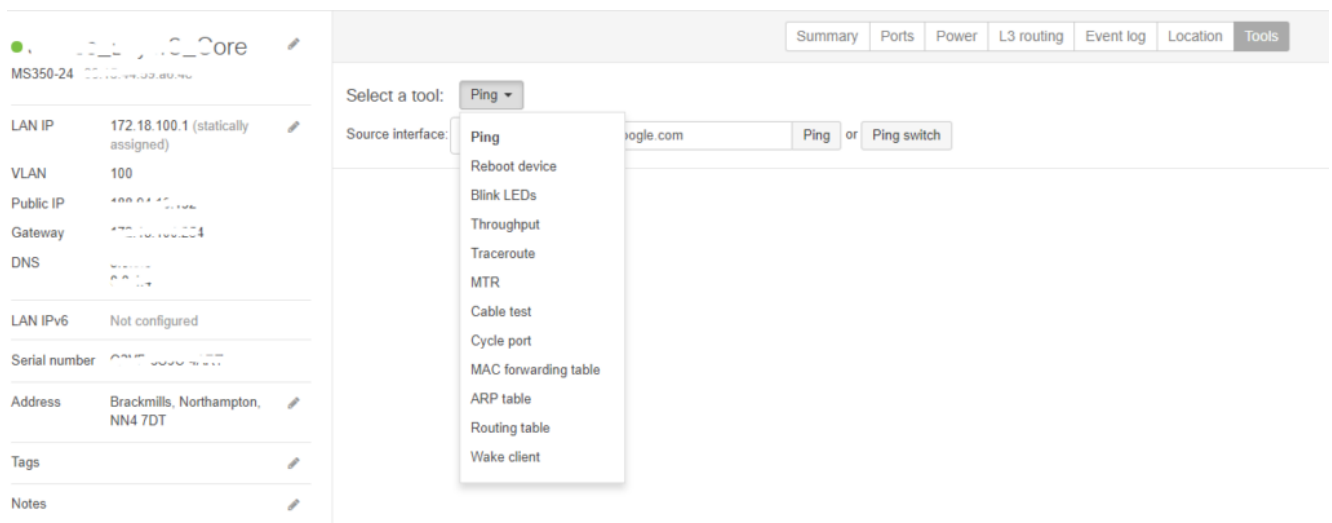


# How to use Packet Capture on Meraki Network Devices

In Meraki, the basic Troubleshooting tools (ping, Throughput, Traceroute, ARP Table, Routing Table) are bundled to the system. So most of the time IT Admins are capable of Troubleshooting the Devices.



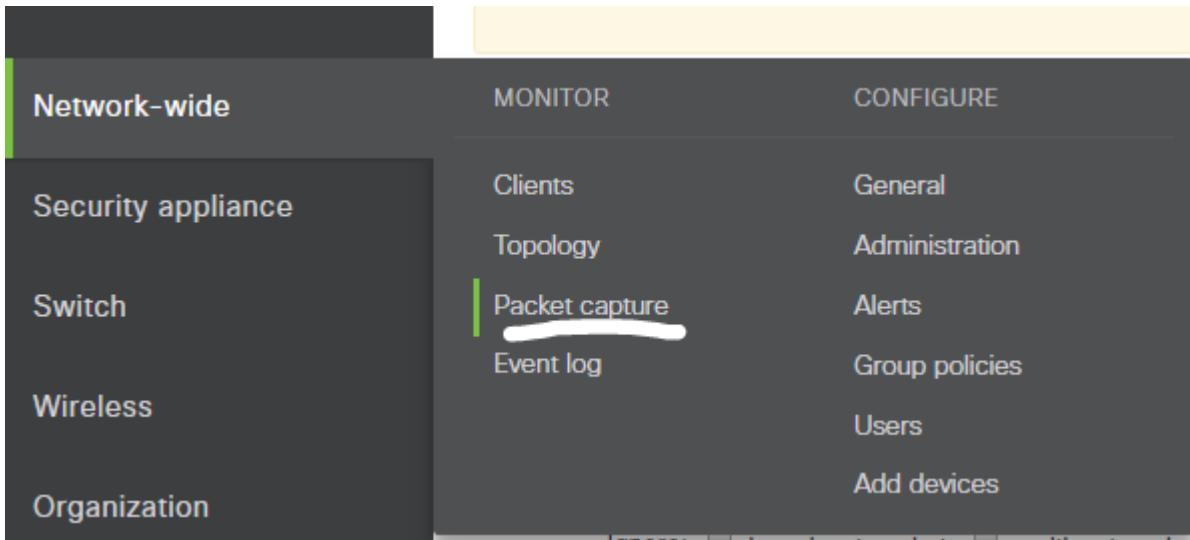
This can be accessed by selecting the Network Device listed under the Site (Device → Tools).

