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Contents

1	Overview	1
2	NetFlow Collector System Health Check	2
3	NetFlow Collector NetFlow Ingestion Count Increase Check	7
4	Dashboard Server System Status API check	14
5	Dashboard Server GUI Login - Interface Validation Check	16
6	Dashboard Server NetFlow Data Rendering Check	18

1. Overview

This guide outlines the steps for validating that the DS9 system is functioning properly from a service perspective, and that is it is receiving and processing NetFlow from the NetFlow source devices.

2. NetFlow Collector System Health Check

This procedure displays the output from the DS9 Collector internal Health Check, via the CLI Administration menu.

Note: If the displayed result is **Success**, the health check has validated that all services and processes are functioning properly.

If the displayed result is Failure, you will need to contact VOSS Support.

1. SSH to the DS9 system, and log in to the system using the DS9 CLI NetFlow Collector System Health Check **admin** credentials (username / password) to access the main **Administration** menu.

Note: The image shows SSH connection example using Putty ssh client.

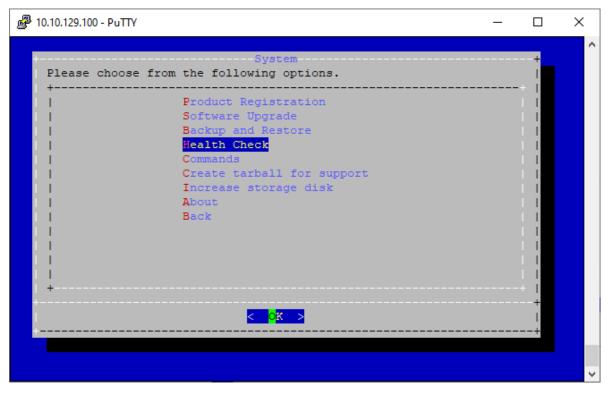
🕵 PuTTY Configuration	? ×
Category: Session Logging Terminal Keyboard Bell Features Window	Basic options for your PuTTY session Specify the destination you want to connect to Host Name (or IP address) Port 10.10.129.100 22 Connection type: Raw Raw Telnet
Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin SSH	Load, save or delete a stored session Saved Sessions Default Settings 10.13.37.118 Cancom ARB DS9 10.13.37.105 DS9 10.13.37.52 RDG ARB 168 RDG Lab ARB 168 V
About <u>H</u> elp	Close window on e <u>xi</u> t: Always Never Only on clean exit <u>Open</u> <u>Cancel</u>

2. In the Administration menu, select System, then select OK, and press <ENTER>.

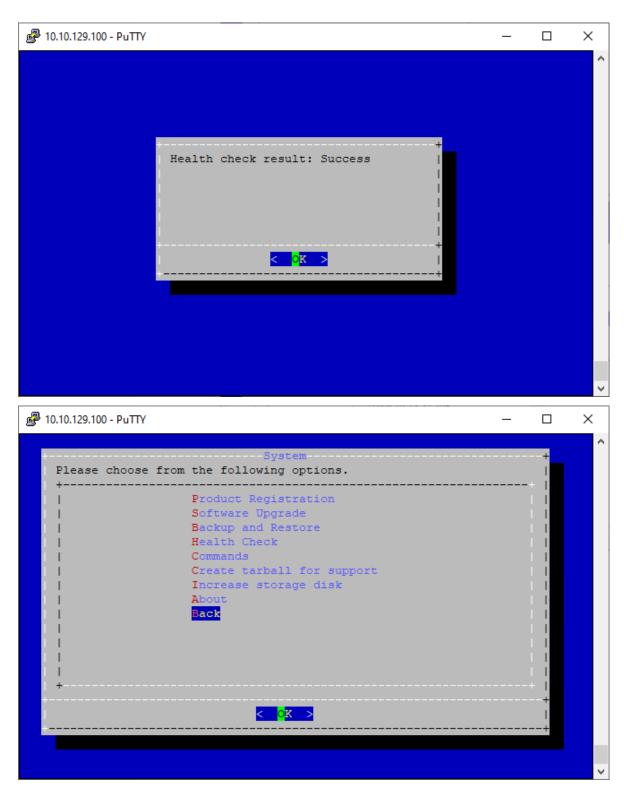
Note: Use the following keyboard keys to choose relevant options and to navigate through the CLI **Administration** menu: **<ARROW**>, **<TAB**>, **<ENTER**>

