VRM: Remote firmware update

1. Introduction

This manual describes how to remotely update firmware. This functionality requires the device to be updated connected to a Venus-device (CCGX, Venus GX, or other).

Features:

1. Remotely update internet-connected products straight from the VRM Portal
2. No need to install any software
3. Works from laptop, tablet & phone
4. No need to find the right firmware file: the system has all, and will clearly indicate that a newer version is available.
5. Works with VE.Direct products: MPPT Solar Chargers, BMV Battery Monitor, Phoenix Inverters, and more.
6. Works with VE.Can products: MPPT VE.Can Solar Chargers, Skylla-i, and more.

2. Details

2.1 Requirements

- Venus OS v2.17 or later
- System must be connected to the internet and communicating to the VRM Portal.
- The `Two way communication` setting, which is on the Venus-device, must be enabled.

2.2 Compatible products

Products ranges for which the firmware can be updated remotely:

Products connected via VE.Direct communication port:

- MPPT Solar Charge Controllers (1)
- BMV Battery Monitors
- Phoenix Inverters

Products connected via VE.Can communication port:

- MPPT Solar Charge Controllers
- Skylla-i battery chargers

2.3 How does it work?

1. The new firmware file is first uploaded to the system.
2. Once received and verified, the Venus-device starts updating the firmware of the connected

device. This eliminates any problems that could be caused by an intermittent internet connection. In case the internet does break while performing the update, the system will continue with the firmware update.

2.4 Where to find the firmware file?

It is not necessary to get a file yourself; the VRM Portal already has all the latest firmware files available. See Victron Professional for the change logs.

2.5 Notes on firmware updating in general

There is a lot that can be said about firmware updating:

- Newer is not always better
- Don't break it if it works

They can all be true. Therefore: use this feature with care.

Our main advice is to not update a running system, unless there are problems with it.

Change logs can be downloaded from Victron Professional.

2.6 Limitations

General

Remotely changing settings currently only works for VE.Bus products: Multis, Quattros, and high power Inverters. For all other products, MPPT Solar Charge Controllers, BMV Battery Monitors, Skylla-i battery chargers and more, it is not possible to remotely change their configuration.

MPPT Solar Chargers connected with VE.Direct

During the update of a VE.Direct connected MPPT Solar Charger, any configuration in the device will be maintained, but in the event that the update fails, which is unlikely, VE.Direct MPPT Charge Controllers will have lost their configuration. Also it is not possible to reconfigure them remotely. All other devices work with a different process and will not lose their settings during an update; even it fails.

BMVs

Updating firmware on a BMV that is connected via a canbus interface is not possible.

VE.Bus Products (Multis, Quattros, high power Inverters)

Remotely updating firmware in VE.Bus products (Inverters, Multis and Quattros) is not possible and will also not become possible.

Lynx BMS Series

Remotely updating firmware of these Lynx series of products is not possible:

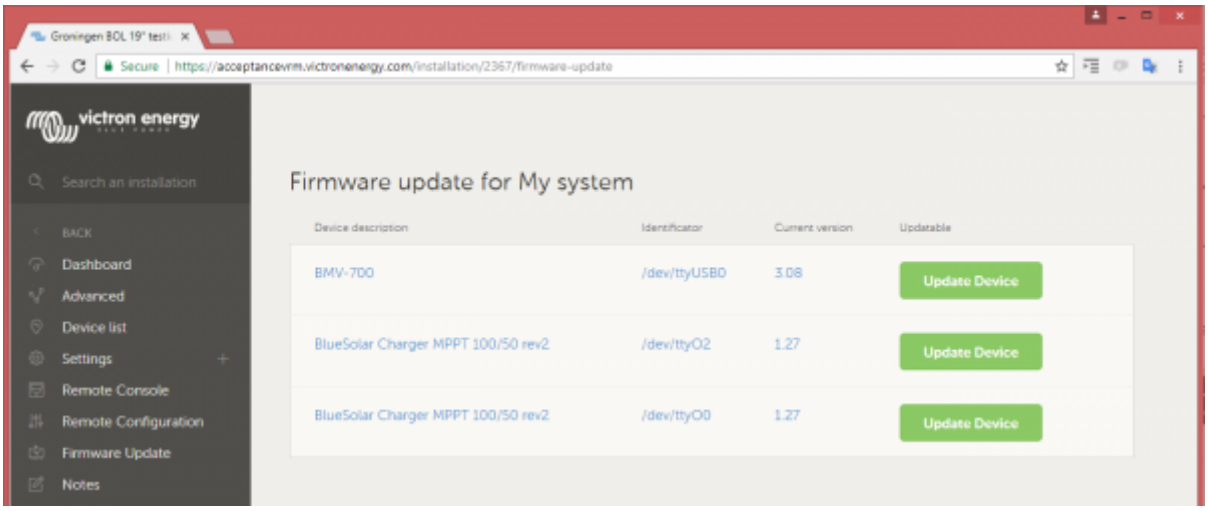
- Lynx Ion - product-id 0x0142
- Lynx Ion + Shunt 350 & 600A model: product-id 0xA130

