Trouble shooting Remote Console on VRM

Looking for how to trouble shoot transmission of data logs to VRM? See chapter 5 in the GX Product manual.

Not using a CCGX but a Victron Global Remote or Victron Ethernet Remote? See this document instead.

The Remote Console on VRM feature allows full remote control of a CCGX, over the internet:

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After enabling the feature in the CCGX setting menu, setting or disabling the password, and then restarting the CCGX, a new Menu Option will show on the VRM website. Click it to open the Remote Console.





Steps to take when it does not work:

- 1. First make sure that basic communication with VRM works, see above steps.
- 2. After enabling the feature, make sure to set (or disable) the password.
- 3. Then restart the CCGX.
- 4. Make sure to update the CCGX to the latest firmware version: v2.11 or newer.
- 5. After the restart, check the Remote Console on VRM status shows online or a port number. In case it says offline, or port number 0, the CCGX was unable to connect to the Remote Console server. This is normally caused by a (company) firewall, blocking the connection. The solution is then to configure an exception rules in the firewall.
- 6. Verify that your local web browser can access the websocket port (8080 on vncrelay.victronenergy.com). If you click that link and get 'Error response, method not allowed', it means the connection between your PC and the VNC relay is working. If you get a timeout or another (browser) error, there may be a firewall blocking the connection.

Remote Console on VRM uses the same reverse SSH tunnel as is used for Remote Support: outbound connection to supporthost.victronenergy.com on port 22, 80 or 443. It is not necessary to set up port forwarding in routers to use Remote Console on VRM. It is necessary for the firewall/router to which the CCGX is connected, to allow outbound connections to supporthost.victronenergy.com on at least one of the three mentioned port numbers. Most routers will allow this by default.

IP Address verification

Remote Console on VRM checks the IP Address for security reasons.

In case all above does not help, it might be that your internet connection very frequently changes its IP-address. And/or that the internet provider routes the different data stream over different of its

routers.

Both of which will make the IP verification fail and therefor makes Remote Console fail. To solve this problem, contact your internet provider and/or change to a different internet provider.

Note that it is not necessary for the CCGX to be addressable itself, and/or have a public IP address. Worded differently: traversing NAT translation is no problem.

Further debugging VRM communication (advanced)

Debugging the connection (advanced)

Data is sent to the VRM Portal using HTTP POST requests to

http://ccgxlogging.victronenergy.com/log/log.php. In case all above checks have been done, internet connection is sure to work, and still 'Last contact' keeps showing dashes: try logging into the CCGX with ssh. And do:

wget --quiet -0- http://ccgxlogging.victronenergy.com/log/log.php

The output should be a line containing the text 'vrm: OK'. If it does not, or wget hangs, check your network. Apparently communication is blocked.

Using HTTPS instead of HTTP (advanced)

If your provider is blocking HTTP requests (e.g. the wget request above times out or fails), you can change the CCGX to log to the VRM portal via HTTPS:

root@ccgx:~# dbus -y com.victronenergy.settings /Settings/Vrmlogger/Url SetValue https://ccgxlogging.victronenergy.com/log/log.php

Verify that the setting has been changed:

```
root@ccgx:~# dbus -y com.victronenergy.settings /Settings/Vrmlogger/Url
GetValue
'https://ccgxlogging.victronenergy.com/log/log.php'
```

It is then recommended to reboot the CCGX to apply the changes. (Alternatively, you could manually restart the vrmlogging services, but it's easier just to restart)

After you reboot, you should see the buffer size decrease:

```
# before rebooting
root@ccgx:~# dbus -y com.victronenergy.logger /Buffer/Count GetValue
375
```

Last update: 2019-05-26 vrm_portal:troubleshooting_ccgx_vrm_connectivity https://www.victronenergy.com/live/vrm_portal:troubleshooting_ccgx_vrm_connectivity?rev=1558897814 21:10

```
# after rebooting
root@ccgx:~# dbus -y com.victronenergy.logger /Buffer/Count GetValue
362
```

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