



INSTALLATION:

CODESYS on PLCnext 1152/2152

This Document uses:

CODESYS Development Version 3.5.17.20

Uses CODESYS Package PLCNext SL 4.2.0.0
(SL Package for PLCnext)

Document version 2022_ver1.0



NOTE: PLCnext Firmware must be 2020.6 or OLDER !!

This Document uses PLCnext Firmware 2020.0.1LTS
Please verify and install before installing CODESYS PLCnext SL
on the controller.



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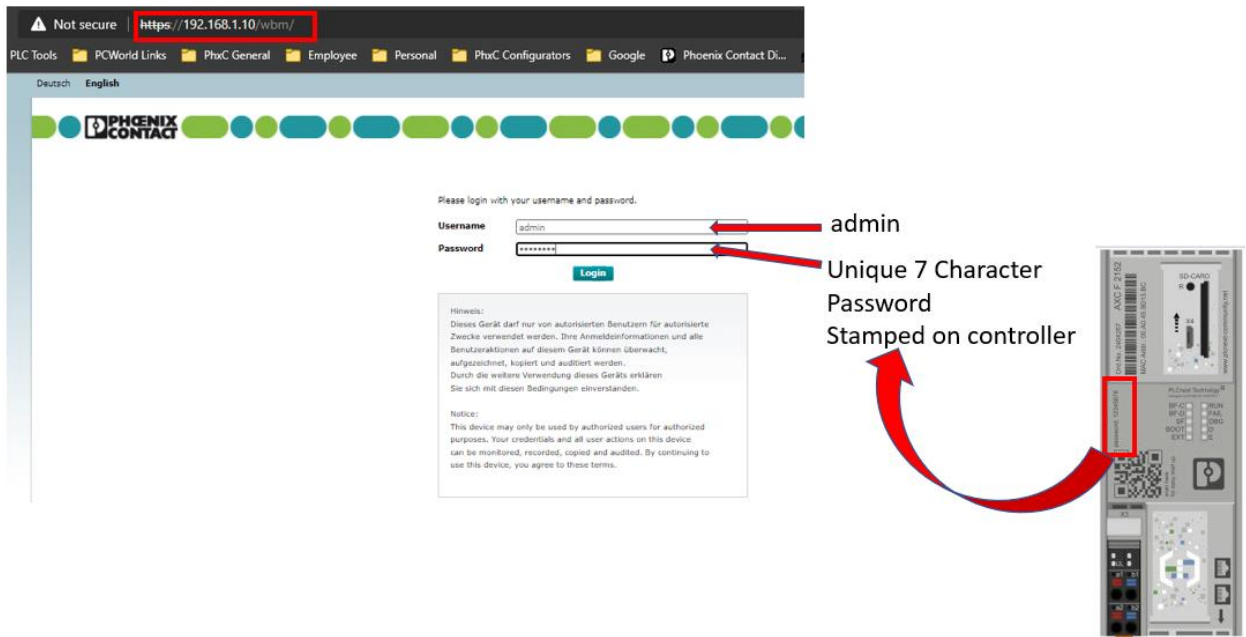


Step 1. Check Firmware on PLCnext Unit.

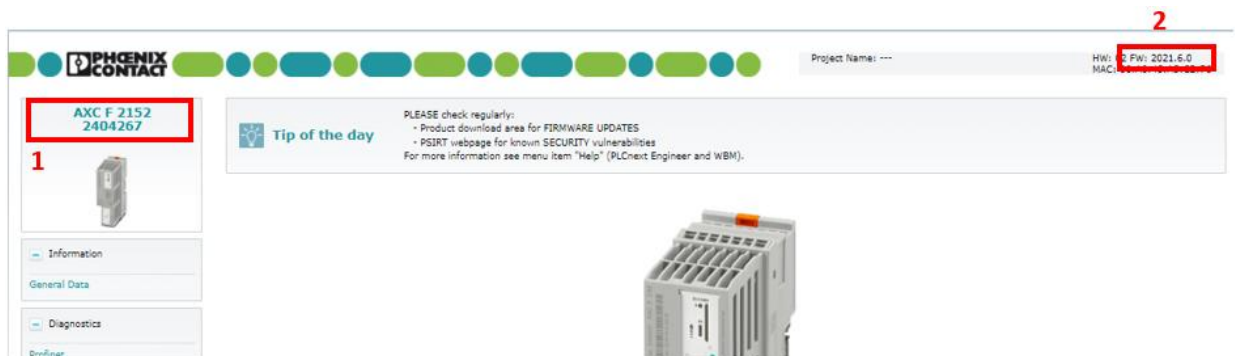
Go to Phoenix Contact PLC's **Web-Based Management Page** from a standard PC Browser.

