



Juniper Networks AP34 Access Point Deployment Guide User Guide

[Home](#) » [JUNIPER NETWORKS](#) » Juniper Networks AP34 Access Point Deployment Guide User Guide 

Contents

- [1 Juniper Networks AP34 Access Point Deployment Guide](#)
- [2 Product Information](#)
 - [2.1 Specifications](#)
- [3 Overview](#)
 - [3.1 Access Points Overview](#)
 - [3.2 Components](#)
- [4 Requirements and Specifications](#)
- [5 Installation and Configuration](#)
 - [5.1 Mount an AP34 Access Point](#)
 - [5.2 Connect an AP34 to the Network and Power It On](#)
- [6 Troubleshoot](#)
 - [6.1 Contact Customer Support](#)
- [7 Documents / Resources](#)
 - [7.1 References](#)
- [8 Related Posts](#)



Juniper Networks AP34 Access Point Deployment Guide



Product Information

Specifications

- **Manufacturer:** Juniper Networks, Inc.
- **Model:** AP34
- **Published:** 2023-12-21
- **Power Requirements:** See AP34 Power Requirements section

Overview

AP34 Access Points Overview

The AP34 Access Points are designed to provide wireless network connectivity in various environments. They offer reliable and high-performance wireless communication.

AP34 Components

The AP34 Access Point package includes the following components:

- AP34 Access Point
- Internal Antenna (for AP34-US and AP34-WW models)
- Power Adapter
- Ethernet Cable
- Mounting Brackets
- User Manual

Requirements and Specifications

AP34 Specifications

The AP34 Access Point has the following specifications:

- **Model:** AP34-US (for United States), AP34-WW (for outside of United States)
- **Antenna:** Internal

AP34 Power Requirements

The AP34 Access Point requires the following power input:

- **Power Adapter:** 12V DC, 1.5A

Installation and Configuration

Mount an AP34 Access Point

To mount an AP34 Access Point, follow these steps:

1. Choose the appropriate mounting bracket for your installation (refer to Supported Mounting Brackets for AP34 section).
2. Follow the specific mounting instructions based on the type of junction box or T-bar you are using (refer to the corresponding sections).
3. Securely attach the AP34 Access Point to the mounting bracket.

Supported Mounting Brackets for AP34

The AP34 Access Point supports the following mounting brackets:

- Universal Mounting Bracket (APBR-U) for Juniper Access Points

Mount an Access Point on a Single-Gang or 3.5-inch or 4-Inch Round Junction Box

To mount an AP34 Access Point on a single-gang or round junction box, follow these steps:

1. Attach the APBR-U mounting bracket to the junction box using the appropriate screws.
2. Securely attach the AP34 Access Point to the APBR-U mounting bracket.

Mount an Access Point on a Double-Gang Junction Box

To mount an AP34 Access Point on a double-gang junction box, follow these steps:

1. Attach two APBR-U mounting brackets to the junction box using appropriate screws.
2. Securely attach the AP34 Access Point to the APBR-U mounting brackets.

Connect an AP34 to the Network and Power It On

To connect and power on an AP34 Access Point, follow these steps:

1. Connect one end of the Ethernet cable to the Ethernet port on the AP34 Access Point.
2. Connect the other end of the Ethernet cable to a network switch or router.
3. Connect the power adapter to the power input on the AP34 Access Point.
4. Plug the power adapter into a power outlet.
5. The AP34 Access Point will power on and start initializing.

Troubleshoot

Contact Customer Support

If you encounter any issues or need assistance with your AP34 Access Point, please contact our customer support team:

- **Phone:** 408-745-2000
- **Email:** support@juniper.net.

About This Guide

Overview

This guide provides detailed information on deploying and configuring the Juniper AP34 Access Point.

AP34 Access Points Overview

The AP34 Access Points are designed to provide wireless network connectivity in various environments. They offer reliable and high-performance wireless communication.

AP34 Components

The AP34 Access Point package includes the following components:

- AP34 Access Point
- Internal Antenna (for AP34-US and AP34-WW models)
- Power Adapter
- Ethernet Cable
- Mounting Brackets
- User Manual

FAQ

- **Q: Are the AP34 Access Points compatible with all network switches?**

A: Yes, the AP34 Access Points are compatible with standard network switches that support Ethernet connectivity.

- **Q: Can I mount an AP34 Access Point on a ceiling?**

A: Yes, the AP34 Access Point can be mounted on a ceiling using the appropriate mounting brackets and installation instructions provided in this guide.

Juniper Networks, Inc. 1133 Innovation Way Sunnyvale, California 94089 USA
408-745-2000
www.juniper.net

Juniper Networks, the Juniper Networks logo, Juniper, and Junos are registered trademarks of Juniper Networks, Inc. in the United States and other countries. All other trademarks, service marks, registered marks, or registered service marks are the property of their respective owners. Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

Juniper AP34 Access Point Deployment Guide

- Copyright © 2023 Juniper Networks, Inc. All rights reserved.
- The information in this document is current as of the date on the title page.

YEAR 2000 NOTICE

Juniper Networks hardware and software products are Year 2000 compliant. Junos OS has no known time-related limitations through the year 2038. However, the NTP application is known to have some difficulty in the year 2036.

END USER LICENSE AGREEMENT

The Juniper Networks product that is the subject of this technical documentation consists of (or is intended for use with) Juniper Networks software. Use of such software is subject to the terms and conditions of the End User License Agreement (“EULA”) posted at <https://support.juniper.net/support/eula/>. By downloading, installing or using such software, you agree to the terms and conditions of that EULA.

About This Guide

Use this guide to install, manage, and troubleshoot the Juniper® AP34 High-Performance Access Point. After completing the installation procedures covered in this guide, refer to the Juniper Mist™ Wi-Fi Assurance documentation for information about further configuration.

Overview

Access Points Overview

The Juniper® AP34 High-Performance Access Point is a Wi-Fi 6E indoor access point (AP) that leverages the Mist AI to automate network operations and boost Wi-Fi performance. The AP34 is capable of operating simultaneously in the 6-GHz band, 5-GHz band, and 2.4-GHz band along with a dedicated tri-band scan radio. The AP34 is suitable for deployments that do not require advanced location services. The AP34 has three IEEE 802.11ax data radios, which deliver up to 2×2 multiple input, multiple output (MIMO) with two spatial streams. The AP34 also has a fourth radio that is dedicated for scanning. The AP uses this radio for radio resource management (RRM) and wireless security. The AP can operate in either multi-user or single-user mode. The AP is backward compatible with the 802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac wireless standards.

The AP34 has an omnidirectional Bluetooth antenna to support asset visibility use cases. The AP34 provides real-time network insights and asset location services without the need for battery-powered Bluetooth Low-Energy (BLE) beacons and manual calibration. The AP34 provides maximum data rates of 2400 Mbps in the 6-GHz band, 1200 Mbps in the 5-GHz band, and 575 Mbps in the 2.4-GHz band.

Figure 1: Front and Rear View of AP34



AP34 Access Point Models

Table 1: AP34 Access Point Models

Model	Antenna	Regulatory Domain
AP34-US	Internal	United States only
AP34-WW	Internal	Outside of United States

NOTE:
 Juniper products are manufactured in accordance with electrical and environmental regulations specific to certain regions and countries. Customers are responsible for ensuring that any regional or country-specific SKUs are used only in the specified authorized area. Failure to do so may void the warranty of Juniper products.

Benefits of AP34 Access Points

- Simple and quick deployment—You can deploy the AP with minimal manual intervention. The AP automatically connects to the Mist cloud after powering on, downloads its configuration, and connects to the appropriate network. Automatic firmware upgrades ensure that the AP runs the latest firmware version.
- Proactive troubleshooting—The AI-driven Marvis® Virtual Network Assistant leverages the Mist AI to identify issues proactively and provide recommendations to fix issues. Marvis can identify issues such as offline APs and APs with insufficient capacities and coverage issues.
- Improved performance through automatic RF optimization—Juniper radio resource management (RRM) automates dynamic channel and power assignment, which helps to reduce interference and enhance user experience. The Mist AI monitors the coverage and capacity metrics and optimizes the RF environment.
- Improved user experience using AI—The AP uses Mist AI to enhance user experience in the Wi-Fi 6 spectrum by ensuring consistent service to multiple connected devices in high-density environments.

Components

Figure 2: AP34 Components



Table 2: AP34 Components

Component	Description
Reset	A pinhole reset button that you can use to reset the AP configuration to the factory default
USB	USB 2.0 port
Eth0+PoE	100/1000/2500/5000BASE-T RJ-45 port that supports an 802.3at or 802.3bt PoE-powered device
Safety tie	Slot for a safety tie that you can use to either secure or hold the AP in place
Status LED	A multicolor status LED to indicate the status of the AP and to help troubleshoot issues.

