

How to Reset the AXC F 2152

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Introduction

This article will go over the steps to reset the controller. There are multiple ways to reset the controller and they are explained below.

Objectives

- Explain the types of resets and what they do
- Show how to reset via reset button on the AXC F 2152 controller
- Show how to reset via PLCnext Engineer
- Show how to reset via SSH connection

Types of resets

This section will go over the types of resets that can be performed on the AXC F 2152 and what they entail.

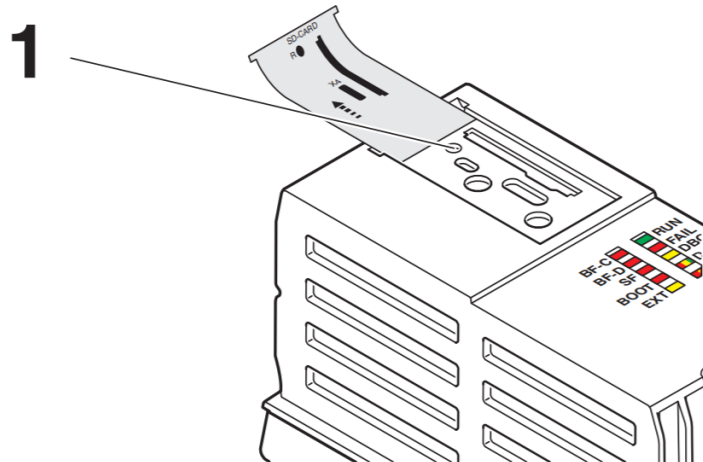
1 - Reboot

A reboot of the controller can be performed multiple different ways and can be used to apply changes to specific settings or remove a fault that cannot be cleared while powered on.

1.1 - Physical button on the AXC F 2152:

1. Remove the cover as shown in Figure 1.1-1 and press the concealed button in the hole marked with number 1 shown in figure 1.1-1 for at least two seconds then release.

Figure 1.1-1 - Location of Reset button on AXC F 2152



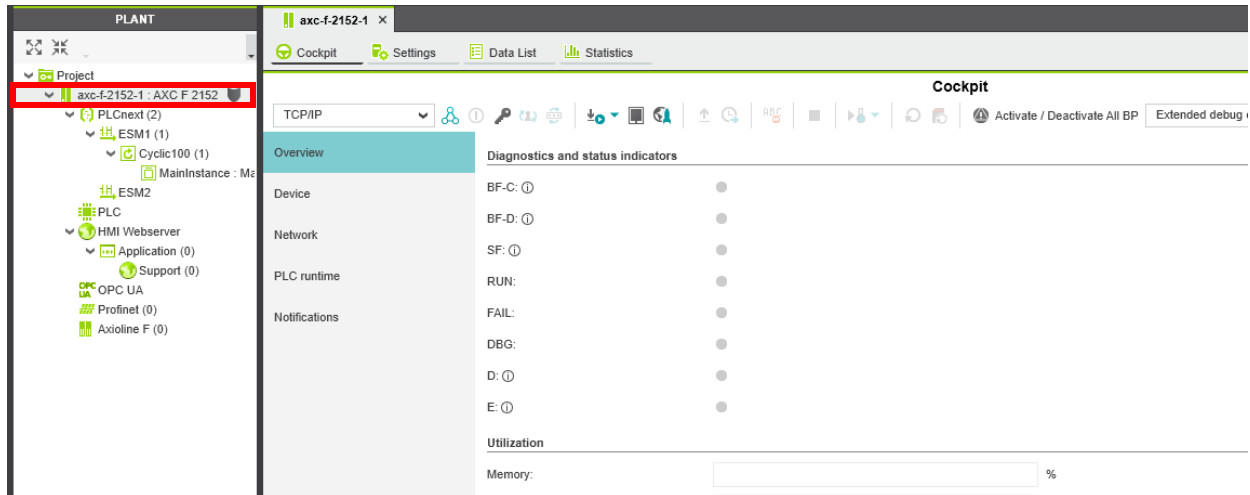
2. The AXC F 2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
3. Once the green RUN LED is solid green the controller has successfully rebooted.

