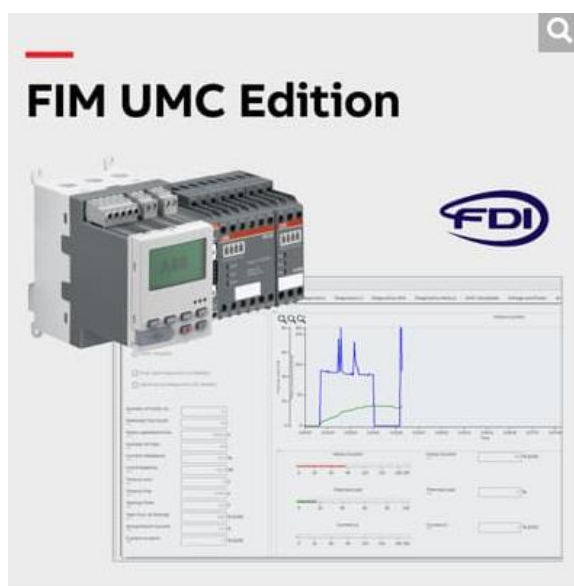


APPLICATION NOTE

UMC FIM EDITION TROUBLESHOOTING

Short guide to fix issues related with UMC100.3 in combination with the Field Information Manager (FIM)



This document is used to record all troubleshooting cases regarding the Field Information Manager. In addition to fault messages, this includes further procedures for troubleshooting.

The document can be divided in the following chapters depending on when the fault occurs:

- Troubleshooting before the commissioning of FIM
- Troubleshooting during the commissioning of FIM
- Troubleshooting during project planning

The following is an overview of the included error fixes.

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1. Troubleshooting before the commissioning of the tool

This section focuses on troubleshooting shortly after the installation of the Field Information Manager tool.

1.1 Repeated crashing of the Field Information Manager when starting

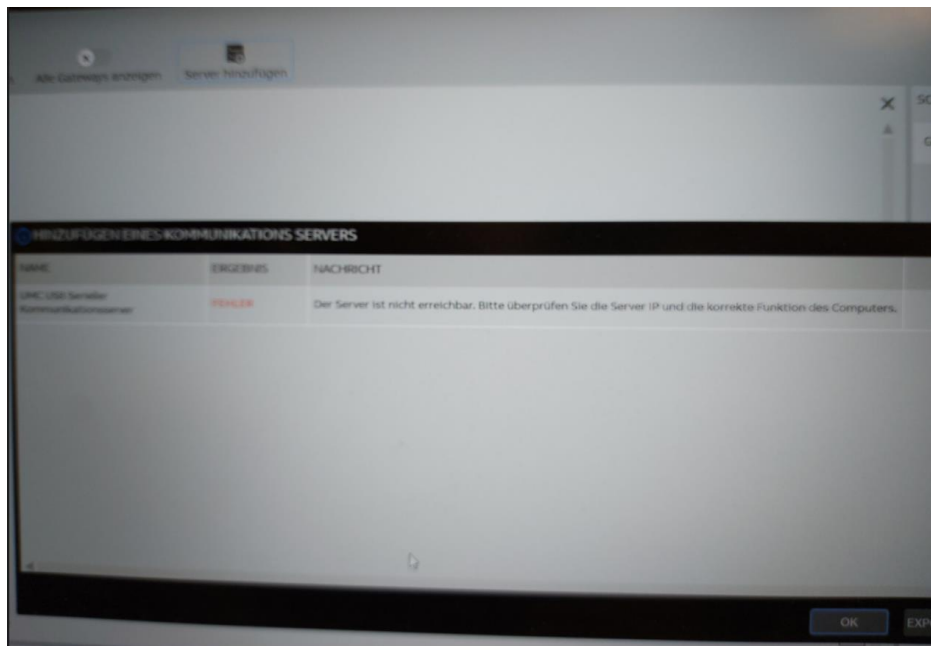
If the Field Information Manager crashes repeatedly during start-up, this may be due to the following causes:

- a) Field Information Manager and "Asset Vision Basic" are installed on the same computer

FIM as well as its predecessor, Asset Vision Basic (AVB) are not compatible, which is why conflicts and subsequent crashes of the tool can occur when starting FIM. Should this be the case, please check the laptop for evidence of the predecessor, uninstall and remove it from the laptop and reinstall FIM if necessary.

