



cnPilot™ Enterprise AP Release Notes

ePMP1000 Hotspot, cnPilot E400, cnPilot E500

System Release 3.3

Sections Included:

- Supported Platforms
 - Supported Features
 - Problems Corrected
 - Known Limitations
 - Technical Support
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Introduction

This document provides information for the Cambium Networks ePMP 1000/cnPilot Enterprise AP system release 3.3.

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Note

Hostnames are only allowed to have the following characters 0-9/a-z/A-Z and hyphens. If a previously configured hostname had other characters those characters will be replaced with hyphens.

Supported Platforms

The following table provides details on the supported platforms:

Model #/HVIN	Part #	Description
C000100P400A	C000100W400A	cnPilot E400 (FCC) 802.11ac dual band concurrent Enterprise class ceiling mount access point with PoE injector with cord and CAT5 Ethernet cable
C000100P401A	C000100W401A	cnPilot E400 (EU) 802.11ac dual band concurrent Enterprise class ceiling mount access point with PoE injector with Cord and CAT5 Ethernet cable
C000100P402A	C000100W402A	cnPilot E400 (AUS, NZ) 802.11ac dual band concurrent Enterprise class ceiling mount access point with PoE injector and CAT5 Ethernet cable
C000100P403A	C000100W403A	cnPilot E400 (BR) 802.11ac dual band concurrent Enterprise class ceiling mount access point with PoE injector and CAT5 Ethernet cable
C000100P404A	C000100W404A	cnPilot E400 (ROW) 802.11ac dual band concurrent Enterprise class ceiling mount access point with PoE injector and CAT5 Ethernet cable. No Country Cord
C050900A021A	C005095H021A	ePMP 1000 hotspot (ROW, no cord) 802.11n 5 GHz Single Band WLAN access point
C050900A023A	C005095H023A	ePMP 1000 hotspot (EU) 802.11n 5 GHz Single Band WLAN access point
C058900A122A	C005095H122A	ePMP 1000 hotspot (FCC) 802.11n 5 GHz Single Band WLAN access point
C050900A221A	C005095H221A	ePMP 1000 hotspot (ROW, EU Cord) 802.11n 5 GHz Single Band WLAN access point
C024900A021A	C024095H021A	ePMP 1000 hotspot (US cord) 802.11n 2.4 GHz Single Band WLAN access point
C024900A221A	C024095H221A	ePMP 1000 hotspot (EU cord) 802.11n 2.4 GHz Single Band WLAN access point
cnPilot E500 Outdoor	PL-E500INTA-US	E500 (FCC) Outdoor 2x2 Integrated Gigabit 11ac access point with PoE Injector
cnPilot E500 Outdoor	PL-E500INTA-EU	E500 (EU) Outdoor 2x2 Integrated Gigabit 11ac access point with PoE Injector
cnPilot E500 Outdoor	PL-E500INTA-RW	E500 (ROW) Outdoor 2x2 Integrated 11ac access point with PoE Injector, No country cord

Supported Features

The following table lists the features that are supported in ePMP 1000/cnPilot Enterprise AP:

Feature	
Capacity	cnPilot E400/E500
	<ul style="list-style-type: none"> • WLANs: 16 • Clients: 127 for 11ac radio and 256 for 11n radio
Security	ePMP 1000 Hotspot
Client Traffic Management	<ul style="list-style-type: none"> • WLANs: 8 • Clients: 127
	<ul style="list-style-type: none"> • Open • WPA-PSK, WPA2-PSK (Pre-shared Keys) • WPA-Enterprise, WPA2-Enterprise (802.1x with EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-SIM, EAP-AKA) • MAC Authentication (Static list, RADIUS based)
Guest Access	<ul style="list-style-type: none"> • Rate limit upstream and downstream per-client, per-WLAN • Scheduled WLAN access (time-based SSID) • VLAN trunking support (Static VLAN, RADIUS assigned VLAN) • Access Control Lists (IP and MAC based ACLs) • DNS based Access Control (DNS based whitelist, blacklist)
Wired bridging and routing services	<ul style="list-style-type: none"> • Captive portal splash pages • Multiple authentication options (click-through, RADIUS) • WISPr interoperable • Walled Garden Support
	<ul style="list-style-type: none"> • NAT, port forwarding • DHCP Server • DNS proxy server • Firewall, DoS attack prevention
Troubleshooting Tools	<ul style="list-style-type: none"> • Connectivity test tools (ping, traceroute) • Packet Capture for traffic analysis • WiFi Analyzer for radio/802.11 analysis
	<ul style="list-style-type: none"> • Support for cnMaestro cloud based onboarding with certificate validation for cnPilot E400/E500 and ePMP 1000 • Enterprise class CLI accessible over Telnet and SSH • On-Device GUI (http, https) • SNMP v2c, v3 based monitoring

