UBIQUITI
NETWORKS

For use with the following airCam models:

airCam™   airCam™ MINI   airCam™ DOME

air Vision™

IP Camera/NVR
Management System

USER GUIDE

Table of Contents

Chapter 1: Installation

Overview

airVision™ is a comprehensive camera management software solution from Ubiquiti Networks, Inc. that is designed to work with Ubiquiti's airCam™ product line. The software interface design is based on the popular and easy to use UniFi™ software interface.

System Requirements

• Microsoft Windows 7, Windows Vista, Windows XP or Ubuntu Linux version 11.04

• Java Runtime Environment 1.6 (1.6.0_26 or above recommended)

• FlashPlayer 10

• 2 GB RAM is highly recommended

• Web Browser: Mozilla Firefox, Google Chrome, or Microsoft Internet Explorer 8 (or above)

Hardware Installation

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

Software Installation

airVision has three different installation options. You can install the airVision and NVR software at once, or install either the airVision or NVR software only.

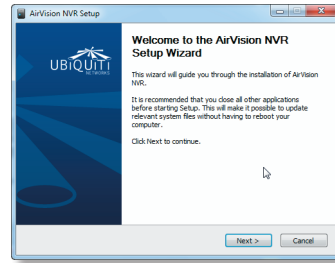### AirVision and NVR Software Install

1. Insert the airVision software CD into your CD-ROM drive and launch **Setup.exe**.
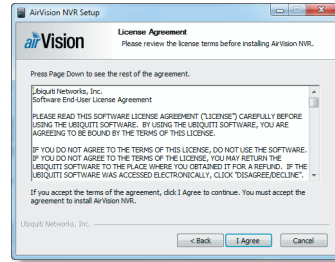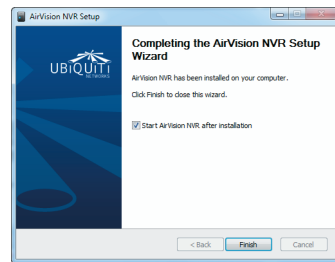

2. Click **Install AirVision with NVR**.

3. The airVision NVR Setup Wizard will start. Click **Next**.
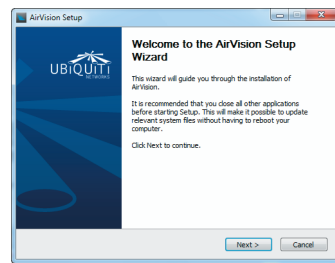

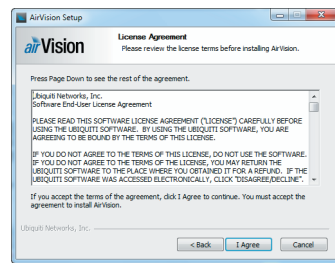4. You must click **I agree** to accept the license agreement and continue.

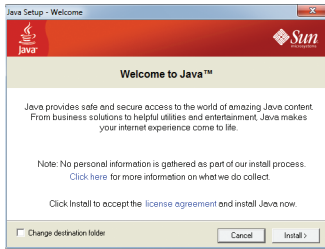5. Be sure that *Start AirVision NVR after installation* is selected and click **Finish**.

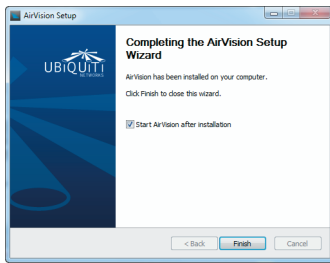6. The airVision Setup Wizard will start. Click **Next**.

7. You must click **I agree** to accept the license agreement and continue.
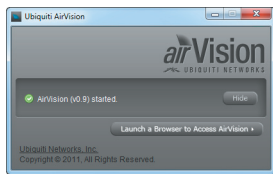
8. If your computer doesn't have Java 1.6 or above installed, you will be prompted to install it. Click **Install** to continue.

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

10. The airVision software startup will begin. When the option becomes available, click **Launch a Browser to Access AirVision**.

NVR Software Install Only

1. Insert the airVision software CD into your CD-ROM drive and launch **Setup.exe**.

2. Click **Install NVR only**.

3. The airVision NVR Setup Wizard will start. Click **Next**.

4. You must click **I agree** to accept the license agreement and continue.

5. Click **Finish**.

AirVision Software Install Only

1. Insert the airVision software CD into your CD-ROM drive and launch **Setup.exe**.

2. Click **Install AirVision with NVR**.

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

4. You must click **I agree** to accept the license agreement and continue.
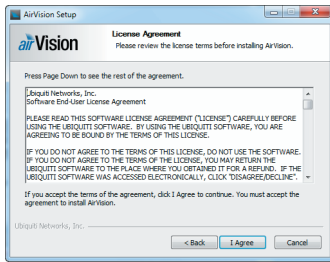
5. Click **Finish.**

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 NVR software (if it isn't already running) using one of the following methods:
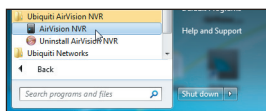
    • Start > Programs

    • airVision NVR desktop icon.
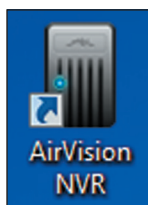
2. Launch the airVision software using one of the following methods:

    • Start > Programs
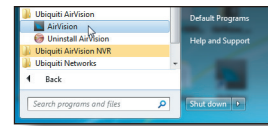
    • airVision desktop icon.
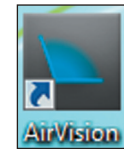
3. The airVision software startup will begin. When the option becomes available, click **Launch a Browser to Access AirVision**.
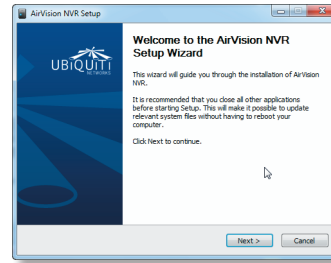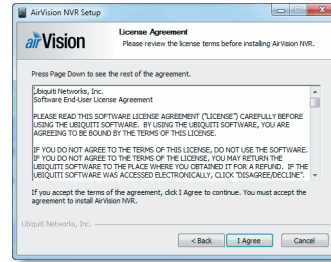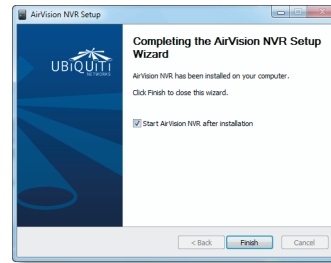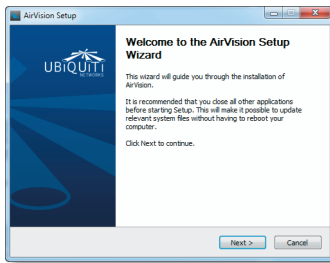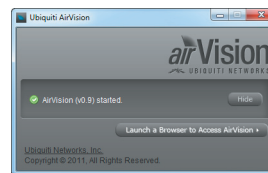

Configuring the airVision Software

1. You may receive a security certificate warning, click **Proceed anyway**.
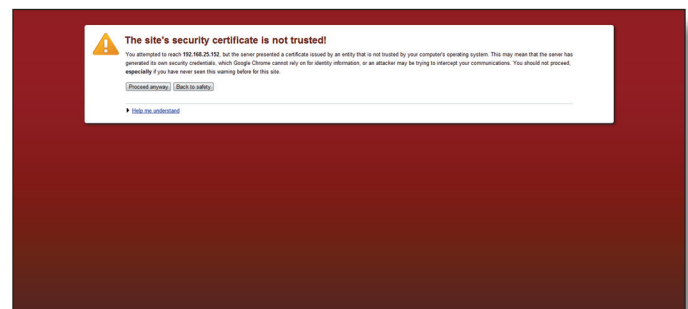
1. Select your language and click **Next**.
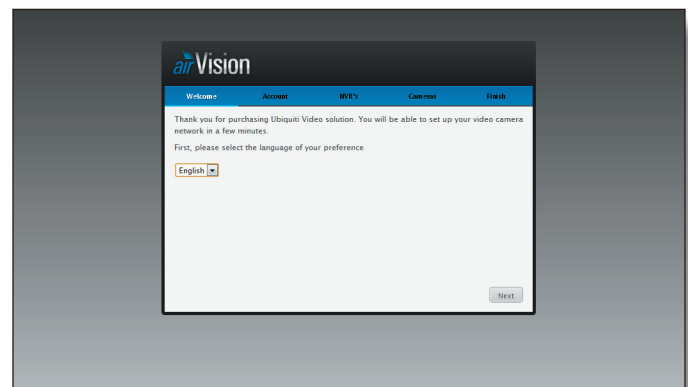
2. Enter an admin name and password to use when accessing the management interface. Confirm your password in the *Confirm* field. Click **Next**.

3. The first detected NVR (Network Video Recorder) will appear. Select an NVR and click **manage**.

4. When a NVR has been successfully managed, it will appear highlighted green. If you have multiple NVRs, use the **Prev NVR** and **Next NVR** buttons to navigate through the detected NVRs. Click manage for each additional NVR that you want to include. Click **Next**.

5. The first detected camera will appear. You will need to enter the *User Name* and *Password* for the camera to begin managing it.

6. Assign the camera to an NVR from the drop-down list and click **manage**. **Use the Prev Camera** and **Next Camera** to view detected cameras. Select the cameras that you want to manage.
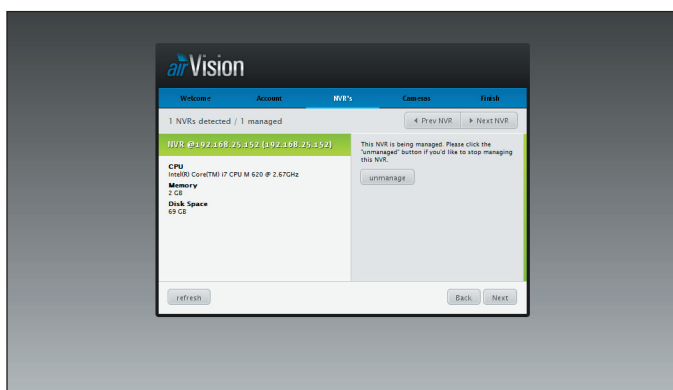
7. When a camera has been successfully managed, it will appear highlighted green. Once you've finished managing cameras, click **Next**.
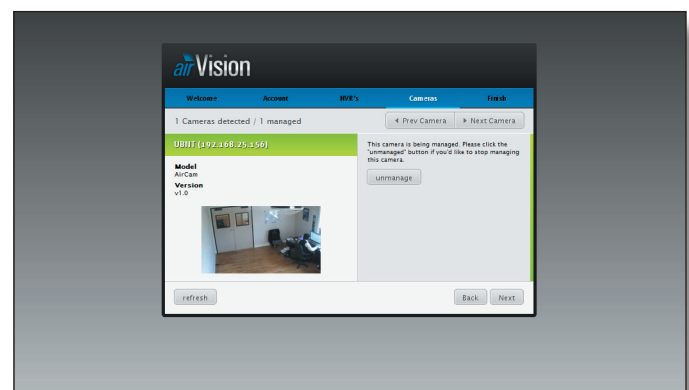
8. Review your settings. Click **Back** to make changes or **Finish** to save your settings. Once finished you will be redirected to the management interface via your web browser.
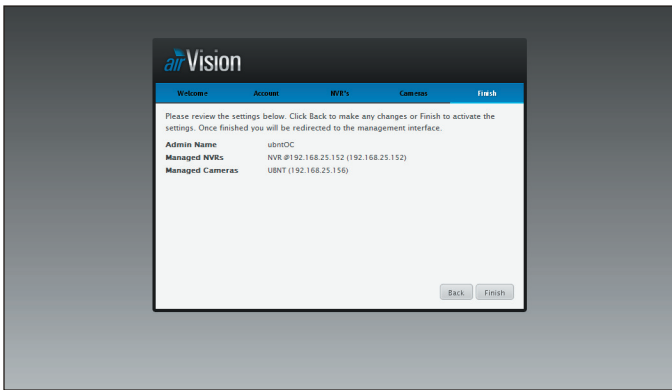
9. A login screen will appear for the airVision management interface. Enter the admin name and password that you created and click **Login**.
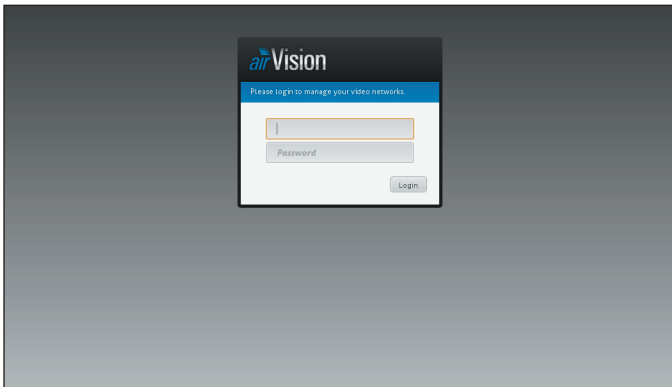
Proceed to the next chapter for information on using the airVision software.

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 hasn't already been started. Windows users go to **Start > All Programs > Ubiquiti airVision > AirVision**.

2. A window will open as the application is starting. Once it is ready to launch, you will be able to click the **Launch a Browser to access AirVision** button.
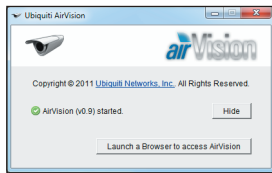
3. The login screen will appear. Enter the admin name and password in the appropriate fields and click **Login**.
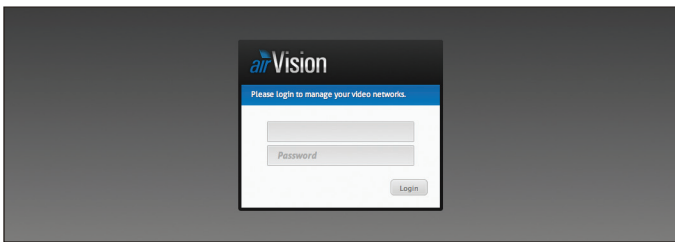
Interface Tabs

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/Logout

The current time and date are displayed on the screen.

Logout Click this icon to logout of airVision.

Recent Recordings

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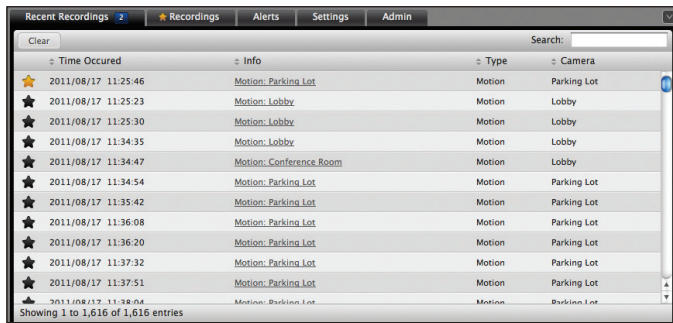
Clear Clears the list of Recent Recordings. This doesn't delete the actual recordings, it just removes the entries from this list.

