

Unity Pro

Installation Manual

12/2015

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All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

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Safety Information



Important Information

NOTICE

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



At a Glance

Document Scope

This document describes the installation and update of Unity Pro 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 Unity Pro 11.0 or later.

Related Documents

Title of Documentation	Reference Number
Unity Pro Operating Modes	33003101 (English), 33003102 (French), 33003103 (German), 33003696 (Italian), 33003104 (Spanish), 33003697 (Chinese)
Unity Pro Program Languages and Structure Reference Manual	35006144 (English), 35006145 (French), 35006146 (German), 35013361 (Italian), 35006147 (Spanish), 35013362 (Chinese)
Unity Pro Control Block Library	33002535 (English), 33002536 (French), 33002537 (German), 33003686 (Italian), 33002538 (Spanish), 33003687 (Chinese)

Title of Documentation	Reference Number
Communication Drivers Installation Manual	35006152 (English), 35006153 (French), 35006154 (German), 35013950 (Italian), 35006155 (Spanish), 35012192 (Chinese)

You can download these technical publications and other technical information from our website at <http://download.schneider-electric.com>

Chapter 1

General Points

Subject of this Chapter

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

What Is in This Chapter?

This chapter contains the following topics:

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Terminal Configuration	12

Presentation of Unity Pro Software Packages

General Points

Unity Pro can be installed using the DVD-ROM. Four packages are available:

- Unity Pro S
- Unity Pro L
- Unity Pro XL
- Unity Pro XL Corporate

Languages

The following languages are available for Unity Pro:

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

NOTE: To modify the language of Unity Pro selection command:

Start → Programs → Schneider Electric → SoCollaborative → Unity Pro → Language Selection.

Registration

When the first installation is complete, the software must be registered with Schneider Electric within 21 days. After this date, if you have not registered the product, Unity Pro no longer runs.

When installing an update from an earlier version of Unity Pro, there is no registration procedure to perform.

Software Update

During installation, enable Schneider Electric Software Update tool to check for updates in order to benefit from hot fix releases.

Software Packages

The following table presents the contents of the software packages for the last version of Unity Pro:

Nodes	Number of CD/Davits	Unity Pro S	Unity Pro L	Unity Pro XL
Unity Pro software	1	Unity Pro S software	Unity Pro L software	Unity Pro XL software

Recommended Precautions when Installing or Updating Unity Pro

Recommended Precautions before Installation

The following table shows the recommended precautions before installing or updating Unity Pro:

Step	Action
1	Check the system requirements (see page 12) of the workstation.
2	Check that the Windows session used to install or update Unity Pro has administrator rights.
3	Perform a back-up (see page 24) of all current applications and settings before updating Unity Pro.
4	Check that the latest Windows Service Pack is installed.
5	Check that the latest Windows Security patches are installed.
6	Disable all the antivirus services (real time, scripting, etc.).
7	Check that the language required with Unity Pro is available with Windows, for example, Chinese language for Windows operating system.
8	Close all running applications, (including the current version Unity Pro when updating).

When Uninstalling Unity Pro is Required

Unity Pro must be uninstalled manually when installing an earlier version of Unity Pro than the one currently installed, [for example, installing Unity Pro 4.1 on a terminal which currently has Unity Pro 5.0 installed.]

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

To uninstall, refer to Uninstalling Unity Pro ([see page 43](#)).

Terminal Configuration

Definition

The configuration type determines the level of expected performance.

Performance of Unity Pro software can be affected by simultaneously opening several windows, accessing large quantities of animated data or using a large application.

