EcoStruxure™ Control Expert

Installation Manual

Original instructions

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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.

Before You Begin

Do not use this product on machinery lacking effective point-of-operation guarding. Lack of effective point-of-operation guarding on a machine can result in serious injury to the operator of that machine.

⚠ WARNING

UNGUARDED EQUIPMENT

- Do not use this software and related automation equipment on equipment which does not have point-of-operation protection.
- Do not reach into machinery during operation.

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

This automation equipment and related software is used to control a variety of industrial processes. The type or model of automation equipment suitable for each application will vary depending on factors such as the control function required, degree of protection required, production methods, unusual conditions, government regulations, etc. In some applications, more than one processor may be required, as when backup redundancy is needed.

Only you, the user, machine builder or system integrator can be aware of all the conditions and factors present during setup, operation, and maintenance of the machine and, therefore, can determine the automation equipment and the related safeties and interlocks which can be properly used. When selecting automation and control equipment and related software for a particular application, you should refer to the applicable local and national standards and regulations. The National Safety Council's Accident Prevention Manual (nationally recognized in the United States of America) also provides much useful information.

In some applications, such as packaging machinery, additional operator protection such as point-of-operation guarding must be provided. This is necessary if the operator's hands and other parts of the body are free to enter the pinch points or other hazardous areas and

serious injury can occur. Software products alone cannot protect an operator from injury. For this reason the software cannot be substituted for or take the place of point-of-operation protection.

Ensure that appropriate safeties and mechanical/electrical interlocks related to point-of-operation protection have been installed and are operational before placing the equipment into service. All interlocks and safeties related to point-of-operation protection must be coordinated with the related automation equipment and software programming.

> **NOTE:** Coordination of safeties and mechanical/electrical interlocks for point-of-operation protection is outside the scope of the Function Block Library, System User Guide, or other implementation referenced in this documentation.

Start-up and Test

Before using electrical control and automation equipment for regular operation after installation, the system should be given a start-up test by qualified personnel to verify correct operation of the equipment. It is important that arrangements for such a check are made and that enough time is allowed to perform complete and satisfactory testing.

⚠ WARNING

EQUIPMENT OPERATION HAZARD

- Verify that all installation and set up procedures have been completed.
- Before operational tests are performed, remove all blocks or other temporary holding means used for shipment from all component devices.
- Remove tools, meters, and debris from equipment.

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

Follow all start-up tests recommended in the equipment documentation. Store all equipment documentation for future references.

Software testing must be done in both simulated and real environments.

Verify that the completed system is free from all short circuits and temporary grounds that are not installed according to local regulations (according to the National Electrical Code in the U.S.A, for instance). If high-potential voltage testing is necessary, follow recommendations in equipment documentation to prevent accidental equipment damage.

Before energizing equipment:

- Remove tools, meters, and debris from equipment.
- Close the equipment enclosure door.

- Remove all temporary grounds from incoming power lines.
- Perform all start-up tests recommended by the manufacturer.

Operation and Adjustments

The following precautions are from the NEMA Standards Publication ICS 7.1-1995 (English version prevails):

- Regardless of the care exercised in the design and manufacture of equipment or in the selection and ratings of components, there are hazards that can be encountered if such equipment is improperly operated.
- It is sometimes possible to misadjust the equipment and thus produce unsatisfactory or unsafe operation. Always use the manufacturer's instructions as a guide for functional adjustments. Personnel who have access to these adjustments should be familiar with the equipment manufacturer's instructions and the machinery used with the electrical equipment.
- Only those operational adjustments actually required by the operator should be accessible to the operator. Access to other controls should be restricted to prevent unauthorized changes in operating characteristics.

About the Book

Document Scope

This document describes the installation and update of Control Expert software. Installation of the different tools (converter, communication drivers, ...) is explained in the different items contained in the online-help documentation.

Validity Note

This documentation is valid for EcoStruxure™ Control Expert 15.1 or later.

Related Documents

Title of documentation	Reference number
Schneider Electric License Manager, User Manual	EIO0000001070 (English), EIO0000001071 (French), EIO0000001072 (German), EIO0000001074 (Spanish), EIO0000001073 (Italian), EIO0000001075 (Chinese)
Schneider Electric Floating License Manager, User Manual	EIO0000001078 (English), EIO0000001079 (French), EIO0000001080 (German), EIO0000001082 (Spanish), EIO0000001081 (Italian), EIO0000001083 (Chinese)
EcoStruxure™ Control Expert, Security Editor, Operation Guide	EIO0000004105 (English), EIO0000004106 (French), EIO0000004107 (German), EIO0000004108 (Italian), EIO0000004109 (Spanish), EIO0000004110 (Chinese)
EcoStruxure™ Control Expert, Topology Manager, User Manual	EIO0000002756 (English), EIO0000004371 (French), EIO0000004372 (German), EIO0000004370 (Italian), EIO0000004369 (Spanish), EIO0000004373 (Chinese)
EcoStruxure™ Control Expert, Operating Modes	33003101 (English), 33003102 (French), 33003103 (German), 33003104 (Spanish), 33003696 (Italian), 33003697 (Chinese)
EcoStruxure™ Control Expert, Program Languages and Structure, Reference Manual	35006144 (English), 35006145 (French), 35006146 (German), 35013361 (Italian), 35006147 (Spanish), 35013362 (Chinese)

Title of documentation	Reference number
EcoStruxure™ Control Expert, Control, Block Library	33002535 (English), 33002536 (French), 33002537 (German), 33003686 (Italian), 33002538 (Spanish), 33003687 (Chinese)
Communication Drivers, Installation Manual	35006152 (English), 35006153 (French), 35006154 (German), 35013950 (Italian), 35006155 (Spanish), 35012192 (Chinese)

You can download these technical publications, the present document and other technical information from our website www.se.com/en/download/.

General Information

This chapter describes the contents of the software packages, the main characteristics of software installation, the system configuration requirements needed to execute Control Expert software, and the recommended precautions when installing or updating Control Expert.

Presentation of Control Expert Software

Installation Media

Control Expert can be installed by using the DVD-ROM or `.iso` file downloaded from the web.

Access Levels

Control Expert installs with two access levels:

Control Expert	It includes the Topology Manager, which manages system projects. One or more controllers (each with their own control project) and various devices constitute a system project. The control projects can be managed by starting one or more Control Expert editor instances within the Topology Manager.
	Control Expert with Topology Manager is based on a client-server architecture, page 13. Setup installs both a Control Expert system server service and the client application on the computer.
	The Control Expert repository constitutes the database, which is managed by the system server and contains system project data.
	NOTE: Refer to *EcoStruxure™ Control Expert, Topology Manager, User Manual* for details on the interaction between a system project and control projects.
Control Expert Classic	It is the equivalent of Control Expert V15.0 and earlier versions. Each instance of Control Expert Classic manages one control project at a time.

Languages

The following display languages are available for Control Expert:

- English
- French
- German
- Spanish
- Italian
- Chinese

   NOTE:

   To modify the language of Control Expert select **Start > Programs > EcoStruxure Control Expert > Language Selection**.

Recommended Control Expert Architectures

Schneider Electric recommends using either of the following architectures for Control Expert (with Topology Manager):

- **All-in-one architecture**: Consists of one computer on which client instances are started and connect locally to the system server (default configuration).

- **Distributed architecture**, which consists of:
    - One computer that acts as system server.

      (Client instances can also be started on this computer and connect locally to the server.)

    - One or more remote computers on which client instances are started and connect to the system server.