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.

★ Functions like a bookmark or favorite that is accessible under the ★ *Recordings* tab. Click on the Star ★ icon to the left of the recording to designate a recording. Once a recording has been designated, the star ★ will appear yellow in color. To remove the designation, simply click on the star ★ icon again.

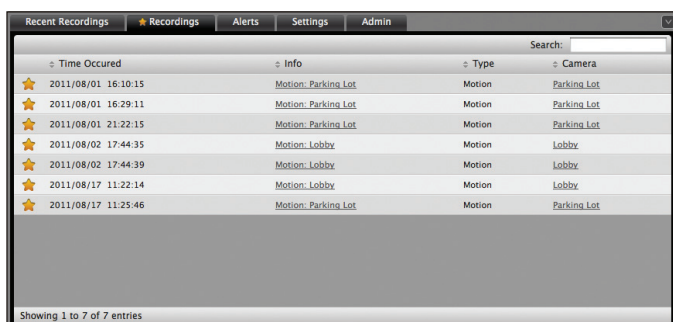**Time Occurred** Displays the date and time that the recording took place. The year/month/day and hour:minute:seconds are displayed.

Info Displays the type of recording and camera information. It is a clickable link that will launch the *Viewer* and play the recording when clicked.

Type The type of event.

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 22.

★ 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.

★ Designated recordings all appear under the ★ *Recordings* tab. If you wish to remove a recording, simply click the ★ next to the recording and it will be removed from the list. This doesn't delete the actual recordings, it just removes the entries from this list.

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

Info Displays the type of recording and camera information. It is a clickable link that will launch the *Viewer* and play the recording when clicked.

Type The type of event.

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 22.

Alerts

Recent/All Toggle between recent alerts or a list of all alert messages.

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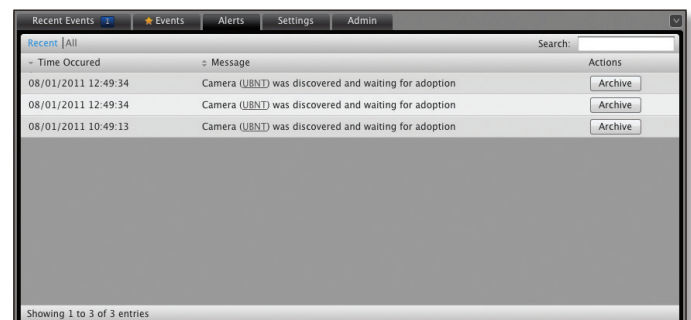
Time Occurred Displays the date and time that the event took place. The year/month/day and hour:minute:seconds are displayed.

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.

Actions Allows you to archive alert messages.

Settings
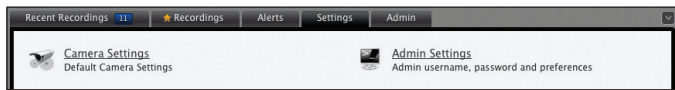
Camera Settings
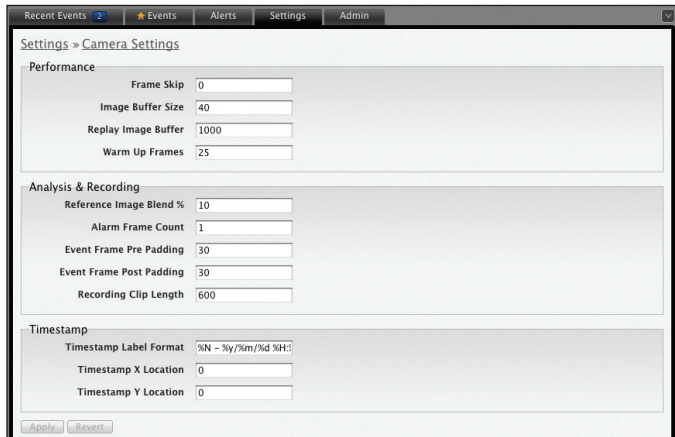
Performance

Frame Skip This option determines how many frames are skipped in recorded events. By default this is set to 0 which doesn't skip any frames and means that every captured frame is saved. Entering a number in this field defines how many frames are skipped between every recorded frame. For example, if 2 were entered in this field, two frames are skipped in between every single frame recorded.

Image Buffer Size Determines how many frames are held in the image buffer. By default, this is set to 40.

Replay Image Buffer Defines the total number of frames for the replay image buffer. 1000 is the default value.

Warm Up Frames Specifies the number of frames processed before analysis occurs. 25 is the default value.

Analysis & Recording

Reference Image Blend % Every analyzed image is a composite of previous images and is formed by applying the current image as a certain percentage of the previous reference image. The value entered here determines the percentage of the previous image used. By default the value is set to 10%. A higher value would make slower progressing events less detectable. Typically if this number is modified, it should be adjusted down.

Alarm Frame Count Specifies how many consecutive alarm frames must occur before an event is generated. The default value of 1 ensures that any alarm frame generates an event. Although a value of up to 16 may be entered here, typically anything larger than 3 or 4 will not be useful.

Event Frame Pre Padding When motion is detected, this is the amount of frames included in the recording before the motion occurs. By default this is set to 30.

Event Frame Post Padding When motion is detected, this is the amount of frames included in the recording after the motion occurs. By default this is set to 30.

Recording Clip Length Defines the maximum length of a recording clip in seconds. The default is 600 seconds (10 minutes).

Timestamp

Timestamp Label Format The timestamp label on the image is defined here. If the field is left blank, there will be no timestamp on your images. Below is a list of strings that can be used to create custom timestamp information. The strings are case sensitive. You can separate the strings with dividing characters such as spaces, slashes, dashes, and colons.

String	Displays
%N	Camera Name
%Y	Year (Full)
%y	Year (2 digit)
%m	Month (2 digit)
%d	Day (2 digit)
%D	Date (yy/mm/dd)
%H	Hour
%h	Month (3 letter)
%M	Minute
%S	Second
%f	hundredths of a second
%T	Time (hh:mm:ss)

Examples:

String	Example:
%N - %y/%m/%d %H:%M:%S	Camera - 11/07/18 17:14:25
%N - %D %T	Camera - 11/07/18 17:15:25

- **X Location** The X value adjusts the position of the timestamp on the image to the left or right. A value of 0 positions the timestamp on the left side of the image.
- **Y Location** The Y value adjusts the position of the timestamp on the image to the top or bottom. A value of 0 positions the timestamp on top of the image.

Admin Settings
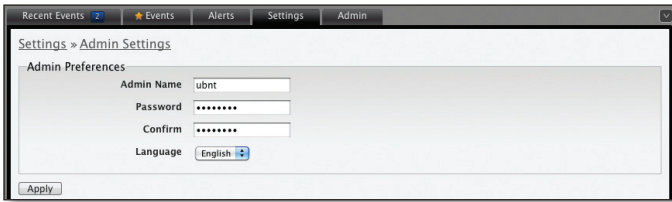
Admin Name Displays the current admin name used to login. To change the admin name, simply enter a new name and click **Apply**.

Password A new password can be entered in this field. Be sure to enter the password again in the *Confirm* field and then click **Apply** to save your new password.

Confirm Used to confirm your new password.

Language Selects the language for use in the interface.

Admin
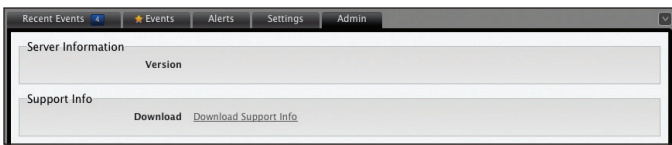
Server Information

Version The software version is displayed here. If there is an update, airVision will automatically download it and display it here.

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.

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.
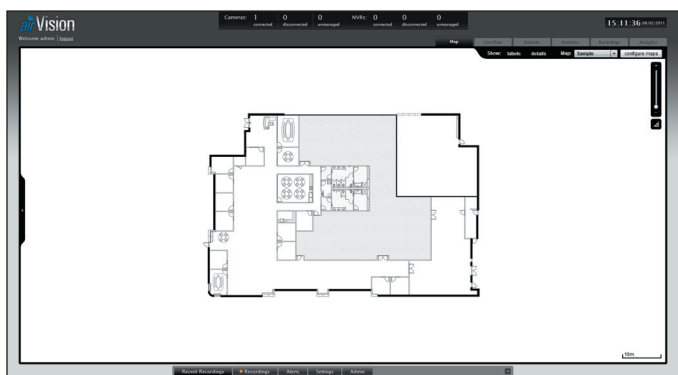
Adding a Map

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.
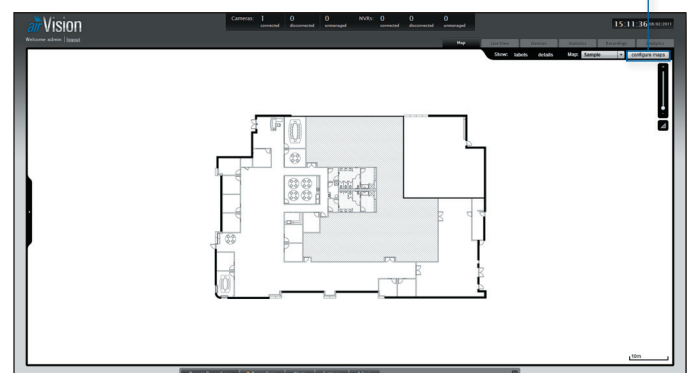
Image Maps

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.
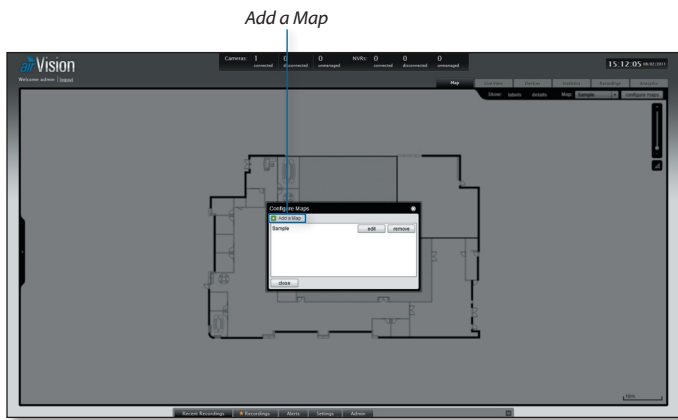
Once you've created the map, you can upload it to the airVision software by performing the following steps:
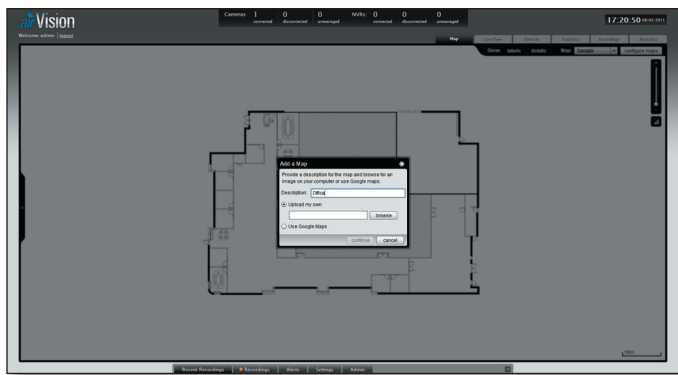
1. Click **Configure Maps**.
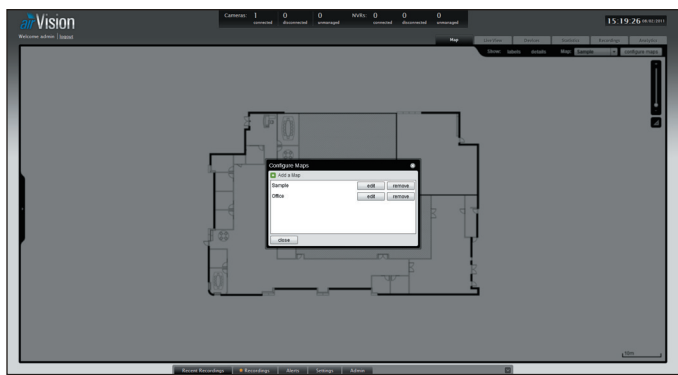
Configure Maps button
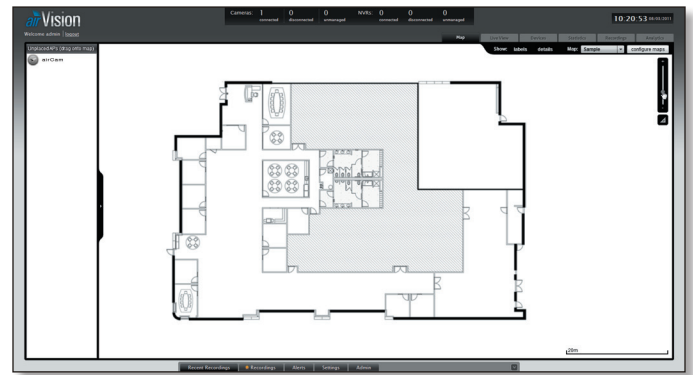
2. Click **Add a Map**.

Add a Map

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**.

4. Click **Close**.

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.
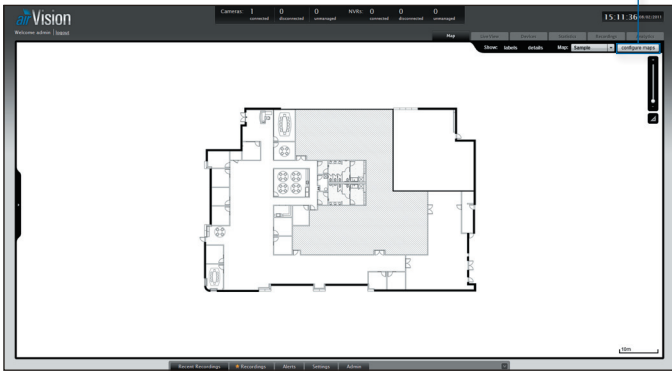

For additional information on the camera icon options, refer to "Camera Icons" on page 14.

