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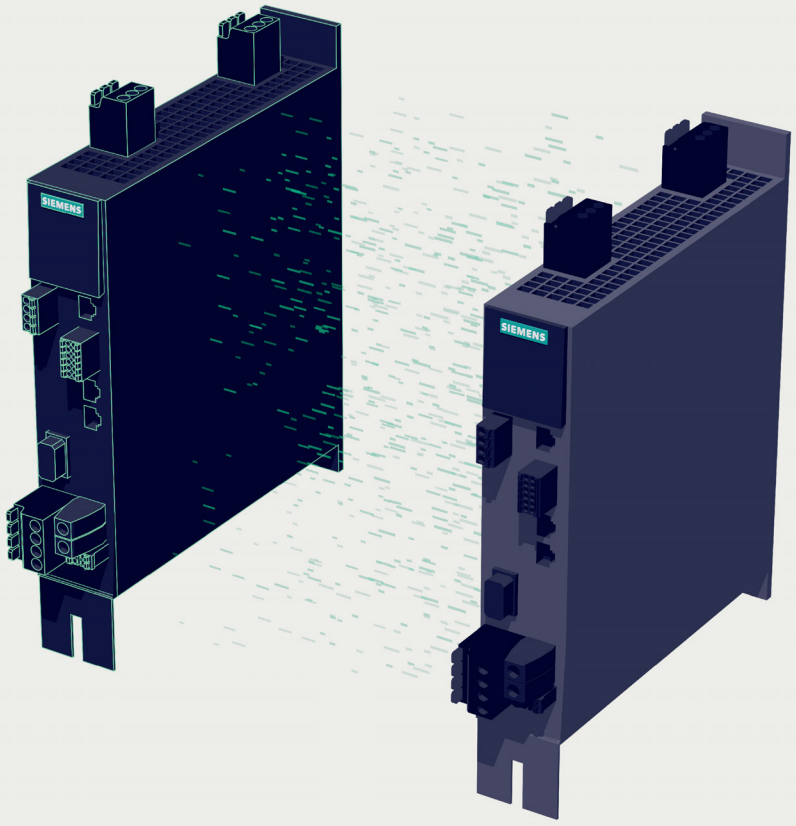

Edition 06/2023

FUNCTION MANUAL

SINAMICS

SINAMICS DriveSim Advanced

www.siemens.com

SIEMENS

SINAMICS

SINAMICS DriveSim Advanced

Function Manual

06/2023

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Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠**DANGER**
indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠**WARNING**
indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠**CAUTION**
indicates that minor personal injury can result if proper precautions are not taken.

NOTICE
indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠**WARNING**
Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Ⓟ 07/2023 Subject to change

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Introduction 1

1.1 About SINAMICS

Description

With the SINAMICS converter series you can solve drive tasks in the low, medium and DC voltage range. All Siemens drive components, such as converters, motors, and controls, are matched to each other and can be integrated into your existing automation systems.

You can find more information via the SINAMICS YouTube playlist (https://www.youtube.com/playlist?list=PLw7lLwXw4H53rtHeTeifKtVMr2aXTYt0X).

1.2 About this manual

1.2.1 Content

Description

This manual provides a summary of functions that can be used in the system or on a machine.

This manual enables the target groups being addressed to commission, program and configure the system functions safely and in the correct manner.

To illustrate possible application areas for our products, typical use cases are listed in this product documentation and in the online help. These are purely exemplary and do not constitute a statement on the suitability of the respective product for applications in specific individual cases. Unless explicitly contractually agreed, Siemens assumes no liability for such suitability. Suitability for a particular application in specific individual cases must be assessed by the user, taking into account all technical, legal, and other requirements on a case-by-case basis. Always observe the descriptions of the technical properties and the relevant constraints of the respective product contained in the product documentation.

1.2.2 Target group

Description

This manual is intended for persons who perform different tasks in the drive environment. The intended target groups include, but are not limited to the following:

- Configuration engineers
- Technologists (of machine manufacturers)
- Commissioning engineers (for systems or machines)
- Programmers

1.2.3 Standard scope

Description

This documentation describes the functionality of the standard scope. This scope may differ from the scope of the functionality of the system that is actually supplied. Please refer to the ordering documentation only for the functionality of the supplied drive system.

Further functions may be executable in the system, which are not explained in this documentation. However, there is no entitlement to these functions in the case of a new delivery or service.

This documentation does not contain all detailed information on all types of the product. Furthermore, this documentation cannot take into consideration every conceivable type of installation, operation and service/maintenance.

The machine manufacturer must document any additions or modifications they make to the product themselves.

1.2.4 Websites of third-party companies

Description

This document may contain hyperlinks to third-party websites. Siemens is not responsible for and shall not be liable for these websites and their content. Siemens has no control over the information which appears on these websites and is not responsible for the content and information provided there. The user bears the risk for their use.

1.3 SINAMICS documentation

Description

The documentation on the SINAMICS product series is available under Siemens Industry Online Support (https://support.industry.siemens.com/cs/ww/en/view/109807358).

You can display documents or download them in PDF and HTML5 formats.

The SINAMICS documentation essentially includes the following manuals:

Table 1- 1 SINAMICS documentation

Information	Documentation class	Content
Basic information	Operating Instructions	Compilation of all of the information required to operate the SINAMICS product
	Product Information	Information that only becomes known shortly before or even after start of delivery and is therefore not included in the associated user documentation
General information	Industrial Security Configuration Manual	Information on the security functions and safe SINAMICS product operation
	Function Manual	Description, commissioning, and optionally the application (programming or configuring) of functions that can be used in the system or on a machine

1.4 Service and Support

1.4.1 Feedback on the technical documentation

Description

We welcome your questions, suggestions, and corrections for this technical documentation. Please use the "Provide feedback" link at the end of the entries in Siemens Industry Online Support.

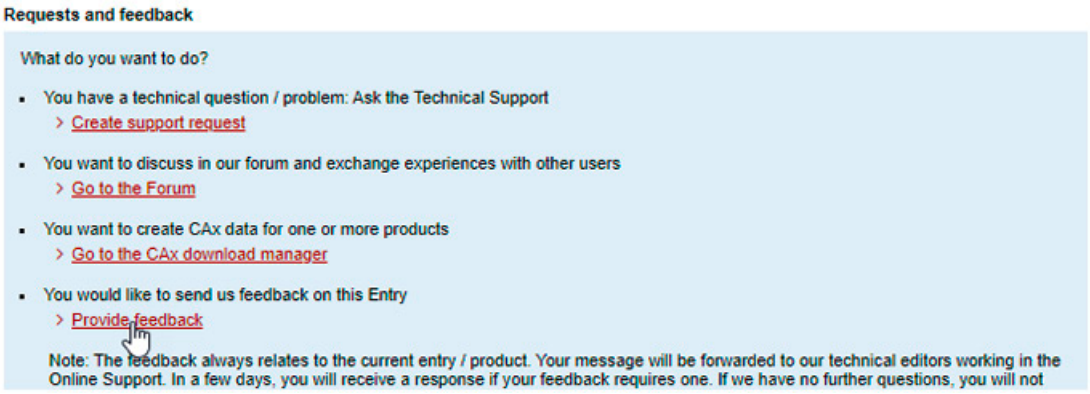


Figure 1-1 Requests and feedback

1.4.2 Technical support

Description

Your routes to technical support (https://support.industry.siemens.com/cs/ww/en/sc/4868):

- Support Request (https://www.siemens.com/SupportRequest)
- Contact person database (https://www.automation.siemens.com/aspa_app)
- "Industry Online Support" mobile app

The Support Request is the most important input channel for questions relating to products from Siemens Industry. This will assign your request a unique ticket number for tracking purposes. The Support Request offers you:

- Direct access to technical experts
- Recommended solutions for various questions (e.g. FAQs)
- Status tracking of your requests

Technical support also assists you in some cases via remote support (https://support.industry.siemens.com/cs/ww/en/view/106665159) to resolve your requests.

A Support representative will assist you in diagnosing or resolving the problem through screen transfer.

More information on the Support service packages is available on the Internet via the following address (https://support.industry.siemens.com/cs/ww/en/sc/4869).

1.4.3 Training

Description

SITRAIN – Digital Industry Academy offers a comprehensive range of training courses on Siemens industrial products – directly from the manufacturer, for all industries and use cases, for all knowledge levels from beginner to expert.

More information can be found on the Internet via the following address (https://www.siemens.com/sitrain).

1.5 Important product information

1.5.1 Open-source software (OSS)

Description

The installation package of SINAMICS DriveSim Advanced includes the license conditions and copyright information of the open-source software components used by SINAMICS DriveSim Core, DriveSim TIA Add-in, and DriveSim Manager. You can find SINAMICS_DriveSim_Advanced_V1.0_ReadMe_OSS under the installation path of DriveSim Advanced: "%ProgramFiles%\Siemens\Automation".

The license conditions and copyright information of the open-source software components used by the SINAMICS device are saved on the device itself. You can download license and copyright information onto your PC via the support page of the integrated web server.

1.5.2 Compliance with the General Data Protection Regulation

Description

Siemens complies with the principles of the **General Data Protection Regulation (EU),** in particular the principle of data minimization (privacy by design). For this SINAMICS product, this means:

- **User management and access control (UMAC)**

  The product processes or stores the following personal data:

  – Login data for user management and access control:

    User name, group, password, role, rights.

  The data for user management and access control are stored in the converter and optionally on a memory card.

- **Support data (optional)**

  For optimal support in service cases, the end user or machine manufacturer (OEM) can optionally store contact data (header, email address, telephone number, homepage) in the converter.

  If this data is created, the author must give thought to data protection consent for this optional data. Siemens takes no responsibility for this data.

  This support contact data can be read and is freely accessible in, for example, the user interface as well as in the diagnostics report. This data is not encrypted!

This data is used for user management and access control (UMAC) and for the support function. The storage of this data is appropriate and limited to what is necessary, as it is essential to identify the authorized operators and service contact.

The personal data is also available as part of the backup system to ensure fast recovery of use cases.

The above-mentioned personal data cannot be stored anonymously or pseudonymized, as they serve the purpose of identifying the operating personnel. The anonymization or pseudonymization, e.g. of the login data, must be performed using suitable login names and contact data by the plant/machine operator.

Our product does not provide any functions for automatically deleting personal data. Individual UMAC data can be deleted manually by authorized personnel as soon as this is deemed recommended/required.

Fundamental safety instructions 2

2.1 General safety instructions

⚠WARNING

Danger to life if the safety instructions and residual risks are not observed

If the safety instructions and residual risks in the associated hardware documentation are not observed, accidents involving severe injuries or death can occur.

- Observe the safety instructions given in the hardware documentation.
- Consider the residual risks for the risk evaluation.

⚠WARNING

Malfunctions of the machine as a result of incorrect or changed parameter settings

As a result of incorrect or changed parameterization, machines can malfunction, which in turn can lead to injuries or death.

- Protect the parameterization against unauthorized access.
- Handle possible malfunctions by taking suitable measures, e.g. emergency stop or emergency off.

2.2 Warranty and liability for application examples

Application examples are not binding and do not claim to be complete regarding configuration, equipment or any eventuality which may arise. Application examples do not represent specific customer solutions, but are only intended to provide support for typical tasks.

As the user you yourself are responsible for ensuring that the products described are operated correctly. Application examples do not relieve you of your responsibility for safe handling when using, installing, operating and maintaining the equipment.

2.3 Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit
https://www.siemens.com/industrialsecurity.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under
https://www.siemens.com/cert.

Further information is provided on the Internet:

Industrial Security Configuration Manual
(https://support.industry.siemens.com/cs/ww/en/view/108862708)

⚠WARNING

Unsafe operating states resulting from software manipulation

Software manipulations, e.g. viruses, Trojans, or worms, can cause unsafe operating states in your system that may lead to death, serious injury, and property damage.

- Keep the software up to date.
- Incorporate the automation and drive components into a holistic, state-of-the-art industrial security concept for the installation or machine.
- Make sure that you include all installed products into the holistic industrial security concept.
- Protect files stored on exchangeable storage media from malicious software by with suitable protection measures, e.g. virus scanners.
- On completion of commissioning, check all security-related settings.

Additional safety instructions 3

3.1 Protection of sensitive data in DriveSim Advanced projects

NOTICE

Protecting parameters in the SINAMICS DriveSim Advanced project
The parameters stored in the SINAMICS DriveSim Advanced project can be read out by unauthorized third parties without protection. Unauthorized persons can therefore cause damage.

- Prevent unauthorized persons from accessing your plants and systems. Implement access restrictions and take the precautions described in Section "Additional safety instructions (Page 13)".

Note

Extraction of sensitive data for unprotected transfer of projects

The parameters of the SINAMICS drives contain your know-how and sensitive configuration data as well as the configuration for protection against modifications for some drive functions like Safety Integrated. After an upload from the device this configuration is stored in the project. If a project is transferred unencrypted via unprotected channels (e.g. email) or stored in an unencrypted form (e.g. in cloud storage), unauthorized persons can extract this configuration from the project files.

- Activate the project protection in SINAMICS Startdrive to encrypt all drive parameters in the project.
- Encrypt the exported files and project files with some other software.
- To prevent access to relevant data memory by unauthorized persons, implement access restrictions (e.g. password protection) and take the precautions described in Section "Additional safety instructions (Page 13)".

3.2 Unsafe configuration after importing and downloading files from unknown or untrustworthy sources

⚠WARNING

Unsafe configuration after importing and downloading files from unknown or untrustworthy sources

If you use project files or files (e.g. from EPLAN, Microsoft Excel) from unknown or untrustworthy sources or import such files into your DriveSim Advanced project, inconsistencies in the project or malfunctions may result. If the appropriate safety precautions are not observed, any untested changes in the system can cause unsafe operating states in your system that may lead to death, serious injury, and property damage.

If project files or imported files are transferred unsigned via unprotected channels (e.g. email) or stored without access protection (e.g. in cloud memories or local memories), unauthorized persons can change the system configuration, thus causing unsafe operating states in your system that may lead to death, serious injury, and property damage.

- Only use projects and files from sources that you know to be trustworthy.
- For the consistency check, use functions such as "Flash LED" in the "Go online" dialog or the parameter comparison in the parameter view.
- Check whether the machine behavior with the changed system configuration meets your expectations and perform an acceptance test of the Safety Integrated Functions on the real devices to ensure and document the safe operation of the system.
- Take the precautions described in Section "Additional safety instructions (Page 13)".

3.3 Authenticity and integrity through digital signatures

Overview

To ensure the authenticity and integrity of the DriveSim Advanced software package, the .dll and .exe files in the package are digitally signed by Siemens with a certificate issued by DigiCert. You can verify the digital signatures in Windows Explorer or by third-party software tools that are included in the software allow-list.

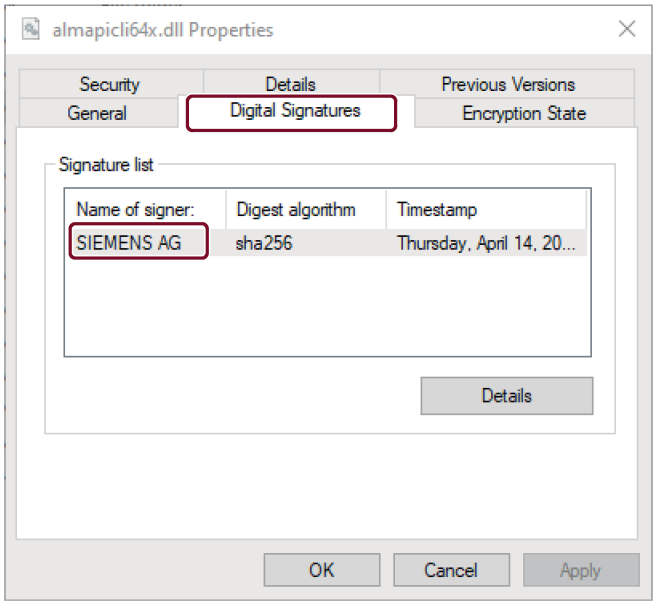
Requirement

You have downloaded the SINAMICS DriveSim Advanced software package.

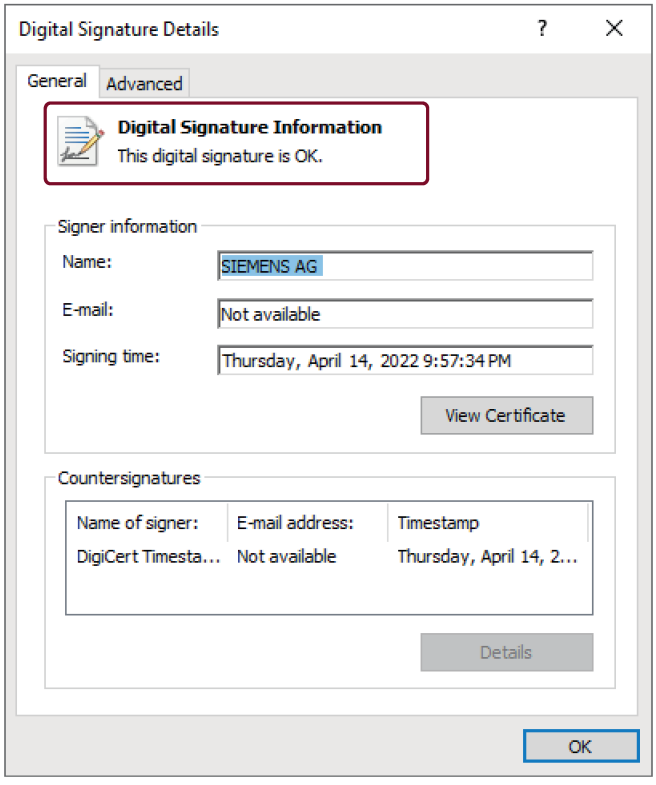
Procedure

Proceed as follows to verify the digital signature of DriveSim Advanced files:

1. In Windows Explorer, select the DriveSim Advanced file to be verified and check its properties.
2. View the digital signature of the file. The file must contain the digital signature "Siemens AG".



3. Double-click the signature to view detailed information.



3.4 Log files

Overview

SINAMICS DriveSim Advanced generates encrypted log files for internal troubleshooting.

Description of function

The log files contain the following information:

- Settings of the simulation instance
- Environmental variables for controlling the interaction of the DriveSim Advanced components
- Troubleshooting information collected during the ramp-up, operation, and ramp-down of the simulated drive

If DriveSim Advanced stops working properly, Siemens recommends that you send the log files to Product Support (Page 8). You can find the log files in the following directory: "%ProgramData%\Siemens\Automation\SinamicsWinHost\Logs".

3.5 Ports and protocols

Description of function

The following protocols and services are used for communication:

Name	Port number	(2) Link layer (4) Transport layer	Function	Description
http Hypertext Transfer Protocol	8081[1)]	(4) TCP	Hypertext transfer protocol	http is used for the communication with the CU-internal web server. http is open in the delivery state and cannot be deactivated.
ISO on TCP (according to RFC 1006)	102	(4) TCP	ISO-on-TCP protocol	ISO on TCP (according to RFC 1006) is used for the message-oriented data exchange to a remote CPU, WinAC, or devices of other suppliers. Communication with ES, HMI, etc. ISO on TCP is open in the delivery state and is always required.
https Secure Hypertext Transfer Protocol	8443[1)]	(4) TCP	Secure Hypertext transfer protocol	https is used for the communication with the CU-internal web server via Transport Layer Security (TLS). https is open in the delivery state and cannot be deactivated.
Internal protocol	5188	(4) TCP	Server/ incoming	Communication with commissioning tools for downloading project data.
Reserved	49152...65535	(4) TCP (4) UDP	-	Dynamic port area that is used for the active connection endpoint if the application does not specify the local port.
ALM	4410	TCP	License service	This service provides the complete functionality for software licenses and is used by both the Automation License Manager as well as all license-related software products.
RFC 1006	102	TCP	S7 communication	Communication to the drive unit via Ethernet/PROFINET for commissioning and diagnostic purposes.
PROFIdrive	34964	UDP	Data set communication	Establishment of communication to the drive unit via Ethernet/PROFINET for commissioning and diagnostic purposes.
PROFIdrive	49152 to 65535	UDP	Data set communication	Communication to the drive unit via Ethernet/PROFINET for commissioning and diagnostic purposes.

1) When the port is used by another application, SINAMICS DriveSim Advanced uses the next available port for the communication.

Functionality

4

4.1 Overview

Overview

SINAMICS DriveSim Advanced is a Windows-based simulation program that provides a virtual simulation of supported SINAMICS drives by using a digital-twin approach. It is integrated with TIA Portal (SINAMICS Startdrive) and provides advanced customization and detail functions to quickly simulate different operating conditions and scenarios.