But there are times, where IT Admins need through data analysis. This can not be achieved with the inbuilt tools. So this will require a .pcap file. This file can be generated on the Network Interface and then can be downloaded to the engineer's computer.

As we all know, software like [Wireshark](#) (formerly known as Ethereal) should be installed on the Engineer's computer.

This is not possible under the described section of tools.

So, to make this configured you will need to access the Network-Wide Tab and then Select Packet Capture.



After selecting the Tab, you will find the option to choose the applicable Network Device.

By default, it will show *“for security appliances”*

Apart from the above, you will find *“for access points”* & *“for switches”*

In my example, the requirement is to get the Layer 3 device packet capture (so i will be choosing the *“for switches”*).

Also, I need to get the statistics for the port *“22”* (these utilized port information can be retrieved through the Network Device summary information)

Packet capture *for switches* ▼

Switch: *Junos\_Layer3\_Core* ▼

Ports: *22*

Output: *Download .pcap file (for Wireshark)* ▼

Duration (secs): *60*

Filter expression:

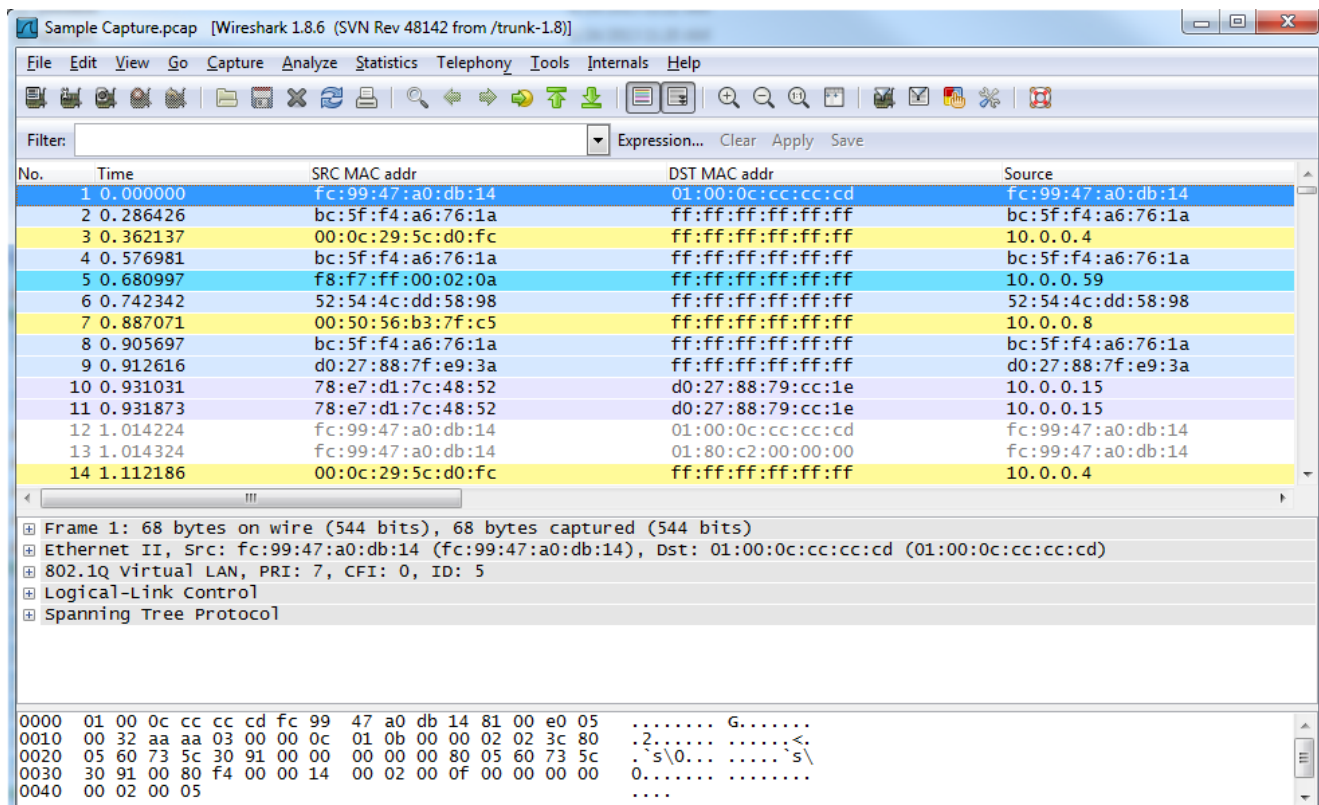
File name: *packet\_capture*

I have selected the specified Switch and Port as 22, the main change to be done is under ***“Output”***

I have selected ***“Download .pcap file (for Wireshark)”***

Then, you are ready to go.

Simply, click ***“Start Capture”*** and it will generate the Packet-Trace in .pcap format.



**NOTE:** If you do not have the Wireshark installed, you can simply get the output in the Window itself. For that, you can simply select ***“view output below”*** instead ***“Download .pcap file (for Wireshark)”***.

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# Data Center Gas Fire Suppression System Comparison