Required Operating System

- Unity Pro software requires one of the following operating systems to be present on the terminal:
- Microsoft Windows 7 Professional edition 32/64 bits
 - Microsoft Windows 8.1
 - Microsoft Windows Server 2012

Other Requirements

- The following are required before installing Unity Pro:
- Internet Explorer V6.0 or later
 - Windows Installer V4.5 or later

Terminal Configuration with Windows 7

The following table provides the minimum and recommended terminal characteristics necessary to install Unity Pro software:

Minimum and recommended terminal configuration with Windows 7 Professional Edition 32/64 bits	
System	Pentium processor 2.4 GHz or higher; recommended: 3.0 GHz.
RAM	2 GB; recommended: 3 GB (*).
Hard disk space	8 GB including the memory space for the software installation, temporary space for execution and space for saving applications; recommended: 20 GB.
Operating Systems	Microsoft Windows 7 Professional edition 32/64 bits system with Service Pack 1 (SP1).
Drive	DVD R, a DVD RW is recommended.
Display	SVGA 1024x768 or higher resolution monitor with high color 24 bits.
Peripherals	A Microsoft mouse or compatible pointing device.
Web Access	As preferred solution, Web registration requires Internet access.
Other	USB port on the computer.
*: A different configuration may be required if other software is used simultaneously with Unity Pro. For example, for a system using FDT/DTM or X80 drops, 4 GB is recommended.	

NOTE: A different configuration may be required if other software is used simultaneously with Unity Pro. For example, for a Modicon M580 system using FDT/DTM 4 GB is recommended.

Unity Pro on Windows 8.1

Installation procedure on Windows 8.1 is provided in **Readme.html** file (**System requirements** → **System with Microsoft Windows 8.1**) on Unity Pro DVD.

Unity Pro on Windows Server 2012

On Windows Server 2012, Unity Pro runs without restriction.

Unity Pro in a Virtual Machine

Unity Pro runs on the following virtual machines:

- VirtualBox
- VMWare

Chapter 2

Installing Unity Pro for the First Time

Subject of this Chapter

This chapter presents the first time installation of Unity Pro software.

What Is in This Chapter?

This chapter contains the following topics:

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How to Perform a First Installation of Unity Pro	16
Automatic Installation	19
How to Register Unity Pro	20

How to Perform a First Installation of Unity Pro

Introduction

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

User Rights

To install the Unity Pro software, you must have the **administrator privileges** on the workstation.

NOTE: Unity Pro is always installed so that it is available for all the users of the workstation.

Components Installed

The following **Unity Pro components** are installed:

- PL7 convertor utility
- Concept convertor utility
- PLC Simulator
- OS Loader
- Following DTMs:
 - M580 embedded Ethernet
 - LOKI
 - 140 CRP 312, 140 NOC 780 00, 140 NOC 781 00
 - HART
 - Scaime
- Schneider Electric Software Update
- Optional drivers
- License manager

Default Directories

The Unity Pro destination directory is set by default as follows:

- **Windows 7 (32 bits):** C:\Program Files\Schneider Electric\Unity Pro\
- **Windows 7 (64 bits):** C:\Program Files (x86)\Schneider Electric\Unity Pro\

The custom libraries destination directory is set by default to:

C:\ProgramData\Schneider Electric\Unity Pro\CustomLibset\Vx.y, where Vx.y corresponds to the version of Unity Pro.

Installation Procedure

Execute the following steps to install the Unity Pro software package:

Step	Action
1	Make sure that your system meets the minimum configuration requirements (see page 12) to install and run Unity Pro.
2	Make sure that you are connected as an administrator of the workstation.
3	Insert the DVD-ROM named Unity Pro .
4	Unity Pro setup is automatically launched. If not, go to the DVD root and launch setup.exe .
5	Select the language for the installation from the drop-down list and confirm by clicking OK . NOTE: The selected language is used for the Unity Pro installation and execution.
6	When Next is available, click it to confirm the Welcome screen.
7	After reading the compatibility information on the ReadMe and ReleaseNotes dialog (and the other information if you want to), click Next to continue.
8	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.
9	You can choose an alternative path for the installation directory and the SESU (Schneider Electric Software Update) tool and/or click Next to continue.
10	You can choose to install communication drivers and/or click Next to continue.
11	Select the shortcuts needed and click Next to continue.
12	To begin the installation, click Install .
13	When the installation process is complete, you can select Open release notes and/or Start Unity Pro after quitting the installation by clicking Finish .

