

Release Notes for Cradlepoint Rev 6.6.4 Firmware

Products supported/tested:

AER3100/AER3150

AER2200

AER2100

AER1600/AER1650

AP22

CBA850

CR4250

IBR1700

IBR1100/IBR1150

IBR900/IBR950

IBR600B/IBR650B

IBR600C/IBR650C

IBR200

IBR350

New features added in this release (Not all features are in all products – see their respective Data Sheets):

- Further improved boot-to-modem WAN connection time (from 6.6.1), reducing time from router power-on to initial WAN connection
- Network Web Filter rules will be sorted so that the rules with the highest precedence will appear first
- Added status for WiFi as WAN and Wireless Client connections
- WiFi as WAN (and, if supported, WiFi Client) in the IBR1700, AER2200, IBR900, IBR600C now have a WiFi Powersave feature. When enabled, the client radio will enable wifi radio powersave features. The default is Off.

Additional UI/Usability changes:

- Added a check box to Enable/Disable WiFi client powersave

Defects fixed:

- IBR1700. \$PCPTOBD header is not present when configured to wrap ODB-II data with GPS sentences. The GPS sentence did not match our Knowledge Base article.
- NMEA reports are now provided even when there is no GNSS fix
- WAN Verify data usage warnings are now displayed in appropriate locations
- Fixed a defect where the router would eventually reboot when hotspot was enabled and https traffic was not redirected.
- Fixed a race condition when the web proxy was restarting during WAN events and config store changes that would cause stale tasks, possibly leading to router reboots.
- Fixed Inhibit WiFi AP feature in AER products
- Fixed WiFi Client alerts on AER3100, AER2100 and AER1600
- Fixed a deadlock encountered when NCM and the modem try to upgrade

Security issues:

Note: All customers are reminded that **changing the default Administration (login) and WiFi passwords** are necessary for router and network security. The default passwords are unique, but are not as safe as a strong password that only you know. The security of the Internet depends on your cooperation.

- Setting the techsupport_access flag while remote access is enabled will generate a persistent warning message and send an alert
- Techsupport_access flag will only stay set for 15 minutes then be cleared

Known issues

- SSID's on some products may become inoperable when "Fast Roaming" is enabled. This is a rarely-occurring, known issue that will be fixed in a future release. The problem may be seen when a router first powers-up or the Wireless configuration is changed.

Products known to be affected: AER2200, AP22, IBR1700, IBR900.

Work-Around:

In the router GUI, under NETWORKING / Local Networks, edit the affected SSID's entry in the "Wireless Access Points / SSIDs" table for the affected radio.

Un-check the "Fast Roaming" checkbox for the SSID and click "Save". The SSID will now operate without the "Fast Roaming" feature enabled.

After approx. 10 minutes, the affected SSID's "Fast Roaming" feature may be re-enabled.

Modems tested: (new 6.6.4 modems / modem platforms are in blue text)

Cradlepoint Cellular Devices (Embedded & USB Modems)

Cradlepoint AER16x0LPE-AT / AT&T (USA)

Cradlepoint AER16x0LPE-GN / T-Mobile, US Cellular (USA); Generic (North America)

Cradlepoint AER16x0LPE-SP / Sprint (USA)

Cradlepoint AER16x0LPE-VZ / Verizon (USA)

Cradlepoint AER16x0LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint AER22x0-600M / AT&T (USA, Canada); Sprint, T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)

Cradlepoint IBR2x0-10M-VZ / Verizon (USA)

Cradlepoint IBR2x0-10M-B-AT / AT&T (USA)

Cradlepoint IBR350L / Verizon (USA)

Cradlepoint IBR350LPE-AT / AT&T (USA)

Cradlepoint IBR350LPE-GN / T-Mobile (USA); Generic (North America)

Cradlepoint IBR350LPE-SP/ Sprint (USA)

Cradlepoint IBR350LPE-VZ / Verizon (USA)

Cradlepoint IBR350P2 / AT&T (USA); Generic GSM-compatible locations (World)

Cradlepoint IBR6x0B-LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint IBR6x0C-LPE-AT / AT&T (USA)

Cradlepoint IBR6x0C-LPE-GN / T-Mobile (USA); Generic (North America)

Cradlepoint IBR6x0C-LPE-SP/ Sprint (USA)

Cradlepoint IBR6x0C-LPE-VZ / Verizon (USA)

Cradlepoint IBR6x0C-150M-B-EU / *Generic operators (Europe)*

Cradlepoint IBR6x0C-150M-C-AU / *Generic operators (Australia)*

Cradlepoint IBR6x0LPE-AT / *AT&T (USA)*

Cradlepoint IBR6x0LPE-GN / *T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)*

