

KB Name	eWON ADSL Modem Upgrade		
Type	How To		
Since revision	5.6S2		
KB Number	KB-0033-0	Build	4
Mod date	7. Oct 2009		

eWON ADSL Modem Upgrade

1 Introduction

In some cases, a critical bug in the ADSL installed inside the eWON requires us to provide an upgrade to the ADSL firmware.

Previously this operation was performed at the eWON factory, but this required the eWON to be send back to the factory and involves a lot of efforts.

It has been decided to provide an upgrade mechanism for the rare case were the ADSL has to be upgraded.

This operation must remain exceptional, as every flash upgrade process is a risky operation.

1.1 Risk taken during operation

The ADSL firmware is provided by eWON sa.

If an invalid file is renamed with the eWON's expected ADSL firmware name, the result is unknown and the device may need to be returned for repair, or lost..

The main risk appears during the firmware download operation between the eWON and the ADSL. If this operation is canceled, due to an internal communication error or a power lost during the upgrade process for example, then the ADSL modem may remain "dead" in the eWON. In that case only a factory repair could solve the situation.

A remote reset request could also be sent to the eWON during the upgrade through FTP (remote.bas) or through web interface, this would also result in the same situation.

1.2 Remote execution

As you can see from the upgrade process described hereunder, the ADSL firmware is stored in the /usr partition before the upgrade takes place. The upgrade process takes place when the eWON reboots. So the operation can actually take place remotely without any problem. The only condition is to avoid any power lost or reset request during the upgrade process, so after rebooting the eWON.

1.3 eWON Firmware version

To be able to follow this guide your eWON needs a firmware version 5.6s2 or higher. A simple way to realize the eWON firmware upgrade is to use eBuddy, the eWON software companion.

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2 The Upgrade process

2.1 Summary

- Obtain the **XXXXXXXX.ewon_adsl_fwr** file for your upgrade process from eWON sa
- Transfer the **XXXXXXXX.ewon_adsl_fwr** file in the eWON **/usr** directory (using an FTP client)
- Reboot the eWON using the special Operation option "ADSL Modem upgrade"
- Wait until the upgrade process starts looking for specific **led blinking sequence**.
- Done!
- Remove the **XXXXXXXX.ewon_adsl_fwr** file from the eWON **/usr** directory (using an FTP client)

2.2 Obtain the ADSL firmware

In order to provide a correct firmware for your ADSL, we need to know a few information about your eWON. This information is available from the

Main Menu → Diagnostic → Status → Info

<u>Serial number</u>	0829-0001-54
<u>Firmware version</u>	327686
<u>Code name</u>	EW_5_6s1
<u>Firmware download date</u>	12/02/2009 13:53:44
<u>CPU ID</u>	00000000
<u>System Enabled</u>	1
<u>Hardware Revision</u>	000000D0
<u>Hard Extended Revision</u>	00000010
<u>Hardware options</u>	87
<u>Modem type</u>	3
<u>MAC address</u>	00:03:27:40:4c:a5
<u>MAC address WAN</u>	00:03:27:00:4c:a5
<u>Modem extended information</u>	
<u>Features</u>	EF0000
<u>Boot loader revision</u>	00030007
<u>ADSL Version info</u>	SW Ver:VUL-2.5.060823p, FW Ver:E37.5.49
<u>ADSL Serial number</u>	456789abcdx

The following data are required:

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Serial number
Code name
ADSL Version info

Send these information to eWON support. (support@ewon.biz).

eWONsa will then send you a file called:

XXXXXXXX.ewon_adsl_fwr

2.3 Check eWON for correct firmware

The upgrade mechanism described in this document is only available since version 5.6s2 of the eWON firmware. So check if your eWON has the correct version, if not upgrade it using eBuddy for example.

2.4 Transfer the ADSL firmware in the eWON /usr

Use any FTP client to perform the operation. The operation will NOT start the upgrade process (not like ewonfwr.edf or bootldr.bin). The firmware will just be stored and an additional action must be done to trigger the actual upgrade.

NOTE  The firmware file may be quite big (about 2MB), make sure the /usr partition has enough place to store the firmware. Otherwise the FTP transfer will fail.

2.5 Check if the ADSL Modem is activated

If you carry out the modem ADSL upgrade operation from remote using the eWON ADSL connection, then you don't need to check because for sure the ADSL modem is already activated.

But if you are not connected to the eWON using the ADSL connection then you have to be aware of following

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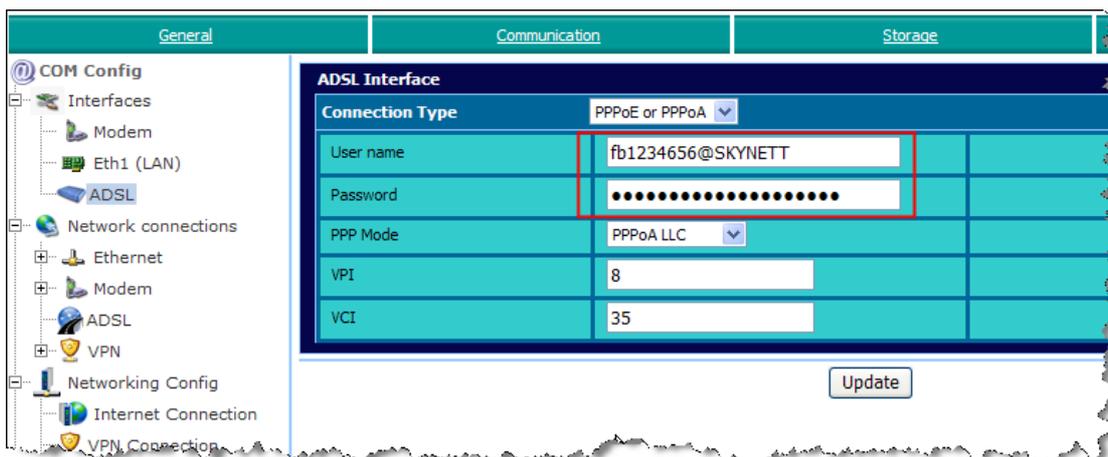


