

FSOS VPN Command Line Reference User Guide

FSOS VPN Command Line Reference User Guide



Contents

- [1 VRF Commands](#)
- [2 Documents / Resources](#)
- [3 Related Posts](#)

VRF Commands

ip vrf

To configure a VPN routing and forwarding (VRF) routing table, use the `ip vrf` command in global configuration mode. To remove a VRF routing table, use the `no` form of this command.

Command Syntax

- **ip vrf VRF:** NAME
- **no ip vrf:** VRF-NAME
- **VRF-NAME:** VPN Routing/Forwarding instance name
- **Command Mode**
- Global Configuration

Default

- None
- **Usage**
- None

Examples

- Switch(config)# ip vrf ComA
- Switch(config-vrf)# route-target both 100:2
- Switch(config-vrf)# route-target import 200:1

Related Commands

ip vrf forwarding

show ip vrf

To show the set of defined VRFs and associated interfaces, use the show ip vrf command in Privileged EXEC mode.

Command Syntax

show ip vrf (bgp (brief | detail) | interfaces | ospf | rip | VRF-NAME)

- **bgp**: Border Gateway Protocol (BGP)
- **interfaces**: Show VPN Routing/Forwarding interface information
- **ospf**: Open Shortest Path First (OSPF)
- **rip**: Routing Information Protocol (RIP)
- **VRF-NAME**: VPN Routing/Forwarding instance name
- **brief**: Brief VPN Routing/Forwarding instance information
- **detail**: Detailed VPN Routing/Forwarding instance information

Command Mode

Privileged EXEC

- **Default**
 - None
- **Usage**
 - None
- **Examples**
 - Switch# show ip vrf
- **Related Commands**
 - None

ip vrf forwarding

To associate a VPN routing and forwarding (VRF) instance with an Layer3 interface , use the ip vrf forwarding command in interface configuration mode . To disassociate a VRF, use the no form of this command. Command Syntax

- **ip vrf forwarding** VRF-NAME
- **no ip vrf forwarding**: VRF-NAME
- **VRF-NAME**: VPN Routing/Forwarding instance name

Command Mode

Interface configuration

Default

None

Usage

Executing this command on an interface removes the IP address on this interface, The IP address should be reconfigured.

Examples

- Switch# configure terminal
- Switch(config)# ip vrf ComA
- Switch(config-vrf)# exit
- Switch(config)# interface eth-0-1
- Switch(config-if)# no switchport
- Switch(config-if)# ip vrf forwarding ComA

Related Commands

- **ip:** vrf
- **ip:** route vrf

ip route vrf

To establish static routes for a VPN routing and forwarding (VRF) instance, use the ip route vrf command in global configuration mode. To disable static routes, use the no form of this command.

Command Syntax

- **ip route vrf VRF-NAME:** DST_NET NH_ADDR
- **no ip route vrf:** VRF-NAME DST_NET NH_ADDR

VRF-NAME	VPN Routing/Forwarding instance name
DST_NET	Destination IP subnet, the format can be target IP address with masklen(A.B.C.D/M) or target IP address with netmask (A.B.C.D A.B.C.D)
NH_ADDR	Next-hop IP address, the format should be A.B.C.D

- **Command Mode**
- Global Configuration
- **Default**
- None
- **Usage**
- None

Examples

Switch(config)# ip route vrf VPN-NAME 2.2.2.0/24 1.1.1.2

Related Commands

- **show ip route vrf**
- **clear ip route vrf**

arp vrf

To add a permanent entry in the Address Resolution Protocol (ARP) cache for VRF, use the `arp vrf` command in global configuration mode. To remove an entry from VRF ARP cache, enter the `no` form of this command.

Command Syntax

- **arp vrf:** VRF_NAME A.B.C.D MAC
- **no arp:** vrf VRF_NAME A.B.C.D

VRF-NAME	VPN Routing/Forwarding instance name
A.B.C.D	IP address of the ARP entry
MAC	Hardware address of the ARP entry in HHHH.HHHH.HHH format

Command Mode

- Global Configuration
- **Default**
- None
- **Usage**
- None

Examples

- Switch# configure terminal
- Switch(config)# arp vrf vpn3 1.1.1.1 0000.1111.2222

Related Commands

- **show ip arp vrf:** VRF-NAME
- **clear ip arp vrf:** VRF-NAME A.B.C.D

show ip arp vrf

Use this command to show arp entry in VRF instance.

Command Syntax

show ip arp vrf: VRF-NAME

VRF-NAME VPN: Routing/Forwarding instance name

Command Mode

Privileged EXEC

Default

None

Usage

None

Examples

This example shows how to display all arp entry in the arp table of the VRF. Swith# show ip arp vrf ComA

```
Protocol Address Age (min) Hardware Addr Interface Internet 1.1.1.1 – 0000.1111.2222
```

Related Commands

arp vrf

clear ip arp vrf

Use this command to refresh a specific dynamic ARP entry from ARP cache for the VRF.