  NOTE: The maximum number of Control Expert client instances that you can open per computer is 4.

Software Licenses

There is one Control Expert setup (.iso file) and the license determines the access level and version that can be launched.

Access level to Control Expert according to the license is given in the following table.

Software License	Control Expert (with Topology Manager)	Control Expert Classic
Control Expert S	No	Yes
Control Expert L	No	Yes[1]
Control Expert XL	No[2]	Yes[1]
Control Expert XL with M580 Safety	No[2]	Yes
Control Expert XL with Topology Manager and M580 Safety	Yes	Yes
(1) Adding the M580 Safety CPUs is possible with a **M580 Safety Add-On** license.		
(2) Access to Control Expert with Topology Manager is possible with a **Topology Manager Add-On** license.		

Two types of licenses are available to activate Control Expert:

- Node-locked license for use on a local PC. A node-locked license is used on the PC where Control Expert is installed.

- Floating license for multiple uses of an authorized number of PCs in a network connected to the Enterprise License Server.

NOTE: To use remote desktop connection on **Windows Server** it is advised to use floating license.

- Only one remote desktop connection is allowed with a node-locked license, whatever the number of seats.
- With a floating license, several remote desktop connections are supported but limited by the available usage rights.

Activation

Control Expert software comes with a 30-day trial license.

When the first installation is complete, the trial license is automatically activated during first launch of the software product.

The trial license includes the maximum set of software product features which corresponds to the Control Expert XL with Topology Manager and M580 Safety license.

At any time during the trial period or after the trial period you can activate your license.

NOTE: When a license is activated, the trial version is no more usable.

If you do not activate your license, Control Expert software no longer runs after the trial period has expired.

Registration

You can register your Control Expert license at any time on the Schneider Electric Software Licensing Web Portal.

NOTE: Registration is not mandatory and can be done even if the license has not yet been activated.

The registration of the license on the Schneider Electric Software Licensing Web Portal allows you to:

- View all your licenses and their status.
- Increase the number of authorized transfer of licenses between PCs.

Recommended Precautions when Installing or Updating Control Expert

Recommended Precautions before Installation

The following table shows the recommended precautions before installing or updating Control Expert:

Step	Action
1	Check the system requirements, page 16 of the workstation.
2	Check that the Windows session used to install or update Control Expert has administrator rights.
3	Perform a back-up, page 34 of all current applications and settings before updating Control Expert.
4	Check that the latest Windows Service Pack is installed.
5	Check that the latest Windows Security patches are installed.
6	Disable temporarily all the antivirus services (real time, scripting, etc.).
7	Check that the language required with Control Expert is available with Windows, for example, Chinese language for the Windows operating system.
8	Close all running applications, (including the current version Control Expert when updating).

Computer Configuration

Performance Considerations

The configuration of the computer determines the level of performance.

The performance of Control Expert can be affected by opening simultaneously several windows, accessing a large quantity of animated data, or using a large application.

Hardware and System Requirements

For details on hardware and system requirements, refer to the readme file. It is available in the ISO installation file and after installation at the path C:\Program Files (x86)\Schneider Electric\Control Expert X (where X is the installed version).

NOTE: If you reinstall the operating system on computer where a license has been activated, then the license information is no longer available. In this case, you can reinstall the already activated license on the Enterprise License Server without consuming additional usage rights.

Firewall

Control Expert with Topology Manager is based on a client-server architecture. The first time Control Expert is installed on a PC, the service `SE.Automation.SystemManager.Service.exe` is executed.

If a firewall is active on the operating system, make sure that this service execution is authorized on the computer acting as Control Expert server. Otherwise, Control Expert clients cannot connect to the server to engineer system projects.

Other Requirements

The following are required before installing Control Expert:

- Microsoft Edge
- Windows Installer V4.5 or later
- .NET 3.5 SP1 and .NET 4.8 (for details, refer to the readme file available in the ISO installation file)

Control Expert on Windows Server 2019

On Windows Server 2019, Control Expert runs without restriction.

Control Expert in a Virtual Machine

Control Expert runs on the following virtual machines:

- VMware Workstation Pro
- VMware vSphere - Hypervisor - ESXi

Before launching Control Expert on your virtual machine, make sure that the setting **Accelerate 3D graphics** is not activated. Otherwise you may have a blank window and/or unreadable messages.

To access the display settings of your Control Expert virtual machine, select **Player > Manage > Virtual Machine Settings...**. In the **Hardware** tab, select **Display**.

Installing Control Expert for the First Time

Overview

This chapter describes the first time installation of Control Expert software.

NOTE: In case Unity Pro is already installed on the computer, refer to the chapter *Updating Unity Pro with Control Expert, page 33* for specific operations to perform prior and after Control Expert installation.

How to Perform a First Installation of Control Expert

Introduction

The procedure for a first-time installation involves installing Control Expert without searching for a Unity Pro or Control Expert version already installed on the computer.

User Rights

To install the Control Expert software, you must have the **administrator privileges** on the workstation.

NOTE: Control Expert is always installed so that it is available for all the users of the workstation. Refer to *EcoStruxure™ Control Expert, Security Editor, Operation Guide*, for configuring user access rights.

Components Installed

The following **Control Expert components** are installed:

- Control Expert with Topology Manager: Allows managing several control projects within one or more system projects.
- Control Expert Classic: Allows managing control projects only.
- PL7 convertor utility
- Concept convertor utility
- PLC Simulator
- OS Loader (an option is provided to download EcoStruxure Automation Device Maintenance to replace it)
- Install libset: When required, this tool allows to install Libset versions that are not available on your computer.

    NOTE: Only the Libset V10.0 and later are automatically installed.

- All DTMs associated to controllers and modules available in Control Expert Hardware Catalog Manager
- Schneider Electric Software Update

    NOTE: During installation, enable Schneider Electric Software Update tool to check for updates in order to benefit from Hotfix releases.

- Optional drivers
- License manager

NOTE: Some equipment that is supported in the Control Expert Topology Manager and available in the catalog may require the installation of additional software so that it can be configured.

Default Directories

The default destination directory of the Control Expert software installation is: `C:\Program Files (x86)\Schneider Electric\Control Expert ••.•\`

The custom libraries destination directory is set by default to: `C:\ProgramData\Schneider Electric\Control Expert ••.•\CustomLibset\V••.•`

NOTE: The characters "••.•" are replaced by the installed version of Control Expert.

Installation Procedure

Execute the following steps to install Control Expert software.

Step	Action
1	Make sure that your system meets the minimum configuration requirements, page 16 to install and run Control Expert.
2	Make sure that you are connected as an administrator of the workstation.
3	The beginning of the installation procedure depends on the software package media. With DVD-ROM: Insert the DVD-ROM named **Control Expert**. The software package setup is automatically launched. If not, go to the DVD root and launch **setup.exe**. With `.iso` file: Extract the files of the installation package to disk or mount the image (.iso). Double-click the setup.exe file located in the root of the installation package. **Result:** The installation procedure starts.
4	Select the language for the installation from the drop-down list and confirm by clicking **OK**. **NOTE:** The selected language is used for the Control Expert installation and execution.
5	When **Next** is available, click it to confirm the **Welcome** screen.
6	After reading the compatibility information in the **ReadMe** and **ReleaseNotes** dialog, and other relevant information, click **Next** to continue.
7	Read the software license, confirm that you agree by checking the "I accept the terms in the license agreements" box, and click **Next** to continue.
8	You can choose an alternative path for the installation directory and the SESU (Schneider Electric Software Update) tool and/or click **Next** to continue.
9	You can choose to install or not the communication drivers and click **Next** to continue.
10	Select the shortcuts needed and click **Next** to continue.

