Eco truxure™

Process Expert
Licensing Guide

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Schneider Electric

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Safety Information

Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER
DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING
WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION
CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

NOTICE
NOTICE is used to address practices not related to physical injury.

Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

About the Book

Document Scope

This document describes how to use Schneider Electric licensing software in the EcoStruxure Process Expert infrastructure and provides general information about available licenses.

> **NOTE:** Read and understand this manual before installing and using this software.

Validity Note

This document is valid for EcoStruxure Process Expert 2021 or later. It supersedes any previous version.

Related Documents

Title of documentation	Reference number
EcoStruxure™ Process Expert - Security Deployment Guide	EIO0000004234 (eng)
Schneider Electric Floating License Manager User Manual	EIO0000001078 (eng)
EcoStruxure™ Process Expert Installation and Configuration Guide	EIO0000001255 (eng)
EcoStruxure™ Process Expert User Guide	EIO0000001114 (eng)

You can download these technical publications at https://www.se.com/myschneider, *Document Downloads* section.

Registration required.

mySchneider Support Portal

Visit https://www.se.com/myschneider for support, software updates, and latest information on EcoStruxure Process Expert.

Registration required.

Product Related Information

The examples in this manual are given for information only.

⚠ **WARNING**
UNINTENDED EQUIPMENT OPERATION
Adapt examples that are given in this manual to the specific functions and requirements of your industrial application before you implement them.
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Using Licenses with EcoStruxure Process Expert

Licensing Mechanisms

Overview

Activating software licenses is required to use the software. When you upgrade the software, you may need to update, page 23 your licenses. The licensing process is independent of the digital certificate installation (see EcoStruxure™ Process Expert, Installation and Configuration Guide).

Licenses are backward compatible; you can use them with earlier versions of the software. Refer to the platform release notes for details.

The licensing mechanism involves using two software applications:

- The **Floating License Manager** (FLM): Allows you to activate licenses on a computer.
- The **License Manager** (LM): Indicates to the EcoStruxure Process Expert system server on which computer the FLM that hosts the required licenses is installed.

Once you receive your license Activation ID from Schneider Electric, activate the license by using the **Floating License Manager**.

The following methods are available to activate a license:

- By Web: Default method when the local computer has an internet connection.
- By Web portal: Alternate method when no Internet connection is available.

For a detailed description of each method, refer to the Schneider Electric **Floating License Manager** help.

Familiarize yourself with the EcoStruxure Process Expert system infrastructure (see EcoStruxure™ Process Expert, Installation and Configuration Guide). This helps you identify the licensing deployment strategy that is adapted to your requirements.

30-Day Trial Period

You can use the software for 30 days for evaluation purposes without activating a software license. The trial period starts the first time you start the system server. During this period, the full functionality is available except for the following:

- The instance count (see EcoStruxure™ Process Expert, User Guide) is limited to 200.
- Usage rights correspond to those of a Mini license, page 12.

Before the trial period expires, you need to order one or more licenses, page 12 and activate, page 23 them to continue using the software features that you need.

After you have activated a license, you must restart the system server.

NOTE:

In case a license for Control Expert XL is already activated on the computer, the Participant services that are provided by Control Expert embedded in EcoStruxure Process Expert during the trial period are impacted as described in the following table.

License type and status	Impact on Participant services
Trial license, which is still valid	Services are available only for the remaining license validity period.
Trial license, which is expired	No Participant services are available during the trial period. A solution consists in installing the FLM or Control Expert on a computer on which no Control Expert trial license has been activated. **NOTE:** Removing Control Expert does not reset the trial license.
Commercial license, which is still valid	Participant services are available without trial period.

The same principle applies also to EcoStruxure Control Expert AssetLink.

NOTE: If you already used up the trial period of an earlier version of the software, no trial period is available anymore when you upgrade the software if both software versions use the same license.

Licensing Configuration Examples

The following example shows the default configuration where the LM and FLM are installed on the same computer. The LM provides license rights to the system server by connecting to the local FLM on which a license is activated.
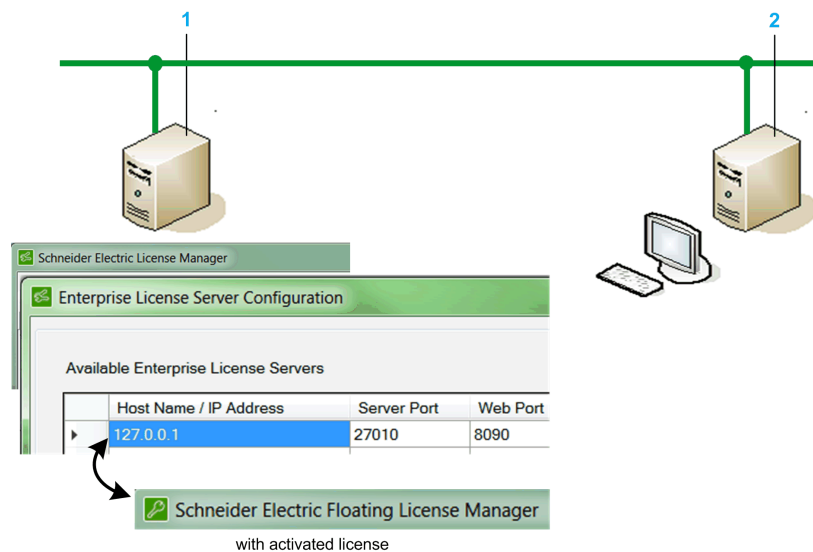
The following example shows a custom configuration where the FLM is installed on another computer. The LM provides license rights to the system server by connecting to the remote FLM on which the necessary license is activated. The FLM is identified by the IP address of the computer on which it is installed.
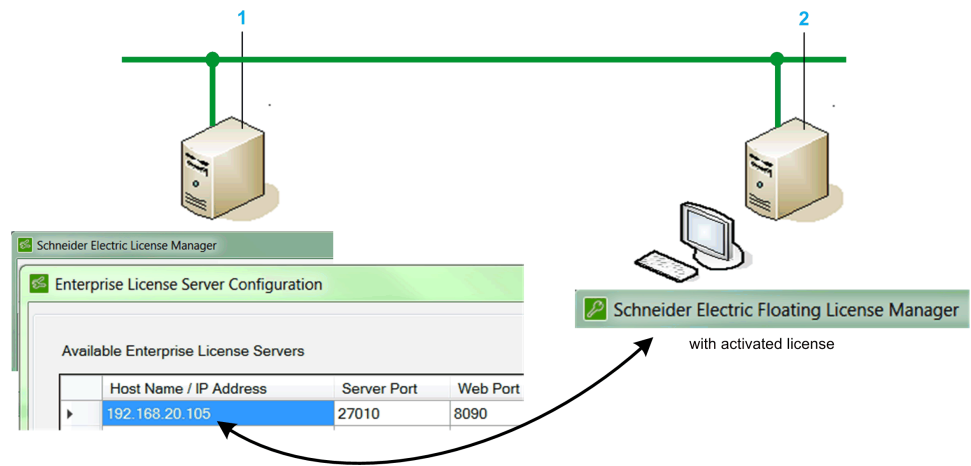
1	Computer running the EcoStruxure Process Expert system server and Control Expert, which require a license for themselves and for connecting clients.
2	Computer connected to the same network as the system server. Clients and/or other software may be installed.

