



Release Notes for CradlePoint Rev 1.6.9 Firmware

Products supported/tested:

Mobile Broadband Router 1000 (MBR1000)
Mobile Broadband Router 900 (MBR900)
CradlePoint Travel Router (CTR500)
Cellular Broadband Adapter (CBA250)
Cellular Broadband Adapter (CBA750)

Modems/handsets tested (devices added since 1.6 in blue):

USB modems:

Calcomp a600/Cricket
EMOBILE D02HW/EMOBILE
EMOBILE D11LC/EMOBILE
EMOBILE D12LC/EMOBILE
EMOBILE D21HW/EMOBILE
EMOBILE D21LC/EMOBILE
EMOBILE D22HW/EMOBILE
Franklin CDU-550/Sprint
Franklin CDU-680/Sprint, nTelos, and Pioneer Wireless (GPS – see Known Issues)
Franklin U300/Clear, Sprint, [Time Warner Cable](#), [Comcast](#) & Xohm (3G and 4G support)
[Franklin U301/Sprint, Time Warner Cable](#)
[Huawei E156G/3 \(UK\)](#)
[Huawei E160E/Orange \(UK\)](#)
Huawei EC168/Alltel
Huawei EC168C
[Huawei E180 \(K3565\)/Vodafone \(UK\)](#)

Huawei UMG-181/T-Mobile & AT&T

Huawei E220/AT&T

Huawei EC228/Alltel

Huawei UMG-181/T-Mobile & AT&T

LG L-02A/AT&T and DoCoMo

[Motorola 25w100 Modem/Time Warner Cable, Clear](#)

Novatel MC760/Virgin, Bell, Comcast

[Novatel MC760D/Bell, Cellcom](#)

Novatel MC930D/AT&T

Novatel MC950D/AT&T

[Novatel MC998D/Bell Canada](#)

Novatel U720/Sprint and Verizon (GPS - Sprint only)

Novatel U727/Sprint and Verizon (GPS - Sprint only)

Novatel U760/Bell, Sprint, Verizon, [Bell Canada](#) (GPS - Sprint only)

Novatel MiFi 2200/Sprint and Verizon

Option Quicksilver/AT&T * (see Known Issues)

Pantech UM100/Cricket

Pantech UM150/Verizon and Alltel

Pantech UM175/Verizon and Alltel

[Pantech UM185/Cricket](#)

[Pantech UMW190/Verizon](#)

[Sierra Wireless 305 USB/Telus](#)

[Sierra Wireless 306 USB/AT&T, Telus](#)

Sierra Wireless 595U USB/Sprint, Verizon and Telus (GPS - Sprint only)

Sierra Wireless Compass 597U/Sprint (GPS), [Telus](#)

Sierra Wireless Compass 598U/Sprint, [Telus](#) and Pioneer Wireless (GPS)

Sierra Wireless 875U USB/AT&T

Sierra Wireless 880U/AT&T

Sierra Wireless 881U USB/AT&T

Sierra Wireless Compass 885U USB/AT&T

[Sierra Wireless Compass 889/O2 \(UK\)](#)

Sierra Wireless AT&T USBConnect Mercury/AT&T

Sierra Wireless U306/ Telus

Softbank C01LC/Softbank

[UBEE PXU1900/ Clear](#)

ZTE MF626 (b-mobile 3G)/AT&T

ZTE MF636/Rogers

[ZTE MF637/T-Mobile](#)

[ZTE MF668/Rogers](#)

ZTE TU25/Bridgemaxx, [Comcast](#), Clear, Xohm

ExpressCard modems:

Huawei E870/AT&T

Kyocera KPC-680/Sprint, Verizon, and nTelos

Novatel C777/Sprint

Novatel PC770/Verizon

Novatel EX720/Sprint (GPS)

Novatel V740/Verizon

Novatel X950D/AT&T

[Option GE442/ T-Mobile](#)

Option GT Max 3.6 Express/AT&T * (see Known Issues)

Option GT Ultra Express/AT&T * (see Known Issues)