Google Maps™

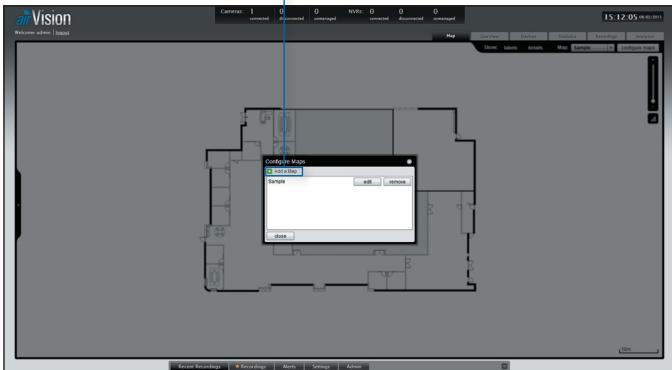To create a custom map using *Google Maps™*, perform the following steps:

1. Click **Configure Maps**.
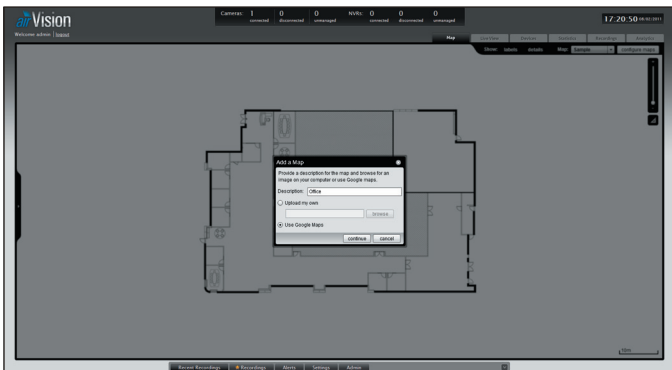
Configure Maps button


2. Click **Add a Map**.

Add a Map

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

4. In order to use *Google Maps™*, you must register with Google for a Google Maps API key. To do so, perform the following steps:

a. Copy and paste the web link from the window into a new web browser window. Do not close the airVision window.

http://code.google.com/apis/maps/signup.html
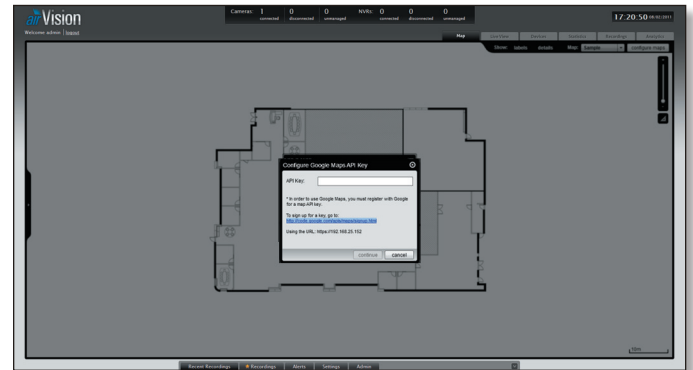
b. You need to be signed in with a Google account to obtain a Google Maps API key.

c. Review the terms and conditions and click the checkbox next to **I have read and agree with the terms and conditions**.

d. Navigate back to the airVision window and copy the address that airVision displays in the address bar.

You only need to copy until the end of the address, do not include the port information. In the example below, the full address is https://192.168.0.245:7443/manage. You only need to copy up to **https://192.168.0.245**. Do not include the colon or anything beyond it.

Address to copy
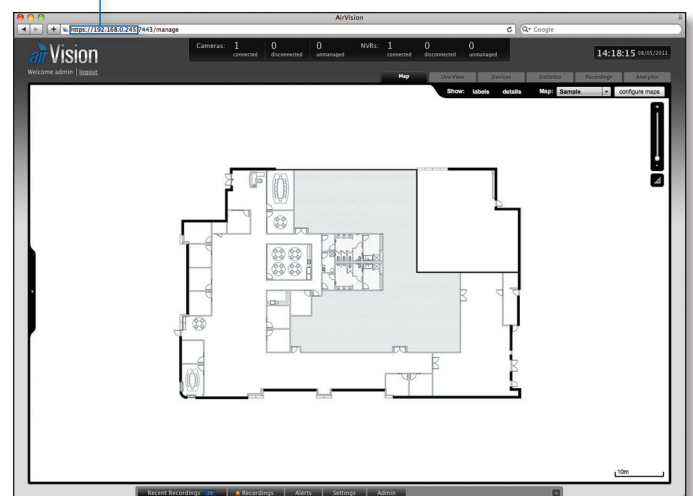
e. Navigate back to the Google window and paste the address into the *My web site URL:* field.
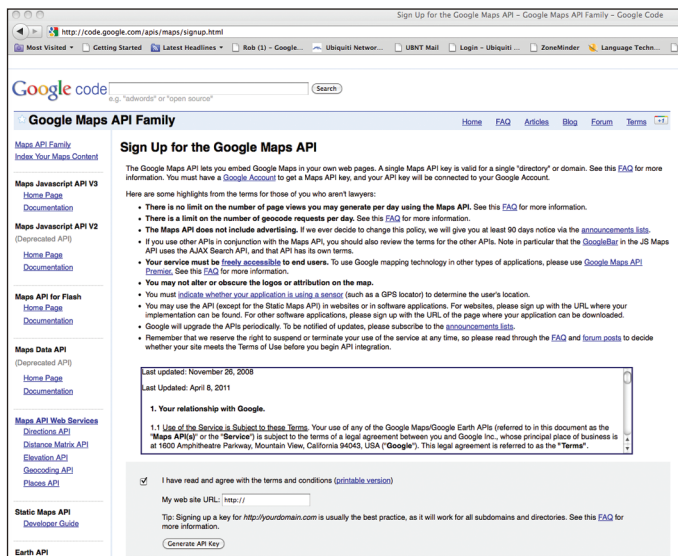
f. Click the **Generate API Key** button.

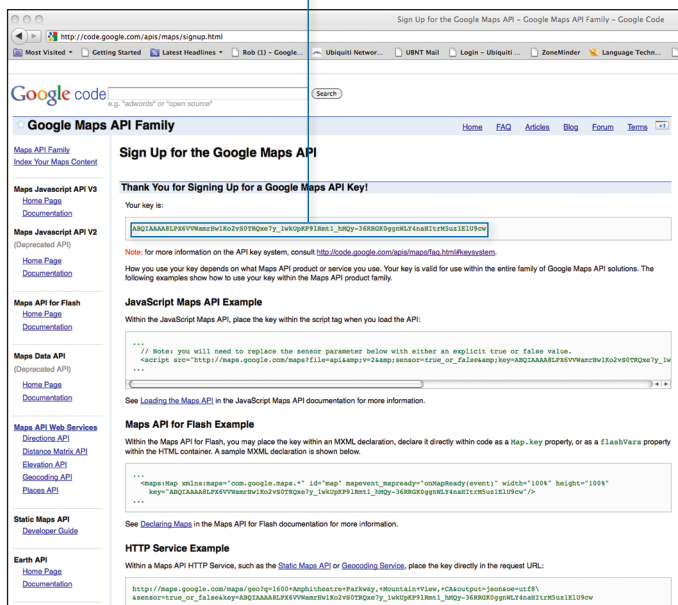g. A new window will open displaying your key. Highlight and copy the Google Maps API key.

Google Maps API Key

h. Navigate back to the airVision window and paste the API Key into the *API Key* field. Click **continue**.
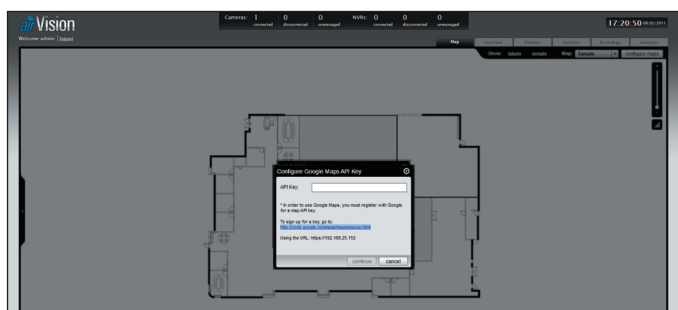
5. The default Google Map location will appear. Click the **Set Location** button in the lower left.

Set Location button

6. Select **Specify Address** to enter an address. Type in the address and then click **Go**.

    You also have the *Specify Coordinates* option to enter the latitude and longitude of a specific location.

7. The specified location should appear. Click **Save**.

8. Click **Close**.

9. Select the new map you created from the *Map* drop-down.
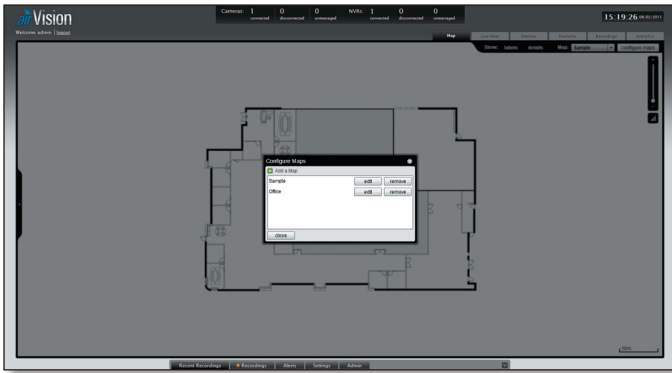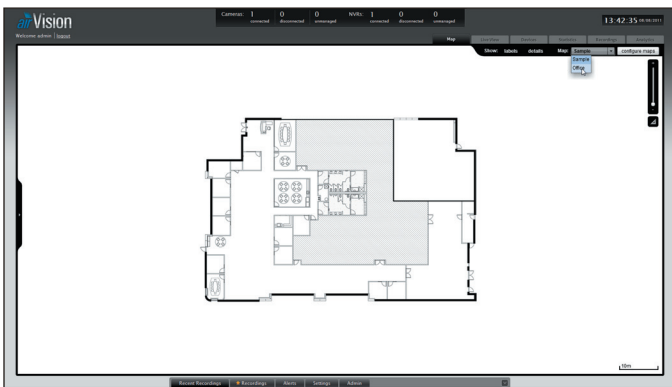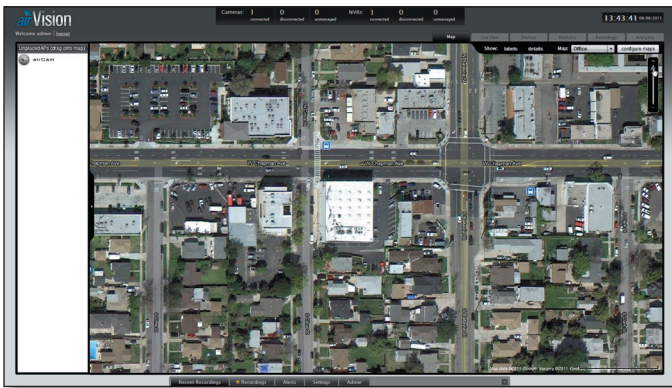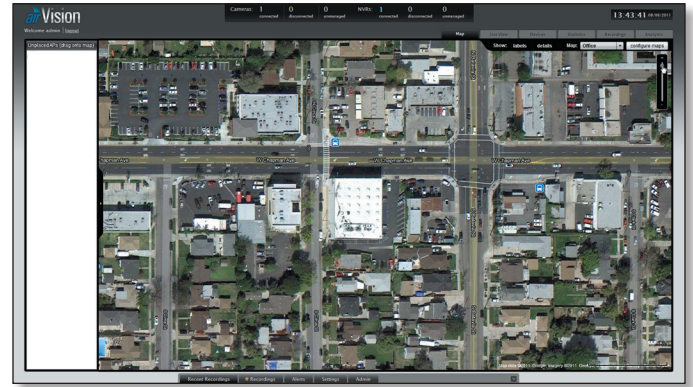

10. You can adjust the zoom using the slider on the right. .

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

Camera Icons

Camera The *Camera* icon(s) can be placed on the map to show the location of the camera(s).

Click and hold the icon to drag the camera to another location on the map.
Click on the *Camera* icon to reveal additional options. Click a blank area of the map to hide the additional options.

Details icon

Lock icon

Adjustable Camera Field allows you to define the visual representation of the camera field of view.

Note: This doesn't adjust the view of the camera.

Remove icon

Live Feed icon

Alert icon
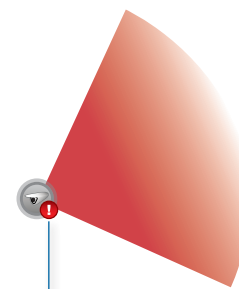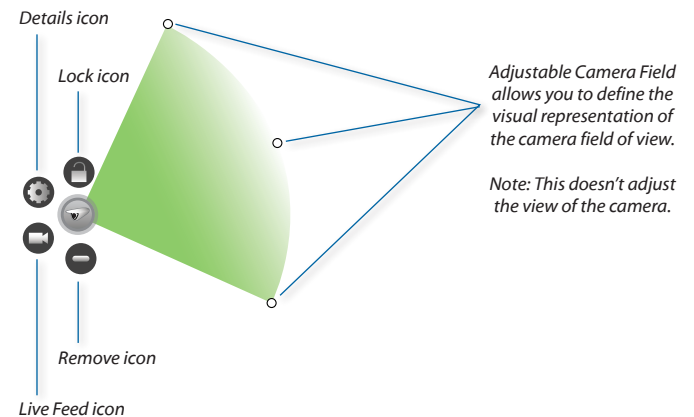
Lock Locks the selected camera to the current location on the map and disables the *Remove* icon functionality for this camera while locked.

Details Brings up the *Details* window.
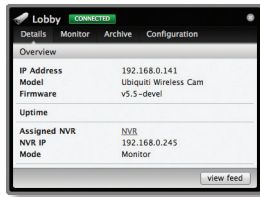
There are 4 tabs to select from in the *Details* window. Details, Monitor, Archive, and Configuration.

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

- **Monitor** Displays camera transmit information in kbps when *Camera Connection* is selected. This can be viewed real-time or you can select the information for the last hour, last day, or last week. When *Activity* is selected, it will display activity from the last 24 hours.

- **Archive** Displays recordings that have been archived for the selected camera. The date and time of the recording are displayed as well as the cause for the recording.

- **Configuration** Displays the camera configuration settings.

Live Feed Click on this icon to view a live feed of the selected camera. You can double-click in the live feed window to expand the view to full screen. Double-click again to return to the minimized view. Click the X in the upper right corner to close the *Live Feed* window.

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

Alert This icon will appear to indicate activity for a specific camera. Click on the icon to launch the *Event Viewer* and view the recording that was captured.

Show: You can select to show labels or details and wireless coverage on the map. The following are the options available:

- **Labels** Displays the name of the Access Point.

