

# Release Notes NCOS 7.21.40

## NetCloud OS 7.21.40 Release Notes (April 2021)

Availability and entitlement to NetCloud OS releases requires an active Cradlepoint NetCloud Service subscription. For more information about the Cradlepoint NetCloud Service click [HERE](#).

**Regarding NetCloud OS manual download availability:** NetCloud OS (NCOS) releases 7.1.0 and greater are no longer available for manual or offline download. NCOS upgrades are performed via NetCloud Manager with an active NetCloud Service subscription. For more information and NCOS upgrade best practices click [HERE](#).

**Updating NCOS and WAN bandwidth:** NCOS updates performed through NetCloud Manager will result in an internet download consuming WAN bandwidth. The size of this update file can vary depending on the specific hardware platform to be updated as well as the specific NCOS version selected for the update. For most Cradlepoint endpoints, the NCOS update can be approx. 15-20MB.

**NOTE:** The exception to this approximate file size is the CR4250, which can have update file sizes up to 150MB.

### *Products supported/tested:*

AER2200

AER1650

AP22

CBA850

CBA550

CR4250

Cradlepoint Virtual Router

E3000

E300

E100

IBR1700

IBR1100/IBR1150

IBR900/IBR950

IBR600B/IBR650B

IBR600C/IBR650C

IBR200

L950

R500-PLTE

W2000

W2005

W4005

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

- Initial production release for the new L950 endpoint platform. For more information on this new endpoint please visit [www.cradlepoint.com](http://www.cradlepoint.com)
- Protocol Independent Multicast - Sparse Mode (PIM SM)
- Added madvise support for memory optimization with containers.

**NOTE:** NetCloud OS 7.2.70 release is the last supported release for the AER1600 router. The AER1650 (non Wi-Fi version) continues to support newer releases.

**NOTE:** NetCloud OS 7.2.70 release, and newer, no longer officially supports 3rd party USB attached 3G/4G cellular modems. USB cellular modems currently in-use will continue to function, however their support and functionality going forward is no longer guaranteed. 3rd party Ethernet attached modems continue to be supported as "Ethernet WAN" sources only, no support for 3rd party Ethernet modems under Connection Manager modem profiles.

## Additional UI/Usability changes:

- Added ability to source GRE tunnels from LAN interfaces.
- Added option to force a firmware upgrade for the MC20BT Bluetooth expansion module.
  - For detailed information on this change, please see the following KB article <https://customer.cradlepoint.com/s/article/Bluetooth-Low-Energy>
- MOBIKE is not supported on VTI interfaces, the UI checkbox has been disabled for VTI tunnels in IKEv2.
- Improved Auto APN selection algorithm to optimize handling of tower attachment failures.

## Defects fixed:

- (IBR1100, IBR200, IBR600B) GTK re-key packets would not be retried if the original packets failed.
- (All) Potential router reboot when connecting with Smart Operator Selection (S.O.S) feature.
- (All) Device/group configuration would not load in NetCloud after deleting a custom SSL certificate.
- (E3000, E300) LAN scheduler disabled ports not controlled by LAN scheduler due to sharing the same VLAN.
- (All) Captive Portal (Hotspot) feature that reversed how known vs. unknown clients were handled when logging off.
- (All) Wi-Fi RADIUS authentication requests using the WAN source when a LAN source was specified.
- (All) Occasionally routers failing NetCloud auto-registration when pre-registered will not enter an invalid registration state and retry.
- (All) GRE source IP not registering in NHRP and changed source IP to source LAN.
- (All) SNMP authentication failures on certain configs and on changes to configs works again.
- (All) Enabling "Require HTTPS Connection" under local management caused traffic to be dropped with GRE in tunnel mode IPsec .
- (All) Diagnostic ping utility would repeat output.
- (All) Disabled GPS/GNSS would re-enable when resetting 150M-D/C4D modems.

## 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.

- MC20BT firmware includes upgrade of Silabs Bluetooth SDK from v2.7 to v3.1 for CVE-2020-26558.

For more information regarding security and vulnerability events please visit the public Cradlepoint Security & Trust web page <https://cradlepoint.com/about-us/trust/>

## Known issues:

Feature: (E3000, E300) VRRP feature

- Scenario:
  - VRRP feature configured and combined with uploading data near gigabit speed over multiple TLS connections.
- Failure:
  - The device may lockup and require a reboot to recover.
- Reason for Failure:

- TBD
- Workaround :
  - This issue was introduced in 7.2.20 release, releases prior are not impacted as a workaround.