Remote updating the Lynx Ion BMS 150A, 400A, 600A and 1000A model is possible. Notes:

- The firmware library does not have the files. Download the file from Victron Professional and use the option to self upload a file.
- Make sure that the Venus-device is powered on the `Aux-power output`. That is the only port that will remain powered during the firmware update process. All others (main contactor, and also Allow-to-charge and Allow-to-discharge signals) will disconnect; causing Multis and also loads to switch off. Once the update is completed, the Lynx BMS will restart and restore everything.

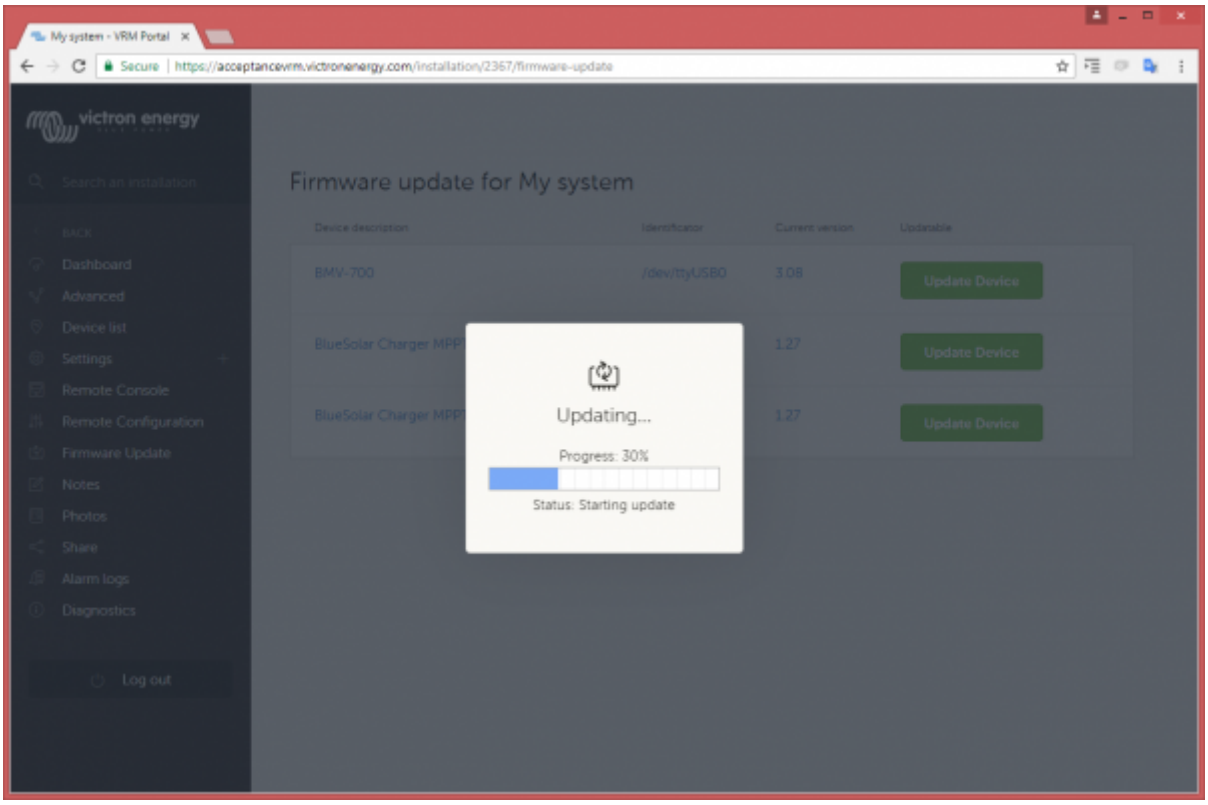
3. Step by step instructions

Step 1. Go to Firmware updates on the VRM Portal

