



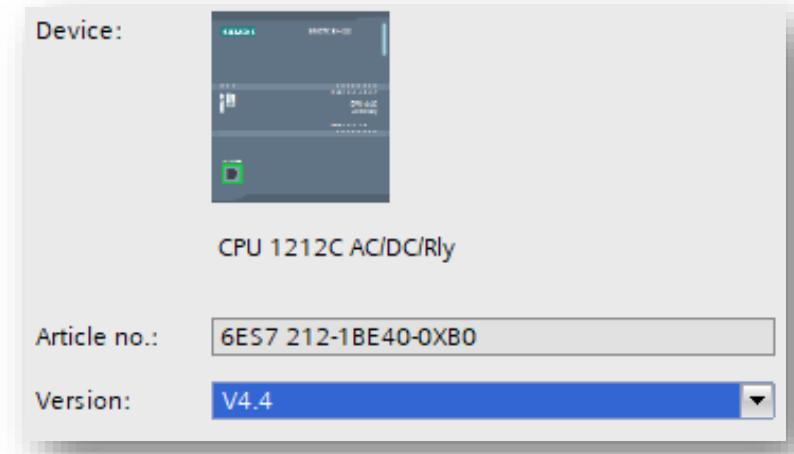
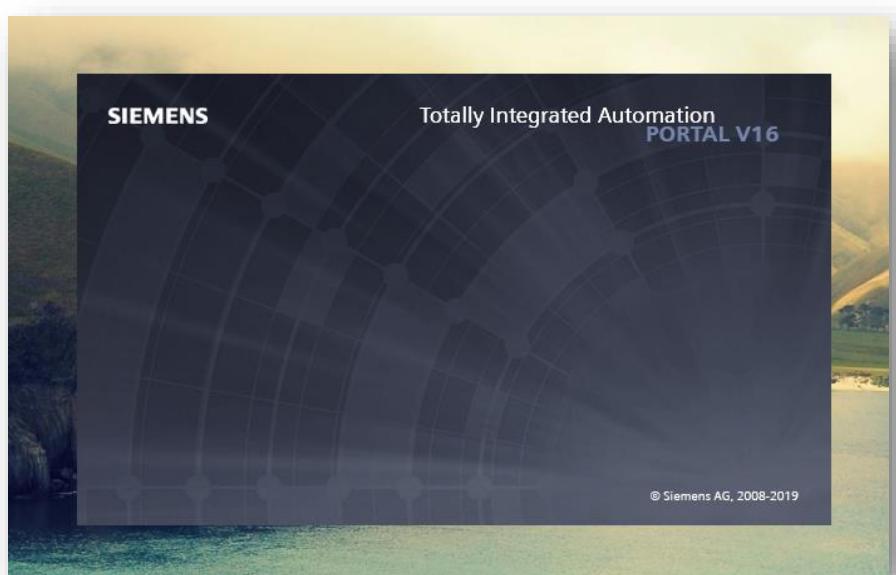
# Setting up OPC UA on Simatic S7-1200