1.2 Missing server connection

When creating a project, an attempt is made to create a server, in this example one for serial communication. When adding the server, the following error message appears:



This can have three reasons.

- a) The communication server is not installed
- b) The server is not activated and is not running
- c) The prevailing firewall blocks the connection

- a) The communication server is not installed

The communication server must be listed in the Apps&Features of the corresponding laptop.

Apps und Features

Optionale Features

Aliase für die App-Ausführung

Sie können nach Laufwerken suchen, sortieren und filtern. Wenn Sie eine App deinstallieren oder verschieben möchten, wählen Sie sie aus der Liste aus.

Sortieren nach: Name ▾

Filtern nach: Alle Laufwerke ▾

1 App gefunden




UMC USB Serial Communication Server

2,31 MB
27.04.2022

- b) The server is not activated and is not running

You can access the overview of all running services via the laptop settings. The service "UMC USB Serial Communication Server" must be set to "Run automatically". The service can also be activated manually in this view.

Dienste (Lokal)		Name	Beschreibung	Status	Starttyp	Anmelden als
Markieren Sie ein Element, um dessen Beschreibung anzuzeigen.		 UMC USB Serial Communication Server	FDI communication server for UMC USB serial communication.	Wird ausgeführt	Automatisch	Lokales System

- c) The prevailing firewall blocks the connection

Please contact your respective technical support and ask whether specific firewall policies in your company interrupt the communication.

1.3 Solving FIM issues regarding missing UMC100.3 devices in the topology

After the update to Windows 10, it can happen that after the installation of FIM and the UMC device package, there are no UMC100.3 visible. This can have three reasons.

- a) Conflict between pre-installed com.servers
- b) Communication error between the USB terminal and the UMC Panel, caused by incorrect drivers coming from WIN10.
- c) An already used COM port, which is incorrectly assigned.

- a) Resolve conflict between com. Server

Please simply remove all the three pre-installed servers by clicking on the three black dots and then delete. Afterwards, please install the com. server you require again. From FIM version 2.2.1 onwards, there will be no pre-installed com. servers.

- b) Install correct VCP drivers

Confirming the missing drivers and fixing the issue

- Open the “device manager” in Windows 10. And check the Ports (COM & LPT). If there is an entry like in picture 1, then the USB port is not using the correct drivers.

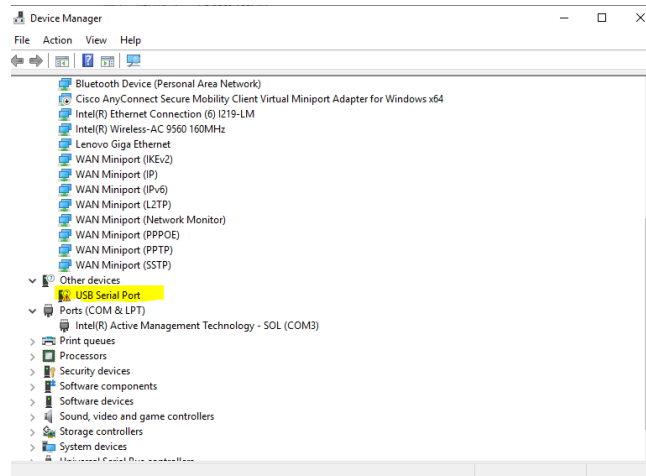


Figure 1: Device Manager - Missing USB drivers

- In order to solve this problem you need to install a VCP (Virtual COM Port) driver. Please choose the right version for download. One of the two options in picture 2 should be the right one.