Installation Diagnostic Considerations

- Unity Pro and PL7 Pro communication drivers:
If Unity Pro and PL7 Pro are installed on the same terminal, it is recommended to reinstall the communication drivers separately.
- Chinese installation:
The installation path must not contain Chinese characters.
- For Unity Pro 3.0 or later with EFB Toolkit V2.0:
The path of Unity Pro installation directory must be configured manually when used with EFB Toolkit V2.0.

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 Unity Pro is installed is: C:\Program Files\Schneider Electric\Unity Pro\ for Windows 7 (32 bits), and C:\Program Files (x86)\Schneider Electric\Unity Pro\ for Windows 7 (64 bits).

NOTE: The EFB Toolkit V3.0 does not need this setting.

Automatic Installation

At a Glance

Automatic installation of Unity Pro 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 Unity Pro DVD-ROM.

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

Modifying the Command File

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

Step	Action
1	From the Unity Pro installation DVD-ROM, select the file <code>install.bat</code> .
2	Right click to display the contextual menu and select Edit. Result: The file opens in text format.
3	Fill in the parameters. The <code>install.bat</code> file is self-documented. It contains an up-to-date description and possible parameter values.
4	Save the file.
5	Double click on the modified file. Result: The installation starts and windows appear with the progress of the installation process.

How to Register Unity Pro

Registration

It is necessary to register the installation to obtain permanent user rights for Unity Pro software:

- For a first installation: The software needs to be registered within 21 days after installation.
- For a trial version: No registration is required, the software is automatically available for a 60-day period.
- For an update: No registration is required as long as the previous installed version of Unity Pro was already registered. Nevertheless, if this previous installed version is less than or equal to 4.0, the Registration Converter tool must be launched once to recover the former registration rights.

NOTE: To register Unity Pro, use the **Registration Tool** available at: **Start** → **Programs** → **Schneider Electric** → **SoCollaborative** → **Unity Pro** → **Registration Tool**. While the Registration Tool runs, you can access its help file by pressing **F1** or by clicking the **Help** button at the bottom left of the window.

NOTE: To recover the registration from a previous version of Unity Pro software, use the **Registration Converter** tool available at: **Start** → **Programs** → **Schneider Electric** → **SoCollaborative** → **Unity Pro** → **Registration Converter**.

