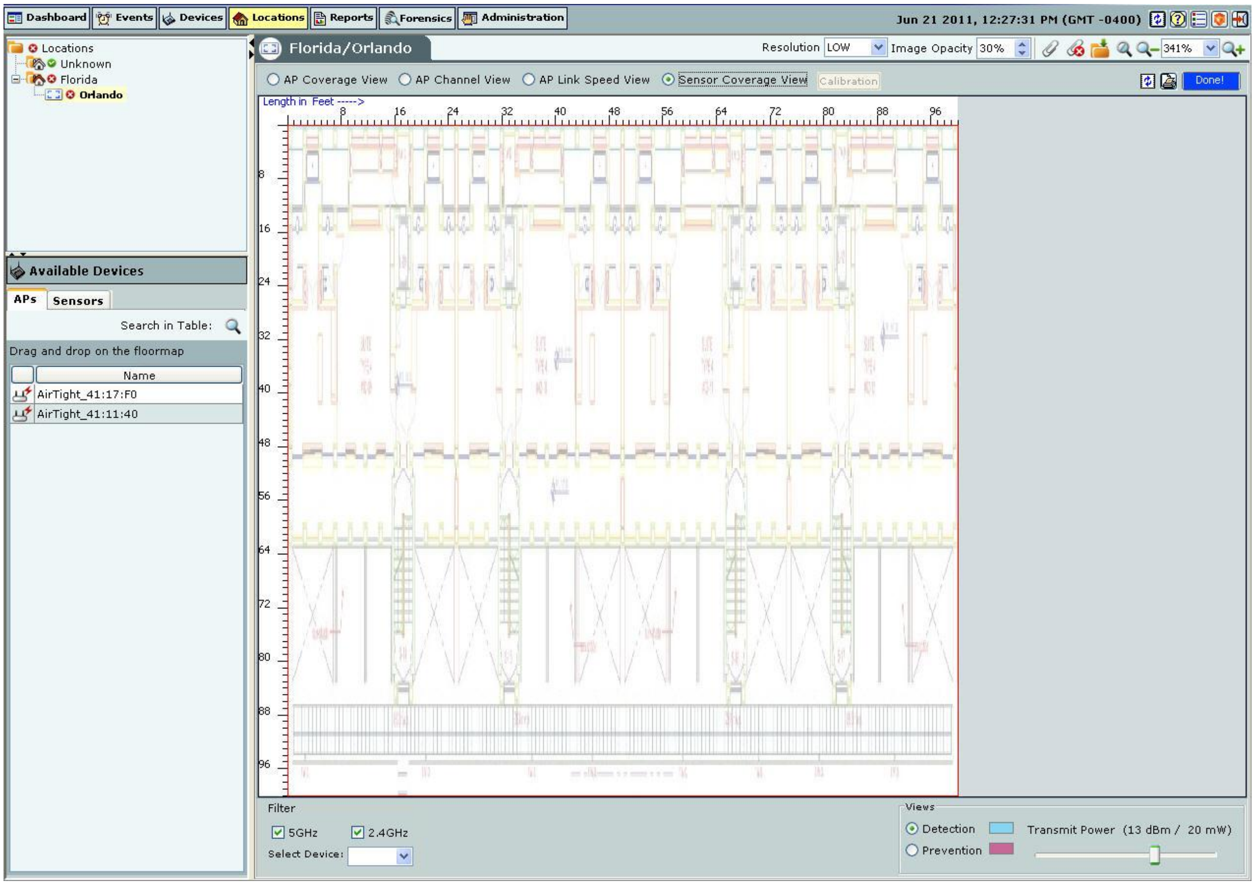
Placing Locations on a Location Folder with an Attached Image

The system enables you to place locations on a location folder that has an attached image. This helps you identify the physical position of each of the locations. The locations placed on the attached image are indicated by colored circles. A green circle indicates that the location is **Secure**, while a red circle indicates that the location is **Vulnerable**.

Use the following steps to place locations on the attached image and view their details:

1. In the **Location** tree, select a location folder.
2. Under **Available Locations**, drag and drop the required locations on the attached image.
3. To view details about the location hold the mouse cursor over the colored circle.
4. To go to a particular location placed on the image, do one of the following:
   - Click the colored circle representing the location.
   - Point to the colored circle representing the location, then right-click and select **Jump to this location**.

Note*: You can traverse to a particular location node by following step 4 until you reach the destination location node.*



Jun 21 2011, 12:27:31 PM (GMT -0400)

Florida/Orlando

Resolution LOW

Image Opacity 30%

341%

○ AP Coverage View ○ AP Channel View ○ AP Link Speed View ● Sensor Coverage View

Drag and drop on the floormap

	Name
	AirTight_41:17:F0
	AirTight_41:11:40

Filter

☑ 5GHz ☑ 2.4GHz

Select Device:

Views

● Detection

○ Prevention

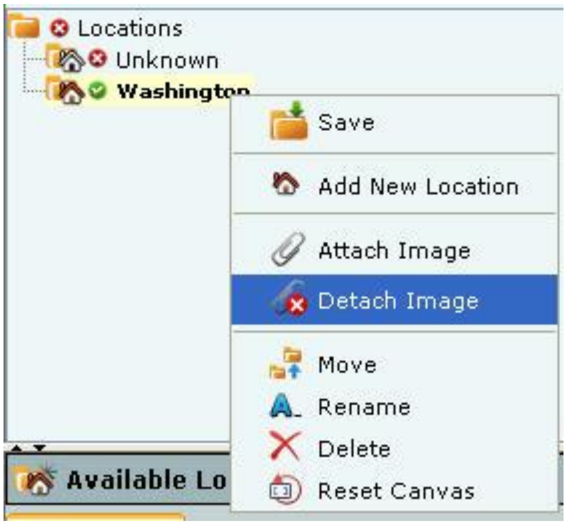
Transmit Power (13 dBm / 20 mW)

Placing Locations on a Location Folder with an Attached Image and Viewing Details

Detaching an Image

Use the following steps to detach an image:

1. In the **Location** tree, select the location from which you wish to detach an image.
2. Do one of the following:
   - Right-click and from the resulting context-sensitive menu, select **Detach Image**.
   - Click the **Detach Image from floor** icon in the right corner.



Detaching an Image from a Location

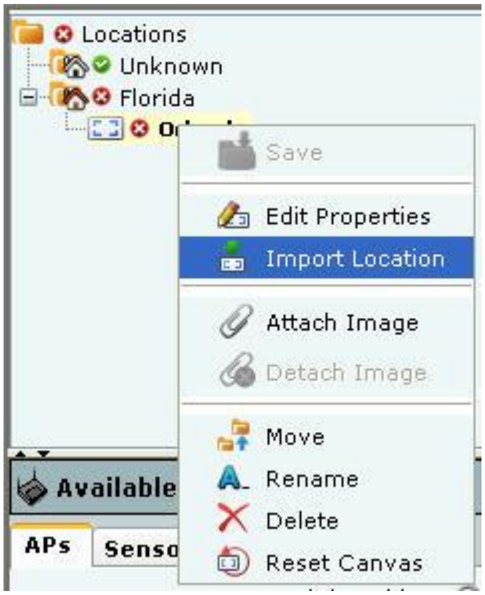
3. Click **Yes** in the **Confirm** dialog to remove the selected image.

***Note**: On detaching an image, all the placed locations go back to the **Available Locations** list.*

Importing a Planner file into a Location Node

The system enables you to specify a layout for each location node using a blank canvas, a layout image, or a .SPM file exported from Planner. Use the following steps to import a Planner file:

1. In the **Location** tree, select the location node into which you wish to import the .SPM file and then right-click.
2. From the resulting context-sensitive menu, select **Import Location**.



Importing a Location

3. In the **Select SpectraGuard Planner (.spm) File** dialog, browse to the appropriate Planner exported .SPM file and then click **Open**.

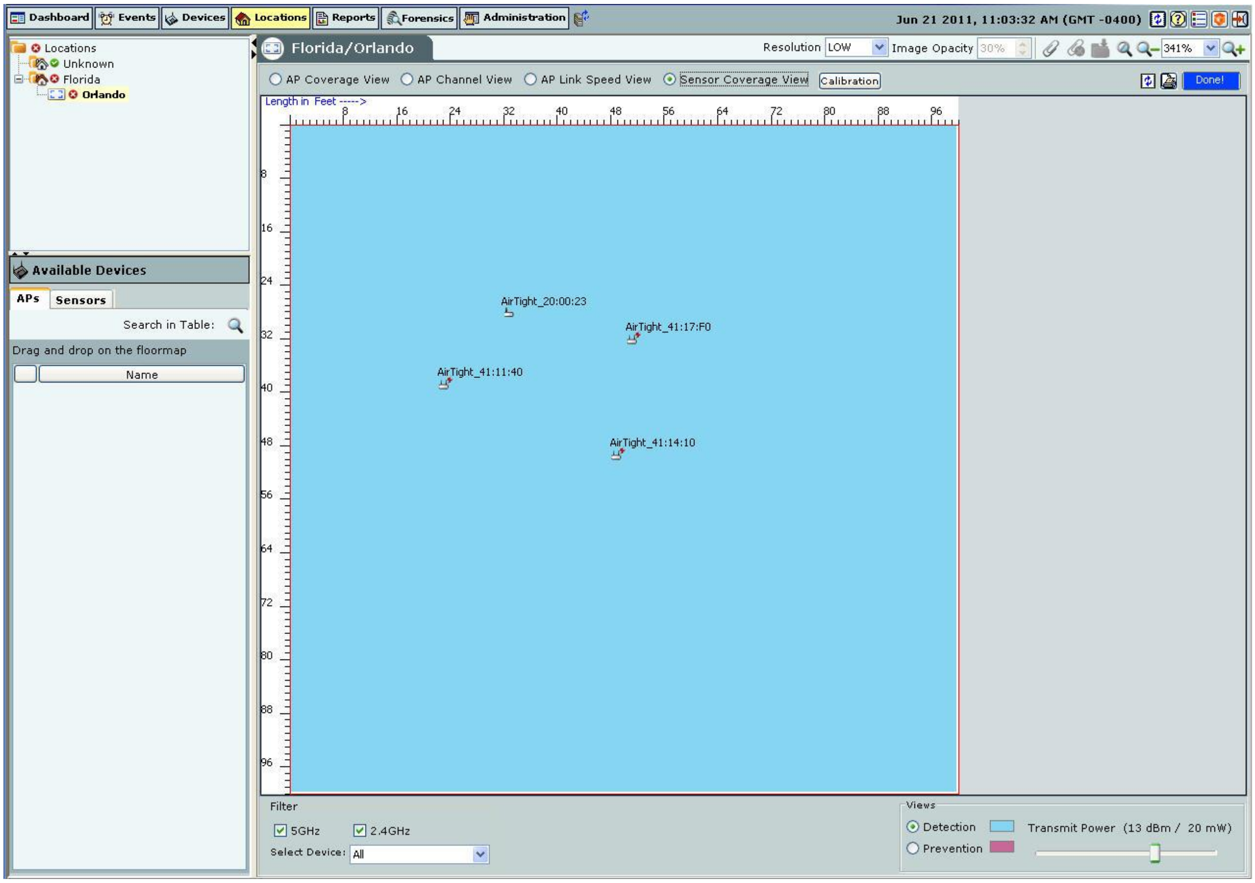
Creating your Layout

This section shows you how to place devices on your floor map, view details of the layout, reset your canvas, and edit floor properties.

Placing APs and Sensors on the Floor map and Viewing Details

The system enables you to place APs and Sensors on the floor map to view live RF coverage maps for a location node and perform on-floor location tracking of visible 802.11 devices. Use the following steps to place APs and Sensors on the floor map and view their details:

1. In the **Location** tree, select a location node.
2. Under **Available Devices**, select either the **APs** or the **Sensors** tab, then drag and drop the APs or Sensors on your floor map. As soon as you drag and drop the APs or Sensors on your floor map, the RF views of the APs or Sensors are displayed.
3. To view details about the AP or Sensor hold the mouse cursor over the appropriate device.
4. Double-clicking the AP or Sensor displays the **AP** or **Sensor Details** screen in the **Devices** tab.



Jun 21 2011, 11:03:32 AM (GMT -0400)

Florida/Orlando

Resolution LOW

Image Opacity 30%

341%

● Sensor Coverage View

☑ 5GHz ☑ 2.4GHz

Select Device: All

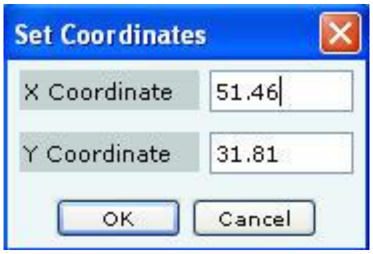
● Detection

Transmit Power (13 dBm / 20 mW)

Placing APs and Sensors on the Floor map and Viewing Details

5. Right-click the AP or Sensor the following menu items appear.

- **Delete:** Deletes the device
- **Set Coordinates:** Select Set Coordinates to move the device to the specified coordinates. Enter the **X** and **Y Coordinate** in the **Set Coordinates** dialog.

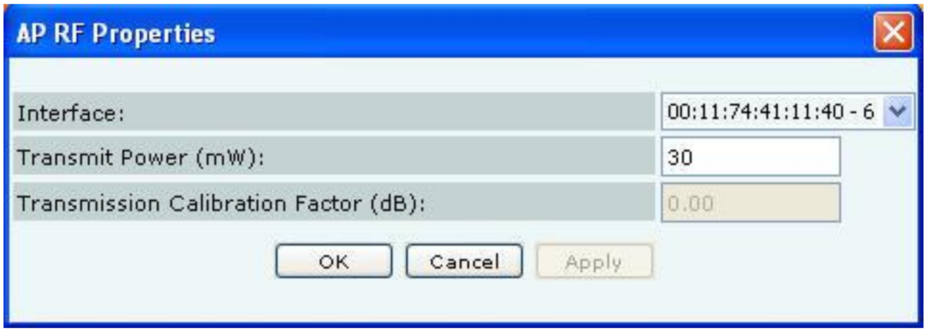


X Coordinate 51.46

Y Coordinate 31.81

Set Coordinates

- **Change RF Property:** Select RF Property to change the RF properties of the device. In **AP RF Properties** dialog, select the Interface name from the **Interface** drop-down list. Enter **Transmit Power (mW)** and **Transmission Calibration Factor (dB)**. Click **Apply** and then **OK**.


AP RF Properties

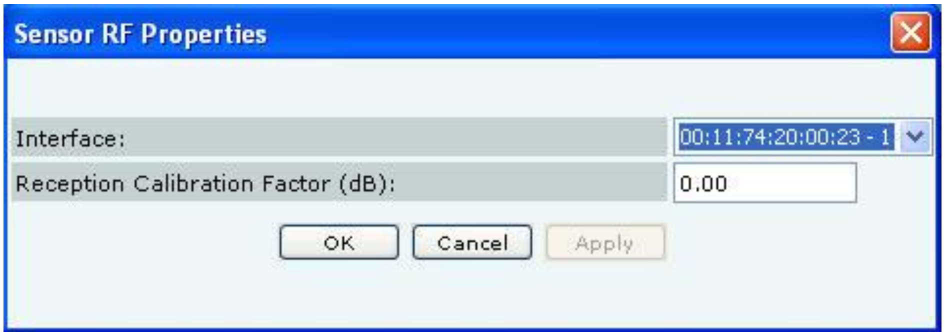
Interface: 00:11:74:41:11:40 - 6

Transmit Power (mW): 30

Transmission Calibration Factor (dB): 0.00

AP RF Properties dialog

- In the **Sensor RF Properties** dialog select the Interface name from the **Interface** drop-down list. Enter **Reception Calibration Factor (dB)**. Click **Apply** and then **OK**.


Sensor RF Properties

Interface: 00:11:74:20:00:23 - 1

Reception Calibration Factor (dB): 0.00

Sensor RF Properties dialog

Setting Coordinates and Deleting Devices from a Floor map

The system enables you to set the coordinates of APs and Sensors placed on the floor map for precise positioning. You can delete APs and Sensors from your floor map so that the deleted devices can be placed again on the floor map. Such devices become available under **Available Devices**. Use the following steps to set the coordinates of a device or delete a device.

1. Right-click an AP/Sensor placed on the floor map. Do one of the following from the resulting menu:
   - Select **Set Coordinates** to open a dialog where you can specify the X and Y coordinates of the selected device. To set the coordinates, click **OK**.
   - Select **Delete** to remove the AP/Sensor from the floor map.

Resetting your Canvas

The system enables you to reset a canvas to revert to a blank canvas. This option removes all folders and location information from a location folder. It removes all device and location information, including the background image and/or any imported Planner file from a location node. All placed devices go back to the **Available Devices** list. The system retains the original size and the location name in the sub-list of locations.

Use the following steps to reset a canvas:

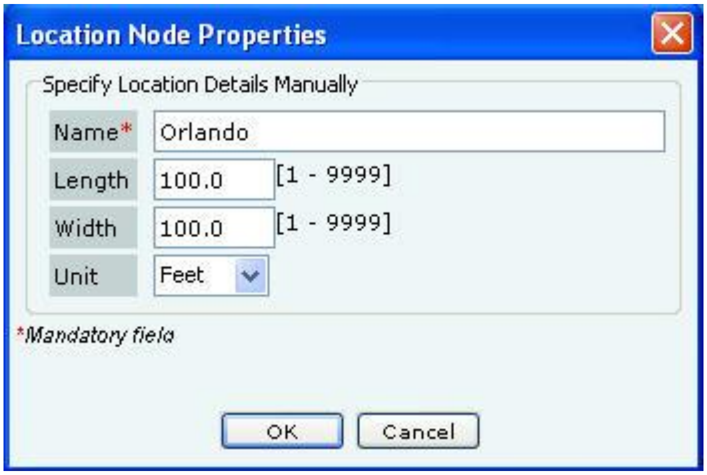
1. In the **Location** tree, select the location at which you wish to reset the canvas and then right-click.
2. From the resulting context-sensitive menu, select **Reset Canvas**.
3. Click **Yes** on the **Confirm** dialog to reset the canvas.

Editing Floor Properties

The system enables you to edit the properties of an existing floor map to change its name and dimensions. Use the following steps to edit the floor properties:

1. In the **Location** tree, select the location node whose properties you wish to edit and then right-click.

2. From the resulting context-sensitive menu, select **Edit Properties**.
3. On the **Location Node Properties** dialog, edit the required properties.



Location Node Properties

Specify Location Details Manually

Name* Orlando

Length 100.0 [1 - 9999]

Width 100.0 [1 - 9999]

Unit Feet

*Mandatory field

Editing the Properties of a Location Node

4. To change the properties, click **Save**.

***Note**: If you resize a location node to a smaller dimension, the objects placed on the floor map are drawn beyond the floor boundaries. The system removes all the devices that fall outside the resized area. The system scales the attached image according to the new size. The size of the objects placed on the floor map however, remains unaltered.*

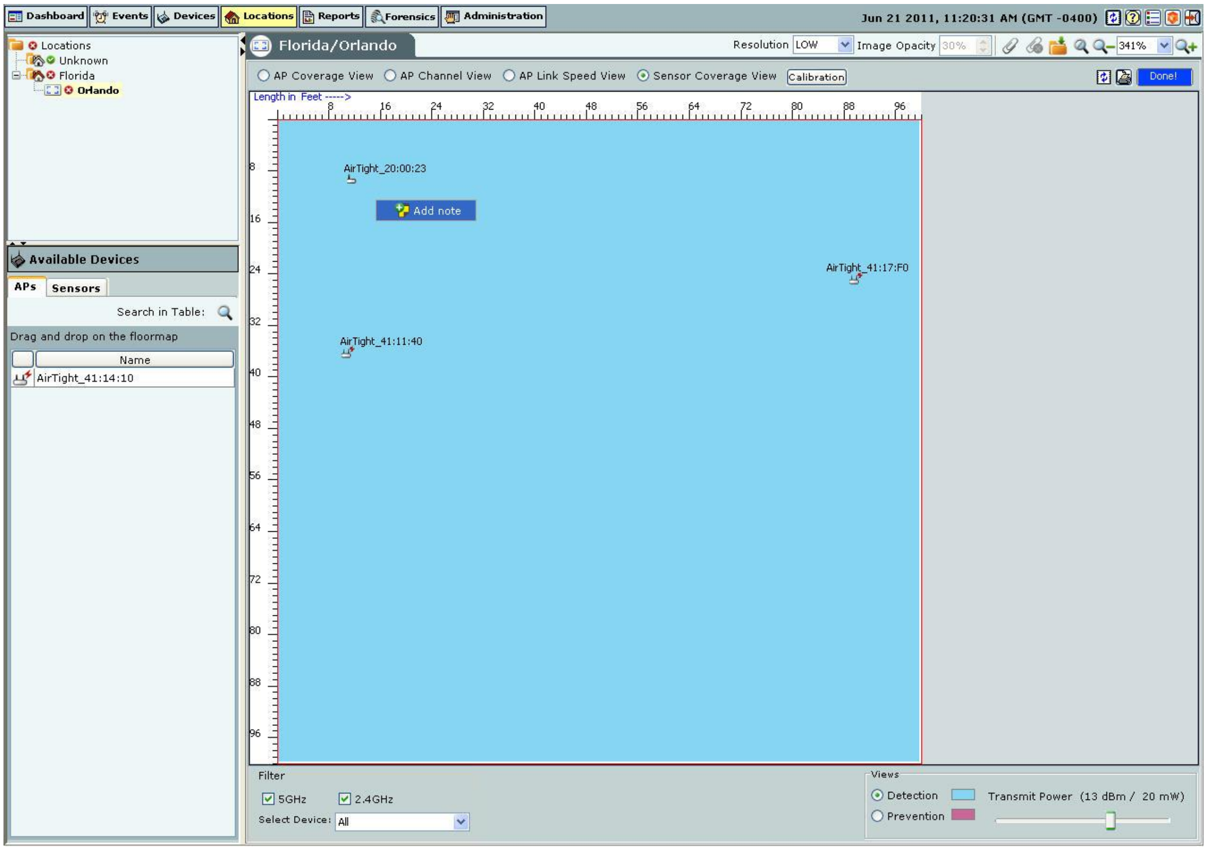
Tagging Locations

The System enables you to tag different locations on the floor map. You can add notes to a floor map. Similarly, you can edit notes, delete notes, hide notes that are displayed on the floor map, and show hidden notes on the floor map.

Adding Location Notes to a Floor Map

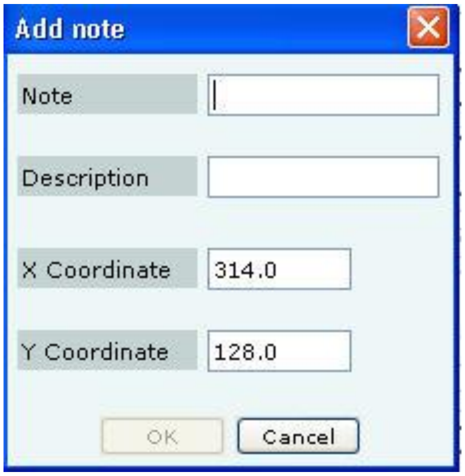
Do the following steps to tag an element or location on the floor map.

1. Right click the element or location on the floor map to be tagged.
2. The Add Notes menu is displayed. The following figure shows the **Add Notes** menu.



Adding Notes to Floor Map Elements

3. Select **Add Notes.**
4. The **Add note** dialog is displayed. Following figure shows the **Add Note** dialog.



Add note

Note

Description

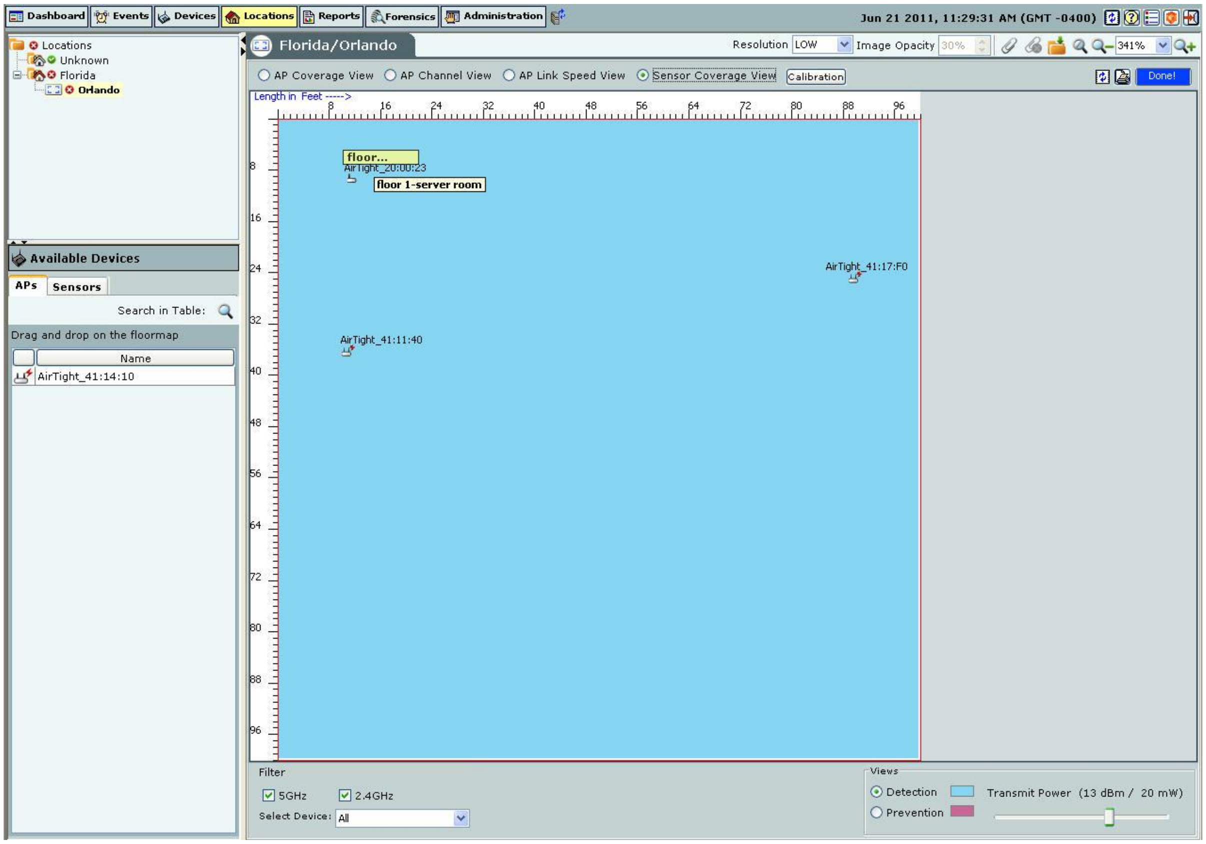
X Coordinate 314.0

Y Coordinate 128.0

OK Cancel

Add Notes dialog

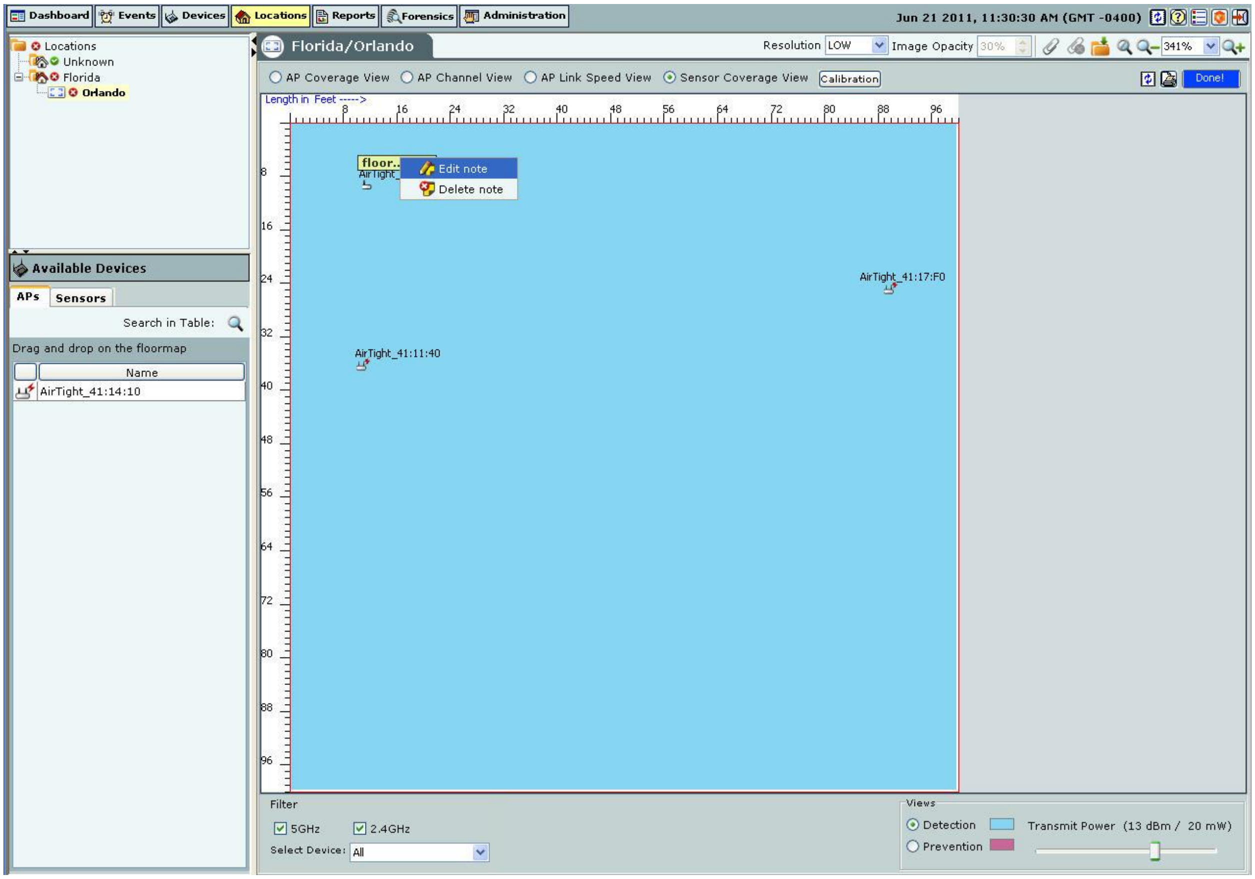
5. Add the note and its description. The **X Coordinate** and **Y Coordinate** are sensed by the System and populated in the **Add note** dialog.
6. To save the note, click **OK.** Click **Cancel** to cancel the operation.
7. On saving the note, note is added to the floor map element. The following figure displays a floor map with notes.