Sierra Wireless 402/Sprint and Pioneer Wireless

Sierra Wireless 597E/Sprint and Telus (GPS – Sprint only)

Sierra Wireless 880E/AT&T

PCCard modems (MBR1200 only):

Huawei EC360/Alltel

Novatel S720/Sprint

Pantech PX-500/Sprint

Sierra Wireless Aircard 595/Sprint and Verizon

Verizon PC5750/Verizon

Handsets:

HP iPaq 910/AT&T

HTC Touch/Sprint

HTC Mogul PPC-6800/Sprint (see usage note under RNDIS below)

HTC Apache PPC-6700/Sprint

LG VX8000 and VX8300/Verizon

LG VX7200/Verizon

LG Musiq/Sprint

LG Fusic LX-500/Sprint

Motorola v3c RAZR/Sprint and Verizon

Motorola RAZR2/Sprint

Motorola Q and Q9c/Sprint

Motorola RAZR v3xx/AT&T

Motorola Q v9h/AT&T

Motorola KRZR/Sprint

Palm 700w/Sprint and Verizon

Palm 700p/Verizon

Palm 755p/Sprint

Palm Centro/Sprint

RIM BlackBerry Bold 9000/AT&T

RIM BlackBerry Curve 8310/AT&T

RIM BlackBerry Curve 8330/Sprint and Verizon

RIM BlackBerry 8703e/Sprint and Verizon

RIM BlackBerry 8830/Sprint and Verizon

RIM BlackBerry Pearl 8130/Sprint and Verizon

RIM BlackBerry 9530 Storm/Verizon

Samsung ACE/Sprint

Samsung A900/A900M/A920/Sprint

Samsung SCH-i830/Sprint

Samsung SGH-A707/AT&T

Samsung Blackjack (SGH-i607)/AT&T

Samsung SPH-m520/Sprint

Sanyo M1/Sprint

Sanyo SCP-6600 (Katana)/Sprint

Sanyo Katana 2/Sprint

Sanyo SCP-8400/Sprint

Notes:

- Upgrading to this firmware release may cause a factory reset from previous firmware. Please be sure to save your configuration settings (Tools -> Admin menu) before loading this firmware and then restore your configuration afterwards if necessary.
- If you upgrade to this version and download a WiMAX modem driver onto your router, the router will not allow you to downgrade back to version 1.3.x. If you need to downgrade your router back to a 1.3.x version, contact CradlePoint support to receive instructions to remove the WiMAX driver and perform the downgrade.
- Devices marked as AT&T were tested using the AT&T network in the United States. The device may or may not work with other UMTS/GSM carriers internationally.

New Features added in this release:

- Added aggressive modem reset (configurable through Modems->Settings web page). This feature causes the router to try various reset techniques to get a modem to recover if it appears to have become unresponsive.
- Added 4g auto reconnect feature (configurable through Modems->Settings web page) This is for dual mode 3G/4G modems. It causes the router to automatically try to remake the 4G connection based on data conditions or based on a timer if operating in 3G mode.
- Added make-before-break to 4G auto reconnect for dual mode 3G/4G modems. For modems that support it, the router will now connect to the 4G network before disconnecting the 3G network (previously it always disconnected the 3G first because some modems required it).
- New modem support added, listed above.

Additional UI/usability changes:

- None.

Defects fixed:

- Fixed Blackberry Bold not working issue.
- Fixed Blackberry Curve not working issue
- Fixed Blackberry Storm OS 5.0 not working issue
- Fixes to make WIMAX connections more reliable

- Fixed WIMAX baseband wakeup not working properly
- Fixed reset issue on Franklin U300
- Fixed WIMAX potential authentication failure issue

Known issues:

GPS

- GPS and Mapquest. When using Mapquest, the default zoom is out too far to be really useful. While you can zoom in, if you use auto-refresh the loaded page will be zoomed out again. Workaround is to either use one of the other map sites, or do not use auto-refresh with Mapquest.
- GPS, Internet Explorer 7.0, and Yahoo maps. When using IE 7.0 and Yahoo maps, the position on the map would not refresh. The Latitude and Longitude change on the address bar, so this is likely an IE 7.0 issue.
- GPS, Safari 3.04, and Windows Vista. Safari and Windows Vista would not load any of the map sites. Safari worked fine on an Apple Mac.