Step	Action
11	To begin the installation, click **Install**.
12	When the installation process is complete, you can select **Open release notes** and/or **Start** Control Expert after quitting the installation by clicking **Finish**.

Installation Diagnostic Considerations

NOTE: For Chinese installation, the installation path must not contain Chinese characters.

To configure the installation directory manually, follow this procedure.

Step	Action
1	Right-click **My Computer > Properties**.
3	Select the **Advanced** tab.
4	Click **Environment Variables** button.
5	Add a new path in the **User Variables**. **NOTE:** The path by default when Control Expert is installed is: `C:\Program Files (x86)\Schneider Electric\Control Expert ••.•\`.

Automatic Installation

At a Glance

Automatic installation of Control Expert requires no action during the installation. The installation performed is the same as a default installation in the manual mode. It is carried out with the provided `install.bat` batch command file. This file is at the root of the Control Expert DVD-ROM or in the installation package (.iso file).

To be able to perform an automatic installation:

- Manually update the `install.bat` file in a text editor.
- Launch the automatic installation process by executing the personalized `install.bat` file.

   NOTE:

   If you use the automatic mode to uninstall Control Expert and have used the Topology Manager, no message is shown in case one or more system projects are not upward compatible. Although the system projects are exported, page 59, you will not be able to reuse those that are not upward compatible in the next version of Control Expert.

   If the system server is not available, page 46, system projects cannot be exported. In such case, the installation is canceled and an event is logged in the Windows Event Viewer.

   For details on the upward compatibility, refer to the topic describing properties of system projects (see EcoStruxure™ Control Expert, Installation Manual).

Modifying the Command File

The following table describes the procedure for modifying the command file and launching the automatic installation:

Step	Action
1	Select the file `install.bat` from the Control Expert installation DVD-ROM or from the extracted files of the installation package (.iso file).
2	Right-click to display the contextual menu and select Edit. **Result**: The file opens in text format.
3	Fill in the parameters. The `install.bat` file is self-documented. It contains an up-to-date description and possible parameter values.

| Step	Action
4	Save the file.
5	Double-click on the modified file.
	Result: The installation starts and windows appear during the progress of the installation process.

How to Activate a Node-locked License

Overview

The node-locked license needs to be activated within 30 days after software installation.

The license is activated on the local PC where Control Expert is already installed:

Local PC with:
- **Control Expert**
- **License Manager**

Node-locked
license
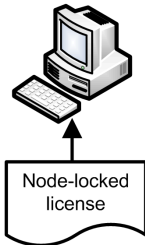
> **NOTE:** At https://www.youtube.com/watch?v=0bSzFztSt7k you can find a video explaining how to activate a Node-locked license.

Required Information

Required to activate a license, you receive the **Activation ID** either:
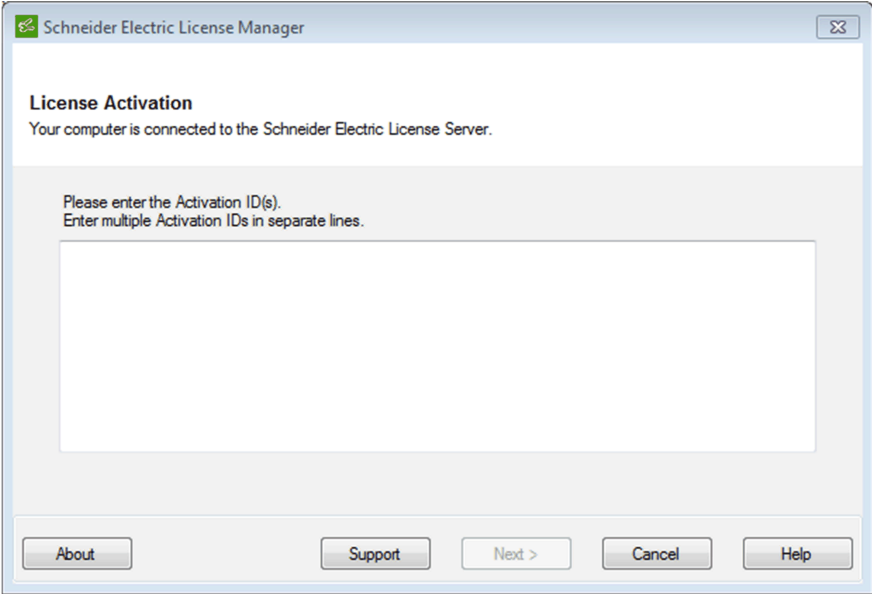
• Printed and sent in an envelope, or

• Sent via email.

Activation ID example:

Information for Software Activation	
Activation ID:	**A - BSCK – CDP9 – F7TS**
Type :	Single ; L Permanent
Part number / Reference produit :	**CEXSPUCZLSPMZZ**
Product / Produit :	**EcoStruxure Control Expert V14.0**

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Node-locked License Activation Procedure

This procedure describes the steps for activating a node-locked license on the computer where Control Expert is already installed:

Step	Action
1	Start **License Manager** tool.
2	Select **Activate**.
3	The following window appears: **NOTE:** If your computer has no Internet connection, or is not connected to the Schneider Electric License Server you can activate by mobile device, by web portal, or by phone. For detailed information, refer to *Schneider Electric License Manager, User Manual* or **License Manager** on-line help.
4	Prompt your **Activation ID** and click **Next**. After few seconds, the successfully created license message appears
5	Click **Finish** Control Expert is now activated on the computer.
6	Close **License Manager** tool.

How to Activate a Floating License

Overview

The floating license is activated on the Enterprise License Server:

PCs in a network with: - **Control Expert**
- **License Manager**

Floating license

Enterprise License Server with
Floating License Manager
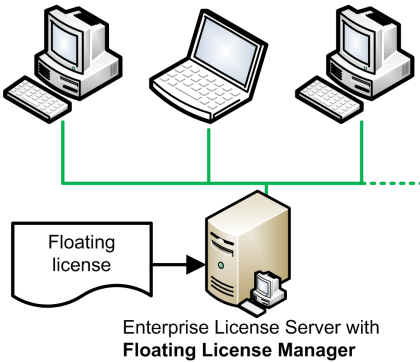
NOTE: At https://www.youtube.com/watch?v=jvQBbFYtOg0 you can find a video explaining how to activate a floating license.

Required Information

Required to activate a floating license, you receive the **Activation ID** either:
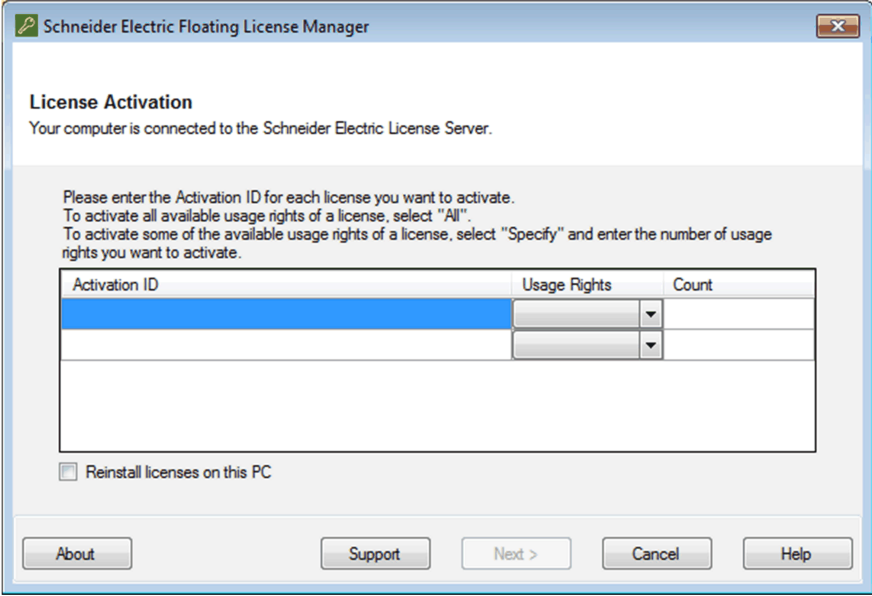
- Printed and sent in an envelope, or
- Sent via email.

