



How to use PLCnext Simulation



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1. Overview

This guide will go over the process to download the PLCnext simulation add-on and how to login/start the simulation.



2. General Information

PLCnext Simulation allows testing of PLCnext Engineer project without connecting to a real controller. Emulating an image of the firmware provides realistic behavior.

PLCnext Simulation can execute IEC 61131-2 code, MATLAB/Simulink models, and High-level language components. Simulation can execute eHMI, Web Based Management tool, OPC UA server connections using a local host, and connect to the simulated PLC using WinSCP.

PLCnext Simulation doesn't support real-time capability, fieldbus communications, physical I/O, left-aligned AXC F XT modules, PLCnext apps, task watchdog, and retained data.

It is important to note that Simulation only works on Windows PCs. Also, PLCnext Simulation is free for the AXC F 1152, is a paid add-on for AXC F 2152/3152, and is not available for the EPC 1502/1522. To obtain a AXC F 2152/3152 license go to the PLCnext Engineer product page and configure a version of PLCnext engineer with PLCnext ENG SIM license. A ticket ID will be mailed and can be activated using the Activation Wizard.

PLCnext Simulation is currently supports for firmware versions 2022.0 LTS and 2023.0 LTS.

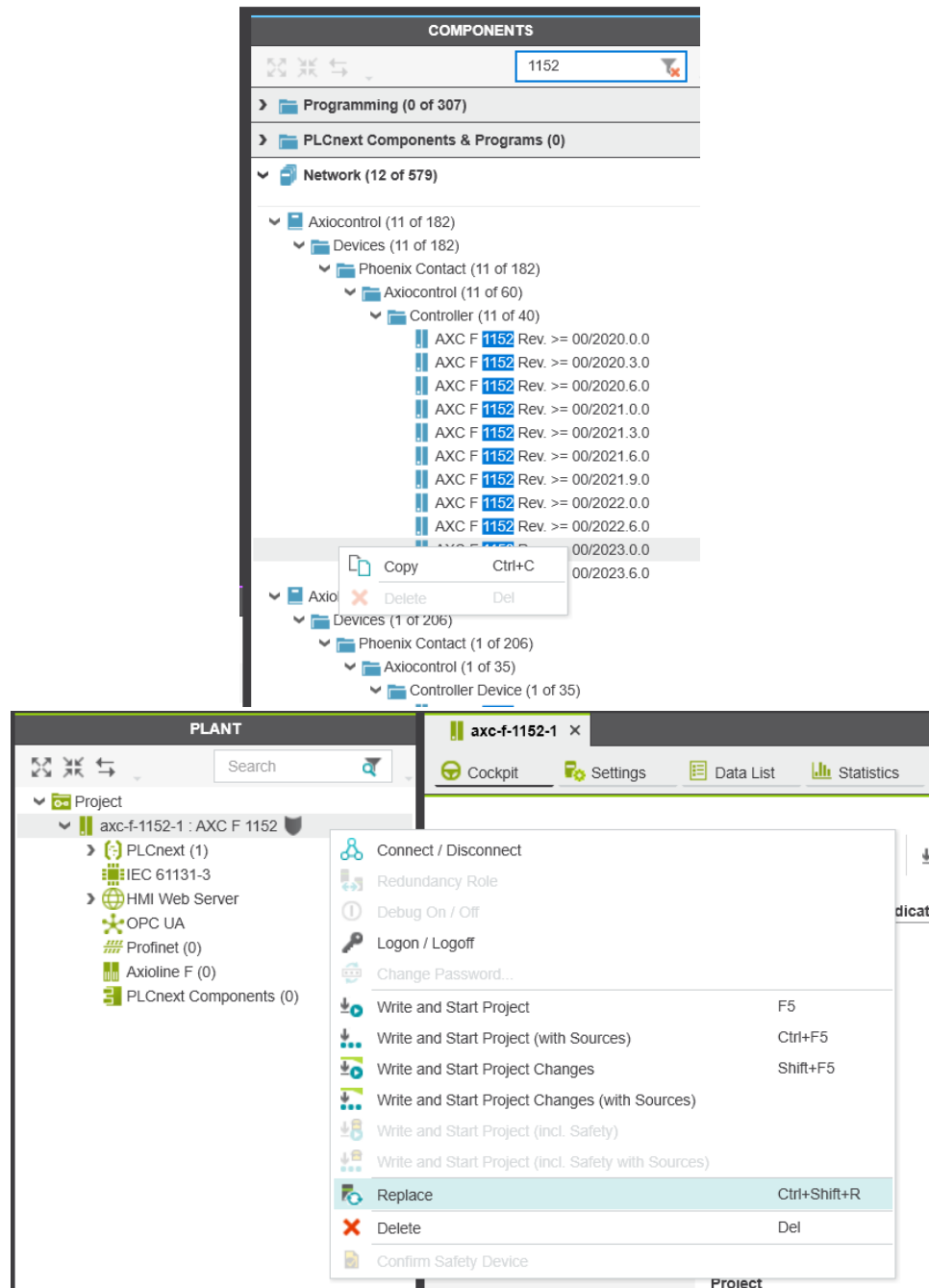


3. Instructions on how to download PLCnext Simulation

1. Navigate to the PLCnext Engineer product page: <https://www.phoenixcontact.com/en-us/products/programming-plcnext-engineer-1046008>
2. Scroll down to Product details.
3. Expand Downloads and Software.
4. Download the applicable version. I would recommend Simulation_Setup_AXCF1152_2023.0.exe
5. Locate the exe file in your download folder and complete the installation wizard.

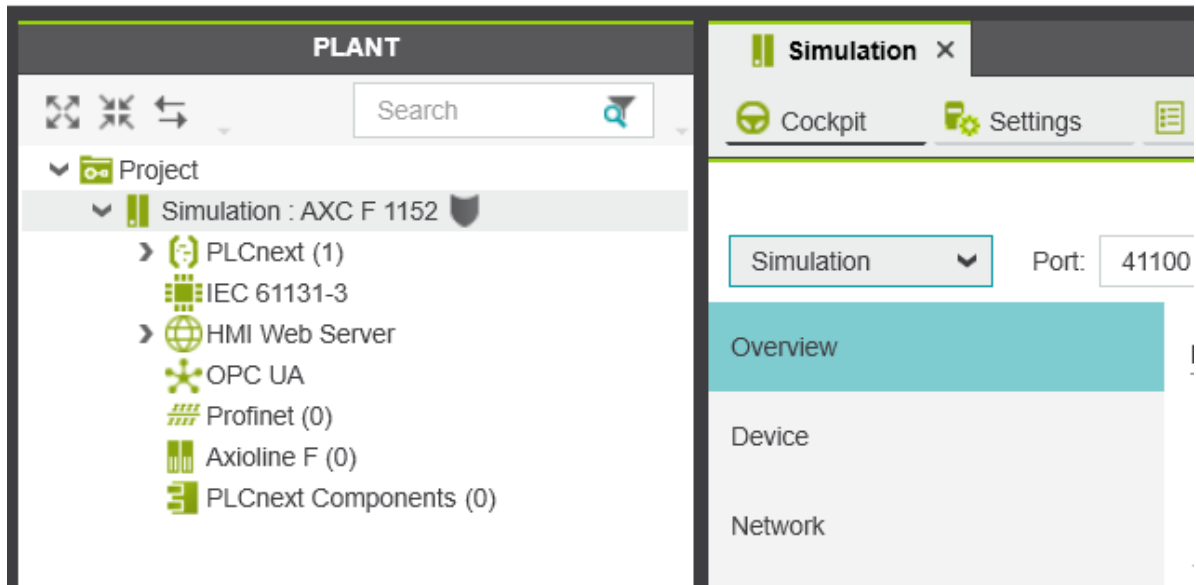
4. Instructions on how to start PLCnext Simulation

1. Launch PLCnext Engineer Version 2023.0 or later.
2. Select project template: AXC F 1152 v00 / 2023.0.0
3. If you already started a project. Search 1152 in the Components window and locate the 1152 FW: 2023.0 Right click and click copy. Then right click on the PLC under Plant window (second option in device tree)





4. Double click on the PLC (second option in device tree) and navigate to the Cockpit tab.
5. Change the TCP/IP setting to Simulation and you should see your PLC update to display this change.



6. To launch the simulation right click on the PLC and select Write and Start Project
7. PLCnext will prompt you for login information. Username: admin Password: plcnext