all multiple and redundant servers are updated including any license administration scripts in use. Run lmutl directly from the EMPro 2010 installation location (\$HPEESOF_DIR/licenses/bin) for information to help modify the scripts. You will need to stop, then restart, the license server to make these updates.

Guidelines for Starting lmgrd

1. You only need to run lmgrd on the SERVER machine(s).
2. If the SERVER machine(s) has EMPro installed on it, you will find the FLEXnet license manager daemon (lmgrd) in the \$HPEESOF_DIR/licenses/bin directory. If the SERVER machine does not have EMPro installed, you can copy the \$HPEESOF_DIR/licenses directory from the machine that has EMPro installed.
3. EMPro installs version 11.6 of FLEXnet. Make sure you use the version 11.6 lmgrd and agilesofd supplied or a newer version of lmgrd. You can determine the version of lmgrd and agilesofd by typing the following commands:

```
cd $HPEESOF_DIR/licenses/bin
./lmgrd -v
cd $HPEESOF_DIR/licenses/vendors
./agilesofd -v
```

To start lmgrd

Change the directory to where lmgrd resides on the SERVER machine and execute lmgrd. For example:

```
cd $HPEESOF_DIR/licenses/bin
./lmgrd -c ../license.lic > ../flex.log
```

The login executing lmgrd must have full permissions to the licenses/bin directory and at least write permissions to the directory specified for flex.log. All error, warning and status messages will be redirected to the flex.log file. After starting lmgrd, wait for about 30 seconds, then look at the contents of flex.log to see if there are any errors that need to be corrected.

To verify that the licenses are available

Make sure that the flex.log file does not contain any errors, then run lmutl as follows:

```
cd $HPEESOF_DIR/licenses/bin
./lmutl lmutat -a -c ../license.lic | more
```

Or, you may launch the Agilent License Information Tool to do this. Refer to Using the Agilent License Information Tool for more information. If the licenses are available, you should see a listing similar to the following:

```
lmutl - Copyright \(\C\) 1989-2007 Agilent Software Inc. All Rights Reserved.
Flexible License Manager status on Mon 9/22/2007 12:42
License server status: 27000@joshua
License files on joshua: empro2010/licenses/bin/./license.lic:
  joshua: license server UP \(\MASTER\) v10.1
Vendor daemon status \(\on joshua\):
agilesofd: UP v10.1
Feature usage info:
Users of empro_core: \(\Total of 3 licenses available\)
Users of ads_layout: \(\Total of 3 licenses available\)
Users of trans_age: \(\Total of 3 licenses available\)
Users of trans_dgsii: \(\Total of 3 licenses available\)
Users of trans_iff: \(\Total of 3 licenses available\)
Users of ads_lite: \(\Total of 3 licenses available\)
Users of ads_datadisplay: \(\Total of 3 licenses available\)
Users of sim_linear: \(\Total of 3 licenses available\)
Users of sim_harmonic: \(\Total of 3 licenses available\)

```

Automating FLEXnet License Manager Startup

You can automate the FLEXnet startup so that lmgrd is started automatically each time the license server machine is rebooted by adding the following three lines for a startup routine to the appropriate rc file for your operating system:

```
/empro/licenses/bin/lmgrd -c /empro/licenses/license.lic > /empro/licenses/flex.log &
echo "Starting Agilent EEsof FLEXnet license daemon....."
/usr/bin/sleep 5
```

Note
Be sure to change all references to EMPro to the actual path of your Agilent EEsof software installation directory.

Following are instructions for the supported operating systems:

1. Change to the appropriate directory:
/etc/rc.d/init.d (Linux)
/etc/rc3.d (Solaris)
2. Create a file in this directory named Sagileesofd.

Note
The S is capitalized. All other letters are in lower-case.

3. Place the FLEXnet startup routine (shown above) into this file.
4. Set the permissions for this file as follows:
chmod 755 Sagileesofd
chown root Sagileesofd
chgrp sys Sagileesofd
5. For Linux license servers, create the following soft links:
ln -s /etc/rc.d/init.d/Sagileesofd rc3.d/S99Sagileesofd
ln -s /etc/rc.d/init.d/Sagileesofd rc4.d/S99Sagileesofd
ln -s /etc/rc.d/init.d/Sagileesofd rc5.d/S99Sagileesofd

[Back to Licensing Flowchart](#)

Node Locked Counted License Setup

For Node Locked license setup, follow the same steps as in [Floating License](#) setup.

Note
In SERVER line of your EMPro license file replace the Host name of SERVER with your local machine Host name. For example, in "SERVER:joshua 2072EFE45" statement replace the server name "joshua" with your local machine host name.

[Back to Licensing Flowchart](#)

Configure User Account

To start the EMPro, you must configure the user accounts as follows:

C Shell

Add the following at the end of \$HOME/.cshrc:

```
setenv HPEESOF_DIR
set path = ( . $HPEESOF_DIR/bin $path )
```

Bourne or Korn Shell

Add the following at the end of \$HOME/.profile:

```
HPEESOF_DIR=
PATH+=:$HPEESOF_DIR/bin:$PATH
```

Note
If you are running Common Desktop Environment (CDE) or HP VUE, your user account may be using \$HOME/.dtprofile or \$HOME/.vueprofile respectively to set up your user account instead of .cshrc or .profile. The .dtprofile and .vueprofile files contain a line that can be uncommented to activate the use of .cshrc or .profile. Please see your system administrator or CDE or VUE documentation for details.

Once the user accounts are configured, each user should log in and verify that the new environment variables are set. Type the env command and check that HPEESOF_DIR and AGILEESOFD_LICENSE_FILE are set and that PATH contains a path to the EMPro bin subdirectory.

