Proxicast

LAN-Cell 3

Firmware Release Notes

Release 5.3.5

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Proxicast LAN-Cell 3
Firmware Release Notes

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Version:

ProxiOS Version: 5.3.5

Supported Hardware Platforms:

Proxicast LAN-Cell 3 (LC3-52U)

Supported USB Modems:

Modems are listed by their original equipment manufacturer and model name. Model names used by cellular operators may be different. Refer to the label on the modem or the documentation to determine if your modem is a rebranded version of a supported device.

Many USB modems from the same manufacturer have similar interfaces – unlisted modems may also function in the LAN-Cell 3 but have not yet been verified.

3GO	U31	E169
3GO11	C-Motech	E1692
Alcatel	CDU-680	E169G
OT-X020	CGU-628	E176G
X220L	CNU-680	E169U
A-Link	D-Link	E170
3GU	DWM-156	E172
AMOI	DWM-157	E1750
H01/H01A	DWR-510	E1762
H02	Dupont / Toshiba	E176G
U2000	BC2703	E177
AnyData	G450	E180
ADU-500A	EpiValley	E182E
ADU-510A	SEC-8089	E219
ADU-520A	Franklin Wireless	E220
AT&T Wireless	U770 (Sprint) [1]	E226
Beam	Huawei	E270
Lightning	B970	E3131
Momentum	E122	E353
Shockwave	E1550	E367
Bandrich	E156	E368
BandLuxe C120	E156G	E397
BandLuxe C170	E160	E398
BandLuxe C270	E160E	E600
BandLuxe M300LC	E160G	E612
BenQ	E161	E620

E660A	ICON 225	MD300
E800	ICON 401	MD400
E960	ICON 7.2	**Sprint**
EC1260	GlobeSurfer HSUPA	341U [1]
EC156	GT Max 3.6	595U
EC168C	Vodafone EasyBox	598U
EC169	Vodafone K3760	760U
ET168	**Pantech**	770U
K1550	UM175	**Toshiba**
K3715	UML290	G450
K3765	UML295 [1]	**Verizon Wireless**
K4505	**Pro-Link**	JetPack 4620LE [1]
K4511	PHS100	JetPack 5510L [2]
T1731	**Qisda**	UM170
UMG366	H21	UML290
Hummer	**Quanta**	UML295 [1]
DTM5731	MDO 588	USB551L
iSonic	Q101	USB760
EDGE CARD	Q110	**Vibo**
LG	Q111	D200
LDU-1900D	Q120	**WinBest**
Maxon	**Samsung**	HSDC-02
BP3	i9000	**ZTE**
BP3-EXT	GT-S8500	K3565-Z
Neotel	SGH-Z810	MC2716
NeoGo	**Sierra Wireless**	MDC503UP
Netgear	AirCard 312U	MDC505UP
AirCard 340U [1]	AirCard 313U	MDC525UP
AirCard 341U [1]	AirCard 330U	MF620
Nokia	AirCard 340U [1]	MF622/MF622 v2
CS-11	AirCard 341U [1]	MF626
CS-12	AirCard 595U	MF628
CS-15	AirCard 598U	MF628+
Novatel Wireless	AirCard 875U	MF631
4620L MiFi [1]	AirCard 880U	MF633
5510L MiFi [2]	AirCard 881U	MF636
MC760	Compass 885	MF636+
MC930D	Compass 888	MF637
MC950D	Compass 889	MF638
MC990D	USB 305	MF668
U679	USB 306	MF668A
U727	USB 308	MF820
U760	**Simcom**	MH600HS
U998	5250	MU351
USB551L	**Solomon**	
Option	S3Gm-660	
ICON 210	**Sony Ericsson**	

[1] Modem requires configuration prior to use in the LAN-Cell 3. See http://support.proxicast.com for more info.
[2] Modem does not support inbound initiated (remote access) connections.

Change History:

V5.3.5

- Added support for Huawei UMG366 (T-Mobile Jet 2.0) modem.
- Fixed issue with Wi-Fi client count on status display panel.
- Fixed issue preventing some Wi-Fi clients from being included in the DHCP table.

V5.3.4

- Added support for the AT&T Beam (Netgear AirCard 340U) modem. See the "AC340U Issues" statement below.
- Added support for the Huawei E3131 modem (non-HiLink mode).
- Added support for the Huawei E397 & E398 modems.