Requirement

Required software

- Commissioning tool "Startdrive" (V18 or later)
- Automation License Manager (V6.0 or later)
- SINAMICS DriveSim Advanced license (article number for one-year license: 9SV1210-3AA00-0AA0)
- SINAMICS DriveSim Advanced software package, which includes the following three items:
  - SINAMICS DriveSim Core
  - SINAMICS DriveSim TIA Add-in
  - SINAMICS DriveSim Manager

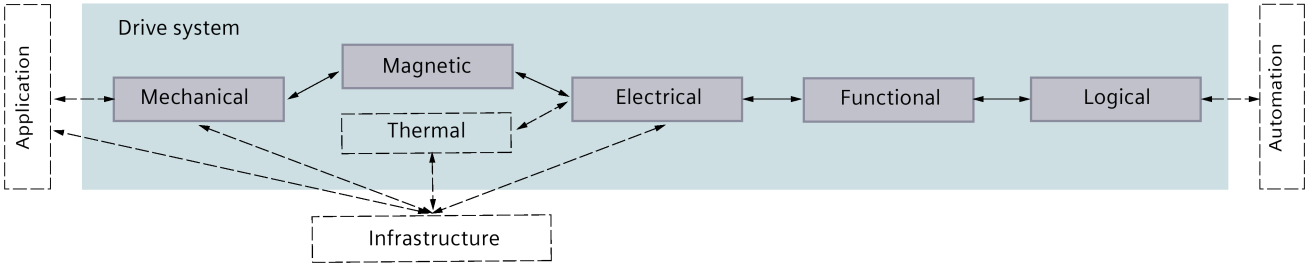
Supported devices

SINAMICS DriveSim Advanced is valid for the following devices:

- SINAMICS S210-3 servo drive system, which includes the following drive components:
  - SINAMICS S210-3 converter, firmware version 6.1
  - Configurable SIMOTICS S-1FS2 motor
  - Configurable SIMOTICS S-1FK2 motor
  - Configurable SIMOTICS S-1FT2 motor

Description of function

SINAMICS DriveSim Advanced provides digital twins of simulated SINAMICS drives.



- Application: environment element, reflecting the mechanical application driven by the drive system. The interaction is established via elements of the mechanical domain such as torque, speed, and position. The interaction with external machines is not supported by this model; however, SINAMICS DriveSim Advanced offers a configurable internal load model for the simulation of mechanical load.
- Infrastructure: environment element, reflecting real effects and objects such as power supply, cooling medium, vibration, and electrical applications. The interaction with external infrastructure is not supported by this model; however, SINAMICS DriveSim Advanced offers an internal supply model for the essential functionality of power supply and infeed.
- Mechanical: physics model, covering the physics domain of mechanical features (such as motor speed)
- Thermal: physics model, covering the thermal domain of the drive system (such as temperature and heat flow). In the real system, the thermal domain interacts with other domains. For example, its interaction with the environment reflects the ambient temperature and the heat exchange of the cooling medium. The thermal domain is not supported by the current SINAMICS DriveSim Advanced version; therefore, its interaction with other domains is not covered in the model.
- Electrical and magnetic: physics model, covering the physics domain of electrical and magnetic features (such as current and fluxes)
- Functional: control loop with setpoint channels and monitoring and diagnostics features
- Logical: signal interconnections and periphery connections (such as the interconnection of digital inputs)
- Automation: environment element, representing the PLC and other higher-level controls and usually communicating with the drive system via fieldbus. This domain is not supported by the current SINAMICS DriveSim Advanced version.

SINAMICS DriveSim Advanced software includes the following three components:

- SINAMICS DriveSim Core

  SINAMICS DriveSim Core is a component inside DriveSim Advanced and does the simulation of the SINAMICS drive.

- SINAMICS DriveSim TIA Add-in

  SINAMICS DriveSim TIA Add-in enables SINAMICS DriveSim Core to be integrated in Startdrive in the form of a Startdrive add-in.

- SINAMICS DriveSim Manager

  SINAMICS DriveSim Manager is a stand-alone Windows program for managing all simulation instances.

Example

SINAMICS DriveSim Advanced has the following typical use cases:

- Validation of drive features before real device selection
- Virtual commissioning of a drive
- Virtual demonstration of drive features
- Diagnostics of problems in customer projects
- Validation of user-defined pages for SINAMICS Web server

More information

For more information about downloading the required software, see Section "Downloading installation packages (Page 26)".

For more information about DriveSim Manager, see Section "SINAMICS DriveSim Manager (Page 63)".

4.2 Range of validity

Note

Range of validity

The SINAMICS DriveSim Advanced model is based on the original firmware of the drives and therefore inherits their features; however, some restrictions exist in the current release, limiting the set of usable features. This will change in the future versions of SINAMICS DriveSim Advanced.

4.2.1 Simplifications of physics parts

Description

Boundary conditions of SINAMICS DriveSim Advanced

The drive system model of SINAMICS DriveSim Advanced is based on the following environmental conditions:

- Ambient temperature: -20 °C to +40 °C
- Installation altitude: ≤ 1000 m
- Relative humidity: ≤ 55% at 40 °C
- Concentration of oxygen in the atmosphere: typically 21%

Simplification of the power supply model

The mains supply voltage, the infeed voltage, and the DC link voltage for the drive are assumed to be constant in the model and the actual voltage depends on the device type and configuration. The effects of supply voltage fluctuations on the drive, the effects of drive performance on the supply voltage, the resistance of cables, or the effects of the Motor Module load on the DC link voltage are not considered in the model.

Simplification of the drive model

The component data that SINAMICS DriveSim Advanced uses to create and validate a drive configuration comes from product catalogs and specific customer specifications; therefore, the model does not cover the manufacturing tolerances and the wear and tear of physical components (for example, the motor tolerance data). To increase the accuracy of drive control, Siemens recommends that you perform drive optimization on real devices after the drive configuration, creation, and validation with SINAMICS DriveSim Advanced.

Thermal domain of the drive

Drive features enabled by temperature sensors are not covered by the model of SINAMICS DriveSim Advanced.

Connection of external components including option modules

SINAMICS DriveSim Advanced does not support the simulation of external components (for example, external contactors and braking resistors) and therefore cannot correctly simulate all drive features depending on these components.

Encoder characteristics

SINAMICS DriveSim Advanced supports the simulation of signals from the encoder; however, it cannot simulate encoder properties (for example, the quality of encoder signals).

Magnetic motor model

SINAMICS DriveSim Advanced supports the magnetic model of the bare motor but does not simulate the magnetic effects of other motor components (for example, motor holding brake). The motor characteristics model is valid for operation at around nominal operating points, with the temperature of motor winding at 20 °C.

The magnetic model uses technical data defined based on the motor's article number. The simulation accuracy depends on the motor type. Generally for permanent magnet synchronous motors used with the SINAMICS S210-3 converter, consider a 10% deviation in simulation accuracy to allow for the manufacturing tolerance of the motor and the magnetization of the permanent magnets.

In addition, the model assumes that the temperature of the motor winding is 20 °C. If the actual temperature of the motor winding is not 20 °C, the real current consumption may differ due to a deviating winding resistance.

Mechanical model for the motor and motor load

SINAMICS DriveSim Advanced supports the simulation of the motor and motor load based on the following two load models:

- A load characteristics-based model

  You can specify the load torque as either a constant value or a function of the motor speed.

- A two-mass oscillator model

The used model is parameterizable; however, the load value and the inertia are invariable during simulation.

4.2.2 Restrictions with software features

Description

Simulation of Technology Extensions

The SINAMICS DriveSim Advanced model does not offer interfaces to Technology Extensions. Even if a Technology Extension for a particular SINAMICS drive is released, it cannot be installed or loaded in the simulated drive.

Safety acceptance tests must always be performed on real devices

A safety configuration includes hardware elements that might not be covered by SINAMICS DriveSim Advanced or might not be identical between the virtual configuration and the physical safety configuration (for example, safety function relevant terminal connections). To ensure the correct safety acceptance test result, make sure that you perform the safety acceptance test on real devices.

Connection to a higher-level control

The SINAMICS DriveSim Advanced model does not offer interfaces to a higher-level control.

Interaction of multiple drives

The SINAMICS DriveSim Advanced model does not offer interfaces to other drives.

Increased resource utilization when running multiple simulation instances

SINAMICS DriveSim Advanced supports running multiple instances in parallel. On a system with the minimum hardware requirements of TIA Portal and Startdrive, it is only guaranteed to run one drive instance with a speed comparable to the real device.

More information

For more information about hardware requirements of SINAMICS DriveSim Advanced, see Section "Preconditions (Page 25)".

Installing

5

5.1 Preconditions

Description

Minimum hardware requirements

SINAMICS DriveSim Advanced requires a minimum CPU of Intel® Core™ i3-6100 processor (dual-core mobile processor).

With the minimum CPU, only one simulated drive can be run at a speed comparable to the physical device. Better hardware allows more simulated drives to run simultaneously.

Supported operating systems (64-bit versions)

- Windows 10
  - Windows 10 Professional Version 21H1
  - Windows 10 Professional Version 21H2
  - Windows 10 Enterprise Version 2009/20H2
  - Windows 10 Enterprise Version 21H1
  - Windows 10 Enterprise Version 21H2
  - Windows 10 Enterprise 2016 LTSB
  - Windows 10 Enterprise 2019 LTSC
  - Windows 10 Enterprise 2021 LTSC
- Windows 11
  - Windows 11 Home Version 21H2
  - Windows 11 Professional Version 21H2
  - Windows 11 Enterprise 21H2
- Windows Server
  - Windows Server 2016 Standard (full installation)
  - Windows Server 2019 Standard (full installation)
  - Windows Server 2022 Standard (full installation)

License requirements

To use SINAMICS DriveSim Advanced, the SINAMICS DriveSim Advanced license is required.

5.2 Downloading installation packages

Requirement

None

Procedure

Proceed as follows to download all the required installation packages to your computer:

1. Download the setup files for Startdrive V18 at the following link (https://support.industry.siemens.com/cs/ww/en/ps/13438/dl).
2. Download the SINAMICS DriveSim Advanced software package at the following link (https://support.industry.siemens.com/cs/document/109821163), which includes the following items:
   - SINAMICS DriveSim Core
   - SINAMICS DriveSim TIA Add-in
   - SINAMICS DriveSim Manager

5.3 Installing SINAMICS DriveSim Advanced

Note

Software installation failure as a result of an incorrect software installation sequence
Failure to observe the correct software installation sequence can result in the failure of SINAMICS DriveSim Advanced installation.

Observe the following installation sequence:

- Before installing the SINAMICS DriveSim Advanced software package, first install Startdrive.
- Before installing SINAMICS DriveSim TIA Add-in or SINAMICS DriveSim Manager, first install SINAMICS DriveSim Core.

5.3.1 Installing SINAMICS DriveSim Core

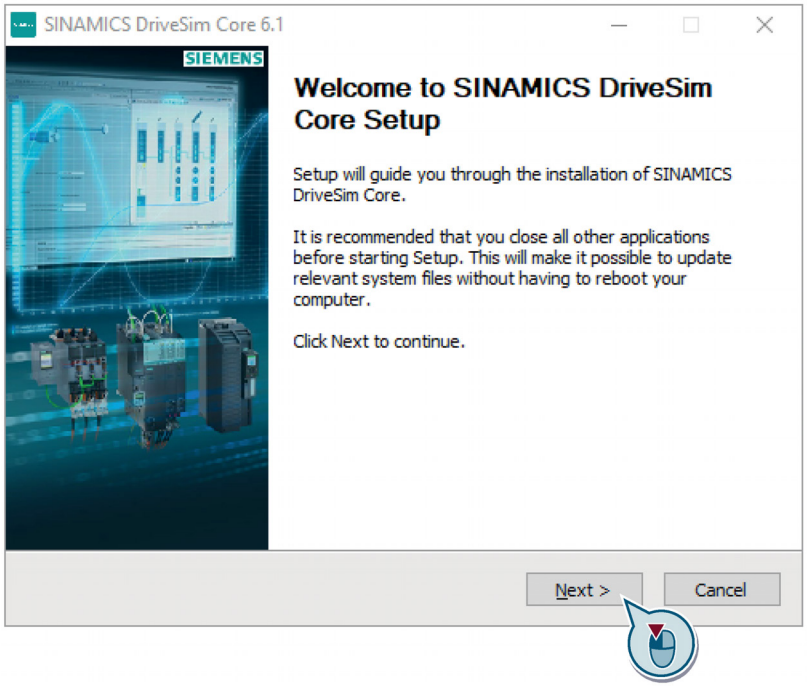
Requirement

- Your computer meets the minimum computer hardware and system requirements.
- You have the administrator right on your computer.
- You have installed Startdrive V18 and activated the SINAMICS DriveSim Advanced license.
- You have downloaded the installation package (Page 26) for SINAMICS DriveSim Core to your computer.

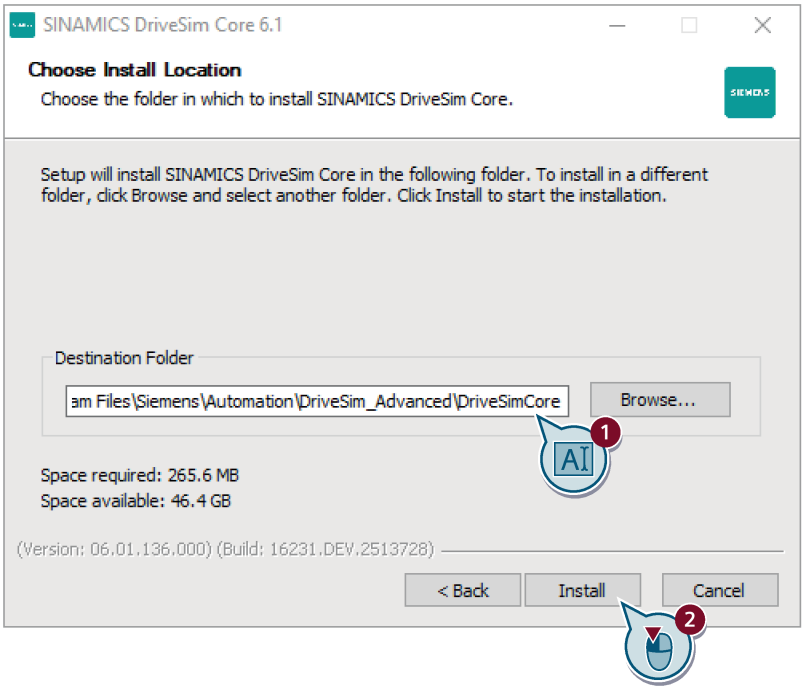
Procedure

Proceed as follows to install SINAMICS DriveSim Core:

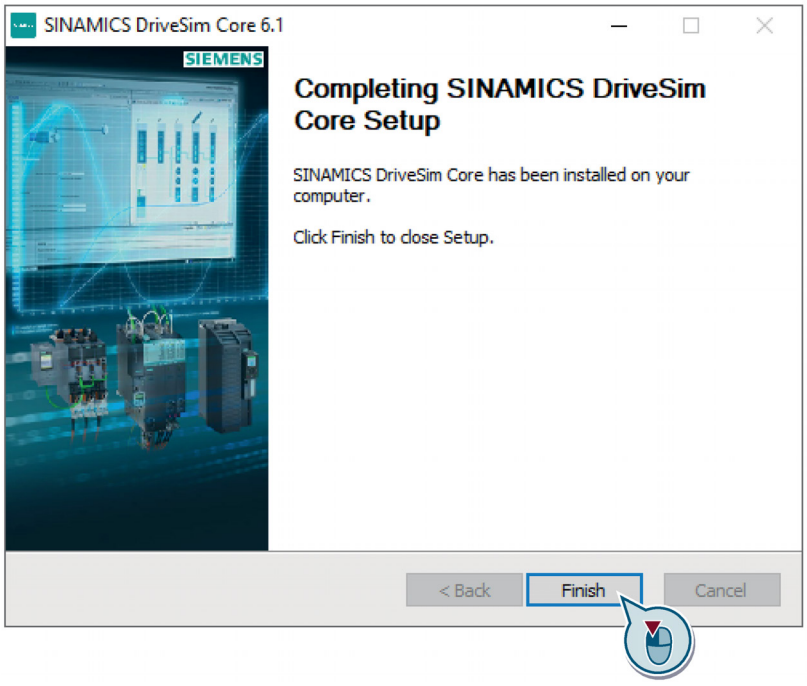
1. Extract the download package to your local drive and then double-click Setup_DriveSimCore.exe. The SINAMICS DriveSim Core setup wizard opens.
2. In the setup wizard, click "Next".



3. Specify an installation path and then click "Install" to start the installation. The setup wizard displays the status of the installation.



4. When the installation is complete, click "Finish" to dismiss the setup wizard.



Result

You have installed SINAMICS DriveSim Core on your computer.

5.3.2 Installing SINAMICS DriveSim TIA Add-in

Requirement

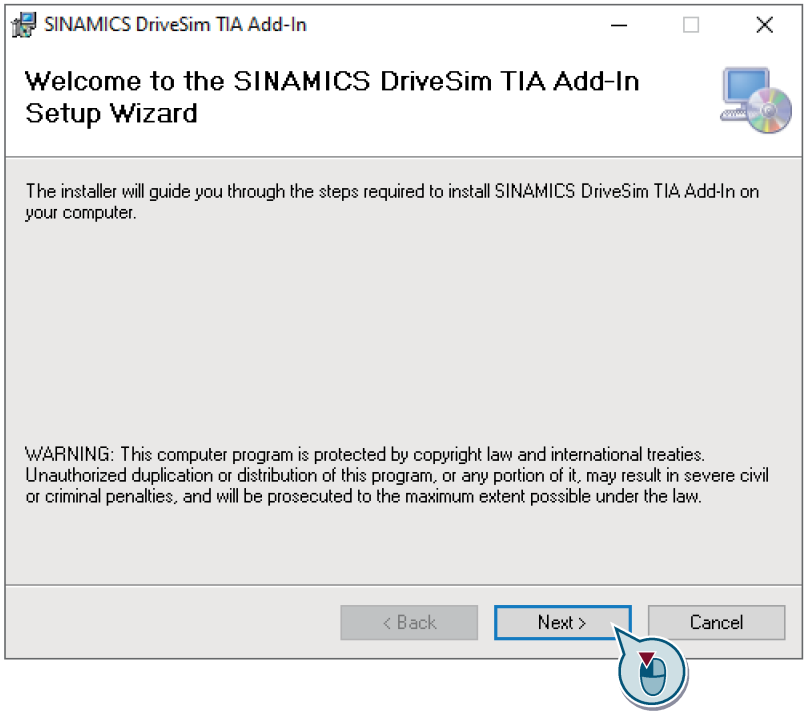
- Your computer meets the minimum computer hardware and system requirements.
- You have administrator rights on your computer.
- You have installed Startdrive V18 and activated the SINAMICS DriveSim Advanced license.
- You have downloaded the installation package (Page 26) for SINAMICS DriveSim TIA Add-in to your computer.

Procedures

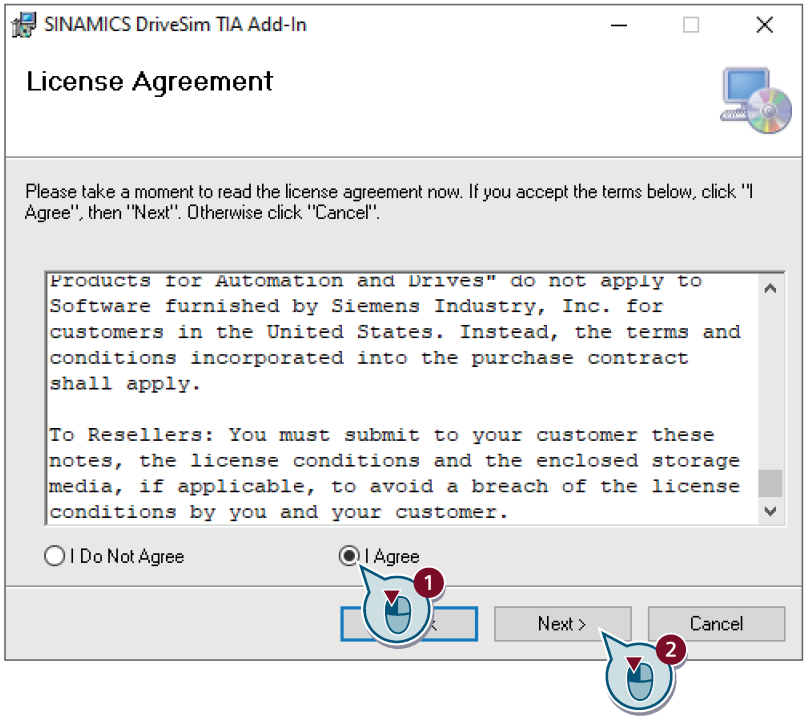
Proceed as follows to install SINAMICS DriveSim TIA Add-in:

1. Extract the download package to your local drive and then select one of the two following methods to open the setup wizard:
   - Double-click the software Setup_TIAAddIn_Release.msi.
   - Right-click the software and select "Install" in the shortcut menu.

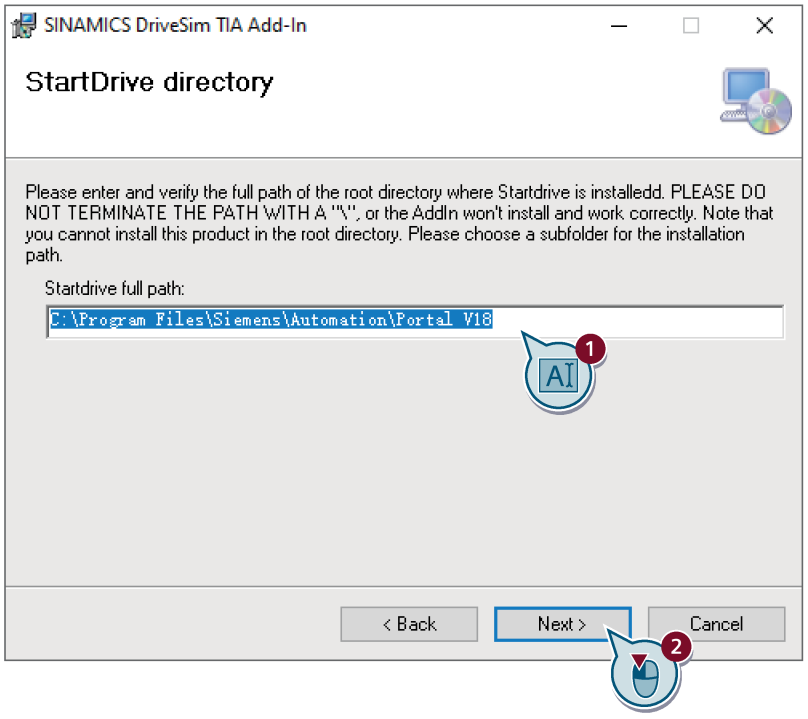
2. In the setup wizard, click "Next".