Floor Map with a Location Note

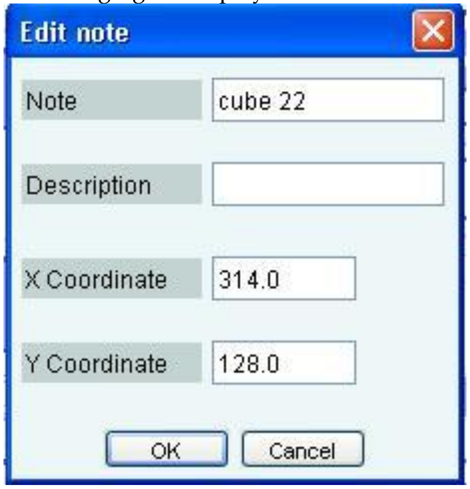
Editing Location Notes on a Floor Map

You can edit existing location notes at any given point. To do this, right click the note to be edited. Select the **Edit note** option to edit the location notes. Following figure displays the **Edit Note** option.



Editing Location Tags

On Selecting **Edit Note** option, Edit Note dialog appears.
Following figure displays the **Edit Note** dialog.



Edit note

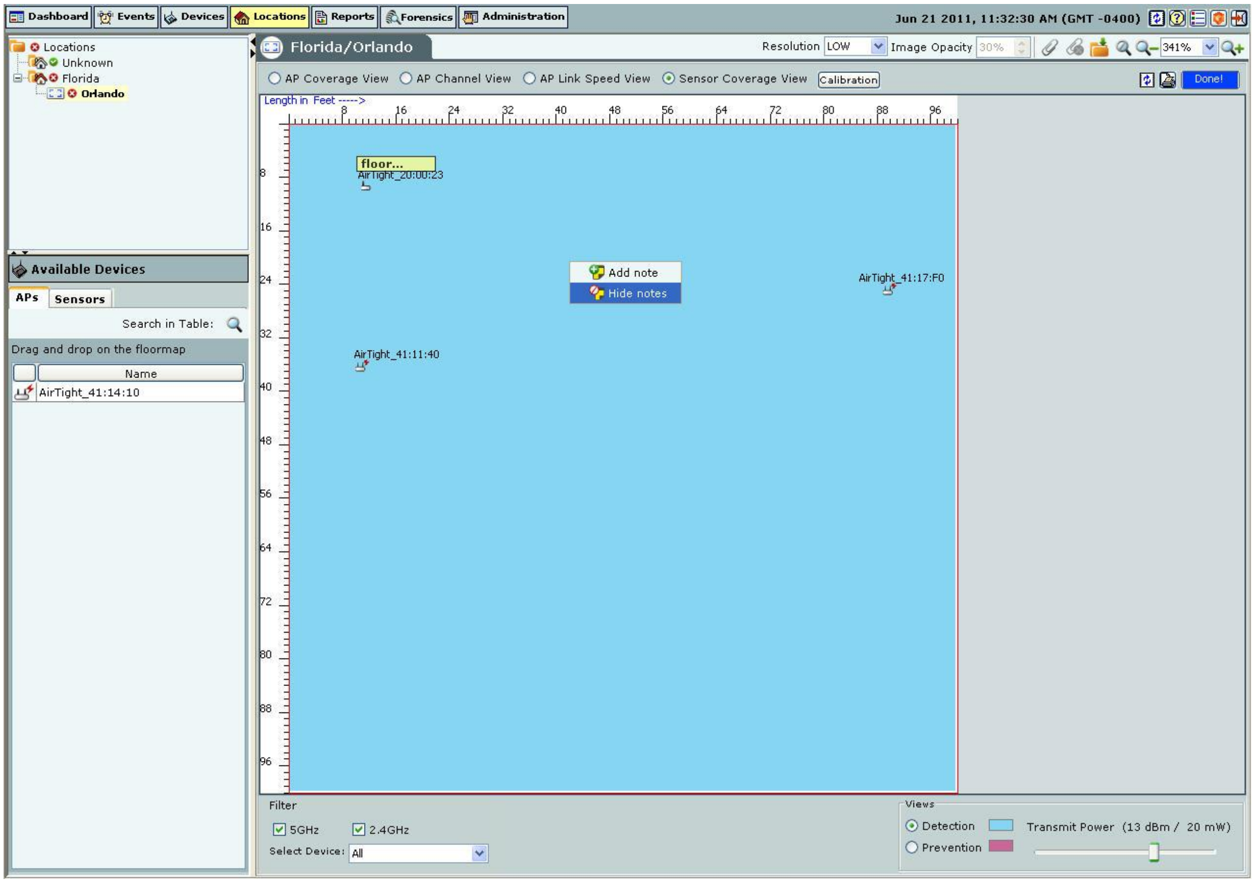
Note	cube 22
Description	
X Coordinate	314.0
Y Coordinate	128.0

Edit Note dialog

You can edit all fields in the dialog.

Hiding Location Notes shown on a Floor Map

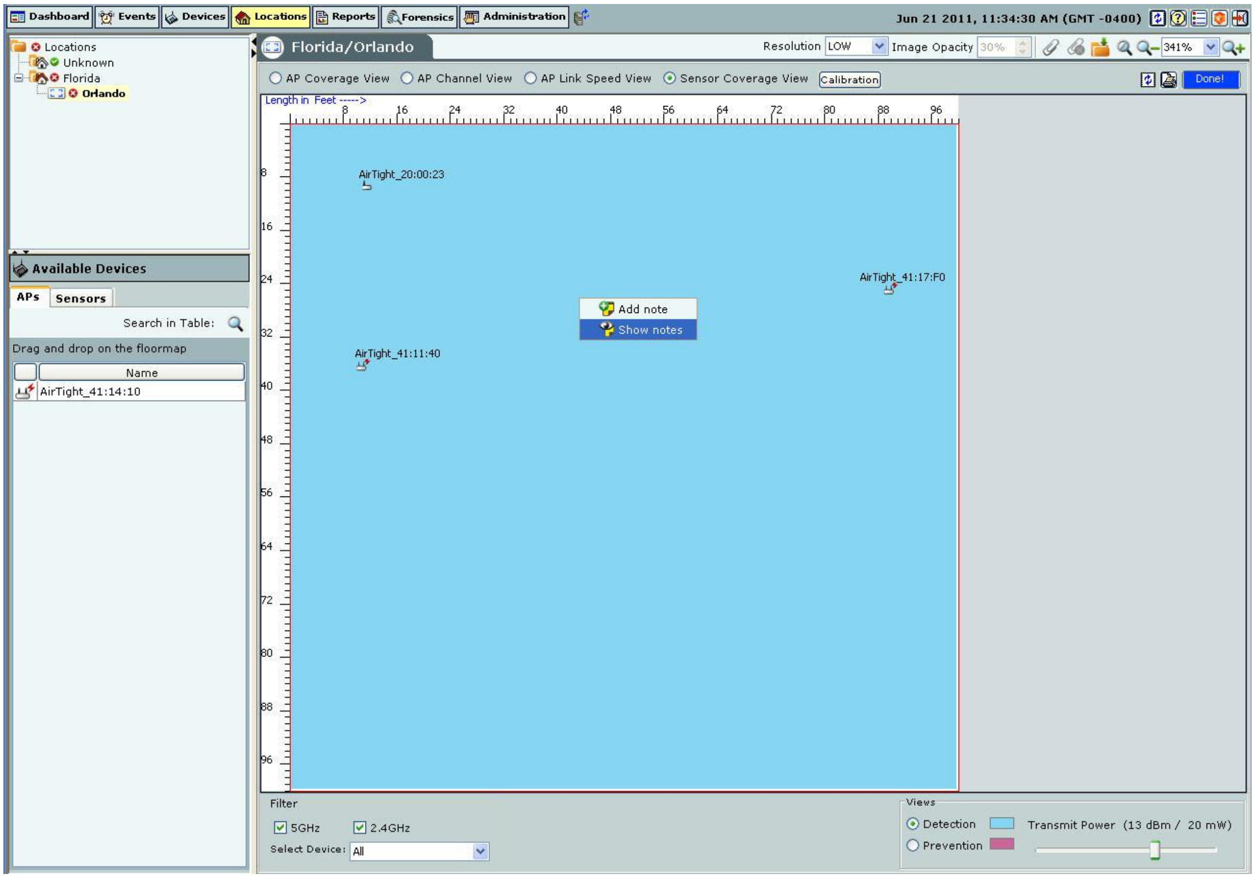
You can hide location notes that are visible on a floor map. To do this, right click anywhere on the floor map. Select the **Hide notes** option to hide all the Location notes. Following figure displays the **Hide notes** option.



Hiding Location Notes visible on Floor Map

Displaying Hidden Location notes shown on a Floor Map

You can display hidden location notes on a floor map. To do this, right click anywhere on the floor map. Select the **Show notes** option to show all the Location notes. Following figure displays the **Show notes** option.

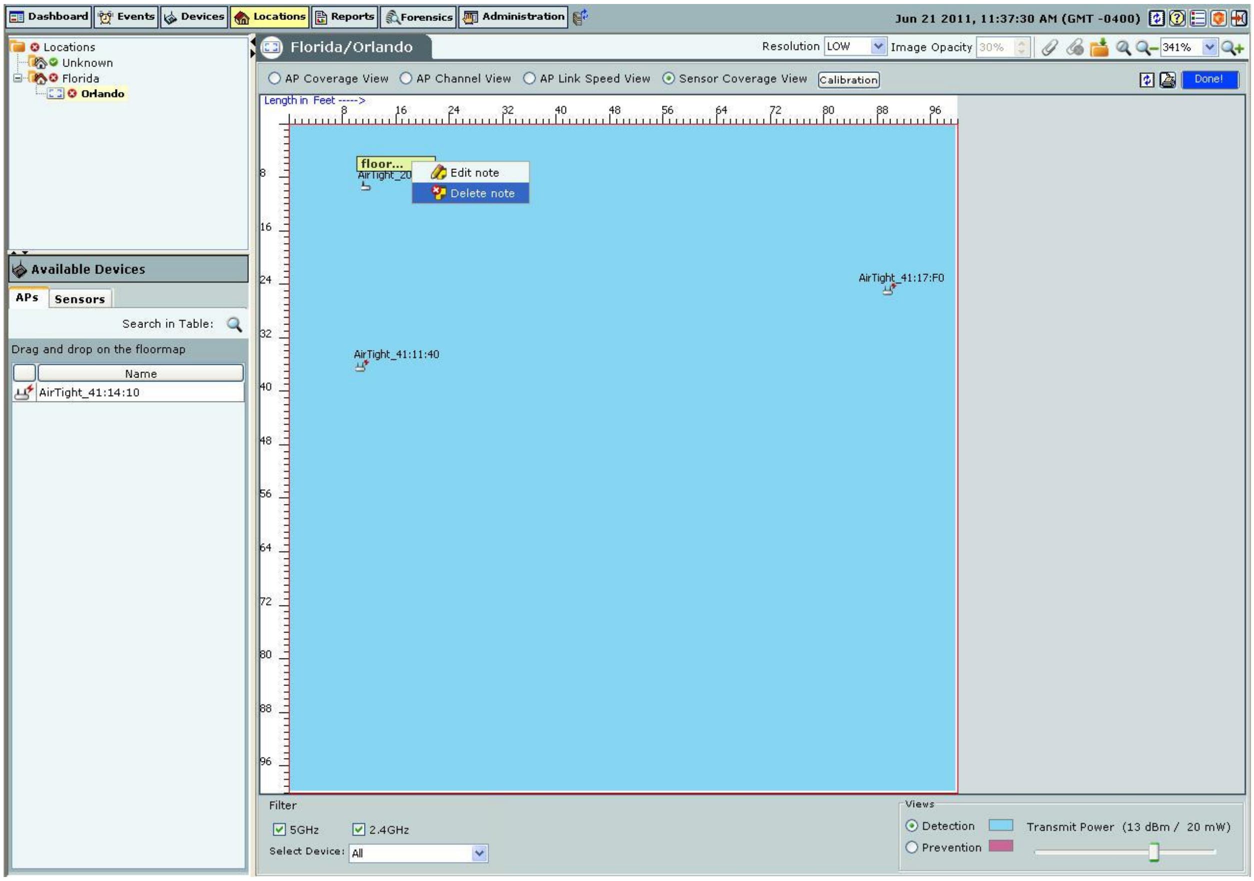


Show notes on Floor Map

Click **Show Notes** button to display all the notes defined for the floor map.

Deleting Location Notes from Floor Map

You can delete Location notes that are visible on a floor map. To do this, right click the note/location tag to be deleted. Select the **Delete note** option to delete the location note. Following figure displays the **Delete note** option.

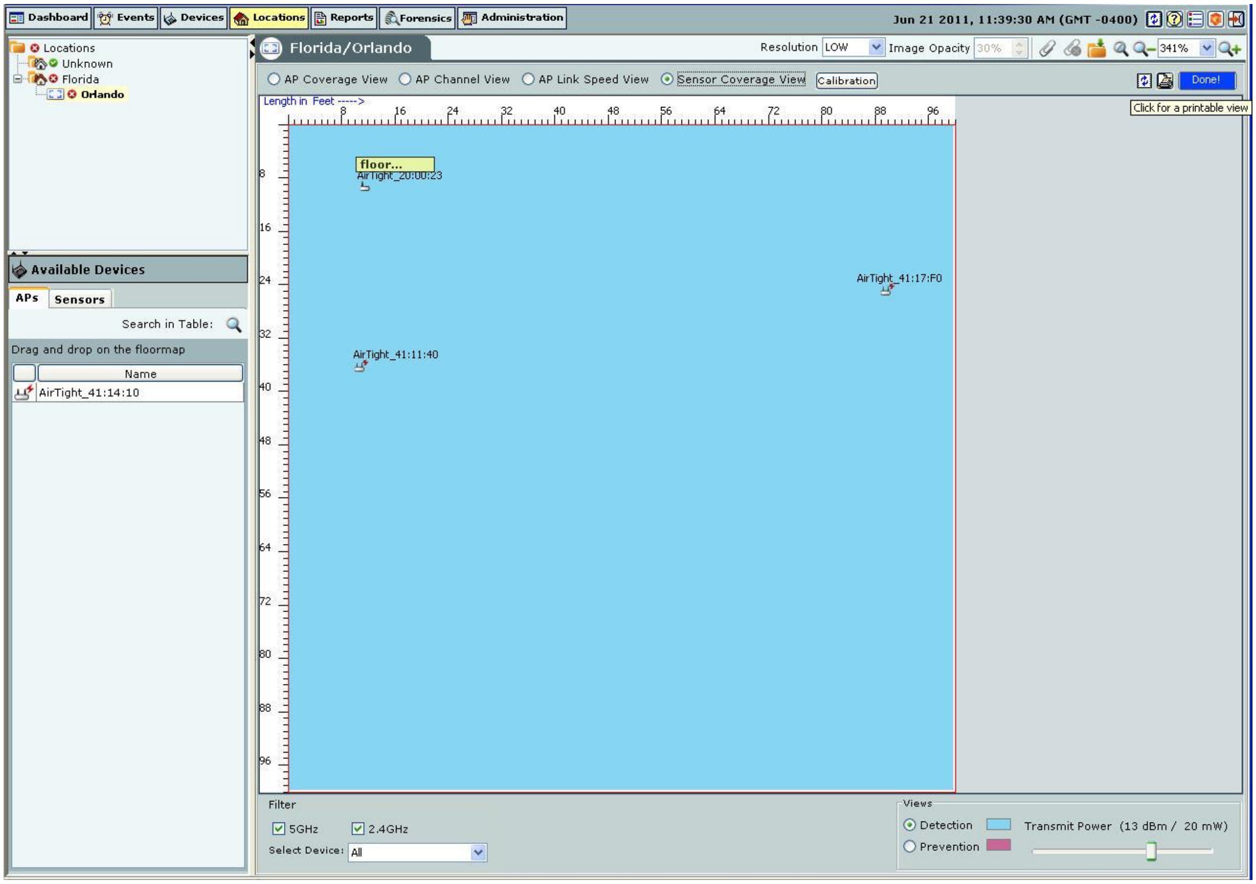


Deleting Note from Floor Map

The note is deleted from the floor map.

Printable View

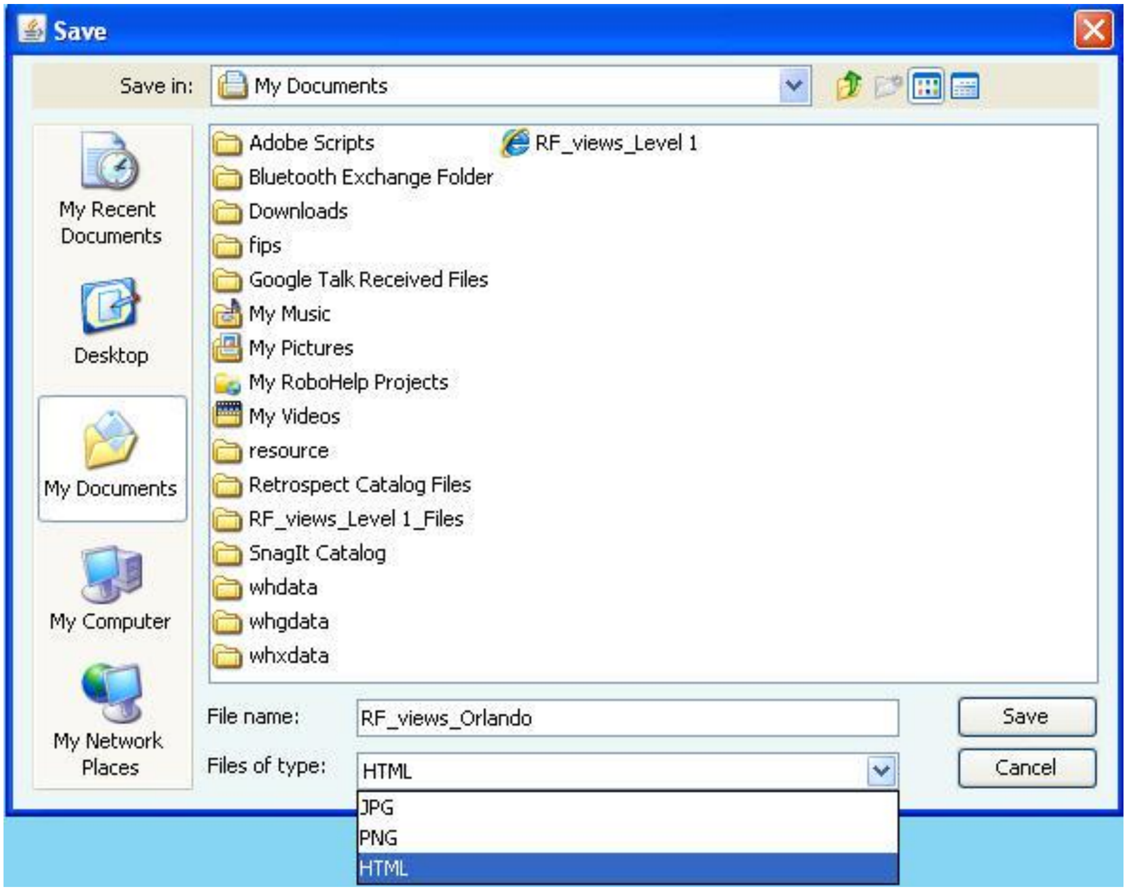
The RF views for the floormap can be saved as printable view in jpg, png, and HTML formats.



Locations Tab – Printable View Icon

Note: *The* ***Printable View*** *icon is available on the Location nodes and not in the Location folders.*

Click the **Printable View** icon and save the printable view as jpg, png, or HTML as shown in the figure.



Save in: My Documents

File name: RF_views_Orlando

Files of type: HTML

Saving the Printable view of the RF views

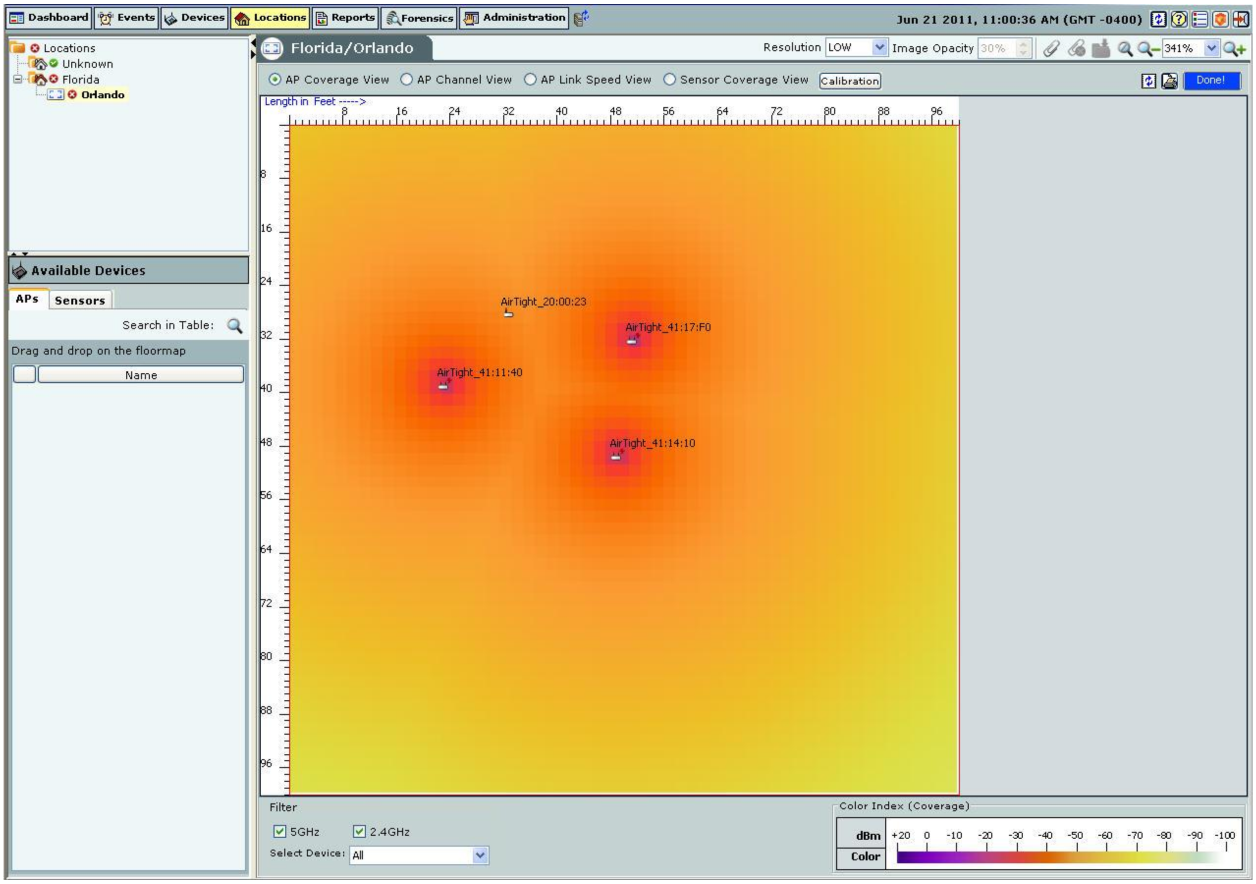
Viewing RF Coverage Maps

To view a live RF coverage map for a location node, Authorized APs and Sensors must be placed on the floor map. Use the following steps to view live RF coverage maps:

1. Place devices on the floor map using the steps given in the Placing APs and Sensors on the Floor map and Viewing Details section.
2. Select one of the following views.

AP Coverage View

The AP Coverage View enables you to view an 802.11 RF coverage map based on the dBm at each point on the layout. This information is useful to find out available signal strength at each point. The color-coding scheme used enhances the readability of the map.



