# Table of Contents

**Chapter 1: Software Installation**
- Introduction .................................................... 1
- System Requirements ........................................... 1
- Network Topology Requirements ............................... 1
- Software Installation ............................................ 1

**Chapter 2: Using the UniFi Controller Software**
- Navigation Bar .................................................. 5
- Common Interface Options ..................................... 5

**Chapter 3: Dashboard**
- Internet .......................................................... 23
- Gateway/Router ................................................ 24
- Local Area Network ............................................. 24
- Wireless Local Area Network ................................. 25
- Voice over IP ..................................................... 25

**Chapter 4: Map**
- Adding Custom Maps .......................................... 27
- Adding a Google Map ........................................... 28
- Placing Devices on the Map ................................... 29
- Map Display Options ........................................... 30
- Setting the Map Scale .......................................... 31

**Chapter 5: Devices**
- All ................................................................. 33
- Gateway/Switches .............................................. 34
- APs .................................................................. 35
- Phones ................................................................ 37
- Properties ........................................................ 38

**Chapter 6: Clients**
- All ................................................................. 39
- Wireless ............................................................ 40
- Wired ................................................................ 40
- Properties ........................................................ 41

**Chapter 7: Calls**
- All ................................................................. 43
- Incoming ............................................................ 44
- Outgoing ........................................................... 44
- Internal ............................................................. 44
# Table of Contents

**Chapter 8: Statistics** ............................................................. 45  
Clients (Total) ......................................................... 46  
Quick Look ........................................................... 46  
Current Usage - Top Access Points ........................................ 46  
Recent Activities ...................................................... 46  
Filter ................................................................. 47

**Chapter 9: Insights** ............................................................ 49  
Known Clients .......................................................... 49  
Rogue Access Points .................................................. 50  
Past Connections ..................................................... 51  
Past Guest Authorizations ........................................... 51  
Switch Stats ............................................................ 52

**Chapter 10: UniFi Security Gateway Details** ................. 55  
Properties .............................................................. 55  
UniFi Security Gateway – Details ..................................... 56  
UniFi Security Gateway – Networks .................................. 56  
UniFi Security Gateway – Configuration ............................. 57

**Chapter 11: UniFi Switch Details** ................................. 61  
Properties .............................................................. 61  
UniFi Switch – Details ................................................ 62  
UniFi Switch – Ports ................................................... 63  
UniFi Switch – Configuration ......................................... 64

**Chapter 12: UniFi Access Point Details** ....................... 67  
Properties .............................................................. 67  
UniFi Access Point – Details ......................................... 68  
UniFi Access Point – Users ........................................... 70  
UniFi Access Point – Guests ......................................... 70  
UniFi Access Point – Configuration .................................. 71

**Chapter 13: UniFi VoIP Phone Details** ......................... 77  
Properties .............................................................. 77  
UniFi VoIP Phone – Details ......................................... 77  
UniFi VoIP Phone – Configuration .................................. 78
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Client Details</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Properties</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Wireless Client – Details</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Wireless Client – Statistics</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Wireless Client – History</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Wireless Client – Configuration</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Wired Client – Details</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Wired Client – Statistics</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Wired Client – History</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Wired Client – Configuration</td>
<td>82</td>
</tr>
<tr>
<td>15</td>
<td>Hotspot Manager</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Wireless Guests</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Payments and Transactions</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Vouchers</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Operator Accounts</td>
<td>86</td>
</tr>
<tr>
<td>Appendix A</td>
<td>Portal Customization</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Overview</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Enabling Portal Customization</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Viewing the Default Portal</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Setup</td>
<td>88</td>
</tr>
<tr>
<td>Appendix B</td>
<td>UniFi Discovery Utility</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Overview</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Launching the UniFi Discovery Utility</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>UniFi Discovery Utility Interface</td>
<td>91</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Contact Information</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Ubiquiti Networks Support</td>
<td>95</td>
</tr>
</tbody>
</table>
Chapter 1: Software Installation

Introduction
Thank you for purchasing the Ubiquiti Networks® UniFi® Enterprise System. The UniFi devices are bundled with the UniFi Controller software, which allows you to manage your UniFi network using a web browser.

This User Guide is for use with version 4.6 or above of the UniFi Controller software.

System Requirements
• Linux, Mac OS X, or Microsoft Windows 7/8
• Java Runtime Environment 1.6 (or above)
• Web Browser: Mozilla Firefox, Google Chrome, or Microsoft Internet Explorer 10 (or above)

Network Topology Requirements
• A DHCP-enabled network (so any device can obtain an IP address)
• A management station running the UniFi Controller software, located either on-site and connected to the same Layer-2 network, or off-site in a cloud or NOC

Software Installation
Download the latest version of the UniFi Controller software at downloads.ubnt.com/unifi
Follow the instructions for your specific computer type.

Mac Users
1. Launch UniFi.pkg.
2. Click Continue and follow the on-screen instructions to install the software.
3. Go to Go > Applications and double-click the UniFi icon.

Proceed to “Configuring the UniFi Controller Software” on page 2.

All UniFi devices support off-site management controllers. Follow the instructions in this chapter after you install the hardware, which is described in the Quick Start Guide.
PC Users
1. Launch **UniFi-installer.exe**.
2. Click **Install**.
3. If your computer doesn’t have Java 1.6 or above installed, you will be prompted to install it. Click **Install** to continue.
4. Click **Next**.
5. Ensure that the **Start UniFi Controller after installation** option is checked and click **Finish**.

**Note:** The UniFi Controller software can also be launched from **Start > All Programs**.

---

Configuring the UniFi Controller Software
1. The UniFi Controller software startup will begin. Click **Launch a Browser to Manage Wireless Network**.
2. By default, the preferred language is **English**. Select your country and time zone. Alternatively, you can click **restore from a previous backup** to use a file that contains your backup settings. Click **Next**.

**Note:** U.S. product versions are locked to the U.S. Country Code to ensure compliance with FCC regulations.
3. Select the devices that you want to configure and click **Next**.
4. The UniFi Setup Wizard will create a secure primary wireless network for your devices. Perform the following steps:

a. Enter the wireless network name (SSID) in the Secure SSID field.
b. Enter a passphrase to be used for your primary network in the Security Key field.
c. To enable guest access, select Enable Guest Access, and enter a guest network name in the Guest SSID field.
d. Click Next.

5. Enter an admin name in the Admin Name field and password in the Password field to use when accessing the management interface. Confirm your password in the Confirm Password field. Click Next.

6. Review your settings. Click Finish to save your settings or click Back to make changes. Once the wizard is finished, the browser will be redirected to the management interface.

Congratulations, your wireless network is now configured. A login screen will appear for the UniFi Controller management interface. Enter the admin name and password that you created and click Login.

Proceed to the next chapter for information on using the UniFi Controller software.
Chapter 2: Using the UniFi Controller Software

The UniFi Controller software has a browser-based interface for easy configuration and management.

To access the interface, perform the following steps:

1. Launch the UniFi Controller application if it hasn’t already been started.
   - Mac users: Go > Applications > UniFi
   - Windows users: Start > All Programs > Ubiquiti UniFi
2. The UniFi login screen will appear. Enter the username and password in the appropriate fields and click LOG IN.

Navigation Bar

The UniFi software consists of six primary pages. This User Guide covers each page with a chapter. For details on a specific page, refer to the appropriate chapter.

- **Dashboard** on page 23
- **Map** on page 27
- **Devices** on page 33
- **Clients** on page 39
- **Calls** on page 43
- **Statistics** on page 45
- **Insights** on page 49

Common Interface Options

The common interface options are accessible from all tabs in the UniFi interface.

Refresh

Click the refresh icon to update the on-screen information. Select the refresh interval: Manually, 15 seconds, 1 minute, 2 minutes (default), 5 minutes, 10 minutes, or Never.

Admin

At the top right of the screen, click to display the Change Password and Sign Out options:

Change Password

To change the login name and/or password, click . The Change My Password screen will appear:

- **Admin** Enter the admin name.
- **Email** Enter the email address of the admin account.
- **Password** Enter the new password.
- **Confirm Password** Enter the new password again.
- **Language** Select the language of the UniFi Controller.
- **Save** Click to apply changes.
- **Cancel** Click to discard changes.

Sign Out

To manually sign out of the UniFi Configuration Interface, click .
Chapter 2: Using the UniFi Controller Software

Site

The UniFi Controller can manage multiple UniFi networks, which are called sites. Each site has its own configurations, maps, statistics, guest portals, and site administrator accounts. The multiple sites are logically separated, and the initial site is named Default.

Current Site To create a new site, click the drop-down ▼ arrow to display the drop-down menu. Click Add Site, and the Add Site screen will appear:

• Site Name Enter a name that describes the site. It will be used in the Current Site drop-down menu.
• Submit Click ✔ SUBMIT to save changes.

Properties

The Properties tab is hidden by default. To display it, click the properties icon.

Information about each selected device appears as a popup within this tab. The information varies depending on the device type. For more information, see the appropriate chapter:

• “UniFi Security Gateway Details” on page 55
• “UniFi Switch Details” on page 61
• “UniFi Access Point Details” on page 67
• “UniFi VoIP Phone Details” on page 77
• “Client Details” on page 79

At the bottom of the screen, there are three controls:

• Alerts (see “Alerts” on page 21)
• Events (see “Events” on page 21)

Settings

The SETTINGS tab displays a list of available sub-tabs:

• Site Site-related settings.
• Wireless Networks Wireless network and group setup, including Zero Handoff Roaming.
• Networks Wired network setup.
• Guest Control Guest portal and policies.
• Admins Admin accounts and privileges.
• User Groups User group settings.
• VoIP VoIP setup.
• Extensions VoIP extension, group, and conference options.
• Auto-Responder Business hours and auto-responder settings.
• Controller Identity, discovery, and email server settings.
• Maintenance System configuration backup, system configuration restore, and support files.

Site Configuration

Site Name Change the name of the site.
Country Select the appropriate country.
Time Zone Select the appropriate time zone.

Services

Automatic Upgrade When enabled, this option will automatically upgrade your firmware when an update is available.

LED When enabled, the LED on the UniFi device will light up. When disabled, the LED will turn off.

Uplink Connectivity Monitor It monitors the uplinks of the managed APs, either wired or wireless, by checking to see if the gateway/custom IP can be reached. The monitor and wireless uplink capability are enabled by default.
Chapter 2: Using the UniFi Controller Software

- **Default Gateway** Enabled by default. All managed APs will use the gateway of the AP that is providing IP information, either by DHCP or Static designation.

- **Custom IP** Click **Use custom IP** to specify an IP address; **Uplink IP Address** All managed APs will use the IP address you enter.

**SNMP** Select this option to activate the SNMP (Simple Network Monitor Protocol) agent. SNMP is an application layer protocol that facilitates the exchange of management information between network devices. Network administrators use SNMP to monitor network-attached devices for issues that warrant attention.

- **Community String** Specify the SNMP community string. It is required to authenticate access to MIB (Management Information Base) objects and functions as an embedded password. The device supports a read-only community string; authorized management stations have read access to all the objects in the MIB except the community strings, but do not have write access. The device supports SNMP v1. The default is **public**.

**Remote Logging** Enable to define a remote syslog server.

- **Remote IP Address** Enter the IP address of the syslog server.

- **Port** Enter the port number of the syslog server. The default is **514**.

**Device Authentication** This option protects SSH access to the UniFi devices. All devices in the same site share the same SSH username and password. You can also make changes:

- **Username** Enter the new username.

- **Password** Enter the new password.

**Apply** Click **APPLY** to save changes.

**Settings > Wireless Networks**
Configure the wireless networks for each site. You can have up to four wireless network names or SSIDs per WLAN group.

**WLAN Group** The Default WLAN group is automatically created.

Add a New WLAN Group To add a new WLAN group, click the button. Go to the **Add or Edit a WLAN Group** section.

Add or Edit a WLAN Group

- **Name** Enter or edit a descriptive name for the WLAN group.

- **Mobility** To enable seamless roaming (Zero Handoff), select the checkbox.

  **Note:** The UniFi AP-AC and AP-AC Outdoor do not currently support Zero Handoff Roaming.

When you enable this option, multiple Access Points (APs) act as an AP cluster, appearing as a single AP. The wireless client detects only one AP, so it seamlessly roams from AP to AP – there is no need to re-negotiate. The APs determine which AP has the best connection and should serve the client. They use multicasting to communicate so they must be wired in the same Layer 2 domain.

Zero Handoff Roaming does not support wireless uplinks and can only be used on a secured network. It is also not meant for all scenarios. For example, if there is too much load or interference, then Zero Handoff Roaming may not be appropriate for your scenario.

Configure the following options:

- **Radio** Select the appropriate radio, **2G** or **5G**.

- **Channel** Select the channel that all of the APs will use for Zero Handoff Roaming.

**Load Balancing** (Not available if you enabled the Mobility option.) Select this option to balance the number of clients you specify per radio. Then enter the number of clients in the field provided.

**Legacy Support** (Not available if you enabled the Mobility option.) By default, legacy devices, such as 802.11b devices, are excluded. Select this option if you want to support legacy devices.
For each WLAN group, you have the following:

- **Remove a WLAN Group** To remove a WLAN group, select it from the drop-down menu, and then click the **button.

- **Options** To make changes, select the WLAN group from the drop-down menu, and then click **OPTIONS**. Go to “Add or Edit a WLAN Group” on page 7.

### Wireless Networks

- **Name** Displays the wireless network name or SSID.
- **Security** Displays the type of security being used on your wireless network.
- **Guest Network** Indicates whether or not the network is a guest network.

### Actions

- **Edit** Click **EDIT** to make changes to the wireless network settings. Go to the **Create or Edit a Wireless Network** section below.
- **Delete** Click **DELETE** to remove the wireless network.

### Add or Edit a Wireless Network

- **Name/SSID** Enter or edit the wireless network name or SSID.
- **Security** Select the type of security to use on your wireless network.
  - **Open** This option is typically only used on the guest network. When enabled, wireless network access is open to anyone without requiring a password.
  - **WEP** WEP (Wired Equivalent Privacy) is the oldest and least secure security algorithm. WPA™ security methods should be used when possible.
    - **WEP Key** Enter a WEP encryption key in hexadecimal format. You can enter a 64-bit or 128-bit key:
      - **64-bit** 10 Hexadecimal Characters (0-9, A-F, or a-f)
        - Example: 00112233AA
        - Note: You can use 5 printable characters, which will be translated to the corresponding HEX code.
      - **128-bit** 26 Hexadecimal Characters (0-9, A-F, or a-f)
        - Example: 00112233445566778899AABBCC
        - Note: You can use 13 printable characters, which will be translated to the corresponding HEX code.
    - **Key Index** Specify which Index of the WEP Key to use. Four different WEP keys can be configured at the same time, but only one is used. Select the effective key: **1**, **2**, **3**, or **4**.
  - **WPA-Personal** WPA or Wi-Fi Protected Access was developed as an encryption method stronger than WEP. WPA-Personal requires a passphrase to connect to the wireless network.
    - **Security Key** Enter the passphrase that users will use to connect to the wireless network.
  - **WPA-Enterprise** WPA Enterprise uses a RADIUS server to authenticate users on the wireless network.
    - **RADIUS Server** Provide the following information about the RADIUS server:
      - **IP Address** Enter the IP address.
      - **Port** Enter the port number. The default is 1812.
      - **Password** Enter the password used for authentication.
    - **Guest Policy** Select this option to enable guest access policies on this wireless network.
Chapter 2: Using the UniFi Controller Software

Advanced Options

• **VLAN** To use a VLAN, select **Use VLAN ID** and enter the VLAN ID number.

• **Hide SSID** Select this option if you don’t want the wireless network name or SSID to be broadcast.

• **WPA Mode** (Available if WPA security is enabled.) Select the appropriate WPA method: **Both**, **WPA1 Only**, or **WPA2 Only**.

• **Encryption** Select the appropriate encryption method: **Auto**, **TKIP Only**, or **AES/CCMP Only**.

• **User Group** Assign wireless users to a specific user group. For more information about user groups, see “Settings > User Groups” on page 15.

• **Scheduled** Select **Enable WLAN Schedule** to restrict wireless access to the schedule you set.
  - **Monday-Sunday** Select the days you want to schedule.
  - **Hours** Use the sliders to select the start and end times of the day’s wireless access.

• **Save** Click **SAVE** to apply changes.

• **Cancel** Click **CANCEL** to discard changes.

Settings > Networks
Configure the networks for each site.

**Networks**

- **Name** Displays the network name.
- **Purpose** Displays a description of this network.
- **Subnet** Displays the IP address and prefix size.
- **VLAN** Displays the VLAN ID, if applicable.

**Actions** Click a button to perform the desired action:
- **Edit** Click **EDIT** to make changes to the network settings. Go to the Create or Edit a Network section below.
- **Create New Network** Click **CREATE NEW NETWORK** to add a wireless network. Go to the Create or Edit a Network section below.