Required Information

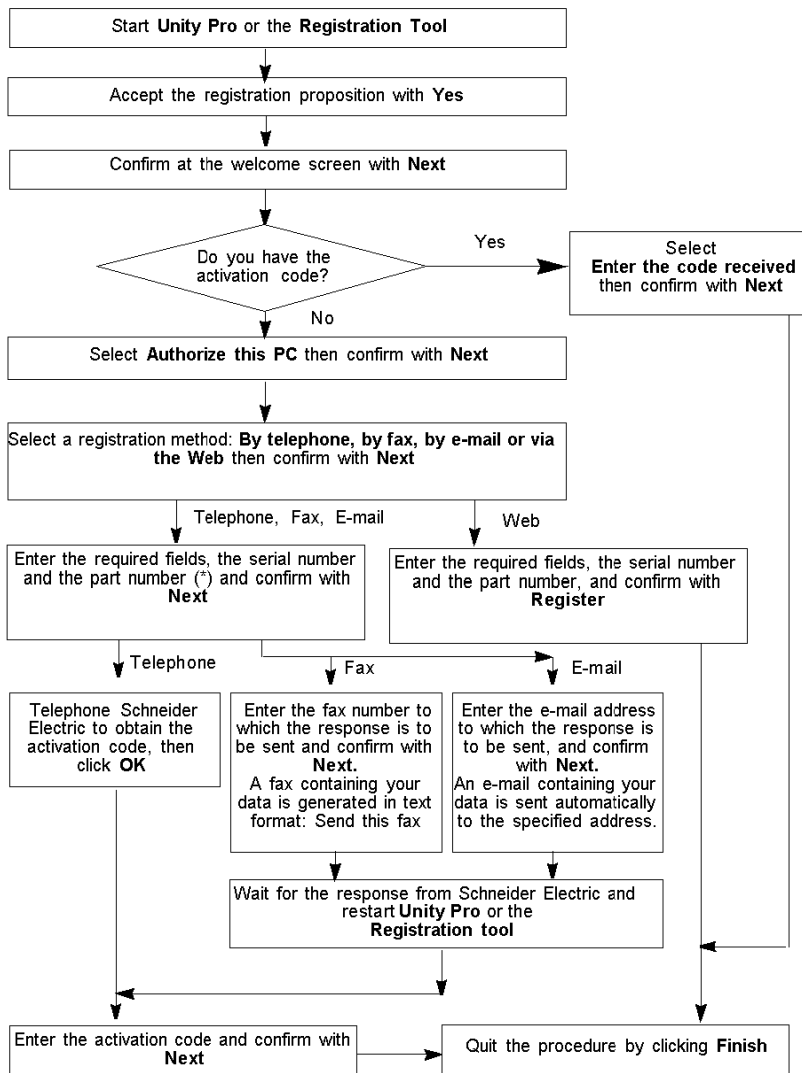
The following elements are required when registering Unity Pro:

- Serial number
- Part number

This information is printed on the back of the Unity Pro package, inside the box and on the certificate of authenticity of Unity Pro.

Procedure

This procedure describes the steps for registering Unity Pro:



(*) These numbers are marked on the label inside the box containing the software CD-ROMs.

Chapter 3

Updating Unity Pro from an Earlier Version

Subject of this Chapter

This chapter describes how to update from an earlier version of Unity Pro. 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.

What Is in This Chapter?

This chapter contains the following topics:

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How to Install Unity Pro Updates and Upgrades	28
Restoring Projects and Settings After Unity Pro Update	29

Operations Required Prior to an Update of Unity Pro

Introduction

Before updating Unity Pro to a later version, it is recommended that the current project files be saved.

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

- Custom libraries
- Private ASI catalog

In addition, refer to specific updates ([see page 27](#)) for older versions of Unity Pro.

Export Current Project Files

This step consists of generating files that are used to migrate projects to a newer version of Unity Pro. 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 new versions.
- *.STA files are archive files compatible between different versions of 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 Unity Pro.
- *.XEF files are used for exporting a global project without global DTMs configuration and are compatible with all versions of 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 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 Unity Pro, Operating Modes*)
- Users Applications and Projects File Formats (*see Unity Pro, 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**.

Create Unity Pro 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 Unity Pro 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 Unity Pro 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.

Step	Action
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 Unity Pro 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 <i>sub-types</i> 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 Files saved in this directory will be deleted during Unity Pro installation.
9	Save other custom libraries by repeating steps 3 to 8.
10	Exit the <i>Types Library Manager</i> by clicking Close in the <i>Types Library Manager</i> 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 Unity Pro, 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 Unity Pro installation.

Specific Update Considerations

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

- For Unity Pro V6.0:
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 the updated Unity Pro V6.0.
- 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 Unity Pro, 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 Unity Pro, Control, Block Library*).

How to Install Unity Pro Updates and Upgrades

Introduction

This section describes the operating modes to update or upgrade Unity Pro on a workstation where another version is already installed.

Terminology

An **update** corresponds to the installation of a new version of Unity Pro, keeping the same package, for example, updating from Unity Pro V4.0 L to Unity Pro V4.1 L.