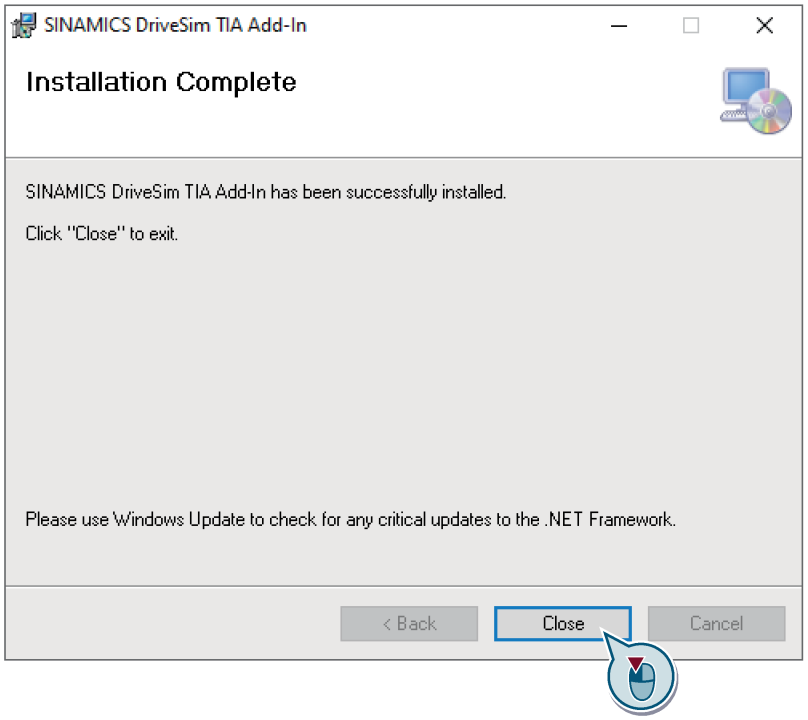
3. Confirm the license agreement.



4. Specify the same installation path where your Startdrive V18 is located; otherwise, you cannot activate the DriveSim TIA Add-in program in Startdrive. Click "Next" to start the installation. The setup wizard displays the status of the installation.



5. When the installation is complete, click "Close" to dismiss the setup wizard.



Result

You have installed SINAMICS DriveSim TIA Add-in on your computer.

5.3.3 Installing SINAMICS DriveSim Manager

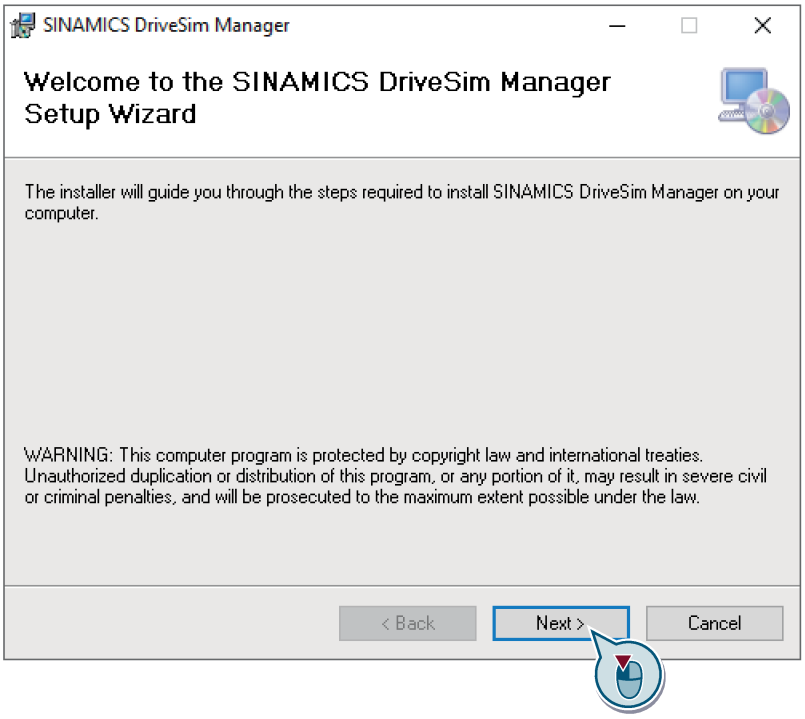
Requirement

- Your computer meets the minimum computer hardware and system requirements.
- You have administrator rights on your computer.
- You have installed Startdrive V18 and activated the SINAMICS DriveSim Advanced license.
- You have installed SINAMICS DriveSim Core on your computer.
- You have downloaded the installation package (Page 26) for SINAMICS DriveSim Manager to your computer.

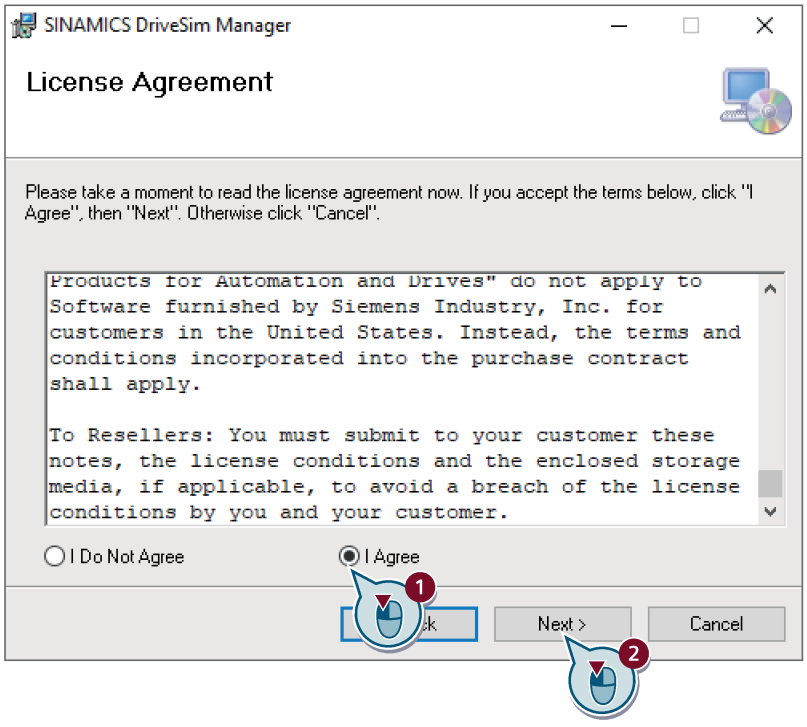
Procedure

Proceed as follows to install SINAMICS DriveSim Manager:

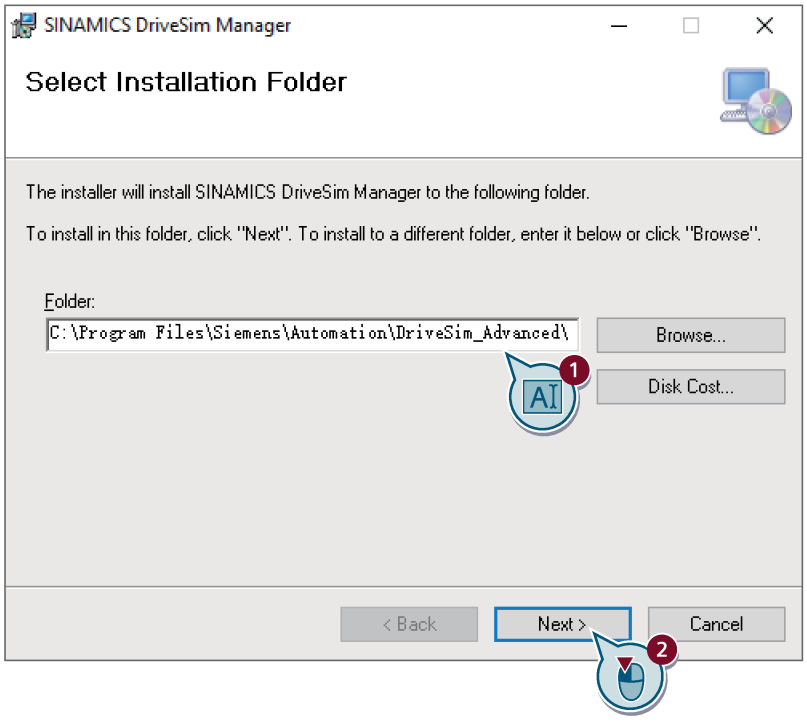
1. Extract the download package to your local drive and then select one of the following two methods to open the setup wizard:
   - Double-click the software Setup_DriveSimManager_Release.msi.
   - Right-click the software and select "Install" in the shortcut menu.
2. In the setup wizard, click "Next".



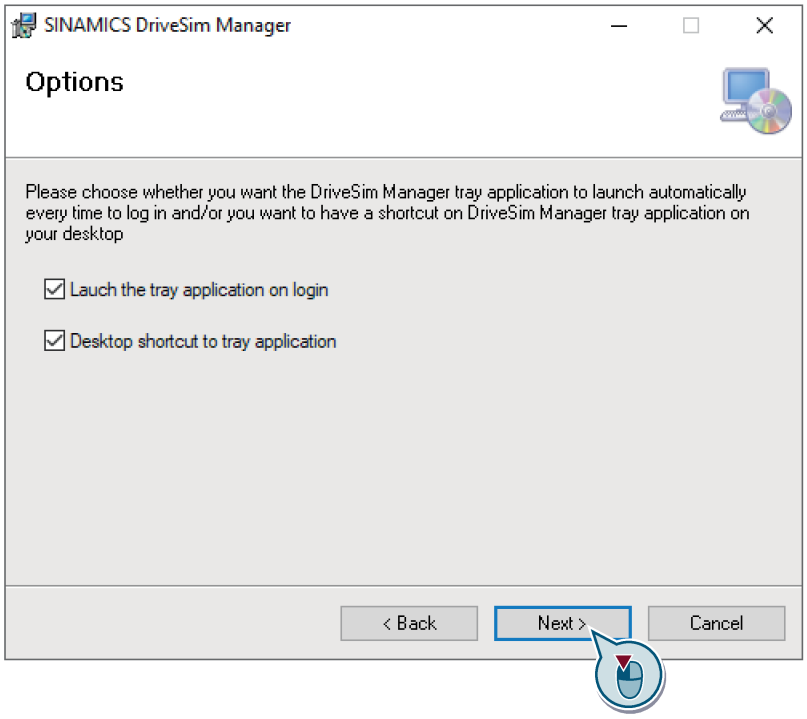
3. Confirm the license agreement.



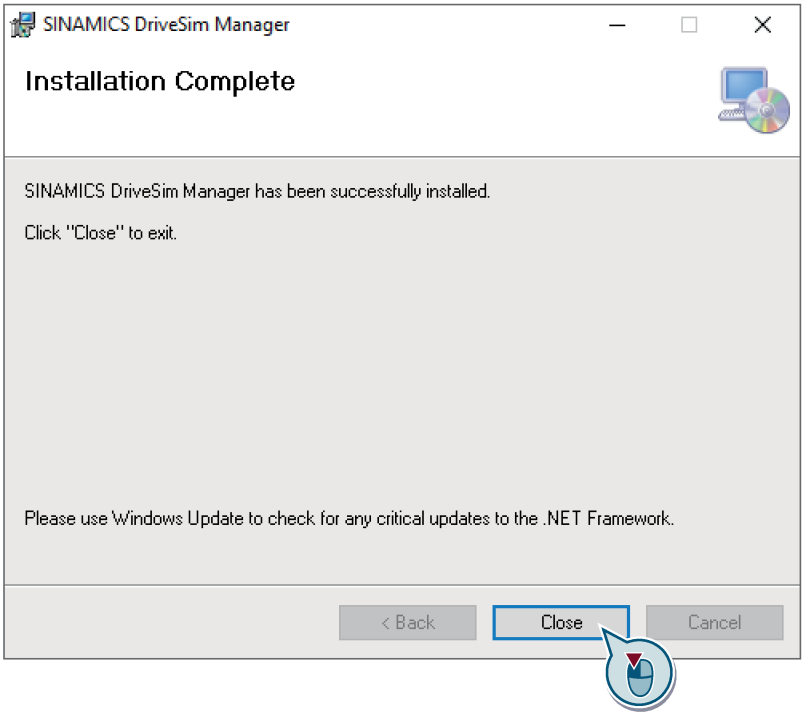
4. Specify the installation path and then click "Next".



5. Specify whether you want to launch the DriveSim Manager tray application every time at logon and whether you want to create a shortcut on the desktop. You then click "Next" to start the installation. The setup wizard displays the status of the installation.



6. When the installation is complete, click "Close" to dismiss the setup wizard.



Result

You have installed SINAMICS DriveSim Manager on your computer.

Activating SINAMICS DriveSim TIA Add-in in Startdrive

6

Requirement

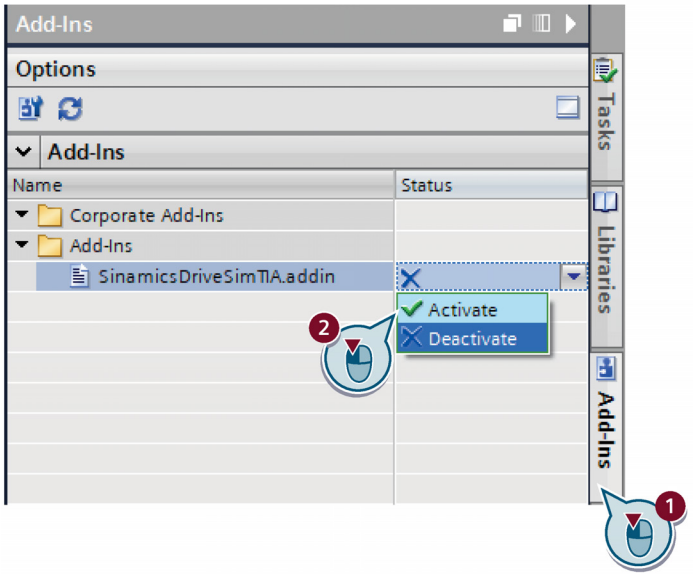
You have successfully installed SINAMICS DriveSim TIA Add-in on your computer and activated the SINAMICS DriveSim Advanced license.

For more information about activating the SINAMICS DriveSim Advanced license, see relevant chapters of the Automation License Manager information system.

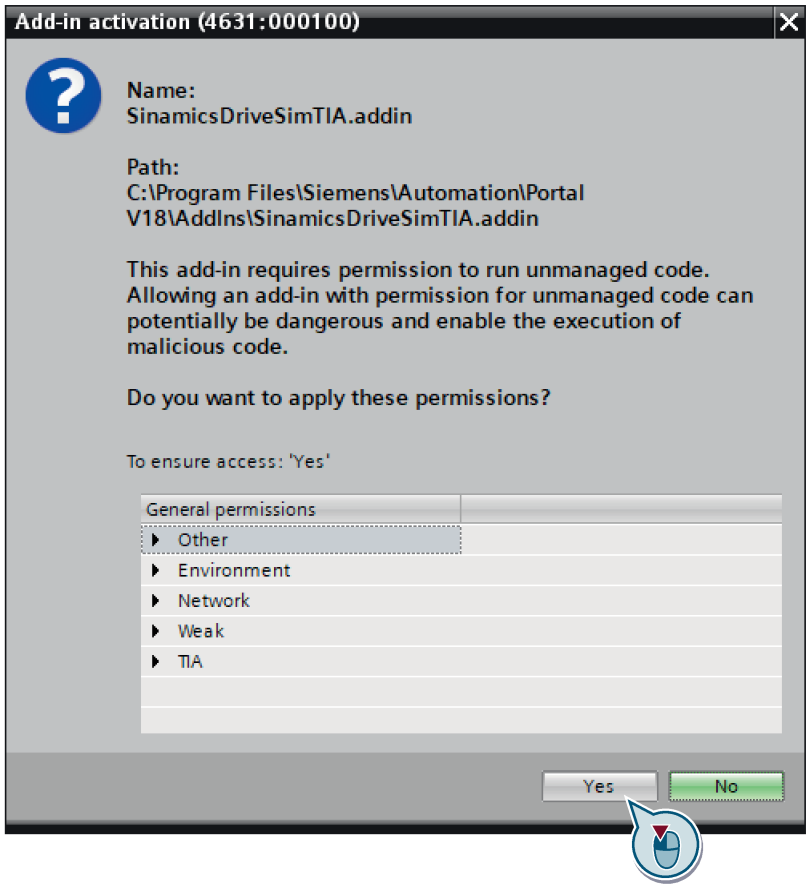
Procedure

Proceed as follows to activate the SINAMICS Add-in program in your computer:

1. Open the task card for add-in programs.
2. Activate the SINAMICS DriveSim TIA Add-in program.



3. Grant permissions to SINAMICS DriveSim TIA Add-in for running unmanaged code.

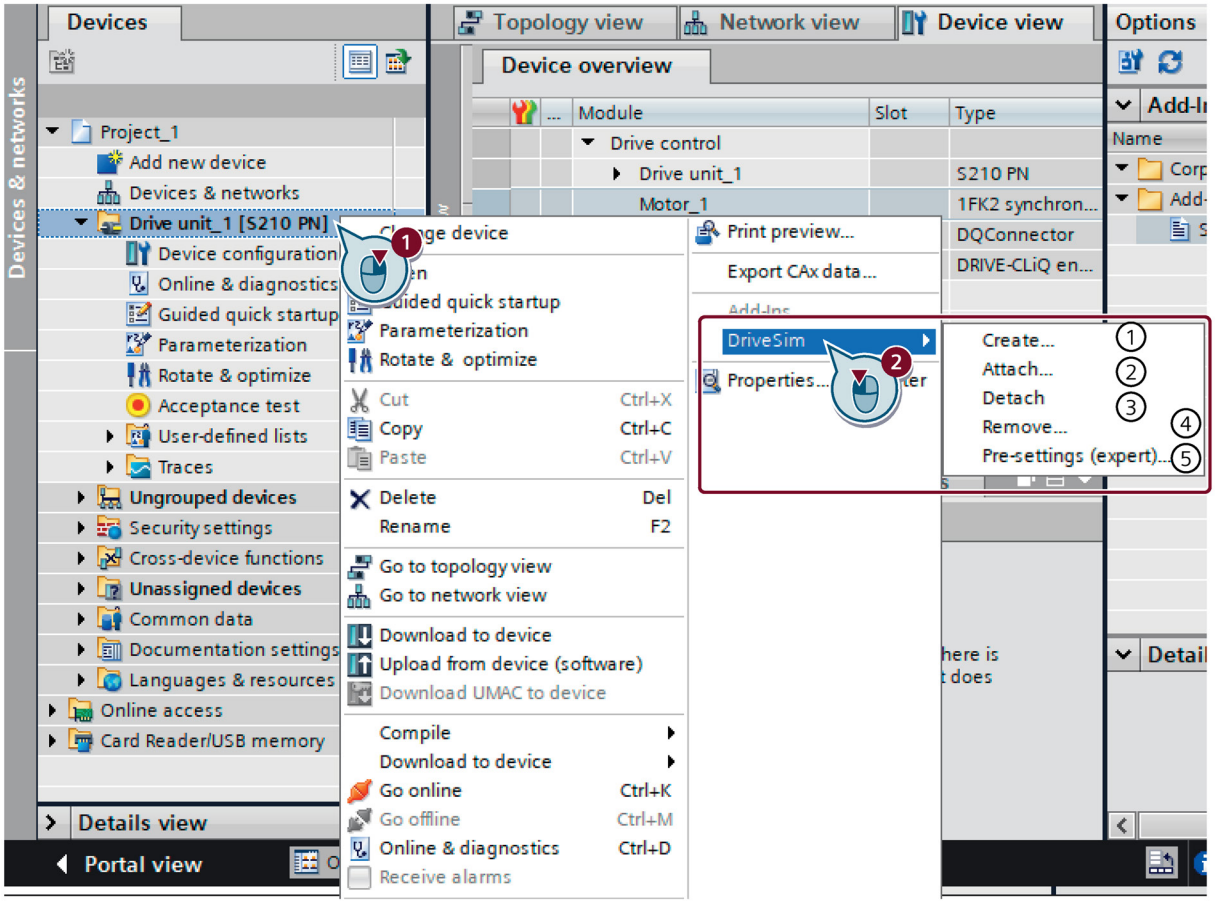


Result

You have successfully activated the SINAMICS DriveSim TIA Add-in program in Startdrive. The program is available in the form of an add-in menu in Startdrive.

Example

With the integrated SINAMICS DriveSim TIA Add-in menu, you can perform the virtual simulation of physical drives in SINAMICS DriveSim Advanced.



① Creates a simulation instance based on the selected device configuration (Page 46)

② Connects a simulation instance to the selected drive (Page 48)

③ Disconnects a simulation instance from the selected drive (Page 57)

④ Deletes the attached simulation instance (Page 60)

⑤ Changes the preset parameters of the simulation instance (Page 41)

Figure 6-1 SINAMICS DriveSim TIA Add-in menu

More information

For more information about installing SINAMICS DriveSim TIA Add-in, see Section "Installing SINAMICS DriveSim TIA Add-in (Page 28)".