[Type here]

1-2 – In PLCnext Engineer

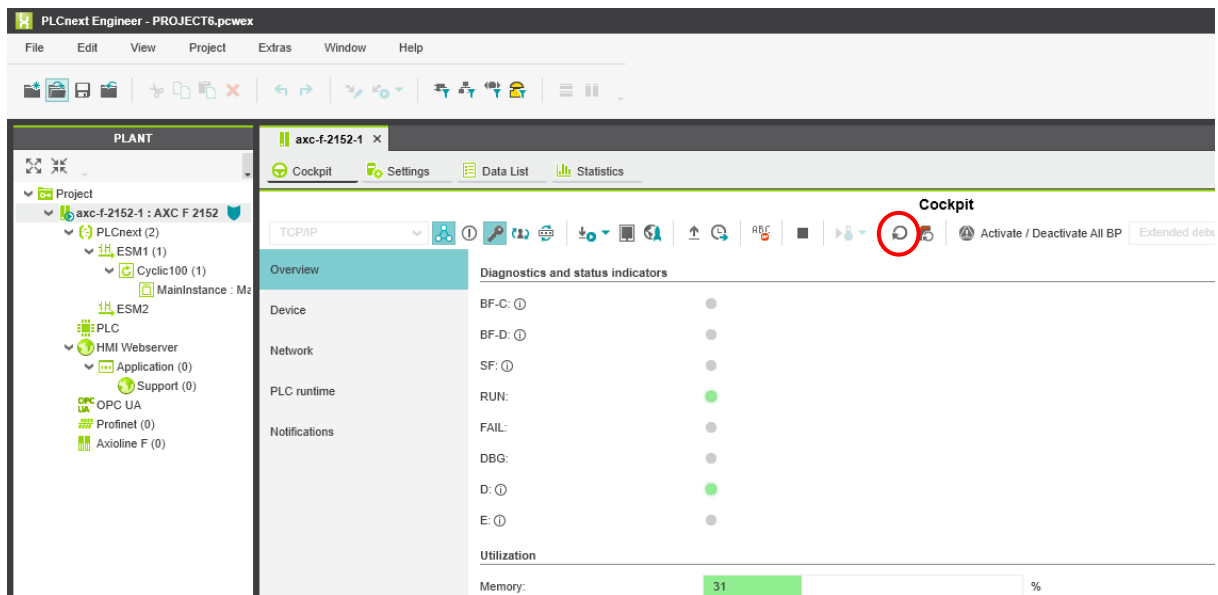
1. Navigate to the AXC F-2152 tab as shown in Figure 1.2-1

Figure 1.2-1 - AXC F-2152 tab in PLCnext Engineer



2. Connect to the controller, and once you are connected click the button circled in Figure 1.2-2

Figure 1.2-2 - Reset button location in PLCnext Engineer



3. The AXC F 2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
4. Once the green RUN LED is solid green the controller has successfully rebooted.

[Type here]

1-3 In SSH session

1. Connect to the controller using an SSH client. For this example, we are using PuTTY.
2. Log into the controller using the admin user.