Requirements and Specifications

AP34 Specifications

Table 3: Specifications for AP34

Parameter	Description
Physical Specifications	
Dimensions	9.06 in. (230 mm) x 9.06 in. (230 mm) x 1.97 in. (50 mm)
Weight	2.74 lb (1.25 kg)
Environmental Specifications	
Operating temperature	32 °F (0 °C) through 104 °F (40 °C)
Operating humidity	10% through 90% maximum relative humidity, non-condensing
Operating altitude	Up to 10,000 ft (3,048 m)
Other Specifications	
Wireless standard	802.11ax (Wi-Fi 6)
Internal antennas	<ul style="list-style-type: none"> • Two 2.4-GHz omnidirectional antennas with a peak gain of 4 dBi • Two 5-GHz omnidirectional antennas with a peak gain of 6 dBi • Two 6-GHz omnidirectional antennas with a peak gain of 6 dBi
Bluetooth	Omnidirectional Bluetooth antenna
Power options	802.3at (PoE+) or 802.3bt (PoE)

Radiofrequency (RF)	<ul style="list-style-type: none"> • 6-GHz radio—Supports 2x2:2SS 802.11ax MU-MIMO and SU-MIMO • 5-GHz radio—Supports 2x2:2SS 802.11ax MU-MIMO and SU-MIMO • 2.4-GHz radio—Supports 2x2:2SS 802.11ax MU-MIMO and SU-MIMO • 2.4-GHz, 5-GHz, or 6-GHz scanning radio • 2.4-GHz Bluetooth® Low Energy (BLE) with an omnidirectional antenna
Maximum PHY rate (maximum transmit rate at the physical layer)	<ul style="list-style-type: none"> • Total maximum PHY rate—4175 Mbps • 6 GHz—2400 Mbps • 5 GHz—1200 Mbps • 2.4 GHz—575 Mbps
Maximum devices supported on each radio	512

AP34 Power Requirements

The AP34 requires 802.3at (PoE+) power. The AP34 requests 20.9-W power to provide wireless functionality. However, the AP34 is capable of running on 802.3af (PoE) power with reduced functionality as described below:

The AP34 requires 802.3at (PoE+) power. The AP34 requests 20.9-W power to provide wireless functionality. However, the AP34 is capable of running on 802.3af (PoE) power with reduced functionality as described below:

- Only one radio will be active.
- The AP can only connect to the cloud.
- The AP will indicate that it requires a higher power input to operate.

You can use any of the following options to power on the AP:

- Power over Ethernet plus (PoE+) from an Ethernet switch
 - We recommend that you use an Ethernet cable with a maximum length of 100 m to connect the access point (AP) to the switch port.
 - If you use an Ethernet cable that is longer than 100 m by placing an Ethernet PoE+ extender in the path, the AP might power up, but the Ethernet link does not transmit data across such a long cable. You might see the status LED blink yellow twice. This LED behavior indicates that the AP is unable to receive data

from the switch.

- PoE injector

Installation and Configuration

Mount an AP34 Access Point

This topic provides the various mounting options for the AP34. You can mount the AP on a wall, ceiling or junction box. The AP ships with a universal mounting bracket that you can use for all mounting options. To mount the AP on a ceiling, you'll need to order an additional adapter based on the type of ceiling.

NOTE:

We recommend that you claim your AP before you mount it. The claim code is located on the rear of the AP and it might be difficult to access the claim code after you mount the AP. For information about claiming an AP, see [Claim a Juniper Access Point](#).

Supported Mounting Brackets for AP34

Table 4: Mounting Brackets for AP34

Part Number	Description
Mounting Brackets	
APBR-U	Universal bracket for T-bar and drywall mounting
Bracket Adapters	
APBR-ADP-T58	Bracket for mounting the AP on a 5/8-in. threaded rod
APBR-ADP-M16	Bracket for mounting the AP on a 16-mm threaded rod
APBR-ADP-T12	Bracket adapter for mounting the AP on a 1/2-in. threaded rod
APBR-ADP-CR9	Bracket adapter for mounting the AP on a recessed 9/16-in. T-bar or channel rail
APBR-ADP-RT15	Bracket adapter for mounting the AP on a recessed 15/16-in. T-bar
APBR-ADP-WS15	Bracket adapter for mounting the AP on a recessed 1.5-in. T-bar

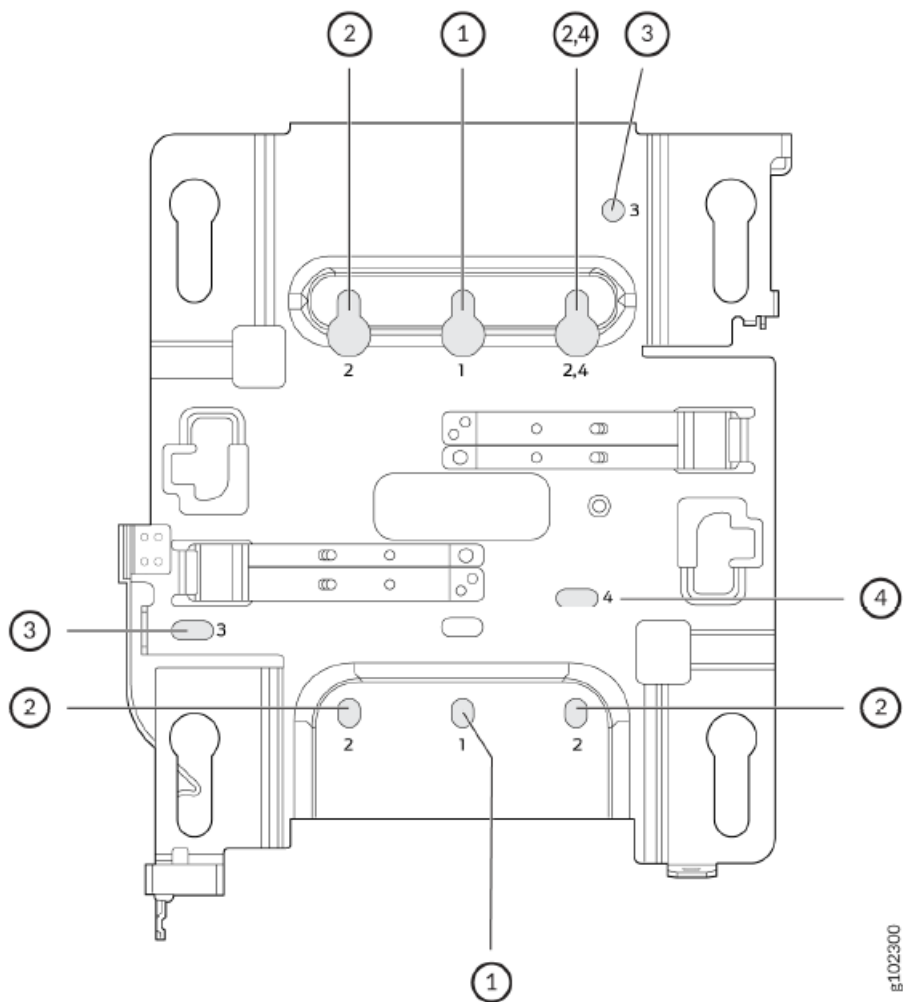
NOTE:

Juniper APs ship with the universal bracket APBR-U. If you need other brackets, you must order them separately.

Universal Mounting Bracket (APBR-U) for Juniper Access Points

You use the universal mounting bracket APBR-U for all types of mounting options—for example, on a wall, a ceiling, or a junction box. Figure 3 on page 13 shows the APBR-U. You'll need to use the numbered holes to insert screws when mounting the AP on a junction box. The numbered holes that you use vary based on the type of junction box.

Figure 3: Universal Mounting Bracket (APBR-U) for Juniper Access Points



If you’re mounting the AP on a wall, use screws with the following specifications:

- **Diameter of the screw head:** ¼ in. (6.3 mm)
- **Length:** At least 2 in. (50.8 mm)

The following table lists the bracket holes that you need to use for specific mounting options.

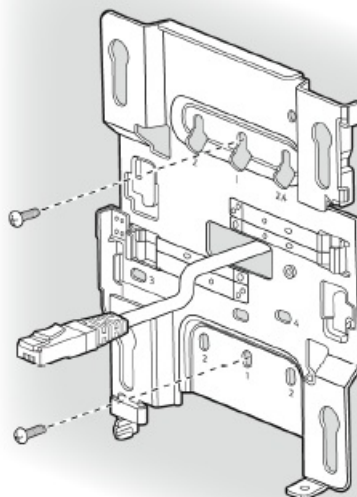
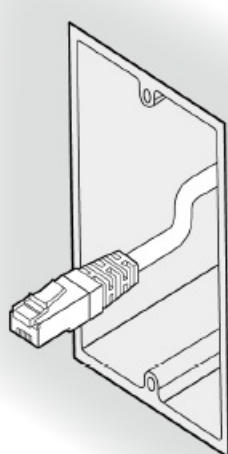
Hole Number	Mounting Option
1	<ul style="list-style-type: none"> • US single-gang junction box • 3.5 in. round junction box • 4 in. round junction box
2	<ul style="list-style-type: none"> • US double-gang junction box • Wall • Ceiling
3	<ul style="list-style-type: none"> • US 4-in. square junction box
4	<ul style="list-style-type: none"> • EU junction box

Mount an Access Point on a Single-Gang or 3.5-inch or 4-inch Round Junction Box

You can mount an access point (AP) on a US single-gang or a 3.5-in. or 4-in. round junction box by using the universal mounting bracket (APBR-U) that we ship along with the AP. To mount an AP on a single-gang junction box:

1. Attach the mounting bracket to the single-gang junction box by using two screws. Ensure that you insert the screws in the holes marked 1 as shown in Figure 4.

Figure 4: Attach the APBR-U Mounting Bracket to the Single-Gang Junction Box



g102301

2. Extend the Ethernet cable through the bracket.
3. Position the AP such that the shoulder screws on the AP engage with the keyholes of the mounting bracket. Slide and lock the AP in place.

