UBIQUITI™
NETWORKS

*air*Vision™

IP Camera/NVR
Management System

Software Release: 2.x

*air*Vision™

USER GUIDE

Table of Contents

Chapter 1: Installation

Overview

airVision™ is a powerful, flexible, integrated IP video management platform for video surveillance designed to work with Ubiquiti's airCam™ product line. airVision has an intuitive, configurable, and feature-packed user interface with advanced features such as motion detection, auto-discovery, user-level security, storage management, reporting, and mobile device support.

airVision is pre-installed on the airVision NVR. This chapter provides instructions for users that wish to install the airVision software on a computer.

System Requirements

- Intel Atom D2500 CPU, 2 GB RAM, 100 GB HDD
- Microsoft Windows 7+ 64-bit or Ubuntu 12.04+ / Debian 6+ 64-bit
- Java Runtime Environment 1.6+
- FlashPlayer 11
- Web Browser: Mozilla Firefox, Google Chrome, Apple Safari, or Microsoft Internet Explorer 10 (or above)

Hardware Installation

Ensure your cameras are running the latest version of the camera firmware. The latest firmware can be found at **downloads.ubnt.com/airvision**

Follow the directions in the Quick Start Guide that accompanied your airCam to install your camera.

Software Installation

Download the latest version of the airVision software at **downloads.ubnt.com/airvision**
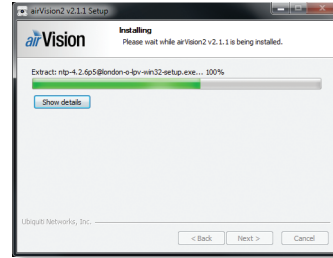
1. Launch the executable (**.exe)** file. You may be asked to allow the program to make changes to this computer. If so, you will need to click **Yes**.

2. The airVision NVR Setup Wizard will start. Click **Next**.
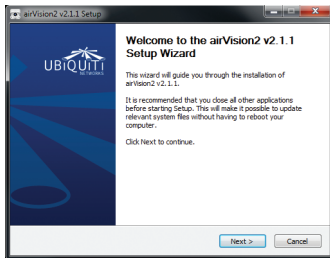
3. To continue, you must click **I agree** to accept the license agreement.
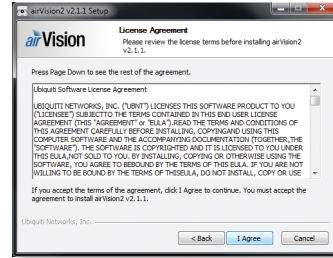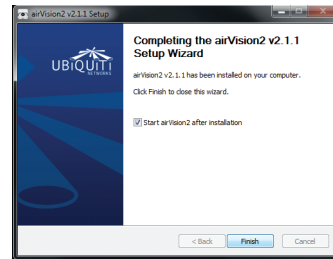

4. The airVision Setup Wizard will start. Click **Next**.

5. If your computer doesn't have Java 1.6 or above installed, you will be prompted to install it. Click **Install** to continue. Click **Close** when it is finished installing.

6. Be sure that *Start AirVision 2 after installation* is selected and click **Finish**.

7. The airVision software will start. Once airVision has started, click the airVision tray icon and select **Open in Browser**.
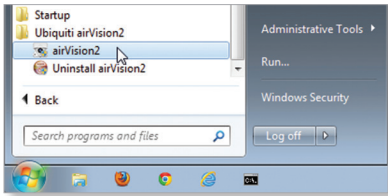
airVision tray icon
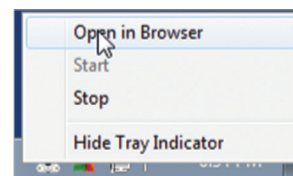
Launching the airVision Software

If you selected *Start AirVision after installation* when you installed the software, airVision will launch automatically. When you need to launch the software again or if you didn't select the option, you can launch airVision via the following methods.

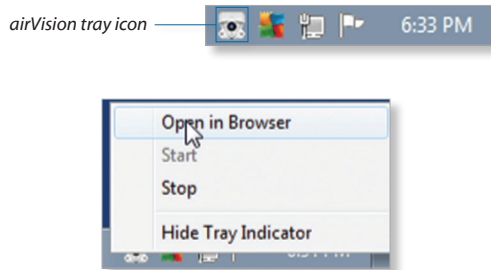1. Launch the airVision software using one of the following methods:

   • Start > Programs
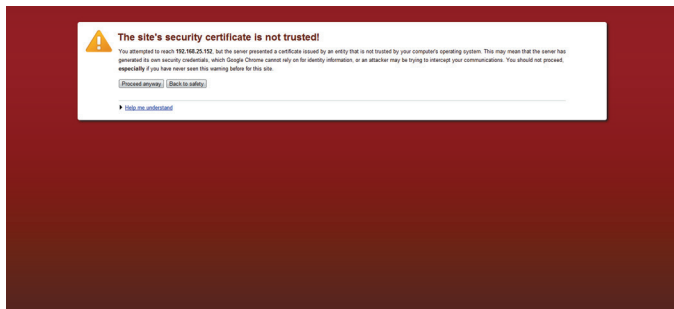

   • airVision desktop icon.

2. The airVision software will start. Once airVision has started, click the airVision tray icon and select **Open in Browser**.
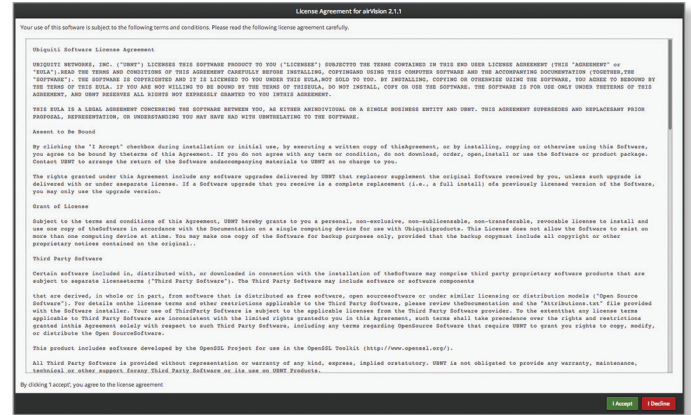
airVision tray icon ─────

Configuring the airVision Software

1. You may receive a security certificate warning, click **Proceed anyway**.

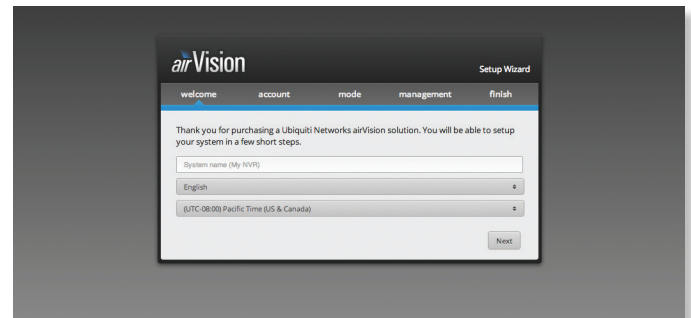2. The airVision License Agreement will appear. To begin you must accept the terms and click **I accept**.

3. The airVision Setup Wizard will appear:

a. Enter a system name for the NVR.

b. Select your preferred language.

c. Specify your time zone.

d. Click **Next**.

4. Enter an administrator email address, name, and password to use when accessing the airVision Controller Interface. Confirm your password. Click **Next**.
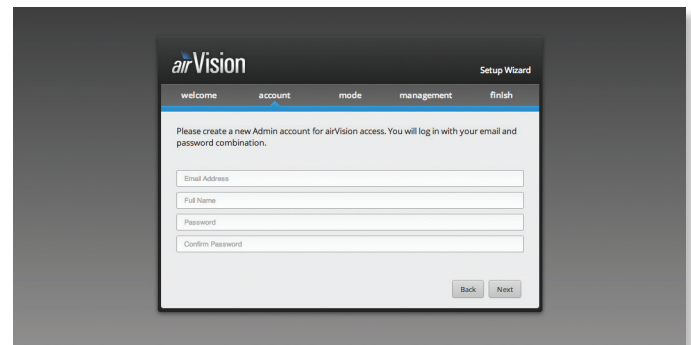
5. Choose one of the following:

- To set up this airVision NVR as a new airVision Controller, select **Create a new Controller**. Click **Next**.
- To link this airVision NVR to an existing airVision Controller, click **Detect Controllers** and select the Controller from the drop-down list. Click **Next**.
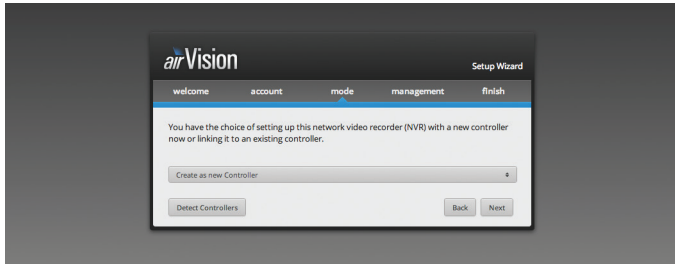
6. Select your desired management settings. To enable automatic airCam management, enter the airCam login username and password. Click **Next**.
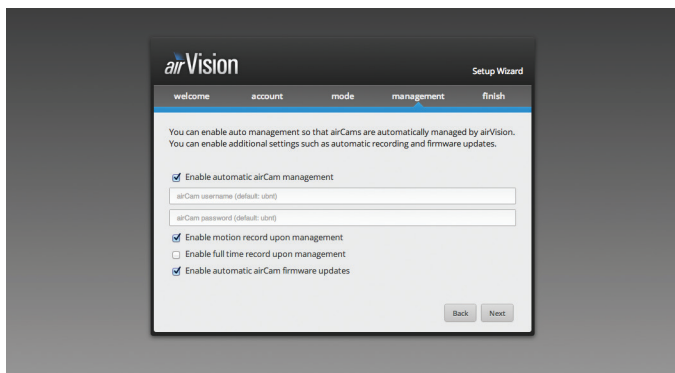
7. Review your settings. Click **Finish** to save your settings, or click *Back* to make changes. When finished, the airVision Controller Interface will launch.
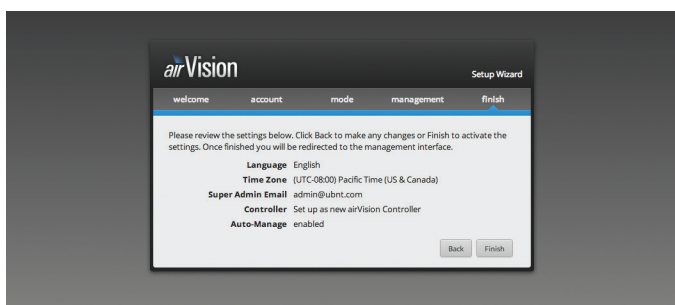
8. A login screen will appear for the airVision Controller Interface. Enter the email address and password that you created, and click **Login**.
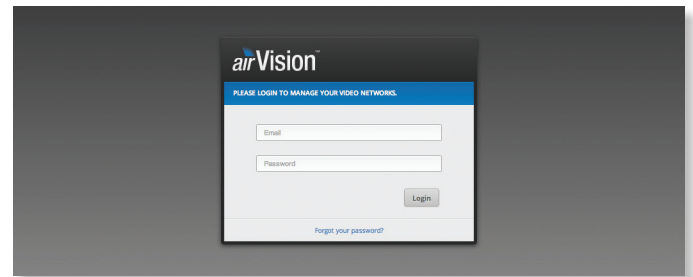
Proceed to the next chapter for information on using the airVision software.

Chapter 2: Using the airVision Software

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

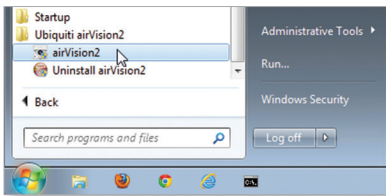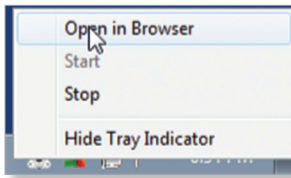To access the interface, perform the following steps:

1. Launch the airVision application if it hasn't already been started. Windows users, go to:
   Start > All Programs > Ubiquiti airVision2 > airVision2

2. The airVision software will start. Once airVision has started, click the airVision tray icon and select **Open in Browser**.

3. The login screen will appear. Enter the email address and password in the appropriate fields and click **Login**.
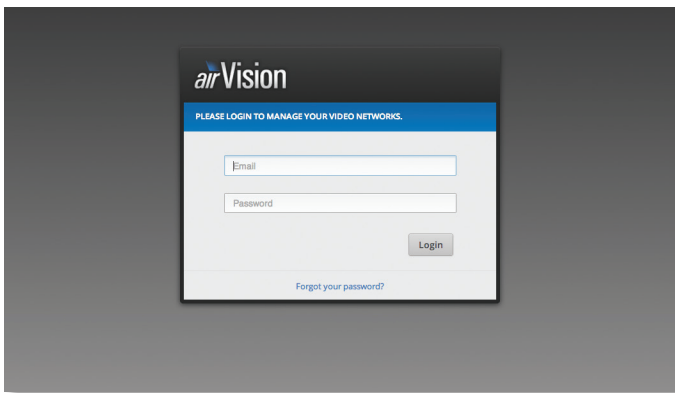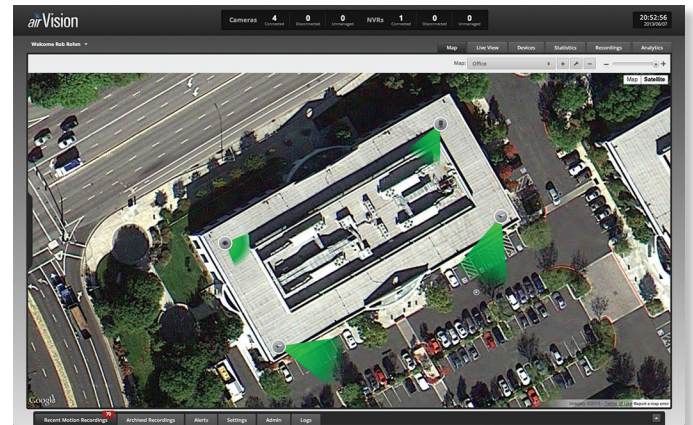

Interface Tabs

The airVision 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.

Common Interface Options

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

Cameras

- **connected** Drop-down clickable list of all of the cameras that are online.
- **disconnected** Displays a list of cameras that were previously online but are no longer accessible.
- **unmanaged** Drop-down clickable list of all of the cameras that are not yet managed but are available for management.

NVRs

- **connected** Drop-down clickable list of all of the NVRs that are online.
- **disconnected** Displays a list of NVRs that were previously online but are no longer accessible.
- **unmanaged** Drop-down clickable list of all of the NVRs that are not yet managed but are available for management.

Time/Date

The current time and date are displayed on the screen.

Welcome <username>

The welcome on the left has a drop-down menu that allows you to select or create camera profiles or log out.

Camera Profiles

Camera profiles can be created to easily save and select different camera recording configurations.

Recent Motion Recordings

Displays a list of recent motion recordings, including the date and time the recording occurred and camera details.
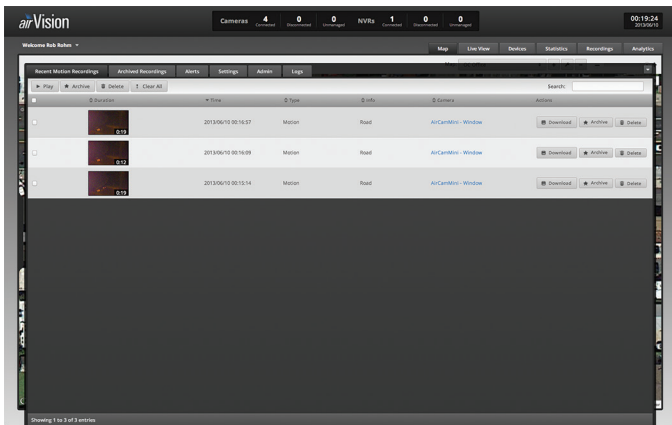
Clear   Clears the list of Recent Recordings. This doesn't delete the actual recordings; it just removes the entries from this list.

Search   Allows you to search for specific text. Simply begin typing; there is no need to press *enter*. The results are filtered in real time as soon as you type two or more characters.

Time   Displays the date and time that the recording took place. The *year/month/day* and *hour:minute:seconds* are displayed.

Type   The type of recording.

Info   Displays the zone information.

Camera   Displays the name of the camera that captured the recording. It is a clickable link that will open the *Camera Details* window. For details on the *Camera Details* window, refer to **"Camera Details Window" on page 21**.

Archived Recordings

Search   Allows you to search for specific text. Simply begin typing; there is no need to press enter. The results are filtered in real time as soon as you type two or more characters.
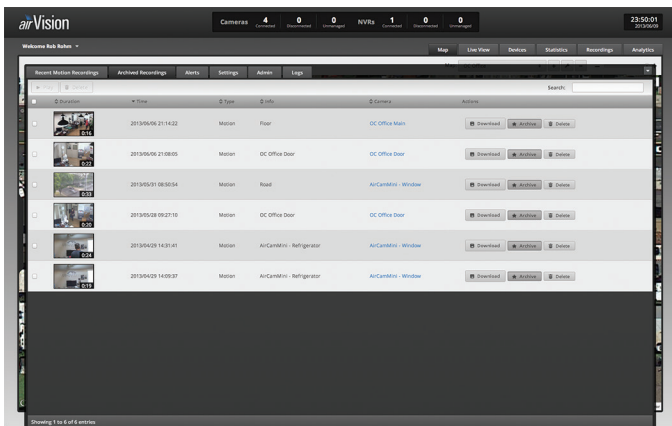
Time   Displays the date and time that the recording took place. The *year/month/day* and *hour:minute:seconds* are displayed.

Type   The type of recording.

Info   Displays the zone information.

Camera   Displays the name of the camera that captured the event. It is a clickable link that will open the *Camera Details* window. For details on the *Camera Details* window, refer to **"Camera Details Window" on page 21**.

Download   Click the **Download** button to save a .MP4 video file of the selected clip to your computer.

Archive   If you wish to remove a recording from the list of archived recordings, simply click the **Archive** button on the right and it will be removed from the list. This doesn't delete the actual recording.

Delete   Click **Delete** to immediately delete a recording permanently.

Alerts

Today/All Pending/Archived   Displays a list of Alerts. Toggle between alerts from *Today*, *All Pending*, and *Archived* alerts.
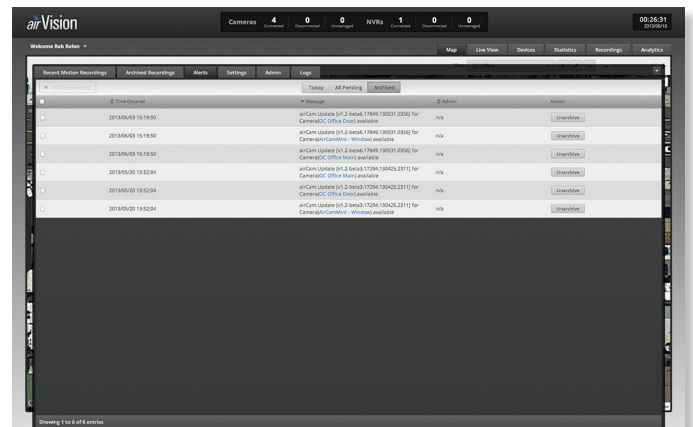
**Time Occurred**   Displays the date and time that the event took place. The *year/month/day* and *hour:minute:seconds* are displayed.