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

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

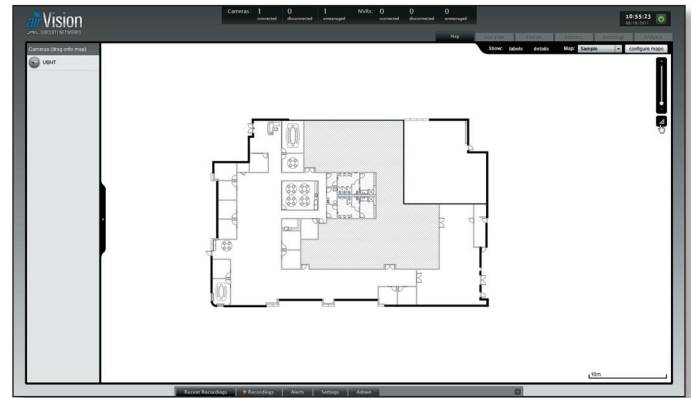**Configure Maps** Use this option to add maps or edit the current map(s).

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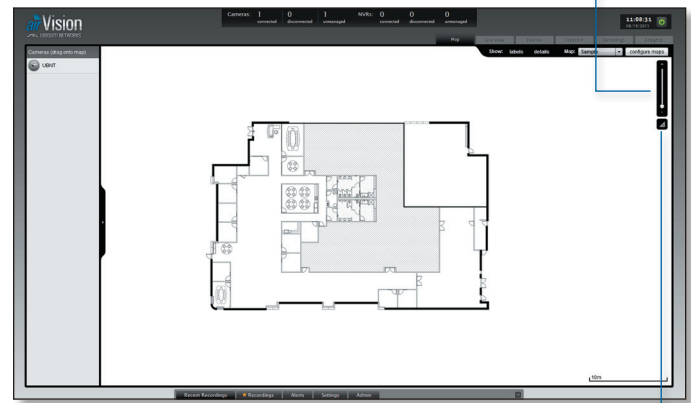

Set Map Scale Use this option to define the scale of the map. You will draw a line and define the distance that the line represents.

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**.
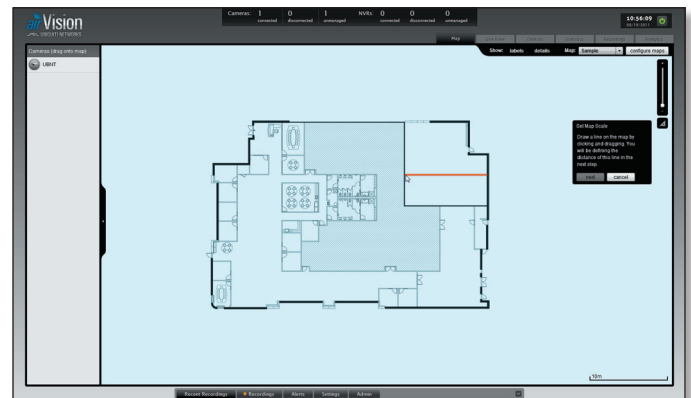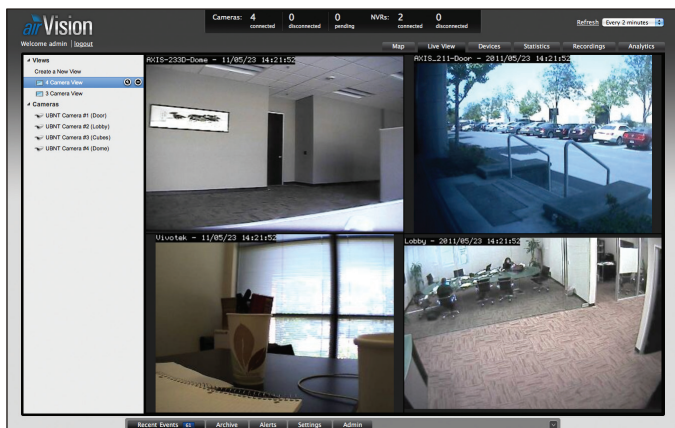
3. Enter the distance that the line represents in the
    Distance: field. The distance is specified in meters by
    default but you can switch to feet using the drop-down
    selection menu on the right. Click **Confirm**.
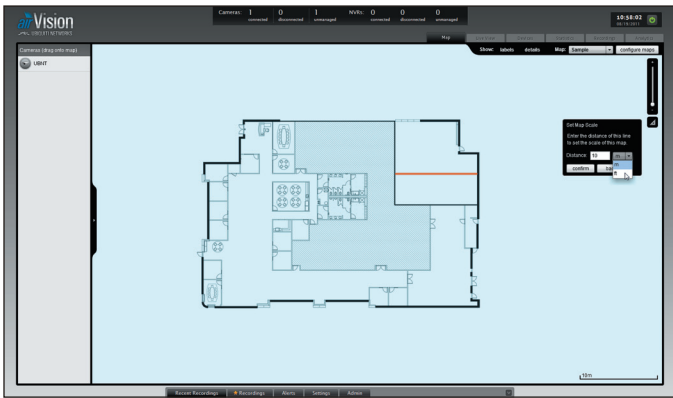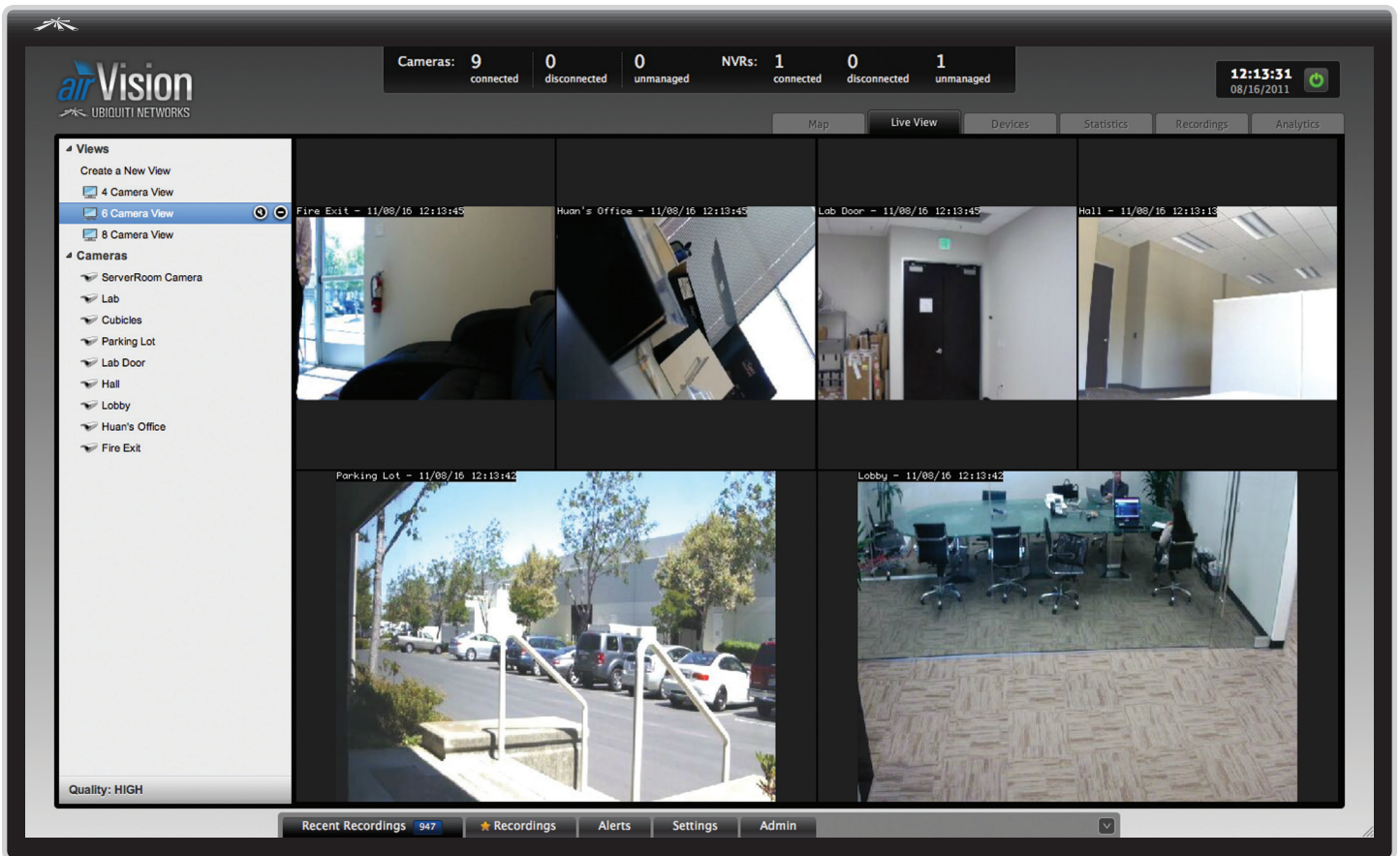
Chapter 4: Live View Tab

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 it to a monitor.

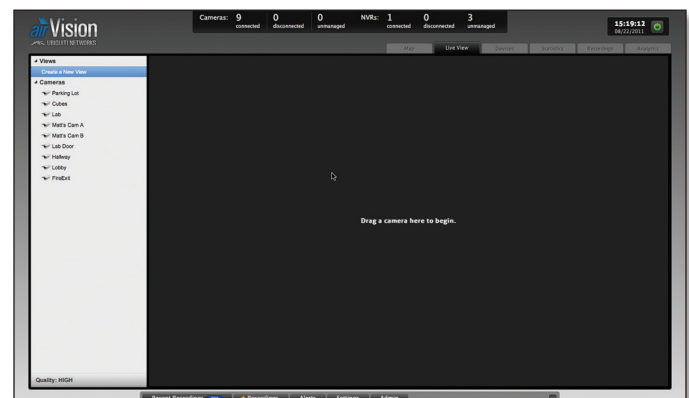## Views

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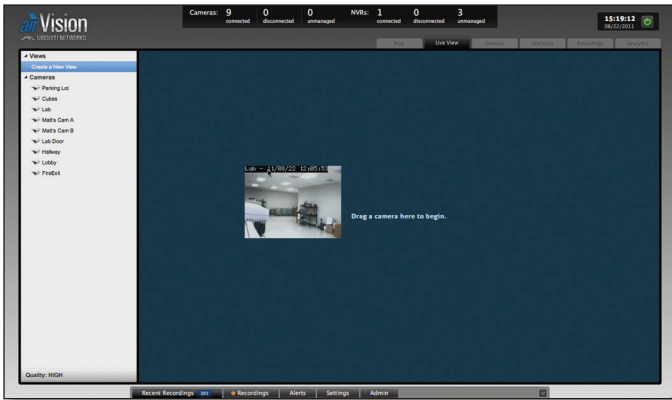
Create a New View

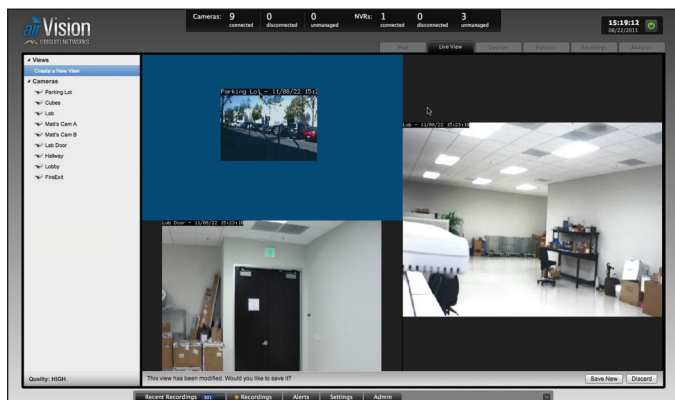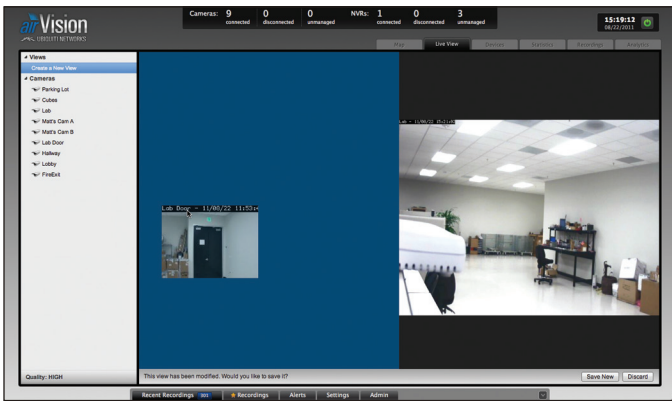To create a new camera view, perform the following steps:

1. Click **Create a New View** under *Views*.

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

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.
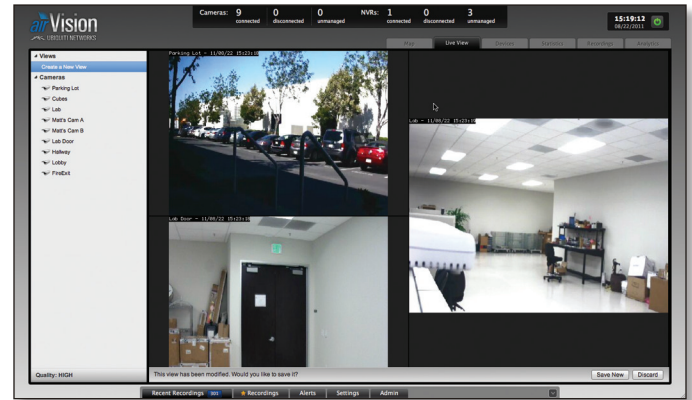
5. Enter a name for the camera view in the *View label:* field and click **Save**.