Figure 5: Mount the AP on the Single-Gang Junction Box



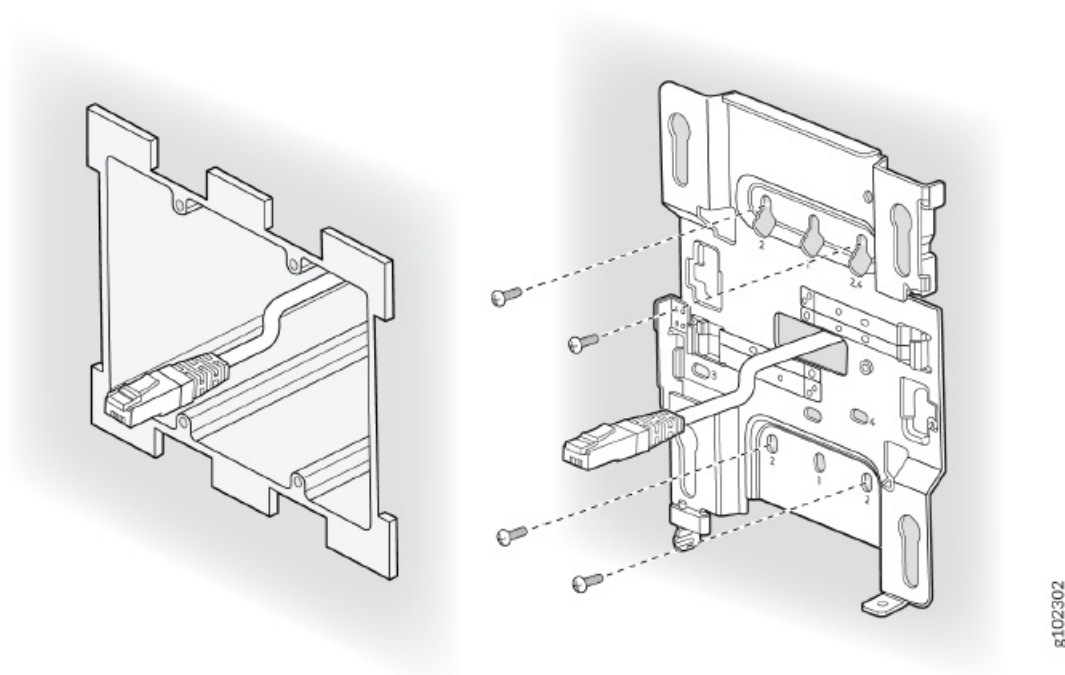
g102308

Mount an Access Point on a Double-Gang Junction Box

You can mount an access point (AP) on a double-gang junction box by using the universal mounting bracket (APBR-U) that we ship along with the AP. To mount an AP on a double-gang junction box:

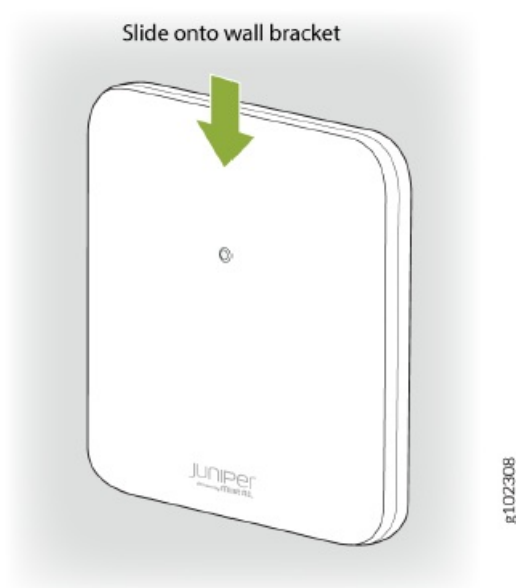
1. Attach the mounting bracket to the double-gang junction box by using four screws. Ensure that you insert the screws in the holes marked 2 as shown in Figure 6.

Figure 6: Attach the APBR-U Mounting Bracket to the Double-Gang Junction Box



2. Extend the Ethernet cable through the bracket.
3. Position the AP such that the shoulder screws on the AP engage with the keyholes of the mounting bracket. Slide and lock the AP in place.

Figure 7: Mount the AP on the Double-Gang Junction Box

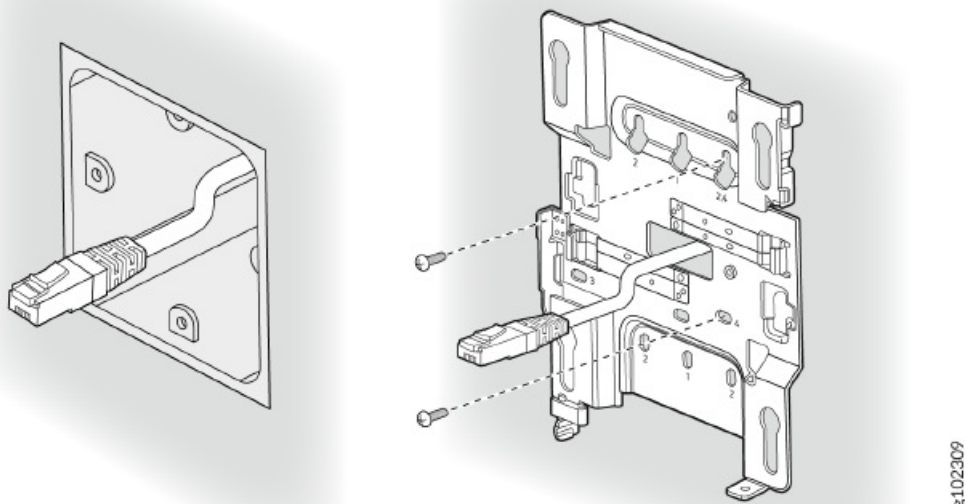


Mount an Access Point on an EU Junction Box

You can mount an access point (AP) on an EU junction box by using the universal mounting bracket (APBR-U) that ships with the AP. To mount an AP on an EU junction box:

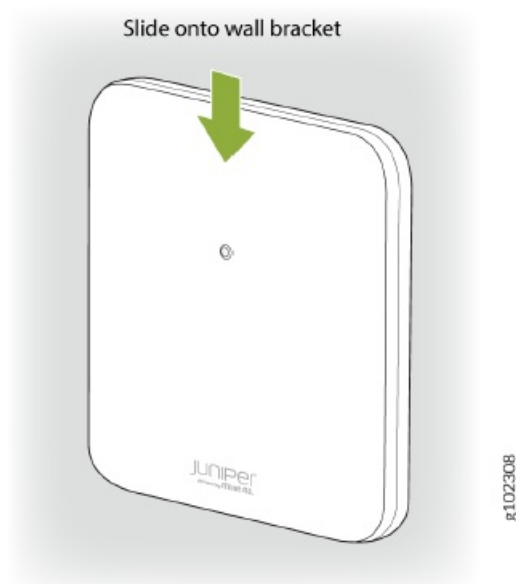
1. Attach the mounting bracket to the EU junction box by using two screws. Ensure that you insert the screws in the holes marked 4 as shown in Figure 8.

Figure 8: Attach the APBR-U Mounting Bracket to an EU Junction Box



2. Extend the Ethernet cable through the bracket.
3. Position the AP such that the shoulder screws on the AP engage with the keyholes of the mounting bracket. Slide and lock the AP in place.

Figure 9: Mount an Access Point on an EU Junction Box

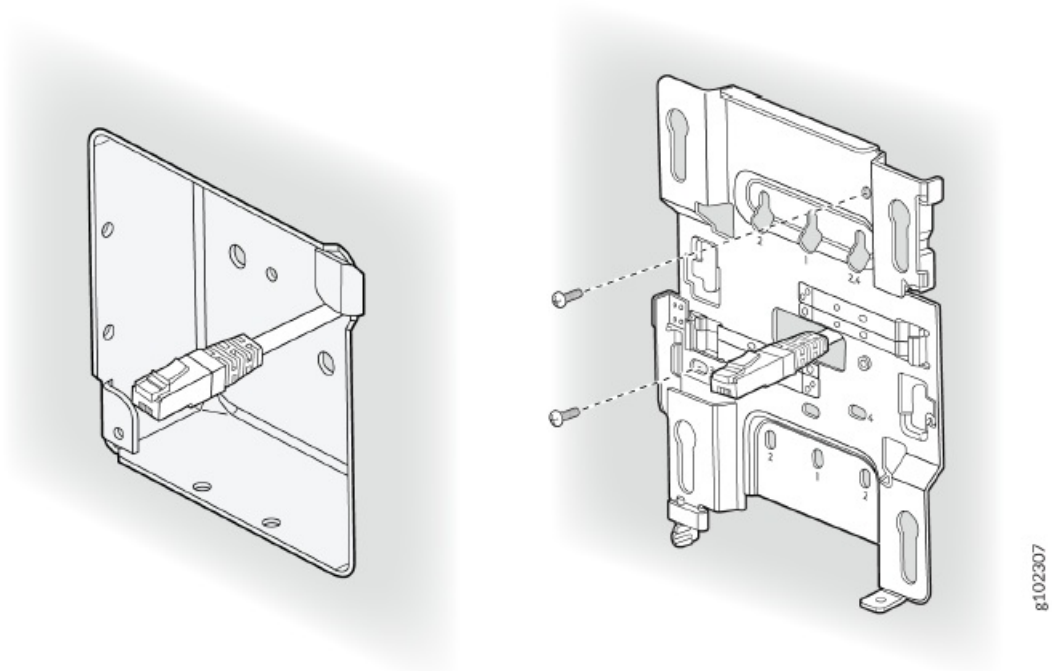


Mount an Access Point on a US 4-Inch Square Junction Box

To mount an access point (AP) on a US 4-in. square junction box:

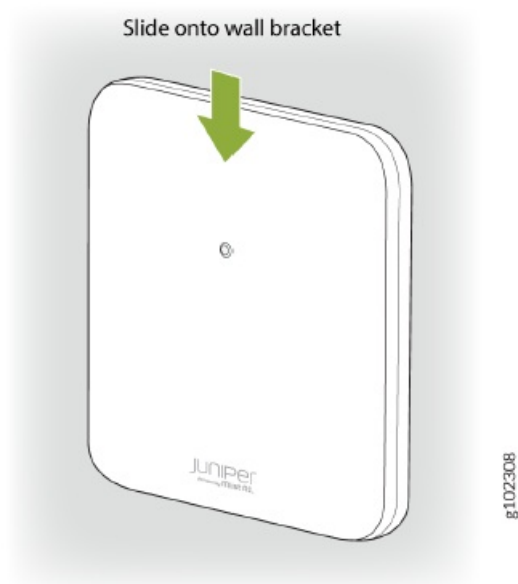
1. Attach the mounting bracket to the 4-in. square junction box by using two screws. Ensure that you insert the screws in the holes marked 3 as shown in Figure 10.