If you installed EMPro as root, the ownership of directories and files will be set to user id 1313 and group id 22. To change this, enter:

```
cd $HPEESOF_DIR
chown -R root *
chgrp -R sys *
```

Provide Access to Licenses

Before starting the EMPro, you must configure each user's login environment to allow access to the licenses. To do this you must also configure the environment variable named AGILEESOFD_LICENSE_FILE in the user's .profile or .cshrc.

Note
The AGILEESOFD_LICENSE_FILE environment variable will override any LM_LICENSE_FILE settings you might have set up. If AGILEESOFD_LICENSE_FILE is not set, LM_LICENSE_FILE will be used.

Following are the two options to access the licenses:

1. Option 1:

C Shell

```
setenv AGILEESOFD_LICENSE_FILE $HPEESOF_DIR/licenses/license.lic
```

Bourne/Korn Shell

```
AGILEESOFD_LICENSE_FILE=$HPEESOF_DIR/licenses/license.lic
export AGILEESOFD_LICENSE_FILE
```

2. Option 2: You can avoid the need to have a copy of the license.lic file directly on the machine running EMPro by setting AGILEESOFD_LICENSE_FILE as follows:

```
AGILEESOFD_LICENSE_FILE=<port>@<SERVER_hostname>
```

where

- port is the TCP port number from the SERVER line(s) of the license.lic file.
- SERVER_hostname is the network name of a SERVER machine serving EMPro licenses. This must be a name that the SERVER is known by on the network. You should be able to successfully ping this name from the machine that will run EMPro.

Or, if your license server is set up to search for an available port, your

```
AGILEESOFD_LICENSE_FILE should be as follows:
AGILEESOFD_LICENSE_FILE=@<SERVER_hostname>
```

For example,

C Shell

```
setenv AGILEESOFD_LICENSE_FILE 27000@joshua OR setenv
AGILEESOFD_LICENSE_FILE @joshua
```

Bourne/Korn Shell

```
AGILEESOFD_LICENSE_FILE=27000@joshua
export AGILEESOFD_LICENSE_FILE
OR
AGILEESOFD_LICENSE_FILE=@joshua
export AGILEESOFD_LICENSE_FILE
```

Accessing Multiple License Server

The syntax to access multiple license servers is as follows:

C Shell

```
setenv AGILEESOFD_LICENSE_FILE 27000@server1:27000@server2:27000@server3
```

Bourne/Korn Shell

```
export AGILEESOFD_LICENSE_FILE=27000@server1:27000@server2:27000@server3
```

However, in this case, "server" should be replaced by the actual license server name or IP address, and the "27000" may need to be changed to the actual port number on the license server. Note that the list of servers is separated by a colon (:).

The following two sections are applicable only for accessing the floating license:

1. Accessing Licenses through a Firewall
2. Using a Linux-to-PC Floating License

Accessing Licenses through a Firewall

There may be situations where it is necessary to check out FLEXnet licenses through a firewall (or router). This may occur when a license server is behind a company firewall and other sites or companies need to check out licenses.

Assuming your license agreement allows you to serve licenses in this manner, you can enable license checkout through a firewall by configuring your firewall to allow TCP communication through the TCP ports used by the license manager daemon (lmgrd) and any vendor daemons you will run. For example, assume you have a license server serving EESof EDA licenses and your license.lic file contains the following lines:

```
SERVER myservr 00809ACT123F8
VENDOR agileesof /apps/flexnet/vendors/agileesof
VENDOR agileesof /apps/flexnet/vendors/agileesof
DAEMON hpeesof /apps/flexnet/vendors/hpeesof
```

To set up your firewall to allow TCP access to the license server, you must specify a TCP port number for lmgrd on the SERVER line and for each vendor daemon on the VENDOR or DAEMON lines. For example:

```
SERVER myservr 00809ACT123F8 27005
VENDOR agileesof /apps/flexnet/vendors/agileesof port=1705
VENDOR agileesof /apps/flexnet/vendors/agileesof port=1706
DAEMON hpeesof /apps/flexnet/vendors/hpeesof port=1707
```

Note
After specifying TCP ports in your license.lic file, you must stop and restart your license server.

Next, configure your firewall or router to allow TCP communication through the TCP ports you specified in your license.lic file. In the example above this would be ports 27005, 1705, 1706, and 1707.

Finally, clients must set the AGILEESOFD_LICENSE_FILE environment variable to the port number assigned to the license server. Using the example above, the setting would be:

```
AGILEESOFD_LICENSE_FILE=27005@myservr
```

Once this has been done, clients outside of the firewall will be able to access licenses from your server.

Note
Some clients may timeout before they can connect to a license server through a firewall set up on a Windows PC. The default timeout period is 0.1 second. If you need a longer timeout period, you can set the environment variable FLEXLM_TIMEOUT to a new value. Enter the value using microseconds. Agilent EESof recommends trying one second. For example:
FLEXLM_TIMEOUT=1000000
Depending on your network, you may need to adjust the period so it is long enough to allow connections without slowing down simulations excessively.