Accessing data by enabling the integrated OPC UA Server

# Requirements

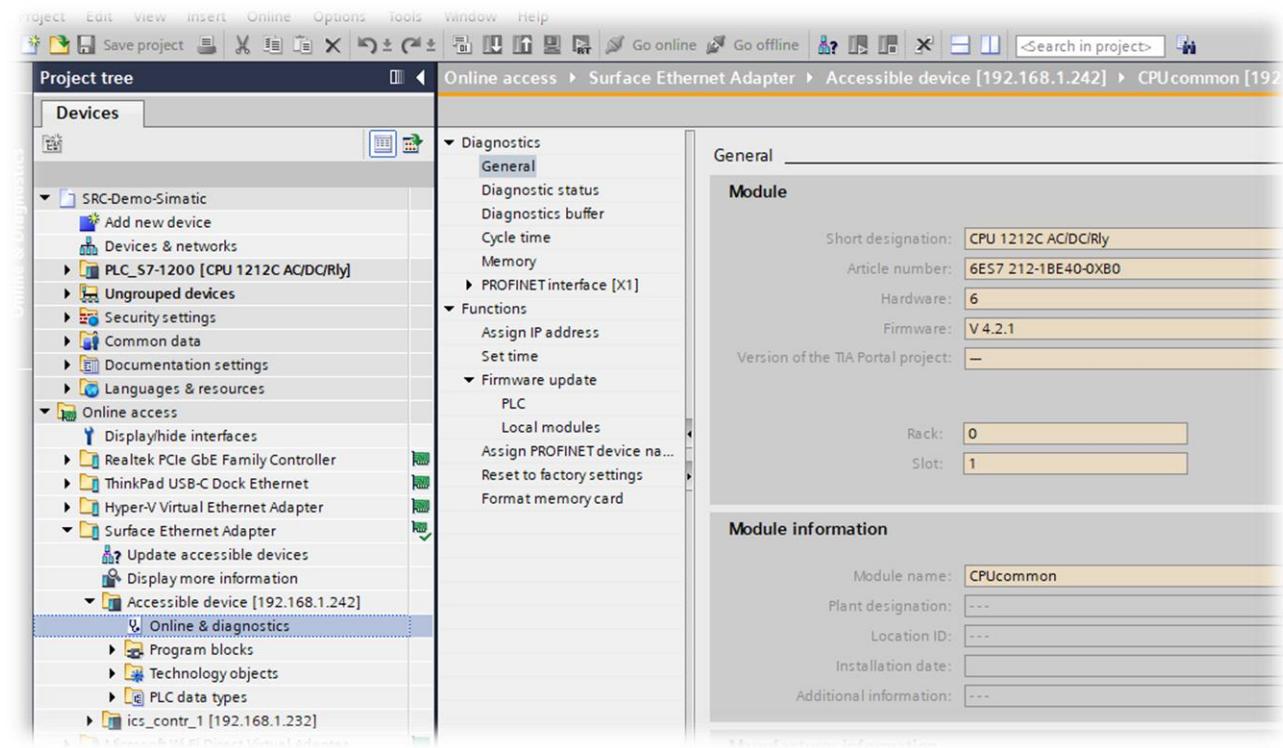
TIA > v16

PLC Firmware  
> v4.4



# Check firmware and download image from web

- Example – firmware image for PLC S7-1212C AC/DC/Rly:  
<https://support.industry.siemens.com/cs/document/107539957/firmware-update-f%C3%BCr-cpu-1212c-ac-dc-relais-8di-6do-2ai>
- Online Access
  - Select network adapter
  - Accessible device (xxx.xxx.xxx.xxx)
    - **Online & diagnostics**
- Check firmware



# Download Firmware onto PLC

The screenshot shows the SIMATIC Manager interface for a PLC configuration. The left sidebar includes sections for Diagnostics (General, Diagnostic status, Diagnostic buffer, Cycle time, Memory), Functions (Assign IP address, Set time), and Firmware update (PLC, Local modules, Assign PROFINET device name, Reset to factory settings, Format memory card). The main area is titled 'PLC' and contains 'Online data' and 'Firmware loader' sections.

**Online data:**

- Article number: 6ES7 212-1BE40-0XB0
- Firmware: V4.2.1
- Name: CPUcommon [192.168.1.242]
- Rack: 0
- Slot: 1

**Firmware loader:**

- Firmware file: C:\Users\johanneskinzig\Downloads\FWUPDATE.S7S\6ES7 212-1BE40-0XB0 V04.04.01 upd
- Firmware version: V4.4.1
- Suitable for modules with:

Article number	Firmware version and higher
6ES7 212-1BE40-0XB0	V 4.0.0

**Status:**

- Run firmware after update
- 

**Success Message:**

The firmware V 4.4.1 was transferred successfully to module CPUcommon [192.168.1.242] with article number 6ES7 212-1BE40-0XB0 and activated on the module.

**Status:** The firmware V 4.4.1 was transferred successfully to module CPUcommon [192.168.1.242] with article number 6ES7 212-1BE40-0XB0 and activated on the module.

# Validate installed firmware

Online access > Surface Ethernet Adapter > Accessible device [192.168.1.242] > CPU common [192.168.1.242] [192.168.1.242]

Diagnostics

- General
- Diagnostic status
- Diagnostics buffer
- Cycle time
- Memory
- PROFINET interface [X1]