Carrier

- nTelos. These modems appear to block incoming ports. That affects the ability to use features such as Remote Management, GPS Network port on WAN, and responding to a WAN ping. It will also effect using IPSEC VPN.
- AT&T. These modems appear to block incoming ports and also NATs ports. That affects the ability to use features such as Remote Management and Port Forwarding. It will also effect using IPSEC VPN with two AT&T modems. If you are using one AT&T modem and a Modem from another carrier, IPSEC VPN should work. To resolve the issue of AT&T blocking ports contact your Carrier provider and ask for the Mobile Terminated Data plan.
- Cricket. Cricket NATs the public address, ports, and blocks all incoming ports. So Dynamic DNS, Port Forwarding, and IPSEC VPN is not supported on Cricket modems.

Wireless

- Wi-Fi Protected Setup (WPS). If you are using WPS to enable security from an insecure wireless network (Basic -> Wireless -> Security Mode = None), a WPS-aware client will not be able to attach to the wireless network. If you use WPS from a secure wireless network, a WPS-aware client will attach correctly. If you reboot the router after using WPS to configure wireless security, a WPS-aware client will attach correctly.

Modem/Phone

- Option GT Max and Ultra Express card usage note. The Option cards have relatively large openings on the top of their cards for their SIM card. The ExpressCard bracket retention tabs in an MBR1100, MBR1000, or MBR800 may slide into the side opening of the Option card when removing the card, apparently locking the card into the router. If this happens, you can get the ExpressCard out of the router by folding a small piece of paper (or cutting a business card to fit the slot) and then sliding it into the top of the slot. This will push the retention tab up so that it cannot contact the opening on the card. A simple workaround is to put a piece of tape over the side opening of the card after inserting the SIM. Our other routers with an ExpressCard slot do not have a bracket, so they will not have this issue. The Option cards do not have retention slots near the antenna housing (as other modems do), so the ExpressCard locking mechanism on our routers will not work with an Option card.
- Option GT and Ultra Express modem support. These modems can take up to 2.5 minutes to make a data connection. In our tests, they appear to spend a long time attempting to get a signal before they can make a data connection. The Ultra seems to connect more quickly in our tests. Note that the Ultra Express' performance in the router is not as good as in the PC. This modem works with the router, but if you have a choice any of the other GSM modems such as the Novatel or Sierra Wireless are more compatible.
- Load Balancing and modem with a SIM PIN. If a modem that requires use of a SIM PIN is the Primary WAN connection, Load Balancing will not work correctly. Data will only go in/out of the Primary modem and not any other modem. If the modem with the SIM PIN is not the Primary connection, Load Balancing will work correctly. The Advanced → Failover/Load Balance → WAN Interfaces menu allows the end user to adjust modem priority.

PCCard

- ExpressCards in PCCard sleds such as the Sierra Wireless 402 mode + sled will not work in the MBR1200. Please use the ExpressCard slot for ExpressCard modems.

WiMAX

- Advanced Failover/Load Balancing Note. When the U300 is in WiMAX mode, changing priorities will actually move two devices (the WiMAX and CDMA modems are on the same port).
- Failover Priority Note (with multiple modems attached). When using the U300 together with other 3G modems the Failover priority settings will not take effect at router boot time. The U300 takes longer to initialize and another modem will have dialed before the U300 is ready. This does not affect the U300's ability to failover between its 3G and 4G capabilities.
- Best performance of the router and modem occur with the router's WiFi channel set to a low number (1 or 2). At higher frequencies the WiFi and WiMAX radios may interfere with each other, which you may see as lower network performance.

- Only one WiMAX modem is supported at a time. Load balancing among WiMAX modems is not supported. Load balancing among a single WiMAX modem, the Wired WAN port, and multiple CDMA modems is supported.