Currently Supported VCP Drivers:

Operating System	Release Date	Processor Architecture			
		x86 (32-bit)	x64 (64-bit)	PPC	ARM
Windows*	2017-08-30	2.12.28	2.12.28	-	-

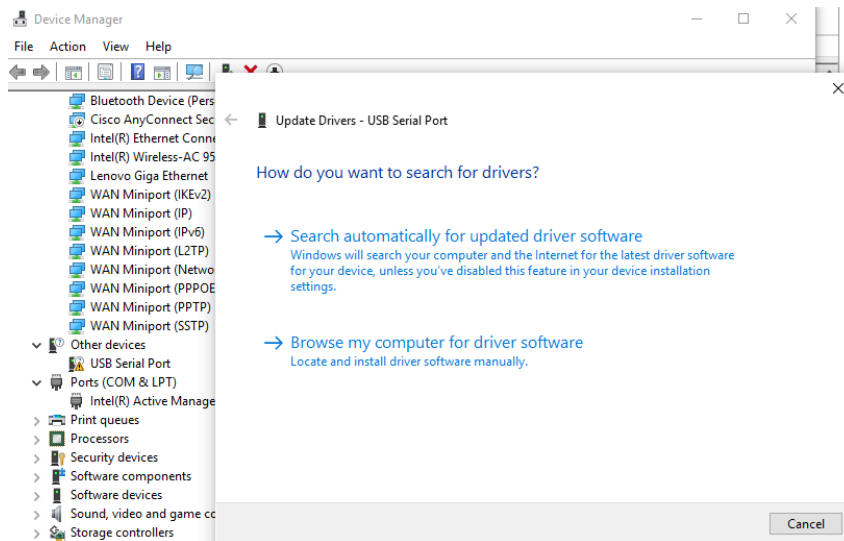
Figure 2: VCP drivers selection

- Download and extract the files to a folder of your choice. Here we used the name VCP. You should see the following files of picture 3.

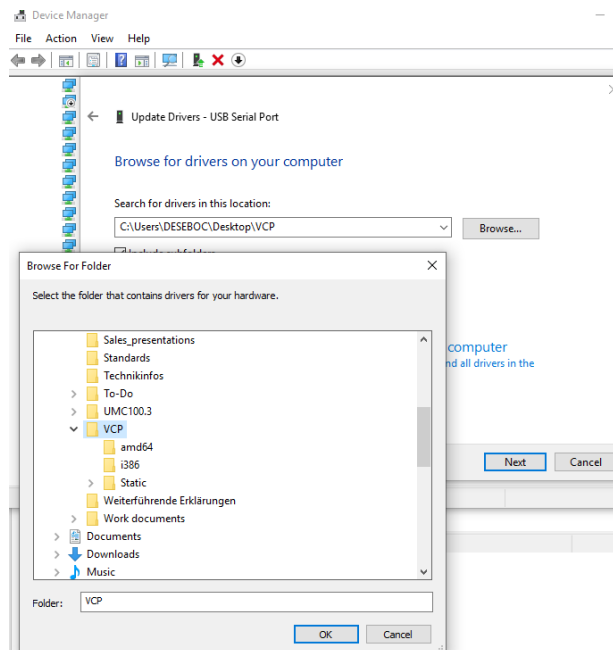
Name	Type	Compressed size
amd64	File folder	
i386	File folder	
Static	File folder	
ftd2xx.h	H File	8 KB
ftdibus.cat	Security Catalog	7 KB
ftdibus.inf	Setup Information	6 KB
ftdiport.cat	Security Catalog	7 KB
ftdiport.inf	Setup Information	6 KB

Figure 3: File Overview of VCP download

- Go to the device manager and select the not correctly installed devices with right-click and update drivers. Here it is “USB Serial Port”, the name might vary, but the process stays the same.



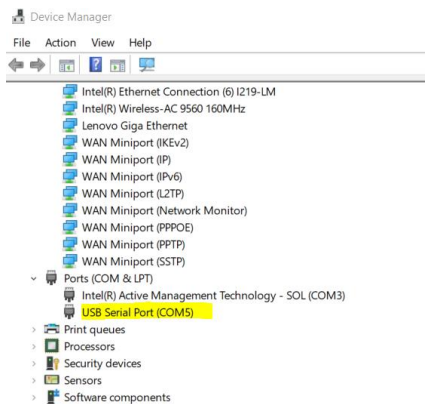
- Select “Browse my computer...” and select the folder, in which all the extracted files are in. We used the name VCP here.