Message   Details of the alert are listed here. Some messages contain clickable links, which are underlined and gray. These links will open the device details window.
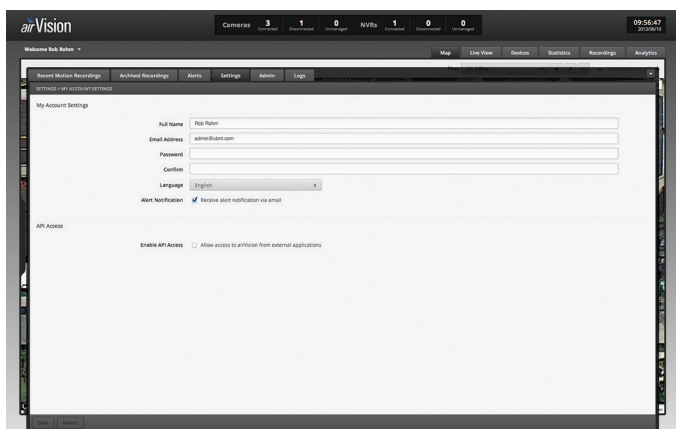
Admin   Displays the name of the associated admin (if applicable).

Actions   Allows you to archive alert messages.

Settings
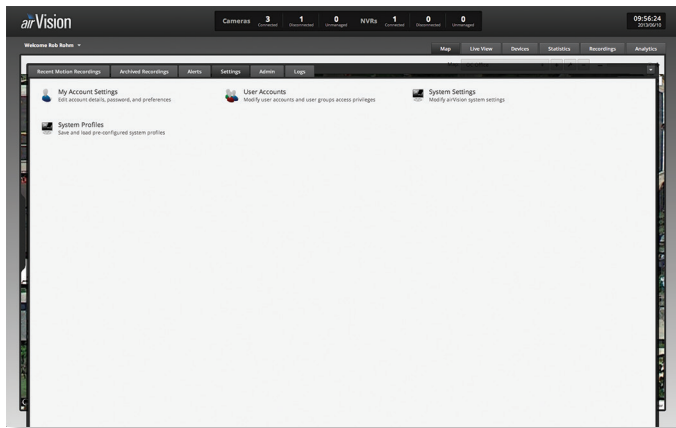
My Account Settings

My Account Settings

Full Name The name associated with the currently logged in account.

Email Address The email address used to log in to the current session.

Password Enter the password to use for this account.
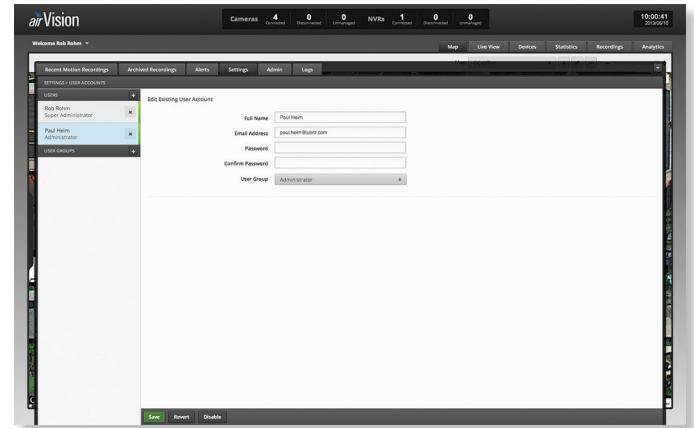
Confirm Confirm the password.

Language Select your language preference.

Alert Notification Click to include this account when email alert notifications are sent out.

API Access

Enable API Access Check to allow access to airVision from external applications.

User Accounts (Only visible to admin)

Users

Full Name The full name of the user.

**Email Address** The email address used to log in.

Password The password to use for this account.

Confirm Password Confirmation of the password.

User Group Select an existing user group, create a new user group, or select custom access to assign camera access, API access, and choose whether to allow alert notifications.

Group

Create groups to give custom access rights to multiple users.
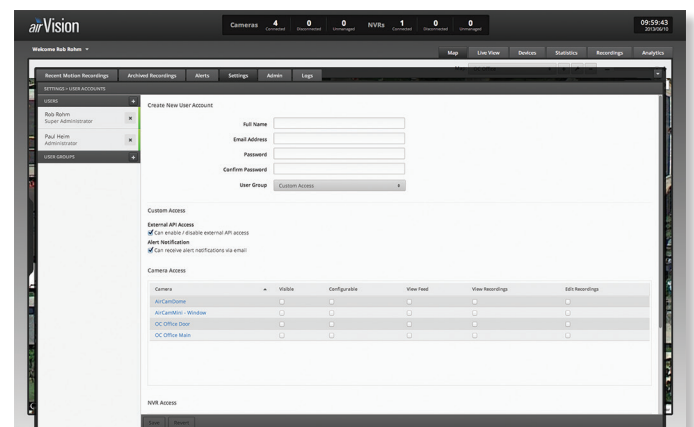
Create User Group

Group Name Enter a name for the group.

External API Access When this is enabled, users in this group will be allowed to enable or disable external API access.

Alert Notification When enabled, users in this group have the ability to receive alert notifications via email. Alert notifications still need to be configured. This just grants them the rights to receive them. Refer to **"Alerts" on page 22** for details on configuring alerts.

Camera Access

Visible When this is enabled, the camera itself is visible to the user group. If only this item is enabled, users cannot configure the camera, view the live feed, or view or edit recordings.

Configurable When enabled, the camera settings can be configured by users in the group.

View Feed When enabled, the live feed is accessible by users in the group.

View Recordings Grants access to view recordings. Users can play the videos in airVision or download MP4 clips.
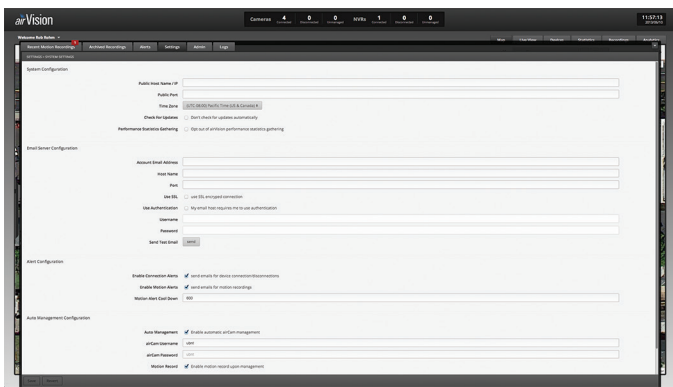
Edit Recordings When enabled, users of this group can edit recordings, allowing archiving and deletion.

NVR Access

Visible When this is enabled, the NVR itself is visible to the user group.

Configurable When enabled, the NVR settings can be configured by users in the group.

System Settings

System Configuration

Public Host Name / IP Public Host / IP information for the airVision system.

Public Port Public port for use with the airVision system.

Time Zone The time zone the airVision Controller is located in.

Check for Updates airVision automatically checks for system updates but doesn't install them unless requested. If you do not want airVision to check for updates, select this option.

Performance Statistics Gathering airVision gathers performance statistics and provides them to Ubiquiti for reference in an effort to continuously improve performance. If you want to opt out of statistics gathering, click this option.

Email Server Configuration

Account Email Address Enter the account information for the email address being used to send the alert.

Host Name Enter the host information (typically the SMTP settings).

Port Enter the port number, which is usually 465.

Use SSL If your email provider requires and SSL-encrypted connection, click this.

Use Authentication If your email provider requires authentication, click this and enter the username and password associated with the account email address.

Username Enter the username associated with the email address.

Password Enter the password associated with the email address.

Send Test Email Click **send** to send a test email once all of your email settings are configured.

Alert Configuration

Enable Connection Alerts Whenever a device is connected or disconnected, an email alert will be sent out if this is enabled.

Enable Motion Alerts When a motion event occurs, an email will be sent out if this option is enabled.

Motion Alert Cool Down Defines the amount of time (in seconds) to wait after a motion event before sending out another motion event email alert.

Auto Management Configuration

Auto Management When enabled, newly discovered cameras will automatically be managed by airVision.

airCam Username Enter the airCam username.

airCam Password Enter the airCam password.

Motion Record When enabled, cameras that are automatically managed will have motion recording enabled.

Full Time Record When enabled, cameras that are automatically managed will have full-time recording enabled.

Firmware Updates Check to enable automatic airCam firmware updates.

System Profiles

Allows you to define and save camera profiles. You can create a new profile by adding cameras manually or select the camera information from the current camera profile.
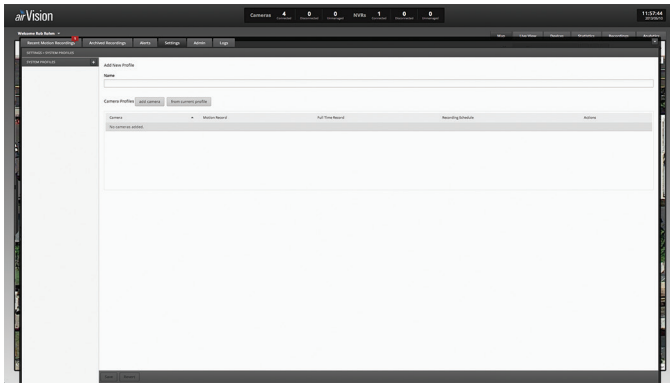
Add New Profile

Name Enter a name for the camera profile.

Camera Profiles

add camera Select **add camera** to select which cameras you want to include in the profile.

from current profile This will duplicate all of the current camera settings.

For each camera you can select motion record, full-time record, and a recording schedule. Motion and full-time recording can both be enabled on one camera as well.

Once you've finished all of your camera profile settings, click **Save**.

Admin
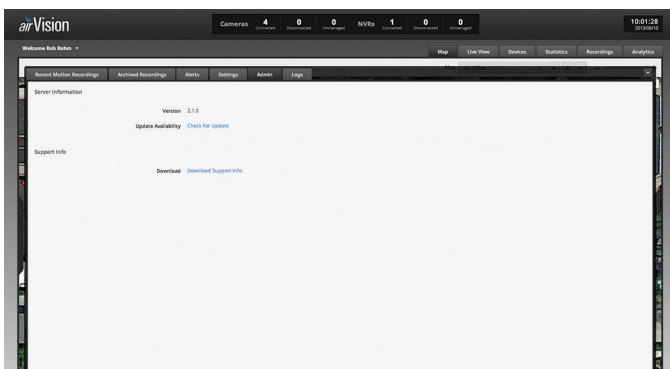
Server Information

Version The airVision software version is displayed here. If there is an update, airVision will automatically download it and display it here (unless *check for updates* is disabled).

Support Info

Download Support Info Select this option to download a file to your computer with information about your configuration that can be emailed to our support team.
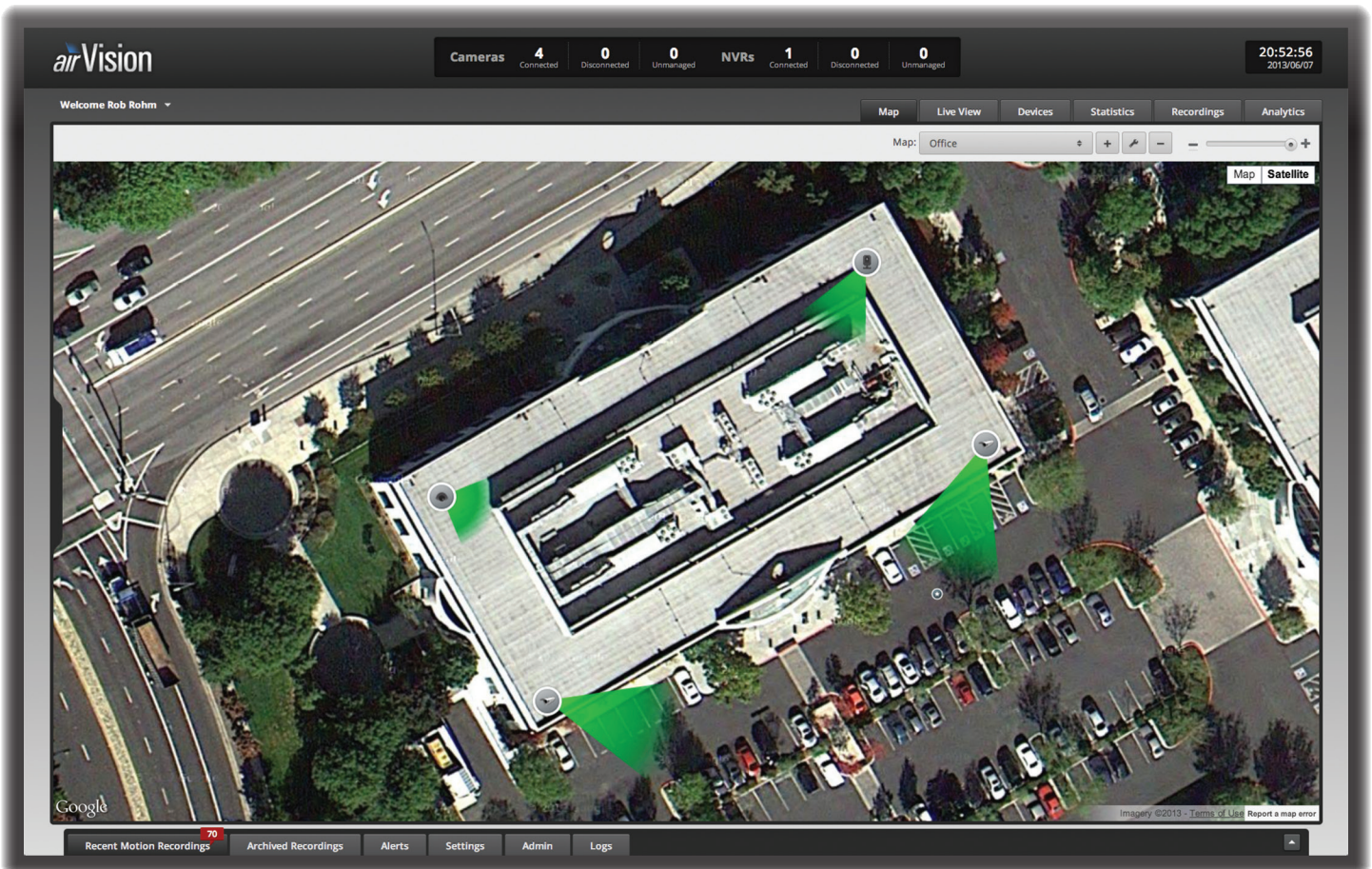
Logs
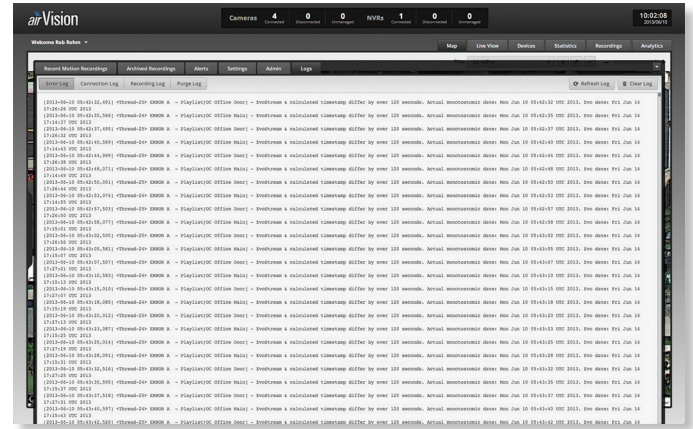
Error Log Displays a log of all error messages.

Connection Log Displays a log of all connections and disconnections.
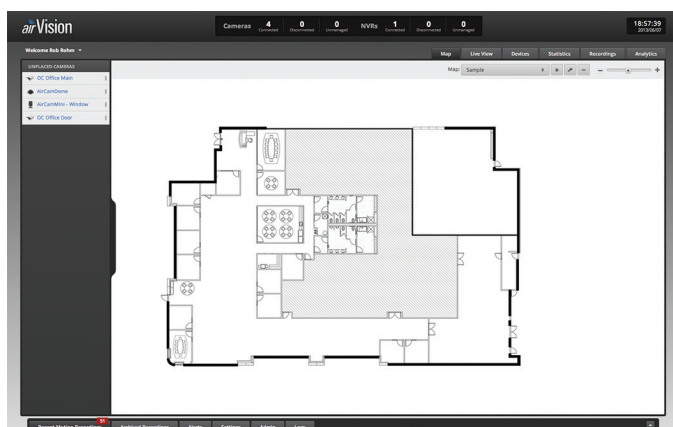
Recording Log Displays a log of all recording activity.

Purge Log Displays a log of all purge activity.

Chapter 3: Map Tab

The airVision software allows you to upload map images of your location or use Google Maps™ for a visual representation of your camera layout. When you initially launch airVision, a default sample map is displayed.


Adding a Map

You can add an image you've created as a map image or use Google Maps to generate an image for use as a background.