Create or Edit a Network

- **Name** Enter or edit the network name.
- **Purpose** Select the most appropriate description: **Corporate**, **Guest**, **Remote User VPN**, **Site-to-Site VPN**, **Voice**, or **VLAN Only**. Then follow the instructions for your selection:

Corporate or Guest Network

- **IP/Subnet** Enter the IP address and prefix size.
- **VLAN** (Only available when you create a network.) Enter the VLAN ID.
- **DHCP Server** Enabled by default. The local DHCP server assigns IP addresses to DHCP clients on the network.
- **DHCP Range** Enter the starting and ending IP addresses of the range in the fields provided.

• **Save** Click **SAVE** to apply changes.

• **Cancel** Click **CANCEL** to discard changes.
Remote User VPN

- **IP/Subnet** Enter the IP address and prefix size.
- **IP Pool** The starting and ending IP addresses of the pool automatically appear after you complete the IP/Subnet field.
- **RADIUS IP** Enter the IP address of the RADIUS server, which is used for authentication.
- **RADIUS Password** Enter the password of the RADIUS server.
- **Save** Click to apply changes.
- **Cancel** Click to discard changes.

Site-to-Site VPN

- **Remote Site** Select the appropriate site from the drop-down list.
  
  **Note:** If you have admin privileges for the local and remote sites, then you can view and select sites.

- **Save** Click to apply changes.
- **Cancel** Click to discard changes.

Voice

In most cases the Voice network is automatically created when you enable VoIP (refer to “Settings > VoIP” on page 16). If you need to manually create a Voice network, then configure the following settings:

- **IP/Subnet** Enter the IP address and prefix size.
- **DHCP Server** Enabled by default. The local DHCP server assigns IP addresses to DHCP clients on the network.
- **DHCP Range** Enter the starting and ending IP addresses of the range in the fields provided.
- **Save** Click to apply changes.
- **Cancel** Click to discard changes.

VLAN Only

- **VLAN** Enter the ID number of the VLAN. This is a unique value assigned to each VLAN at a single device; every VLAN ID represents a different VLAN. The VLAN ID range is 2 to 4009.
- **Save** Click to apply changes.
- **Cancel** Click to discard changes.
Chapter 2: Using the UniFi Controller Software

Settings > Guest Control

The Guest Control screen displays the following sections:

- Guest Policies (see below)
- “Hotspot” on page 13 (for Hotspot authentication)
- “Access Control” on page 15

Guest Policies

Guest Portal  Disabled by default. When disabled, guests can access the Internet without entering a password or accepting the Terms of Use. When this option is enabled, you can control the Guest Portal.

Authentication  When the Guest Portal is enabled, the authentication options will appear:

- “Authentication > No Authentication” on page 11
- “Authentication > Simple Password” on page 11
- “Authentication > Hotspot” on page 12
- “Authentication > External Portal Server” on page 14

Authentication > No Authentication

Select this option if guests are not required to log in, but must accept the Terms of Use. You must also select Enable Guest Portal under Settings > Guest Control to enforce selection of the Terms of Use by the guest. See “Guest Policy” on page 8 for more information.

Authentication > Simple Password

Select this option if guests are required to enter a simple password and accept the Terms of Use. You must also select Enable Guest Portal under Settings > Guest Control to enforce password entry and selection of the Terms of Use by the guest. See “Guest Policy” on page 8 for more information.

Expiration  Specify the guest login expiration after a designated period of time: 8 hours, 24 hours, 2 days, 3 days, 4 days, 7 days, or User-defined, which can be designated in minutes, hours, and days.

Landing Page  After accepting the Terms of Use, guests are redirected to the landing page. Select one of the following options:

- Redirect to the original URL  After accepting the Terms of Use, guests are directed to the URL they requested.
- Promotional URL  After accepting the Terms of Use, guests are redirected to the URL that you specify. Ensure that the URL begins with http://
  Example: http://www.ubnt.com

Portal Customization  Select this option to have customized portal pages appear in place of the default login pages. See “Portal Customization” on page 87 for details on setting up custom portal pages.

Portal URL Hostname  Select this option to enter and use a hostname for the portal URL in place of the default IP address. Paired with an SSL certificate, this ensures that site certificates are displayed as trusted in the guest browser. Example: www.ubnt.com

When logging in with No authentication, guests will be required to accept the Terms of Use before gaining access to the Internet.

Guest Password  Enter a password that guests must enter before accepting the Terms of Use and connecting to the Internet.
Expiration  Specify the guest login expiration after a designated period of time: 8 hours, 24 hours, 2 days, 3 days, 4 days, 7 days, or User-defined, which can be designated in minutes, hours, and days.

Landing Page  After accepting the Terms of Use, guests are redirected to the landing page. Select one of the following options:

- **Redirect to the original URL**  After accepting the Terms of Use, guests are directed to the URL they requested.
- **Promotional URL**  After accepting the Terms of Use, guests are redirected to the URL that you specify. Ensure that the URL begins with http:// Example: http://www.ubnt.com

Portal Customization  Select this option to have customized portal pages appear in place of the default login pages. See “Portal Customization” on page 87 for details on setting up custom portal pages.

Portal URL Hostname  Select this option to enter and use a hostname for the portal URL in place of the default IP address. Paired with an SSL certificate, this ensures that site certificates are displayed as trusted in the guest browser. Example: www.ubnt.com

When logging in with Simple Password authentication, guests will be required to enter the Guest Password and accept the Terms of Use before gaining access to the Internet.

Authentication > Hotspot
Select this option to enable Hotspot functionality, including the ability to customize portal login pages and bill customers using major credit cards or other supported methods. You must also select Enable Guest Portal under Settings > Guest Control to enforce voucher entry, payment, and selection of the Terms of Use by the guest. See “Guest Policy” on page 8 for more information.

Landing Page  After accepting the Terms of Use, guests are redirected to the landing page. Select one of the following options:

- **Redirect to the original URL**  After accepting the Terms of Use, guests are directed to the URL they requested.
- **Promotional URL**  After accepting the Terms of Use, guests are redirected to the URL that you specify. Ensure that the URL begins with http:// (example: http://www.ubnt.com).

Portal Customization  Select this option to have customized portal pages appear in place of the default login pages. See “Portal Customization” on page 87 for details on setting up custom portal pages.

Portal URL Hostname  Select this option to enter and use a hostname for the portal URL in place of the default IP address. Paired with an SSL certificate, this ensures that site certificates are displayed as trusted in the guest browser. Example: www.ubnt.com
Hotspot
When Hotspot authentication is selected, the Hotspot section is displayed.

Select the Voucher or Payment method of authorization:

- **Voucher** Use Hotspot Manager to create vouchers (including distributable code, duration values, and use restrictions). See “Hotspot Manager” on page 83.
- **Payment** Set up payment-based authentication. If you select this option, then the Gateway option will appear.
- **Gateway** (Available only for payment-based authentication.) You have multiple options:
  - **PayPal Website Payment Pro (US, Canada, UK)** Use your PayPal Website Payments Pro account. To manage payments and transactions, use Hotspot Manager and see “Hotspot Manager” on page 83.
  - **Stripe (US, Canada)** Use your Stripe account. To manage payments and transactions, use Hotspot Manager and see “Hotspot Manager” on page 83.
  - **Quickpay (Europe)** Use your Quickpay account. To manage payments and transactions, use Hotspot Manager and see “Hotspot Manager” on page 83.
  - **Authorize.Net® (US, Canada)** Use your Authorize.Net account. To manage payments and transactions, use Hotspot Manager and see “Hotspot Manager” on page 83.

Enter the PayPal account details:
- **Username** Enter the corresponding Username.
- **Password** Enter the corresponding Password.
- **Signature** Enter the corresponding Signature for the PayPal account that will receive payments.
- **Use PayPal Sandbox** For PayPal testing purposes, select this option. Then click Apply Sandbox Account to set up or access your PayPal Sandbox Test Environment.

Enter the Stripe account details:
- **API Key** Enter the live secret API key.

Note: We recommend that you perform a test transaction with the test secret API key first before using the live secret API key.

Enter the Quickpay account details:
- **Merchant ID** Enter the ID for your merchant account.
- **MD5 Secret** Enter the MD5 secret key.

Enter the Authorize.Net account details:
- **API Login ID** Enter the API login ID used to identify yourself as an authorized user.
- **Transaction Key** Enter the key used to authenticate transactions.
- **Use Test Account** For Authorize.Net testing purposes, select this option. Then click Apply Test Account to set up or access your Authorize.Net test account.
- **Merchant Warrior (Australia, New Zealand)** Use your Merchant Warrior account. To manage payments and transactions, use Hotspot Manager and see “Hotspot Manager” on page 83.

Enter the Merchant Warrior account details:
- **Merchant UUID** Enter the ID for your merchant account.
- **API Key** Enter the API key.
- **API Passphrase** Enter the API passphrase.
- **Use Test Account** For Merchant Warrior testing purposes, select this option. Then click **Apply Test Account** to set up or access your Merchant Warrior test account.

- **IPpay™ (US, Canada)** Use your IPpay account. To manage payments and transactions, use Hotspot Manager and see “Hotspot Manager” on page 83.

Enter the IPpay account details:
- **Terminal ID** Enter the terminal number for your merchant account.
- **Use Test Account** For IPpay testing purposes, select this option. Then click **Apply Test Account** to set up or access your IPpay test account.
- **Hotspot Operator** Click **Go to Hotspot Manager** to manage Wireless Guests, Payments/Transactions, Vouchers, and Operator Accounts. See “Hotspot Manager” on page 83.

When logging in with voucher-based Hotspot authentication, guests will be required to enter the voucher number and accept the Terms of Use before gaining access to the Internet.

When logging in with payment-based Hotspot authentication, guests will be required to select the package type, click the payment choice, and accept the Terms of Use before gaining access to the Internet.

Authentication > External Portal Server
Select this option if you are using an external server to host a custom guest portal.

Custom Portal Enter the IP address in the IP Address field.

Portal URL Hostname Select this option to enter and use a hostname for the portal URL in place of the default IP address. Paired with an SSL certificate, this ensures that site certificates are displayed as trusted in the guest browser. Example: www.ubnt.com
Access Control

Restricted Subnets  Enter any subnets that you don’t want guests to be able to access. Click the delete icon to remove a subnet from this list.

Add New  Click Add New to add more restricted subnets.

Allowed Subnets  Enter any subnets that you want guests to be able to access. Click delete to remove a subnet from this list.

Add New  Click Add New to add more allowed subnets.

Apply  Click to save changes.

Settings > Admins

You can create administrator accounts that are site-specific; these site administrators can only see the sites they manage.

The superadmin account is created during the Setup Wizard and has global admin (read/write) access; this superadmin account cannot be revoked or re-invited.

The list of administrator accounts also includes the operator accounts created in Hotspot Manager; see “Operator Accounts” on page 86.

Username  Displays the name of the administrator.

Email  Displays the email address of the administrator.

Role  Displays the permissions level: Admin (read/write access), Read-only, or Hotspot (operator read-only access).

Actions  Click a button to perform the desired action:

• Revoke  Click to remove the selected account.

• Edit  Click to make changes.

Create New Admin  Click to add a new site admin or operator. Go to the Create or Edit an Admin section.

Create or Edit an Admin

Settings > User Groups

Configure user groups on this screen. The default user group is named Default and has no bandwidth limits.

User Group Settings

Name  Displays the name of the user group.

Bandwidth Limit  Displays the upload and download limits.

Actions  Click a button to perform the desired action:

• Edit  Click to make changes to the user group settings. Go to “Create or Edit a User Group” on page 16.

• Delete  Click to delete the user group. (The Default user group cannot be deleted.)

Create New User Group  Click to create a new user group. Go to “Create or Edit a User Group” on page 16.
Chapter 2: Using the UniFi Controller Software

Create or Edit a User Group

- **Name** Enter or edit the name of the user group.
- **Bandwidth Limit (Download)** Select to limit the download bandwidth. Enter the maximum in Kbps.
- **Bandwidth Limit (Upload)** Select to limit the upload bandwidth. Enter the maximum in Kbps.
- **Save** Click **SAVE** to apply changes.
- **Cancel** Click **CANCEL** to discard changes.

See “Wireless Client – Configuration” on page 80 or “Wired Client – Configuration” on page 82 for information on how to assign a user or guest to a user group.

Settings > VoIP

Enable the VoIP feature and configure the VoIP settings of the UniFi Controller.

**Global**

- **VoIP** Select this option to enable the VoIP feature.
- **Platform Image Cache** Select this option to enable the automatic update of the cached platform image.
- **Apply** Click **APPLY** to save the change.
- **Cancel** Click **CANCEL** to discard the change.

**Provider & Numbers**

When enabled, UniFi will send email alerts triggered by pending and disconnected UniFi devices. Specify the administrator email address when you create an account under “Settings > Wireless Networks” on page 7.

**VoIP Provider** Displays the Session Initiation Protocol (SIP) provider type.

**Setup** Click this option to set up the SIP provider. The Provider Setup screen appears:

- **SIP Provider** Select the appropriate provider type: Manual, External, or None. Then follow the appropriate instructions.
  - **Manual** Select this option if you are using the UniFi Security Gateway as your PBX with your own SIP credentials.
    - **SIP Server** Enter the IP address of your SIP server.
    - **SIP Authentication Method** Select the authentication method used for your SIP account:
      - **User-Based (Most Common)** If your VoIP system uses a dynamic IP address, then select this option and enter the following:
        - **SIP Username** Enter the username for your SIP account.
        - **SIP Password** Enter the password for your SIP account.
        - **Advanced Options** Click the ▼ arrow to display the following:
          - **SIP Voicemail** Enter the URL or IP address of the SIP voicemail server.
Chapter 2: Using the UniFi Controller Software

- **IP-Based** If your VoIP system uses a static IP address, then select this option.
  - **Advanced Options** Click the ▼ arrow to display the following:
    - **Outbound Proxy** Enter the URL or IP address of the SIP proxy server.
    - **Authorization ID** Enter the username used for authorization or authentication.
    - **SIP Voicemail** Enter the URL or IP address of the SIP voicemail server.
    - **Tech Prefix** Enter the technology prefix (leading digits) that should be prepended (added) to outbound numbers.
    - **SIP From User** Enter the SIP address in the format: `username@domain`, which is similar to an email address.
  - **Apply** Click ✔️ APPLY to save changes.
  - **Cancel** Click × CANCEL to discard changes.

- **External** Select this option if you are using an external PBX; the UniFi Controller only manages the UniFi VoIP Phones.
  - **SIP Server** Enter the IP address of your SIP server.
  - **SIP Authentication Method** Select the authentication method used for your SIP account:
    - **User-Based (Most Common)** If your VoIP system uses a dynamic IP address, then select this option.
    - **IP-Based** If your VoIP system uses a static IP address, then select this option.
  - **Apply** Click ✔️ APPLY to save changes.
  - **Cancel** Click × CANCEL to discard changes.

- **None** Select this option for local testing only.
  - **Apply** Click ✔️ APPLY to save changes.
  - **Cancel** Click × CANCEL to discard changes.

- **Add** Click this option to set up a new number. The **Create New Number** screen appears:
  - **Number** Enter the new phone number.
  - **Extension** Select the appropriate extension number.
  - **Save** Click ✔️ SAVE to apply changes.
  - **Cancel** Click × CANCEL to discard changes.

**Note:** If an external PBX is used, then the **Auto-Responder** and other PBX settings will not be shown because they are not available.
Chapter 2: Using the UniFi Controller Software

The new phone numbers you create will appear on the VoIP screen:

**Number**  The phone number is displayed.

**Extension**  The extension number is displayed. You can select a different extension number from the drop-down menu.

**Type**  The type of extension number: Phone, Auto-Responder, Conference, or Group is displayed.

**Actions**

**Save**  Click ▶️ SAVE to apply changes.

**Settings > Extensions**

The Extensions tab appears if VoIP is enabled.

---

**Create New Extension**  Click ☰️ CREATE NEW EXTENSION to add a new conference. Go to “Create or Edit a Conference” on page 19.

**Create or Edit an Extension**

- **Extension**  Enter the extension number. The default is 101.
- **Name**  Enter a name for the extension.
- **Phone**  Select the MAC address of the appropriate UniFi VoIP Phone.
- **Email**  Enter the email address of the extension contact.
- **Save**  Click ▶️ SAVE to apply changes.
- **Cancel**  Click ✗ CANCEL to discard changes.

**Create or Edit a Group**

- **Extension**  Enter the extension number. The default is 200.
- **Name**  Enter a name for the group.
- **Call Screening**  Disabled by default. Click On to screen calls to this group.
- **Members**  Enter the name or email address of the extension to add. When the appropriate extension is shown in the drop-down list, select it.
• **Remove**  To remove a member from the group, click the X of that member in the group list.

• **Save**  Click ✔️ SAVE to apply changes.
• **Cancel**  Click ✗ CANCEL to discard changes.

**Create or Edit a Conference**

- **Extension**  Enter the extension number. The default is 300.
- **Name**  Enter a name for the conference.
- **Phone**  Select the MAC address of the appropriate UniFi VoIP Phone.
- **Require PIN**  To set a PIN for joining this conference, enter it in the field provided.
- **Save**  Click ✔️ SAVE to apply changes.
- **Cancel**  Click ✗ CANCEL to discard changes.