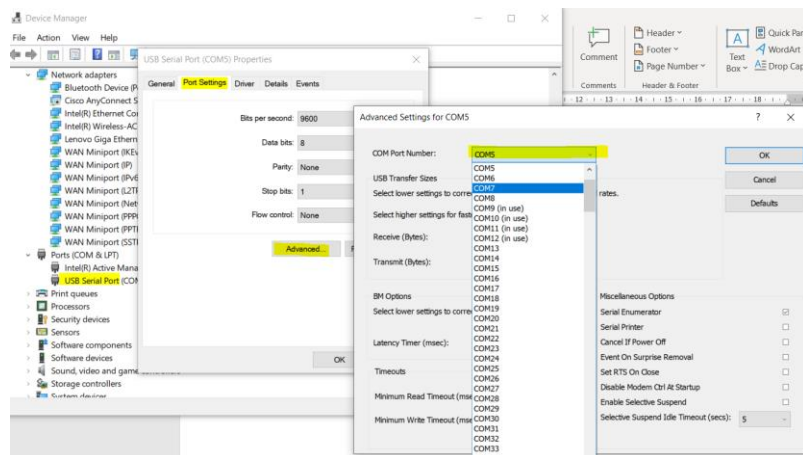
- The pc will install the correct drivers. At the end restart the pc and start FIM. You should now see the UMC100.3 devices in the USB topology.

c) Assign a different COM Port

- Go to the USB Serial Port used for the connection to the Panel



- Right click on the COM Port, select “Properties” -> Select the TAB “Port Settings” -> “Advanced” -> Open the Drop-Down Menu COM Port Number and select a COM not in use. Click “OK”. Restart PC.

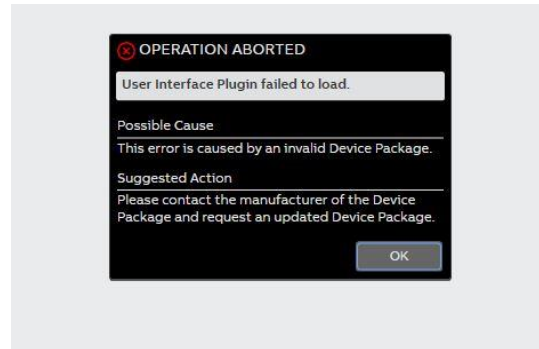


2. Troubleshooting during the commissioning of the tool

This section focuses on troubleshooting during the initial project creation and the basic settings.

2.1 Invalid Device Packages

When opening the first project, the following error message appears:



This can have two reasons:

- There are no implemented device packages
- The implemented device packages are not up to date

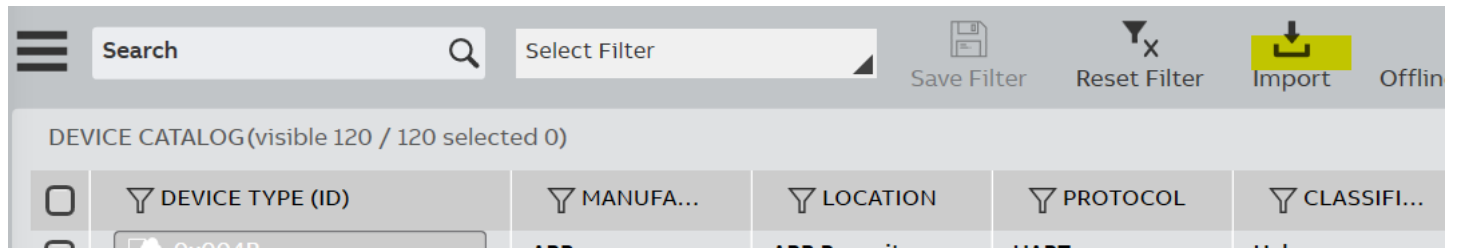
For both reasons, there is the same troubleshooting:

The latest Device Packages are linked on our ABB homepage under Downloads and can be downloaded: <https://new.abb.com/low-voltage/de/produkte/motor-controller/universal-motor-controller/umc100-3>

Roll-up (6)	
Software (13)	
Technische Beschreibung (1)	
Versionshinweise (4)	

FDIX	UMC100.3 Device Package 4.0.33 Profibus Inhaltsangabe: UMC100.3 Device Package 4.0.33 Profibus Englisch - 2022-12-13 - 2,23 MB	FDIX
FDIX	UMC100.3 Device Package 4.0.49 PROFINET Inhaltsangabe: UMC100.3 Device Package 4.0.49 PROFINET Englisch - 2022-12-13 - 2,23 MB	FDIX

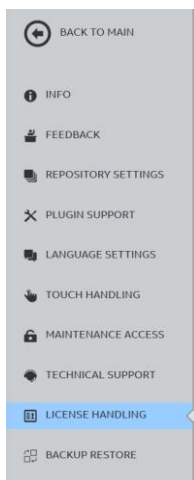
These can then be imported into the Device Catalog in FIM through “Import” or via Drag’n drop:



2.2 Subsequent implementation of the licence for the full version

Upgrading from the limited Windows edition to the FIM UMC edition full version is possible without reinstalling the Field Information Manager.

The Field Information Manager tool is the same for all versions. By implementing an appropriate license, the full features of FIM can be unlocked:

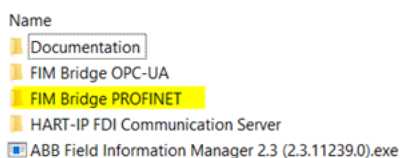


This is possible under Settings -> License Handling -> Load License

2.3 Implementation of the Profinet setup

Information about this can be found under the following link: <https://new.abb.com/control-systems/fieldbus-solutions/fim/connectivities/profinet> -> **Setup Instructions – One Domain Network**

- When downloading the trial version, there should also be a folder named "**FIM Bridge Profinet**" in this zip file.

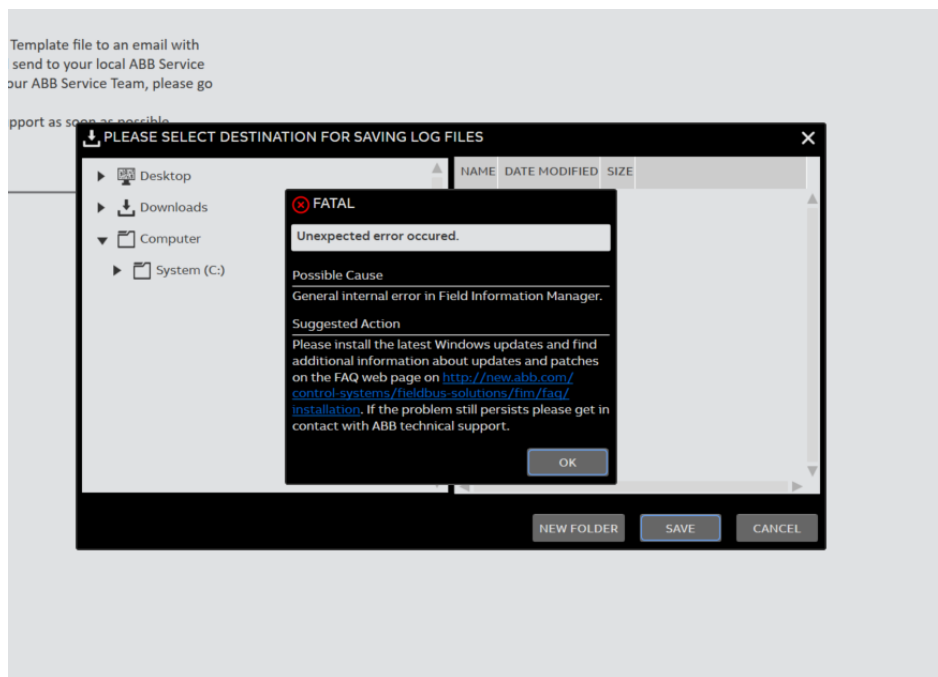


- You have to extract this folder to your computer, go to the folder and install the file in it.