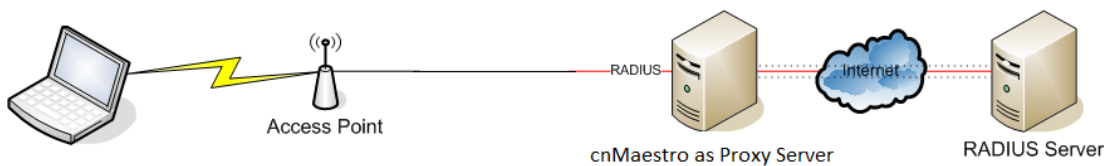
Features introduced in 3.3 release

This section lists the features and enhancements that are introduced in this release of ePMP 1000/cnPilot Enterprise AP.

RADIUS Proxying through cnMaestro On-Premises

cnMaestro On-Premises can act as a proxy server to authenticate the requests coming from cnPilot Enterprise AP. In this scenario, cnMaestro will act as NAS for radius server.

In below scenario, access point sends radius packets to cnMaestro On-Premises and it forwards to the RADIUS server. It can act as a proxy for either authentication or accounting messages.



Radius Proxy Configuration

Follow the below procedure to configure Radius proxy on cnMaestro On-Premises:

1. Navigate to **Configure > WLAN > AP GROUPS > WLANs** page.
2. Select **WLAN profile > EDIT > RADIUS Server**.
3. Select and enable Proxy RADIUS through **cnMaestro**: checkbox.
4. Configure Authentication Server details.
5. Configure Accounting Server details.
6. Configure NAS-Identifier. For this, include **NAS-Identifier** attribute to use in Radius Request packets and **Default** to system name.
7. Push the configuration from cnMaestro to AP



Note

Radius Proxy through cnMaestro feature is available from 1.4.1-b1 build on cnMaestro and is available from 3.3 beta version on cnPilot Enterprise AP.

Fixed Issues (System Release 3.3)

This section lists the issues that are fixed in 3.3 release of ePMP 1000/cnPilot Enterprise AP:

Tracking	Product	Description / Workaround
FLCN-1374	cnPilot E400/E500, ePMP 1000	UDFCPD failed to provide IPs when the netmask was less than 24.

Tracking	Product	Description / Workaround
FLCN-2306	cnPilot E400/E500, ePMP 1000	The "space" character is not handled in PSK passphrase.
FLCN-2418	cnPilot E400/E500, ePMP 1000	The IP to MAC binding limit has been increased from 32 to 200.
FLCN-2472	cnPilot E400/E500, ePMP 1000	The client isolation feature did not work as expected and the associated clients could ping each other.
FLCN-2482	cnPilot E400/E500, ePMP 1000	SNMP support for WLAN total packets count has been added.
FLCN-2498	cnPilot E400/E500, ePMP 1000	Schedule Access failed when WLAN profile was set with RADIOS 2.4G and both Band options.
FLCN-2525	cnPilot E400/E500, ePMP 1000	SNMP support to get the associated mesh clients information has been added.
FLCN-2545	cnPilot E400/E500, ePMP 1000	Unable to change native VLAN in GUI when switchport mode was selected as trunk.
FLCN-2565	cnPilot E400/E500, ePMP 1000	Client connectivity failed when WPA2-Enterprise security was enabled with Server Pool Mode selected as Failover .
FLCN-2571	cnPilot E400/E500, ePMP 1000	CLI support for Mesh Client statistics has been added.
FLCN-2573	cnPilot E400/E500, ePMP 1000	The SNMP trap details were coming out of non-native VLAN interface.

Known Issues (System Release 3.3)

This section lists the known issues in 3.3 release of ePMP 1000/cnPilot Enterprise AP:

Tracking	Product	Description / Workaround
FLCN-2283	cnPilot E400/E500, ePMP 1000	Auto RF feature works only with non DFS channels.

Technical Support

For technical support, see

<http://www.cambiumnetworks.com/support>

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