

# Updating the firmware of the AXC F 2152

## Contents

Introduction .....	1
1 – Download the firmware file .....	2
1.1 – Download firmware package from Phoenix Contact .....	2
2 – Installing the firmware update via web-based management.....	4
3 – Installing the firmware via SSH .....	7

## Introduction

This article will go over the steps to update the firmware of the AXC F 2152.

## Objectives

- Download the firmware file from the Phoenix Contact website
- Install the firmware file onto the AXC F 2152 via the web-based management (recommended)
- Install the firmware file onto the AXC F 2152 via SSH

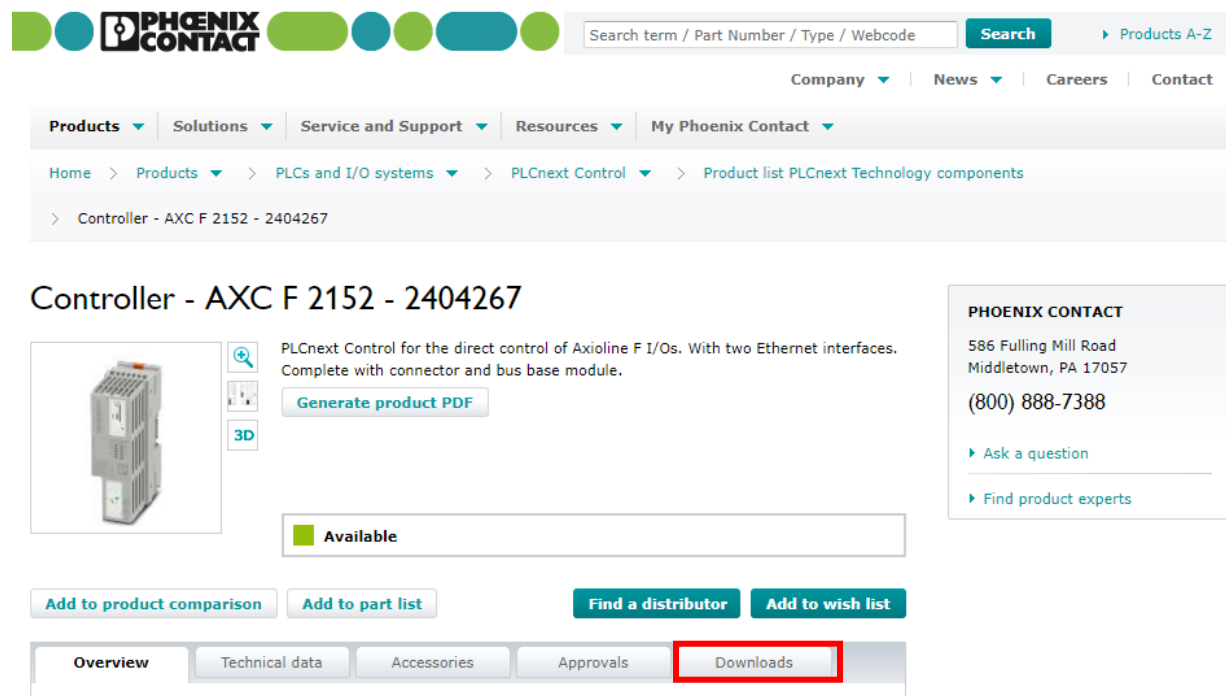
### 1 – Download the firmware file

This section will go over the steps to download the firmware file from the Phoenix Contact website.

#### 1.1 – Download firmware package from Phoenix Contact

- 1) Go to [www.phoenixcontact.com/us](http://www.phoenixcontact.com/us)
- 2) In the search bar, type AXC F 2152. Hit enter.
- 3) Select the first result by double clicking **Controller - AXC F 2152 – 2404267**
- 4) As seen in Figure 1.1-1, click the downloads tab

Figure 1.1-1 – AXC F 2152 page on Phoenix Contact website



- 5) Scroll down until you see the link for Firmware as shown in Figure 1.1-2, and double click it.

