



Quick Tip: Mitigate Network Downtime by Monitoring CPU Load in Real-Time

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One of the top reasons for poor network performance is the high CPU load during peak network traffic. Too many network packets can increase the number of system processes that a CPU can handle at any given time. It is imperative that you continuously monitor CPU load for critical network devices and resolve any issues that affect your network's performance. To monitor and troubleshoot issues quickly and easily, you need a combination of proactive and reactive network management tools.

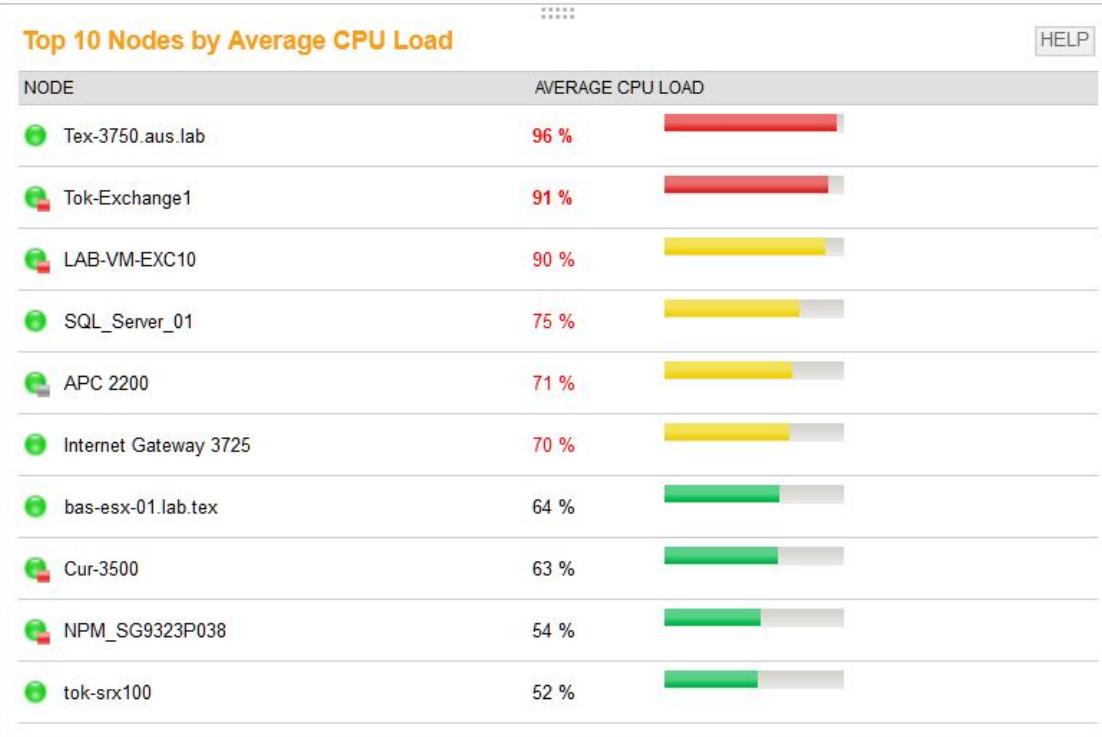
Using [SolarWinds® Network Performance Monitor](#) (NPM), you can proactively identify network devices with a high CPU load through performance data polled via SNMP. This helps you ensure that your network stays running at peak performance. Follow these four steps to easily troubleshoot network devices:

1. Monitor Top 10 nodes for high CPU load.
2. Check historical Min/Max/Average CPU load data.
3. Set up [Engineer's Toolset](#) for real-time CPU load statistics.
4. Correlate CPU load with network device performance.

Step 1 - Monitor Top 10 Nodes for High CPU Load

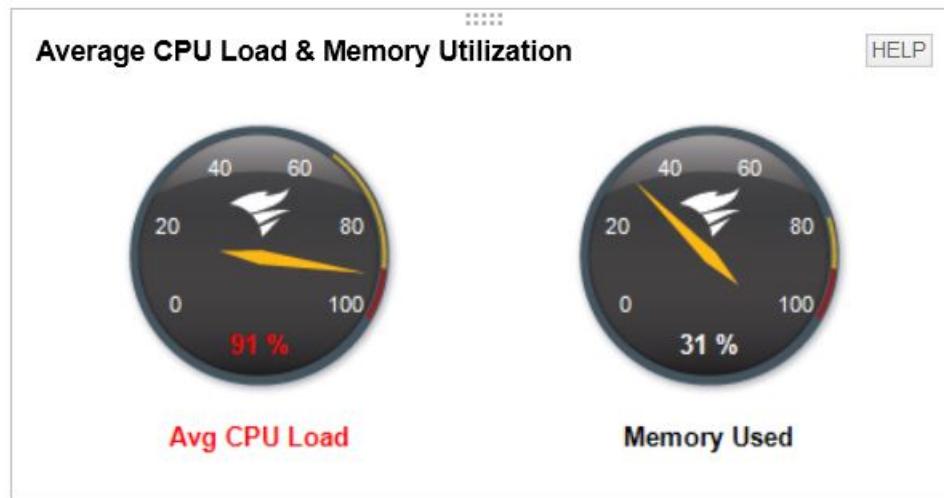
The Top 10 page in SolarWinds NPM provides you with the list of nodes with high CPU load. You can also set up and configure alerts or notifications when CPU load exceeds pre-defined thresholds. This helps you easily identify issues even before users report them.

