



System and IP Configuration Commands

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system settings default-gw

To configure the default gateway, use the **system settings default-gw** command in global configuration mode. To delete the default gateway, use the **no** form of the command.

```
system settings default-gw ip-address
```

```
no system settings default-gw
```

Syntax Description	<i>ip-address</i> The default gateway IP address				
Command Default	The default gateway is not set.				
Command Modes	Global configuration (config)				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.5.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.5.1	This command was introduced.
Release	Modification				
3.5.1	This command was introduced.				
Usage Guidelines	To configure DHCP either on the WAN interface or the management interface, delete the default gateway.				

Example

The following command sets the default gateway:

```
nfvis(config)# system settings default-gw 209.165.201.1
nfvis(config)# commit
```

system settings disk-space threshold

To configure the threshold for disk space usage, use the **system settings disk-space threshold** command in global configuration mode. To delete the configured disk space usage threshold, use the **no** form of the command.

```
system settings disk-space threshold value
```

```
no system settings disk-space threshold
```

Syntax Description	threshold <i>value</i> Specifies the threshold value in percentage for disk space usage. Valid range is from 1 to 100. When the disk space usage reaches the specified threshold, a notification is sent.
Command Default	Default notification threshold is set at 90%.
Command Modes	Global configuration (config)
Command History	Release Modification 3.7.1 This command was introduced.

Example

```
nfvis(config)# system settings disk-space threshold 1  
nfvis(config)# commit
```

system settings hostname

To set the hostname of the system, use the **system settings hostname** command in global configuration mode.

```
system settings hostname host-name
```

Syntax Description	<i>host-name</i> The hostname of the system.				
Command Default	The default hostname is nfvis				
Command Modes	Global configuration (config)				
Command History	<table><thead><tr><th>Release</th><th>Modification</th></tr></thead><tbody><tr><td>3.5.1</td><td>This command was introduced</td></tr></tbody></table>	Release	Modification	3.5.1	This command was introduced
Release	Modification				
3.5.1	This command was introduced				

Example

The following command changes the hostname of the system to nfvis-demo:

```
nfvis(config)# set system settings hostname nfvis-demo
nfvis(config)# commit
```

system settings ip-receive-acl

To configure the source network for Access Control List (ACL) access to the management interface, use the **system settings ip-receive-acl** command in global configuration mode. To remove the configured source network, use the **no** form of the command.

```
system settings ip-receive-acl source-ip-address [service {https | icmp | netconf | scpd | snmp | ssh}] [priority priority] [action {accept | reject | drop}]
```

```
no system settings ip-receive-acl
```

Syntax Description

source-ip-address Specifies the IPv4 IP address of the source network. When the management ACL access is enabled, only specified source networks can access the management interface. When no ACL rule is defined, all types of traffic is allowed. If the source network is specified as 0.0.0.0/0, the configuration is applicable to all source networks.

service Specifies the service type for the management ACL access. Valid values are:

- **https**: Includes port 80, port 443 and all ports to access the service console.
- **icmp**: Provides ability to ping the host.
- **netconf**: Includes port 2022. This port is required for communication between nodes of a cluster.
- **scpd**: Provides ability to run the **scp** command from an external system.

Note To use the port 22222, you must run the **system settings ip-receive-acl** command with **scpd** service. Starting with release 3.7.1, the port 22222 is closed by default.

- **snmp**: Includes port 161 and configured NET-SNMP port.
- **ssh**: Includes port 22 and port 2024.

You can specify one, more than one, or all service types in this parameter. To specify multiple service types, enter the values within the square brackets []; for example, **service [snmp https]**. If you do not specify any specific service, the configuration is applicable to all services.

priority priority Specifies the priority for the ACL rule. Each ACL rule must have a unique priority value. Valid range is from 0 to 65,535. ACL rule with priority 0 has the highest priority. Whenever an ACL rule with priority 0 is matched, Cisco Enterprise NFWIS performs the action associated with this ACL rule and does not look up any lower priority ACL rules.

action Specifies the action for the packets received from a source network. Valid values are:

- **accept**: Accept the packets.
- **reject**: Reject the packets and return the error to the source network.
- **drop**: Drop packets immediately and do not send any information to the source network.

Command Default	None				
Command Modes	Global configuration (config)				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.7.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.7.1	This command was introduced.
Release	Modification				
3.7.1	This command was introduced.				