This is the PLC's IP Address with '/wbm' at the end.. e.g. : 192.168.1.10/wbm

(Note: All PLCnext Controllers have Default address of 192.168.1.10)



When the Web Page Opens, you will see the following:



Make Note of the Hardware (#1) and the Firmware (#2), as these are Critical for the Next Steps.

If the FW (#2) **IS NOT** FW: 2020.0.1LTS, then Execute Step 2.

If the FW (#2) **IS** FW: 2020.0.1LTS, then Go to step 4.



Step 2. Download the Correct PLCnext Firmware File

If #1 above is AXC F 1152 (1151412),

Download this File (axcf1152-bundle-base-axcf1152.raucb): [axcf1152-2020.1](#)

If #1 above is AXC F 2152 (2404267),

Download this File(axcf2152-bundle-base-axcf2152.raucb): [axcf2152-2020.1](#)

When Web Browser opens, In the upper Right Corner, Click to Download



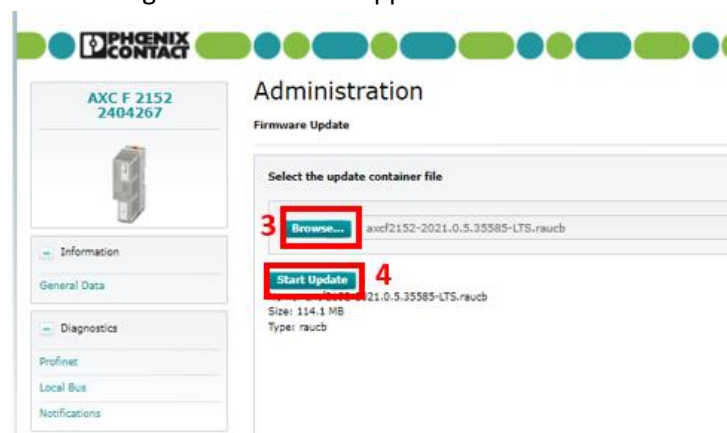
Please note where the file is downloaded, as the file will be needed in Step 3.

Step 3. Install the correct PLCnext Firmware File from Step 2.

Select 'Firmware Update' from the Left Navigation.



The following Screen will now Appear:



Click on the Browse...Button (#3 above) and use the File Browser to locate the file downloaded under Step #2.

Once the File is ready, press the 'Start Update' Button.



Step 3... Continued...

The file will now automatically load to the controller, install and the controller will Restart. This process will take about 2 Minutes.

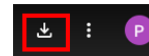
Once completed, The Green RUN LED on the PLCnext will be Solid, proceed to Step 4.

Step 4. Download the CodeSys PLCnext SL Packages (This are the Soft PLC Runtimes)

Download File#1: [CODESYS Control for PLCnext SL 4.2.0.0 Package](#)

Download File#2: [CODESYS Edge Gateway for Linux 4.2.0.0 Package](#)

When Web Browser opens and the file is visible, In the upper Right Corner, Click to Download



Please note where the files are downloaded, as they will be needed in Step 7.

Step 5. Download the CODESYS 64 3.5.17 Package (this is the Programming Software)

Download this File: [CODESYS 64 3.5.17](#)

When Web Browser opens and the file is visible, In the upper Right Corner, Click to Download

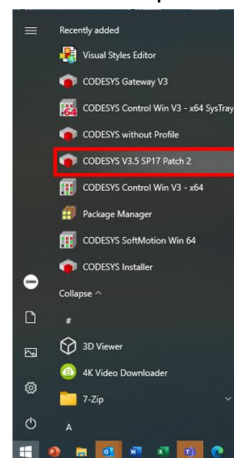


Please note where the file is downloaded, as the file will be needed in Step 6.