**Settings > Auto-Responder**
The Auto-Responder tab appears if VoIP is enabled. Configure the system settings of the UniFi Controller.

- **Business Hours**  When selected, configure the Auto-Responder settings for business hours (the defaults are Monday-Friday, 9:00 am-5:00 pm).

- **After Hours**  When selected, configure the Auto-Responder settings for non-business hours.

- **Edit Business Hours**  To change the business hours (the defaults are Monday-Friday, 9:00 am-5:00 pm), click this option. The Auto-Responder > Edit Business Hours screen appears:

  - **Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday**  Select the days of business.
  - **Hours**  Adjust the sliders to match the business hours for each business day. (All other hours will be considered After Hours.)
  - **Save**  Click ✔️ SAVE to apply changes.
  - **Cancel**  Click ✗ CANCEL to discard changes.

- **Greeting**
The default for Business Hours is Text to Speech: "Welcome. If you know your party’s extension, please dial it at any time.”
The default for After Hours is Text to Speech: "Our business is currently closed. Our business hours are from 8 AM to 5 PM, Monday to Friday.”

  Click Edit to change the greeting:

  - **Text to Speech**  Enter the text in the field provided; it will be converted into an audio file.

- **Save**  Click Save to apply changes.
- **Cancel**  Click Cancel to discard changes.
Upload Audio  Upload an audio file (.mp3 or .wav) to use as your greeting.

- **Choose**  Click Choose to select the appropriate audio file, and then click Open.
- **Cancel**  Click Cancel to discard changes.

**Menu**

**Add Option**  When a call is answered, you can have multiple menu options available. Click ADD OPTION to set up menu options for the Auto-Responder. Then configure the following:

- **Press**  Select the appropriate keypad number.
- **For**  Select the appropriate action: Transfer or Voicemail.
- **Select one**  Select the appropriate extension from the drop-down menu.

**Remove Option**  Click REMOVE OPTION to remove the appropriate menu option.

**Save**  Click SAVE to apply changes.

**Settings > Controller**

Configure the system settings of the UniFi Controller.

**Controller Settings**

**Controller Hostname/IP**  Enter the hostname or IP address of the UniFi Controller.

**Note:** When alert emails are sent out, the Controller Hostname/IP will be specified in the Controller URL at the bottom of every message.

**Network Discovery**  When enabled, this option allows UniFi to be discoverable via UPnP. This option is disabled by default.

**Mail Server**

When enabled, UniFi will send email alerts triggered by pending and disconnected UniFi devices. Specify the administrator email address when you create an account under “Settings > Admins” on page 15.

**SMTP Server**  Select this option to enable emails.

- **Enable mail server**  Enter the outgoing (SMTP) mail server name.
- **Port**  The default is 25. If Secure Sockets Layer (SSL) is enabled, then the port number will automatically change to 465.
- **Enable SSL**  You can enable SSL to enhance secure communications over the Internet.
- **Enable authentication**  Select this option to enable authentication.
  - **Username**  Enter the username required by the mail server.
  - **Password**  Enter the password required by the mail server.
- **Specify sender address**  Select this option to specify the sender email address. Enter the email address that will appear as the sender of the email alert.
- **Test SMTP Server**  Enter an email address and click Send to test the mail server setup.

**Apply**  Click APPLY to save changes.
Settings > Maintenance

The *Maintenance* tab displays server version information, allows system backups to be created and downloaded, allows system restoration from backup files, and allows configuration information to be downloaded to assist in support issues.

### Server Information

**Version** Displays the software version. If there is an update, UniFi will display it.

**Services**

**Historical Data Retention** Select the time duration of the backup: 1 week, 30 days, 60 days, 90 days, 180 days, 365 days, or All time. The default is 1 week.

**Download** Click Download Backup Settings to download a file that contains all of your settings so you can restore them later if you choose.

### Restore

**Browser** Click Choose File to select a backup configuration file that you’ve already downloaded. Then follow the on-screen instructions to restore settings from the selected backup file.

### Support Info

**Debug Log** You can customize the support information that is collected:

- **device** Select the level of severity required to trigger device log entries: Normal, More, or Debug. The default is Normal.
- **mgmt** Select the level of severity required to trigger management log entries: Normal, More, or Debug. The default is Normal.
- **system** Select the level of severity required to trigger system log entries: Normal, More, or Debug. The default is Normal.

**Download** Select this option to download a file to your computer with information about your configuration. You can email this file to our support team.

**Apply** Click APPLY to save changes.

### Alerts

The *Alerts* tab displays a list of important events, along with the corresponding date, time, and message. When there is a new alert, a red icon displaying the number of new alerts appears.

**Show archived alerts** Displays all of the archived alert messages.

**Archive All** Click Archive All to archives all of the alert messages.

**Archive** Click to archive the selected alert message.

**Search** You can enter text that you want to search for. Simply begin typing; there is no need to press Enter.

### Clicking an Alert Device Link

The messages have clickable links (white text on a gray background) for client and UniFi devices:

- “UniFi Security Gateway Details” on page 55
- “UniFi Switch Details” on page 61
- “UniFi Access Point Details” on page 67
- “UniFi VoIP Phone Details” on page 77
- “Client Details” on page 79

### Events

The *Events* tab displays a list of recent events, along with the corresponding date, time, and message.

You can apply one of the following filters:

- **All** Display all of the recent events.
- **Admin** Only display recent events for the administrator.
- **LAN** Only display recent events for the wired network.
- **WLAN** Only display recent events for the wireless networks.

**Search** You can enter text that you want to search for. Simply begin typing; there is no need to press Enter.
Clicking an Event Device Link

The messages have clickable links (white text on a gray background) for client and UniFi devices:

- “UniFi Security Gateway Details” on page 55
- “UniFi Switch Details” on page 61
- “UniFi Access Point Details” on page 67
- “UniFi VoIP Phone Details” on page 77
- “Client Details” on page 79
Chapter 3: Dashboard

The Dashboard screen provides a visual representation of your network’s status. Basic information is provided for each network segment:

- “Internet” on page 24
- “Gateway/Router” on page 24
- “Local Area Network” on page 24
- “Wireless Local Area Network” on page 25
- “Voice over IP” on page 25

**Note:** VOIP functionality requires UniFi Controller version 4.6 or higher.

**Green** Green indicates that the network segment is active and all devices are online.

**Speed Test** If your WAN connection is active, then you can mouse over the WWW icon to display the test.
  - **Start Now** Click **Start Now** to run the test.

After the Speed Test is complete, the results will be displayed.
  - **Re-Test** Click **Re-Test** to run the test again.
Red  Red indicates one of the following:
- **WWW**  Internet connectivity is down.
- **WAN**  The gateway/router is offline.
- **LAN**  One or more Switches are offline.
- **WLAN**  More than half of the APs are offline.
- **VoIP**  More than half of the Phones are offline.

Orange  Orange indicates one of the following:
- **WLAN**  Half or fewer than half of the APs are offline.
- **VoIP**  Half or fewer than half of the Phones are offline.

**Note:** Orange is not applicable to the **WWW**, **WAN**, and **LAN** network segments.

Gray  Gray indicates that there are no devices available for that network segment.

Internet  The basic details of the Internet connection are displayed.

**Status**  Displays the status of the network segment: *Connected and Stable, Unreachable, or No Data Available.*

**IP**  Displays the Internet IP address of the UniFi Security Gateway.

**Gateway**  Displays the IP address of the service provider’s gateway.

**DNS**  Displays the IP addresses of the Domain Name System (DNS) servers.

**Latency**  Displays the amount of time it takes a packet to travel from the UniFi Security Gateway to the service provider’s gateway.

**Uptime**  Displays the length of time the Internet connection has been active.

Gateway/Router  The basic details of the UniFi Security Gateway are displayed.

**Status**  Displays the status of the network segment: *Connected and Stable, Gateway Down, Unreachable, or No Data Available.*

**LAN IP**  Displays the local IP address of the UniFi Security Gateway.

**Clients**  Displays the total number of local clients.

**Down**  Displays the download rate of your Internet connection.

**Configuration**  Click the configuration  icon to edit the configuration. The *UniFi Security Gateway screen* appears and displays three tabs: *Details, Networks, and Configuration.* Go to “UniFi Security Gateway Details” on page 55 for more information.

Local Area Network  The basic details of the wired network(s) are displayed:

**Status**  Displays the status of the network segment: *Connected and Stable, Switch Down, Unreachable, or No Data Available.*

**Switches**  Displays the number of UniFi Switches connected to the wired network.

**Users**  Displays the number of clients connected to the wired network.

**Guests**  Displays the number of clients connected to the guest wired network.

**Down**  Displays the download rate of the wired network.

**Up**  Displays the upload rate of the wired network.
**Configuration** Click the *configuration* icon to edit the configuration. Go to “*Settings > Networks*” on page 9 for more information.

**Wireless Local Area Network**

The basic details of the wireless network(s) are displayed.

![Wireless Network Details](image)

- **Status** Displays the status of the network segment: *Connected and Stable*, *Devices Down*, *Unreachable*, or *No Data Available*.
- **APs** Displays the number of APs in the wireless network(s).
- **Users** Displays the number of clients connected to the primary wireless network(s).
- **Guests** Displays the number of clients connected to the guest wireless network(s).
- **Down** Displays the download rate of the wireless network(s).
- **Up** Displays the upload rate of the wireless network(s).
- **Graph** Click the *graph* icon to view detailed status information. Go to “*Statistics*” on page 45 for more information.

**Configuration** Click the *configuration* icon to edit the configuration. Go to “*Settings > Wireless Networks*” on page 7 for more information.

**Voice over IP**

VOIP functionality is available with UniFi Controller version 4.6 or higher. The basic details of the VoIP network are displayed.

![Voice over IP Details](image)

- **Phones** Displays the number of UniFi VoIP Phones.
- **Extensions** Displays the number of extensions, including groups and conferences.
Chapter 4: Map

The UniFi Controller software allows you to upload custom map images of your location(s) or use Google Maps™ for a visual representation of your UniFi network. When you initially launch the UniFi Controller application, a default map is displayed. The legend at the bottom of the map shows the scale of the map.

Adding Custom Maps
To add a custom map, you must first create the image using an illustration, image editing, or blueprint application that exports a file in .jpg, .gif, or .png file format.

Once you've created the map, you can upload it to the UniFi Controller software:
1. Click the drop-down menu at the top right of the screen and then click **Configure Maps**.

2. Click **ADD A MAP**.
3. Locate the file to use as a map (valid file formats are .jpg, .gif, and .png) and then click Open. If you do not want to upload a file, click Cancel.

4. Enter a map name in the field provided and click DONE.

5. Click DONE.

Adding a Google Map

To add a Google Map to the UniFi Controller software Map view:

1. Click the drop-down menu at the top right of the screen and then click CONFIGURE MAPS.

2. Click ADD A MAP.

3. Click Cancel.

4. Enter a map name in the Description field and click Google Maps.
5. The default view is *Satellite* view, as seen from above. Use the tools to navigate the map or zoom in/out. Click **Labels** to display street and location names. In the **Location** field, enter an address or the latitude and longitude of a specific location. Then click **Locate**.

You can also click **Map**, which looks like a street map. Click **Terrain** to display geographic markers.

Click **Done** to capture a screenshot.

6. Click **Done**.

You can adjust the zoom using the slider on the left.

---

### Placing Devices on the Map

1. Click **Unplaced Devices** at the lower right.
2. Drag each device icon from the *Unplaced Devices* list to the appropriate location on the map.

The device icon will appear in the area that you placed it.

---

### Status

The device icon indicates the UniFi model (not all icons are shown below):

- UniFi AP AC
- UniFi AP PRO
- UniFi AP/AP LR
- UniFi AP AC Outdoor
- UniFi AP Outdoor+
- UniFi AP Outdoor5
- UniFi Security Gateway
- UniFi 24-Port Switch
- UniFi 48-Port Switch
- UniFi VoIP Phone/Pro
- UniFi VoIP Phone Executive

The LED color of the device icon indicates the device status.

- **Blue/Green** Indicates the device is connected.
- **Red/Orange** Indicates the device is disconnected. A *disconnected* icon also marks the device icon.
Options
Click a UniFi icon to reveal options. Click a blank area of the map to hide them.

- **Lock**  Lock the device icon to its current location.
- **Details** Display the **Details** screen. For more information, go to the appropriate chapter:
  - “UniFi Security Gateway Details” on page 55
  - “UniFi Switch Details” on page 61
  - “UniFi Access Point Details” on page 67
  - “UniFi VoIP Phone Details” on page 77
- **Remove** Remove the device icon from its location.

Map Display Options
The **Map** screen can display the devices with the following options:

- **Labels** Displays the name applied to the device. If no custom label is applied, the device’s MAC address will be displayed.
  
  To change a name applied to a device, refer to **Alias** in the appropriate section:
  - “UniFi Security Gateway – Configuration” on page 57
  - “UniFi Switch – Configuration” on page 64
  - “UniFi Access Point – Configuration” on page 71
  - “Settings > Extensions” on page 18 (to change the name of a UniFi VoIP Phone)

- **Details** Displays the device name, MAC address, transmit/receive channel, number of users connected, and number of guests connected.

- **Coverage** Displays a visual representation of the wireless range covered by any APs.

- **Topology** Displays a visual representation of the network configuration and connections between any APs. A dashed line will indicate the wireless AP and its uplink to a wired AP.
(Map) If multiple maps have been uploaded, you can select which map you want to view using this option.

Configure Maps  Click to add maps or edit the current map(s).

Zoom Slider  Use to zoom the map detail in and out.

Set Map Scale  Use this option to define the scale of the map. You will draw a line and define the distance that the line represents.

Setting the Map Scale
1. Click the set map scale button.
2. Click and hold to draw a line in the area that you want to use to set the scale of the map. If you need to redraw the line, just click and hold again to draw a new line.

3. Enter the distance that the line represents in the Distance field. By default, the distance is specified in meters but you can switch to feet using the drop-down menu on the right. Click .

The legend at the bottom of the map shows the new scale of the map.
Chapter 5: Devices

The Devices screen displays a list of UniFi devices discovered by the UniFi Controller. You can click any of the column headers to change the list order.

Search. Enter the text you want to search for. Simply begin typing; there is no need to press Enter.

You can apply one of the following primary filters:

- **All** Displays all UniFi devices.
- **Gateway/Switches** Displays all UniFi Security Gateways and Switches.
- **APs** Displays all UniFi APs.
- **Phones** Displays all UniFi VoIP Phones. (Enable VoIP “Settings > VoIP” on page 16.)

If the APs filter is applied, then another filter is available:

- **Overview** Displays the number of clients, amount of data downloaded, amount of data uploaded, and channel setting.
- **Config** Displays the WLAN and radio settings for the 2.4 GHz and 5 GHz radio bands.
- **Performance** Displays the number of 2.4 GHz and 5 GHz clients, overall transmit rate, overall receive rate, transmit rates in the 2.4 GHz and 5 GHz radio bands, and channel setting.

The columns of information vary depending on which primary filter (All, Gateway/Switches, APs, or Phones) is applied.

If there is more than one page of entries to display, click the navigation controls or page numbers at the bottom right of the screen to display different pages.

**All**

All UniFi device types are displayed.

(Icon) Displays the icon corresponding to the UniFi device (not all icons are shown below):

- UniFi AP AC
- UniFi AP PRO
- UniFi AP/AP LR
- UniFi AP AC Outdoor
- UniFi AP Outdoor+
- UniFi AP Outdoor5
- UniFi Security Gateway
- UniFi 24-Port Switch
- UniFi 48-Port Switch
- UniFi VoIP Phone/Pro
- UniFi VoIP Phone Executive
If displayed, the LED color of the device icon indicates the device status.

- **Blue/Green** Indicates the device is connected.
- **Red/Orange** Indicates the device is disconnected.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the UniFi device. You can click the name to get additional details. For more information, see the appropriate chapter:

- “UniFi Security Gateway Details” on page 55
- “UniFi Switch Details” on page 61
- “UniFi Access Point Details” on page 67
- “UniFi VoIP Phone Details” on page 77

**IP Address** Displays the IP address used by the UniFi device.

**Status** Indicates the device status: *Connected*, *Disconnected*, *Pending Approval*, *Adopting*, *Upgrading*, *Managed by Other*, or *Isolated* (APs only).

**Model** Displays the model name of the UniFi device.

**Version** Displays the version number of the UniFi device's firmware.

**Uptime** Displays the duration of time the UniFi device has been running.

**Actions** Click a button to perform the desired action:

- **Locate** For most devices, click ![Locate](locate.png) to flash the LED on the physical device and the device's icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)
  
  If the device is a Phone, then click ![Locate](locate.png) to ring the Phone and flash the Phone's icon on the Map tab so you can locate it. (The Phone will ring three times and stop; the icon on the Map tab will flash three times and stop.)

- **Restart** Click ![Restart](restart.png) to restart the selected device.