Example

The following example opens port 22222 for all IPs.

```

nfvis(config)# system settings ip-receive-acl 0.0.0.0/0 service scpd priority 2 action
accept
nfvis(config-ip-receive-acl-0.0.0.0/0)# commit

```

Example

The following example opens port 22222 for a specific IP.

```

nfvis(config)# system settings ip-receive-acl 203.0.113.1/32 service scpd priority 1 action
accept
nfvis(config-ip-receive-acl-203.0.113.1/32)# commit

```

Example

The following example configures the SSH service for a specific IP.

```

nfvis(config)# system settings ip-receive-acl 198.51.100.11/32 priority 1 service ssh action
accept
nfvis(config-ip-receive-acl-198.51.100.11/32)# commit

```

show running-config system settings ip-receive-acl

To display the configured source network for ACL access to the management interface, use the **show running-config system settings ip-receive-acl** command in privileged EXEC mode.

```
show running-config system settings ip-receive-acl
```

Syntax Description	This command has no arguments or keywords.
---------------------------	--

Command Default	None
------------------------	------

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	3.7.1	This command was introduced.

Example

```
nfvis# show running-config system settings ip-receive-acl
system settings ip-receive-acl 198.51.100.11/24
  service [ ssh https scp ]
  action  accept
  priority 100
!
```

system settings mgmt

To configure the management interface either with a static IP address or with DHCP, use the **system settings mgmt** command in global configuration mode.

```
system settings mgmt {dhcp | ip address mgmt-ip-address subnet}
```

```
no system settings mgmt {dhcp | ip address mgmt-ip-address }
```

Syntax Description	ip address <i>mgmt-ip-address</i>	Specifies the management IP address.
	<i>subnet</i>	Specifies the IP subnet for the management IP address.
Command Default	By default, the management interface is assigned the static IP address 192.168.1.1.	
Command Modes	Global configuration (config)	
Command History	Release	Modification
	3.5.1	This command was introduced.

Usage Guidelines You can configure DHCP either on the WAN interface or the management interface; you cannot configure DHCP on both the interfaces simultaneously.

Before configuring the management interface with DHCP, delete the default gateway. After you configure DHCP on the management interface, either reboot the system or enter the command **hostaction mgmt-dhcp-renew** to renew the DHCP IP address.

Example

The following command sets the IP address and netmask for the management interface:

```
nfvis(config) system settings mgmt ip address 192.168.1.2 255.255.255.0
nfvis(config) commit
```

The following command configures DHCP on the management interface:

```
nfvis(config)# no system settings default-gw
nfvis(config)# system settings mgmt dhcp
nfvis(config)# commit
nfvis# hostaction mgmt-dhcp-renew
nfvis# end
```


system settings wan

To configure the WAN interface either with a static IP address or with DHCP, use the **system settings wan** command in global configuration mode.

```
system settings wan { dhcp | ip address wan-ip-address netmask-address | vlan vlan-id }
no system settings wan { dhcp | ip address wan-ip-address netmask-address | vlan vlan-id }
```

Syntax Description		
ip-address <i>wan-ip-address</i>		The WAN IP address.
netmask <i>netmask-address</i>		The netmask for the WAN IP address.
vlan <i>vlan-id</i>		Specifies the VLAN tagging ID. Valid range: 1-4094 If no VLAN is configured, the default value is set to "untag".

Command Default By default, the WAN interface is configured with DHCP.

Command Modes Global configuration (config)

Command History	Release	Modification
	3.5.1	This command was introduced.

Usage Guidelines You can configure DHCP either on the WAN interface or the management interface; you cannot configure DHCP on both the interfaces simultaneously.

Before configuring the WAN interface with DHCP, delete the default gateway. After you configure DHCP on the WAN interface, either reboot the system or enter the command **hostaction wan-dhcp-renew** to renew the DHCP IP address.