Cradlepoint IBR6x0LPE-SP / *Sprint (USA)*

Cradlepoint IBR6x0LPE-VZ / *Verizon (USA)*

Cradlepoint IBR6x0LP3-EU / *Generic (Europe)*

Cradlepoint IBR900LPE-VZ / *Verizon (USA); also certified on AT&T (USA), Sprint (USA), and Generic (North America)*

Cradlepoint IBR9x0LP5 / *Generic (APAC)*

Cradlepoint IBR9x0LP6 / *AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)*

Cradlepoint IBR9x0-600M / *AT&T (USA, Canada); Sprint, T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)*

Cradlepoint IBR11x0LPE-AT / *AT&T (USA)*

Cradlepoint IBR11x0LPE-GN / *C-Spire, T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)*

Cradlepoint IBR11x0LPE-SP / *Sprint (USA)*

Cradlepoint IBR11x0LPE-VZ / *Verizon (USA)*

Cradlepoint IBR11x0LP3-EU / *Generic (Europe), Telstra (Australia)*

Cradlepoint IBR11x0LP6 / *AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)*

Cradlepoint IBR1700-600M / *AT&T (USA, Canada); Sprint, T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)*

Cradlepoint MC400L2 / *Public Safety Band 14 only (USA)*

Cradlepoint MC400LPE-AT / *AT&T (USA)*

Cradlepoint MC400LPE-GN / *T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)*

Cradlepoint MC400LPE-SP / *Sprint (USA)*

Cradlepoint MC400LPE-VZ / Verizon (USA)

Cradlepoint MC400LP3-EU / Generic (Europe)

Cradlepoint MC400LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint MC400LP5 / Generic (APAC)

Cradlepoint MC400LP6 / AT&T, Sprint, T-Mobile, Verizon (USA); Vodafone (Worldwide), Generic (North America, Europe)

Cradlepoint MC400-600M-C / AT&T, FirstNet (USA)

3rd Party USB Cellular Modems

Franklin U770 ("Sprint Plug-In-Connect Tri-Mode USB Modem") / Sprint (USA) (*HTTP modem*)

Franklin U772 ("Franklin U772 USB Modem") / Sprint (USA)

Huawei E3276 / Telus (Canada)

Huawei E368 ("AT&T USBConnect Force 4G") / AT&T (USA)

Netgear AC340U ("AT&T Beam") / AT&T (USA)

Netgear AC341U ("NETGEAR® 341U USB Modem") / Sprint (USA)

**supports Netgear firmware 4.07.01.11 and MR2 firmware 45.04.20.00*

Novatel 551L LTE ("Verizon USB551L") / Verizon (USA)

Novatel U620L ("Verizon MiFi® 4G LTE Global USB Modem U620L") / Verizon (USA)

Novatel U679 ("4G LTE Novatel Wireless U679 Turbo Stick") / Bell Mobility (Canada)

Novatel USB730L ("Verizon Global Modem USB730L") / Verizon (USA)

Pantech UML295VW ("Verizon 4G LTE USB Modem UML2954G LTE") / Verizon (USA)

**requires Pantech firmware version L0295VWD821F.B4 or later*

Sierra Wireless 308 USB ("AT&T USBConnect Shockwave") / AT&T (USA)

Sierra Wireless 313U ("AT&T USBConnect Momentum 4G") / AT&T (USA)

Sierra Wireless 320U ("Telstra USB 4G (Sierra AirCard 320U)") / Telstra (Australia)

Sierra Wireless 330U ("4G LTE Sierra Wireless U330 - Turbo Stick") / Bell Mobility (Canada)

Sierra Wireless 330U ("LTE Rocket Stick – Sierra Wireless AirCard 330U") / Rogers (Canada)

ZTE MF683 ("T-Mobile Rocket 3.0 4G Laptop Stick") / *T-Mobile (USA)*

Release Notes for Cradlepoint Rev 6.6.2 Firmware

Products supported/tested:

AER3100/AER3150

AER2200

AER2100

AER1600/AER1650

AP22

CBA850

CR4250

IBR1700

IBR1100/IBR1150

IBR900/IBR950

IBR600B/IBR650B

IBR600C/IBR650C

IBR200

IBR350

New features added in this release (Not all features are in all products – see their respective Data Sheets):

- We made improvements to the router logging system. The log level for an individual service can be controlled so that you see more messages in a system you are interested in.