Prerequisites

The following are required to proceed with the activation of licenses:

- The **Floating License Manager** needs to be installed on the computer on which you want to activate your licenses. This computer is referred to as the *Enterprise license server* and can be:
  - The computer on which the system server is installed. Select to install the FLM (see EcoStruxure™ Process Expert, Installation and Configuration Guide) during installation of the system server.
  - Any other computer that can communicate with the computer on which the system server is installed. If you are installing an EcoStruxure Process Expert component on this computer, select to install the FLM during installation. Otherwise, install the FLM separately. Refer to the installation procedure of the FLM (see EcoStruxure™ Process Expert, Installation and Configuration Guide).
- The Activation IDs that you have received by e-mail.

  NOTE: You can activate licenses on more than one computer, page 15.

Recommendations

Choose a license deployment strategy that allows the licensing mechanisms to operate properly. If a license becomes unavailable, you may not be able to use the software anymore and your process may stop.

For a high level of availability and flexibility, Schneider Electric recommends the following:

- Do not activate all your licenses on the same computer. If a single Enterprise license server goes out of service or becomes unreachable, all your licenses become unavailable.

  For example, it is good practice to group licenses for engineering and Supervision and activate them on separate Enterprise license servers. This is a requirement if you are using redundant operation servers with redundant licenses, page 12.

- Verify that the network connections between EcoStruxure Process Expert components, Supervision components, and the Enterprise license servers are working properly and are not interrupted unexpectedly.

- Configure only one Enterprise license server, page 14 in the LM of the system server computer.

- If you use redundant operation servers, verify that you have the necessary licenses to allow a seamless switchover.

NOTE: When you run more than one EcoStruxure Process Expert system infrastructure (for example, two system servers with one or more clients connecting to each server), activate licenses for each system infrastructure on separate Enterprise license servers.

This also applies to application size licenses.

License Acquisition Mechanisms

The various components of the software check the availability of licenses to function in the following way:

- Engineering and operation clients: Access license information directly through their connection to the system server.

- The system server: Accesses licenses that are activated on the Enterprise license server whose IP address is configured in the local **License Manager**. If you have configured several Enterprise license servers, page 15, they are scanned in the order they appear in the **Enterprise License Server Configuration** window of the local **License Manager** until a valid license is found.

  The system server checks license availability for software components at startup and then every 15 min.

- Control Expert: Accesses licenses that are activated on the Enterprise license server whose IP address is configured in the local **License Manager**.

- Supervision clients: Poll operation servers and use the license of the first operation server that responds with a valid license.

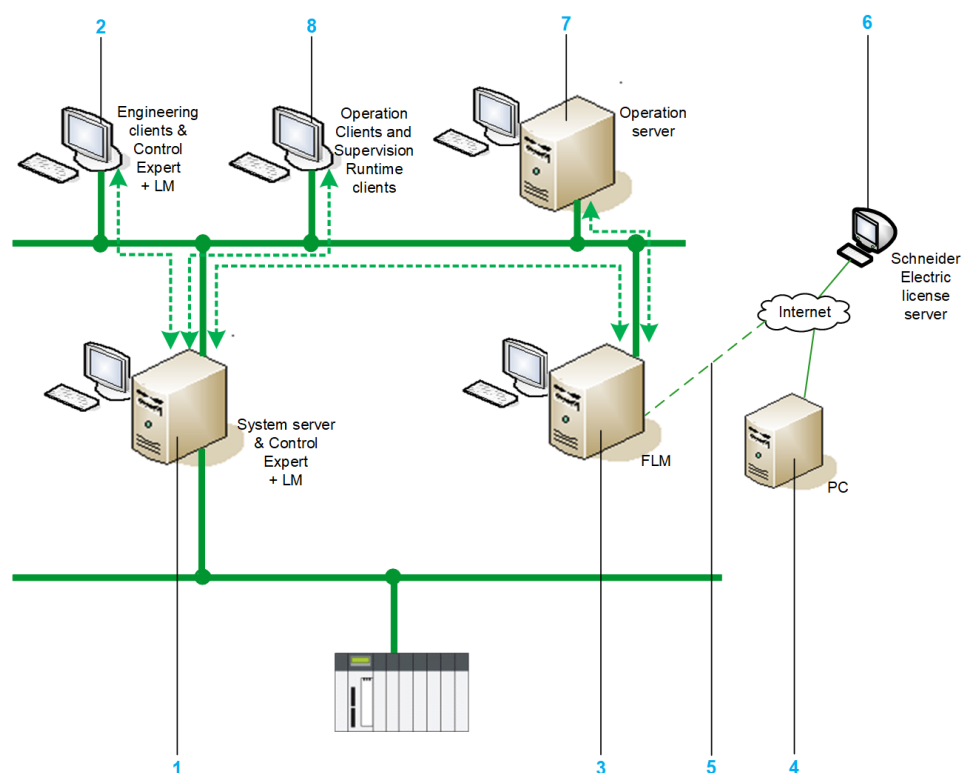 Alarm, trend, and report servers act as clients to the I/O server.

- Operation servers: Access licenses either on the local computer or on a computer whose IP address is configured in their citect.ini file, page 17.

On each Enterprise license server, the **Floating License Manager** is used to activate licenses.

Licenses are allocated to the software components (clients) that require them on a first come, first served basis.

NOTE: If a license request cannot be fulfilled or a license that is being used becomes unavailable, the software displays notifications, page 25.

The following figure illustrates the license acquisition mechanisms used by EcoStruxure Process Expert components.

Item	Description
1	EcoStruxure Process Expert system server and Control Expert: Acquire license rights from the Enterprise license server through the network connection. The IP address of the Enterprise license server is configured in the local LM.
2	EcoStruxure Process Expert engineering clients acquire license rights through their network connection with the system server. Control Expert uses the local LM to connect to the FLM.
3	Enterprise license server: Hosts licenses by using the FLM. To use the activation method by Web, it needs to be connected temporarily to the Internet to establish a connection with the Schneider Electric license server to register the licenses. If the Enterprise license server cannot be connected to the Internet, the activation by Web portal allows using any other computer (4) that is connected to Internet to register the licenses with the Schneider Electric license server. To complete the process, usage rights can then be transferred to the Enterprise license server with the help of an XML response file on a USB drive.
4	Computer connected to the Internet. The connection can be temporary.
5	Internet connection.
6	Schneider Electric license server.
7	Operation server: Depending on its configuration, acquires license rights from the computer on which it is installed (in which case it acts as the Enterprise license server) or from a distant Enterprise license server.
8	EcoStruxure Process Expert operation clients acquire license rights through their network connection with the system server. Supervision runtime clients acquire license rights through their network connection with the operation server. If you install Control Expert, it installs the LM, which connects to the FLM to acquire license rights.