Resolution LOW

Image Opacity 30%

341%

● AP Coverage View ○ AP Channel View ○ AP Link Speed View ○ Sensor Coverage View

Filter

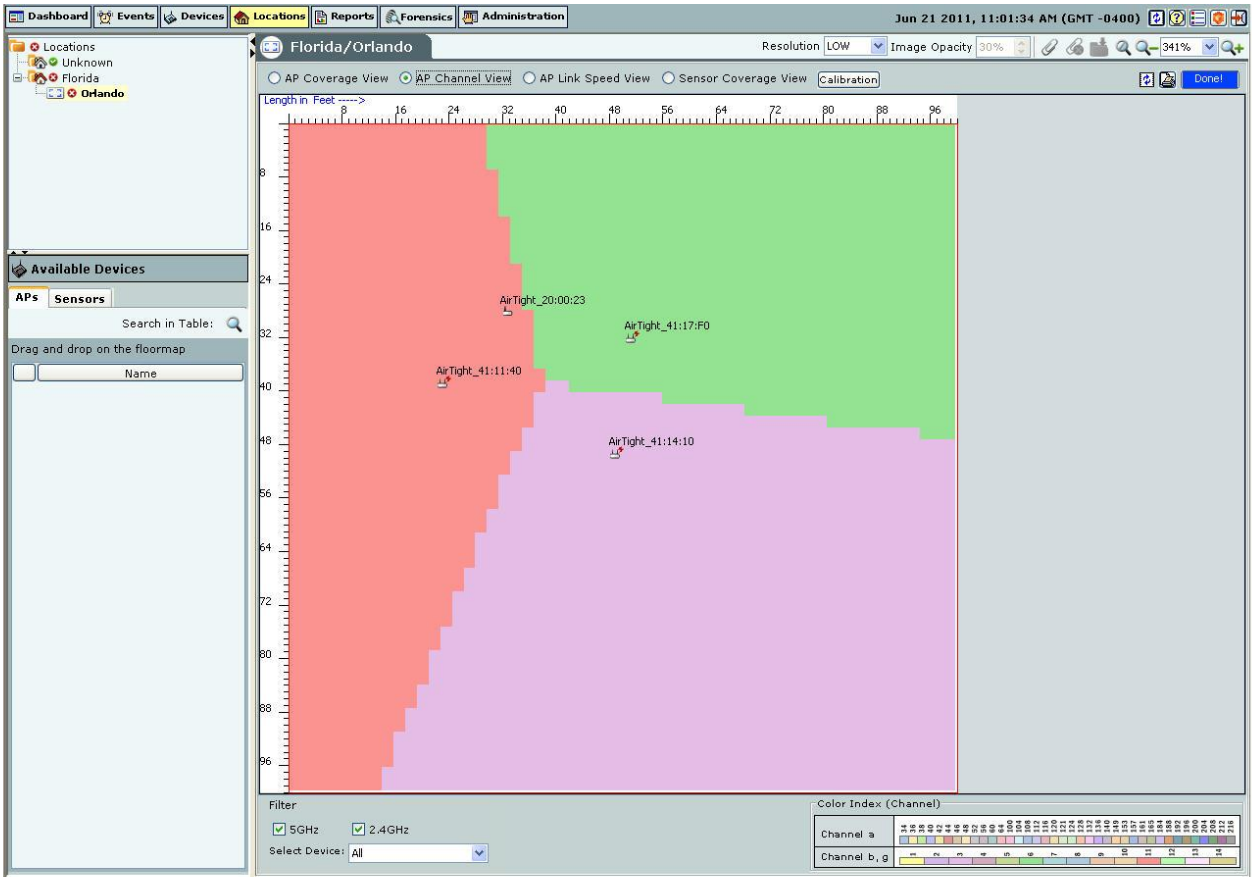
☑ 5GHz ☑ 2.4GHz

Select Device: All

AP Coverage View

AP Channel View

The AP Channel View enables you to view all the 802.11 channels available for connection at each point on the floor. It helps in preventing potential channel interference scenarios.



Resolution: LOW

Image Opacity: 30%

341%

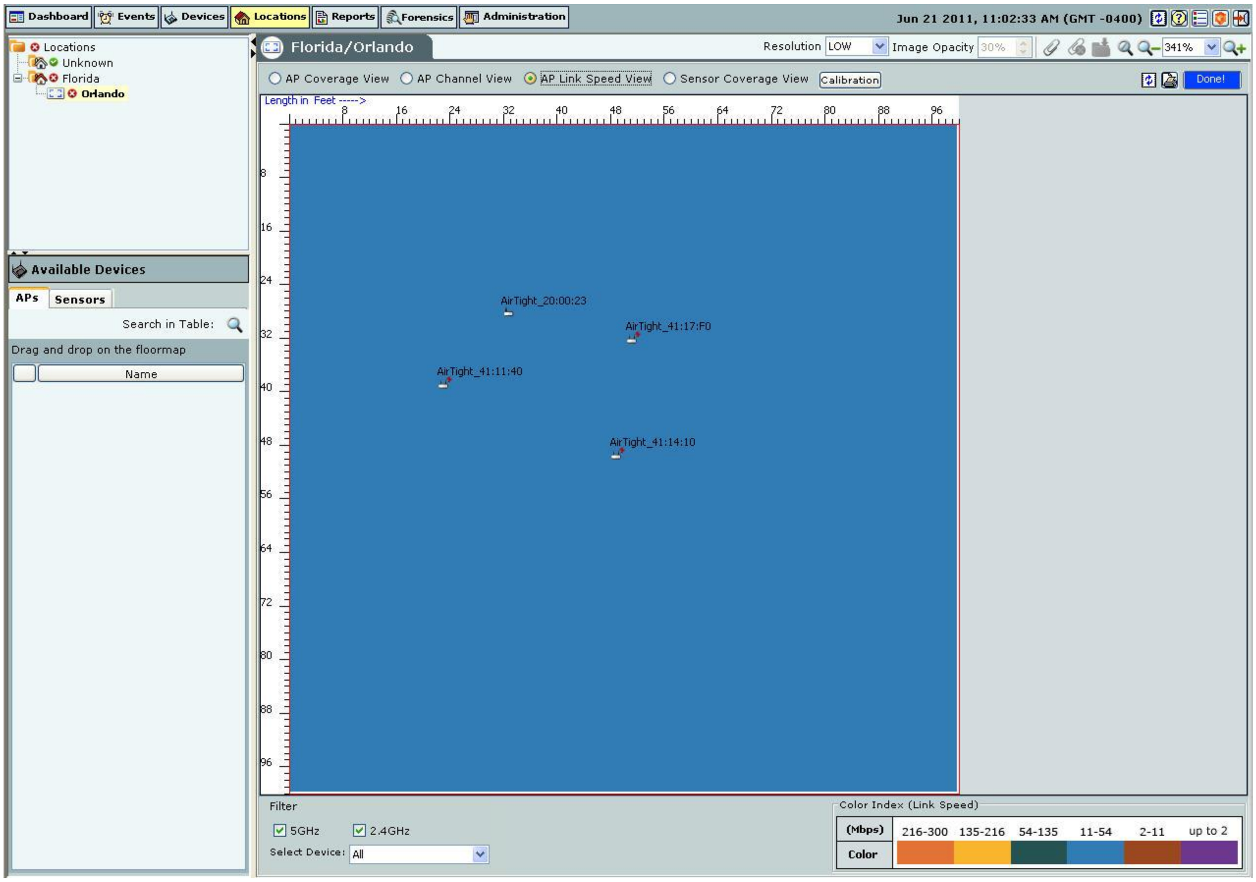
☑ 5GHz ☑ 2.4GHz

Select Device: All

AP Channel View

AP Link Speed View

The AP Link Speed View enables you to view the maximum downlink rate with which a Client at a particular point can connect to an AP on the floor.



Resolution LOW

Image Opacity 30%

341%

○ AP Coverage View ○ AP Channel View ● AP Link Speed View ○ Sensor Coverage View

Filter

☑ 5GHz ☑ 2.4GHz

Select Device: All

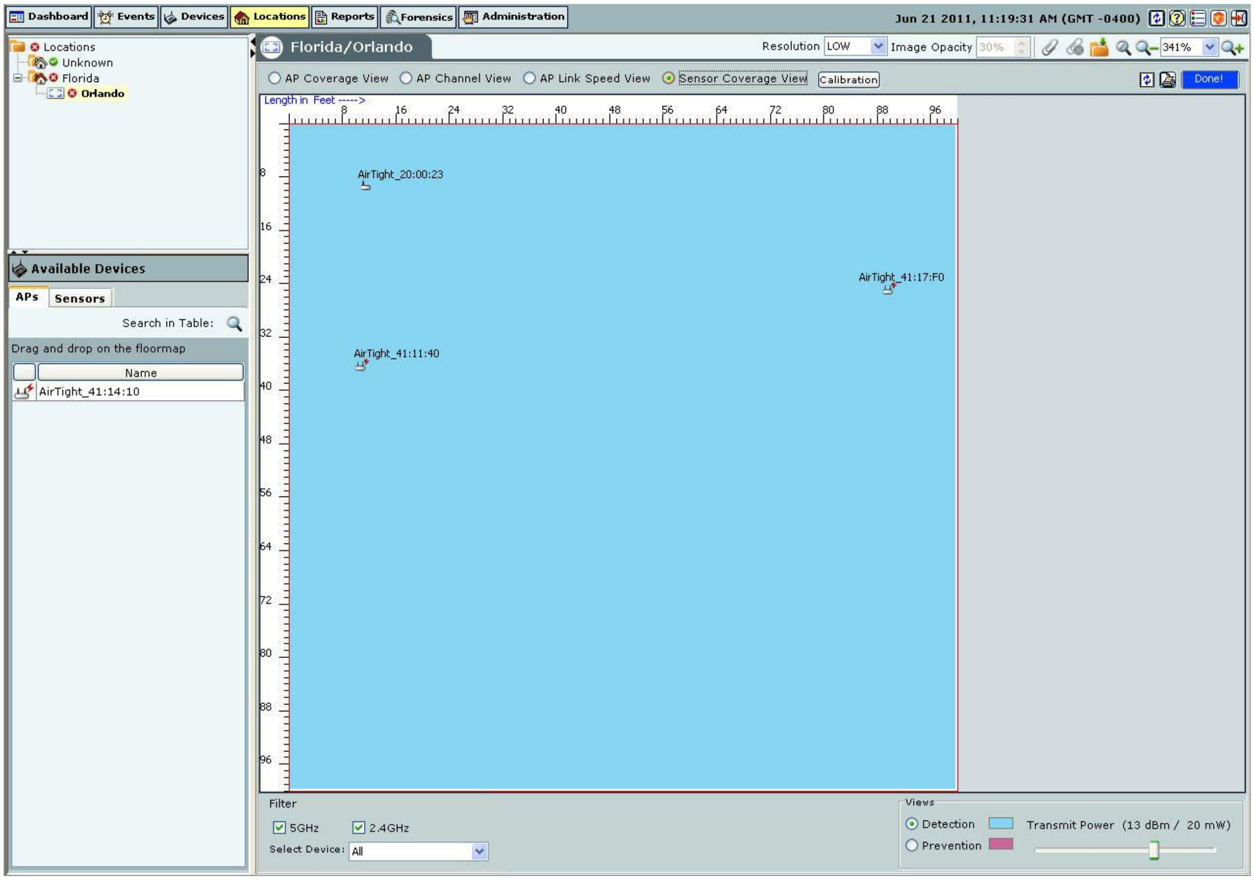
Color Index (Link Speed)

(Mbps)	216-300	135-216	54-135	11-54	2-11	up to 2
Color	🟧	🟨	🟩	🟦	🟫	🟪

AP Link Speed View

Sensor Coverage View

The Sensor Coverage View enables you to view the detection and prevention zones of visibility for selected Sensors.



Sensor Coverage View

Detection Range is the area over which Sensors can reliably detect wireless activity of devices operating at a power level greater than the value set in the **Transmit Power** slider. The **Intrusion Detection Display Threshold** determines the threshold for this range.

Prevention Range is the area over which Sensors can prevent unauthorized wireless activity. The **Intrusion Prevention Display Threshold** determines the threshold for this range.

Note: Prevention Range *view is* ***not*** *visible if* ***WIDS*** *license is applied.*

Both detection and prevention ranges are affected by various parameters under **Administration→Global→Location Settings→RF Propagation**. The reliability of the prevention also depends on the Intrusion Prevention Level chosen under **Administration→Local→Operating Policies→Intrusion Prevention→ Intrusion Prevention Level.**

Calibrating RF Views

Calibration helps in tuning RF parameters used by the system to compare the AP and Sensor predictions to actual observations. The system has a robust calibration technique that also allows manual intervention in case of discrepancy. Use the following steps to calibrate RF views:

1. Generate the RF Coverage map using the steps explained in the Viewing RF Coverage Maps section and then clicking **Calibration**.
2. To improve predictions, fine-tune the **Min. Signal Decay Constant** and the **Max. Signal Decay Constant.**

Note*: **Min. Signal Decay Constant*** *specifies the amount of signal loss that is acceptable for regions close to the transmitter (Sensor).* ***Max. Signal Decay Constant*** *specifies the amount of signal loss that is acceptable for regions away from the transmitter. Signal loss is directly proportional to the signal decay constants.*

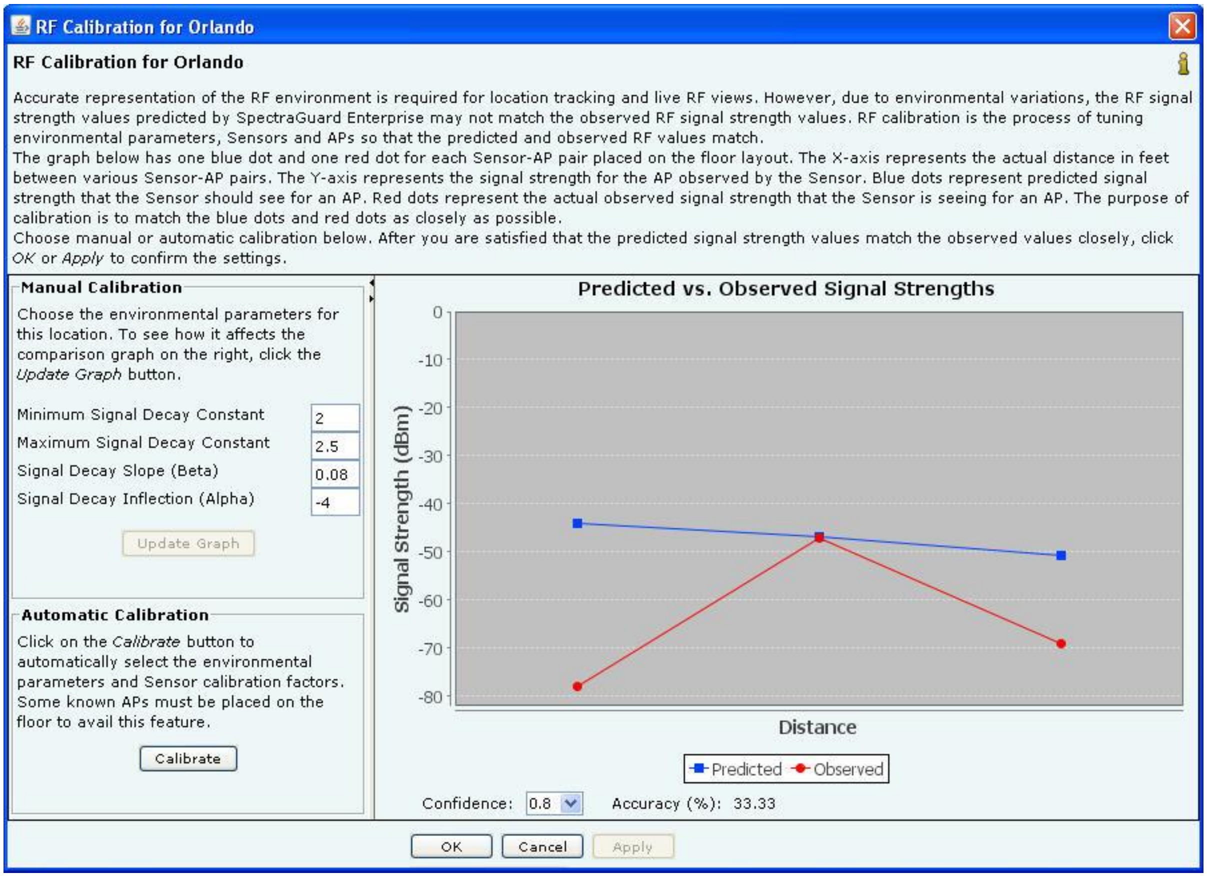
3. Change the values of the **Signal Decay Slope (Beta)** and the **Signal Decay Inflection (Alpha)**. The system uses these parameters when computing the RF and defines the region around the transmitter that is unobstructed.

***Note**: When you change the **Min. Signal Decay Constant, Max. Signal Decay Constant, Signal Decay Slope (Beta)**, and **Signal Decay Inflection (Alpha)** the RF view and location tracking for unobstructed regions is affected. In the obstructed regions, only Location Tracking is affected, RF view is not affected.*

4. Click **Update Graph** to view your selection against the predicted values.

***Important**: The **Predicted value** curve should overlap the **Observed value** curve as much as possible.*

5. Click **Calibrate** to complete calibration if you have adjusted the parameters manually such that the two curves are parallel (but not coinciding).
6. Click **Apply** to commit your changes.



RF Calibration for Orlando

RF Calibration for Orlando

Accurate representation of the RF environment is required for location tracking and live RF views. However, due to environmental variations, the RF signal strength values predicted by SpectraGuard Enterprise may not match the observed RF signal strength values. RF calibration is the process of tuning environmental parameters, Sensors and APs so that the predicted and observed RF values match.
The graph below has one blue dot and one red dot for each Sensor-AP pair placed on the floor layout. The X-axis represents the actual distance in feet between various Sensor-AP pairs. The Y-axis represents the signal strength for the AP observed by the Sensor. Blue dots represent predicted signal strength that the Sensor should see for an AP. Red dots represent the actual observed signal strength that the Sensor is seeing for an AP. The purpose of calibration is to match the blue dots and red dots as closely as possible.
Choose manual or automatic calibration below. After you are satisfied that the predicted signal strength values match the observed values closely, click *OK* or *Apply* to confirm the settings.

Manual Calibration

Choose the environmental parameters for this location. To see how it affects the comparison graph on the right, click the *Update Graph* button.

Minimum Signal Decay Constant	2
Maximum Signal Decay Constant	2.5
Signal Decay Slope (Beta)	0.08
Signal Decay Inflection (Alpha)	-4

Automatic Calibration

Click on the *Calibrate* button to automatically select the environmental parameters and Sensor calibration factors. Some known APs must be placed on the floor to avail this feature.

Confidence: 0.8

Accuracy (%): 33.33

RF Calibration Dialog

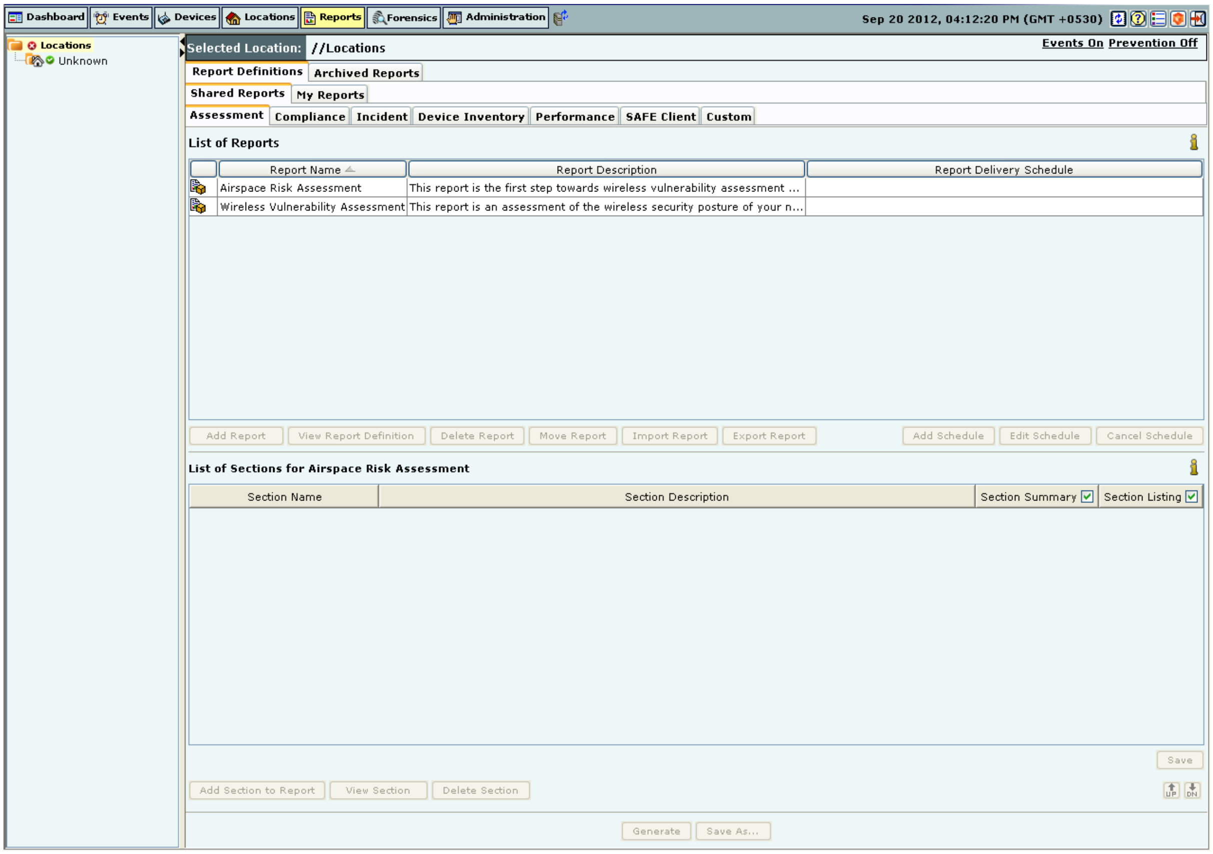
Reports Tab

Reports: Panel for Generating Reports

The **Reports** screen enables you to generate predefined and customized reports. The system uses a query-based mechanism to generate various reports. The system provides predefined compliance reports: Health Insurance Portability and Accountability Act (HIPAA), Sarbanes-Oxley (SOX), Gramm-Leach-Bliley (GLBA), Payment Card Industry (PCI) Standard, and so on. Additionally, information about devices and events is also available in the form of ready made reports.

Reports Screen

You can open the Reports screen by selecting the **Reports** tab on the navigation bar.



Selected Location: //Locations

Report Name	Report Description	Report Delivery Schedule
Airspace Risk Assessment	This report is the first step towards wireless vulnerability assessment ...	
Wireless Vulnerability Assessment	This report is an assessment of the wireless security posture of your n...	

Section Name	Section Description	Section Summary ☑	Section Listing ☑

Report Definitions Screen: Shared Reports Tab

The **Reports** screen includes two panes.
On the left, the Location tree.
On the right, the report panel.

Location Tree

The **Location** tree shows the complete list of locations created for your WLAN in the system. You can select locations for which you need to generate the report.

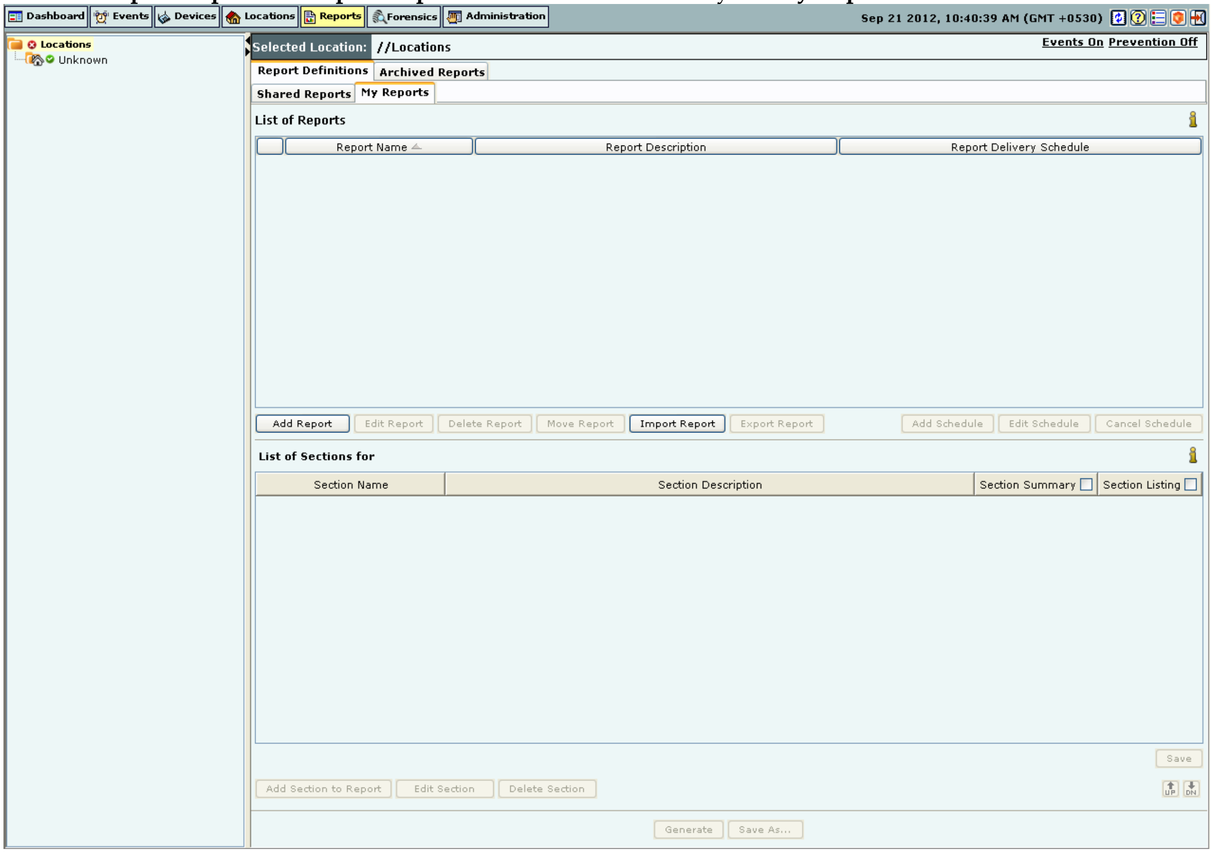
Report Panel

On the top of the Reports screen, **Selected Location** gives the path of the selected location.

The Reports screen includes two tabs:

1. **Report Definitions:** This tab consists of two sub-tabs:

- **Shared Reports:** Contains reports that all the users can view and schedule. These include Assessment Reports, Compliance Reports, Incident Reports, Device Inventory Reports, Performance Reports, SAFE Client Reports, and Custom Reports.
- **My Reports:** Contains reports available only to those users who have generated them. These are custom reports. You can import a custom report by clicking **Import Report.**You can import a report created in SpectraGuard Enterprise. You can export a report by clicking **Export Report.** The **Import Report** and **Export Report** buttons are enabled only for **My Reports**.



Report Definitions Screen: My Reports Tab

2. **Archived Reports:** This tab allows you to view saved or archived reports generated on the server. These reports are useful for trend analysis. An archived report is visible to a user if the user generated the report. A superuser can see all archived reports.

On the two tabs – **Shared Reports** and **My Reports** are two tables described in the following sections.

