



UniFi®

## Enterprise WiFi System

Controller  
Release Version: 3.2

USER GUIDE

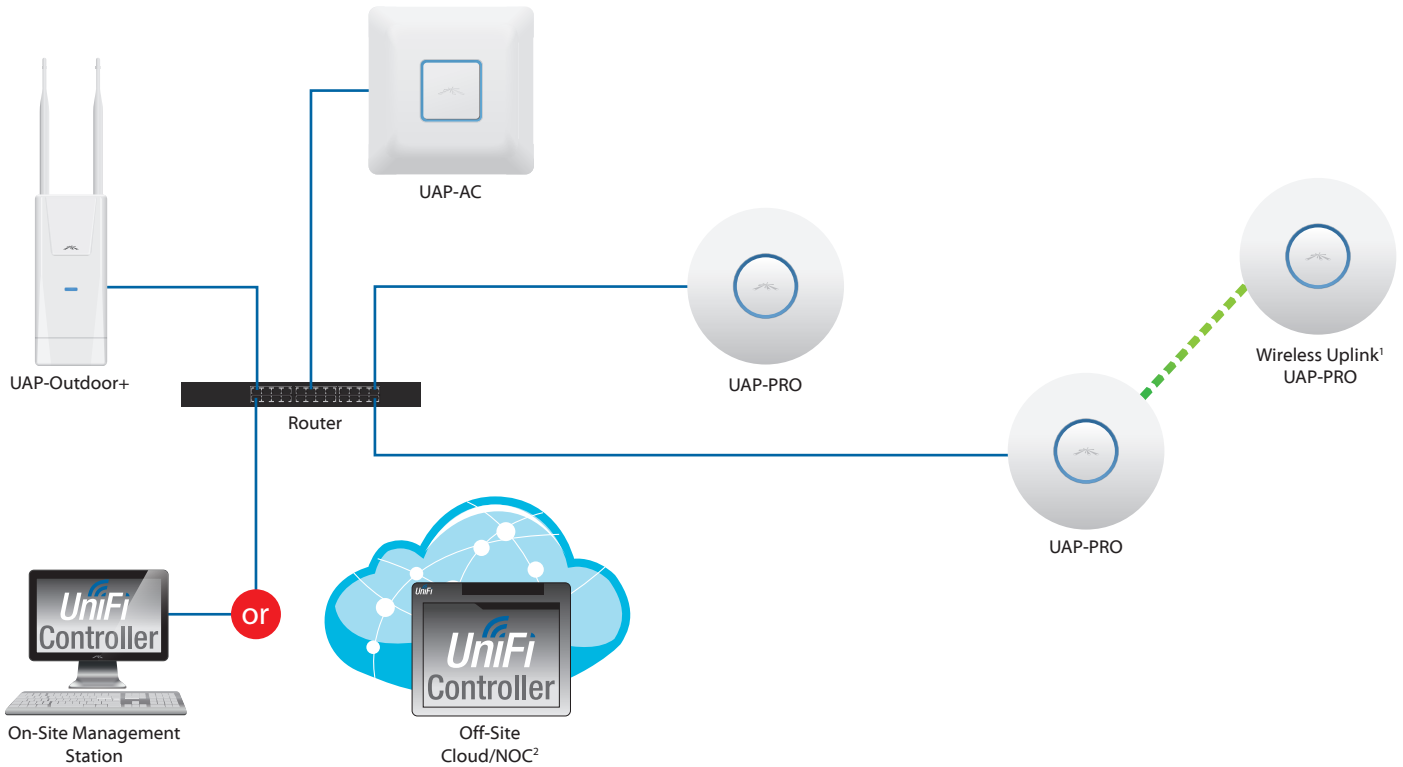
# Table of Contents

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<b>Chapter 1: System Setup</b> .....	1
System Requirements .....	1
Network Topology Requirements .....	1
Hardware Overview and Installation .....	1
Software Installation.....	2
<b>Chapter 2: Using the UniFi Controller Software</b> .....	5
Interface Tabs .....	5
Common Interface Options.....	5
<b>Chapter 3: Map Tab</b> .....	15
Adding Custom Maps.....	15
Adding a Google Map .....	16
Placing Access Points on the Map.....	17
Setting the Map Scale .....	19
<b>Chapter 4: Statistics Tab</b> .....	20
Clients .....	20
Quick Look.....	21
Current Usage - Top Access Points .....	21
Recent Activities.....	21
<b>Chapter 5: Access Points Tab</b> .....	22
Overview.....	22
Config .....	23
Performance .....	24
<b>Chapter 6: Users Tab</b> .....	25
<b>Chapter 7: Guests Tab</b> .....	27
<b>Chapter 8: Insight Tab</b> .....	29
Known Wireless Clients .....	29
Rogue Access Points.....	30
Past Connections.....	30
Past Guest Authorizations .....	31
<b>Chapter 9: Access Point Details</b> .....	32
Details .....	32
Users.....	35
Guests .....	35
Configuration .....	36

<b>Chapter 10: User/Guest Details</b> .....	43
Details .....	43
Statistics .....	43
History .....	44
Configuration .....	44
<b>Chapter 11: Hotspot Manager</b> .....	45
<b>Appendix A: Portal Customization</b> .....	48
Overview .....	48
Enabling Portal Customization .....	48
Viewing the Default Portal .....	48
Setup .....	48
<b>Appendix B: UniFi Discovery Utility</b> .....	51
Overview .....	51
Launching the UniFi Discovery Utility .....	51
UniFi Discovery Utility Interface .....	51
<b>Appendix C: Contact Information</b> .....	54
Ubiquiti Networks Support .....	54

UniFi Example Diagram



<sup>1</sup> Please refer to **“Wireless Uplinks” on page 39** for setting up wireless-linked APs.

<sup>2</sup> All UniFi APs support off-site management controllers.

# Chapter 1: System Setup

The UniFi® Controller is a wireless network management software solution from Ubiquiti Networks™. It allows you to manage multiple wireless networks using a web browser.

This User Guide is for use with version 3.2 or above of the UniFi Controller software and all of the UniFi Enterprise WiFi System Access Point models, which this User Guide will collectively refer to as UniFi AP. Additional information about the AP models is available on our website at <http://documentation.ubnt.com/UniFi>

Model	2.4 GHz	5 GHz
UAP/UAP-LR	✓	
UAP-Outdoor/UAP-Outdoor+	✓	
UAP-Outdoor-5G		✓
UAP-AC Outdoor	✓	✓
UAP-PRO	✓	✓
UAP-AC	✓	✓

Additional information about the UniFi Controller is available on our website at

<http://community.ubnt.com/unifi>

## 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 8 (or above)

## Network Topology Requirements

- A DHCP-enabled network (for the wired Access Point to obtain an IP address as well as for the wireless Access Points after the deployment)
- A management station computer running the UniFi Controller software, located either onsite and connected to the same Layer-2 network, or off-site in a cloud or NOC

The *Sample Network Diagram* above illustrates an example of a single UniFi network. The router is connected via Ethernet to a variety of UniFi AP models. There is a wireless uplink from a wireless UAP-PRO to a wired UAP-PRO.

## Hardware Overview and Installation

The Quick Start Guide that accompanied your UniFi AP includes a hardware description and instructions for hardware installation.

## Software Installation

The UniFi Controller software is installed just once when you initially create a UniFi network. UniFi APs can be added at any time through the controller interface but you do not need to go through the software installation process every time you add another UniFi AP.

Download the UniFi Controller software from the Ubiquiti Networks website.

1. Go to **downloads.ubnt.com/UniFi**.
2. Mac users should download **UniFi.pkg**, and Windows users should download **UniFi-installer.exe**.
3. Follow the instructions for your computer type.

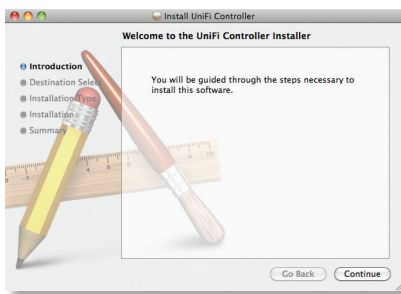
### Mac Users

1. Launch **UniFi.pkg**.

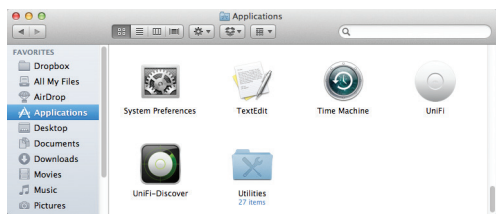


**Note:** If *UniFi.pkg* is identified as coming from an unidentified developer, then do the following:

1. Right-click *UniFi.pkg* and select **Open**.
2. Click **Open**.
3. Click **Continue** and follow the on-screen instructions to install the software.



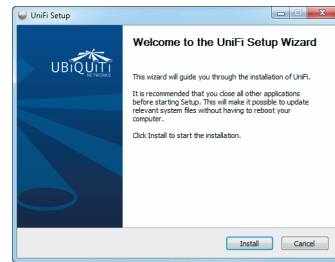
4. Go to **Go > Applications** and double-click the *UniFi* icon.



Proceed to **"Configuring the UniFi Controller Software"** on page 3.

### PC Users

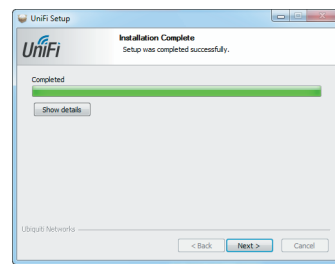
1. Launch **UniFi-installer.exe**.
2. Click **Install**.



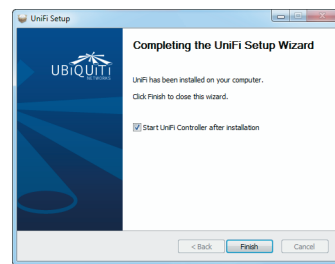
3. If your computer doesn't have Java 1.6 or above installed, you will be prompted to install it. Click **Install** to continue.



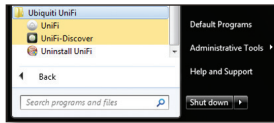
4. Click **Next**.



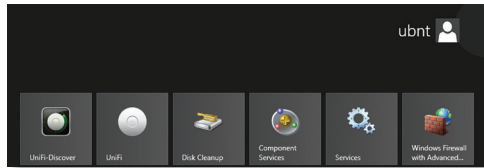
5. Ensure that the *Start UniFi Controller after installation* option is checked and click **Finish**.



For most versions of Windows, the UniFi Controller software can also be launched from **Start > All Programs**.



For Windows 8, the UniFi Controller software can also be launched from the *Start* menu.

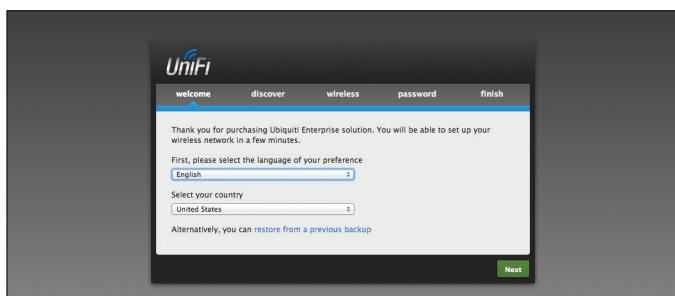



## Configuring the UniFi Controller Software

1. The UniFi Controller software startup will begin. Click **Launch a Browser to Manage Wireless Network**.

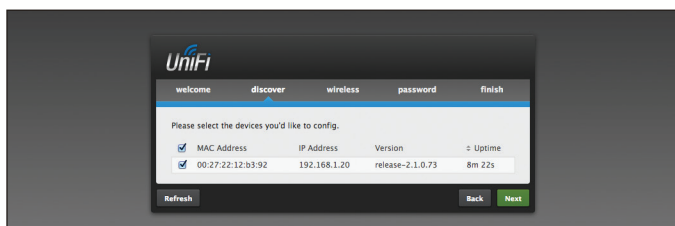


2. Select your language and country. Alternatively, you can click *restore from a previous backup* to use a file that contains your backup settings. Click **Next**.

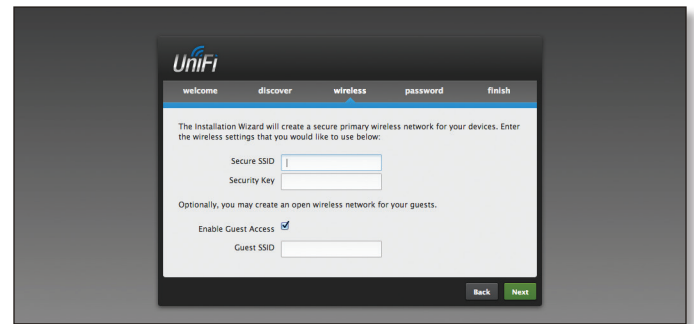


 **Note:** U.S. product versions are locked to the U.S. Country Code to ensure compliance with FCC regulations.

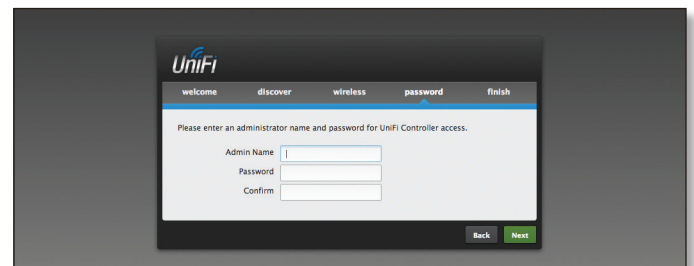
3. Select the devices that you want to configure and click **Next**.



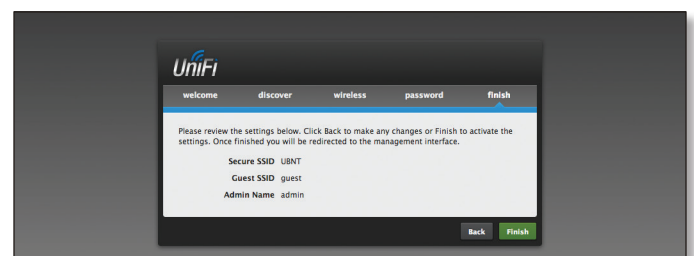
4. The UniFi Installation Wizard will create a secure primary wireless network for your devices. Perform the following steps:



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

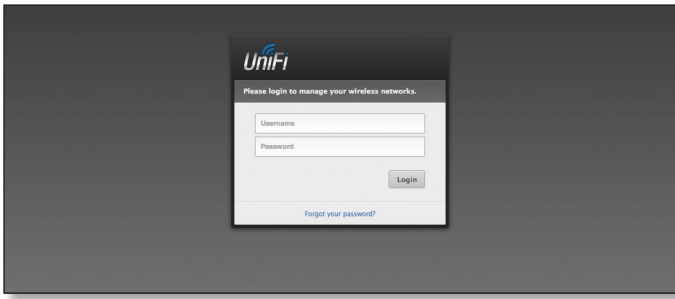


6. Review your settings. Click **Finish** to save your settings or click **Back** to make changes. Once the wizard is finished, the browser will be redirected to the management interface.



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**.



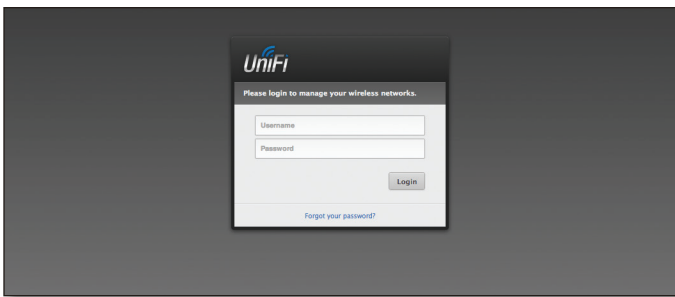
Proceed to the next chapter for information on using the UniFi Controller software.

## 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 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 admin name and password in the appropriate fields and click **Login**.



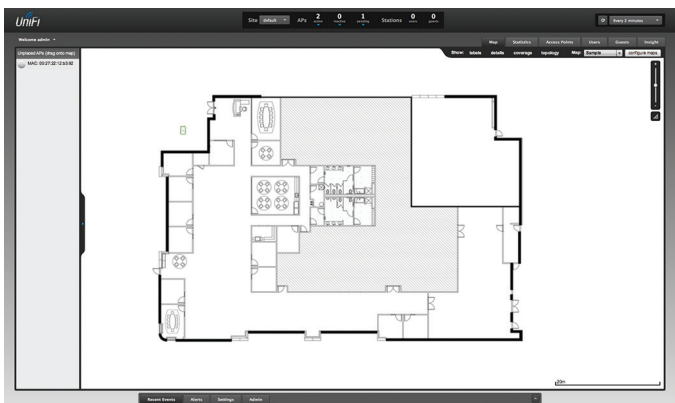
### Interface Tabs

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

- **"Map Tab" on page 15**
- **"Statistics Tab" on page 20**
- **"Access Points Tab" on page 22**
- **"Users Tab" on page 25**
- **"Guests Tab" on page 27**
- **"Insight Tab" on page 29**

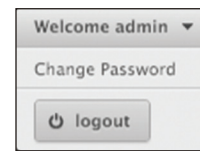
### Common Interface Options

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

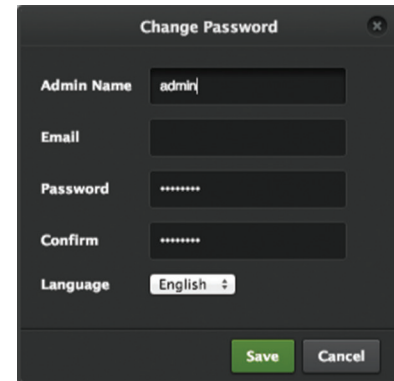


### Welcome

At the top left of the screen, click **Welcome** to display the *Change Password* and *Logout* options:



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



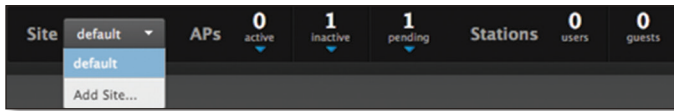
- **Admin Name** Enter the admin name.
- **Email** Enter the email address of the admin account.
- **Password** Enter the new password.
- **Confirm** Enter the new password again.
- **Language** Select the language of the UniFi Controller.
- **Save** Click **Save** to save changes.
- **Cancel** Click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

**Logout** To manually log out of the UniFi Configuration Interface, click this option.



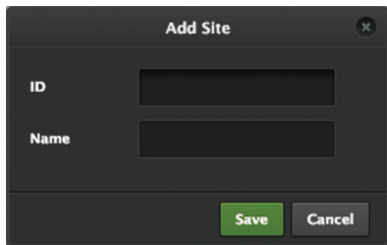
## Site

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*.



**Site** To create a new site, click the ▼ arrow to display the drop-down menu.

Click **Add Site**, and the *Add Site* screen will appear:



- **ID** Enter a unique name to permanently identify the site. It will be used in the URL, and if you customize the portal, it will be used to identify the site folder.
- **Name** Enter a name that describes the site. It will be used in the *Site* drop-down menu.
- **Save** Click **Save** to save changes.
- **Cancel** Click *Cancel* to discard changes.

## APs

- **active** Click the ▼ arrow to display a list of Access Points that are online.
- **inactive** Click the ▼ arrow to display a list of Access Points that were previously online but are no longer accessible.
- **pending** Click the ▼ arrow to display a list of Access Points that are not yet managed but are available.

## Stations

- **users** Displays the total number of users.
- **guests** Displays the total number of guests.

## Refresh

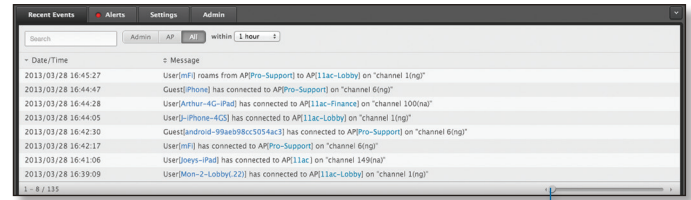
Click the **Refresh** icon to update the on-screen information. Select the refresh interval: **Manually**, **Every 5 seconds**, **Every 15 seconds**, **Every 30 seconds**, **Every minute**, **Every 2 minutes** (default), or **Every 5 minutes**.

At the bottom of the screen, there are four tabs:

- *Recent Events* (see the next column)
- *Alerts* (see the next column)
- **“Settings” on page 7**
- **“Admin” on page 14**

## Recent Events

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



**Event Slider** Move the slider right and left to navigate between pages of events.

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

You can apply one of the following filters:

- **Admin** Only display recent events for the administrator.
- **AP** Only display recent events for the AP.
- **All** Display all of the recent events.

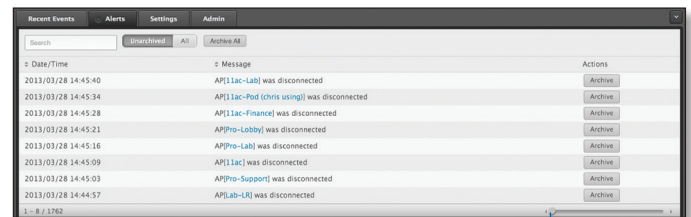
**within** Filter recent events based on the time period you specify. Select **1 hour**, **8 hours**, **24 hours**, **2 days**, **7 days**, **2 weeks**, or **1 month**.

## Clicking an Event Device Link

The messages have clickable links [blue text in gray brackets] for *AP* (see **“Access Point Details” on page 32**), *User*, and *Guest* (see **“User/Guest Details” on page 43**). Details vary based on the selection.

## Alerts

When there is an alert, a red circle ● will flash on the *Alerts* tab. The *Alerts* tab displays a list of important events, along with the corresponding date, time, and message.



**Alert Slider** Move the slider right and left to navigate between pages of alerts.

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

You can apply one of the following filters:

- **Unarchived** Only display alert messages that have not been archived.
- **All** Display all of the alert messages.

**Archive All** Archive all of the alert messages.

**Adopt** Adopt an Access Point that is waiting for adoption.

**Archive** Archive the selected alert message.

## Clicking an Alert Device Link

The messages have clickable links [blue text in gray brackets] for AP (see “[Access Point Details](#)” on page 32), User, and Guest (see “[User/Guest Details](#)” on page 43). Details vary based on the selection.

