



Troubleshooting Network and NAM Issues

This appendix addresses some common issues you might encounter while using Cisco Prime Network Analysis Module as well as how to use NAM to troubleshoot NAM network connection issues.

This appendix contains the following topics:

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Resolving Typical NAM Issues

Q. I see a notification message No data for selected time interval on my dashboard reports. What should I do?

A. You may have created a filter that needs to be changed in order to see data. Use the Interactive Report Filter to do any or all of the following actions until your data displays:

- Change the site filters
- Change the application filter
- Incrementally expand the time range from the default to a greater time range

Review the following question for additional details if this does not resolve your issue.

Q. I am sending traffic to the NAM but nothing comes up on the default monitoring page. What could be wrong?

A. There are two typical issues that are seen when first setting up traffic to the NAM:

- Wait for at least five minutes after traffic is sent to the NAM. Prime NAM collects and displays information at intervals and traffic may not display in charts immediately.
- Ensure the client time is synchronized with the NAM time. Typically this means setting your NTP server to synchronize your NAM time. For details, see [Synchronizing Your System Time, page 5-5](#).

Q. What information should I collect and what else should I do when the NAM is not responding?

A. Determine the answers to the following questions and gather the following information:

- Does **session** from the switch/router CLI work?
- Does **ping** over EOBC (127 subnet) work?
- Does **ping** to the management IP address work?
- Collect output of **show tech-support** command from both the NAM and the switch or router.
- Collect core files.

• Check if NAM hardware is seated correctly in chassis

Perform the following tasks to troubleshoot your issue:

- Reset NAM
- Reset into maintenance image or helper
- Clear the configuration
- Reinstall the application image (using the **--reformat** option)

Q. What can I do to increase my Prime vNAM performance level?

A. Prime NAM virtual appliance (vNAM) supports different traffic monitoring speeds based on your deployments. For more details about licensing options and hypervisor dependencies, see the [Prime vNAM Data Sheet](#) on Cisco.com.

Q. How can I view NAM log files and send them to TAC for review?

A. From the GUI, go to **Administration -> Diagnostics -> Tech Support**. After the support screen dump is complete, click **Download log files**. Save the files to your local disk. You can analyze the files locally or, if requested forward on to your technical support team for review.

Troubleshooting Login Issues

Log into the NAM by using the username and password that the NAM administrator provided you, and click the Login button. If you are having problems logging in:

- Make sure you are using a browser that is currently supported for use with NAM: English Firefox 3.6+ or Microsoft Internet Explorer 8+ (Microsoft Internet Explorer 7 is not supported)
- Make sure you are using a platform that is currently supported for use with NAM: Microsoft Windows XP or Microsoft Windows 7. The Macintosh platform is not supported on this release.
- Make sure you have JavaScript enabled.
- Clear the browser cache and restart the browser (not necessary if installing NAM for the first time).
- Make sure cookies are enabled in your browser.
- If you see the following message: “Initializing database. Please wait until initialization process finishes,” you must wait until the process finishes.
- Make sure your username and password does not use any special characters.
- If your platform requires licensing, make sure you accepted the license agreement and that the license has not expired.
- If the Prime vNAM permanent license is installed and you log in for the first time and accept the EULA, you may be logged out so the permanent license can take effect. We recommend you wait several minutes before you attempt another logon.

To view the full documentation set (including the User Guide and Release Notes) for the Cisco Prime NAM software, go to the NAM software Technical Documentation area on Cisco.com:

- http://www.cisco.com/en/US/products/sw/cscowork/ps5401/tsd_products_support_series_home.html

Understanding Typical Error Messages

- Q.** I'm waiting for the graphical data to populate on a dashboard. What does this red error "Request Error -- Please Try Again" mean?
- A.** This means an internal error has occurred, or the login session may have timed out.
- Q.** I'm waiting for the graphical data to populate on a dashboard. What does this red error "Query resulted in no data" mean?
- A.** The NAM does not have any data for the specified time frame and specified filter. Go to the Interactive Report (the pane on the left side of the window) and click the **Filter** button to check the filter settings and data sources to make sure the NAM is getting data. You can also check the Overview page to ensure the traffic is reaching the NAM. If no traffic appears, check your data sources and SPAN session configuration.
- Q.** What does the message "Client or NAM time is incorrect" mean?
- A.** The browser or client time and the NAM time must be synchronized to avoid this error. See [Synchronizing Your System Time, page 5-5](#).