- **Upgrade** If a software upgrade is available for the device, click ![Upgrade](upgrade.png) to install the latest UniFi firmware on the device. The Status will appear as *Upgrading* until the process is complete and the device reconnects to the UniFi Controller software.

- **Adopt** Click ![Adopt](adopt.png) to adopt a device that appears as *Pending Approval* for its status. The Status will appear as *Adopting* until the device is connected.

---

**Gateway/Switches**

All UniFi Gateway and Switch devices are displayed.

![Gateway/Switches](gateway-switches.png)

**(icon)** Displays the icon corresponding to the UniFi device (not all icons are shown below):

- UniFi Security Gateway
- UniFi 24-Port Switch
- UniFi 48-Port Switch

The LED color of the device icon indicates the device status.

- **Blue** Indicates the device is connected.
- **Red** Indicates the device is disconnected.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the UniFi device. You can click the name to get additional details. For more information, see the appropriate chapter:

- “UniFi Security Gateway Details” on page 55
- “UniFi Switch Details” on page 61

**IP Address** Displays the IP address used by the UniFi device.

**Status** Indicates the device status: *Connected*, *Disconnected*, *Pending Approval*, *Adopting*, *Upgrading*, or *Managed by Other*.

**Model** Displays the model name of the UniFi device.

**Down** Displays the total amount of data downloaded by the UniFi device.

**Up** Displays the total amount of data uploaded by the UniFi device.

**Actions** Click a button to perform the desired action:

- **Locate** Click ![Locate](locate.png) to flash the Status LED on the Gateway/Switch and its icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)

- **Restart** Click ![Restart](restart.png) to restart the selected device.
• **Upgrade** If a software upgrade is available for the device, click ![Upgrade](Upgrade.png) to install the latest UniFi firmware on the device. The Status will appear as **Upgrading** until the process is complete and the device reconnects to the UniFi Controller software.

• **Adopt** Click ![Adopt](Adopt.png) to adopt a device that appears as **Pending Approval** for its status. The Status will appear as **Adopting** until the device is connected.

### APs
You can apply one of the following filters to display different status information:

• **Overview** Displays the number of clients, amount of data downloaded, amount of data uploaded, and channel setting.

• **Config** Displays the WLAN and radio settings for the 2.4 GHz and 5 GHz radio bands.

• **Performance** Displays the number of 2.4 and 5 GHz clients, overall transmit rate, overall receive rate, 2.4 and 5 GHz transmit rates, and channel setting.

On any sub-tab, you can initiate a rolling upgrade of the firmware for all APs.

**Start Rolling Upgrade** Click ![Start Rolling Upgrade](Start Rolling Upgrade.png) to begin automatically upgrading APs, one by one, except for wirelessly uplinked APs, which are intentionally excluded from upgrading.

### Overview

![Overview](Overview.png)

(icon) Displays the icon corresponding to the AP model (not all icons are shown below):

- UniFi AP AC
- UniFi AP PRO
- UniFi AP/AP LR
- UniFi AP AC Outdoor
- UniFi AP Outdoor+
- UniFi AP Outdoor5

The LED color of the device icon indicates the device status.

• **Blue/Green** Indicates the device is connected.

• **Red/Orange** Indicates the device is disconnected.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the AP. You can click the name to get additional details; see “UniFi Access Point Details” on page 67 for more information.

**IP Address** Displays the IP address of the AP.

**Status** Displays the connection status.

- **Connected** The AP is physically wired to the network.
- **Connected (wireless)** The AP is wirelessly uplinked to a physically wired AP.
- **Disconnected** The AP is unreachable by the UniFi Controller software.
- **Isolated** A managed AP is unable to locate its uplink.
- **Managed by Other** The AP is not in the default state but it is not controlled by the UniFi Controller.
- **Pending Approval** The AP is in the default state and is available for adoption.

**Clients** Displays the number of clients connected to the AP.

**Down** Displays the total amount of data downloaded by the AP.

**Up** Displays the total amount of data uploaded by the AP.

**Channel** Displays the transmit/receive channel being used by the AP. The radio band is represented as (ng) for 2.4 GHz and (na)/(ac) for 5 GHz.

**Actions** Click a button to perform the desired action:

• **Locate** Click ![Locate](Locate.png) to flash the LED on the AP and the AP’s icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)

• **Restart** Click ![Restart](Restart.png) to restart the selected device.

• **Upgrade** If a software upgrade is available for the device, click ![Upgrade](Upgrade.png) to install the latest UniFi firmware on the device. The Status will appear as **Upgrading** until the process is complete and the device reconnects to the UniFi Controller software.

• **Adopt** Click ![Adopt](Adopt.png) to adopt a device that appears as **Pending Approval** for its status. The Status will appear as **Adopting** until the device is connected.
Chapter 5: Devices

Config

Displays the icon corresponding to the AP model (not all icons are shown below):
- UniFi AP AC
- UniFi AP PRO
- UniFi AP/AP LR
- UniFi AP AC Outdoor
- UniFi AP Outdoor+
- UniFi AP Outdoor5

The LED color of the device icon indicates the device status.
- Blue/Green Indicates the device is connected.
- Red/Orange Indicates the device is disconnected.

Name/MAC Address Displays the hostname, alias, or MAC address of the AP. You can click the name to get additional details; see “UniFi Access Point Details” on page 67 for more information.

Status Displays the connection status.
- Connected The AP is physically wired to the network.
- Connected (wireless) The AP is wirelessly uplinked to a physically wired AP.
- Disconnected The AP is unreachable by the UniFi Controller software.
- Isolated A managed AP is unable to locate its uplink.
- Managed by Other The AP is not in the default state but it is not controlled by the UniFi Controller.
- Pending Approval The AP is in the default state and is available for adoption.

Model Displays the model name of the UniFi AP.
Version Displays the version number of the UniFi AP’s firmware.
WLAN 2G Displays the name of the WLAN group using the 2.4 GHz radio band.
WLAN 5G Displays the name of the WLAN group using the 5 GHz radio band.

Radio 2G Displays the channel and TX power settings used in the 2.4 GHz radio band.
Radio 5G Displays the channel and TX power settings used in the 5 GHz radio band.

Actions Click a button to perform the desired action:
- Locate Click to flash the LED on the AP and the AP’s icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)
- Restart Click to restart the selected device.
- Upgrade If a software upgrade is available for the device, click to install the latest UniFi firmware on the device. The Status will appear as Upgrading until the process is complete and the device reconnects to the UniFi Controller software.
- Adopt Click to adopt a device that appears as Pending Approval for its status. The Status will appear as Adopting until the device is connected.

Performance

Displays the icon corresponding to the AP model (not all icons are shown below):
- UniFi AP AC
- UniFi AP PRO
- UniFi AP/AP LR
- UniFi AP AC Outdoor
- UniFi AP Outdoor+
- UniFi AP Outdoor5

The LED color of the device icon indicates the device status.
- Blue/Green Indicates the device is connected.
- Red/Orange Indicates the device is disconnected.

Name/MAC Address Displays the hostname, alias, or MAC address of the AP. You can click the name to get additional details; see “UniFi Access Point Details” on page 67 for more information.

IP Address Displays the IP address of the AP.
Status Displays the connection status.
- **Connected** The AP is physically wired to the network.
- **Connected (wireless)** The AP is wirelessly uplinked to a physically wired AP.
- **Disconnected** The AP is unreachable by the UniFi Controller software.
- **Isolated** A managed AP is unable to locate its uplink.
- **Managed by Other** The AP is not in the default state but it is not controlled by the UniFi Controller.
- **Pending Approval** The AP is in the default state and is available for adoption.

**2G Clients** Displays the number of clients connected to the AP using the 2.4 GHz band.

**5G Clients** Displays the number of clients connected to the AP using the 5 GHz band.

**TX** Displays the overall TX (transmit) rate.

**RX** Displays the overall RX (receive) rate.

**TX 2G** Displays the overall TX rate for the 2.4 GHz radio band. The different colors represent different types of packet activity:

<table>
<thead>
<tr>
<th>Color</th>
<th>Packet Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Packets sent</td>
</tr>
<tr>
<td></td>
<td>Packets retried</td>
</tr>
<tr>
<td></td>
<td>Packets not sent due to likely interference</td>
</tr>
</tbody>
</table>

**TX 5G** Displays the overall TX rate for the 5 GHz radio band. The different colors represent different types of packet activity:

<table>
<thead>
<tr>
<th>Color</th>
<th>Packet Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Packets sent</td>
</tr>
<tr>
<td></td>
<td>Packets retried</td>
</tr>
<tr>
<td></td>
<td>Packets not sent due to likely interference</td>
</tr>
</tbody>
</table>

**Channel** Displays the transmit/receive channel being used by the AP. The radio band is represented as (ng) for 2.4 GHz and (na)/(ac) for 5 GHz.

**Actions** Click a button to perform the desired action:
- **Locate** Click to flash the LED on the AP and the AP’s icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)
- **Restart** Click to restart the selected device.
- **Upgrade** If a software upgrade is available for the device, click to install the latest UniFi firmware on the device. The Status will appear as Upgrading until the process is complete and the device reconnects to the UniFi Controller software.
- **Adopt** Click to adopt a device that appears as Pending Approval for its status. The Status will appear as Adopting until the device is connected.

**Phones**

VoIP is available with UniFi Controller version 4.6 or higher.

**Upgrade All** Click to begin automatically upgrading the firmware of all Phones.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the Phone. You can click the name to get additional details; see “UniFi VoIP Phone Details” on page 77 for more information.

**IP Address** Displays the IP address used by the Phone.

**Status** Indicates the device status: Connected, Disconnected, Pending Approval, Adopting, Upgrading, or Managed by Other.

**Extension** Displays the extension of the Phone. You can click the extension to get additional details; see “Add Click this option to set up a new number. The Create New Number screen appears:” on page 17 for more information.

**Num Calls** Displays the total number of incoming and outgoing calls for the Phone.

**Minutes** Displays the total number of call minutes used by the Phone.

**Actions** Click a button to perform the desired action:
- **Locate** Click to ring the Phone and flash the Phone’s icon on the Map tab so you can locate it. (The Phone will ring three times and stop; the icon on the Map tab will flash three times and stop.)
- **Restart** Click to restart the selected device.
- **Upgrade** If a software upgrade is available for the device, click to install the latest UniFi firmware on the device. The Status will appear as Upgrading until the process is complete and the device reconnects to the UniFi Controller software.
- **Adopt** Click to adopt a device that appears as Pending Approval for its status. The Status will appear as Adopting until the device is connected.
Properties

The Properties tab is hidden by default. To display it, click the properties icon. The Properties tab appears on the right side of the Devices screen.

Information about each selected device appears as a popup within this tab. The information varies depending on the device type. For more information, see the appropriate chapter:

- “UniFi Security Gateway Details” on page 55
- “UniFi Switch Details” on page 61
- “UniFi Access Point Details” on page 67
- “UniFi VoIP Phone Details” on page 77

Close Click to close the Properties tab and client popups.

Minimize Click to display the clients as drop-down rows.

Each row displays the following:

- **(icon)** Displays the icon of the device (the icon will vary depending on the model).
- **Name/MAC Address** Displays the hostname, alias, or MAC address of the device.
- **Display** Click to display the device information.

- **Detach** Click to display the same information in a separate popup screen that can be moved anywhere within the browser screen.
- **Close** Click to close the device popup.
- **Hide** Click to hide the Properties tab but allow the device popups to remain accessible from this tab.
Chapter 6: Clients

The Clients screen displays a list of network clients. You can click any of the column headers to change the list order. 

**Search**  
 Enter the text you want to search for. Simply begin typing; there is no need to press Enter.

You can apply one of the following primary filters:

- **All** Displays all clients, regardless of connection type.
- **Wireless** Displays all wireless clients.
- **Wired** Displays all wired clients.

A secondary filter is available:

- **All** Displays all users and guests.
- **Users** Only displays users.
- **Guests** Only displays guests.

**Items per page**  
Select how many results are displayed per page: 10, 50, 100, or 200.

The columns of information vary depending on which primary filter (All, Wireless, or Wired) is applied.

If there is more than one page of entries to display, click the navigation controls or page numbers at the bottom right of the screen to display different pages.

All

**Name/MAC Address** Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details; refer to “Client Details” on page 79 for more information.

**IP Address** Displays the IP address used by the client.

**Connection** Indicates which local network is used.

**AP/Port** Indicates which AP or switch port is used.

**Down** Displays the total amount of data downloaded by the client.

**Up** Displays the total amount of data uploaded by the client.

**Activity** Displays the level of activity for each client.

<table>
<thead>
<tr>
<th>Bars</th>
<th>Activity Level (Bytes per second)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Idle" /></td>
<td>Idle</td>
</tr>
<tr>
<td><img src="image" alt="500" /></td>
<td>500</td>
</tr>
<tr>
<td><img src="image" alt="8000" /></td>
<td>8000</td>
</tr>
<tr>
<td><img src="image" alt="64000" /></td>
<td>64000</td>
</tr>
<tr>
<td><img src="image" alt="512000" /></td>
<td>512000</td>
</tr>
<tr>
<td><img src="image" alt="2048000" /></td>
<td>2048000</td>
</tr>
</tbody>
</table>

**Uptime** Displays the amount of time the client has been connected for this session.

**Actions** Click a button to perform the desired action:

- **Block** Click to block this client from accessing the network.
- **Reconnect** Click to reconnect a client that has been previously blocked. You can also click to kick out a client, which usually reconnects back quickly; this is useful for troubleshooting or resolving a problematic wireless connection.
Chapter 6: Clients

- **Unauthorize** (Available for Guests only.) Click to remove authorization of wireless guest access and disconnect the client.

### Wireless

**AP** If the Wireless filter is applied, then the AP filter is available:
- **All** Displays all wireless clients.
- **2G** Only displays 2.4 GHz clients.
- **5G** Only displays 5 GHz clients.
- **AP** Select the AP whose clients you want displayed.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details; refer to "Client Details" on page 79 for more information.

**IP Address** Displays the IP address used by the client.

**Status** (Displayed when the Guests filter is applied.) Displays “Authorized” for all authorized guests.

**WLAN** Displays the name of the wireless network.

**Access Point** Displays the name of the connected AP.

**Signal** Displays the signal strength level and signal type:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Clients</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>![5 GHz (802.11 ac)]</td>
<td>5 GHz (802.11 ac)</td>
<td>Active</td>
</tr>
<tr>
<td>![5 GHz (802.11 ac)]</td>
<td>5 GHz (802.11 ac)</td>
<td>Power Save</td>
</tr>
<tr>
<td>![5 GHz (802.11 n)]</td>
<td>5 GHz (802.11 n)</td>
<td>Active</td>
</tr>
<tr>
<td>![5 GHz (802.11 n)]</td>
<td>5 GHz (802.11 n)</td>
<td>Power Save</td>
</tr>
<tr>
<td>![2.4 GHz (802.11 n)]</td>
<td>2.4 GHz (802.11 n)</td>
<td>Active</td>
</tr>
<tr>
<td>![2.4 GHz (802.11 n)]</td>
<td>2.4 GHz (802.11 n)</td>
<td>Power Save</td>
</tr>
<tr>
<td>![2.4 GHz (802.11 g)]</td>
<td>2.4 GHz (802.11 g)</td>
<td>Active</td>
</tr>
<tr>
<td>![2.4 GHz (802.11 g)]</td>
<td>2.4 GHz (802.11 g)</td>
<td>Power Save</td>
</tr>
<tr>
<td>![2.4 GHz (802.11 b)]</td>
<td>2.4 GHz (802.11 b)</td>
<td>Active</td>
</tr>
<tr>
<td>![2.4 GHz (802.11 b)]</td>
<td>2.4 GHz (802.11 b)</td>
<td>Power Save</td>
</tr>
</tbody>
</table>

**Down** Displays the total amount of data downloaded by the client.

**Up** Displays the total amount of data uploaded by the client.

**Activity** Displays the level of activity for each client.

<table>
<thead>
<tr>
<th>Bars</th>
<th>Activity Level (Bytes per second)</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Idle]</td>
<td>Idle</td>
</tr>
<tr>
<td>![500]</td>
<td>500</td>
</tr>
<tr>
<td>![8000]</td>
<td>8000</td>
</tr>
<tr>
<td>![64000]</td>
<td>64000</td>
</tr>
<tr>
<td>![512000]</td>
<td>512000</td>
</tr>
<tr>
<td>![2048000]</td>
<td>2048000</td>
</tr>
</tbody>
</table>

**Uptime** Displays the amount of time the client has been connected for this session.

**Actions** Click a button to perform the desired action:
- **Block** Click to block this client from accessing the network.
- **Reconnect** Click to reconnect a client that has been previously blocked. You can also click to kick out a client, which usually reconnects back quickly; this is useful for troubleshooting or resolving a problematic wireless connection.
- **Unauthorize** (Available for Guests only.) Click to remove authorization of wireless guest access and disconnect the client.

### Wired

**Network** If the Wired filter is applied, then the Network filter is available.
- **All** Displays all wired clients.
- **(name)** Select the network whose clients you want displayed.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details; refer to "Client Details" on page 79 for more information.