An **upgrade** corresponds to the installation of another package. It can be the same or another version, for example, upgrading from Unity Pro L to Unity Pro XL.

About Updating or Upgrading Unity Pro

If the version currently installed on the workstation is **incomplete** for any reason, it must be uninstalled before updating. Then, the new version of Unity Pro must be installed using the First Time Installation procedure ([see page 16](#)).

An **update** of Unity Pro does not require you to register the software. The authorization code is preserved on the terminal.

If this previous installed version is less than or equal to 4.0, the Registration Converter tool must be launched one time to recover the former registration rights.

The Registration Converter tool available at:

Start → Programs → Schneider Electric → SoCollaborative → Unity Pro → Registration Converter

An **upgrade** of Unity Pro requires registration of the software ([see page 20](#)).

Restoring Projects and Settings After Unity Pro Update

Introduction

After the update of Unity Pro is completed, projects and settings can be recovered by restoring in the following recommended order:

Only if the previous installed version is less than 4.0:

- Custom libraries
- Private ASI catalog

For all versions, including less than 4.0:

- DFBs and DDTs in the Type Library Manager
- Unity Pro Archived Application *.STA and/or Application Exchange Files *.XEF

Restoring Custom Libraries

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

The procedure is explained below:

Step	Action
1	Close Unity Pro if it is open.
2	Start → Programs → Schneider Electric → SoCollaborative → Unity Pro → Types Library Update.
3	In the Types Library Update dialog: • Enter the directory of the custom family previously stored (see page 26) 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: <i>The installation has succeeded but there are warnings.</i> <i>Details are in file: <C:\WINNT\logunit\install.log></i> Disregard this message. Click OK .
6	Repeat steps 3 to 5 for each custom family that needs to be restored.
7	Launch Unity Pro: Start → Programs → Schneider Electric → SoCollaborative → Unity Pro.
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 Unity Pro, 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 ([see page 26](#)) 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 (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): <code>C:\Program Files\Schneider Electric\Application Data\Schneider Electric\Unity Pro\CustomLibset\Vx.y</code>
2	Paste the content of the old custom library into the newer Unity Pro custom library directory: <code>C:\ProgramData\Schneider Electric\Unity Pro\CustomLibset\Vx.y</code>
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 version.

Restoring Private ASI Catalog

If the private ASI catalog files were previously saved, they must be restored to their original location ([see page 27](#)).

Restoring Unity Pro Archived Application File (*.STA)

This restoration consists of importing the *.STA files previously stored ([see page 24](#)). 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 Unity Pro: Start → Programs → Schneider Electric → SoCollaborative → Unity Pro .
2	Open the *.STA file from File → Open menu. The file type selected must be <i>Unity Pro Archived Application File (*.STA)</i> .
3	Click Open .
4	Save the project as an *.STU file.

Restoring Unity Pro Application Exchange File (*.XEF)

This restoration consists of importing the *.XEF files previously stored ([see page 24](#)). 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 Unity Pro: Start → Programs → Schneider Electric → SoCollaborative → Unity Pro .
2	Open the *.XEF file from File → Open menu. The file type selected must be <i>Unity Pro Application Exchange File (*.XEF)</i> .
3	Click Open .
4	Save the project as an *.STU file.

Chapter 4

Operations Common to Unity Pro Installation and Update

Subject of this Chapter

This chapter describes procedures that are common to Unity Pro first time installation and update.

What Is in This Chapter?

This chapter contains the following topics:

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Increasing Number of Unity Pro Editors Open	40

How to Launch Unity Pro

How to Start a Unity Pro Session

To launch Unity Pro, execute the command:

Start → **Program** → **Schneider Electric** → **SoCollaborative** → **Unity Pro** → **Unity Pro (S, L, or XL)** depending on the version of Unity Pro installed.

NOTE: If you have yet to register the software, a message alerts you of the remaining number of days of use left and whether the registration ([see page 20](#)) can still be completed.