Types of Licenses

The table outlines the various types of licenses that are available and the rights that they entitle you to.

License type	Usage rights	Description
Enduser		
System server license	1	Includes rights for: • 1 system server • 1 engineering client • EcoStruxure Control Expert[1] • 1 operation client The license supports a distributed infrastructure.
Operation server license	1	This license is required to use Supervision and runtime navigation services. Includes licenses for: • 1 operation server. • 1 local Supervision control client. • 1 local EcoStruxure Process Expert operation client. • 1 EcoStruxure OPC UA Server Expert.
Engineering client license	5	Additional engineering client license. Includes rights for EcoStruxure Control Expert[1].
Application size license	For 1 system server	1 license is required per system server in addition to any engineering license. Several sizes are available based on instance count (see EcoStruxure™ Process Expert, User Guide) per system server.
Operation client license	1	Additional operation client license. Different types are available: • A control-type license for: 　◦ 1 Supervision control client. 　◦ 1 EcoStruxure Process Expert operation client. • A view-only type license for: 　◦ 1 Supervision view-only client. 　◦ 1 EcoStruxure Process Expert operation client. • Licenses for redundant operation server configurations: 　◦ Control type 　◦ View-only type
Mini license	1	All-in-one license for 1 computer, which includes rights for 1 of each: • System server with 1 engineering client. • 1 operation server with 1 local Supervision control client. • 1 EcoStruxure Process Expert operation client. • 1 EcoStruxure OPC UA Server Expert. • Includes application size rights.
Development		

License type	Usage rights	Description

System integrator license	3	1-year license.
		
		Each usage right includes rights for:
		• 1 system server
		• 1 engineering client
		• EcoStruxure Control Expert[1]
		• 4 operation clients
		• Unlimited application size rights.
		• 8-hour continuous use (resetable) of Supervision and runtime navigation services with licenses for:
		  ◦ 1 operation server with 1 local Supervision control client.
		  ◦ 7 Supervision control and 7 view-only clients.
		• 1 EcoStruxure OPC UA Server Expert.
		
		The license supports a distributed infrastructure.
		
		NOTE: Development License is indicated in the UI when this license type is activated.

Educational		

Education license	1	Includes rights for:
		• 1 system server
		• Multiple engineering clients.
		• EcoStruxure Control Expert[1]
		• Time-limited use of:
		  ◦ Several operation servers with 1 local Supervision control client each.
		  ◦ Several Supervision control and view-only clients.
		• 1 EcoStruxure OPC UA Server Expert.
		
		Includes application size license for 3,000 instances.
		
		The license supports a distributed infrastructure.
		
		NOTE: Reserved for use by educational entities.

(1) Allows using several instances on 1 computer only.		

NOTE: You can activate licenses that have more than one usage right on several Enterprise license servers.

Configuring the Enterprise License Server

Default Enterprise License Server Configuration

When you install the FLM and the LM on the same computer, by default, the FLM configures IP address 127.0.0.1 in the LM so that the Enterprise license server is the local computer.
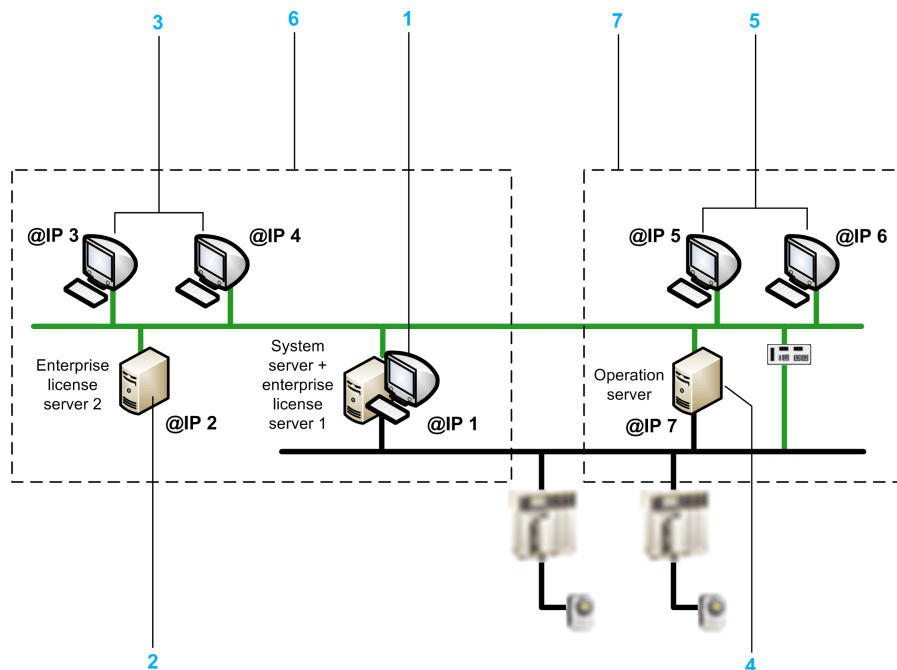
To use this default configuration when you install the system server, select to install the FLM on the computer.

NOTE: If the LM is already installed on the computer and you have configured one or more IP addresses of Enterprise license servers other than 127.0.0.1, when the FLM is installed or updated on this computer, IP address 127.0.0.1 (localhost) is added in first position in the LM. The IP addresses that were already configured are shifted to position 2 and lower in the same order. If IP address 127.0.0.1 was already configured in the LM, no change is made.

Enterprise license server in an EcoStruxure Process Expert Infrastructure

To be able to decide how many Enterprise license servers are required, and which computers should have this role, it is necessary that you familiarize yourself with the software and hardware architecture. For more information, refer to the topic describing the EcoStruxure Process Expert infrastructure (see EcoStruxure™ Process Expert, Installation and Configuration Guide).

The following figure shows a distributed architecture where EcoStruxure Process Expert, Supervision software, and Schneider Electric licensing software is installed on different computers connected to an Ethernet network. Because in this architecture both engineering and operation activities are performed, and to follow Schneider Electric recommendations, two Enterprise license servers are used to host licenses.