Simulating a drive with SINAMICS DriveSim Advanced

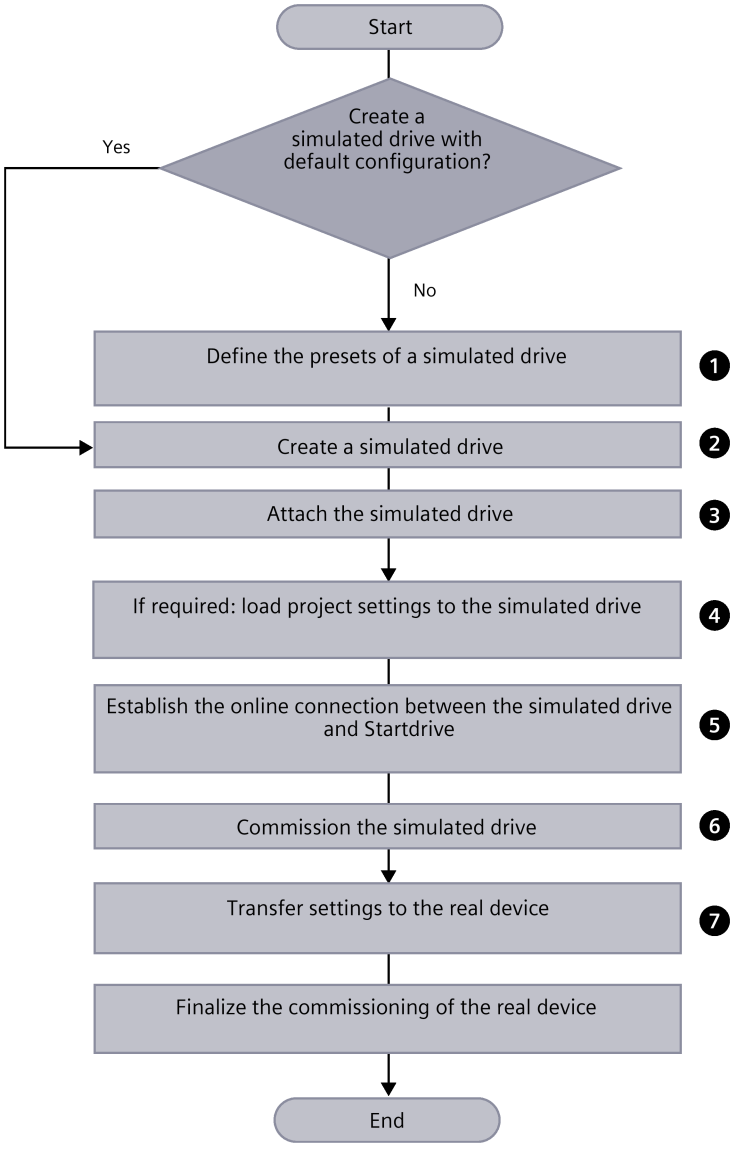
7

7.1 General workflow

Overview

To simulate a drive with DriveSim Advanced and transfer the commissioning results to the real device, take the subsequently listed steps.

Description of function



① Defining the presets of a simulated drive (Page 41)
② Creating a simulated drive (Page 46)
③ Attaching a simulated drive (Page 48)
④ Loading project settings to a simulated drive (Page 50)
⑤ Establishing connection between Startdrive and the simulation instance (Page 52)
⑥ Commissioning a simulated drive (Page 55)
⑦ Transferring the settings from a simulated drive to the real device (Page 57)

Figure 7-1 General workflow

7.2 Defining the presets of a simulated drive

Overview

The preset parameters are specific simulation parameters that define the simulation instance. You can specify the preset parameters and save the parameter settings to a local file before creating a new simulation instance.

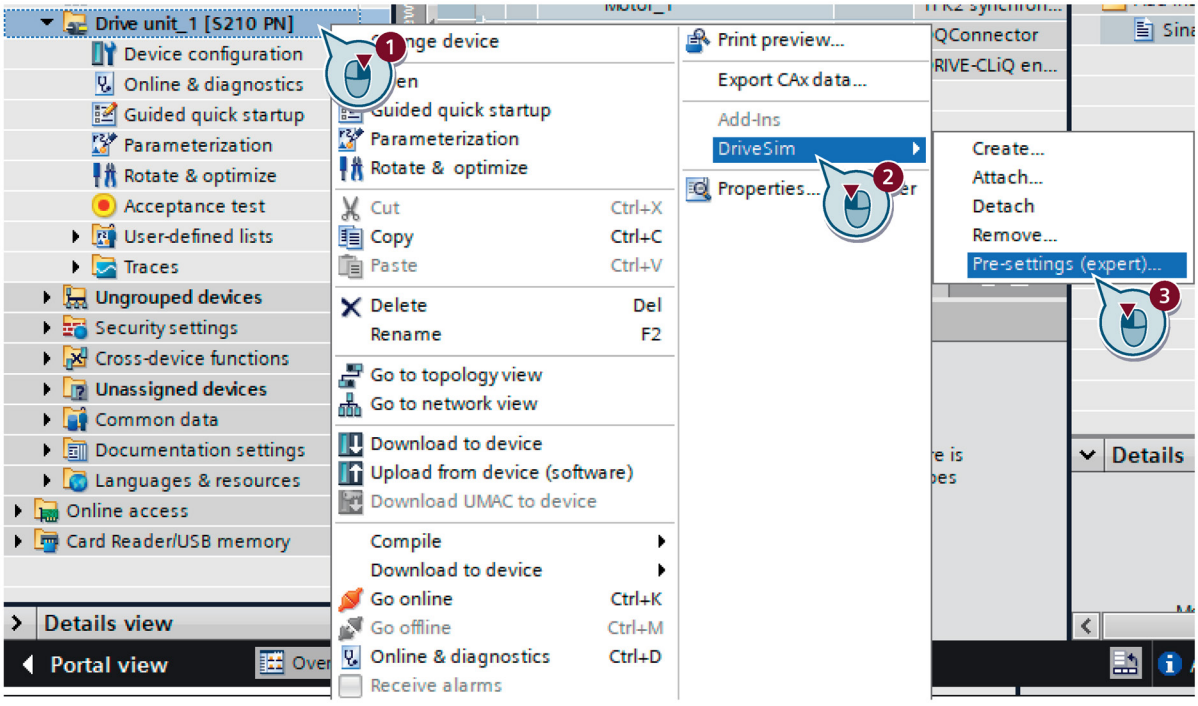
Requirement

You have installed and activated the SINAMICS DriveSim TIA Add-in program.

Procedure

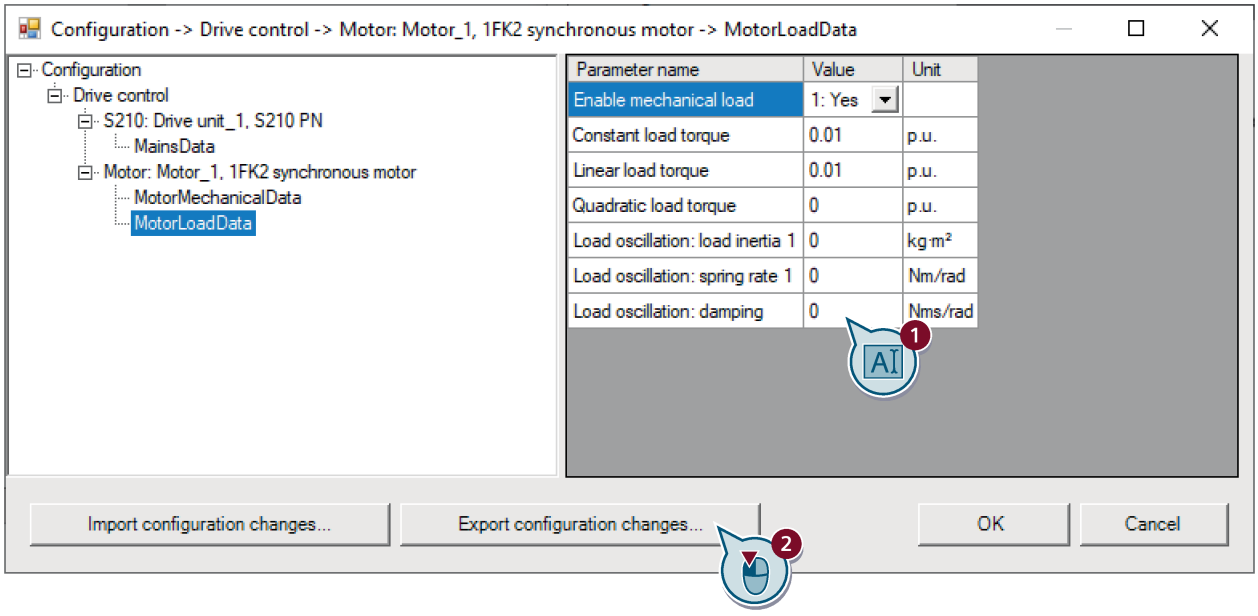
Proceed as follows to define the presets of a simulation instance:

1. Right-click a device based on which you change the preset parameters. Make sure that the device you select is supported by SINAMICS DriveSim Advanced.



2. In the pop-up window, specify the values of the preset parameters including the mains data, motor mechanical data, and motor load data. Then save the settings to a local file.

   To view the default values of preset parameters, click the parameter value and press <Ctrl+Z>. For more information about editable parameters, see Section "Defining the presets of a simulated drive (Page 41)".



Result

You have saved the preset parameter settings to a local file.

Parameters

The following tables show all the preset parameters of SINAMICS DriveSim Advanced.

Mains data

Parameter	Unit	Value range	Factory setting	Description
Device supply voltage	V	0 ... 100000	230	Sets the voltage of the mains supply network. The typical value is 230 V or 400 V.

Motor mechanical data

Parameter	Unit	Value range	Factory setting	Description
Total moment of inertia	kgm^2	10^{-6}... 10^{6}	-[1]	Sets the total inertia of the drive train in a stiff mechanical system. For a two-mass spring load system, the parameter sets only the motor moment of inertia.
Inertia factor	p.u.	0 ... 1000	5	Sets the scaling factor of the total inertia. Setting the value to 1.0 means that the total inertia remains unchanged. If the total inertia setting represents the motor inertia, the scaled total inertia can be used to simulate the external moment of inertia. Consider the fact that in typical mechanical arrangements the external moment of inertia is greater than the motor inertia, set this parameter to a value greater than 2.0.

[1] The factory setting varies depending on the configured motor.

Motor load data

- Settings for no motor load

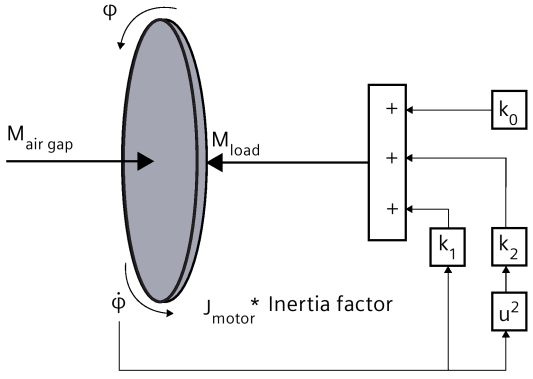
  Enable mechanical load = 0

  Load oscillation: load inertia 1 = 0

- Settings for constant, linear, or quadratic motor load

  Enable mechanical load = 1

  Load oscillation: load inertia 1 = 0



J_{motor}	Total moment of inertia	k_0	Constant load torque
$M_{air\ gap}$	Air gap torque of the motor (without mechanical loss)	k_1	Linear load torque
M_{load}	Load torque	k_2	Quadratic load torque
φ	Rotation angle of the simulated motor	$\dot{\Phi}$	Angular speed of the simulated motor

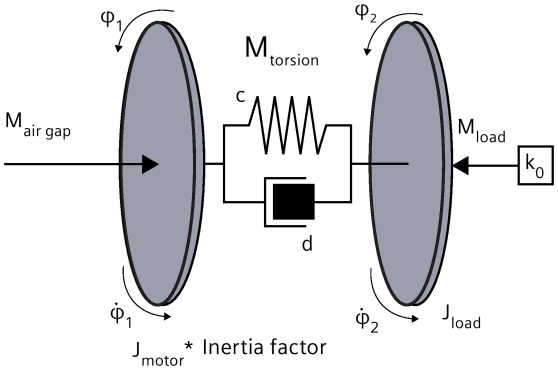
Parameter	Unit	Value range	Factory setting	Description
Constant load torque	p.u.	-100 ... 100	0.01[1)]	Sets the ratio between the passive load torque and the rated motor torque. A positive ratio (≠1) results in a braking torque independent of the motor direction of rotation. When the value is set to 1, the motor runs at the rated torque. If parameterized, the constant load torque is added up to the total load torque of the simulation instance. **Dependency**: When the load inertia parameter is set to a value greater than 0 or the load enable parameter is set to 0, the load torque settings become invalid.
Linear load torque	p.u.	-100 ... 100	0.01[1)]	Defines the passive load torque as a function of the motor speed. The braking torque increases proportionally to the motor speed. When the value is set to 1, the motor runs with a braking torque equal to its rated torque at the rated speed. If parameterized, the linear load torque is added up to the total load torque of the simulation instance. **Dependency**: When the load mass inertia parameter is set to a value greater than 0 or the load enable parameter is set to 0, the load torque settings become invalid.
Quadratic load torque	p.u.	-100 ... 100	0	Defines the passive load torque as a function of the motor speed. The braking torque increases quadratically with the motor speed. When the value is set to 1, the motor runs with a braking torque equal to its rated torque at the rated speed. If parameterized, the quadratic load torque is added up to the total load torque of the simulation instance. **Dependency**: When the load mass inertia parameter is set to a value greater than 0 or the load enable parameter is set to 0, the load torque settings become invalid.

[1)] The factory setting is determined in consideration of the friction in the drive system.

- Settings for the two-mass oscillator model

  Enable mechanical load = 1

  Load oscillation: load inertia 1 > 0



J_{motor}	Total moment of inertia	c	Load oscillation: spring rate 1
$M_{air\ gap}$	Air gap torque of the motor (without mechanical loss)	d	Load oscillation: damping
M_{load}	Load torque	$M_{torsion}$	Torque created by the difference in the rotation angle and angular speed of the simulated motor and load
J_{load}	Load oscillation: load inertia 1	φ_1	Rotation angle of the simulated motor
φ_2	Rotation angle of the simulated load	$\dot{\varphi}_1$	Angular speed of the simulated motor
$\dot{\varphi}_2$	Angular speed of the simulated load		

Parameter	Unit	Value range	Factory setting	Description
Load oscillation: load inertia 1	kgm^2	0 ... 10^6	0	Sets the load moment of inertia. Setting this parameter to a value greater than 0 enables the two-mass spring load and disables the load torque settings.
Load oscillation: spring rate 1	Nm/rad	0 ... 10^6	0	Sets the stiffness of the motor shaft and other transmission elements between the motor and the load.
Load oscillation: damping	Nms/rad	0 ... 10^6	0	Sets the mechanical damping of the two-mass spring load.

7.3 Creating a simulated drive

Requirement

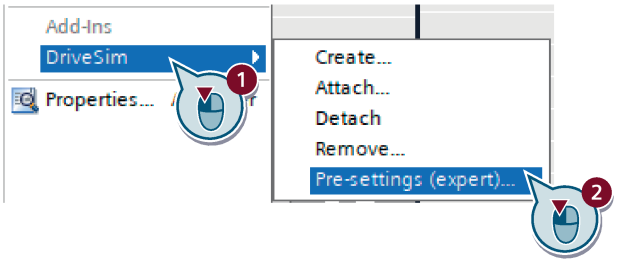
You have installed and activated the SINAMICS DriveSim TIA Add-in program.

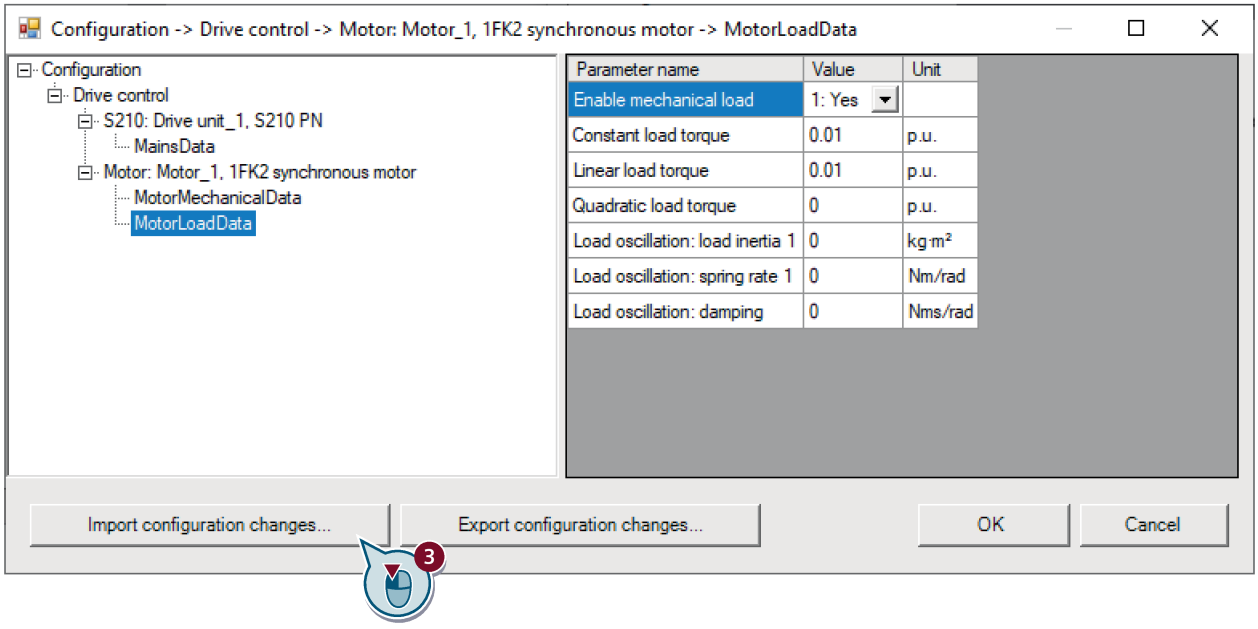
Procedure

Proceed as follows to create a simulation instance:

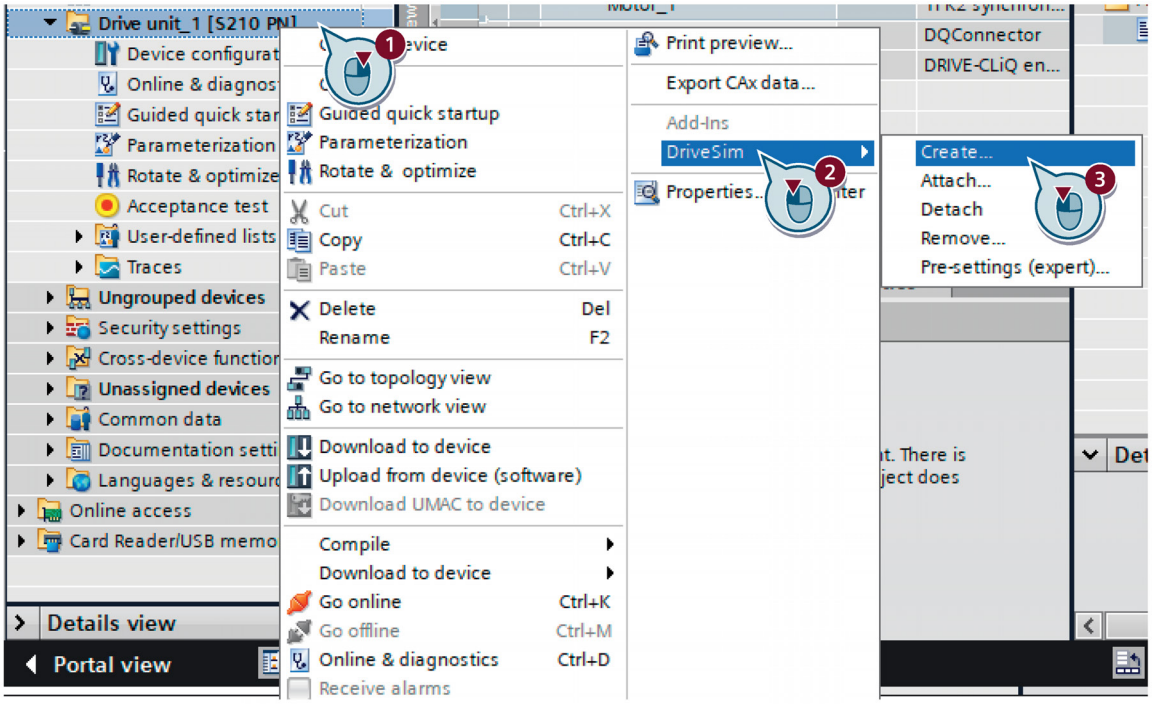
1. In Startdrive, select a target device to be simulated. Make sure that the device you select is supported by SINAMICS DriveSim Advanced.
2. To create a simulated drive with the default configuration, skip this step and proceed to step 3.

   To create a simulated drive based on the presets from a local file, right-click the device to import the preset parameters.