How to Change the Language of Unity Pro

The following table describes the procedure for changing the language of Unity Pro:

Step	Action
1	Execute the command Start → Program → Schneider Electric → SoCollaborative → Unity Pro → Language selection . Result: The Unity Pro Language Selection dialog is displayed.
2	Select the language for Unity Pro.
3	Confirm with OK . Result: A message tells you that the language selection is effective the next time you launch Unity Pro.

How to Repair Unity Pro

Objective

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

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

Procedures

There are two methods to repair Unity Pro:

- Unity Pro setup on the DVD-ROM
- Unity Pro repair program on the workstation

The following table describes the procedure to repair Unity Pro from the Unity Pro Setup on the DVD-ROM in the maintenance mode:

Step	Action
1	Insert the DVD-ROM named Unity Pro in the DVD-ROM drive.
2	Open the Setup.exe file.
3	Select the language for the installation assistant.
4	Confirm by clicking Start Unity Pro installation .
5	Select the Repair option.
6	Confirm by clicking Next .

To repair Unity Pro from the workstation, use the command: **Start → Program → Schneider Electric → SoCollaborative → Unity Pro → Repair Unity Pro xx** (xx refers to Unity Pro package).

NOTE: These are the only supported methods to repair (reinstall) the Unity Pro software. Any other method may not work.

NOTE: These procedures perform a complete removal of the Unity Pro software followed automatically by a new installation ([see page 17](#)).

How to Transfer Unity Pro User Rights

Introduction

This function transfers user rights from a source workstation to a target workstation, thus enabling Unity Pro to be launched on it.

To perform this action, use the **Registration Tool: Start → Programs → Schneider Electric → SoCollaborative → Unity Pro → Registration Tool**

NOTE: While the **Registration Tool** runs, you can access its help file by pressing the **F1** key or by clicking the **Help** button at the bottom left of the window.

NOTE: After the user rights have been transferred, the source workstation can no longer use Unity Pro unless you register it again by entering a new code (or by performing another transfer).

NOTE: The user rights of a facility license cannot be transferred from one workstation to another.

Supported Media

The transfer can be carried out using one of the following media:

- A network. The Unity Pro folders must be shared.
- A USB removable device (that is, USB memory key). The USB device must be write-enabled.
- A 3 1/2" removable media (that is, a diskette). The removable media must be write-enabled.

It is recommended to use the USB device transfer method because no Computer ID is requested.

If you decide to use either the network transfer or the removable media transfer, please note the Computer ID displayed during the first step of the **Registration Tool**. This number then allows you to complete the registration process.

NOTE: Following the transfer of the rights to a 3 1/2" removable media or a USB device, if the storage medium is damaged before transferring to the target workstation, contact Schneider Electric for a new registration.

How to Transfer User Rights from Earlier Versions

User rights transfer operation between Unity Pro versions less than or equal to V4.0 and versions V4.1 or above is not directly possible using a diskette or USB memory key.

The following tables describe the two methods to perform a user rights transfer operation from a Unity Pro version 4.0 or lower to a Unity Pro version V4.1 or above:

Step	Action
1	Update the source workstation with the new version of Unity Pro.
2	To update the user rights of the source workstation use the Registration Converter tool.
3	Transfer the rights from the source to the target workstation.

Step	Action
1	Install a Unity Pro version less than or equal to V4.0 onto the target workstation.
2	Transfer the rights from the source to the target workstation.
3	Update the target workstation with a Unity Pro version V4.1 or above.
4	Update the user rights of the target workstation using the Registration Converter tool.