Example

The following command sets the IP address and netmask for the WAN interface:

```
nfvis(config)# system settings wan ip-address 172.19.162.209 255.255.255.0
nfvis(config)# commit
```

The following command configures DHCP on the WAN interface:

```
nfvis(config)# no system settings default-gw
nfvis(config)# system settings wan dhcp
nfvis(config)# commit
nfvis# hostaction wan-dhcp-renew
nfvis# end
```

system storage

To configure the system storage, use the **system storage** command in global configuration mode. Use the **no** form of the command to delete the storage configuration.

```
system storage storage_name storagetype storagetype storage_space_total_gb storage_space_total_gb
server_ip server_ip server_path server_path
```

```
no system storage storage_name
```

Syntax Description	<i>storage_name</i>	Specifies the storage name.
	storagetype <i>storagetype</i>	Specifies the storage type. Valid values are internal, iscsi, nfs, and not_enabled.
	storage_space_total_gb <i>storage_space_total_gb</i>	Specifies the total storage space.
	server_ip <i>server_ip</i>	Specifies the IP address of the remote storage device server.
	server_path <i>server_path</i>	Specifies the remote server directory path.
Command Default	None	
Command Modes	Global configuration (config)	
Command History	Release	Modification
	3.7.1	This command was introduced.

Example

```
nfviz(config)# system storage nfs_storage
Value for 'storagetype' [internal,iscsi,nfs,not_enabled]: nfs
Value for 'storage_space_total_gb' (<decimal number>): 100
Value for 'server_ip' (<string, min: 1 chars, max: 80 chars>): 198.51.100.1
Value for 'server_path' (<string, min: 1 chars, max: 64 chars>): /export/vm/sample
nfviz(config-storage-nfs_storage)# commit
```

show system settings

To display the system settings, use the **show system settings** command in privileged EXEC mode.

```
show system settings [brief]
```

Syntax Description	brief Displays brief system settings.						
Command Default	None						
Command Modes	Privileged EXEC (#)						
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.7.1</td> <td>Brief parameter was added and other parameters were removed.</td> </tr> <tr> <td>3.5.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.7.1	Brief parameter was added and other parameters were removed.	3.5.1	This command was introduced.
Release	Modification						
3.7.1	Brief parameter was added and other parameters were removed.						
3.5.1	This command was introduced.						
Usage Guidelines	None						

Example

```
nfvis# show system settings
system settings brief lan-br
ipv4_address 192.0.2.1
ipv4_netmask 255.255.255.0
ipv4_dhcp disabled
global_ipv6_address ::
global_prefixlen 0
link_local_ipv6_address fe80::72db:98ff:fe07:1f35
link_local_prefixlen 64
ipv6_dhcp disabled
ipv6_slaac disabled
system settings brief wan-br
ipv4_address 198.51.100.1
ipv4_netmask 255.255.255.0
ipv4_dhcp disabled
global_ipv6_address ::
global_prefixlen 0
link_local_ipv6_address fe80::72db:98ff:fe70:2f6e
link_local_prefixlen 64
ipv6_dhcp enabled
ipv6_slaac disabled
ipv6_dhcp_state Stateful
```

show system settings-native

To display all information related to management settings, use the **show system settings-native** command in privileged EXEC mode.

show system settings-native [**dns** | **domain** | **gateway** | **hostname** | **mgmt** | **wan vlan**]

Syntax Description	
dns	(Optional) DNS details.
domain	(Optional) Domain name.
gateway	(Optional) Default gateway details.
hostname	(Optional) Hostname details.
mgmt	(Optional) Management interface details.
wan	(Optional) Wan interface details
vlan	(Optional) Provides information about the VLAN tag.

Command Default None

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	3.5.1	This command was introduced.

Examples

The following is a sample output of the **show system settings-native** command without any keywords:

```
nfvis# show system settings-native
system settings-native mgmt ip-info interface lan-br
system settings-native mgmt ip-info ipv4_address 192.168.1.1
system settings-native mgmt ip-info netmask 255.255.255.0
system settings-native mgmt ip-info ipv6_address fe80::7aba:f9ff:feee:2f97
system settings-native mgmt ip-info prefixlen 64
system settings-native mgmt ip-info mac_address 80:e0:1d:37:93:47
system settings-native mgmt ip-info mtu 1500
system settings-native mgmt ip-info txqueuelen 0
system settings-native mgmt stats rx_packets 64157
system settings-native mgmt stats rx_bytes 8869998
system settings-native mgmt stats rx_errors 0
system settings-native mgmt stats rx_dropped 101
system settings-native mgmt stats rx_overruns 0
```

The following is a sample output of the **show system settings-native** command to verify the VLAN configuration details. If no VLAN is configured, the default setting (untagged) is displayed as shown below:

```
nfvis# show system settings-native wan vlan tag
system settings-native wan vlan tag untagged
```

show system top

To display the top system processes, use the **show system top** command in privileged EXEC mode.

show system top

Syntax Description	This command has no arguments or keywords.
---------------------------	--

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release Modification
	3.6.1 This command was introduced.

