

Vodafone



MachineLink 3G Plus

Firmware release notes

Vodafone

Power to you

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1.4 – MR2.1 RC5	31/08/2015
1.5 – MR3 RC1	20/02/2017
1.6 – MR3	27/03/2017
1.7 – Updated for v2.0.57.5	24/05/2017
1.8 – Updated for v2.0.57.6	28/06/2017

Release information

Item	Details
Product Code	NWL-12-02
Hardware Version	Hardware v1.0
Router Firmware Version	2.0.57.6
Module Firmware Version	Revision 03.320
Beta/Official	Official
Main system firmware file name	vdn_nwl12_2.0.57.6_m.cdi (45 MB) MD5: 0fe5ca28b8465b61a8750004ea68eb50
Recovery system firmware file name	vdn_nwl12_2.0.57.6_r.cdi (12 MB) MD5: e7d13194d3c2b6252bef53a64fa56149
uboot system file name	uboot.sb (293 KB) MD5: 73b40024d9b30c0936faf9e8ffe29b29
Module image file	phs8-p_r03.320_a01.000.06.usf (9.97 MB) MD5: 905f5aa17ba72d8b7da3a042242ba830
Date	28 th June 2017

Upgrade / Downgrade instructions

Please refer to the accompanying “**Vodafone MachineLink 3G Plus Firmware Upgrade Guide**” file for details.

Changes / New features

V2.0.57.6

- **Cosmetic**
 - Various cosmetic fixes.
 - Updated user guide.
- **Functional:**
 - Resolved an issue where some SNMP parameters were not being saved in non-volatile memory and would lose its settings after the device was rebooted.
 - Improved the security of the device.
 - Added validation check on the destination address field for the port forwarding feature so that misconfiguration is not possible.
 - When attempting to install a uboot image via SMS, an error message was incorrectly sent even though the installation completed successfully.
 - Due to a change in the OpenSSH package, SSH key authentication with SSH-2 DSA keys was disabled by default. Added options to allow them to work.
 - Fixed an issue where I/O configuration for Pin1 would not be saved to non-volatile memory and would lose its settings after the device is rebooted.
 - Fixed an issue where the '@' character was being appended to GSM 7-bit sent messages that are 161 characters long.

V2.0.57.5

- **Cosmetic**
 - None.
- **Functional:**
 - Updated PLMN lists (17.05.12.20404 and 17.05.12.90128)
 - Moved User Guide from /usr/local to /opt/cdcs.

V2.0.57.4 (MR3)

- **Cosmetic**
 - Various cosmetic fixes.
- **Functional:**
 - Improved browser support.
 - Improved password strength algorithm.
 - Improved manual band selection feature.
 - Improved storage management on the router.
 - Updated Time zone list.
 - Improved the reliability of the Event configuration feature when used with I/O events.

V2.0.57.1 (MR3 RC1)

- **Cosmetic**
 - Miscellaneous cosmetic fixes
- **Functional:**
 - Added a Network quality page providing ability to conduct a test of network speed.
 - Added WAN failover.
 - Added a feature to disable the physical reset button and USB port.
 - Added Geofence.

- Added new notification events for USB OTG connection state, enter/exit geofence zone, VRRP notification, reset button disabled/enabled event and I/O event notification/state change.
- Added Simple Certificate Enrolment Protocol (SCEP).
- Administrator account renamed to User account.
- SDK now includes a pre-built VirtualBox image.
- Improved SDK to allow for better debugging.
- SDK documentation improvement.
- Added VRRP WAN watchdog feature to allow monitoring via ping.
- Added Open Source Software Disclaimer.
- **Security:**
 - New password algorithm requires that the root manager account, IPSec VPN Pre-shared key and SMS white list passwords must now meet certain requirements to ensure a strong password is configured.
 - Only root user may edit account passwords and view them in clear text.
 - Network services such as SAMBA and Quagga are disabled by default. Warnings are displayed when enabling non-encrypted services (e.g. HTTP, Samba, Quagga).
 - Strengthened HTTP methods and transport security: HTTPS is now the default protocol used to access the web interface and HTTP is disabled by default.
 - Added options to set HTTPS/HTTP on web interface via LAN.
 - Added support for SNMP v3.
 - Added option to disable SSH and Telnet on LAN interface.
 - Hardened security for web interface logins by adding ability to configure web interface session timeout value, lockout period and number of failed attempts for unsuccessful web interface logins.
 - Various security fixes to prevent unauthorized access and Denial of Service (DoS) attacks.
 - SMS commands now require a password which enhances security.

V2.0.18.22 (RC5)

- Fixed manual band selection issue where the unit ignores *GSM_all* band selection and reverts to 3G band.
- Fixed a PDP validation bug where the PDP activation procedure initiates two consecutive 0-byte data sessions under certain network conditions.
- Fixed a memory bug where if a memory page is not erased properly, UBIFS enters read only mode.
- Fixed a USB OTG bug where the unit does not enumerate.
- Added missing Java library [libgcc_s.so] into software code.
- Applied a new network registration monitoring procedure, where the unit triggers full network scan if lost IMSI registration.

V2.0.18.9 (RC4)

- Updated PLMN lists (PLMN Ver. 14.11.09.20404 RC3.csv and PLMN Ver. 14.11.09.90128 RC3.csv).
- SMS diagnostics 'Access advanced RDB variables' & 'Allow execution of advanced commands' options now enabled by default.
- Fixed: Profile #17 PDP connection / zero-byte session issue.
- Updated User Guide.