Additional UI/Usability changes:

- A new welcome screen was added to the UI once the admin has logged in. It helps direct the admin to connect to NCM if a connection has not been made and it helps the admin to go to their NCM account to better manage the router. If the admin needs to make a simple configuration change or status check at the individual router, there is a field on the welcome page to direct the admin to the local UI.
- Renamed "VPN Networks" to "Auto VPN Networks"

Defects fixed:

- AER22x0/IBR1700 only. Addressed connection stability of MC400-600M-C when both embedded modem and MC400 modem are in use.
- IBR1700. If the "Prepend ID" checkbox was checked in GPS's "Send-to-Server", "Send-to-Client", or "Send-to-Serial" configuration for NMEA sentences, then the OBD-II NMEA sentences would be dropped.
- AP22 not reporting 5GHz SSIDs when doing a wireless scan from NetCloud Manager
- IBR1100/IBR600B. Fixed Wireless Bridge mode
- WiFi as WAN: Fixed the need for a reboot when configuring WiFi as WAN the first time
- Fixed a problem causing lockups on the CR4250 when configured to use NHRP
- Fixed a problem where a hash entry in a tunnel config could cause NCM to reject the router configuration
- Fixed a problem with the router not being able to establish an NCM connection
- Fixed a problem where a Traffic Steering (previously WAN Affinity) rule without failover selected would block other traffic on failover
- Telnets to Serial stops after a few hours of use
- IBR1700. Known working GPS antenna works with IBR900 but has intermittent results with the IBR1700.
- When in Advanced Security Mode and authentication was set to RADIUS, local credentials were still being accepted via the API
- Fixed a problem where the marks for dynamic vti anonymous responder hub was not generated correctly.
- The feature allowing whitelisting of custom URLs in CP Secure Web filter was not working
- CBA850. Removed Auto VPN Networks menu. Feature is not applicable to platform.

Security issues:

- Session tokens were not being immediately invalidated after logging out of the router UI

Known issues

- None

Modems tested: (new 6.6.2 modems / modem platforms are in

blue text)

Cradlepoint Cellular Devices (Embedded & USB Modems)

Cradlepoint AER16x0LPE-AT / *AT&T (USA)*

Cradlepoint AER16x0LPE-GN / *T-Mobile, US Cellular (USA); Generic (North America)*

Cradlepoint AER16x0LPE-SP / *Sprint (USA)*

Cradlepoint AER16x0LPE-VZ / *Verizon (USA)*

Cradlepoint AER16x0LP4 / *AT&T, T-Mobile, Verizon (USA)*

Cradlepoint AER22x0-600M / *AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)*

Cradlepoint IBR2x0-10M-VZ / *Verizon (USA)*

Cradlepoint IBR2x0-10M-B-AT / *AT&T (USA)*

Cradlepoint IBR350L / *Verizon (USA)*

Cradlepoint IBR350LPE-AT / *AT&T (USA)*

Cradlepoint IBR350LPE-GN / *T-Mobile (USA); Generic (North America)*

Cradlepoint IBR350LPE-SP/ *Sprint (USA)*

Cradlepoint IBR350LPE-VZ / *Verizon (USA)*

Cradlepoint IBR350P2 / *AT&T (USA); Generic GSM-compatible locations (World)*

Cradlepoint IBR6x0B-LP4 / *AT&T, T-Mobile, Verizon (USA)*

Cradlepoint IBR6x0C-LPE-AT / *AT&T (USA)*

Cradlepoint IBR6x0C-LPE-GN / *T-Mobile (USA); Generic (North America)*

Cradlepoint IBR6x0C-LPE-SP/ *Sprint (USA)*

Cradlepoint IBR6x0C-LPE-VZ / *Verizon (USA)*

Cradlepoint IBR6x0C-150M-B-EU / *Generic operators (Europe)*

Cradlepoint IBR6x0C-150M-C-AU / *Generic operators (Australia)*

Cradlepoint IBR6x0LPE-AT / *AT&T (USA)*

Cradlepoint IBR6x0LPE-GN / *T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)*

Cradlepoint IBR6x0LPE-SP/ *Sprint (USA)*

Cradlepoint IBR6x0LPE-VZ / *Verizon (USA)*

Cradlepoint IBR6x0LP3-EU / *Generic (Europe)*

Cradlepoint IBR900LPE-VZ / *Verizon (USA); also certified on AT&T (USA), Sprint (USA), and Generic (North America)*

Cradlepoint IBR9x0LP5 / *Generic (APAC)*

Cradlepoint IBR9x0LP6 / *AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)*

Cradlepoint IBR9x0-600M / *AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)*

Cradlepoint IBR11x0LPE-AT / *AT&T (USA)*

Cradlepoint IBR11x0LPE-GN / *C-Spire, T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)*

Cradlepoint IBR11x0LPE-SP / *Sprint (USA)*

Cradlepoint IBR11x0LPE-VZ / *Verizon (USA)*

Cradlepoint IBR11x0LP3-EU / *Generic (Europe), Telstra (Australia)*

Cradlepoint IBR11x0LP6 / *AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)*