Command Syntax

```
clear ip arp vrf VRF-NAME A.B.C.D
```

- **VRF-NAME:** VPN Routing/Forwarding instance name
- **A.B.C.D:** Dynamic learned ARP entry IP address

Command Mode

Privileged EXEC

Default

None

Usage

None

Examples

- This example shows how to refresh a dynamic arp entry in VRF.
- Switch(config)# clear ip arp vrf ComA 1.1.1.1

Related Commands

arp vrf

ping vrf

Use this command to ping address in VRF.

Command Syntax

```
ping vrf VRF-NAME WORD
```

- **VRF-NAME:** VPN Routing/Forwarding instance name
- **WORD:** Ping destination address or hostname

Command Mode

Privileged EXEC

Default

None

Usage

None

Examples

Switch# ping vrf vpn 1.1.1.1

- PING 1.1.1.1 (1.1.1.1) 56(84) bytes of data.
- 64 bytes from 1.1.1.1: icmp_seq=0 ttl=64 time=0.114 ms
- 64 bytes from 1.1.1.1: icmp_seq=1 ttl=64 time=0.087 ms
- 64 bytes from 1.1.1.1: icmp_seq=2 ttl=64 time=0.087 ms
- 64 bytes from 1.1.1.1: icmp_seq=3 ttl=64 time=0.097 ms
- 64 bytes from 1.1.1.1: icmp_seq=4 ttl=64 time=0.133 ms
- — 1.1.1.1 ping statistics —
- 5 packets transmitted, 5 received, 0% packet loss, time 4041ms
- rtt min/avg/max/mdev = 0.087/0.103/0.133/0.020 ms, pipe 2

Related Commands

None

traceroute vrf

Use this command to trace route in VRF.

Command Syntax

traceroute vrf VRF-NAME WORD

- **VRF-NAME:** VPN Routing/Forwarding instance name
- **WORD:** Trace route destination address or hostname
- **Command Mode**
- Privileged EXEC
- **Default**
- None
- **Usage**
- None

Examples

Switch# traceroute vrf vpn 1.1.1.1

- traceroute to 1.1.1.1 (1.1.1.1), 30 hops max, 38 byte packets
- 1 1.1.1.1 (1.1.1.1) 0.222 ms 0.169 ms 0.169 ms

Related Commands

None

telnet vrf

Use this command to telnet in VRF.

Command Syntax

telnet vrf VRF-NAME WORD

- **VRF-NAME:** VPN Routing/Forwarding instance name
- **WORD:** The destination address or hostname for telnet

Command Mode

Privileged EXEC

Default

None

Usage

None

Examples

Switch# telnet vrf vpn 9.9.9.2

- Trying 9.9.9.2...
- Connected to 9.9.9.2.
- Escape character is '^']
- Fedora Core release 4 (Stentz)
- Kernel 2.6.32.23 on an i686
- login: root
- Password:

Related Commands

None

rd

Use this command to set route distinguisher.

Command Syntax

rd RD-VALUE

RD-VALUE: Route distinguisher value. ASN:nn or IP-address:nn

- **Command Mode**
- VRF Mode
- **Default**
- None
- **Usage**
- None

Examples

Switch(config-vrf)# rd 1.1.1.1:1

Related Commands

None

route-target

Use this command to set route target.

Command Syntax

route-target (both | export | import) RT-VALUE

- **both:** Import and export
- **export:** Export
- **import:** Import
- **RT-VALUE:** Route-target value. ASN:nn or IP-address:nn

Command Mode

VRF Mode

Default

None

Usage

None

Examples

Switch(config-vrf)# route-target import 100:1

Related Commands

None

import map

Use this command to set import map.

Command Syntax

import map WORD

WORD Pointer to route-map entries

Command Mode

VRF Mode

Default

None

Usage

None

Examples

Switch(config-vrf)# import map 100

Related Commands

export map

export map

Use this command to set export map.

Command Syntax

export map WORD

WORD Pointer to route-map entries

Command Mode

VRF Mode

Default

None

Usage

None

Examples

Switch(config-vrf)# export map 100

Related Commands

import map

router-id

Use this command to set router-id.

Command Syntax

router-id A.B.C.D

A.B.C.D Router identifier in IP address format

Command Mode

VRF Mode

Default

None

Usage

None

Examples

Switch(config-vrf)# router-id 1.1.1.1

Related Commands

show ip vrf

description

Use this command to specific VRF description.

Command Syntax

description LINE

LINE: Characters describing this VRF, the name length should be no more than 20 **Command Mode**

VRF Mode

Default

None

Usage

None

Examples

Switch(config-vrf)# description VrfName1

Related Commands

show ip vrf

clear ip route vrf static

Use this command to clear static routes VPN Routing/Forwarding instance.

Command Syntax

clear ip route vrf VRF-NAME static

- **VRF-NAME:** VPN Routing/Forwarding instance name

Command Mode

Privileged EXEC

Default

None

Usage

None

Examples

Switch# clear ip route vrf 100 static

Related Commands

ip route vrf



Documents / Resources

 FSOS VPN Command Line Reference	FS FSOS VPN Command Line Reference [pdf] User Guide FSOS VPN Command Line Reference, FSOS, VPN Command Line Reference, Command Line Reference, Line Reference
---	--