For example, the Top 10 resource in SolarWinds NPM provides you with nodes that have a high average CPU load.



Step 2 - Check Historical Min/Max/Average CPU Load Data

Once you drill-down into the specific node with a high CPU load, you can see the radial gauges for Average CPU Load and Memory Used.



You can also view the Min/Max/Average CPU load resource to get more details over a specific time period. With historical data, you can use customizable charts to look for unusual patterns during specific times and find the exact time an anomaly occurred.

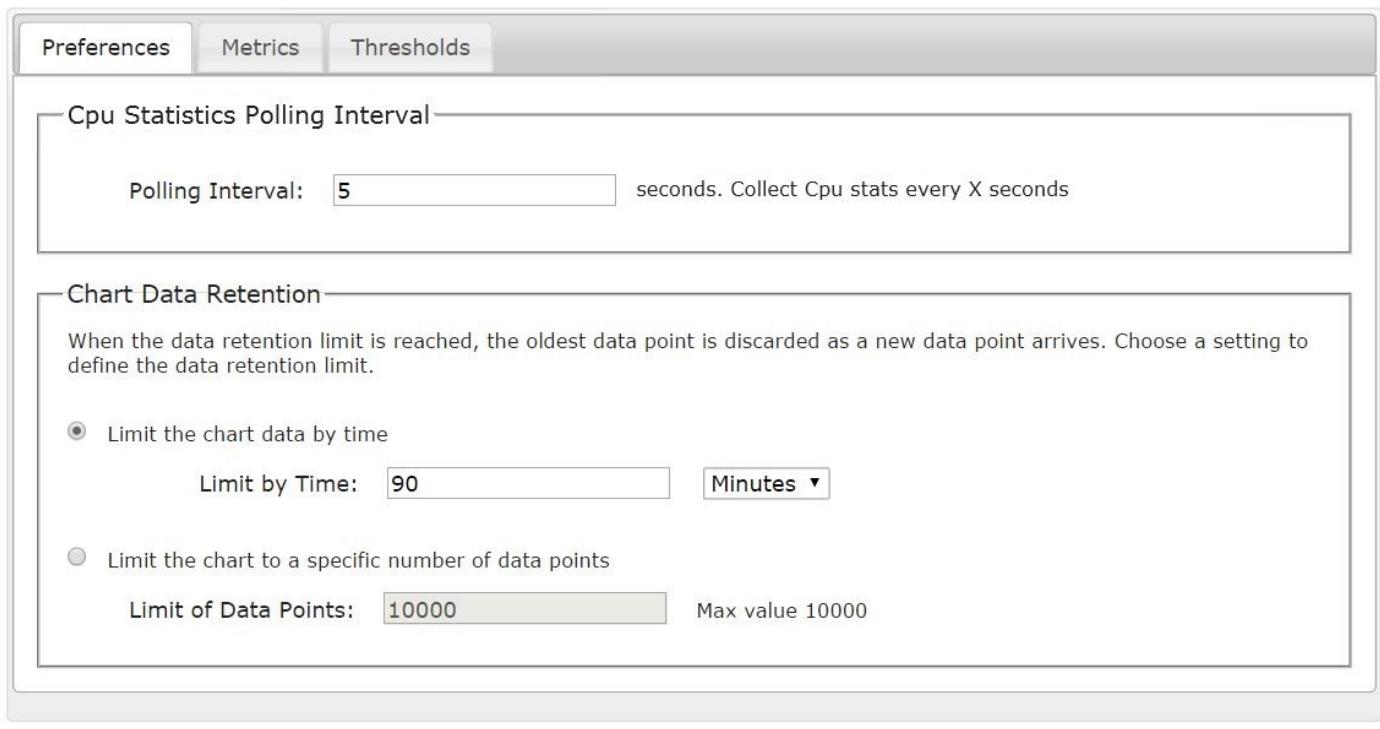
With information from steps 1 and 2, you need real-time statistics to quickly pin-point issues or investigate further. [SolarWinds Engineer's Toolset](#) enables this by integrating seamlessly with NPM.

Step 3 - Set Up Engineer's Toolset for Real-Time CPU Load Statistics

SolarWinds [Engineer's Toolset's CPU Monitor](#) provides the ability to monitor and graph the CPU load for multiple devices in real time by polling as frequently as every five seconds, providing CPU and host statistics in a tabular form. It enables you to see the current load in relation to the maximum CPU load.