## Settings

The *Settings* tab displays a list of available sub-tabs:



**Site** Site-related settings.



**Wireless Networks** Wireless networks and group setup, including Zero Handoff Roaming.



**Guest Control** Guest portal and policies.



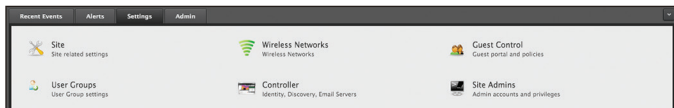
**User Groups** User group settings.



**Controller** Identity, discovery, and email server settings.

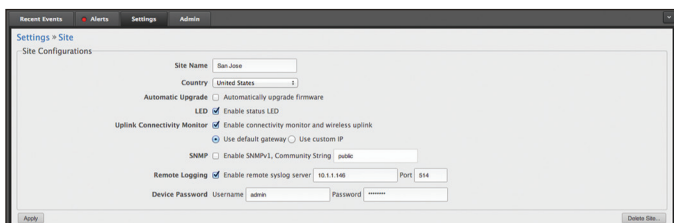
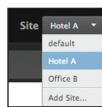


**Site Admins** Admin accounts and privileges.



## Settings > Site

Configure the site-specific settings. To switch sites, select a different site from the *Site* drop-down menu at the top of any screen.



## Site Configurations

**Site Name** Change the name of the site.

**Country** Select your country from the drop-down menu.

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

**LED** When enabled, the LED on the Access Point will light up. When disabled, the LED will turn off.

**Uplink Connectivity Monitor** It monitors the uplinks of the managed Access Points, 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.

- **Use default gateway** Enabled by default. All managed Access Points will use the gateway of the Access Point that is providing IP information, either by DHCP or Static designation.

- **Use custom IP** Select **Use custom IP** to specify an IP address; all managed Access Points will use the IP address you enter in the *Uplink IP address* field.

**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. Enter the IP address and port of the syslog server.

**Device Password** The *Device Password* protects SSH access to the UniFi APs. It is randomly generated when you create a site. All devices in the same site share the same SSH username and password. You can also make changes:

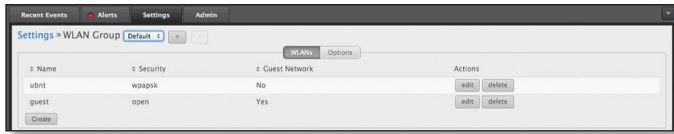
- **Username** Enter the new username.

- **Password** Enter the new password.

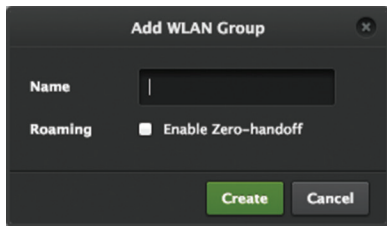
**Apply** Click **Apply** to save changes.

## 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. To create a new WLAN group, click the **+** button. The *Add WLAN Group* screen will appear.



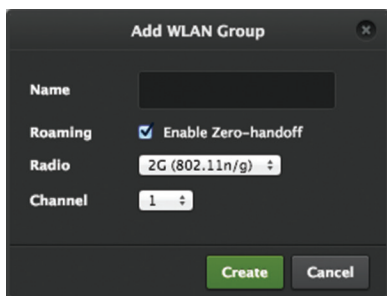
- **Name** Enter a descriptive name for the WLAN group.
- **Roaming** To enable Zero Handoff Roaming, select the checkbox.



**Note:** The UniFi AP-AC does not support Zero Handoff Roaming for the initial release, but it will with a future firmware upgrade.

When you enable this option, multiple 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.



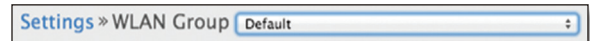
Configure the following options:

- **Radio** Select the appropriate radio, **2G** or **5G**.
- **Channel** Select the channel that all of the APs will use for Zero Handoff Roaming.
- **Create** Click **Create** to save changes.
- **Cancel** Click *Cancel* to discard changes.

For each WLAN group, you have two tabs:

- *WLANs* (see below)
- **“Options” on page 9**

Select the appropriate WLAN group from the *WLAN Group* drop-down menu.



### WLANs

**Name** Displays the wireless network name or SSID.

**Security** Displays the type of security being used on your wireless network.

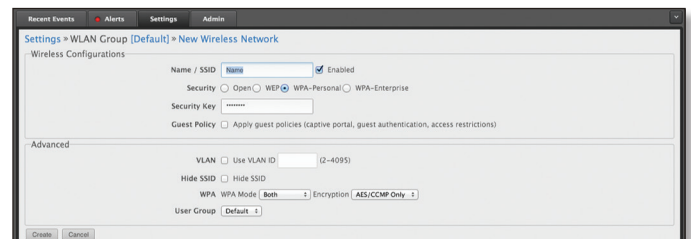
**Guest Network** Indicates whether or not the network is a guest network.

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

- **Edit** Make changes to the wireless network settings. Go to the *Create or Edit a Wireless Network* section below.
- **Delete** Delete the wireless network.

**Create** Add a wireless network. Go to the *Create or Edit a Wireless Network* section below.

### Create or Edit a Wireless Network



- **Name/SSID** Enter or edit the wireless network name or SSID.
- **Enabled** Select the checkbox to enable the wireless network.
- **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:

Type	Hex
64-bit	10 Hexadecimal Characters (0-9, A-F, or a-f) Example: <b>00112233AA</b> 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: <b>00112233445566778899AABBCC</b> 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.

- **IP Address** Specify the IP address of the RADIUS server.
- **Port** Enter the port number. The default is 1812.
- **Password** Enter the password used to authenticate on the RADIUS server.
- **Guest Policy** Select this option to enable guest access policies on this wireless network.

## Advanced

- **VLAN** To use a VLAN, select **Use VLAN ID** and enter the port number.
- **Hide SSID** Select this option if you don't want the wireless network name or SSID to be broadcast.
- **WPA** Select the appropriate WPA and encryption methods:
  - **WPA Mode** Select **Both**, **WPA1 Only**, or **WPA2 Only**.
  - **Encryption** Select **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 13**.

Click **Create** to create a new wireless network, or click **Apply** to save changes. Click **Cancel** to discard changes.

## Options

Options vary depending on whether or not your WLAN group uses Zero Handoff Roaming.



**Note:** The UniFi AP-AC does not support Zero Handoff Roaming for the initial release, but it will with a future firmware upgrade.

## No Zero Handoff

**Name** You can change the name of your WLAN group.

**Load Balancing** Select this option to balance the number of clients you specify per radio.



**Note:** The UniFi AP-AC does not support *Load Balancing* for the initial release, but it will with a future firmware upgrade.

**Legacy Support** By default, legacy devices, such as 802.11b devices, are excluded. Select this option if you want to support legacy devices.

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

## Zero Handoff

**Name** You can change the name of your WLAN group.

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

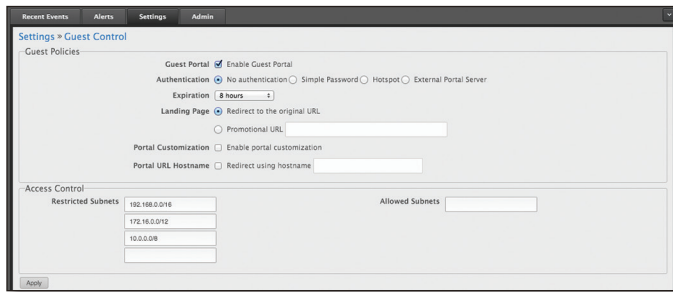
**Channel** Select the channel that all of the APs will use for Zero Handoff Roaming.

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

## Settings > Guest Control

The *Guest Control* screen displays the following sections:

- *Guest Policies* (see below)
- **“Hotspot” on page 11** (for *Hotspot* authentication)
- **“Access Control” on page 12**



### Guest Policies

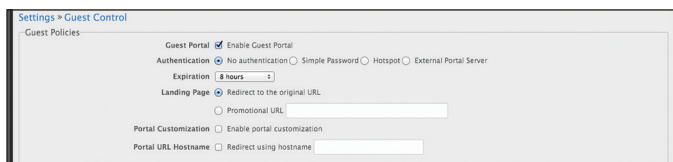
**Guest Portal** Disabled by default. When disabled, guests can access the Internet without entering a password or accepting the Terms of Use. When this option is enabled, you can control the *Guest Portal*.

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

- No Authentication (see below)
- Simple Password (see the next column)
- **“Authentication > Hotspot” on page 11**
- **“Authentication > External Portal Server” on page 12**

### 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 **Guest Policy** under *Settings > Wireless Networks > wireless\_network\_name > Edit > Wireless Configurations* in order to enforce selection of the Terms of Use by the guest. See **“Guest Policy” on page 9** 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*.

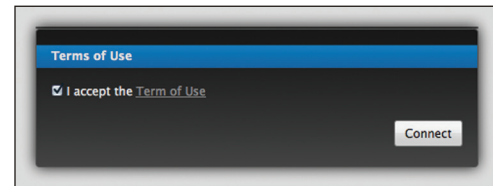
**Landing Page** After accepting the Terms of Use, guests are redirected to the landing page. Select one of the following options:

- **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 48** for details on setting up custom portal pages.

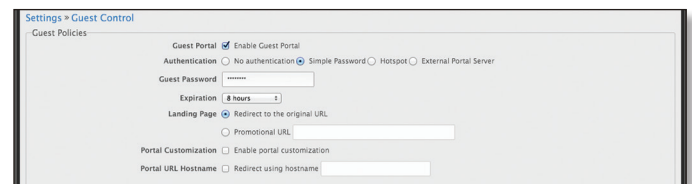
**Portal URL Hostname** Enter a hostname for the portal URL in place of the default IP address. Paired with an SSL certificate, this ensures that site certificates are displayed as trusted in the guest browser. Example: [www.ubnt.com](http://www.ubnt.com)

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



### Authentication > Simple Password

Select this option if guests are required to enter a simple password and accept the Terms of Use. When you select *Simple Password*, you must select **Guest Policy** under *Settings > Wireless Networks > wireless\_network\_name > Edit > Wireless Configurations* in order to enforce password entry and selection of the Terms of Use by the guest. See **“Guest Policy” on page 9** for more information.



**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*.

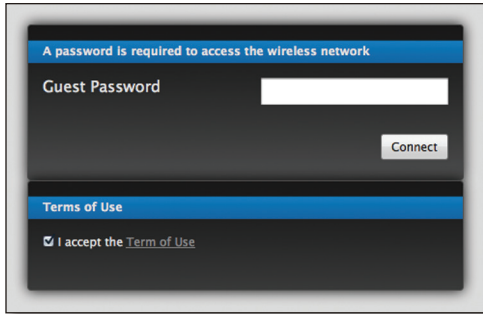
**Landing Page** After accepting the Terms of Use, guests are redirected to the landing page. Select one of the following options:

- **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 48** for details on setting up custom portal pages.

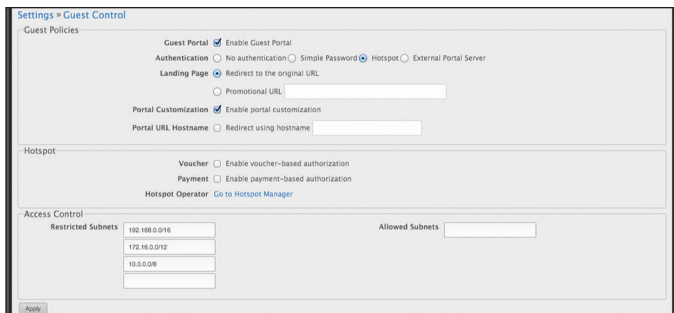
**Portal URL Hostname** Enter a hostname for the portal URL in place of the default IP address. Paired with an SSL certificate, this ensures that site certificates are displayed as trusted in the guest browser. Example: www.ubnt.com

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 **Guest Policy** under *Settings > Wireless Networks > wireless\_network\_name > Edit > Wireless Configurations* in order to enforce voucher entry, payment, and selection of the Terms of Use by the guest. See **“Guest Policy” on page 9** for more information.



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

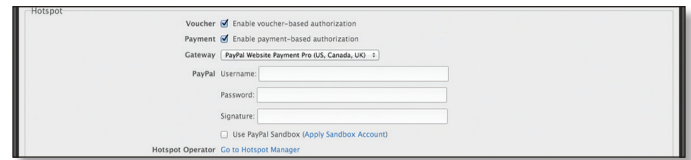
- **Redirect to the original URL** After accepting the Terms of Use, guests are directed to the URL they requested.
- **Promotional URL** After accepting the Terms of Use, guests are redirected to the URL that you specify. Ensure that the URL begins with **http://** (example: http://www.ubnt.com).

**Portal Customization** Select this option to have customized portal pages appear in place of the default login pages. See **“Portal Customization” on page 48** for details on setting up custom portal pages.

**Portal URL Hostname** Enter 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 45**.
- **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™ (US, Canada, UK)** Use your **PayPal Website Payments Pro** account. To manage payments and transactions, use Hotspot Manager and see **“Hotspot Manager” on page 45**.



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**.
- **Stripe (US, Canada)** Use your **Stripe** account. To manage payments and transactions, use Hotspot Manager and see **“Hotspot Manager” on page 45**.



Enter the Stripe account detail:

- **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.

- **Quickpay (Europe)** Use your **Quickpay** account. To manage payments and transactions, use Hotspot Manager and see **“Hotspot Manager” on page 45**.

Enter the QuickPay account details:

- **Merchant ID** Enter the ID for your account.
- **MD5 Secret** Enter the MD5 secret key.
- **Authorize.Net®(US, Canada)** Use your **Authorize.Net** account. To manage payments and transactions, use Hotspot Manager and see **“Hotspot Manager” on page 45**.

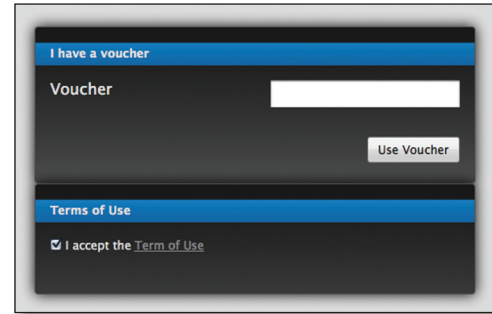
Enter the Authorize.Net account details:

- **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 45**.

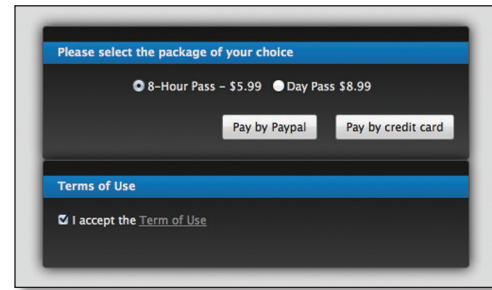
Enter the Merchant Warrior account details:

- **Merchant UUID** Enter the ID for your 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 Account** to set up or access your **Merchant Warrior test account**.
- **Hotspot Operator** Click **Go to Hotspot Manager** to manage *Wireless Guests, Payments/Transactions, Vouchers, and Operator Accounts*. See **“Hotspot Manager” on page 45**.

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 using the following format: 192.168.0.0.

**Portal URL Hostname** Enter 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

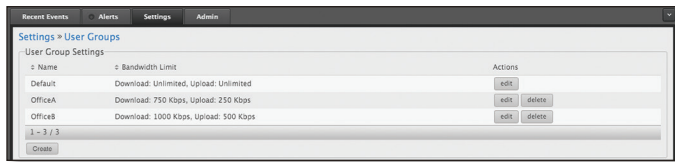
**Restricted Subnets** Enter any subnets that you don't want guests to be able to access.

**Allowed Subnets** Enter any subnets that you want guests to be able to access.

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

## 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.

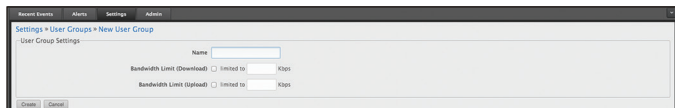
**Bandwidth Limit** Displays the upload and download limits.

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

- **Edit** Make changes to the user group settings. Go to the *Create or Edit a User Group* section below.
- **Delete** Delete the user group. (The *Default* user group cannot be deleted.)

**Create** Create a new user group. Go to the *Create or Edit a User Group* section below.

### Create or Edit a User Group

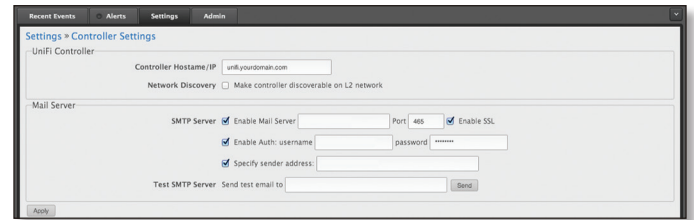


- **Name** Enter or edit the name of the user group.
- **Bandwidth Limit (Download)** Select to limit the download bandwidth. Enter the maximum in Kbps.
- **Bandwidth Limit (Upload)** Select to limit the upload bandwidth. Enter the maximum in Kbps.
- **Create** Click **Create** to create a new user group.
- **Apply** Click **Apply** to save changes.
- **Cancel** Click *Cancel* to discard changes.

See **“Configuration” on page 44** for information on how to assign a user or guest to a user group.


## Settings > Controller

Configure the system settings of the UniFi Controller.



### UniFi Controller

**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 Access Points and Disconnected Access Points. Specify the administrator email address when you create an account under *Settings > Site Admins*.

**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 Auth.** 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.

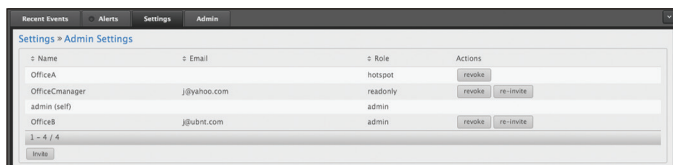


## Settings > Site Admins

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 47](#).



**Name** Displays the name of the administrator.

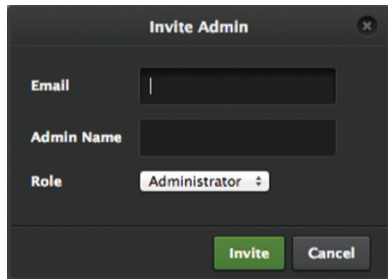
**Email** Displays the email address of the administrator.

**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** Remove the selected account.
- **Re-invite** (Not applicable to superadmin or operator accounts.) Send another email invitation.

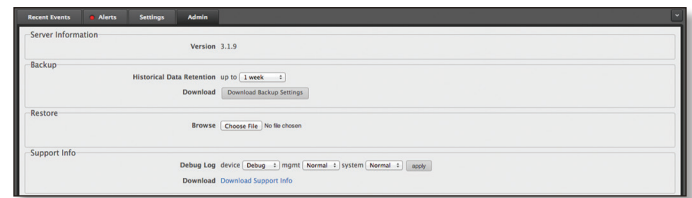
**Invite** Click to add a new site administrator.



- **Email** Enter the email address of the new administrator.
- **Admin Name** Enter the name of the new administrator.
- **Role** Select **Administrator** (read/write access) or **User** (read-only access).
- **Invite** Click **Invite** to send an email invitation.
- **Cancel** Click **Cancel** to discard changes.

## Admin

The *Admin* 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 automatically download it and display it.

### Backup

**Historical Data Retention** Select the time duration of the backup: **1 week**, **1 month**, **2 months**, **3 months**, **6 months**, **1 year**, or **Everything**. 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

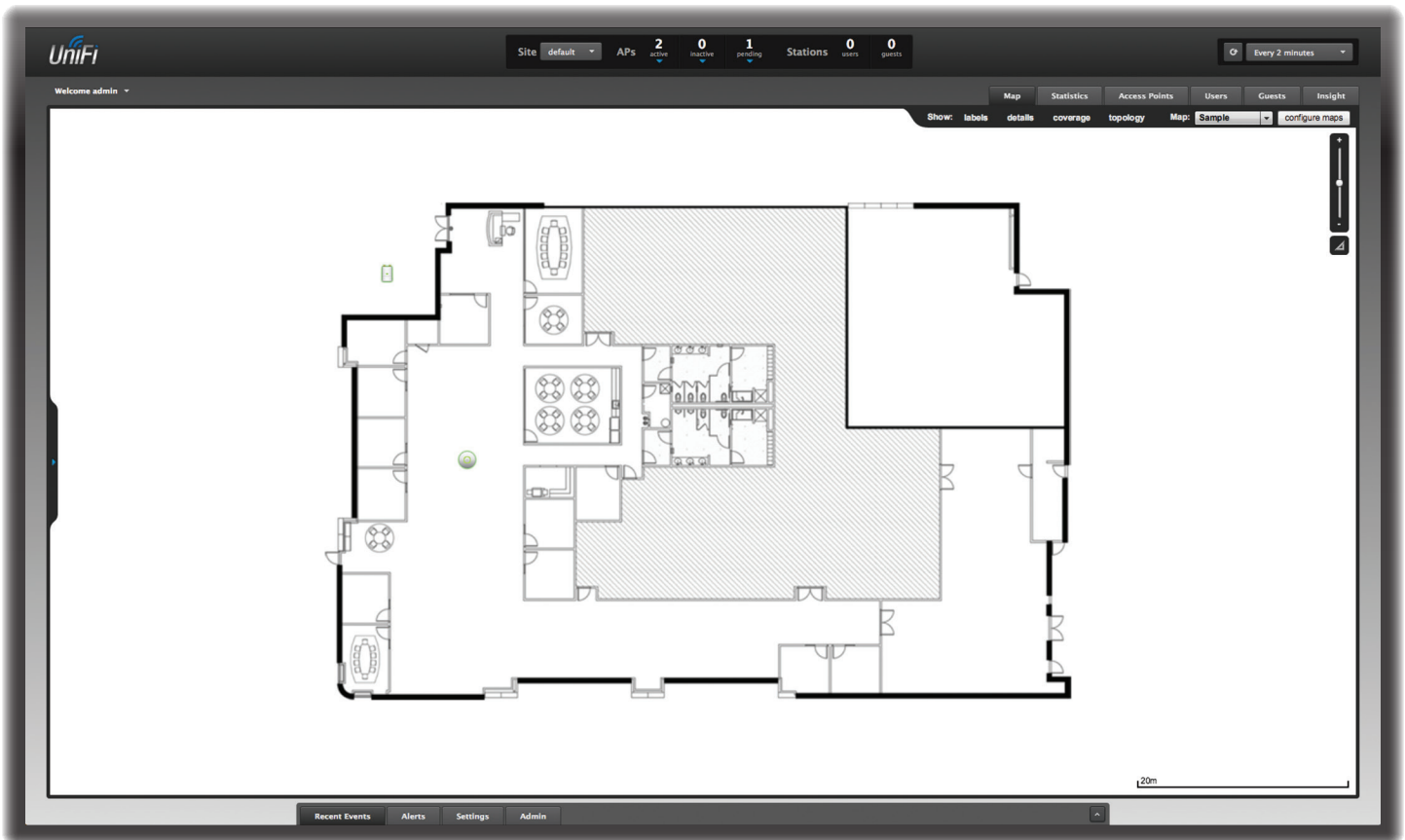
**Choose File** Select this option to restore settings from a backup file that you've already downloaded.