Figure 10: Attach the Mounting Bracket (APBR-U) to a US 4-inch Square Junction Box



2. Extend the Ethernet cable through the bracket.
3. Position the AP such that the shoulder screws on the AP engage with the keyholes of the mounting bracket. Slide and lock the AP in place.

Figure 11: Mount the AP on a US 4-Inch Square Junction Box

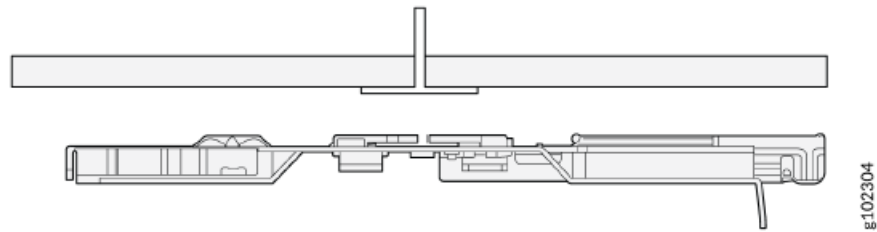


Mount an Access Point on a 9/16-Inch or 15/16-Inch T-Bar

To mount an access point (AP) on a 9/16-in. or 15/16-in. ceiling T-bar:

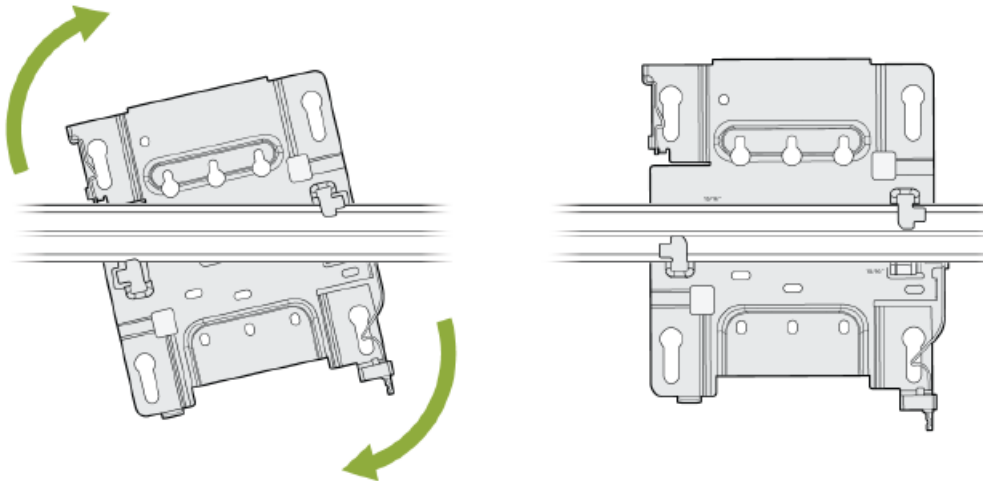
1. Attach the universal mounting bracket (APBR-U) to the T-bar.

Figure 12: Attach the Mounting Bracket (APBR-U) to a 9/16-in. or 15/16-in. T-Bar



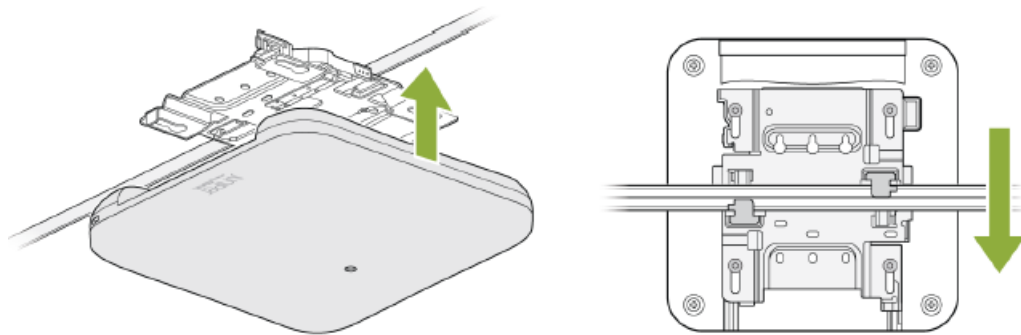
2. Rotate the bracket until you hear a distinct click, which indicates that the bracket is locked in place.

Figure 13: Lock the Mounting Bracket (APBR-U) to a 9/16-in. or 15/16-in. T-Bar



3. Position the AP such that the keyholes of the mounting bracket engage with the shoulder screws on the AP. Slide and lock the AP in place.

Figure 14: Attach the AP to a 9/16-in. or 15/16-in. T-Bar

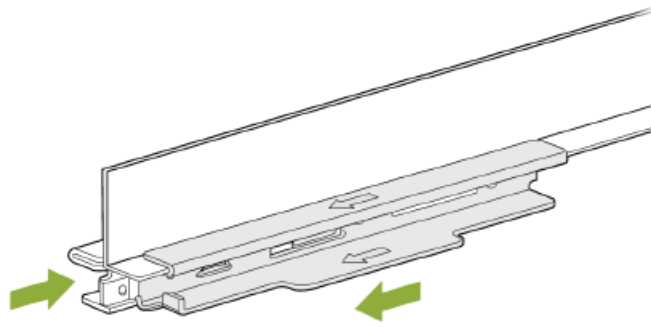


Mount an Access Point on a Recessed 15/16-Inch T-Bar

You'll need to use an adapter (ADPR-ADP-RT15) along with the mounting bracket (APBR-U) to mount an access point (AP) on a recessed 15/16-in. ceiling T-bar. You need to order the ADPR-ADP-RT15 adapter separately.

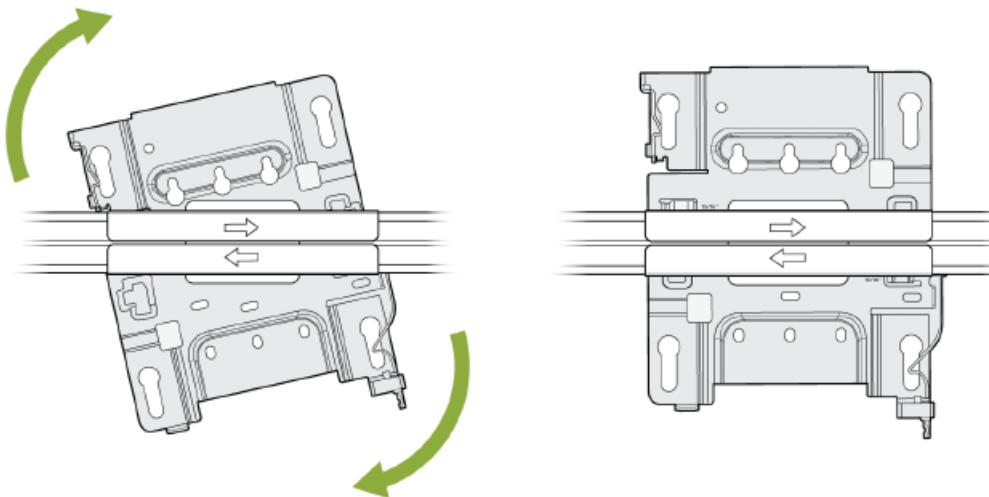
1. Attach the ADPR-ADP-RT15 adapter to the T-bar.

Figure 15: Attach the ADPR-ADP-RT15 Adapter to the T-Bar



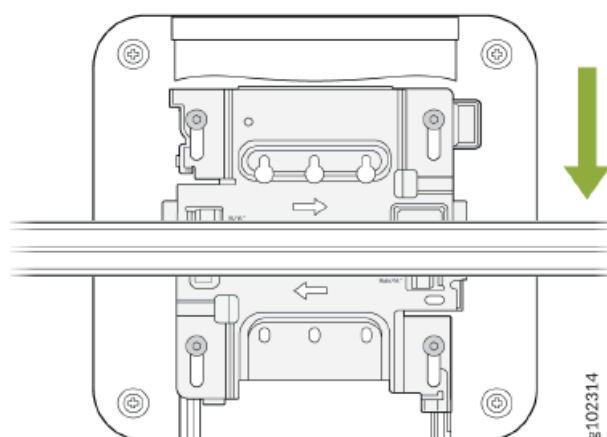
2. Attach the universal mounting bracket (APBR-U) to the adapter. Rotate the bracket until you hear a distinct click, which indicates that the bracket is locked in place.

Figure 16: Attach the Mounting Bracket (APBR-U) to the ADPR-ADP-RT15 Adapter



3. Position the AP such that the keyholes of the mounting bracket engage with the shoulder screws on the AP. Slide and lock the AP in place.

Figure 17: Attach the AP to a Recessed 15/16-Inch T-Bar



Mount an Access Point on a Recessed 9/16-Inch T-Bar or Channel Rail

To mount an access point (AP) on a recessed 9/16-in. ceiling T-bar, you'll need to use the ADPR-ADP-CR9 adapter along with the mounting bracket (APBR-U).