Functions

General

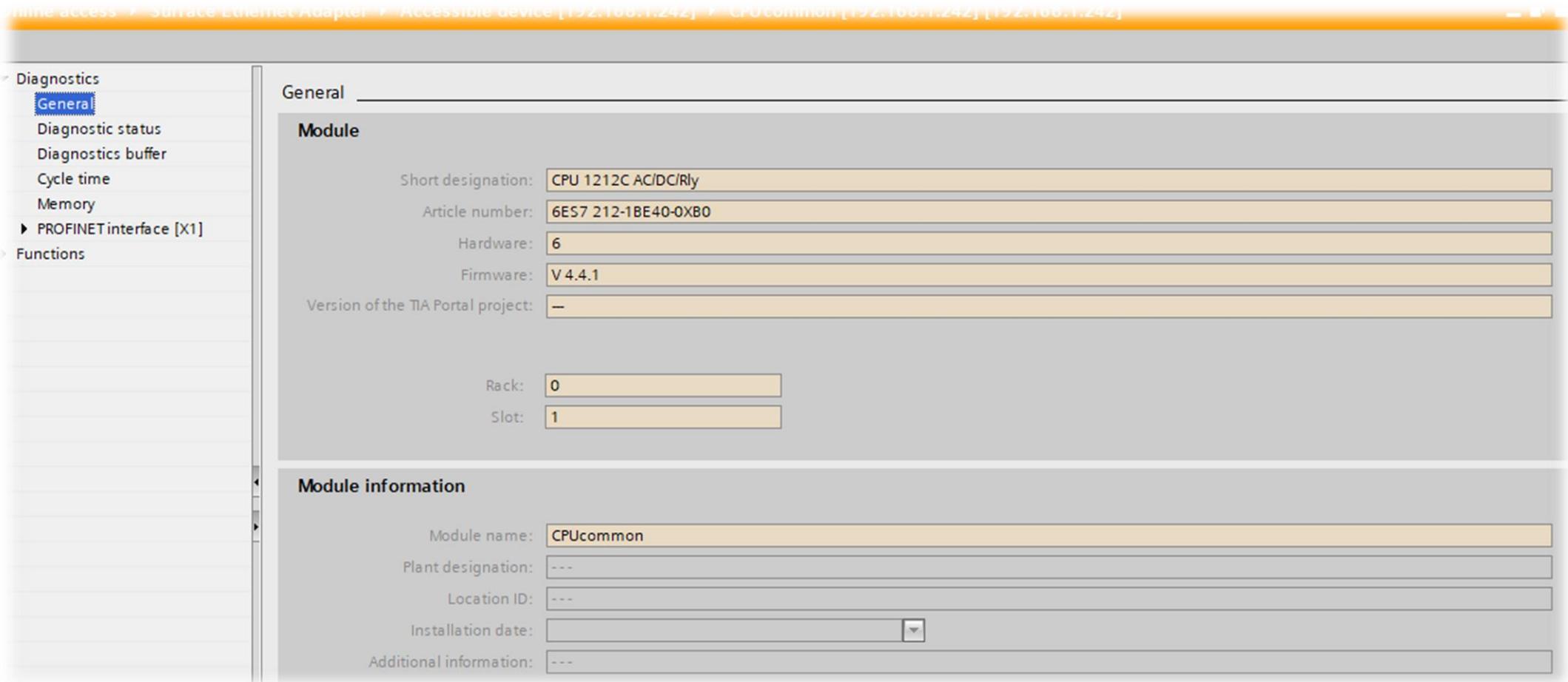
**Module**

Short designation: CPU 1212C AC/DC/Rly  
Article number: 6ES7 212-1BE40-0XB0  
Hardware: 6  
Firmware: V 4.4.1  
Version of the TIA Portal project: —