### 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. The default is *Normal*.
- **mgmt** Select the level of severity required to trigger management log entries. The default is *Normal*.
- **system** Select the level of severity required to trigger system log entries. The default is *Normal*.
- **apply** Click **apply** to save changes.

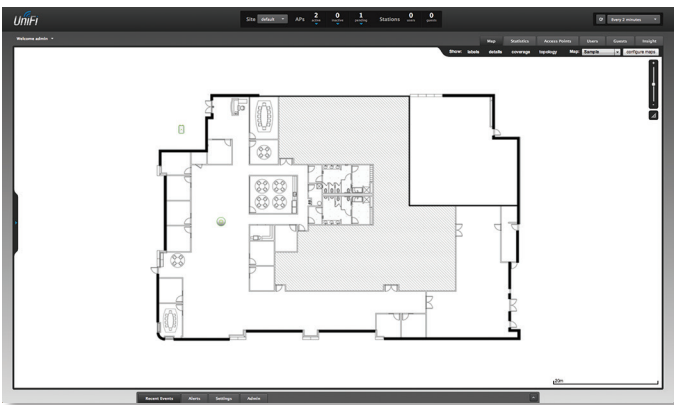
**Download** Select this option to download a file to your computer with information about your configuration. You can email this file to our support team.



## Chapter 3: Map Tab

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 wireless 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

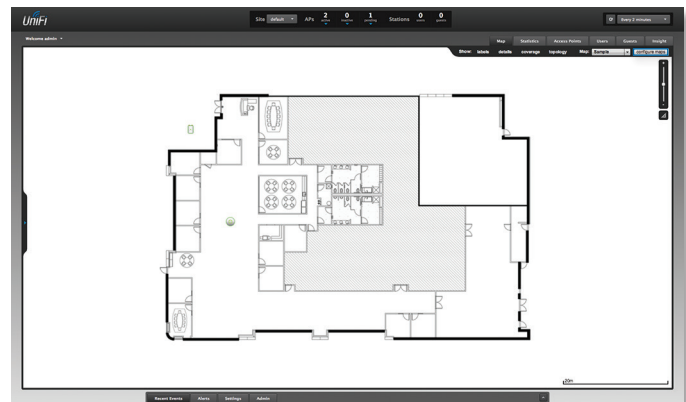


To add a custom map, you must first create the image using an illustration, image editing, or blueprint application that exports a file in .jpg, .gif, or .png file format.

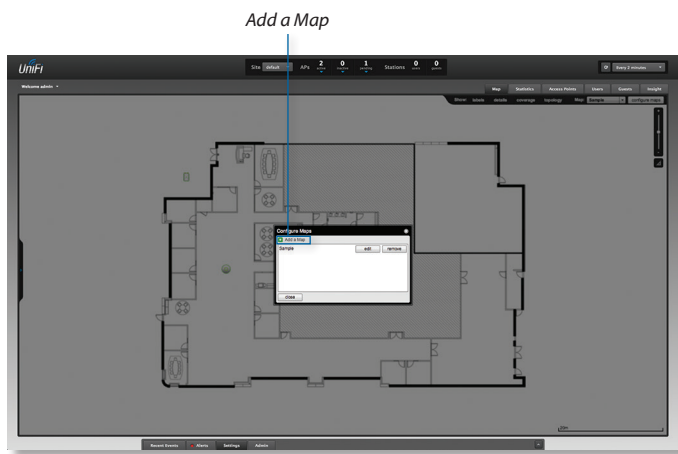
Once you've created the map, you can upload it to the UniFi Controller software by performing the following steps:

1. Click **Configure Maps**.

*Configure Maps button*



2. Click **Add a Map**.



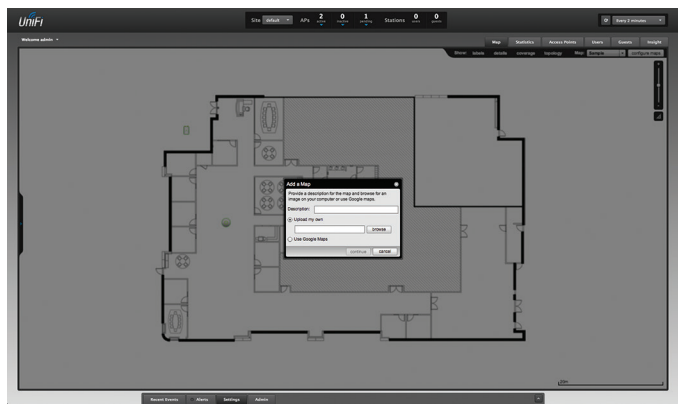
## Adding a Google Map

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

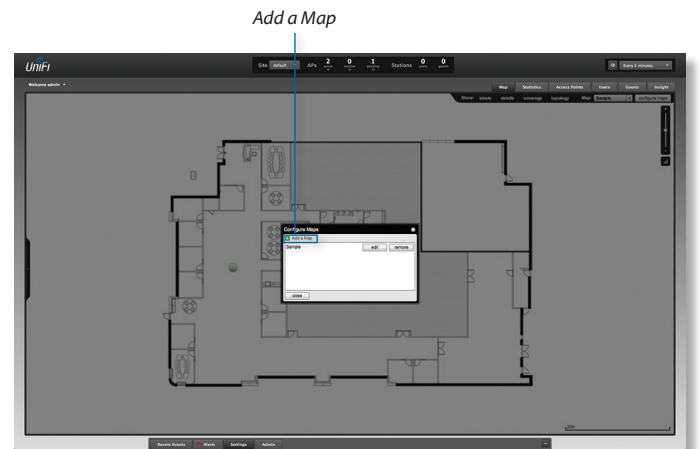
1. Click **Configure Maps**.



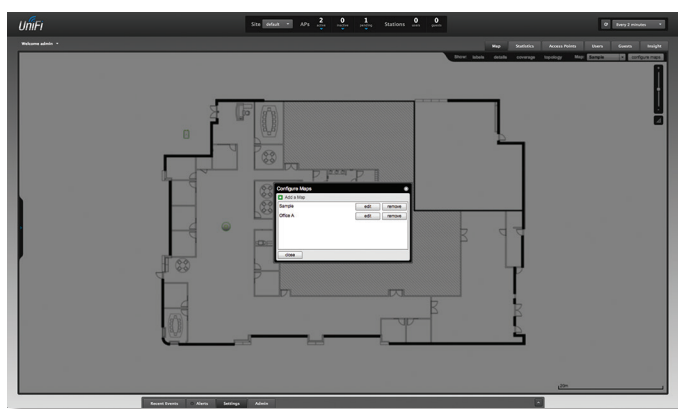
3. Enter a map name in the *Description* field and click **Upload my own**. Click the **Browse** button to locate the file to use as a map (valid file formats are .jpg, .gif, and .png). Click **Continue**.



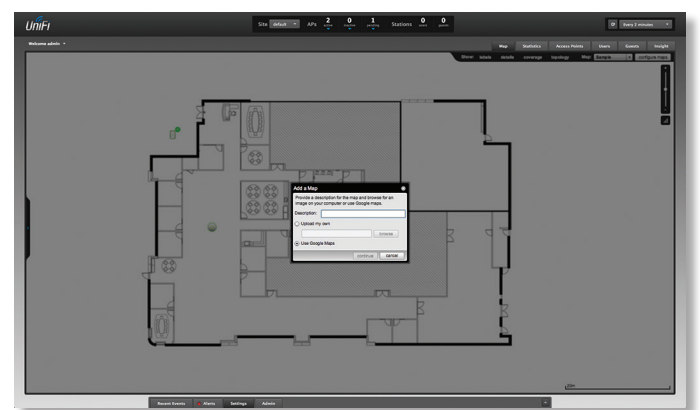
2. Click **Add a Map**.



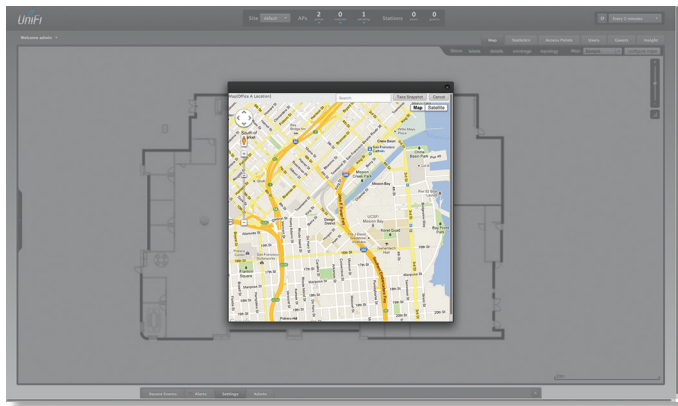
4. Click **Close**.



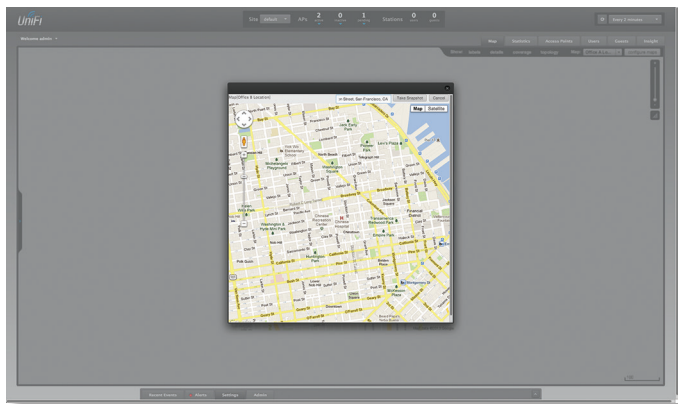
3. Enter a map name in the *Description* field and click **Use Google Maps**. Click **Continue**.



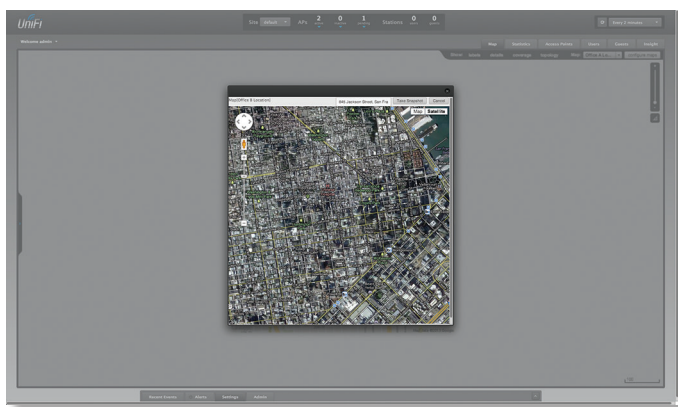
- The default view is *Map*, which looks like a street map. Use the tools on the left to navigate the map or zoom in/out.



In the *Search* field, you can enter an address or the latitude and longitude of a specific location. Then press the **return** or **enter** key.

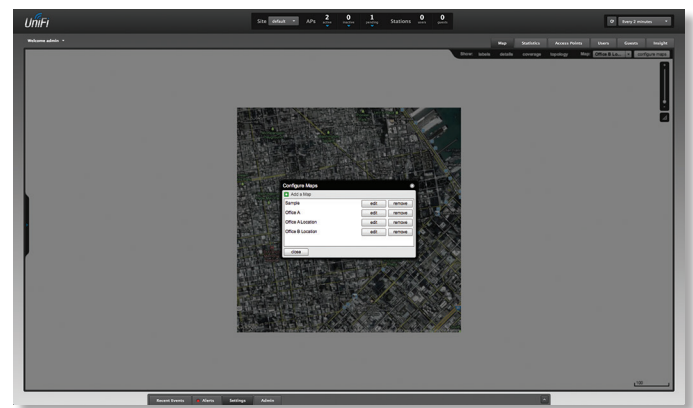


You can also click **Satellite** for a satellite view, as seen from above.






Click **Take Snapshot** to capture a screenshot.

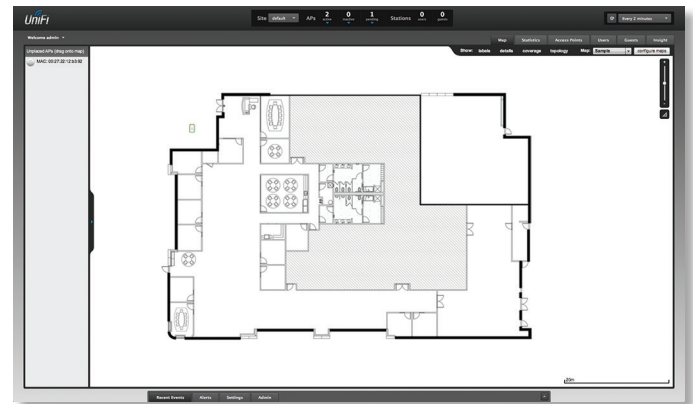
- Click **Close**.



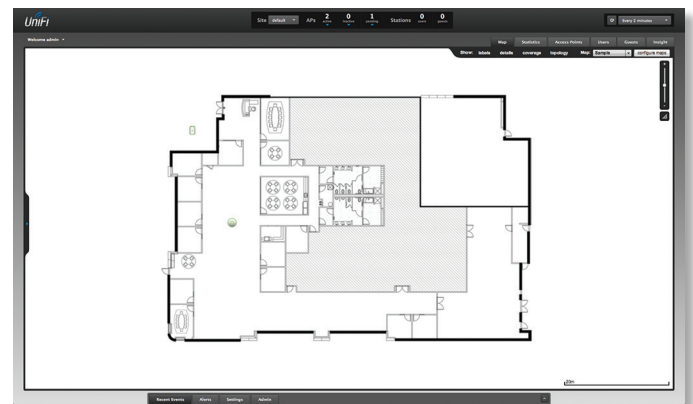
You can adjust the zoom using the slider on the right.

### Placing Access Points on the Map

Drag the *Access Point*  /  /  icon(s) from the *Unplaced APs* list on the left to the appropriate location(s) on the map.



The Access Point will appear in the area that you placed it.



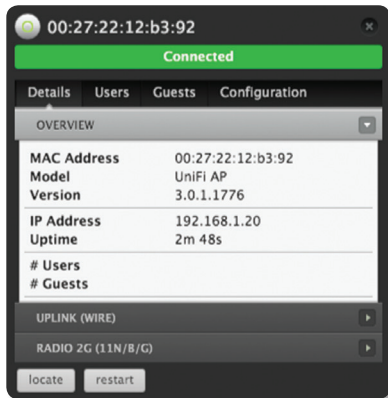
**Wired/Wireless Access Point** Each icon indicates the location of the Access Point on the map. Click and hold this icon to drag the Access Point to another location on the map. Click an *Access Point* icon to reveal additional options. Click a blank area of the map to hide the icons.

**Note:** Not all icons are shown here.



**Lock** Lock the selected Access Point to the current location on the map.

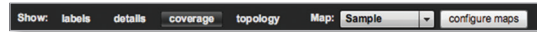
**Details** Display the *Details* screen so you can view and edit the Access Point configuration. You can also view the lists of connected users and guests. For more information, go to **“Access Point Details” on page 32**.



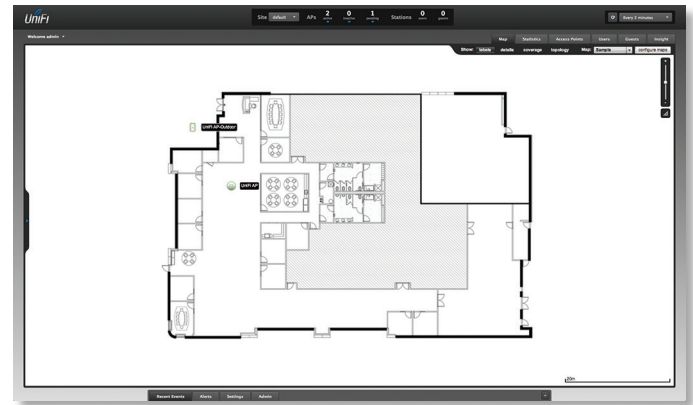
**Remove** Remove the Access Point from its location on the map.



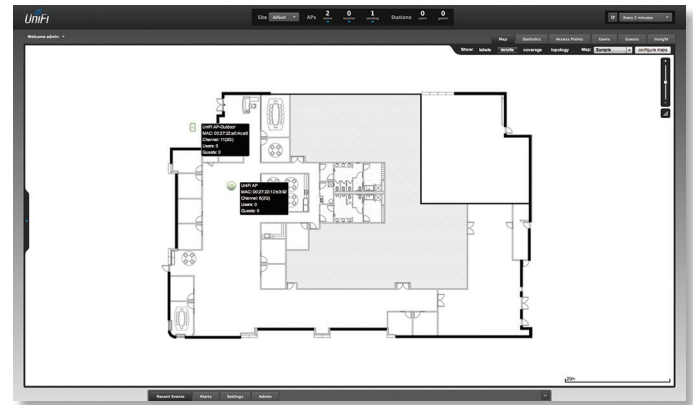
**Show:** Click any of the following options to display Access Point *labels*, *details*, *wireless coverage*, and *topology* on the map.



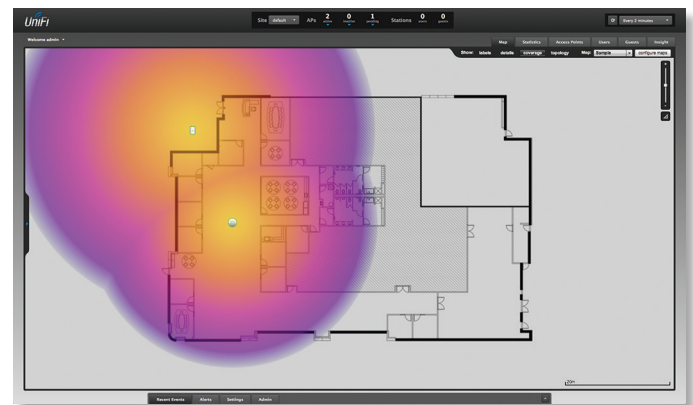
- Labels** Displays the name applied to the Access Point. Refer to *Alias* under **“Configuration” on page 36** to change a name applied to an Access Point. If no custom label is applied, the Access Point’s MAC address will be displayed.



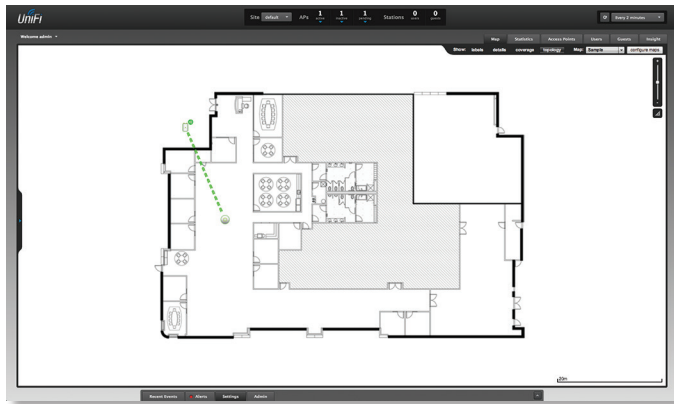
- Details** Displays the Access Point name, MAC address, transmit/receive channel, number of users connected, and number of guests connected.



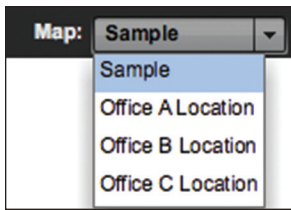
- Coverage** Displays a visual representation of the wireless range covered by the Access Point.



**Topology** Displays a visual representation of the network configuration and connections between Access Points. Any device that is wirelessly connected will have a wireless icon next to it. A path of arrows will indicate the wireless Access Point and its uplink to a wired Access Point.

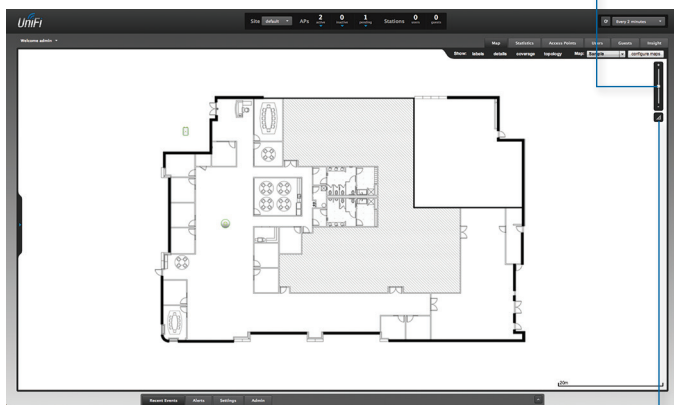


**Map:** If multiple maps have been uploaded, you can select which map you want to view using this option.



**Configure Maps** Use this option to add maps or edit the current map(s).

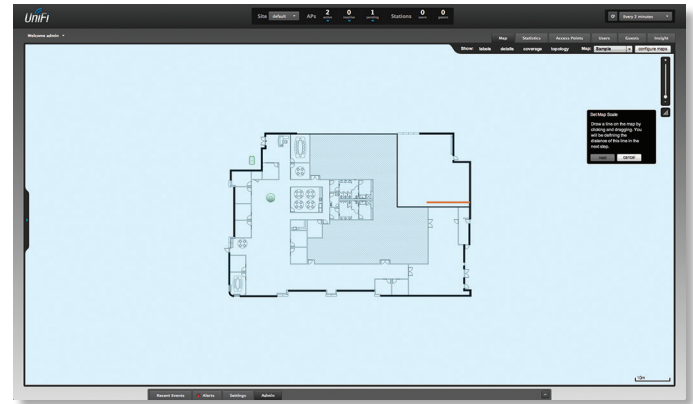
**Zoom Slider** Use to zoom the map detail in and out.