Item	Computer role	Installed software	LM configuration	Comment
1	System server Enterprise license server 1 with licenses for: • System server • Engineering clients • Operation clients	• System server • LM and FLM	127.0.0.1 (default) for system server and engineering/operation clients.	–
2	Enterprise license server 2 with a license for the operation server.	FLM	N/A	The LM is not required.
3	Engineering stations	Engineering client Control Expert LM	IP1 for Control Expert	The LM is required by Control Expert only.
4	Operation server	Operation server	Not required	*LicenseStore* parameter of the Citect.ini file configured with IP address IP2, page 17 of Enterprise license server 2.
5	Operator stations	• Supervision client • Operation client	Not required	The LM configured with IP1 is required if Control Expert is installed on the operator station.
6	Control room 1			
7	Control room 2			

Considerations When Using Several Enterprise License Servers

It is possible to configure the LM of the computer on which the system server is installed with several Enterprise license servers.

In such case, during startup, the system server connects to the license servers that appear in the **Host Name / IP Address** column in the order they are listed (from top to bottom) until it detects the necessary licenses, page 12 on an FLM.

However, if any of the configured Enterprise license servers is not reachable, independently of its position in the list, the system server start-up time is increased by several minutes.
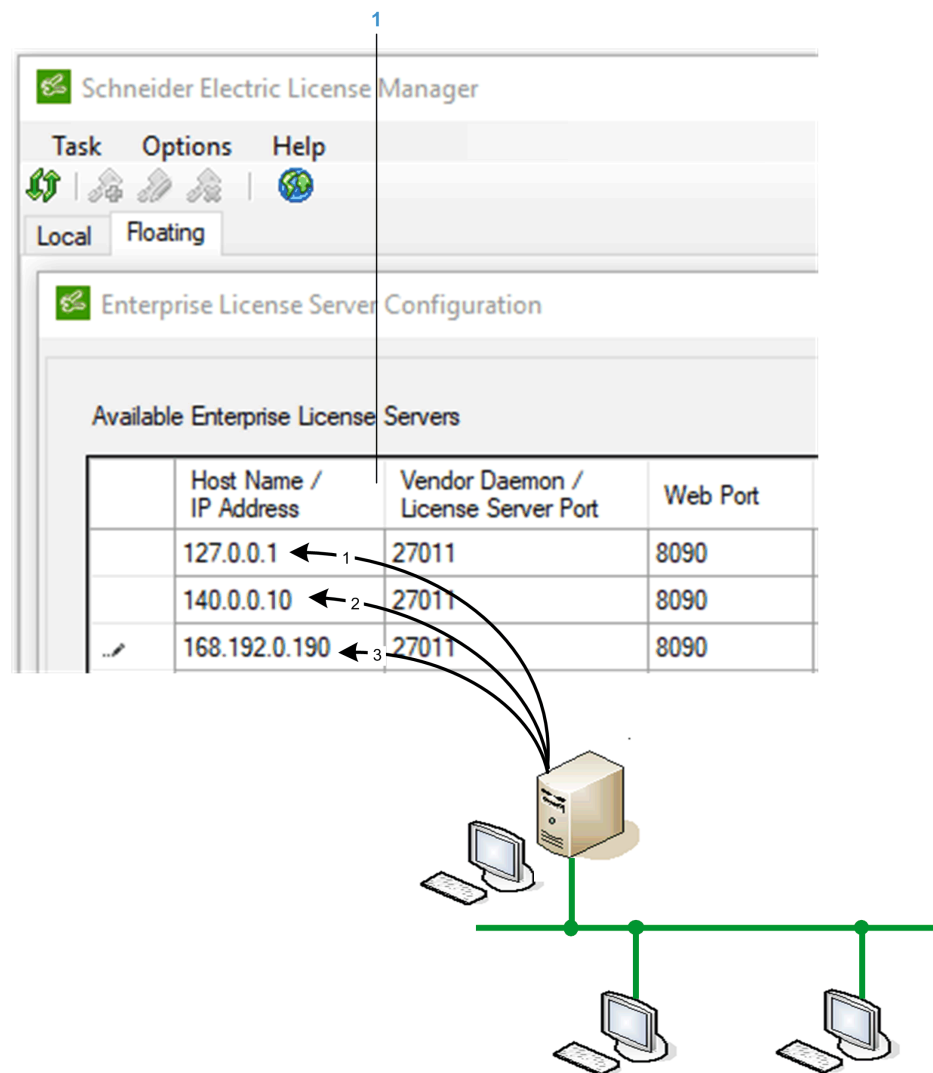
1 You can change the order of the Enterprise license servers that appear in the LM by using the sort button. It appears when you click the column header. This changes the connection sequence.

Configuring An Enterprise License Server

To configure a computer to be the Enterprise license server:

- Install the FLM on the computer that is to become the Enterprise license server and activate your licenses.
- In the LM of the system server computer, configure the IP address and the vendor daemon/license server port of the Enterprise license server.

The table describes the procedure to configure an Enterprise license server in the LM that installed on the system server computer.

Step	Action
1	On the system server computer, open the **License Manager** by clicking, from the Windows® Start menu **Schneider Electric License Manager > License Manager**.
2	Click the **Floating** tab.
3	Click **Configure**. **Result:** The **Enterprise License Server Configuration** window opens.
4	In the **Enterprise License Server Configuration** window, enter parameter values in their respective fields:

Step	Action
	• **Host Name/IP Address**: *127.0.0.1* (if the FLM is installed on the same computer) or IP address of another computer acting as Enterprise license server (computer on which you have installed the FLM and activated licenses). • **Vendor Daemon / License Server Port**: 27011[(1)] (default value, corresponds to the license server port of the FLM) • **Web Port**: 8090
5	To configure additional Enterprise license servers, enter their IP address in the other rows. Enter the appropriate port parameter values for each one.
6	Click **OK**.
7	Close the **License Manager**.
8	Verify that the computer can communicate with the Enterprise license servers that you have configured.
(1) Enter a value that matches either the vendor daemon port (default value 27010) or the license server port of the FLM, page 17, especially if you have installed it separately on a computer or by using the installation package of a different software. This setting is independent of the IP address that you are using.		

Verifying the Vendor Daemon/License Server Port and Web Port Setting of the FLM

The table describes how to verify which vendor daemon, license server, and Web ports are used by the **Floating License Manager**.

Step	Action
1	Open the **Floating License Manager** by clicking, from the Windows® start menu **Schneider Electric Floating License Manager > Floating License Manager**.
2	In the toolbar, click the **Open FLEXnet License Administrator** icon. **Result**: The **FlexNet Publisher** page opens in the default web browser.
3	Click **Administration** and sign in by using your Windows® account credentials. If you are logged on to a domain, use the format *Domain\Username* in the **User Name** field; otherwise, *Domain* is the computer name for a local account. **Result**: • The license server port that is used by the FLM appears under **License Server Manager Port in Use** in the **System Information** tab. • The vendor daemon port that is used by the FLM appears under **Port** in the **Vendor Daemon Configuration** tab. • The Web port that is used by the FLM appears under **Web Server Configuration**, **HTTP Port** in the **Server Configuration** tab.
4	Sign out and close the **FlexNet Publisher** page.