List of Reports

The **List of Reports** table displays reports available for all the locations. This table consists of the following columns:

- **Report Name:** Displays the name of each report
- **Report Description:** Displays a brief description of each report
- **Report Delivery Schedule:** Displays the delivery schedule of each report for the selected location. The schedule is only visible to the user who created it.

In the **List of Reports** table, you can perform the following operations under Shared Reports–Custom Reports tab or My Reports:

- Add, edit, delete, and move a report to a different tab
- Add, edit, and cancel a report schedule

Under Shared Reports – Assessment Reports, Compliance Reports, Incident Reports, Device Inventory Reports, Performance Reports, and SAFE Client Reports tabs, you can only view a report and add a report delivery schedule.

List of Sections

The **List of Sections** table displays sections created for a selected report. This table consists of the following columns:

- **Section Name:** Displays the name of the section contained in the selected report
- **Section Description:** Displays a brief description of each section

Note: *Throughout the user interface, events can have one of the three states (Live, Instantaneous, or Expired); however, while defining Reports Instantaneous and Live events are grouped into a single status (Past).*

Depending on whether or not you want Section Summary, Section Listing for a particular section to appear in the report, you can select or deselect the check box under **Section Summary**, **Section Listing** for that section. To have Section Summary for all the sections in the report, select the check box next to **Section Summary**. To have Section Listing for all sections in the report, select the check box next to **Section Listing**. Click the **Save** button to save these settings. The setting is saved for the individual user, for the report. In this way, every user can have different settings for each report based on individual requirement.

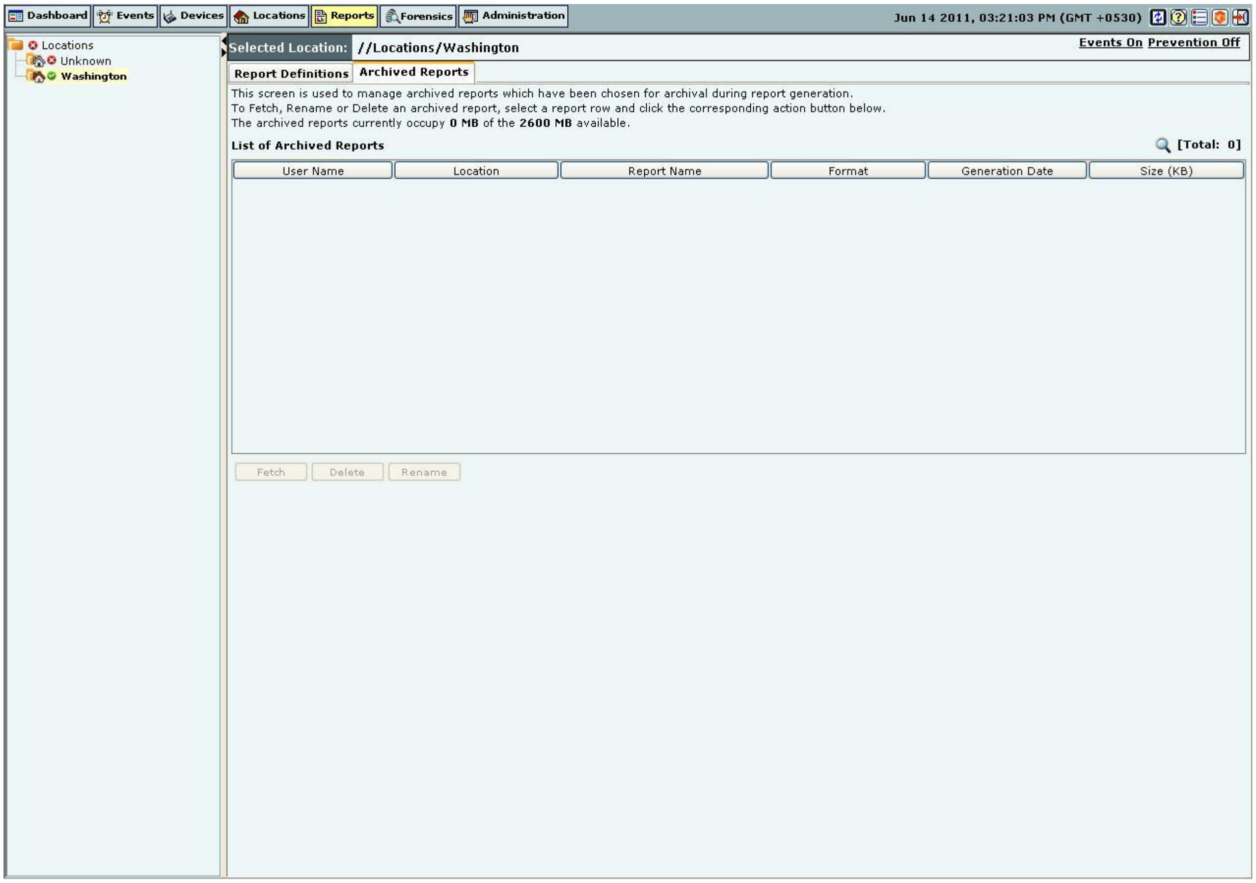
By default, Section Summary and Section Listing for all sections are selected.
This feature is available for Shared Reports and My Reports.

In the **List of Sections** table, you can perform the following operations under Shared Reports–Custom Reports tab or My Reports:

- Add, edit, and delete a section of a report
- Organize the sections in the report using UP and DN
- Generate a report, save a report with the same, or different name

Under Shared Reports – Assessment Reports, Compliance Reports, Incident Reports, Device Inventory Reports, Performance Reports, and SAFE Client Reports tabs, you can only view a section of a report, generate a report, and save a report with a different name. The saved report is available under Shared Reports – Custom Reports tab.

On the **Archived Reports** tab, the following information is available:



Selected Location: //Locations/Washington

This screen is used to manage archived reports which have been chosen for archival during report generation.
To Fetch, Rename or Delete an archived report, select a report row and click the corresponding action button below.
The archived reports currently occupy **0 MB** of the **2600 MB** available.

User Name	Location	Report Name	Format	Generation Date	Size (KB)

Archived Reports Tab

- **User Name:** Displays the name of the user who generated the report.
- **Location:** Displays the name of the location at which the report is generated. If the Location tree is updated after a report is generated, this field is not updated.
- **Report Name:** Displays the name of the report that appears at the time of report generation. Updating the report name does not update the name here.
- **Format:** Specifies the format of the report; that is HTML, XML, or PDF.
- **Generation Date:** Indicates the time of report generation.
- **Size (KB):** Displays the report size. This parameter is useful when deleting reports.

Managing Reports

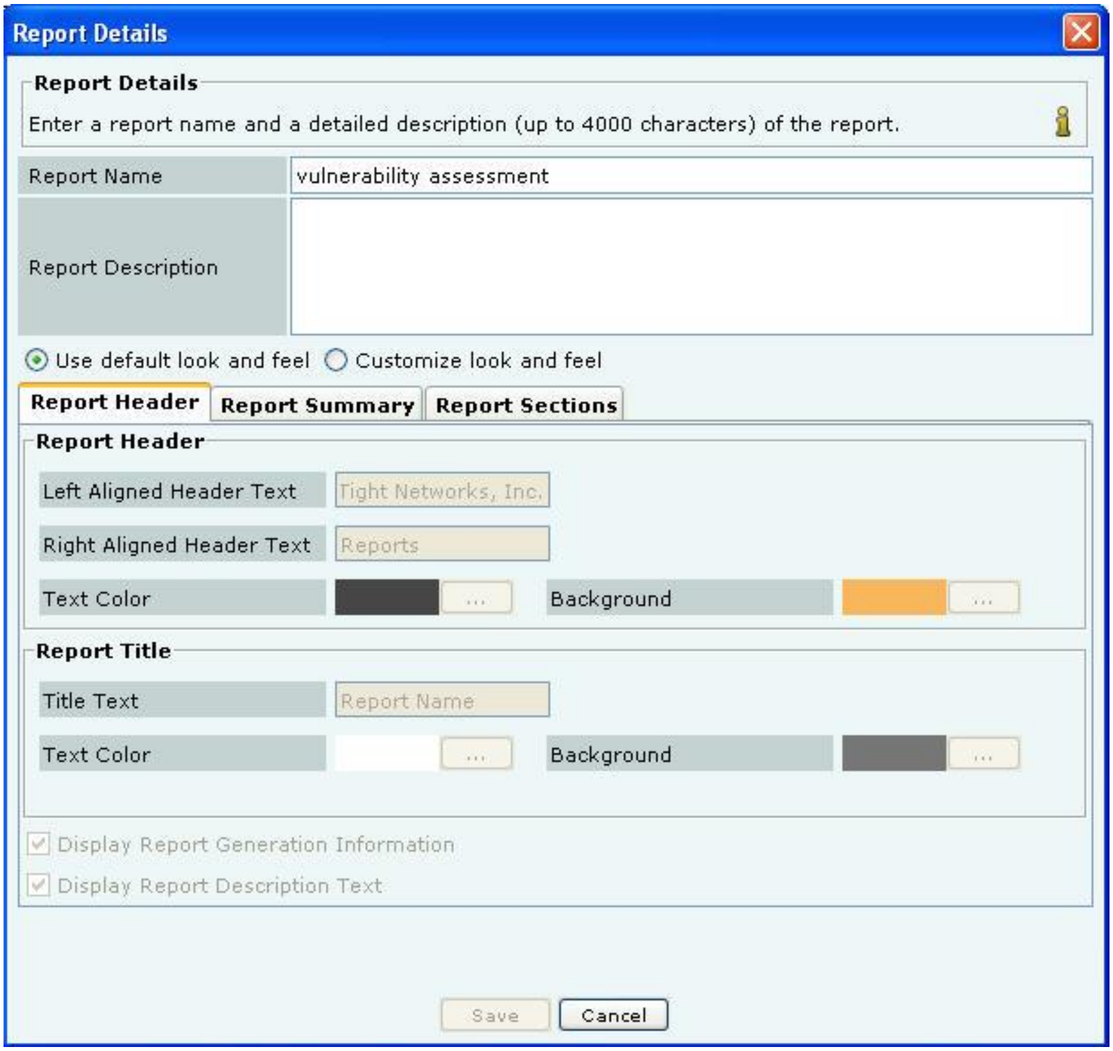
This section shows how to add a report, edit a report, delete, and move a report. You can perform these operations either under the **My Reports** tab or the **Shared Reports–Custom Reports** tab.

Adding a Report

The system enables you to define customized reports so that you can view precise details that you require. Use the following steps to add a report:

1. Select the tab **My Reports**.

2. Under **List of Reports**, click **Add Report**.



Report Details

Report Details

Enter a report name and a detailed description (up to 4000 characters) of the report.

Report Name	vulnerability assessment
Report Description	

● Use default look and feel ○ Customize look and feel

Report Header | Report Summary | Report Sections

Report Header

Left Aligned Header Text	Tight Networks, Inc.		
Right Aligned Header Text	Reports		
Text Color	■ ...	Background	■ ...

Report Title

Title Text	Report Name		
Text Color	□ ...	Background	■ ...

☑ Display Report Generation Information

☑ Display Report Description Text

Report Details Screen showing Report Header Tab

3. On the **Report Details** dialog, under **Report Name**, enter a unique, user-friendly name for the report.

4. Under **Report Description,** enter brief note to help identify the report.

5. Click **Use default look and feel**, to retain the default text, title, and colors for the reports.

6. Alternatively, click **Customize look and feel**, to customize the appearance of the report.

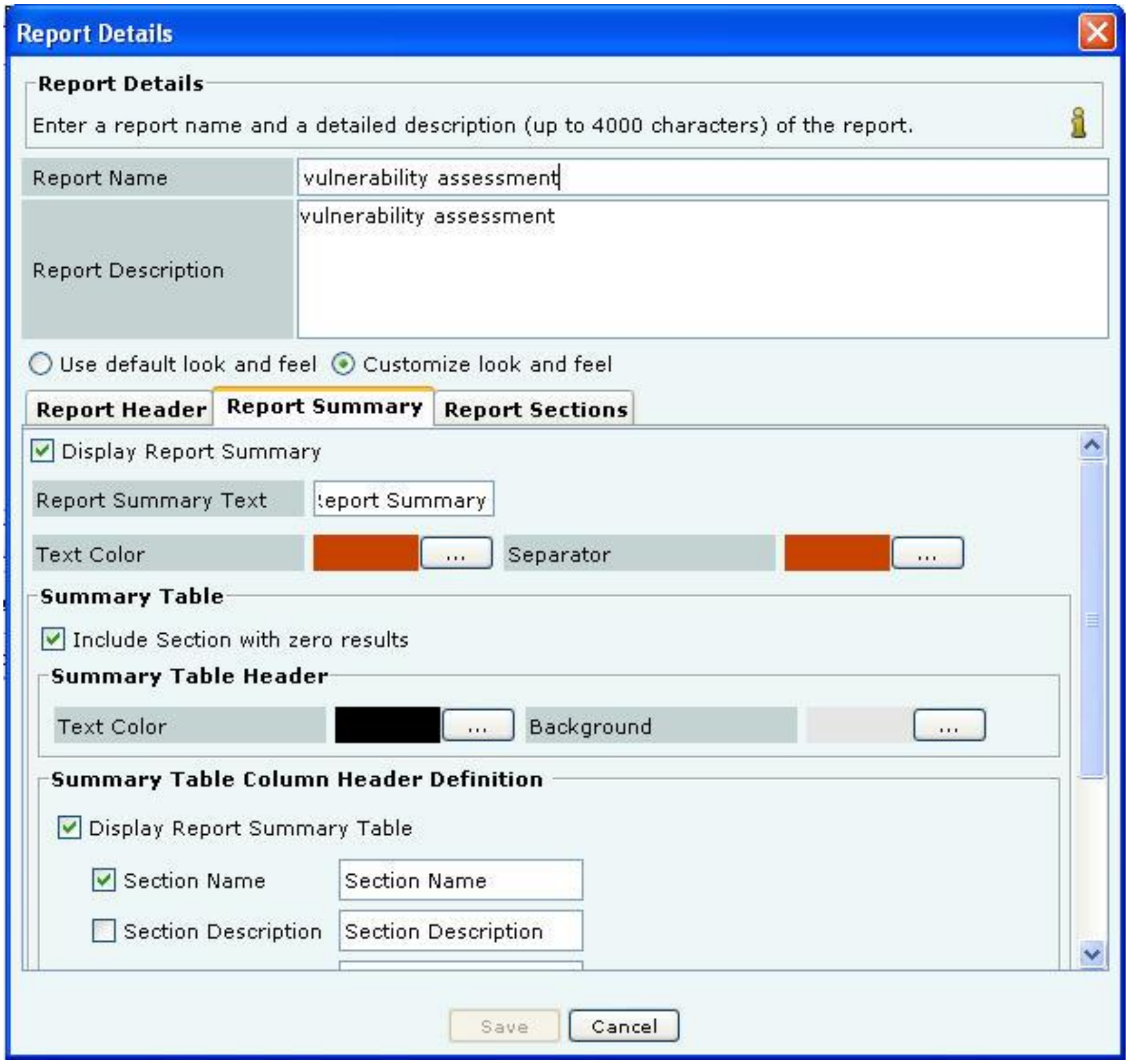
7. Select the **Report Heade**r tab.

8. Under **Report Header**, specify the following parameters to be customized in the generated report:
   - **Left Aligned Header Text:** Specify the text that should appear in the header on the left side.
   - **Right Aligned Header Text:** Specify the text that should appear in the header on the right side.
   - Click **Pick…** and select the **Text Color** and **Background** colors for the Report Header.

9. Under **Report Title**, specify the following parameters to be customized in the generated report:
   - **Title Text:** Specify a title that appears below the header on the left side. The Report Description follows this title.
   - Click **Pick…** and select the **Text Color** and **Background** colors for the Report Title.
   - Select the checkbox, **Display Report Generation Information** to view the following information below the Report Title
     - Duration for which the report is generated

    - Location for which the report is generated
    - User who generated the report
    - Date and time when the report is generated
- Select the checkbox, **Display Report Description Text** to view a detailed description of the report.

10. Select the **Report Summary** tab.



Report Details

Report Details

Enter a report name and a detailed description (up to 4000 characters) of the report.

Report Name	vulnerability assessment
Report Description	vulnerability assessment

○ Use default look and feel ● Customize look and feel

☑ Display Report Summary

Report Summary Text	:eport Summary		
Text Color	🟥 ...	Separator	🟥 ...

Summary Table

☑ Include Section with zero results

Summary Table Header

Text Color	■ ...	Background	...

Summary Table Column Header Definition

☑ Display Report Summary Table

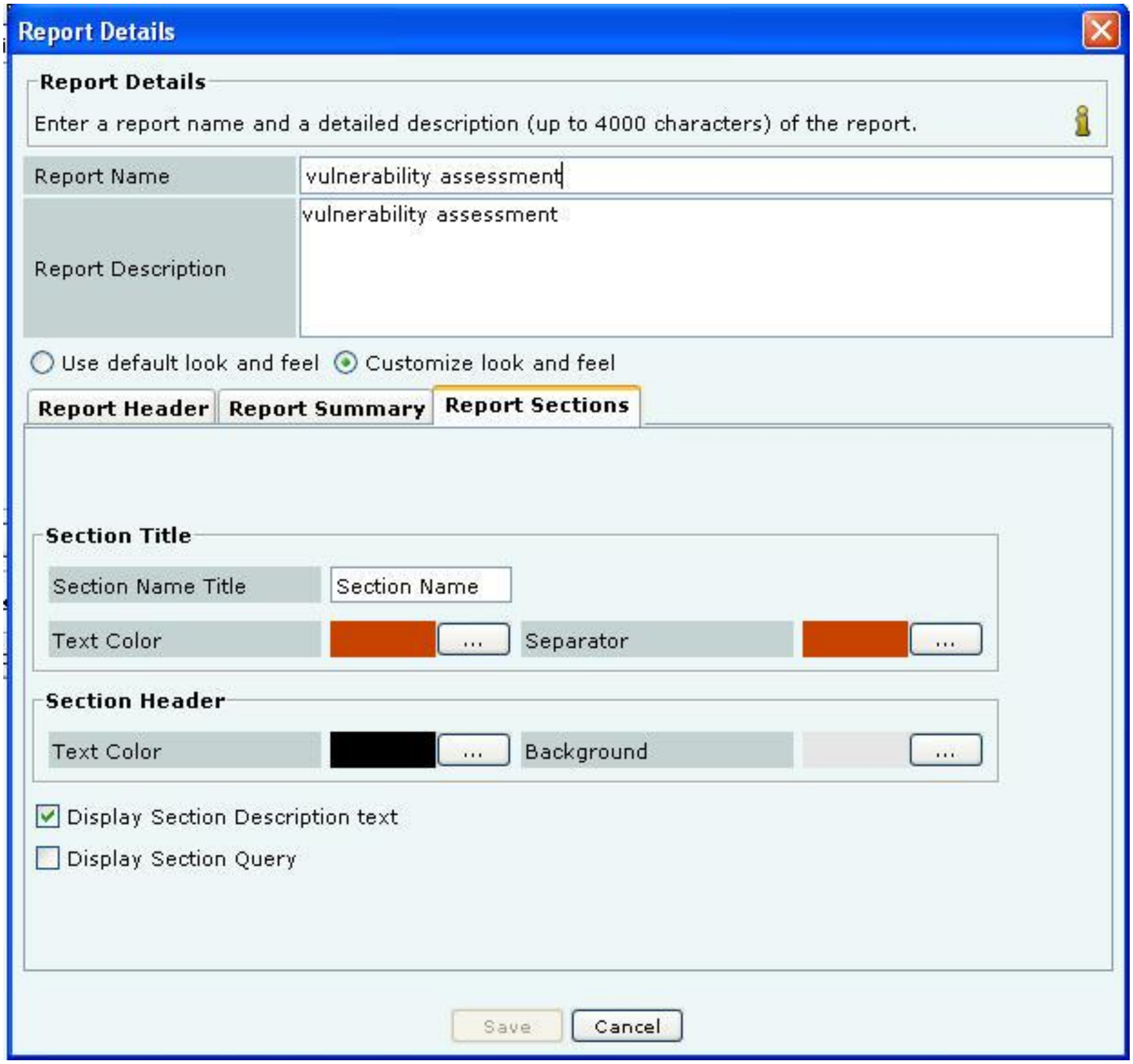
☑ Section Name	Section Name
☐ Section Description	Section Description

Report Details Screen showing Report Summary Tab

- Clear the checkbox, **Display Report Summary** if you do not wish to view the Report Summary in a tabular form.
- Alternatively, select the checkbox, **Display Report Summary** to customize parameters in the Report Summary table in the generated report.
    - Specify the **Report Summary Text** that should appear as the Report Summary table heading.
    - Click **Pick…** and select the **Text Color** and **Separator** colors for the Report Summary table heading.
- Under **Summary Table**, select the checkbox, **Include Section with zero results** to view sections in which the result count is zero.
- Under **Summary Table Header**, click **Pick…**, select the **Text Color**, and **Background** colors for the Report Summary table row header.

- Under **Summary Table Column Header Definition,** select the checkbox, **Display Report Summary Table** to customize the following column names in the Report Summary table in the generated report.
  - Section Name
  - Section Description
  - Query Type
  - Result Count
  - Jump to
- Under **Summary Charts,** select an option button to view the charts in the desired format.

11. Select the **Report Sections** tab.



Report Details

Report Details

Enter a report name and a detailed description (up to 4000 characters) of the report.

Report Name	vulnerability assessment
Report Description	vulnerability assessment

○ Use default look and feel ● Customize look and feel

Section Title

Section Name Title	Section Name		
Text Color	...	Separator	...

Section Header

Text Color	...	Background	...

☑ Display Section Description text

☐ Display Section Query

Report Details Screen showing Report Sections Tab

Under **Section Title**, specify the following parameters to be customized in the generated report:

- **Section Name Title:** Specify the text that should appear as a common heading for all the Section Names.
- Click **Pick…** and select the **Text Color** and **Separator** colors for the Section Name Title.

Under **Section Header**, specify the following parameters to be customized in the generated report:

- Click **Pick…**, select the **Text Color**, and **Background** colors for the table row headers in the Section Summary and Section Results sections.

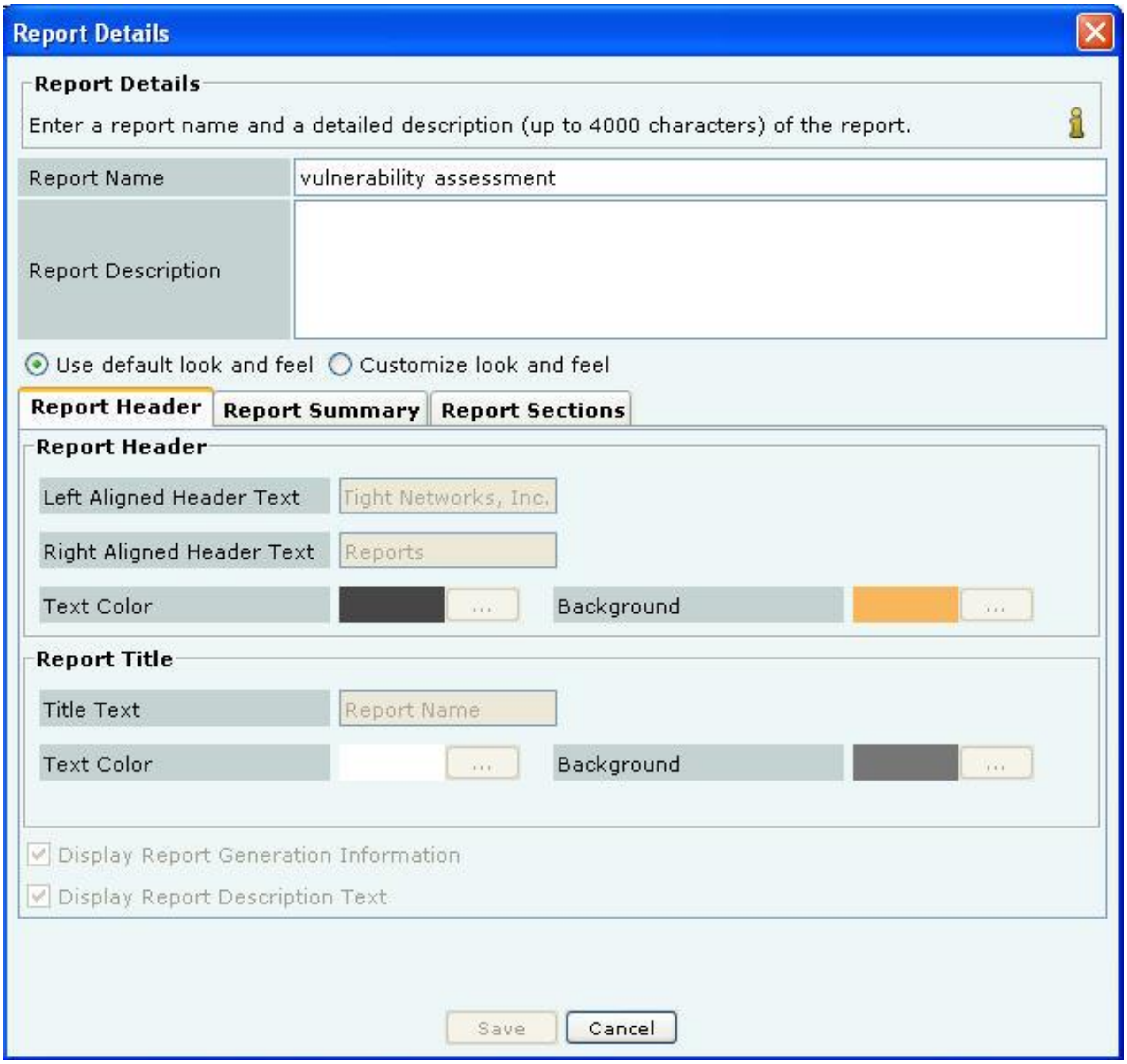
- Select **Display Section Description text** to view a brief description for each section of the report.
- Select **Display Section Query** to view all the constraints specified in the database query for that section.

11. To add the report to the **List of Reports**, click **Save**. The new report appears under the **List of Reports** table.

Editing a Report

The system enables you to edit user-defined reports. You cannot edit pre-defined reports. AirTight recommends that you do not edit a shared report scheduled by multiple users for delivery. Instead, save the report under a different name and then modify that report. Use the following steps to edit a selected report:

1. From the **List of Reports** table select the report that you want to edit.
2. Click **Edit Report**.
3. On the **Report Details** dialog, change the Report Name, Report Description, default look and feel, or customize the look and feel.



Report Details

Report Details

Enter a report name and a detailed description (up to 4000 characters) of the report.

Report Name	vulnerability assessment
Report Description	

● Use default look and feel ○ Customize look and feel

Report Header | Report Summary | Report Sections

Report Header

Left Aligned Header Text	Tight Networks, Inc.			
Right Aligned Header Text	Reports			
Text Color	■ ...		Background	■ ...

Report Title

Title Text	Report Name			
Text Color	□ ...		Background	■ ...

