

Firmware 8.1.1 RC 2 Release Notes

Release Date: Dec 18, 2020

Devices Supported

This firmware release supports the following devices:

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|---------------------------|--|
| X Series | EPX / SDX Pro / SDX / PDX / MBX / 580X / 380X / 310X / 20X |
| Balance | 20X / 20 / 30 / 30 LTE / 30 Pro / 50 / One / Two / 210 / 310 / 310X / 305 HW2 / 380 HW6 / 580 HW2-3 / 710 HW3 / 1350 HW2 / 2500 |
| MAX | BR1 MK2 / BR1 HW2-3 / BR1 Slim / BR1 Mini / BR1 M2M / BR1 ENT / BR1 PRO / BR1 IP67 / BR2 / BR1 IP55 HW2-4 / BR2 IP55 HW2-3 / HD2 / HD2 IP67 / HD2 Mini / HD1 Dome / HD2 Dome / HD4 / HD4 IP67 / Transit / Transit Duo / Transit Mini / Hotspot / On-The-Go HW2 / 700 |
| UBR | UBR LTE |
| Surf | SOHO HW2 / SOHO MK3 |
| MediaFast | 200 / 500 / 750 / HD2 / HD4 |
| SpeedFusion Engine | SFE / SFE CAM |
| FusionHub | FusionHub |

Important Notices

- For the following models, the unit must be upgraded to [Firmware 7.1.2](#) first before upgrading to 8.0.0 or above.

| Product | Hardware Revision |
|--------------|-------------------|
| MAX BR1 | HW2-3 |
| MAX BR1 IP67 | HW1 |
| MAX BR1 Mini | HW1-2 |
| MAX BR1 Pro | HW2,4-5 |
| MAX BR1 Slim | HW1 |
| MAX BR2 | HW2 |
| SOHO | HW2 |

- PepVPN backward compatibility option is no longer available. By deprecating the old firmware versions, we now have a more secure handshake channel as the default setting, only TLS 1.2 will be accepted, no more TLS 1.0 and 1.1 for the old devices. Thus, if you are using devices running Firmware 6.1 or older, you will no longer be able to form PepVPN tunnels with those devices unless the firmware is updated.
- Please note that the “High Application Compatibility” and “Normal Application Compatibility” settings in “Outbound Policy” have been deprecated. Both options still work, if you set up a Custom Outbound Policy, you cannot change them back.
- Internet Explorer 11 is no longer supported by Web Admin.
- Updated minimum version of supported browser:
 - Mozilla Firefox 54
 - Google Chrome 51
 - Safari 10
 - Microsoft Edge 15

New Features

| Reference | Description | Device Supported |
|-----------|--|---|
| 23245 | [Beta 1] [Firewall] Added support for firewall filtering by DSCP | All Models |
| 2861 | [Beta 1] [Outbound Policy] Added support for Outbound Policy by DSCP | All Models (Except FusionHub) |
| 23267 | [RC 1] [20X / 380X / 580X] Added support for Flex Module Mini VDSL | X Series: 20X, 380X, 580X |
| 23959 | [RC 1] [SpeedFusion Cloud] Added the ability to select Cloud Applications for the SpeedFusion Cloud | All Models (Except FusionHub) |

Improvements

| Reference | Description | Device Supported |
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| 23227 | [Beta 1] [Air Monitor] Added support for Wi-Fi "Air Monitoring Mode". The report can be viewed under InControl 2 > Reports > AirProbe Reports. | Balance: 30 Pro, One MAX: BR1 MK2, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: 200, HD2/4 X Series: PDX, MBX, 20X Surf SOHO: SOHO MK3 |
| 22229 | [Beta 1] [AP Controller] Added ability to "Set Firmware" directly in "AP > Controller Status > Access Point" | Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX |
| 23364 | [Beta 1] [AP Controller] Added support for AP Mesh Configuration and Status reporting for AP One. Mesh combination below: - Balance/MAX/Surf SOHO MK3 (Build-in Wi-Fi) to AP One (Bridge Mode) - AP One (Bridge Mode) to AP One (Bridge Mode) | Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX |
| 18450 | [Beta 1] [API] Added new API to configure WAN Settings | All Models |
| 23362 | [Beta 1] [API] Added support for get and update the GPIO | All Models |

