

# Integrity Checking

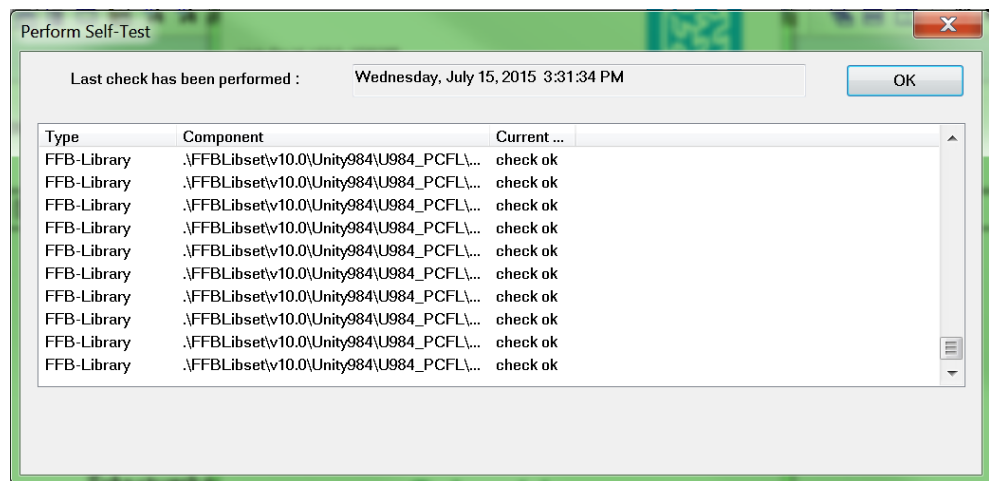
## Integrity Checks

The integrity check feature in Unity Pro running on an authorized PC helps prevent Unity Pro files from being changed via a virus / malware through the Internet.

The integrity check feature concerns the following components:

- DLLs
- Unity Pro hardware catalogue
- libset and object files of EFBs
- DTMs

Unity Pro automatically performs an integrity check when you first open an application. Beyond the first check, Unity Pro will automatically run the integrity check periodically.



It is also possible to run the Integrity Check manually.

## Exercise - Integrity Checks

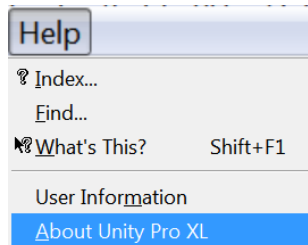
### Learning Outcomes

By the completion of this exercise you will be able to:

- Complete a manual integrity check.

### Open the Unity Pro Properties.

- From the **Help** menu select **About Unity Pro XL**:



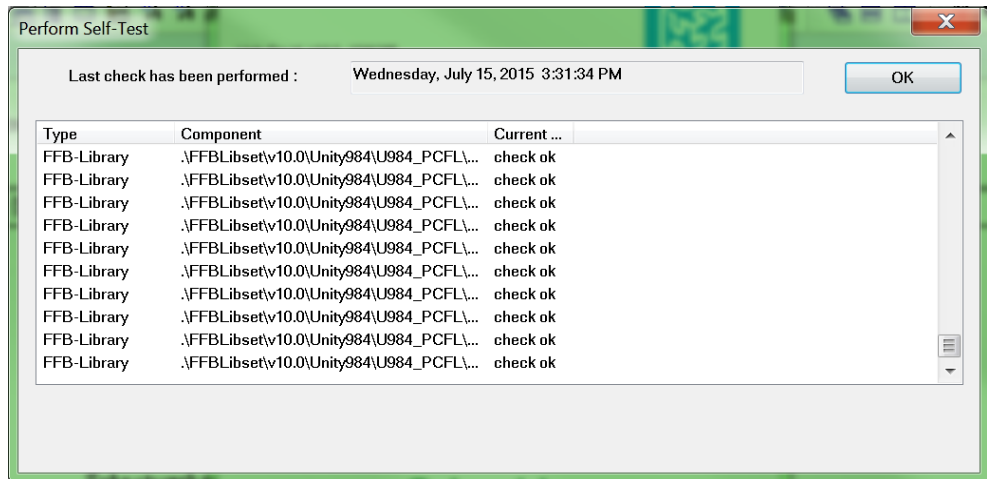
- Click the **Perform self-test** button from the Integrity check area of the dialog:



## Exercise - Integrity Checks (cont.)

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- iii. The **Perform Self-Test** window will display. The **Integrity Check** will commence and complete automatically:



- iv. Scroll up the finished list and ensure that all entries have **check ok** for the **Current Status**.
- v. Click **OK** when finished with the **Self-Test** window.
- vi. Then click **OK** to close the **About** window.

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### Remove all Cyber Security & Passwords settings.

- i. Return to the Embedded Ethernet Port properties and open the **Security** tab and click the **Unlock Security** button.
- ii. Visit the **Application Settings** and **remove** the **Application Password** set in the earlier exercise.
- iii. **Build, Transfer, Run & Test** that the settings have **Cyber Security** and that the **Application Password** has been removed.
- iv. The exercise is now over click the link to go back to the [Chapter 2 Organisation Chart](#) or to the [Table of Contents](#).



# Access Control

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## Introduction

Access control is a feature that allows the user to set which IP addresses are allowed to communicate with the device (PLC or cyber secured NOC), communication from any other IP will be rejected by the device.

In Unity Pro v11 this feature will be combined with the restriction of the features allowing IP addresses to communicate with device via specific protocols only.

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## How to enable it?

As with most of the M580 cyber security features, this feature is located in the Security tab of the M580. From there type in the list of authorised IP addresses, then enable access control and download the program to the PLC.



### Note:

Be careful if you usually download the projects to the PLC via Ethernet cable to add the IP address of the computer in allowed IP addresses, and remember the PC IP address.

If you usually transfer the project via other media, make sure that the service is enabled before downloading the project to the PLC!

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