1. Attach the ADPR-ADP-CR9 adapter to the T-bar or channel rail.

Figure 18: Attach the ADPR-ADP-CR9 Adapter to a Recessed 9/16-Inch T-Bar

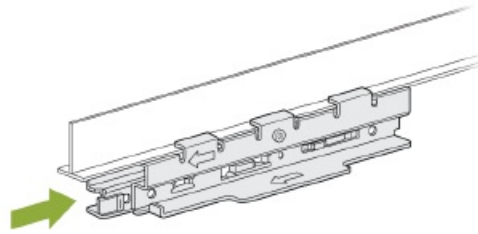
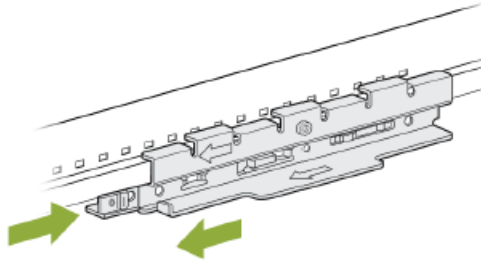
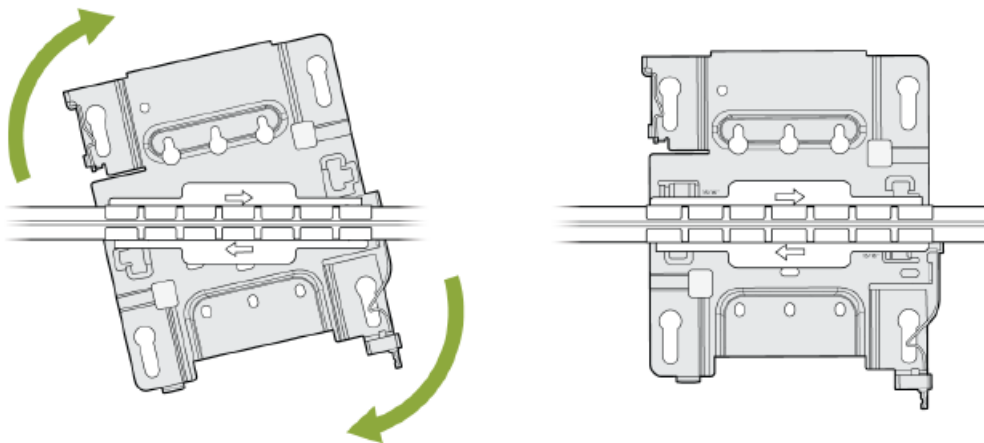


Figure 19: Attach the ADPR-ADP-CR9 Adapter to a Recessed 9/16-Inch Channel Rail



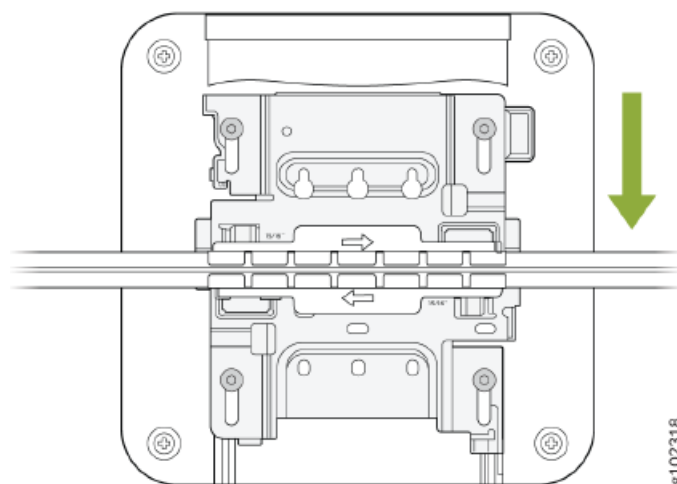
2. Attach the universal mounting bracket (APBR-U) to the adapter. Rotate the bracket until you hear a distinct click, which indicates that the bracket is locked in place.

Figure 20: Attach the APBR-U Mounting Bracket to the ADPR-ADP-CR9 Adapter



3. Position the AP such that the keyholes of the mounting bracket engage with the shoulder screws on the AP. Slide and lock the AP in place.

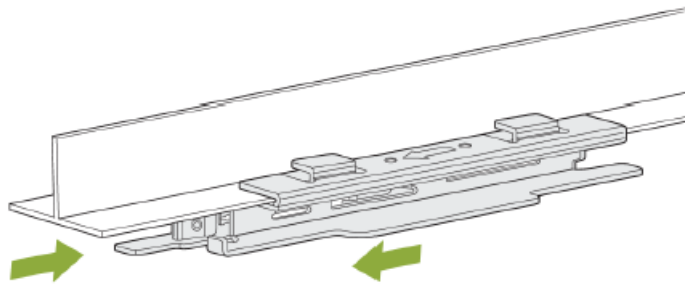
Figure 21: Attach the AP to a Recessed 9/16-in. T-Bar or Channel Rail



To mount an access point (AP) on a 1.5-in. ceiling T-bar, you'll need the ADPR-ADP-WS15 adapter. You need to order the adapter separately.

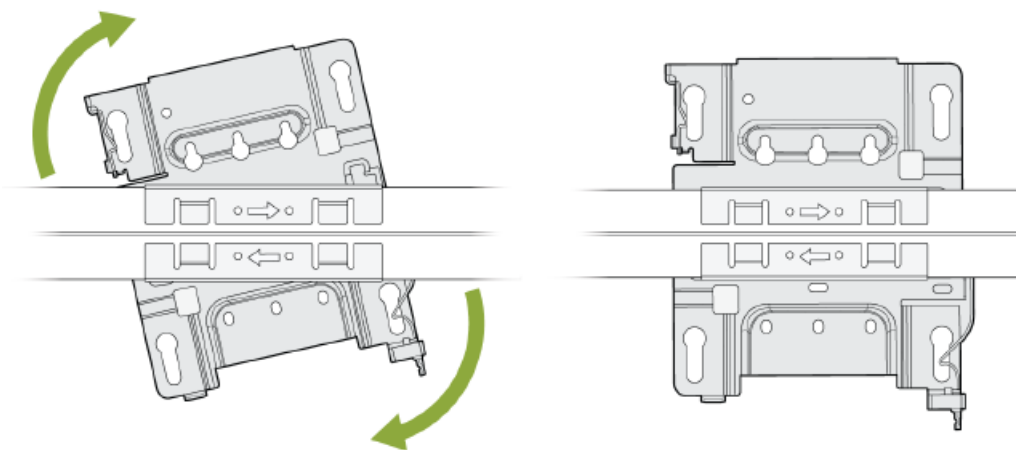
1. Attach the ADPR-ADP-WS15 adapter to the T-bar.

Figure 22: Attach the ADPR-ADP-WS15 Adapter to a 1.5-Inch T-Bar



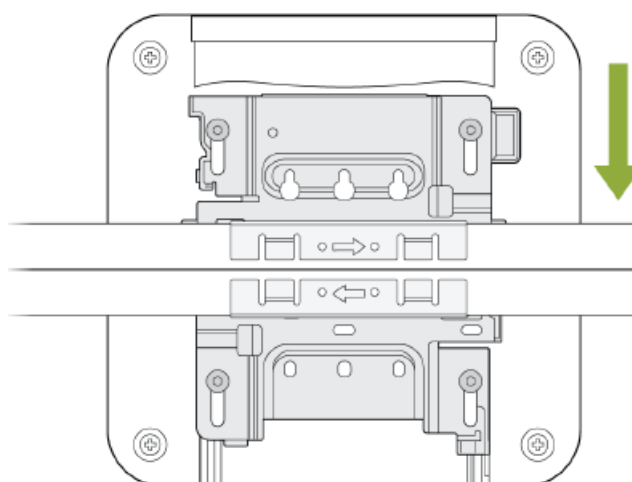
2. Attach the universal mounting bracket (APBR-U) to the adapter. Rotate the bracket until you hear a distinct click, which indicates that the bracket is locked in place.

Figure 23: Attach the APBR-U Mounting Bracket to the ADPR-ADP-WS15 Adapter



3. Position the AP such that the keyholes of the mounting bracket engage with the shoulder screws on the AP. Slide and lock the AP in place.

Figure 24: Attach the AP to a 1.5-Inch T-Bar

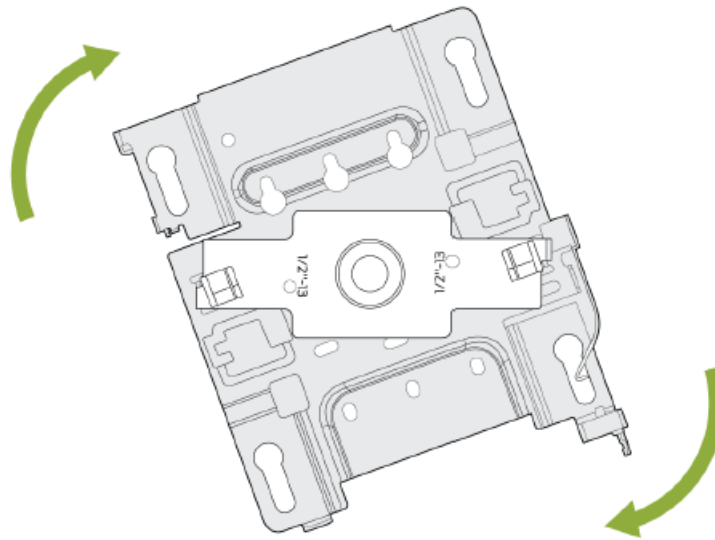


Mount an Access Point on a 1/2-Inch Threaded Rod

To mount an access point (AP) on a 1/2-in. threaded rod, you'll need to use the APBR-ADP-T12 bracket adapter and the universal mounting bracket APBR-U.

