4 STEPS TO CREATE AN ACCURATE WIRELESS HEAT MAP

Using SolarWinds Network Performance Monitor

Be it in small organizations or enterprise-level networks, network maps are an absolute necessity to accelerate troubleshooting for both wired and wireless infrastructure. With the trend toward a more mobile workforce and the steady increase of BYOD, ensuring adequate wireless coverage is becoming more and more critical.

A wireless heat map is a visual presentation of the state of wireless network signal coverage over a certain area and will help network engineers visualize wireless network coverage, identify dead zones, make adjustments, and improve coverage within the wireless network environment. With SolarWinds® NPM's built-in Network Atlas,™ you can create and visualize wireless signal strengths along with the locations of all connected clients.

How Network Atlas helps Network Administrators

SolarWinds Network Atlas is used to create custom dynamic maps and network diagrams. It enables network engineers to view a graphical depiction of their network via the web console. In addition to mapping your wired infrastructure, you can use Network Atlas to create wireless heat maps to visualize wireless coverage and locate all connected clients. It helps to improve wireless coverage within your network environment, and help troubleshoot issues related to wireless access points. Using **SolarWinds NPM's** built-in Network Atlas you can easily create wireless network maps and related documentation, which can then be printed and exported as needed.

Step 1 - Launch Network Atlas to Create a Wireless Heat Map

Network Atlas uses the information from wireless APs, connected clients, and their signal strengths per AP in order to create a wireless heat map. Once you launch Network Atlas, choose the 'create wireless heat map' option from the wizard.

Step 1 – Launch Network Atlas

Step 2 – Select 'Wireless Heat Map' in the welcome screen

Step 3 – Name the Wireless Heat Map, for example, "Denver Branch Office"
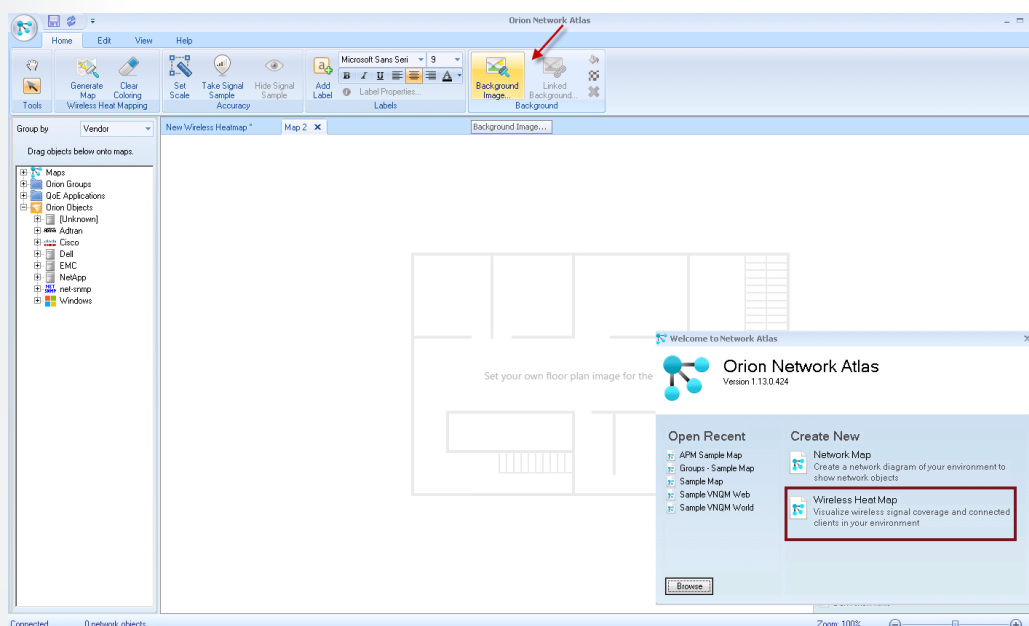
Step 2 - Choose Background Image for Wireless Heat Map and Set Map Scale