V5.3.3

- Added support for the Sprint/Netgear AirCard 341U (CDMA/LTE) modem. See the "AC341U Issues" statement below.
- Fixed issue causing remote user VPN connections to time-out after 5 minutes.

V5.3.2

- Added support for the Verizon Wireless/Pantech UML295 modem. See the "UML295 Issues" statement below.

V5.3.0

- Added option for IPSec net-to-net VPN tunnels to disable "split-tunneling" (i.e. force all non-local traffic to go through the VPN tunnel rather than directly to its destination).
- Increased length of IPSec Phase 1 ID fields to 128 characters.
- Added support for static IP when WAN is in Wi-Fi Client mode.
- Added ability for Wi-Fi Client Mode to automatically re-associate with a different AP on a different channel having the same target SSID value (WDS roaming).
- Added logging when Wi-Fi devices fail to associate with the LAN-Cell 3's AP.
- Added logging when WAN Wi-Fi Client mode fails to associate with the target SSID.
- Fixed issue generating erroneous log entries when IPSec VPN is configured for Remote User mode.
- Fixed issue with not correctly redirecting DNS queries to OpenDNS servers when client devices have static DNS server settings.
- Fixed issue causing DHCP Lease Time to display incorrect value when DHCP leases are issued prior to an NTP update.
- Fixed issue affecting the Novatel USB551L modem that caused the modem to be incorrectly initialized under certain conditions.
- Improved reconnection technique for the Pantech UML290 modem.

V5.2.0

- Added support for Virgin Mobile MC760 modem (variant of Novatel U760).
- Added support for tethered operation of the Novatel 4620L MiFi JetPack.
- Increased frequency of signal strength display updates when USB modem does not have an active data connection.
- Allow $ ( ) characters in password.
- Increased maximum length of DDNS hostnames to 128 characters.
- Increased maximum IPSec SA lifetime to 86400 seconds.
- Moved scheduled system restart timer function from Setup>Time to Admin>Management screen.
- Changed default system time zone to pure UTC (was GMT).
- Fixed issue causing static routing / IPSec conflict.
- Fixed issue with SNMP MIB causing some values to be returned incorrectly.
- Fixed PPTP client issue causing PPTP client to drop unexpectedly.
- Force IPSec to lookup remote gateway in DNS before every connection attempt when remote gateway specified as FQDN host.
- Corrected issue causing incorrect number of VPN connections to be displayed on status panel.
- Enable Wi-Fi client to connect to access points which have spaces in their SSID
- Fixed issue with outbound ACL that affected packet denials.
- Force number of ports specified in Port Forwarding rules to match between external and internal interfaces.

V5.1.15

- Added support for the Bell Canada variant of the Sierra Wireless AirCard U330 modem.
- Increased aggressiveness of USB connection watchdog to include full system restart after repeated lockup detection.
- Improved initial display of modem signal strength on boot-up.
- Fixed DNS Server issue with DHCP-enabled Wi-Fi Guest LAN clients.
- Fixed DHCP Server issue limiting number of assignable addresses.
- Exempt LAN-Cell management port from DMZ when changed from 8080.
- Persist interface status changes made via Status Panel buttons across system restarts.
- Prevent backup routes from taking precedence over user-defined static routes.
- Increased maximum size of log entries.
- Enable newly added Virtual Host rules by default.
- Fix display issue on VLAN screen.
- Changed Wi-Fi Client Mode wording on WAN interface status.

V5.1.10

- Added software watchdog feature for USB-modems to detect reinitialization failures and other lock-up conditions.
- Fixed issue where Scheduled Reboot was not occurring based on count-down timer.
- Fixed compatibility issue with some Atheros-based Wi-Fi access points.
- Increased security of httpd daemon.
- Added support for D-Link modem: DWM157
- Added support for Huawei modems: EC156, E353, E367, K4511, T1731
- Added support for Novatel modems: U679 (LTE), U998
- Added support for Sierra Wireless modems: 312U (HSPA+), 330U (LTE)
- Added support for ZTE modems: MC2716 and MF668/MF668A

V5.1.0

Initial release to manufacturing.

Known Issues:

1. When in WAN Wi-Fi Client mode, the new SSID is not used when target SSID is updated in the GUI. Reboot to use the new target SSID.