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Please choose f	Administration from the following options.		+	Í
	Network Configuration Time Configuration Change Passwords DS9 Configuration NRS System Power Off Reboot Quit			
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3. On the System page, select Health Check, then select OK, and press <ENTER>.



View the result, which should be **Success**. Select **OK**, and press **<ENTER>** to return to the **System** page.



4. On the System page, select Back, select OK, and press <ENTER> to return to the main Administration menu.

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Please choose fr	om the following options.		+	
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1	Software Upgrade		1.1	
1	Backup and Restore		1.1	
- E	Health Check		1.1	
	Commands		1.1	
	Create tarball for support			
	Increase storage disk			
	About Back			
	Back			
+			+ 1	
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5. In the **Administration** menu, select **Quit**, and press **<ENTER>** to disconnect from the system.

3. NetFlow Collector NetFlow Ingestion Count Increase Check

This procedure displays the output from the DS9 Collector NetFlow Count indicator via the CLI Administration menu.

A count increase when comparing 2 count values generated in succession validates that all NetFlow ingestion and parsing services and processes are functioning properly, and that the database is functioning properly.

If the netflow count displays a value of **0** and the Health Check is showing **SUCCESS**, the system might not be receiving flow from the systems configured to send flow to the DS9. Validate that there are no firewalls impeding the netflow traffic to the DS9 before contacting VOSS support.

1. SSH to the system IP, and log in to the system using the CLI **admin** credential below to access the **Administration** menu.

Note: The image shows SSH connection example using Putty ssh client.

	? ×		
Category:			
	Basic options for your PuTTY session		
Logging	Specify the destination you want to connect to		
	Host Name (or IP address) Port		
Keyboard	10.10.129.100 22		
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Features	Connection type:		
⊡ ·· Window	⊖ Ra <u>w</u> ⊖ <u>T</u> elnet ⊖ Rlogin		
Behaviour	Load, save or delete a stored session		
Translation	Sav <u>e</u> d Sessions		
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	10.13.37.118		
Data	Cancom ARB DS9 10.13.37.105 Save		
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···· Telnet ···· Rlogin	RDG ARB 168		
	RDG Lab ARB 168		
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🚰 login as: admin 🖉 Pre-authentication	banner message from server:		
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2. In the Administration menu, select System, then select OK, and press <ENTER>.

Note: Use the following keyboard keys to choose relevant options and to navigate through the CLI **Administration** menu: **<ARROW>**, **<TAB>**, **<ENTER>**

Putty 10.10.129.100 - Putty	_	
Administration Please choose from the following options.		+
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< <mark>○</mark> K >		 + +

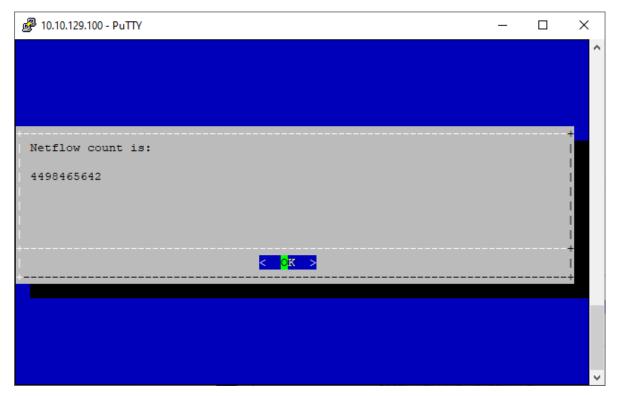
3. On the System page, select Commands, then select OK, and press <ENTER>.