Image Maps

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

Once you've created the map, you can upload it to the airVision software by performing the following steps:
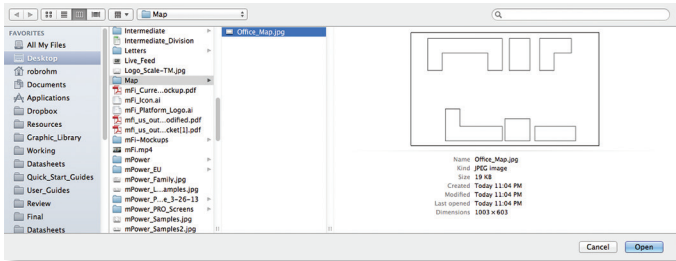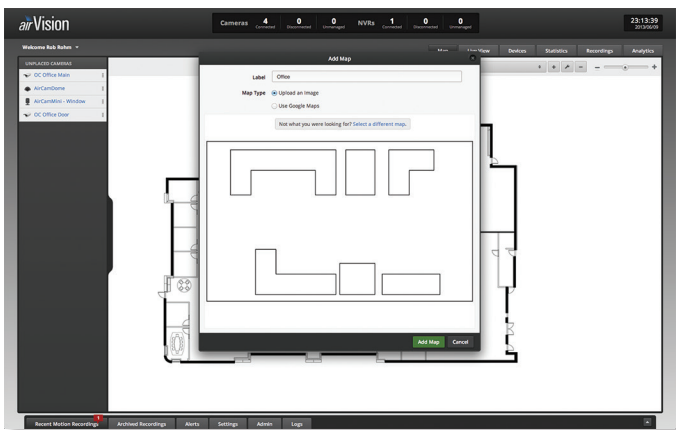
1. Click the *Add* ⊞ button.
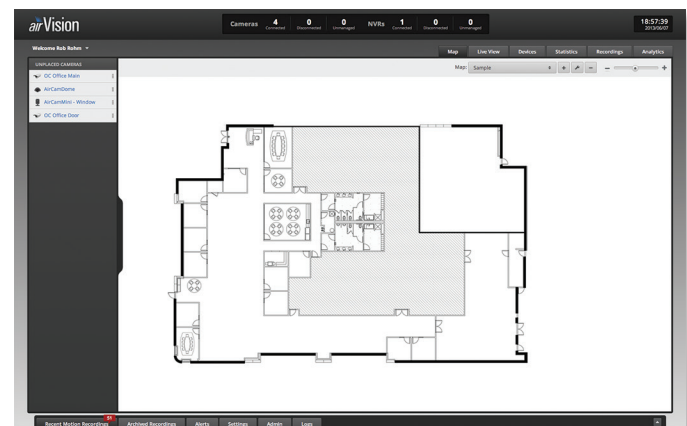
2. Enter a map name in the *Label* field and click **Upload an Image**.
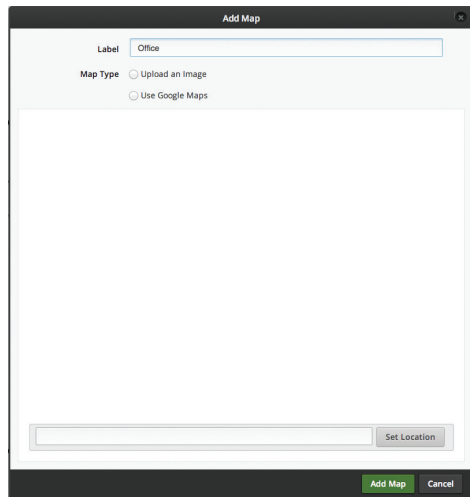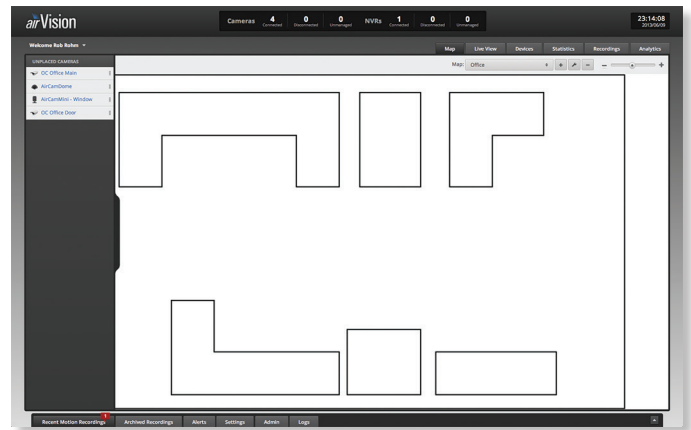

3. Select the file to use as a map (valid file formats are .jpg, .gif, and .png). Click **Open**.
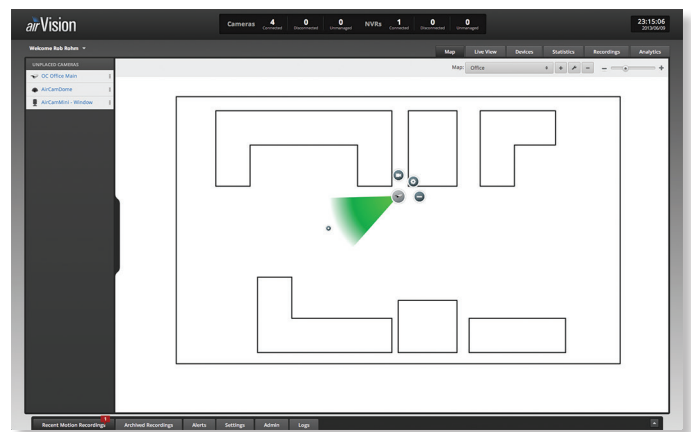

4. Click **Add Map**.

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

6. Drag the *Camera* icon(s) from the *Cameras* list on the left to the appropriate location(s) on the map. The camera will appear in the area that you place it.

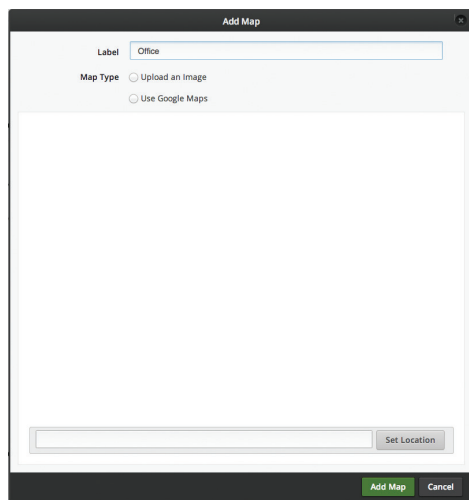For additional information on the camera icon options, refer to **"Camera Icons" on page 12**.

Google Maps

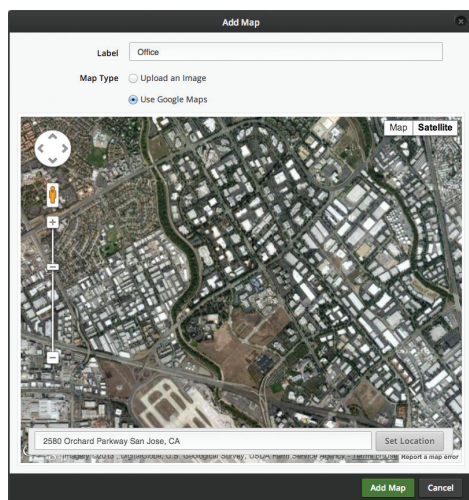To create a custom map using *Google Maps*, perform the following steps:
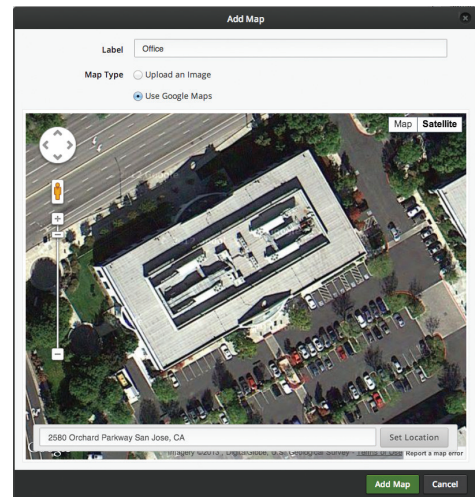
1. Click the *Add* [+] button.

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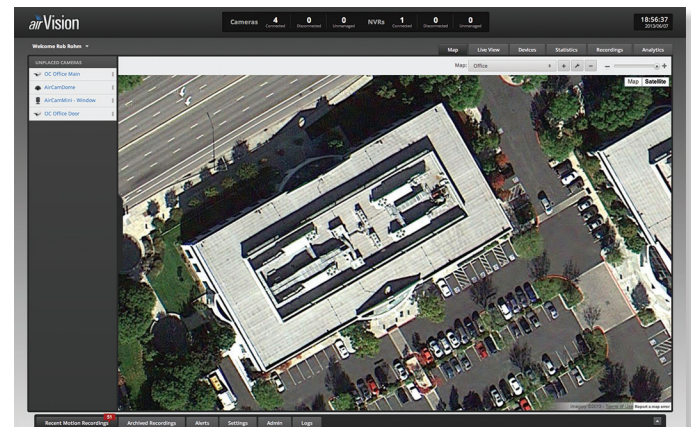

3. The default Google Map location will appear. Type in the desired address and click **Set Location**.
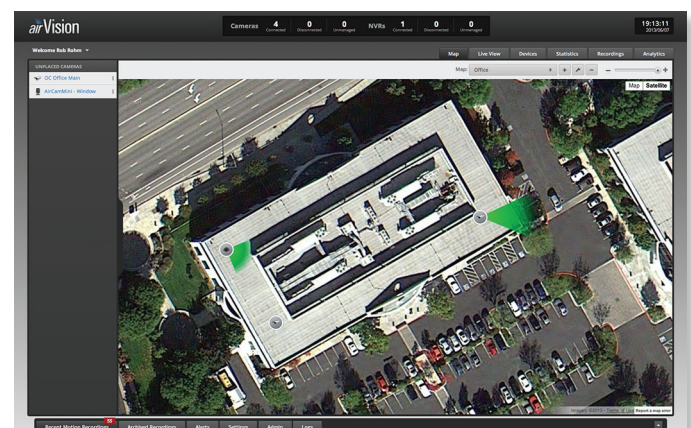

4. Drag the zoom slider on the left to full magnification by sliding it all the way up to the plus (**+**) sign. Click the **Add Map** button.

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

6. Drag the *Camera* icon(s) from the *Cameras* list on the left to the appropriate location(s) on the map.
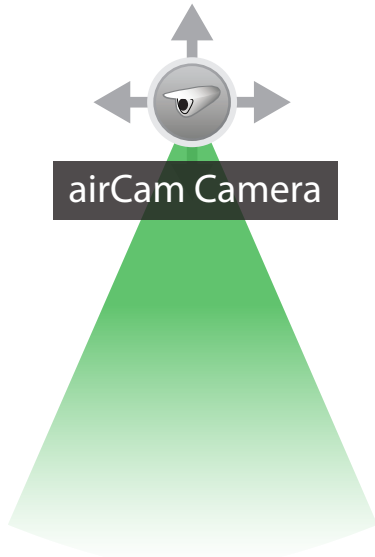
Camera Icons

*airCam*

airCam Dome

airCam Mini

Camera *Camera* icons can be placed on the map to show the location of the camera. They lock into the position they are placed. To move the camera position on the map, click and hold the camera icon until the arrows appear and then drag the camera to another location on the map.

airCam Camera

Click the *Camera* icon to reveal additional options. Click a blank area of the map to hide the additional options.

Live Feed icon

Configuration icon

Remove icon

airCam Camera

Adjustable Camera Field icon
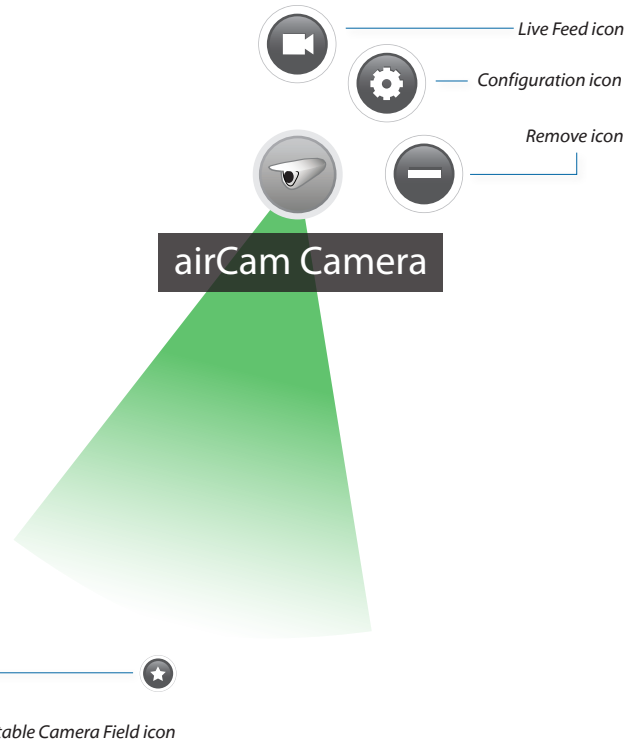
Adjustable Camera Field The field of view for the camera is predefined based on the camera type. Just adjust the direction and distance. The field of view changes to red when motion is detected and transitions in various shades every 10 seconds until returning to green after a minute.

Motion	10 Seconds	20 Seconds	30 Seconds	40 Seconds	No Motion

airCam Camera
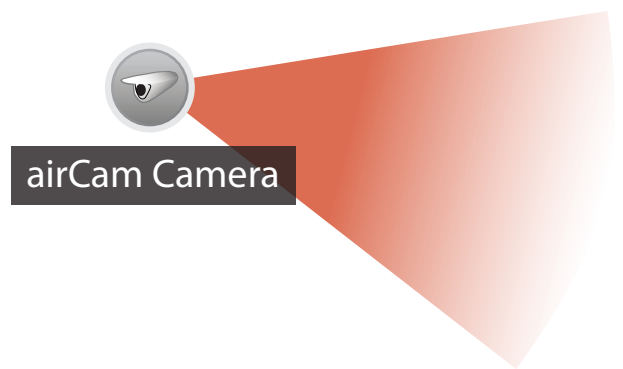
Configuration Brings up the *Configuration* window.
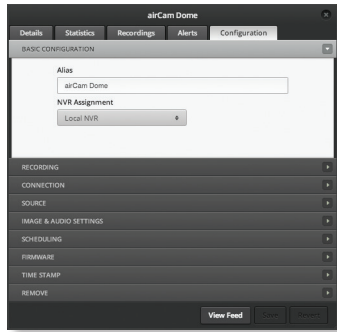
There are five main tabs to select from in the *Configuration* window: *Details*, *Statistics*, *Recordings*, *Alerts*, and *Configuration*. The *Configuration* tab is displayed initially.

- **Details** Displays the IP Address, Model, Firmware, Uptime, Assigned NVR, NVR IP, and Mode of NVR operation.

- **Statistics** Displays *CPU Utilization*, *Network*, and *Disk Usage* statistics.

- **Recordings** Displays the most recent recordings from the selected camera. The duration, date and time of the recording, and recording type are displayed.

- **Alerts** Connection and motion alerts can be enabled from here. A schedule of when motion alerts should be sent can also be defined here.

- **Configuration** Camera configuration settings are displayed and can be edited from this tab. It includes several sub-tabs:

  - **Basic Configuration** Defines the camera alias and NVR assignment.

  - **Recording** Defines whether motion, full-time, or both recording modes are enabled. Seconds before and after a motion event are defined here too.

  - **Connection** Defines the hostname, ports, username, and password.

  - **Source** Defines the source video settings including resolution, bit rate, frame rate, refresh rate, and orientation.

  - **Image & Audio Settings** Defines image settings including gamma, brightness, contrast, hue, saturation, sharpness, and denoise. Microphone volume levels are also defined here.

  - **Scheduling** Allows you to define camera recording schedules.

  - **Broadcast** Settings for streaming to RTMP (Real Time Messaging Protocol) push capable CDN (Content Delivery Network).

  - **Maintenance** Displays current firmware version and allows for firmware updates.

  - **Time Stamp** Time zone and NTP server settings are defined here.

  - **Remove** Removes the camera from its location on the map and places in the *Unplaced Cameras* list on the left.

Live Feed Click this icon to view a live feed of the selected camera. You can click on the arrows in the upper right of the live feed window to expand the view to full-screen. Press the *esc* key to return to the minimized view. Click the window and a popup allows you to adjust the resolution and set the view to *Contrain Proportions* or *Fill Screen*. Click the **X** in the upper right corner to close the *Live Feed* window.

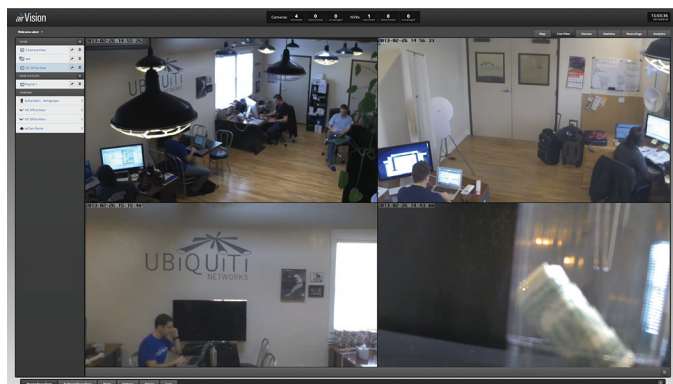**Remove** Remove the camera from the map.

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).
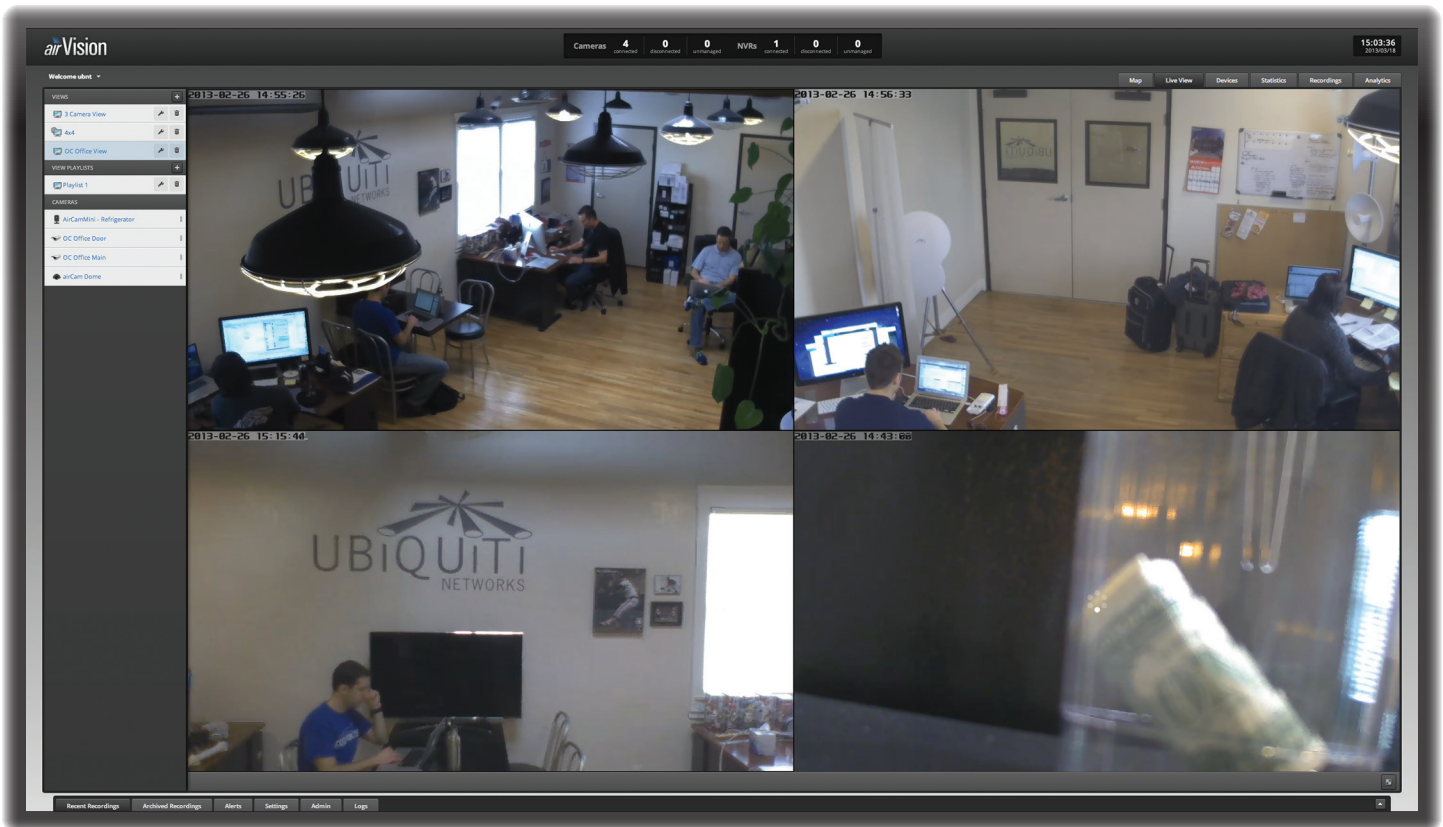
Chapter 4: Live View Tab

The *Live View* tab provides access to your live camera feeds. You can view individual cameras or create custom multiple camera views.