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| 23096 | [Beta 1] [Captive Portal] Allowed Client supports Hostname. | All Models (Except FusionHub) |
| 18749 | [Beta 1] [Cellular] Added the ability to define Upload & Download Bandwidth values on Cellular WAN. | Balance: 30 LTE/Pro MAX: BR1/2, HD2/4, Transit UBR: UBR LTE MediaFast: HD2/HD4 X Series: All |
| 23422 | [Beta 1] [Cellular] SIM Toolkit page now shows the SMS Storage capacity | Balance: 30 LTE/Pro MAX: BR1/2, HD2/4, Transit UBR: UBR LTE MediaFast: HD2/HD4 X Series: All |
| 23004 | [Beta 1] [CLI] Added RADIUS status supporting | All Models |
| 23684 | [Beta 1] [Firewall] Added "KVM Management Port" and "KVM VNC Port" under Local Service Firewall Rules | All Models |
| 23307 | [Beta 1] [FlexModule] Added the ability to enable PoE on FlexModule Ethernet ports when they are configured as WAN | X Series: EPX, SDX Pro, SDX |
| 23309 | [Beta 1] [HD1 Dome] Added support for IP Passthrough | MAX: HD1 Dome |
| 23316 | [Beta 1] [IPsec] The IPsec SA Lifetime is now supporting 31536000 seconds (365 days) | All Models |
| 22481 | [Beta 1] [LAN] Added LACP Support for the SDX | X Series: All |
| 23654 | [Beta 1] [NetFlow] Added options for additional NetFlow server, and Active/Inactive Flow Timeout values. | Balance: 30 LTE/Pro, One/Two, 210/310 HW4 or above, 305/380 or above MAX: BR1 ENT, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: All X Series: All FusionHub |
| 22814 | [Beta 1] [NetFlow] Added support for NetFlow information retrieval via SNMP | Balance: 30 LTE/Pro, One/Two, 210/310 HW4 or above, 305/380 or above MAX: BR1 ENT, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: All X Series: All |

| | | FusionHub |
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| 18223 | [Beta 1] [OpenVPN WAN] Added support for OpenVPN as WAN. (license activated) | All Models (Except FusionHub) |
| 23554 | [Beta 1] [OpenVPN WAN] Added the option to define a preferred DNS resolver. | All Models (Except FusionHub) |
| 23414 | [Beta 1] [OpenVPN] Added the "Connection Security Refresh" option. | All Models |
| 23551 | [Beta 1] [PepVPN] Every new PepVPN handshake initiated or accepted by the device is now visible in the Event Log | All Models |
| 23441 | [Beta 1] [PepVPN] For PepVPN/SpeedFusion traffic, remote Serial Number is now included in the Session Logging. | All Models |
| 18550 | [Beta 1] [PepVPN] The PepVPN Log is now located in an individual tab under Event Log | All Models |
| 23562 | [Beta 1] [PepVPN] The PepVPN Status and Dashboard now show the "OSPF Area mismatch" message if needed. | All Models |
| 4828 | [Beta 1] [QoS] Added the ability to rename QoS User Groups | All Models |
| 23513 | [Beta 1] [SpeedFusion Cloud] Added ability to configure WAN Smoothing on all devices. | All Models (Except FusionHub) |
| 16476 | [Beta 1] [System] Added PCI Compliance Mode: disable TCP and ICMP timestamp responses for PCI Compliance tests. | All Models |
| 23500 | [Beta 1] [System] Added RADIUS / TACACS+ authentication log | All Models |
| 23082 | [Beta 1] [System] Remote Syslog server address is now supporting broadcast address | All Models |
| 23675 | [Beta 1] [System] The LAN's port name is now included in LAN Port Event Log | All Models |
| 23628 | [Beta 1] [UART] Renamed "UART" to "Serial" in the Web Admin / CLI / Event Logs | MAX: BR1 Slim/Mini/M2M/ENT, Transit, HD2 Mini |
| 15769 | [Beta 2] [HA] The Web UI now shows the WAN connection & PepVPN status when the option "Establish Connections in Slave Role" is enabled | Balance: 210 or above MAX: BR1/2, HD2/4, Transit UBR: UBR LTE MediaFast: All X Series: EPX, SDX Pro, SDX, |

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| | | 580X, 380X, PDX, MBX, 310X |
| 23839 | [Beta 2] [PDX, MBX, 310X] Added jumbo frame supporting. | X Series: PDX, MBX, 310X |
| 19180 | [Beta 2] [System] Added the ability to configure the session timeout value under support.cgi | All Models |
| 23852 | [Beta 2] [Wi-Fi Mesh] Added ability to accept incoming Mesh connection from AP One (Bridge Mode). | Balance: 30 Pro, One MAX: BR1 MK2, Transit, 700 HW3 or above, HD2 HW5 or above, HD4 MediaFast: 200, HD2/4 X Series: PDX, MBX, 20X Surf SOHO: SOHO MK3 |
| 23030 | [RC 1] [API / PoE] Added the ability to turn PoE ports on or off | Balance: 30 Pro MAX: BR1 ENT, HD2/4 MediaFast: HD2/4 X Series: EPX, SDX Pro, SDX, PDX, MBX |
| 23963 | [RC 1] [SpeedFusion Cloud] Added sub-tunnels on SpeedFusion Cloud > Connect Client to Cloud | All Models (Except FusionHub) |