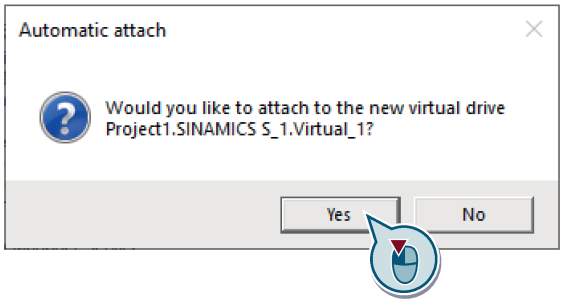




3. Right-click the device to create its simulation instance.



4. Wait for a few seconds until the following dialog box appears. Specify whether to attach the newly-created instance to the device. If you choose to attach the newly-created instance to the device, the previously attached instance is detached automatically.



Result

You have created a simulation instance. The IP address and name of the instance are assigned automatically. You can view the status of the simulation instance in SINAMICS DriveSim Manager.

7.4 Attaching a simulated drive

Overview

Attaching a simulation instance changes the drive's IP address into that of the simulation instance.

Requirement

You have created the simulation instance.

Procedure

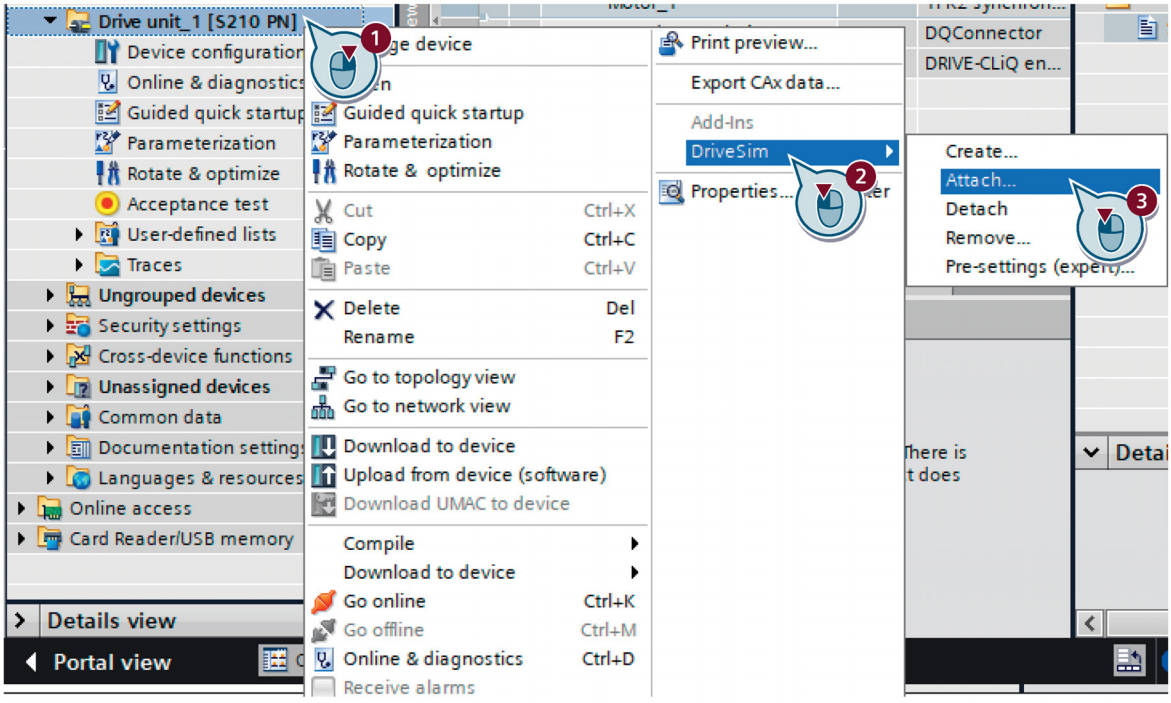
Attaching a newly-created simulation instance

You can attach a simulation instance when creating the instance.

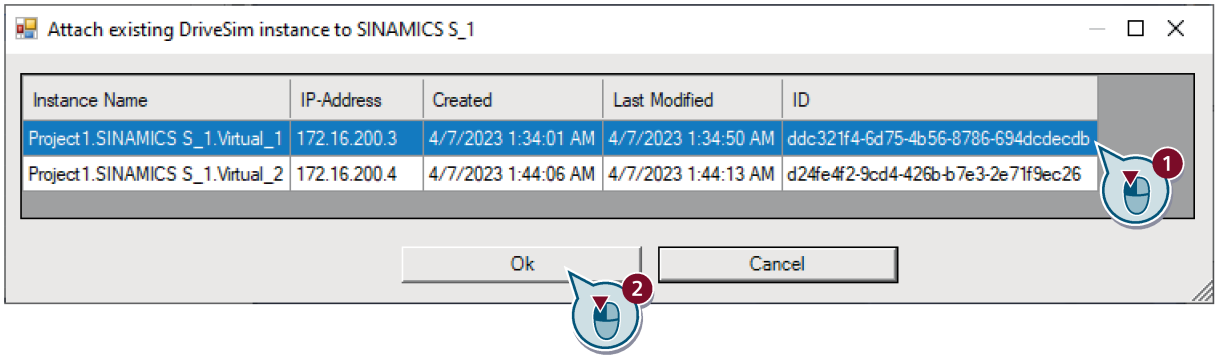
For more information, see Section "Creating a simulated drive (Page 46)".

Attaching an existing simulation instance

1. Right-click the device to attach the simulation instance.



2. Attach the target simulation instance.



Result

You have attached the simulation instance to the drive. The previously attached instance is detached automatically.

More information

For more information about detaching a simulation instance, see related steps in Section "Transferring the settings from a simulated drive to the real device (Page 57)".

7.5 Loading project settings to a simulated drive

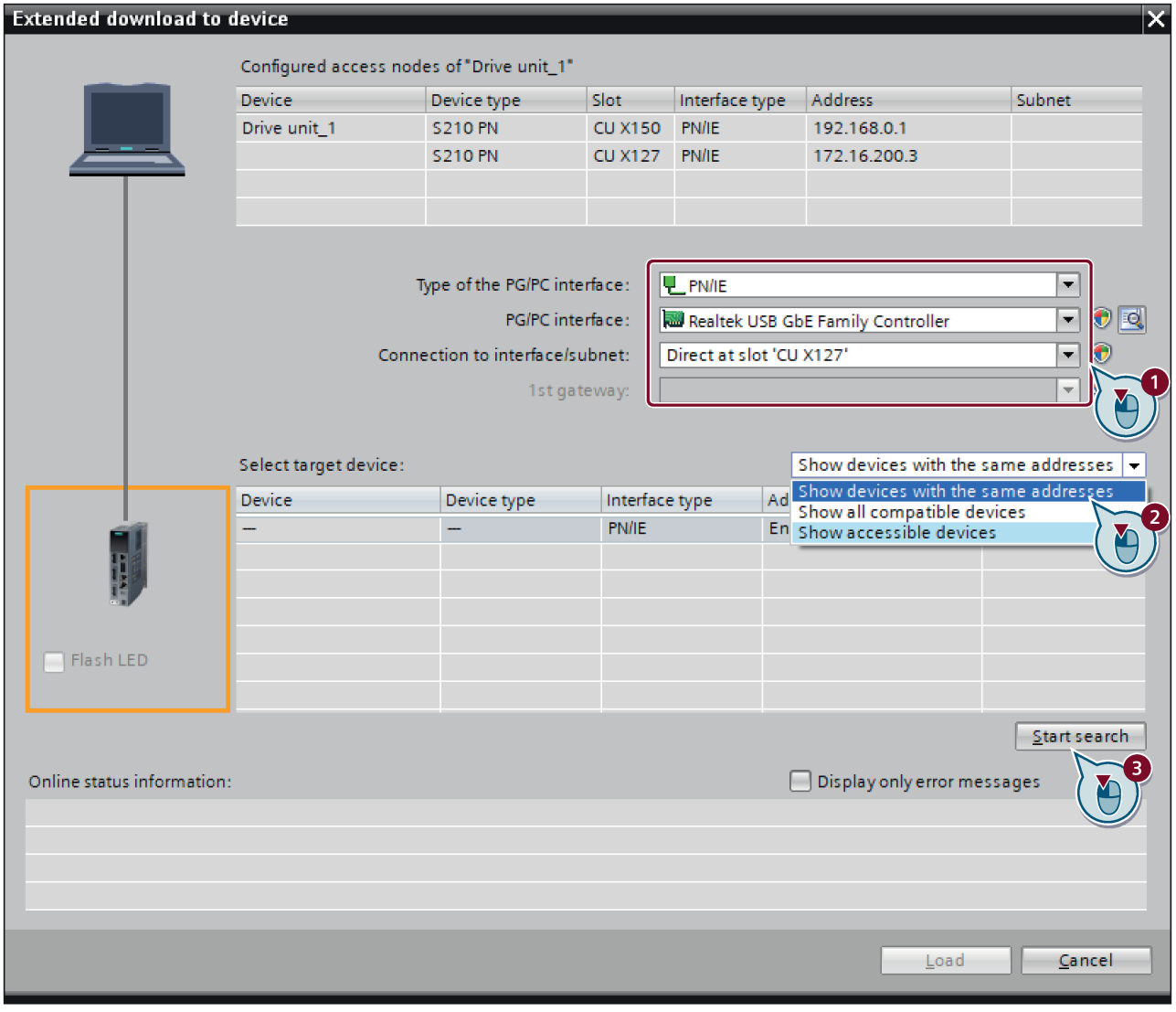
Requirement

The simulation instance has been attached.

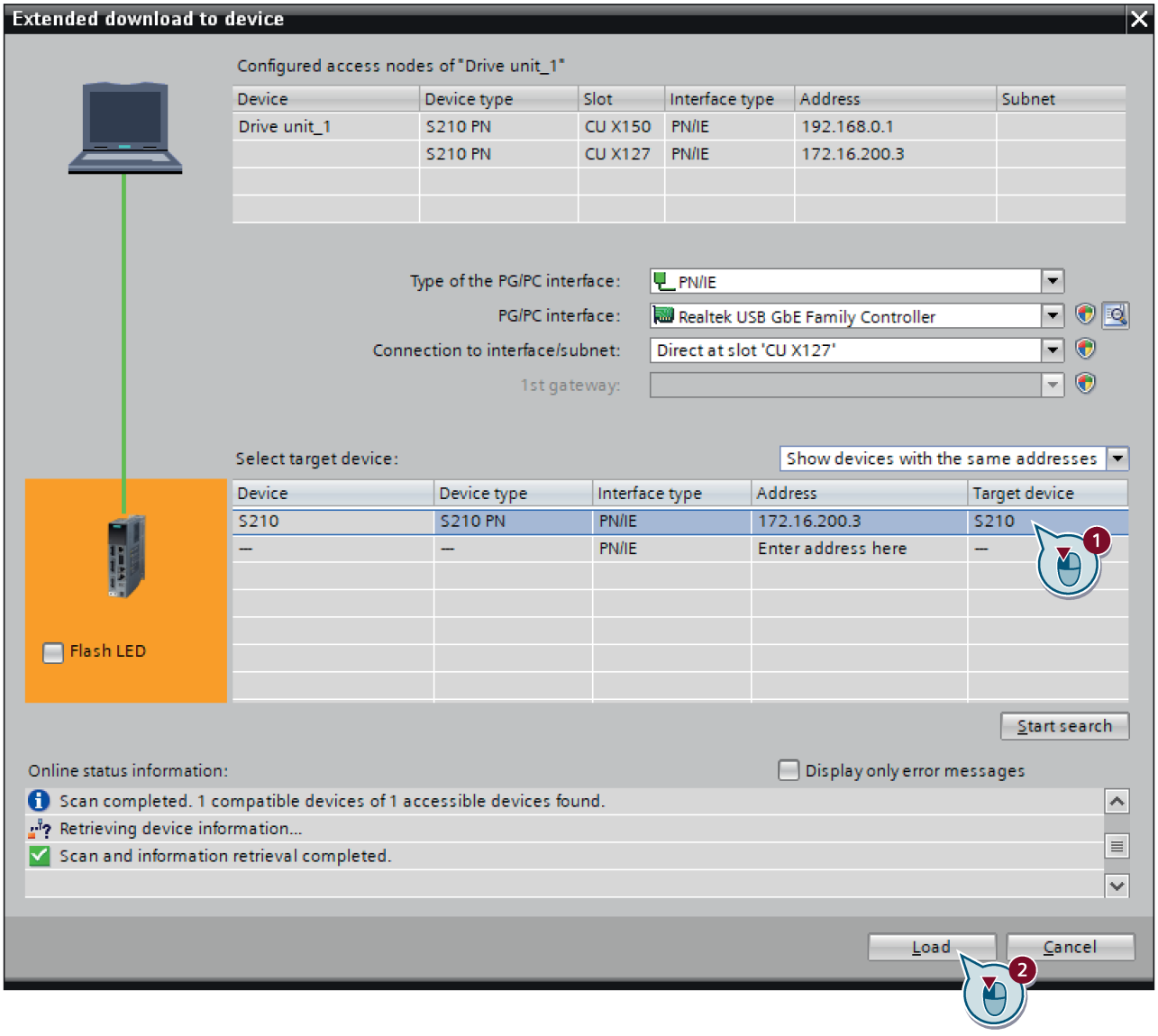
Procedure

Proceed as follows to load settings from a Startdrive project to the simulation instance:

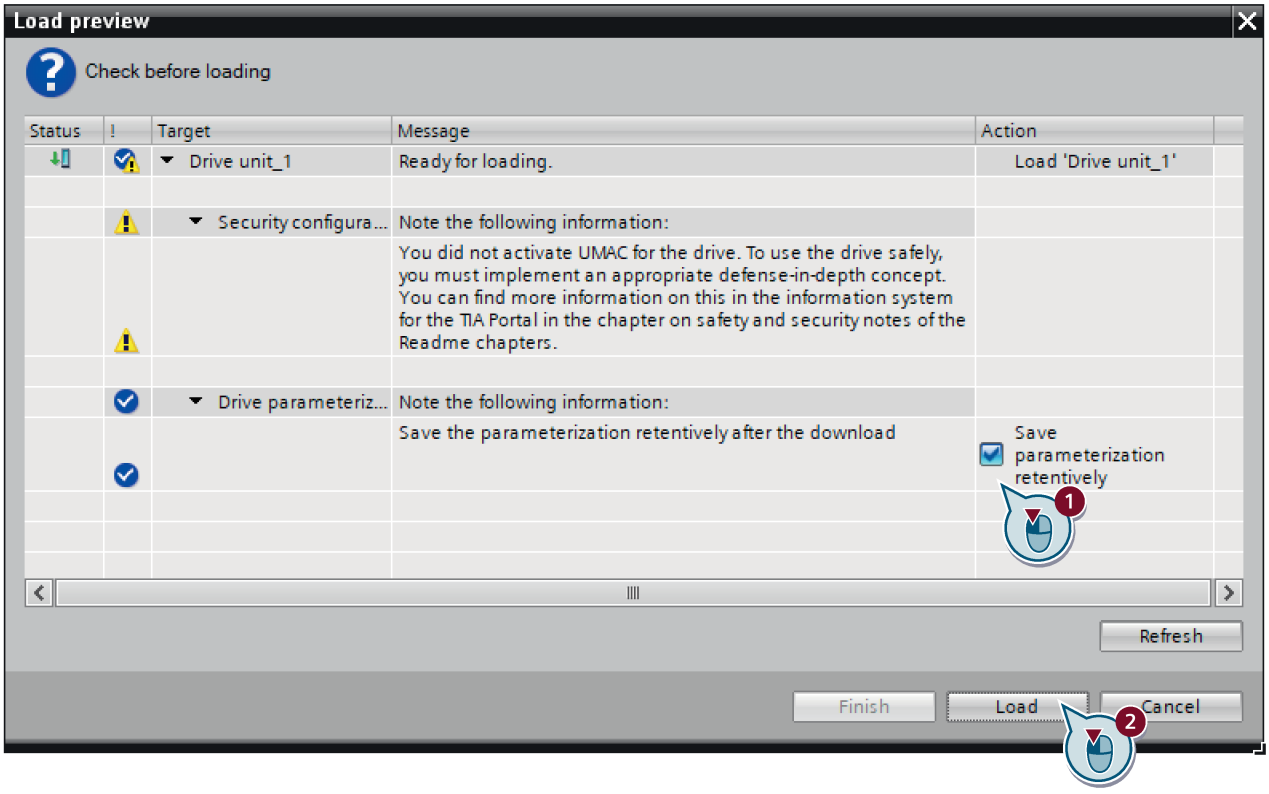
1. Select the simulation instance and click to download the settings from the Startdrive project.
2. Configure the access nodes of the simulation instance.
   - Specify the PG/PC interface of your computer.
   - Set the connection interface of the simulation instance to X127.
   - From the list for target device selection, select to show devices with the same addresses and then start search for the target devices.



3. Select the simulation instance from the target device list.



4. Select the settings you want to load to the simulation instance and start the loading process. The process may take a few minutes.



Result

You have transferred the settings from the project to the simulation instance.

7.6 Establishing connection between Startdrive and the simulation instance

Overview

To commission the simulated device, the online connection between the simulation instance and Startdrive is necessary to establish.

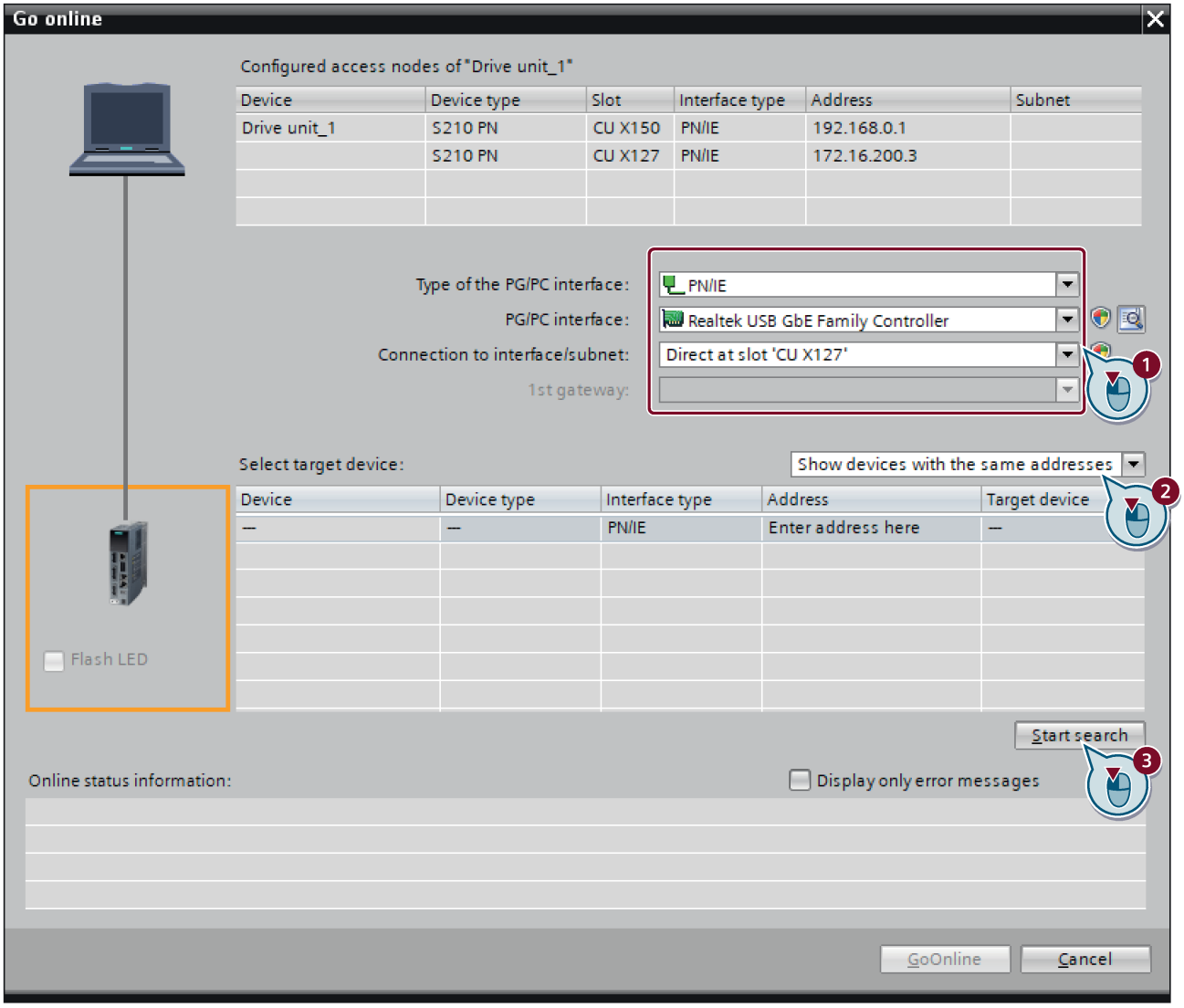
Requirement

The simulation instance is attached.