Activation ID example:

Information for Software Activation

Activation ID:	**A - 6928 – CRW3 – J7NP**
Type :	Floating ; Group ; XL Permanent
Part number / Reference produit :	**CEXSPUCZXGPTZZ**
Product / Produit :	**EcoStruxure Control Expert V14.0**

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Floating License Activation Procedure

This procedure describes the steps for activating a floating license on the Enterprise License Server:

Step	Action
1	Start **Floating License Manager** tool. **NOTE:** If not already installed on the Enterprise License Server, the Floating License Manager installation package is available in Control Expert installation package (.iso) in the `FloatingLicenseManager` folder.
2	Select **Activate**.
3	The following window appears: **NOTE:** If your computer has no Internet connection, or is not connected to the Schneider Electric License Server you can activate by web portal. For detailed information, refer to *Schneider Electric Floating License Manager, User Manual* or **Floating License Manager** on-line help.
4	Prompt your **Activation ID**, set **Usage Rights** and click **Next**. After few seconds, the successfully created license message appears
5	Click **Finish** The floating license is now activated on the Enterprise License Server.
6	Close **Floating License Manager** tool.
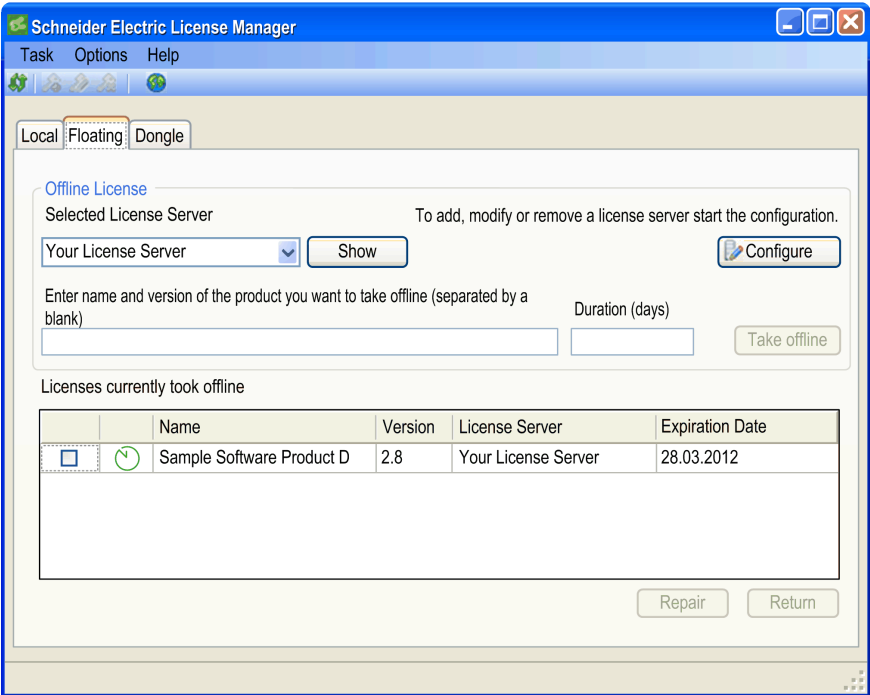
Floating License Usage

Once activated, the floating license can be used from any computer connected to the same network as the Enterprise License Server.

When used on a computer, the floating license is checked out from the Enterprise License Server and is not available for any other connected computer from this moment. After usage the floating license is checked in again and is available for other connected computers again.

NOTE: The license can be taken offline from Enterprise License Server to a computer. It then behaves as a node-locked license, and the computer can be disconnected from the Enterprise License Server network.

Connecting to the Enterprise License Server

Step	Action
1	Start **License Manager** tool.
2	Select the **Floating** tab.
3	The following window appears: Select your Enterprise License Server in the **Selected License Server** drop list and click **Show**. **NOTE:** If the connection to the Enterprise License Server is not yet configured, click **Configure**. For detailed information on Enterprise License Server configuration procedure, refer to *Schneider Electric License Manager, User Manual* or **License Manager** on-line help.

Taking Offline a Floating License

Step	Action
1	In the **Floating** tab of the **License Manager** tool, select your Enterprise License Server.
2	Click **Show**. **Result:** An Internet browser opens with the web portal of the FLEXnet License Administrator.

Step	Action
3	In the FLEXnet License Administrator click **Activatable** to display the available floating licenses. From the list copy, the name and the version of the product to be taken offline.
4	Go back to the **Floating** tab of the **License Manager** and enter name and version (separated by a blank) in the text box for requested information.
5	Enter **Duration (Days)** form 1 day to unlimited (1 000 000). **NOTE:** Duration is the time period you want to take offline the license from the Enterprise License Server to your local PC. It is recommended to keep the duration short to avoid in case of damage or loss of your local PC that this license will be blocked for usage to other users till the duration expires.
6	Click **Take offline**. **Result:** The license is added to the list of **Licenses currently took offline**.
7	After time period expires, the license is automatically returned to the Enterprise License Server. If you want to return the license back to the Enterprise License Server before the end of the time period set above: 1. Go back to the **Floating** tab of the **License Manager**. 2. In the list of **Licenses currently took offline** select the license you want to return. 3. Click **Return**.

Control Expert License Registration

Overview

Registration is done on Schneider Electric Software Licensing Web Portal (SLP).

The SLP is a cloud-based service of Schneider Electric that provides universal access to your Schneider Electric Software licenses on the web. The SLP allows you to overview and manage your licenses and registrations.

> **NOTE:** before registering a license, you have to create your Schneider Electric Web User Account if not already done.

When licences are registered, the number of return, repair, and reinstall is extended:

Actions	Single (1 seat)	Group (3 seats)	Team (10 seat)s	Entity (100 seats)
Return	1 → 7	2 → 9	5 → 20	25 → 150
Repair	1 → 3	2 → 5	3 → 10	8 → 50
Reinstall	1 → 3	2 → 5	3 → 10	8 → 50

> **NOTE:** At https://www.youtube.com/watch?v=0bSzFztSt7k you can find a video explaining how to register your licenses.

Creating your Schneider Electric Web User Account

Step	Action
1	Go to www.se.com\licensing, or click on the globe icon ![globe] on the **License Manager** / **Floating License Manager** tool.
2	Select **Create new Schneider Electric Web User Account**.
3	Enter your email address that will be your user ID for your Schneider Electric Web User Account. Fill in the mandatory fields and validate.

Registering a License

Step	Action
1	Login to the Schneider Electric Software Licensing Web Portal (SLP).
2	Select **Register license into my account**.
3	Enter the **Activation ID** for your license and click **Register**. **NOTE:** If your license is yet registered, a message will inform you.

Updating Unity Pro With Control Expert

Subject of this Chapter

This chapter describes how to update a Unity Pro version with Control Expert.