First, choose a preferred background image by importing your floor plan into Network Atlas. The background image can be a floor plan, a map of an outdoor environment, or any other image that represents the coverage area. Next, set the scale of the map. The background image should include at least one measurement of the distance between two points, for example the length of a conference room. If it does not include this information, administrators need to measure that distance in the environment. As an example, the image below includes at least one measurement of the distance between two points.
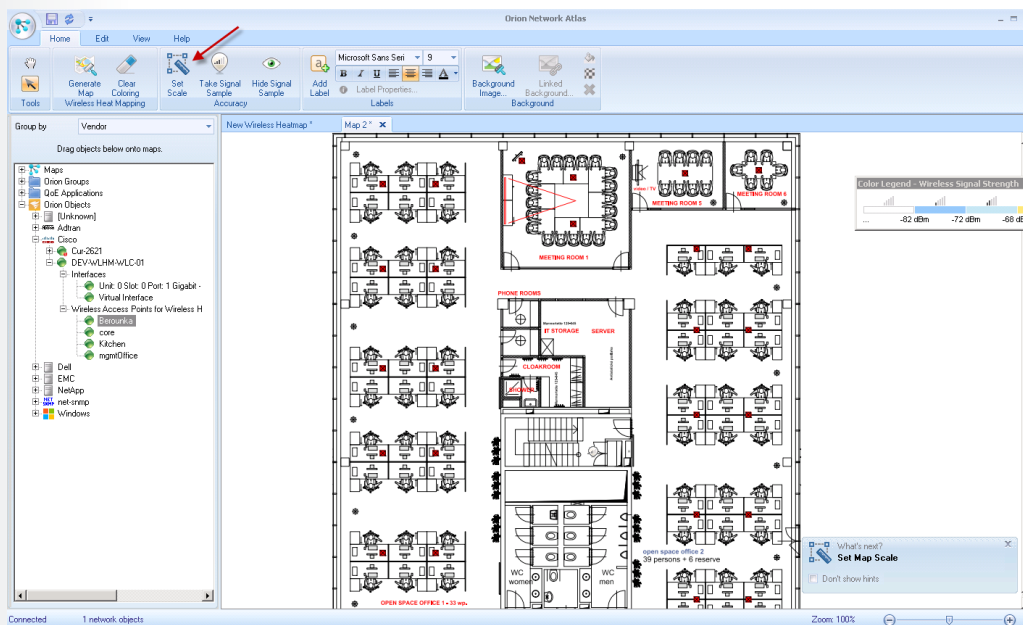
Step 1 – Click "Background Image" button in tool bar

Step 2 – Browse to floor plan and 'Open' the image

Step 3 – 'Set map scale' line to conference room walls

Step 4 – Input the distance in feet
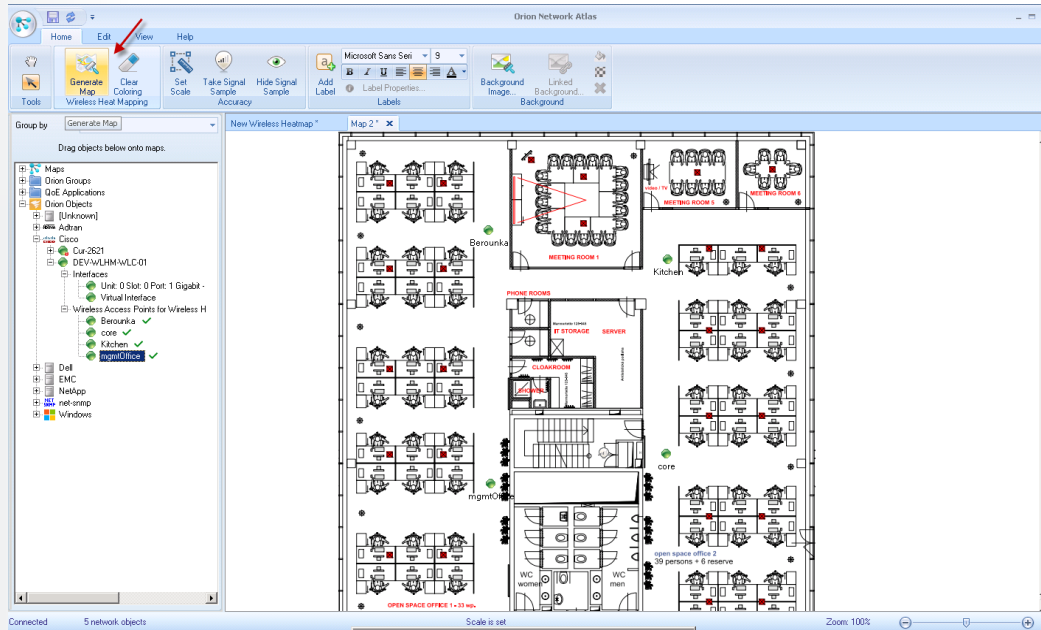
Step 5 – Click 'Set Scale'