Resolved Issues

| Reference | Description | Device Supported |
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| 23602 | [Beta 1] [AP Controller] Fixed an issue of HTTP to HTTPS Redirection does not work if the HTTPS port is not 443 | Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX |
| 23190 | [Beta 1] [AP Controller] Fixed an issue where the AP One 300M 5GHz does not work when both the 2.4GHz and 5GHz SSIDs are configured with same name | Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX |
| 23373 | [Beta 1] [AP Controller] Fixed an issue where the Firmware Pack cannot be stored. | Balance: All MAX: 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX |
| 23771 | [Beta 1] [API / Cellular Cat-18] Fixed the issue where the device was unable to send SMS via API. | Integrated Cat-18 cellular models |
| 23315 | [Beta 1] [Balance Two] Fixed an issue where VLAN Tagging does not work. | Balance: Two |
| 22833 | [Beta 1] [Captive Portal] Fixed an issue where a blank page will be shown after logging into the Captive Portal via a second RADIUS server | All Models (Except FusionHub) |
| 23674 | [Beta 1] [Captive Portal] Fixed an issue where the Captive Portal is unstable when running for a long period of time | All Models (Except FusionHub) |
| 23428 | [Beta 1] [Captive Portal] Fixed an vulnerability where a binary file will be returned on HTTP Port 80 | All Models (Except FusionHub) |
| 23620 | [Beta 1] [Drop-in Mode] Fixed an issue where the Static Route does not work if the Gateway is on the WAN side. | Balance: All MAX: All UBR: UBR LTE MediaFast: All X Series: All |
| 21263 | [Beta 1] [Firewall] Fixed an issue where "Local Service" under "Firewall Rule > Event Logging" malfunctions. | All Models |
| 23314 | [Beta 1] [FusionHub] Fixed an issue where URL Logging & Session Logging are missing in the Event | FusionHub |

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| | Logs | |
| 22581 | [Beta 1] [HA] Fixed an issue where the Master device will keep its Master status even if the LAN ports are disconnected. | X Series: SDX, PDX, MBX, 310X |
| 20874 | [Beta 1] [InControl 2] Fixed an issue where IC2 shows the incorrect APN if using Remote SIM | Integrated cellular models with Remote SIM supported |
| 23749 | [Beta 1] [IP Passthrough] Fixed an issue where the client is unable to obtain a correct IP address after failover between IP Passthrough mode WANs | Balance: 30 Pro MAX: BR1, Transit UBR: UBR LTE Surf SOHO: SOHO HW2 / MK3 X Series: 20X |
| 23804 | [Beta 1] [LAN] Fixed an issue where LAN broadcast packets are forwarded to the WAN | Balance: 20X MAX: BR1 IP55 HW4 |
| 22988 | [Beta 1] [LAN] Fixed the issue where LAN broadcast packets forwarded to the WAN | MAX: BR1 Classic, Mini, Pro, BR2 UBR: UBR LTE Surf SOHO: SOHO HW2 |
| 23243 | [Beta 1] [Management Port] Fixed an issue where the Management Port is considered as a LAN port during HA mode. | Balance: 305/380 or above MediaFast: 500, 750 X Series: EPX, SDX Pro, SDX, 580X, 380X |
| 23732 | [Beta 1] [MediaFast & KVM] Fixed an issue where the Virtual Machine Autostart does not work | MediaFast: 500, 750 |
| 23144 | [Beta 1] [MediaFast] Fixed an issue where the Root CA certificate and key for ContentHub & MediaFast are stored on an unencrypted area of the firmware | MediaFast: All |
| 23234 | [Beta 1] [Outbound Policy] Fixed an issue where the throughput performance will be degraded when an Outbound Policy by Domain Name has been applied. | All Models (Except FusionHub) |
| 23547 | [Beta 1] [PepVPN] Fixed an issue causing the device to not apply MSS clamping if the FusionHub is running on KVM and if the PepVPN tunnel is unencrypted. | All Models |
| 23676 | [Beta 1] [PepVPN] Fixed an issue where PepVPN does not work under Drop-in with a Shared IP | All Models |
| 23733 | [Beta 1] [PepVPN] Fixed an issue where PepVPN may become stuck on the "Updating Routes" status. | All Models |
| 23377 | [Beta 1] [PepVPN] Fixed an issue where PepVPN may cause system instability | All Models |