It explains how to perform a back-up of the user applications, settings, custom libraries, private ASI Catalog and also deals with the recommendations related to previous versions of Unity Pro.

Operations Required Prior to an Update of Unity Pro with Control Expert

Overview

Before updating Unity Pro with Control Expert, it is recommended that the current project files be saved.

If the previous installed version is earlier than Unity Pro 4.0, the following items must also be saved:

- Custom libraries
- Private ASI catalog

In addition, refer to for older versions of Unity Pro.

> **NOTE:** If the version currently installed on the workstation is **incomplete** for any reason, it must be uninstalled before updating. Then, the new version of Control Expert must be installed using the .

Export Current Project Files

This step consists of generating files that are used to migrate projects to Control Expert (Classic). Export current projects from the project file format (*.STU) into an archive application file format (*.STA). It is also recommended to export into an application exchange file format (*.XEF).

The file types are:

- *.STU files from previous versions of Unity Pro are not readable on the new version of Control Expert.
- *.STA files are archive files compatible between different versions of Control Expert and Unity Pro. However, these files can only be created for projects that can be successfully built. The advantage of this format is the capability to connect to the PLC after opening the project on a newer version of Control Expert.
- *.XEF files are used for exporting a global project without global DTMs configuration and are compatible with all versions of Control Expert or Unity Pro. Importing an *.XEF file requires a **Rebuild All** of the project.
- *.ZEF files are used for exporting projects with global DTMs configuration and are compatible with all versions of Control Expert or Unity Pro. Importing an *.ZEF file requires a **Rebuild All** of the project

For additional information about file formats, refer to:

- Service in Offline Mode (see EcoStruxure™ Control Expert, Operating Modes)
- Users Applications and Projects File Formats (see EcoStruxure™ Control Expert, Program Languages and Structure, Reference Manual)

For additional information about project compatibilities with Unity Pro versions and PLC firmware, refer to **Start > Programs > Schneider Electric > SoCollaborative > Unity Pro > ReleaseNotes**.

For additional information about using projects with Control Expert with Topology Manager, refer to Importing Control Projects (see EcoStruxure™ Control Expert, Topology Manager User Manual).

Create Archived Application File (*.STA)

The following table describes the procedure for generating *.STA* files:

Step	Action
1	Launch the current Unity Pro software: **Start > Programs > Schneider Electric > SoCollaborative > Unity Pro > Unity Pro xx** (*xx* refers to Unity Pro package).
2	Open the project (*.STU* file): • **File > Open**. • Select the project (*.STU* file). • Click **Open**.
3	**File > Save Archive**, see note below.
4	Choose a location for the file to be saved. Do not save files in the default Schneider Electric directory: `C:\Program Files\Schneider Electric\Unity Pro` or `C:\Program Files (x86)\Schneider Electric\Unity Pro` Files saved in this directory may be deleted during Control Expert installation.
5	Click **Save**.
6	Remember the location where the *.STA* file is stored on the terminal as it is needed when recovering the project.

NOTE: The **Save Archive** function is only available if:

- The project has been generated.
- The **Tools > Project Settings > General > PLC embedded data > Upload information**, option is selected and at least **Comments** or **Animation tables** is selected.

Create Application Exchange File (*.XEF or *.ZEF)

The following table describes the procedure for generating *.XEF or *.ZEF* files:

Step	Action
1	Launch the current Unity Pro software: **Start > Programs > Schneider Electric > SoCollaborative > Unity Pro > Unity Pro xx** (*xx* refers to Unity Pro package).
2	Open the project (*.STU* file): • **File > Open**. • Select the project (*.STU* file). • Click **Open**.
3	**File > Export Project**.
4	Choose a location for the file to be saved. Do not save files in the default Schneider Electric directory: `C:\Program Files\Schneider Electric\Unity Pro` or `C:\Program Files (x86)\Schneider Electric\Unity Pro` Files saved in this directory may be deleted during Control Expert installation.
5	Click **Export** and select the export file format (*.ZEF* or *.XEF*).
6	Remember the location where the *.ZEF* or *.XEF* file is stored on the workstation as it is needed when recovering the project.

Save Custom Libraries

Save custom libraries and families as follows:

Step	Action
1	Launch the current Unity Pro software: **Start > Programs > Schneider Electric > SoCollaborative > Unity Pro > Unity Pro xx** (*xx* refers to Unity Pro package).
2	**Tools > Types Library Manager**.
3	Select 1 custom family.
4	Right-click the selected custom family.
5	Click **Create an installable family**.
6	Choose a location for the installable family to be saved.
7	If *sub-types* need to be included, select **Include sub-types** check box.
8	Click **OK**. Do not save files in the default Schneider Electric directory: `C:\Program Files\Schneider Electric\Unity Pro` or `C:\Program Files (x86)\Schneider Electric\Unity Pro`

Step	Action
	Files saved in this directory will be deleted during Control Expert installation.
9	Save other custom libraries by repeating steps 3 to 8.
10	Exit the *Types Library Manager* by clicking **Close** in the *Types Library Manager* dialog.

After the storage location is defined and the settings saved, several *DSC* files containing the custom library settings will be created.

For more information, refer to Types Library Manager (see EcoStruxure™ Control Expert, Operating Modes).

Save the Private ASI Catalog

If a private *ASI* catalog is used, copy the following files to another directory where they can be recuperated later:

- *...\Schneider Electric\ConfCatalog\Database\Asi \1031\private.ctg, private2.ctg*
- *...\Schneider Electric\ConfCatalog\Database\Asi \1033\private.ctg, private2.ctg*
- *...\Schneider Electric\ConfCatalog\Database\Asi \1034\private.ctg, private2.ctg*
- *...\Schneider Electric\ConfCatalog\Database\Asi \1036\private.ctg, private2.ctg*
- *...\Schneider Electric\ConfCatalog\Database\Asi \1040\private.ctg, private2.ctg*
- *...\Schneider Electric\ConfCatalog\Database\Asi \2052\private.ctg, private2.ctg*

NOTE: Do not save files in the default Schneider Electric directory: `C:\Program Files \Schneider Electric\Unity Pro` or `C:\Program Files (x86)\Schneider Electric\Unity Pro`. Files saved in this directory will be deleted during Control Expert installation.

Specific Update Considerations

The following are specific update considerations related to older versions of Unity Pro:

- For Unity Pro V5.0:

  The Installer of DTM library cannot completely manage uninstallation of the previous DTMs installed with Unity Pro V5.0. This may lead to incorrect installation of the DTMs (especially the Generic DTMs).

  Uninstall previous versions of the LOKI and Generic DTMs (using the Windows add or remove Programs function) before installation of Control Expert.

- For Unity Pro versions earlier than Unity Pro 3.0:

  For projects that were built with an earlier version than Unity Pro 3.0, packing the PLC memory in RUN on Premium may lead to stop the PLC. In order to avoid this behavior,

after opening the *STA* archive file, perform a **Rebuild All** of the project. Rebuilding the project involves a STOP of the PLC as well as a full download of the project.

For more information, refer to Service in Offline Mode (see EcoStruxure™ Control Expert, Operating Modes).

- For Unity Pro versions earlier than Unity Pro 2.0:

  As the pin layout for the elementary function block **COM_DB** was changed with Unity Pro 2.0, applications containing this EF and designed with an earlier version need to be exported and imported. Moreover, new variables must be assigned on the inputs and outputs of the EF.

  For more information, refer to COMP_DB: Comparison (see EcoStruxure™ Control Expert, Control, Block Library).