**Figure 1.1-2 – Firmware link location for AXC F 2152 on website**  
Configuration software

	Description	Language	Revision
<input type="checkbox"/>	<p>[zip, 150 MB] <a href="#">Configuration software PROJECT+ 3</a></p> <p>Configuration tool for I/O stations (free of charge)</p> <p>Installation for MS Windows® 10 (64-bit)</p> <hr/> <p>SHA256 Checksum: ac9936f19ab078e03e6f33f370df09a6ebd178f0736b93d5c3150159f37aad94 ProjectPlus(3.4.266)Setup.zip</p>	International	Project+ 3.4

## Firmware

	Description	Language	Revision
	<p><a href="#">► Firmware</a></p> <p>Detailed information about dependencies between the hardware, firmware, tool and driver versions</p>		

- 6) Once there scroll down to the bottom until you see the newest firmware revision. In this example it is 2020.0.1 LTS.
- 7) As seen in figure 1.1-3, click the .zip file and accept the terms.

**Figure 1.1-3 – Firmware version selection**

## Firmware Download

### Firmware version 2020.0.1 LTS

Description	Language	Revision
<p>[zip, 108 MB]</p> <p>Firmware Firmware version 2020.0.1 LTS for AXC F 2152</p> <hr/> <p>SHA256 Checksum: 9b52f3e073e00146ff63b2652e1760e5184de30832f16e913a9b92311db4 <a href="#">AXC_F_2152_FW2020_0_1_LTS.zip</a></p>		2000

[↩ Top of page](#)

Firmware modifications
<ul style="list-style-type: none"> <li>Firmware version 2020.0.1 LTS for AXC F 2152</li> </ul>

[↩ Top of page](#)

Firmware modifications	Language	Revision
<p>[pdf, 200 KB]</p> <p>Firmware 108427_de_18.pdf</p>		2000

[↩ Top of page](#)

Firmware modifications	Language	Revision
<p>[pdf, 175 KB]</p>		1000

- 8) Once the .zip file is downloaded, extract the files on your computer and run the .exe .

**NOTE:** You will need administrative rights to run the .exe

**NOTE:** If a message from Windows appears, click more info and click run anyway.

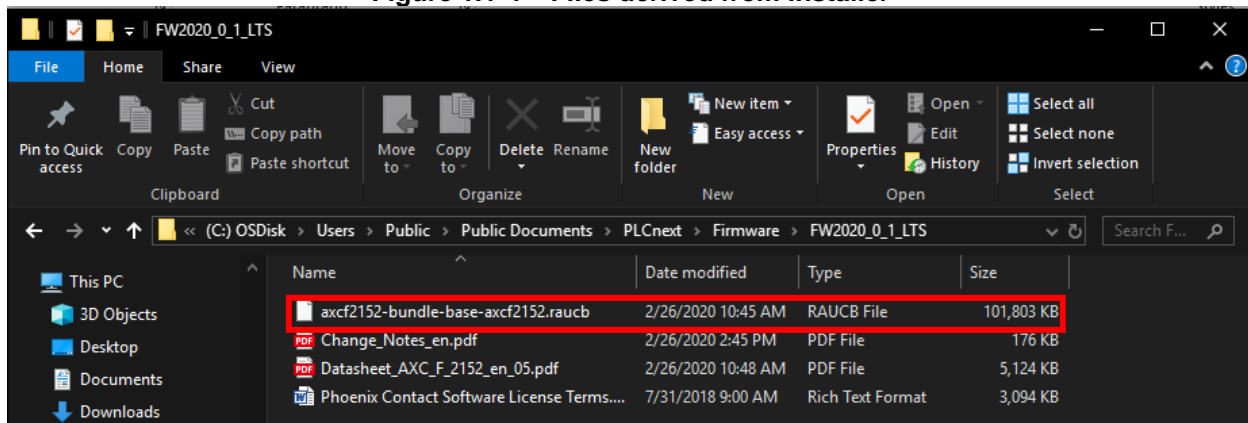
9) Agree to the terms and conditions and keep the default installation path.

10) If the installer asks you to make a folder since it has not been created, select yes.

11) Once finished, open your file explorer and go to

C:\Users\Public\Documents\PLCnext\Firmware\\*\*Firmware version you downloaded\*\* as seen in Figure 1.1-4. The circled file is the update file.

**Figure 1.1-4 – Files derived from installer**

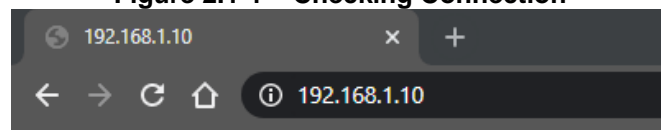


## 2 – Installing the firmware update via web-based management (recommended)

This section goes over how to update the firmware using the file we just downloaded from the website.

