ManageEngine

INSTALLATION AND GETTING STARTED

ManageEngine Network Configuration Manager

https://networkconfigurationmanager.com/

Introduction

ManageEngine Network Configuration Manager is a comprehensive multi-vendor supporting solution designed for network configuration and change management (NCCM). It caters to switches, routers, firewalls, and various network devices. This tool streamlines and automates the entire life cycle of device configuration management. With Network Configuration Manager, you can efficiently handle time-consuming tasks such as initiating backups, modifying configurations, identifying firmware vulnerabilities, and conducting compliance audits. The system discovers network devices, establishes an inventory database, and empowers network administrators to configure devices through a user-friendly web-based console centrally. This administrator console serves as the interface for executing all configuration operations, and it is accessible from any location through a standard web browser.

Devices supported by Network Configuration Manager

A reliable choice embraced by network administrators worldwide, Network Configuration Manager accommodates a wide array of devices from various vendors, including Cisco, Juniper, HP, Fortinet, and more. With support for over 250 device templates, it offers extensive compatibility. Moreover, beyond the predefined list of devices, Network Configuration Manager enables the addition of custom devices. Explore the supported device list by clicking here.

Pre-installation

Network Configuration Manager - minimum system requirements

Network Configuration Manager is packaged with the PostgreSQL database and is compatible with MS SQL database. It operates seamlessly on both Windows and Linux platforms. The following are the minimum hardware requirements for Network Configuration Manager to manage 50 devices:

Parameter	Professional edition	Enterprise edition (Central)	Enterprise edition (Probe)
Processor	2 GHz Dual-core, or more	2.5 GHz Dual-core, or more	2 GHz Dual-core, or more
RAM	4 GB RAM	16 GB RAM	4 GB RAM
Hard disk space	100 GB	100 GB	100 GB

Note: If you want to know the system requirements of more than 50 devices, click here.

Detailed requirements

Supported OS	Supported web-clients	Supported protocols
Windows • Windows 10 • Windows Server 2022/ 2019/ 2016/ 2012 R2/ 2012 **Linux** • RedHat 7 to 9.1 • CentOS Stream 8 and 9 • CentOS 7 • Debian 10 to 11.6 • Ubuntu 14 to 22.04 • Opensuse 15.4	**Browsers** • Chrome (preferred) • Firefox • Edge	**Protocols** • SSH/Telnet • SSH/Telnet - TFTP • SSH-SCP • SSH-SFTP • SNMP v1/v2/v3

Ports supported

Port	Protocol	Port type	Usage	Direction	Remarks
22	TCP	Static	SCP port	Bidirectional	Used for backup / upload / configlets
69	UDP	Static	TFTP port	Bidirectional	Used for backup / upload / configlets
8060	TCP	Static	Web-client port	Inbound	Can be configured using ChangeWebServerPort.bat
514 & 519	UDP	Static	Syslog server port	Inbound	Used for change detection. Syslog server port can be changed via web-client
1433	TCP	MSSQL Database port	Database port	-	Can be changed in conf/database_params.conf file/ dbconfiguration.bat file
13306	TCP	PostgreSQL Database port	Database port	-	Can be changed in conf/database_params.conf file

Note:

Port	Usage
32000-32999	Wrapper
31000-31999	JVM (to connect wrapper)

Installation

Windows installation process

After downloading ManageEngine_NetworkConfigurationManager.exe., the installation wizard will guide you through the installation process:

1. Choose an installation directory (The installation directory path will be "NCM_Home" by default).

2. Once the installation begins, choose one of the two check boxes - one for viewing ReadMe file and the other one for starting the server immediately after installation.

3. If you choose to start the server immediately, the process will start in the background.

4. If you choose to start the server later, after installation, you can start it from the Start >> Programs >> ManageEngine Network Configuration Manager menu.

Linux installation process

1. Download ManageEngine_NetworkConfigurationManager_64bit.bin for Linux.

2. Login as root user.

3. Assign executable permission using command chmod a+x

4. Execute the following command with administrator privileges (sudo):./

5. Follow the instructions as they appear on the screen.

6. Network Configuration Manager is installed in your machine in the desired location. Henceforth, this installation directory path shall be referred as "NCM_Home".