Using a Linux-to-PC Floating License

A Windows PC system can access the Linux license server's license.lic file in either of two ways:

1. By copying the license.lic file from the Linux license server to the Windows PC's \$HPEESOF_DIR/licenses folder
2. By setting the AGILEESOFD_LICENSE_FILE variable on the Windows PC to point to the Linux license server as follows:

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```
set AGILEESOFD_LICENSE_FILE=<port>@<host>
```

For example:

```
set AGILEESOFD_LICENSE_FILE=27000@joshua
where
```

- 27000 is the port number on the SERVER line in the license.lic file on the Linux license server
 - joshua is the hostname of the Linux license server
- Conversely, the license server can be a Windows PC with a floating license locked to a LAN card or dongle hardware key and the Linux computer can be set to point to it in the same way by using its host name or IP address.

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Search for "empro_core" in License File

empro_core is an incremental codeword that enables you to launch EMPro.

Open the license file (license.lic) in text editor and search for "empro_core" string in the license file. If empro_core is found EMPro can be directly launched without any further setup (such as license preference etc.).

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First Time EMPro Installation

If you have installed EMPro for the first time on this machine then you can directly launch EMPro otherwise you need to select the EMPro License Bundle or Set ELSM ON before launching the EMPro.

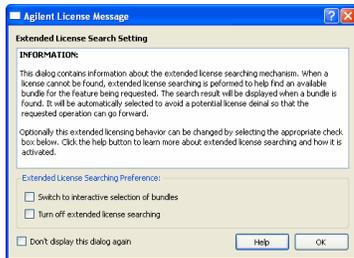
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ELSM / LPT

Set ELSM ON (ELSM Settings)

To Set ELSM ON, you can invoke the EMPro License Preference Tool in following two different ways:

1. When starting EMPro, enter aEMPro -p in your Linux terminal window to run the License Preference Tool.
 2. To run the tool as a standalone utility, enter \$HPEESOF_DIR/bin/aglmpref in your Linux terminal window to start only the License Preference Tool.
- Once License Preference Tool is opened, select **Extended License Search Settings** from the **Options** menu of License Preference Tool. Uncheck the "Turn off extended license searching" and click OK as shown in the following figure:



After above changes you are ready to launch the EMPro.

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Choose License Bundle

Before choosing the EMPro license bundle please ensure that Environment Variables setting is already done.

This step is necessary only if you are using license bundles. Bundles are an improvement over packages by giving you more control over which license bundles are used during an EMPro session. You must select a bundle when starting EMPro to ensure a license bundle is being used. The Agilent License Preference Tool is available to help you make a selection. To learn how to select bundles using the preference tool

To select the EMPro license bundle, invoke the EMPro License Preference Tool using following

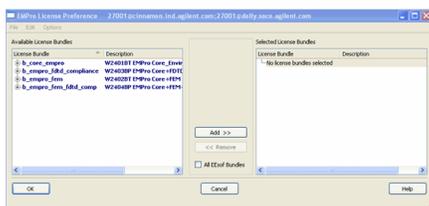
There are two ways to start the License Preference Tool. In a terminal window:

1. When starting EMPro, enter EMPro -p. This runs the License Preference Tool
2. To run the tool as a standalone utility, enter \$HPEESOF_DIR/bin/aglmpref. This runs only the License Preference Tool.

Once License Preference window appears similar to the figures below. It enables you to view the available bundles and their features, and select bundles.

1. To see the features available in a bundle, click the expansion icon next to the bundle name under Available License Bundles.
2. To select a bundle, choose one of the bundles listed under Available License Bundles, then click Add. The selected bundle appears under Selected License Bundles.
3. To accept your choice, click OK. This sets the environment variable AGILEESOFD_LIC_PREF=<hostname> in \$HOME/hpeesof/config/hpeesof.cfg.

Note
You must have write permissions to update this file.



Bundle-Selection Rules

The License Preference Tool controls bundle selection using the following rules. A warning message appears for any incorrect selection.

If you are using Limited Term Package Bundles

1. LTP bundles (except ltp_design_guides) contain a design environment license (empro_core) enabling EMPro to run. You must select an LTP bundle containing a

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- design environment license for a license preference to occur.
- Only one LTP bundle containing a design environment license can be selected at a time.
- The `ltp_design_guides` bundle (if available) can be selected with any other LTP bundle except `ltp_iccap`.
- Any PL bundles available on your system cannot be selected with an LTP bundle.
- If EMPro and RF Design Environment are installed on the same Linux system, RFDE bundles cannot be selected with LTP bundles.

If you are using Pay-Per-Use License Bundles

- The `pl_desenv` and `pl_ui` bundles contain a design environment license (`empro_core`) enabling EMPro to run. You must select either `pl_desenv` or `pl_ui` for a license preference to take place. Other PL bundles appearing under `pl_desenv` are not selectable.
- Any LTP bundles available on your system cannot be selected with PL bundles.
- After selecting a PL bundle, you cannot select any additional bundles except for the following conditions:
 - The `pl_design_guides` bundle (if available) can be selected with the PL bundle.
 - If EMPro and RF Design Environment are installed on the same Linux system, only the `pl_rfde` bundle (if available) can be selected for RFDE.

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Launch EMPro

Environment variables must be set before you can run EMPro. To set the environment variables, see [Configuring User Accounts](#).

Your FLEXnet license file must be properly configured and installed before you can run EMPro. To set up your license file, follow the instructions in *Linux License Setup* (license).

To run EMPro, open a terminal window and enter the command:

```
empro
```

Choose **Help > Topics and Index > Quick Start** for help on getting started with EMPro.

Starting EMPro in Verbose Mode (Debug Mode)

EMPro 2010 can be started in verbose (debug) mode to display more information about what is occurring as EMPro runs. This extra information can be very useful to debug a problem with EMPro both at startup and in general operation. In verbose mode, EMPro writes log files that can be used by Agilent EEsof EDA Technical Support to help track down any problems.

To run EMPro 2010 in verbose mode on Windows, navigate to the `<EMPro_installation_location>/bin/Win32` (for 32 bit platform) or `Win64` (for 64 bit platform) and run the command

Windows: `emprfstd70.exe -v <"project.xml" location>`

To run EMPro 2010 in verbose mode on Linux, navigate to the `<EMPro_installation_location>/bin/Linux32` (for 32 bit platform) or `Linux64` (for 64 bit platform) and run the command

Mac OS X/Linux: `emprfstd70.exe -v <"project.xml" location>`

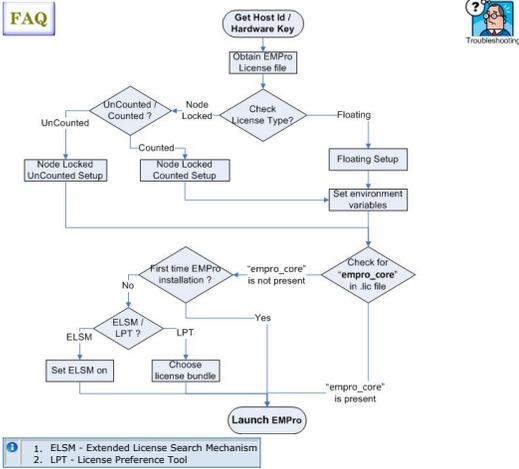
If you can't locate the trouble based on the contents of the log files, please contact Agilent EEsof EDA Technical Support. You will want to e-mail the log files to the support engineer working with you.

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EMPro License Setup for Windows

Click the respective box in the flowchart below for further details on the selected topic.

EMPro License Setup Flowchart



Get Host Id / Hardware Key

- If you have already installed EMPro you can obtain the Host Id (Ethernet Address / License Id) from `license_info.html` which is saved in the EMPro installation directory, for example, `c:\EMPro installation folder\`. There can be more than one Host IDs listed in the file.

Note
Agilent recommends the usage of Host Id present highlighted in green color.

- If EMPro is not installed, you can obtain the Host Id (Ethernet Address / License Id) as follows:
 - Select **Start > Run** and enter the following command `cmd /k ipconfig /all`.
 - Host Id is the Physical Address displayed on your machine of the LAN adapter.
For example:
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix your_network.com
Description Broadcom NetXtreme Gigabit Ethernet
Physical Address **00-08-05-E1-A8-DF**

Notes

- The 12-digit Host Id / Physical Address should be used without dashes, for example, **000805E1A8DF**.
- This example applies to LAN card users. Wireless Network Card users should locate their network card in the text file and use that Physical Address.

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Obtain EMPro License File

You can place the EMPro license request for:

- New Sale License Request
- New Release License Request
- Renew Expired License Early Access
- License Request Change / Transfer
- Evaluation License / Token Redemption / Renewal Request

[Click here](#) to order EMPro evaluation / trial version

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Check License Types

EMPro supports the following license types:

- Floating:** This license type is used for accessing EMPro from the remote machines. EMPro floating license always requires license daemon. For example:

```

SERVER hostname 00065B86E810 27000
VENDOR agileesofd
INCREMENT b_empro_fem_ftdd_comp agileesofd 2.8 19-apr-2011 60 \
VENDOR_STRING="00065B86E810P=#128,138,141,142,157,312,314,315D=#W2404BP,EMPro_Core+FEM+FDTD+Compliance_Module;e_core_empro,e_sim_ftdd,e_sim_empro_compliance,e_sim_fem \
\
: VRFWQGK CUE2QGA UHFLXQZ ACBECHL 1WZY2BH IWHYQGU ORXY1OE \
NRXY1G1 KWTYFGC OWHYQ" START=20-oct-2009 SIGN="00EB 5E1D B024 \
FE60 886A 8A13 6020 CE87 38D6 57AF 4400 94B0 5D55 4C07 ECFE \
C47A D584 7AE0 FB91 B02B 67E8"
INCREMENT e_sim_ftdd_gt agileesofd 2.8 19-apr-2011 60 \
VENDOR_STRING="00065B86E810P=#318D=#W2408ET,EMPro_FDTD_GT;e_sim_ftdd_gt \
\
: NE2QGAU HFLYQRB 1MPC1ET WZGXJEL DCYPBHA 1UCMGIV ZZUMRFW \
QGKCU" START=20-oct-2009 SIGN="0032 DD1A 6F4E 0B3D 273A 8948 \
6600 9A63 6335 1170 9301 73D0 57C2 4E03 05AF 0227 9BA6 93D4 \
6823 D2CA 234F"
INCREMENT pj_c_b_empro_fem_ftdd_comp agileesofd 2.8 19-apr-2011 60 \
VENDOR_STRING="00065B86E810 : JAUHFLY NA1HSMR NAH1UMJ PEYRX12 \
BHIWHYQ GUORXY1 OENRXY1 GIKWYTF GCOWHYQ RFWQKCC UE2QG" \
START=20-oct-2009 SIGN="0382 380C F4E7 DC0F 3154 9BAD A308 \
0CF4 A5F7 0317 4900 B2DE 1E47 860D 0134 81A8 CCDA 1E0A B4A1 \
776B 6061"
INCREMENT pj_c_e_sim_ftdd_gt agileesofd 2.8 19-apr-2011 60 \
VENDOR_STRING="00065B86E810 : NAKUOWS GSXVJHC FIGDYNL GSHFUWX \
JMVZU2J OENRXY1 GIKWYTF GAKHVUW SQ" START=20-oct-2009 \
SIGN="00C2 DDAC 8F4F 9AE7 DA4C 8D47 127A CA5A 15EF 6E76 5F00 \
6B13 9FA2 8FC9 F383 83B4 03BB B279 FC32 F27D E339"
  
```

- Node Locked UnCounted:** This license type is also used for accessing EMPro on current machines. It is supported only on Windows. The uncounted license allows unlimited number of simulations on the current machine. For example:

```

INCREMENT b_empro_fem_ftdd_comp agileesofd 2.8 03-aug-2010 uncounted \
VENDOR_STRING="001B9EC55DD9P=#128,138,141,142,157,312,313,314,315,318D=#W2404BT,W2408ET,EMPro_Core+FEM+FDTD+Compliance_Module+EMPro_FDTD_GT;e_core_empro,e_sim_ftdd,e_sim_empro_compliance,e_sim_fem,e_sim_ftdd_gt \
\
: UWWTQJK REWQGAU HWLXVDG 1USCYLM WDY2BHI WHYQGUO RXY1OEN \
RXY1G1K WYTFGCO WHYQR" HOSTID=001b9ec55dd9 START=14-jul-2010 \
SIGN="0115 FAA7 30B5 23F8 3C6F E952 4392 3FBD 83A7 F176 DC01 \
6E98 30C8 1C5D 3501 CF1B 861C 915B 7D22 AC34 2F12"
  
```