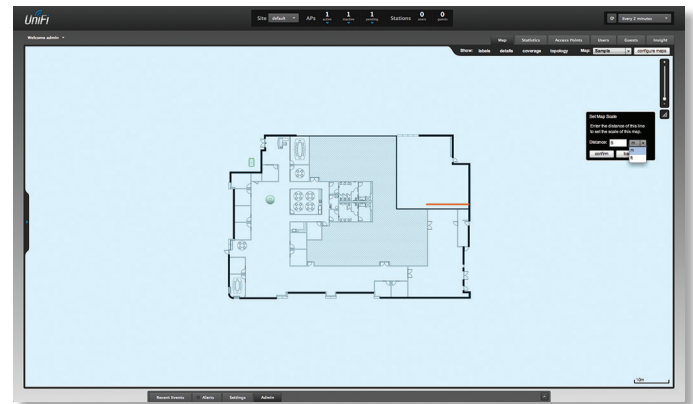
**Set Map Scale** Use this option to define the scale of the map. You will draw a line and define the distance that the line represents.

## Setting the Map Scale

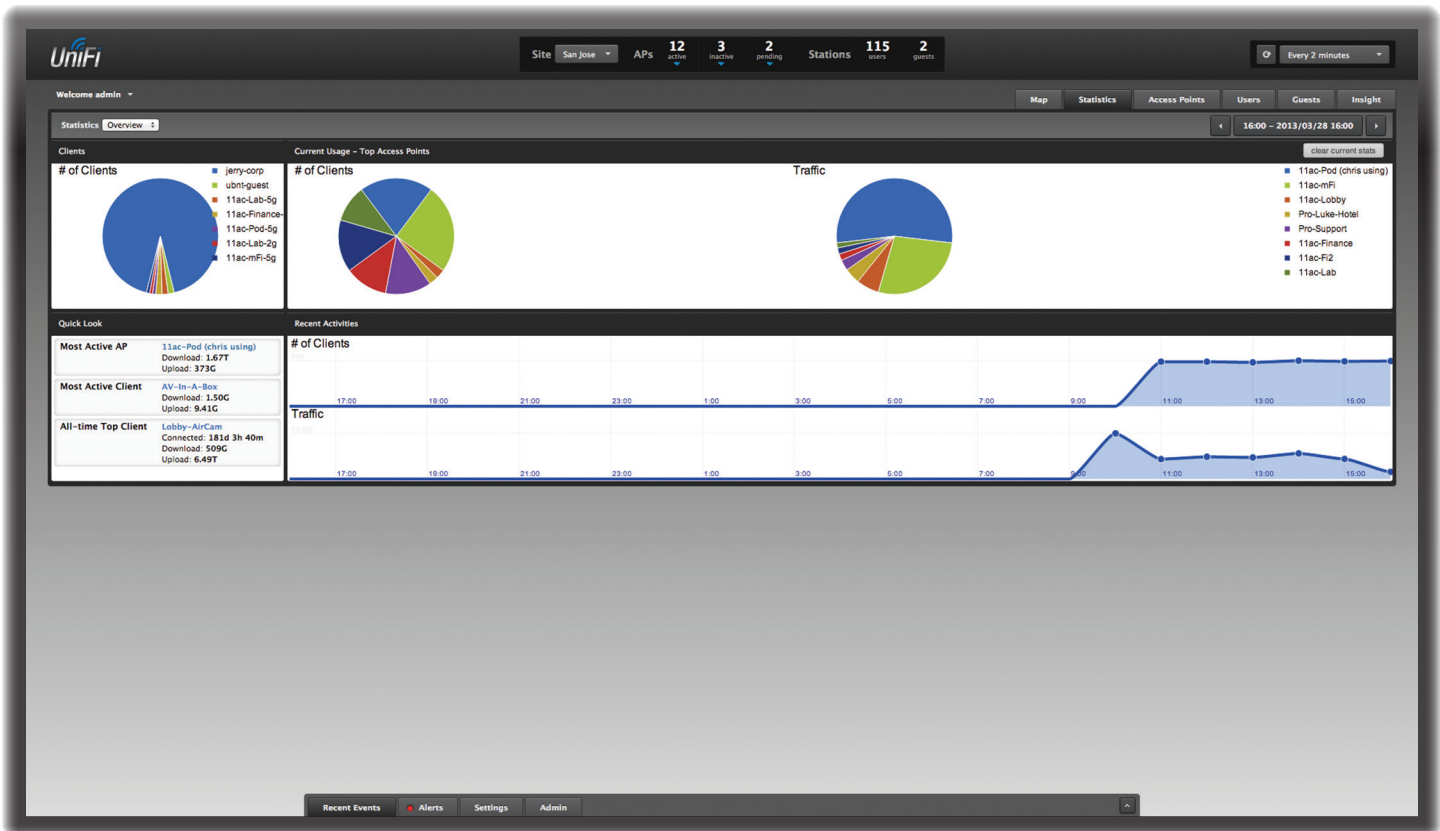
1. Click the **Set Map Scale** button.
2. Click and hold to draw a line in the area that you want to use to set the scale of the map. If you need to redraw the line, just click and hold again to draw a new line. Once you're happy with the line, click **Next**.



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



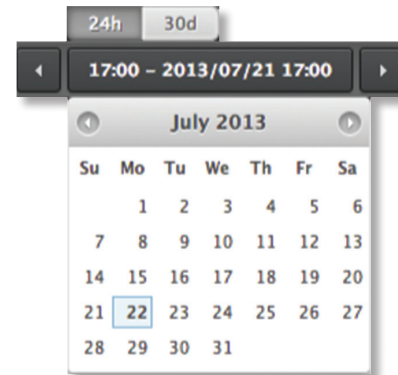
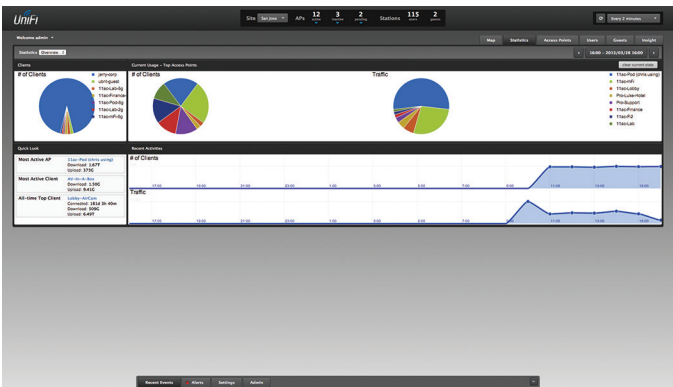
The legend at the bottom of the map shows the new scale of the map.



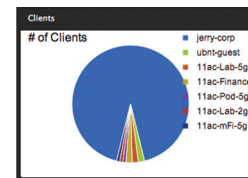
## Chapter 4: Statistics Tab

The *Statistics* tab provides a visual representation of the network traffic connected to your managed APs. Charts representing the number of clients and network traffic. An hour-by-hour chart of the usage over the last 24 hours is also displayed on this screen.

**Date** At the top right of the screen, you can filter the statistics by date and time period. You can also change the duration interval by toggling between *24h* (24 hours) and *30d* (30 days).

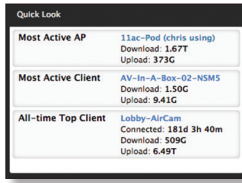


### Clients



**# of Clients** A visual pie chart represents the client distribution amongst the APs. Place the mouse cursor over the chart for percentage details.

## 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 **“Access Point Details” on page 32** 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 *User/Guest Details* screen. See **“User/Guest Details” on page 43** 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:

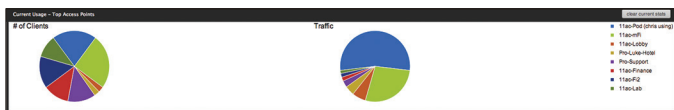
**Name or MAC address** You can click this link to open the *User/Guest Details* screen. See **“User/Guest Details” on page 43** for additional information.

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

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

## 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 percentage details.

**Traffic** A pie chart represents traffic on the most active Access Points. Place the mouse cursor over the chart for percentage details.

**Clear current stats** Reset the current statistics to start over.

## Recent Activities

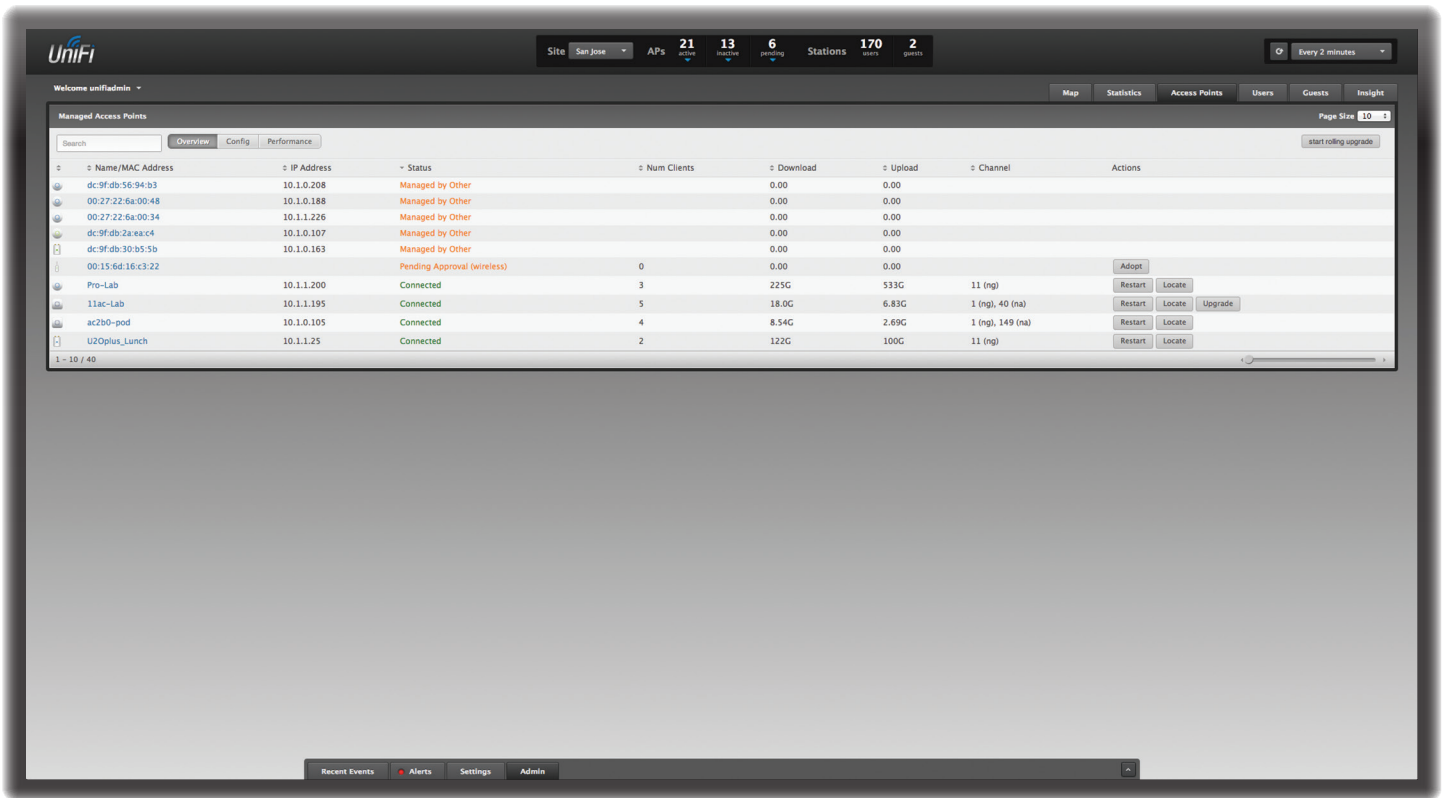
The details of recent network activities are displayed.



**# of Clients** A graph displays the number of clients connected during the selected time period. Place the mouse cursor over a point to display the exact number.

**Traffic** A graph displays the network traffic during the selected time period. Place the mouse cursor over a point to display the specific amount of data.





## Chapter 5: Access Points Tab

The *Access Points* tab displays a list of managed Access Points. Three sub-tabs 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 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.

These sub-tabs share common options:

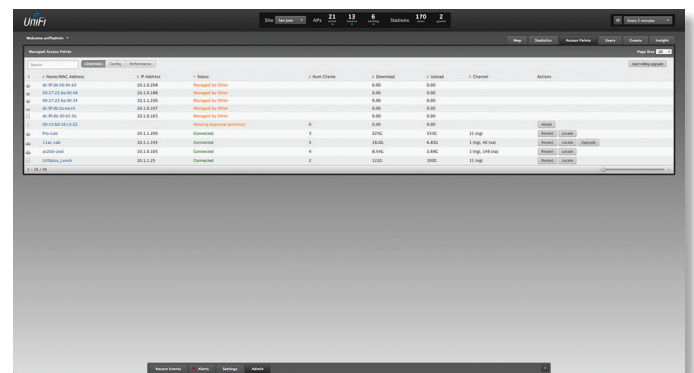
**Search** Enter the text you want to search for. Simply begin typing; there is no need to press **Enter**.

**Page Size** Select how many results are displayed per page: **10, 20, 30, 40, 60, or 100**.

**Rolling upgrade** Click to begin automatically upgrading Access Points, one by one, except for wirelessly uplinked Access Points, which are intentionally excluded from upgrading.

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

## Overview



**Icon** Displays the icon of the Access Point is displayed (the icon will vary depending on the model).

**Name/MAC Address** Displays the hostname, alias, or MAC address of the Access Point. You can click the name to get additional details on the Access Point.

**IP Address** Displays the IP address of the Access Point.

**Status** Displays the connection status.

- **Connected** The Access Point is physically wired to the network.
- **Connected (wireless)** The Access Point is wirelessly uplinked to a physically wired Access Point.
- **Disconnected** The Access Point is unreachable by the UniFi Controller software. Disconnected Access Points will also appear under *Access Points > Disconnected* at the top of the interface.
- **Isolated** A managed Access Point is unable to locate its uplink.
- **Managed by Other** The Access Point is not in the default state but it is not controlled by the UniFi Controller.
- **Pending Approval** The Access Point is in the default state and is available for adoption.

**Num Clients** Displays the number of clients connected to the Access Point.

**Download** Displays the total amount of data downloaded by the Access Point.

**Upload** Displays the total amount of data uploaded by the Access Point.

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

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

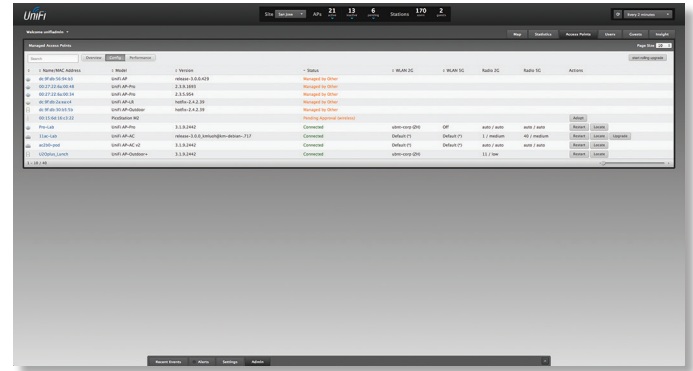
- **Restart** Restart the selected Access Point.
- **Locate** Locate the Access Point on the map. The button will flash green until the *Locate* button is clicked again. The LED on the Access Point will flash so that you can place it in the correct location on the map. The LED will flash until the *Locate* button is clicked again.
- **Adopt** Adopt an Access Point that appears under *Access Points > Pending* at the top of the interface. The *Status* will appear as *Adopting* until the Access Point is connected.

Name/MAC Address	IP Address	Status
00:27:22:12:83:92	192.168.1.20	Adopting
dc:9f:db:1a:3f:3a	10.0.2.116	Managed by Other

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

Name/MAC Address	IP Address	Status
00:27:22:12:83:92	192.168.1.20	Upgrading
dc:9f:db:1a:3f:3a	10.0.2.116	Managed by Other

## Config



**Icon** Displays the icon of the Access Point is displayed (the icon will vary depending on the model).

**Name/MAC Address** Displays the hostname, alias, or MAC address of the Access Point. You can click the name to get additional details on the Access Point.

**Model** Displays the model number of the Access Point.

**Status** Displays the connection status.

- **Connected** The Access Point is physically wired to the network.
- **Connected (wireless)** The Access Point is wirelessly uplinked to a physically wired Access Point.
- **Disconnected** The Access Point is unreachable by the UniFi Controller software. Disconnected Access Points will also appear under *Access Points > Disconnected* at the top of the interface.
- **Isolated** A managed Access Point is unable to locate its uplink.
- **Managed by Other** The Access Point is not in the default state but it is not controlled by the UniFi Controller.
- **Pending Approval** The Access Point is in the default state and is available for adoption.

**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:

- **Restart** Restart the selected Access Point.
- **Locate** Locate the Access Point on the map. The button will flash green until the *Locate* button is clicked again. The LED on the Access Point will flash so that you can place it in the correct location on the map. The LED will flash until the *Locate* button is clicked again.

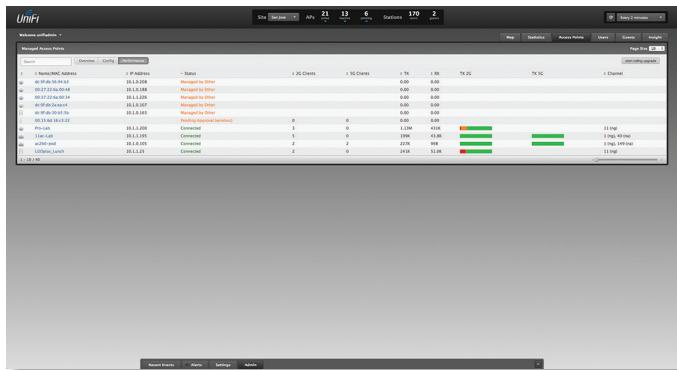
- **Adopt** Adopt an Access Point that appears under *Access Points > Pending* at the top of the interface. The *Status* will appear as *Adopting* until the Access Point is connected.

Name/MAC Address	IP Address	Status
00:27:22:12:93:92	192.168.1.20	Adopting
dc:9f:db:1a:3f:3a	10.0.2.116	Managed by Other

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

Name/MAC Address	IP Address	Status
00:27:22:12:93:92	192.168.1.20	Upgrading
dc:9f:db:1a:3f:3a	10.0.2.116	Managed by Other

## Performance



**Icon** Displays the icon of the Access Point is displayed (the icon will vary depending on the model).

**Name/MAC Address** Displays the hostname, alias, or MAC address of the Access Point. You can click the name to get additional details on the Access Point.

**IP Address** Displays the IP address of the Access Point.

**Status** Displays the connection status.

- **Connected** The Access Point is physically wired to the network.
- **Connected (wireless)** The Access Point is wirelessly uplinked to a physically wired Access Point.
- **Disconnected** The Access Point is unreachable by the UniFi Controller software. Disconnected Access Points will also appear under *Access Points > Disconnected* at the top of the interface.
- **Isolated** A managed Access Point is unable to locate its uplink.
- **Managed by Other** The Access Point is not in the default state but it is not controlled by the UniFi Controller.
- **Pending Approval** The Access Point is in the default state and is available for adoption.

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

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

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

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

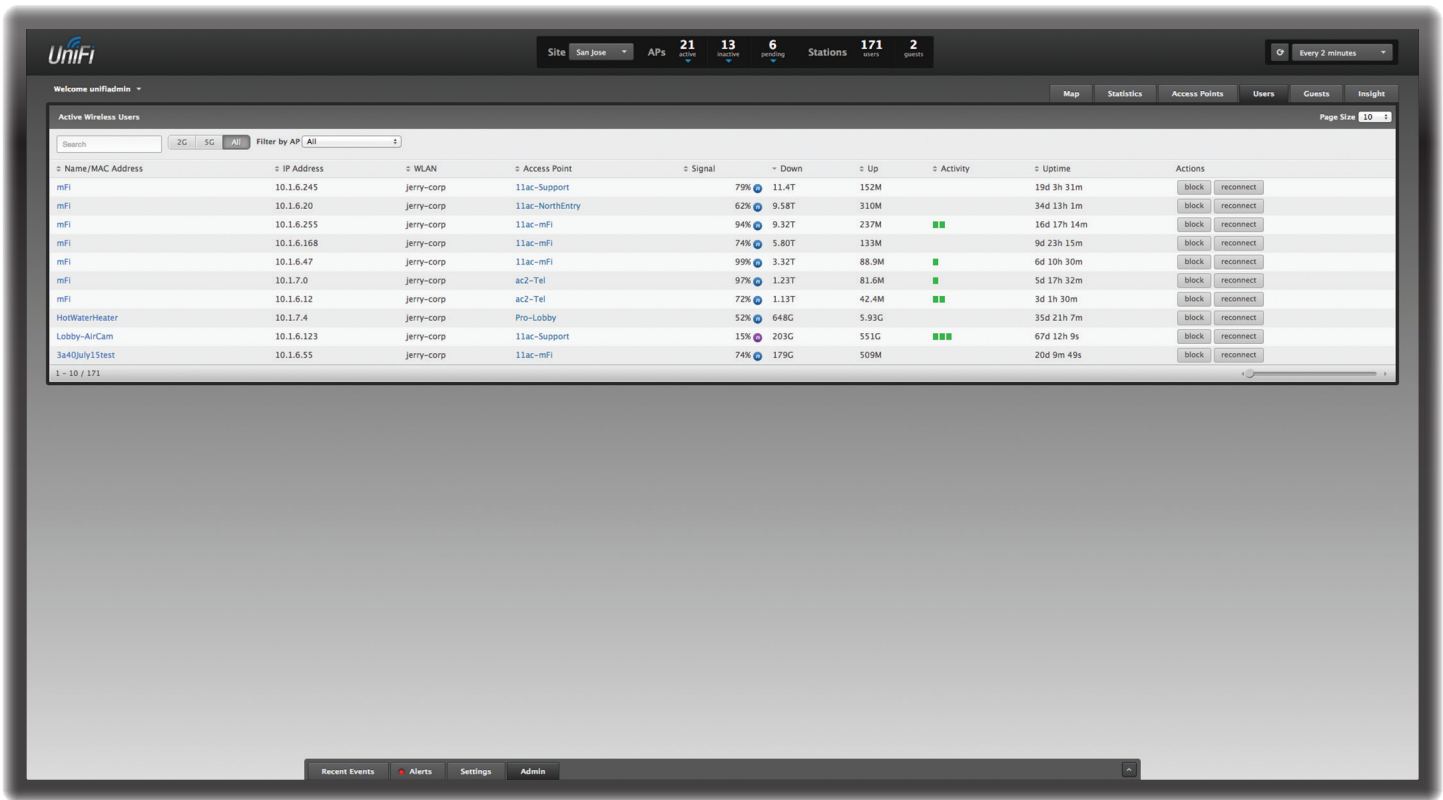
**TX 2G** Displays the overall TX rate for the 2.4 GHz radio band. The different colors represent different types of packet activity:

Color	Packet Activity
Green	Packets sent
Orange	Packets retried
Red	Packets not sent due to likely interference

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

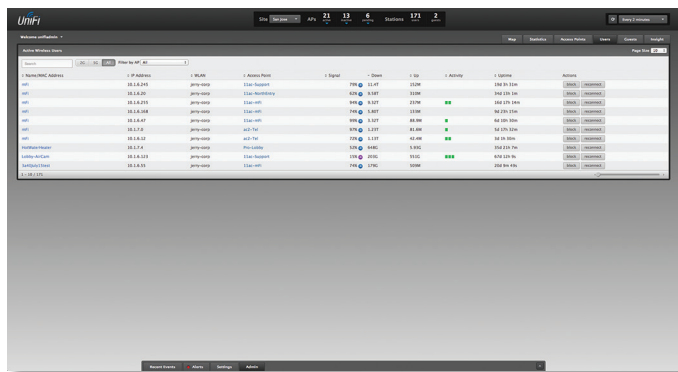
Color	Packet Activity
Green	Packets sent
Orange	Packets retried
Red	Packets not sent due to likely interference

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



## Chapter 6: Users Tab

The *Users* tab displays a list of users that are connected to the primary wireless network(s) of an Access Point. 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:

- **2G** Only display users of the 2.4 GHz wireless network.
- **5G** Only display users of the 5 GHz wireless network.
- **All** Display all users.