The ADSL Modem is disabled and **POWERED OFF** if the username or the password is empty or the Connection timeout is 0.

If one of these conditions is met, the upgrade will **NOT** occur. Yet the username and password won't be used, so they can be set to anything.

So if not already done, enter a Username and a password in the ADSL Interface configuration window.

Configuration → System Setup → Communication → Interfaces → ADSL



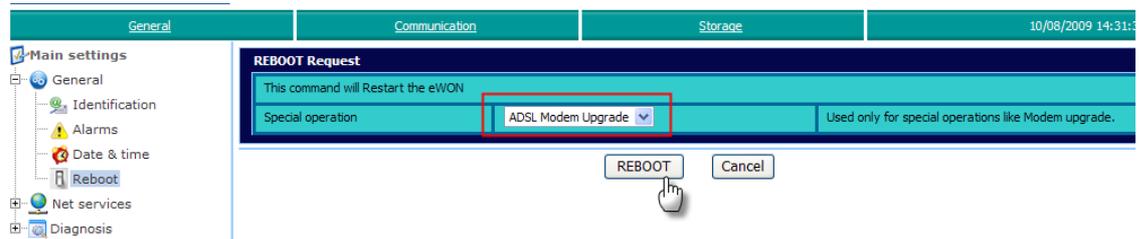
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2.6 Reboot the eWON with special Operation

The modem firmware upgrade process will only take place at boot time, so you will need to reboot your eWON.

Configuration → System Setup → General → General → Reboot



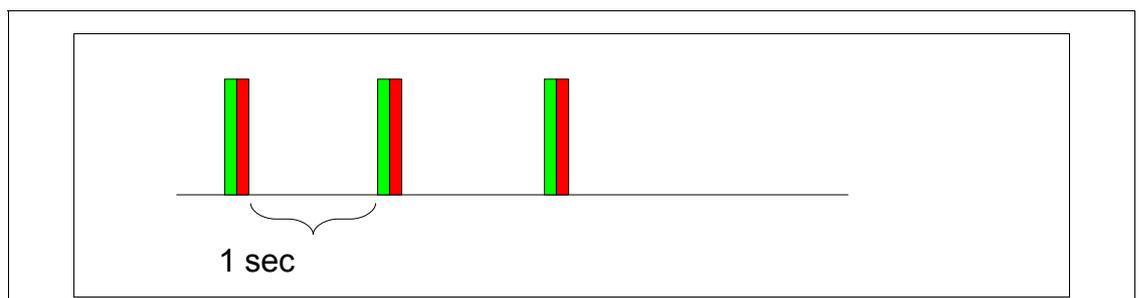
Select "**ADSL Modem Upgrade**" in the Special Operation box.

Then click on the "Reboot" button.

The eWON will first boot normally. Then eWON will check for special operation and the modem upgrade will start.

The first upgrade operation is to reset the Special Operation to "None" and save the config. So that in case of error, the upgrade must be manually restarted and eWON does not enter a crazy loop.

When the modem upgrade actually starts, following scheme gets displayed on the eWON user led:



At the end of the upgrade process, the eWON will automatically reboot and recover normal operation.

IMPORTANT



Do not remove power or reset the eWON during the ADSL upgrade process or the ADSL could become unusable.

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2.7 Final check

When upgrade is done, you can control the Event Log.

Main Menu → Diagnostic → Event Log

Select "Trace" for the Reporting Level, and click on the Update button.

You should see the upgrade process start and end traces in the events file.

12/02/2009 14:08:28	1073775753	adsl-ADSL modem upgrade finished
12/02/2009 14:07:27	1073775752	adsl-Starting ADSL modem upgrade
12/02/2009 14:07:17	1073769085	emodem-Modem powered off
12/02/2009 14:06:56	1073775744	adsl-Open ADSL Connection
12/02/2009 14:06:56	1073772933	wanmgt-Restarting permanent WAN connection
12/02/2009 14:06:54	1073762140	Reboot reason: Unknown (power loss,...)
12/02/2009 14:06:54	-22602	System Booting, FWR: EW_5_6s1 (5.6), SN: 0829-0001-54 [EF0000]

You can also check the "Info" for the new ADSL version.

Main Menu → Diagnostic → Status → Info

Here you should find displayed the new modem firmware version.

2.8 Remove the modem firmware file

eWON does not remove the modem firmware file.

So you will need to remove manually the file in the /usr directory.

Use any FTP client to perform the operation.