Cradlepoint IBR1700-600M / *AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)*

Cradlepoint MC400L2 / *Public Safety Band 14 only (USA)*

Cradlepoint MC400LPE-AT / *AT&T (USA)*

Cradlepoint MC400LPE-GN / *T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)*

Cradlepoint MC400LPE-SP / *Sprint (USA)*

Cradlepoint MC400LPE-VZ / *Verizon (USA)*

Cradlepoint MC400LP3-EU / *Generic (Europe)*

Cradlepoint MC400LP4 / *AT&T, T-Mobile, Verizon (USA)*

Cradlepoint MC400LP5 / *Generic (APAC)*

Cradlepoint MC400LP6 / *AT&T, Sprint, T-Mobile, Verizon (USA); Vodafone (Worldwide), Generic (North America, Europe)*

[Cradlepoint MC400-600M-C / AT&T, FirstNet \(USA\)](#)

3rd Party USB Cellular Modems

Franklin U770 ("Sprint Plug-In-Connect Tri-Mode USB Modem") / *Sprint (USA)*

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Netgear AC341U ("NETGEAR® 341U USB Modem") / *Sprint (USA)*

**supports Netgear firmware 4.07.01.11 and MR2 firmware 45.04.20.00*

Novatel 551L LTE ("Verizon USB551L") / *Verizon (USA)*

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Novatel USB730L ("Verizon Global Modem USB730L") / *Verizon (USA)*

Pantech UML295VW ("Verizon 4G LTE USB Modem UML2954G LTE") / *Verizon (USA)*

**requires Pantech firmware version L0295VWD821F.B4 or later*

Sierra Wireless 308 USB ("AT&T USBConnect Shockwave") / *AT&T (USA)*

Sierra Wireless 313U ("AT&T USBConnect Momentum 4G") / *AT&T (USA)*

Sierra Wireless 320U ("Telstra USB 4G (Sierra AirCard 320U)") / *Telstra (Australia)*

Sierra Wireless 330U ("4G LTE Sierra Wireless U330 - Turbo Stick") / *Bell Mobility (Canada)*

Sierra Wireless 330U ("LTE Rocket Stick – Sierra Wireless AirCard 330U") / *Rogers (Canada)*

ZTE MF683 ("T-Mobile Rocket 3.0 4G Laptop Stick") / *T-Mobile (USA)*

Release Notes for Cradlepoint Rev 6.6.1 Firmware

Products supported/tested:

AER3100/AER3150

AER2200

AER2100

AER1600/AER1650

AP22

CBA850

CR4250

IBR1700

IBR1100/IBR1150

IBR900/IBR950

IBR600B/IBR650B

IBR600C/IBR650C

IBR200

IBR350

New features added in this release (Not all features are in all products – see their respective Data Sheets):

- USB Logging improvements. We significantly improved the performance of USB logging.
- Improved boot-to-modem WAN connection time, reducing time from router power-on to initial WAN connection. Especially for the IBR900, but performance improvements apply to any product that supports a modem WAN connection.
- [CR4250](#). Please note that if you upgrade from 6.6.0 to 6.6.1 you will not be able to downgrade to 6.6.0 in the future and keep your configured settings. You will also lose your router's NCM credentials and will need to re-register a router with NCM.
- Added lan network binding support for webaccess filtering to allow filtered traffic to be directed more easily, such as through a VTI tunnel

- Connection Manager. Added WAN Stability check to ensure continued online, stable interface connectivity prior to changing primary WAN device (e.g. failback)
- Added support for AutoVPN configured via the Networks, AutoVPN page in NCM
- Added WiFi Client Alerts for connect and disconnect
- Wireless Wan Refactor (including WiFi as WAN and Wireless Client) We recommend restarting the device on a configuration change.

Additional UI/Usability changes:

- Add Telnet Control checkbox to Serial Redirector to enable negotiation of com port control options (see RFC 2217)
- Added Data port control to the Speed Test dialog under System > Diagnostics. This may be useful if you run your own netperf server and want to control which port your firewall will respond on.
- Added source IP address to the Ping tool in System > Diagnostics, to specify the source IP address of the ICMP requests
- Administration Pages Unresponsive in Firefox 60.0.2.
- Added support for Telstra LANES in AutoAPN
- Reordered Connection Manager Profile Filter criteria to reflect priority of settings, with the top being the highest priority criterion

Defects fixed:

- Added validation for the size of the configuration being sent down by NCM where the number of certificates configured overloaded the router storage.
- GPS Fails and does not recover when multiple GPS sources are available.
- IBR900, IBR1700, AER2200. LAN-to-WAN performance when in NAT mode with no Security, Routing, or Analytics features enabled had been compromised in NCOS release 6.6.0. This change restores that performance.
- When a router is configured for both HotSpot and a web proxy and there is no Terms of Service page specified in the HotSpot configuration, clients will not be able to be authorized to use the network.
- Fixed a problem where the CP Secure Webfilter was made available on the IBR6xC products.
- Administration Pages Unresponsive in Firefox 60.0.2.
- SNMP NCOS Upgrades. The use of SNMP to trigger NCOS upgrades has been deprecated. The NCOS version can still be read using SNMP.

