

DEIF A/S

ML2 Backup Tool

Advanced Mode Description

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Document information

Revision history

Version	Date	Initials	Comment
0.1	2015-08-23	FLS	Document created
0.2	2015-09-03	HTD	Documented reviewed + changes

Acronyms and abbreviations

Acronym	Description
ASW	Application software for the controller.
USW	Utility Software
ML2	Multi line 2 controller e.g. AGC 2/3/4, PPM 2/3, GPC 2/3, PPU 2/3, GPU 2/3, MDR 2 etc.

Purpose

The purpose of this document is making a guide, so the user is capable of making the correct choices in the advanced menu for the ML2 Backup Tool.

References

ID	BAAN/Link	Document name	Description

Advanced mode

Introduction

The “Advanced mode” feature is intended to be used when the normal wizard procedure in the “ML2 Backup Tool” is not capable of making the right choices. In the “Advanced mode” the ASW and Bootloader must be selected. If incorrect choices are made regarding the bootloader the controller will be damaged and most likely not be able to be repaired again. When using the “Advanced mode”, the user must know what he is doing and be capable of making the right choices.

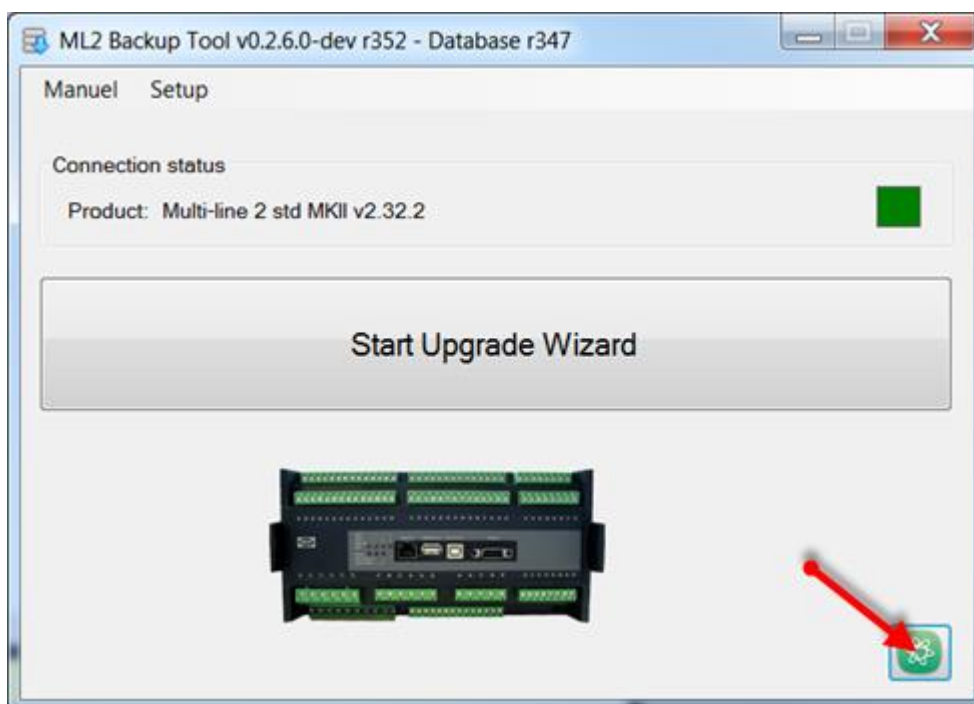


When using the “Advanced mode”, the user can easily damage the controller! The user must know exactly what he is doing.

When entering the “Advanced mode”, the ML2 unit can be in two different states. Either in “application mode” or in “boot mode”. When the controller is in “application mode” the controller looks normal on the display and it is possible to move around in the menu. If the ML2 unit is in “boot mode”, it is not possible to do anything from the display. When it has been determined which state the controller is in, the chapter for each state can be used, by following the steps in each chapter.

How to enter “Advanced mode”

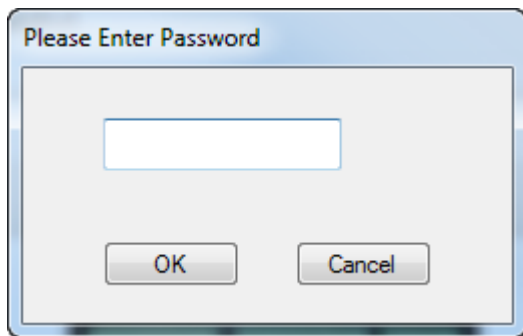
When the “ML2 Backup Tool” has been opened, the “Advanced mode” is located in the bottom right corner, shown with the arrow below:



Navn: How_to_enter

A popup window will then appear and asks for a password. The password to enter the “Advanced mode” is:
ml2adv15

The screen with the password is shown below:



A screenshot of a standard Windows-style dialog box. The title bar is light blue and contains the text "Please Enter Password". The main area of the dialog is light gray and contains a single-line text input field. Below the input field are two buttons: "OK" on the left and "Cancel" on the right. The dialog box has a thin blue border and a slight shadow.