```
INCREMENT pjc_b_empro_fem_ftdd_comp agilesofd 2.8 03-aug-2010 \
uncounted VENDOR_STRING="001B9EC55DD9 : FSHYCDH LMJFEDW \
NYQ2NAU PBCFZDE ULCUEQK PBC1MAJ PBC12EG UCKXEYK ULUCUPSP \
OKONPAS OKEYF" HOSTID="001b9ec55dd9 START=14-jul-2010 \
SIGN="02BF D1D7 C568 7662 73E7 9439 C6C9 F29D 0361 12AC 0100 \
9207 2096 E571 96FB 5A80 E077 8081 F402 E23D DEBF"
```

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License File Setup

The `license.lic` file that implements FLEXnet security must be obtained from Agilent Business Support to run EMPro. For any licensing setup, EMPro must be installed on your machine / server.

Floating License Setup

If your licenses will be served by a central server, use the following sections to install your EMPro floating licenses.

Installing the License File

The `license.lic` file that implements FLEXnet security must be installed to run EMPro. The default install path is: `<installation folder>\licenses` (for example, `C:\EMPro installation folder\licenses`). Copy the `license.lic` file to the `<installation folder>\licenses` folder.

If your licenses will be served by a central server, have your system administrator install the `license.lic` file on the license server machine.

Notes

1. Be sure to use the following information to update all existing license servers with the latest version of the FLEXnet software (e.g., `lmgrd` and `lmutil`). The software is installed with EMPro 2010. Using older versions may cause license-encryption errors, invalid `hostid` results, and unsupported feature errors.
2. You will need to stop, then restart the license server to make these updates.

Entering the Hostname

Change the default hostname setting in your license file to the actual hostname of your license server. The license server is the machine that will serve the licenses on the network, and whose Ethernet address or FLEXID hardware key number, appears on the SERVER line.

For example, assuming that a machine with FLEXID hardware key number 8-5E700059B957 has a hostname of `joshua`. The SERVER line should read:

```
SERVER joshua FLEXID=8-5E700059B957
```

You can also specify a specific TCP port number for license requests as follows:

```
SERVER <hostname> <hostid> <tcp_port>
```

For example:

```
SERVER joshua FLEXID=8-5E700059B957 27000
```

To run EMPro and check out a license from this license server, you will need to set your `AGILEESOFD_LICENSE_FILE` setting (recommended) or `LM_LICENSE_FILE` setting as follows:

```
AGILEESOFD_LICENSE_FILE=27000@joshua
OR
LM_LICENSE_FILE=27000@joshua
```

The `AGILEESOFD_LICENSE_FILE` environment variable overrides any `LM_LICENSE_FILE` settings you might have set up. The `LM_LICENSE_FILE` variable is used only when the `AGILEESOFD_LICENSE_FILE` is not set. As a result, using the `AGILEESOFD_LICENSE_FILE` variable will isolate your EMPro license configurations from other applications that use the `LM_LICENSE_FILE` variable.

If you do not specify a TCP port number on the SERVER line, the license server will use the first available TCP port number in the range 27000 to 27009. In this case you will need to set the `LM_LICENSE_FILE` or `AGILEESOFD_LICENSE_FILE` as follows.

```
LM_LICENSE_FILE=@joshua
AGILEESOFD_LICENSE_FILE=@joshua
```

Note

Enter a specific port address on the SERVER line for improved license check-out performance. You may enter a port address outside the range of 27000 to 27009, as long as the address is not used elsewhere. Then set the environment variable `AGILEESOFD_LICENSE_FILE` or `LM_LICENSE_FILE`.

Setting the Vendor Daemon Path

By default, no path is specified for the `agilesofd` vendor daemon executable. This is acceptable as long as `lmgrd` and `agilesofd` are in the same folder when you start FLEXnet.

In the typical license configuration, `lmgrd` and `agilesofd` are both located in the `<EMPro installation folder>\licenses\bin` folder. When `lmgrd` is started from the `<EMPro installation folder>\licenses\bin` folder, it looks for `agilesofd` in the same folder. If `agilesofd` is not in the same folder as `lmgrd`, you must specify a path to it using the following syntax

```
VENDOR agilesofd c:\EMPro installation
folder\licenses\vendors\agilesofd
```

Connecting to a License Server through a Firewall

If client systems connect to a license server through an Internet firewall set up on a Windows PC, you must also specify the port number the vendor daemon uses. You can specify the port number on the license file's VENDOR line. If the port is not specified, the default is chosen by the operating system at run time. If this port number is specified, there may be a delay restarting the vendor daemon until all clients have closed their connections to the daemon. Here is an example of a properly configured VENDOR line including the daemon path and port number:

```
VENDOR agilesofd c:\EMPro installation
folder\licenses\vendors\agilesofd 1705
```

Some clients may timeout before they can connect to a license server through a firewall. The default timeout period is 0.1 second. If you need a longer timeout period, you can set the environment variable `FLEXLM_TIMEOUT` to a new value. Enter the value using microseconds. Agilent EEs of recommends trying one second. For example:

```
FLEXLM_TIMEOUT=1000000
```

Depending on your network, you may need to adjust the period so it is long enough to allow connections without slowing down simulations excessively.

Starting FLEXnet

FLEXnet can be started either manually or automatically. You must start the FLEXnet license manager daemon (`lmgrd`) on the license server(s) first. Once the license server(s) is running `lmgrd` and has started the vendor daemon(s), you can configure the other machines (clients) and user login accounts that need to access EMPro.

To start FLEXnet you need the following.

- FLEXnet software installed in the `<installation_location>\licenses` folder. This is done when you install EMPro.
- The license server machine connected to the network using the TCP/IP network protocol.

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- A local copy of the *license.lic* file that contains the FLEXnet licenses. Every machine that will run EMPro must be able to access the *license.lic* file used by the license server(s) to check out a license. Access to the *license.lic* file can be via a local copy of the *license.lic* file or through a network drive.
- Properly configured SERVER and VENDOR lines in your *license.lic* file.

If you have a three-server redundant configuration, you must start FLEXnet on all three servers before the licenses will be available on the network. Once you have FLEXnet running, you can configure the other machines (clients) and user login accounts that need to access EMPro by setting the LM_LICENSE_FILE or AGILEESOFD_LICENSE_FILE.

Starting FLEXnet Manually

While starting FLEXnet manually is a good way to verify that FLEXnet starts correctly, it is generally not recommended for a server machine, because it requires a dedicated MS-DOS Command Prompt to be open at all times and it requires re-starting after rebooting the license server. Use the following steps to start the FLEXnet executable file, *lmgrd.exe*:

1. From a MS-DOS Command Prompt, change to `<installation_directory>\licenses\bin`, where `<installation_directory>` is the folder where you installed EMPro.
2. Type the following command specifying the full path and location of the license file.

```
lmgrd -app -c <installation_directory>\licenses\license.lic -l <inst_dir>\licenses\flex.log
```

To shut down the license manager, enter the following at a command prompt, from the `<installation_directory>\licenses\bin` folder:

```
lmutil lmdown -c <installation_directory>\licenses\license.lic
```

Starting FLEXnet Automatically

Ideally you should configure FLEXnet to start up automatically each time your system is booted by installing the license manager as a Control Panel service.

To start the license manager automatically:

1. From a MS-DOS Command Prompt, change to `<installation_directory>\licenses\bin`, where `<installation_directory>` is the folder where you installed EMPro.
2. Enter the full path and filename of both the license executable file and the *license.lic* file. The default location for the executable file is `installation_directory\licenses\bin\lmgrd.exe`. (The *flex.log* file is useful for troubleshooting.)

```
installs -e <path to lmgrd> -c <path to license file> -l <path to flex.log>
```

For example:

```
installs -e d:\<product-name> installation folder\licenses\bin\lmgrd.exe -c d:\<product-name> installation folder\licenses\license.lic -l d:\<product-name> installation folder\licenses\flex.log
```

If you don't specify a *flex.log* file using the `-l` option when you run *installs.exe*, FLEXnet creates a default log file in the `system32` folder. While this default log file does not contain as much information, it can still be useful. This file is typically located in `c:\winnt\system32\` and is named `lmgrd.log` or `lmgrd.xxxx` where `xxxx` is the process ID number of *lmgrd*.

3. Activate the license server by starting the FLEXnet service using the Control Panel or by rebooting the system:

Start > Control Panel (in classic view) > **Administrative Tools > Services**

To remove the license manager from the service list and cancel the automatic FLEXnet startup:

From a system prompt, change to the license folder and enter: `installs -r`

To change the path to your license file, first remove the existing FLEXnet service using the `installs -r` command, reinstall FLEXnet using the new location, and then reboot your system.

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Node Locked Un-Counted License Setup

Installing the License File

The *license.lic* file with the node-locked licenses must be installed on each local machine. The default install path is: `<installation folder>\licenses` (for example, `C:\EMPro installation folder\licenses`). Copy the *license.lic* file that you received via e-mail to the `<installation folder>\licenses` folder.

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Node Locked Counted License Setup

The default install path of EMPro license is: `<installation folder>\licenses` for example, `C:\EMPro installation folder\licenses`). Copy the *license.lic* file that you received to the `<installation folder>\licenses` folder.

Follow the steps instructions of the [Floating License](#) setup.

Node Locked Counted example for MAC Address

```
SERVER hostname 002564B4DEB8
VENDOR agileesofd
INCREMENT b_empro_fem_ftdd_comp agileesofd 2.8 25-jul-2010 1 \
VENDOR_STRING="002564B4DEB8=#128,138,141,142,157,312,313,314,315,318D=#W2404BT_W2408ET,EMPro_Core+FEM+FDTD+Compliance_Module+EMPro_FDTD_GT;e_core_empro,e_sim_ftdd,e_sim_empro_compliance,e_sim_fem,e_sim_ftdd_gt \
\
: GCOVQNL FCBWCF2 PEZRXC TEOWKMX JE1EULX JE1WYIC KZDWSMC \
TEOHXW SLJD2FT AQ" HOSTID=002564b4deb8 START=25-may-2010 \
SIGN="0105 522E 3B39 C737 E985 1B11 72B1 CB38 31D5 BD7F 2103 \
C14A 286D 24D9 C2C8 0FC0 111D A8A1 A276 2E5A 4E30"
INCREMENT b_empro_fem_ftdd_comp agileesofd 2.8 25-jul-2010 1 \
VENDOR_STRING="002564B4DEB8=#128,138,141,142,157,312,313,314,315,318D=#W2404BT_W2408ET,EMPro_Core+FEM+FDTD+Compliance_Module+EMPro_FDTD_GT;e_core_empro,e_sim_ftdd,e_sim_empro_compliance,e_sim_fem,e_sim_ftdd_gt \
\
: SKJP2LD LSOIWBO FZ1LCEB FGWHSB2 CFZDEUL CUEQKPB C1MAJPB \
C12EGUC XJYEKUL CUPCVO" START=25-may-2010 SIGN="0301 F511 DDCE \
BFC3 C26F BF56 1934 8A06 8761 920C 6F00 4AE5 26CA BAEF C1AC \
8DA1 A0A2 2778 7388 B6BD 8010"
INCREMENT pj_c_b_empro_fem_ftdd_comp agileesofd 2.8 25-jul-2010 1 \
VENDOR_STRING="002564B4DEB8 : LSOIWBO FZARVSW DTLMDTY QZNAUPB \
RXY2BHI WHYQGUO RXY1OEN RXY1G1K WYTFGCO WHYQRGZ QGFLN" \
HOSTID=002564b4deb8 START=25-may-2010 SIGN="006D 2D7D 7995 \
DDEE CF60 3A1A 9EDD B274 3158 C536 A502 F412 1868 425C FBD9 \
E77A F656 E556 75BD B3BD CB22"
INCREMENT pj_c_b_empro_fem_ftdd_comp agileesofd 2.8 25-jul-2010 1 \
VENDOR_STRING="002564B4DEB8 : LSOIWBO FZARVSW DTLMDTY QZNAUPB \
CFZDEUL CUEQKPB C1MAJPB C12EGUC XJYEKUL CUPCVOK JP2LDL" \
START=25-may-2010 SIGN="0035 B2F5 F7C7 5C22 F206 0F2D AB5B \
463C 5358 DA91 ED03 7569 2D21 6C86 4894 561F B3F8 0538 7B2C \
E375 0369"
```

Node Locked Counted for USB Hardware Key