Step 6. Install the CODESYS 64 Installer Package Downloaded in Step 5.

Step 7. Via the Desktop Icon or 'Windows' Button.

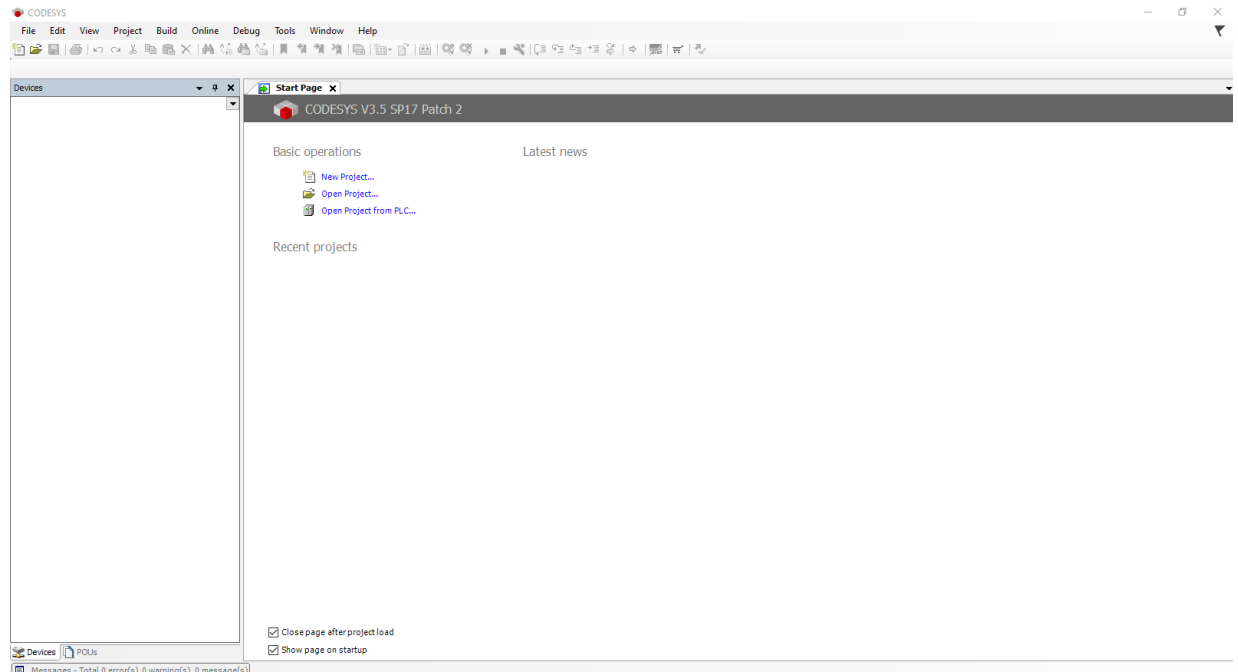
Run The CODESYS V3.5 SP17 Patch 2 Package that we Installed in Step 6.