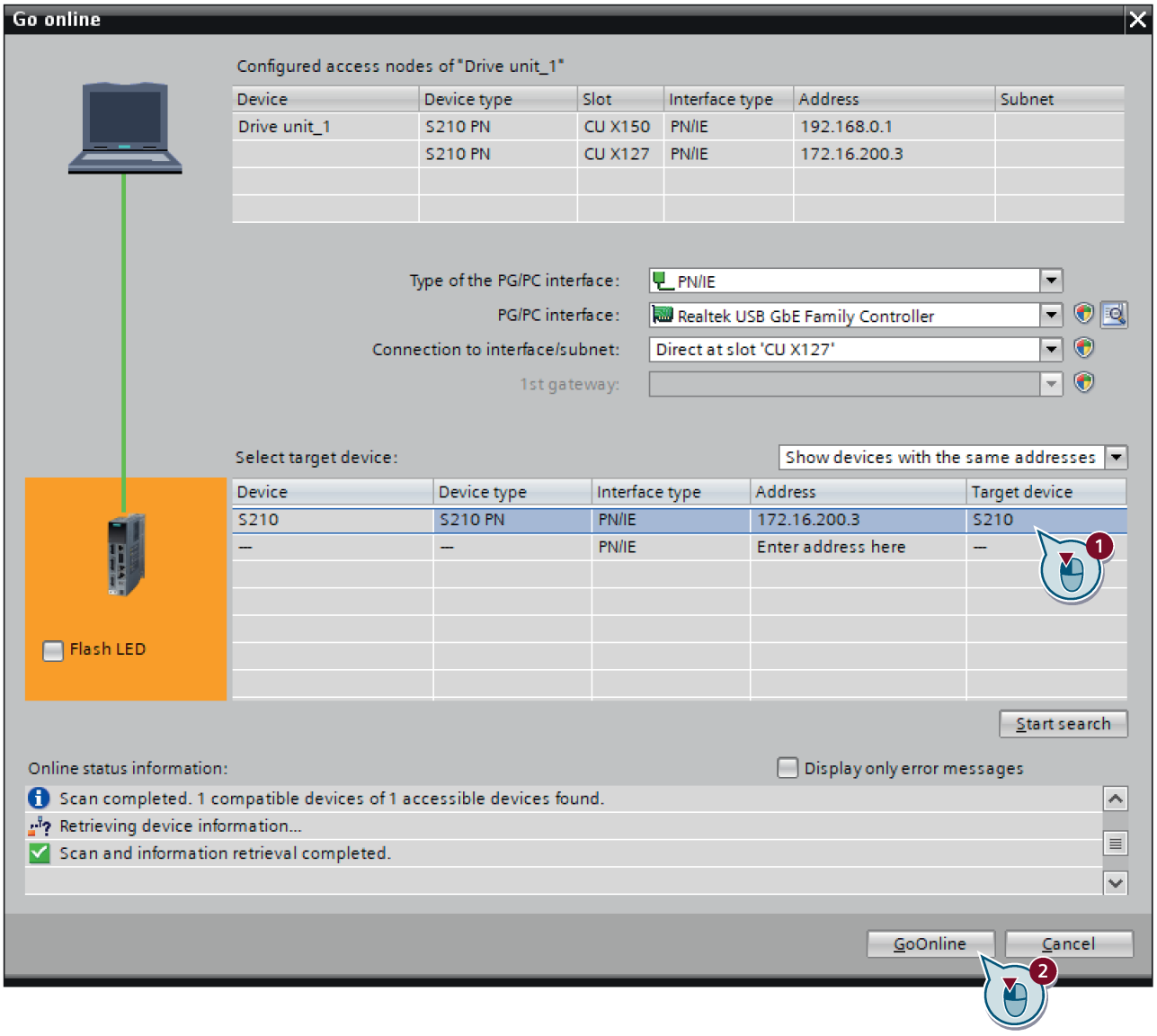
Procedure

Proceed as follows to establish an online connection between Startdrive and the simulation instance:

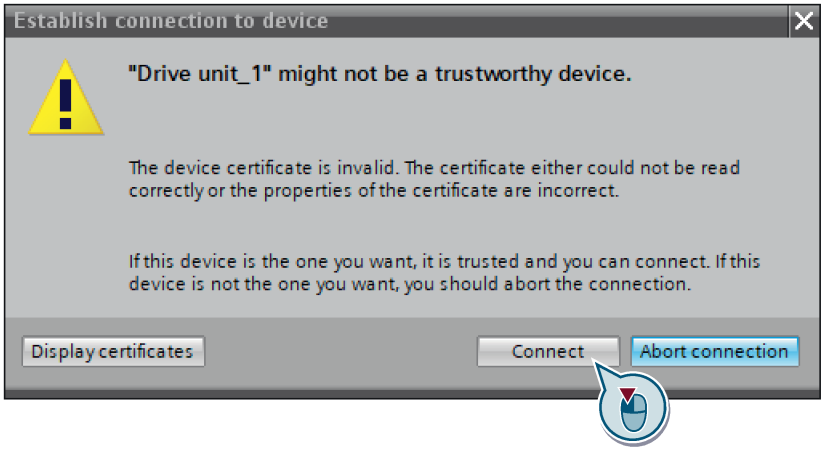
1. In Startdrive, select the simulation instance and click .
2. Configure the access nodes of the simulation instance as shown below:
   - Specify the PG/PC interface of your computer.
   - Set the connection interface of the simulated device to X127.
   - From the list for target device selection, select to show devices with the same addresses and then start search for the target devices.



3. Select the simulation instance from the target device list and connect the simulation instance online.



4. Dismiss the security warning.



Result

The online connection between Startdrive and the simulation instance is established.

7.7 Commissioning a simulated drive

Overview

SINAMICS DriveSim Advanced supports the commissioning of the simulation instance both in Startdrive and via the Web server. To access the Web server of the simulation instance, enter "**https://172.16.200.xxx:8443**" in a supported browser. "172.16.200.xxx" stands for the IP address of the corresponding instance.

This section takes Startdrive as an example.

Requirement

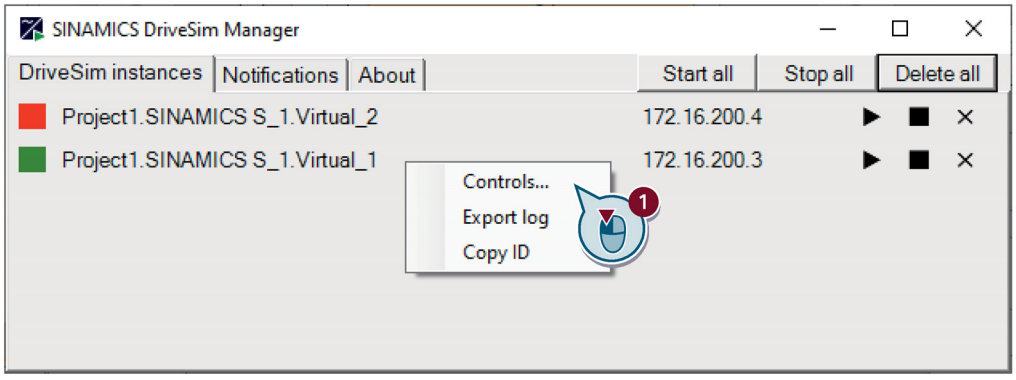
The online connection between Startdrive and the simulation instance is established.

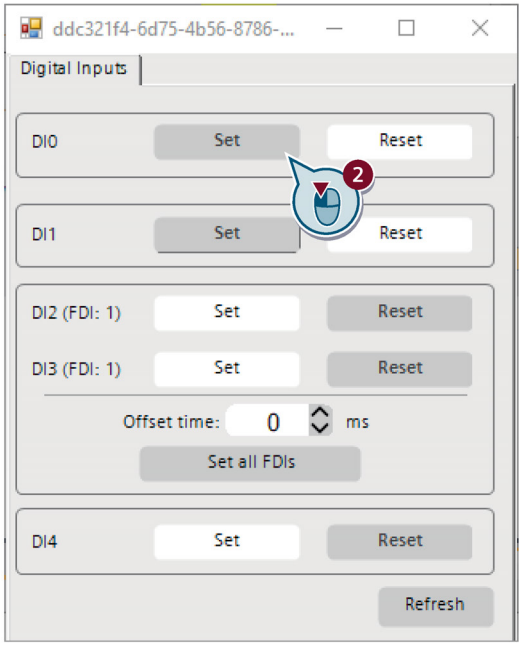
Procedure

Proceed as follows to commission a simulation instance:

1. Set the basic parameters for the simulation instance.
2. Assign the input signals.

   You can set the status of input signals in SINAMICS DriveSim Manager and observe how the simulation instance responds.





   Optionally, you can configure the offset time to define the allowed discrepancy time of two F-DI signals. During the offset time, the simulated drive tolerates the inconsistency of two F-DI signals. When the discrepancy time of the signals exceeds the offset time, the simulated drive reports a safety message.

3. Configure drive functions.
4. Set Safety Integrated Functions.
5. Optimize parameter settings.

Result

You have commissioned the simulation instance.

More information

For more information about drive commissioning, see relevant chapters of the TIA Portal information system.

For more information about restrictions in commissioning the instance, see Section "Range of validity (Page 21)".

7.8 Transferring the settings from a simulated drive to the real device

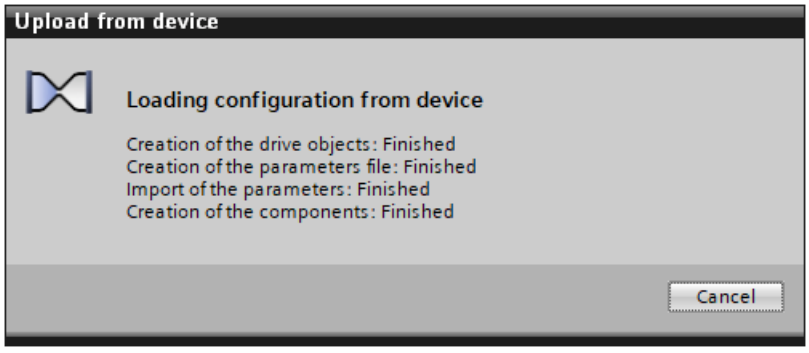
Requirement

- The online connection between Startdrive and the simulation instance is established.
- The real device and the simulated device have the same firmware version.

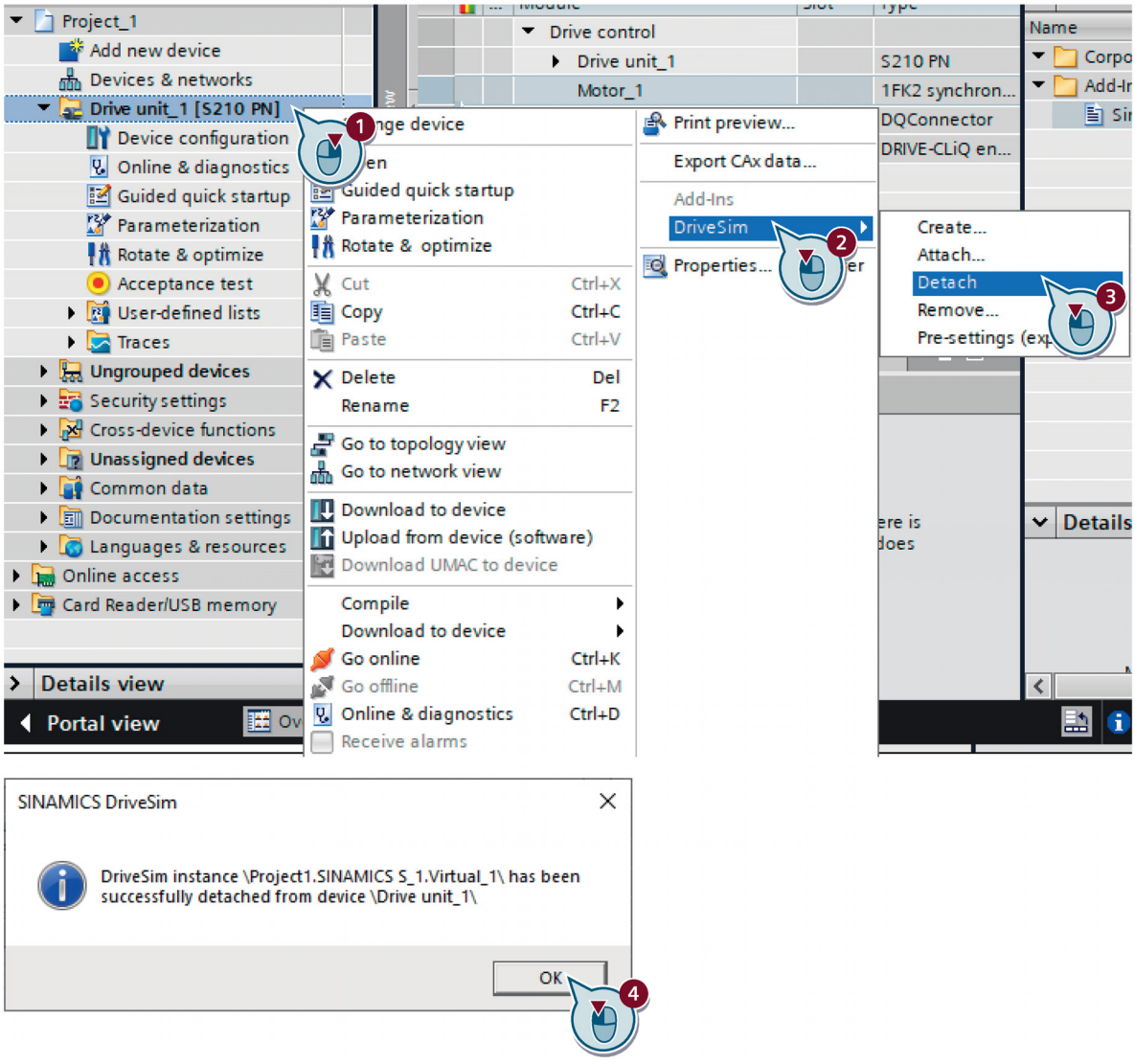
Procedure

Proceed as follows to transfer settings from a simulation instance to the real device:

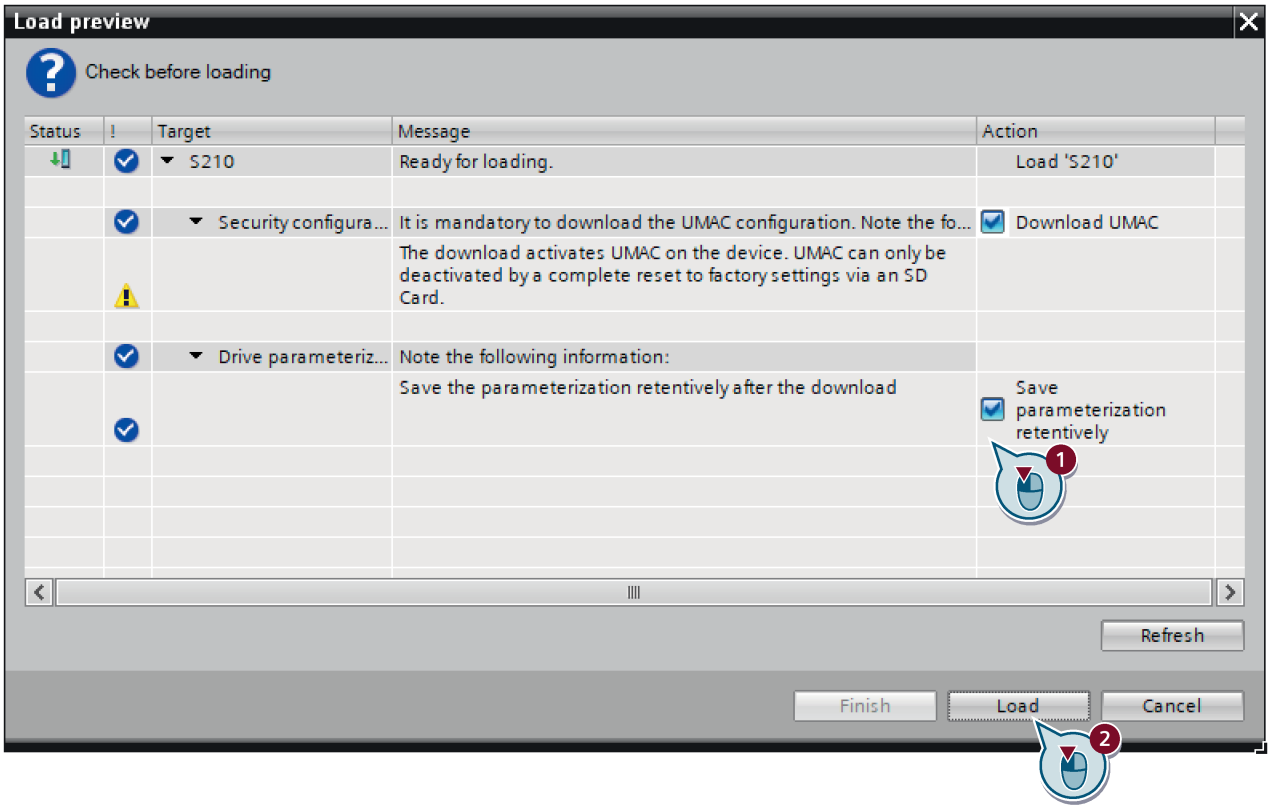
1. Disconnect the simulation instance from Startdrive by clicking  .
2. Select the simulation instance and click  to upload its settings to the Startdrive project.



3. Detach the simulation instance from the project.



4. Connect the real device to Startdrive and click to download the settings from the Startdrive project. The process may take a few minutes.



Result

You have transferred the settings from the simulation instance to the real device. You can finalize the commissioning of the real device now.

7.9 Deleting a simulated drive

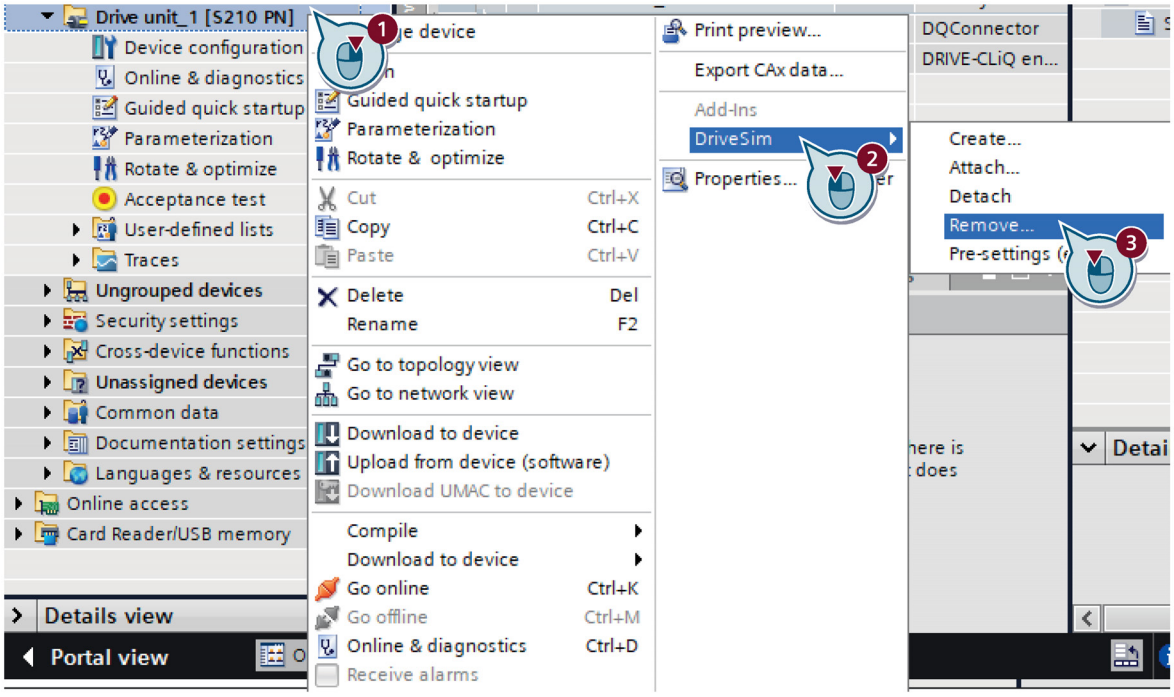
Requirement

The simulation instance has been created.