- Devices using the LP4 modem would occasionally encounter connectivity issues with NCM when in IP Passthrough mode.
- Modified Connection Manager WAN Verify to ensure verifying traffic is sent out the correct interface
- Fixed a problem where the LAN ports were sometimes disabled (requiring a reboot) after a router was added to an NCM group with a large VLAN and Local IP Network configuration
- Fixed an abnormally high system load when several hostname Identities were used in the Zone Firewall
- Fixed a problem with password validation in the router UI to preserve the password when editing other fields on the same page
- Fixed a problem where static routes could be lost following a WAN failover
- Fixed a problem where some products would not connect WiFi as WAN - AER31x0, AER2100, AER16x0, IBR600B, IBR200

Security issues:

- Upgraded Zscaler service connection to TLSv1.2
- Closed a small window where IPS/IDS alerts would sometimes not be sent, even though an attack was detected and blocked.

Known issues

- Wireless Bridge will not connect on 6.6.1 FW. Not recommended to upgrade. Will be fixed in 6.6.2 Release.

Modems tested: (new 6.6.1 modems / modem platforms are in blue text)

Cradlepoint Cellular Devices (Embedded & USB Modems)

Cradlepoint AER16x0LPE-AT / AT&T (USA)

Cradlepoint AER16x0LPE-GN / T-Mobile, US Cellular (USA); Generic (North America)

Cradlepoint AER16x0LPE-SP / Sprint (USA)

Cradlepoint AER16x0LPE-VZ / Verizon (USA)

Cradlepoint AER16x0LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint AER22x0-600M / AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)

Cradlepoint IBR2x0-10M-VZ / Verizon (USA)

Cradlepoint IBR2x0-10M-B-AT / AT&T (USA)

Cradlepoint IBR350L / Verizon (USA)

Cradlepoint IBR350LPE-AT / AT&T (USA)

Cradlepoint IBR350LPE-GN / T-Mobile (USA); Generic (North America)

Cradlepoint IBR350LPE-SP/ Sprint (USA)

Cradlepoint IBR350LPE-VZ / Verizon (USA)

Cradlepoint IBR350P2 / AT&T (USA); Generic GSM-compatible locations (World)

Cradlepoint IBR6x0B-LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint IBR6x0C-LPE-AT / AT&T (USA)

Cradlepoint IBR6x0C-LPE-GN / T-Mobile (USA); Generic (North America)

Cradlepoint IBR6x0C-LPE-SP/ Sprint (USA)

Cradlepoint IBR6x0C-LPE-VZ / Verizon (USA)

Cradlepoint IBR6x0C-150M-B-EU / Generic operators (Europe)

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Cradlepoint IBR6x0LPE-AT / AT&T (USA)

Cradlepoint IBR6x0LPE-GN / T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)

Cradlepoint IBR6x0LPE-SP/ Sprint (USA)

Cradlepoint IBR6x0LPE-VZ / Verizon (USA)

Cradlepoint IBR6x0LP3-EU / Generic (Europe)

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Cradlepoint IBR9x0LP5 / Generic (APAC)

Cradlepoint IBR9x0LP6 / AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)

Cradlepoint IBR9x0-600M / AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)

Cradlepoint IBR11x0LPE-AT / AT&T (USA)

Cradlepoint IBR11x0LPE-GN / C-Spire, T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)

Cradlepoint IBR11x0LPE-SP / *Sprint (USA)*

Cradlepoint IBR11x0LPE-VZ / *Verizon (USA)*

Cradlepoint IBR11x0LP3-EU / *Generic (Europe), Telstra (Australia)*

Cradlepoint IBR11x0LP6 / *AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)*

Cradlepoint IBR1700-600M / *AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)*

Cradlepoint MC400L2 / *Public Safety Band 14 only (USA)*

Cradlepoint MC400LPE-AT / *AT&T (USA)*

Cradlepoint MC400LPE-GN / *T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)*