Updating Unity Pro with Control Expert

Procedure

As Control Expert licenses are not compatible with Unity Pro licenses, updating Unity Pro on a workstation with Control Expert is very similar to the first time installation procedure, page 18.

Restoring Projects and Settings After Control Expert Installation

Overview

After the installation of Control Expert is completed, projects and settings can be recovered by restoring in the following recommended order:

Only if the previous installed version is less than Unity Pro 4.0:

- Custom libraries
- Private ASI catalog

For all versions, including versions less than Unity Pro 4.0:

- DFBs and DDTs in the Type Library Manager
- Archived Application *.STA* and/or Application Exchange Files *.XEF* (Control Expert Classic)

  NOTE: The Libset V10.0 and later are automatically installed with Control Expert. If required to install previous Libset versions, start **Programs > EcoStruxure Control Expert > Install libset** tool.

Restoring Custom Libraries

To restore custom libraries, import them using the **Type Library Update** tool.

The procedure is explained below:

Step	Action
1	Close Control Expert if it is open.
2	Start **Programs > EcoStruxure Control Expert > Types Library Update**.
3	In the **Types Library Update** dialog: • Enter the directory of the custom family previously stored, page 36 on the workstation (*DSC* file type). • Select the version of the libset where the custom family needs to be installed.
4	Click **Install family**.
5	The following message may appear: *The installation has succeeded but there are warnings. Details are in file: <C:\WINNT\logunit\install.log>* Disregard this message. Click **OK**.
6	Repeat steps 3 to 5 for each custom family that needs to be restored.

Step	Action
7	Launch Control Expert: **Start > Programs > EcoStruxure Control Expert > Control Expert**.
8	Check that all the families have been successfully installed: **Tools > Types Library Manager > \<Libset\> > Custom Lib**.

For more information, refer to Types Library Manager (see EcoStruxure™ Control Expert, Operating Modes).

Restoring Manually DFBs, DDTs, and FFBs in the Type Library Manager

It is possible to restore the custom libraries manually even if they have not been saved.

This operation is useful in the following cases:

- You forgot to save custom libraries in an installable form, page 36 before updating,
- You have been using custom FFBs defined with EFB Toolkit.

The directory of the custom libraries depends on Unity Pro version installed and the operating system. Generally, they are saved automatically during the installation process in the following directory:

- Unity Pro 4.0 or later:
  - Windows 7 or 10 (32 bits or 64 bits): `C:\ProgramData\Schneider Electric \Unity Pro\CustomLibset\Vx.y`
  - Windows XP: `C:\Program Files\Schneider Electric\Application Data \Schneider Electric\Unity Pro\CustomLibset\Vx.y`
- Unity Pro 3.1 or earlier:

  `C:\Program Files\Schneider Electric\Application Data\Schneider Electric\Unity Pro\CustomLibset\OldCustomdbxx.yy`

The following table shows how to proceed when replacing Unity Pro 3.1 or earlier:

Step	Action
1	Copy the content of the old custom library from the following directory (example): `C:\Program Files\Schneider Electric\Application Data\Schneider Electric\Unity Pro\CustomLibset\Vx.y`
2	Paste the content of the old custom library into the newer Control Expert custom library directory: `C:\ProgramData\Schneider Electric\Control Expert ••.•\CustomLibset\Vx.y`, where ••.• is the installed Control Expert version.
3	Repeat step 1 and 2 for all versions Vx.y where the custom library is needed.

NOTE: *x.y* or *xx.yy* are the version number of the former Unity Pro and Control Expert versions.

Restoring Private ASI Catalog

If the private *ASI* catalog files were previously saved, they must be restored to their original location, page 37.

Restoring Archived Application File (*.STA)

This restoration consists of importing the *.STA* files previously stored, page 34. The *.STA* files are used when the PLC cannot be stopped. To restore *.STA* files follow the procedure below for each project:

Step	Action
1	Launch Control Expert: **Start > Programs > EcoStruxure Control Expert > Control Expert**.
2	Open the *.STA* file from **File > Open** menu. The file type selected must be *Unity Pro Archived Application File (*.STA)*.
3	Click **Open**.
4	Save the project as an *.STU* file.

Restoring Application Exchange File (*.XEF)

This restoration consists of importing the *.XEF* files previously stored, page 34. Importing from an *XEF* format involves to re-generate the project. To restore *.XEF* files follow the procedure below for each project:

Step	Action
1	Launch Control Expert: **Start > Programs > EcoStruxure Control Expert > Control Expert**.
2	Open the *.XEF* file from **File > Open** menu. The file type selected must be *Unity Pro Application Exchange File (*.XEF)*.
3	Click **Open**.
4	Save the project as an *.STU* file.

Operations Common to Control Expert Installation and Update

Subject of this Chapter

This chapter describes procedures that are common to Control Expert first time installation and update.

Updating Control Expert

Description

An **update** of Control Expert corresponds to the installation of a new version of Control Expert by keeping the same package, for example, updating from Control Expert V14.0 L to V15.0 L.

It consists in:

- The installation of the new software version. This is similar to a

- The activation of an update license:
    - In case of a major release update (for example, updating Control Expert from V14.1 to V15.0) a new license activation is required.
    - In case of minor release update (for example, updating Control Expert from V14.0 to V14.1), a license activation is not required. License of the previous version is still valid.

Upgrading Control Expert

Description

An **upgrade** of Control Expert corresponds to the activation of another package license. For example, upgrading from Control Expert V15.0 L to Control Expert V15.0 XL.

How to Start Control Expert

Overview

Control Expert installs with two access levels:

- Control Expert (with Topology Manager).
- Control Expert Classic

How to Start a Control Expert Instance

To start Control Expert with Topology Manager execute the command:

Start > Programs > EcoStruxure Control Expert > Control Expert.

Independently of the access security that is configured in the Security Editor of the computer acting as Control Expert server, you need to enter in the log-in window the username of a user that has been created and enabled in the centralized security database. If a password is set for this user, you must enter it.

The functionality that you can use depends on the rights of the user whose username you have entered. For more information, refer to *EcoStruxure™ Control Expert, Security Editor, Operation Guide*.

By default, Control Expert (client) instances that you open connect to the local Control Expert server whose address and port is `localhost:19950`.

To connect to a remote Control Expert server, page 13, configure the listening IP address of the server, page 49. Then, enter its IP address in the **Networks and Server** section of the **User Preferences** window (see EcoStruxure™ Control Expert Topology Manager, User Guide). The window opens by clicking its icon in the Topology Manager toolbar.

⚙

NOTE: The system server service is configured to start automatically. If you experience difficulties connecting to the system server, verify that the `SE.Automation.System Manager.exe` process is running on the computer that is used as system server.

NOTE:

If you have yet to activate the software, a message alerts you of the remaining number of days of use left and whether the activation can still be completed.

The Topology Manager is available only with specific software licenses, page 13.

How to Start a Control Expert Classic Instance

To start Control Expert Classic, execute the command:

Start > Programs > EcoStruxure Control Expert > Control Expert Classic.

You need to enter in the log-in window, the username and password of a user that has been created and enabled in the centralized security database if access security is set to either policy in the Security Editor:

- **Security on, mandatory login**
- **Security on, avoidable login**

For more information, refer to *EcoStruxure™ Control Expert, Security Editor, Operation Guide*.

> **NOTE:** If you have yet to activate the software, a message alerts you of the remaining number of days of use left and whether the activation can still be completed.