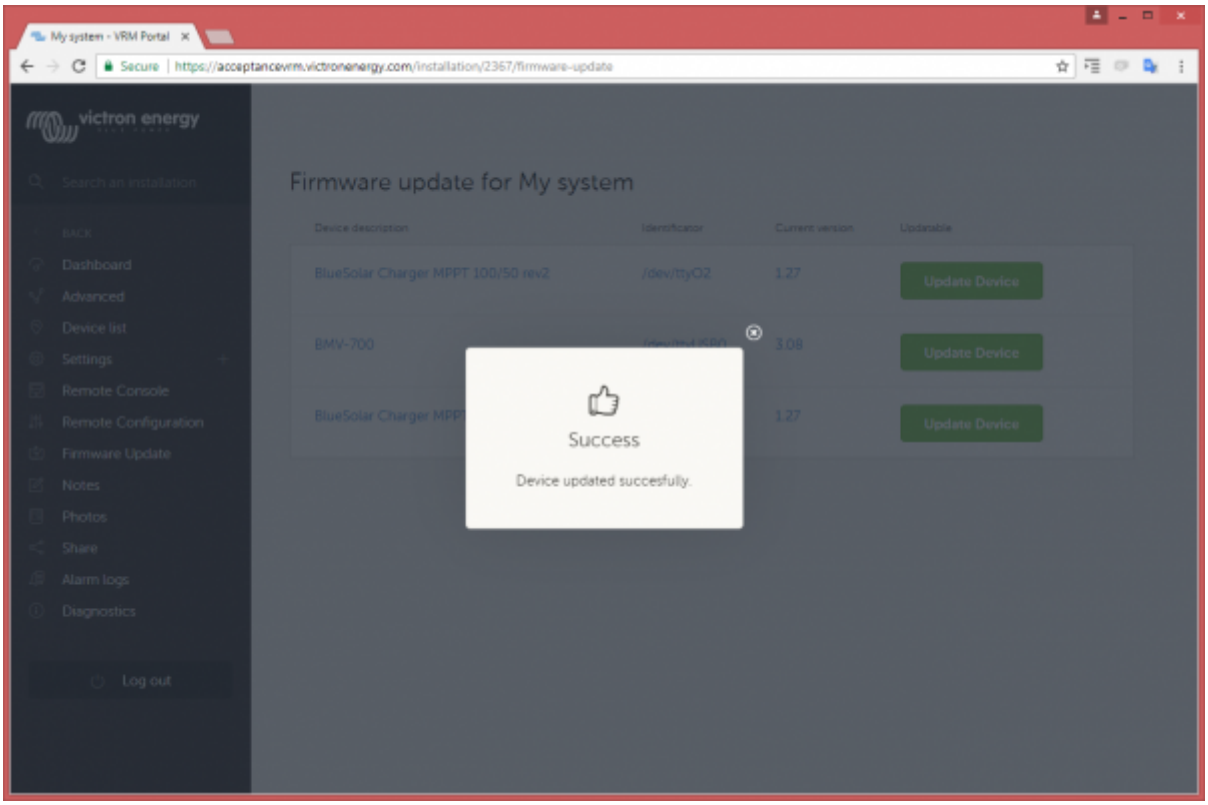


There, any device for which a new firmware version is available will show a green Update button. Press that button to initiate the update.

Step 2. Update process



Step 3. Finished



4. Trouble shooting

Error 1341 Not updatable

Typically shows when it is not a Victron product.

Error 1342 Not updatable

Updatable not true as returned by the device/vup/dup.

Error 1343 Not updatable: Blacklisted

See limitations chapter above. The product you are trying to update cannot be updated remotely.

From:
https://www.victronenergy.com/live/ - **Victron Energy**

Permanent link:
https://www.victronenergy.com/live/vrm_portal:remote-firmware-update?rev=1538057115

Last update: **2018-09-27 16:05**