V2.0.18.7 (RC3)

- Uboot updated to support 128MB RAM.
- Fixed: Connection drop issue. [QC defect #294/305]
- Embedded User Guide in firmware. [QC defect #301]
- Changed wording of event notification email. [QC defect #312]

- Miscellaneous cosmetic fixes.

V2.0.18.5 (RC2)

- Fixed: Rendering issue with Vodafone speech mark graphic. [QC defect #295]
- The "Clear" Event notification log button now also resets Event count on Status page. [QC defect #297]
- Added static device type information on Status page. [QC defect #298]
- Added MSB (A-GPS) page to web UI. [QC defect #299]
- Added test email button on Email server settings page. [QC defect #302]
- Condensed whitespace used in System Information section on Status page. [QC defect #303]
- Default RSSI threshold value changed to -105dBm. UI option tweaked as per Vodafone's specification. [QC defect #305]
- Updated User Guide image on Help page.
- Fixed: OpenVPN client mode authentication types aren't aligned correctly in web UI.
- Removed redundant firmware downgrade validation/warning message.
- Added workaround for PDP stability issue (pending Gemalto/Qualcomm resolution).
- Miscellaneous cosmetic fixes in web UI.

V2.0.18.3 (RC1)

- Updated PLMN lists for RC1 (PLMN Ver. 14.09.15.20404 RC1.csv and PLMN Ver. 14.09.15.90128 RC1.csv)
- Added Event Notification/Alarm via email, TCP and UDP.
- Redesigned Event Notification user interface.
- Added clear button to Event notification log. [QC defect #284]
- Fixed rendering of Status menu button upon click. [QC defect #283]

V2.0.18.1 (Beta)

- Added PLMN Versioning and ability to view the 'active' PLMN list version (ID#06).
- Added Network Acquire Threshold Control (ID#14).
- Implemented Best Network Mode selection (ID#16).
- Roaming algorithm improvements - added ability to monitor RSSI and restart roaming algorithm, when RSSI is below set threshold (ID#23).
- Web-GUI adaptation to new Vodafone brand style (ID#32).
- Changed IMSI check of GDSP roaming algorithm for 20404 range to 5 digits, from formerly 8 digits (#ID33).
- Implemented SMS Event Notification/Alarm
- Added SSH key management.
- The minus "-" sign can now be used when configuring RSSI threshold values via SMS command.
- MAC/IP/Port filtering subnet mask prefix for Source/Destination IP addresses has been modified to accept the value '0'.
- Added domain name support for IPSec, GRE and OpenVPN client.
- Added "Device Info" section on Web UI for ease of configuration of TR-069 on ACS server.
- SMS Inbox/Outbox: Added ability to select/delete part/all of stored SMSs per page.
- Re-named SMS 'Outbox' into 'Sent items' for compatibility with the standard of similar services, i.e. e-mail applications, mobile handsets, etc.
- SMS Diagnostics: Added extra two more options to allow the user a broader range of controlling the unit remotely via SMS:
 - Access advanced RDB variables: to provide an unrestricted access to all RDB variables involved into the router's data base.
 - Allow execution of advanced commands: to provide the user with an advanced level of controlling the unit through the execution of advanced level Linux-based commands via SMS functionality.
- Added support for SNMP remote management functionality to restore the unit back to its factory defaults, similar to other functions such as TR-069 and SMS.

- Fixed "Save" button in DHCP configuration section in web UI.
- Fixed HTML page authentication problem.
- Fixed Ethernet link speed (10/100Mbps) negotiation problem.
- Changed uboot sequence to reduce component stress during device boot.
- Upgraded jQuery version 1.6.4 to v1.9.1

- **Cosmetic -**
 - Changed product name in the title bar to "Vodafone MachineLink 3G Plus"
 - Relocated Vodafone 'Roaming settings' page to be between 'Operator settings' & 'SIM security settings' under Wireless WAN section
 - Relocated data 'Roaming settings' option section from 'Data connection' page to bottom of options on 'Operator settings' page
 - Moved 'Connect on demand' page to bottom of 'Wireless WAN' list underneath 'SIM security settings'
 - Updated radios buttons, toggle switches and other graphical assets in Web UI.
 - Removed clock icon from 'Status' page.
 - Increased the frequency of the time used in 'System up time' section on 'Status' page to update every second.
 - Repositioned the 'Show data usage' button to the bottom centre of the 'Packet connection status' container.
 - Changed the data usage button wording to 'v Show data usage' and '^ Hide data usage'.
 - User guide image now an active element that will initiate downloading of the user guide upon selection.
 - Miscellaneous cosmetic fixed in Web UI.

- Implemented beta PLMN lists (PLMN Ver. 14.08.18.20404 BETA.csv and PLMN Ver. 14.09.02.90128 BETA.csv).
- Added new TR-069 parameter to control RSSI threshold value via ACS
- Uploading "Vendor Log File" via TR-069 fixed.
- MAC/IP/Port filtering: iptables now correctly sets incoming traffic from a range of ports.
- Fixed intermittent UBIFS crash.
- Added 'Log capture level' for non-volatile memory log

Known Issues/ Features under modification

V2.0.57.4

- None.

V2.0.57.1

- None.

V2.0.18.22

- None.

V2.0.18.9

- None.