 Note: Camera streams are viewable without assigning the camera to an NVR, but for optimal performance, cameras should be assigned to a monitor.
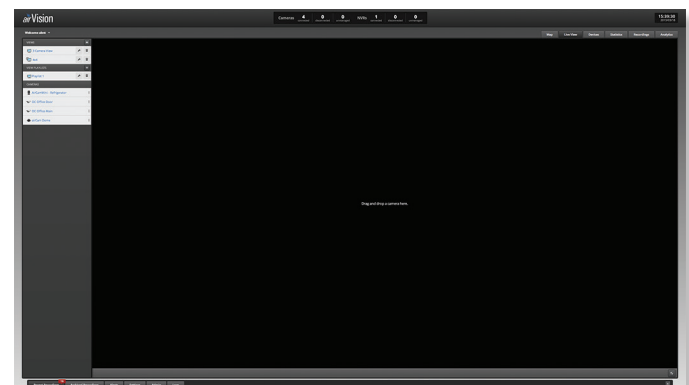
Views

Custom views can be created to allow you to monitor multiple cameras from a single view.
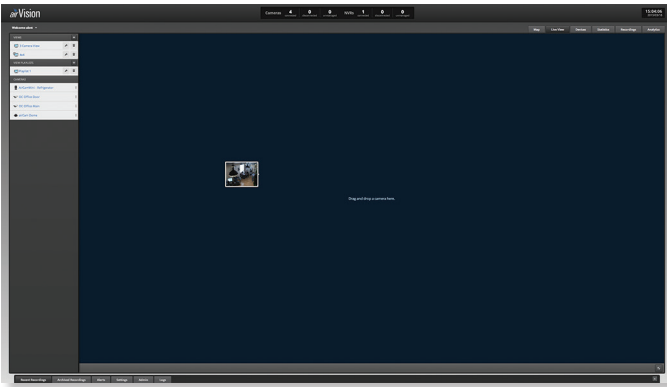
Create a New View

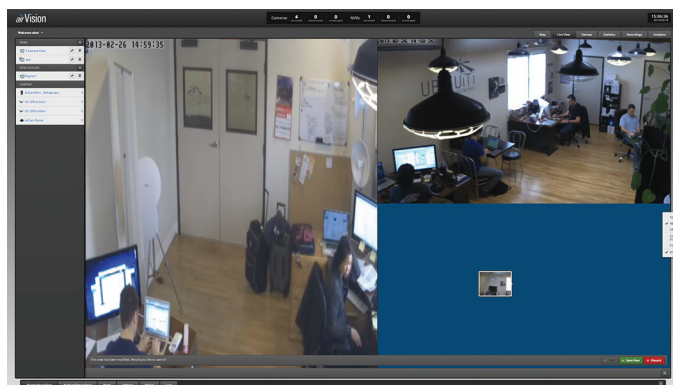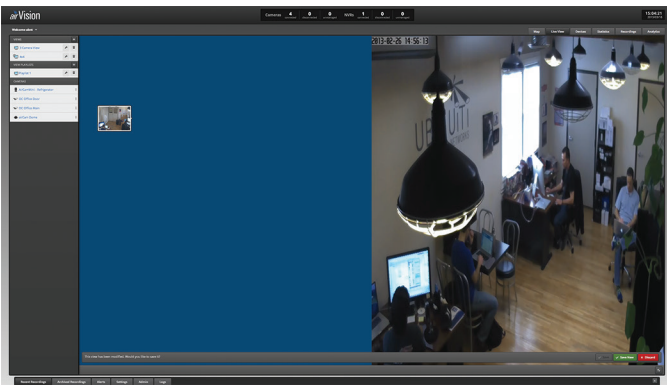To create a new camera view, perform the following steps:

1. Click the *Add* ➕ icon next to *Views*.

2. Click-drag a camera from the list of *Cameras* to the area on the right that says "*Drag and drop a camera here*".
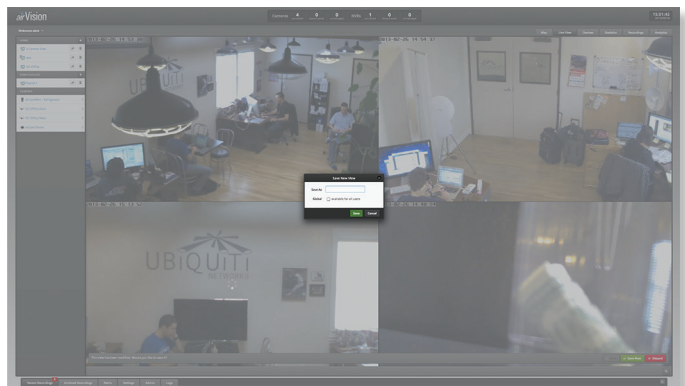

3. Click-drag additional cameras to the desired positions on the screen. A blue position indicator highlights the area where the camera will be placed. Release the mouse to lock a camera into place. The scale of the camera is determined by the location it is placed on the screen and the number of cameras in the view.

4. To finalize your camera view, click **Save New** in the lower right corner.
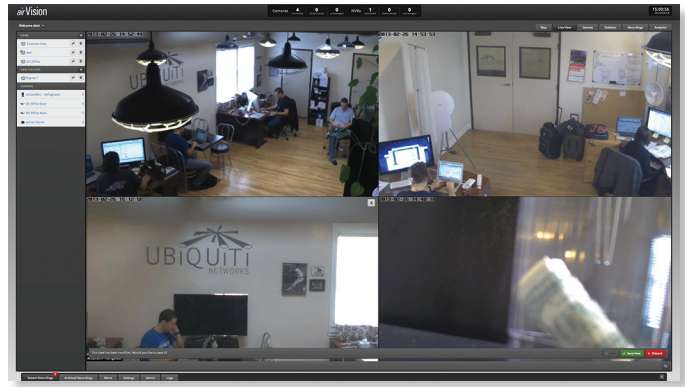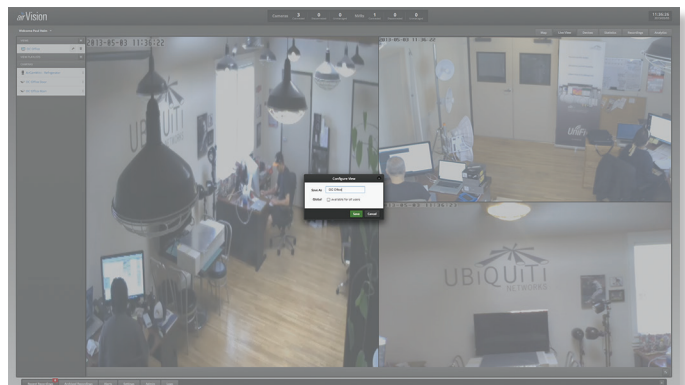

5. Enter a name for the camera view in the *Save As* field and click **Save**.

Renaming a View

To rename a view, perform the following steps:

1. Click the *Edit* ✦ icon of the view you want to rename.
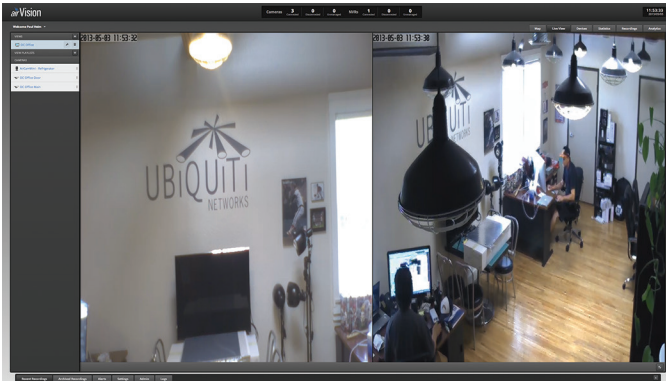

2. Enter a new name and click **Save**.

Adding Cameras to an Existing View

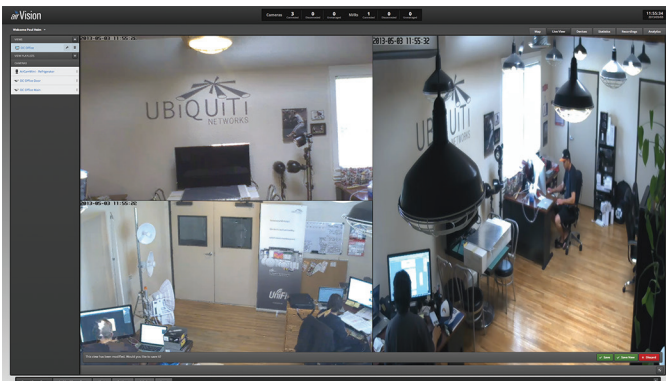To add cameras to an existing view, perform the following steps:

1. Click the view that you want to add cameras to.

2. Click-drag additional cameras to the desired positions on the screen. A blue position indicator highlights the area where the camera will be placed. Release the mouse to lock a camera into place. If you want to replace an existing camera with another, simply click-drag the new camera from the list and place it over the camera you want to replace in the view.
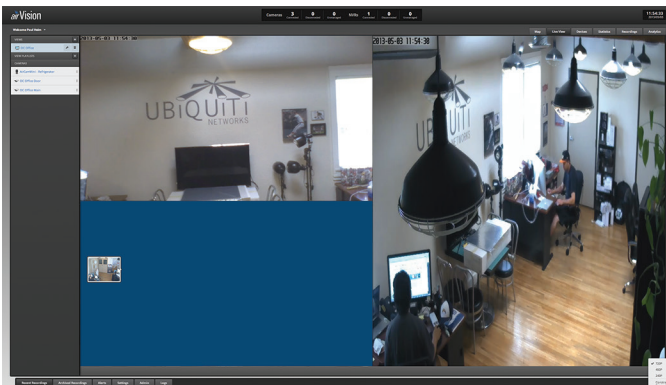
3. You can save the updated view as a new view or replace the existing view. Click **Save** to replace the existing view. Click **Save New** if you want to save it as a new view.

Deleting a View

To delete an existing view, perform the following steps:

1. Click the *Delete* 🗑 icon next to the view that you want to delete.
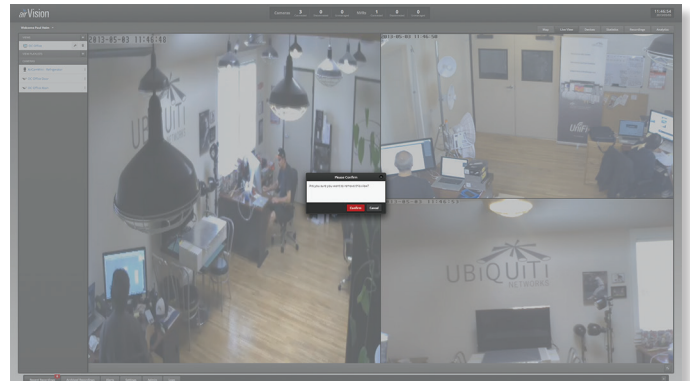
2. Click **Confirm**.

View Playlists

You can create playlists to display a rotation of individual live camera feeds and/or pre-defined multi-camera views. The amount of time that each feed is displayed can be 5, 10, 15, 30, or 60 seconds.

Create a New Playlist

To create a new playlist, perform the following steps:

1. Click the *Add* ➕ icon next to *View Playlists*.

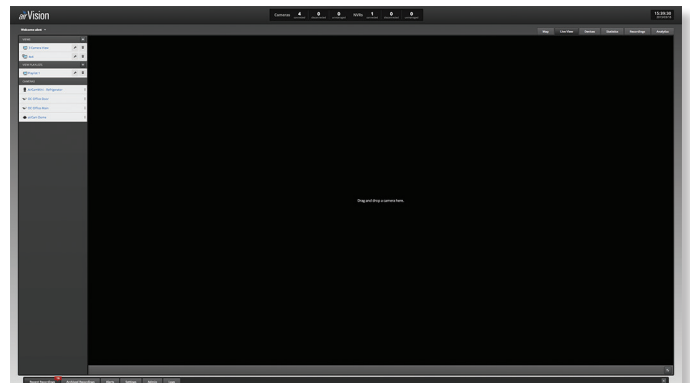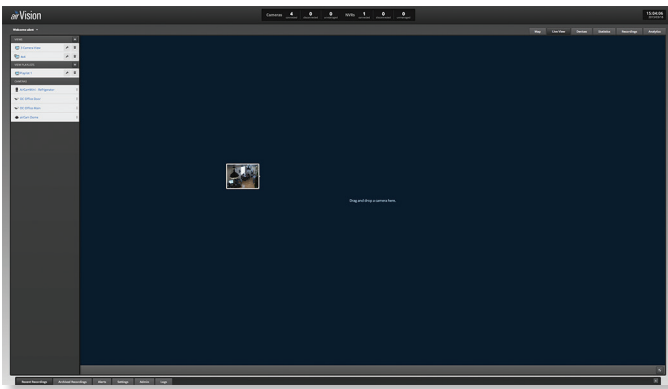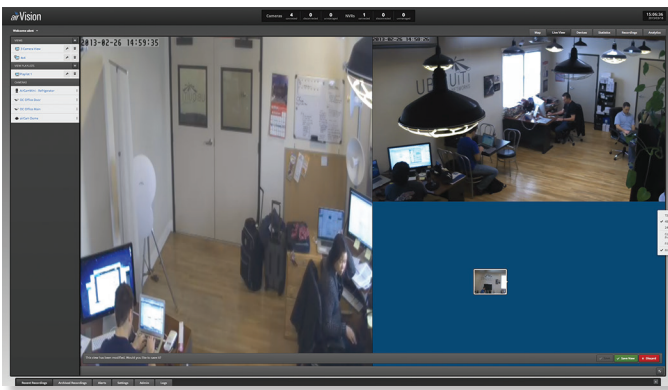2. Click-drag a camera from the list of *Cameras* or a view from the list of *Views* to the area on the right that says "*Drag and drop a camera here*".

3. Add addtional cameras and/or views to the *Playlist Editor* until the playlist suits your needs. If you want to remove a camera or view, click the *Delete* 🗑 icon.

4. The playlist plays each selection for 10 seconds by default before moving on to the next item in the playlist. To change the value, click the **10s** next to the item in the playlist and select *5s*, *15s*, *30s*, or *60s*. This will determine the number of seconds this camera or view will be displayed during the playlist rotation.

5. Enter a name for the playlist in the *Name* field. If you want the playlist available to all users, click the checkbox next to *available for all users*. Click **Save**.
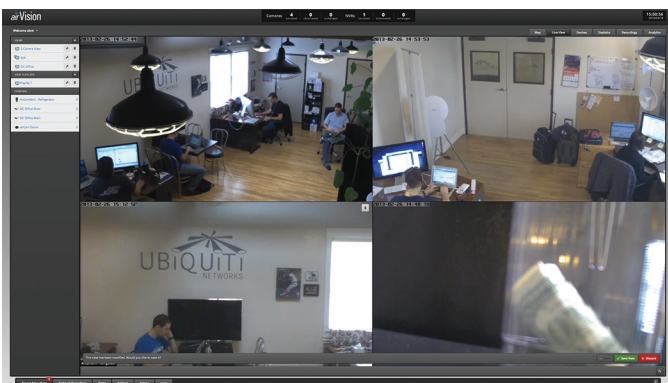
Editing a Playlist

To edit a playlist, perform the following steps:

1. Click the *Edit* 🔧 icon of the playlist you want to edit.
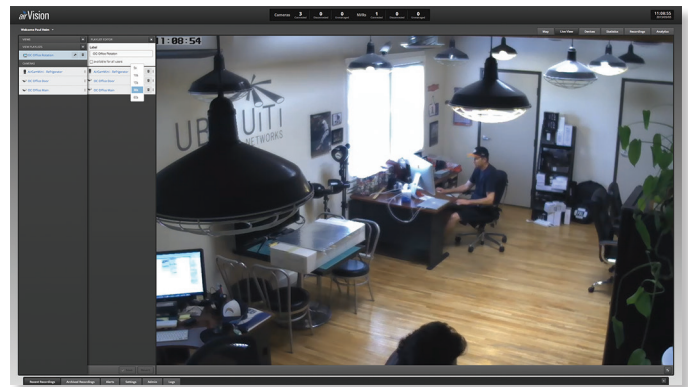
2. Adjust the time of any camera and/or view in the playlist by clicking the *Time* icon.