## Modems tested in this release:

### **Cradlepoint Cellular Modems (Embedded & Modular)**

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 (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint AER2200-1200M / AT&T, Verizon (USA)

Cradlepoint AER2200-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint CBA550-150M-D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint CBA550-150M-E / Generic operators (Europe, APAC)

Cradlepoint E300-C4D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint E300-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint E3000-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint IBR200-10M-VZ / Verizon (USA)

Cradlepoint IBR200-10M-B-AT / AT&T (USA)

Cradlepoint IBR200-10M-C-SP/ Sprint (USA)

Cradlepoint IBR200-10M-D-GN / Generic operators (Europe)

Cradlepoint IBR200-10M-E-GN / Generic operators (Australia)

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 IBR6x0C-150M-D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

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 (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint IBR900-1200M / AT&T, Verizon (USA)

Cradlepoint IBR900-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

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 (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint IBR1700-1200M / AT&T, Verizon (USA)

Cradlepoint IBR1700-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint L950-C7A /AT&T, T-Mobile, Verizon (USA); Generic (North America)

Cradlepoint L950-C7B / Generic (Europe, APAC)

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)

Cradlepoint MC400-1200M / AT&T, Verizon (USA)

Cradlepoint MC400-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint R500-PLTE-C7C /PLTE networks (USA)

Cradlepoint W2000-5GA / Telstra (Australia)

Cradlepoint W2005-5GA / Telstra (Australia)

Cradlepoint W2000-5GB / AT&T, Verizon (USA); Generic (Europe, APAC)

Cradlepoint W2005-5GB / AT&T, Verizon (USA); Generic (Europe, APAC)

Cradlepoint W4005-5GB / AT&T, Verizon (USA)

## NetCloud OS 7.21.30 Release Notes (March 2021)

**Availability and entitlement to NetCloud OS releases requires an active Cradlepoint NetCloud Service subscription. For more information about the Cradlepoint NetCloud Service click [HERE](#).**

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**NOTE:** The exception to this approximate file size is the CR4250, which can have update file sizes up to 150MB.

### *Products supported/tested:*

**AER2200**

**AER1650**

**AP22**

**CBA850**

**CBA550**

**CR4250**

**Cradlepoint Virtual Router**

**E3000**

**E300**

**E100**

**IBR1700**

**IBR1100/IBR1150**

**IBR900/IBR950**

**IBR600B/IBR650B**

**IBR600C/IBR650C**

**IBR200**

**R500-PLTE**

**W2000/W2005**

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

- Initial production release for the new R500-PLTE endpoint platform. For more information on this new endpoint please visit [www.cradlepoint.com](http://www.cradlepoint.com)

**NOTE:** NetCloud OS 7.2.70 release is the last supported release for the AER1600 router. The AER1650 (non Wi-Fi version) continues to support newer releases.

**NOTE:** NetCloud OS 7.2.70 release, and newer, no longer officially supports 3rd party USB attached 3G/4G cellular modems. USB cellular modems currently in-use will continue to function, however their support and functionality going forward is no longer guaranteed. 3rd party Ethernet attached modems continue to be supported as "Ethernet WAN" sources only, no support for 3rd party Ethernet modems under Connection Manager modem profiles.

### **Additional UI/Usability changes:**

- No new UI/usability changes in this release.

### **Defects fixed:**

- (E3000, E300) VRRP feature, shortened master-backup transition times that took too long under some conditions.
- (E100) Wi-Fi LED now turns off when both Wi-Fi radios are disabled.
- (5G Modems) Demoted non-fatal MHI error logs that show up during carrier switching.
- (E3000) Ethernet link speed on port 1 is now correct when auto-negotiating with a device capable of less than 1000FD.
- (MC20BT) Serial number is now correctly populated in status tree.
- (IBR1100) Failure to re-connect WiFi as WAN/Wireless client.
- (All) Static Multicast could fail to resolve non-UID devices and not apply config for interfaces not ready on boot.
  - Prevent Static Multicast from adding broad allow rules when interface was not available for broadcast group.
- (All) SNMPv3 was unavailable for Branch Continuity adapters.
- (All) BGP using listen range and IPv6 resulted in routes not being exchanged.