**IP Address** Displays the IP address used by the client.

**Network** Indicates which local network is used.
Port Displays the name of the network device and port number used by the client. You can click the name to get additional details; refer to “UniFi Switch Details” on page 61 for more information.

Down Displays the total amount of data downloaded by the client.

Up Displays the total amount of data uploaded by the client.

Activity Displays the level of activity for each client.

<table>
<thead>
<tr>
<th>Bars</th>
<th>Activity Level (Bytes per second)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Idle</td>
</tr>
<tr>
<td>■</td>
<td>500</td>
</tr>
<tr>
<td>■■</td>
<td>8000</td>
</tr>
<tr>
<td>■■■</td>
<td>64000</td>
</tr>
<tr>
<td>■■■■</td>
<td>512000</td>
</tr>
<tr>
<td>■■■■■</td>
<td>2048000</td>
</tr>
</tbody>
</table>

Uptime Displays the amount of time the client has been connected for this session.

Actions Click a button to perform the desired action:

- **Block** Click to block this client from accessing the network.
- **Reconnect** Click to reconnect a client that has been previously blocked.

Properties

The Properties tab is hidden by default. To display it, click the properties icon. The Properties tab appears on the right side of the Devices screen.

Information about each selected client appears as a popup within this tab. The information varies depending on whether the client is wired or wireless:

- “Wireless Client – Details” on page 79
- “Wired Client – Details” on page 81

Close Click to close the Properties tab and client popups.

Minimize Click to display the clients as drop-down rows.

Each row displays the following:

- **(icon)** Displays the icon of the device (the icon may vary depending on the device type).
- **Name/MAC Address** Displays the hostname, alias, or MAC address of the device.
- **Display** Click to display the device information.
- **Detach** Click to display the same information in a separate popup screen that can be moved anywhere within the browser screen.
- **Close** Click to close the device popup.

Hide Click to hide the Properties tab but allow the device popups to remain accessible from this tab.
Chapter 7: Calls

The Calls screen displays a list of VoIP calls. You can click any of the column headers to change the list order.

Search  
Enter the text you want to search for. Simply begin typing; there is no need to press Enter.

You can apply one of the following filters:
- **All** Display all calls.
- **Incoming** Only display incoming calls.
- **Outgoing** Only display outgoing calls.
- **Internal** Only display internal calls.

**Time Duration**  
Filter the results on the page based on the time duration. Select 1 hour, 8 hours, 24 hours, 2 days, 7 days, 2 weeks, or 1 month.

**Items per page**  
Select how many results are displayed per page: 10, 50, 100, or 200.

If there is more than one page of entries to display, click the navigation controls or page numbers at the bottom right of the screen to display different pages.

**Manage Extensions**  
Click this button to access the Settings > Extensions screen for configuration. Go to “Add Click this option to set up a new number. The Create New Number screen appears:” on page 17 for more information.

**All**

**Direction**  
Displays whether the call is Incoming or Outgoing.

**Origin**  
Displays the extension or phone number of the caller, if known.

**Recipient**  
Displays the extension or phone number of the call recipient.

**Status**  
Displays the current status of the call: Ongoing, Successful, Voicemail, Transferred, or Terminated.

**Start Time**  
Displays the start date and time of the call.

**Duration**  
Displays how long the call lasted.

**Actions**  
Click a button to perform the desired action:
- **Terminate**  
Click X TERMINATE to end this call.
Chapter 7: Calls

Incoming

- **Direction** Displays *Incoming*.
- **Origin** Displays the extension or phone number of the caller, if known.
- **Recipient** Displays the extension or phone number of the call recipient.
- **Status** Displays the current status of the call: *Ongoing*, *Successful*, *Voicemail*, *Transferred*, or *Terminated*.
- **Start Time** Displays the start date and time of the call.
- **Duration** Displays how long the call lasted.
- **Actions** Click a button to perform the desired action:
  - **Terminate** Click **TERMINATE** to end this call.

Internal

- **Direction** Displays whether the call is *Incoming* or *Outgoing*.
- **Origin** Displays the extension or phone number of the caller, if known.
- **Recipient** Displays the extension or phone number of the call recipient.
- **Status** Displays the current status of the call: *Ongoing*, *Successful*, *Voicemail*, *Transferred*, or *Terminated*.
- **Start Time** Displays the start date and time of the call.
- **Duration** Displays how long the call lasted.
- **Actions** Click a button to perform the desired action:
  - **Terminate** Click **TERMINATE** to end this call.

Outgoing
Chapter 8: Statistics

The Statistics screen provides a visual representation of the clients and network traffic connected to your managed UniFi network.

Overview  The default view.
Clear Current Stats  Reset the current statistics to start over.

Time and Date  At the top right of the screen, you can filter by date and time period. You can also change the duration interval by toggling between 24 Hour and Month.

- **Update**  Click to apply the new filter.
- **Cancel**  Click to discard changes.
Chapter 8: Statistics

Clients (Total)

# of Clients A visual pie chart represents the client distribution amongst the APs. Place the mouse cursor over the chart for the number of clients per network.

Quick Look

Most Active AP
The details of the most active Access Point are displayed:
Name or MAC address You can click this link to open the AP Details screen. See “UniFi Access Point Details” on page 67 for additional information.
Download Displays the total amount of data downloaded by the AP.
Upload Displays the total amount of data uploaded by the AP.

Most Active Client
The details of the most active client in current use are displayed:
Name or MAC address You can click this link to open the Client Details screen. See “Client Details” on page 79 for additional information.
Download Displays the total amount of data downloaded by the client.
Upload Displays the total amount of data uploaded by the client.

All-Time Top Client
The details of the all-time, most active client are displayed:
Name or MAC address You can click this link to open the Client Details screen. See “Client Details” on page 79 for additional information.
Uptime Displays the duration of time the client has been connected.
Download Displays the total amount of data downloaded by the client.
Upload Displays the total amount of data uploaded by the client.

Current Usage - Top Access Points
The details of the most active Access Points in current use are displayed.

# of Clients A pie chart represents the client distribution on the most active Access Points. Place the mouse cursor over the chart for the number of clients per specified AP.
Traffic A pie chart represents traffic on the most active Access Points. Place the mouse cursor over the chart for the amount of traffic per specified AP.

Recent Activities
The details of recent network activities are displayed.

Clients (Total) A graph displays the number of clients connected during the selected time period. Place the mouse cursor over an hour or day to display the exact number.

Traffic A graph displays the network traffic during the selected time period. Place the mouse cursor over an hour or day to display the specific amount of data.
Filter

You can view the number of clients and amount of traffic by device. The Filter drop-down list displays managed devices by name or MAC address and amount of traffic.

Click the appropriate device from the Filter drop-down list.

A second line that is color-coded to the selected device appears in the time period selected.

You can place your mouse over an hour or day to display the number of clients and amount of data in total and per the selected device.
Chapter 9: Insights

The Insights screen displays different kinds of status information. Four filters are available:

- **Known Clients** Displays information about detected clients.
- **Rogue Access Points** Displays information about wireless devices not managed by the UniFi Controller.
- **Past Connections** Displays information about previous client connection sessions (for example, a client can have multiple sessions from different days).
- **Past Guest Authorizations** Displays information about the authorization of previous guest connections.
- **Switch Stats** Displays information about the status, ports, PoE, and traffic activity of the UniFi Switches.

These sub-tabs share common options:

**Search** Enter the text you want to search for. Simply begin typing; there is no need to press Enter.

**Items per page** Select how many results are displayed per page: 10, 50, 100, or 200.

On any sub-tab, you can click any of the column headers to change the list order.

If there is more than one page of entries to display, click the navigation controls or page numbers at the bottom right of the screen to display different pages.

Known Clients

You can apply one of the following primary filters:

- **All** Display all users and guests.
- **Blocked** Only display blocked clients.
- **Noted** Only display clients whose configurations include notes or who are forced to connect to a specific AP. (See “Wireless Client – Configuration” on page 80 or “Wired Client – Configuration” on page 82 for more information.)
- **User** Only display users.
- **Guest** Only display guests.
- **Static IP** Only display clients using static IP addresses.
Chapter 9: Insights

A secondary filter is available:
- **All** Display all clients, regardless of connection type.
- **Wireless** Display all wireless clients.
- **Wired** Display all wired clients.

**Last Seen** Filter the results on the page based on the date the client was last seen. Select **1 Day**, **3 Days**, **7 Days**, **2 Weeks**, **1 Month**, **2 Months**, or **1 Year**.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details; see “Client Details” on page 79 for more information.

**Manufacturer** Displays the name of the device manufacturer.

**User/Guest** Indicates whether the client is/was connected to a primary or guest network.

**Down** Displays the total amount of data downloaded by the client.

**Up** Displays the total amount of data uploaded by the client.

**Last Seen** Displays the last date and time the client was connected.

**Actions** Click a button to perform the desired action:
- **Block** Click **X BLOCK** to block this client from accessing the network.
- **Reconnect** Click **RECONNECT** to reconnect a client that has been previously blocked.

**Rogue Access Points**

**Last Seen** Filter the results on the page based on the time the AP was last seen. Select **1 Day**, **3 Days**, **7 Days**, **2 Weeks**, **1 Month**, **2 Months**, or **1 Year**.

**Name/SSID** Displays the name of the wireless network.

**BSSID** Displays the MAC address of the AP’s wireless interface.

**Channel** Displays the channel setting that the AP was detected on.

**Security** Displays the security status indicating whether encryption is used.

**Manufacturer** Displays the name of the AP manufacturer.

**Location** Displays the name of the closest AP managed by the UniFi Controller. You can click the name to get additional details on the AP.

**Signal** Displays the signal strength level and signal type:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Clients Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>⚡</td>
<td>5 GHz (802.11ac) Active</td>
</tr>
<tr>
<td>⚡</td>
<td>5 GHz (802.11ac) Power Save</td>
</tr>
<tr>
<td>⚡</td>
<td>5 GHz (802.11n) Active</td>
</tr>
<tr>
<td>⚡</td>
<td>5 GHz (802.11n) Power Save</td>
</tr>
<tr>
<td>⚡</td>
<td>2.4 GHz (802.11n) Active</td>
</tr>
<tr>
<td>⚡</td>
<td>2.4 GHz (802.11n) Power Save</td>
</tr>
<tr>
<td>⚡</td>
<td>2.4 GHz (802.11g) Active</td>
</tr>
<tr>
<td>⚡</td>
<td>2.4 GHz (802.11g) Power Save</td>
</tr>
<tr>
<td>⚡</td>
<td>2.4 GHz (802.11b) Active</td>
</tr>
<tr>
<td>⚡</td>
<td>2.4 GHz (802.11b) Power Save</td>
</tr>
</tbody>
</table>

**Last Seen** Displays the last date and time the AP was connected.
Past Connections

You can apply one of the following filters:

- **All**  Display all users and guests.
- **User**  Only display users.
- **Guest**  Only display guests.

**Time and Date**  You can filter by time and date period. You can also change the duration interval by toggling between 1 Hour, 24 Hour, and 7 Days.

- **Update**  Click **UPDATE** to apply the new filter.
- **Cancel**  Click **CANCEL** to discard changes.

**Name/MAC Address**  Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details; see “Client Details” on page 79 for more information.

**User/Guest**  Indicates whether the client is/was connected to a primary or guest network.

**Associated**  Displays the date and time the client first connected.

**Duration**  Displays the length of time the client was connected.

**Down**  Displays the total amount of data downloaded by the client.

**Up**  Displays the total amount of data uploaded by the client.

**IP**  Displays the last known IP address of the client.

**Last AP**  Displays the name or MAC address of the last AP used by the client. You can click the name of the AP to get additional details; refer to “UniFi Access Point Details” on page 67 for more information.

Past Guest Authorizations

**Time and Date**  You can filter by time and date period. You can also change the duration interval by toggling between 1 Hour, 24 Hour, and 7 Days.

- **Update**  Click **UPDATE** to apply the new filter.
- **Cancel**  Click **CANCEL** to discard changes.

**Name/MAC Address**  Displays the hostname, alias, or MAC address of the previous guest.

**Package**  Displays the name of the guest access package.

**Amount**  Displays the amount paid by the guest.

**Authorized By**  Displays the name of the authorizing body.

**Start**  Displays the start date and time of the session.

**Duration**  Displays the length of time the guest was connected.

**Down**  Displays the total amount of data downloaded by the guest.

**Up**  Displays the total amount of data uploaded by the guest.

**IP**  Displays the last known IP address of the guest.

**Last AP**  Displays the name or MAC address of the last AP used by the guest. You can click the name of the AP to get additional details; refer to “UniFi Access Point Details” on page 67 for more information.
Switch Stats
You can apply one of the following primary filters:

- **Switch**: Displays the ports of all UniFi Switches or a specific Switch.
- **Link Status**: Displays the ports of the specified status:
  - **All**: Displays all ports.
  - **Connected**: Displays all connected ports.
  - **Disconnected**: Displays all disconnected ports.

Once you have applied the primary filters, then apply a secondary filter:

- **Overview**: Displays the general status information of each port.
- **PoE**: Displays the specific PoE configuration and status of each port.
- **Counters**: Displays the specific TX and RX rates for each port.

Overview

The ports display their status:

- **Indicates a 10/100 Mbps connection.**
- **Indicates 10/100 Mbps connection with PoE.**
- **Indicates a 1000 Mbps connection.**
- **Indicates 1000 Mbps connection with PoE.**
- **Indicates no connection.**

**Switch** If **Switch: All** is selected, then this displays the hostname, alias, or MAC address of the UniFi Switch. You can click the name to get additional details. For more information, see “UniFi Switch Details” on page 61.

**Port** Displays the port number.

**Name** Displays the name of the port.

**PoE** Displays the PoE setting:
- **Off**: PoE is disabled.
- **24V Passive**: 24V passive PoE is enabled.
- **PoE+**: 802.3at/af devices can be plugged in and automatically receive PoE.

**Mode** Displays the operation mode:
- **Switching**: The default mode.
- **Mirroring**: The network traffic of this port will receive the mirrored traffic from the port selected in “Port Configuration” on page 63.
- **Aggregate**: This port is part of an aggregate link. A port channel, also known as a Link Aggregation Group (LAG), combines multiple links into a single logical link (single IP address) for load balancing and/or redundancy.

**Networks/VLANs** Displays the networks/VLANs that the port belongs to.

**Link Status** Displays the connection speed and duplex mode.

**STP** Displays the STP (Spanning Tree Protocol) mode.

**TX** Displays the amount of data transmitted.

**RX** Displays the amount of data received.

**TX Rate** Displays the transmit rate.

**RX Rate** Displays the receive rate.

**Activity** Displays the level of activity. The different colors represent different types of packet activity.

You can place your mouse over the **Activity** icon to display the specific TX or RX rate.

**Actions** Click a button to perform the desired action:
- **Edit**: Click **Edit** to make changes to the wireless network settings. For more information, see “UniFi Switch Details” on page 61.
- **Power Cycle**: If applicable, click **Power Cycle** to power cycle the port.
### PoE

You can apply the PoE Mode filter:

- **All** Displays all ports using any PoE Mode setting.
- **Enabled** Displays all ports set to PoE+ or 24V Passive.
- **Power On** Displays all ports with active PoE output.
- **Passive** Displays all ports set to 24V passive PoE.
- **Disabled** Displays all ports with PoE disabled.

The ports display their status:

- ![Icon](image) Indicates a 10/100 Mbps connection.
- ![Icon](image) Indicates 10/100 Mbps connection with PoE.
- ![Icon](image) Indicates a 1000 Mbps connection.
- ![Icon](image) Indicates 1000 Mbps connection with PoE.
- ![Icon](image) Indicates no connection.

**Switch** If Switch: All is selected, then this displays the hostname, alias, or MAC address of the UniFi Switch. You can click the name to get additional details. For more information, see “UniFi Switch Details” on page 61.

**Port** Displays the port number.

**Name** Displays the name of the port.

**PoE Mode** Displays the PoE setting:
- **Off** PoE is disabled.
- **24V Passive** 24V passive PoE is enabled.
- **PoE+** 802.3at/af devices can be plugged in and automatically receive PoE.

**PoE Detection** Displays the PoE status:
- **Not detected** No 802.3at/af device is detected.
- **Passive** 24V passive PoE is enabled.
- **Good** An 802.3at/af device is plugged in and automatically receiving PoE.

**PD Class** Displays the PD (Powered Device) class of the detected device, if applicable; this indicates its power requirements.

**Power** Displays the power output in watts, if applicable.

**Voltage** Displays the voltage output, if applicable.

### Current

Displays the current output in amperes, if applicable.

### Actions

Click a button to perform the desired action:

- **Edit** Click [Edit] to make changes to the wireless network settings. For more information, see “UniFi Switch Details” on page 61.
- **Power Cycle** If applicable, click [POWER CYCLE] to power cycle the port.

### Counters

**Switch** If Switch: All is selected, then this displays the hostname, alias, or MAC address of the UniFi Switch. You can click the name to get additional details. For more information, see “UniFi Switch Details” on page 61.