Configuring an Enterprise License Server for Operation Servers

The Supervision server is configured internally to access licenses on the local computer by using port 27010, which by default, corresponds to the vendor daemon port.

You need to add to the *citect.ini* file of the Supervision server the *LicenseStore* parameter in the following cases:

• You want the operation server to use the FLM that is installed on a remote computer.

• The FLM that is installed on the local computer uses a vendor daemon port other than 27010.

The *LicenseStore* parameter contains the IP address of the computer on which the FLM is installed and the vendor daemon port used by this FLM.

The table describes the procedure to add the *LicenseStore* parameter to the *citect.ini* file.

Step	Action
1	On the computer on which you have installed Supervision software, open the *citect.ini* file by using the **Computer Setup Editor**.
2	Enter *AddressForwarding* in the **Section** field.
3	Enter *LicenseStore* in the **Parameter** field.
4	Enter *Port@IP_Address* in the **Value** field, where: • *Port* is either: ◦ The license server port of the FLM, page 17. ◦ The vendor daemon port. • *IP_Address* is the IP address of the computer on which the FLM is installed (enter 127.0.0.1 if the FLM is installed on the local computer). For example, *27011@192.167.10.01*.
5	You may enter a comment in the **Comment** field.
6	Click **Add**.
7	Run the **Computer Setup Wizard** to confirm the change.

NOTE: *AddressForwarding* is only interpreted and verified when you start the Supervision runtime.

License Deployment Examples

Overview

With the use of examples, this topic describes some common license deployment strategies, and outlines the license requirements depending on the number of users working simultaneously.
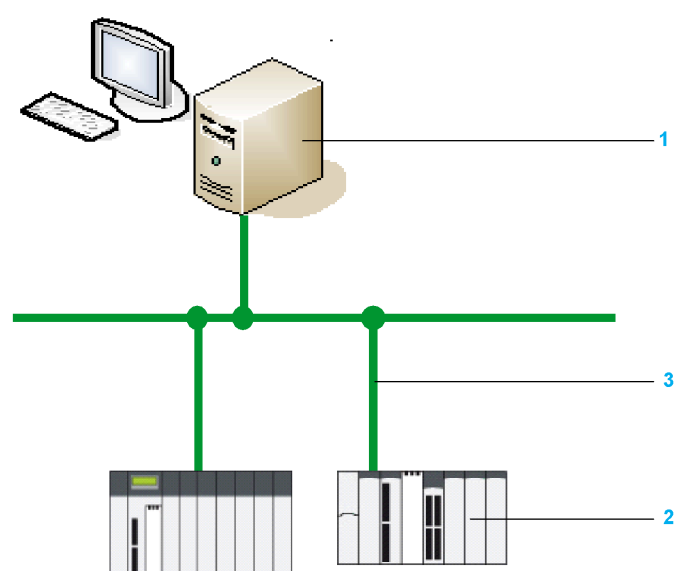
It also describes the configuration of the Enterprise license server (on which the FLM is installed) and LM.

Use these examples as a guideline to define the license deployment strategy that is adapted to your needs, and the resulting license requirements.

All-In-One Architecture

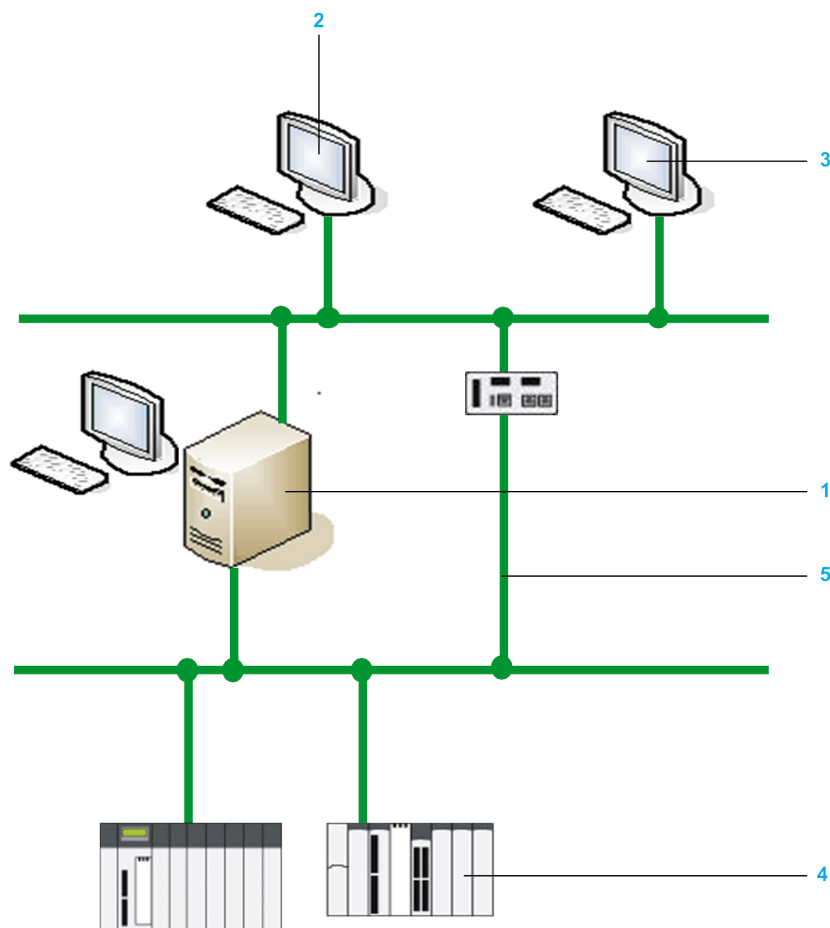The all-in-one architecture is a common small engineering configuration for a single user.

The following figure shows an architecture where all EcoStruxure Process Expert and Supervision software components are installed on one computer.