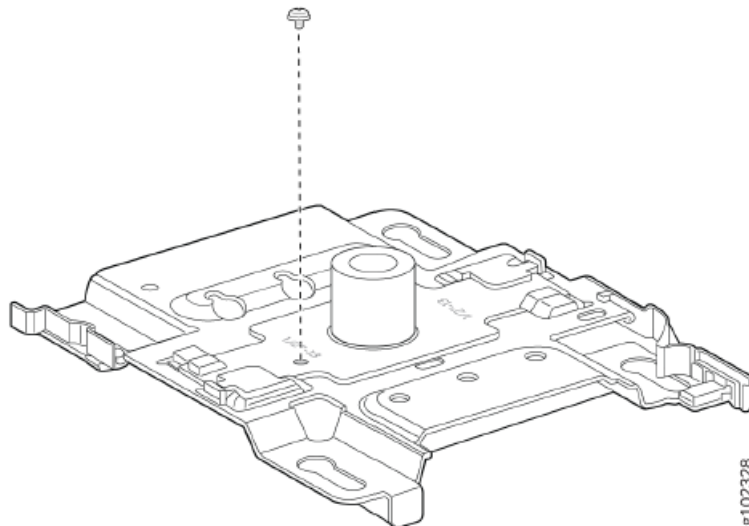
1. Attach the APBR-ADP-T12 bracket adapter to the APBR-U mounting bracket. Rotate the bracket until you hear a distinct click, which indicates that the bracket is locked in place.

Figure 25: Attach the APBR-ADP-T12 Bracket Adapter to the APBR-U Mounting Bracket



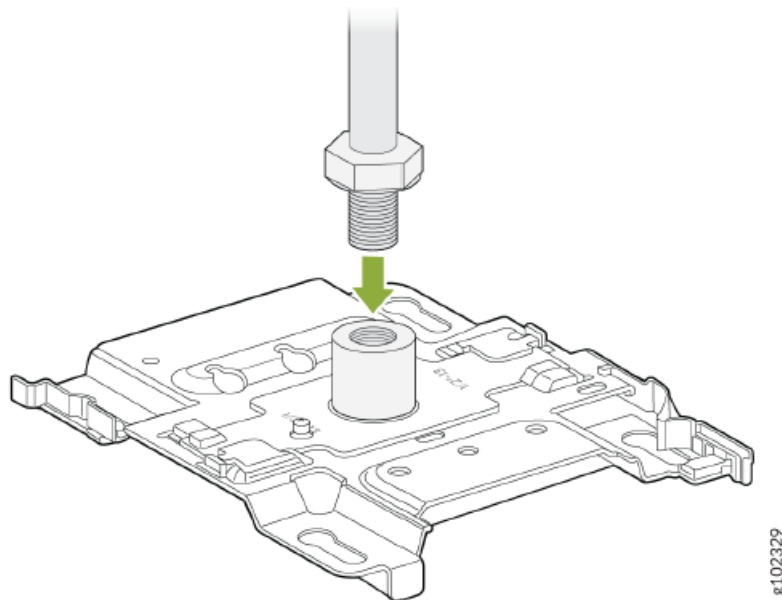
2. Secure the adapter to the bracket using a screw.

Figure 26: Secure the APBR-ADP-T12 Bracket Adapter to the APBR-U Mounting Bracket



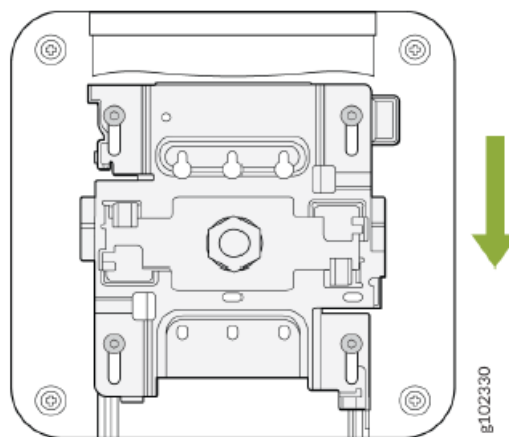
3. Attach the bracket assembly (bracket and adapter) to the 1/2-in. threaded rod by using the lock washer and nut provided

Figure 27: Attach the APBR-ADP-T12 and APBR-U Bracket Assembly to the 1/2-Inch Threaded Rod



4. Position the AP such that the shoulder screws on the AP engage with the keyholes of the mounting bracket. Slide and lock the AP in place.

Figure 28: Mount the AP on a 1/2-in. Threaded Rod

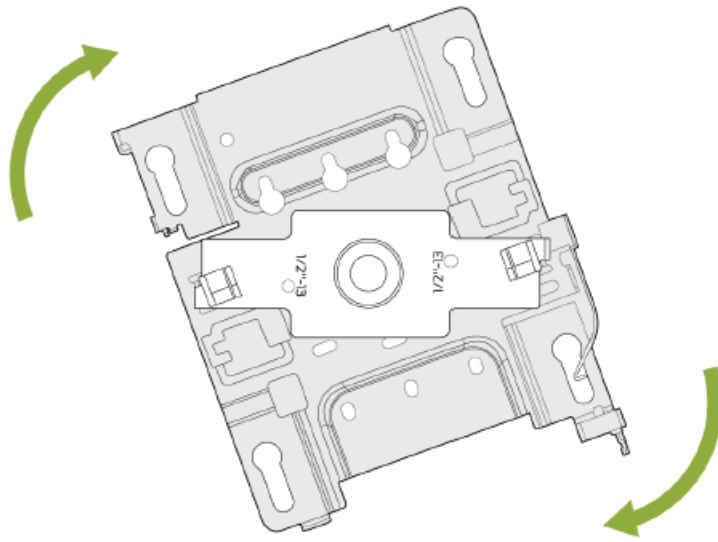


Mount an AP24 or AP34 on a 5/8-Inch Threaded Rod

To mount an access point (AP) on a 5/8-in. threaded rod, you'll need to use the APBR-ADP-T58 bracket adapter and the universal mounting bracket APBR-U.

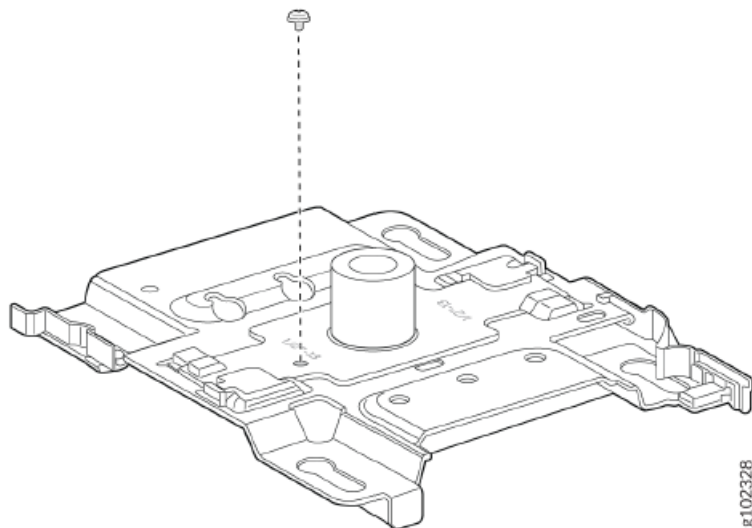
1. Attach the APBR-ADP-T58 bracket adapter to the APBR-U mounting bracket. Rotate the bracket until you hear a distinct click, which indicates that the bracket is locked in place.

Figure 29: Attach the APBR-ADP-T58 Bracket Adapter to the APBR-U Mounting Bracket



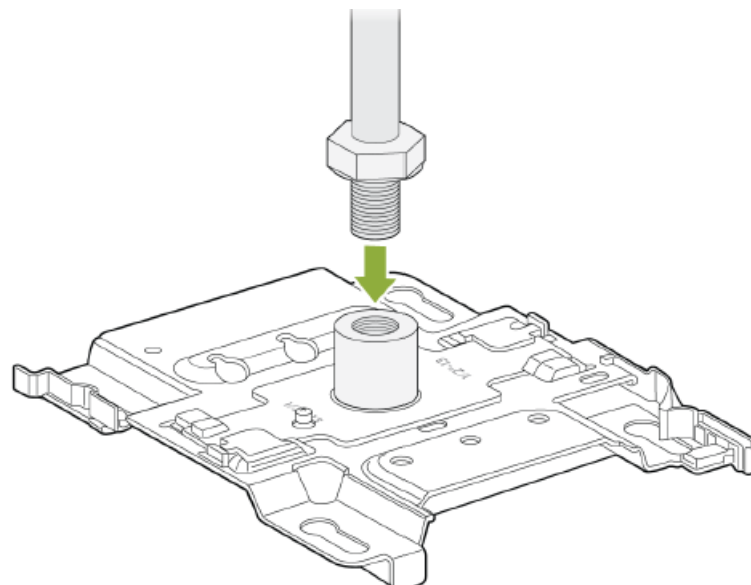
2. Secure the adapter to the bracket using a screw.