**Port** Displays the port number.

**TX Bytes** Displays the number of bytes transmitted.

**TX Frames** Displays the number of frames transmitted.

**TX Multicast** Displays the number of multicast packets transmitted.

**TX Broadcast** Displays the number of broadcast packets transmitted.

**TX Errors** Displays the number of error packets transmitted.

**RX Bytes** Displays the number of bytes received.

**RX Frames** Displays the number of frames received.

**RX Multicast** Displays the number of multicast packets received.

**RX Broadcast** Displays the number of broadcast packets received.

**RX Errors** Displays the number of error packets received.
Chapter 10: UniFi Security Gateway Details

The UniFi Security Gateway hyperlink opens the UniFi Security Gateway’s Details window either in the Properties tab or as a separate popup window. You can always dock this window in the Properties tab or detach it as a separate window.

The top of the window displays the device icon and name (or MAC address).

Properties

The Properties tab is hidden by default. To display it, click the properties icon. The Properties tab appears on the right side of the Devices screen.

Information about each selected device appears as a popup within this tab.

Close Click to close the Properties tab and client popups.

Minimize Click to display the clients as drop-down rows.

Each row displays the following:

- **(icon)** Displays the icon of the device (the icon will vary depending on the model).
- **Name/MAC Address** Displays the hostname, alias, or MAC address of the device.
- **Display** Click to display the device information.
- **Detach** Click to display the same information in a separate popup screen that can be moved anywhere within the browser screen.
- **Close** Click to close the device popup.
- **Hide** Click to hide the Properties tab but allow the device popups to remain accessible from this tab.

The upper part of the detached popup screen has three icons:

- **WAN**
- **LAN**
- **VOIP (enabled in “Settings > VoIP” on page 16)**

A green icon indicates an active port, and a black icon indicates no activity. A gray icon indicates a disabled port (VoIP requires UniFi Controller v4.6 or higher).

There are three clickable tabs:

- **“UniFi Security Gateway – Details” on page 56**
- **“UniFi Security Gateway – Networks” on page 56**
- **“UniFi Security Gateway – Configuration” on page 57**

The bottom of the window has three buttons:

- **Locate** Click to flash the Status LED on the Gateway and the Gateway’s icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)
- **Restart** Click to restart the Gateway.
- **Upgrade** If a software upgrade is available for the Gateway, click to install the latest UniFi firmware on the Gateway. The Status will appear as Upgrading until the process is complete and the Gateway reconnects to the UniFi Controller software.
Chapter 10: UniFi Security Gateway Details

UniFi Security Gateway – Details
Click Details to display the device specifics, LAN/WAN connection details, and uptime.

Overview

MAC Address Displays the MAC address or unique hardware identifier of the Gateway.
Model Displays the model name of the Gateway.
Version Displays the version number of the Gateway’s firmware.
LAN IP Address Displays the local IP address of the Gateway.
Uptime Displays the duration of time the Gateway has been running without interruption.

Overview

WAN

Overview

IP Address Displays the WAN (public) IP address of the WAN interface.
Speed Displays the connection speed in Mbps.
Duplex Displays the mode, Full Duplex or Half Duplex.
Down Pkts/Bytes Displays the amount of data downloaded as packets and bytes.
Up Pkts/Bytes Displays the amount of data uploaded as packets and bytes.
Down Activity Displays the level of download activity in Bytes per second.
Up Activity Displays the level of upload activity in Bytes per second.

UniFi Security Gateway – Networks
Click Networks to display the network name, IP address, TX and RX throughput, and number of clients.

Overview

Network Displays the name of the network.
IP Displays the local IP address of the network.
TX Displays the outgoing (transmit) throughput.
RX Displays the incoming (receive) throughput.
Num Clients Displays the number of clients on the network.
UniFi Security Gateway – Configuration

Click Configuration to configure the alias, WAN settings, and port forwarding entries. You can also move the Gateway to another site.

Config

- **Alias** Displays the customizable name or identifier of the Gateway. The Alias is also known as the host name.
- **Apply** Click Apply to save the change.

WAN

- **Connection Type** Select the Internet connection type for your service.
- **Using DHCP** The use of the Dynamic Host Configuration Protocol (DHCP) is the default. The Gateway automatically acquires network settings from the service provider’s DHCP server.
  - **Preferred DNS** Enter the IP address of the service provider’s primary DNS server.
  - **Alternate DNS** Enter the IP address of the service provider’s secondary DNS server.
- **Apply** Click Apply to save changes.

- **Static IP** The service provider assigns fixed network settings to your service for manual entry. Enter the following information:
  - **IP Address** Enter the Internet IP address of the Gateway.
  - **Subnet Mask** Enter the subnet mask of the Gateway.
  - **Router** Enter the IP address of the service provider’s gateway router.
  - **Preferred DNS** Enter the IP address of the service provider’s primary DNS server.
  - **Alternate DNS** Enter the IP address of the service provider’s secondary DNS server.
- **Apply** Click Apply to save changes.
Chapter 10: UniFi Security Gateway Details

• **PPPoE**  Point-to-Point Protocol over Ethernet (PPPoE) is a virtual private and secure connection between two systems that enables encapsulated data transport. Enter the following information:
  - **Username**  Enter the username used to connect to the PPPoE server.
  - **Password**  Enter the password used to connect to the PPPoE server.
  - **Preferred DNS**  Enter the IP address of the service provider’s primary DNS server.
  - **Alternate DNS**  Enter the IP address of the service provider’s secondary DNS server.
• **Apply**  Click **Apply** to save changes.

**Port Forward**

• **Create**  Click **CREATE** to add a new entry. Go to the **Create New Entry** section in the next column.
• **Name**  Displays the name of the port forwarding entry.
• **From**  Displays the source IP address, if specified.

**Actions**  Click a button to perform the desired action:
- **Edit**  Click **Edit** to edit the port forwarding entry.
- **Delete**  Click **Delete** to delete the port forwarding entry.

**Create New Entry**

**Name**  Enter a name to identify this port forwarding entry.

**From**  The default is **Anywhere**, which accepts traffic from any source IP address. To specify a source IP address, select **Limited** and enter the source IP address in the field provided.

**Port**  Enter the port or ports that will be forwarded to the LAN. You can identify the port or ports by name, number, and/or range. To specify multiple ports, use a comma-separated list (example: https, 20-23, 554).

**Forward IP**  Enter the LAN IP address that will receive the forwarded port traffic.

**Forward Port**  Enter the port or ports that will receive the forwarded port traffic. You can identify the port or ports by name, number, and/or range. If you do not specify this port, then the original destination port of the traffic will be used.

**Advanced Options**

**Protocol**  Select the protocol that will be forwarded: **Both**, **TCP**, or **UDP**.

**Apply**  Click **Apply** to save changes.

**Cancel**  Click **Cancel** to discard changes.
Forget This Gateway

**Forget** Click **Forget** to remove the Gateway from management by the UniFi Controller software and reset it to factory default settings.

**Note:** Use caution when clicking **Forget**. This will restore the Gateway to factory default settings while it is in a **Connected** state.

**Move to** To move the Gateway, select another site from the drop-down menu.
Chapter 11: UniFi Switch Details

A UniFi Switch hyperlink opens the UniFi Switch’s Details window either in the Properties tab or as a separate popup window. You can always dock this window in the Properties tab or detach it as a separate window.

The top of the window displays the device icon and name (or MAC address).

Properties

The Properties tab is hidden by default. To display it, click the properties icon. The Properties tab appears on the right side of the Devices screen.

Information about each selected device appears as a popup within this tab.

- **Close** Click to close the Properties tab and client popups.
- **Minimize** Click to display the clients as drop-down rows.

Each row displays the following:

- **(icon)** Displays the icon of the device (the icon will vary depending on the model).
- **Name/MAC Address** Displays the hostname, alias, or MAC address of the device.

**Display** Click to display the device information.

**Detach** Click to display the same information in a separate popup screen that can be moved anywhere within the browser screen.

**Close** Click to close the device popup.

**Hide** Click to hide the Properties tab but allow the device popups to remain accessible from this tab.

The top part of the window displays the connection status:

- **Pending Approval** Default state, available for adoption.
- **Connected** Indicates a managed connection.
- **Disconnected** Indicates no connection.

The ports display their status:

- Indicates a 10/100 Mbps connection.
- Indicates 10/100 Mbps connection with PoE.
- Indicates a 1000 Mbps connection.
- Indicates 1000 Mbps connection with PoE.
- Indicates no connection.

Place your cursor over a port to view the following:

- **Port** Displays the port number.
- **Name** Displays the name of the port.
- **Status** Displays the connection speed and duplex mode.
- **TX** Displays the amount of data transmitted.
- **RX** Displays the amount of data received.
- **PoE** (Not applicable to the SFP ports.) Displays the PoE setting:
  - **Off** PoE is disabled.
  - **24V Passive** 24V passive PoE is enabled.
  - **__W** Power output is displayed in watts.
  - **PoE+** 802.3at/af devices can be plugged in and automatically receive PoE.

- **Networks/VLANs** Displays the networks/VLANs that the port belongs to.

There are three clickable tabs:

- “UniFi Switch – Details” on page 62
- “UniFi Switch – Ports” on page 63
- “UniFi Switch – Configuration” on page 64
The bottom of the window has three buttons:

- **Locate** Click to flash the System LED on the Switch and the Switch’s icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)
- **Restart** Click to restart the Switch.
- **Upgrade** If a software upgrade is available for the Switch, click to install the latest UniFi firmware on the Switch. The Status will appear as Upgrading until the process is complete and the Switch reconnects to the UniFi Controller software.

**UniFi Switch – Details**

Click **Overview** to display the device specifics, connection details, and uptime.

**Overview**

**MAC Address** Displays the MAC address or unique hardware identifier of the Switch.

**Model** Displays the model name of the Switch.

**Version** Displays the version number of the Switch’s firmware.

**IP Address** Displays the IP address of the Switch.

**Power Consumption** Displays the amount of power used by the Switch.

**Uptime** Displays the duration of time the Switch has been running without interruption.

**Uplink**

**Port** Displays the port number.

**Uplink** Displays the name or MAC address of the uplink device. You can click the name to get additional details.

**Speed** Displays the connection speed in Mbps.

**Duplex** Displays the mode, **Full Duplex** or **Half Duplex**.

**DownPkts/Bytes** Displays the amount of data downloaded as packets and bytes.

**UpPkts/Bytes** Displays the number of packets and total bytes uploaded by the device.

**Activity** Displays the level of activity in Bytes per second.

**Downlinks**

**Port** Displays the number of the connected port.

**Device** Displays the name or MAC address of the downlink device. You can click the name to get additional details.

**Model** Displays the model number of the downlink device.

**Status** Displays the connection speed and duplex mode.
UniFi® Controller User Guide

Chapter 11: UniFi Switch Details

UniFi Switch – Ports

Click Ports to display the port name, status, TX and RX throughput, PoE setting, and networks/VLANs.

Port
Displays the port number.

Name
Displays the name of the port.

Status
Displays the connection speed and duplex mode.

TX
Displays the amount of data transmitted.

RX
Displays the amount of data received.

PoE
Displays the PoE setting:

- Off
PoE is disabled.

- 24V Passive
Select this option to power devices that support 24V passive PoE.

- PoE+
802.3at/af devices can be plugged in and automatically receive PoE.

Networks/VLANs
Select the appropriate network or VLAN, or select Disabled to disable this port. The default is All.

Actions
Click a button to perform the desired action:

- Edit
Click to change the port configuration. Proceed to the following section, Port Configuration.

- Powercycle
(Available only if the connected devices uses PoE.) Click to restart the connected device.

Port Configuration

• Port Displays the number of the port.

• Name Displays the customizable name or identifier of the port. Click Apply to save the change.

• PoE All ports are set to auto-sensing PoE+ by default.
  - Off Disable PoE.
  - 24V Passive Select this option to power devices that support 24V passive PoE.

  Note: Before activating 24V passive PoE, ensure that the connected device supports PoE and the supplied voltage.
  - PoE+ 802.3at/af devices can be plugged in and automatically receive PoE.

• Networks/VLANs Select the appropriate network or VLAN, or select Disabled to disable this port. The default is All.
Chapter 11: UniFi Switch Details

- **Advanced Options** Click the icon to display the following:
- **Operation** Select the operation mode for this port.
  - **Switching** The default mode.
  - **Mirroring** The network traffic of this port will receive the mirrored traffic from the port listed below for analysis:
    - **Mirroring Port** Enter the number of the port that will be mirrored.

- **Aggregate** A port channel, also known as a Link Aggregation Group (LAG), combines multiple links into a single logical link (single IP address) for load balancing and/or redundancy. If you select this option, then this port becomes the start port of the aggregate link.
  - **Aggregate Ports** Enter the end port number of the LAG. (Two to four ports are permitted per LAG.)

- **Apply** Click **Apply** to save changes.
- **Cancel** Click **Cancel** to discard changes.

**UniFi Switch – Configuration**

Click **Configuration** to configure the alias, network/VLANs, services, and network settings. You can also move the Switch to another site.

**Alias**

Displays the customizable name or identifier of the Switch. The **Alias** is also known as the host name.

**Apply** Click **Apply** to save changes.

**Networks/VLANs**

**Create** Click to add a new entry. Go to “Create New Network/VLAN” on page 65.
Name  Displays the name of the network/VLAN.
Config  Displays the configuration: Native (____) or Customized. (Networks may be created in “Settings > Networks” on page 9.)
Actions  Click a button to perform the desired action:
  • Edit  Click   to edit the network/VLAN entry.
  • Delete  Click   to delete the network/VLAN entry.
Create New Network/VLAN

• Name  Enter a name to identify this network/VLAN.
• Native Network  A native network has a Port VLAN Identifier (PVID), which identifies the default VLAN. A switch assigned to a native network participates in the VLAN of that native network.

The Switch accepts tagged and untagged packets in the ingress direction, and the untagged packets are assigned to the VLAN of the native network. For example, if the PVID is VLAN 30, then all untagged packets are assigned to VLAN 30. In the egress direction, the native network packets are stripped of the VLAN 30 header and exit as untagged packets.

This table lists how the packets are handled:

<table>
<thead>
<tr>
<th>Packet Type</th>
<th>Ingress</th>
<th>Action</th>
<th>Egress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tagged</td>
<td>Accepted</td>
<td>Remains tagged</td>
<td>Sent out as tagged</td>
</tr>
<tr>
<td>Untagged</td>
<td>Accepted</td>
<td>Assigned to VLAN of native network</td>
<td>VLAN header removed and sent out as untagged</td>
</tr>
</tbody>
</table>

Each physical port can have multiple networks attached; however, only one of them can be native (untagged). Select the appropriate native network. (Additional networks may be created in “Settings > Networks” on page 9.)

• Tagged Networks  For a Switch belonging to a tagged network, the packets will be tagged in both ingress and egress directions. For example, the native network is LAN with VLAN 1 as the PVID. The switch is connected to an AP with two tagged networks:
  • VLAN 20: corporate
  • VLAN 30: guest

This table lists how the packets are handled:

<table>
<thead>
<tr>
<th>Packet Type</th>
<th>Ingress</th>
<th>Action</th>
<th>Egress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untagged</td>
<td>Accepted</td>
<td>Assigned to VLAN 1</td>
<td>VLAN header removed and sent out as untagged</td>
</tr>
<tr>
<td>Tagged as VLAN 20</td>
<td>Accepted</td>
<td>Remains tagged</td>
<td>Sent out tagged VLAN 20</td>
</tr>
<tr>
<td>Tagged as VLAN 30</td>
<td>Accepted</td>
<td>Remains tagged</td>
<td>Sent out tagged VLAN 30</td>
</tr>
</tbody>
</table>

The proper use of VLANs isolates the traffic of each VLAN. The guest traffic on VLAN 30 will be kept separate from the traffic on the corporate network.

Select the appropriate tagged network. (Additional networks may be created in “Settings > Networks” on page 9.)

• Apply  Click  Apply  to save changes.
• Cancel  Click  Cancel  to discard changes.

Services

Network Group  A network group defines the management VLAN for the Switch. Select the appropriate network group.
Enable Jumbo Frame  Disabled by default. The Maximum Transmission Unit (MTU) is the maximum packet size (in bytes) that a network interface can transmit. A jumbo frame is larger than the standard Ethernet frame with an MTU of 1500. Jumbo frames are typically used for Gigabit Ethernet connections. If you enable this option, then this port handles jumbo frames and forwards them.
Enable Flow Control  Disabled by default. Flow Control allows the port to manage data rates in case the sending and receiving devices use different data transmission rates.

Apply  Click Apply to save changes.

Network

Configure IP  Select the Internet connection type for your service.

- **Using DHCP** The use of the Dynamic Host Configuration Protocol (DHCP) is the default. The AP automatically acquires network settings from the network’s DHCP server.

- **Apply** Click Apply to save changes.