License Selection for Control Expert Classic

The first time you start Control Expert Classic after activating a valid license, page 13, you have to select the package corresponding to your license in the **Package Selector** tool.
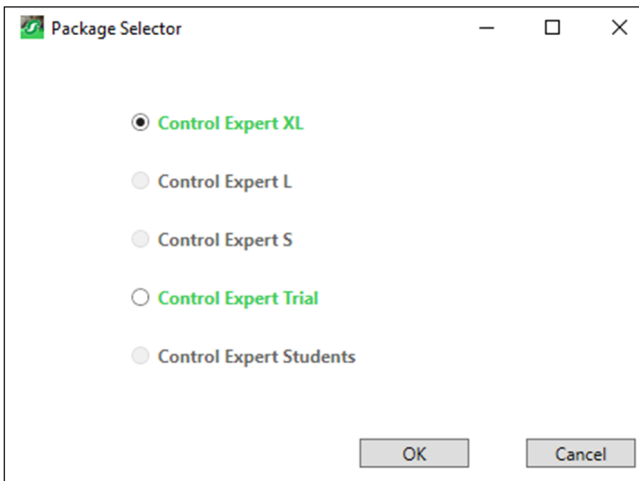
> **NOTE:** If you have multiple valid licenses on your computer, the **Package Selector** tool selects by default the highest package (XL > L > S).

The **Package Selector** tool differentiates the package (S, L or XL) as shared base and M580 safety is not mentioned. So, if XL with M580 Safety or XL with Topology Manager and M580 Safety is installed, select the XL package.

M580 safety CPUs are included in the following licenses:

- Control Expert XL with M580 SAFETY
- Control Expert XL with Topology Manager and M580 SAFETY
- M580 Safety Add-On for Control Expert L or XL licenses.

In both cases, selecting the corresponding Control Expert package (L or XL) opens the software with M580 safety CPUs.

How to Change the Language of Control Expert

To change the language of Control Expert Classic and Control Expert with Topology Manager, proceed as follows.

Step	Action
1	Execute the command **Start > Programs > EcoStruxure Control Expert > Language selection**. **Result**: The **Control Expert Language Selection** dialog is displayed.
2	Select the language for Control Expert.
3	Confirm with **OK**. **Result**: A message tells you that the language selection is effective the next time you start Control Expert Classic or Control Expert.

Enabling Communication with Remote Clients and Reinforcing Security

Overview

This topic describes the steps that you need to perform on the computer acting as Control Expert server when you want to connect a remote Control Expert client.

NOTE: Schneider Electric strongly recommends strengthening communication security between the system server and the client.

Configuring the Listening IP Address by Using the Server Configuration Tool

To manage and restrict client access to the Control Expert server, proceed as follows:

Step	Action
1	Run as administrator the **Server Configuration** tool on the computer acting as Control Expert server by executing the following command: **Start > Programs > EcoStruxure Control Expert > Server Configuration**.
2	In the **Listening Connections** section, select the **Listening IP address** value from the list and click **Apply**: • **127.0.0.1** *(Local connection)*: The server does not allow connections from remote Control Expert clients. (Default value) • **0.0.0.0** *(All connections)*: The server allows connections from any Control Expert client. • **Network adapters of the system server computer**: The server only allows connections from Control Expert clients that are on the same network as the adapter.

Strengthening Communication Security

The following procedure applicable to Windows Defender is provided as example only. Your operating system and application may have different requirements or procedures.

To set-up a communication with improved security, proceed as follows:

Step	Action
1	Open **Windows Defender Firewall with Advanced Security** (wf.msc) using the **Microsoft Management Console** (mmc.exe).
2	Click **Inbound Rules** in the left pane. In the **Action** pane, click **New rule…**. Result: The **New Inbound Rule Wizard** opens.
3	In the **New Inbound Rule Wizard**: • In the step **Rule Type** select **Custom** and click **Next**. • The step **Program** opens. Select **This program path:**, set `C:\Program Files (x86)\Schneider Electric\Control Expert X\Server\SE.Automation.SystemManager.exe` (where X is the version that is installed) and click **Next**. • The step **Protocols and Ports** opens: ◦ Set **Protocol Type** to **TCP**, ◦ Set **Local Port** to **Specific Ports**, and enter `19950-19952` to port range. ◦ Click **Next**. • The step **Scope** opens. Leave the settings as they are and click **Next**. • The step **Action** opens. Select **Allow the connection if it is secure** and click **Next**. • The step **Users** opens. Leave the settings as they are and click **Next**. • The step **Computers** opens. For Authorized computers select **Only allow connections from these computers** and add authorized computer names. Click **Next**. • The step **Profile** opens. Select **Domain**, clear **Private**, and clear **Public**. Click **Next**. • The step **Name** opens. In the **Name** box enter `SystemManager`, and in the **Description** box enter `TCP rules`. Click **Finish**.
4	In the **Inbound Rules** pane select then, copy and paste the `SystemManager` rule.
5	Select the pasted `SystemManager` rule and click **Properties**. • In the **General** tab, change the description from `TCP rules` to `UDP rules`. • In the **Protocols and Ports** tab: ◦ Set **Protocols Type** to UDP, ◦ Set **Local Port** to **Specific Ports** and enter `19950` as port range. Click **OK** to close the **Properties** window.
6	Close the **Microsoft Management Console**.

How to Repair Control Expert

Objective

This feature allows to completely repair an existing Control Expert distribution if the current installation is damaged.

Control Expert repair method is only performed through installation Setup (from DVD-ROM or .iso file). Any other method may not work.

NOTE: Corrupted DTM installations cannot be repaired. They must be uninstalled using the Windows **remove programs** function and then reinstalled.

Control Expert Repair Procedure

The following table describes the procedure to repair Control Expert from the Control Expert Setup on the DVD-ROM or .iso file in the maintenance mode:

Step	Action
1	The beginning of the repair procedure depends on the software package media. With DVD-ROM: Insert the DVD-ROM named Control Expert. The software package setup is automatically launched. If not, go to the DVD root and launch **Setup.exe**. With .iso file: Extract the files of the installation package to disk or mount the image (.iso). Double-click the **Setup.exe** file located in the root of the installation package.
2	The installation wizard for Control Expert starts. Click **Next**.
3	The Program Maintenance window opens. Select the **Repair** option and confirm by clicking **Next**.
4	Launch the procedure by clicking **Install**.

NOTE: Repair Control Expert procedure does not install Libset files. To update Libset files, it is necessary to use **Install libset** tool.

How to Transfer a License

License Transfer Procedure

In order to transfer a Control Expert license to another user:

Step	Action
1	Return the license from the computer and send it back to the Schneider Electric License Server. **Result**: The license is available for activation on another computer.
2	Activate the license, page 24 on the other computer.

License Return Procedure

This procedure describes the steps for returning a node-locked license:

Step	Action
1	Start **License Manager** tool.
2	On the **Local** tab, select the **Activation ID** of the license you want to return.
3	Select **Return**. After few seconds, the successfully removed license message appears
4	Click **Finish** You cannot any more start Control Expert on the computer.
5	Close **License Manager** tool.

Floating License Return Procedure

This procedure describes the steps for returning a floating license:

Step	Action
1	Start **Floating License Manager** tool on the Enterprise License Server.
2	On the **Local** tab, select the **Activation ID** of the license you want to return.
3	Select **Return**. After few seconds, the successfully removed license message appears
4	Click **Finish** You cannot any more start Control Expert on the computers connected to Entreprise License Server.
5	Close **Floating License Manager** tool.