2. When connecting a LAN-Cell 3 which has a private WAN IP address (e.g. 10.x.x.x from Verizon's LTE APN "vzwinternet" or AT&T's APN "broadband") to a remote IPSec VPN server, you must explicitly specify the Phase 1 Local and Remote ID values on both VPN devices; otherwise, the LAN-Cell 3 will send its WAN IP address as the default Local ID – this will not match the incoming IP address of the packet on the remote VPN Server. IP Addresses as well as Strings (e.g. DNS, E-Mail) are supported for Phase 1 ID's. If the LAN-Cell 3 has a private WAN IP address, it must also initiate all VPN connections with the remote VPN Server (enable Connection Initiation on the VPN rule popup screen).

3. The Pantech UML290 modem sometimes does not display signal strength when first initialized. Disable and re-enable the USB interface to enable signal strength display.

4. The following characters cannot be used as part of a Preshared Key:
   ( ) $ ^ & + ` | \ ; " ' < >

UML295 ISSUES

By default, the firmware currently available on the Verizon Wireless/Pantech UML295 modem does not allow "inbound" initiated connections from the Internet to the modem. In order to use remote access applications such VNC, pcAnywhere, camera and DVR viewing, etc. the UML295 must have a public static IP address assigned by Verizon Wireless and be configured to perform Port Forwarding. Please see our Knowledgebase article Configuring the Verizon / Pantech UML295 for Remote Access Applications.

You may also work around this issue by having the LAN-Cell 3 initiate an outbound VPN connection to a VPN server (e.g another LAN-Cell, Cisco, Juniper, SonicWall, etc.) to create a two-way communications tunnel. The VPN tunnel must conform to the conditions outlined in Issue #2 above.

The UML295 has a default fixed IP subnet of 192.168.32.0 / 255.255.255.0. An address from this range will be assigned to the USB WAN interface on the LAN-Cell 3 even if the UML295 has been assigned a static IP address by Verizon Wireless. Do not use this subnet on any LAN segments connected to the LAN-Cell 3 or change the UML295's subnet using the instructions in the KB article above.

The UML295 must be configured to AutoConnect via its internal web interface (http://192.168.32.2). If the UML295's "Mobile Broadband Enhanced Application" has been installed on any PC that will remain connected to the LAN-Cell 3, the Enhanced Application should be removed (via the Windows Control Panel) before the connecting the PC to the LAN-Cell 3.

These limitations may be removed in a future firmware release from Pantech, but no timeframe has been announced.

AC341U ISSUES

The Netgear AirCard 341U modem requires an adapter (Proxicast part # ACC-USB-002) for compatibility with the LAN-Cell 3.

The Netgear 341U should have "IP Pass-Thru" mode enabled in its onboard firmware before using it in the LAN-Cell 3. Sprint has sold multiple firmware versions of the 341U modem. Some modems require an external tool to enable IP-Pass-Thru; for others, there is an option in the onboard 341U firmware's web interface. If necessary, download the Netgear Enterprise Tools for Windows: http://downloadcenter.netgear.com/en/Disclaimer.aspx?redirecturl=http://www.downloads.netgear.com/files/aircard/AC341U Enterprise Tools v1_1.zip to obtain the mode change utilities.

On the LAN-Cell 3's Setup>WAN screen, select "4G DirectIP Modems / Netgear / AirCard 341U" for reliable modem detection. New 341U firmware versions may require selecting "AirCard 341U V2".

The 341U's LCD screen may not correctly reflect the cellular connection status at all times.

This modem takes longer to initialize and register on the Sprint network than most other modems. Please allow up to 5 minutes for this process to complete.

AC340U ISSUES

The Netgear AirCard 340U modem requires an adapter (Proxicast part # ACC-USB-002) for compatibility with the LAN-Cell 3.

The Netgear 340U should have "IP Pass-Thru" mode enabled in its onboard firmware before using it in the LAN-Cell 3. Please refer to our knowledgebase article http://www.proxicast.com/AbsoluteFM/?f=268 to obtain the latest 340U firmware and mode change utility.

On the LAN-Cell 3's Setup>WAN screen, select "4G DirectIP Modems / Netgear / AirCard 340U" for reliable modem detection.

Modem signal strength is not displayed in the LAN-Cell 3's GUI, but is available on the 340U's LCD screen.

This modem takes longer to initialize and register on the AT&T network than most other modems. The modem may restart or display various messages during this time. Please allow up to 5 minutes for this process to complete.