- 1) Open an internet browser (preferred browser is chrome). Type the IP address (i.e. 192.168.1.10) of the controller into the URL area and hit ENTER. See figure 2.1-1

**Figure 2.1-1 – Checking Connection**



- 2) This connection will be unsecure. You will need to allow the browser to navigate to the controller's webpage. For Chrome click "Advanced" (a) and then click "Proceed to..."(b) See figure 2.1-2.

**NOTE:** Use chrome if you're unsure how to proceed with other browsers.

**Figure 2.1-2 – Proceeding to Webpage**



## Your connection is not private

Attackers might be trying to steal your information from **192.168.1.10** (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR\_CERT\_AUTHORITY\_INVALID

☐ Help improve Chrome security by sending [URLs of some pages you visit](#), [limited system information](#), and [some page content](#) to Google. [Privacy policy](#)

a

Advanced

Back to safety

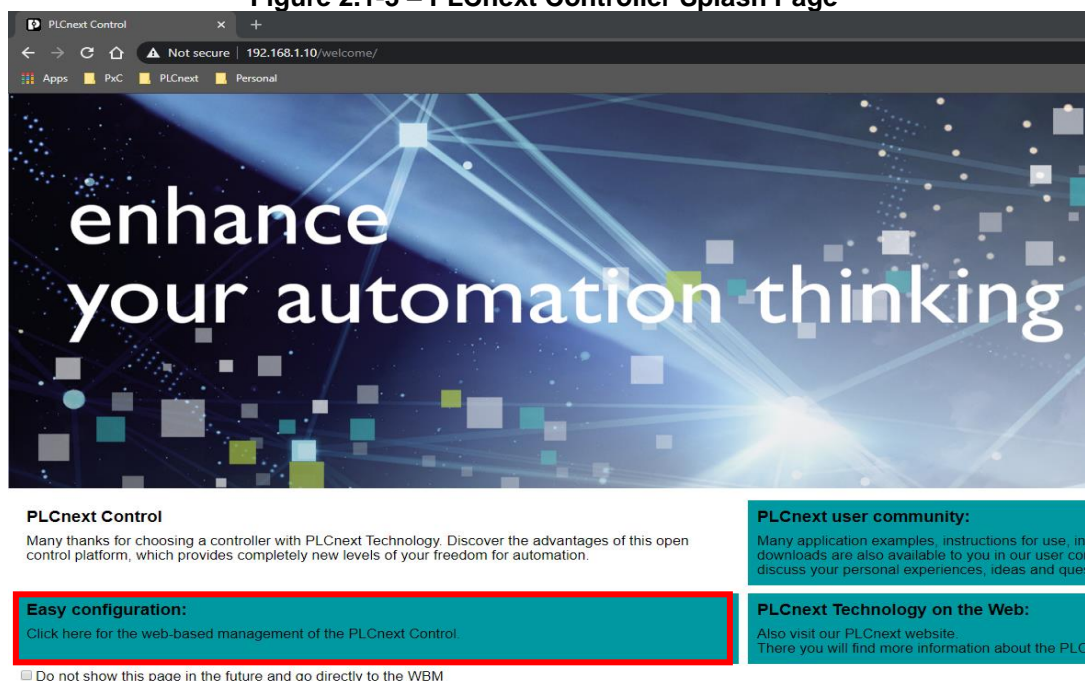
This server could not prove that it is **192.168.1.10**; its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.

b

[Proceed to 192.168.1.10 \(unsafe\)](#)

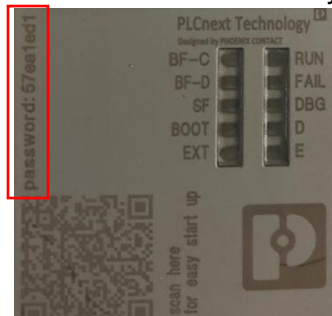
3) Click “Easy Configuration”, see figure 2.1-3.

Figure 2.1-3 – PLCnext Controller Splash Page



4) You will need to login in to get access. Default info:

- Username: admin
- Password: Located by QR code on controller



Please login with your username and password.