Navn: Password

ML2 unit in application mode

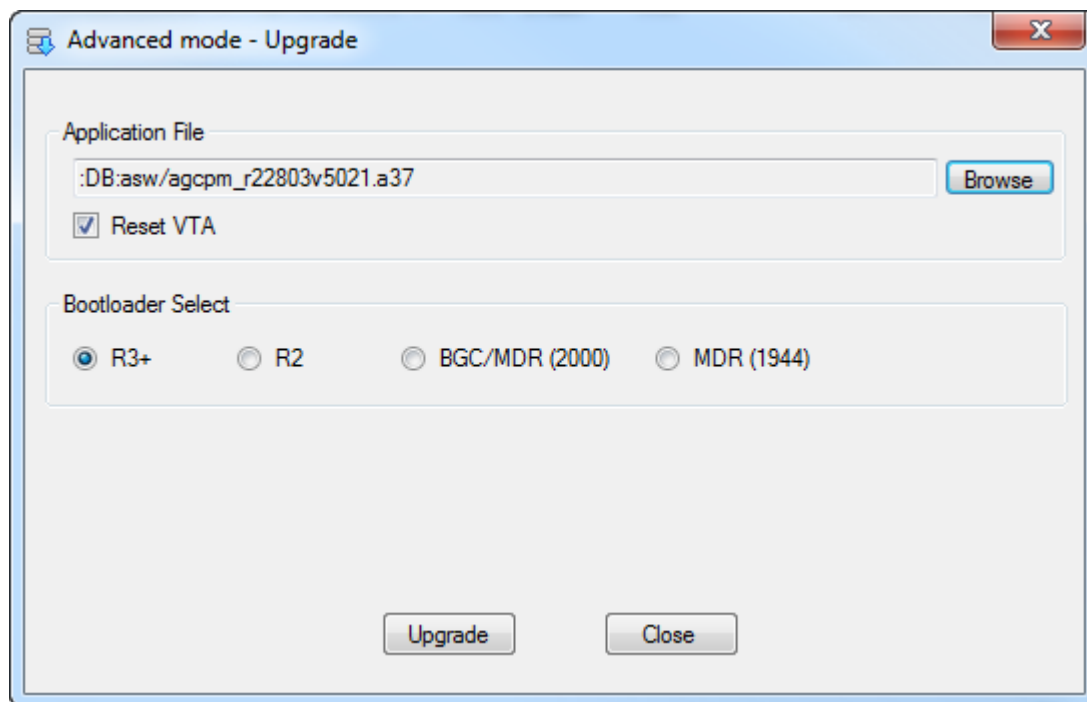
If the ML2 unit is in “normal mode” (application mode), then it is possible to upgrade the application software and the bootloader.

When the upgrade process is started the “ML2 Backup Tool” will create a backup file and save it on the computer. The backup file contains different info about the unit such as options, settings etc.

If the backup file is not moved from the location where it is saved, it can be used for an automatic restore process at a later time.

When the controller is in “normal mode” (application mode), and the “Advanced mode” is opened, the “ML2 Backup Tool” will try to make some “safe” choices, if it is possible. The user cannot be sure that choices the “ML2 Backup Tool” makes is safe, so the user must always be sure, before moving on in the process.

When the ML2 unit is in “normal mode” the advanced menu will look like below:



Navn: Advanced_AppMode

Application file selection

The first line in the “Advanced mode” window represents which ASW should be flashed into the unit. If line starts with “:DB:”, it means that the “ML2 Backup Tool” is able to recognise the software in the unit, and suggests to put a matching software into the unit. If this software is not wanted to be used, the “Browse” button can be pushed and another software can manually be selected.

Below the line with software selection, a box is shown. This gives two different possibilities:

If “Reset VTA” box is ticked. (A checkmark is shown in the box)	When the process has been done, the ML2 unit will have default settings. The options that were before the update process will still be in place.
If “Reset VTA” box is <u>NOT</u> ticked. (A checkmark is <u>NOT</u> shown in the box)	When the upgrade process has been done, the ML2 unit will have the same settings as before the process. This includes Input/Outputs, settings and M-Logic.



If the “Reset VTA” is left unchecked and software is changed, it is possible that the parameters are not compatible, which can lead to hazardous situations.

Bootloader selection

The bootloader selection determines which bootloader should be put into the ML2 unit.

If the “application file line” starts with “:DB:”, the “ML2 Backup Tool” has detected a bootloader which is relatively safe to put in. In the bootloader selection it is possible to choose between four different bootloader softwares. The bootloader software must match the controller:

Bootloader	Controller
R3+	Version 3 and upward products: AGC-3/4/PM, PPM-3, PPU-3, GPC-3, GPU-3 etc.
R2	Version 2 products: PPU-2, GPC-2, AGC-2, PPM-2 etc.
BGC/MDR (2000)	BGC and BGC-2/MDR bootloader for 20 MHz processors
MDR (1944)	Special MDR bootloader for 19,44 MHz processors



Selecting the wrong bootloader might damage the unit.