**Filter by AP** Drop-down menu of all available Access Points. Select one to filter the results and only display users connected to the selected Access Point.

**Page Size** Select how many results are displayed per page: **10, 20, 30, 40, 60, or 100**.













**Name/MAC Address** Displays the hostname, alias, or MAC address of the connected user. You can click the name to get additional details.

**IP Address** Displays the IP address of the connected user.

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

**Access Point** Displays the hostname, alias, or MAC address of the Access Point. You can click the name to get additional details on the Access Point.






**Signal** Displays the percentage of signal strength and type of signal in use. The leaf symbol indicates power save mode. The device will return to active mode when *Down* or *Up* activity resumes.

Icon	Clients	Mode
	5 GHz (802.11ac)	Active
	5 GHz (802.11ac)	Power Save
	5 GHz (802.11a)	Active
	5 GHz (802.11a)	Power Save
	5 GHz (802.11n)	Active
	5 GHz (802.11n)	Power Save
	2.4 GHz (802.11n)	Active
	2.4 GHz (802.11n)	Power Save
	2.4 GHz (802.11g)	Active
	2.4 GHz (802.11g)	Power Save
	2.4 GHz (802.11b)	Active
	2.4 GHz (802.11b)	Power Save

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

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

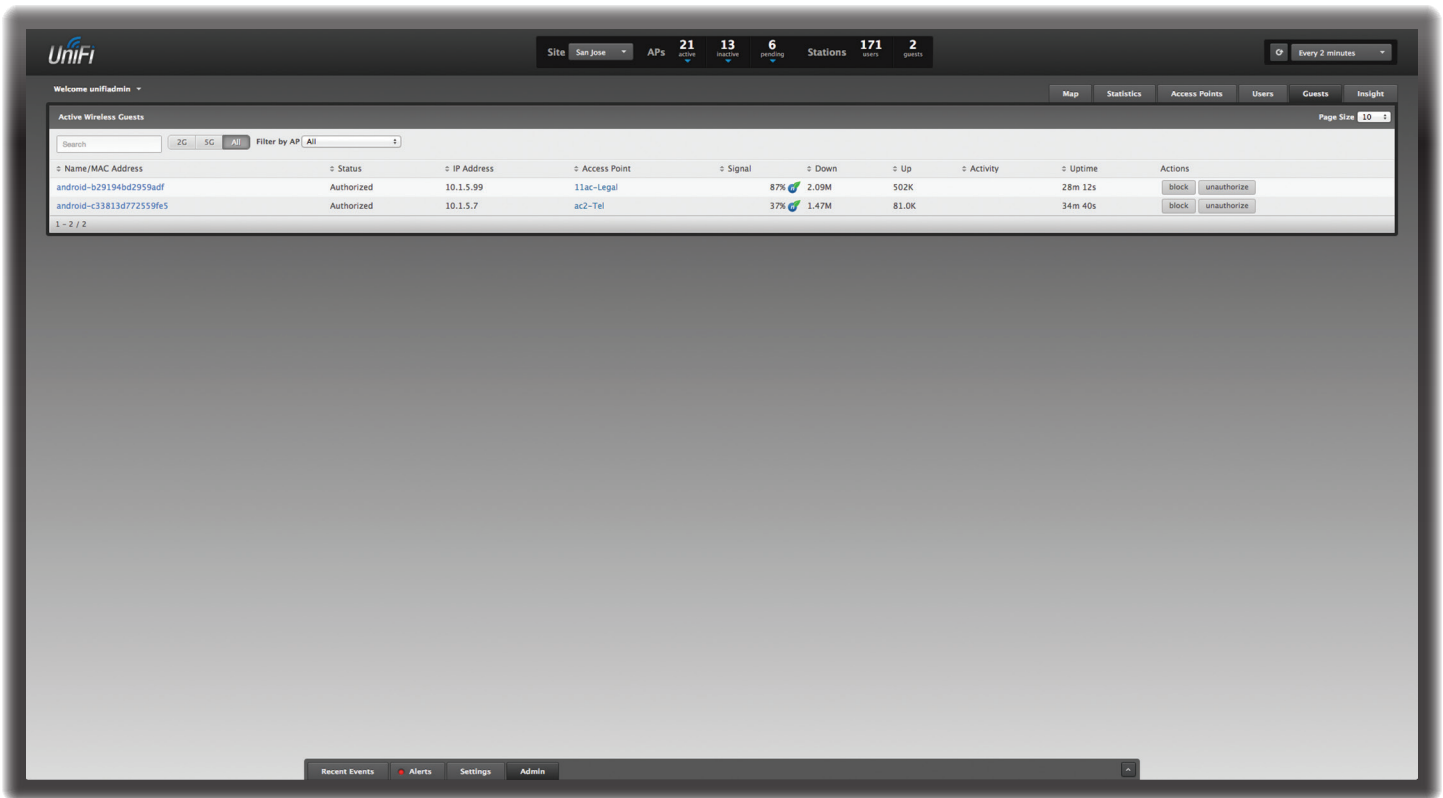
**Activity** Displays the level of activity for each user.

Bars	Activity Level (Bytes per second)
	Idle
	500
	8000
	64000
	512000
	2048000

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

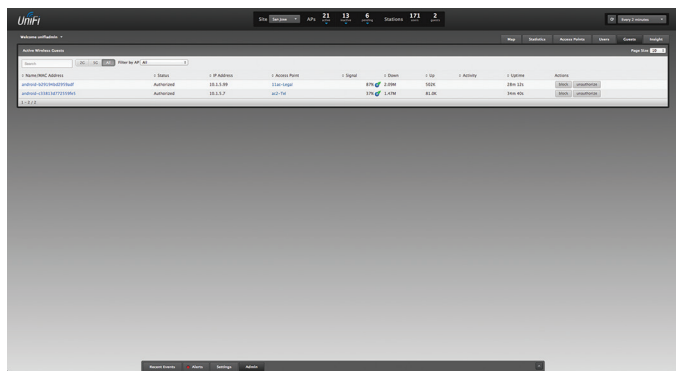
**Actions** Click a button to perform the desired action:

- **Block** Block this user from accessing the Access Point and add the client device to the Blocked Device list.
- **Reconnect** Reconnect this user to the Access Point and remove the client device from the Blocked Device list.



## Chapter 7: Guests Tab

The *Guests* tab displays a list of guests that are connected to the guest network(s) of an Access Point. 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:

- **2G** Only display guests of the 2.4 GHz wireless network.
- **5G** Only display guests of the 5 GHz wireless network.
- **All** Display all guests.

**Filter by AP** Drop-down menu of all available Access Points. Select one to filter the results and only display guests connected to the selected Access Point.

**Page Size** Select how many results are displayed per page: **10**, **20**, **30**, **40**, **60**, or **100**.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the connected guest. You can click the name to get additional details.

**Status** Indicates whether the guest is authorized or not. For authorization, guests must accept the Terms of Use if the guest portal is enabled and authenticate if authentication is enabled.

**IP Address** Displays the IP address of the connected guest.

**Access Point** Displays the hostname, alias, or MAC address of the Access Point. You can click the name to get additional details on the Access Point.

**Signal** Displays the percentage of signal strength and type of signal in use. The leaf symbol indicates power save mode. The device will return to active mode when *Down* or *Up* activity resumes.

Icon	Clients	Mode
	5 GHz (802.11ac)	Active
	5 GHz (802.11ac)	Power Save
	5 GHz (802.11a)	Active
	5 GHz (802.11a)	Power Save
	5 GHz (802.11n)	Active
	5 GHz (802.11n)	Power Save
	2.4 GHz (802.11n)	Active
	2.4 GHz (802.11n)	Power Save
	2.4 GHz (802.11g)	Active
	2.4 GHz (802.11g)	Power Save
	2.4 GHz (802.11b)	Active
	2.4 GHz (802.11b)	Power Save

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

- **Block** Block this guest from accessing the Access Point.
- **Reconnect** Reconnect this guest to the Access Point.
- **Authorize** Manually grant authorization when a guest is in a pending state.
- **Unauthorize** Remove authorization of wireless guest access and disconnect the client.

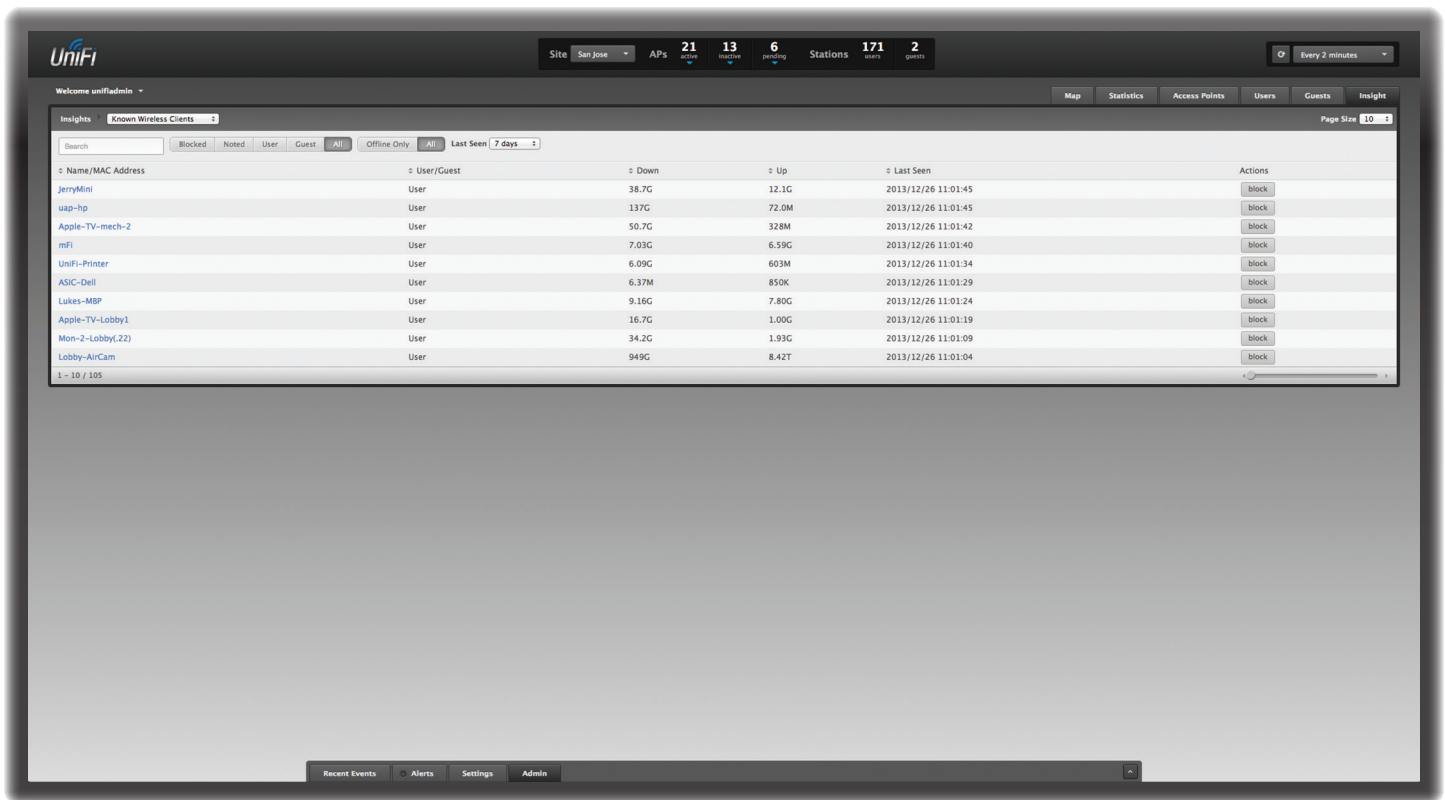
**Down** Displays the total amount of data downloaded by the guest.

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

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

Bars	Activity Level (Bytes per second)
	Idle
	500
	8000
	64000
	512000
	2048000

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



## Chapter 8: Insight Tab

The *Insight* tab displays different kinds of status information. Four sub-tabs are available:

- **Known Wireless Clients** Displays information about detected wireless clients.
- **Rogue Access Points** Displays information about APs 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.

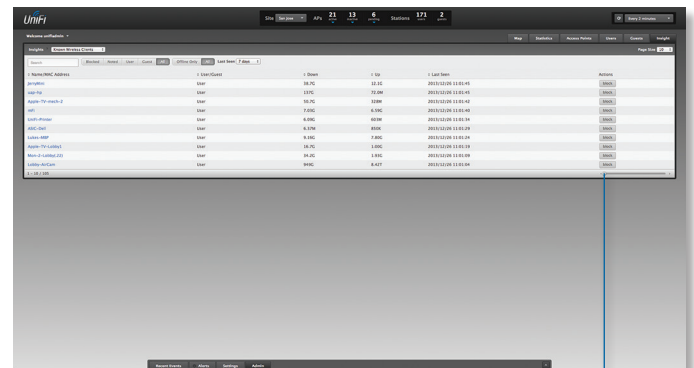
These sub-tabs share common options:

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

**Page Size** Select how many results are displayed per page: **10, 20, 30, 40, 60, or 100**.

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

## Known Wireless Clients



**Slider** Move the slider right and left to navigate between pages of clients.

You can apply one of the following primary filters:

- **Blocked** Only display blocked clients.
- **Noted** Only display clients whose configurations include notes or who are forced to connect to a specific Access Point. (See **“Configuration” on page 44** for more information.)
- **User** Only display users.
- **Guest** Only display guests.
- **All** Display all users and guests.



For the *User*, *Guest*, and *All* filters, a secondary filter is available:

- **Offline Only** Only display clients who are currently offline.
- **All** Display all clients, regardless of connection status.

**Last Seen** Filter the results on the page based on the time 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.

**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.

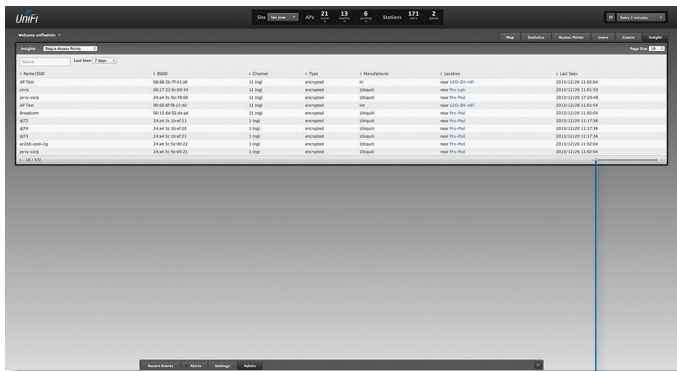
**Up** Displays the total amount of data uploaded by the client.

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

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

- **Block** Block this client from accessing the Access Point. After you have blocked a client, you can click **unblock** to allow access.

## Rogue Access Points



**Slider** Move the slider right and left to navigate between pages of APs.

**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.

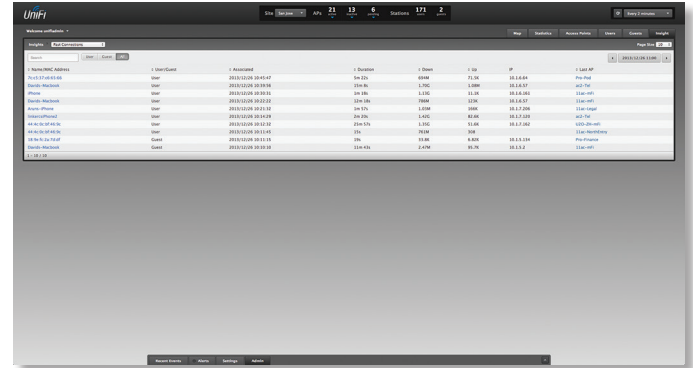
**Type** Displays the security status indicating whether encryption is used.

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

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

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

## Past Connections



You can apply one of the following filters:

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

**Date** Filter by date and time period.

**Name/MAC Address** Displays the hostname, alias, or MAC address of the connected client. You can click the name to get additional details.

**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 Access Point used by the guest. You can click the name to get additional details on the Access Point.

## Past Guest Authorizations

Name/MAC Address	Package	Amount	Authorized By	Start	Duration	Down	Up	IP	Last AP
10.89.80.30:37	None	0.00	None	2023/05/15 11:01:02	0s	0.00	0.00	0027:22:18:1a:8e	
10.89.80.30:37	None	0.00	None	2023/05/15 11:00:58	0s	0.00	0.00	0027:22:18:1a:8e	
10.89.80.37:4c	None	0.00	None	2023/05/15 11:00:48	0s	0.00	0.00	0027:22:18:1a:8e	
10.89.80.84:60:00	None	0.00	None	2023/05/15 11:00:07	0s	0.00	0.00	0027:22:18:1a:8e	
10.89.80.27:58:6d	None	0.00	None	2023/05/15 11:00:05	0s	0.00	0.00	0027:22:18:1a:8e	
10.89.80.27:58:6d	None	0.00	None	2023/05/15 11:00:01	0s	0.00	0.00	0027:22:18:1a:8e	
10.89.80.84:12:3f	None	0.00	None	2023/05/15 10:59:48	0s	0.00	0.00	0027:22:18:1a:8e	
10.24.144.88:37:4f	None	0.00	None	2023/05/15 10:58:58	0s	0.00	0.00	0027:22:18:1a:8e	
10.79.15.80:25:06	None	0.00	None	2023/05/15 10:58:31	0s	0.00	0.00	0027:22:18:1a:8e	

**Date** Filter by date.

**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 guest access.

**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 Access Point used by the guest. You can click the name to get additional details on the Access Point.

# Chapter 9: Access Point Details

UniFi Access Points connect to the UniFi Controller software either by Ethernet, indicated as *Connected*, or by a wireless connection, indicated as *Connected (wireless)*. Based on connection type, options under each tab vary.


 **Note:** The UniFi AP-AC and AP-AC Outdoor do not support wireless uplinks for the initial release, but they will with a future firmware upgrade.

The upper part of the window has four clickable tabs:

- *Details* (see below)
- **“Users” on page 35**
- **“Guests” on page 35**
- **“Configuration” on page 36**

The bottom of the window has two buttons:

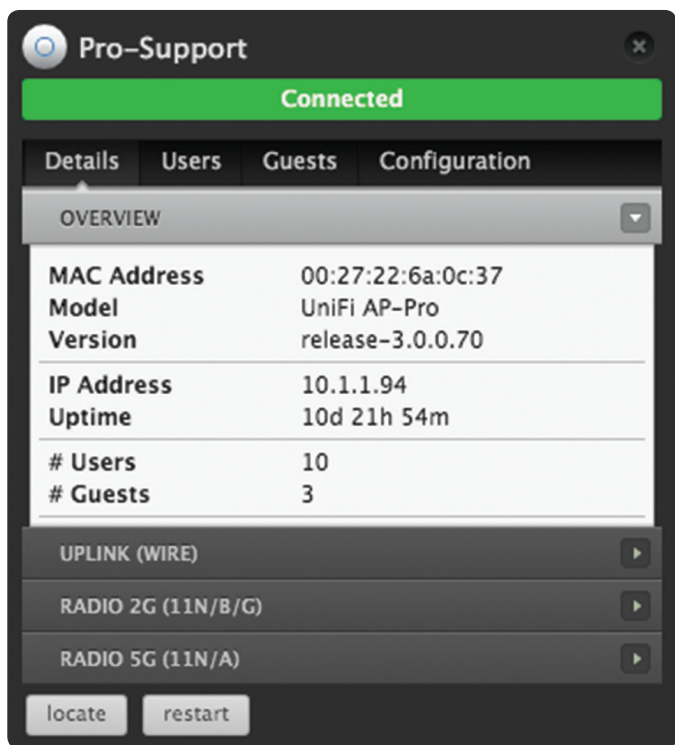
- **Locate** Use the **Locate** button to flash the LED on the Access Point and flash the Access Point icon on the map.
- **Restart** Use the **Restart** button to restart the Access Point.

 **Note:** The UAP-AC, UAP-PRO, and UAP models are shown in this chapter; however, this information also applies to the other UniFi AP models.

## Details

Details about the Access Point. Click **Overview** to display the device specifics, connection details, uptime, and user statistics.