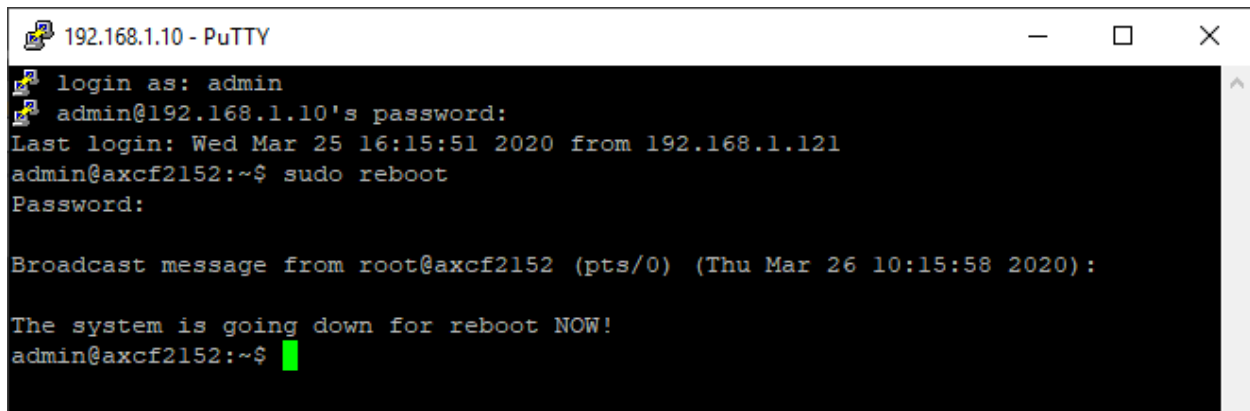
See Appendix 3 if you would like to use a SSH client but do not know how

3. Type the command:

`sudo reboot`

4. Enter the password of the admin account
5. As seen in Figure 1.3-1 the AXC F 2152 will notify you that it is rebooting.

Figure 1.3-1 - PuTTY commands to reboot controller



```
192.168.1.10 - PuTTY
login as: admin
admin@192.168.1.10's password:
Last login: Wed Mar 25 16:15:51 2020 from 192.168.1.121
admin@axcf2152:~$ sudo reboot
Password:

Broadcast message from root@axcf2152 (pts/0) (Thu Mar 26 10:15:58 2020):

The system is going down for reboot NOW!
admin@axcf2152:~$
```

6. The AXC F 2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
7. Once the green RUN LED is solid green the controller has successfully rebooted.

[Type here]

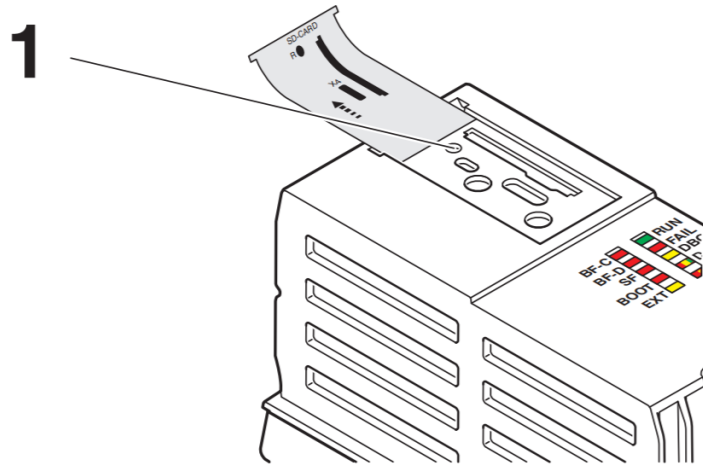
2 – Type 1 Reset

A type 1 reset removes all application specific data from the AXC F 2152. This includes all programs and files in PLCnext Engineer, and Linux. It also resets the network configuration (IP address), and any file changes that have been made to the operating system or firmware.

2-1 Physical button on the AXC F 2152

1. Remove the cover as shown in Figure 2.1-1.

Figure 2.1-1 - Location of Reset button on AXC F 2152



2. Remove power from the AXC F 2152
3. Press and hold the concealed button as shown in Figure 2.1-1 marked with the number 1.
4. Restore power to the AXC F 2152
5. Once the RUN and FAIL LEDs are solid as shown in Figure 2.1-2, release the reset button