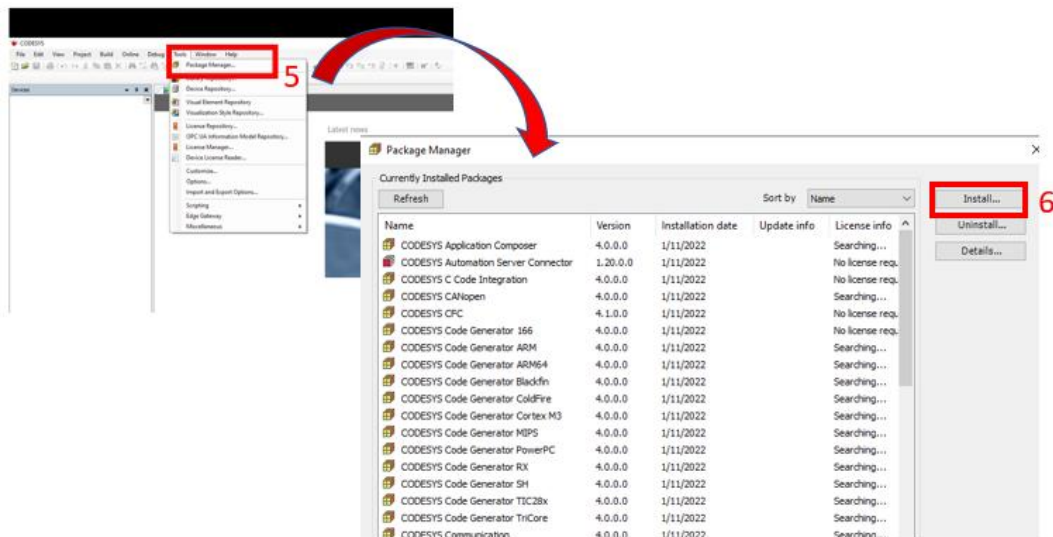
Step 7...Continued

Your Screen will now Show CODESYS Ver3.5 SP17 similar to the below:



Step 8. Install the 'CodeSys Packages' into CODESYS Software

From the CodeSys Top Menu, Select Tools->Package Manager (#5)...



Press Install... Button (#6) and Find/Open the Files Downloaded in Step #4.

CODESYS Control for PLCnext SL 4.2.0.0.package

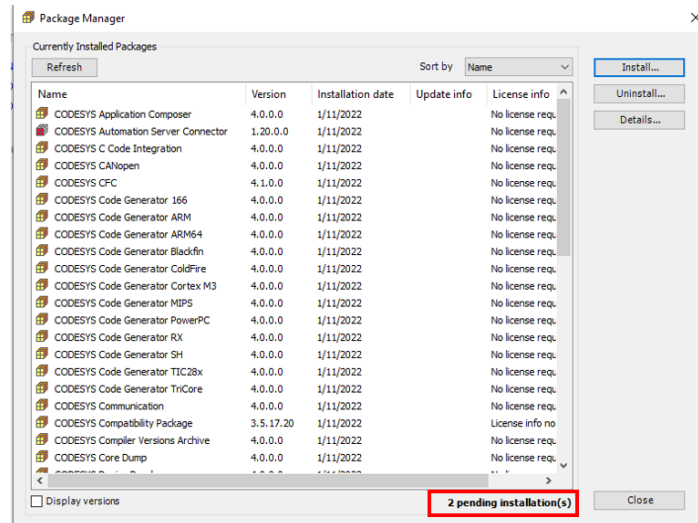
AND

CODESYS Edge Gateway for Linux 4.2.0.0.package



Step 8. ... Continued

Select 'Install' and finish for Each of the Above (any order). Failure to do
So will result in the PLCnext not being able to be used correctly.



As seen above, "2 pending installations" will be shown.

Step 9. Close the Window and Exit the Software

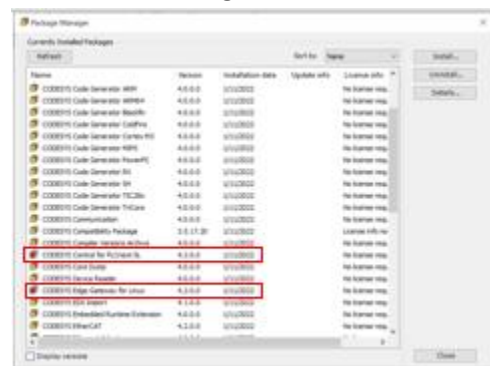
This will Allow the Package Manager to Install the Packages Installed in Step 8, as the
the Packages will be installed Only When the Software is Shutdown.

Once Shut Down, Proceed thru the Installation of the 'Packages'. This may take several
minutes.

Step 10. Re-Open The CODESYS V3.5 SP17 Patch 2 Package.

From the CodeSys Top Menu, Select Tools->Package Manager.

Verify that the Two Packages are Installed and Listed (as Below):



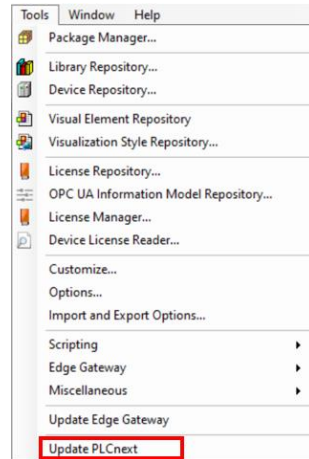
If they are not both installed, Go back to Step 8 and Correct the issue.