Renaming a View

To rename a view, perform the following steps:

1. Click on the view that you want to rename.

2. Click the Edit ⊙ icon on the line that is highlighted.

3. Enter a new name for the camera view in the *View label:* field and click **Save**.

Adding Cameras to an Existing View

To add cameras to an existing view, perform the following steps:
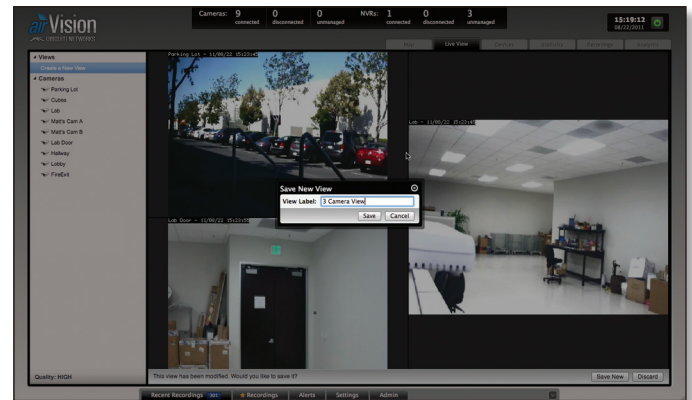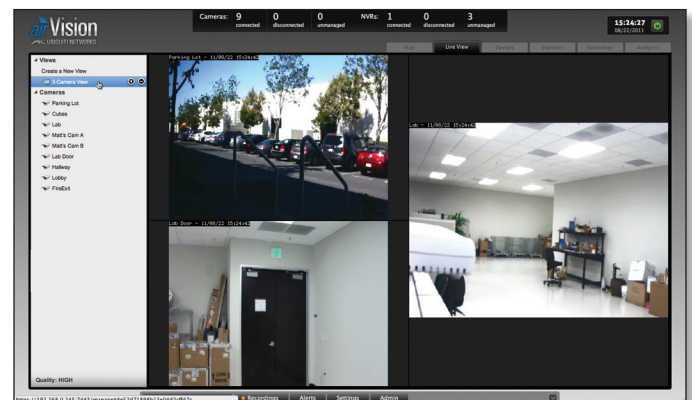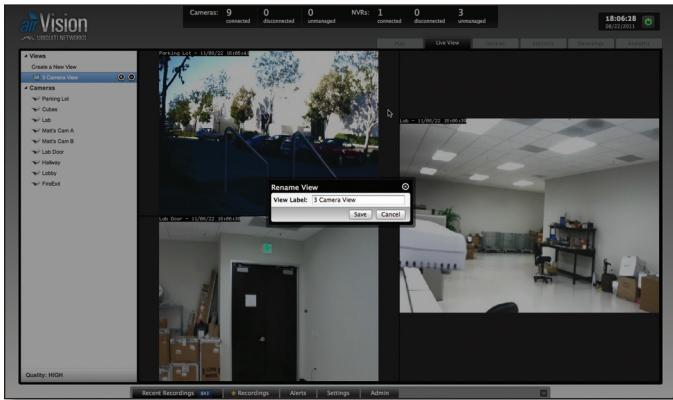
1. Click on the view that you want to add cameras to.

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.
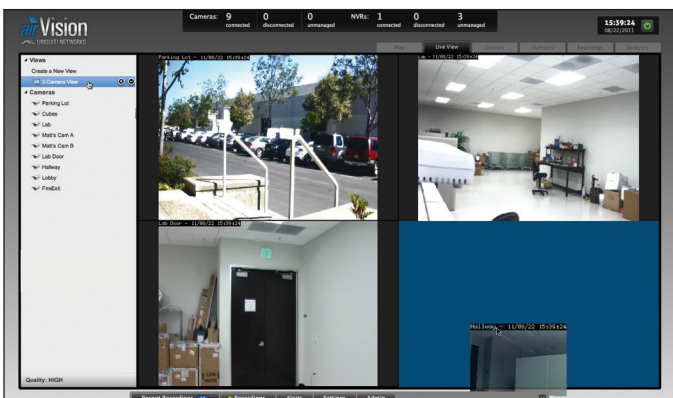
3. You can save the updated view as a new view or replace the existing view. Click **Save** to replace the existing view. Click **Save New** if you want to save it as a new view.
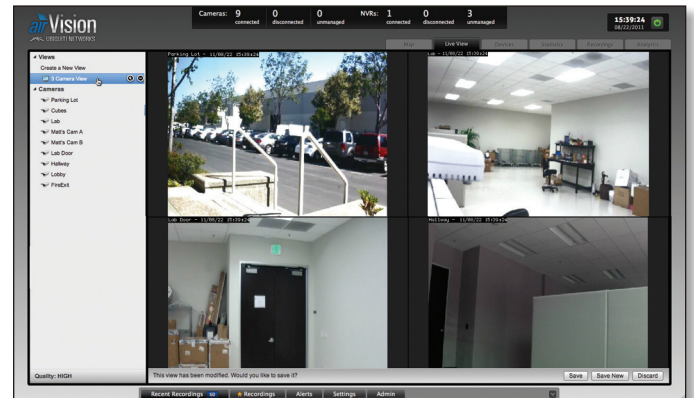
Deleting a View

To delete an existing view, perform the following steps:

1. Click on the view that you want to delete.
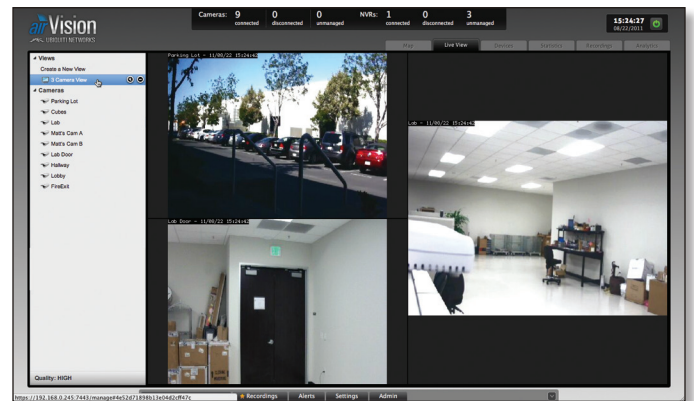
2. Click the Delete ⊖ icon on the line that is highlighted.

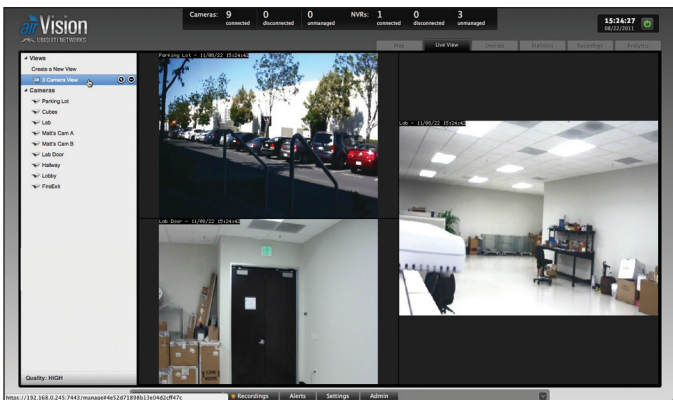## Cameras

Displays a list of available camera feeds. Click on a camera to view a live feed.
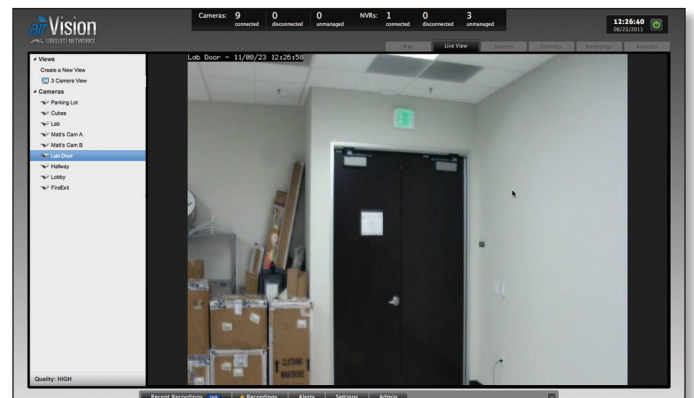
Quality

The camera quality can be changed at the bottom of the *Live View* tab. This selection applies to all of the cameras viewed in the *Live View* window.
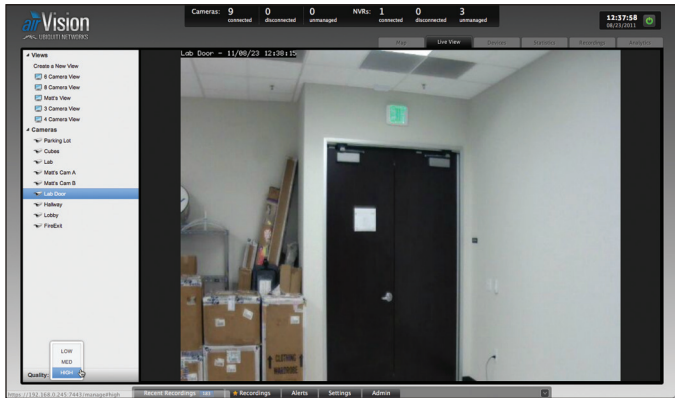
Select the quality of the live feed that you want to use.

- **High**
- **Med**
- **Low**
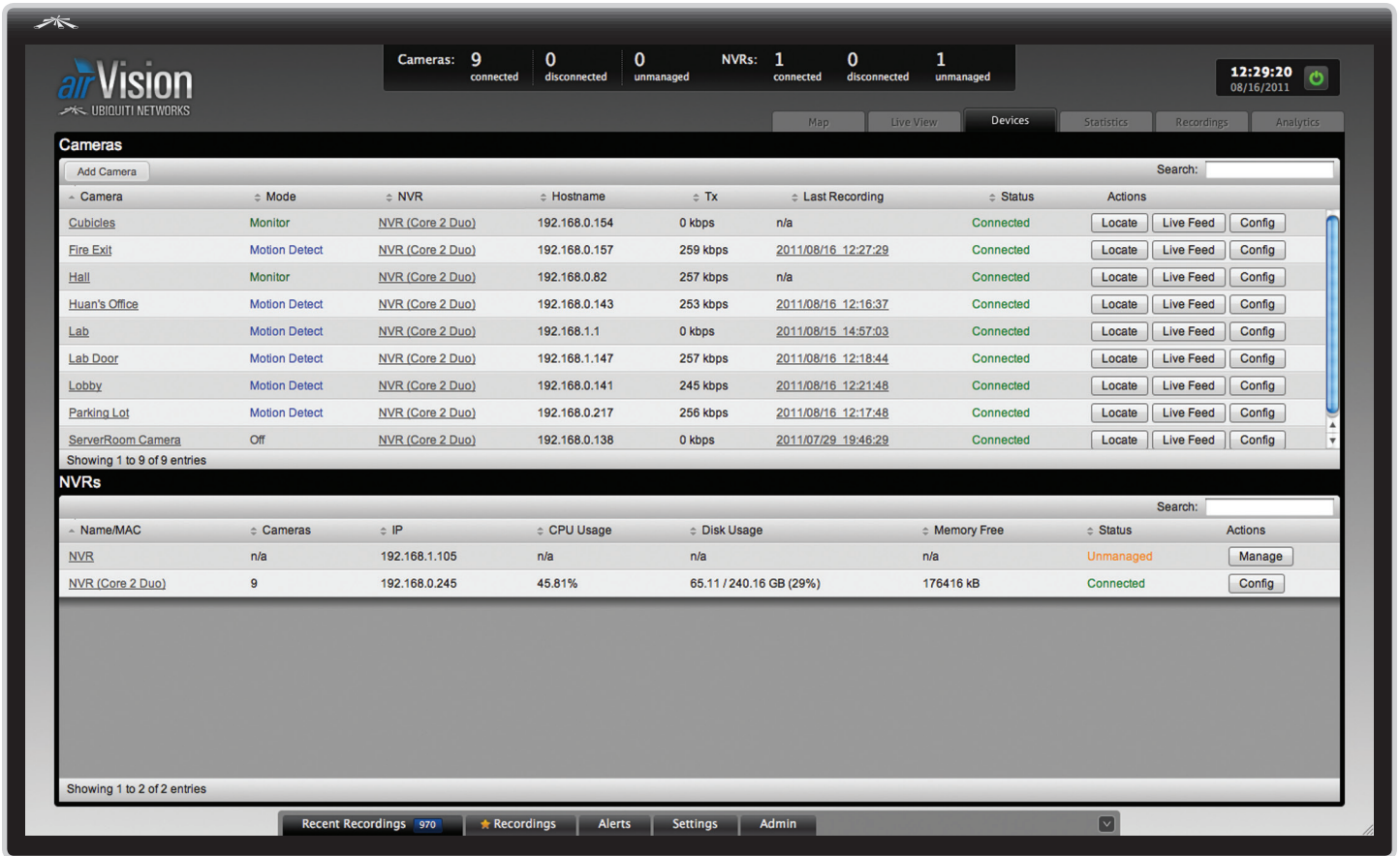
Chapter 5: Devices Tab

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

Cameras

Cameras are displayed with their name, operation mode, the connected NVR, IP address, throughput, last recording date and time, camera status, and an action button to locate the camera on the map and another action button to view the live feed of the camera.

Add Camera Click this button to add a camera manually. The Add Camera window will appear.
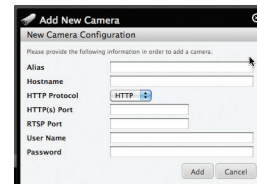
- **Alias** This is the friendly name of the camera.
- **Hostname** Displays the host name or IP address of the camera.
- **HTTP Protocol** Drop-down allows you to select between HTTP or HTTPS access to the camera. HTTPS offers encrypted communication.

- **HTTP(s) Port** The port used for HTTP or HTTPS access to the camera. The standard default port for HTTP communication is port 80. The standard default port for HTTPS communication is port 443.
- **RTSP Port** The RTSP port is typically port 554.
- **User Name** The user name used to access the camera.
- **Password** The password used to access the camera.

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 a normal view.

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

Mode Displays the operation mode that the camera is in.

NVR Displays the NVR that is being used for recordings by the camera. Click on 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 located on the CD-ROM for interface details.

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:

- **Locate** Click this button to locate the camera on the map. You will be taken to the map screen and an animation will indicate which camera it is on the map.
- **Live Feed** Click this button to view a live feed from the selected camera.
- **Config** Click this button to open that camera's configuration details. Refer to "Configuration" on page 24 for additional details.
- **Manage** Click to manage a camera that is currently unmanaged by airVision. You will need to enter the user name and password for the camera.

NVRs

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 a normal view.

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

Cameras Displays the number of cameras that are connected to the NVR.

Hostname Displays the hostname or IP address of the NVR.

CPU Usage Displays the percentage value 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 config settings.

Clicking on a Device Link

The recordings have clickable links **underlined in gray text** for recordings and cameras. Details vary based on the selection.

Camera Details Window

The upper part of the window has 4 clickable tabs. The 4 tabs contain the following information:

Details

Displays details on the selected camera.

Overview

- **IP address** Displays the IP address of the camera.

- **Model** Displays the camera model information.
- **Firmware** Displays the version of software used on the camera.
- **Uptime** Displays the amount of time the camera has been running without interruption.
- **Assigned NVR** Displays the name of the NVR that the camera has been assigned to.
- **NVR IP** Displays the IP address of the NVR.
- **Mode** Displays the recording mode of operation that the camera is using.