☑ Display Report Generation Information

☑ Display Report Description Text

Editing a Report

4. To save the changes, click **Save**.

Deleting a Report

The system enables you to delete a user-defined report. You cannot delete pre-defined reports or a shared report scheduled by other users. Use the following steps to delete a report:

1. From the **List of Reports** table, select the report that you want to delete.
2. Click **Delete Report**.
3. Click **Yes** on the **Confirm** dialog to delete the report.

Moving a Report

The system enables you to move a report from **Shared Reports–Custom Reports** to **My Reports** and vice versa. Use the following steps to move a report:

1. From the **List of Reports** table, select the report that you want to move.
2. Click **Move Report**.
3. Click **Yes** on the **Confirm** dialog to move the report.

You cannot move:

- A report from **Shared Reports–Custom Reports** to **My Reports** if more than one user share or schedule it for delivery at that location.
- A report from **My Reports** to **Shared Reports–Custom Reports** if a user schedules it for delivery at that location.
- Reports provided under **Shared Reports – Assessment Reports, Compliance Reports, Incident Reports, Device Inventory Reports, Performance Reports,** and **SAFE Client Reports** to **My Reports**

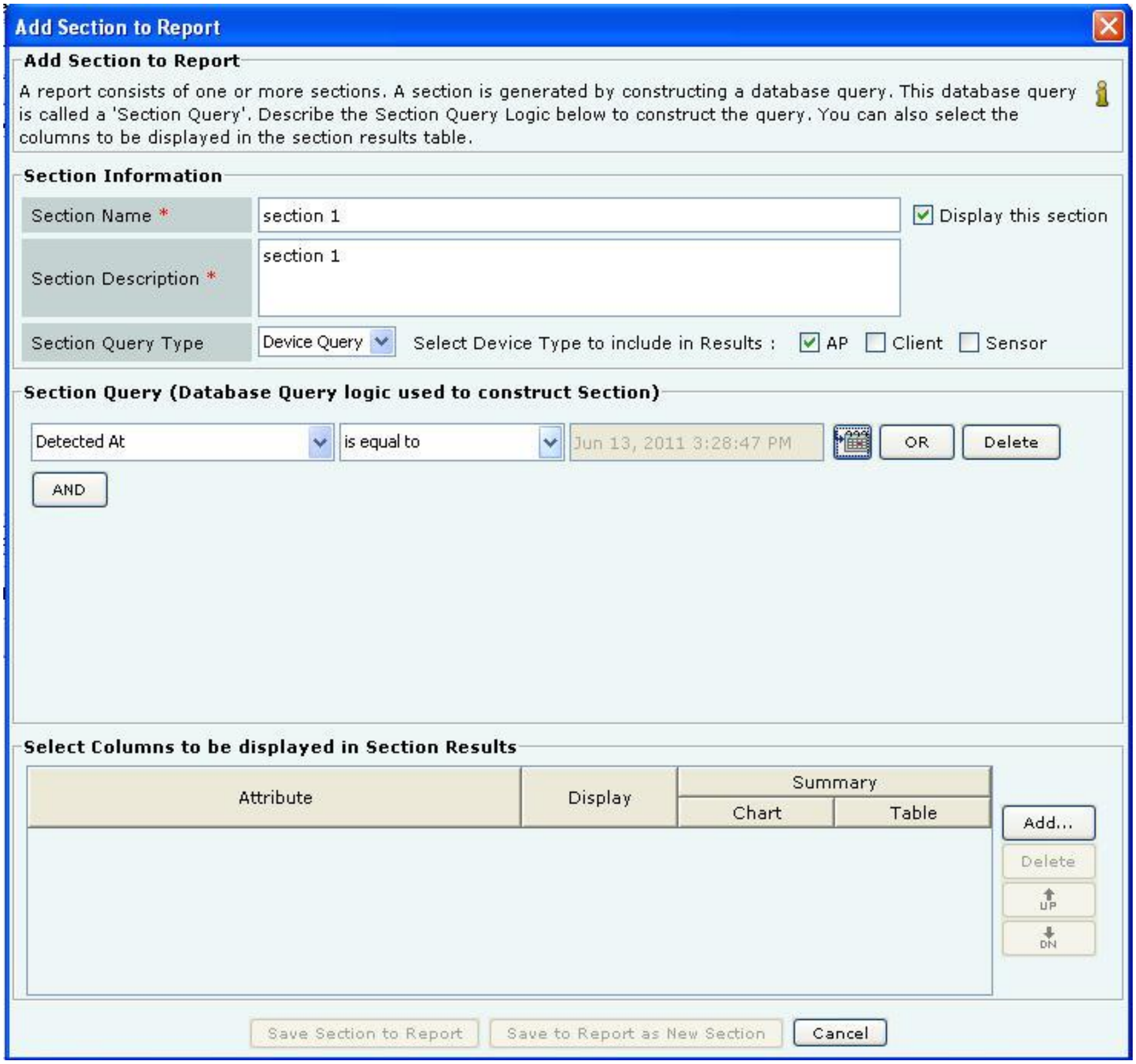
Working with Sections of a Report

This section shows you how to add a section to a report, edit a section of a report, and delete a section of a report.

Adding a Section to a Report

A report consists of one or more sections. Each section is a query to the database. The system then searches its database for those records that satisfy the conditions that you impose. You cannot however add sections to predefined reports. Use the following steps to add a section to a report:

1. From the **List of Reports** table, select the report to which you need to add a section.
2. Click **Add Section to Report**.



Add Section to Report

Add Section to Report

A report consists of one or more sections. A section is generated by constructing a database query. This database query is called a 'Section Query'. Describe the Section Query Logic below to construct the query. You can also select the columns to be displayed in the section results table.

Section Information

Section Name *: section 1 ☑ Display this section

Section Description *: section 1

Section Query Type: Device Query Select Device Type to include in Results : ☑ AP □ Client □ Sensor

Section Query (Database Query logic used to construct Section)

Detected At | is equal to | Jun 13, 2011 3:28:47 PM

Select Columns to be displayed in Section Results

Attribute	Display	Summary	
		Chart	Table

Adding a Section to a Report

3. On the **Add Section to Report** dialog, enter a **Section Name** and a **Section Description** for the newly added section.
4. Select the checkbox **Display this section** to view this section in the generated report.
5. Under **Section Query Type**, select **Device**, **Event**, or **SAFE** as the query type.
6. Select any combination of the **AP**, **Client**, and **Sensor** checkboxes to include these device types in the results. These checkboxes are not available for a **SAFE** query.
7. Describe the **Section Query** construction logic by selecting the following:
   - A column from **Select Column**
   - A condition from **Select Condition**
   - An object for the query, which you can select or enter
8. Optionally, select one or more Boolean connectors (**OR** or **AND**) to join two or more queries. Click **Delete** to delete a query.
9. Under **Select Columns to be displayed in Section Results**, do the following:
   - Click **Add** to view a list of attributes and select an attribute.
   - Select the checkbox **Display** to view the selected attribute in the generated report.
   - Under **Summary**, you can choose to do the following:
     - Select the type of chart from the drop-down list to view a graph for the selected attribute.

- Select the checkbox **Table** to view a tabulated count for the selected attribute.

***Note**: Pie charts are not visible in an HTML report. You can view pie charts only in a PDF report.*

- Select an attribute and click <**Delete**> to delete that attribute.
- Select an attribute and click <**Up**> or <**Down**> to organize the attributes that appear as columns in the **Section Results** table of the generated report.

10. To save the section to an existing report, click <**Save Section to Report**>. To save the section with a new name, click <**Save to Report as New Section**>.

***Note**: When the **Section Query Type** is **Event Query**, and you select **Event** from the **Select Column** list to construct the section query, a list of predefined events appears in the **Select Value** list**.** This list also includes deprecated events. A deprecated event has the strike-through style applied to the event name. For example: ~~AP MAC Spoofing~~*

Editing a Section of a Report

The system enables you to edit a report's section information, query, or attributes to display in the generated report. AirTight recommends that you do not edit a shared report scheduled by multiple users for delivery.

Use the following steps to edit a section of a report:

1. From the **List of Sections** table, select the section that you want to edit.
2. Click **Edit Section.**
3. On the **Edit Section in Report** dialog, make changes to the required field(s).
4. To save the changes in an existing section, click **Save Section to Report**. To save the edited section with a new name, click **Save to Report as New Section**.

Deleting a Section of a Report

The system enables you to delete a section from a report if you no longer need the query defined in that section.

***Note**: Be careful when deleting a section of a report. The system cancels any existing delivery schedules for the selected report in the selected location. Further, if you delete the last section of a report, scheduling and report generation functions are disabled.*

Use the following steps to delete a section from a report:

1. From the **List of Sections** table, select the section that you want to delete.
2. Click **Delete Section**.
3. Click **OK** on the **Confirm** dialog to delete the section.

Scheduling a Report

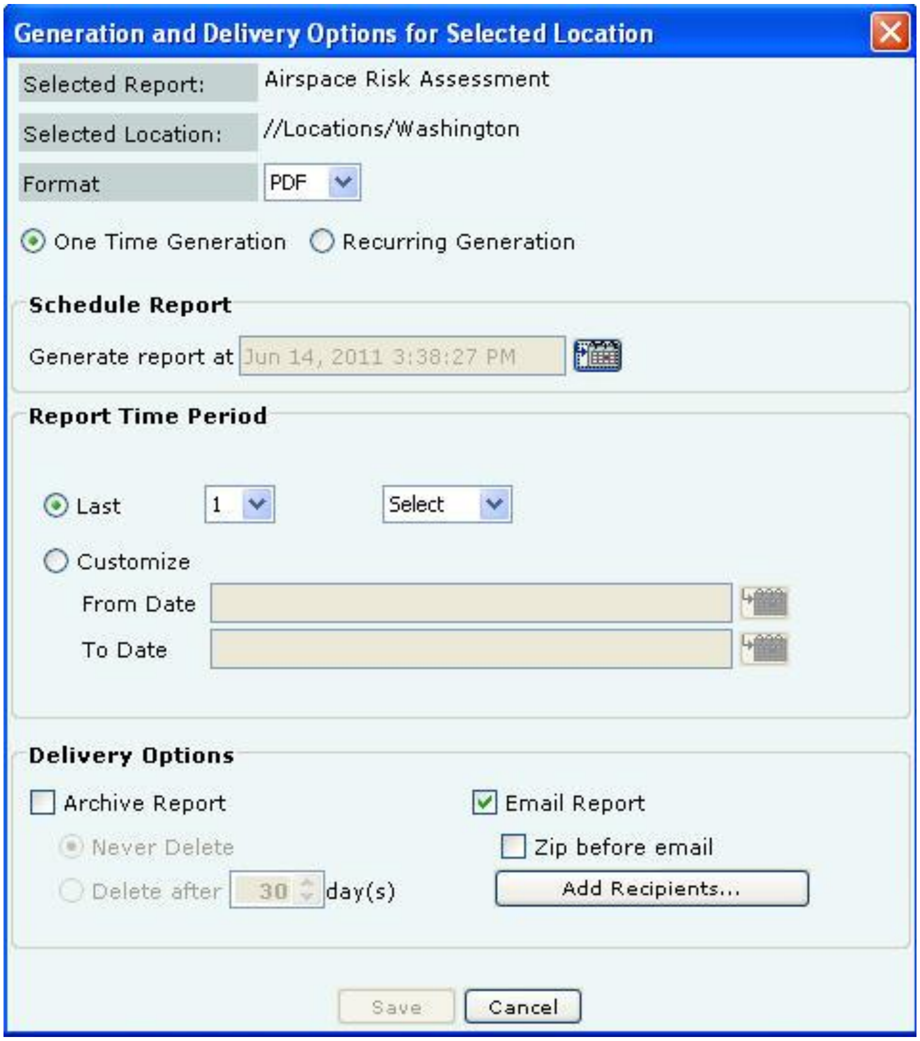
The system enables you to schedule email delivery of a report. You can select one time delivery or recurring delivery.

***Important:** Scheduled reports are emailed at incorrect times if incorrect time zone settings are configured in the Server Initialization and Configuration Wizard from the Server Config shell so choose the time zone carefully.*

Setting a Report Schedule

Use the following steps to schedule email delivery of a report:

1. From the **List of Reports** table, select the report that you want to schedule.
2. Click **Add Schedule**. The **Generation and Delivery Options for Selected Location** dialog appears.



Generation and Delivery Options for Selected Location

Selected Report:	Airspace Risk Assessment
Selected Location:	//Locations/Washington
Format	PDF

● One Time Generation ○ Recurring Generation

Schedule Report

Generate report at Jun 14, 2011 3:38:27 PM

Report Time Period

● Last 1 Select

○ Customize

From Date

To Date

Delivery Options

□ Archive Report

● Never Delete

○ Delete after 30 day(s)

☑ Email Report

□ Zip before email

Scheduling a Report for One Time Generation

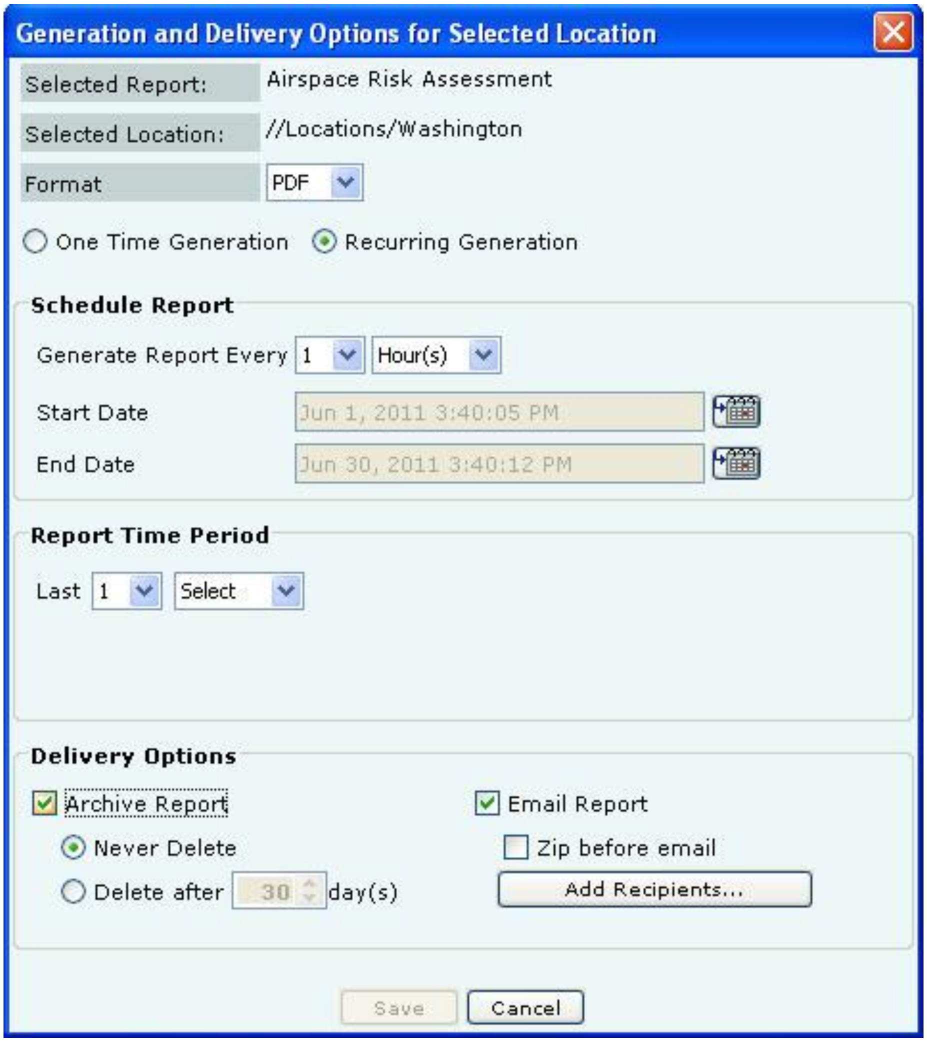
3. From the **Format** drop-down list, select the output type for the report, that is, HTML, XML, or PDF.

Note*: The system does not support PDF report generation on older versions of IE (versions lower than 7.0).*

4. Select either **One Time Generation** or **Recurring Generation**.

To schedule a report for **One Time Generation**, perform the following:

- Under **Schedule Report**, click the calendar icon to specify the date and the time on which to generate the report.
- Under **Report Time Period**, customize the duration for which the report should be generated by doing either of the following:
    - Select **Last** and then the number of hours, days, or months before the report delivery time.
    - Select **Customize** and then the exact date and time in **From Date** and **To Date** fields.



Generation and Delivery Options for Selected Location

Selected Report: Airspace Risk Assessment

Selected Location: //Locations/Washington

Format: PDF

○ One Time Generation ● Recurring Generation

Schedule Report

Generate Report Every: 1 Hour(s)

Start Date: Jun 1, 2011 3:40:05 PM

End Date: Jun 30, 2011 3:40:12 PM

Report Time Period

Last: 1 Select

Delivery Options

☑ Archive Report

● Never Delete

○ Delete after 30 day(s)

☑ Email Report

□ Zip before email

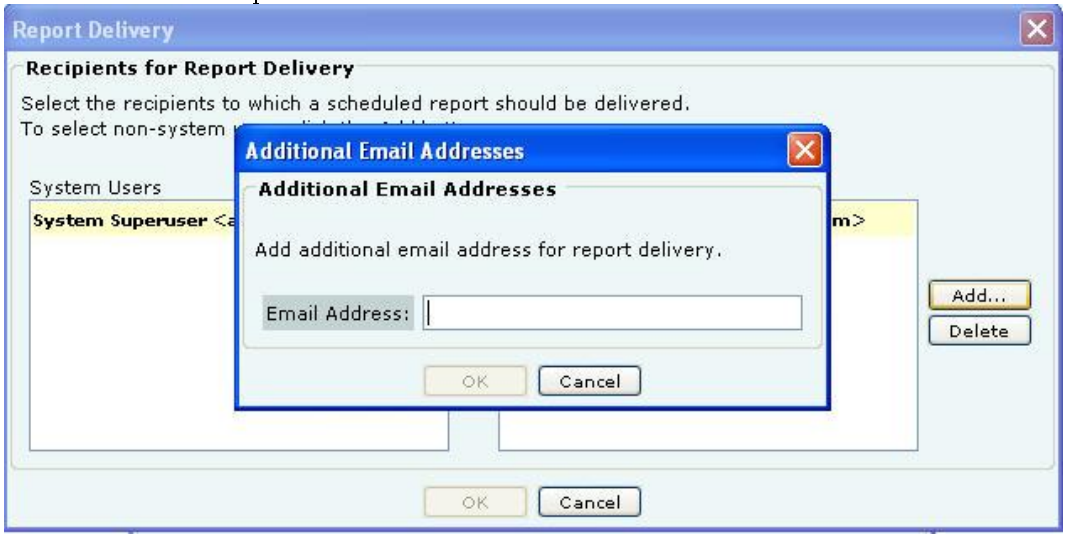
Scheduling a Report for Recurring Generation

To schedule a report for **Recurring Generation**, perform the following:

- Under **Schedule Report**, from the **Generate Report Every** drop-down list select the number of hours, days, or months over which to deliver the report.
- Click the calendar icon next to **Start Date** to select the start date and time for the report.
- Click the calendar icon next to **End Date** to select the end date and time for the report. The **End Date** must be greater than the **Start Date**. The system automatically selects the **End Date** and **Time** from the **Start Date**.
- Under **Report Time Period**, customize the duration for which the report should be generated by selecting **Last** and then the number of hours, days, or months before the report delivery time.

5. Under **Delivery Options**, perform the following:
   - Select **Archive Report** and then choose the following:
     - **Never Delete** to retain the report forever.
     - **Delete after 'n' days** to delete the report after the specified number of days
   - Select **Email Report** to email a copy of the report to the selected user(s).
     - Select **Zip before email** to compress the report before emailing it.
6. Click **Add Recipients** to open **Report Delivery** dialog. Here, you can do the following:
   - Select one or more email addresses under **System Users** and then click→ to move the chosen email address(s) to **Recipients**. The system delivers scheduled reports to the users under **Recipients**.

- Click **Add** to open **Additional Email Addresses** dialog where you can specify a custom email address for a non-system user who will receive a scheduled report. In this dialog, you can add multiple email addresses one at a time.



Report Delivery

Recipients for Report Delivery

Select the recipients to which a scheduled report should be delivered.

To select non-system

Additional Email Addresses

Add additional email address for report delivery.

Email Address:

Specifying Additional Email Addresses for Report Delivery

7. Click **OK** to close the **Additional Email Addresses** dialog.
8. Click **OK** to close the **Report Delivery** dialog.
9. To schedule the report, click **Save**.

Editing a Report Schedule

The system enables you to edit a report schedule in response to your requirements. Use the following steps to edit a report schedule:

1. From the **List of Reports** table, select the report whose schedule you want to edit.
2. Click **Edit Schedule**.
3. On the **Generation and Delivery Options for Selected Location** dialog, make the necessary changes using the steps given in the Setting a Report Schedule section.
4. To save the changes, click **Save**.

Canceling a Report Schedule

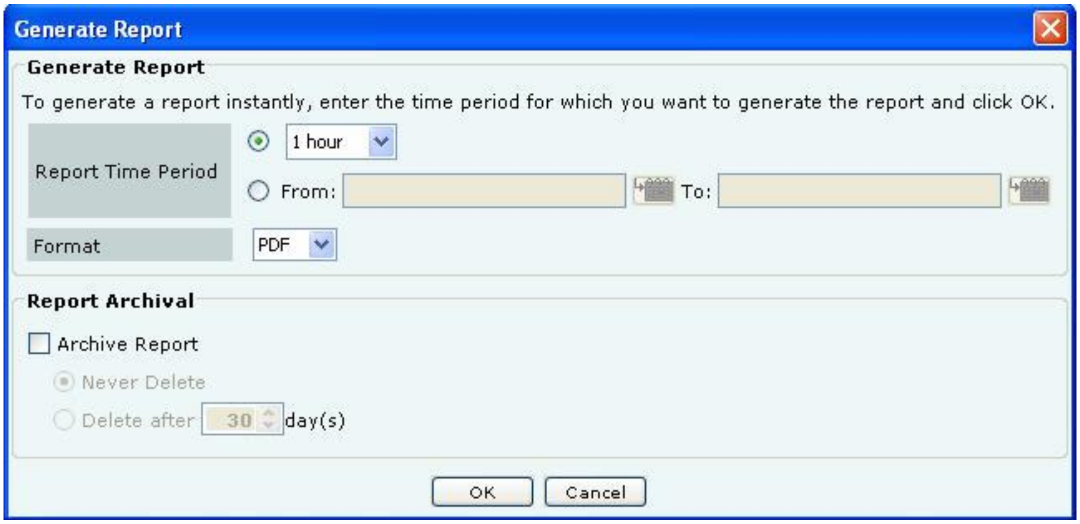
The system enables you to cancel a report schedule based on your requirements. Use the following steps to cancel a schedule:

1. From the **List of Reports** table, select the report whose schedule you want to cancel.
2. Click **Cancel Schedule**.
3. Click **Yes** on the **Confirm** dialog to cancel the schedule.

Generating a Report Instantly

The system enables you to generate a report instantly to display detailed information about your WLAN for a selected period. Use the following steps to generate a report:

1. From the **List of Reports** table, select a report that has at least one section.
2. Click **Generate**.



Generate Report

Generate Report

To generate a report instantly, enter the time period for which you want to generate the report and click OK.

Report Time Period	● 1 hour ○ From: To:
Format	PDF

Report Archival

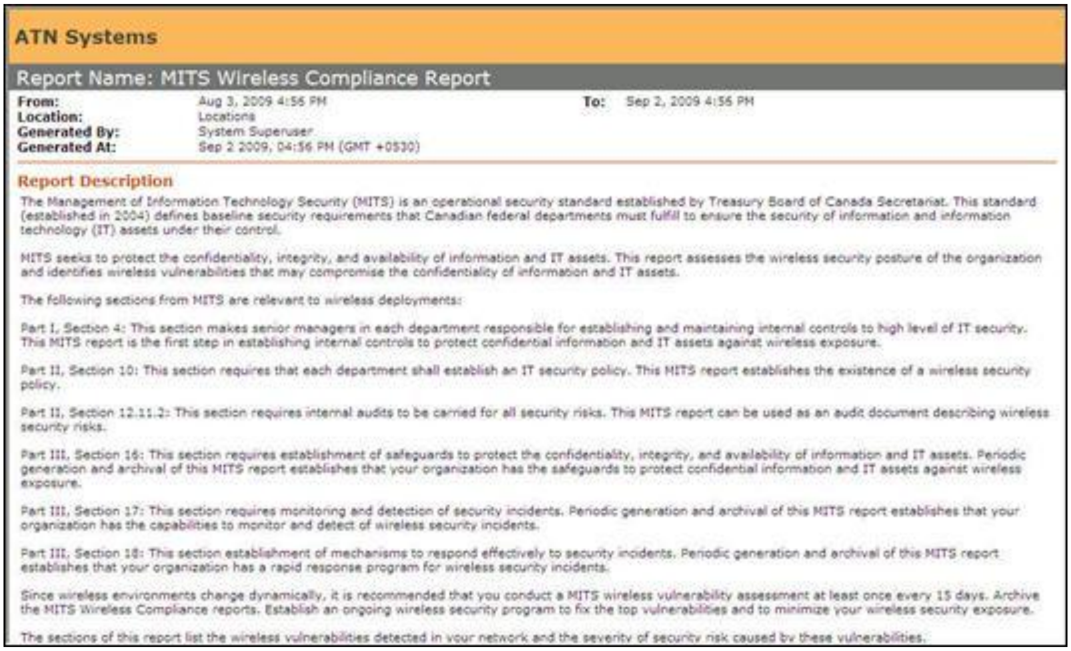
☐ Archive Report

● Never Delete

○ Delete after 30 day(s)

Generating a Report

3. On the **Generate Report** dialog, select the **Report Time Period** by doing one of the following: Select the number of days or hours from the drop-down list over which to collect data. Use the calendar icons to the right of the **From** and **To** fields to select the start time and end time for which to collect the data.
4. Select the **Format** in which to generate the report, that is, HTML, XML, or PDF.
5. Under **Report Archival**, select **Archive Report** and then select one of the following:
   - **Never Delete** to retain the archived report in the database forever.
   - **Delete after 'n' days** to delete the archived report after the selected number of days
6. Click **OK** to generate the report.
7. An HTML or PDF report opens in another browser window.



ATN Systems

Report Name: MITS Wireless Compliance Report

From:	Aug 3, 2009 4:56 PM	**To:**	Sep 2, 2009 4:56 PM
Location:	Locations		
Generated By:	System Superuser		
Generated At:	Sep 2 2009, 04:56 PM (GMT +0530)		

Report Description

The Management of Information Technology Security (MITS) is an operational security standard established by Treasury Board of Canada Secretariat. This standard (established in 2004) defines baseline security requirements that Canadian federal departments must fulfill to ensure the security of information and information technology (IT) assets under their control.

MITS seeks to protect the confidentiality, integrity, and availability of information and IT assets. This report assesses the wireless security posture of the organization and identifies wireless vulnerabilities that may compromise the confidentiality of information and IT assets.

The following sections from MITS are relevant to wireless deployments:

Part I, Section 4: This section makes senior managers in each department responsible for establishing and maintaining internal controls to high level of IT security. This MITS report is the first step in establishing internal controls to protect confidential information and IT assets against wireless exposure.