### 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.

- Upgraded dnsmasq to stable v2.83 for CVE-2020-25681 through CVE-25687 (seven total)

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### Known issues:

Feature: (E3000, E300) VRRP feature

- Scenario:
  - VRRP feature configured and combined with uploading data near gigabit speed over multiple TLS connections.
- Failure:
  - The device may lockup and require a reboot to recover.
- Reason for Failure:
  - TBD
- Workaround :
  - This issue was introduced in 7.2.20 release, releases prior are not impacted as a workaround.

### Modems tested in this release:

#### Cradlepoint Cellular Modems (Embedded & Modular)

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Cradlepoint AER1650LPE-GN /T-Mobile, US Cellular (USA);Generic (North America)

Cradlepoint AER1650LPE-SP /Sprint (USA)

Cradlepoint AER1650LPE-VZ /Verizon (USA)

Cradlepoint AER1650LP4 /AT&T, T-Mobile, Verizon (USA)

Cradlepoint AER2200-600M / AT&T (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint AER2200-1200M / AT&T, Verizon (USA)

Cradlepoint AER2200-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint CBA550-150M-D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint CBA550-150M-E / Generic operators (Europe, APAC)

Cradlepoint E300-C4D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint E300-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint E3000-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint IBR200-10M-VZ / Verizon (USA)

Cradlepoint IBR200-10M-B-AT / AT&T (USA)

Cradlepoint IBR200-10M-C-SP/ Sprint (USA)

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Cradlepoint IBR200-10M-E-GN / Generic operators (Australia)

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Cradlepoint IBR6x0C-LPE-VZ /Verizon (USA)

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Cradlepoint IBR900-1200M / AT&T, Verizon (USA)

Cradlepoint IBR900-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint IBR11x0LPE-AT /AT&T (USA)

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Cradlepoint MC400-1200M / AT&T, Verizon (USA)

Cradlepoint MC400-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint W2000-5GA /Telstra (Australia)

Cradlepoint W2005-5GA /Telstra (Australia)

## NetCloud OS 7.21.20 Release Notes (February 2021)

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**NOTE:** The exception to this approximate file size is the CR4250, which can have update file sizes up to 150MB.

### *Products supported/tested:*

**AER2200**

**AER1650**

**AP22**

**CBA850**

**CBA550**

**CR4250**

### **Cradlepoint Virtual Router**

**E3000**

**E300**

**E100**

**IBR1700**

**IBR1100/IBR1150**

**IBR900/IBR950**

**IBR600B/IBR650B**

**IBR600C/IBR650C**

**IBR200**



## W2000/W2005

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

- No new features in this release.

**NOTE:** NetCloud OS 7.2.70 release is the last supported release for the AER1600 router. The AER1650 (non Wi-Fi version) continues to support newer releases.

**NOTE:** NetCloud OS 7.2.70 release, and newer, no longer officially supports 3rd party USB attached 3G/4G cellular modems. USB cellular modems currently in-use will continue to function, however their support and functionality going forward is no longer guaranteed. 3rd party Ethernet attached modems continue to be supported as "Ethernet WAN" sources only, no support for 3rd party Ethernet modems under Connection Manager modem profiles.

### Additional UI/Usability changes:

- The ability to migrate Sprint Curiosity SIMs to the T-Mobile network is now supported in the IBR200-10M-C platform.

### Defects fixed:

- (All) Connection Manager "Unrecognized password format" error after profile configuration.
- (All) Tunnel interfaces bound to WANs with static routes and auto gateway in certain cases failed to add route on WAN change.
- (E100, E300, E3000) Adding NetCloud Perimeter gateway client when network web filter configured no longer requires a reboot to access local UI via NetCloud Perimeter IP.

### 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.

- Upgraded OpenSSL library to 1.1.1h.