Monitor

Monitor has two selectable options below it:

Camera Connection

- **Realtime** Displays real-time camera transmission information in kbps.
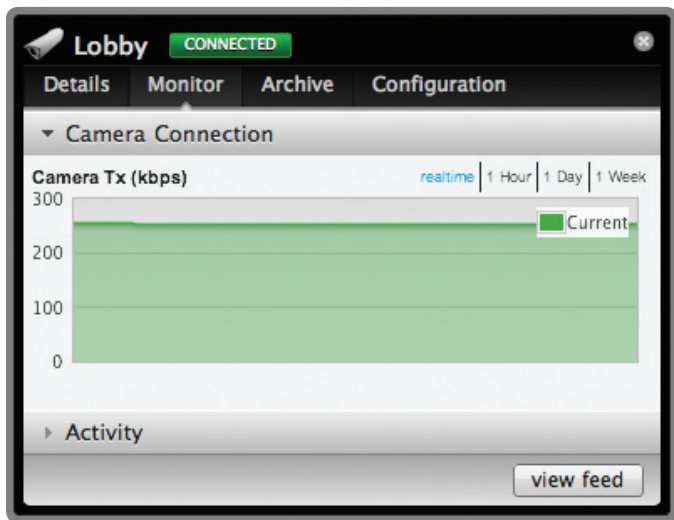
- **1 Hour** Displays camera transmission information for the last hour in kbps.
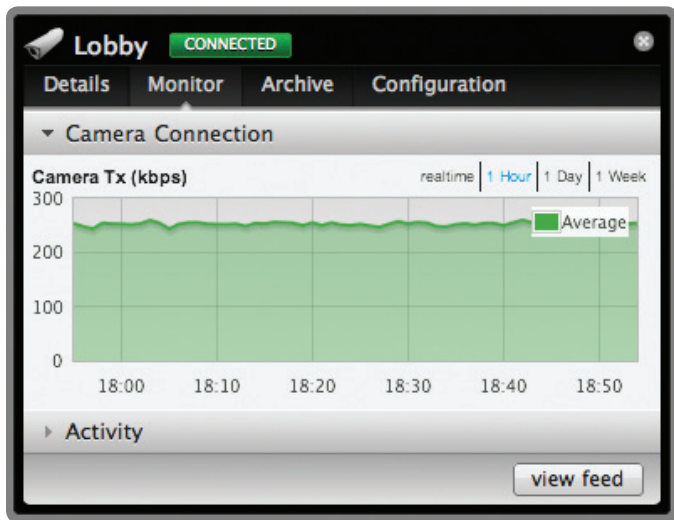
- **1 Day** Displays a chart of the camera transmission information for the last day. The chart displays the low, average, and high transmission information in kbps.
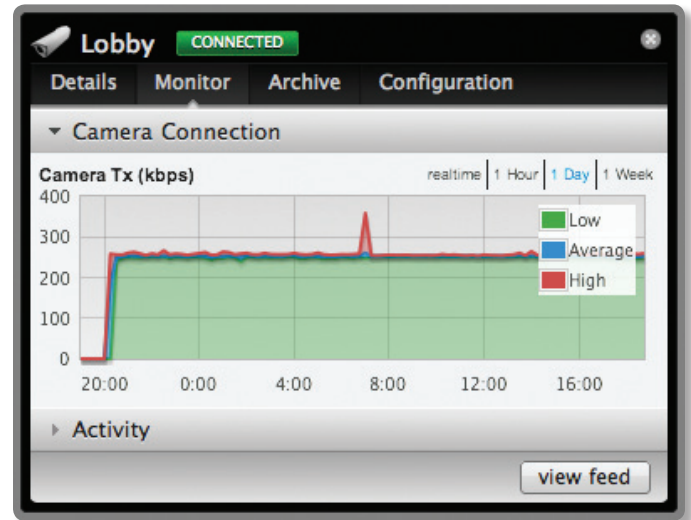
- **1 Week** Displays a chart of the camera transmission information for the last day. The chart displays the low, average, and high transmission information in kbps.
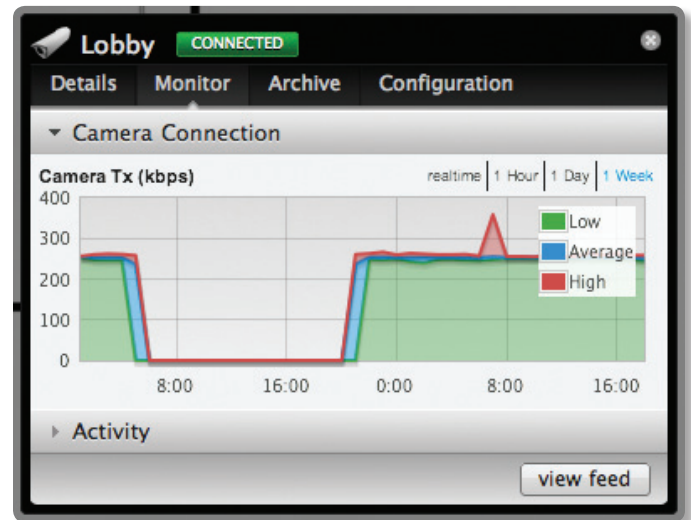
Activity

Displays activity from the last 24 hours.

Archive

- **Date** Displays the date and time of the recording.
- **Cause** Displays the cause of the recording.

Configuration

Basic Configuration

- **Alias** This field defines the name of the camera.
- **NVR Assignment** Defines the NVR that the selected camera is assigned to.
- **Record Mode** Allows you to define the recording mode of the camera on the NVR. Below are the available options:
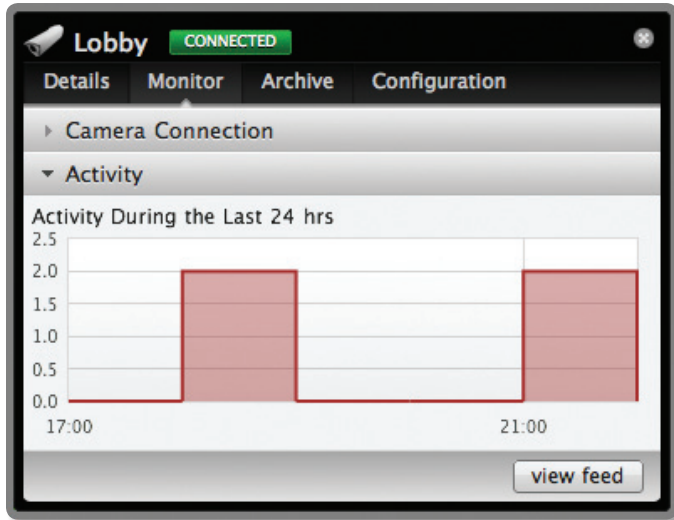
Record Mode	Description
Off	No recording or events generated in this mode.
Monitor	In *Monitor* mode, no image analysis is done and no events are generated. In Monitor mode, the NVR will downscale live feeds to suit the users feed size/quality settings.
Motion Detect	In *Motion Detect* mode, all captured images are analyzed and events are generated when motion is detected.
Full Time Record	In *Full Time Record* mode, continuous events of a fixed length are generated regardless of motion which is similar to a time-lapse video recorder. There is no motion detection used in this mode.
Motion Record	*Motion Record* mode uses elements from *Motion Detect* and *Full Time Record* modes by recording fixed length events and highlighting any motion detected within those events.

Recording Modes

Connection

- **Host Name** The host name is the IP address of the camera.
- **HTTP Protocol** Drop-down allows you to select between HTTP or HTTPS access to the camera. HTTPS offers encrypted communication.
- **HTTP(s) Port** The port used for HTTP or HTTPS access to the camera. The standard default port for HTTP communication is port 80. The standard default port for HTTPS communication is port 443.
- **RTSP Port** The RTSP port is typically port 554.
- **User Name** The user name 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 resolution selected must be supported on the camera or the image may not appear properly.

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

Orientation	Description	Example
Normal	Displays the video feed in normal mode.	
Rotate Right	Rotates the entire video feed to the right 90 degrees.	
Rotate Left	Rotates the entire video feed to the left 90 degrees.	
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 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.

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

Performance

Setting these values will override global defaults. Leave blank to use default values.

Frame Skip	(0)
Image Buffer Size	(40)
Replay Image Buffer	(1000)
Warm Up Frames	(25)

Settings entered in the fields under *Performance* will override the global defaults. Leave the fields blank to use the global default values.

- **Frame Skip** This option determines how many frames are skipped in recorded events. By default this is set to 0 which doesn't skip any frames and means that every captured frame is saved. Entering a number in this field defines how many frames are skipped between every recorded frame. For example, if 2 were entered in this field, two frames are skipped in between every single frame recorded.
- **Image Buffer Size** Determines how many frames are held in the image buffer. 40 is the default value.
- **Replay Image Buffer** Defines the total number of frames for the replay image buffer. 1000 is the default value.
- **Warm Up Frames** Specifies the number of frames processed before analysis occurs. 25 is the default value.

Analysis & Recording

Setting these values will override global defaults. Leave blank to use default values.

Reference Image Blend %ge	10
Alarm Frame Count	1
Event Frame Pre Padding	10
Event Frame Post Padding	10
Recording Clip Length	600

Reference Image Blend % Every analyzed image is a composite of previous images and is formed by applying the current image as a certain percentage of the previous reference image. The value entered here determines the percentage of the previous image used. By default the value is set to 10%. A higher value would make slower progressing events less detectable. Typically if this number is modified, it should be adjusted down.

Alarm Frame Count Specifies how many consecutive alarm frames must occur before an event is generated. The default value of 1 ensures that any alarm frame generates an event. Although a value of up to 16 may be entered here, typically anything larger than 3 or 4 will not be useful.

Event Frame Pre Padding When motion is detected, this is the amount of frames included in the recording before the motion occurs. By default this is set to 30.

Event Frame Post Padding When motion is detected, this is the amount of frames included in the recording after the motion occurs. By default this is set to 30.

- **Recording Clip Length** Defines the maximum length of a recording clip in seconds. The default is 600 seconds (10 minutes).

Timestamp

Setting these values will override global defaults. Leave blank to use default values.

Label Format	%N – %y/%m/%d %H:%I
X Location	0
Y Location	0

Label Format The timestamp label on the image is defined here. If the field is left blank, there will be no timestamp on your images. Below is a list of strings that can be used to create custom timestamp information. The strings are case sensitive. You can separate the strings with dividing characters such as spaces, slashes, dashes, and colons.

String	Displays
%N	Camera Name
%Y	Year (Full)
%y	Year (2 digit)
%m	Month (2 digit)
%d	Day (2 digit)
%D	Date (yy/mm/dd)
%H	Hour
%h	Month (3 letter)
%M	Minute
%S	Second
%f	hundredths of a second
%T	Time (hh:mm:ss)

Examples:

String	Example:
%N - %y/%m/%d %H:%M:%S	Camera - 11/07/18 17:14:25
%N - %D %T	Camera - 11/07/18 17:15:25

- **X Location** The X value adjusts the position of the timestamp on the image to the left or right. A value of 0 positions the timestamp on the left side of the image.
- **Y Location** The Y value adjusts the position of the timestamp on the image to the top or bottom. A value of 0 positions the timestamp on top of the image.
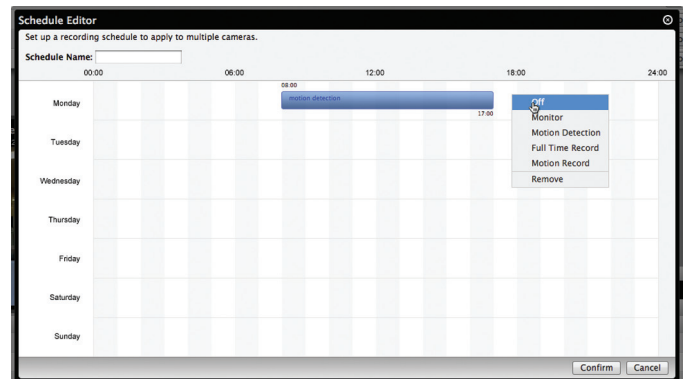
Scheduling
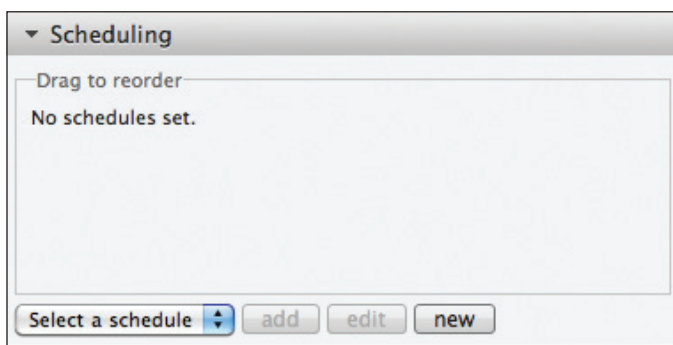
- **Select a schedule**
  - **Add** Click to apply a schedule that you've created to the camera.

- **Edit** Select the schedule that you want to edit from the *Select a schedule* drop-down. Click **edit**.
- **New** Click to create a new schedule.

Creating a New Schedule

1. Go to the *Configuration* tab in the *Camera Details* window.
2. Click the **Scheduling** sub-tab.
3. Click **new**.
4. Enter a schedule name in the *Schedule Name* field.
5. 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.
6. 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 Modes" on page 24.
7. Repeat steps 5 & 6 until you have the schedule defined correctly.
8. Click **Confirm** to save the schedule.

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

Remove

Remove Click the *Remove* button only if you no longer wish to manage the camera in airVision. If you remove it, all configuration and history for this camera will be lost.
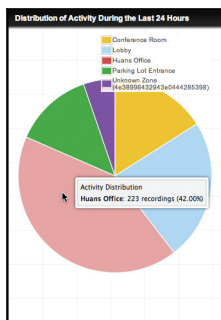
Chapter 6: Statistics Tab

The *Statistics* tab contains four primary windows:

- Activity Distribution (Last 24 Hours)
- Disk Usage (NVR)
- Camera Activity (Last 24 Hours)
- NVR Load

Activity Distribution (Last 24 Hours)

Displays a pie chart representation of all of the recording activity that has occurred in the last 24 hours. You can highlight areas of the chart to view the total number of recordings for each camera in the last 24 hours. This will also display the percentage of activity that each camera represents.

