SATELLAR REMOTE UPDATE

REMOTE UPDATE FOR SATELLAR

Remote update provides mechanism to update the firmware (FW) of modems that are behind one ore more radio links in the network. SATELLAR smart radio modem family has a built-in support for the remote update for both, SATELLAR Central Unit (CU) and Radio Unit (RU).

However, primary update mechanism should be the local update with a direct access to the modem.

1. STARTING POINT

Make sure you have:

- Radio connections established in the radio network

- IP level connections already configured from the PC to remote modem

- PC directly connected to the first SATELLAR, by using Ethernet cable or USB WLAN adapter or other already existent connection
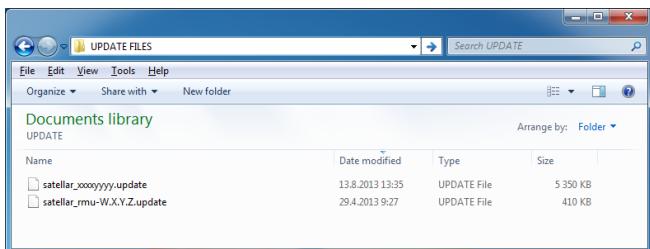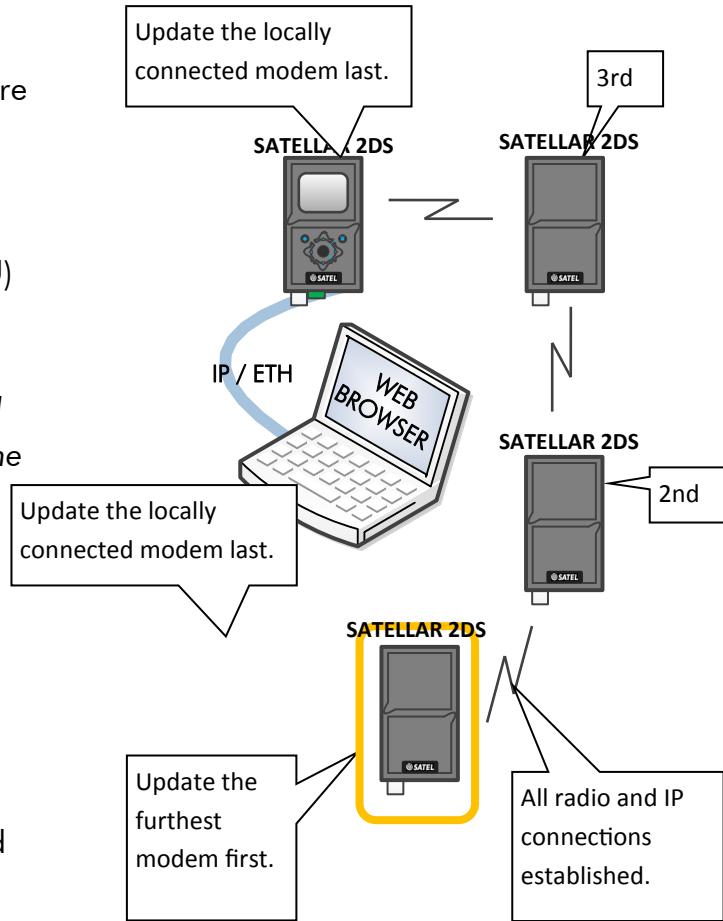
2. FILES NEEDED

- satellar_xxxxyyyy.update
  CU pdate file from version xxxx to yyyy

- satellar_rmu-W.X.Y.Z.update
  RU update file to install version W.X.Y.Z

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CU UPDATE

3. CONNECT

- Connect with the web browser to the last modem in the topology, which is not up-graded yet.

- Chrome browser recommended because it shows the file transfer progress.

- Enter the IP address of the remote mo-dem to the browser.