## Overview



**MAC Address** Displays the MAC address of the Access Point.

**Model** Displays the model number.

**Version** Displays the version of software used on the Access Point.

**IP Address** Displays the IP address of the Access Point.

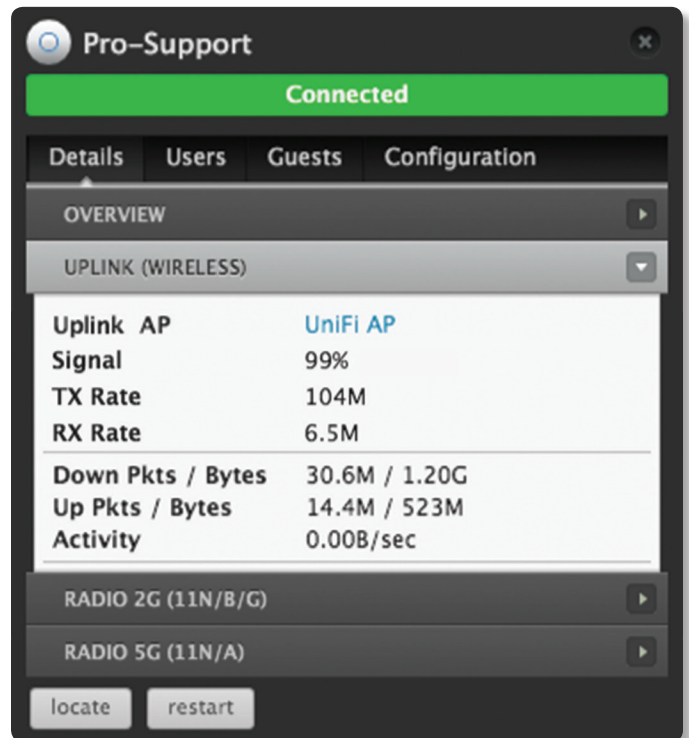
**Uptime** Displays the amount of time the Access Point has been running without interruption.

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

**# Guests** Displays the number of users connected to the guest network.

## Uplink (Wireless)

Click **Uplink (Wireless)** to display details about the wireless uplink. See **“Wireless Uplinks” on page 39** to find, select, and connect to a wireless Access Point.



**Uplink AP** Displays the name or MAC address of the Uplink Access Point.

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

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

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

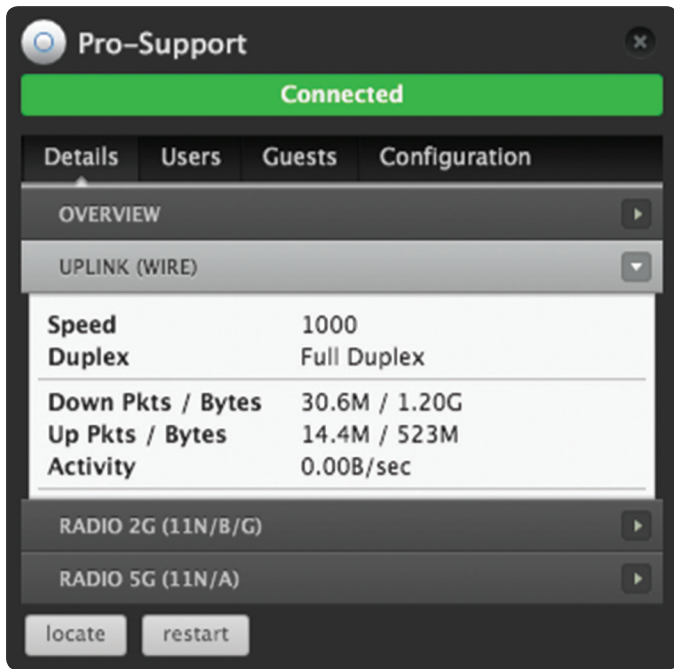
**Down Pkts/Bytes** Displays the amount of data downloaded as packets and bytes.

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

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

## Uplink (Wire)

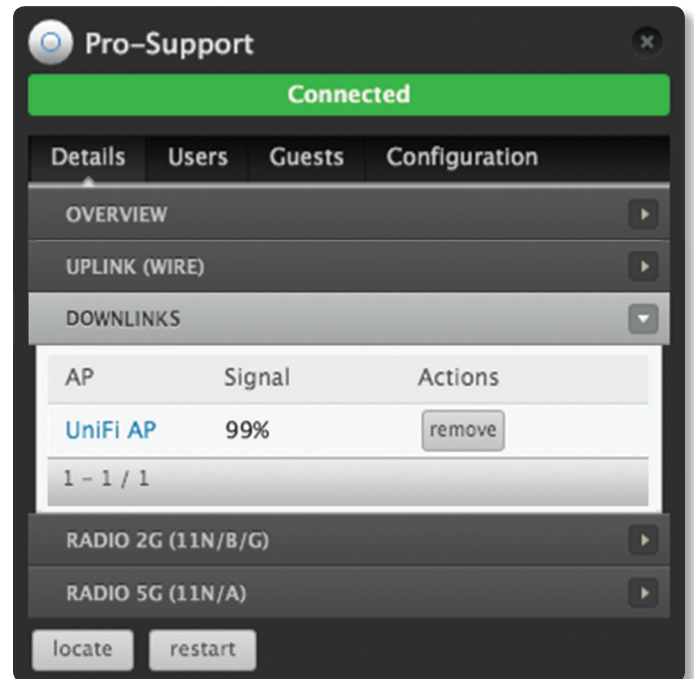
Click **Uplink (Wire)** to display details about the wired uplink.



- Speed** Displays the connection speed in Mbps.
- Duplex** Displays the mode, *Full Duplex* or *Half Duplex*.
- 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.

## Downlinks

The wireless Access Points currently connected to the wired Access Point are displayed.

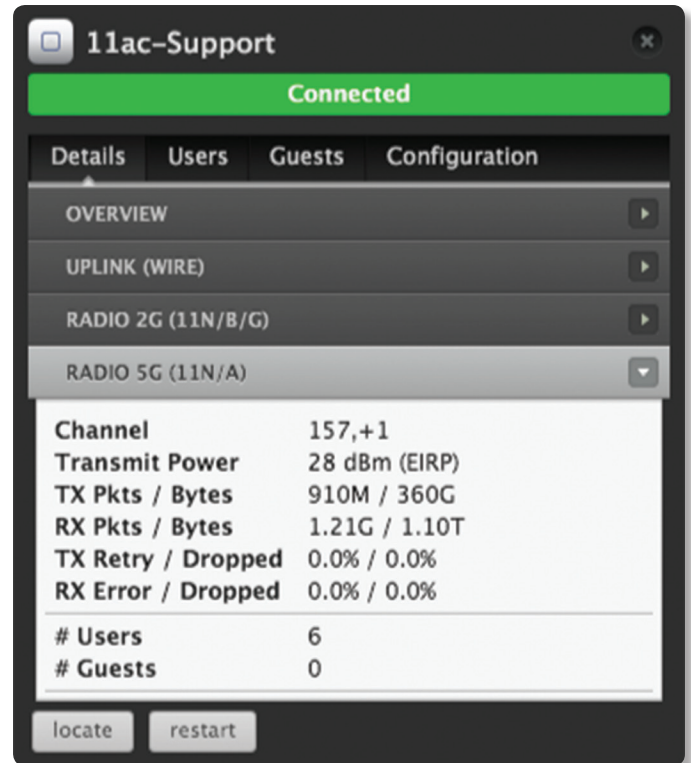
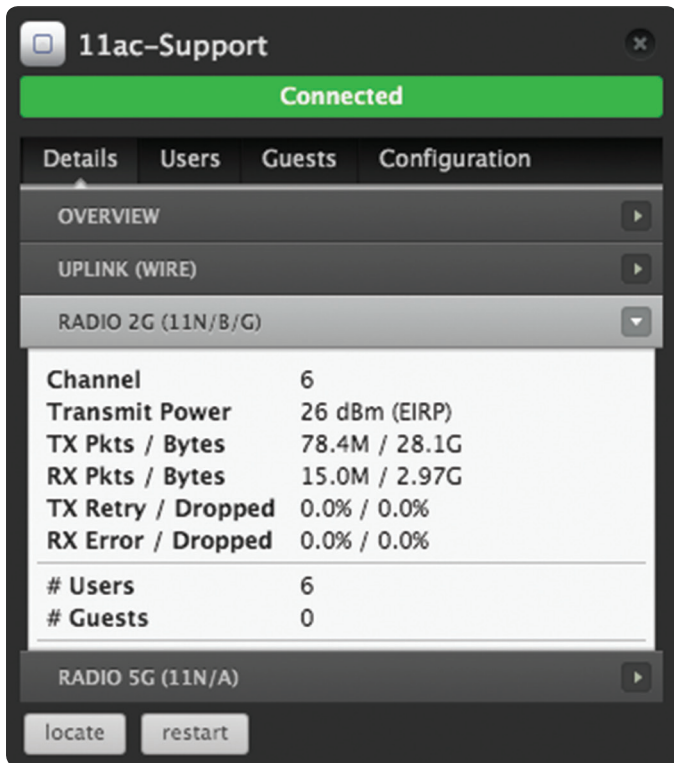


 **Note:** *Downlinks* will only be visible under the *Details* tab when a wireless Access Point is connected.

- AP** Displays the name, alias, or MAC address of the Downlink Access Point.
- Signal** Displays the percentage of signal strength between the two APs.
- Actions** Click a button to perform the desired action:
  - **Remove** Remove the wireless Access Point from the wired Access Point.


### Radio 2G (11n/b/g) or Radio 5G (11n/a)

Click **Radio 2G (11n/b/g)** or **Radio 5G (11n/a)** to display the channel and transmit/receive statistics.



**Channel** Displays the wireless channel in use.

**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 by the Access Point as packets and bytes.

**RX Pkts / Bytes** Displays the amount of data received by the Access Point as packets and bytes.

**TX Retry / Dropped** Displays the percentage of transmitted packets that needed to be resent and the percentage of packets that were dropped.

**RX Error / Dropped** Displays the percentage of packets received that needed to be resent and the percentage of packets that were dropped.

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

**# Guests** Displays the number of users connected to the guest network.

## Users

Connected			
Details	Users	Guests	Configuration
Name	WLAN	Signal	TX
UBNT-PC	jerry-corp	-56dBm	300M
mFi	jerry-corp	32dBm	52M
Jessica-PC	jerry-corp	-60dBm	52M
Matt-macair	jerry-corp	-59dBm	300M
android-83280f6a1fc60ea3	jerry-corp	7dBm	52M
Lobby-AirCam	jerry-corp	-82dBm	162M
android-e9b80efddf8b8130	jerry-corp	4dBm	72.222M
Austins-iPhone	jerry-corp	-53dBm	58.5M

**Name** Displays the hostname, alias, or MAC address of the connected user. You can click the name to get additional details. See [“User/Guest Details” on page 43](#) for more information.

**Name** Displays the hostname, alias, or MAC address of the connected user. You can click the name to get additional details.

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

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

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

## Guests

Connected			
Details	Users	Guests	Configuration
Name	WLAN	Signal	TX
Stacey	ubnt-guest	-48dBm	54M
android-b29194bd2959adf	ubnt-guest	-45dBm	72.222M
User-HP	ubnt-guest	-52dBm	65M
iPhone	ubnt-guest	0dBm	-0.001M

**Name** Displays the hostname, alias, or MAC address of the connected guest. You can click the name to get additional details. See [“User/Guest Details” on page 43](#) for more information.

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

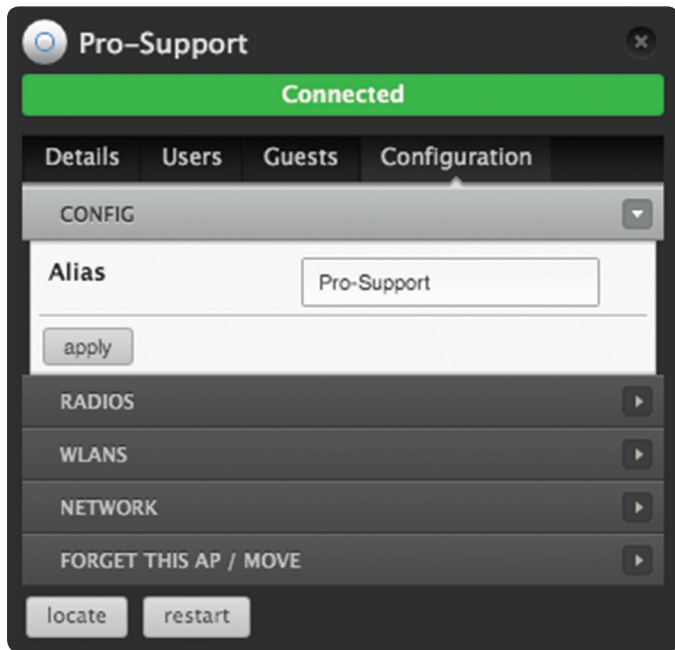
**Signal** Displays the percentage of signal strength between the guest and AP.

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

## Configuration

Change device configuration settings. Click the **Apply** button to save changes.

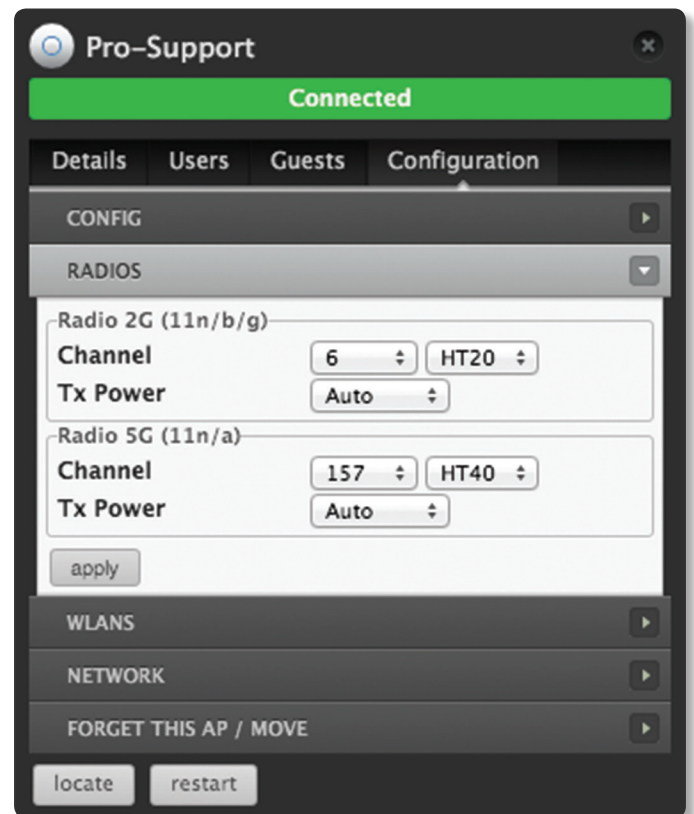
### Config



**Alias** Enter or edit the name of the device.

**Apply** Click **Apply** to save your change.

### Radio(s)



#### Radio (11n/b/g) or Radio (11n/a)

**Channel** Select a channel or keep the default setting, *Auto*. You can also use the default *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* setting is chosen for you ("**Zero Handoff**" on page 9) and cannot be changed.

**Tx Power** By default the transmit power is set to *Auto*. You can also manually select **High**, **Medium**, **Low**, or **Custom**.

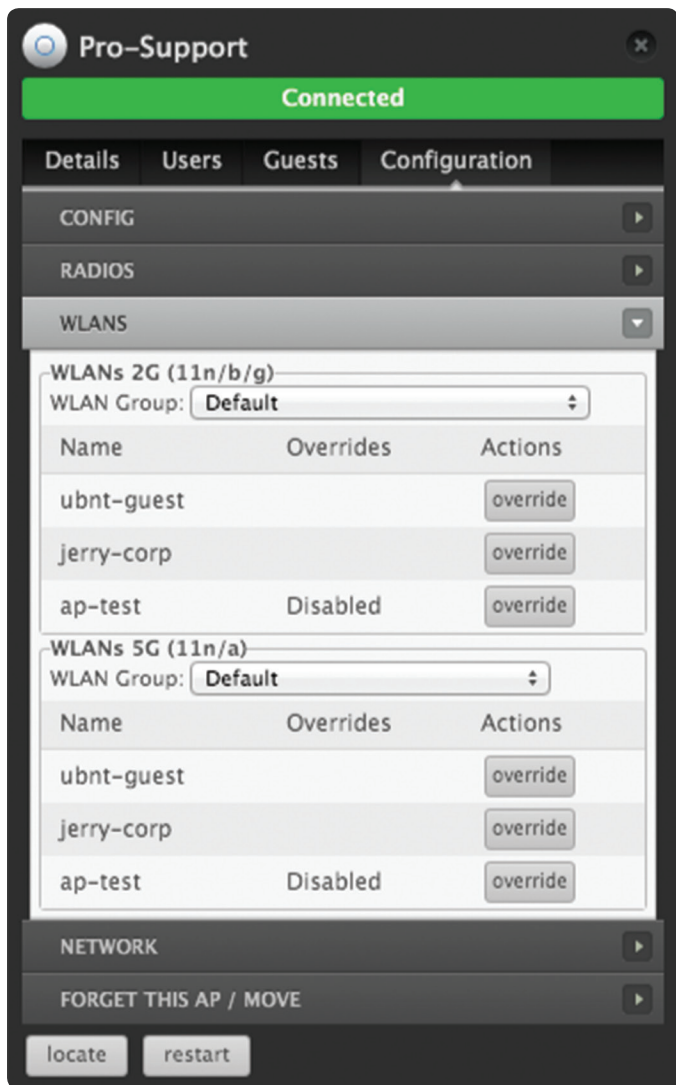
- **High** The highest TX power available.
- **Low** The lowest TX power available.
- **Medium** Halfway between *High* and *Low*.
- **Custom** Custom setting that you specify.

If the AP is using an external antenna, the *Antenna Gain* field will appear, allowing you to specify the gain of the attached antenna. After applying the settings, go to **Transmit Power** under *Details > Radio*, which always shows EIRP, and place the mouse over it to display how it's calculated.

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

## WLANs

You can deploy multiple wireless networks organized into WLAN groups on different Access Points.



### WLANs (11n/b/g) or WLANs (11n/a)

**WLAN Group** Select the appropriate WLAN group from the drop-down menu.

**Name** Displays the network name or SSID of the available wireless network.

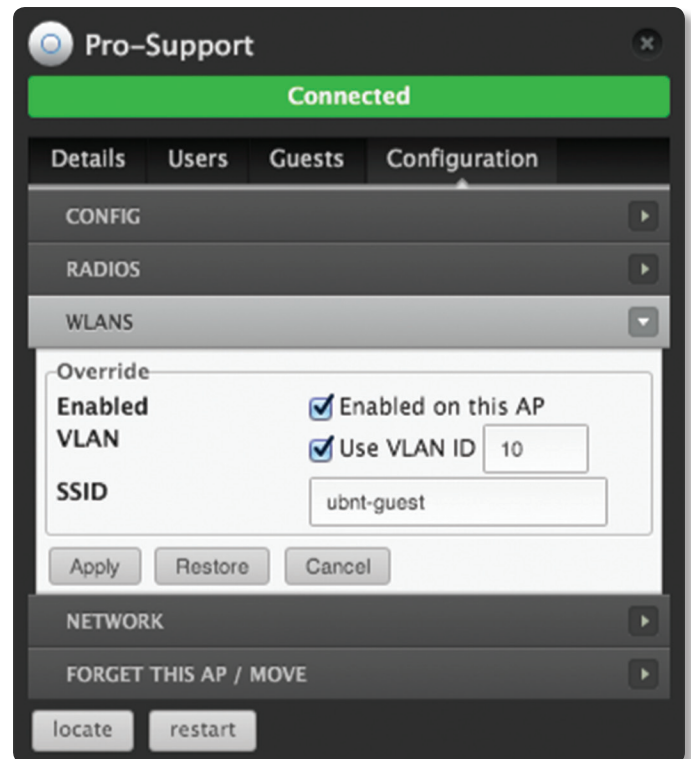
**Overrides** SSID override information applied to the wireless network.

**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 Access Point.

**VLAN** Select the checkbox to enable the VLAN.

- **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”** on [page 8](#), the Pre-Shared Key (PSK) for the SSID specified will automatically appear in this field.

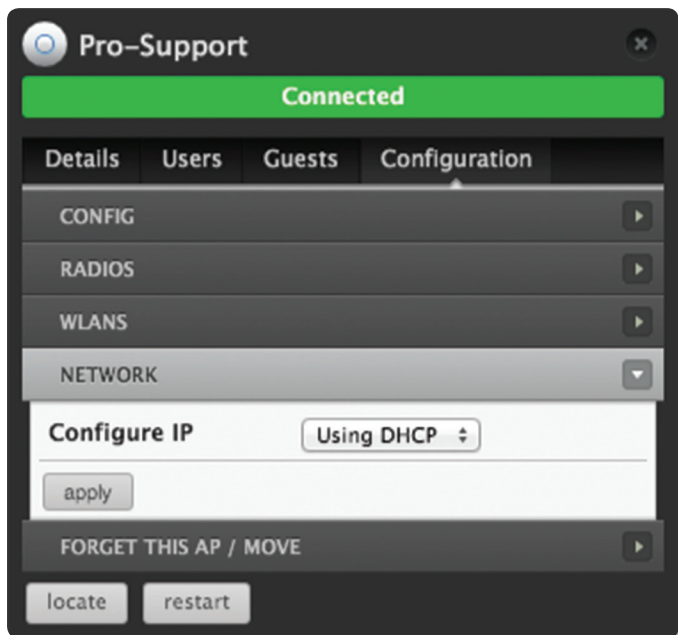
**Actions** Click a button to perform the desired action:

- **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.