Disk Usage (NVR)
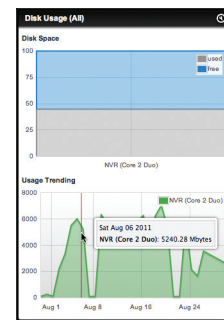
Disk Usage statistics are displayed for all managed NVRs. If you have multiple managed NVRs and want to display disk usage statistics for only specific NVRs, click the **edit** 🔧 icon in the *Disk Usage* header.
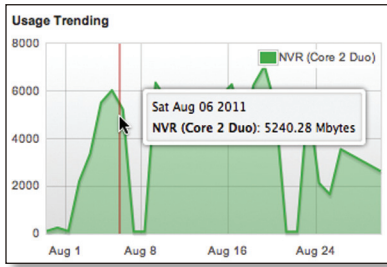
Disk Space

A visual representation of the amount of free space and used space is displayed. Hovering over will display detailed disk space statistics.
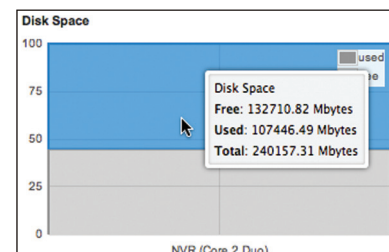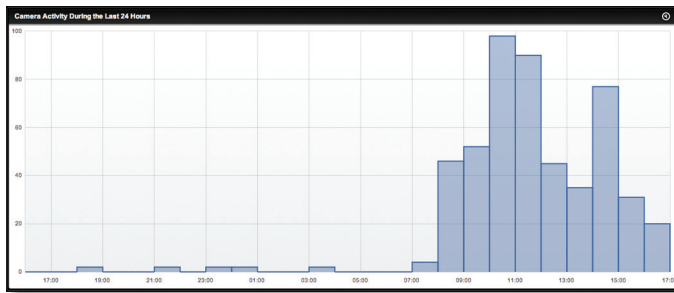
Usage Trending

Displays a chart of the disk space usage trends for the last month. Hovering over the chart will display details.


## Camera Activity (Last 24 Hours)

The *Camera Activity* portion of the *Statistics* window displays an hourly graph chart of all recordings made in the last 24 hours.

All cameras are selected by default but you can show only recordings from specific cameras by clicking the **edit** ⚙ icon to select specific cameras. Remove checkmarks from any cameras that you do not want included in the graph chart and click **Apply**.
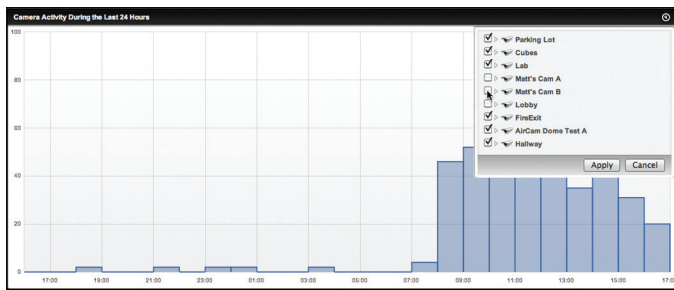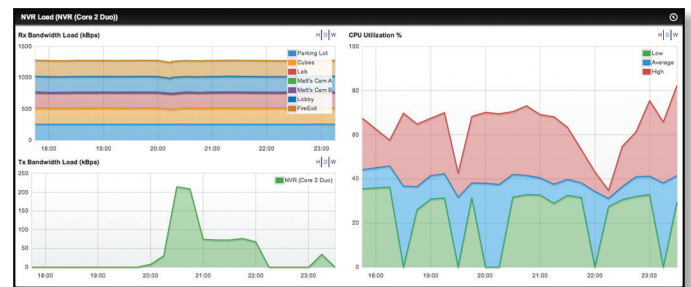

Hovering over the bars on the chart will display the number of recordings that took place that hour.
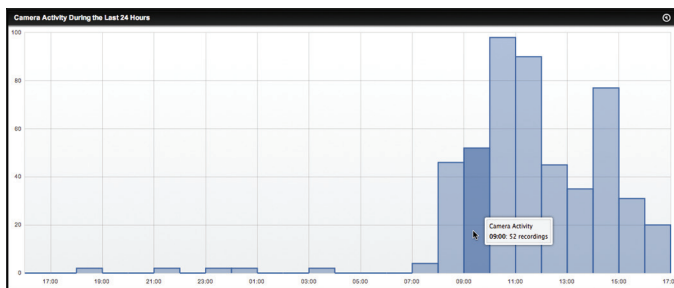
Clicking on a bar on the chart will open the *Event Viewer* window with all of the recordings that took place that hour. The first recording will begin playing and the rest of the recordings will play in order.
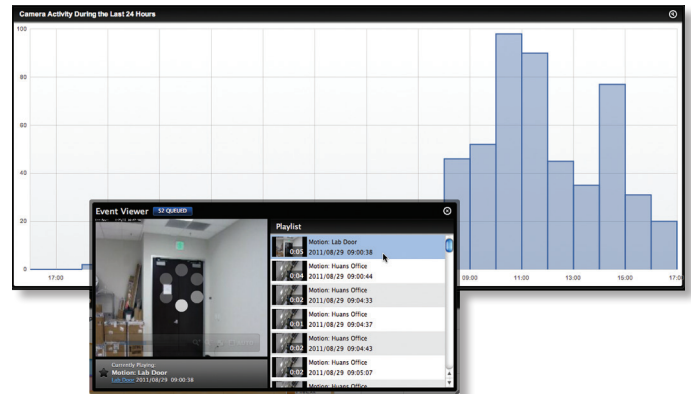

NVR Load (NVR)

The *NVR Load Statistics* window displays three different statistics that apply to all managed NVRs by default. To show only information from specific NVRs, click the **edit** ⚙ icon to select specific NVRs. Remove checkmarks from any NVRs that you do not want included in the statistics and click **Apply**.

Each of the statistics in the *NVR Load Statistics* window can display statistics with the hour, day, or week time scale. Below are the details on these options:

- **H** This default view shows the statistics for the last hour.
- **D** Displays the statistics from the last 24 hours.
- **W** Displays the statistics from the last week.

Rx Bandwidth Load (kBps)

The Rx Bandwidth Load details the receiving bandwidth usage from all of the cameras connected to the selected NVRs. Drag the mouse over the timeline to view detailed statistics in the timeline.
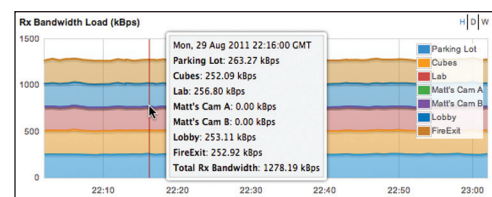
Tx Bandwidth Load (kBps)

The Tx Bandwidth Load details the transmitting bandwidth usage from all of the cameras connected to the selected NVRs. Drag the mouse over the timeline to view detailed statistics in the timeline.
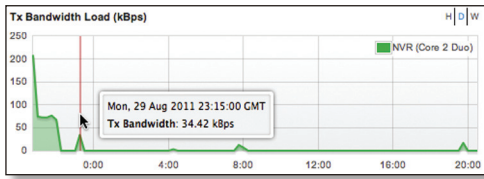
CPU Utilization

Displays the CPU Utilization of the selected NVRs. Drag the mouse over the timeline to view detailed statistics in the timeline.
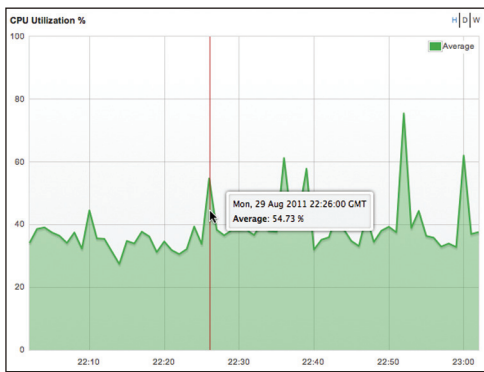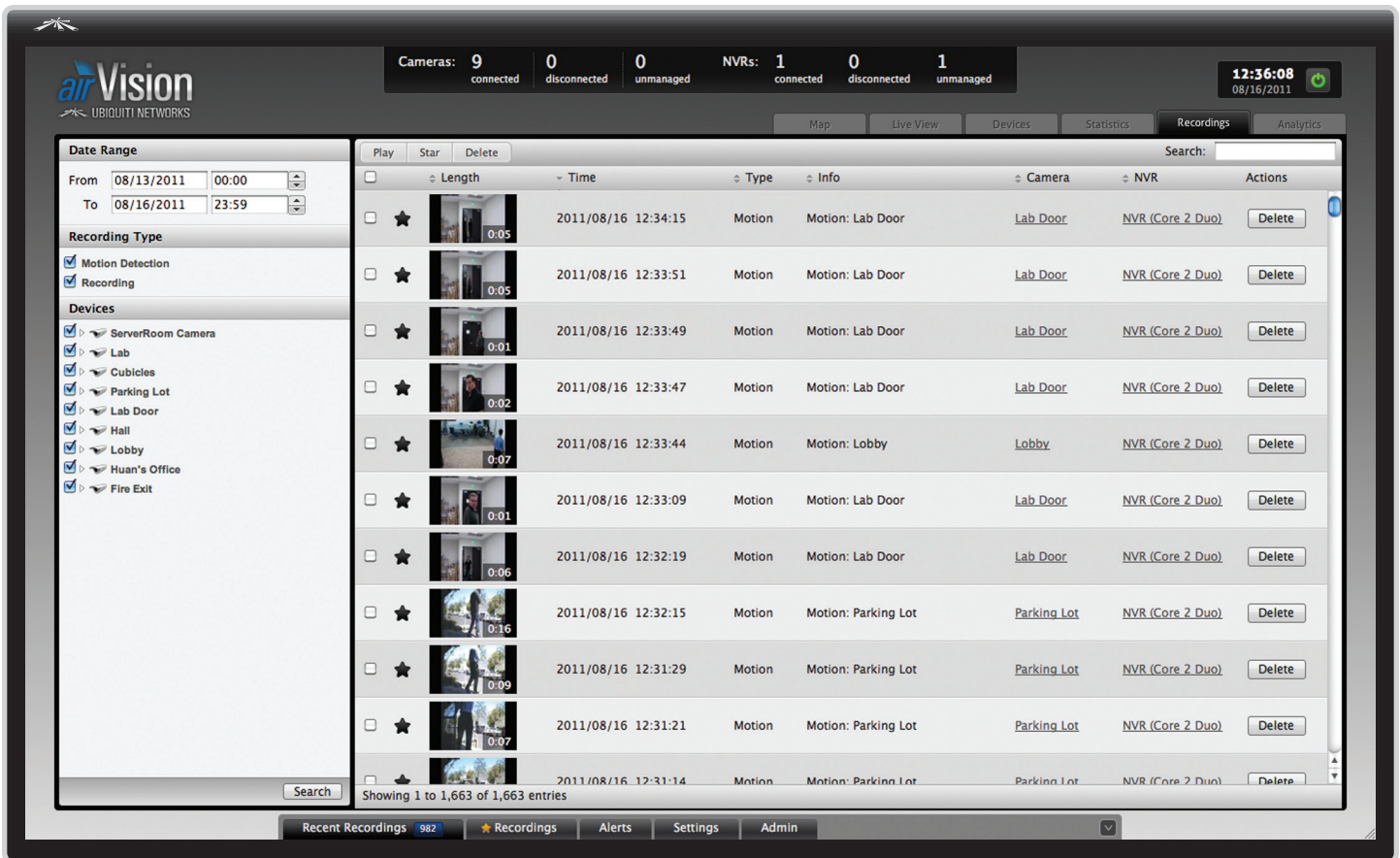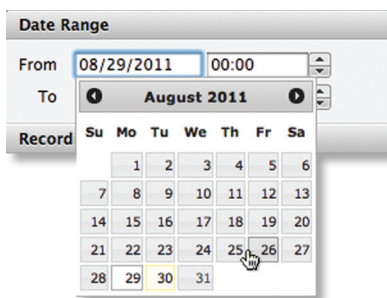
Chapter 7: Recordings Tab

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

Date Range

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

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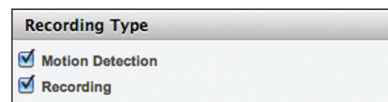
- **Motion Detection** Select this if you want your search results to include motion detection recordings.

- **Recording** Select this if you want your search to include standard recordings.

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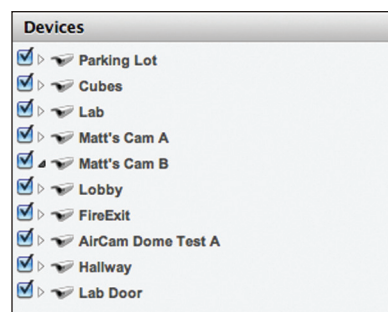
Devices allows you to select cameras and zones that you want included in recording searches. Every camera that has a checkmark next to it will be included in your search.
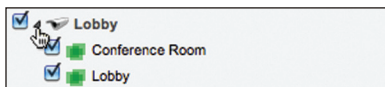
Searching Zones

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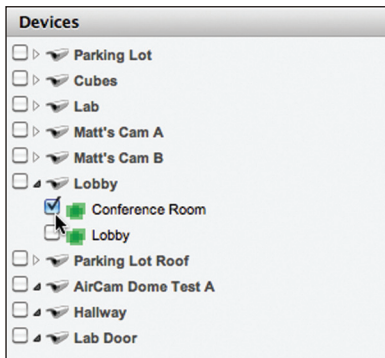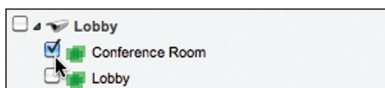

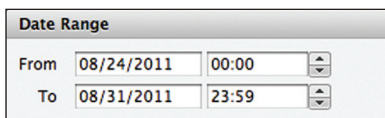To search individual zones, perform the following steps:

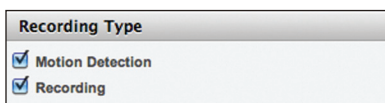1. Click the arrow between the checkbox and the camera icon.

2. Deselect any zones that you do not want searched.

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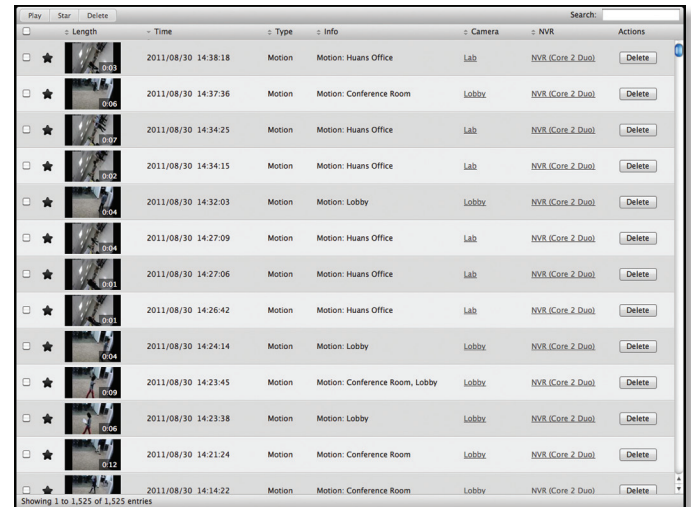

4. Ensure that *Motion Detection* is selected under *Recording Type*.

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 and then click the **Play** button. The selected recordings will begin playing in *Event Viewer*.

