# **Proxicast**

# LAN-Cell 3

# **Firmware Release Notes**

Release 5.3.3

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Date: October 2, 2013

#### Version:

ProxiOS Version: 5.3.3

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

E612	ICON 225	MD400
E620	ICON 401	Sprint
E660A	ICON 7.2	341U <sup>1</sup>
E800	GlobeSurfer HSUPA	595U
E960	GT Max 3.6	598U
EC1260	Vodafone EasyBox	760U
EC156	Vodafone K3760	770U
EC168C	Pantech	Toshiba
EC169	UM175	G450
ET168	UML290	Verizon Wireless
K1550	UML295 <sup>1</sup>	JetPack 4620LE <sup>1</sup>
K3715	Pro-Link	JetPack 5510L <sup>2</sup>
K3765	PHS100	UM170
K4505	Qisda	UML290
K4511	H21	UML295 <sup>1,2</sup>
T1731	Quanta	USB551L
Hummer	MDO 588	USB760
DTM5731	Q101	Vibo
iSonic	Q110	D200
EDGE CARD	Q111	WinBest
LG	Q120	HSDC-02
LDU-1900D	Samsung	ZTE
Maxon	19000	K3565-Z
BP3	GT-S8500	MC2716
BP3-EXT	SGH-Z810	MDC503UP
Neotel	Sierra Wireless	MDC505UP
NeoGo	AirCard 312U	MDC525UP
Netgear	AirCard 313U	MF620
AirCard 341U <sup>1</sup>	AirCard 330U	MF622/MF622 v2
Nokia	AirCard 341U <sup>1</sup>	MF626
CS-11	AirCard 595U	MF628
CS-12	AirCard 598U	MF628+
CS-15	AirCard 875U	MF631
Novatel Wireless	AirCard 880U	MF633
4620L MiFi 1	AirCard 881U	MF636
5510L MiFi <sup>2</sup>	Compass 885	MF636+
MC760	Compass 888	MF637
MC930D	Compass 889	MF638
MC950D	USB 305	MF668
MC990D	USB 306	MF668A
U679	USB 308	MF820
U727	Simcom	MH600HS
U760	5250	MU351
U998	Solomon	
USB551L	S3Gm-660	1
Option	Sony Ericsson	1
ICON 210	MD300	1
	prior to use in the LAN-Cell 3. See http:	//support.proxicast.com for more info.

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

## Change History:

#### 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 <u>Configuring the Verizon / Pantech UML295 for Remote Access Applications</u>.

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 (<u>http://192.168.32.2</u>). 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 # <u>ACC-USB-002</u>) for compatibility with the LAN-Cell 3.

The Netgear 341U should have "IP Pass-Thru" mode <u>enabled</u> in its onboard firmware before using it in the LAN-Cell 3. Download the Netgear Enterprise Tools for Windows (<u>http://downloadcenter.netgear.com/en/Disclaimer.aspx?redirecturl=http://www.downloads.netgear.com/files/aircard/AC341U Enterprise Tools v1\_1.zip</u>) 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.

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.