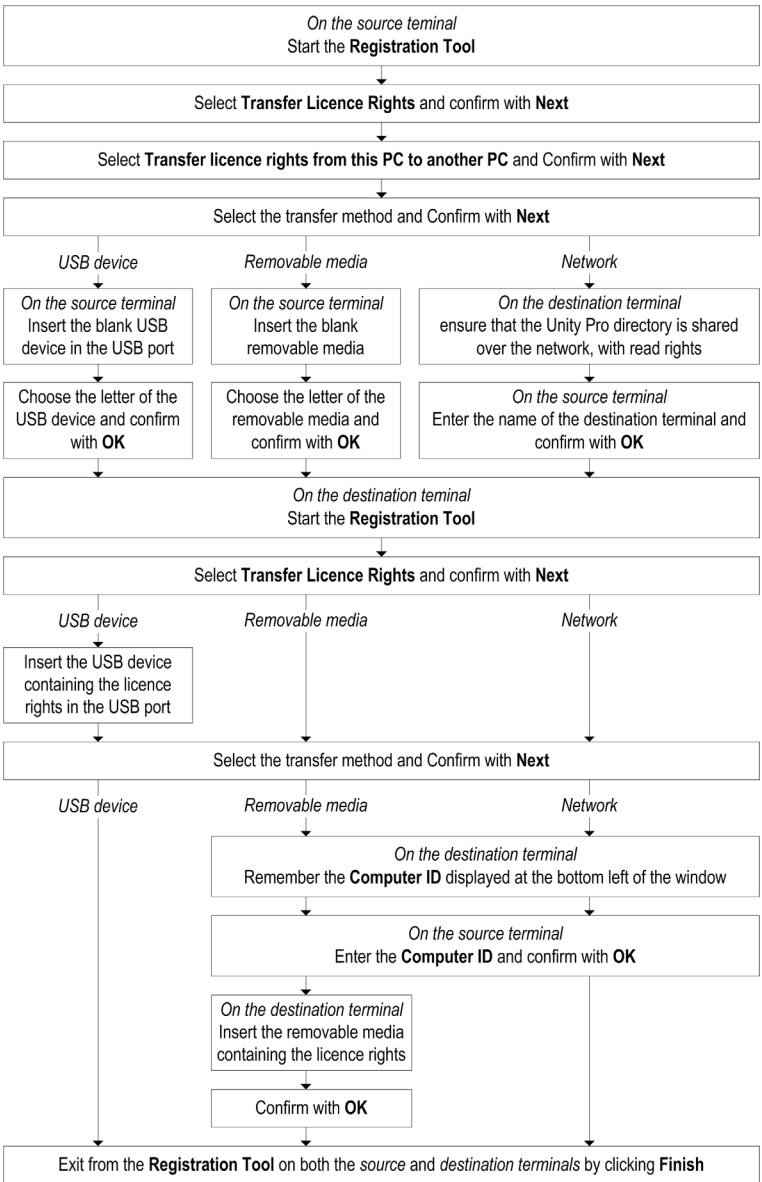
NOTE: The **Registration Converter** tool is available through the following shortcut: **Start** → **Programs** → **Schneider Electric** → **SoCollaborative** → **Unity Pro** → **Registration Converter**.

How to Transfer License to Another Person

In order to transfer the Unity Pro license to another user. Launch the **Registration Tool** and select the **Transfer the license to another person** option to perform this operation.

How to Perform a Transfer

This procedure describes the different steps for transferring user rights:



Drivers

At a Glance

During installation of Unity Pro, 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 Unity Pro.

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 Unity Pro 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 → Schneider Electric → Communication Drivers → Drivers Manager.

Increasing Number of Unity Pro Editors Open

Introduction

After a standard installation use of multiple instances of Unity Pro 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.

Chapter 5

Installing the Hardware

Type of Connection From a Terminal to a PLC

At a Glance

To program a Modicon M340, M580, Momentum, Premium, or Quantum PLC using Unity Pro, it is necessary to use a linking cable between the workstation and the PLC.

Connections

The cables available for connecting a workstation to a PLC follow.