- **Star** Place a checkmark next to videos that you want to make accessible via the ★ *Recordings* window and then click the **Star** button.

- **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 a normal view.

- **Select All** The *Select All* button allows you to select all of the recordings in the playback window. You can Play, Star, or Delete them.

- **Length** Videos are listed below the *Length* header with a thumbnail preview and the length of the clip in the lower right corner. The *Length* 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. The first clips to appear are the oldest (closest to the *From* date and time). Click on the *Time* header if you wish to sort the clips starting from the most recent.

- **Type** Displays the recording type.

- **Info** Displays recording type and zone/camera name.

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

- **NVR** Displays the NVR that recordings are stored on. Click on the name to open the *NVR Details* window for the specific NVR.

- **Actions** Click *Delete* to delete a recording.
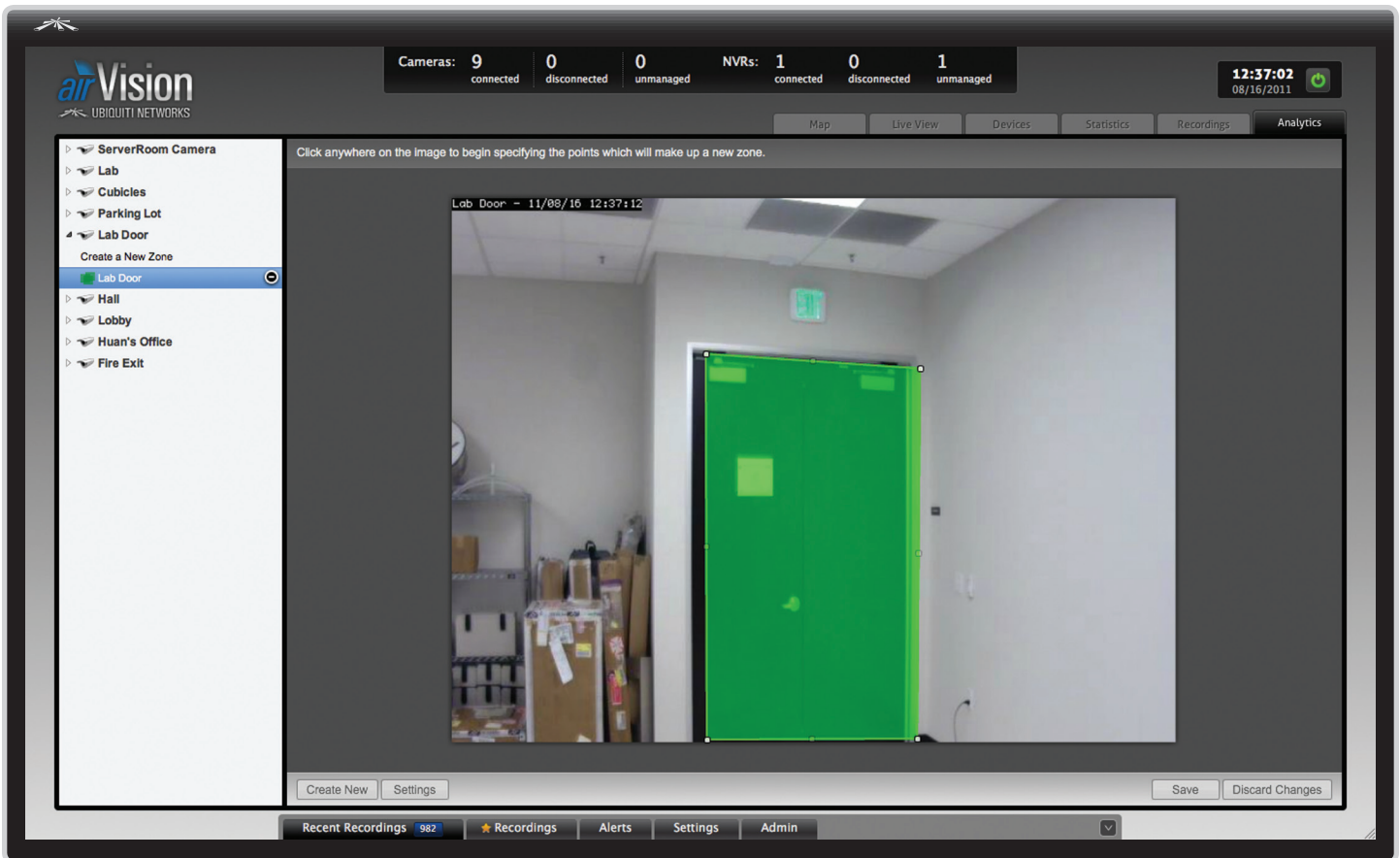
Chapter 8: Analytics Tab

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.
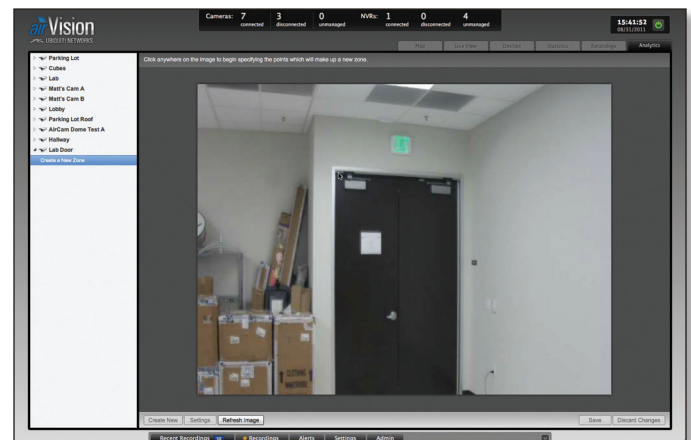
Creating a New Zone

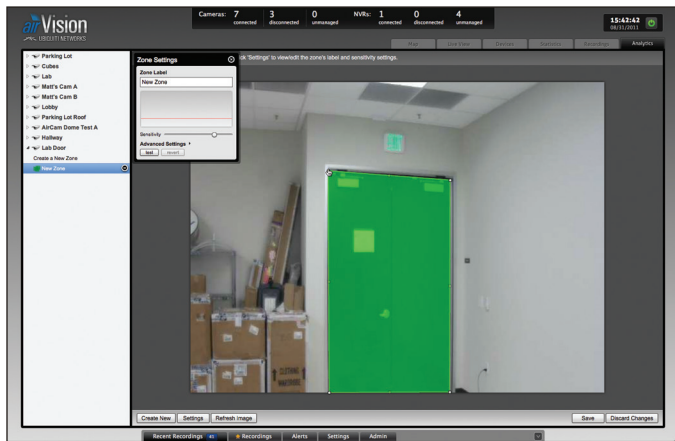1. Click the arrow next to the camera that you want to create a zone for.

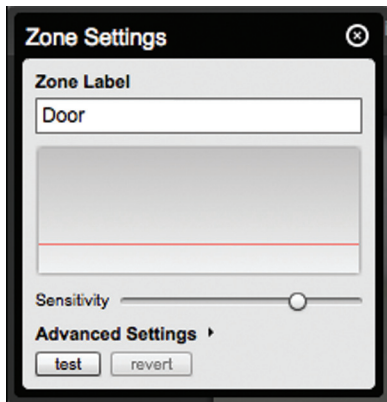2. Click the **Create a New Zone** text below the camera.
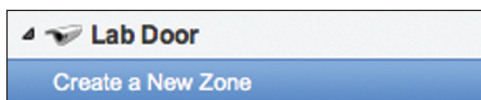
3. Click on the image where you want to start the zone.

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


5. The *Zone Settings* window will appear. Type in a name for the zone in the *Zone 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.
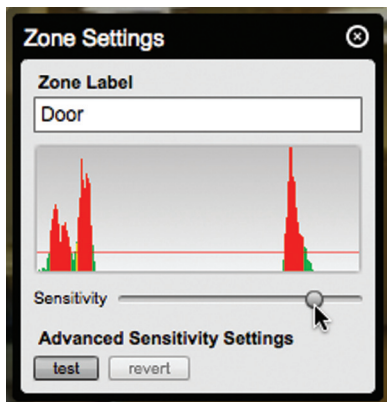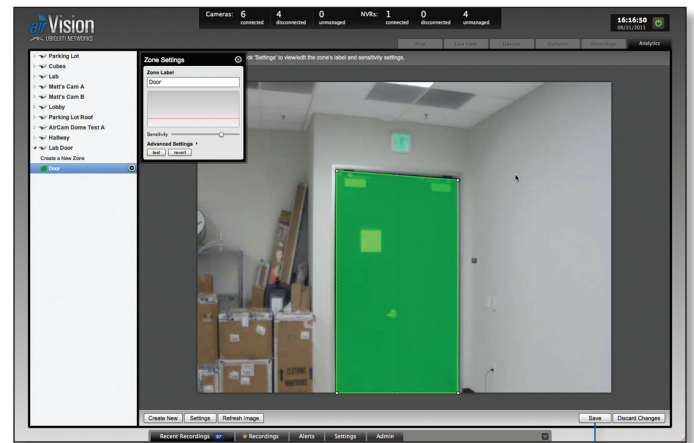

7. (Optional) If you want to create additional zones, click the **Create New** button.
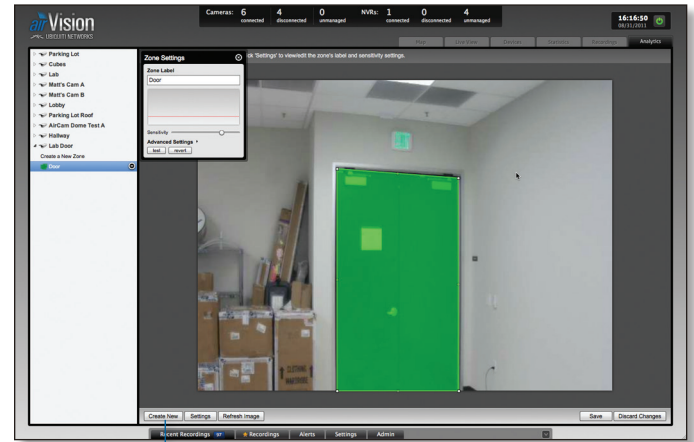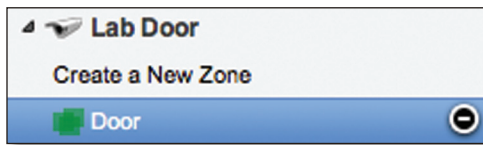

Create New button

8. Once you've created your zone(s), click **Save** to add the zone(s) or **Discard Changes** to discard your zone(s).
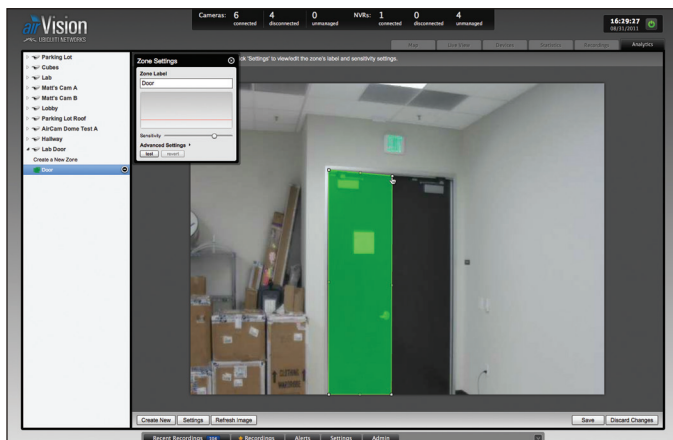

Save button

Editing a Zone

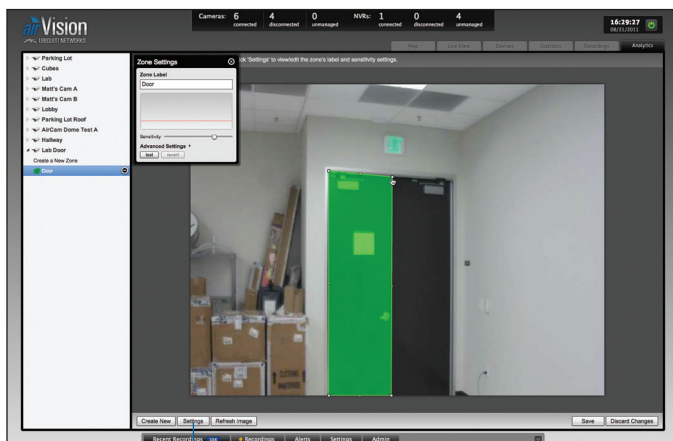1. Click on the zone that you want to edit.

2. If you want to expand or reduce the zone coverage, click-drag on the points you want to change. To delete a point, click on 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.
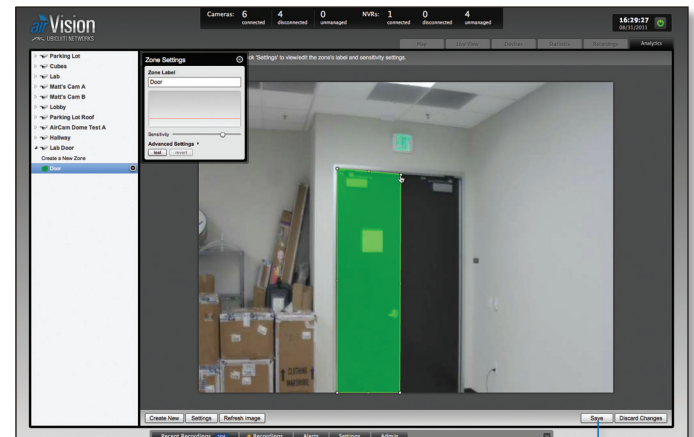

3. If you need to change the zone name or sensitivity level of the zone, click **Settings**.
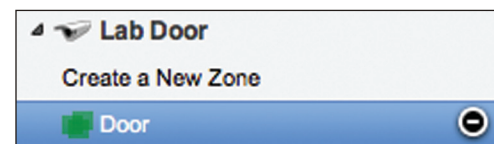

Settings button

4. Once you've made all your changes, click **Save** to apply the changes or **Discard Changes** if you don't want to apply them.

Save button

Deleting a Zone

1. Click on the zone that you want to delete.

2. Click the Delete ⊖ icon to the right of the zone name.

Appendix A: Contact Information

Ubiquiti Networks Support

Ubiquiti Support Engineers are located in the U.S. and Europe 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.

Email: **support@ubnt.com**

Phone: 408-942-1153 (9 a.m. - 5 p.m. PST)

Online Resources

Wiki Page: **www.ubnt.com/wiki**

Support Forum: **www.ubnt.com/forum**

Downloads: **www.ubnt.com/support/downloads**

91 E. Tasman Drive
San Jose, CA 95134
www.ubnt.com