Example

```

nfvis# show system top
top - 14:35:44 up 12 min, 1 user, load average: 0.00, 0.11, 0.17
Tasks: 272 total, 1 running, 271 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.6 us, 0.2 sy, 0.0 ni, 99.2 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem : 16158248 total, 14234804 free, 1435900 used, 487544 buff/cache
KiB Swap: 8388604 total, 8388604 free, 0 used. 14467448 avail Mem
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
1 root 20 0 44028 6628 3904 S 0.0 0.0 0:04.90 systemd
2 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kthreadd
3 root 20 0 0 0 0 S 0.0 0.0 0:00.02 ksoftirqd/0

```

show system disk-space

To display information about the system disk space, use the **show system disk-space** command in privileged EXEC mode.

show system disk-space

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC (#)

Command History

Release	Modification
3.6.1	This command was introduced.

Example

```

nfvis# show system disk-space
          ASSOCIATED
          PHYSICAL   TOTAL  SIZE  SIZE    USE
DISK NAME  DISK       SIZE  USED  AVAILABLE PERCENT
-----
lv_data    sdf2         45G   321M   42G      1%
lv_var     sdf2         2.0G   461M   1.4G     26%
lv_root    sdf2         7.8G   1.7G   5.7G     23%
extdatastore1  sdd         917G   77M   871G     1%

```

show system file-handles

To display information about the system file handles, use the **show system file-handles** command in privileged EXEC mode.

show system file-handles

Syntax Description	This command has no arguments or keywords.
---------------------------	--

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	3.6.1	This command was introduced.

Example

```
nfvis# show system file-handles
2848    0          780124
```


show system processes

To display information on the processes in the system, use the **show system processes** command in privileged EXEC mode.

```
show system processes [process process-name]
```

Syntax Description	process <i>process-name</i> (Optional) Name of the process.
Command Default	Display information on all the processes in the system.
Command Modes	Privileged EXEC (#)
Command History	Release Modification
	3.5.1 This command was introduced.

Example

```
nfvis# show system processes
PID CPU MEM VSZ RSS START TIME CMD
-----
USER PID %CPU %MEM VSZ RSS TTY STAT
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
root 1 0.0 0.0 192156 7424 ? Ss
```

show system services

To display information on the services in the system, use the **show system services** command in privileged EXEC mode.

```
show system services [service service-name]
```

Syntax Description	service <i>service-name</i> (Optional) Name of the service.
---------------------------	--

Command Default	Display information on all the services in the system.
------------------------	--

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release Modification
	3.5.1 This command was introduced.

Example

```
nfvis# show system services service auditd.service
UNIT          LOAD    ACTIVE SUB    DESCRIPTION
-----
auditd.service loaded active running Security
```

show system status

To display system defaults and services status, use the **show system status** command in privileged EXEC mode.

```
show system status [diagnostics entity-name [status | type]]
```

Syntax Description	<i>entity-name</i> (Optional) Name of the entity or service.
	status (Optional) Display the entity or service status.
	type (Optional) Display the type of the entity or service.
Command Default	Show the status of all the entities in the system.
Command Modes	Privileged EXEC (#)
Command History	Release Modification
	3.5.1 This command was introduced.

Example

```
nfvis# show system status diagnostics wan-br
NAME      STATUS  TYPE
-----
wan-br    OK      default-bridge
```

show platform-detail

To display the hardware information, port details, switch details and software packages related to the platform, use the **show platform-detail** command in privileged EXEC mode.

show platform-detail [**hardware_info** | **port_detail** | **software_packages** | **switch_detail**]

Syntax Description	hardware_info	The hardware information of the platform.
	port_detail	The details of the ports used by the platform.
	software_packages	The software packages installed on the platform.
	switch_detail	The details of the switch on the platform.
Command Default	None	
Command Modes	Privileged EXEC (#)	
Command History	Release	Modification
	3.5.1	This command was introduced.

show version

To display the name, version number and build date of the NFVIS software that is currently running in the system, use the **show version** command in privileged EXEC mode

show version [**build-date** | **name** | **version**]

Syntax Description	<p>build-date (Optional) The build date of the version.</p> <p>name (Optional) The name of the version.</p> <p>version (Optional) The version number of the version.</p>				
Command Default	Displays the name, version number, and build date of Cisco Enterprise NFVIS.				
Command Modes	Privileged EXEC (#)				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.5.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.5.1	This command was introduced.
Release	Modification				
3.5.1	This command was introduced.				