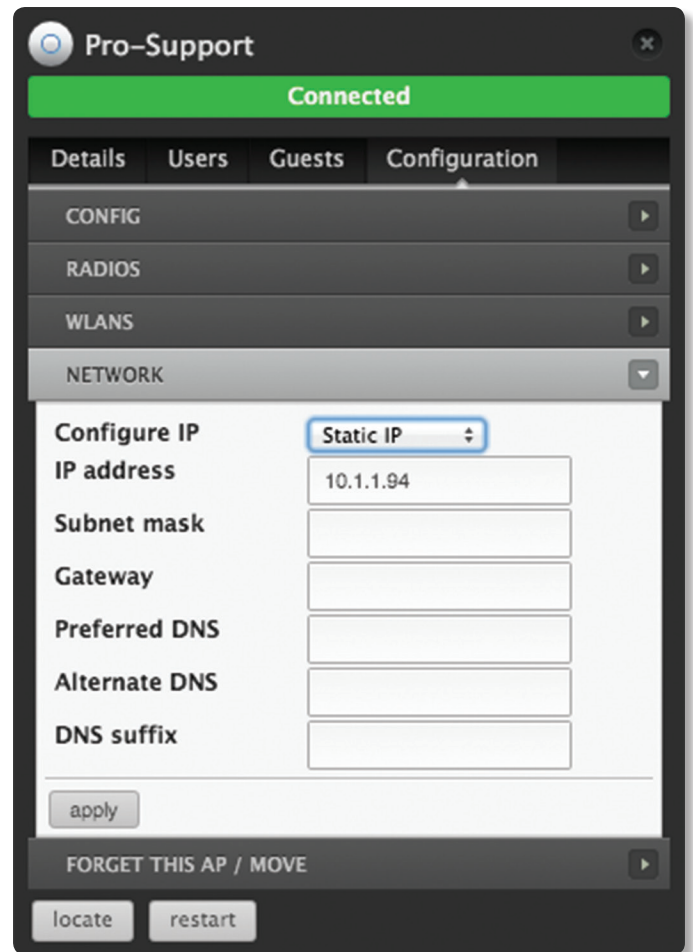
## Network

Configure the Access Point to obtain an IP address automatically or use a static IP address.



**Configure IP** Select **Using DHCP** or **Static IP**:

- **Using DHCP** Obtain the IP address, gateway IP address, and DNS (Domain Name Server) addresses dynamically from the external DHCP server.

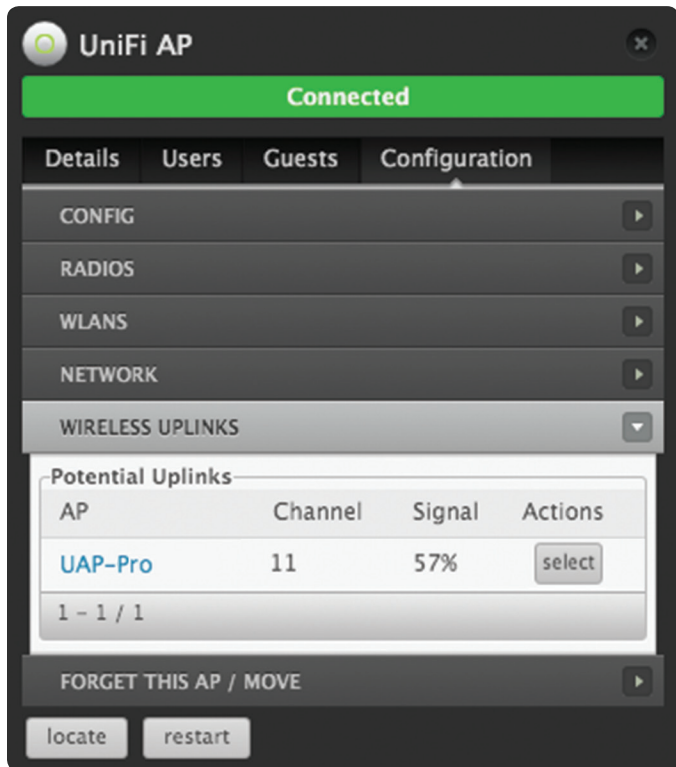


- **Static IP** Assign fixed network settings to the Access Point.
  - **IP address** Enter the IP address for the Access Point.
  - **Subnet mask** Enter the subnet mask for the Access Point.
  - **Gateway** Enter the IP address of the gateway.
  - **Preferred DNS** Enter the IP address of the primary DNS server.
  - **Alternate DNS** Enter the IP address of the secondary DNS server.
  - **DNS suffix** Enter the FQDN (Fully Qualified Domain Name) without the hostname.

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

## Wireless Uplinks

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



### Potential Uplinks


**AP** Displays the name or MAC address of the potential Uplink Access Point.

**Channel** Displays the channel in use for wireless communication.

**Signal** Displays the percentage of signal strength.

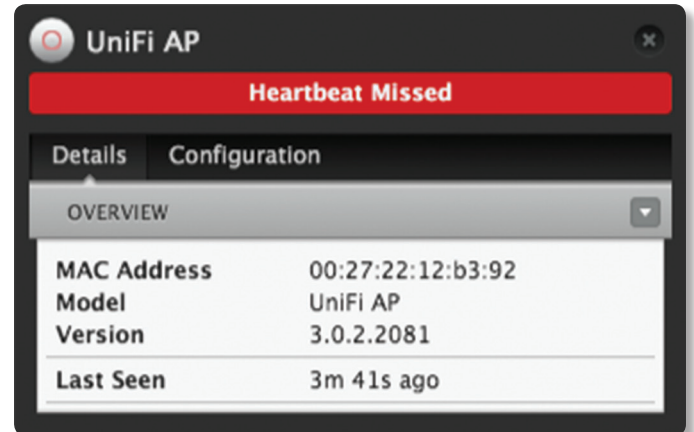
**Actions** Click a button to perform the desired action:

- **Select** Click **Select** to connect the wireless Access Point to the wired Access Point.
- **Remove** Click **Remove** to remove the wired Access Point from this list of Potential Uplinks.

 **Note:** An Access Point can only uplink to another Access Point 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 - Heartbeat Missed

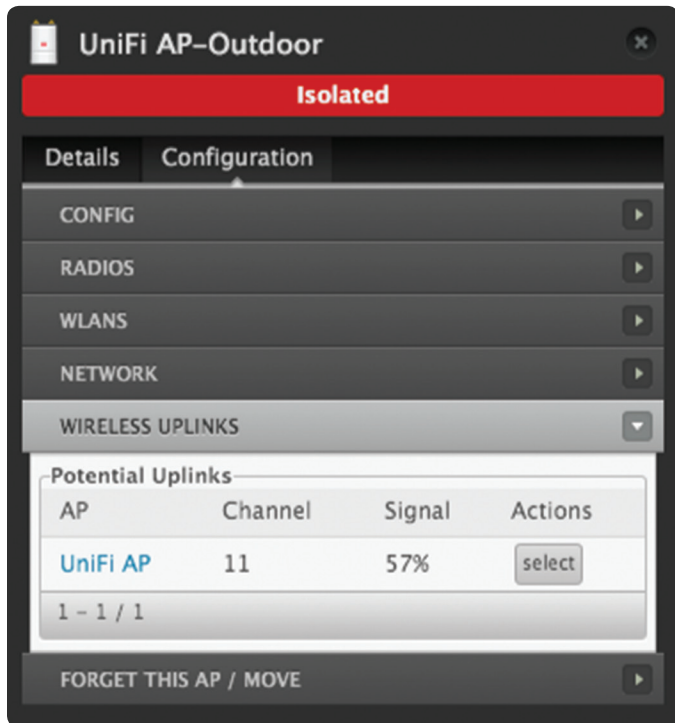
When a wired Access Point is disconnected from the router, its state will initially change to *Heartbeat Missed*, followed by *Isolated*, and ending with *Disconnected*.




## Access Point - Isolated


When an Access Point is in an *Isolated* state, you can reestablish a connection to the UniFi Controller software using one of three methods:

- Reconnect the Access Point to the router.
- Connect an Ethernet cable from the *Secondary Ethernet Port* (if available) of the isolated Access Point to the *Secondary Ethernet Port* (if available) of another UniFi AP that is connected to the router.
- Establish a wireless uplink to a wired Access Point. See **“Wireless Uplinks” on page 39** to find, select, and connect to a wireless Access Point.



**Isolated Access Point** In an *Isolated* state, the Access Point icon will change to red/orange with an *Isolated* icon  on the *Map* tab.

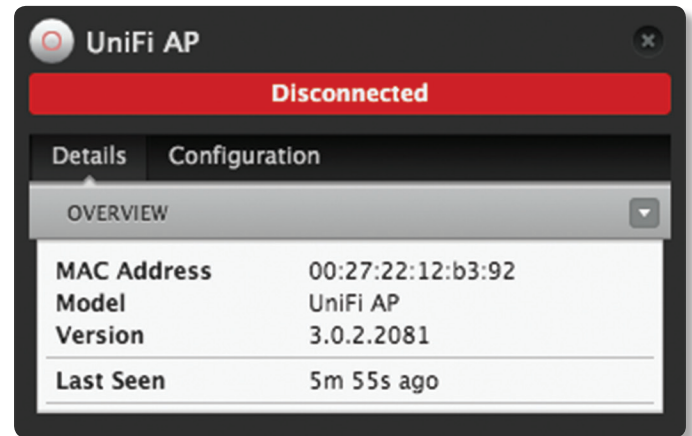
The LED on the actual device will be steady green with occasional flashing. This Access Point doesn't provide any wireless service.


 **Note:** Do not use the *Forget this AP* option when the Access Point is in an *Isolated* state. If you do, then the only way to make the Access Point accessible from the UniFi Controller is to take it down and connect it by wire.

## Access Point - Disconnected


When an Access Point is in a *Disconnected* state, you can reestablish a connection to the UniFi Controller software using one of three methods:

- Reconnect the Access Point to the router.
- Connect an Ethernet cable from the *Secondary Ethernet Port* (if available) of the isolated Access Point to the *Secondary Ethernet Port* (if available) of another UniFi AP that is connected to the router.
- Establish a wireless uplink to a wired Access Point. See **“Wireless Uplinks” on page 39** to find, select, and connect to a wireless Access Point.



**Disconnected Access Point** In a *Disconnected* state, the Access Point icon will change to red/orange with a *Disconnected* icon  on the *Map* tab.

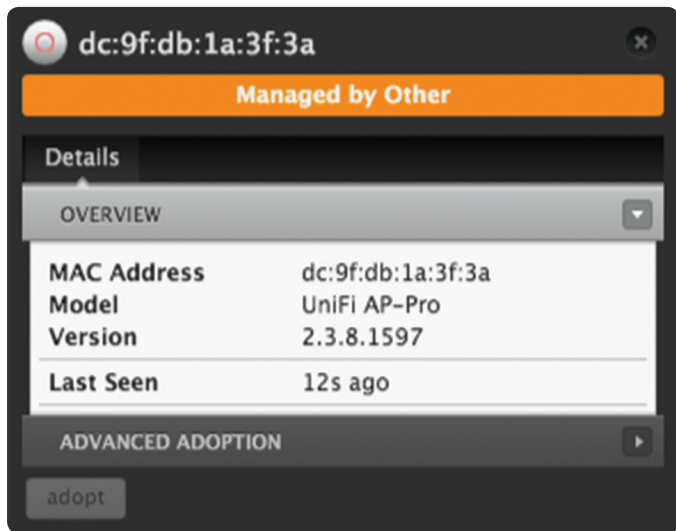
The LED on the actual device will be steady green with occasional flashing. This Access Point doesn't provide any wireless service.

 **Note:** Do not use the *Forget this AP* option when the Access Point is in a *Disconnected* state. If you do, then the only way to make the Access Point accessible from the UniFi Controller is to take it down and connect it by wire.

## Access Point - Managed by Other

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

### Overview



**MAC Address** Displays the MAC address of the Access Point.

**Model** Displays the model number.

**Version** Displays the version of software used on the Access Point.

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

## Advanced Adoption



**IP** Displays the IP address and SSH port of the Access Point.

**Username** Enter the SSH Username for management access. This is the *Device Username* you configured in **“Settings > Site” on page 7**.

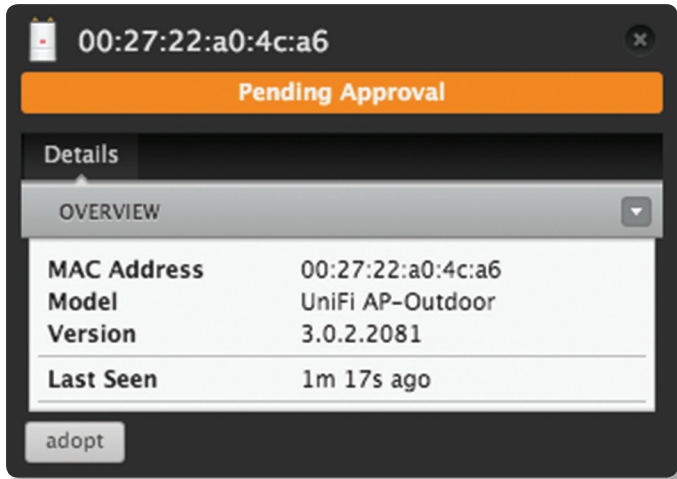
**Password** Enter the SSH Password for management access. This is the *Device Password* you configured in **“Settings > Site” on page 7**.

**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 Access Point 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 Access Point.

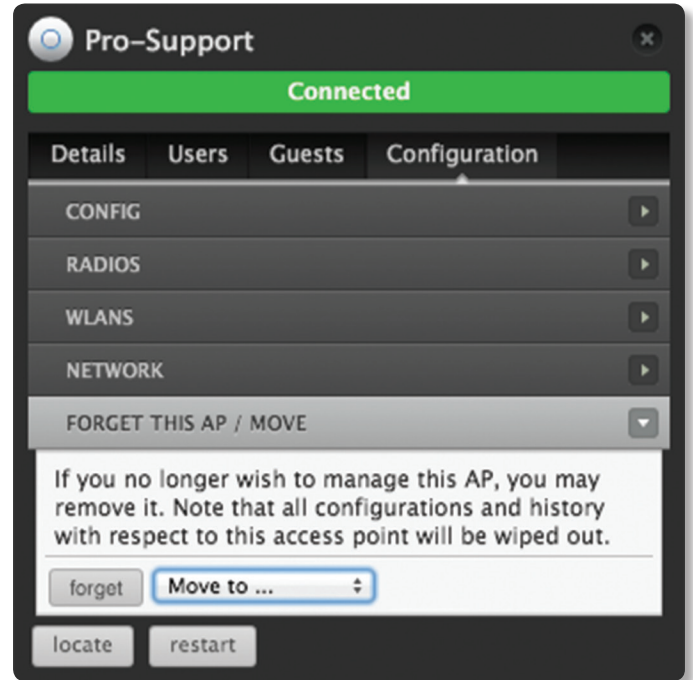
**Model** Displays the model number.

**Version** Displays the version of software used on the Access Point.

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

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

### Forget this AP/Move



**Forget** Remove the Access Point from management by the UniFi Controller software and reset it to factory default settings.

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

**Move to** To move the Access Point, select another site from the drop-down menu.

## Chapter 10: User/Guest Details

The User and Guest hyperlinks open the *User/Guest Details* window. Unless otherwise needed to specify differences between the user and guest, this User Guide will refer to both as user in the rest of this chapter.

The upper part of the window has four clickable tabs:

- *Details* (see below)
- *Statistics* (see the next column)
- **“History” on page 44**
- **“Configuration” on page 44**

The bottom of the window has two or three buttons:

- **Block** Block this user from accessing the network.
- **Reconnect** Reconnect a user that has been previously blocked.
- **Unauthorize** (Available for *guests* only.) Remove authorization of wireless guest access and disconnect the client.

### Details

#### Overview

Details	Statistics	History	Configuration
MAC Address	00:db:df:11:e0:31		
Hostname	PC		
IP Address	10.1.6.122		
Uptime	8h 52m 24s		
Connected AP	11ac		

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

**Hostname** Displays the name (if defined).

**IP Address** Displays the IP address of the Access Point.

**Uptime** Displays the amount of time the Access Point has been running without interruption.

**Connected AP** Displays the name, alias, or MAC address of the Access Point in use.

If the user is offline, the following information is displayed:

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

**Hostname** Displays the name (if defined).

**Last Seen** Displays the last date and time the user was connected to the primary or guest network.

### Statistics

Details	Statistics	History	Configuration
ESSID	jerry-corp		
Connected AP	11ac		
Channel	11 (11ng)		
Signal	99% (-3 dBm)		
TX Rate	104M		
RX Rate	6.5M		
Activity	12.0B/sec		
Power Save	Not enabled		
Down Pkts / Bytes	122K / 113M		
Up Pkts / Bytes	70.4K / 11.3M		

**ESSID** Displays the network name or SSID of the wireless network in use.

**Connected AP** Displays the name, alias, or MAC address of the Access Point in use.

**Channel** Displays the wireless channel in use.

**Signal** Displays the signal strength.

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

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

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

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

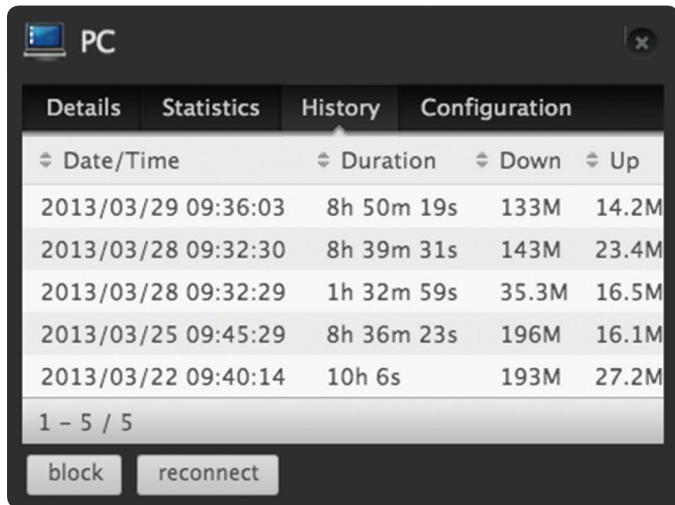
**Down Pkts / Bytes** Displays the amount of data downloaded by the user in packets and bytes.

**Up Pkts / Bytes** Displays the amount of data uploaded by the user in packets and bytes.



**Note:** The *Statistics* tab will only appear when the user is connected.

## History



Date/Time	Duration	Down	Up
2013/03/29 09:36:03	8h 50m 19s	133M	14.2M
2013/03/28 09:32:30	8h 39m 31s	143M	23.4M
2013/03/28 09:32:29	1h 32m 59s	35.3M	16.5M
2013/03/25 09:45:29	8h 36m 23s	196M	16.1M
2013/03/22 09:40:14	10h 6s	193M	27.2M

1 - 5 / 5

block reconnect

**Date/Time** Displays the date and time the user first connected to the Access Point.

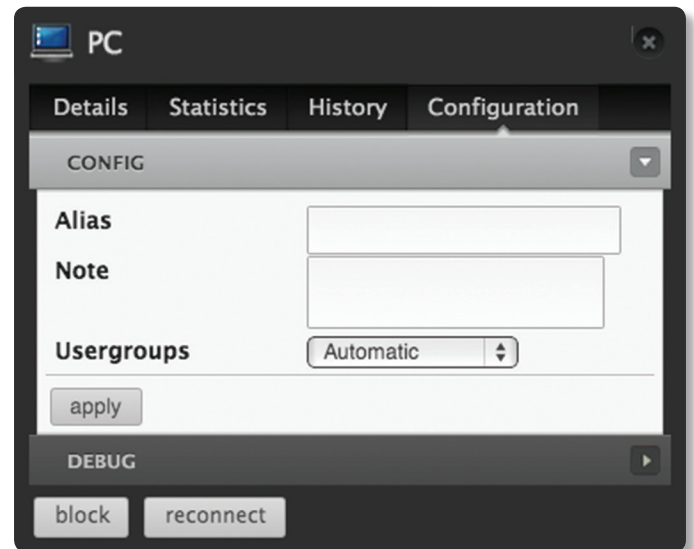
**Duration** Displays the length of time the user was connected to the Access Point.

**Down** Displays the amount of data downloaded by the user during the session.

**Up** Displays the amount of data uploaded by the user during the session.

## Configuration

### Config



PC

Details Statistics History Configuration

CONFIG

Alias

Note

Usergroups Automatic

apply

DEBUG

block reconnect

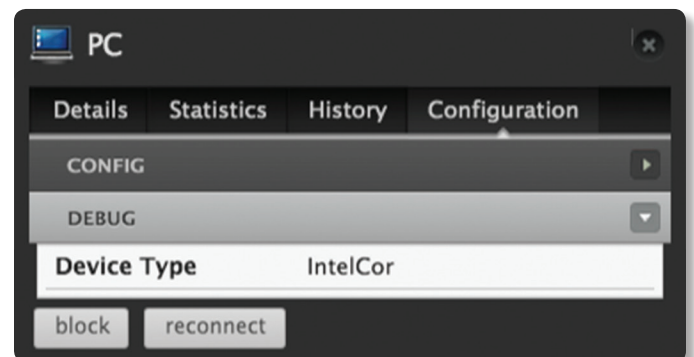
**Alias** Enter a name for the user.

**Note** Enter a description or comments. Once the note is saved, the user will be designated a “Noted” client on the *Insight > Known Wireless Clients* tab.

**Usergroups** Assign a User Group to the user, or keep the default, *Automatic*. User Groups are set up under the *Settings* tab > *User Groups* option (see **“Settings > User Groups” on page 13** for more information).