- **Static IP** Assign fixed network settings to the Switch. Enter the following information:
  - **IP Address** Enter the IP address for the Switch.
  - **Subnet Mask** Enter the subnet mask of the Switch.
  - **Gateway** Enter the IP address of the gateway (for example, the UniFi Security Gateway).
  - **Preferred DNS** Enter the IP address of the primary DNS server.
  - **Alternate DNS** Enter the IP address of the secondary DNS server.
  - **DNS Suffix** Enter the Fully Qualified Domain Name (FQDN) without the hostname.

- **Apply** Click Apply to save changes.

Forget This Switch

Forget  Click Forget to remove the Switch from management by the UniFi Controller software and reset it to factory default settings.

Note: Use caution when clicking Forget. This will restore the Switch to factory default settings when it is in a Connected state.

Move to  To move the Switch, select another site from the drop-down menu.
Chapter 12: UniFi Access Point Details

A UniFi AP hyperlink opens the UniFi AP’s Details window either in the Properties tab or as a separate popup window. You can always dock this window in the Properties tab or detach it as a separate window.

The top of the window displays the device icon and name (or MAC address).

Properties

The Properties tab is hidden by default. To display it, click the properties icon. The Properties tab appears on the right side of the Devices screen.

Information about each selected device appears as a popup within this tab.

![Properties Tab](image)

Close Click to close the Properties tab and client popups.

Minimize Click to display the clients as drop-down rows.

Each row displays the following:

- **(icon)** Displays the icon of the device (the icon will vary depending on the model).

- **Name/MAC Address** Displays the hostname, alias, or MAC address of the device.

- **Display** Click to display the device information.

- **Detach** Click to display the same information in a separate popup screen that can be moved anywhere within the browser screen.

- **Close** Click to close the device popup.

- **Hide** Click to hide the Properties tab but allow the device popups to remain accessible from this tab.

The upper part of the window displays the connection status:

- **Pending Approval** Default state, available for adoption.

- **Connected** Indicates a wired connection.

- **Connected (wireless)** Indicates a wireless connection.

- **Managed by Other** Not in the default state but not controlled by the current UniFi Controller.

- **Isolated** To establish a connection to the UniFi Controller, perform one of the following actions:
  - Reconnect the AP to the gateway or router.
  - Connect an Ethernet cable from the Secondary Ethernet Port (if available) of the isolated AP to the Secondary Ethernet Port (if available) of another UniFi AP that is connected to the gateway or router.
  - Establish a wireless uplink to a wired AP.

- **Disconnected** To establish a connection to the UniFi Controller, perform one of the following actions:
  - Reconnect the AP to the gateway or router.
  - Connect an Ethernet cable from the Secondary Ethernet Port (if available) of the isolated AP to the Secondary Ethernet Port (if available) of another UniFi AP that is connected to the gateway or router.
  - Establish a wireless uplink to a wired AP.

There are four clickable tabs:

- “UniFi Access Point – Details” on page 68
- “UniFi Access Point – Users” on page 70
- “UniFi Access Point – Guests” on page 70
- “UniFi Access Point – Configuration” on page 71

The bottom of the window has three buttons:

- **Locate** Click to flash the LED on the AP and the AP’s icon on the Map tab so you can locate it. The LED will flash until the Locate button is clicked again. (The icon on the Map tab will flash three times and stop.)

- **Restart** Click to restart the AP.

- **Upgrade** If a software upgrade is available for the AP, click to install the latest UniFi firmware on the AP. The Status will appear as Upgrading until the process is complete and the AP reconnects to the UniFi Controller software.
Chapter 12: UniFi Access Point Details

UniFi Access Point – Details

Click Overview to display the device specifics, connection details, uptime, and user statistics.

Overview

<table>
<thead>
<tr>
<th>Overview</th>
<th>Details</th>
<th>Users</th>
<th>Guests</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>Displays the connection speed in Mbps.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplex</td>
<td>Displays the mode, Full Duplex or Half Duplex.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uplink</td>
<td>Displays the name, alias, or MAC address of the switch or other uplink device being used by the AP. You can click the name to get additional details on the device.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Down Pkts/Bytes</td>
<td>Displays the amount of data downloaded as packets and bytes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up Pkts/Bytes</td>
<td>Displays the amount of data uploaded as packets and bytes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Displays the level of activity in Bytes per second.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MAC Address  Displays the MAC address or unique hardware identifier of the AP.
Model  Displays the model name of the AP.
Version  Displays the version number of the AP's firmware.
IP Address  Displays the IP address of the AP.
Uptime  Displays the duration of time the AP has been running without interruption.
# Users  Displays the number of users connected to the primary network.
# Guests  Displays the number of users connected to the guest network.

Uplink (Wire)

If your AP has a wired uplink connection, click Uplink (Wire) to display details about the wired uplink.

Speed  Displays the connection speed in Mbps.
Duplex  Displays the mode, Full Duplex or Half Duplex.
Uplink  Displays the name, alias, or MAC address of the switch or other uplink device being used by the AP. You can click the name to get additional details on the device.
Down Pkts/Bytes  Displays the amount of data downloaded as packets and bytes.
Up Pkts/Bytes  Displays the amount of data uploaded as packets and bytes.
Activity  Displays the level of activity in Bytes per second.
Chapter 12: UniFi Access Point Details

Uplink (Wireless)
If your AP has a wireless uplink connection, click Uplink (Wireless) to display details about the wireless uplink.

Uplink AP Displays the name, alias, or MAC address of the uplink AP. You can click the name to get additional details on the uplink AP.

Signal Displays the percentage of signal strength between the two APs.

TX Rate Displays the transmit rate.

RX Rate Displays the receive rate.

Down Pkts/Bytes Displays the amount of data downloaded as packets and bytes.

Up Pkts/Bytes Displays the amount of data uploaded as packets and bytes.

Activity Displays the level of activity in Bytes per second.

Downlink
The wireless APs currently connected to the wired AP are displayed.

Note: Downlinks will only be visible under the Details tab when a wireless AP is connected.

AP Displays the name, alias, or MAC address of the downlink AP. You can click the name to get additional details on the device.

Signal Displays the percentage of signal strength between the two APs.

Actions Click a button to perform the desired action:

- Remove Remove the wireless AP from the wired AP.
Chapter 12: UniFi Access Point Details

Radio (11N/B/G) or Radio (11N/A/AC)

Click Radio (11N/B/G) or Radio (11N/A/AC) to display the channel and transmit/receive statistics.

Channel Displays the channel being used.

Transmit Power Displays the EIRP in dBm.

Note: If the device has an external antenna, you can place the mouse over the icon for additional details.

TX Pkts/Bytes Displays the amount of data transmitted as packets and bytes.

RX Pkts/Bytes Displays the amount of data received as packets and bytes.

TX Retry/Dropped Displays the percentage of transmit packets that needed to be re-sent and the percentage of packets that were dropped.

RX Retry/Dropped Displays the percentage of receive packets that needed to be re-sent and the percentage of packets that were dropped.

# Users Displays the number of users connected to the primary network.

# Guests Displays the number of guests connected to the guest network.

UniFi Access Point – Users

Name Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details; see “Client Details” on page 79 for more information.

WLAN Displays the name or SSID of the wireless network in use.

Signal Displays the percentage of signal strength between the user and AP.

TX Displays the transmit rate.

UniFi Access Point – Guests

Name Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details; see “Client Details” on page 79 for more information.

WLAN Displays the name or SSID of the wireless network in use.

Signal Displays the percentage of signal strength between the guest and AP.

TX Displays the transmit rate.
UniFi Access Point – Configuration
Change device configuration settings.

**Alias**
Enter or edit the customizable name or identifier of the AP. The Alias is also known as the host name.

**Apply**  
Click **Apply** to save the change.

**Channel**  
Select the appropriate settings:
- **Auto/(channel number)**  
  Select a channel number or keep the default, *Auto*.
- **HT20/HT40**  
  Select **HT20** for 20 MHz operation or **HT40** for 40 MHz operation.

**Note:** If the AP is part of a Zero Handoff WLAN Group, the **Channel** settings are chosen for you and cannot be changed.

**TX Power**  
By default the transmit power is set to *Auto*. You can also manually select the following:
- **High**  
  The highest TX power available.
- **Medium**  
  Halfway between *High* and *Low*.
- **Low**  
  The lowest TX power available.
- **Custom**  
  Custom setting that you specify in the field provided. The **Antenna Gain** field also appears:
  - **Antenna Gain**  
    Specify the antenna gain for your custom setting.

**Apply**  
Click **Apply** to save your changes.
WLANs
You can deploy multiple wireless networks organized into WLAN groups on different APs.

WLAN Group  Select the appropriate group from the drop-down menu.
Name  Displays the network name or SSID of the available wireless network.
Overrides  Displays the SSID override information applied to the wireless network.
Actions  Click a button to perform the desired action:
  • Override  Click Override to enable a VLAN (Virtual Local Area Network), set the VLAN ID, and enter the SSID override name to apply to the wireless network.

Note: The Override option is not available for a Zero Handoff WLAN Group.

Override
Enabled  Select the checkbox to enable override settings on the AP
VLAN  Select the checkbox to enable the VLAN.
  • Use VLAN ID  The VLAN ID is a unique value assigned to each VLAN on a single device. Enter a value between 2 and 4095. For example, in a large deployment where there are multiple buildings, you can use a different VLAN ID for each building while all of the VLANs remain on the same corporate network.
SSID  Enter the SSID override name to apply to the wireless network.
PSK  If the WPA-Personal security option has been applied to the WLAN under Settings > Wireless Networks, then the Pre-Shared Key (PSK) for the SSID specified will automatically appear in this field.
Actions  Click a button to perform the desired action:
  • Apply  Click Apply to save changes.
  • Restore  Click Restore to remove any overrides that were applied to the selected wireless network.
  • Cancel  Click Cancel to discard changes.
Network

Configure IP  Select the Internet connection type for your service.

- **Using DHCP**  Enabled by default. The AP automatically acquires network settings from the network’s Dynamic Host Configuration Protocol (DHCP) server.
- **Apply**  Click Apply to save the change.

- **Static IP**  Assign fixed network settings to the AP. Enter the following information:
  - **IP Address**  Enter the IP address for the AP.
  - **Subnet Mask**  Enter the subnet mask of the AP.
  - **Gateway**  Enter the IP address of the gateway (for example, the UniFi Security Gateway).
  - **Preferred DNS**  Enter the IP address of the primary DNS server.
  - **Alternate DNS**  Enter the IP address of the secondary DNS server.
  - **DNS Suffix**  Enter the Fully Qualified Domain Name (FQDN) without the hostname.
- **Apply**  Click Apply to save changes.

Wireless Uplinks

When an AP is not connected by a wire, the Wireless Uplinks section lists potential uplink APs that can be selected to establish a wireless connection.

AP  Displays the hostname, alias, or MAC address of the potential Uplink AP. You can click the name to get additional details.
Channel  Displays the channel in use for wireless communication.
Signal  Displays the percentage of signal strength.
Actions  Click a button to perform the desired action:
- **Select**  Click Select to connect the wireless AP to the wired AP.
- **Remove**  Click Remove to remove the wired AP from this list.

Note: An AP can only uplink to another AP using the same radio band. For example, the UAP-Outdoor 5G can only uplink to another UniFi AP using the 5 GHz radio band.
Access Point - Isolated/Disconnected
When an AP is in an Isolated or Disconnected state, you can re-establish a connection to the UniFi Controller software using one of three methods:
• Reconnect the AP to the gateway/router.
• Connect an Ethernet cable from the Secondary Ethernet Port (if available) of the isolated AP to the Secondary Ethernet Port (if available) of another UniFi AP that is connected to the gateway/router.
• Establish a wireless uplink to a wired AP. See “Wireless Uplinks” on page 73 to find, select, and connect to a wired AP.

In an Isolated or Disconnected state, the Map tab displays the AP icon with a red/orange LED and disconnected icon.
The LED on the actual device will be steady green or blue with occasional flashing. This AP doesn’t provide any wireless service.

Access Point - Managed by Other
The Managed by Other state indicates that the AP is not in the default state but it is not controlled by the UniFi Controller.

Overview

MAC Address  Displays the MAC address of the AP.
Model  Displays the model number.
Version  Displays the version of software used on the AP.
Last Seen  Displays the amount of time that has passed since the Access Point was last seen.
Advanced Options

IP  Displays the IP address and SSH port of the AP.
Username  Enter the SSH Username for management access. This is the Device Username you configured in “Settings > Site” on page 6.
Password  Enter the SSH Password for management access. This is the Device Password you configured in “Settings > Site” on page 6.
Inform URL  This tells the AP where to look for the UniFi Controller. The URL will be automatically displayed but you may need to verify its accuracy as the system may have multiple interfaces.
Adopt  Click Adopt to adopt the AP so you can manage it using the UniFi Controller software.
Access Point - Pending Approval

The *Pending Approval* state indicates that the Access Point is in the default state and is available for adoption.

**MAC Address** Displays the MAC address of the AP.

**Model** Displays the model number.

**Version** Displays the version of software used on the AP.

**Last Seen** Displays the amount of time that has passed since the AP was last seen.

**Adopt** Click **Adopt** to adopt the AP so you can manage it using the UniFi Controller software.

For **Forget This AP**

Click **Forget** to remove the AP from management by the UniFi Controller software and reset it to factory default settings.

Note: Use caution when clicking **Forget**. This will restore the AP to factory default settings when it is in a *Connected* state. Do not use the **Forget** option when the AP is in an *Isolated* or *Disconnected* state. If you do, the only way to make the AP accessible from the UniFi Controller is to take it down and connect by wire.

**Move to** To move the AP, select another site from the drop-down menu.
Chapter 13: UniFi VoIP Phone Details

A UniFi VoIP Phone hyperlink opens the UniFi VoIP Phone’s Details window either in the Properties tab or as a separate popup window. You can always dock this window in the Properties tab or detach it as a separate window.

The top of the window displays the device icon and name (or MAC address).

Properties

The Properties tab is hidden by default. To display it, click the properties icon. The Properties tab appears on the right side of the Devices screen.

Information about each selected device appears as a popup within this tab.

Close Click to close the Properties tab and client popups.

Minimize Click to display the clients as drop-down rows.

Each row displays the following:

- **(icon)** Displays the icon of the device (the icon will vary depending on the model).
- **Name/MAC Address** Displays the hostname, alias, or MAC address of the device.
- **Display** Click to display the device information.

Detach Click to display the same information in a separate popup screen that can be moved anywhere within the browser screen.

Close Click to close the device popup.

Hide Click to hide the Properties tab but allow the device popups to remain accessible from this tab.

The top part of the window displays the connection status:

- **Pending Approval** Default state, available for adoption.
- **Connected** Indicates a managed connection.
- **Disconnected** Indicates no connection.

There are two clickable tabs:

- **Details**
- **“UniFi VoIP Phone – Configuration” on page 78**

The bottom of the window has three buttons:

- **Locate** Click to ring the Phone and flash the Phone’s icon on the Map tab so you can locate it. (The Phone will ring three times and stop; the icon on the Map tab will flash three times and stop.)
- **Restart** Click to restart the Phone.
- **Upgrade** If a software upgrade is available for the Phone, click to install the latest UniFi firmware on the Phone. The Status will appear as Upgrading until the process is complete and the Phone reconnects to the UniFi Controller software.

UniFi VoIP Phone – Details

The Overview displays the device specifics and uptime.

Overview

- **MAC Address** Displays the MAC address or unique hardware identifier of the Phone.
- **Model** Displays the model name of the Phone.
- **Version** Displays the version number of the Phone’s firmware.
- **IP Address** Displays the IP address of the Phone.
- **Uptime** Displays the duration of time the Phone has been running without interruption.
Chapter 13: UniFi VoIP Phone Details

UniFi VoIP Phone – Configuration

Click Configuration to reset the Phone to its factory default settings. To make other changes, go to “Add Click this option to set up a new number. The Create New Number screen appears:” on page 17 for more information.

Forget This Switch

![Forget Phone Screen]

Forget  Click Forget to remove the Phone from management by the UniFi Controller software and reset it to factory default settings.

Note: Use caution when clicking Forget. This will restore the Phone to factory default settings when it is in a Connected state.
Chapter 14: Client Details

A client hyperlink opens the client’s Details window either in the Properties tab or as a separate popup window. You can always dock this window in the Properties tab or detach it as a separate window.

The top of the window displays the device icon and name (or MAC address).

Properties

The Properties tab is hidden by default. To display it, click the properties icon. The Properties tab appears on the right side of the Devices screen.

Information about each selected client appears as a popup within this tab. The information varies depending on whether the client is wired or wireless:

• Wireless Client – Details
• “Wired Client – Details” on page 81

Close Click to close the Properties tab and client popups.
Minimize Click to display the clients as drop-down rows.

Each row displays the following:

• (icon) Displays the icon of the device (the icon may vary depending on the device type).
• Name/MAC Address Displays the hostname, alias, or MAC address of the device.
• Display Click to display the device information.

- Detach Click to display the same information in a separate popup screen that can be moved anywhere within the browser screen.
- Close Click to close the device popup.
- Hide Click to hide the Properties tab but allow the device popups to remain accessible from this tab.