Figure 30: Secure the APBR-ADP-T58 Bracket Adapter to the APBR-U Mounting Bracket



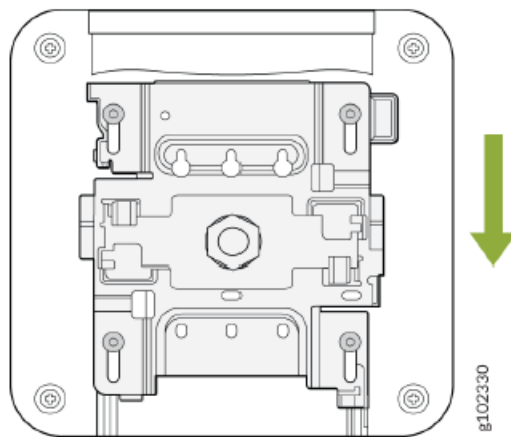
3. Attach the bracket assembly (bracket and adapter) to the 5/8-in. threaded rod by using the lock washer and nut provided

Figure 31: Attach the APBR-ADP-T58 and APBR-U Bracket Assembly to the 5/8-Inch Threaded Rod



4. Position the AP such that the shoulder screws on the AP engage with the keyholes of the mounting bracket. Slide and lock the AP in place.

Figure 32: Mount the AP on a 5/8-in. Threaded Rod

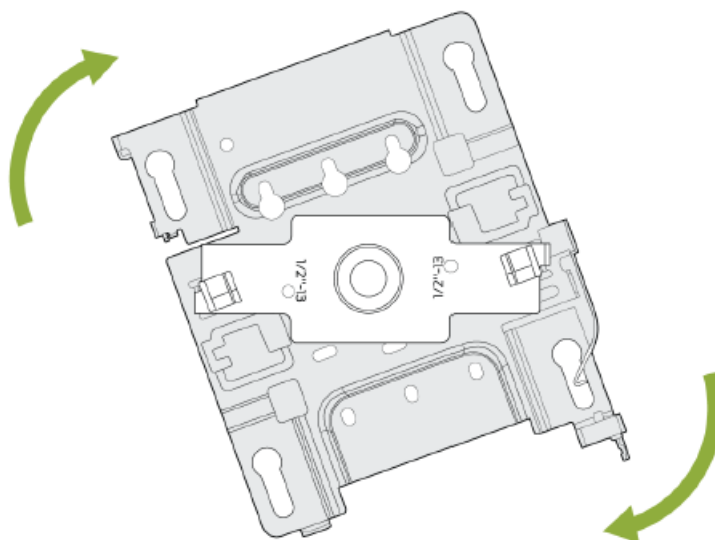


Mount an AP24 or AP34 on a 16-mm Threaded Rod

To mount an access point (AP) on a 16-mm threaded rod, you'll need to use the APBR-ADP-M16 bracket adapter and the universal mounting bracket APBR-U.

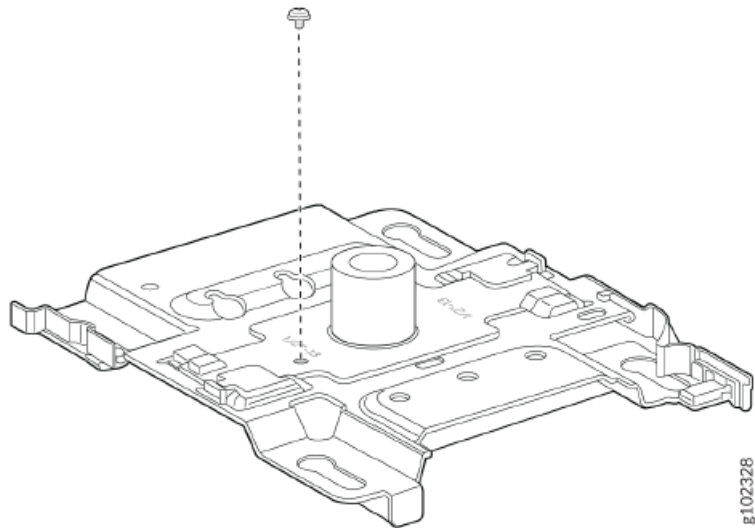
1. Attach the APBR-ADP-M16 bracket adapter to the APBR-U mounting bracket. Rotate the bracket until you hear a distinct click, which indicates that the bracket is locked in place.

Figure 33: Attach the APBR-ADP-M16 Bracket Adapter to the APBR-U Mounting Bracket



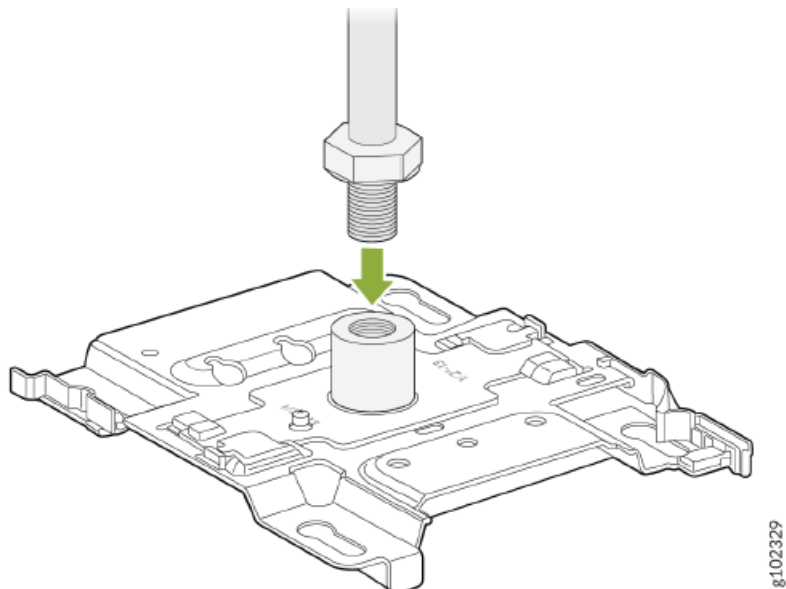
2. Secure the adapter to the bracket using a screw.

Figure 34: Secure the APBR-ADP-M16 Bracket Adapter to the APBR-U Mounting Bracket



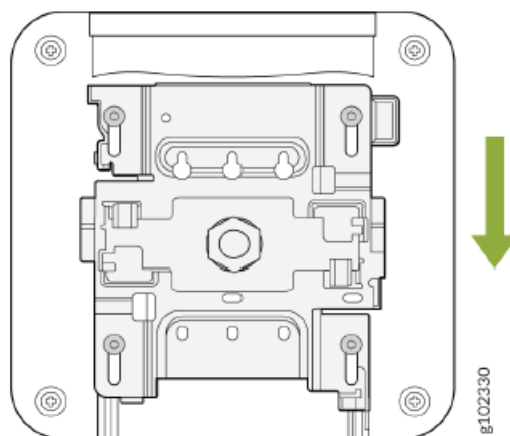
3. Attach the bracket assembly (bracket and adapter) to the 16-mm threaded rod by using the lock washer and nut provided.

Figure 35: Attach the APBR-ADP-M16 and APBR-U Bracket Assembly to the ½-Inch Threaded Rod



4. Position the AP such that the shoulder screws on the AP engage with the keyholes of the mounting bracket. Slide and lock the AP in place.

Figure 36: Mount the AP on a 16-mm Threaded Rod



Connect an AP34 to the Network and Power It On

When you power on an AP and connect it to the network, the AP is automatically onboarded to the Juniper Mist cloud. The AP onboarding process involves the following steps:

- When you power on an AP, the AP obtains an IP address from the DHCP server on the untagged VLAN.
- The AP performs a Domain Name System (DNS) lookup to resolve the Juniper Mist cloud URL. See Firewall Configuration for the specific cloud URLs.
- The AP establishes an HTTPS session with the Juniper Mist cloud for management.
- The Mist cloud then provisions the AP by pushing the required configuration once the AP is assigned to a site.

To ensure that your AP has access to the Juniper Mist cloud, ensure that the required ports on your Internet firewall are open. See Firewall Configuration.

To connect the AP to the network:

1. Connect an Ethernet cable from a switch to the Eth0+PoE port on the AP.

For information on power requirements, see “AP34 Power Requirements”.

NOTE: If you are setting up the AP in a home setup where you have a modem and a wireless router, do not connect the AP directly to your modem. Connect the Eth0+PoE port on the AP to one of the LAN ports on the wireless router. The router provides DHCP services, which enables wired and wireless devices on your local LAN to get IP addresses and connect to the Juniper Mist cloud. An AP connected to a modem port connects to the Juniper Mist cloud but does not provide any services. The same guideline applies if you have a modem/router combo. Connect the Eth0+PoE port on the AP to one of the LAN ports.

If the switch or router that you connect to the AP does not support PoE, use an 802.3at or 802.3bt power injector.

- Connect an Ethernet cable from the switch to the data in port on the power injector.
- Connect an Ethernet cable from the data out port on the power injector to the Eth0+PoE port on the AP.

2. **Wait for a few minutes for the AP to boot completely.**

When the AP connects to the Juniper Mist portal, the LED on the AP turns green, which indicates that the AP is connected and onboarded to the Juniper Mist cloud.

After you’ve onboarded the AP, you can configure the AP according to your network requirements. See the Juniper Mist Wireless Configuration Guide.

A few things to keep in mind about your AP:

- When an AP boots for the first time, it sends a Dynamic Host Configuration Protocol (DHCP) request on the trunk port or native VLAN. You can reconfigure the AP to assign it to a different VLAN after you’ve onboarded the AP (that is, the AP state shows as Connected in the Juniper Mist portal. Ensure that you reassign the AP to a valid VLAN because, on rebooting, the AP sends DHCP requests only on that VLAN. If you connect the AP to a port on which the VLAN doesn’t exist, Mist displays a No IP address found error.
- We recommend that you avoid using a static IP address on an AP. The AP uses the configured static information whenever it reboots, and you cannot reconfigure the AP until it connects to the network. If you need to correct the
- IP address, you’ll need to reset the AP to the factory default configuration.
- If you must use a static IP address, we recommend that you use a DHCP IP address during the initial setup. Before assigning a static IP address, ensure that:

- You've reserved the static IP address for the AP.
- The switch port can reach the static IP address.