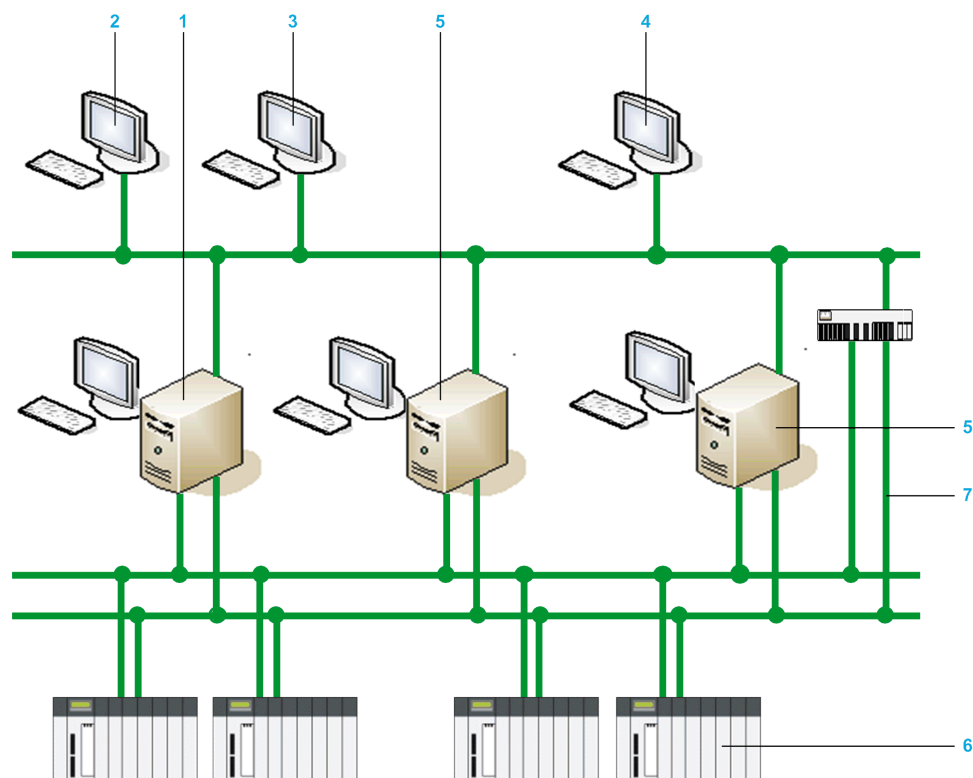| Item	Computer role	Installed software	Activated licenses	Comment
1	System server and engineering station. Operation server and operator station. Enterprise license server.	System server 1 engineering and 1 operation client Control Expert Operation server and its Supervision control client LM and FLM	Either of: • 1 Mini license • 1 system integrator license (1 usage right) • 1 system server license	Default LM settings.
2	Controllers.			
3	Control network.			

Engineering Architecture

This architecture is a common medium-size configuration that is used by system integrators with up to three users working simultaneously. While two users do engineering work exclusively, the third user does engineering work and is able to use Supervision services for test purposes.

Item	Computer role	Installed software	Activated licenses	Comment
1	System server and engineering station. Operation server and operator station. Enterprise license server.	System server 1 engineering and 1 operation client Control Expert Operation server and its Supervision control client LM and FLM	1 system integrator license (3 usage rights are used)	Default LM settings. Alternatively, you can activate: • 1 system integrator license (1 usage right) • Individual licenses for 2 additional engineering clients. This scenario gives you the flexibility to activate the additional engineering client licenses on another computer configured as additional Enterprise license server.
2	Engineering station.	1 engineering client Control Expert	None	Engineering and operation clients access usage rights directly through their connection to the system server.
3	Engineering station and operator station.	1 engineering and 1 operation client Control Expert 1 Supervision control client	None	**NOTE:** The LM is installed by the installer of Control Expert and gets license rights from the FLM installed on the Enterprise license server.
4	Controllers			
5	Control network			

On-Site Architecture

This architecture models small to medium-size configurations, which are deployed on site with one engineering user, and up to four operators working simultaneously.

Item	Computer role	Installed software	Activated licenses	Comment
1	System server. Enterprise license server 1.	System server Control Expert LM and FLM	• 1 system server license. • 2 individual additional engineering client licenses. • 4 individual additional operation client licenses (each includes a Supervision client license).	LM settings: • IP address of system server (127.0.0.1) • IP address of operation server **NOTE:** If the operation servers are redundant servers, you need to activate 1 redundant operation client license per individual operation client license. In this example, 4 redundant licenses.
2	Engineering station.	1 engineering client Control Expert LM	None	The engineering client accesses usage rights directly through its connection to the system server. **NOTE:** The LM is installed by the installer of Control Expert and gets license rights from the FLM installed on the Enterprise license server 1.
3	Engineering and operator station.	1 engineering client Control Expert 1 operation client. 1 Supervision control client LM	None	The engineering and operation clients access usage rights directly through their connection to the system server; the Supervision client through its connection to the operation server. **NOTE:** The LM is installed by the installer of Control Expert and gets license rights from the FLM installed on the Enterprise license server 1.
4	3 computers acting as operator stations.	1 operation client and 1 Supervision client per computer **NOTE:** The installation of Control Expert for use with the operation client is optional.	None	Operation clients access usage rights directly through their connection to the system server; Supervision clients through their connection to the operation server. The LM is not required unless you install Control Expert.
5	Operation server. Enterprise license server 2.	Operation server and its Supervision control client. FLM.	1 operation server license (includes a Supervision control client license).	Default configuration for the operation server that is hosting the I/O server.

Item	Computer role	Installed software	Activated licenses	Comment
6	Controllers			
7	Control network			

Activating, Updating, Returning, and Reinstalling Licenses

Activating a License

To activate a license, you need to enter in the **Floating License Manager** its Activation ID, which you have received by e-mail.

The **Usage Rights** that you need to configure for each license depend on the type of license, page 12, which you activate.

For a description of the available activation procedures, refer to *Activation Methods* in the **Floating License Manager** help.

Updating Licenses

If you have already activated a license for the software and you want to upgrade it to any later version, you may need a license update. License updates are also available for application size licenses.

License updates need to be purchased or may be requested free-of-charge if you have a valid Gold or Gold Plus support agreement.

The license update is linked to the Activation ID of your current software component, which you need to provide at the time of purchase or when you request the update.

Once you have received the license update Activation ID, you can activate it by using the FLM.

The table describes the procedure to request a license update if you have a valid Gold or Gold Plus support agreement.

Step	Action
1	Log on to app.schneider-electric.com/ecostruxure-hybrid-dcs.
2	Click **License Generator**.
3	Enter the software key Activation ID for which you want an update and follow the instructions on screen. **NOTE:** You need to provide a valid e-mail address to receive the license update Activation ID.
4	Repeat the operation for each activated license, which you want to update.

NOTE: To activate any new licenses (for example, additional licenses for engineering clients that you have added to an existing installation), follow the normal activation procedure.

Activating License Updates

The table outlines the procedure to activate a license update by using its Activation ID.

Step	Action
1	Open the FLM on which the license for which you have purchased or requested an update is activated.
2	Select the license. **NOTE:** If you have purchased or requested an update for several licenses that are activated on the same FLM, you can select all of them.
3	Click **Update**. **Result**: The steps that follow vary if the computer is connected to the Internet or not.
4	Follow the instructions on screen. For more information, refer to the topic describing update methods in the **Floating License Manager** help.