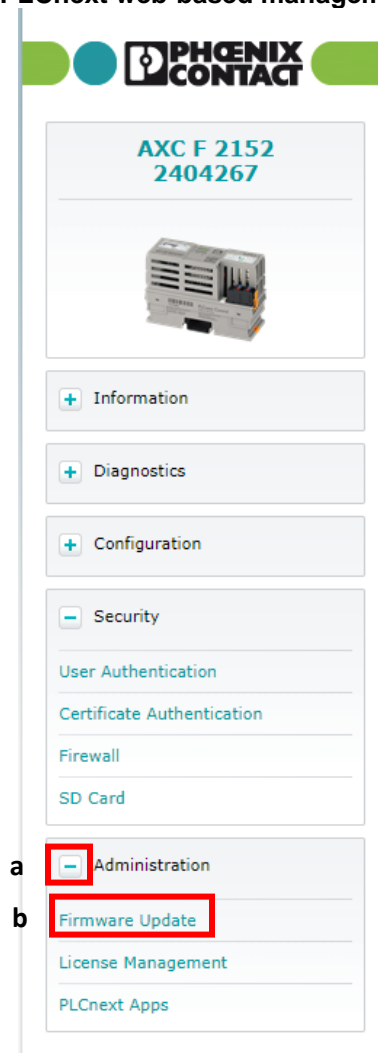
**Username**

**Password**

[Login](#)

- Once logged in, on the left side click the + next to Administration (a) then click Firmware Update (b) as shown in Figure 2.1.4

Figure 2.1.4 – PLCnext web-based management options tree



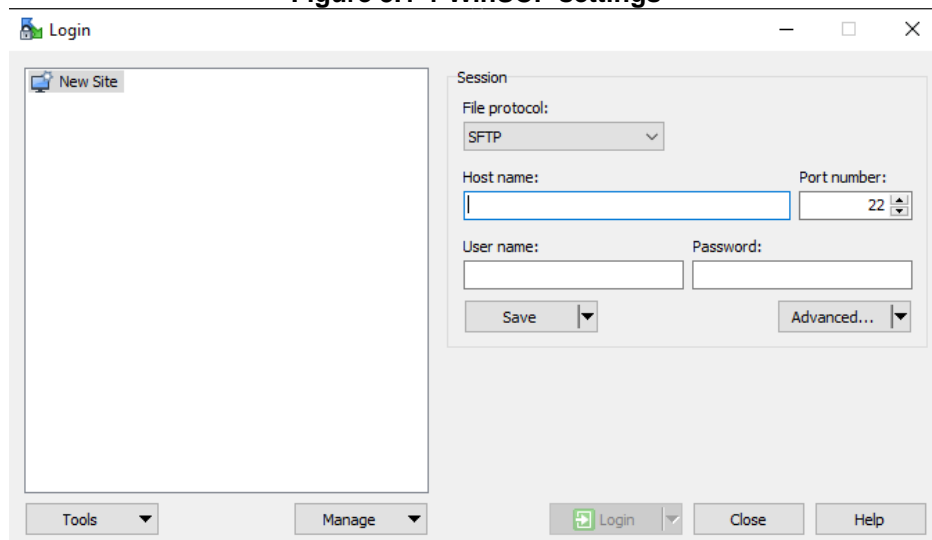
- 6) Once there, click Browse and navigate to  
C:\Users\Public\Documents\PLCnext\Firmware\\*\*Firmware version you downloaded\*\*  
As shown in Figure 1.1-4
- 7) Select the axcf2152-bundle-base-axcf2152.raucb file as circled in Figure 1.1-4
- 8) Click the start update button.
- 9) The AXC F 2152's firmware will now update.
- 10) The AXC F 2152 will reboot on its own.
- 11) Once the RUN LED is flashing or solid green the firmware update is complete.

### 3 – Installing the firmware via SSH (only do if necessary)

This section goes over how to install the firmware via SSH. Section 1 still needs to be completed before completing this section.