Frequently Asked Questions about Prime NAM Behavior

- Q.** How does NAM calculate network latency?
- A.** To calculate network latency, the software looks at each packet and associates it to a transaction. For example, NAM looks at SYN and SYN-ACK and timestamps these packets to perform these calculations.
- Q.** How can Prime NAM be restricted to one tenant's traffic when using SPAN or ERSPAN on a Nexus 1000V?
- A.** Prime NAM can be deployed per tenant so they each NAM has their own portal. NAM processes VXLAN, LISP, FabricPath, and OTV for multiple tenants.
- Q.** Why is the browser behaving strangely? It is displaying data for no apparent reason or is not displaying expected data.
- A.** Clear the browser cache, close the browser, and open a new session and try again. Also, make sure you are using a supported browser (see the [Cisco Prime Network Analysis Module Release Notes](#)).
- Q.** Why is the NAM performance lower than expected?
- A.** Disk capture will reduce the NAM performance considerably. It is due to the disk input/output speed. You will see a warning in the top right corner of the window.
- Q.** Why won't the system change the storage option for my capture session from disk to memory and then back to disk?

- A.** If you set up a capture session to disk and later modify the same packet session to save into memory, Prime NAM is unable to change the storage selection back to disk because it is in the *in use* state. You cannot delete the capture session to release the disk for capture. The workaround is to reboot the NAM. This has been fixed in the latest patch (patch 5) on the Cisco software download web page.
- Q.** What MIBs do the Prime NAM support?
- A.** [Table D-1](#) lists the MIB objects supported by Prime NAM.

Table D-1 Supported MIBs

Description	Source
MIB-II: All groups except Exterior Gateway Protocol (EGP) and transmission.	RFC 1213
RMON2: trapDestTable only	RFC 2021
CDP-MIB: Cisco Discovery Protocol ¹	
EntityMIB	RFC 2737

- 1. CDP is received on NAM management ports only. NAM does not transmit CDP packets.
- Q.** Why do all platforms except for NAM-NX1 need if-mib (ifTable) to provide **Analyze > Managed Device** interface data?
- A.** NAM-NX1 gets this data by exchanging messaging with the Supervisor Engine on EOBC channel. There is no MIB involved
- Q.** Which platforms require MIBs?
- A.** All NAM platforms except NAM-NX1 and NAM appliance platform require the Entity-mib, mib-2, if-mib, and... (don't remember) to get and configure SPAN sessions. NAM-NX1 uses EOBC and proprietary messaging with SUP on EOBC to get and configure SPAN session. Appliance NAM platforms have two options: For the SNMP option, the requirements are the same as other NAM platforms. With a NetConf interface, there is not any MIB involved.

Troubleshooting WAAS Data Issues

- Q.** Why does Prime NAM display the status of WAAS devices as pending?
- A.** Prime NAM is unable to monitor WAAS traffic until you set up WAAS monitored servers. To change the pending status, you must set up WAAS monitored servers. See your product documentation for more details.
- Q.** Why is no WAAS data seen in the Monitor windows?
- A.** Perform the following steps:
 - Use the NAM GUI to verify that the Monitored Servers list is configured with the correct server IP addresses.
 - Use the NAM GUI to verify that WAAS data sources have data collection enabled for applicable segments.

- Use the WAAS CLI **show statistics flow filters** to verify that the servers have active traffic flows that are optimized and monitored.
 - Use the WAAS CLI **show statistics flow mon tcpstat** to verify that WAAS Flow Agent exports flow data to the correct NAM IP address.
- Q.** The WAAS is not sending data to the NAM, and the reports are not showing any values.
- A.** The WAAS will not send data unless filtering is enabled on the NAM. Enable filtering at **Setup > Data Sources > WAAS > Monitored Servers**, and check the “Filter Response Time for all Data Sources by Monitored Servers” check box.

Using the CLI to Troubleshoot Issues

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- Using the CLI to Troubleshoot Performance Agent (PA), page D-6

Locating Packet Drops

- Q.** How can I find out using the CLI if packets are being dropped?
- A.** The following CLI command shows packet drops at different layers of the NAM system at 5 minute intervals and up to the last 24 hours:

```
root@NAM1x-18.cisco.com# show pkt-drop-counters Hour-0
```

Time	hardware pkts dropped	FM pkts dropped	ART pkts dropped
13:05	3548	0	0
13:10	3354	0	0
13:15	2843	0	0
13:20	2629	0	0
13:25	3592	0	0
13:30	3298	0	0
13:35	1823	0	0
13:40	2549	0	0
00:00	0	0	0
00:00	0	0	0
00:00	0	0	0
00:00	0	0	0

Handling an Unresponsive NAM

- Q.** Why is my NAM Blade not responding?
- A.** Do the following:
- Check the NAM IP configuration (using the CLI command **show ip**)
 - Check VLAN configuration of management port on Sup:

```
analysis module <slot> management-port access-vlan <#>
```

Using the CLI to Troubleshoot Issues

- Does the session from the switch/router work?
- Does a ping to NAM mgmt IP address work?
- What is the module status on Sup/router?

```
show modules CLI
```

Using the CLI to Troubleshoot Performance Agent (PA)

- Q.** Why is the NAM not receiving data from PA?
- A.** Prime NAM no longer uses Performance Agent as a remote data source. Use Prime Infrastructure or Prime Assurance to collect PA data.