	System	 +
lease choose	from the following options.	 1
	Product Registration	
	Software Upgrade	1.1
	Backup and Restore	1.1
	Health Check	11
	Commands	
	Create tarball for support	
	Increase storage disk About	
	Back	
	Back	
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4. On the Commands page, select Show netflow count, then select OK, and press <ENTER>.

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			^
Please select the product option.		+	
Show netflow count		i i	
Show service times		1.1	
Reset netflow datasource		1.1	
Reset netflow database		1.1	
Reset authorization		1.1	
Back		1.1	
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< <mark>OK ></mark>		1	
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5. View the current count number.



- 6. Press **<ENTER>** to return to the **Commands** page.
- 7. On the Commands page, select Show netflow count again, then select OK, and press <ENTER>.

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Please select t	Commands the product option.		1	
1	Show netflow count		-+	
1.1	Show service times		11	
1.1	Reset netflow datasource		11	
1.1	Reset netflow database		11	
1.1	Reset authorization			
1.1	Back		11	
1.1			1.1	
1.1			11	
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			11	
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1 I.			11	
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+			-+ 1	
			+	
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8. View the NetFlow data count number, which displays for the second time.

The count number displays a larger number compared to the first count display. This count increase is

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Netflow count is:		i.
4498512323		
		1
i		i.
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		 +

validation that the incoming NetFlow packets are being ingested into the database and that the system processes are working properly.

- 9. To disconnect from the system:
 - Press <ENTER> to return to the Commands page.
 - On the **Commands** page, select **Back**, then select **OK**, and press **<ENTER>** to return to the **Administration** menu.
 - In the Administration menu, select Quit, then select OK, and press <ENTER>.

🗬 10.10.129.100 - PuTTY		_		×
Please choose from	Administration a the following options.		+	^
	Network Configuration Time Configuration Change Passwords DS9 Configuration NRS System Power Off Reboot Quit			
				~

4. Dashboard Server System Status API check

In a browser, navigate to the Dashboard System Status API, using a URL with the following format:

https://<IP address>/api/system/stats

S https://10.10.129.102/api/system × +				×
← → C ▲ Not secure https://10.10.129.102/api/system/stats	☆	*	•	:
<pre>{"data":{"Cpu - Idle":"98.27267119062307","Cpu - Irq":"0","Cpu - Nice":"0","Cpu - Sys":"0.67859346(Total":"1.727328809376928","Cpu - User":"1.0487353485502777,"Load Percentage":"0.390625","Load ow Minute:":0.6625","Load over Last 5 Minute":"0.03361406253","Load ver Last 15 Minute":"0.0400390625 Free":63752421376,"Memory Used":3780595712,"Memory Total":67533017088,"Memory Used Percent":"5.5983 Free Percent":"94.40185751426544","Number of Cores":16,"Disk Used Percent":"2","Disk Free Percent" Total":5230809912,"Disk Used":6552306,"Disk Free":516537516,"Customer":"um-lxdb01p","hostmame":"um lxdb01p","version":"sp65","services": "["yostgres":"running","ndx_server":"running","reporter":"running","apache2":"running","sshd":"runni runit":"running"}}</pre>	082665 er Las ","Me 44248 "98", '-	02","(t 1 mory 573454 "Disk	∶pu - ⊧","Memor	у

API output text displays system utilization statistics (CPU, RAM, Disk) and process status. All service status results should display as "running" for proper system operation.