There are four clickable tabs:

• Details
• Statistics
• History
• Configuration

The bottom of the window has three buttons:

• Block Click to block this client from accessing the network.
• Reconnect Click to reconnect a user that has been previously blocked.
• Unauthorize (Available for Guests only.) Click to block guest access and disconnect the client.

Wireless Client – Details

MAC Address Displays the MAC address or unique hardware identifier of the client.
Hostname Displays the customizable name or identifier of the client.
IP Address Displays the IP address of the client.
Uptime Displays the duration of time the client has been connected.
Connected AP Displays the hostname, alias, or MAC address of the UniFi AP. You can click the name to get additional details; see “UniFi Access Point Details” on page 67 for more information.
Wireless Client – Statistics

**ESSID**  Displays the name of the wireless network.

**Connected AP**  Displays the name or MAC address of the AP being used by the client. You can click the name to get additional details on the AP.

**Channel**  Displays the channel being used.

**Signal**  Displays the percentage of signal strength between the AP and client.

**TX Rate**  Displays the transmit rate.

**RX Rate**  Displays the receive rate.

**Power Save**  Displays the status of the power save mode.

**Activity**  Displays the level of activity in Bytes per second.

**Down Pkts/Bytes**  Displays the amount of data downloaded as packets and bytes.

**Up Pkts/Bytes**  Displays the amount of data uploaded as packets and bytes.

Wireless Client – History

**Config**

**Date/Time**  Displays the date and time of the connection.

**Duration**  Displays the duration of the connection.

**Down**  Displays the total amount of data downloaded by the client.

**Up**  Displays the total amount of data uploaded by the client.

Wireless Client – Configuration

**Alias**  Allows you to change the hostname of the client.

**Note**  Allows you to enter comments about the client. Once saved, the client will be designated as a “Noted” client on the Clients tab.

**User Group**  Allows you to assign the client to a User Group. User Groups are set up under the Settings tab > User Groups option (see “Settings > User Groups” on page 15 for more information). The default User Group is Automatic.

**Apply**  Click Apply to save changes.

**IP Config**

**Fixed IP**  Select this option to assign a static IP address to the client, and configure the settings below. If you want the local DHCP server to assign an IP address to the client, remove the checkmark.

- **Network**  Select the appropriate network from the drop-down list.
- **IP**  Enter the local IP address.

**Apply**  Click Apply to save changes.
Chapter 14: Client Details

Debug

Device Type  Displays the type of device. If it is offline, “Unknown” is displayed.

Wired Client – Details

MAC Address  Displays the MAC address or unique hardware identifier of the client.
Hostname  Displays the customizable name or identifier of the client.
IP Address  Displays the local IP address of the client.
Uptime  Displays the duration of time the client has been connected.
Network  Displays the network used by the client.
Port  Displays the name and port of the UniFi device being used by the client. You can click the name to get additional details on the UniFi device.

Wired Client – Statistics

Network  Displays the network used by the client.
Port  Displays the name and port of the UniFi device being used by the client. You can click the name to get additional details on the UniFi device.
Activity  Displays the level of activity in Bytes per second.
Down Pkts/Bytes  Displays the amount of data downloaded as packets and bytes.
Up Pkts/Bytes  Displays the amount of data uploaded as packets and bytes.

Wired Client – History

Config

Date/Time  Displays the date and time of the connection.
Duration  Displays the duration of the connection.
Down  Displays the total amount of data downloaded by the client.
Up  Displays the total amount of data uploaded by the client.
### Wired Client – Configuration

#### Config

- **Alias** Allows you to change the hostname of the client.
- **Note** Allows you to enter comments about the client. Once saved, the client will be designated as a “Noted” client on the Clients tab.
- **User Group** Allows you to assign the client to a User Group. User Groups are set up under the Settings tab > User Groups option (see “Settings > User Groups” on page 15 for more information). The default User Group is Automatic.
- **Apply** Click Apply to save changes.

#### IP Config

- **Fixed IP** Select this option to assign a static IP address to the client, and configure the settings below. If you want the local DHCP server to assign an IP address to the client, remove the checkmark.
  - **Network** Select the appropriate network from the drop-down list.
  - **IP** Enter the local IP address.

Click **Apply** to save changes.

#### Debug

- **Device Type** Displays the type of device. If it is offline, “Unknown” is displayed.
Chapter 15: Hotspot Manager

Hotspot Manager includes four main tabs when accessed by the UniFi Controller admin account. For details on a specific tab, refer to the appropriate section.

- **“Wireless Guests” on page 84**
- **“Payments and Transactions” on page 84**
- **“Vouchers” on page 85**
- **“Operator Accounts” on page 86**

The UniFi Controller admin can create operator accounts for the Hotspot Manager. Operator accounts are designed for use by hotels or other businesses to service guests and have no access to other UniFi administrative features. Operator accounts will have access to three tabs after login: Guests, Payments, and Vouchers.

**Items per page** Select how many results are displayed per page: 10, 50, 100, or 200.

On any sub-tab, you can click any of the column headers to change the list order.

If there is more than one page of entries to display, a vertical scroll bar will appear on the right; use it to display additional entries.

If there is more than one page of entries to display, click the navigation controls or page numbers at the bottom right of the screen to display different pages.

To access the Hotspot Manager, go to **Settings > Guest Control**, and click **Go to Hotspot Manager**. See “**Hotspot** on page 13” for more information.

The UniFi Hotspot Manager login screen will appear. Enter the username and password in the appropriate fields and click **LOG IN**.
Chapter 15: Hotspot Manager

Wireless Guests
The Hotspot’s active wireless guests are displayed.

- **Search** Enter keywords in the Search field to find a specific guest based on Name/MAC Address, Package, Amount, Authorized By, or Status value.
- **Show** Filter by time duration: last 24 hours, 3 days, 7 days, 2 weeks, 30 days, and 120 days.
- **Name [MAC Address]** Displays the connected guest’s device name or MAC address.
- **Package** Displays the description of the package that was purchased (if applicable).
- **Amount** Displays the amount paid for access (if applicable).
- **Authorized By** Displays the authorization method. If there is no authorization, then None is displayed.
- **Download** Displays the total amount of data downloaded.
- **Upload** Displays the total amount of data uploaded.
- **Status** Displays the remaining session time for the guest.
- **Actions** Click a button to perform the desired action:
  - **Disconnect** Immediately disconnect the selected guest.
  - **Extend** Every time you click this button, you extend a guest’s session for an additional 24 hours. For example, if you click it three times, you will extend guest access for three more days.

Payments and Transactions
The Hotspot’s payments and transactions are displayed.

- **Search** Enter keywords in the Search field to find a specific voucher based on Time, Name, Package, Amount, Extra Info, or Status value.
- **Show** Filter by time duration: last 24 hours, 3 days, 7 days, 2 weeks, 30 days, and 120 days.
- **Time** Displays the date and time of the transaction.
- **Last Name** Displays the user’s last name.
- **First Name** Displays the user’s first name.
- **Package** Displays the description of the package.
- **Amount** Displays the amount of the transaction.
- **Extra Info** If the user paid by PayPal, the Extra Info field displays the email address associated with the PayPal account. If the user paid by credit card, the Extra Info field will display the type of credit card and the last four digits of the credit card used.
- **Status** Displays the status of the transaction.
- **Actions** Click a button to perform the desired action:
  - **Refund** Click the Refund button to refund the selected customer if necessary.
Vouchers
Create vouchers that include distributable codes, duration values, and use restrictions.

Search  Enter keywords in the Search box to find a specific voucher based on Code, Create Time, Note, Duration, or Status value.

Print all Unused Vouchers Click to send a page to your printer with the codes and durations of unused vouchers.

Code Displays each active voucher code.

Create Time Displays the date and time a voucher was created.

Note Displays any notes that were added using the Notes option during voucher creation.

Duration Displays the duration of minutes, hours, or days that the voucher enables the user to access the Internet.

Status Indicates whether the voucher is valid for a single use or multiple uses.

Actions Click a button to perform the desired action:

• Revoke Click to immediately deactivate the selected voucher.

• Print Batch Click to print the batch of vouchers created at the same time.

Create Vouchers To create a batch of vouchers, click and complete the following:

• Create __ Enter the number of vouchers to create.

• One time/Multi-use Select how often the voucher can be used: One time or for Multi-use.

• Vouchers for __ Select how long the voucher is valid: 8 hours, 24 hours, 2 days, 3 days, 4 days, 7 days, or User-defined. If you select User-defined, enter a number and specify day, minute, or hour.

• Notes Enter any notes specific to this batch of vouchers.

• Create Vouchers Click to create the vouchers as specified.

• Cancel Click to discard changes.
Operator Accounts

Create Operator Accounts that can log in to Hotspot Manager to manage wireless guests, payments or transactions, and vouchers.

Search  
Enter keywords in the Search field to find a specific operator account based on Name, Password, or Notes value.

Name  
Displays the name of the operator.

Password  
Displays the password.

Notes  
Displays any descriptive notes.

Actions  
Click a button to perform the desired action:

- **Delete**  
  Click DELETE to remove an operator account.

Create New Operator  
To create an operator account, complete the following:

- **Account Name**  
  Enter a name for the operator. The Account Name can only be A-Z, a-z, or 0-9. No spaces are allowed.

- **Password**  
  Enter a password for the operator. The Password has to start with A-Z, a-z, or 0-9. The other characters can only be printable ASCII characters.

- **Notes**  
  (Optional) Enter a note to identify or describe the operator.

- **Create New Operator**  
  Click CREATE NEW OPERATOR to create the operator account.

- **Cancel**  
  Click CANCEL to discard changes.

To test the operator account, log out of the UniFi Controller software and log in using the operator credentials. Only the Guests, Payments, and Vouchers tabs will appear.
Appendix A: Portal Customization

Overview
With Portal Customization, the UniFi Controller software allows complete branding of a portal implementation, allowing you to “white label” your wireless Internet service as if you had developed it yourself.

In order to provide the maximum flexibility in your branding effort, the UniFi Controller software provides total access to the portal directory on the system in which it is installed.

This open architecture allows you to include unlimited content while keeping development simple through the use of plain .html (hand code or use any editor of your choice). Testing is simple and immediate; simply reload changes from any browser.

Enabling Portal Customization
By default, Portal Customization is disabled in all Guest Portal implementations. See “Settings > Guest Control” on page 11 for more information on enabling the Guest Portal for the following authentication and landing page options: No authentication, Simple Password, and Hotspot.

To enable Portal Customization, perform the following steps:
1. Go to Settings and click Guest Control.
2. Select Guest Portal to enable it, and then select an authentication method.
3. Select Portal Customization to enable it, and then click APPLY.

Viewing the Default Portal
Once Guest Portal and Portal Customization are enabled, connect to the Guest Network SSID as shown below, depending on your platform.

Windows
1. Go to Connect to Network.
   - Windows 8 Go to the Settings menu and click the Network icon.
   - Windows 7 Right-click the Network icon.
2. Select the Guest Network SSID and click Connect.
3. Depending on the security type applied to the network, enter the security key or password. Click OK or Connect.
4. Once connected, the AirPort icon will change from gray to solid black. The number of black lines indicates the signal strength.
5. Launch your web browser and you will be directed to the default portal page for the authentication type configured on the Guest Portal (see “Settings > Guest Control” on page 11 for screenshots of default portal pages by authentication method).

Mac
1. Click the AirPort icon in the menu bar (top right side of the screen).
2. Select the Guest Network SSID and click Connect.
3. Depending on the security type applied to the network, enter the security key or password. Click OK.
4. Once connected, the AirPort icon will change from gray to solid black. The number of black lines indicates the signal strength.
5. Launch your web browser and you will be directed to the default portal page for the authentication type configured on the Guest Portal (see “Settings > Guest Control” on page 11 for screenshots of default portal pages by authentication method).
Appendix A: Portal Customization

Setup
The html and css files are located on the system that the UniFi Controller software has been installed on. The files are in the following locations:

Mac
/Applications/UniFi.app/Contents/Resources/data/sites/<site_name>/portal

Windows
<Drive_Letter>:\Users\<Username>\Ubiquiti UniFi\data\sites\<site_name>\portal

For specific instructions on accessing the files, refer to the specific operating system:

• Mac
• “Windows” on page 89

Mac
1. Navigate to Go > Applications.

2. Control-click the UniFi application and then click Show Package Contents.

3. Double-click the Contents folder to open it.

4. Double-click the Resources folder to open it.

5. Double-click the data folder to open it.

6. Double-click the sites folder to open it.

7. Double-click the folder whose name matches the name of the site you are configuring.
8. Double-click the portal folder to open it.

9. You have several files that you can customize in the portal folder (these are described in the Customizable Default Files section).

10. To customize the voucher, double-click the bundle folder to open it.

11. You can customize voucher.css and voucher.html to fit your needs.

Windows

The Windows files are located in the following location:

```
<Drive_Letter>\Users\<Username>\Ubiquiti UniFi\data\sites\<site_name>\portal
```

Customizable Default Files

The following default customizable html and css files are located in the portal folder:

- **index.html** Main landing page that displays pricing to the guest.
- **payment.html** Used to submit credit card information. It requires https and also serves as an example of an additional .html page.
- **fail.html** Displayed when there is an error handling a guest login.
- **reset-min.css** Standardizes the rendering of HTML elements across browsers.
- **styles.css** Controls the style of HTML elements.

The following default files are located in the bundle folder:

- **voucher.html** Main landing page.
- **voucher.css** Standardizes the rendering of HTML elements across browsers.
- **messages.properties** You can edit this file using a text editor such as TextEdit. This file defines package costs, duration of access, package titles, and how the charge will appear on a customer’s credit card account. Error messages are also defined by this file.

Additional details on portal customization can be found in our community site at:

[http://kb.ubnt.com/unifi/portal-customization](http://kb.ubnt.com/unifi/portal-customization)
Appendix B: UniFi Discovery Utility

Overview
The Ubiquiti UniFi Discovery Utility includes tools that allow the discovery and management of UniFi APs. It is installed automatically as part of the UniFi Controller software installation process. See “Software Installation” on page 1 for more information.

Launching the UniFi Discovery Utility

Mac Users
From the Finder, click Go > Applications and double-click the UniFi-Discover.app icon.

PC Users
For most versions of Windows, go to Start > All Programs > Ubiquiti UniFi and double-click the UniFi-Discover icon.

For Windows 8, go to the Start menu and double-click the UniFi-Discover icon.

UniFi Discovery Utility Interface
Upon launch, the UniFi Discovery Utility listens to Layer-2 broadcast/multicast beacons from UniFi APs in both a factory default state and an unmanaged state (adopted but unable to contact the UniFi Controller software).

MAC Address Displays the MAC address and alias of the AP. The alias is displayed in parentheses if it has been specified; see “UniFi Access Point – Configuration” on page 71 for details.

IP Address Displays the IP address of the AP and the method used by the AP to obtain an IP address. The method is displayed as DHCP or Static in parentheses.

Model Displays the model number of the AP.

Version Displays the firmware version installed on the AP.

Status Displays the current status of the AP: Pending, Managed/Adopted, Login Failed, or IP Unreachable.

There are three buttons available:

• “Locate” on page 92
• “Manage” on page 92
• “Reset” on page 93

Note: To reboot the AP, click one of the buttons listed above and proceed to “Reboot” on page 93.
Appendix B: UniFi Discovery Utility

**Locate**

Locate the AP. The following window will appear:

- **Actions**: If you clicked the *Locate* button, then *Locate* is automatically selected.
- **Username**: If required, enter the device username.
- **Password**: If required, enter the device password.
- **Apply**: Click **Apply** to locate the AP. The LED on the AP will flash so that it can be differentiated from the other APs.

**Manage**

Set the inform URL, allowing the AP to be managed by the UniFi Controller software running in a NOC or in the cloud. (See "Network Topology Requirements" on page 1 for a visual representation of this configuration.) The following window will appear:

- **Actions**: If you clicked the *Manage* button, then *Manage* is automatically selected.
- **Set Inform URL**: Enter the URL, port, and path to the UniFi Controller software.
- **Username**: If required, enter the device username.
- **Password**: If required, enter the device password.
- **Apply**: Click **Apply** to save the inform URL.
Reset
Reset the AP to factory default settings. The following window will appear:

**Actions** If you clicked the *Reset* button, then *Restore to factory default* is automatically selected.

**Username** If required, enter the device username.

**Password** If required, enter the device password.

**Apply** Click *Apply* to reset the AP to factory default settings.

Reboot
To reboot the AP, click any of the buttons (*Locate, Manage, or Reset*) on the *UniFi Discovery Utility* screen. The following window will appear:

**Actions** Select *Reboot* from the drop-down menu.

**Username** If required, enter the device username.

**Password** If required, enter the device password.

**Apply** Click *Apply* to reboot the AP.
Appendix C: Contact Information

Ubiquiti Networks Support
Ubiquiti Support Engineers are located around the world and are dedicated to helping customers resolve software, hardware compatibility, or field issues as quickly as possible. We strive to respond to support inquiries within a 24-hour period.

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