- Login: admin / Satel456
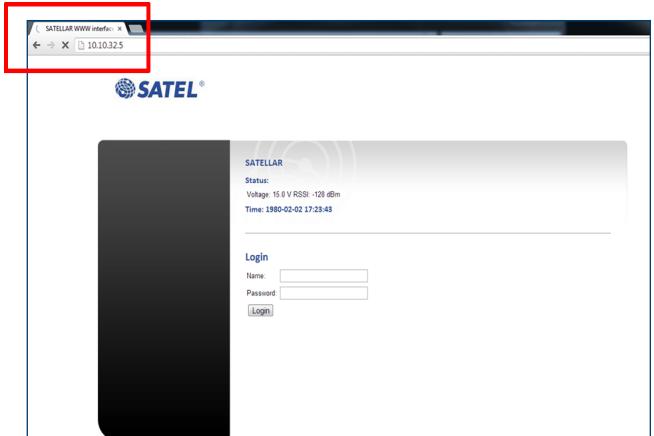
4. THE CU UPDATE STARTED

Now you are connected to the remote modem with the web browser. Select the remote modem Firmware Updater functionality: The Firmware Updater tab is used to transfer the update file from the PC to the remote modem.

Select **Firmware Updater**

Select to proceed to choosing the file to send.

CU update file selected
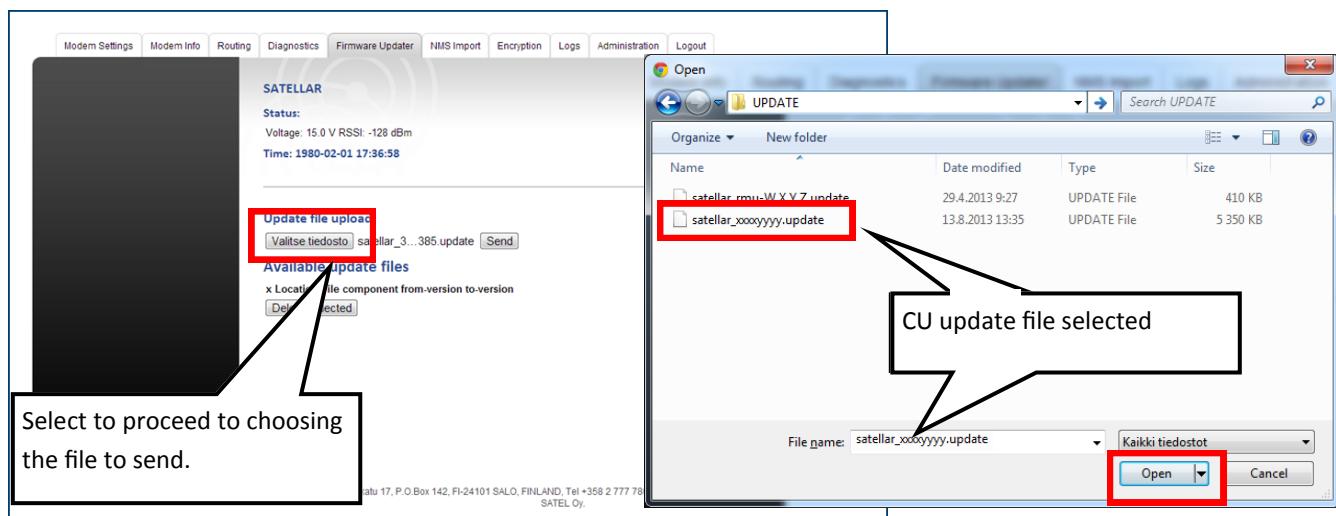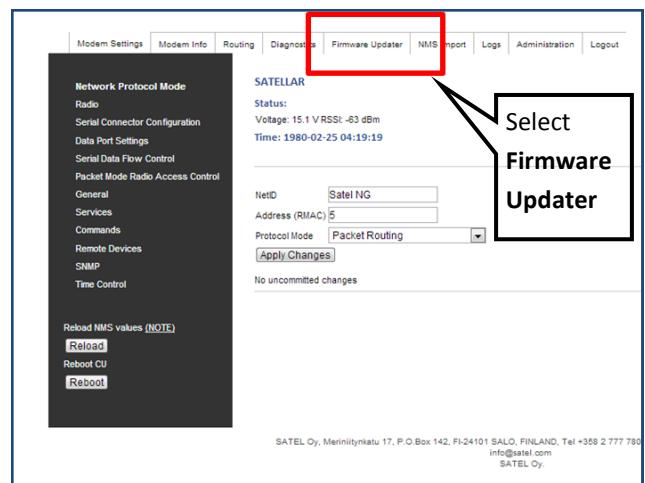
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CU UPDATE

SMART RADIO

5. TRANSFER FILES

The next step copies the file to the remote modem. If the update is done over radio interface, the next step may take more than 1 hour per radio hop. For example chain of 4 modems:

- 4th modem (3 hops): 3 hours
- 3rd modem (2 hops): 2 hours
- 2nd modem (1 hop):1 hour
- 1st modem (no radio hops): 5 min

Select **Send** to start uploading the firmware file

Uploading process can be monitored in some browsers
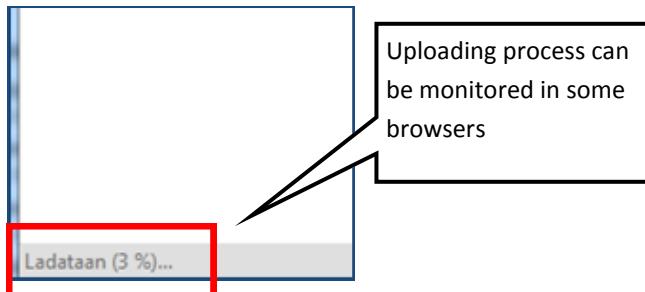
In case of transmission problems or timeouts or browser reporting error, repeat the sending step.
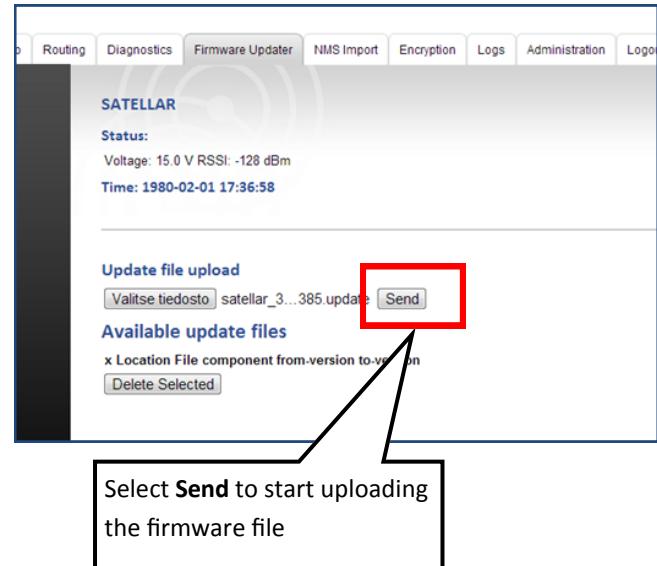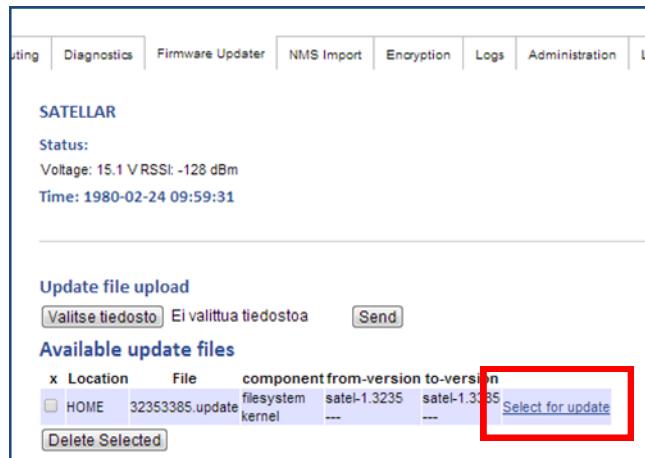
6. INSTALL UPLOADED FIRMWARE

When sending is successfully finished you will see CU firmware listed on the Firmware Updater page. The actual installation is started by opening the link **Select for update.** In the next screen device 0 must be selected and the update installation is started by selecting **Start transfer** as illustrated in the following pictures.

Select *only* device **0!** (local device, the one the web browser is currently connected to)

Select **Start transfer** to actually begin the update file installation.

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SMART RADIO

7. MONITOR UPDATE PROCESS

During the actual update installation, you can monitor the process by viewing the number of blocks sent.

> **SATELLAR**
>
> Status:
>
> Voltage: 15.1 V RSSI: -127 dBm
>
> Time: 1980-02-24 10:01:21
>
> ---
>
> 0
> 23 of 42 blocks sent
> Cancel transfer   Refresh

8. INSTALLATION READY

When you see the text *Transfer Completed,* the updating is finished. Select **Reboot** to finalize the update by rebooting the CU.