Cradlepoint MC400LPE-SP / *Sprint (USA)*

Cradlepoint MC400LPE-VZ / *Verizon (USA)*

Cradlepoint MC400LP3-EU / *Generic (Europe)*

Cradlepoint MC400LP4 / *AT&T, T-Mobile, Verizon (USA)*

Cradlepoint MC400LP5 / *Generic (APAC)*

Cradlepoint MC400LP6 / *AT&T, Sprint, T-Mobile, Verizon (USA); Vodafone (Worldwide), Generic (North America, Europe)*

[Cradlepoint MC400-600M-C / AT&T, FirstNet \(USA\)](#)

3rd Party USB Cellular Modems

Franklin U770 ("Sprint Plug-In-Connect Tri-Mode USB Modem") / *Sprint (USA)*

Franklin U772 ("Franklin U772 USB Modem") / *Sprint (USA)*

Huawei E3276 / *Telus (Canada)*

Huawei E368 ("AT&T USBConnect Force 4G") / *AT&T (USA)*

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Netgear AC341U ("NETGEAR® 341U USB Modem") / *Sprint (USA)*

**supports Netgear firmware 4.07.01.11 and MR2 firmware 45.04.20.00*

Novatel 551L LTE ("Verizon USB551L") / *Verizon (USA)*

Novatel U620L ("Verizon MiFi® 4G LTE Global USB Modem U620L") / *Verizon (USA)*

Novatel U679 ("4G LTE Novatel Wireless U679 Turbo Stick") / *Bell Mobility (Canada)*

Novatel USB730L ("Verizon Global Modem USB730L") / *Verizon (USA)*

Pantech UML295VW ("Verizon 4G LTE USB Modem UML2954G LTE") / *Verizon (USA)*

**requires Pantech firmware version L0295VWD821F.B4 or later*

Sierra Wireless 308 USB ("AT&T USBConnect Shockwave") / *AT&T (USA)*

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Sierra Wireless 330U ("4G LTE Sierra Wireless U330 - Turbo Stick") / *Bell Mobility (Canada)*

Sierra Wireless 330U ("LTE Rocket Stick – Sierra Wireless AirCard 330U") / *Rogers (Canada)*

ZTE MF683 ("T-Mobile Rocket 3.0 4G Laptop Stick") / *T-Mobile (USA)*

Release Notes for Cradlepoint Rev 6.6.0 Firmware

Products supported/tested:

AER3100/AER3150

AER2200

AER2100

AER1600/AER1650

AP22

CBA850

IBR1700

IBR1100/IBR1150

IBR900/IBR950

IBR600B/IBR650B

IBR600C/IBR650C

IBR200

IBR350

Note1: Before upgrading to new firmware, it is always a good idea to save the configuration file from your current version. This firmware version will remove a configuration for version 3.2 or lower and will not try to keep your settings

New features added in this release (Not all features are in all products – see their respective Data Sheets):

- Increase the number of Speedtests allowed against Cradlepoint servers from 10 to 100
- SNMP MIBS for GPIO are now available on IBR900 and IBR600c. Note that the GPIO Configuration OIDs are read-only.
- SSH Public Key authentication has been added.
 - Post your public key to /config/certmgmt/public_keys
 - Post previous step's 'key_id' to /config/system/users/N/keys (where N is user you wish to login as).

- All following router SSH connections will attempt PK authentication before moving to password base authentication.
- Remove excessive log messages when using WiFi as WAN
- IBR1700. Dead reckoning performance has improved. Requires OBD-II Vehicle Speed to be enabled with a 1 second (or less) update interval

Additional UI/Usability changes:

- Allow 64 Characters in WPA2 Personal
- Mac whitelist wildcard option available in WiFi settings
- A Webroot policy can now be applied to 'All Networks' instead of having to set the same policy on separate, individual networks
- Renamed "VPN Networks" to "AutoVPN Networks"
- Connection Manager default link resumes Devices display
- Added Connection Manager Fast Primary select. When failing over and to further minimize connection down time, the Connection Manager now gives preference to already-connected Always On interfaces
- 600M, 150M, 150M-B, 10M, 10M-B, LP6, LP5, LPE, LP3. Enhanced Aggressive No Carrier feature, which reduces LTE tower registration time (at the expense of 3G/2G registration) when no carrier conditions are common
- 600M, 150M, 150M-B, 10M, 10M-B, LP6, LP5, LPE, LP3: Improved tower re-registration time when recovering from connection verification failure

Defects fixed:

- Webroot saving config timing out through local UI
- Cannot SSH to a Cisco 2901 via LAN port with Ethernet cable
- Grid buttons persist across pages when they shouldn't
- Client usage and app analytics was not reporting for clients that are outside the LAN subnet range but are allowed through with a static route.
- BGP now allows 32-bit AS Numbers
- Portscan attacks are not identified from the WAN side.
- In some configurations, the Wired 802.1x service was not getting started properly