After selecting CPU from the nodes to monitor, you can configure the polling intervals, metrics, and thresholds based on your requirements.

Settings



The screenshot shows a configuration page for the CPU monitor. At the top, there are three tabs: Preferences (selected), Metrics, and Thresholds. The main area is titled "Cpu Statistics Polling Interval". It contains a field labeled "Polling Interval: 5" followed by the text "seconds. Collect Cpu stats every X seconds". Below this is a section titled "Chart Data Retention". It includes a note about discarding old data when retention limits are reached. There are two options: "Limit the chart data by time" (selected) with a "Limit by Time: 90 Minutes" setting, and "Limit the chart to a specific number of data points" with a "Limit of Data Points: 10000 Max value 10000" setting. At the bottom of the page are three buttons: "SUBMIT" (orange), "SAVE AND CONTINUE WORKING", and "CANCEL".

Step 4 - Correlate CPU Load with Network Device Performance

Submit and run the Engineer's Toolset's CPU Monitor from the Web console and get CPU load information instantly. This tool also provides real-time CPU statistics for metrics like current CPU

value and Min/Max/Average CPU value. You can also set up warning and critical thresholds for specific nodes.

You can set warning and critical thresholds independently for each monitored device. If the load on a router reaches the user-defined threshold for a warning, the load bar turns yellow. If a critical level is reached, the bar turns red. CPU Monitor also records the peak load level and when it happened. In this example, CPU's monitored has the maximum value of 98%, which is above the critical threshold.



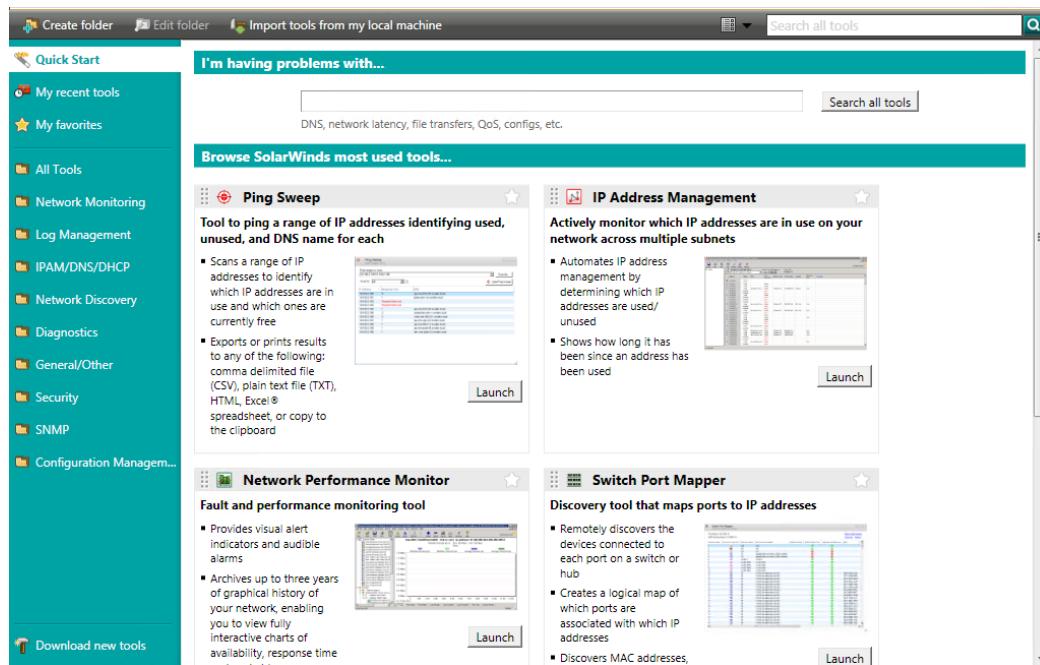
You can save time, troubleshoot issues faster and more accurately, and use the CPU load statistics in real time by downloading [SolarWinds Engineer's Toolset](#) now.

Top Five Reasons to Try SolarWinds Engineer's Toolset

[Engineer's Toolset](#) delivers an advanced collection of monitoring, discovery, diagnostic, and Cisco® tools. Here are the top five reasons to use SolarWinds Engineer's Toolset:

- All the network tools you need in one complete package
- Monitoring tools include Real-Time Interface Monitor, SNMP Real-Time Graph, and more
- Diagnostic tools include Ping Sweep, DNS Analyzer, Trace Route, and more

- Network discovery tools include Port Scanner, Switch Port Mapper, Advanced Subnet Calculator, and more
- Cisco management tools include Real-Time NetFlow Analyzer, Config Downloader, and more



SolarWinds Engineer's Toolset has more than 60 network tools that help you easily perform your daily network management and troubleshooting tasks.

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