Figure 2.1-2 LED status when Type 1 Reset will be performed



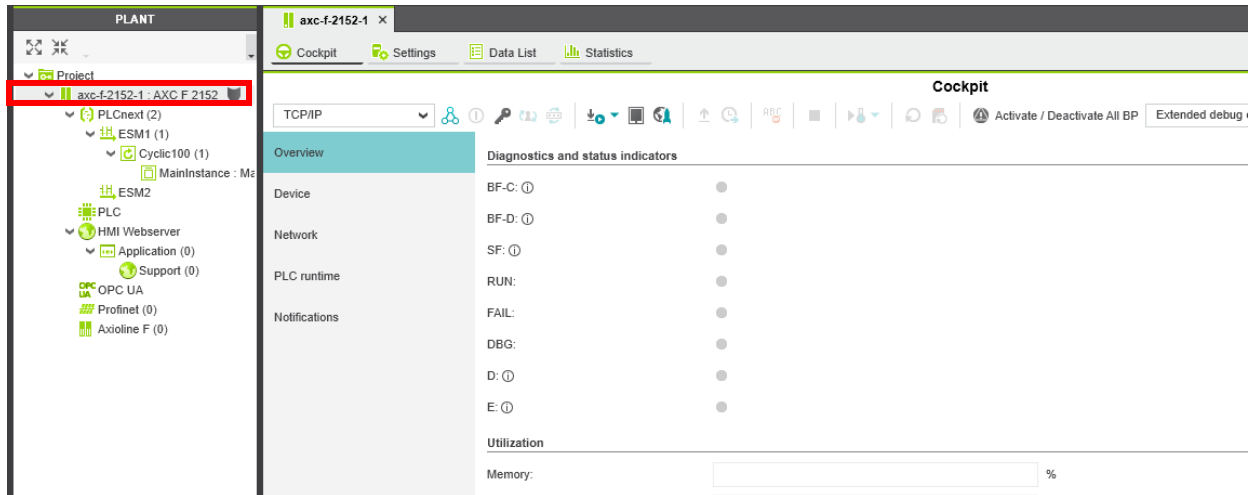
6. The AXC F 2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
7. Once the green RUN LED is flashing green for a few seconds the controller has successfully rebooted.

[Type here]

2-2 Using PLCnext Engineer

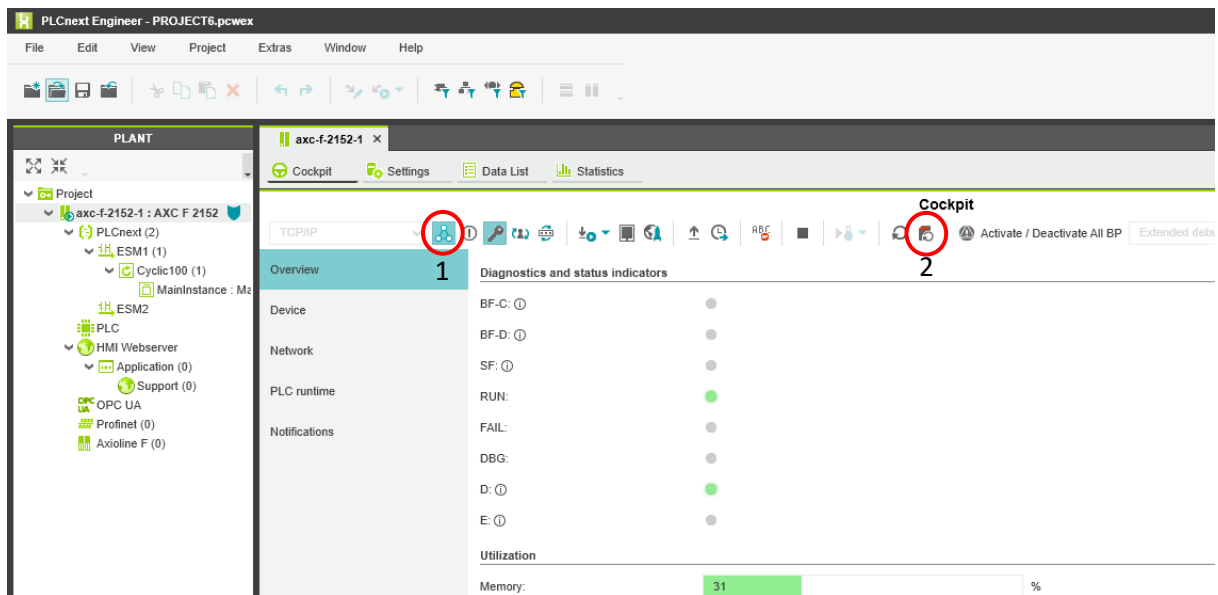
1. Navigate to the AXCF-2152 tab as shown in Figure 2.2-1