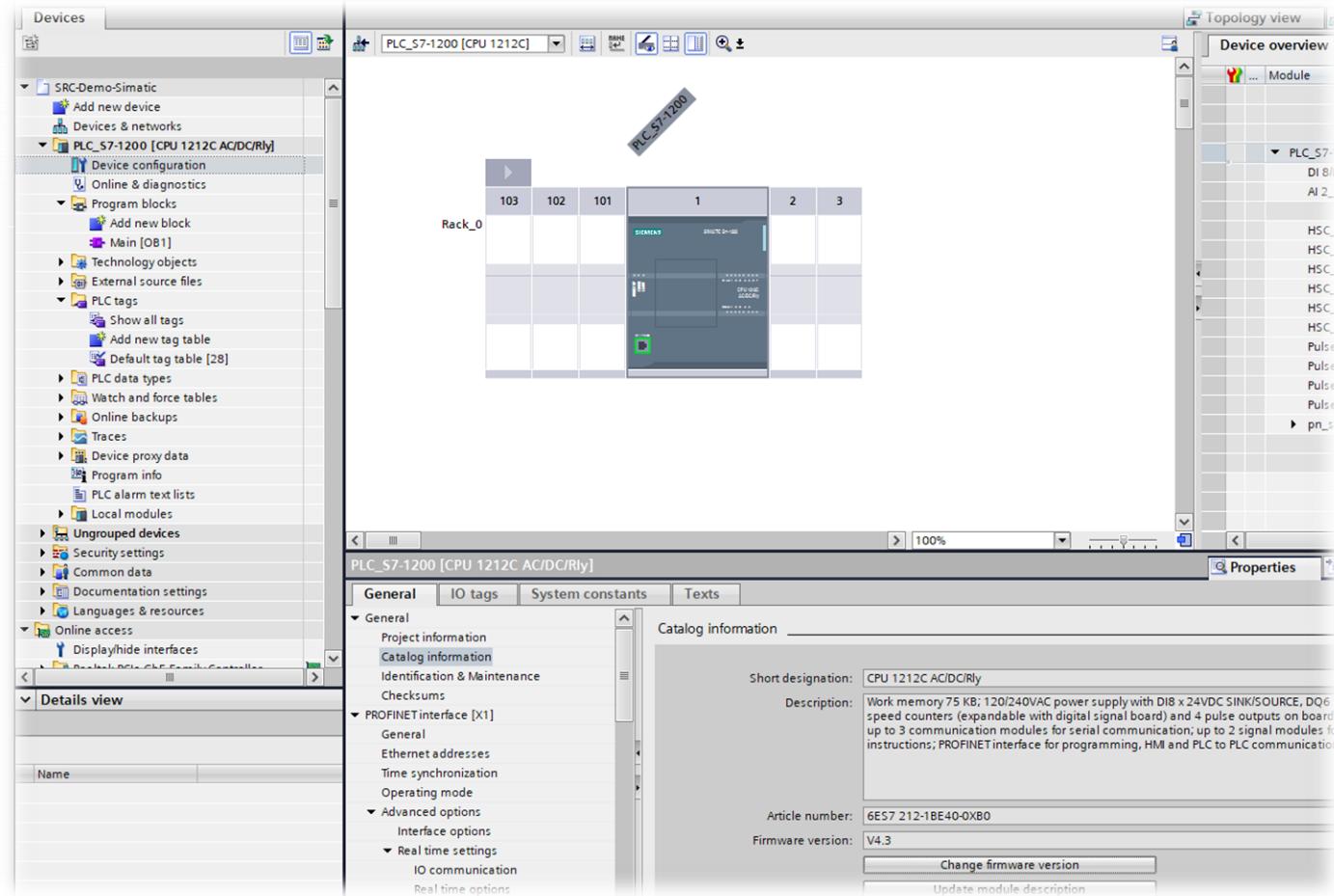
Rack: 0  
Slot: 1

**Module information**

Module name: CPUcommon  
Plant designation: ---  
Location ID: ---  
Installation date: ---  
Additional information: ---



# Set new firmware version in TIA project (1/2)



**TIA v16 required to set firmware > v4.4 for project**

# Set new firmware version in TIA project (2/2)

The image shows two screenshots of the Siemens TIA Portal interface. The left screenshot displays the 'Information' dialog for a selected module, showing details like the device type (CPU 1212C AC/DC/Rly), article number (6ES7 212-1BE40-0XB0), and current version (V4.4). The right screenshot shows the 'Catalog information' tab of the module's properties, where the firmware version is explicitly set to V4.4. Both screenshots include descriptive text about the module's capabilities.

**Device:** CPU 1212C AC/DC/Rly

**Article no.:** 6ES7 212-1BE40-0XB0

**Version:** V4.4

**Description:** Work memory 75 KB; 120/240VAC power supply with DI8 x 24VDC SINK/SOURCE, DQ6 x relay and AI2 on board; 4 high-speed counters (expandable with digital signal board) and 4 pulse outputs on board; signal board expands on-board I/O; up to 3

**PLC\_1 [CPU 1212C AC/DC/Rly]**

**General** IO tags System constants Texts

**Catalog information**

**Short designation:** CPU 1212C AC/DC/Rly

**Description:** Work memory 75 KB; 120/240VAC power supply with DI8 x 24VDC SINK/SOURCE, DQ6 x relay and AI2 on board; 4 high-speed counters (expandable with digital signal board) and 4 pulse outputs on board; signal board expands on-board I/O; up to 3 communication modules for I/O expansion; PROFINETIO controller, I-device Communication, S7 communication, Web server, OPC UA

**Article number:** 6ES7 212-1BE40-0XB0

**Firmware version:** V4.4

**Change firmware version**

**Update module description**

# OPC UA settings available in device properties