3. Delete any camera and/or view in the playlist by clicking the *Delete* 🗑 icon.

4. Click **Save**.

Deleting a Playlist

To delete an existing playlist, perform the following steps:

1. Click the *Delete* 🗑 icon of the playlist you want to delete.

2. Click **Confirm** to remove the playlist.
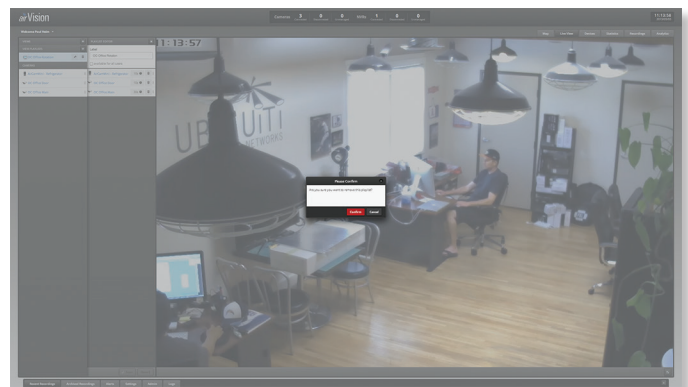
Cameras

Displays a list of available camera feeds. Click a camera to view a live feed.
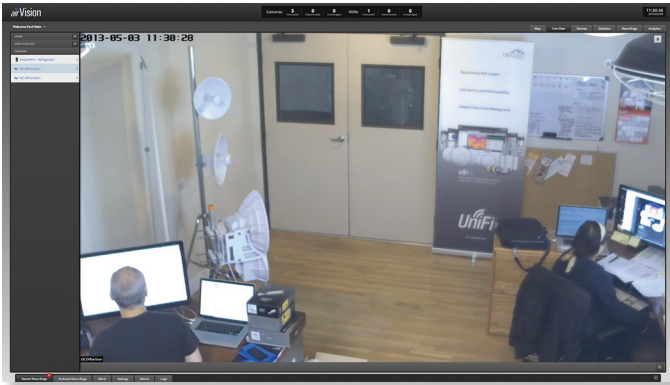
Display Settings

The image resolution, display settings, and audio muting can be changed by clicking a live camera feed.
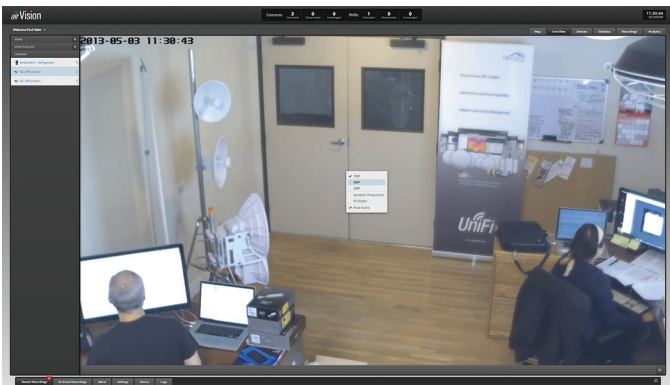
- **720P** 720 pixels of vertical resolution
- **480P** 480 pixels of vertical resolution
- **240P** 240 pixels of vertical resolution
- **Constrain Proportions** Fits the image to the display area without stretching the image.
- **Fill Screen** Stretches the image to fill the screen.
- **Mute Audio** Mute or unmute the audio feed. Not all cameras support audio.
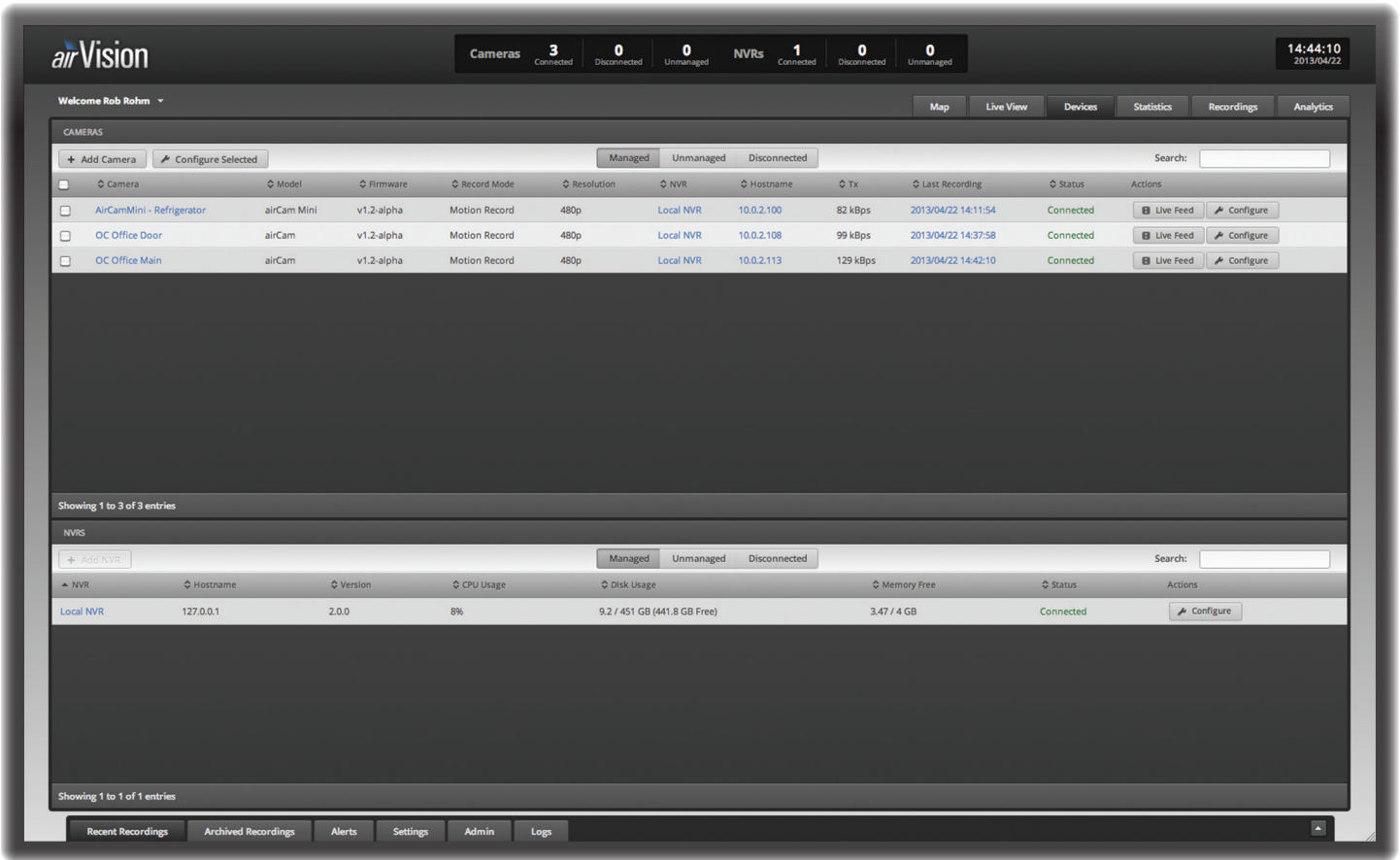
Chapter 5: Devices Tab

The *Devices* tab displays two separate device lists, one for cameras and one for NVRs.

Cameras
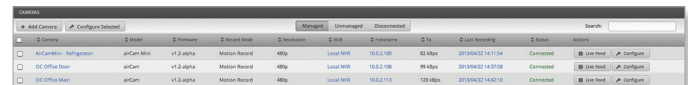
Cameras are displayed with their name, model, firmware, recording mode, image resolution, NVR assignment, hostname/IP address, throughput, last recording date/time, camera status, and action buttons to view the live feed of the camera or configure the camera.

Add Camera

Click the **Add Camera** button to manually add a camera. The *Add Camera* window will appear.
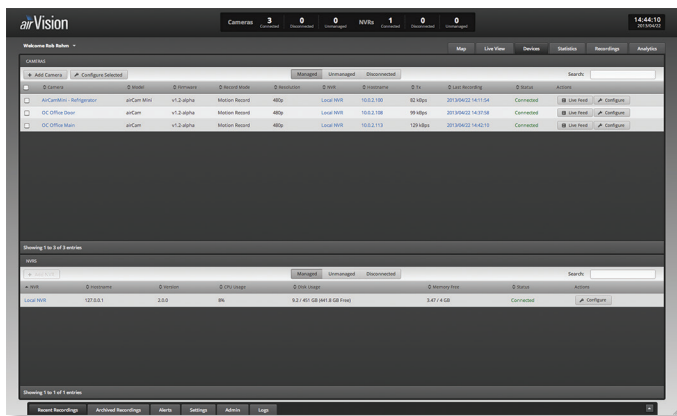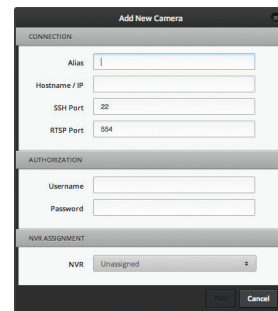
Connection

Alias This is the user-friendly name of the camera.

Hostname/IP Displays the host name or IP address of the camera.

SSH Port The port used for SSH access to the camera. The standard default port is *22*.

RTSP Port The RTSP port is typically port 554.

Authorization

Username The username used to access the camera.

Password The password used to access the camera.

NVR Assignment

NVR Selectable from the drop-down list or unassigned.

Configure Selected

Click the **Configure Selected** button to configure camera settings. Multiple cameras can be selected at one time. The *Configure Selected Cameras* window will appear.

Recording Settings

NVR Assignment Allows you to change the NVR that the cameras are assigned to. Select from the drop-down list of available NVRs.
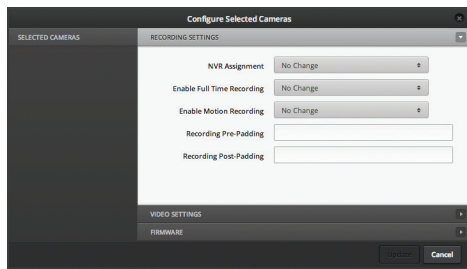
Enable Full Time Recording Allows you to turn on or off full-time recording for the selected camera(s).

Enable Motion Recording Allows you to turn on or off motion recording for the selected camera(s).

Recording Pre-Padding When motion recording is enabled, this defines the amount of time (in seconds) that is included in a video clip before the triggering motion.

Recording Post Padding When motion recording is enabled, this defines the amount of time (in seconds) that is included in a video clip after the last triggering motion.

Video Settings
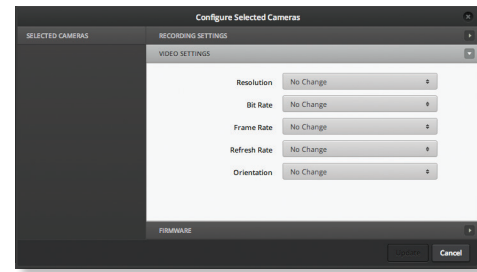
Resolution Camera resolution settings can be configured here. Higher resolutions provide sharper images but consume more bandwidth and disk space.

Bit Rate Configures the bit rate for the selected camera(s). Higher bit rates provide better quality images but consume more bandwidth and disk space.

Frame Rate Configures the frames per second. Higher frame rates provide less lapse between images but consume more bandwidth and disk space.

Refresh Rate Configures the refresh rate, *50 Hz* or *60 Hz*.

Orientation Allows you to change the camera image orientation. For examples, see *Orientation* under **"Image & Audio Settings" on page 24**.

Firmware
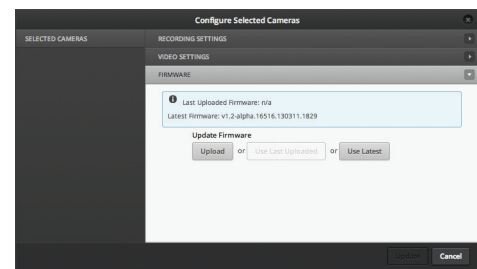
Upload Allows you to upload a firmware file to the selected camera(s).

Use Last Uploaded Uses the last firmware file uploaded to the selected camera(s).

Use Latest Uses the latest version of the firmware available for the selected camera(s).

Search

Search Allows you to search the tables for specific search criteria. Any text that is entered is used as real-time search criteria, and anything that doesn't match the entered characters will be removed from the view. Delete the search string to return to an unfiltered view.

Managed/Unmanaged/Disconnected

Managed cameras are shown by default. You can select *Unmanaged* or *Disconnected* for a list of cameras that are not yet managed or are no longer connected.

Camera Displays the name of the camera. Click the name to open the *Camera Details* window for the specific camera.

Model Displays the camera model information.

Firmware Displays the version of software used on the camera.

Record Mode Displays the operation mode that the camera is in.

Resolution Displays the current image resolution setting for the camera.

NVR Displays the NVR that is being used for recordings by the camera. Click the name to open the *NVR Details* window for the specific NVR.

Note: An NVR will also automatically downscale attached cameras when viewing the live feed.

Hostname Displays the hostname of the camera. Click the hostname to access the camera configuration interface of the selected camera. The login screen for the camera configuration will appear. Refer to the airCam Camera Configuration Interface User Guide available on our website at **documentation.ubnt.com/airvision**

Tx Displays the camera throughput.

Last Recording Displays the date and time of the last recording made by the camera. Click it to view the last recording, and the *Event Viewer* will open and play the recording.

Status Displays the connection status information.

Actions Select an *Action* button to perform the desired action:

Icon	Action	Description
	Live Feed	Click to view a live feed of the camera in that row.
	Configure	Configure the camera in that row. Refer to **"Configuration" on page 22** for additional details.
	Manage	If automanagement is not enabled under *Settings > System Settings*, new cameras will appear under the *Unmanaged* tab. Click the *Unmanaged* tab and click the *Manage* button to manage an unmanaged camera. You will need to enter the user name and password for the camera.

NVRs
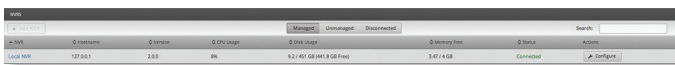
Search

Search Allows you to search the tables for specific search criteria. Any text that is entered is used as real-time search criteria and anything that doesn't match the entered characters will be removed from the view. Delete the search string to return to an unfiltered view.

Managed/Unmanaged/Disconnected

Managed cameras are shown by default. You can select *Unmanaged* or *Disconnected* for a list of NVRs that are not yet managed or are no longer connected.

NVR Displays the alias or IP address of the NVR. Click the name to open the *NVR Details* window of the NVR.

Hostname Displays the hostname or IP address of the NVR.

Version Displays the version number of the NVR firmware.

CPU Usage Displays the percentage of the CPU being utilized by the NVR.

Disk Usage Displays the amount of disk space being used.

Memory Free Displays the amount of memory available.

Status Displays the connection status information.

Actions Allows you to manage an NVR or edit the configuration settings.

Clicking a Device Link

The clickable device and recording links are highlighted in blue. Details vary based on the selection.

Camera Details Window

The *Camera Details* window has five clickable tabs: *Details*, *Statistics*, *Recordings*, *Alerts*, and *Configuration*.

Details

Displays a preview of the camera feed, map location, and details on the selected camera. Click the camera feed preview to view the live feed, or click the map preview to see the location of the camera on the map.
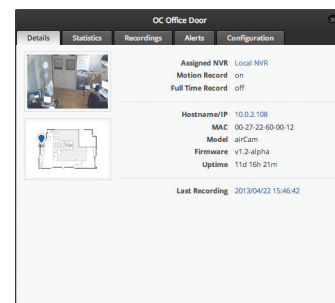
Assigned NVR Displays the name of the NVR that the camera has been assigned to.

Motion Record Displays whether motion recording is on or off.

Full Time Record Displays whether full-time recording is on or off.

Hostname/IP Displays the host name or IP address of the camera.

MAC Displays the MAC address of the camera.

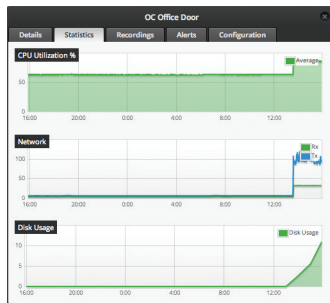**Model** Displays the camera model information.

Firmware Displays the version of firmware used on the camera.

Uptime Displays the amount of time the camera has been running without interruption.

Last Recording The date and time of the selected camera's last recording.

Statistics

Statistics are shown for *CPU Utilization %*, *Network*, and *Disk Usage*.

CPU Utilization % Displays the percentage of CPU utilization.

Network Displays a chart of transmit and receive data to and from the camera for the last 24 hours. The chart displays the information in kbps.

Disk Usage Displays a chart of the disk usage for the last 24 hours.

Recordings

Recordings for the selected camera can be viewed from this tab. A chart of recordings made by the selected camera in the last 24 hours is also displayed here.
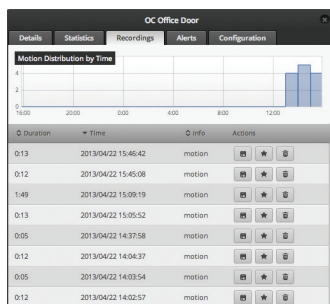
Duration Displays the time duration of the recording.

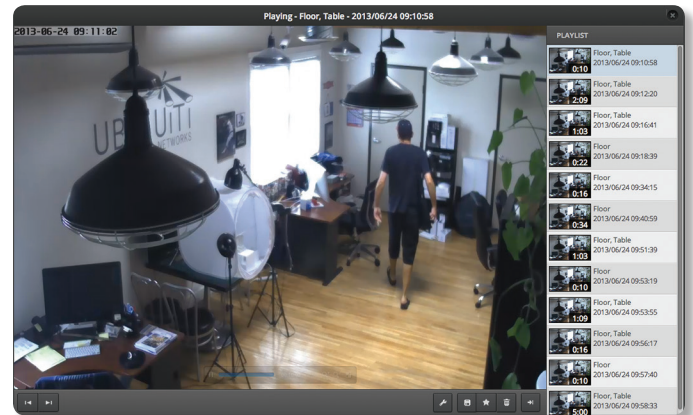**Time** Displays the date and time of the recording.

Info Displays the cause of the recording.

Actions *Action* buttons are as follows:

Icon	Action	Description
🖨	Export	Exports an .MP4 of the selected video to your system default download folder.
★	Archive	Select this to archive a recording for quick access from the *Archived Recordings* tab.

Icon	Action	Description
🗑	Delete	Deletes the selected recording.

Clicking the bars of the chart will display recordings made during the selected time frame.

Playlist

The right side of the *Playback* window displays a playlist of the selected recordings. Thumbnails display a preview of the recording and recording length. The camera name, date, and time of the recording are displayed next to the thumbnail.

Playback Controls

I◄	**Previous** Play the previous recording in the playlist.
►I	**Next** Play the next recording in the playlist.
🔧	**Config** Adjust the camera settings:

- **Constrain Proportions** Fits the image to the display area without stretching the image.
- **Fill Screen** Stretches the image to fill the screen.
- **Mute Audio** Mute or unmute the audio feed. Not all cameras support audio.
- **Show Motion** When enabled, graphic elements are overlaid during playback to indicate where motion was detected to trigger the recording.

💾	**Download** Click the *Download* button to download an .MP4 video file of the selected clip to your computer.
★	**Archive** Click to archive a recording. The recording will be listed under the *Archived Recordings* tab and will not be deleted.

 Delete Click to immediately delete a recording permanently.

 Toggle Playlist Click this button to show/hide the playlist thumbnails in the *Playback* window.

Alerts

Enable Connection Alerts Click the checkbox *Email me when camera goes offline/online*. Connection alerts will be sent out when the connection status changes.

Enable Motion Alerts Click the checkbox *Email me when motion is detected*. Motion alerts will be sent out when motion is detected during the times selected in the *Motion Alert Schedule*.

Motion Alert Schedule Select or create a motion alert schedule. Only motion that is detected during the time in the selected schedule will trigger an email notification.

Configuration
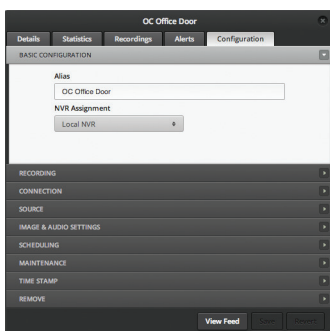
Basic Configuration
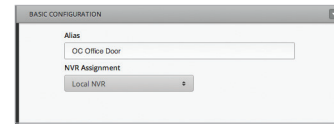
Alias This field defines the name of the camera.

NVR Assignment Defines the NVR that the selected camera is assigned to.

Recording

Record Mode Allows you to define the recording mode of the camera on the NVR. You can select either of the options below or both of them to have full-time recordings and motion clips:

- **Motion Record** All captured images are analyzed and clips are generated when motion is detected in zones specified on the *Analytics* tab.

  - **Seconds to Record Before Motion** Defines the amount of time in the video clip before the triggering motion occurs.

  - **Seconds to Record After Motion** Defines the amount of time in the video clip after the triggering motion occurs.

- **Full Time Record** Continuous clips of a fixed length are generated regardless of motion; this is similar to a time-lapse video recorder. There is no motion detection used in this mode.