For more information regarding security and vulnerability events please visit the public Cradlepoint Security & Trust web page <https://cradlepoint.com/about-us/trust/>

### Known issues:

- Feature: (All) SNMP Queries (GETs)
  - Scenario:
    - A user tries to get information from router using CLI commands like 'snmpwalk' and 'snmpget'.
    - The protocol used is SNMPv3 and the security level used is 'authPriv'
  - Failure:
    - The query request is rejected by the SNMP agent running in the router.
  - Reason for Failure:
    - The SNMP agent running in the router does not support 'authPriv' security level.
    - Even though the 'SNMP Configuration' on the router allows for security level 'authPriv', it is supported only for the 'Alert Notifications using SNMP' feature.
  - Workaround :
    - Use the supported security levels only - noAuthNoPriv or authNoPriv
- Feature: (All) Wi-Fi client radios
  - Scenario:
    - A race condition could cause Wi-Fi radio startup failover on router boot.
  - Failure:
    - Wi-Fi radios will not beacon. The system log will contain a message "CRIT root Service start exception: wireless."
  - Workaround:
    - The router must be rebooted to restart and recover Wi-Fi radios.

## Modems tested in this release:

### **Cradlepoint Cellular Modems (Embedded & Modular)**

Cradlepoint AER1650LPE-AT /AT&T (USA)

Cradlepoint AER1650LPE-GN /T-Mobile, US Cellular (USA);Generic (North America)

Cradlepoint AER1650LPE-SP /Sprint (USA)

Cradlepoint AER1650LPE-VZ /Verizon (USA)

Cradlepoint AER1650LP4 /AT&T, T-Mobile, Verizon (USA)

Cradlepoint AER2200-600M / AT&T (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint AER2200-1200M / AT&T, Verizon (USA)

Cradlepoint AER2200-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint CBA550-150M-D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint CBA550-150M-E / Generic operators (Europe, APAC)

Cradlepoint E300-C4D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint E300-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint E3000-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint IBR200-10M-VZ / Verizon (USA)

Cradlepoint IBR200-10M-B-AT / AT&T (USA)

Cradlepoint IBR200-10M-C-SP/ Sprint (USA)

Cradlepoint IBR200-10M-D-GN / Generic operators (Europe)

Cradlepoint IBR200-10M-E-GN / Generic operators (Australia)

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 IBR6x0C-150M-D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

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 (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint IBR900-1200M / AT&T, Verizon (USA)

Cradlepoint IBR900-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

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 (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)*

Cradlepoint IBR1700-1200M / *AT&T, Verizon (USA)*

Cradlepoint IBR1700-1200M-B / *AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)*

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)*

Cradlepoint MC400-1200M / *AT&T, Verizon (USA)*

Cradlepoint MC400-1200M-B / *AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)*

Cradlepoint W2000-5GA /*Telstra (Australia)*

Cradlepoint W2005-5GA /*Telstra (Australia)*

## NetCloud OS 7.21.10 Release Notes (January 2021)

**Availability and entitlement to NetCloud OS releases requires an active Cradlepoint NetCloud Service subscription. For more information about the Cradlepoint NetCloud Service click[HERE](#).**

**Regarding NetCloud OS manual download availability:** NetCloud OS (NCOS) releases 7.1.0 and greater are no longer available for manual or offline download. NCOS upgrades are performed via NetCloud Manager with an active NetCloud Service subscription. For more information and NCOS upgrade best practices click[HERE](#).

**Updating NCOS and WAN bandwidth:** NCOS updates performed through NetCloud Manager will result in an internet download consuming WAN bandwidth. The size of this update file can vary depending on the specific hardware platform to be updated as well as the specific NCOS version selected for the update. For most Cradlepoint endpoints, the NCOS update can be approx. 15-20MB.

**NOTE:**The exception to this approximate file size is the CR4250, which can have update file sizes up to 150MB.

### *Products supported/tested:*

**AER2200**

**AER1650**

**AP22**

**CBA850**

**CBA550**

**CR4250**

**Cradlepoint Virtual Router**

**E3000**

**E300**

**E100**

**IBR1700**

**IBR1100/IBR1150**

**IBR900/IBR950**

**IBR600B/IBR650B**

**IBR600C/IBR650C**

**IBR200**

**W2000/W2005**

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

- Initial production release for the new MC20BT Bluetooth Low Energy 5.1 optional accessory (only supported on E300 Series, E3000 Series).
  - See accessory data sheet for full specifications and details on the MC20BT.
  - For detailed information on this new accessory, please see the following KB article <https://customer.cradlepoint.com/s/article/Bluetooth-Low-Energy>
- Added support for MQTT data collection from wired, wireless, or bluetooth connected devices.
  - For detailed information on this new feature, please see the following KB article <https://customer.cradlepoint.com/s/article/MQTT-Server-Configuration>

**NOTE:**NetCloud OS 7.2.70 release is the last supported release for the AER1600 router. The AER1650 (non Wi-Fi version) continues to support newer releases.