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| 22115 | [Beta 1] [PepVPN] Fixed an issue where PepVPN tunnels establish only one WAN when all WAN interfaces are using the same IP address. | All Models |
| 23203 | [Beta 1] [PepVPN] Fixed an issue where the PepVPN Test shows empty Device Names | All Models |
| 23792 | [Beta 1] [Remote SIM] Fixed an issue where the Remote SIM does not work after the WAN IP has been changed | MAX: HD2 Mini, HD1/2 Dome SFE: SFE UBR: UBR LTE X Series: PDX, MBX |
| 23807 | [Beta 1] [Remote User Access] Fixed an issue where OpenVPN clients cannot route traffic to a different VLAN behind a Balance/MAX device. | All Models |
| 23081 | [Beta 1] [Remote User Access] Fixed an issue where Remote Users may be disconnected after applying device configurations. | All Models |
| 22952 | [Beta 1] [Security] Fixed the potential vulnerability of CSRF Protection | All Models |
| 23723 | [Beta 1] [SpeedFusion Cloud] Fixed an issue where Dynamic Weighted Bonding does not work on the SpeedFusion Cloud. | All Models (Except FusionHub) |
| 23825 | [Beta 1] [System] Fixed an issue of TCP SYN and RST packets are forwarded to WAN without NAT. | All Models |
| 21966 | [Beta 1] [System] Fixed an issue where UPnP / NAT-PMP does not work if OpenVPN is enabled. | All Models |
| 23000 | [Beta 1] [System] Fixed CVE-2020-11022 & CVE-2020-11023 | All Models |
| 23335 | [Beta 1] [WAN] Fixed an issue where the DNS-O-Matic service cannot be updated | All Models |
| 23409 | [Beta 1] [Wi-Fi AP & BR1 MK2 / SOHO MK3] Fixed an issue that causes system instability when using the Wi-Fi AP | MAX: BR1 MK2, Hotspot, IP55 HW2-3 Surf SOHO: SOHO MK3 |
| 23095 | [Beta 1] [Wi-Fi AP] Fixed an issue that causes the secondary RADIUS server to not work. | Balance: 30 Pro, One MAX: 700, BR1/2, HD2/4, Transit (Exclude: BR1 ENT, HD2 Mini, HD1/2 Dome) MediaFast: HD2/4 X Series: PDX, MBX, 20X Surf SOHO |
| 23612 | [Beta 1] [Wi-Fi AP] Fixed an issue where the SSID | Balance: 20X |

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| | does not broadcast | MAX: BR1 IP55 HW4 |
| 23906 | [Beta 2] [B20X / BR1 IP55 HW4] Fixed an issue where the throughput is limited by the lowest speed port | MAX: BR1 IP55 HW4 X Series: 20X |
| 23638 | [Beta 2] [Captive Portal] Fixed an issue where Client Bandwidth Settings from RADIUS does not work when the Captive Portal is configured on VLAN | All Models (Except FusionHub) |
| 23369 | [Beta 2] [Firmware Upgrade] Fixed an issue causing Firmware upgrades does not work. | MAX: BR1/2 Series (Except ENT), 700 HW1-2, HD2 HW1-4 UBR: UBR LTE Surf SOHO: SOHO HW2 / MK3 |
| 23867 | [Beta 2] [OpenVPN WAN] Fixed an issue where the OpenVPN WAN accepted routes from the server | All Models (Except FusionHub) |
| 23332 | [Beta 2] [Outbound Policy] "Normal and High Application Compatibility" have been deprecated | All Models (Except FusionHub) |
| 23898 | [Beta 2] [uPnP] Fixed the potential vulnerability | All Models (Except FusionHub) |
| 23657 | [RC 1] [B20X] Fixed an issue of where the LAN Interface numbers are not correct | X Series: 20X |
| 23828 | [RC 1] [Firewall] Fixed an issue of Firewall Log showing inconsistent date and time. | All Models |
| 23939 | [RC 1] [WINS Server] Fixed an issue that causes system instability when using the LAN > WINS Server. | Balance: All (Except 20X) MAX: BR1 ENT, 700, HD2/4, Transit MediaFast: All X Series: EPX, SDX Pro, SDX, 580X, 380X, PDX, MBX |
| 23919 | [RC 2] [Client List] Fixed an issue where the Client List shows the download usage of offline devices. | All Models (Except FusionHub) |
| 23816 | [RC 2] [System] Fixed a rare issue of the Client List that causes system instability. | All Models |

Report an Issue

To report an issue, please open a support ticket at:
<https://ticket.peplink.com/>

For the latest development news and known issues, take a look at our forums:
<https://forum.peplink.com/>