So, you have to choose a gas fire suppression system to protect against fire destroying valuable assets such as Computer Equipment, Document Vaults or Telecommunications / Switch Gear. You have a choice between Chemical Fire Suppression Systems such as Novec 1230 or FM200 and Inert Fire Suppression Systems such as Inergen.

## **FM200 Fire Suppression**

Firstly, FM200 is a HFC Gas that is now monitored under the Kyoto Protocol. Why? Well, it has a high Global Warming Potential and therefore has to be treated and monitored accordingly.

Any engineer working on an FM200 fire suppression system, even for maintenance purposes, has to be trained and certified in F-Gases.

The disposal of FM200 can only be carried out by licensed companies. All this additional licensing puts additional responsibilities and expense on the end user, who are often not aware of their responsibilities around this gas.

So why is FM200 still chosen as a fire suppression agent? FM200 is more cost effective when its maintenance and disposal costs are left out of the equation. However, if the cost of the system is considered over its lifetime and subsequent disposal, then the obvious decision is to consider a different agent.

## **Novec 1230 Fire Suppression**

Novec 1230 fire suppression agent is a relatively recent

addition to the fire suppression industry. Manufactured by 3M, Novec 1230 comes with a 20 year "Blue Sky Warranty", guaranteeing its "Green" credentials.

Choosing Novec 1230 over FM200 is the smarter choice and from here in this article, we shall consider only Novec 1230 and Inergen for that reason.

### **Inergen Fire Suppression**

Inergen fire suppression agent is a mixture of three naturally occurring gases: nitrogen, argon and carbon dioxide. As Inergen agent is derived from gases present in the earth's atmosphere, it exhibits no ozone depleting potential, does not contribute to global warming, nor does it contribute unique chemical species with extended atmospheric lifetimes. Because Inergen agent is composed of atmospheric gases, it does not pose the problems of toxicity associated with some of the chemically derived agents.