Returning a License

A license can be activated only on one computer (Enterprise license server) at a time.

If you want to use your license on a different computer, first return the already activated license by using the FLM, and activate it again on the other computer.

The number of returns for rehost of a license is limited depending on the usage rights of the license.

License usage rights/category	Allowed number of returns per year
1/single	7
3/group	9
10/team	20

For a description of the return procedure of a license, refer to *Return Methods* in the **Floating License Manager** help.

> **NOTE:** EcoStruxure Process Expert does not track the number of returns that you have performed. You need to manage this data yourself to know the number of returns that remain for a license.

Reinstalling a License

Reinstalling a license consists in installing an already activated license once more on the same computer.

This is necessary if the license is not visible in the FLM anymore, for example, because you have reinstalled the operating system.

To start the re-installation procedure, enter the license Activation ID and select **Reinstall**. You do not need to return the license first.

The number of re-installations of a license is limited depending on the usage rights of the license.

License usage rights/category	Allowed number of re-installations per year
1/single	3
3/group	4
10/team	5

Licensing Conflicts

Overview

EcoStruxure Process Expert detects licensing conflicts and displays diagnostic messages to inform you. The different scenarios that can occur are described in this chapter, grouped by type of conflict. For each scenario, one or more corrective actions are proposed.

License Availability

License for the System Server Is Not Available at Startup

If...	Then...
you start the system server and it detects that the license for the system server is not available.	the system server displays a notification in the console and stops immediately.

Solutions

- Check your license:
  - Has it been activated properly?
  - Has it expired? Check whether you need the software for a longer time and contact Schneider Electric to renew your license, if necessary.
  - Has it become untrusted, page 30?
  - Do you need to update a license, page 23 that was activated for the system server of an earlier version?

  For further information on licenses, see the Schneider Electric **Floating License Manager** User Manual.

- Check the network connection to the Enterprise license server.
  - Verify that the vendor daemon port setting for IP addresses configured in the LM is identical to the vendor daemon port used by the corresponding FLM, page 16.
  - Verify if the configured web port is already used on one of the computers. You can change the port setting, page 17. The allowed range is 1 to 65535.

- You may need to restart the FLEXnet License Administrator (lmadminschneider service, page 27).

- Check the status of the vendor daemon, page 27 in the FLEXnet License Administrator.

- If you have upgraded the software, verify that you have restarted the computer if you were prompted to do so during installation.

License for a Client Is Not Available at Startup

If...	Then...
you start an engineering/operation client and it detects that there is no license available.	the client displays a message informing you about the unavailability of the license and closes when you acknowledge the message.

Solutions

- Verify that the system server is running properly.

- Has the license expired? Check whether you need the software for a longer time and contact Schneider Electric to renew your license, if necessary.

- Check if the available licenses for clients are already in use. As soon as a corresponding license becomes available on any Enterprise license server that is configured in the LM of the system server, you can start the client.

License for System Server or Client Becomes Unavailable

If...	Then...
a system server and/or client license becomes unavailable while the system server and client is running.	the software displays a notification on the respective EcoStruxure Process Expert component (system server and/or clients connected to the system server) advising you that the component will shut down in 11 hr 50 min. Additional messages advising you about the upcoming shutdown are displayed every 3 hours. The last two messages appear:
	• 1 hr 20 min before shutdown.
	• 35 minutes before shutdown.
	After the first notification for a system server license, you cannot open additional clients anymore.
	The functionalities of the engineering and operation clients are not available after the server is shut down and unsaved changes are lost. Refer to Client-Server Connection (see EcoStruxure™ Process Expert, User Guide) for a description of the client behavior.

Solutions

- Verify that the system server is running properly.

- Check if the available licenses for clients are already in use. As soon as a corresponding license becomes available on any Enterprise license server that is configured in the LM of the system server, you can start the client.

- Has the license become untrusted, page 30?

- Did you return the license?

- Check the network connection to the Enterprise license server.

  NOTE: The system server checks license availability before a notification about component shutdown is displayed and before the actual shutdown of a component. These license checks are performed in addition to the license checks at a 15 min interval, page 10.

Restarting the FLEXnet License Administrator

During a restart of the FLEXnet License Administrator, all floating licenses activated on this Enterprise license server, which is exclusively dedicated to managing floating licenses for Schneider Electric software products, are temporarily not available. An Enterprise license server can also host licenses that are required by software controlling production systems to function. When its license becomes unavailable, the software stops functioning.

⚠WARNING

LOSS OF CONTROL

Perform a restart of the FLEXnet License Administrator only when the floating licenses that it hosts are not required by EcoStruxure Process Expert or other software controlling production systems.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

To restart the FLEXnet License Administrator, proceed as follows.

Step	Action
1	Open the FLM.
2	In the menu bar, click **Task > Restart FLEXnet License Administrator**.
3	Confirm the command. This requires elevated privileges.

Starting the Vendor Daemon in the FLEXnet License Administrator

To start the vendor daemon when it is down, proceed as follows.

Step	Action
1	Open the FLM on which the system server license is activated.
2	In the toolbar, click the **Open FLEXnet license Administrator** icon. **Result**: The **FlexNet Publisher** page opens in the default web browser.
3	Click **Administration** and sign in by using your Windows® account credentials. If you are logged on to a domain, use the format *Domain\Username* in the **User Name** field; otherwise, *Domain* is the computer name for a local account.
4	Select the **Vendor Daemon Configuration** tab.
5	In the **Vendor Daemons** page, if the status of the **schneide** entry is **Down**, click **Administer**.
6	Click **Start** under **Vendor Daemon Actions**. **Result**: The status of the **schneide** entry changes to **Starting Up**.
7	Select the **Vendor Daemon Configuration** tab again. **Result**: In the **Vendor Daemons** page, the status of the **schneide** entry is **Up**.
8	Sign out and close the **FlexNet Publisher** page.

NOTE: For more information, refer to the help of the **FlexNet Publisher** page.

License Limits

Time Limit of a License Is About to Expire

If...	Then...
a license that is restricted to 1 year is about to expire	a daily notification message is displayed 21 days before the expiration date.

Solutions

Check whether you need the software for a longer time and contact Schneider Electric to renew your license, if necessary.

Limit of Application Size License Is Reached

If...	Then...
the software detects that it has reached the limit of the application size	you receive a notification message and cannot create additional instances in the application.

Open the **About** dialog box of clients or the system server for information on the current number and maximum number of instances per system. |

Solutions

Refer to the topic describing the instance count (see EcoStruxure™ Process Expert, User Guide) and check whether you need to upgrade to another application license to extend the limit if necessary.