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Step 3 - Select Wireless Access Points and Generate Map

All discovered Orion® objects will be listed in the left pane of Network Atlas. Drag-and-drop all of your relevant wireless access points and place them on the new map in the relevant location.

Step 1 - Drag and drop Wireless APs onto map

Step 2 - Click 'Generate Map'

## Step 4 – Test Signal Strength for Accurate Wireless Coverage

Improve the accuracy using the wireless signal sample function. Select 'Take Signal Sample' in the toolbar. Now, we can identify the location of one or more wireless devices on the floor plan. Orion will then query the wireless controller to get a signal strength reading for that client, and incorporate that new knowledge with everything else it knows.

Note: SolarWinds NPM periodically polls the wireless infrastructure for client signal information and updates current user location.

Step 1 – Drag and drop wireless clients

Step 2 – Click 'Take Signal Sample'

Step 3 – Save Map
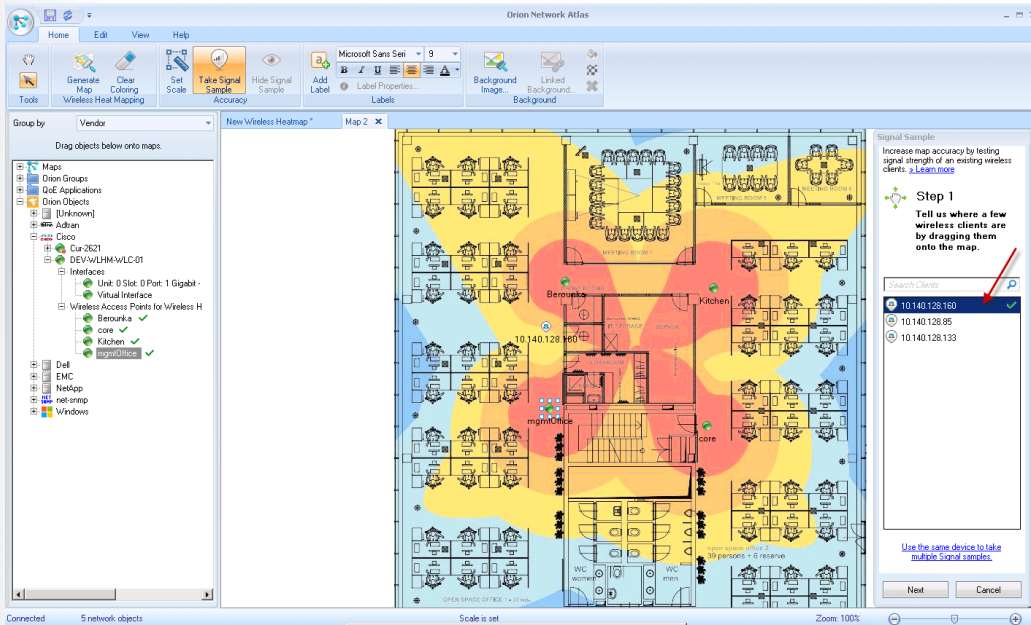
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TOP 5 REASONS TO TRY SOLARWINDS NETWORK PERFORMANCE MONITOR

SolarWinds Network Performance Monitor (NPM) provides an at-a-glance summary of network and application performance metrics using deep packet inspection, and helps to quickly & accurately identify network & application reliability.

• Speeds troubleshooting, increases service levels, and reduces downtime

• Monitors & displays response time, availability, and performance of network devices

• Analyzes user quality of experience using deep packet inspection and analysis

• Improves operational efficiency with out-of-the-box dashboards, alerts, and reports

• Automatically discovers network devices and typically deploys in less than an hour

Fully Functional for 30 Days

🔍 **LEARN MORE**

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