```
SERVER hostname FLEXID=9-4B2EB759
VENDOR agileesofd
INCREMENT b_empro_fem_ftdd_comp agileesofd 2.8 25-jul-2010 1 \
VENDOR_STRING="9-4B2EB759=#128,138,141,142,157,312,313,314,315,318D=#W2404BT_W2408ET,EMPro_Core+FEM+FDTD+Compliance_Module+EMPro_FDTD_GT;e_core_empro,e_sim_ftdd,e_sim_empro_compliance,e_sim_fem,e_sim_ftdd_gt \
\
: GCOVQNL FCBWCF2 PEZRXC TEOWKMX JE1EULX JE1WYIC KZDWSMC \
```

```
TEOHWWX SLJDZFT AQ" START=25-may-2010 SIGN="02DB 455E 6569 \
2612 3CEC BA62 12D1 4D10 4F30 5532 3F02 00EE A4ED 2A0D 4E6D \
DE6E 9104 FC9F 008F 99BB 4E58"
INCREMENT pjc_b empro_fem_ftdt_comp agileesofd 2.8 25-jul-2010 1 \
VENDOR_STRING="9-4B2EB759 : HBOFZ1L CEWDFTEF DIVQ2NA UPBCFZD \
EULCUEQ KPBC1MA JPBC1ZE GUCXJEY KULCUPC VOKJ2L DLSOIW" \
START=25-may-2010 SIGN="005F D1D1 393F 2863 0F1D EE39 2D73 \
A634 C07B D743 9C02 0F44 A29F 7793 C2F3 88A6 2160 DA6D F0B7 \
1C9F 2534"
```

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Setting Environment Variables

The Agilent License Information Tool is available to check your environment variable settings, display your *license.lic* file, and show your license and server status. If you use the default license file location, your environment variables are set automatically. To use the *license.lic* file from a different location, you need to set the `AGILEESOFD_LICENSE_FILE` environment variable to point to the location.

You can set the environment variables for:

1. **Node Locked UnCounted:** There are no changes required in environment variables if license file is present in the default folder, i.e., <EMPro Installation Folder>\licenses folder. If license file is located in some other folder then change the license path settings using Agilent License Path window by selecting **License Path Settings** from the **Options** menu of License Preference Tool (Start > Programs > EMpro > EMPro 2010 > EMpro Tools > License Preference Tool).



Another option to change license settings is to set the environment variables in Windows is, select **Start > Settings > Control Panel > System > Advanced > Environment Variables** then add a new variable named `AGILEESOFD_LICENSE_FILE` that points to the full path to the *license.lic* file to access license.

2. **Node Locked Counted:** Your environment variable can be entered either as a user variable or as a system variable. The user variable affects only the currently logged-in user; the system variable affects all users. For a node-locked license, be sure you add the `AGILEESOFD_LICENSE_FILE` variable to the *System variables*, not the *User variables*. If you are running multiple versions of EMPro, do not include the `HPPEESOF_DIR` variable in the *System variables* or *User variables* list boxes (and remove them have you have them). You need to configure the local machine to access the license by using one of two methods:
 - Place a copy of the license.lic file in the <installation_directory>\licenses folder.
 - Configure the `LM_LICENSE_FILE` or `AGILEESOFD_LICENSE_FILE` to point to the license file.
 Typically, it is best to use the `port@localmachine` syntax to set the `AGILEESOFD_LICENSE_FILE` to point to the license.

```
set AGILEESOFD_LICENSE_FILE=27000@joshua
```

Where 27000 is the TCP port on the SERVER line in the license.lic file and *joshua* is the host name of the local machine.

If your license is set up to search for an available port, use the `@localmachine` syntax to set the `AGILEESOFD_LICENSE_FILE` to point to the license.