Part II, Section 10: This section requires that each department shall establish an IT security policy. This MITS report establishes the existence of a wireless security policy.

Part II, Section 12.11.2: This section requires internal audits to be carried for all security risks. This MITS report can be used as an audit document describing wireless security risks.

Part III, Section 16: This section requires establishment of safeguards to protect the confidentiality, integrity, and availability of information and IT assets. Periodic generation and archival of this MITS report establishes that your organization has the safeguards to protect confidential information and IT assets against wireless exposure.

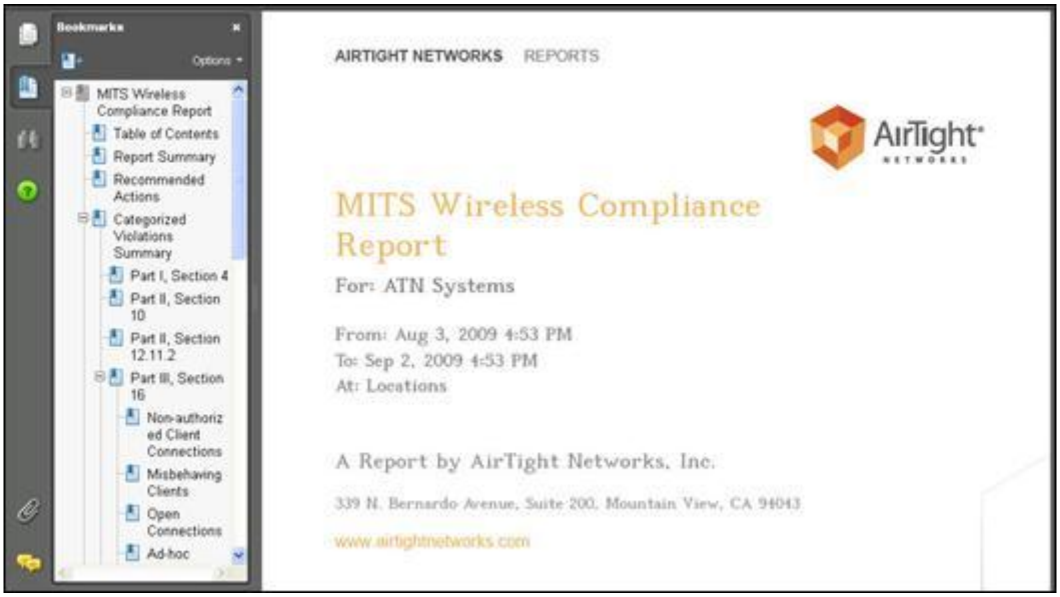
Part III, Section 17: This section requires monitoring and detection of security incidents. Periodic generation and archival of this MITS report establishes that your organization has the capabilities to monitor and detect of wireless security incidents.

Part III, Section 18: This section establishment of mechanisms to respond effectively to security incidents. Periodic generation and archival of this MITS report establishes that your organization has a rapid response program for wireless security incidents.

Since wireless environments change dynamically, it is recommended that you conduct a MITS wireless vulnerability assessment at least once every 15 days. Archive the MITS Wireless Compliance reports. Establish an ongoing wireless security program to fix the top vulnerabilities and to minimize your wireless security exposure.

The sections of this report list the wireless vulnerabilities detected in your network and the severity of security risk caused by these vulnerabilities.

Report in HTML Format



AIRTIGHT NETWORKS REPORTS

MITS Wireless Compliance Report

For: ATN Systems

From: Aug 3, 2009 4:53 PM
To: Sep 2, 2009 4:53 PM
At: Locations

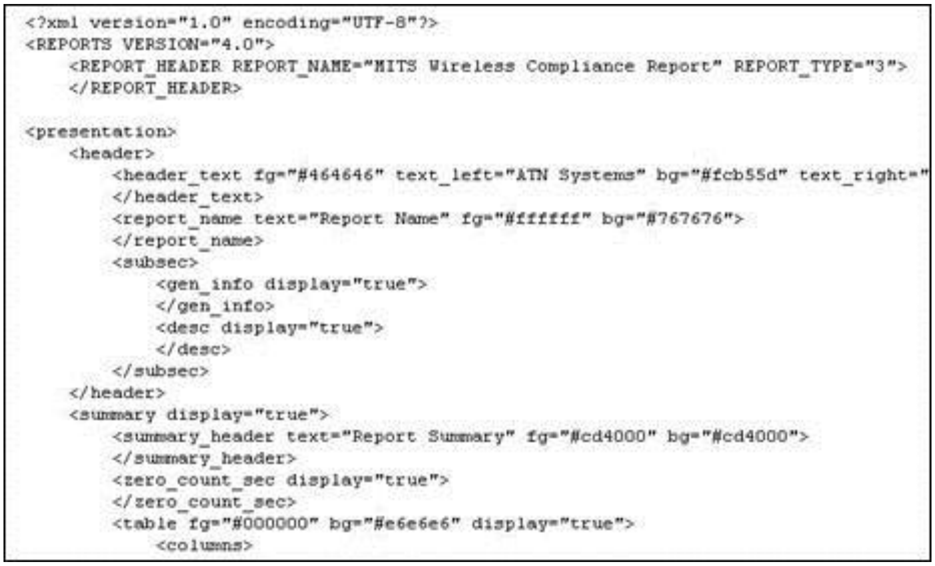
A Report by AirTight Networks, Inc.

339 N. Bernardo Avenue, Suite 200, Mountain View, CA 94043

www.airtightnetworks.com

Report in PDF Format

8. Alternatively, to save a report in XML format, in the **Save** dialog, specify the path where you want to save the report.



```
<?xml version="1.0" encoding="UTF-8"?>
<REPORTS VERSION="4.0">
    <REPORT_HEADER REPORT_NAME="MITS Wireless Compliance Report" REPORT_TYPE="3">
    </REPORT_HEADER>

<presentation>
    <header>
        <header_text fg="#464646" text_left="ATN Systems" bg="#fcb55d" text_right="
        </header_text>
        <report_name text="Report Name" fg="#ffffff" bg="#767676">
        </report_name>
        <subsec>
            <gen_info display="true">
            </gen_info>
            <desc display="true">
            </desc>
        </subsec>
    </header>
    <summary display="true">
        <summary_header text="Report Summary" fg="#cd4000" bg="#cd4000">
        </summary_header>
        <zero_count_sec display="true">
        </zero_count_sec>
        <table fg="#000000" bg="#e6e6e6" display="true">
            <columns>
```

Report in XML Format

Sample Report Generation

The example given in this section walks you through the process of creating a new report and shows you how to add a new section consisting of several database queries to the report.

Following are the steps involved in generating a report:

- Creating a report
- Adding a section
- Specifying a section query
- Selecting columns
- Saving the section
- Generating the report

These steps are illustrated with an example of a report that lists of all the Rogue APs in the WLAN that:

- Operate only on the 802.11 b protocol.

- Use either Channel 6 or Channel 11 for wireless communication

Creating a Report

1. Select the tab **My Reports**.
2. Add a new report to the **List of Reports** table by clicking **Add Report**.
3. On the **Report Details** dialog, enter a **Report Name** for the new report (for example, Rogue AP Associations), a **Report Description** to identify the report, and optionally customize the look and feel of the report.
4. Click **Save**. The new report appears under the **List of Report** table.

Adding a Section

1. Select the newly added report.
2. Click **Add Section to Report.**
3. On the **Add Section to Report** dialog, enter a **Section Name** and a brief **Section Description**.
4. Select the checkbox **Display this section** to view this new section in the generated report.

Specifying a Section Query

1. Under **Section Query Type**, select **Device Query**.
2. Under **Select Device Type to include in Results**, select the **AP** checkbox. By default, the system selects this checkbox.
3. Under **Section Query**, from left to right, select the following:
   - Violates Security Policy? is equal to Yes; the Boolean connector **AND** joins the first query to the second
   - Active Status is equal to Inactive; the Boolean connector **AND** joins the second query to the third
   - Channel is equal to 6; the Boolean connector **OR** joins the third query to the fourth
   - Channel is equal to 11

***Note**: The following steps explain a suggested method of implementing this query. You can implement the same query by changing the order of the queries.*

4. Under **Select Columns to be displayed in Section Results**, do the following
   - Click **Add** to view a list of attributes.
   - Select the following attributes one at a time and click **OK**.
     - **MAC Address**
     - **SSID**
     - **Network Status**
     - **Protocol**
     - **Channel**
     - **Device Folder**
   - Ensure that you select the following under **Select Columns to be displayed in Section Results**.

Attribute	Display	Summary	
		Chart	Table
MAC Address	Selected	-	-
SSID	Selected	Pie	Selected
Network Status	Selected	Bar	Selected
Protocol	Selected	Pie	Selected
Channel	Selected	Bar	Selected
Device Folder	Selected	Bar	Selected

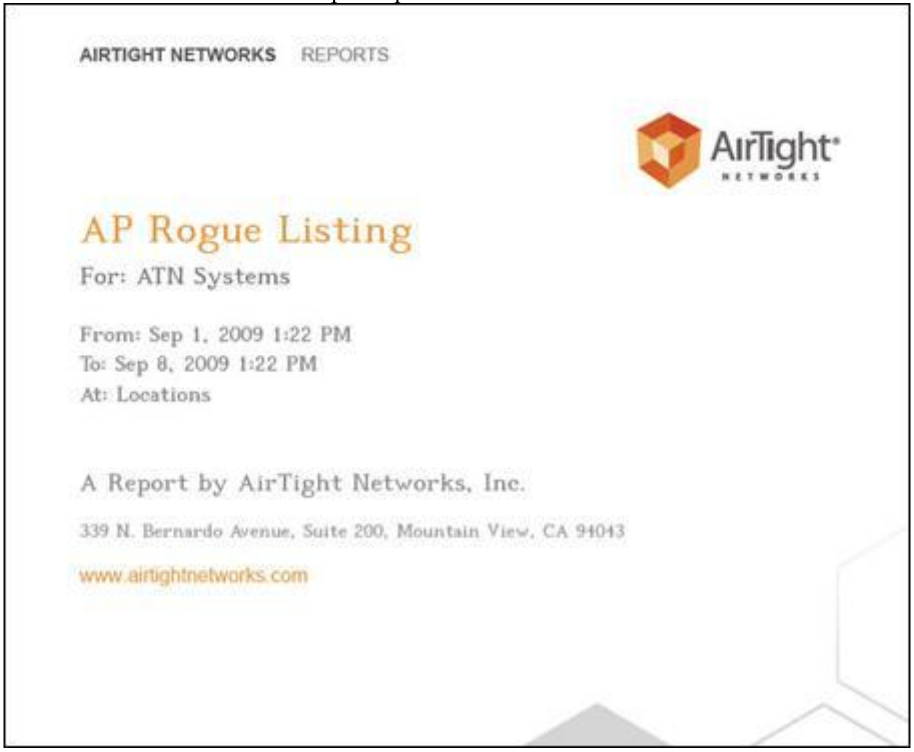
Saving the Section

To save this section to the report (Rogue AP Associations), click **Save Section to Report**. The new section appears under the **List of Sections** table.

Generating the Report

1. Select the newly created report (Rogue AP Associations).

2. Click **Generate**. The **Generate Report** dialog appears.
3. Under **Report Time Period**, select **7 days**.
4. Under **Format**, select **PDF**.
5. Under **Report Archival**, select **Archive Report** and then select **Delete after 360 days** to retain the archived report for 360 days.
6. Click **OK**. The PDF report opens in a different browser window.



AIRTIGHT NETWORKS REPORTS

AP Rogue Listing

For: ATN Systems

From: Sep 1, 2009 1:22 PM
To: Sep 8, 2009 1:22 PM
At: Locations

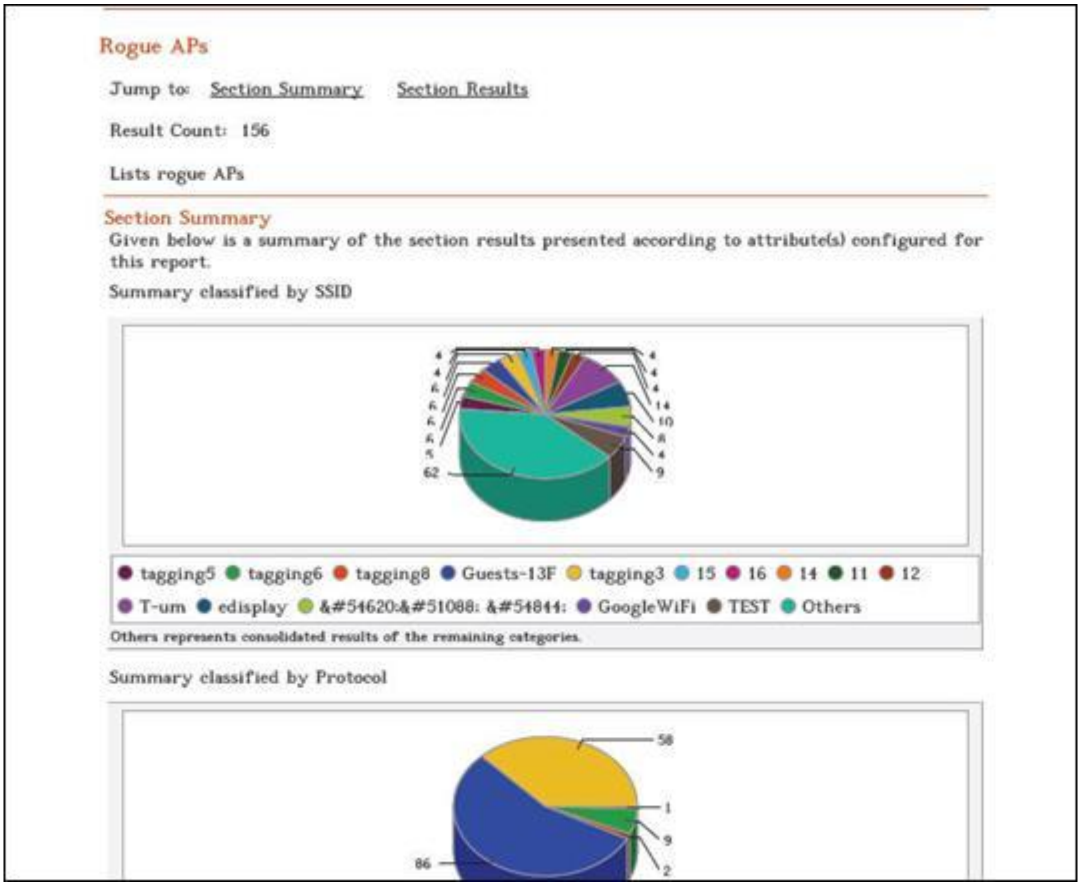
A Report by AirTight Networks, Inc.

339 N. Bernardo Avenue, Suite 200, Mountain View, CA 94043

www.airtightnetworks.com

Report in PDF format for 'Rogue AP Associations'

7. To view the **Section Summary** and **Section Results** of a section, click the corresponding link(s) in the **Jump to** column in the Report Summary table.



Rogue APs

Jump to: Section Summary Section Results

Result Count: 156

Lists rogue APs

Section Summary

Given below is a summary of the section results presented according to attribute(s) configured for this report.

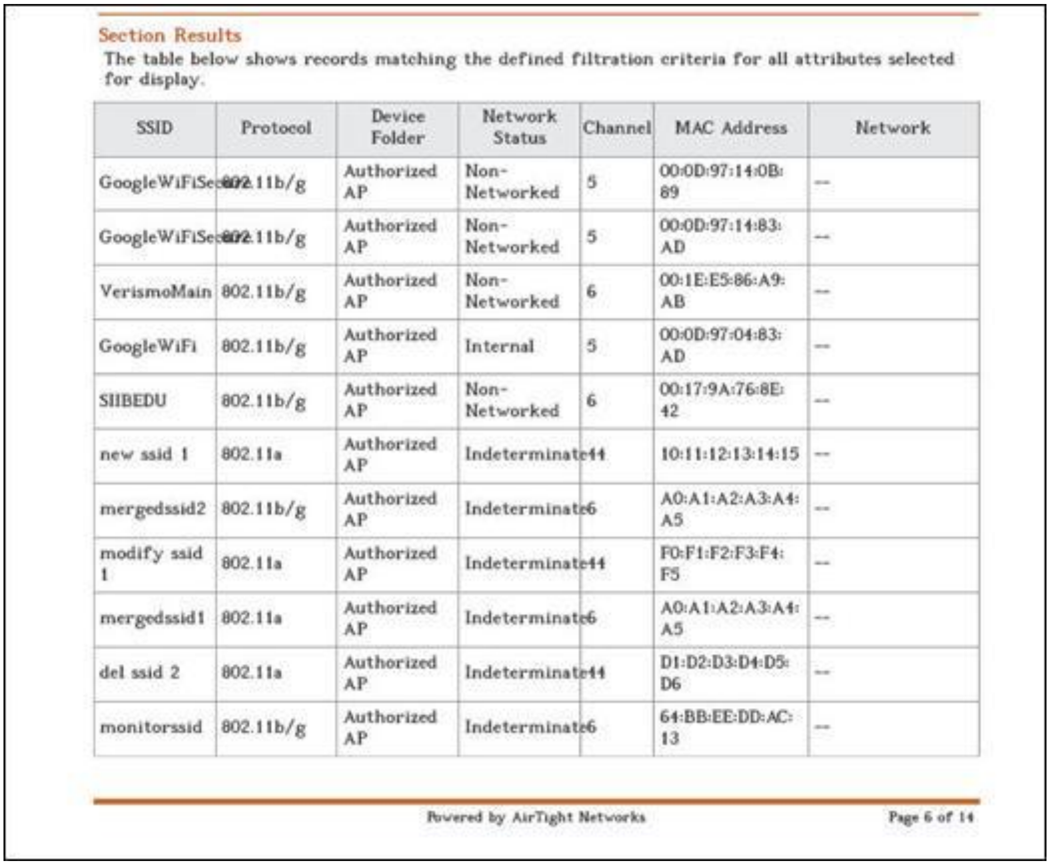
Summary classified by SSID

4
4
6
6
6
6
5
62
4
4
4
14
10
8
4
9
● tagging5 ● tagging6 ● tagging8 ● Guests-13F ● tagging3 ● 15 ● 16 ● 14 ● 11 ● 12
● T-um ● edisplay ● &#54620;&#51088; &#54844; ● GoogleWiFi ● TEST ● Others

Others represents consolidated results of the remaining categories.

Summary classified by Protocol

Report for 'Rogue AP Associations' showing Section Summary



Section Results

The table below shows records matching the defined filtration criteria for all attributes selected for display.

SSID	Protocol	Device Folder	Network Status	Channel	MAC Address	Network
GoogleWiFiSe	802.11b/g	Authorized AP	Non-Networked	5	00:0D:97:14:0B:89	--
GoogleWiFiSe	802.11b/g	Authorized AP	Non-Networked	5	00:0D:97:14:83:AD	--
VerismoMain	802.11b/g	Authorized AP	Non-Networked	6	00:1E:E5:86:A9:AB	--
GoogleWiFi	802.11b/g	Authorized AP	Internal	5	00:0D:97:04:83:AD	--
SIIBEDU	802.11b/g	Authorized AP	Non-Networked	6	00:17:9A:76:8E:42	--
new ssid 1	802.11a	Authorized AP	Indeterminate	44	10:11:12:13:14:15	--
mergedssid2	802.11b/g	Authorized AP	Indeterminate	6	A0:A1:A2:A3:A4:A5	--
modify ssid 1	802.11a	Authorized AP	Indeterminate	44	F0:F1:F2:F3:F4:F5	--
mergedssid1	802.11a	Authorized AP	Indeterminate	6	A0:A1:A2:A3:A4:A5	--
del ssid 2	802.11a	Authorized AP	Indeterminate	44	D1:D2:D3:D4:D5:D6	--
monitorssid	802.11b/g	Authorized AP	Indeterminate	6	64:BB:EE:DD:AC:13	--

Powered by AirTight Networks

Page 6 of 14

Report for 'Rogue AP Associations' showing Section Results

Forensics Tab

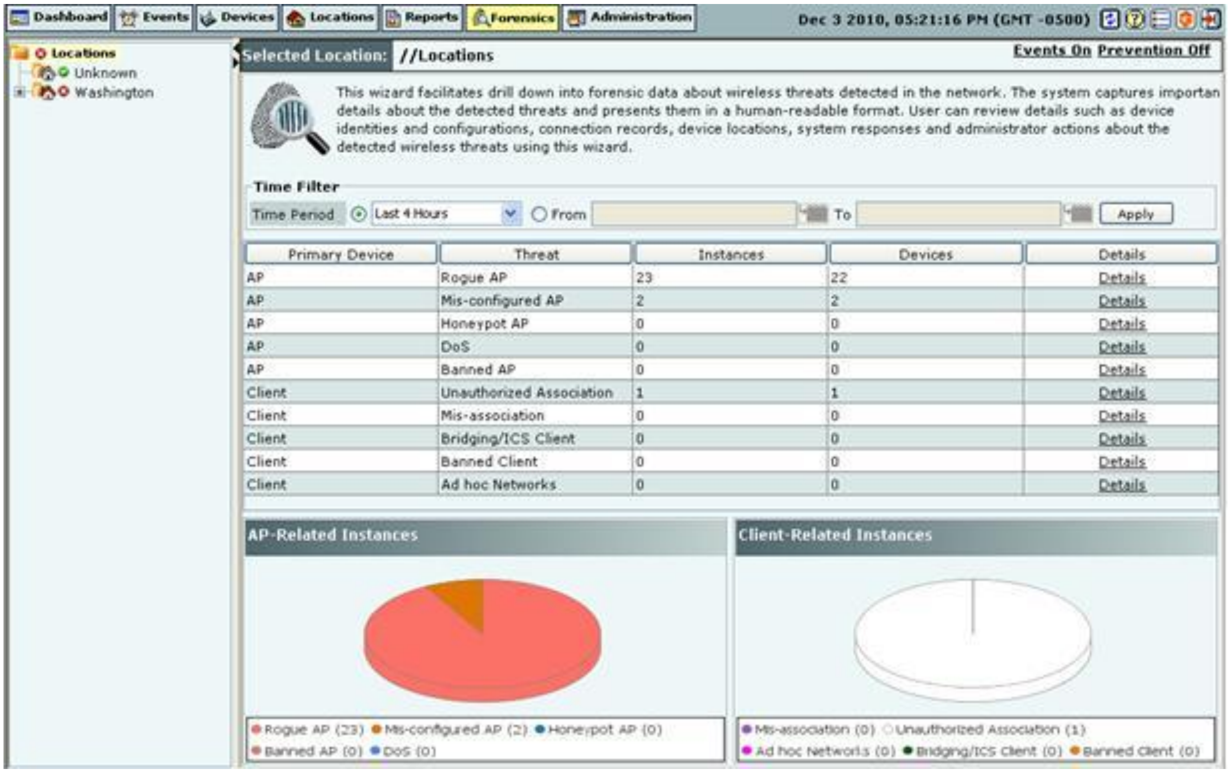
Forensics: Panel for Threat Forensics

The **Forensics** screen enables you to drill down into forensic data about wireless threats detected in the network. The system captures important details about the detected threats and presents them in a human-readable format. You can review details such as device identities and configurations, connection records, device locations, system responses, and administrator actions about the detected wireless threats using this tab.

Note: *The* ***Forensics Tab*** *is* ***not*** *visible if* ***WIDS*** *license is applied.*

Forensics Screen

You can open the Forensics screen by selecting the **Forensics** tab on the navigation bar.


Dashboard
Events
Devices
Locations
Reports
Forensics
Administration
Dec 3 2010, 05:21:16 PM (GMT -0500)
Locations
Unknown
Washington
Selected Location:
//Locations
Events On
Prevention Off
AP-Related Instances
● Rogue AP (23) ● Mis-configured AP (2) ● Honeypot AP (0)
● Banned AP (0) ● DoS (0)
Client-Related Instances
● Mis-association (0) ○ Unauthorized Association (1)
● Ad hoc Networks (0) ● Bridging/ICS Client (0) ● Banned Client (0)

This wizard facilitates drill down into forensic data about wireless threats detected in the network. The system captures importan details about the detected threats and presents them in a human-readable format. User can review details such as device identities and configurations, connection records, device locations, system responses and administrator actions about the detected wireless threats using this wizard.

Time Filter

Time Period ● Last 4 Hours ○ From ______ To ______ Apply

Primary Device	Threat	Instances	Devices	Details
AP	Rogue AP	23	22	Details
AP	Mis-configured AP	2	2	Details
AP	Honeypot AP	0	0	Details
AP	DoS	0	0	Details
AP	Banned AP	0	0	Details
Client	Unauthorized Association	1	1	Details
Client	Mis-association	0	0	Details
Client	Bridging/ICS Client	0	0	Details
Client	Banned Client	0	0	Details
Client	Ad hoc Networks	0	0	Details

Forensics Screen

The **Forensics** screen includes two panes.
On the left, the Location tree.
On the right, the Forensics tab: Time Filter, Threats List, and Pie Charts showing the AP and Client-Related Instances in graphical form.

Forensics: Location Tree

The Location tree shows the complete list of locations created for your WLAN in the system. To view a list of wireless threats, select a location in the Location tree, and a list of threats appears for the selected location and its child locations.

Forensics: Time Filter, Threat List, and Pie charts

This pane shows:

- Path of the selected location.
- List of threats that have occurred at that location
- Graphical representation of AP and Client threats as pie chart

You can view the threats based on the **Time Filter,** do one of the following:

- Select **Time Period** and select **Last 4 Hours**, **Last 12 Hours, Last 24 Hours,** or **Last 48 Hours** from the drop-down list.
- Select **From** click the 📅 icon to specify a start date and time. Under **To**, click the 📅 icon to specify an end date and time and then click **Apply**.

Threat list is organized such that it is easy to determine whether it is AP based threat or Client based threat, based on the primary device involved in the threat.