For **Modicon M340** and **Modicon M580** the following cables can be used:

- Modbus cable, product reference TCS MCN 3M4F3C2
- Crossed Ethernet cable, product reference 490 NTC 000 05 ⁽¹⁾
- USB cable, product reference BMX XCA USBH 018
- USB cable, product reference BMX XCA USBH 045

For **Modicon Momentum** the following cables can be used:

- USB cable, product reference BMX XCA USBH 018
- USB cable, product reference BMX XCA USBH 045

For **Modicon Premium** the following cables can be used:

- Terminal port cable, reference TSX PCX 1031 (RS 232/RS 485)
- Terminal port cable, reference TSX PCX 3030 (USB/RS 485)
- Crossed Ethernet cable, reference 490 NTC 000 05 ⁽¹⁾
- USB cable, reference UNY XCA USB 033

For **Modicon Quantum** the following cables can be used:

- Modbus cable, reference 990 NAA 263 20
- Modbus Plus cable, product reference UNY XCA 42 020
- Crossed Ethernet cable, reference 490 NTC 000 05 ⁽¹⁾
- USB cable, reference UNY XCA USB 033

(1): For a workstation-PLC link the cable must be a crossed cable, whereas for a workstation-Hub or PLC-Hub link a straight-through cable must be used.

Procedure

The connection between the workstation (PLC address, type of driver) and the PLC is configured in Unity Pro software, refer to the Project Management (*see Unity Pro, Operating Modes*).

Chapter 6

Uninstalling Unity Pro

How to Uninstall Unity Pro

Objective

This operation is used to delete all Unity Pro software components from the workstation.

However, this does not affect:

- Application files.
- Unity Pro execution rights.
- Elements shared with other software packages (for example, Unity Pro user).

NOTE: DTM software must be manually uninstalled, for more details refer below to *Uninstalling Unity Pro using the Windows Control Panel* ([see page 44](#)).

When Uninstalling Unity Pro Is Required

Unity Pro must be uninstalled manually when installing a former version of Unity Pro, for example, installing Unity Pro 4.1 on Unity Pro 5.0.

NOTE: Installing a former version of Unity Pro can lead to incompatibility with other software, for example, OFS, UDE and UAG.

Before Uninstalling Unity Pro

Before uninstalling Unity Pro in order to install it onto another workstation, it is recommended to transfer the authorization code the other workstation ([see page 36](#)).

NOTE: When uninstalling Unity Pro, the **Registration Tool** is also deleted. The authorization code is still present on the terminal after uninstalling Unity Pro. However it cannot be recovered unless Unity Pro is reinstalled on the workstation.

Uninstalling Unity Pro

The following table shows how to uninstall Unity Pro manually:

Step	Action
1	Click Start → Program → Schneider Electric → SoCollaborative → Unity Pro → Remove Unity Pro xx (xx refers to Unity Pro package).
2	The installation wizard is launched, Unity Pro starts being removed.
3	When the uninstallation of Unity Pro is completed, select the installed drivers and click Remove .

Uninstalling Unity Pro using the Windows Control Panel

The following table shows how to uninstall Unity Pro manually with the Windows control panel:

Step	Action
1	Start → Control Panel → Programs and Features.
2	Right-click Unity Pro and select Remove .
3	A pop-up window appears asking for confirmation. Click Yes .
4	When the uninstallation of Unity Pro is completed select, in the same manner, the installed drivers, and DTMs and click Remove .

Replacing Unity Pro with a Former Version

To install a previous version of Unity Pro, the current version must be uninstalled using the Windows control panel as previously described.

In addition, the following directories must be manually removed:

- **Windows 7 (32 bits):**
 - C:\Program Files\Common Files\Schneider Electric Shared\Tlb
 - C:\Program Files\Common Files\Schneider Electric Shared\Common
 - C:\Program Files\Common Files\Schneider Electric Shared\SRCSDK
 - C:\Program Files\Common Files\Schneider Electric Shared\SSTA
- **Windows 7 (64 bits):**
 - 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