

QUICK START GUIDE

NetFlow Analyzer



<https://www.manageengine.com/products/netflow/>

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INTRODUCTION

NetFlow Analyzer is a complete traffic analysis and network performance monitoring tool that leverages flow technologies like NetFlow, sFlow, IPFIX, NetStream J-Flow, AppFlow, and cFlow to provide real-time visibility into network traffic patterns and bandwidth performance. NetFlow Analyzer supports all major vendor devices, including Cisco, Enterasys Extreme Networks, HP ProCurve, Huawei, Juniper, Riverbed, and [more](#).

Using Cisco technologies like NBAR, CBQoS, IP SLA, WAAS, and Medianet, NetFlow Analyzer helps in application recognition; validates QoS policies; monitors performance metrics like jitter, latency, and packet loss; and provides insight on traffic optimization performed by your Cisco devices.

PREINSTALLATION

NetFlow Analyzer is an integrated flow collector and analyzer that comes bundled with PostgreSQL database and requires no configuration. The product also supports MS SQL database. The recommended hardware requirements for NetFlow Analyzer are found below:

Parameter	Professional Edition	Enterprise Edition	
		Central server	Collector
Processor	2.4GHz quad-core processor	2.4GHz dual-core	3.2GHz quad-core
RAM	4GB	4GB	8GB
Hard disk space	200GB for database	600GB	1TB SATA hard disk
Operating system	64-bit	64-bit	64-bit

Please note that change in flow rate will lead to change in system requirements as follows:

Rate of flow/second	Processor	RAM	Disk space for aggregated data (forever)	Additional disk space for raw data (optional)	Server type
0 to 3k	2.4GHz Quad-Core Processor	4GB	200GB	75GB/day	-
3k to 6k	3.2GHz Quad-Core Processor	6GB	200GB	150GB/day	64-bit
6k to 9k	3.2GHz Quad-Core Processor	8GB	200GB	225GB/day	64-bit
9k to 10k	3.2GHz Quad-Core Processor	16GB	200GB	250GB/day	64-bit
10k to 25k	3.2 GHz Quad Core Processor	18GB	225GB	-	64-bit
25k to 50k	3.2 GHz Quad Core Processor	20GB	250GB	-	64-bit
50k to 75k	3.2 GHz Quad Core Processor	22GB	250GB	-	64-bit
75k to 100k	3.2 GHz Quad Core Processor	24GB	300GB	-	64-bit

Note: Aggregated data is calculated based on the top 100 records.

For the device exporting NetFlow, ensure that the NetFlow export version format is the same as the Cisco NetFlow version 5,7, or 9. For information on Cisco devices and iOS versions supporting NetFlow, consult the [Cisco NetFlow Device Support table](#).

Supported operating systems	Supported browsers	Database supported
Windows Server 2022	Google Chrome	PostgreSQL (bundled with the product)
Windows Server 2019	Mozilla Firefox	MS SQL Supported versions: SQL 2019 SQL 2017 SQL 2016 SQL 2014 SQL 2012 SQL 2008
Windows Server 2016	Microsoft Edge	For HighPerf add-on - PostgreSQL - Bundled with the product.
Windows Server 2012 R1	Internet Explorer 11	Note: <ul style="list-style-type: none"> • For production use 64 bit versions of SQL • Recovery mode should be set to SIMPLE. • SQL and NetFlow should be on the same LAN. Currently WAN based SQL installations are not supported.
Windows 10		
Windows 8		
Windows 7		
Windows Vista		
Windows Server 2008 R1		
RedHat Linux 6.0 & above		
Cent OS 6.0 & above		
Fedora 18 & above		
Debian version 6.0 &		
Ubuntu 12 6.0 & above		
SUSE 10 & above		

Note: NetFlow Analyzer is an integrated flow cNetFlow Analyzer that runs in both Windows and Linux; supports NetFlow® versions 5, 7, and 9; sFlow®; cflowd®; J-Flow®; IPFIX®; and NetStream®.

Connection ports

NetFlow Analyzer uses the following ports, and we recommend that these ports are not blocked or used by other services. The port numbers mentioned below can be changed as per your network requirements.

Refer to the user guide for advanced product information, or contact technical support.

Web server port: 8060, TCP, to connect to NetFlow Analyzer GUI from a web browser.

NetFlow Listener port: 9996, UDP, to receive NetFlow exports from routers.

Embedded database port: 13306, to connect to the PostgreSQL database in NetFlow Analyzer.

MS SQL port: 1433, port that connects NetFlow Analyzer to a SQL database.

Wrapper port: 32000-32999

JVM port: 31000-31999, to connect to Wrapper

INSTALLATION

Installing in Microsoft Windows:

- Navigate to your download location, and then launch the executable file.
- In the welcome screen that appears, click Next.
- Accept the terms of the license agreement, and click Yes.
- Enter the installation location, and click Next.
- Enter the web server port and listener port, then click Next.
- Register for technical support (optional), and click Next or Skip.
- On the extracting files screen, select the back-end database for NetFlow Analyzer and click Next.

- Click OK, and the installation summary should be displayed.
- Click Finish.

Installing in Linux:

- Download the BIN file `ManageEngine_NetFlowAnalayzer64bit.bin` and assign execute permission using the command: `chmod 777 ManageEngine_NetFlowAnalayzer64bit.bin`
- Execute the following command:
`./ManageEngine_NetFlowAnalayzer64bit.bin -i console`

Note: During installation, if you get an error message stating that the temp folder does not have enough space, try executing the following commands

```
mkdir /tmp2  
chmod 777 /tmp2  
export IATEMPDIR="/tmp2"
```

Now try installing NetFlow Analyzer as usual
`./ManageEngine_NetFlowAnalyzer_64bit.bin -i console`

- Follow the instructions as they appear on the screen to successfully install NetFlow Analyzer on to your machine.