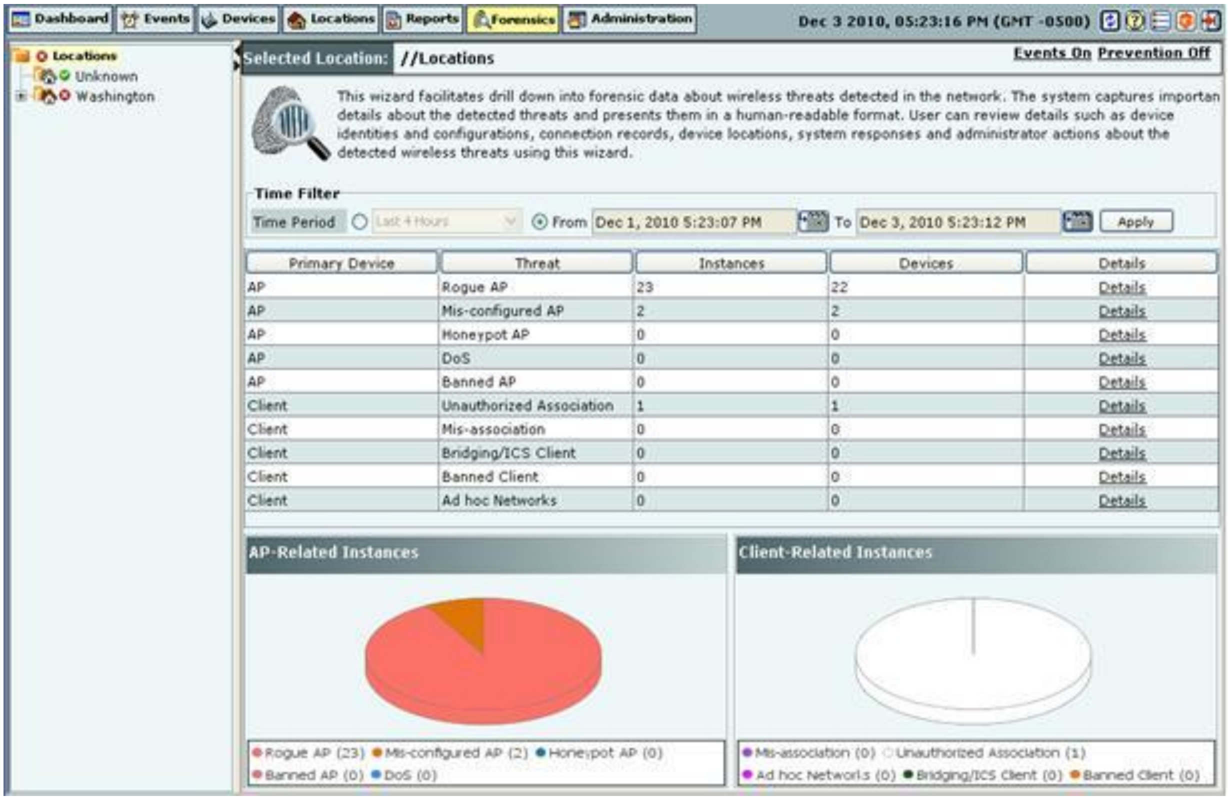
- **AP Based Threats:** These are threats wherein the main participating/effected device is an AP. AP based threats are sub-categorized as follows:
  - Rogue AP
  - Mis-configured AP
  - Honeypot AP
  - Banned AP
  - DoS
- **Client Based:** These are threats wherein main participating/effected device is a Client. Client based threats are sub-categorized as follows:
  - Unauthorized Association
  - Mis-association
  - Bridging Client
  - Banned Client
  - Ad hoc Networks

You can also view the summary information about threats in the form of pie charts under the AP related instances and Client related instances.

Viewing Threats List

Forensics analysis of threats involve systematic drill down into the threat details. Viewing the threat list is the first of those actions. Use the following steps to view threat list:

1. In the **Location** tree, select a location.
2. In the right pane, the threat list displays. The threat list has the following columns:



This wizard facilitates drill down into forensic data about wireless threats detected in the network. The system captures importan details about the detected threats and presents them in a human-readable format. User can review details such as device identities and configurations, connection records, device locations, system responses and administrator actions about the detected wireless threats using this wizard.

Time Filter

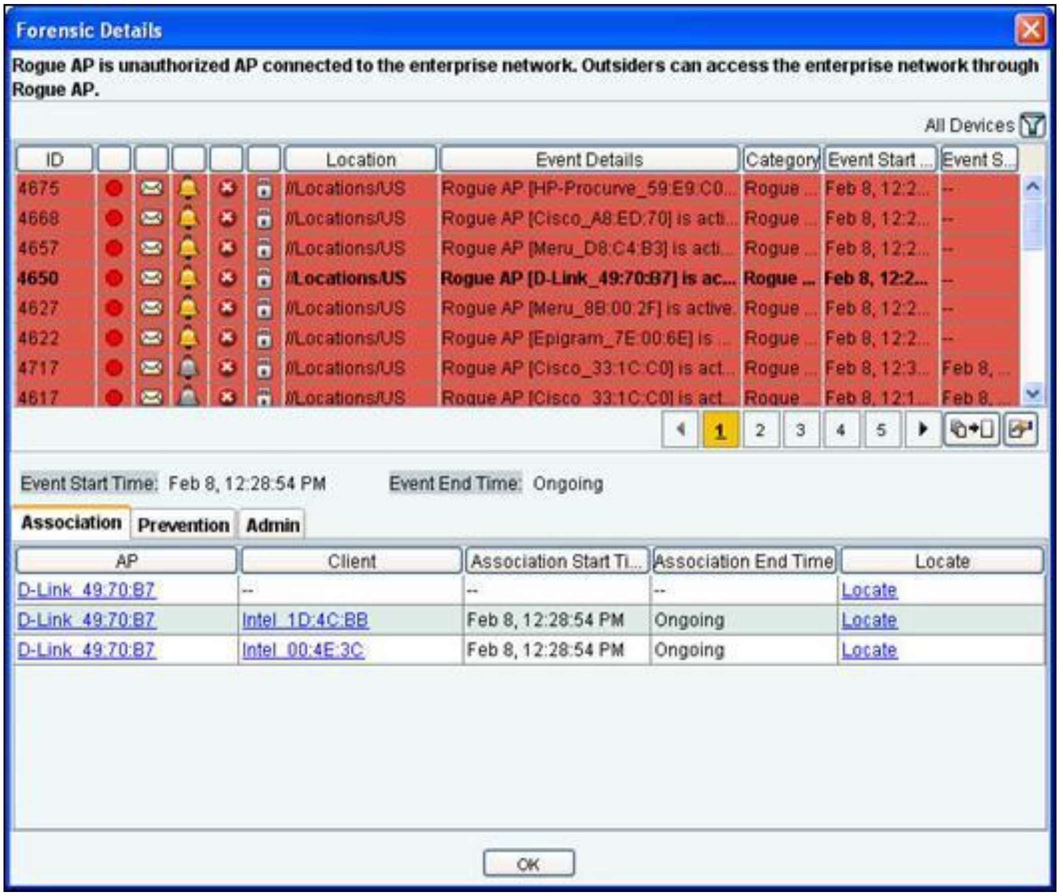
Time Period ○ Last 4 Hours ● From Dec 1, 2010 5:23:07 PM To Dec 3, 2010 5:23:12 PM Apply

Primary Device	Threat	Instances	Devices	Details
AP	Rogue AP	23	22	Details
AP	Mis-configured AP	2	2	Details
AP	Honeypot AP	0	0	Details
AP	DoS	0	0	Details
AP	Banned AP	0	0	Details
Client	Unauthorized Association	1	1	Details
Client	Mis-association	0	0	Details
Client	Bridging/ICS Client	0	0	Details
Client	Banned Client	0	0	Details
Client	Ad hoc Networks	0	0	Details

AP-Related Instances
● Rogue AP (23) ● Mis-configured AP (2) ● Honeypot AP (0)
● Banned AP (0) ● DoS (0)
Client-Related Instances
● Mis-association (0) ○ Unauthorized Association (1)
● Ad hoc Networks (0) ● Bridging/ICS Client (0) ● Banned Client (0)

Threats List

- **Primary Device:** Specifies the category of the threat (AP or Client) based on the primary device involved/effected by the threat.
- **Threat:** Specifies the actual name of the threat type (such as Rogue AP, Honeypot AP, Ad hoc Networks , and so on).
- **Instances:** Specifies the number of threats of the respective type in the given time frame.
- **Devices:** Specifies the number of unique Primary Devices which were involved in this threat type.
- **Details:** When you click **Details**, the **Forensics Details dialog** opens. This helps you drill down into the details of that threat type.



Forensic Details

Rogue AP is unauthorized AP connected to the enterprise network. Outsiders can access the enterprise network through Rogue AP.

All Devices

ID						Location	Event Details	Category	Event Start ...	Event S...
4675	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [HP-Procurve_59:E9:C0...	Rogue ...	Feb 8, 12:2...	--
4668	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_A8:ED:70] is acti...	Rogue ...	Feb 8, 12:2...	--
4657	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Meru_D8:C4:B3] is acti...	Rogue ...	Feb 8, 12:2...	--
4650	●	✉	🔔	✖	🔒	**//Locations/US**	**Rogue AP [D-Link_49:70:B7] is ac...**	**Rogue ...**	**Feb 8, 12:2...**	--
4627	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Meru_8B:00:2F] is active.	Rogue ...	Feb 8, 12:2...	--
4622	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Epigram_7E:00:6E] is ...	Rogue ...	Feb 8, 12:2...	--
4717	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:3...	Feb 8, ...
4617	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:1...	Feb 8, ...

◀ 1 2 3 4 5 ▶

Event Start Time: Feb 8, 12:28:54 PM   Event End Time: Ongoing

Association | Prevention | Admin

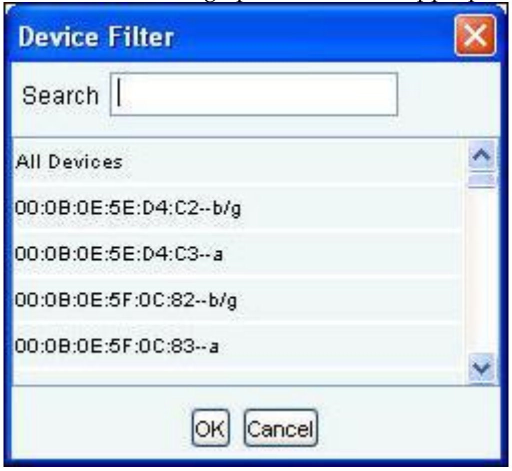
AP	Client	Association Start Ti...	Association End Time	Locate
D-Link_49:70:B7	--	--	--	Locate
D-Link_49:70:B7	Intel_1D:4C:BB	Feb 8, 12:28:54 PM	Ongoing	Locate
D-Link_49:70:B7	Intel_00:4E:3C	Feb 8, 12:28:54 PM	Ongoing	Locate

OK

Forensics Details Dialog

The various fields and buttons in the **Forensics Details** dialog are:

- **Short Description:** Provides a brief description of the selected AP/Client threat. This is presented as bold text at the top of the dialog.
- **All Devices Filter:** Displays unique list of all the Primary Devices which where involved in the threat in the time frame selected in the **Time Filter** in the **Threats List** screen. Click the **All Devices Filter** icon, the **Device Filter** dialog opens. Select the appropriate **Device/All Devices** in the **Search**. Click <**OK**>.



Device Filter

Search

All Devices
00:0B:0E:5E:D4:C2--b/g
00:0B:0E:5E:D4:C3--a
00:0B:0E:5F:0C:82--b/g
00:0B:0E:5F:0C:83--a

OK Cancel

Device Filter dialog

- **Event Details:** Specifies the event details. Right click option of Events is also available. Refer to Viewing Events Lists section in the **Events** tab for details.**Event Start Time:** Displays the event start time.

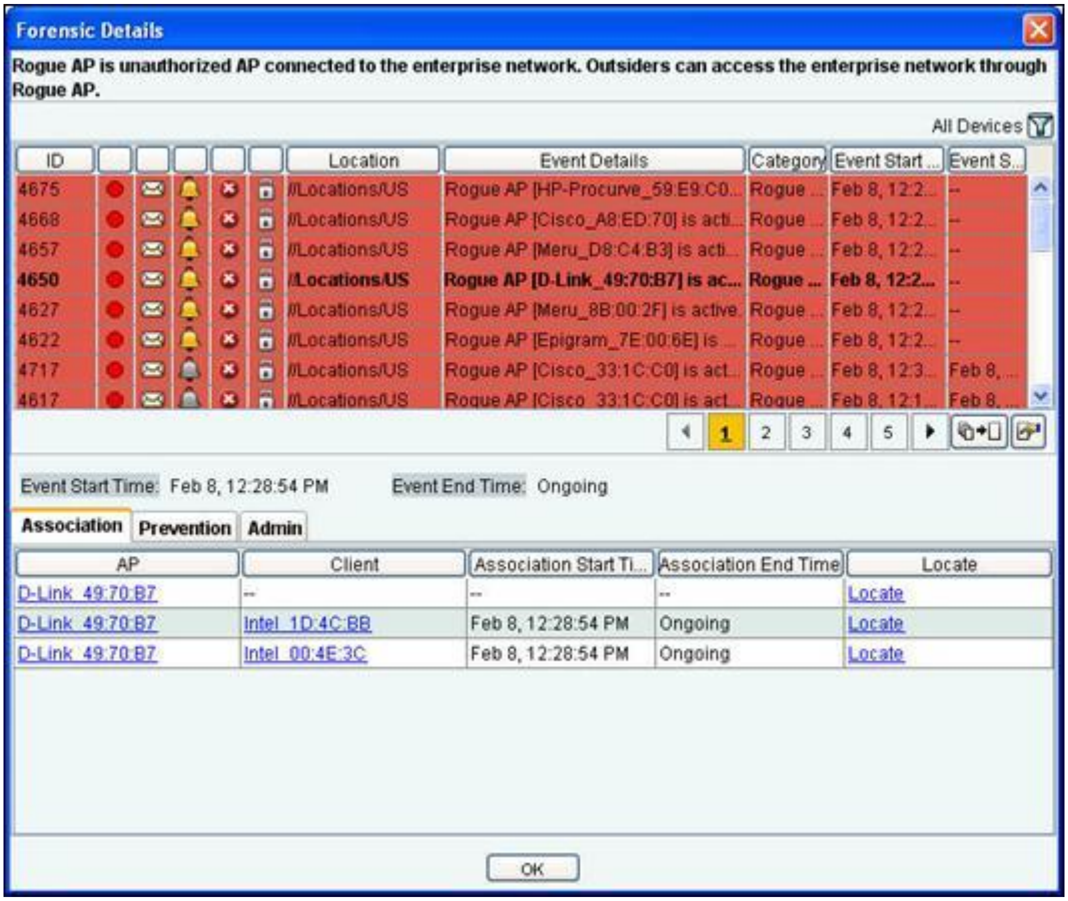
- **Event End Time:** Displays the event end time. If the event **is live**, the **Event End Time** is **Ongoing**.

Refer to AP Based Threats section or Client Based Threats section for more details about **Association, Prevention,** and **Admin** tabs depending on the threat type.

AP Based Threats

The **AP Based Threats Details** dialog gives information about the AP based threat, which helps you determine the actions taken after the threat was detected.

To open the **AP Based Threat Details** dialog, select an AP Threat row on the **Forensics** screen, and click **Details**. The **AP Based Threat Details** dialog has the following tabs namely: **Association**, **Prevention**, and **Admin**. By default, the **Association** tab appears.



Forensic Details

Rogue AP is unauthorized AP connected to the enterprise network. Outsiders can access the enterprise network through Rogue AP.

All Devices

ID						Location	Event Details	Category	Event Start ...	Event S...
4675	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [HP-Procurve_59:E9:C0...	Rogue ...	Feb 8, 12:2...	--
4668	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_A8:ED:70] is acti...	Rogue ...	Feb 8, 12:2...	--
4657	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Meru_D8:C4:B3] is acti...	Rogue ...	Feb 8, 12:2...	--
4650	●	✉	🔔	✖	🔒	**//Locations/US**	**Rogue AP [D-Link_49:70:B7] is ac...**	**Rogue ...**	**Feb 8, 12:2...**	--
4627	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Meru_8B:00:2F] is active.	Rogue ...	Feb 8, 12:2...	--
4622	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Epigram_7E:00:6E] is ...	Rogue ...	Feb 8, 12:2...	--
4717	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:3...	Feb 8, ...
4617	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:1...	Feb 8, ...

Event Start Time: Feb 8, 12:28:54 PM   Event End Time: Ongoing

AP	Client	Association Start Ti...	Association End Time	Locate
D-Link_49:70:B7	--	--	--	Locate
D-Link_49:70:B7	Intel_1D:4C:BB	Feb 8, 12:28:54 PM	Ongoing	Locate
D-Link_49:70:B7	Intel_00:4E:3C	Feb 8, 12:28:54 PM	Ongoing	Locate

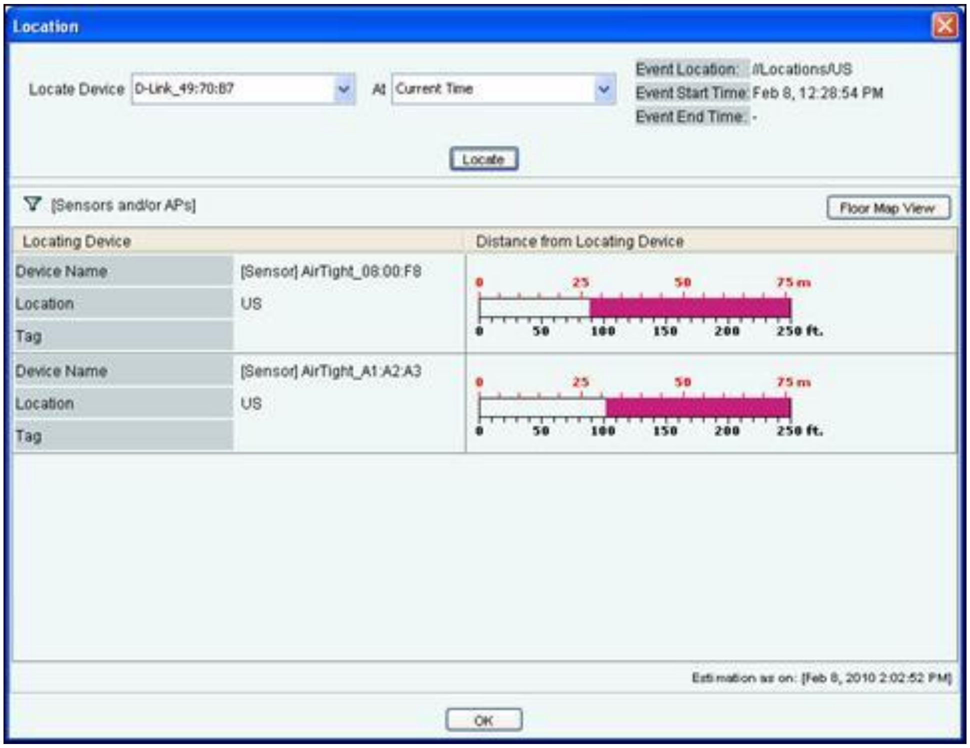
AP Based Threat Details dialog

AP Based Threat – Association Tab

Association Tab shows the number of connection attempts that where made to the AP selected for the duration of the selected Event. The fields in **Association Tab** are as follows:

- **AP:** In case of AP based threats, AP is the Primary Device. Click **AP,** the **AP Details** dialog opens.
- **Client:** Client is the device, which is associated to the Primary Device. Click **Client,** the **Client Details** dialog opens.
- **Association Start Time:** Specifies the start time when the Primary Device associates with the device.
- **Association End Time:** Specifies the end time when the Primary Device ends association with the device.
- **Locate:** Click **Locate,** the **Location** dialog opens. Select the **AP/Client** participating in the event from **Locate Device** drop down list. Select **Start Time of Association** and **End Time of Association** from **At** drop down list. Click **Locate** the location of the selected device at the selected time is displayed in the Thermometer

View. Click **Floor Map View** to view the location of the selected device at the selected time in the Floor Map View.



Location

Locate Device: D-Link_49:70:B7 At: Current Time

Event Location: //Locations/US
Event Start Time: Feb 8, 12:28:54 PM
Event End Time: -

Locating Device		Distance from Locating Device
Device Name	[Sensor] AirTight_08:00:F8	
Location	US	
Tag		
Device Name	[Sensor] AirTight_A1:A2:A3	
Location	US	
Tag		

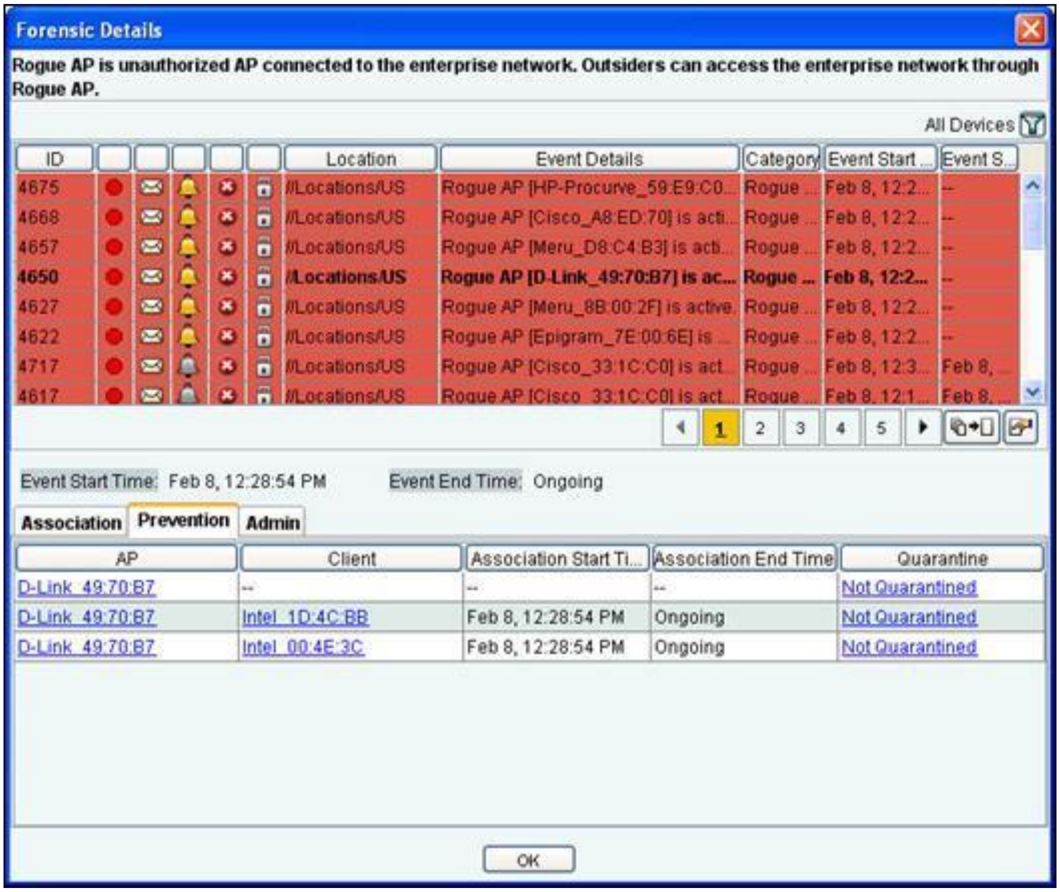
Estimation as on: [Feb 8, 2010 2:02:52 PM]

Location dialog

Note: *The first row in the AP based threat displays the Event Time, while rest of the rows displays the Start/End Time of Association. This is valid for all AP based threats, **except DoS**.*

AP Based Threat – Prevention Tab

Prevention Tab shows the details of the Quarantine status of the association in the Association tab.



Forensic Details

Rogue AP is unauthorized AP connected to the enterprise network. Outsiders can access the enterprise network through Rogue AP.

ID						Location	Event Details	Category	Event Start ...	Event S...
4675	●	✉	🔔	⊗	🔒	//Locations/US	Rogue AP [HP-Procurve_59:E9:C0...	Rogue ...	Feb 8, 12:2...	--
4668	●	✉	🔔	⊗	🔒	//Locations/US	Rogue AP [Cisco_A8:ED:70] is acti...	Rogue ...	Feb 8, 12:2...	--
4657	●	✉	🔔	⊗	🔒	//Locations/US	Rogue AP [Meru_D8:C4:B3] is acti...	Rogue ...	Feb 8, 12:2...	--
4650	●	✉	🔔	⊗	🔒	**//Locations/US**	**Rogue AP [D-Link_49:70:B7] is ac...**	**Rogue ...**	**Feb 8, 12:2...**	--
4627	●	✉	🔔	⊗	🔒	//Locations/US	Rogue AP [Meru_8B:00:2F] is active.	Rogue ...	Feb 8, 12:2...	--
4622	●	✉	🔔	⊗	🔒	//Locations/US	Rogue AP [Epigram_7E:00:6E] is ...	Rogue ...	Feb 8, 12:2...	--
4717	●	✉	🔔	⊗	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:3...	Feb 8, ...
4617	●	✉	🔔	⊗	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:1...	Feb 8, ...

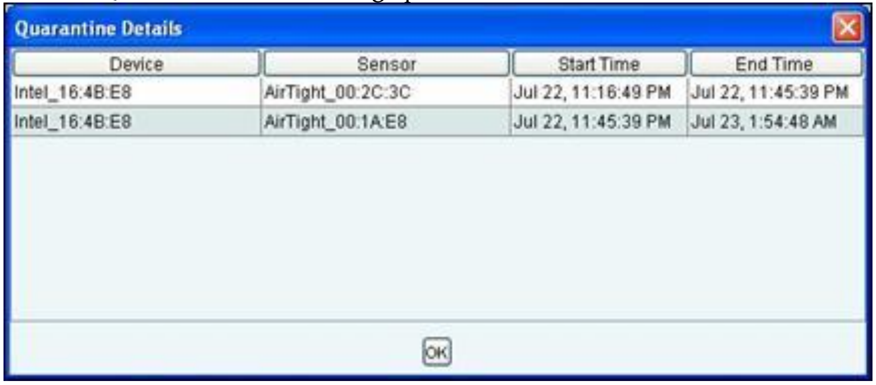
Event Start Time: Feb 8, 12:28:54 PM   Event End Time: Ongoing

AP	Client	Association Start Ti...	Association End Time	Quarantine
D-Link_49:70:B7	--	--	--	Not Quarantined
D-Link_49:70:B7	Intel_1D:4C:BB	Feb 8, 12:28:54 PM	Ongoing	Not Quarantined
D-Link_49:70:B7	Intel_00:4E:3C	Feb 8, 12:28:54 PM	Ongoing	Not Quarantined

AP Based Threat Details – Prevention Tab

The fields in **Prevention Tab** are as follows:

- **AP**
- **Client**
- **Association Start Time**
- **Association End Time**
- **Quarantine:** Specifies the action taken on both the devices in the association. Even one of device is quarantined, the association is Quarantined, otherwise it is Not Quarantined. Click **Quarantined**, the **Quarantine Details dialog** opens.

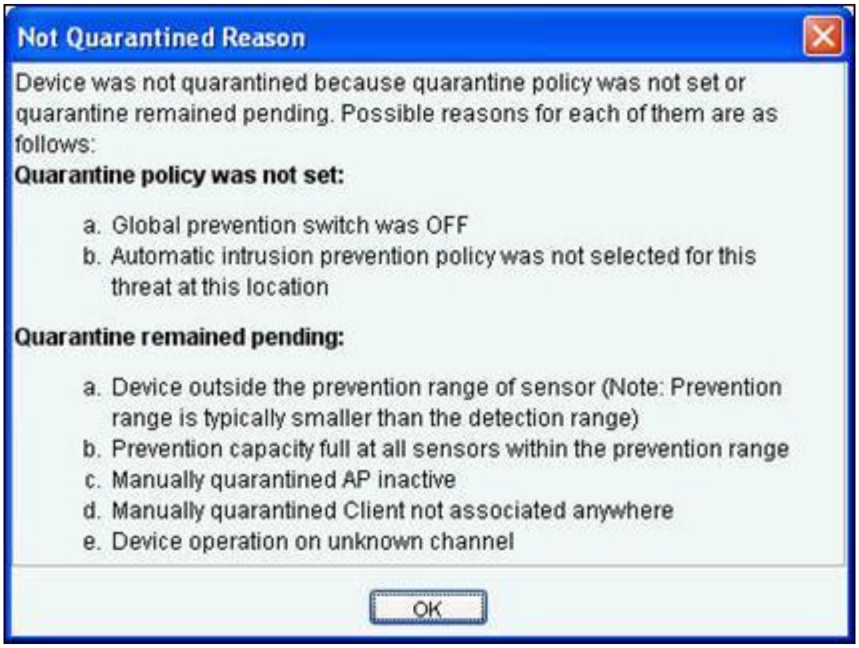


Quarantine Details

Device	Sensor	Start Time	End Time
Intel_16:4B:E8	AirTight_00:2C:3C	Jul 22, 11:16:49 PM	Jul 22, 11:45:39 PM
Intel_16:4B:E8	AirTight_00:1A:E8	Jul 22, 11:45:39 PM	Jul 23, 1:54:48 AM

Quarantine Details dialog

Click **Not Quarantined,** the **Not Quarantined Reason** dialog opens.