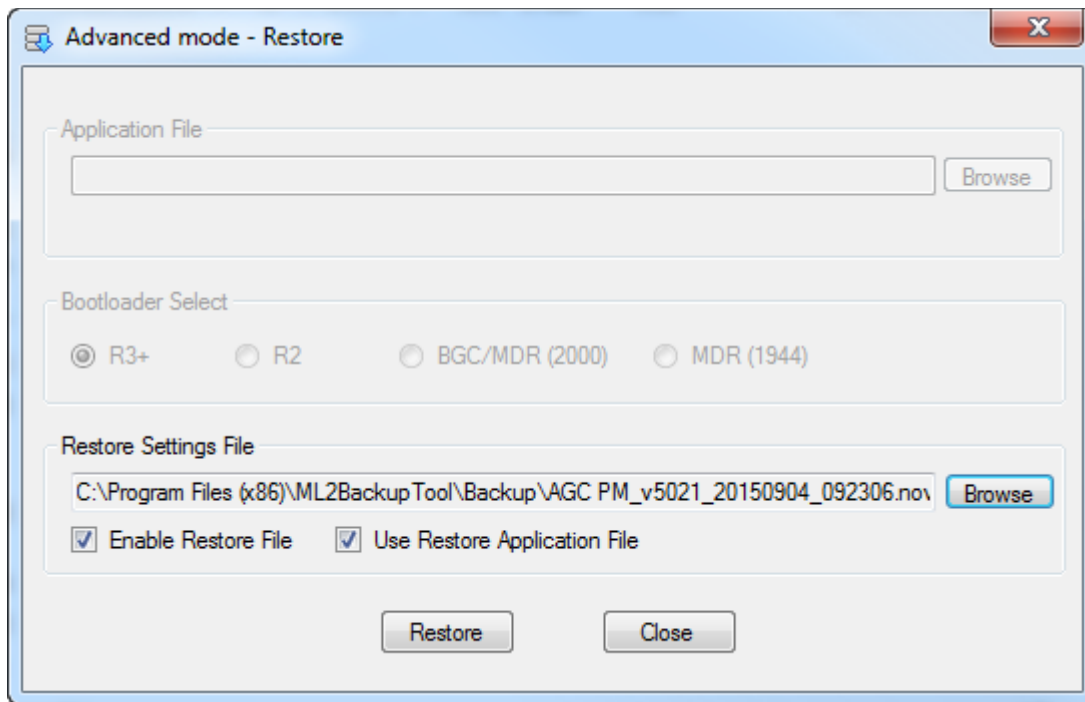
Upgrade

Push the “Upgrade” button, when the different selections have been made, to start the upgrade process.

ML2 unit in boot mode

If the ML2 unit is in “boot mode”, and there is no backup of the unit, the unit will have to be restored manually through the “Advanced mode”. If a backup have been made earlier on the specific computer connected to the ML2 unit, it is possible to restore the unit to the state it was, when the backup was made.

When the ML2 unit is in “boot mode” and a backup file is present, the “Advanced mode” window will look like below:



Navn: Advanced_BootMode

Application file selection

When the unit is in “boot mode”, the line for “Application file” can only be active from two reasons. Either there is no backup file present on the computer, or box further down called “Use Restore Application File” is not checked. If the line for “Application file” is greyed out, there is a backup file present on the computer and the “ML2 Backup Tool” will use the ASW that was used when the backup file for the unit was made.

Bootloader selection

From the bootloader selection the bootloader can be selected. If a backup file is present the bootloader software will be chosen automatically. If the bootloader software has to be chosen manually the software match between the controller looks like below:

Bootloader	Controller
R3+	Version 3 and upward products: AGC-3/4/PM, PPM-3, PPU-3, GPC-3, GPU-3 etc.
R2	Version 2 products: PPU-2, GPC-2, AGC-2, PPM-2 etc.
BGC/MDR (2000)	BGC and BGC-2/MDR bootloader for 20 MHz processors
MDR (1944)	Special MDR bootloader for 19,44 MHz processors

Restore settings file selection

If a previous backup have been made, this backup file can be used to restore the unit. Click on the browse button, and select the backup file, the unit should restore with.



It is only possible to backup files from the exact same unit.

The “Bootloader selection” will be updated, so it matches the bootloader used in backup file.

Enable Restore File

If the checkbox is marked all the settings in the ML2 unit will be restored from the backup file. If the checkbox is not marked only the application configuration will be restored.

Use Restore Application File

If this checkbox is marked the “ML2 Backup Tool” will use the ASW when restoring the unit. If the box is not marked, the ASW will have to manually selected.

Restore

Push the “Restore” button, when the different selections have been made, to start the restore process.