Connection
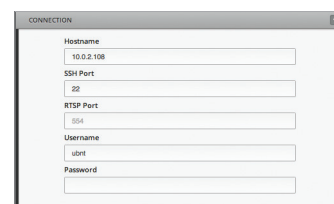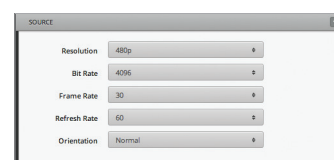

Hostname The hostname or IP address of the camera.

SSH Port The port used for SSH access to the camera. The standard default port is *22*.

RTSP Port The RTSP port is typically port *554*.

Username The username used to access the camera.

Password The password used to access the camera.

Source

Resolution Displays the current resolution setting for the camera and allows you to change the setting.

> Note: The selected resolution must be supported by the camera or the image may not appear correctly.

Bit Rate The bit rate can be *256*, *512*, *1024*, *2048*, or *4096*. Typically larger numbers are used for higher quality.

**Frame Rate** Selects the frames per second. Larger frame rates capture more images per second but require more bandwidth and storage space.

Refresh Rate The refresh rate is *50 Hz* or *60 Hz*. Typically this depends on the region.

Orientation Defines the image orientation. Below are the options for image orientation.

Orientation	Description	Example
Normal	Displays the video feed in normal mode.	
Flip Horizontally	Flips the entire image horizontally.	
Flip Vertically	Flips the entire image vertically.	
Inverted	Flips the entire image horizontally and vertically.	

Image Orientation Options

Image & Audio Settings
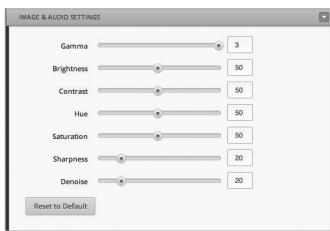
The image settings can be adjusted using the adjustment sliders. Click **View Feed** to view a live feed of the camera to view your settings adjustments as you make them.

Gamma Adjusts the gamma correction of the image using the adjustment slider. The range is from 0 to 100.

Brightness Adjusts the image brightness using the adjustment slider. The range is from 0 (darkest) to 100 (brightest).

Contrast Adjusts the image contrast using the adjustment slider. The value goes from 0 (lowest) to 100 (highest).

Hue Adjusts the image hue using the adjustment slider. The range is from 0 (lowest) to 100 (highest).

Saturation Adjusts the image color saturation using the adjustment slider. The range is from 0 (no color) to 100 (maximum color).

Sharpness Adjusts the image sharpness using the adjustment slider. The range is from 0 to 100.

Denoise Adjusts the denoise image filter using the adjustment slider. The range is 0 to 100.

Mic Volume Level This option only appears if audio is supported on the selected camera. The volume level range is from 0 to 100.
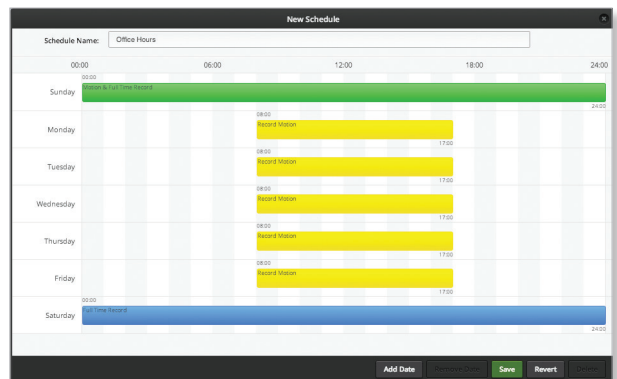
Reset to Default Returns all of the *Image & Audio Settings* to their default values.

Scheduling
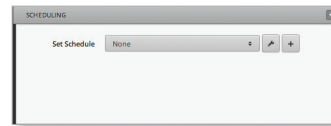
Set Schedule Schedules can be created by clicking the *Add* + icon. To edit a schedule, click the *Edit* icon. Select the desired schedule from the drop-down list.

Creating a New Schedule

1. Click the *Add* + icon.
2. Enter a schedule name in the *Schedule Name* field.
3. Click and drag a timeline on a day of the week and start time. You can adjust the timeline by clicking and holding at the start or end point of a timeline.

> Note: You can add specific calendar dates to the schedule by clicking the *Add Date* button.

4. Click the *Edit* icon, which is visible when you rollover the upper right end of a timeline. Select the type of recording that you want applied to this timeline. For

additional information on recording options, refer to **"Recording" on page 23**.

5. Repeat steps 5 and 6 until you have the schedule defined correctly.

6. Click **Save** to save the schedule.

Note: For regions that aren't defined, the camera will go back to default mode.

Maintenance

The version of the camera firmware is displayed here. You can update the firmware and reboot the camera from here.
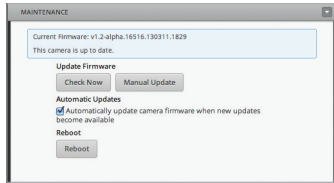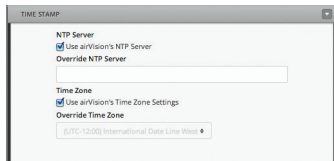

Update Firmware Click **Check Now** to check the website for newer firmware for the camera. Click **Manual Update** to manually select a firmware file from your computer.

Automatic Updates Click this option to automatically update the camera firmware when new updates become available.

Reboot Click this button to reboot the camera.

Time Stamp

NTP Server When *Use airVision's NTP Server* is selected, airVision's time server is used for video time stamps. When deselected, the *Override NTP Server* field allows you to specify an alternate time server for the selected camera.

Time Zone By default the camera uses airVision's *Time Zone* settings (as configured during installation or edited in *Settings > System Settings > Time Zone*). To override the time zone and use a different time zone for the selected camera, deselect the checkbox *Use airVision's Time Zone settings* and select a time zone from the drop-down list.

Remove
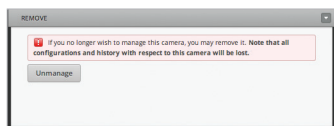
Remove Click the *Unmanage* button only if you no longer wish to manage the camera in airVision. If you remove it, all configurations and history for this camera will be lost.

View Feed Click to view a live feed of the camera. Use the *Full Screen* icon in the upper right to toggle between full screen and the standard view.
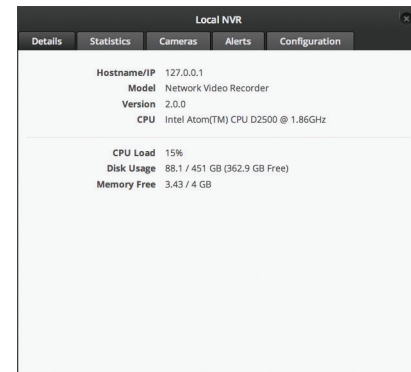
Save Click save to apply and configuration changes.

Revert Click to revert to the last saved configuration.

NVR Details Window

The *NVR Details* window has five clickable tabs: *Details*, *Statistics*, *Cameras*, *Alerts*, and *Configuration*.

Details

Hostname/IP Displays the host name or IP address of the NVR.

Model Displays the NVR model information.

**Version** Displays the version number of the NVR firmware.

CPU Displays the NVR CPU details.

CPU Load Displays the percentage of the CPU being utilized by the NVR.

Disk Usage Displays the amount of disk space used and the total amount of disk space. The amount of free space available is displayed in parenthesis.

Memory Free Displays the amount of free memory available and the total memory.

Statistics
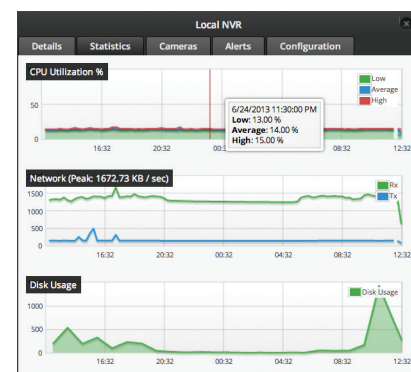
CPU Utilization % Displays a chart with the low, average, and high CPU utilization details for the last 24 hours. You can place the mouse over areas in the timeline for specific details.

Network (Peak) Displays a chart of transmit and receive data to and from the NVR for the last 24 hours. The chart displays the information in kbps.

Disk Usage Displays a chart of the disk usage for the last 24 hours.

Cameras
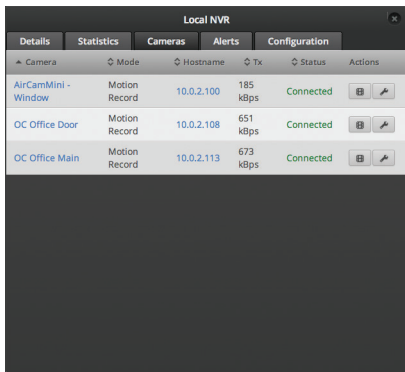
Camera Displays the name of the camera.

Mode Displays the camera recording mode.

Hostname The hostname or IP address of the camera.

Tx Displays the camera transmission rate in kbps.

Status Displays the connection status of the camera.

Actions

Icon	Action	Description
	Live Feed	Click to view a live feed of the camera in that row.
	Configure	Configure the camera in that row.

Alerts
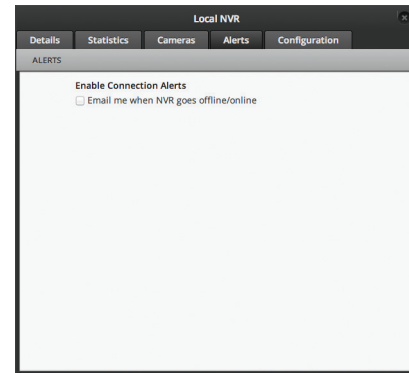
Enable Connection Alerts Click *Email me when NVR goes offline/online* to receive messages when an NVR offline/online event occurs. Refer to **"Email Server Configuration" on page 7** for details on configuring email.

Configuration
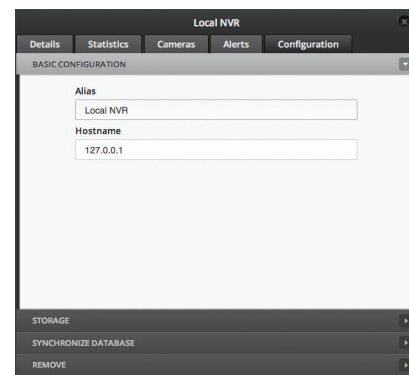
Basic Configuration
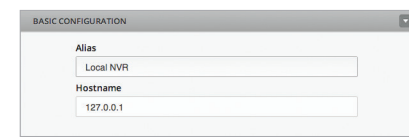
Alias This is the name of the NVR.

Hostname The hostname or IP address of the NVR.

Storage
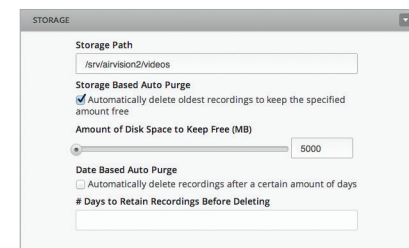
Storage Path Defines the path to where video clips are stored.

Storage Based Auto Purge Storage Based Auto Purge is enabled when *Automatically delete oldest recordings to keep the specified amount free* is selected. When enabled, the oldest recordings that have not been archived will be deleted when the amount of disk space available reaches the amount defined next to the *Amount of Disk Space to Keep Free (MB)* option.

Amount of Disk Space to Keep Free (MB) Defines the amount of disk space to keep free when *Storage Based Auto Purge* is enabled.

Date Based Auto Purge Date Based Auto Purge is enabled when *Automatically delete recordings after a certain amount of days* is selected. When enabled, recordings are deleted after the number of days specified in *# Days to Retain Recordings Before Deleting* field.

 # Days to Retain Recordings Before Deleting Defines the number of days to keep recordings before deleting them when *Date Based Auto Purge* is enabled.

Synchronize Database
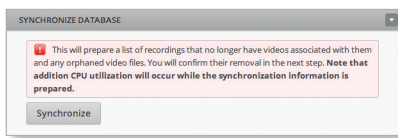
Synchronize This option prepares a list for removal of recordings that no longer have videos associated with them. Orphaned video files are also included in the list.

Remove
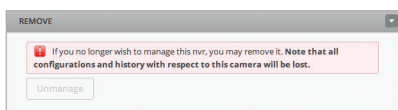
Unmanage Click the *Unmanage* button only if you no longer wish to manage the NVR in airVision.
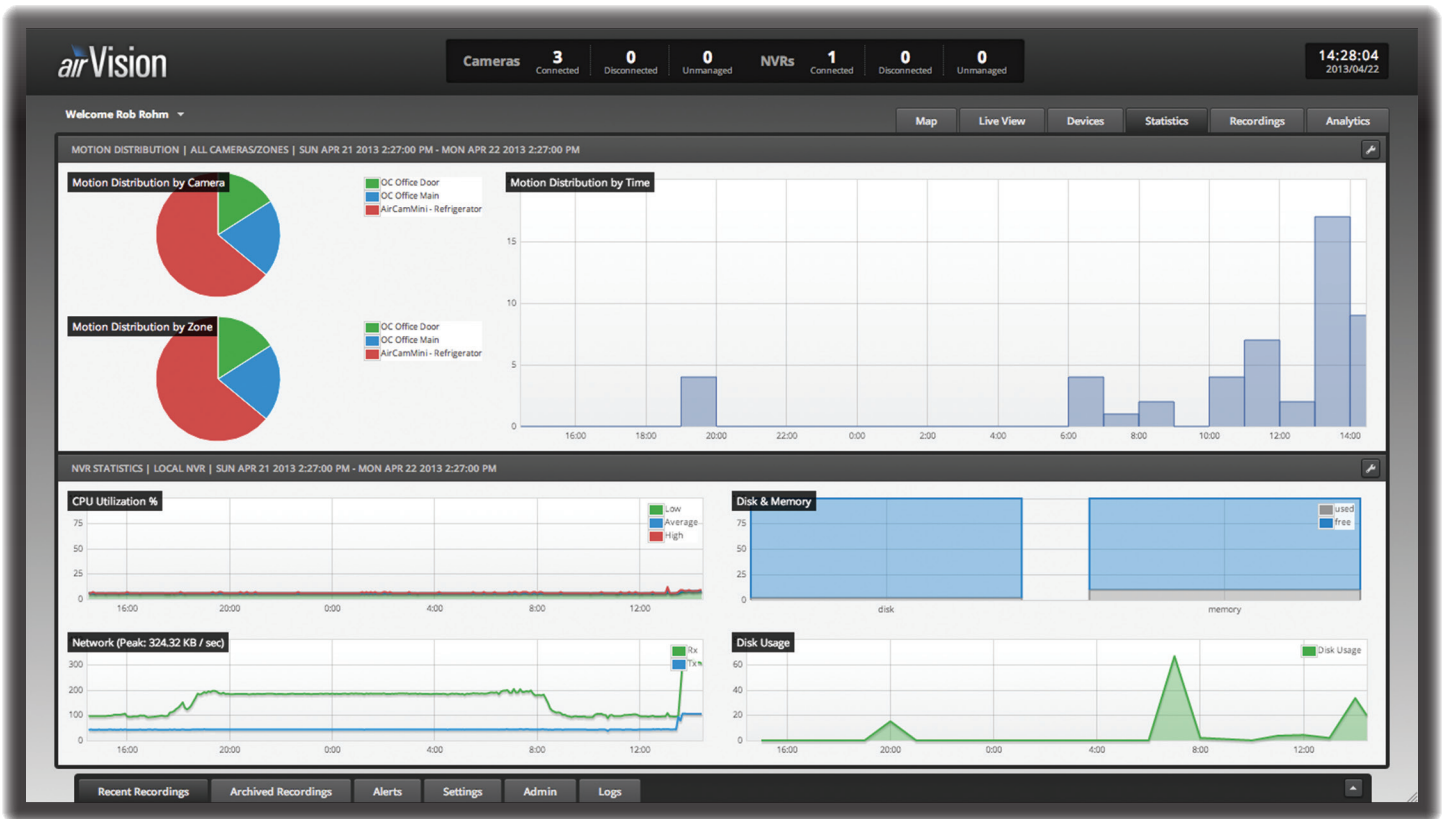
Chapter 6: Statistics Tab

The *Statistics* tab displays the following:

- Motion Distribution
  - By Camera
  - By Zone
  - By Time
- NVR Statistics
  - CPU Utilization
  - Network
  - Disk & Memory
  - Disk Usage

Motion Distribution

The default statistics displayed show data from all cameras and zones for the last 24 hours.
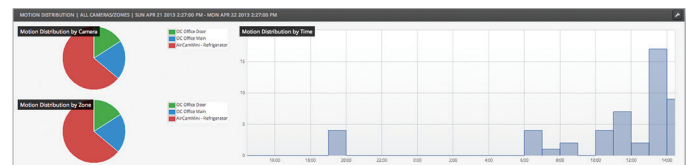

You can modify the time frame, cameras, and zones included by clicking the *Edit* ⚙ icon in the upper right. Remove checkmarks from any cameras that you want to exclude from the chart. To deselect zones, click the *Plus* [+] sign next to the camera to reveal available zones. Remove checkmarks from the zones you want to exclude. Click **Update** after you've removed the checkmarks from the cameras and zones you want to exclude.

## Motion Distribution by Camera
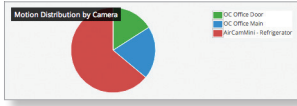
Displays a pie chart representation of motion distributed by camera that occurred during the specified time frame (24 hours by default). You can place the cursor over areas of the chart to view the total number of recordings for each camera during the specified time frame. The percentage of activity for each camera is also displayed. Click an area of the chart to see a playlist of recordings for the selected camera during the specified time frame.

Motion Distribution by Zone
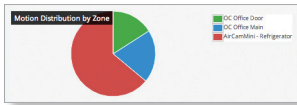
Displays a pie chart representation of motion distributed by zone that occurred during the specified time frame (24 hours by default). You can place the cursor over areas of the chart to view the total number of recordings for each zone during the specified time frame. The percentage of activity for each zone is also displayed. Click an area of the chart to see a playlist of recordings for the selected zone during the specified time frame.

Motion Distribution by Time
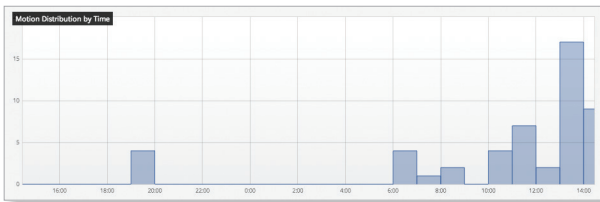
Displays a bar chart representation of motion distributed by time that occurred during the specified time frame (24 hours by default). You can place the cursor over areas of the chart to view the total number of recordings for each time slot during the specified time frame. Click a bar of the chart to see a playlist of the recordings created during the selected time period.
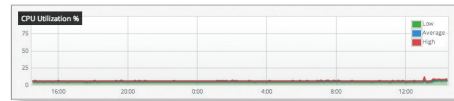
NVR Statistics

By default, statistics for all NVRs for the last 24 hours are displayed.
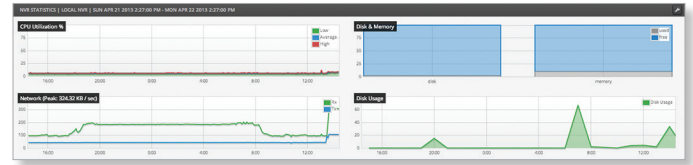
You can modify the time frame and the NVRs selected by clicking the *Edit* 🔧 icon in the upper right of the *NVR Statistics* area.
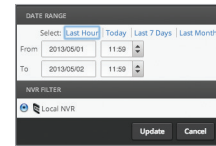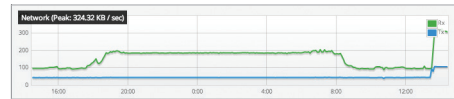

CPU Utilization %

Displays the *CPU Utilization* of the selected NVR(s). Place the cursor over the timeline to view detailed statistics during the timeline.