- App Logging is no longer needed to be enabled for App Sets to work
- Could not connect to a hidden SSID if BSSID was specified
- AP-22: Channel switch due to radar does not update UI dashboard
- wifi-as-wan profile signal strength could be incorrect in Connection Manager
- No SSID broadcast after upgrade
- IBR200 and IBR350: MAC-based filtering is functional again
- Password validation would fail in the router's UI, anytime a user changed a networking tunnel configuration
- 600M. Fixed potential configuration failure when enabling multi-PDN on 600M modem
- Removed RSSI/SINR statistics graphs for modems
- Modem FW upgrade enhancements: corrected file missing error message, modified underlying upgrade triggers
- Always On modems were not connecting in tandem as expected
- Restored ability to run WAN Verify Active Ping on Ethernet interfaces

Security issues:

- None

Known issues

CP Secure Web Filter

- Previous versions of firmware had a defect that improperly allowed customers to enter more than 5 items per category in a custom category. Custom categories with more than 5 items need to be removed before upgrading to 6.5.x firmware and later. Failure to do this will lead to unpredictable results. See Cradlepoint knowledge base for more detailed instructions.
 - <http://knowledgebase.cradlepoint.com/articles/Support/Migration-Process-for-devices-upgrading-to-NCOS-6-5-or-newer-while-utilizing-Custom-CP-Secure-Web-Filter-Categories>

PSE

- **AER2200 and AER31x0:** PSE port status will not update if PSE is globally disabled.

GPS/OBD-II

- IBR1700. Due to a 20-30ms delay in sampling, setting a configured reporting time to the minimum of one second will give samples at 1.02-1.03 seconds apart.
- IBR1700. Occasionally, PCPTOBD sentences will not be sent with other NMEA sentences (Send-to-Server, Send-to-Client)

WiFi as WAN

- AER31x0, 2100 and AER16x0 will not connect wifi as wan.

LTE

- Unless you have a specific service from your carrier, LTE modems will not generally provide an externally-available IP address. Services, such as Remote Management, will not work.

Modem

- Franklin U770. The Modem's Ethernet address conflicts with the default address of the Guest LAN. A warning message is placed in the log and the Guest LAN is disabled. If you change the address of the Guest LAN to a non-conflicting address, this restriction will not occur.
- Sierra Wireless 313U, 330U. When these modems connect on 2G or 3G bands, specifically on GSM 850, they will sometimes cause interference on the USB bus, resulting in the modem not plugging properly. If this occurs, attaching the modem to a USB extension cable will generally fix the problem.
- The following USB modems contain an embedded web server through which many modem settings are configured. To access the modem's web pages, you must be logged in as the router administrator. Once logged in, you can then access the modem web pages at these given IP addresses:

Franklin U770, U772 / *Sprint (USA)* -> 192.168.10.1

Netgear AC341U * / *Sprint (USA)* -> 192.168.1.1 (address is configurable)

Pantech UML295VW * / *Verizon (USA)* -> 192.168.32.2

Novatel USB730L / *Verizon (USA)* -> 192.168.1.1 (address is configurable)

* The modem web pages are available only when the modem is operating in NAT mode.

Application Identities

- For Application Identities to work properly the user needs to also enable Application ID Logging

Modems tested: (new 6.6.0 modems / modem platforms are in blue text)

Cradlepoint Cellular Devices (Embedded & USB Modems)

Cradlepoint AER16x0LPE-AT / AT&T (USA)

Cradlepoint AER16x0LPE-GN / T-Mobile, US Cellular (USA); Generic (North America)

Cradlepoint AER16x0LPE-SP / Sprint (USA)

Cradlepoint AER16x0LPE-VZ / Verizon (USA)

Cradlepoint AER16x0LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint AER22x0-600M / AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)

Cradlepoint IBR2x0-10M-VZ / Verizon (USA)

Cradlepoint IBR2x0-10M-B-AT / AT&T (USA)

Cradlepoint IBR350L / Verizon (USA)

Cradlepoint IBR350LPE-AT / AT&T (USA)

Cradlepoint IBR350LPE-GN / T-Mobile (USA); Generic (North America)

Cradlepoint IBR350LPE-SP/ Sprint (USA)

Cradlepoint IBR350LPE-VZ / Verizon (USA)

Cradlepoint IBR350P2 / AT&T (USA); Generic GSM-compatible locations (World)

Cradlepoint IBR6x0B-LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint IBR6x0C-LPE-AT / AT&T (USA)

Cradlepoint IBR6x0C-LPE-GN / T-Mobile (USA); Generic (North America)