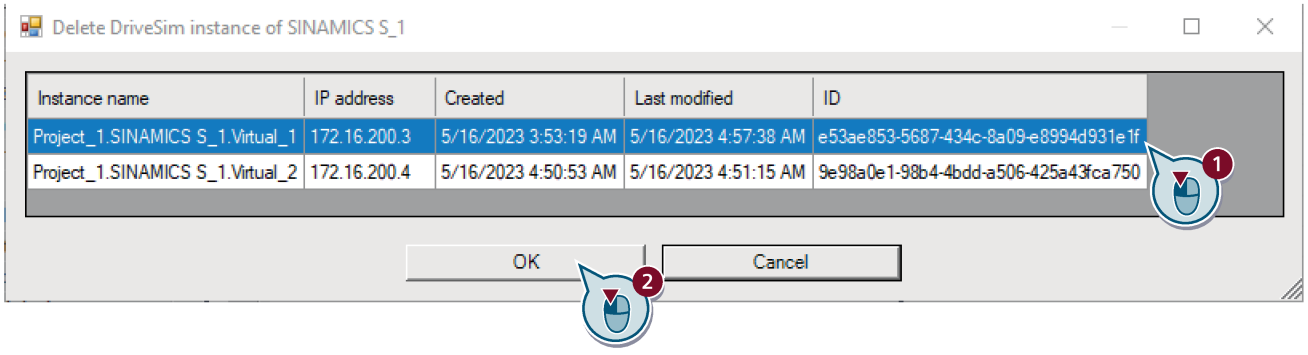
Procedure

Deleting a simulation instance in Startdrive

1. In Startdrive, select the targeted device to delete simulation instances.

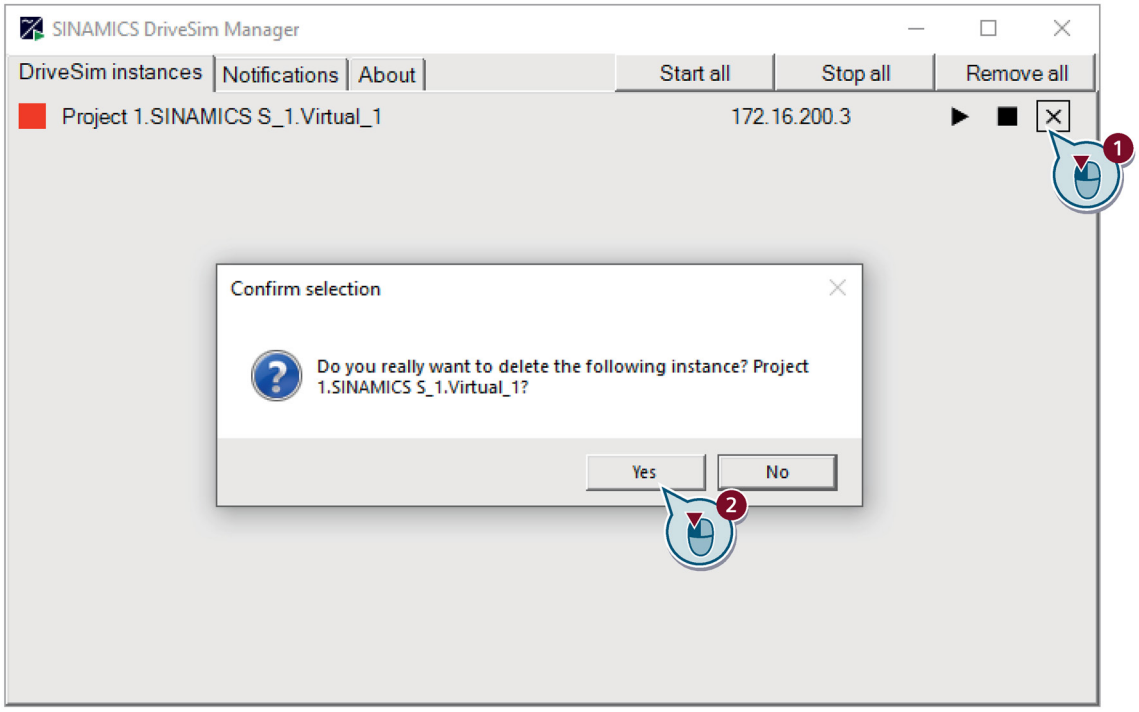


2. Select the instance you want to delete.



Deleting a simulation instance in DriveSim Manager

In DriveSim Manager, select and delete the target simulation instance.



Result

You have deleted the simulation instance. The IP address of the deleted simulation instance will be re-assigned to a new instance.

Additional information

8

8.1 SINAMICS DriveSim Manager

Overview

SINAMICS DriveSim Manager is a stand-alone application of SINAMICS DriveSim Advanced for managing simulation instances.

After Installing SINAMICS DriveSim Manager (Page 31), the software icon appears in the system tray of the Windows taskbar. Double-clicking opens the application.

Note

If the icon does not appear in the system tray, double-click the desktop icon to open the application. For more information about tray application settings, see Section "Installing SINAMICS DriveSim Manager (Page 31)".

Description of function

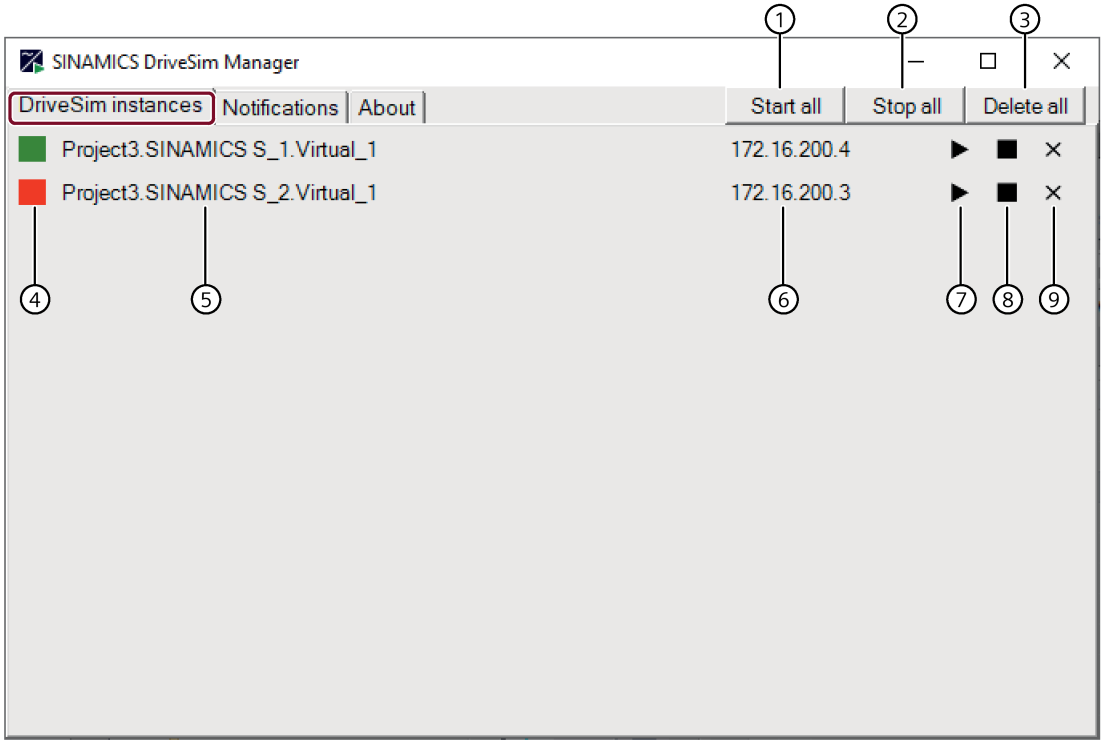
With SINAMICS DriveSim Manager, you can perform the following tasks:

- View the statuses and IP addresses of simulation instances
- Start, stop or delete simulation instances
- View recorded actions
- View detailed version information about SINAMICS DriveSim Manager and SINAMICS DriveSim Core
- Configure digital inputs of simulation instances

SINAMICS DriveSim Manager user interface

The SINAMICS DriveSim Manager user interface includes three tabbed pages.

- First tab: used for managing simulation instances

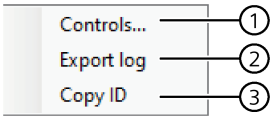


① Starts all simulation instances
② Stops all simulation instances
③ Deletes all simulation instances
④ Displays the status of the simulation instance
- Red: the simulation instance is stopped.
- Yellow: the simulation instance is initiating.
- Green: the simulation instance is running.

⑤ Displays the name of the simulation instance
⑥ Displays the IP address of the simulation instance
⑦ Starts the stopped simulation instance
⑧ Stops the running or initializing simulation instance
⑨ Deletes the simulation instance

The first tab also provides you with the possibility to configure the digital inputs of simulated instances.

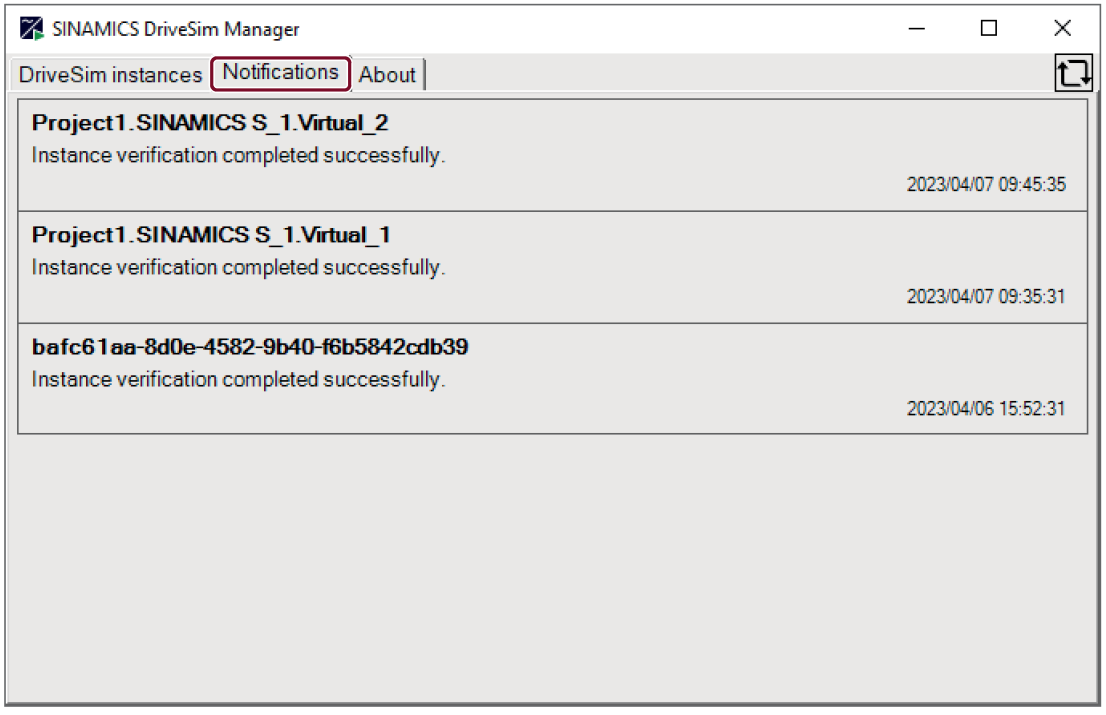
Right-click a target simulation instance and SINAMICS DriveSim Manager shows the following shortcut menu:



① Configures digital inputs of the simulation instance
For more information, see Section "Commissioning a simulated drive (Page 55)".
② Exports logs for troubleshooting
③ Copies the ID of the simulation instance

- Second tab: used for viewing notifications about the following recorded actions:
  - The verification of the started simulation instance is complete successfully.
  - The simulation instance has stopped responding.

  To view the latest notifications, click to refresh the notifications. To clear the notifications, restart SINAMICS DriveSim Manager (usually by restarting your computer).



- Third tab: used for viewing SINAMICS DriveSim Manager and SINAMICS DriveSim Core version information

  This tab also provides you with a more detailed list of internal software versions to support troubleshooting.

8.2 Repairing SINAMICS DriveSim Advanced

8.2.1 Repairing SINAMICS DriveSim TIA Add-in

Overview

The function of repairing is used when the installation encounters errors or when certain system settings are changed.

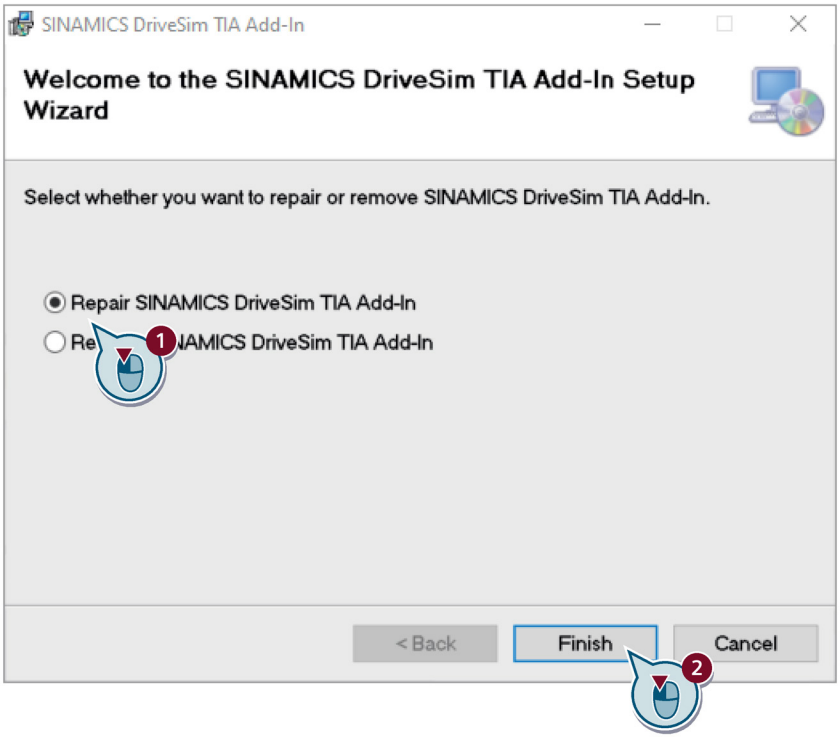
Requirement

- You have installed SINAMICS DriveSim TIA Add-in on your computer.
- You have administrator rights on your computer.

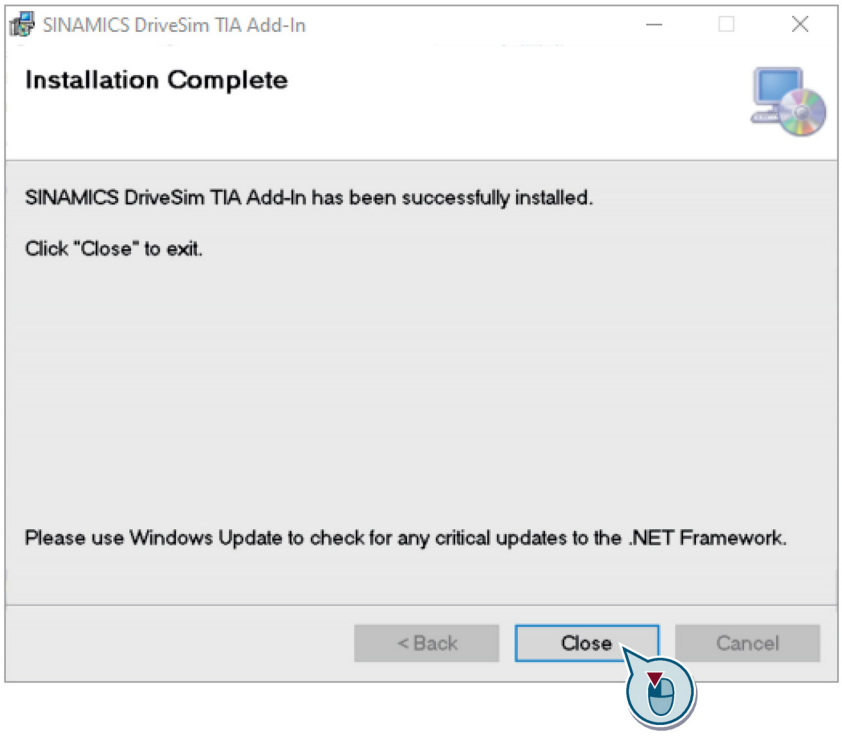
Procedure

Proceed as follows to repair SINAMICS DriveSim TIA Add-in:

1. Choose one of the following two alternative methods to repair SINAMICS DriveSim TIA Add-in:
   - Right-click Setup_TIAAddIn_Release.msi installed on your computer and select "Repair" in the shortcut menu. The pop-up window will be closed automatically after the repair is finished.
   - Double-click Setup_TIAAddIn_Release.msi installed on your computer to open the SINAMICS DriveSim TIA Add-in setup wizard.
2. Select "Repair SINAMICS DriveSim TIA Add-in", and then click "Finish".



3. Click "Close" to dismiss the setup wizard after the repair is completed.



Result

You have finished repairing the software on your computer.

8.2.2 Repairing SINAMICS DriveSim Manager

Overview

The function of repairing is used when the installation encounters errors or when certain system settings are changed.

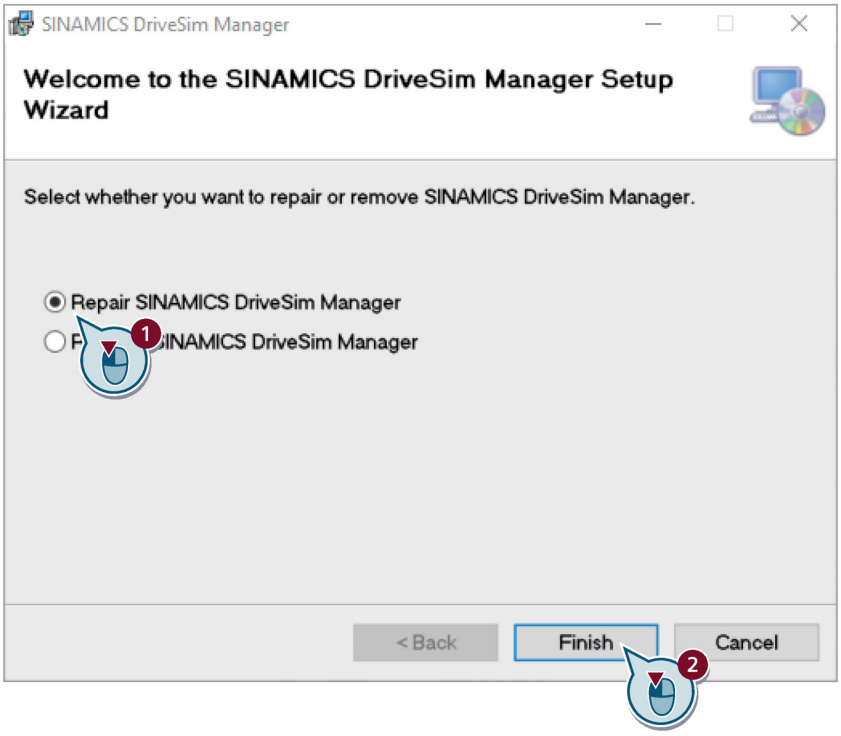
Requirement

- You have installed SINAMICS DriveSim Manager on your computer.
- You have administrator rights on your computer.

Procedure

Proceed as follows to repair SINAMICS DriveSim Manager:

1. Choose one of the following two alternative methods to repair SINAMICS DriveSim Manager:
   - Right-click Setup_DriveSimManager_Release.msi installed on your computer and select "Repair" in the shortcut menu. The pop-up window will be closed automatically after the repair is finished.
   - Double-click Setup_DriveSimManager_Release.msi installed on your computer to open the SINAMICS DriveSim Manager setup wizard.
2. Select "Repair SINAMICS DriveSim Manager", and then click "Finish".



3. Click "Close" to dismiss the setup wizard after the repair is completed.

Result

You have finished repairing the software on your computer.

8.3 Upgrading SINAMICS DriveSim Advanced

Overview

You can install newer versions of the SINAMICS DriveSim Advanced components (SINAMICS DriveSim Core, SINAMICS DriveSim Manager, and SINAMICS DriveSim TIA Add-in) to upgrade the software.

8.3.1 Upgrading SINAMICS DriveSim Core

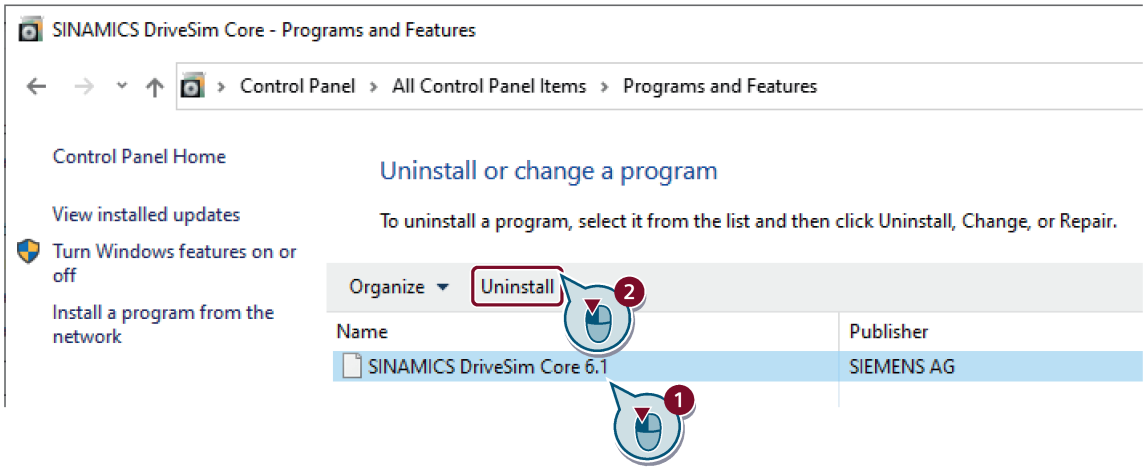
Requirement

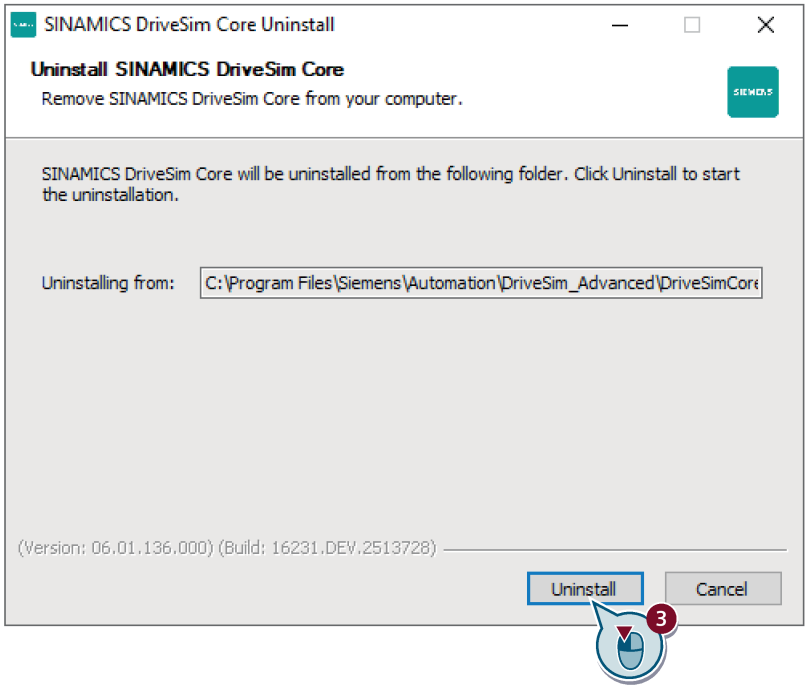
- You have installed SINAMICS DriveSim Core on your computer.
- You have administrator rights on your computer.
- You have stopped SINAMICS DriveSim Manager.