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

### Debug



PC

Details Statistics History Configuration

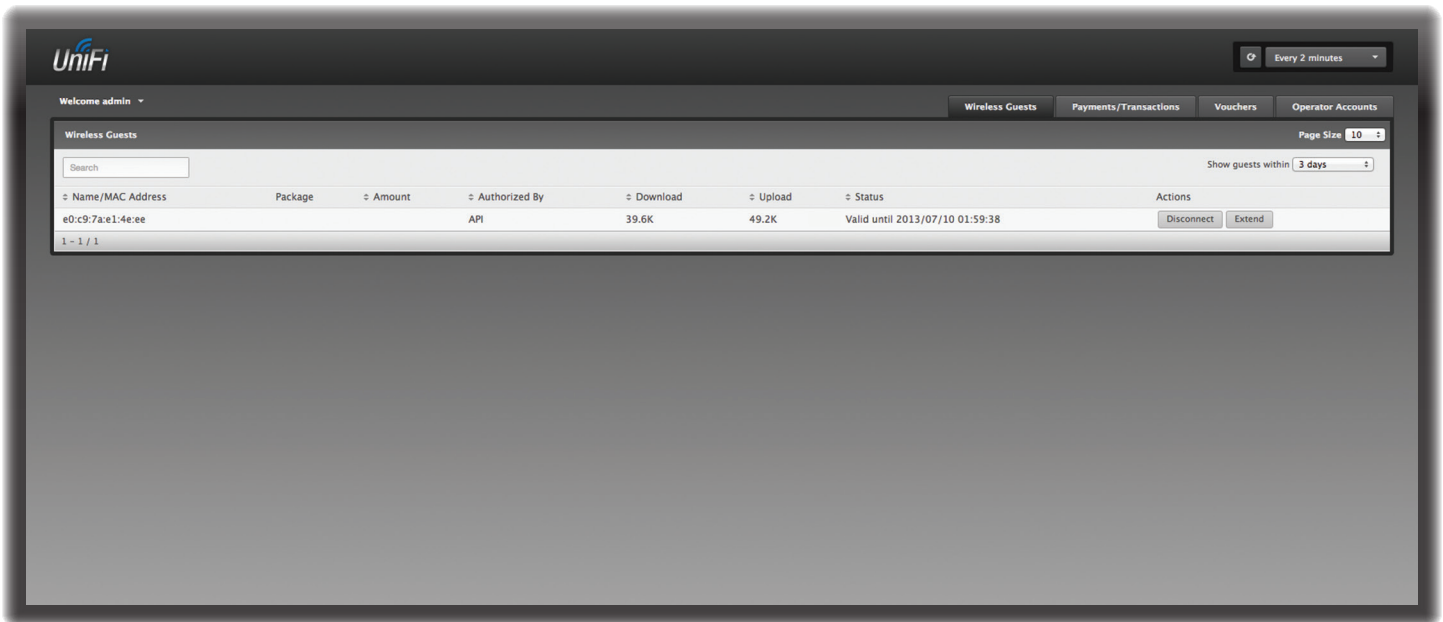
CONFIG

DEBUG

Device Type IntelCor

block reconnect

**Device Type** Displays the manufacturer of the client device.



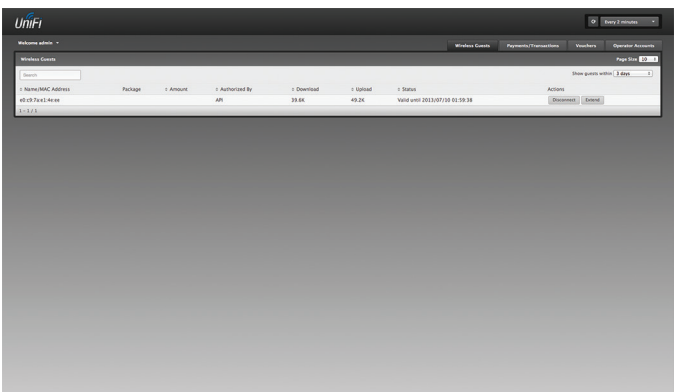
## Chapter 11: Hotspot Manager

*Hotspot Manager* includes four main tabs when accessed by the UniFi Controller admin account. These tabs include *Wireless Guests*, *Payments/Transactions*, *Vouchers*, and *Operator Accounts*.

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: *Wireless Guests*, *Payments/Transactions*, and *Vouchers*.

### 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 guests within** 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.

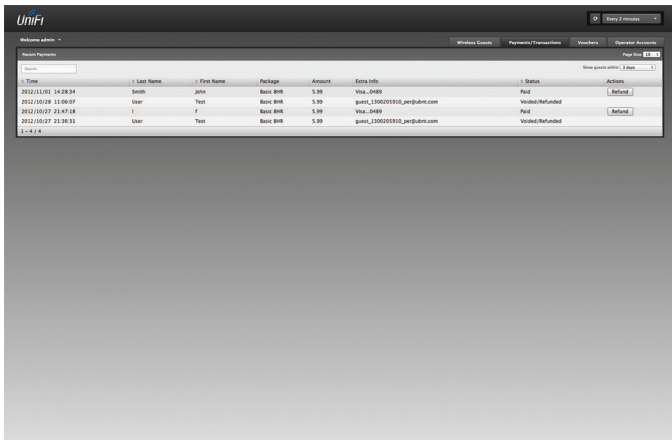
**Actions** Click a button to perform the desired action:

- **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/Transactions

The Hotspot's payments and transactions are displayed.



Time	Last Name	First Name	Package	Amount	Extra Info	Status	Actions
2012-11-01 14:28:34	Smith	John	Basic 60k	5.99	Via_Card	Paid	[Refund]
2012-10-08 13:06:57	User	Test	Basic 60k	5.99	gsmc_1300020303_per@ubnt.com	Voided/Refunded	
2012-10-07 21:47:18	I	F	Basic 60k	5.99	Via_Card	Paid	[Refund]
2012-10-07 21:36:31	User	Test	Basic 60k	5.99	gsmc_1300020303_per@ubnt.com	Voided/Refunded	

**Search** Enter keywords in the *Search* field to find a specific voucher based on *Time*, *Name*, *Package*, *Amount*, *Extra Info*, or *Status* value.

**Show guests within** 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.

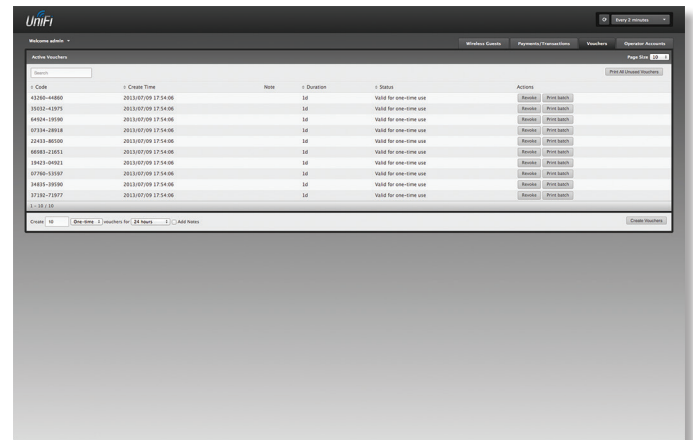
**Status** Displays the status of the transaction.

**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.



Code	Create Time	Note	Duration	Status	Actions
43208-4880	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
30324-4375	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
94906-1050	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
07316-8918	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
22418-8020	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
00808-2081	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
18428-0921	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
07706-3397	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
14410-3090	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]
37326-7377	2013-07-09 12:54:00		1d	Valid for one-time use	[Revoke] [Print Batch]

**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 **Print All Unused Vouchers** 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 *Add 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** Immediately deactivate the selected voucher.
- **Print Batch** Print the batch of vouchers created at the same time.

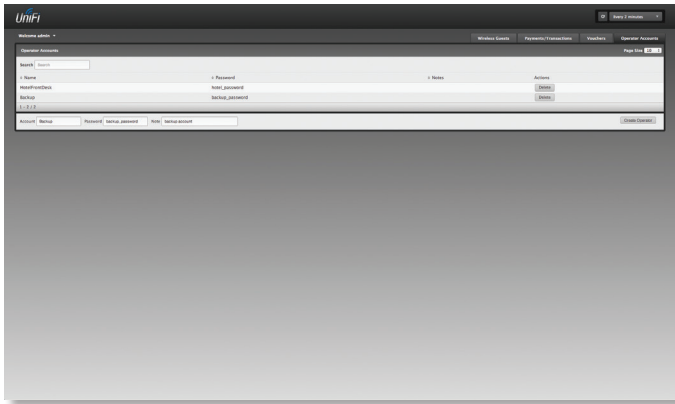
**Active Voucher Page Slider** Adjust the slider from left to right to view all *Active Vouchers*.

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

- **Create** \_\_ Enter the number of vouchers to create.
- \_\_ **vouchers** Select how often the voucher can be used: **One-time** or for **Multi-use**.
- **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**.
- **Add Notes** Click **Add Notes** to include any notes specific to this batch of vouchers.
- **Create Vouchers** Click **Create Vouchers** to create the vouchers as specified.

## 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.

**Account** 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 Operator** To create an operator account, complete the following:

- **Account** 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 Operator** Click **Create Operator** to create the operator account.

To test the operator account, log out of the UniFi Controller software and log in using the operator credentials. Only the *Wireless Guests*, *Payments/Transactions*, 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.

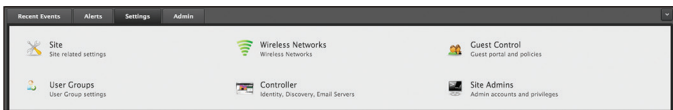
This open architecture allows you to include unlimited content while keeping development simple through the use of plain .html (hand code or use any editor of your choice). Testing is simple and immediate; simply reload changes from any browser.

## Enabling Portal Customization

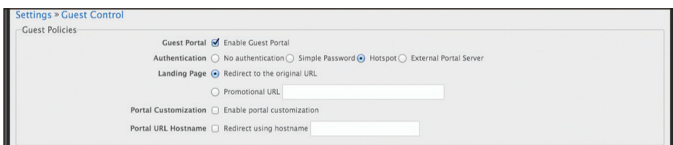
By default, *Portal Customization* is disabled in all *Guest Portal* implementations. See **“Settings > Guest Control” on page 10** for more information on enabling the *Guest Portal* for the following authentication and landing page options: *No authentication*, *Simple Password*, and *Hotspot*.

To enable *Portal Customization*, perform the following steps:

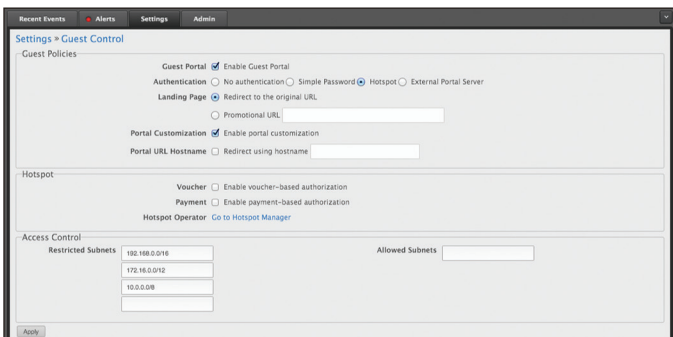
1. Go to **Settings** and click **Guest Control**.



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.
  - **Windows Vista** Go to **Start > Connect To**.
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. 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 10** 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 10** for screenshots of default portal pages by authentication method).

## 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

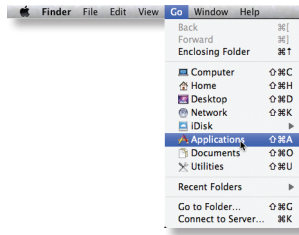
```
<Drive_Letter>:\Users\<Username>\Ubiquiti UniFi\data\sites\<site_name>\portal
```

For specific instructions on accessing the files, refer to the specific operating system:

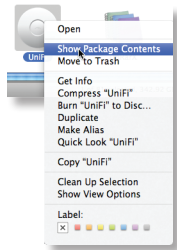
- **“Mac” on page 49**
- **“Windows” on page 50**

## Mac

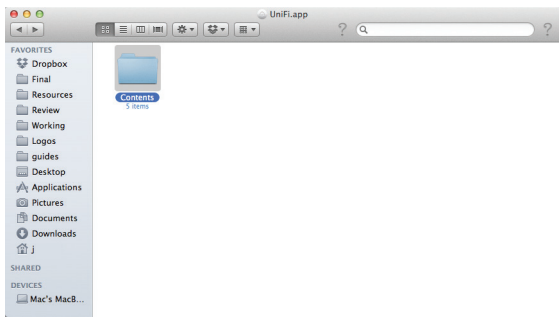
1. Navigate to **Go > Applications**.



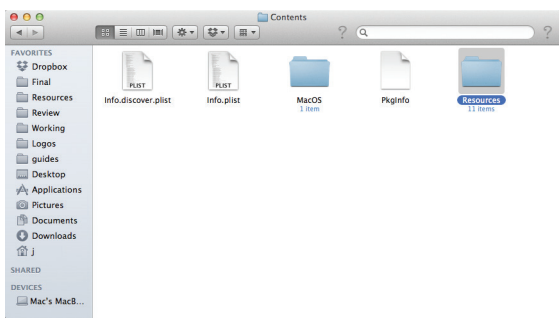
2. Control-click the **UniFi** application and then click **Show Package Contents**.



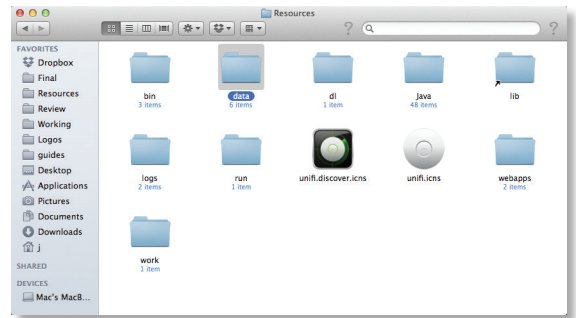
3. Double-click the **Contents** folder to open it.



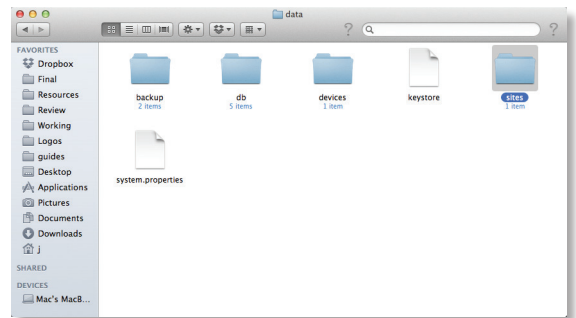
4. Double-click the **Resources** folder to open it.



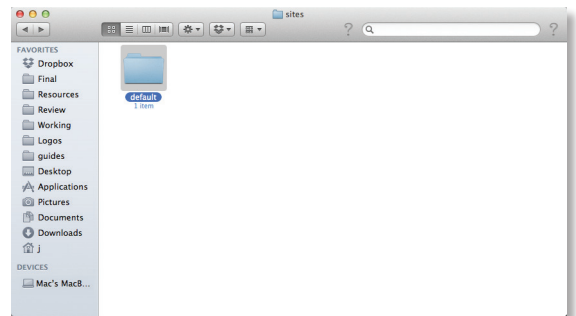
5. Double-click the **data** folder to open it.



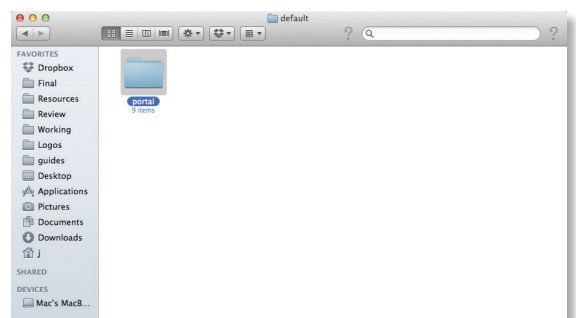
6. Double-click the **sites** folder to open it.



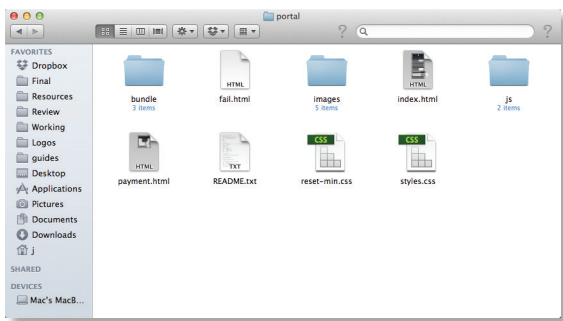
7. Double-click the folder whose name matches the name of the site you are configuring.



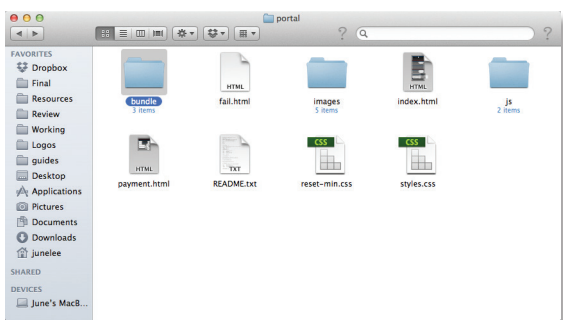
8. Double-click the **portal** folder to open it.



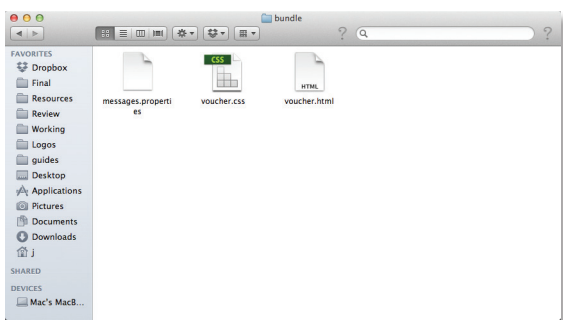
9. You have several files that you can customize in the portal folder (these are described in the *Customizable Default Files* section).



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.

```

messages.properties
## package 1
# account is in US dollars
package.1.account=5.99
package.1.hours=8
# what's shown in the Hotspot Manager
package.1.name=Basic 8H
# what's shown on the credit card statement
package.1.charge_label=Hotspot 8-Hour WiFi

## package 2
package.2.account=5.99
package.2.hours=24
package.2.name=Premium 24Hours
package.2.charge_label=Hotspot 1-dayWiFi

## package 3
# this is a free trial package (with account 0)
package.3.account=0
package.3.hours=2
package.3.name=Free Trial
# whether to overwrite the user group policy per VLAN/user, default is
false
package.3.list_overwrite=true
# http, default is unlimited
package.3.list_group=990
# http, default is unlimited
package.3.list_group=1024
# http, default is unlimited
package.3.list_group=1024

InvalidAccessPoint-Please connect from guest wireless network
InvalidPassword-Invalid Password
InvalidPinches-Invalid Voucher
VoucherQuoteExpired-The voucher has been used too many times
VoucherExpired-The voucher has expired
UseVoucher-1 have a voucher
PasswordRequiredForWirelessAccess-A password is required to access the
wireless network
PaymentCancelled-Payment cancelled
WelcomePage-TitledActionRequired - Guest Access
WelcomePage-FailedInternet-The hotspot is not configured correctly
PaymentPage-InputCredit-Please input the credit card information
PaymentPage-InvalidCardNumber-Invalid credit card number
PaymentPage-InvalidExpiration-Invalid expiration month
PaymentPage-InvalidExpiration-Invalid expiration year
PaymentPage-InvalidCVV-Invalid security code
PaymentPage-InvalidCountry-Invalid country code
PaymentPage-FailedInternet-Unable to process the payment

```

Additional details on portal customization can be found in our community site at:  
<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 Enterprise WiFi System Access Points. It is installed automatically as part of the UniFi Controller software installation process. See **“Software Installation” on page 2** for more information.

## Launching the UniFi Discovery Utility

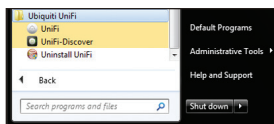
### Mac Users

From the Finder, click **Go > Applications** and double-click the *UniFi-Discover.app* icon.

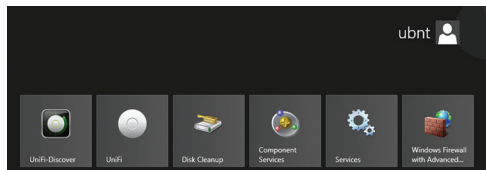


### PC Users

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 Access Points in both a factory default state and an unmanaged state (adopted but unable to contact the UniFi Controller software).

MAC Address	IP Address	Model	Version	Status			
00:27:22:12:b2:2b (UAP4)	192.168.25.10 (dhcp)	UniFi AP	develop.536	Managed/Adopted	locate	manage	reset
00:27:22:12:b3:92 (UAP1)	192.168.25.97 (dhcp)	UniFi AP	develop.536	Managed/Adopted	locate	manage	reset
00:15:6d:5c:b5:d1 (UAP6)	192.168.25.115 (dhcp)	UniFi AP	2.1.0.942	Managed/Adopted	locate	manage	reset

**MAC Address** Displays the MAC address and alias of the Access Point. The alias is displayed in parentheses if it has been specified; see **“Configuration” on page 36** for details.

**IP Address** Displays the IP address of the Access Point and the method used by the Access Point to obtain an IP address. The method is displayed as *DHCP* or *Static* in parentheses.


**Model** Displays the model number of the Access Point.

**Version** Displays the software version installed on the Access Point.

**Status** Displays the current status of the Access Point: *Pending*, *Managed/Adopted*, *Login Failed*, or *IP Unreachable*.

There are three buttons available:

- **“Locate” on page 52**
- **“Manage” on page 52**
- **“Reset” on page 53**

 **Note:** To reboot the Access Point, click one of the buttons listed above and proceed to **“Reboot” on page 53**.

## Locate

Locate the Access Point. The following window will appear:

**Actions** *Locate* is automatically selected.

**Username** If required, enter the device username.

**Password** If required, enter the device password.

**Apply** Click **Apply** to locate the Access Point. The LED on the Access Point will flash so that it can be differentiated from the other Access Points.

## Manage

Set the inform URL, allowing the Access Point 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** *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 Access Point to factory default settings. The following window will appear:

192.168.25.115 - Apply

**Device Information**

Status: **Managed/Adopted**  
This device is managed by other controller. You need to provide the username/password in order to perform any actions against this device.

Model: UniFi AP (2.1.0.942)

IP Address: 192.168.25.115 (dhcp)

MAC Address: 00:15:6d:5c:b5:d1 (UAP6)

Actions: **Restore to factory default**

---

Username:

Password:

**Actions** *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 Access Point to factory default settings.

## Reboot

To reboot the Access Point, click any of the buttons (*Locate, Manage, or Reset*) on the *UniFi Discovery Utility* screen. The following window will appear:

192.168.25.115 - Apply

**Device Information**

Status: **Managed/Adopted**  
This device is managed by other controller. You need to provide the username/password in order to perform any actions against this device.

Model: UniFi AP (2.1.0.942)

IP Address: 192.168.25.115 (dhcp)

MAC Address: 00:15:6d:5c:b5:d1 (UAP6)

Actions: **Reboot**

---

Username:

Password:

**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 Access Point.



## Appendix C: Contact Information

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### 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.

#### Online Resources

Support: [support.ubnt.com](http://support.ubnt.com)

Community: [community.ubnt.com](http://community.ubnt.com)

Downloads: [downloads.ubnt.com](http://downloads.ubnt.com)



2580 Orchard Parkway  
San Jose, CA 95131  
[www.ubnt.com](http://www.ubnt.com)

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