Starting Network Configuration Manager

Windows:

1. Click on Start > Programs > ManageEngine Network Configuration Manager to start the server.

2. Alternatively you can navigate to the \bin folder and invoke the run.bat file.

Linux:

1. Navigate to the /bin directory and execute the run.sh file.

2. When the server is started, a command prompt window opens up showing startup information on several modules of Network Configuration Manager. Once all the modules have been successfully created, the following message will be displayed:

"Server started. Please connect your client at http://localhost:8060"

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

Default login credentials

Username: admin
Password: admin

Note: The username and password can be modified later.

Discovering devices

The discovery process in Network Configuration Manager allows you to discover devices in two ways:

SNMP - based discovery
SNMP-enabled network devices can be discovered using this method.

1. Go to Settings -> Discovery -> Network Discovery.

2. Enter the 'Device Name/ IP Address' to discover a particular IP address.

3. If you wish to discover more than one device, specify the start IP and end IP and discover devices falling within that IP range.

4. You can also export a CSV file containing IP address, host names, series and model and discover devices.

Manual device discovery

Devices which do not have SNMP enabled can be added by manual discovery method.

1. Go to Inventory >> click on '+' symbol.

2. In the tab that opens, provide the hostname/IP address, vendor, device type, series & model from the drop-down and click "Add".

3. The device will be added to the Inventory.

You can also manually add devices in bulk through CSV file import.

To know more about device discovery in detail, click here.

Credentials

To provide credentials:

1. Go to Inventory and click on the Credential icon.

2. Select the required credential protocol.

3. Enter the required parameters and click 'Save'. You can also create credential profiles and apply them to devices.

To create a credential profile:

1. Go to Config Automation -> Credentials -> Credential profile.

2. Click on "+" and provide the necessary details.

3. Click on "Save" to create the credential profile.

Once the credentials are successfully given, you can start using Network Configuration Manager for various configuration activities like backup, compliance auditing, Configlet automation, etc.

To know more about applying credentials, click here.

To create/add credential rules:

1. Go to Config Automation > Credentials > Credential Rules

2. Click on the add icon on top right of the grid

3. Enter a name for the new rule

4. Add a description to the rule (Optional)

5. Select the device selection type (Device group or Criteria)

6. Select the device groups if device group is selected in the previous step

7. If the Criteria option is selected then create a selection criteria for the device

8. To create a criteria, the user needs to select a parameter, a condition and a value

9. Multiple criteria rows can be added by clicking the add button in front of the

criteria row

10. A criteria pattern will be automatically created and the criteria will be applied accordingly

11. While creating multiple criteria rows, the user has to select the join operator between two rows that can be AND or OR

12. Once the device selection type is set, please select a credential profile and the protocol that needs to be applied from the credential profile

13. If a device fulfils the criteria for the rule, click on Save.

To know more about credential rules, click here.

License

Network Configuration Manager follows a device-based licensing model with its base p rice at $595 for 10 devices. For a detailed pricing structure, click here.

Editions

Features	Free edition	Professional edition	Enterprise edition
Starting Price	Free	$595 (10 devices)	$8395 (250 devices)
Max Devices Count	2 devices	10,000	50,000
Multi-Site/ Distributed Network Monitoring	×	×	✔
Detailed feature comparison			
Configuration backup	✔	✔	✔

Network automation using Configlets	✔	✔	✔
Real-time change detection	✔	✔	✔
Configuration change notifications and rollback mechanism	✔	✔	✔
Network compliance management	✔	✔	✔
Detailed reports	✔	✔	✔
Support for devices from 200+ vendors	✔	✔	✔
Manage up to 10000 devices	×	✔	✔
24x5 technical support	×	✔	✔
Multi-Site / Distributed Network Configuration Management	×	×	✔
Automatic data sync between all probes (Multiple sites)	×	×	✔
Smart Upgrade - Automatic PPM Upgrade for all probes	×	×	✔
Collective data/reports in the central server	×	×	✔

Resources & contact details

For queries on the product: ncm-support@manageengine.com

Forum for discussion: https://pitstop.manageengine.com/portal/en/community/network-configuration-manager

Product download: https://www.manageengine.com/network-configuration-manager/download.html

Free demo: https://www.manageengine.com/network-configuration-manager/demo-form.html

Get quote: https://www.manageengine.com/network-configuration-manager/get-quote.html

Help docs: https://www.manageengine.com/network-configuration-manager/help/

E-books: https://www.manageengine.com/network-configuration-manager/ncm-ebooks.html

Tech videos: https://youtube.com/playlist?list=PL0FkrkKW27nMUCckMzGOMgnuQ2eud9By-&si=OCV5HFt-6G6oC21o