Procedure

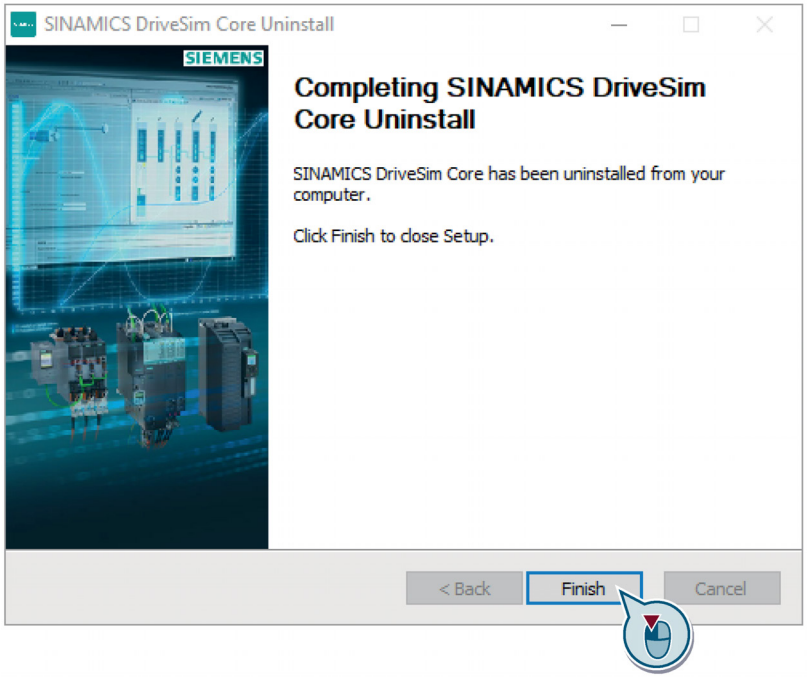
Proceed as follows to upgrade SINAMICS DriveSim Core:

1. Open "Control Panel" on your computer.
2. Specify "SINAMICS DriveSim Core" in the "Programs and Features", and uninstall the software from your computer.





3. Click "Finish" after the uninstallation is completed.



Note

Delete log files manually

If the log files are not deleted automatically after the uninstallation, you can find these files in the following address and delete them manually:

%ProgramData%\Siemens\Automation\SinamicsWinHost\Logs

For more information about log files, see Section "Log files (Page 16)".

4. Download the latest version of the installation package at the following link (https://support.industry.siemens.com/cs/document/109821163).
5. Follow the installation procedure described in Section "Installing SINAMICS DriveSim Core (Page 26)" to finish the installation of the latest software version on your computer.

Result

You have finished the software upgrade on your computer.

8.3.2 Upgrading SINAMICS DriveSim TIA Add-in

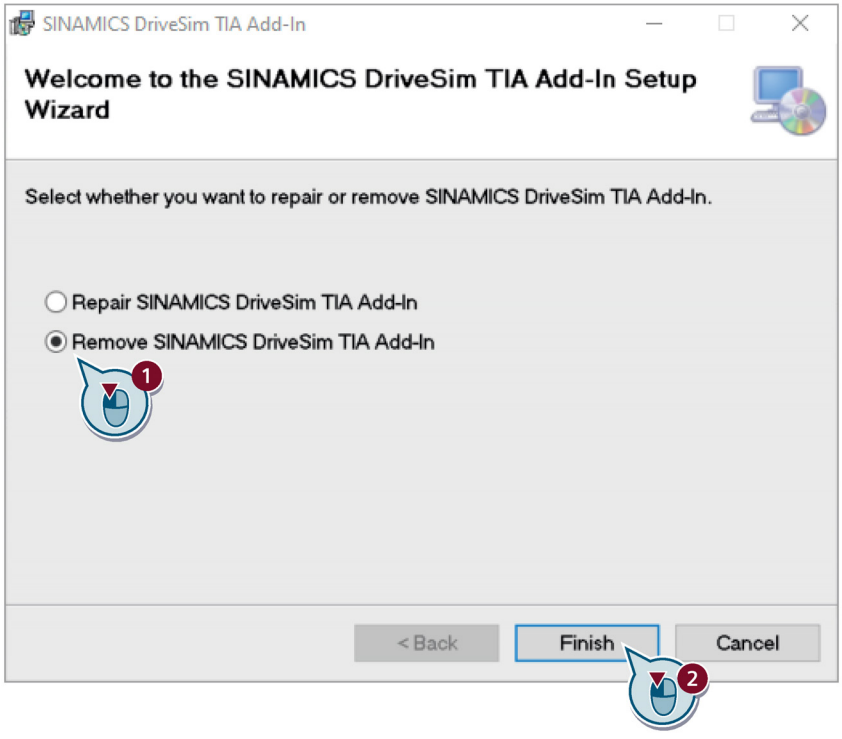
Requirement

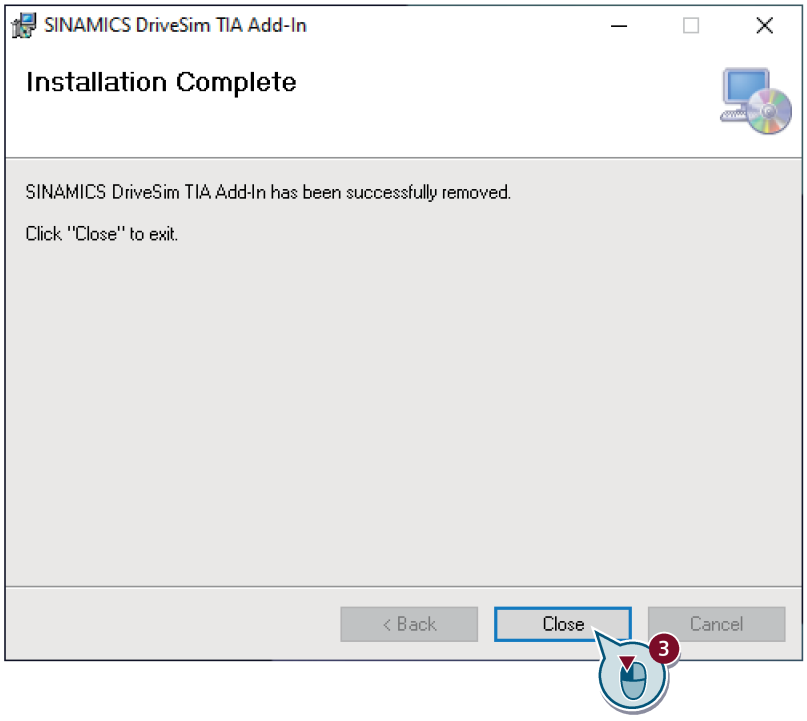
- You have installed SINAMICS DriveSim TIA Add-in on your computer.
- You have administrator rights on your computer.

Procedure

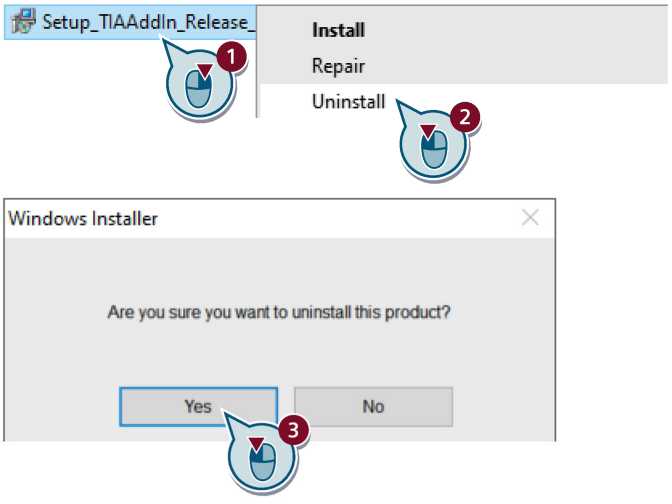
Proceed as follows to uninstall SINAMICS DriveSim TIA Add-in:

1. Double-click Setup_TIAAddIn_Release.msi installed on your computer to open the SINAMICS DriveSim TIA Add-in wizard.
2. Choose one of the following three alternative methods to remove the software.
   - Select "Remove SINAMICS DriveSim TIA Add-in", and then click "Finish". Click "Close" after the uninstallation completes.

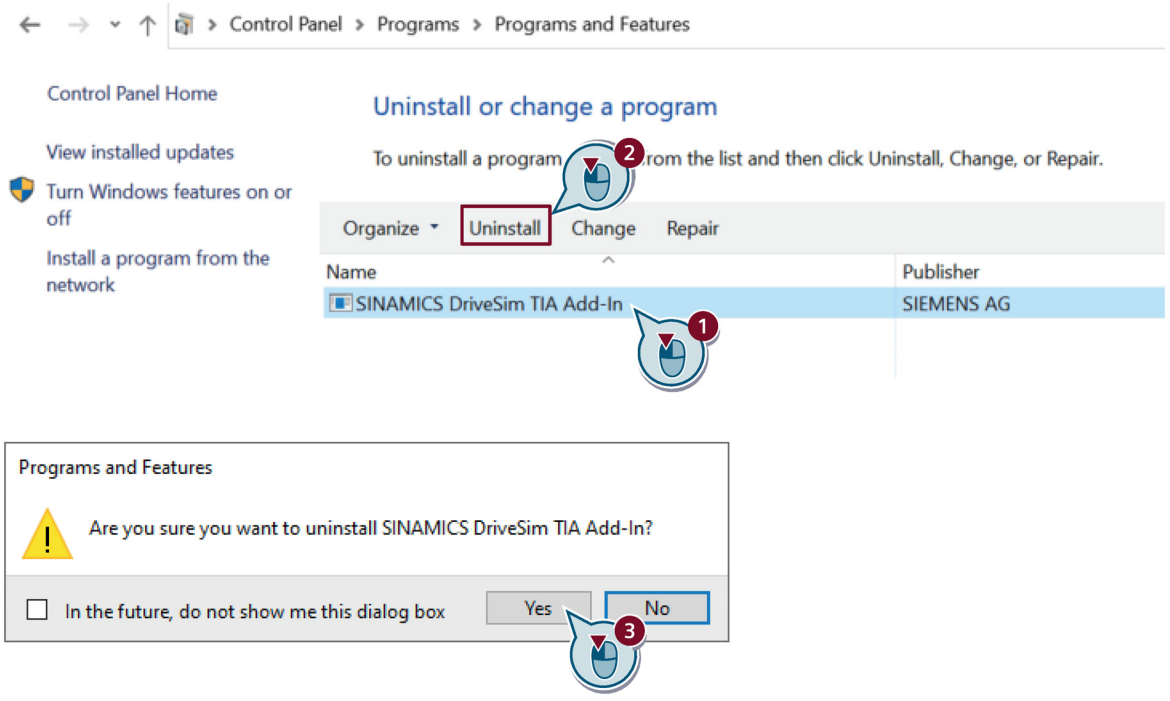




– Right-click Setup_TIAAddIn_Release.msi installed on your computer to open the shortcut menu. Click "Uninstall" to open the "Windows Installer" wizard, and then click "Yes" to finish the uninstallation.



– Uninstall the software via "Control Panel".



Note

Delete log files manually after the uninstallation

If log files are not deleted automatically after the uninstallation, you can find these files in the following address and delete them manually:

%ProgramData%\Siemens\Automation\SinamicsWinHost\Logs

For more information about log files, see Section "Log files (Page 16)".

3. Follow the installation procedure described in Section "Installing SINAMICS DriveSim TIA Add-in (Page 28)" to finish the installation of the latest software version on your computer.

Result

You have finished the software upgrade on your computer.

8.3.3 Upgrading SINAMICS DriveSim Manager

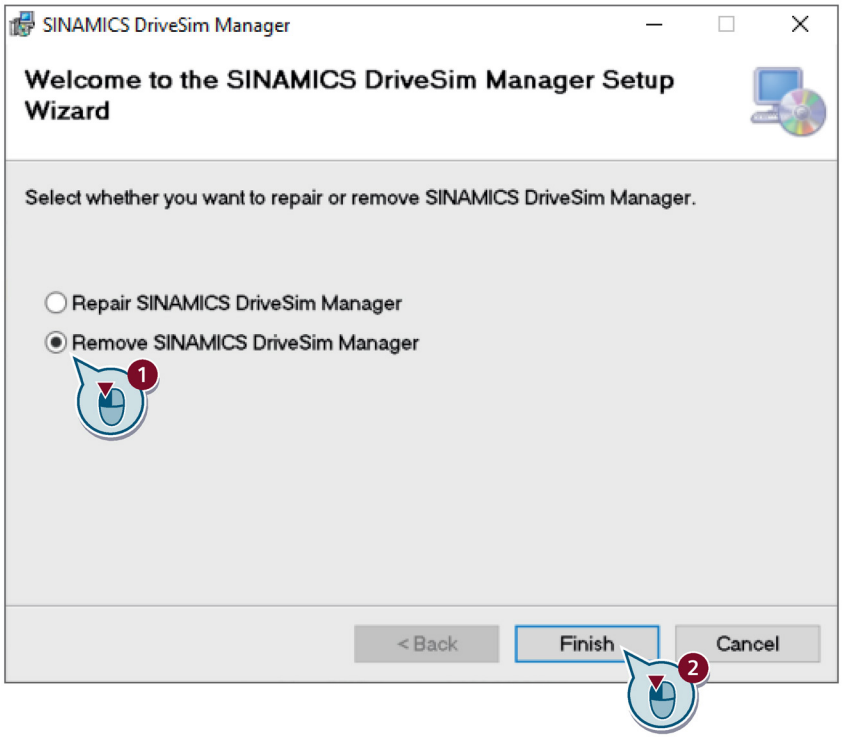
Requirement

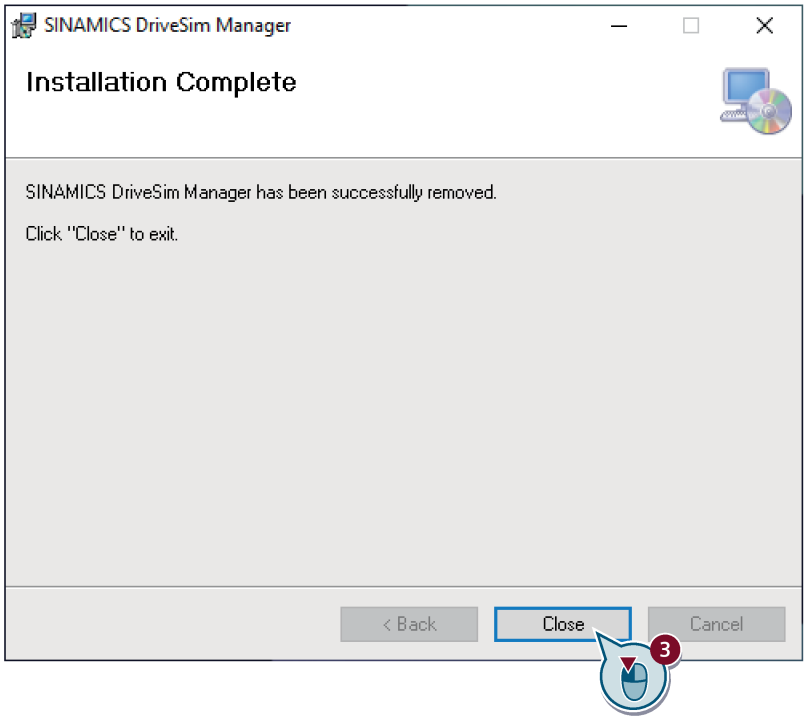
- You have installed SINAMICS DriveSim Manager on your computer.
- You have administrator rights on your computer.

Procedure

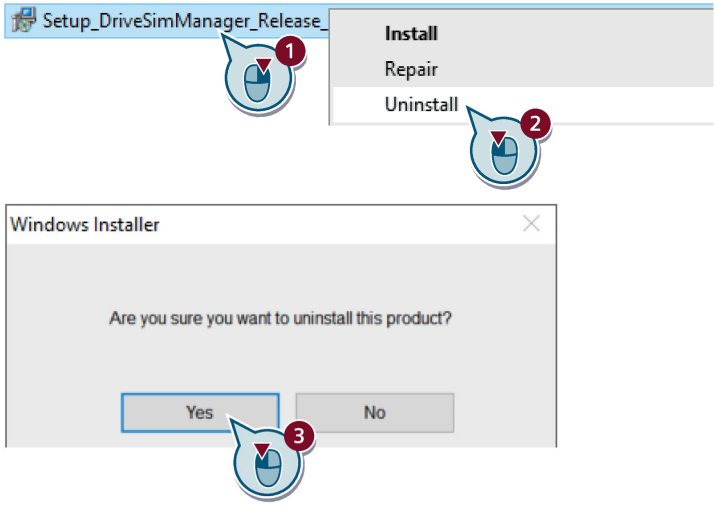
Proceed as follows to upgrade SINAMICS DriveSim Manager:

1. Double-click Setup_DriveSimManager_Release.msi installed on your computer to open the SINAMICS DriveSim Manager wizard.
2. Choose one of the following three alternative methods to remove the software.
   – Select "Remove SINAMICS DriveSim Manager", and then click "Finish". Click "Close" after the uninstallation is complete.

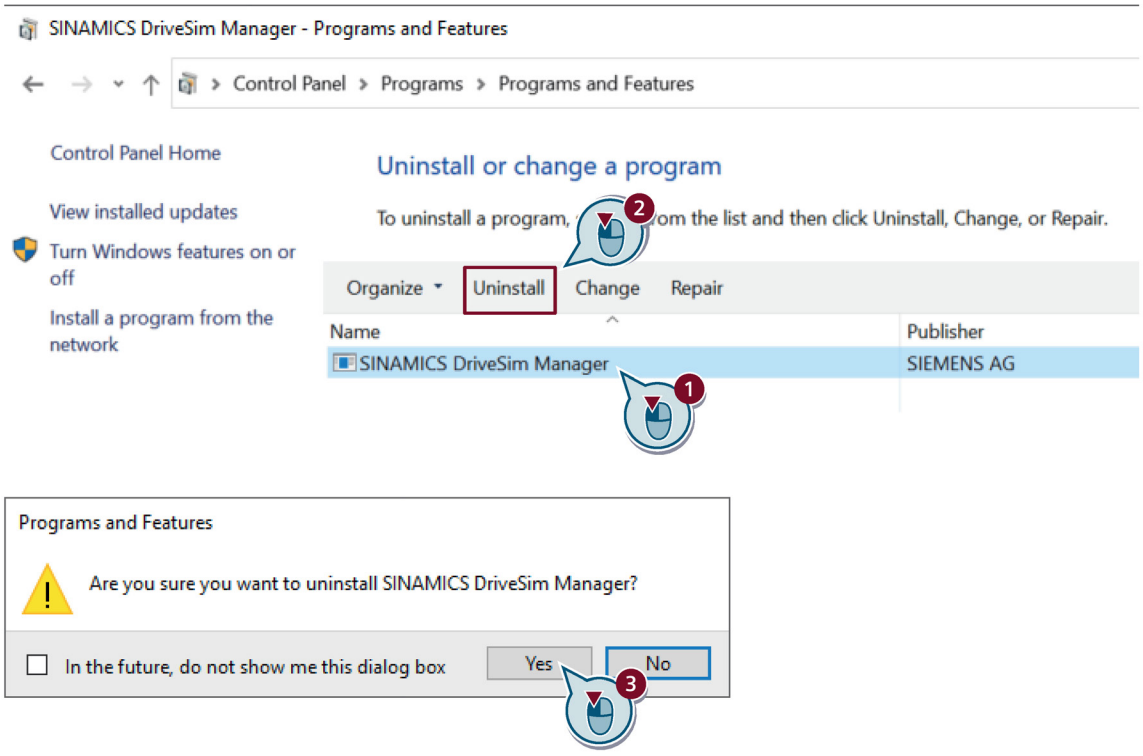




– Right-click Setup_DriveSimManager_Release.msi to open the shortcut menu. Click "Uninstall" to open the "Windows Installer" wizard, and then click "Yes" to finish the uninstallation.



– Uninstall the software via "Control Panel".



Note

Delete log files manually

If the log files are not deleted automatically after the uninstallation, you can find these files in the following address and delete them manually:

%ProgramData%\Siemens\Automation\SinamicsWinHost\Logs

For more information about log files, see Section "Log files (Page 16)".

3. Follow the installation procedure described in Section "Installing SINAMICS DriveSim Manager (Page 31)" to finish the installation of the latest software version on your computer.

Result

You have finished the software upgrade on your computer.

Further information

Siemens:
www.siemens.com

Industry Online Support (service and support):
www.siemens.com/online-support

IndustryMall:
www.siemens.com/industrymall

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Digital Industries
Motion Control
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Scan the QR code for more information about this product.