API text output:

```
{"data":
{"Cpu - Idle":"98.27267119062307",
```

(continues on next page)

(continued from previous page)

```
"Cpu - Irq":"0",
"Cpu - Nice":"0",
"Cpu - Sys":"0.6785934608266502",
"Cpu - Total":"1.727328809376928",
"Cpu - User":"1.0487353485502777",
"Load Percentage":"0.390625",
"Load over Last 1 Minute":"0.0625",
"Load over Last 5 Minute": "0.03369140625",
"Load over Last 15 Minute": "0.0400390625",
"Memory Free":63752421376,
"Memory Used": 3780595712,
"Memory Total":67533017088,
"Memory Used Percent": "5.598144248573454",
"Memory Free Percent": "94.40185575142654",
"Number of Cores":16,
"Disk Used Percent":"2".
"Disk Free Percent":"98",
"Disk Total":523089912,
"Disk Used":6552396,
"Disk Free": 516537516,
"customer":"vmv-lxdb01p",
"hostname":"vmv-lxdb01p",
"version":"sp65",
"services":{"postgres":"running",
            "ndx_server":"running",
            "reporter":"running",
            "apache2": "running",
            "sshd":"running",
            "slapd":"running",
            "runit":"running"}}}
```

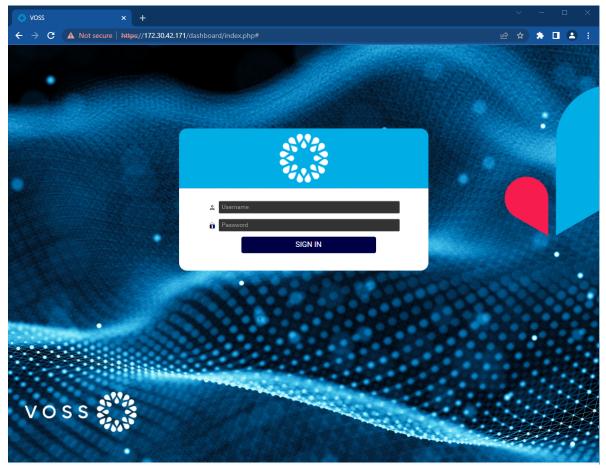
5. Dashboard Server GUI Login - Interface Validation Check

 In a browser, navigate to the Dashboard GUI, using a URL with the following format: https://<IP address>

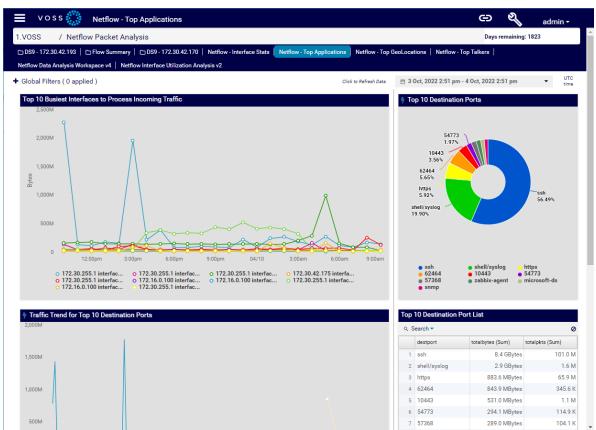
If the log in page displays, this validates that the system is reachable and the Apache service is running.

2. Log in to the system using admin credentials (admin / admin).

Successful authentication indicates that the system processes are running, and serving its GUI via Apache.



3. View the default Dashboard.



Data displayed in the dashboard validates GUI function and connectivity to the DS9 Collector system from the Dashboard system.

6. Dashboard Server NetFlow Data Rendering Check

1. In a browser, connect to the Dashboard GUI, using a URL with the following format:

https://<IP address>

- 2. Log in to the system using admin credentials (admin / admin).
- 3. In the Deep Flow Inspection folder, select the NetFlow License dashboard.
- 4. Set the time frame for the data to be viewed, to the 1 hour time frame.

If you're able to see data rendered in the tables and graphs in the NetFlow License dashboard, system connectivity to the DS9 Collector databases is validated, as well as DS9 NetFlow data ingestion.

If you're able to see data displaying in any dashboard in the NetFlow Packet Analysis and Deep Flow Inspection folders on the Dashboard application, then both systems are functioning properly.