Troubleshoot

Contact Customer Support

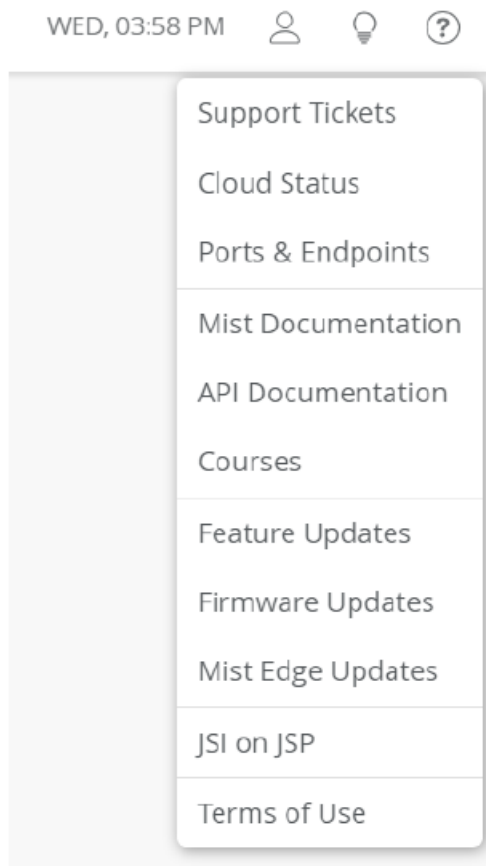
If your access point (AP) is not working correctly, see Troubleshoot a Juniper Access Point to troubleshoot the issue. If you are unable to resolve the issue, you can create a support ticket on the Juniper Mist portal. The Juniper Mist Support team will contact you to help resolve your problem. If needed, you can request a Return Material Authorization (RMA).

Before you begin, ensure that you have the following information:

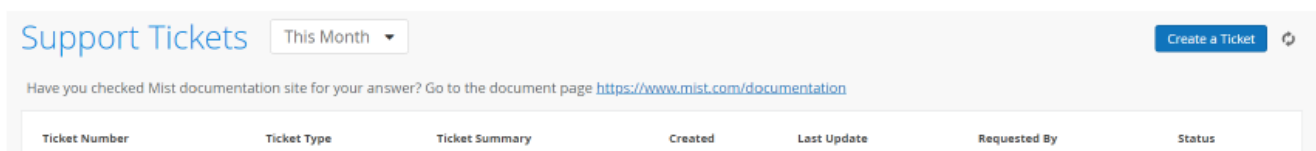
- The MAC address of the faulty AP
- The exact LED blink pattern seen on the AP (or a short video of the blinking pattern)
- The system logs from the AP

To create a support ticket:

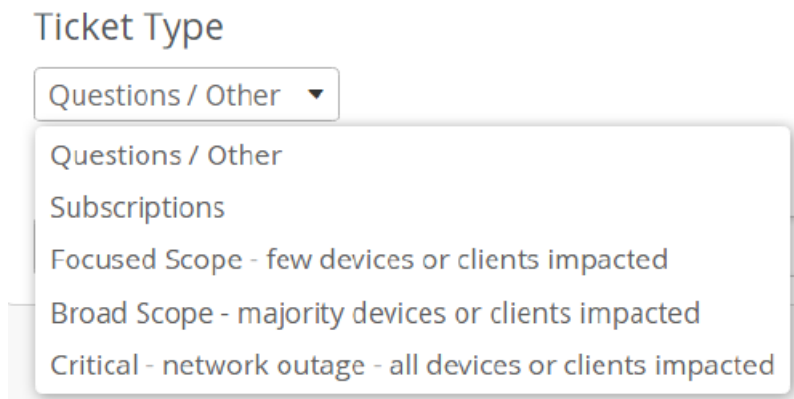
1. Click the? (question mark) icon in the top-right corner of the Juniper Mist portal.
2. Select Support Tickets from the drop-down menu.



3. Click Create a Ticket in the top-right corner of the Support Tickets page.



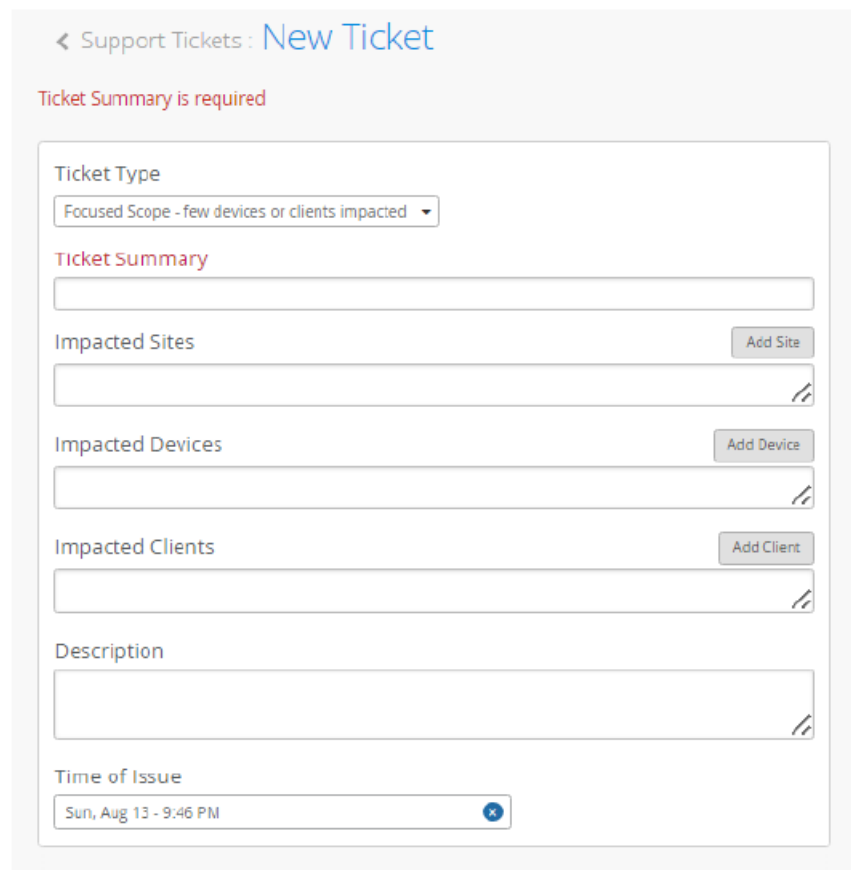
4. Select the appropriate ticket type depending on the severity of your problem.



The screenshot shows a dropdown menu titled "Ticket Type". The selected option is "Questions / Other". The dropdown list contains the following options: "Questions / Other", "Subscriptions", "Focused Scope - few devices or clients impacted", "Broad Scope - majority devices or clients impacted", and "Critical - network outage - all devices or clients impacted".

NOTE: Selecting Questions/Other will open a search box and redirect you to available documentation and resources related to your issue. If you cannot resolve your issue by using the suggested resources, click I still need to create a ticket.

5. Enter a ticket summary, and select the sites, devices, or clients that are impacted.
If you are requesting an RMA, select the impacted device.



The screenshot shows the "New Ticket" form in the Juniper Mist portal. The form includes the following fields and buttons:

- Support Tickets : New Ticket** (Breadcrumb)
- Ticket Summary is required** (Error message)
- Ticket Type** (Dropdown menu, currently set to "Focused Scope - few devices or clients impacted")
- Ticket Summary** (Text input field)
- Impacted Sites** (Text input field with an "Add Site" button)
- Impacted Devices** (Text input field with an "Add Device" button)
- Impacted Clients** (Text input field with an "Add Client" button)
- Description** (Text input field)
- Time of Issue** (Text input field, currently set to "Sun, Aug 13 - 9:46 PM")

6. Enter a description to explain the issue in detail. Provide the following information:

- The MAC address of the device
- The exact LED blink pattern is seen on the device
- The system logs from the device

NOTE: To share device logs:

- Navigate to the Access Points page in the Juniper Mist portal. Click the impacted device.
- Select Utilities > Send AP Log to Mist in the top right corner of the device page.

It takes at least 30 seconds to 1 minute to send the logs. Do not reboot your device in that interval.

7. (Optional) You can provide any additional information that may help to resolve the issue, such as:

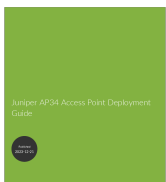
- Is the device visible on the connected switch?
- Is the device receiving power from the switch?
- Is the device receiving an IP address?
- Is the device pinging on the Layer 3 (L3) gateway of your network?
- Have you already followed any troubleshooting steps?

8. Click Submit.

Juniper Networks, Inc.

- 1133 Innovation Way Sunnyvale, California 94089 USA
- 408-745-2000
- www.juniper.net.

Documents / Resources

	<p>Juniper Networks AP34 Access Point Deployment Guide [pdf] User Guide AP34 Access Point Deployment Guide, AP34, Access Point Deployment Guide, Point Deployment Guide, Deployment Guide</p>
--	---

References

- [Juniper Networks – Leader in AI Networking, Cloud, & Connected Security Solutions](#)
- [End User License Agreement - Support - Juniper Networks](#)
- [Firewall Configuration: Juniper Mist Ports and IP Addresses | Mist | Juniper Networks](#)
- [Juniper Mist Wireless Assurance Configuration Guide | Mist | Juniper Networks](#)
- [User Manual](#)