Example

The following is the sample output from the **show version** command:

```
nfvis# show version
version name "Enterprise NFV Infrastructure Software"
version version 3.5.1-FC4
```

show free-memory

To display information about free memory, use the **show free-memory** command in privileged EXEC mode.

show free-memory

Syntax Description	This command has no arguments or keywords.				
Command Default	None				
Command Modes	Privileged EXEC (#)				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.7.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.7.1	This command was introduced.
Release	Modification				
3.7.1	This command was introduced.				

Example

```
nfvis# show free-memory
total used free shared buff/cache available
Mem: 128660 2761 120879 15 5020 125222
Swap: 16383 0 16383
```

show certificate

To show all certificates and related files in the system, use the **show certificate** command in privileged EXEC mode.

show certificate

Syntax Description	This command has no keywords or parameters.
---------------------------	---

Command Default	None
------------------------	------

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	3.7.1	This command was introduced.

Example

```

nfvis# show certificates
      File Name           Type           Last Modified           Size
ca-bundle.legacy.crt    ca-trust       Wed Mar 15 12:08:40 2017    59653
ca-bundle.trust.crt     ca-trust       Fri Oct 6 10:39:53 2017    346654
email-ca-bundle.pem    ca-trust       Fri Oct 6 10:39:53 2017    208874
tls-ca-bundle.pem      ca-trust       Fri Oct 6 10:39:53 2017    262042
objsign-ca-bundle.pem  ca-trust       Fri Oct 6 10:39:53 2017    208976
server.key              nginx          Fri Oct 6 11:06:12 2017     1679
server.crt              nginx          Fri Oct 6 11:06:12 2017     964
server.key              self-signed    Fri Oct 6 11:06:12 2017    1679
server.csr              self-signed    Fri Oct 6 11:06:12 2017     887
server.crt              self-signed    Fri Oct 6 11:06:12 2017     964
ca-bundle.crt           tls            Fri Oct 6 10:39:53 2017    262042
ca-bundle.trust.crt    tls            Fri Oct 6 10:39:53 2017    346654
cert.pem                tls            Fri Oct 6 10:39:53 2017    262042

```

show file

To show the contents of a file, use the **show file** command in privileged EXEC mode.

```
show file filepath_name
```

Syntax Description	<i>filepath_name</i> Specifies the location and name of the file.				
Command Default	None				
Command Modes	Privileged EXEC (#)				
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.7.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.7.1	This command was introduced.
Release	Modification				
3.7.1	This command was introduced.				

Example

```
nfvis# show file /data/intdatastore/logs/2017-10/confd_devel.log-20171008
<DEBUG> 7-Oct-2017::19:30:08.444 nfvis confd[3626]: devel-cdb connect from python
<DEBUG> 7-Oct-2017::19:30:08.444 nfvis confd[3626]: devel-cdb client python has pid 3724/174
<DEBUG> 7-Oct-2017::19:30:08.444 nfvis confd[3626]: devel-cdb new session on operational
for python
...
```


show cores

To show crash core files, run the **show cores** command in privileged EXEC mode.

show cores

Syntax Description

This command has no keywords or parameters.

Command Default

None

Command Modes

Privileged EXEC (#)

Command History

Release Modification

3.7.1	This command was introduced.
-------	------------------------------

Usage Guidelines

None

```
nfvis# show cores
```

```
Local storage:
```

```
File Name
```

```
Last Modified
```

```
Size
```

show nfv_mode

To show the NFV mode, use the **show nfv_mode** command in privileged EXEC mode.

show nfv_mode

Syntax Description	This command has no keywords or parameters.
---------------------------	---

Command Default	None
------------------------	------

Command Modes	Privileged EXEC (#)
----------------------	---------------------

Command History	Release	Modification
	3.7.1	This command was introduced.

```
nfvis# show nfv_mode
nfv_mode: vbranch_nfv
```