Network (Peak)

The *Network* chart details the transmit and receive bandwidth usage from all of the cameras connected to the selected NVR(s). Place the cursor over the timeline to view detailed statistics during the timeline.
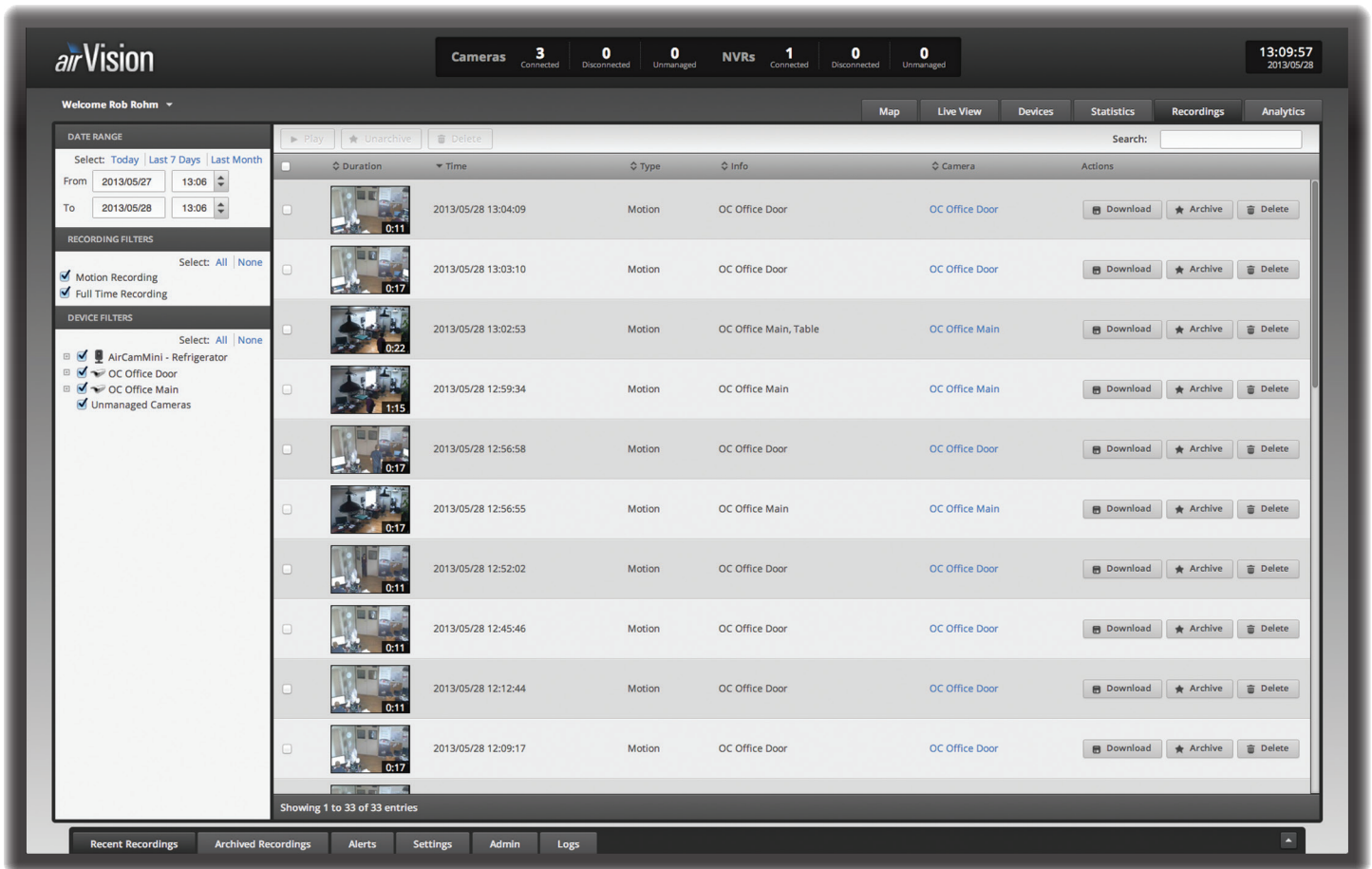
Disk & Memory
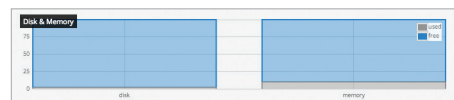
A visual representation of the amount of free space and used space is displayed. Place the cursor over the graphs to display detailed disk space statistics.
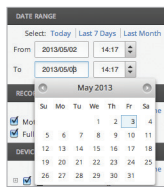
Disk Usage
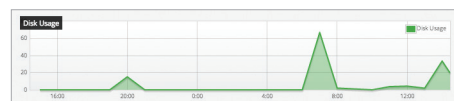
Displays a chart of disk usage for the specified time frame. Place the cursor over the chart to display details.

Chapter 7: Recordings Tab

The *Recordings* tab allows you to search recordings by date, recording type, and camera.

Date Range

Select *Quick Links* display recordings from selected time frames. Recording and device filters will filter quick link content results.

- **Today** Displays a list of all recordings from today.
- **Last 7 Days** Displays a list of recordings from the last 7 days.
- **Last Month** Displays a list of recordings from the last month.

From Click in the *From* date field and a calendar will appear and allow you to select a start date. Click the time field and either manually enter a time or use the arrows to select an hour.

To Click in the *To* date field and a calendar will appear that will allow you to select an end date. Click the time field and either manually enter a time or use the arrows to select an hour.

Recording Filters
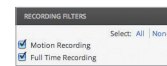
- **Motion Detection** Select this if you want your search results to include motion detection recordings.
- **Recording** Select this if you want your search to include standard recordings.

Device Filters
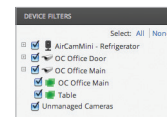
Devices allows you to select cameras and zones that you want included in recording searches. Every camera that has a checkmark next to it will be included in your search.
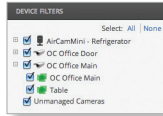
Searching Zones

For cameras that have multiple zones configured, you can select individual zones to search.
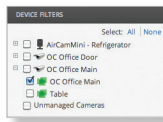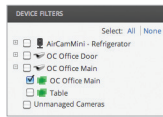

To search individual zones, perform the following steps:

1. Click the *Plus* [+]sign to the left of the checkbox and camera icon.

2. Deselect any zones that you do not want to search.

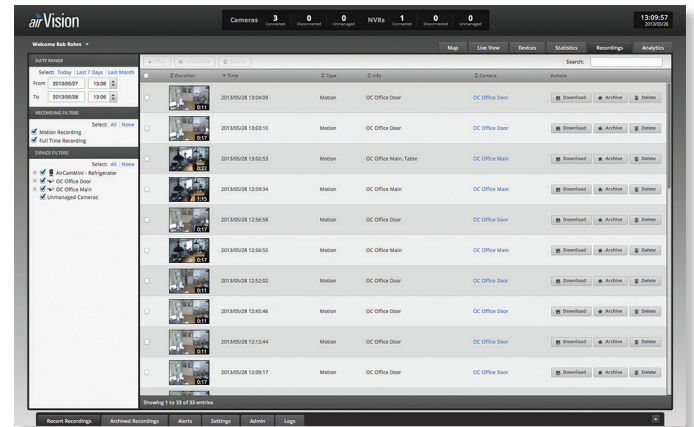3. Select the date range by entering values in the *From* and *To* fields under *Date Range*.

4. Ensure that *Motion Detection* is selected under *Recording Type*.

5. Click the **Search** button and the results will appear in the *Recordings* view.
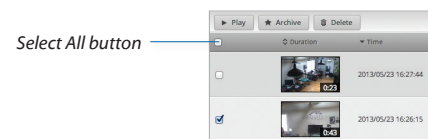
Recordings View

Play Place a checkmark next to the videos that you want to play. If you want to sort them by duration, time, info, or camera, then click the appropriate title in the *Recordings* window. Once you click the **Play** button, the selected recordings will open in the *Playback* window according to the sort selection you have applied.

Archive Place a checkmark next to videos that you want to make accessible via the *Archived Recordings* tab, and then click the **Archive** button. Archived videos are not deleted.

Delete Place a checkmark next to videos that you want to permanently delete and then click the **Delete** button.

Search Allows you to search the results for specific search criteria. Any text that is entered is used as real-time search criteria, and anything that doesn't match the entered characters will be removed from the view. Delete the search string to return to an unfiltered view.

Select All The *Select All* button allows you to select all of the recordings in the *Playback* window. You can play, archive, or delete them.

Select All button

Duration Videos are listed below the *Duration* header with a thumbnail preview and the length of the clip in the lower right corner. The *Duration* header can be used to sort videos by recording length, either descending from shortest to longest or from longest to shortest.

Time By default the clips are sorted by time and date. If you enter a date range, the first clips to appear are the oldest (closest to the *From* date and time). If you select a *Quick Link*, the clips are sorted from newest to oldest. To toggle the date and time sorting, click the *Time* header.

Type Displays the recording type. Click the header to group all of the same types of recording.
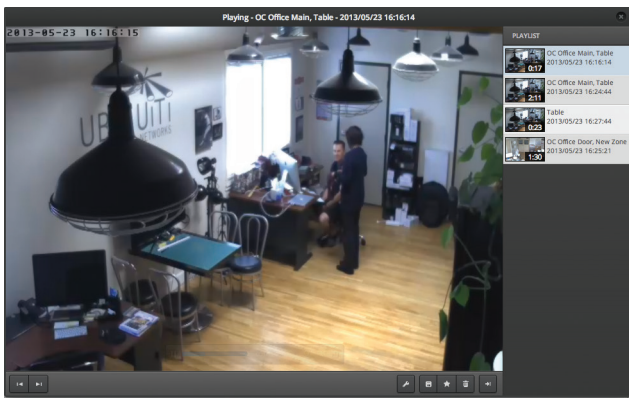
Info Displays the recording zone and camera name. Click the header to group all of the same zones.

Camera Displays the name of the camera. Click the name to open the *Camera Details* window for the specific camera. Click the header to group the camera recordings based on the camera.

Actions The actions are as follows:

- **Download** Click the **Download** button to save a .MP4 video file of the selected clip to your computer.

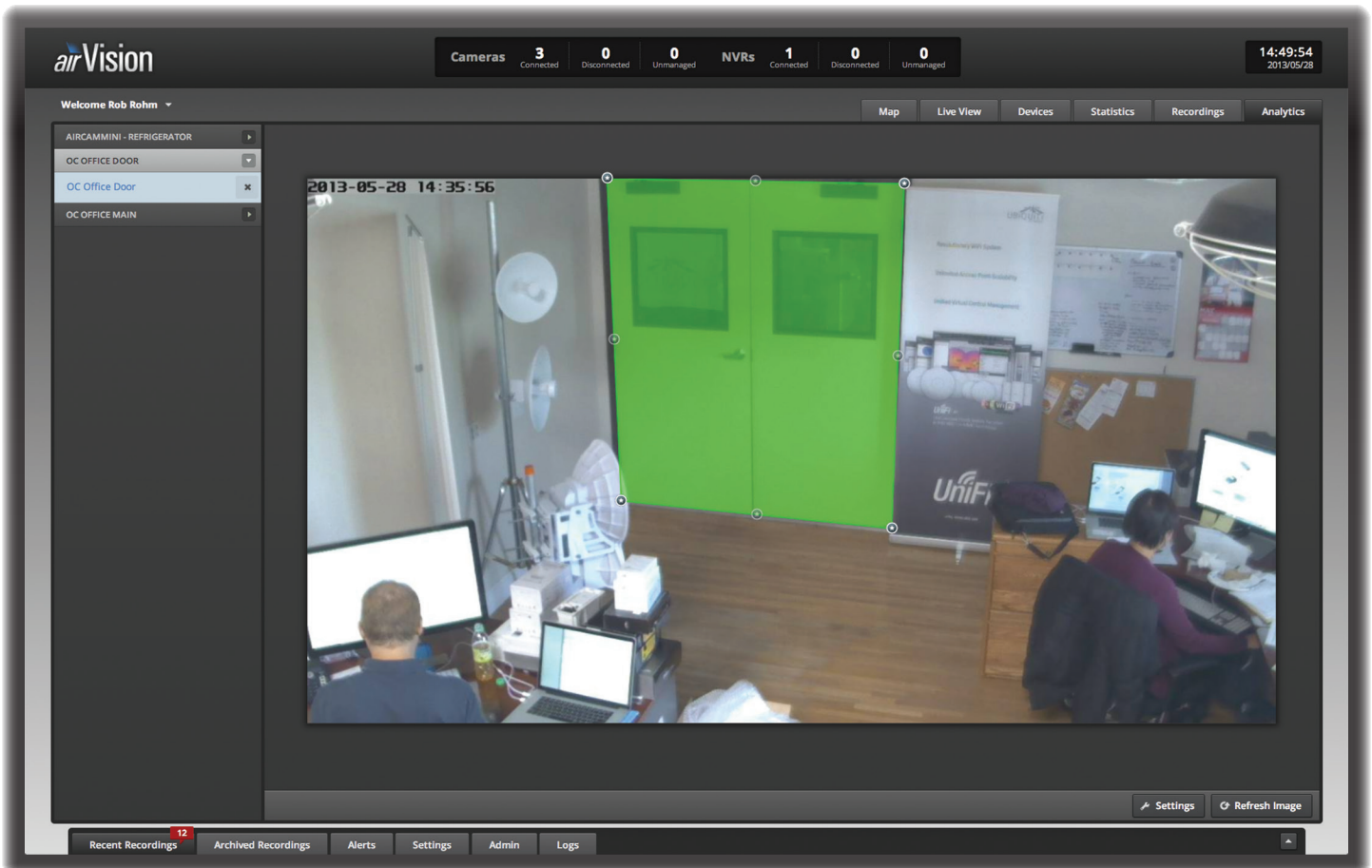- **Archive** Click to archive a recording. The recording will be listed under the *Archived Recordings* tab and will not be deleted.

- **Delete** Click *Delete* to immediately delete a recording permanently.

Download Click the *Download* button to download an .MP4 video file of the selected clip to your computer.

Archive Click to archive a recording. The recording will be listed under the *Archived Recordings* tab and will not be deleted.

Delete Click to immediately delete a recording permanently.

Toggle Playlist Click this button to show/hide the playlist thumbnails in the *Playback* window.

Playback Window

Playlist

The right side of the *Playback* window displays a playlist of the selected recordings. Thumbnails display a preview of the recording and recording length. The camera name, date, and time of the recording are displayed next to the thumbnail.

Playback Controls

Previous Play the previous recording in the playlist.

Next Play the next recording in the playlist.

Config Adjust the camera settings:

- **Constrain Proportions** Fits the image to the display area without stretching the image.

- **Fill Screen** Stretches the image to fill the screen.

- **Mute Audio** Mute or unmute the audio feed. Not all cameras support audio.

- **Show Motion** When enabled, graphic elements are overlaid during playback to indicate where motion was detected to trigger the recording.

Chapter 8: Analytics Tab

The *Analytics* tab allows you to define zones for motion detection. You can define multiple zones for each camera and adjust the sensitivity threshold. This allows your NVR to record only when motion is detected in areas of a camera feed that you've defined. Setting the sensitivity level allows you to define how much motion is required to trigger the motion detection recording.
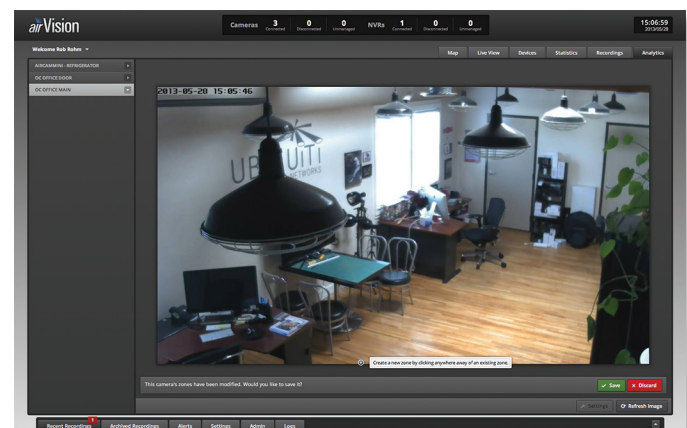
Creating a New Zone

1. Click the camera that you want to create a zone for.

2. A default zone is created for each camera that encompasses the entire viewing area. The zone has the same name as the camera. Click the **x** next to the zone name to delete the default zone.
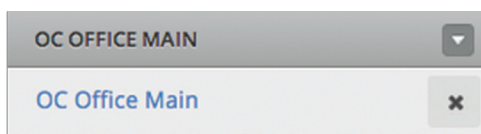
3. Click the area on the image where you want to start the zone.