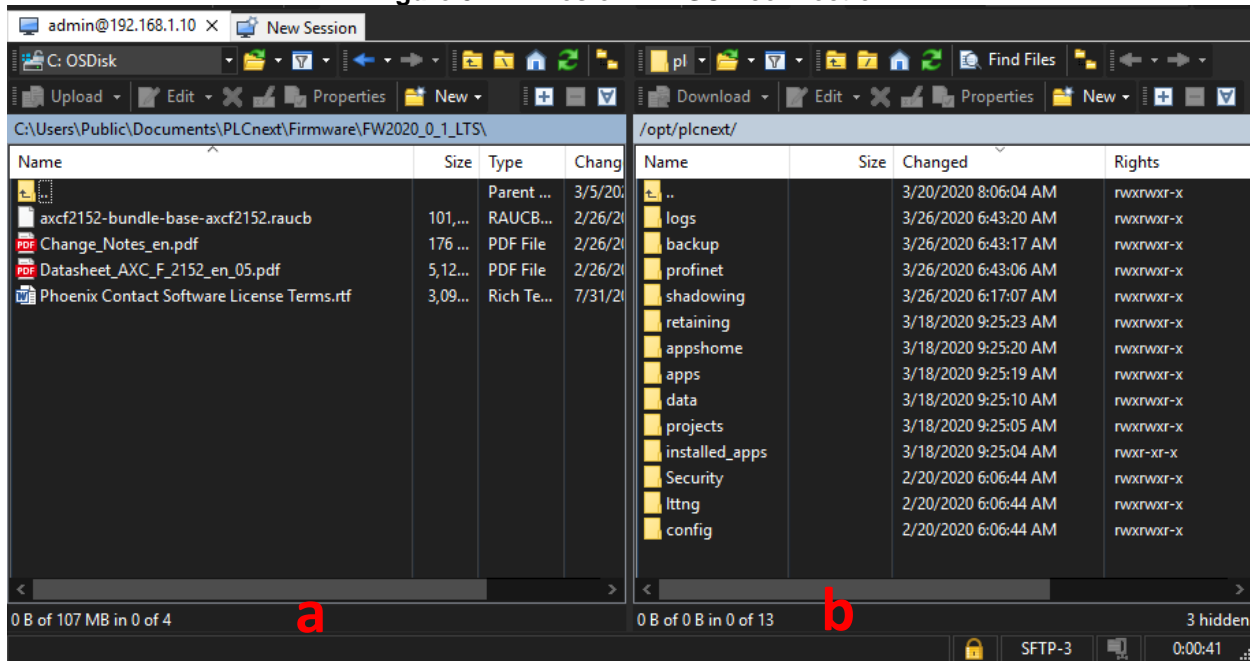
- 1) Open your favorite SFTP client. In this example we are using WinSCP and PuTTY. Once open make sure the selections match Figure 3.1-1.

**Figure 3.1-1 WinSCP settings**



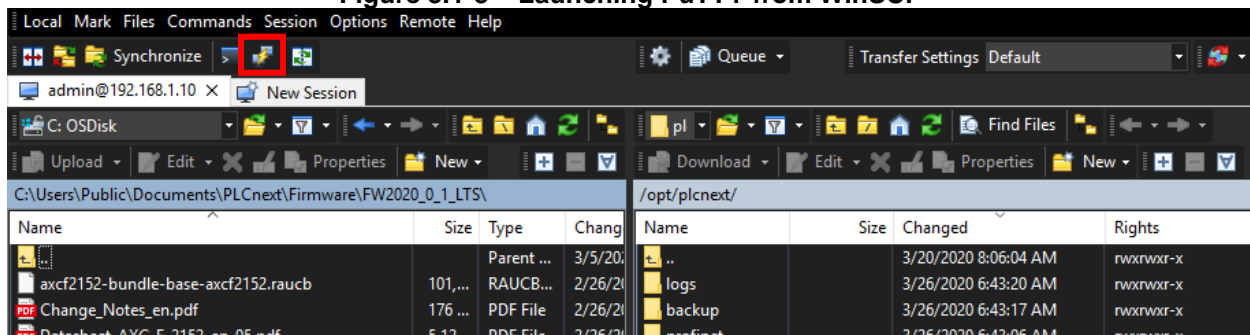
- 2) Once these settings are correct, in the host name type the IP address (192.168.1.10 is default), and the login credentials as shown in step 2.4 .
- 3) Once connected, the left side (a) is your local PC files, and the right side (b) is the AXC F 2152's files as shown in figure 3.1-2.

**Figure 3.1-2 Files on WinSCP connection**



- 4) On the left side, navigate to C:\Users\Public\Documents\PLCnext\Firmware\\*\*Firmware version you downloaded\*\* As shown in Figure 1.1-4
- 5) Once you are in the correct directory on your PC, drag and drop the axcf2152-bundle-base-axcf2152.raucb file to the AXCF 2152's filesystem.
- 6) Now we are going to launch PuTTY. To launch putty from WinSCP, click the button shown in figure 3.1-3.

**Figure 3.1-3 – Launching PuTTY from WinSCP**



- 7) This button will launch a PuTTY SSH session. Log in with the credentials shown in step 2.4

If you are not familiar with any SSH software please refer to Appendix 3.

- 8) Once logged in type the below command:

```
sudo update-axcf2152
```

- 9) Enter the password shown in step 2.4.
- 10) The AXCF 2152's firmware will now update.
- 11) Once the RUN LED is flashing or solid green the firmware update is complete.