Not Quarantined Reason

Device was not quarantined because quarantine policy was not set or quarantine remained pending. Possible reasons for each of them are as follows:

Quarantine policy was not set:

a. Global prevention switch was OFF
b. Automatic intrusion prevention policy was not selected for this threat at this location

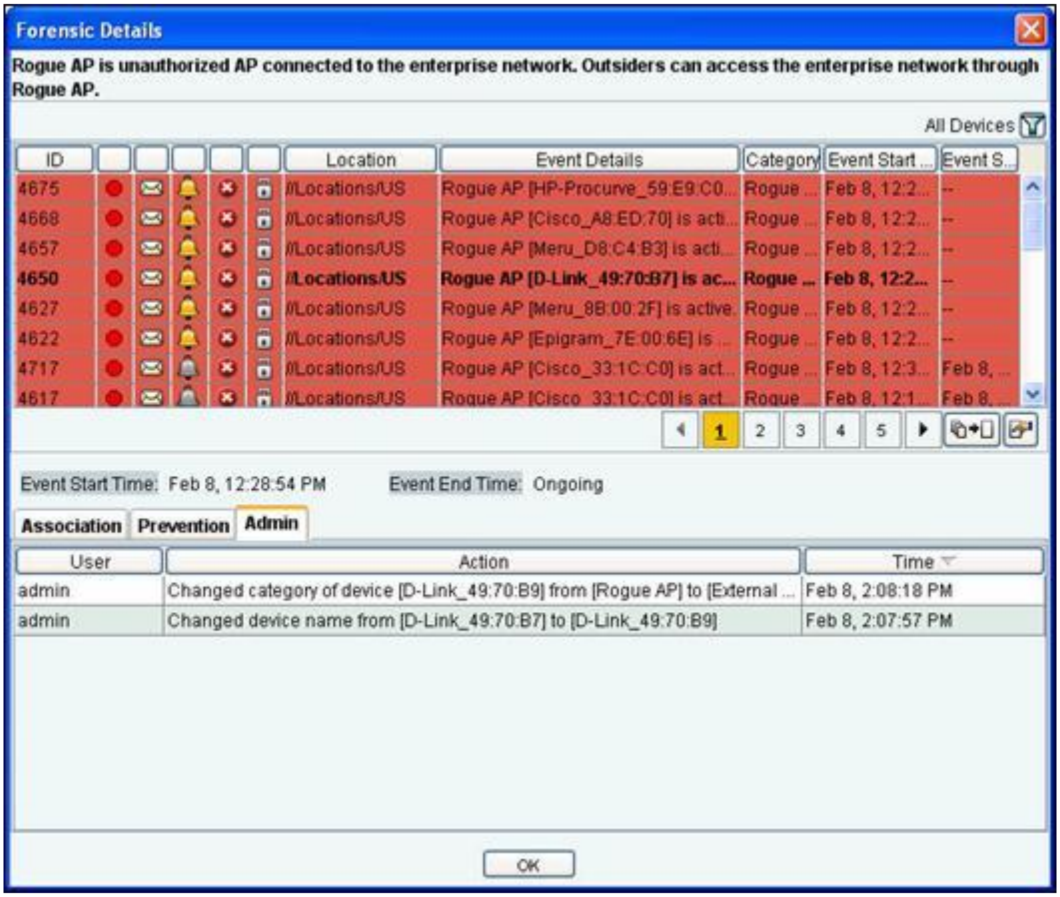
Quarantine remained pending:

a. Device outside the prevention range of sensor (Note: Prevention range is typically smaller than the detection range)
b. Prevention capacity full at all sensors within the prevention range
c. Manually quarantined AP inactive
d. Manually quarantined Client not associated anywhere
e. Device operation on unknown channel

Not Quarantined Reason

AP Based Threat – Admin Tab

Admin Tab shows all the administrator actions taken on the AP between the Event Start Time and Event End Time.



Forensic Details

Rogue AP is unauthorized AP connected to the enterprise network. Outsiders can access the enterprise network through Rogue AP.

All Devices

ID						Location	Event Details	Category	Event Start ...	Event S...
4675	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [HP-Procurve_59:E9:C0...	Rogue ...	Feb 8, 12:2...	--
4668	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_A8:ED:70] is acti...	Rogue ...	Feb 8, 12:2...	--
4657	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Meru_D8:C4:B3] is acti...	Rogue ...	Feb 8, 12:2...	--
4650	●	✉	🔔	✖	🔒	**//Locations/US**	**Rogue AP [D-Link_49:70:B7] is ac...**	**Rogue ...**	**Feb 8, 12:2...**	--
4627	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Meru_8B:00:2F] is active.	Rogue ...	Feb 8, 12:2...	--
4622	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Epigram_7E:00:6E] is ...	Rogue ...	Feb 8, 12:2...	--
4717	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:3...	Feb 8, ...
4617	●	✉	🔔	✖	🔒	//Locations/US	Rogue AP [Cisco_33:1C:C0] is act...	Rogue ...	Feb 8, 12:1...	Feb 8, ...

Event Start Time: Feb 8, 12:28:54 PM   Event End Time: Ongoing

User	Action	Time
admin	Changed category of device [D-Link_49:70:B9] from [Rogue AP] to [External ...	Feb 8, 2:08:18 PM
admin	Changed device name from [D-Link_49:70:B7] to [D-Link_49:70:B9]	Feb 8, 2:07:57 PM

AP Based Threat Details – Admin Tab

The fields in **Admin Tab** are as follows:

- **User:** Specifies the name of the user who took action on the threat.
- **Action:** Specifies the action taken by the user for the AP based threat such as AP added to quarantine, AP name changed
- **Time:** Specifies the time when the user action was taken

*Note: All the above tabs **Association, Prevention**, and **Admin** shows the information based on the **Device** and **Event** selected in the Threats List dialog.*

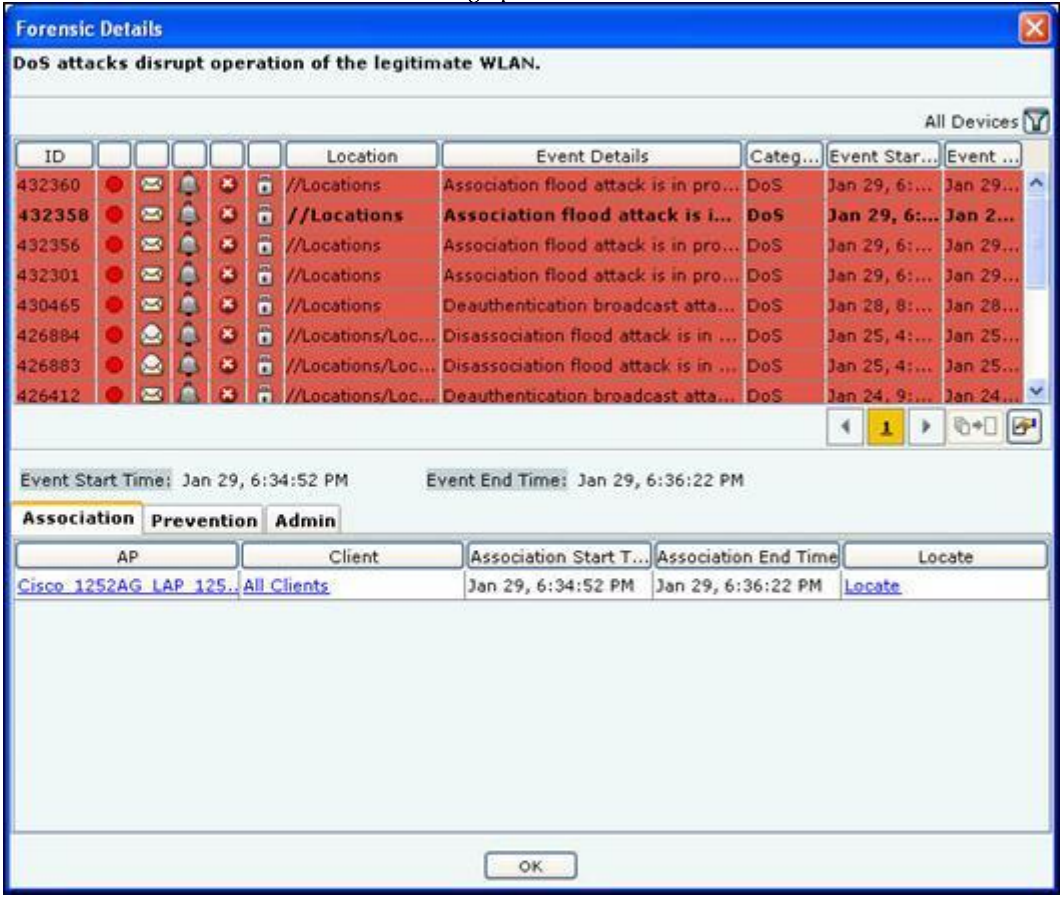
*Note: AP Based Threat – Rogue AP, Mis-configured AP, and Honeypot AP have the same fields for the tabs **Association, Prevention**, and **Admin**. However AP Based Threat – DoS has some different fields as discussed in the section below.*

AP Based Threat – DoS

DoS is classified into two categories:

- **Unicast:** In Unicast only one Client connected to the AP is effected in the DoS attack
- **Broadcast:** In Broadcast all the Clients connected to the AP are effected in the DoS attack

To open the **AP – DoS Threat Details** dialog, select the **AP – DoS threat** row on the **Forensics** screen, and click **Details**. The **AP – DoS Threat Details** dialog opens.



DoS attacks disrupt operation of the legitimate WLAN.

ID						Location	Event Details	Categ...	Event Star...	Event ...
432360	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
432358	●	✉	🔔	✖	🔒	**//Locations**	**Association flood attack is i...**	**DoS**	**Jan 29, 6:...**	**Jan 2...**
432356	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
432301	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
430465	●	✉	🔔	✖	🔒	//Locations	Deauthentication broadcast atta...	DoS	Jan 28, 8:...	Jan 28...
426884	●	✉	🔔	✖	🔒	//Locations/Loc...	Disassociation flood attack is in ...	DoS	Jan 25, 4:...	Jan 25...
426883	●	✉	🔔	✖	🔒	//Locations/Loc...	Disassociation flood attack is in ...	DoS	Jan 25, 4:...	Jan 25...
426412	●	✉	🔔	✖	🔒	//Locations/Loc...	Deauthentication broadcast atta...	DoS	Jan 24, 9:...	Jan 24...

Event Start Time: Jan 29, 6:34:52 PM

Event End Time: Jan 29, 6:36:22 PM

AP	Client	Association Start T...	Association End Time	Locate
Cisco 1252AG LAP 125...	All Clients	Jan 29, 6:34:52 PM	Jan 29, 6:36:22 PM	Locate

AP – DoS Threat Details dialog

AP DoS Threat – Association tab

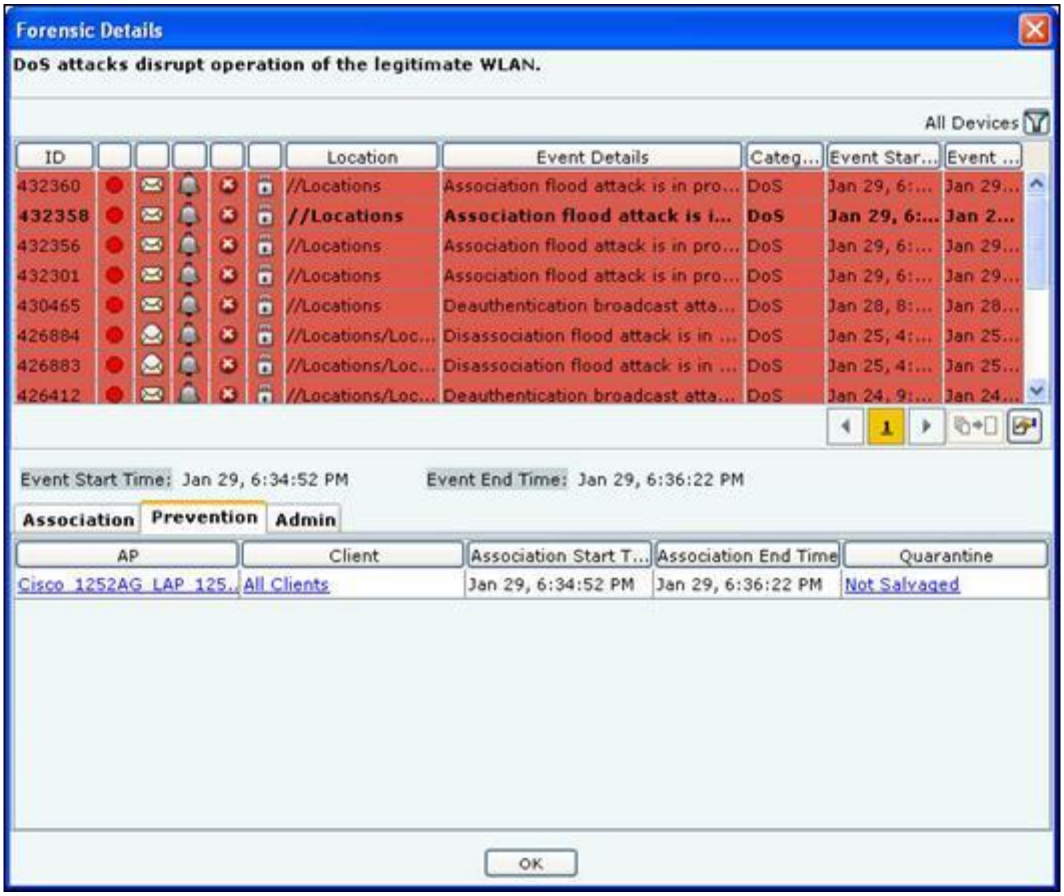
The fields in **Association Tab** are as follows:

- **AP**
- **Client:** Incase of **Unicast,** a single Client name appears, click the **Client name**, the **Client Details** screen opens. Incase of **Broadcast, All Clients** is displayed in the Client name.

- **Association Start Time**
- **Association End Time**
- **Locate** Click **Locate,** the **Location** dialog opens. In case of **Unicast,** select the **AP/Client/DoS Attacker** participating in the event from **Locate Device** drop down list. Incase of **Broadcast,** select the **AP/DoS Attacker** participating in the event from **Locate Device** drop down list. Select **Start Time of Association** and **End Time of Association** from **At** drop down list. Click **Locate** the location of the selected device at the selected time is displayed.

AP DoS Threat – Prevention tab

Click on **Prevention Tab** in the AP – DoS Threat Details dialog.



Forensic Details

DoS attacks disrupt operation of the legitimate WLAN.

All Devices

ID						Location	Event Details	Categ...	Event Star...	Event ...
432360	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
432358	●	✉	🔔	✖	🔒	**//Locations**	**Association flood attack is i...**	**DoS**	**Jan 29, 6:...**	**Jan 2...**
432356	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
432301	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
430465	●	✉	🔔	✖	🔒	//Locations	Deauthentication broadcast atta...	DoS	Jan 28, 8:...	Jan 28...
426884	●	✉	🔔	✖	🔒	//Locations/Loc...	Disassociation flood attack is in ...	DoS	Jan 25, 4:...	Jan 25...
426883	●	✉	🔔	✖	🔒	//Locations/Loc...	Disassociation flood attack is in ...	DoS	Jan 25, 4:...	Jan 25...
426412	●	✉	🔔	✖	🔒	//Locations/Loc...	Deauthentication broadcast atta...	DoS	Jan 24, 9:...	Jan 24...

Event Start Time: Jan 29, 6:34:52 PM Event End Time: Jan 29, 6:36:22 PM

AP	Client	Association Start T...	Association End Time	Quarantine
Cisco 1252AG LAP 125...	All Clients	Jan 29, 6:34:52 PM	Jan 29, 6:36:22 PM	Not Salvaged

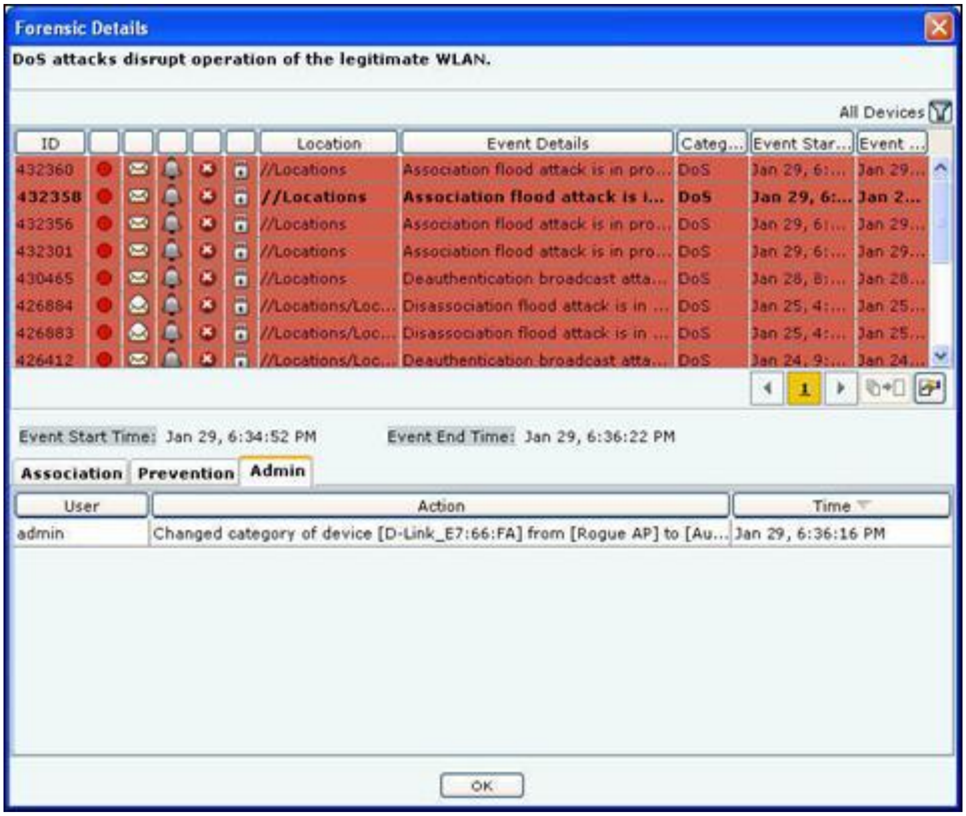
AP – DoS Threat Details – Prevention tab

The fields in **Prevention** tab are as follows:

- **AP**
- **Client:** Incase of **Unicast,** a single Client name appears, click the **Client name**, the **Client Details** screen opens. Incase of **Broadcast, All Clients** is displayed in the Client name.
- **Association Start Time**
- **Association End Time**
- **Quarantine:** Specifies the action taken during the association, whether the device was Salvaged/Not Salvaged. **Salvage** unblocks the effected communication of the Authorized AP. Click **Salvaged**, the **Quarantine Details dialog** opens. Click **Not Salvaged,** the **Not Quarantined Reason** dialog opens

AP DoS Threat – Admin Tab

Click on **Admin Tab** in the AP – DoS Threat Details dialog.



Forensic Details

DoS attacks disrupt operation of the legitimate WLAN.

ID						Location	Event Details	Categ...	Event Star...	Event ...
432360	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
432358	●	✉	🔔	✖	🔒	**//Locations**	**Association flood attack is i...**	**DoS**	**Jan 29, 6:...**	**Jan 2...**
432356	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
432301	●	✉	🔔	✖	🔒	//Locations	Association flood attack is in pro...	DoS	Jan 29, 6:...	Jan 29...
430465	●	✉	🔔	✖	🔒	//Locations	Deauthentication broadcast atta...	DoS	Jan 28, 8:...	Jan 28...
426884	●	✉	🔔	✖	🔒	//Locations/Loc...	Disassociation flood attack is in ...	DoS	Jan 25, 4:...	Jan 25...
426883	●	✉	🔔	✖	🔒	//Locations/Loc...	Disassociation flood attack is in ...	DoS	Jan 25, 4:...	Jan 25...
426412	●	✉	🔔	✖	🔒	//Locations/Loc...	Deauthentication broadcast atta...	DoS	Jan 24, 9:...	Jan 24...

Event Start Time: Jan 29, 6:34:52 PM Event End Time: Jan 29, 6:36:22 PM

User	Action	Time
admin	Changed category of device [D-Link_E7:66:FA] from [Rogue AP] to [Au...	Jan 29, 6:36:16 PM

AP – DoS Threat Details – Admin tab

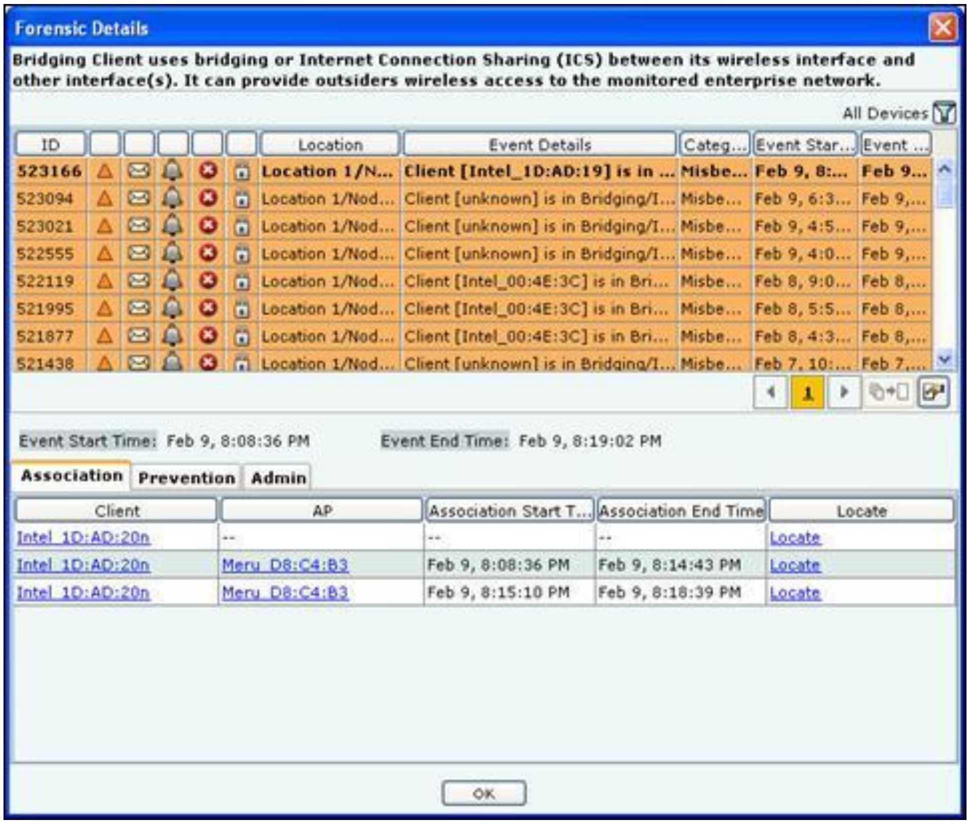
The fields in **Admin** tab are as follows:

- **User**
- **Action**
- **Time**

Client Based Threats

The **Client Based Threats Details** dialog gives information about the Client based threat, which helps you determine the actions taken after the threat was detected.

To open the **Client Based Threat Details** dialog, select a Client Threat row on the **Forensics** scree,n and click **Details**. The **Client Based Threat Details** dialog has the following tabs namely: **Association**, **Prevention**, and **Admin**. By default, the **Association** tab appears.



Bridging Client uses bridging or Internet Connection Sharing (ICS) between its wireless interface and other interface(s). It can provide outsiders wireless access to the monitored enterprise network.

ID						Location	Event Details	Categ...	Event Star...	Event ...
523166	△	✉	🔔	✖	🔒	**Location 1/N...**	**Client [Intel_1D:AD:19] is in ...**	**Misbe...**	**Feb 9, 8:...**	**Feb 9...**
523094	△	✉	🔔	✖	🔒	Location 1/Nod...	Client [unknown] is in Bridging/I...	Misbe...	Feb 9, 6:3...	Feb 9,...
523021	△	✉	🔔	✖	🔒	Location 1/Nod...	Client [unknown] is in Bridging/I...	Misbe...	Feb 9, 4:5...	Feb 9,...
522555	△	✉	🔔	✖	🔒	Location 1/Nod...	Client [unknown] is in Bridging/I...	Misbe...	Feb 9, 4:0...	Feb 9,...
522119	△	✉	🔔	✖	🔒	Location 1/Nod...	Client [Intel_00:4E:3C] is in Bri...	Misbe...	Feb 8, 9:0...	Feb 8,...
521995	△	✉	🔔	✖	🔒	Location 1/Nod...	Client [Intel_00:4E:3C] is in Bri...	Misbe...	Feb 8, 5:5...	Feb 8,...
521877	△	✉	🔔	✖	🔒	Location 1/Nod...	Client [Intel_00:4E:3C] is in Bri...	Misbe...	Feb 8, 4:3...	Feb 8,...
521438	△	✉	🔔	✖	🔒	Location 1/Nod...	Client [unknown] is in Bridging/I...	Misbe...	Feb 7, 10:...	Feb 7,...

Event Start Time: Feb 9, 8:08:36 PM   Event End Time: Feb 9, 8:19:02 PM

Client	AP	Association Start T...	Association End Time	Locate
Intel_1D:AD:20n	--	--	--	Locate
Intel_1D:AD:20n	Meru_D8:C4:B3	Feb 9, 8:08:36 PM	Feb 9, 8:14:43 PM	Locate
Intel_1D:AD:20n	Meru_D8:C4:B3	Feb 9, 8:15:10 PM	Feb 9, 8:18:39 PM	Locate

Client Based Threat Details dialog

Client Based Threat – Association Tab

Association Tab shows the number of connection attempts that where made to the Client selected for the duration of the selected Event. The fields in **Association Tab** are as follows:

- **Client:** In case of Client based threats, Client is the Primary Device. Click **Client,** the **Client Details** dialog opens.
- **AP:** AP is the device which is associated to the Primary Device. Click **AP,** the **AP Details** dialog opens.
- **Association Start Time:** Specifies the start time when the Client associates with the AP.
- **Association End Time:** Specifies the end time when the Client ends association with the AP.
- **Locate:** Click **Locate,** the **Location** dialog opens. Select the **AP/Client** participating in the event from **Locate Device** drop down list. Select **Start Time of Association** and **End Time of Association** from **At** drop down list. Click **Locate** the location of the selected device at the selected time is displayed in the Thermometer View. Click **Floor Map View** to view the location of the selected device at the selected time in the Floor Map View.