**NOTE:**NetCloud OS 7.2.70 release, and newer, no longer officially support USB attached 3rd party 3G/4G cellular modems. USB cellular modems currently in-use will continue to function, however their support going forward is no longer guaranteed.

**Additional UI/Usability changes:**

- No UI/usability changes in this release.

**Defects fixed:**

- (Models with C4D, 150M-D modems) Integrated a workaround to address mis-configuration of the modem's carrier settings on a carrier switch event.
- (All) SDK application failed to run due to permission errors.
- (All) NEMO tunnels will successfully establish but fail to pass traffic.
- (E300, E3000) Forcing ethernet link speed when paired with some switch manufacturers resulted in degraded performance.
- (All) Configuring SNMPv3 with SHA and AuthPriv does not work as expected.
- (All) Cannot use GRE key of 0 when configuring DMVPN.

**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.

- CVE-2018-18066 NULL pointer vulnerability in NET-SNMP addressed.
- CVE-2020-12762 integer overflow and out-of-bounds write via a large JSON file in json-c addressed.
- Cradlepoint Severity: **Low**
  - CVE-2018-18066 NULL pointer vulnerability in NET-SNMP addressed.
    - Affected Feature: SNMP (disabled by default)

Add copy about Security & Trust and link to web page <https://cradlepoint.com/about-us/trust/>

### Known issues:

- Feature: SNMP Queries (GETs)
  - Scenario:
    - A user tries to get information from router using CLI commands like 'snmpwalk' and 'snmpget'.
    - The protocol used is SNMPv3 and the security level used is 'authPriv'
  - Failure:
    - The query request is rejected by the SNMP agent running in the router.
  - Reason for Failure:
    - The SNMP agent running in the router does not support 'authPriv' security level.
    - Even though the 'SNMP Configuration' on the router allows for security level 'authPriv', it is supported only for the 'Alert Notifications using SNMP' feature.
  - Workaround :
    - Use the supported security levels only - noAuthNoPriv or authNoPriv
- IBR1100 WiFi as WAN or Wireless Client modes
  - Scenario:
    - If a user makes WiFi configuration changes in the local Router UI.
  - Failure:
    - WiFi radio will crash.
  - Reason for Failure:
    - Unable to get scan results need for WiFi as WAN/Wireless Client connection.
  - Workaround:
    - Per best practice, use NetCloud Manager to make all configuration changes.

### Modems tested in this release:

#### Cradlepoint Cellular Modems (Embedded & Modular)

Cradlepoint AER1650LPE-AT /AT&T (USA)

Cradlepoint AER1650LPE-GN /T-Mobile, US Cellular (USA);Generic (North America)

Cradlepoint AER1650LPE-SP /Sprint (USA)

Cradlepoint AER1650LPE-VZ /Verizon (USA)

Cradlepoint AER1650LP4 /AT&T, T-Mobile, Verizon (USA)

Cradlepoint AER2200-600M / AT&T (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint AER2200-1200M / AT&T, Verizon (USA)

Cradlepoint AER2200-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint CBA550-150M-D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint CBA550-150M-E / Generic operators (Europe, APAC)

Cradlepoint E300-C4D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

Cradlepoint E300-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint E3000-C18B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

Cradlepoint IBR200-10M-VZ / Verizon (USA)

Cradlepoint IBR200-10M-B-AT / AT&T (USA)

Cradlepoint IBR200-10M-C-SP / Sprint (USA)

Cradlepoint IBR200-10M-D-GN / Generic operators (Europe)

Cradlepoint IBR200-10M-E-GN / Generic operators (Australia)

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 IBR6x0C-150M-D / AT&T, T-Mobile, Verizon (USA); Generic (Canada)

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 (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint IBR900-1200M / AT&T, Verizon (USA)

Cradlepoint IBR900-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

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 (T-Mobile, Canada); Sprint, Verizon (USA); Generic (US Cellular (USA), Telstra (AU), Europe, Australia, NZ)

Cradlepoint IBR1700-1200M / AT&T, Verizon (USA)

Cradlepoint IBR1700-1200M-B / AT&T (USA), Verizon (USA); NoAmerica GN (T-Mobile USA, Canada), EuAPAC GN (Europe, Australia)

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)

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