POST-INSTALLATION

Prerequisite:

If there are any antivirus scanners or automatic backup applications running, they might interfere with database files and the normal functioning of the database. Exclude the home directory, `OpManager_home` directory, from antivirus scanners. If the database is running on a remote server, network connectivity should be up to avoid the chance of data loss.

Default login credentials

Username: admin

Password: admin

Note: The username and password can be modified later.

Configuring flow exports

Export flow can be done in three ways:

Predefined Flow Export, where the device type and configuration commands are auto-discovered.

Custom Flow Export, where the users can manually enter the configuration commands.

NetFlow Generator, that captures and converts raw network packets into NetFlow packets to help users monitor devices that do not support flow export.

Accessing NetFlow Analyzer

To access NetFlow Analyzer, enter the following in your browser's address bar: `http://localhost:8060` or `http://<server_IP_address>:<port>`

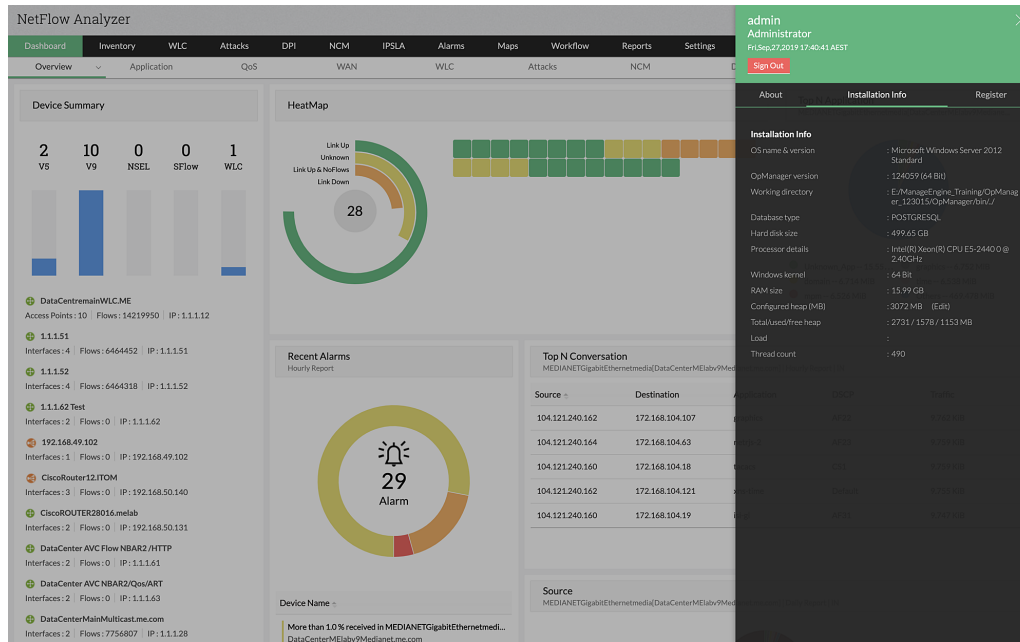
Note: If you have changed the default web server port (8060) during installation, use that port number instead of 8060.

Viewing reports

Once the device has been configured to export NetFlow packets to the server, NetFlow Analyzer will receive the packets and generate reports automatically. Log into the NetFlow Analyzer web client to view NetFlow reports.

Performance tuning

We recommend tuning Java and a few database parameters to improve the performance of the system.



- To access performance tuning settings, go to **Support > Load Details**.
- Click on **Configured heap size**, and edit it.
- After you have updated the values, the server has to be restarted. To learn more on performance tuning, [refer to this page](#).

License

NetFlow Analyzer licensing is based on the number of interfaces to be monitored from your routing and switching devices. For example, if you have 10 devices, each with 1 LAN, 1 WAN, and 1 VLAN interface, you have a total of 30 interfaces. If you need reports for only the WAN and VLAN interfaces from each device, then you need a license for 20 interfaces.

It's the monitored interfaces that count, not the total number of interfaces in your network.

Free Edition

After the download and installation, the product runs as a fully featured trial version (including add-ons) for 30 days and then switches to the Free Edition. The Free Edition allows you to manage a maximum of two interfaces with all the features of the Professional Edition.

Professional Edition

The Professional Edition of NetFlow Analyzer allows you to manage a maximum of n interfaces (where n is the number of interfaces for which you have purchased the NetFlow Analyzer license).

Enterprise Edition

The Enterprise Edition is a scalable bandwidth monitoring solution that involves a single Central server and n number of distributed collectors based on the number of remote locations. It contains all the features of the Professional Edition and also reports on CBQoS, NBAR, NetFlow Analyzer's Advanced Security Analytics Module, and Capacity Planning.

Support

Support: netflowanalyzer-support@manageengine.com

Onboarding assistance:

<https://www.manageengine.com/products/netflow/onboarding.html>

Resources: <https://www.manageengine.com/products/netflow/resources.html>

Forums: <https://pitstop.manageengine.com/portal/community/netflow-analyzer/>

Blogs: <https://blogs.manageengine.com/netflowanalyzer>

Help doc: <https://www.manageengine.com/products/netflow/help/>

Request a free demo: <https://www.manageengine.com/products/netflow/demo-form.html>

Live online demo: <https://demo.netflowanalyzer.com/>

Tech videos: <https://www.youtube.com/channel/UCHLusaahd4nS9esD3xBVeUQ>