Cradlepoint IBR6x0C-LPE-SP/ Sprint (USA)

Cradlepoint IBR6x0C-LPE-VZ / Verizon (USA)

Cradlepoint IBR6x0C-150M-B-EU / Generic operators (Europe)

Cradlepoint IBR6x0C-150M-C-AU / Generic operators (Australia)

Cradlepoint IBR6x0LPE-AT / AT&T (USA)

Cradlepoint IBR6x0LPE-GN / T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)

Cradlepoint IBR6x0LPE-SP/ Sprint (USA)

Cradlepoint IBR6x0LPE-VZ / Verizon (USA)

Cradlepoint IBR6x0LP3-EU / Generic (Europe)

Cradlepoint IBR900LPE-VZ / Verizon (USA); also certified on AT&T (USA), Sprint (USA), and Generic (North America)

Cradlepoint IBR9x0LP5 / Generic (APAC)

Cradlepoint IBR9x0LP6 / AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)

Cradlepoint IBR9x0-600M / AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)

Cradlepoint IBR11x0LPE-AT / AT&T (USA)

Cradlepoint IBR11x0LPE-GN / C-Spire, T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)

Cradlepoint IBR11x0LPE-SP / Sprint (USA)

Cradlepoint IBR11x0LPE-VZ / Verizon (USA)

Cradlepoint IBR11x0LP3-EU / Generic (Europe), Telstra (Australia)

Cradlepoint IBR11x0LP6 / AT&T, Sprint, T-Mobile, Verizon (USA); Generic (North America, Europe)

Cradlepoint IBR17x0-600M / AT&T (USA, Canada); T-Mobile, Verizon (USA); Generic (Europe, Australia, NZ)

Cradlepoint MC400L2 / Public Safety Band 14 only (USA)

Cradlepoint MC400LPE-AT / AT&T (USA)

Cradlepoint MC400LPE-GN / T-Mobile, US Cellular (USA); Bell Mobility, Rogers, Telus (Canada); Generic (North America)

Cradlepoint MC400LPE-SP / Sprint (USA)

Cradlepoint MC400LPE-VZ / Verizon (USA)

Cradlepoint MC400LP3-EU / Generic (Europe)

Cradlepoint MC400LP4 / AT&T, T-Mobile, Verizon (USA)

Cradlepoint MC400LP5 / Generic (APAC)

Cradlepoint MC400LP6 / AT&T, Sprint, T-Mobile, Verizon (USA); Vodafone (Worldwide), Generic (North America, Europe)

3rd Party USB Cellular Modems

Franklin U770 ("Sprint Plug-In-Connect Tri-Mode USB Modem") / Sprint (USA)

Franklin U772 ("Franklin U772 USB Modem") / Sprint (USA)

Huawei E3276 / Telus (Canada)

Huawei E368 ("AT&T USBConnect Force 4G") / AT&T (USA)

Netgear AC340U ("AT&T Beam") / AT&T (USA)

Netgear AC341U ("NETGEAR® 341U USB Modem") / Sprint (USA)

**supports Netgear firmware 4.07.01.11 and MR2 firmware 45.04.20.00*

Novatel 551L LTE ("Verizon USB551L") / Verizon (USA)

Novatel U620L ("Verizon MiFi® 4G LTE Global USB Modem U620L") / Verizon (USA)

Novatel U679 ("4G LTE Novatel Wireless U679 Turbo Stick") / Bell Mobility (Canada)

Novatel USB730L ("Verizon Global Modem USB730L") / Verizon (USA)

Pantech UML295VW ("Verizon 4G LTE USB Modem UML2954G LTE") / Verizon (USA)

**requires Pantech firmware version L0295VWD821F.B4 or later*

Portsmith PSA1U1M ("Portsmith USB Client to Analog Modem Adapter") / POTS phone providers

Sierra Wireless 308 USB ("AT&T USBConnect Shockwave") / AT&T (USA)

Sierra Wireless 313U ("AT&T USBConnect Momentum 4G") / AT&T (USA)

Sierra Wireless 320U ("Telstra USB 4G (Sierra AirCard 320U)") / Telstra (Australia)

Sierra Wireless 330U ("4G LTE Sierra Wireless U330 - Turbo Stick") / Bell Mobility (Canada)

Sierra Wireless 330U ("LTE Rocket Stick – Sierra Wireless AirCard 330U") / Rogers (Canada)

ZTE MF683 ("T-Mobile Rocket 3.0 4G Laptop Stick") / T-Mobile (USA)

Analog Modems

Portsmith PSA1U1M ("Portsmith USB Client to Analog Modem Adapter") / *POTS phone providers*