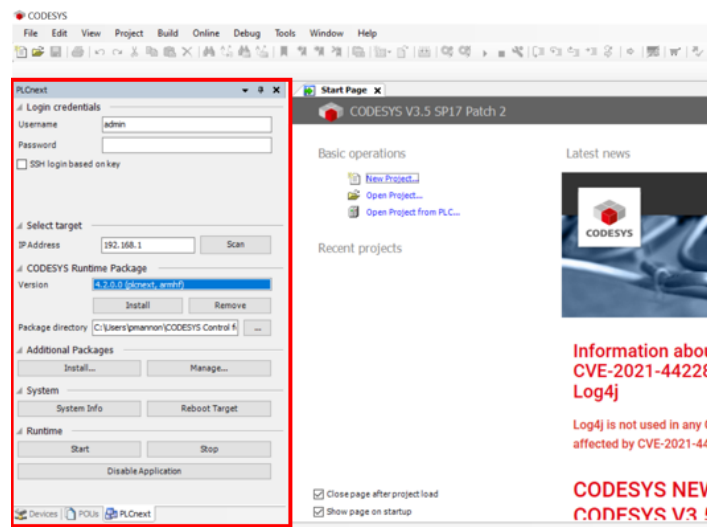
Step 11. Update the PLCnext (Install and configure for CODESYS)

From the CodeSys Top Menu, Select Tools->Update PLCnext.

If this new Menu Item does NOT exist (as Below), go back to Step 8.



The Left Side of the CODESYS Window will now look similar to the Below.





Step 12. Fill out and Complete the Installation of the Package to the Correct PLCnext

The screenshot shows the PLCnext web interface. The 'Login credentials' section has 'admin' entered in the 'Username' field. The 'Select target' section has '192.168.1.10' entered in the 'IP Address' field. The 'CODESYS Runtime Package' section shows version '4.2.0.0 (plcnext_armhf)' selected, with the 'Install' button highlighted. Red boxes and numbers 7, 8, and 9 point to the Username field, the IP Address field, and the Install button respectively.

7 – PLCnext Admin and Password (Same as in Step 1).

8 – PLCnext IPAddress (If you don't know it, Use the Scan Feature).

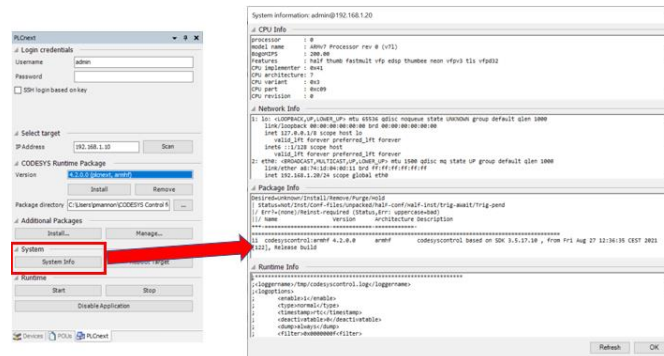
9 – Press the 'Install' to begin the Download and Update to the PLCnext.

After Pressing the 'Install', you can see the Installing Status at the Bottom of the screen:

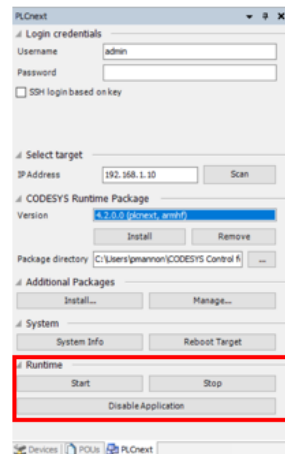
The screenshot shows the CODESYS Start Page. The left sidebar contains the same PLCnext interface as the previous screenshot. The main area displays 'Basic operations', 'Recent projects', and 'Latest news'. At the bottom, a red progress bar indicates the installation status: 'admin@192.168.1.10: Package install ARM package'.



Step 13. Verify the Installation of the PLCnext SL Package onto the Controller...



You can Start/Stop/Disable the CODESYS Runtime on the PLCnext



Step 14. Enjoy !!!