How to Repair a License

Introduction

A license can become untrusted, for example due to replacement of hardware components of a PC or Enterprise License Server.

License Repair Procedure

This procedure describes the steps for repairing a node-locked license:

Step	Action
1	start **License Manager** tool.
2	On the **Local** tab, select the **Activation ID** of the license you want to repair.
3	Click the **Repair** button. Result: The **Repair in Progress** dialog opens. In the text box information about the internal processing of license repair is displayed. **NOTE:** If your computer has no Internet connection, or is not connected to the Schneider Electric License Server you can repair by mobile device, by web portal, or by phone. For detailed information, refer to *Schneider Electric License Manager, User Manual* or **License Manager** on-line help.
4	After the license is successfully repaired, click the **Finish** button. Result: The repaired license is displayed in the list of licenses as active in the **Local** tab.
5	Close **License Manager** tool.

Floating License Repair Procedure

This procedure describes the steps for repairing a floating license:

Step	Action
1	Start **Floating License Manager** tool on the Enterprise License Server.
2	On the **Local** tab, select the **Activation ID** of the license you want to return.
3	Click the **Repair** button. Result: The **Repair in Progress** dialog opens. In the text box information about the internal processing of license repair is displayed. **NOTE:** If your computer has no Internet connection, or is not connected to the Schneider Electric License Server you can repair by web portal. For detailed information, refer to *Schneider Electric Floating License Manager, User Manual* or **Floating License Manager** on-line help.

Step	Action
4	After the license is successfully repaired, click the **Finish** button.
	Result: The repaired license is displayed in the list of licenses as active in the **Local** tab.
5	Close **Floating License Manager** tool.

Drivers

At a Glance

During installation of Control Expert, three drivers can be optionally installed:

- Uni-Telway
- Modbus
- USB

If selected, the three drivers are installed. One driver cannot be installed without the others being installed.

These drivers provide the link between the workstation and the PLC. The driver to be used is selected in Control Expert.

Normally, it is not necessary to change the configuration of the installed drivers. In exceptional cases use the **Drivers Manager** to reconfigure a driver or install a new drivers from **Communication Drivers** directory on the Control Expert DVD-ROM.

For information about drivers installations and configurations, refer to the SetupDrv.pdf in your language in the **Communication Drivers** directory.

Launching the Drivers Manager

To launch the Drivers Manager execute the command:

Start > Programs > EcoStruxure Control Expert > Drivers Manager.

Increasing Number of Control Expert Editors Open

Introduction

After a standard installation use of multiple instances of Control Expert only allows a limited number of editors that can be open at the same time: 15 open editors for the first instance and 6 open for the remaining instances.

Removing Editor Limits

By modifying a Windows registry parameter with the following procedure, the number open editors can be increased:

1. Run the registry editor (%SystemRoot%\WINDOWS\regedit.exe).

   NOTE: %SystemRoot% is normally the "C:" drive.

2. Find the registry key:

   HKEY_LOCAL_MACHINE\ System\CurrentControlSet\Control\Session Manager \SubSystems\Windows.

3. Right-click **Windows** and select **Edit String**.

4. Find the parameter **SharedSection**=xxxx,yyyy,zzzz. **SharedSection** is the first parameter and it is placed nearly at the beginning of the data content.

5. Set the **yyyy** value (in kB) to 8192 (if it was set to a lower value). It controls the size of the desktop heap, which is used for Windows objects.

6. Restart the workstation to have the updated value taken into account.

   NOTE: After changing the **SharedSection** value the only limit on the number of open editors is the amount of RAM installed on the workstation.

Uninstalling Control Expert

Subject of this Chapter

This chapter describes when it is necessary to uninstall Control Expert. It also explains how to proceed when uninstalling.

How to Uninstall Control Expert

Objective

This operation is used to delete all Control Expert software components from the workstation.

However, this does not affect:

- Application files.
- System projects (Topology Manager). They are automatically exported to the Migration folder at the path %ProgramData%\Schneider Electric\ControlExpert.Topology X (where X is the installed version) on the computer acting as system server.
- Database backup files (Server Configuration tool).
- Control Expert execution rights (Activation IDs are managed with Schneider Electric License Manager).
- Elements shared with other software packages (for example, Control Expert user).

When Uninstalling Control Expert Is Required

Control Expert must be uninstalled manually when installing:

- An earlier version of Control Expert, for example, installing Control Expert 14.1 on Control Expert 15.0.
- A version of Unity Pro.

    NOTE: Installing a version of Unity Pro or an earlier version of Control Expert can lead to incompatibility with other software, for example, OFS, UDE and UAG.

Before Uninstalling Control Expert

- For Control Expert with Topology Manager, ensure that the *Supports Upward Compatibility* attribute of your system projects is selected; otherwise, they are not compatible anymore with the next version of the software.
- For Control Expert activated with a node-locked license, it is recommended to return the license, page 52 before uninstalling Control Expert in order to install it onto another workstation.

    NOTE: When uninstalling Control Expert, the Schneider Electric License Manager tool might be also deleted if it is not required by any other software.

Uninstalling Control Expert by Using the Setup File

The following table describes the procedure to uninstall Control Expert from the Control Expert Setup on the DVD-ROM or `.iso` file in the maintenance mode:

Step	Action
1	The beginning of the uninstall procedure depends on the software package media. With DVD-ROM: Insert the DVD-ROM named Control Expert. The software package setup is automatically launched. If not, go to the DVD root and launch **Setup.exe**. With `.iso` file: Extract the files of the installation package to disk or mount the image (`.iso`). Double-click the **Setup.exe** file located in the root of the installation package.
2	The installation wizard for Control Expert starts. Click **Next**.
3	The Program Maintenance window opens. Select the **Uninstall** option and confirm by clicking **Next**.
4	Launch the procedure by clicking **Remove**.

Uninstalling Control Expert by Using the Windows Control Panel

The following table shows how to uninstall Control Expert manually with the Windows control panel:

Step	Action
1	**Start > Control Panel > Programs and Features**.
2	Right-click **Control Expert** and select **Remove**.
3	A pop-up window appears asking for confirmation. Click **Yes**.

After Uninstalling Control Expert

Uninstalling Control Expert from the Windows Control Panel or **Setup.exe** file does not remove the DTM Library. As a result, installation of an earlier version of Control Expert / Unity Pro (with earlier version of DTM Library) will not succeed.

In this case uninstall manually the following DTM libraries:

- EcoStruxure Control Expert PSx DTM Library
- Schneider Electric Placeholder DTM Library
- Schneider Electric Mx80 HART Gateway DTM Library
- Schneider Electric BME NOR DTM Library
- Schneider Electric PME DTM Library

- CXM DTM

    NOTE: When the uninstallation of Control Expert and the DTM Library is completed you may have to proceed in the same manner to uninstall drivers and other DTMs that you have manually installed for Control Expert.

Replacing Control Expert with an Earlier Version

To install an earlier version of Control Expert / Unity Pro, the current version of Control Expert must be uninstalled using the Windows control panel as previously described.

In addition, the following directories must be manually removed if not used by another Schneider Electric software:

- `C:\Program Files (x86)\Common Files\Schneider Electric Shared\Tlb`

- `C:\Program Files (x86)\Common Files\Schneider Electric Shared \Common`

- `C:\Program Files (x86)\Common Files\Schneider Electric Shared \SRCSDK`

- `C:\Program Files (x86)\Common Files\Schneider Electric Shared\SSTA`

As standards, specifications, and design change from time to
time, please ask for confirmation of the information given in
this publication.

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