4. Click to define as many additional points as you need until you close the zone by clicking the starting point again.
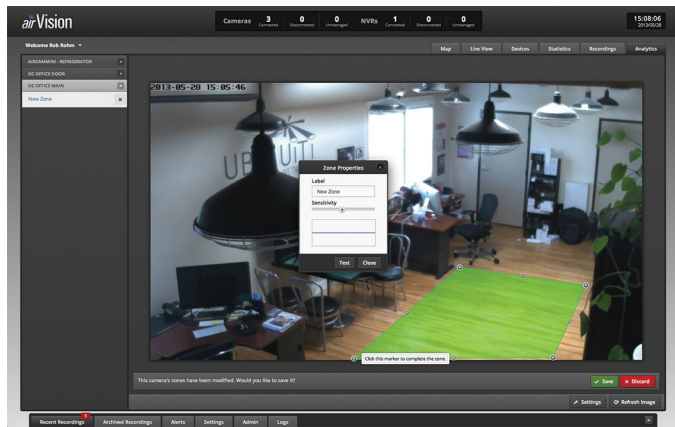

5. The *Zone Settings* window will appear. Enter a name for the zone in the *Label* field.
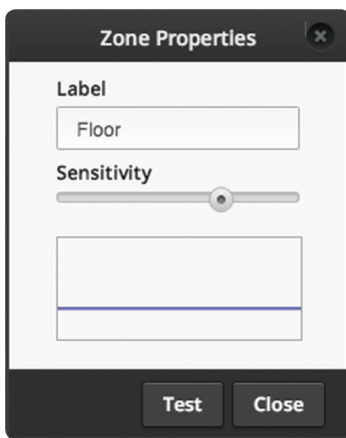
6. Adjust the sensitivity using the *Sensitivity* slider. If you want to test the sensitivity, click the **Test** button. As various degrees of motion occur, you'll see different level spikes. Adjust the sensitivity to a level that best suits your needs. Motion spikes that exceed the sensitivity threshold you define will be recorded when motion detection is enabled. Click **Test** again to stop the test.
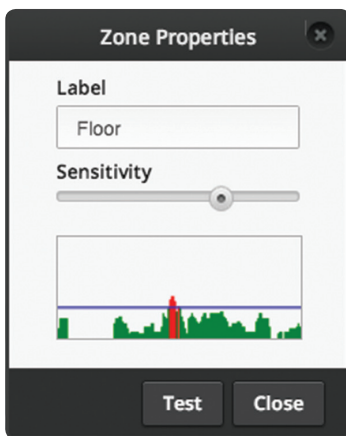
7. (Optional) If you want to create additional zones, click the desired areas on the feed and follow the same steps.
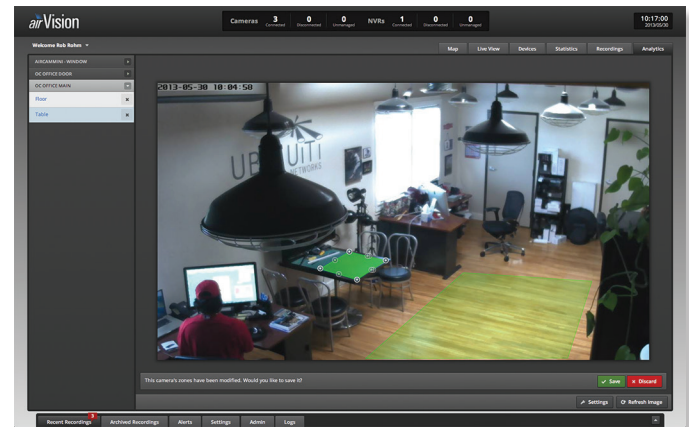
8. Once you've created your zone(s), click **Save** to add the zone(s) or **Discard** to discard the zone(s).
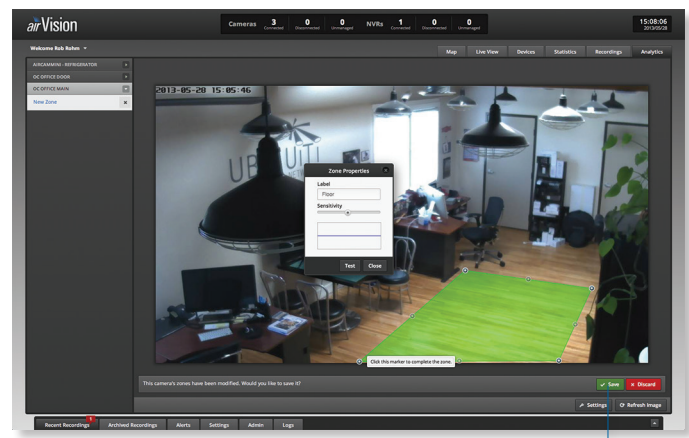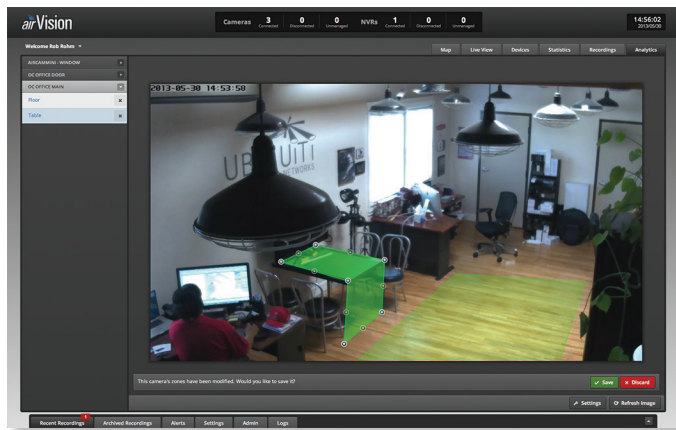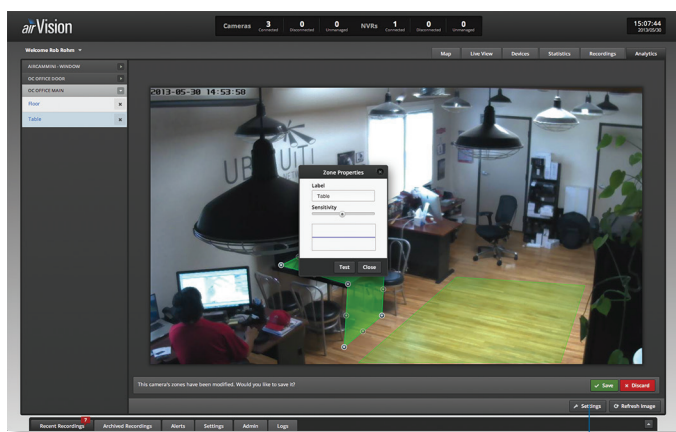

Save button

Editing a Zone

1. Click the zone that you want to edit.
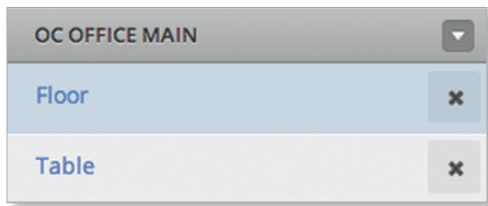
2. If you want to expand or reduce the zone coverage, click-drag the points you want to change. To delete a point, click it without dragging it. If you need to add a point, click in between two defined points (white in color) to add another point to the zone.
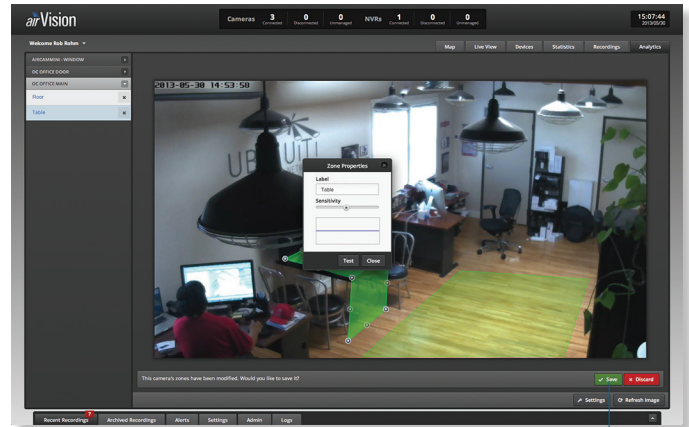

3. If you need to change the zone name or sensitivity level of the zone, click Settings .

Settings button

4. Once you've made all your changes, click **Save** to apply the changes or **Discard** to discard the changes.

Save button

Deleting a Zone

1. Click the **x** next to the zone you want to delete.

Appendix A: Mobile Support

You can access the airVision user interface from iOS and Android-based smart phones and tablets. airVision has a mobile site and a desktop site. Smart phones default to the mobile site and tablets use the desktop site.

Mobile Site

1. To connect to the web interface, enter the IP address of the airVision server in your web browser.
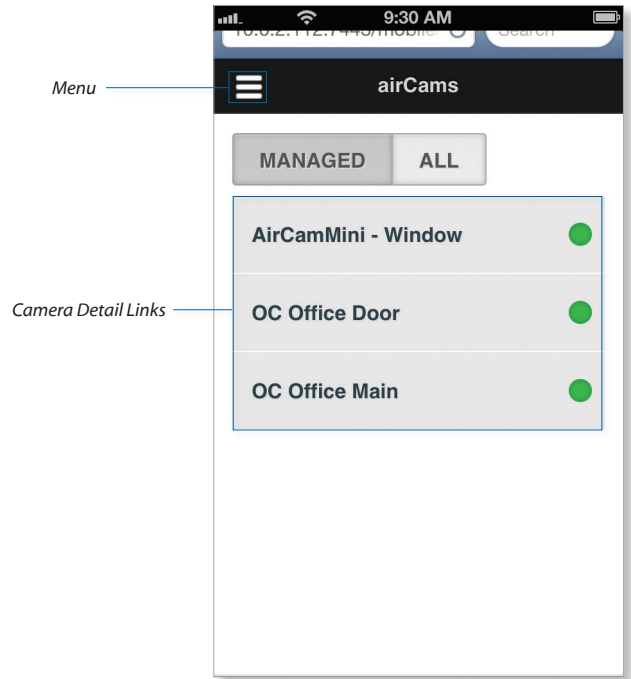
2. Select **airVision Controller**.

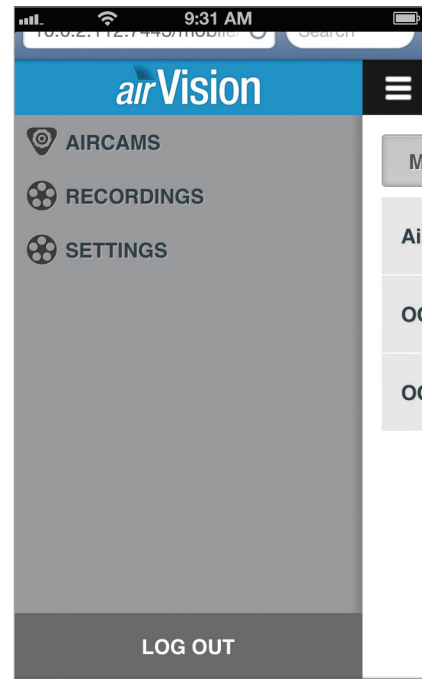3. Enter the *email address* and *password* used to login to your airVision Controller.
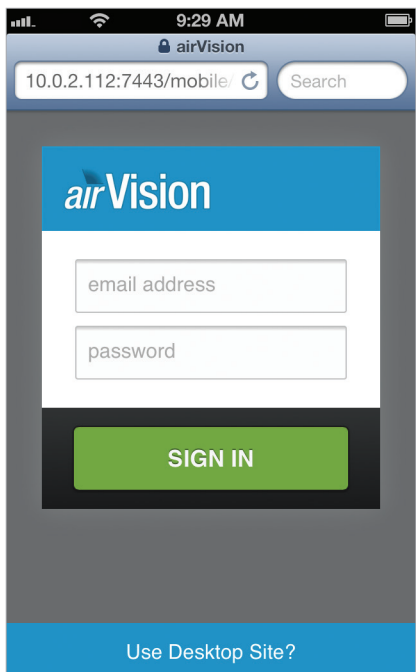
airCams
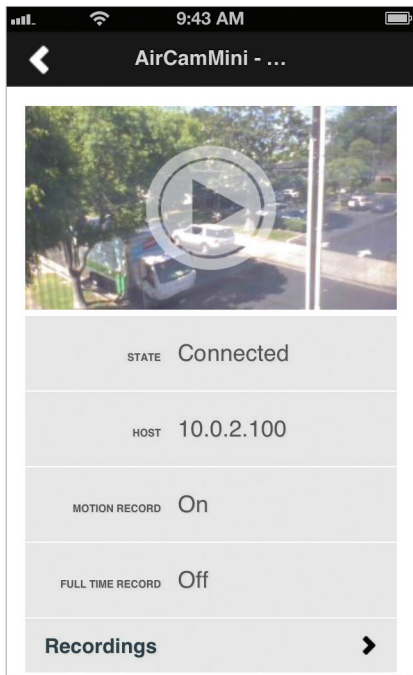
After login, a list of managed airCams is displayed.

Menu

Camera Detail Links

Menu

Camera Details

Displays a preview of camera video feed. Click on the image to view the live feed.
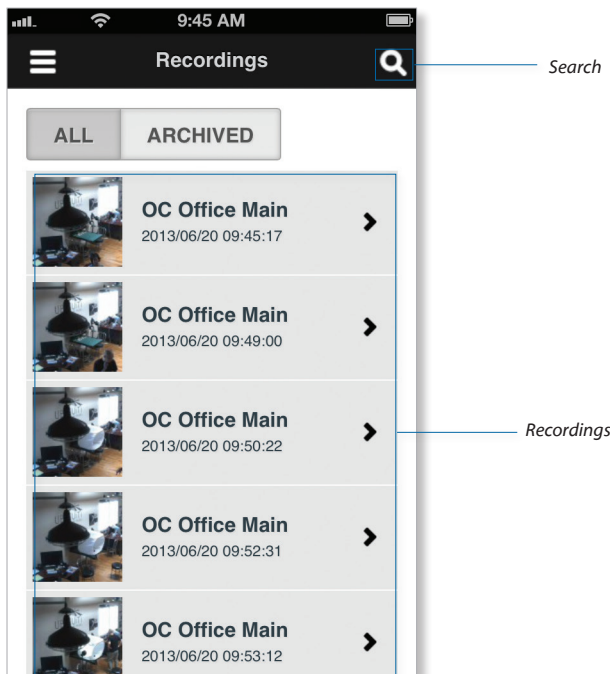
State Displays that current state of the camera.

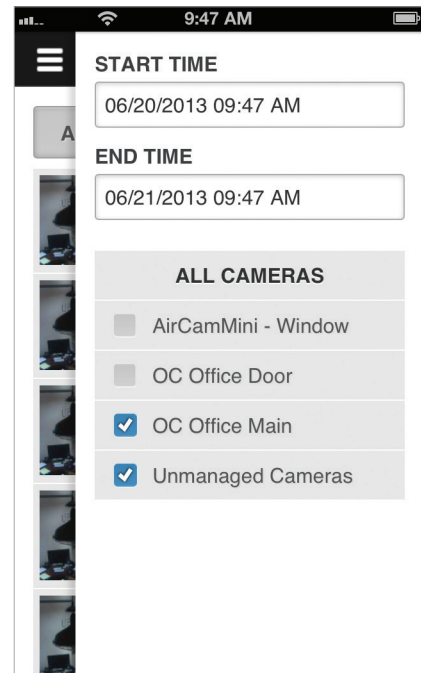**Host** Displays the host name or IP address of the camera.

Motion Record Displays whether motion recording is on or off.

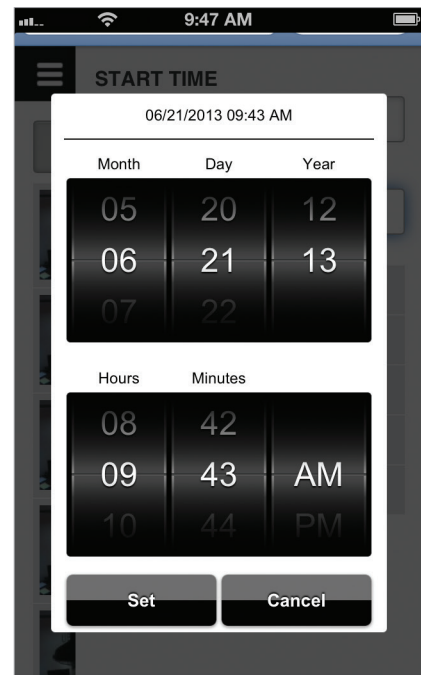**Full Time Record** Displays whether full time recording is on or off.

Recordings

Search

Start Time Touch in the field below *Start Time* and a calendar will appear that will allow you to select a beginning date and time. Touch **Set**.
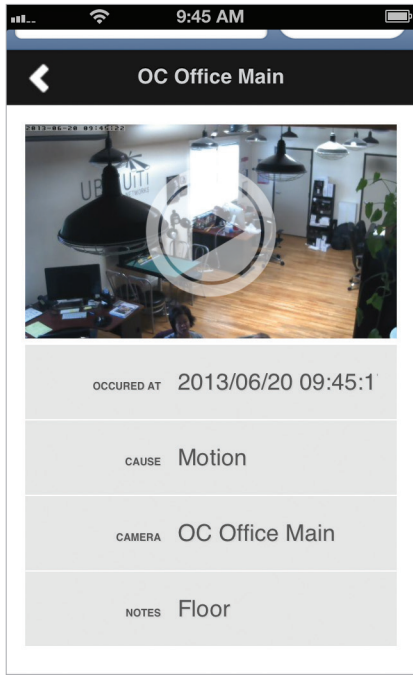
End Time Touch in the field below *End Time* and a calendar will appear that will allow you to select an ending date and time. Touch **Set**.

All Cameras Touch to select all available cameras.

Recording Details

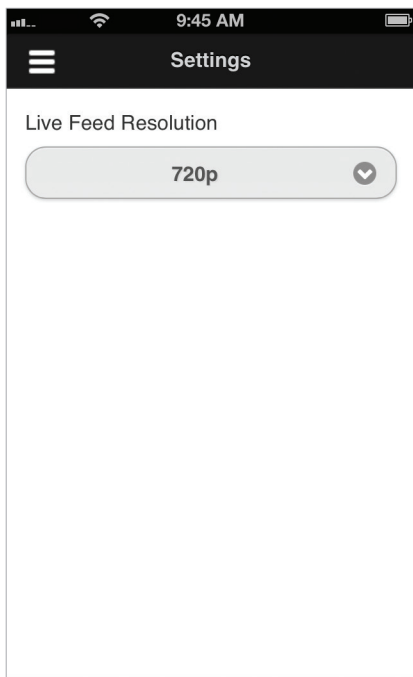Displays a preview of the recording. Click on the image to view the recording.

Select *720p*, *480p*, or *240p* resolution.

Recorded At Displays the date and time of the recording.

Cause Displays what triggered the recording.

Camera Displays the name of the camera.
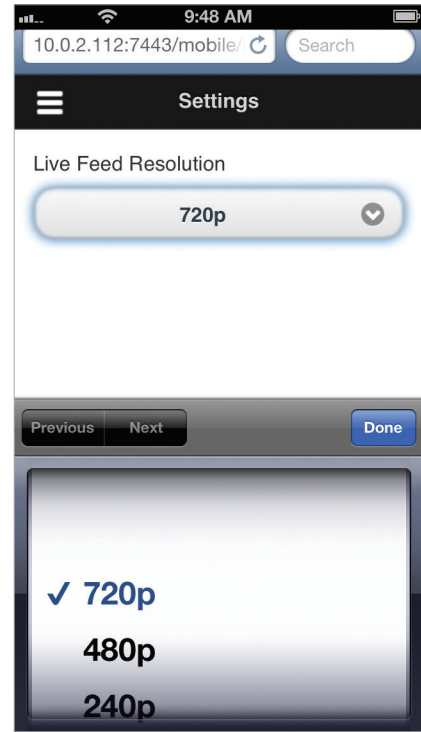
Notes Displays the name of the zone (if applicable).

Settings

Live Feed Resolution Displays the resolution of the live feed. Touch it to change the resolution.

Appendix B: Contact Information

Ubiquiti Networks Support

Ubiquiti Support Engineers are located around the world and are dedicated to helping customers resolve software, hardware compatibility, or field issues as quickly as possible. We strive to respond to support inquiries within a 24-hour period.

Online Resources

Support: **support.ubnt.com**

Community: **community.ubnt.com**

Downloads: **downloads.ubnt.com**

2580 Orchard Parkway
San Jose, CA 95131
www.ubnt.com