Limit of Application Size Is Exceeded

If...	Then...
you start the software with an application license size that is smaller than the instance count of the systems that exist in the software.	the software displays a notification to inform you of the detected error. You can use engineering clients to access the **Systems Explorer** but you cannot open the application, the projects, nor the topology of any of the systems.

Operation clients are not affected.

Refer to Counting Instances (see EcoStruxure™ Process Expert, User Guide) for information on the instance count. |

Solutions

- Delete one or more systems.
- Upgrade to another application license to extend the allowed instance count.

Network Connection

Connection to the Enterprise license server Is Interrupted

If...	Then...
the software detects that the connection to the Enterprise license server is interrupted.	the software displays a notification on the clients connected to the system server advising you that the system server will shut down in 11 hr 50 min. Additional messages advising you about the upcoming shutdown are displayed every 3 hours. The last two messages appear: • 1 hr 20 min before shutdown. • 35 minutes before shutdown. After the first notification, you cannot open additional clients anymore. The functionalities of the engineering and operation clients are not available after the server is shut down and unsaved changes are lost. Refer to Client-Server Connection (see EcoStruxure™ Process Expert, User Guide) for a description of the client behavior. NOTE: If the Enterprise license server and the system server are two distinct computers, the communication interruption also affects the system server and it will display similar notifications to advise you of its upcoming shutdown.

Solutions

• Verify that a communication interruption on the enterprise network is not causing the firewall of the operating system of computers to block ports that are used for communication with the Enterprise license server.

• Check the network connection to the Enterprise license server and start the system server, if it has shut down, after you re-establish the connection to the Enterprise license server.

• You may need to restart the FLEXnet License Administrator, page 27.

NOTE: If you re-establish the connection to the Enterprise license server before the system server shuts down, the system server continues running. It also displays a message to report that it has found a license and has canceled the shutdown.

License Repairs, Returns, and Changes

Number of Allowed Returns Is Reached

If you need to return a license and you have reached the number of allowed returns, page 24 for that license, contact the Schneider Electric Software Registration Center.

Not Possible to Repair a License

You need to repair licenses that you had activated on the computer if they become untrusted.

This can happen if:

- The hardware configuration of your computer has changed significantly.
- You restored a backup that included licenses.

In some cases, if the Schneider Electric license server cannot identify the computer anymore, the repair procedure may not complete.

The number of repairs that you can perform per license is limited depending on the usage rights of the license.

License usage rights/category	Allowed number of repairs per year
1/single	3
3/group	4
10/team	5

If you need to repair a license and you have reached the number of allowed repairs, or if the repair process does not complete successfully, contact the Schneider Electric Software Registration Center.

Downgrading to a Smaller Application License Size

If...	Then...
while the system server is running, you downgrade your application license size, and the instance count of the systems that exists in the software exceeds the new application license size.	the software displays a notification on the engineering and operation clients connected to the system server advising you that the system server will shut down in 1 hour 20 minutes. 2 additional messages are displayed informing you about the upcoming shutdown: • 20 minutes before shutdown. • 1 minute before shutdown. The functionalities of the engineering and operation clients are not available after the server is shut down and unsaved changes are lost. Refer to Client-Server Connection (see EcoStruxure™ Process Expert, User Guide) for a description of the client behavior.

Solutions

- Upgrade to another application license size to extend the allowed instance count.
- Delete instances and/or systems.

  NOTE: Refer to the Counting Instances (see EcoStruxure™ Process Expert, User Guide) for information on the instance count of systems on the system server.

Glossary

A

activate:

To activate means to use a trusted storage license on a local computer or an Enterprise license server. During activation the e-mail address of the license user is transmitted to the Software Registration Center.

Activation ID:

An Activation ID is an identifier for a license of an ordered software product and needs to be entered during the activation of the license.

An Activation ID is necessary to order updates (later version, more capabilities, more seats).

The Activation ID can be found in the Entitlement Certificate of the software product to be activated.

activation service:

The activation service is a software component running on the Schneider Electric License Server which is used to activate, update, return and repair licenses.

active license:

A license is active during the period until expiration.

An active license can be
- a trial license.
- an activated trusted storage license (node-locked or floating license).
- a dongle license (node-locked or floating license).
- a corporate license.

E

Enterprise license server:

The Enterprise license server contains the floating licenses in your local network.

expiration date:

A software product is only running until the expiration date is reached.

expired license:

A license is expired if the expiration date is reached or the trial period of the software product has been exceeded.

expiring license:

An expiring license can only be used for a defined period of time. The time period starts at first activation of any seat of the license. It is not possible to update an expiring license.

F

floating license:

A floating license is activated on an Enterprise license server and:

- It can be used from different local computers connected to the same local network as the Enterprise license server. Using a floating license on a local computer the license is checked out from the Enterprise license server and is not available for any other computer from this moment. After usage the floating license is checked in again and is available for other computers again.

- It can be a trusted storage license which has been activated by the Schneider Electric Floating License Manager or a dongle license activated by plugging in the dongle containing the license file and the correct Dongle ID.

L

license:

A license is one line item of an entitlement which is identified by an Activation ID.

One license can have one or multiple seats.

N

node-locked license:

A node-locked license

- can be used on a local computer only.

- can be a trusted storage license which has been activated by Schneider Electric License Manager or a dongle license activated by plugging in the dongle containing the license file and the correct Dongle ID.

O

operator:

The *operator* is a person responsible for using:

- the run-time process,

- the control system in order to control the process.

P

part number:

A part number is a character string that characterizes a type of software product.

Individual part numbers are used to identify different types of licenses for the same software product, e.g. to distinguish between node-locked and floating licenses.

A separate part number can be used to identify the media (box, CD case(s) and CD/DVD) for a software product.

R

repair:

You can repair a license which has become untrusted for further usage. A license can become untrusted, e.g. due to replacement of hardware components of a computer or Enterprise license server.

S

Schneider Electric Floating License Manager:

With the Schneider Electric Floating License Manager you manage (activate, update, return, repair) floating licenses stored on an Enterprise license server.

Schneider Electric License Manager:

With the Schneider Electric License Manager:

- You manage (activate, update, return, repair) node-locked licenses on your local computer.
- You open the web portal of the FLEXnet License Administrator to:
  - Display the available floating licenses which can be detached from the Enterprise license server to a computer in your local network.
  - Display the currently used floating licenses and show details of the hosts (local computers) currently using the floating licenses.

Software Licensing Web Portal:

The Software Licensing Web Portal is the entry point for you to access the Schneider Electric web sites which are dedicated to license management.

You can use the Software Licensing Web Portal

- to create a Web User Account.
- to manage licenses (view licenses, activate license) without contact to Software Registration Center.

U

untrusted license:

A license can become damaged, e.g. due to replacement of hardware components of the computer or Enterprise license server. You can repair an untrusted license for further usage.

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