Figure 2.2-1 - AXCF-2152 tab in PLCnext Engineer



2. Connect to the controller (1), and once you are connected click the button (2) circled in Figure 2.2-2

Figure 2.2-2- Location of Type 1 Reset in PLCnext Engineer



3. The AXCF-2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
4. Once the green RUN LED is flashing green for a few seconds the controller has successfully rebooted.

[Type here]

2-3 Using SSH

1. Connect to the controller using an SSH client. For this example, we are using PuTTY.
2. Log into the controller using the root user.

See Appendix XX if you would like to use a SSH client but do not know how

See Appendix XX if you do not know how to create a root user.

3. Type the command:

```
recover-axcf2152 1
```

4. The AXC F 2152 will now perform a type 1 reset.
5. The AXC F 2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
6. Once the green RUN LED is solid green the controller has successfully rebooted.

[Type here]

3 – Type 2 Reset

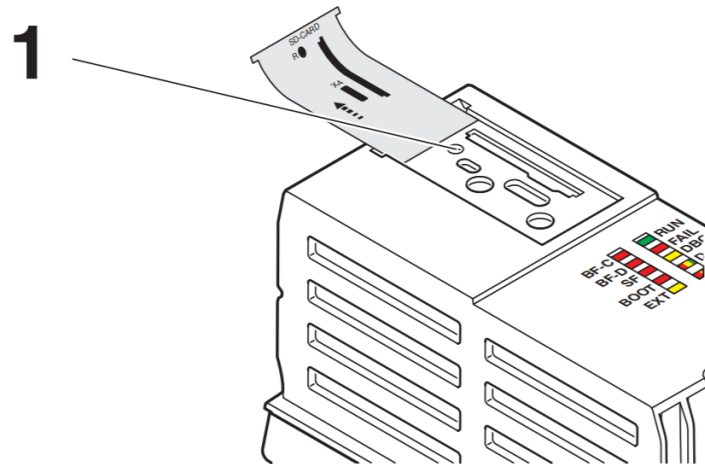
A type 2 resets the controller to the state it was delivered in. This means all programs, settings, and Firmware has been reset to its defaults. This procedure is not possible in PLCnext Engineer.

This procedure should only be done in extreme scenarios as it will reset the firmware!

3-1 Physical button on the AXC F 2152

1. Remove the cover as shown in Figure 3.1-1.

Figure 3.1-1 - Location of Reset button on AXC F 2152



2. Remove power from the AXC F 2152
3. Press and hold the concealed button as shown in Figure 2.1-1 marked with the number 1.
4. Restore power to the AXC F 2152 (the button must be held for at least 30 seconds)
5. Once all LEDs are solid as shown in Figure 3.1-2, release the reset button

Figure 3.1-2 - LED status when a Type 2 reset will be performed



6. The AXC F 2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
7. Once the green RUN LED is solid green the controller has successfully rebooted.

[Type here]

3-2 Using SSH

7. Connect to the controller using an SSH client. For this example, we are using PuTTY.
8. Log into the controller using the root user.

See Appendix 3 if you would like to use a SSH client but do not know how

See Appendix 4 if you do not know how to create a root user.

9. Type the command:

```
recover-axcf2152 2
```

10. The AXC F 2152 will now perform a type 2 reset.
11. The AXC F 2152 will reboot and the BOOT LED will flash red indicating that the controller is booting.
12. Once the green RUN LED is solid green the controller has successfully rebooted.