> 0
> Updated local device, needs to be reboot to proceed with update.
>
> **Transfer completed.**
>
> Clear the list
>
> To proceed with update, CU Needs to be rebooted now.
>
> Update process takes about 5-10 minutes.
>
> Reboot
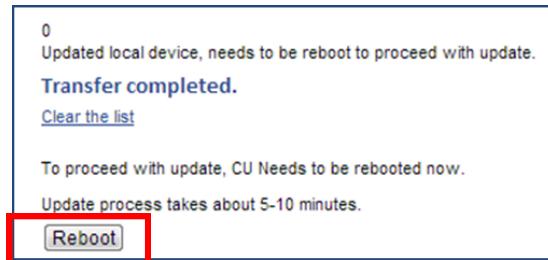
9. WAIT FOR THE FINALIZATIONS

When the text below is displayed, the device is rebooting. Do not press browser "refresh" button or F5 key, or the modem will reboot again. Wait until the STAT-led of the modem starts blinking and then stops, or at least 10 minutes, before proceeding.

> **Device is rebooting and doing the update. This takes several minutes. Page reloads after 20 minutes. Reload of page can be tried sooner if noticed that device up (e.g. stat-led is not blinking anymore or GUI is on). IMPORTANT! Device must be on at least 10 minutes after the boot up process is complete (stat-led is not blinking anymore or GUI is on). This is a safety margin to make sure all application are working properly after update. In case the device is rebooted sooner (e.g. power switched off and on), it will do revert to previous version.**

10. CU UPDATE DONE

Now the CU update is done, and you can login back to the web browser by entering the IP address of the remote SATELLAR again. The credentials are *admin / Satel456.*
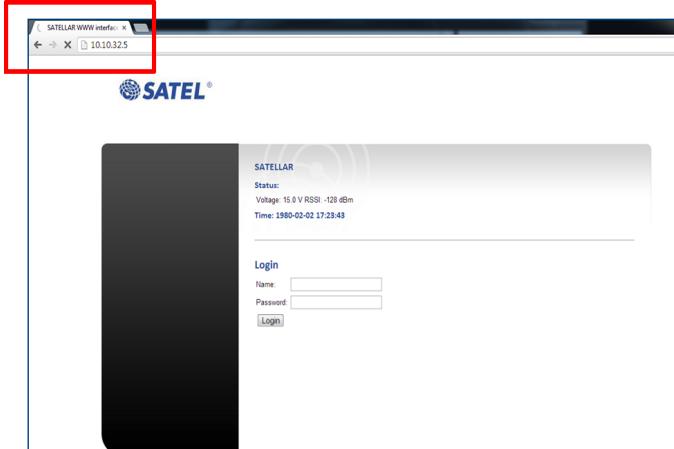
11. THE RU UPDATE STARTED

The procedure for the RU update is similar to the CU update: The Firmware Updater tab is used to transfer the update file from the PC to the remote modem. Then the update is started at the remote modem over the web browser connection.