```
set AGILEESOFD_LICENSE_FILE=@joshua
```

You can also set the `AGILEESOFD_LICENSE_FILE` to point to the full path and filename of the license.lic file used by the license on the local machine.

Note
The `AGILEESOFD_LICENSE_FILE` environment variable will override any `LM_LICENSE_FILE` settings you might have set up. If `AGILEESOFD_LICENSE_FILE` is not set, `LM_LICENSE_FILE` will be used.

Important
The `AGILEESOFD_LICENSE_FILE` environment variable overrides any `LM_LICENSE_FILE` settings you might have set up. The `LM_LICENSE_FILE` variable is used only when the `AGILEESOFD_LICENSE_FILE` is not set. As a result, using the `AGILEESOFD_LICENSE_FILE` variable will isolate your EMPro license configurations from other applications that use the `LM_LICENSE_FILE` variable.

3. **Floating:**
Your environment variable can be entered either as a user variable or as a system variable. The user variable affects only the currently logged-in user; the system variable affects all users. For a node-locked license, be sure you add the `AGILEESOFD_LICENSE_FILE` variable to the *System variables*, not the *User variables*. If you are running multiple versions of EMPro, do not include the `HPPEESOF_DIR` variable in the *System variables* or *User variables* list boxes (and remove them have you have them).

Important
The `AGILEESOFD_LICENSE_FILE` environment variable overrides any `LM_LICENSE_FILE` settings you might have set up. The `LM_LICENSE_FILE` variable is used only when the `AGILEESOFD_LICENSE_FILE` is not set. As a result, using the `AGILEESOFD_LICENSE_FILE` variable will isolate your EMPro license configurations from other applications that use the `LM_LICENSE_FILE` variable.

You need to configure each client machine to access the license server and to check out a license. You can do this by using one of two methods:

- Place a copy of the license.lic file in the <installation_directory>\licenses folder of each local machine.
 - Configure the `LM_LICENSE_FILE` or `AGILEESOFD_LICENSE_FILE` to point to the license file.
- Typically it is best to use the `port@host` syntax to set the `AGILEESOFD_LICENSE_FILE` to point to the license server.

```
set AGILEESOFD_LICENSE_FILE=27000@joshua
```

Where 27000 is the TCP port on the SERVER line in the license.lic file and *joshua* is the host name of the local machine.

If your license server is set up to search for an available port, use the `@host` syntax to set the `AGILEESOFD_LICENSE_FILE` to point to the license server.

```
set AGILEESOFD_LICENSE_FILE=@joshua
```

You can also set the `AGILEESOFD_LICENSE_FILE` to point to the full path and filename of the license.lic file used by the license server.

Note
The `AGILEESOFD_LICENSE_FILE` environment variable will override any `LM_LICENSE_FILE` settings you might have set up. If `AGILEESOFD_LICENSE_FILE` is not set, `LM_LICENSE_FILE` will be used.

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Search for "empro_core" in License File

{{empro_core}} is an incremental codeword that enables you to launch EMPro design environment.

Open the license file (*license.lic*) in text editor and search for "empro_core" string in the license file. If `empro_core` is found EMPro can be directly launched without any further

setup (such as license preference etc.).

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First Time EMPro Installation

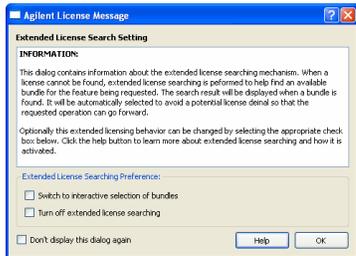
If you have installed EMPro for the first time on this machine then you can directly launch EMPro otherwise you need to select the EMPro License Bundle or Set ELSM ON before launching the EMPro.

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ELSM / LPT

Set ELSM ON (ELSM Settings)

To **Set ELSM ON**, invoke the EMPro License Preference Tool (Start > Program > EMPro > EMPro 2010 > EMPro Tools > License Preference Tool) and select "Extended License Search Settings" from the **Options** menu of License Preference Tool. Uncheck the "Turn off extended license searching" and click OK as shown in the following figure:



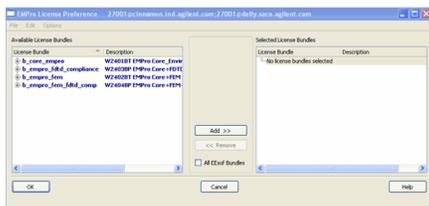
After above changes you are ready to launch the EMPro.

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Choose License Bundle

Before choosing the EMPro license bundle please ensure that Environment Variables setting is already done.

To select the EMPro license bundle, invoke the License Preference Tool (Start > Program > EMPro > EMPro 2010 > EMPro Tools > License Preference Tool)



Bundle-Selection Rules

The License Preference Tool controls bundle selection using the following rules. A warning message appears for any incorrect selection.

If you are using Limited Term Package Bundles

1. LTP bundles (except ltp_design_guides) contain a design environment license (empro_core) enabling EMPro to run. You must select an LTP bundle containing a design environment license for a license preference to occur.
2. Only one LTP bundle containing a design environment license can be selected at a time.
3. The ltp_design_guides bundle (if available) can be selected with any other LTP bundle except ltp_iccap.
4. Any PL bundles available on your system cannot be selected with an LTP bundle.
5. If EMPro and RF Design Environment are installed on the same UNIX or Linux system, RFDE bundles cannot be selected with LTP bundles.

If you are using Pay-Per-Use License Bundles

1. The pl_desenv and pl_ui bundles contain a design environment license (empro_core) enabling EMPro to run. You must select either pl_desenv or pl_ui for a license preference to take place. Other PL bundles appearing under pl_desenv are not selectable.
2. Any LTP bundles available on your system cannot be selected with PL bundles.
3. After selecting a PL bundle, you cannot select any additional bundles except for the following conditions:
The pl_design_guides bundle (if available) can be selected with the PL bundle.
If EMPro and RF Design Environment are installed on the same UNIX or Linux system, only the pl_rfde bundle (if available) can be selected for RFDE.

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Launch EMPro

To launch EMPro, choose one of the following options:

- For 32-bit GUI, choose **Start > All Programs > EMPro > EMPro 2011 > EMPro 2011 (32bit GUI)**.
- For 64-bit GUI, choose **Start > All Programs > EMPro > EMPro 2011 > EMPro 2011 (64bit GUI)**.

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