3. Troubleshooting during project planning

3.1 Field Information Manager crashed after try to Import or Export Project and Configuration Files

In the full version of FIM it is possible to import and export projects, data sets or logic files. This is possible by clicking on the respective import or export button. It can happen that after clicking on the button, the storage location of the files is not opened, but the following error message appears:

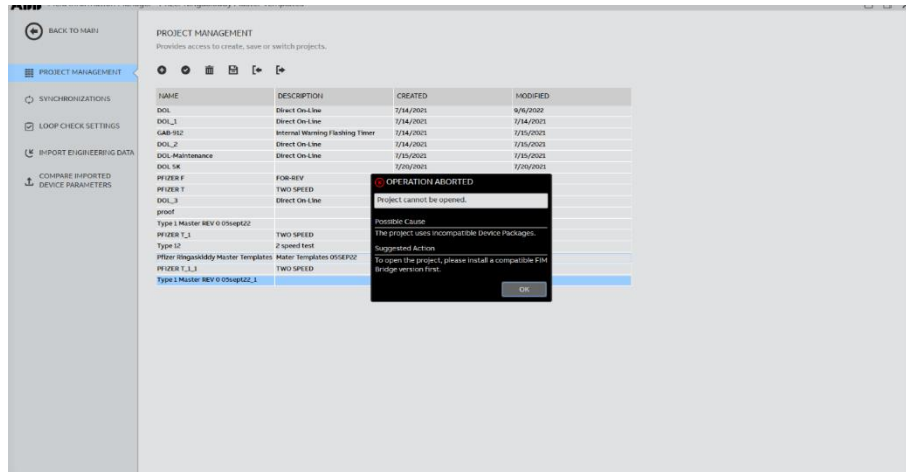


After this error message appears, FIM freezes and crashes.

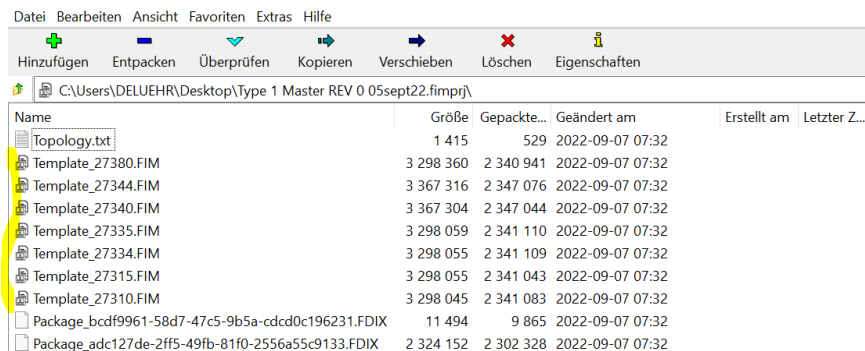
The reason for this is as follows: After clicking on the button, FIM searches the PC/laptop for potential files. If there are drives or folders on the laptop that cannot be accessed, for example due to default settings, this causes conflicts with FIM and causes it to crash.

Therefore, it is necessary to search for drives that cannot be accessed and to disconnect them beforehand. FIM can then access the corresponding data.

3.2 Use of old FIM projects, which can no longer be opened

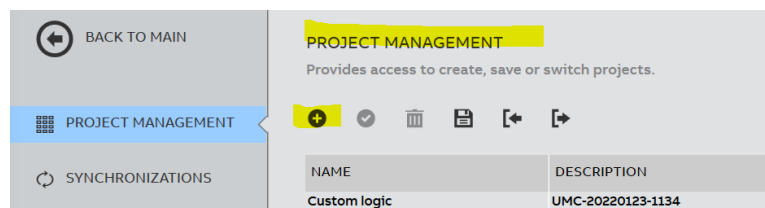


The FIM project file is a packed file full of templates. If you open this file via right click as a zip file, you can access the data and thus the templates of the project (see screenshot):



The included templates can be exported afterwards.

In the following step you can start FIM and create a new project.



In the configuration tool you can now import the templates.

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