Select **Firmware Updater**

RU update file selected

Select to proceed to choosing the file to send.
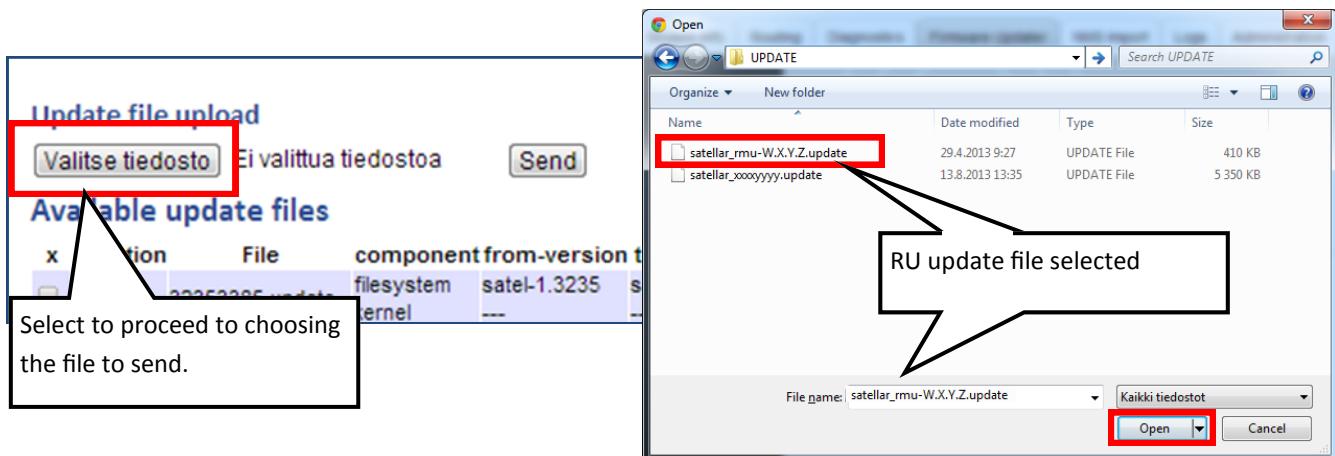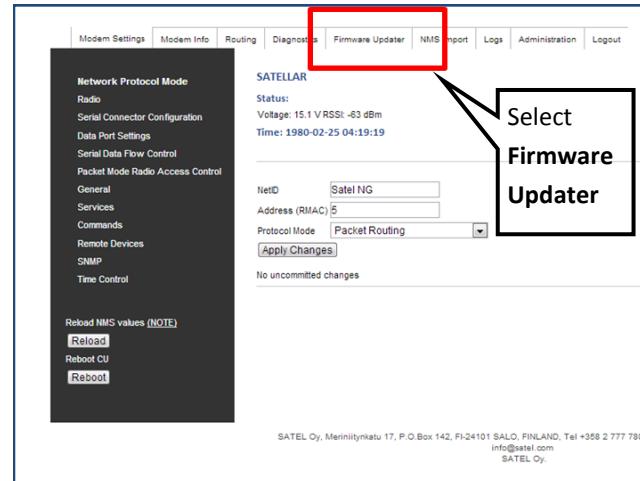
12. SEND THE FILE

The firmware file is sent from your PC to the remote modem when the **Send** button is selected.

5
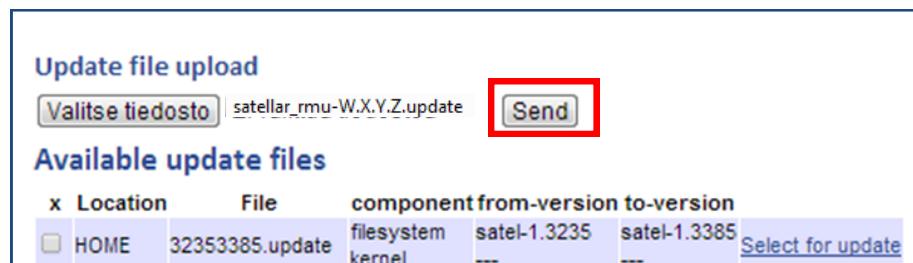
13. INSTALL UPLOADED FIRMWARE

When sending is successfully finished you will see CU and RU firmware listed on the Firmware Updater page. The actual installation is started by opening the link **Select for update.** In the next screen device 0 must be selected and the update installation is started by selecting **Start transfer** as illustrated in the following pictures.

Select *only* device **0!** (local device, the one the web browser is currently connected to)

Select **Start transfer** to actually begin the update file installation.
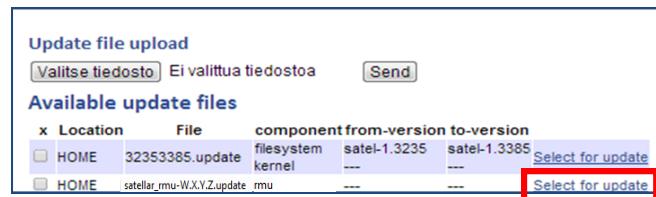
14. RADIO CONNECTION LOST

If the new RU firmware is not compatible with the previous version, the radio connection will be lost at this point. Radio connections will be established again, when all modems in the network are updated.
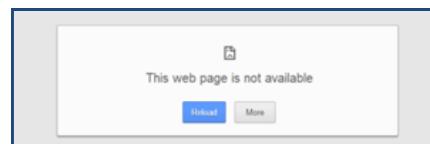
15. CONTINUE THE UPDATE PROCESS

Now that the current modem is updated, the process continues by updating the next modem in the topology. The next update is carried out with the same procedure as before, by following the steps starting from the step 3 at page 2.

Update the second furthest modem next.