

Monitor VOS Devices in Real Time

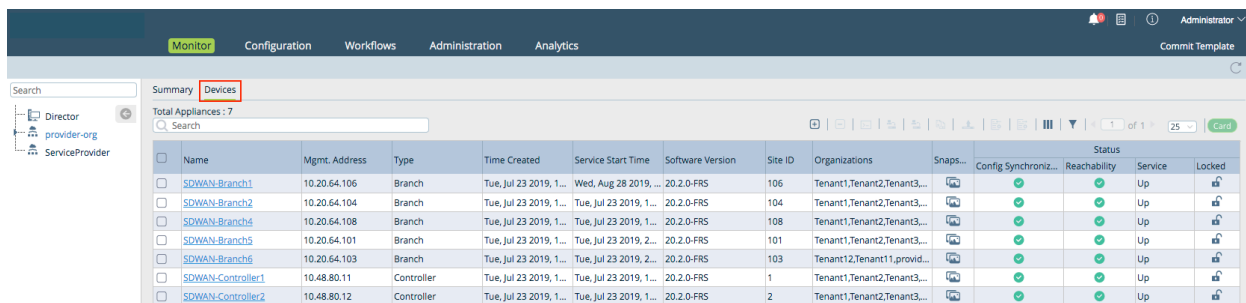
 For supported software information, click [here](#).

The Versa Director node, in conjunction with Versa Analytics, can poll Versa Operating System™ (VOS™) devices in real time to gain insight into what is happening on the devices. You can display this real-time information to gather information and to assist in troubleshooting, as described in this article.

From a Director node, you can monitor the Director node itself, provider organizations, tenants, and VOS devices. For more information, see [Monitor VOS Devices and Organizations](#).

Access Real-Time Monitoring

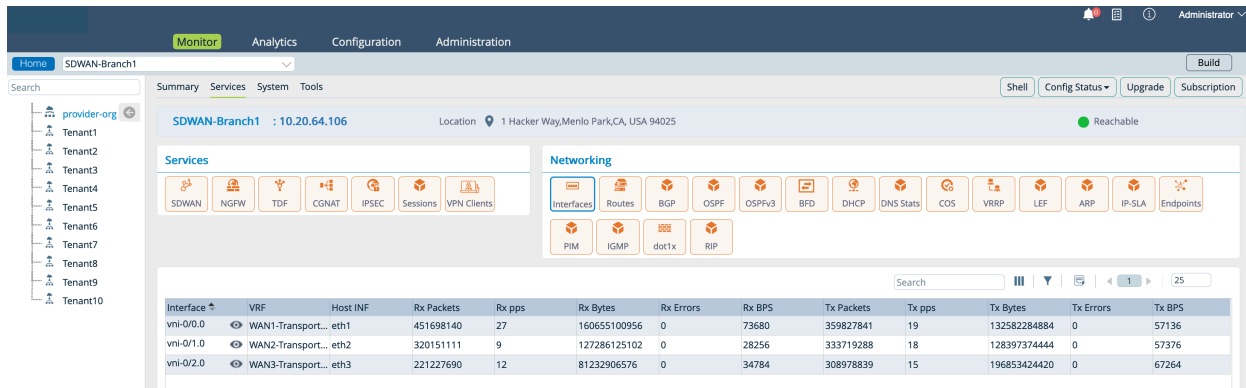
1. In Director view, select the Monitor tab in the top menu bar.
2. Select a provider organization in the left menu bar.
3. Select the Devices tab in the horizontal menu bar.



The screenshot shows the Versa Director interface. The top navigation bar includes 'Monitor', 'Configuration', 'Workflows', 'Administration', and 'Analytics'. The left sidebar shows a tree view with 'Director', 'provider-org', and 'ServiceProvider'. The 'Monitor' tab is active, and the 'Devices' sub-tab is selected. Below the sub-tab, there is a search bar and a table of appliances. The table has columns for Name, Mgmt. Address, Type, Time Created, Service Start Time, Software Version, Site ID, Organizations, Snaps..., Config Synchroniz..., Status (Reachability, Service, Locked), and a 'Card' button. The table lists several SD-WAN branches and controllers, all with a status of 'Up'.

Name	Mgmt. Address	Type	Time Created	Service Start Time	Software Version	Site ID	Organizations	Snaps...	Config Synchroniz...	Status	Service	Locked
SDWAN-Branch1	10.20.64.106	Branch	Tue, Jul 23 2019, 1...	Wed, Aug 28 2019, ...	20.2.0-FRS	106	Tenant1,Tenant2,Tenant3...				Up	
SDWAN-Branch2	10.20.64.104	Branch	Tue, Jul 23 2019, 1...	Tue, Jul 23 2019, 1...	20.2.0-FRS	104	Tenant1,Tenant2,Tenant3...				Up	
SDWAN-Branch3	10.20.64.108	Branch	Tue, Jul 23 2019, 1...	Tue, Jul 23 2019, 1...	20.2.0-FRS	108	Tenant1,Tenant2,Tenant3...				Up	
SDWAN-Branch5	10.20.64.101	Branch	Tue, Jul 23 2019, 1...	Tue, Jul 23 2019, 2...	20.2.0-FRS	101	Tenant1,Tenant2,Tenant3...				Up	
SDWAN-Branch6	10.20.64.103	Branch	Tue, Jul 23 2019, 1...	Tue, Jul 23 2019, 2...	20.2.0-FRS	103	Tenant12,Tenant11,provid...				Up	
SDWAN-Controller1	10.48.80.11	Controller	Tue, Jul 23 2019, 1...	Tue, Jul 23 2019, 1...	20.2.0-FRS	1	Tenant1,Tenant2,Tenant3...				Up	
SDWAN-Controller2	10.48.80.12	Controller	Tue, Jul 23 2019, 1...	Tue, Jul 23 2019, 1...	20.2.0-FRS	2	Tenant1,Tenant2,Tenant3...				Up	

4. In the table in the main pane, click the name of a tenant. The view changes to Appliance view.



The main pane has the following tabs in the horizontal menu bar. The following sections describes each of the tabs.:

- Summary
- Services
- System
- Tools

Summary Tab

Select the Summary tab in the horizontal menu bar to display panes that show the following general overview information about the VOS device. The following sections describe each of the panes.

- CPE interfaces—Displays information about the device's CPE interfaces and the traffic transiting them
- SD-WAN Application Traffic—Displays SD-WAN traffic flows between VOS devices and SLA performance in real time
- Recent Events—Displays the recent alarms received from the VOS device
- Health Monitor—Displays the current health of the VOS device
- Policy Violations—Displays the SD-WAN policy violations that occurred on the VOS device
- Appliance Activity—Displays the top applications that are going through the VOS device
- Usage—Displays the current bandwidth usage

The screenshot shows the SD-WAN Branch1 Monitor page. The top navigation bar includes Home, SDWAN-Branch1, Monitor, Analytics, Configuration, and Administration. The left sidebar lists tenants from Tenant1 to Tenant10. The main content area displays the following sections:

- Summary:** SDWAN-Branch1 : 10.20.64.106, Location: 1 Hacker Way, Menlo Park, CA, USA 94025, Status: Reachable.
- CPE Interfaces:** A table showing interface details for WAN1, WAN2, and WAN3.
- Health Monitor:** A section showing system health metrics like Config Sync Status, Reachability Status, Service Status, Interfaces, BGP Adjacencies, IKE Status, and Paths.
- Policy Violations:** A section showing packet drop statistics for various reasons.
- Appliance Activity:** A section showing current usage in Kbps.

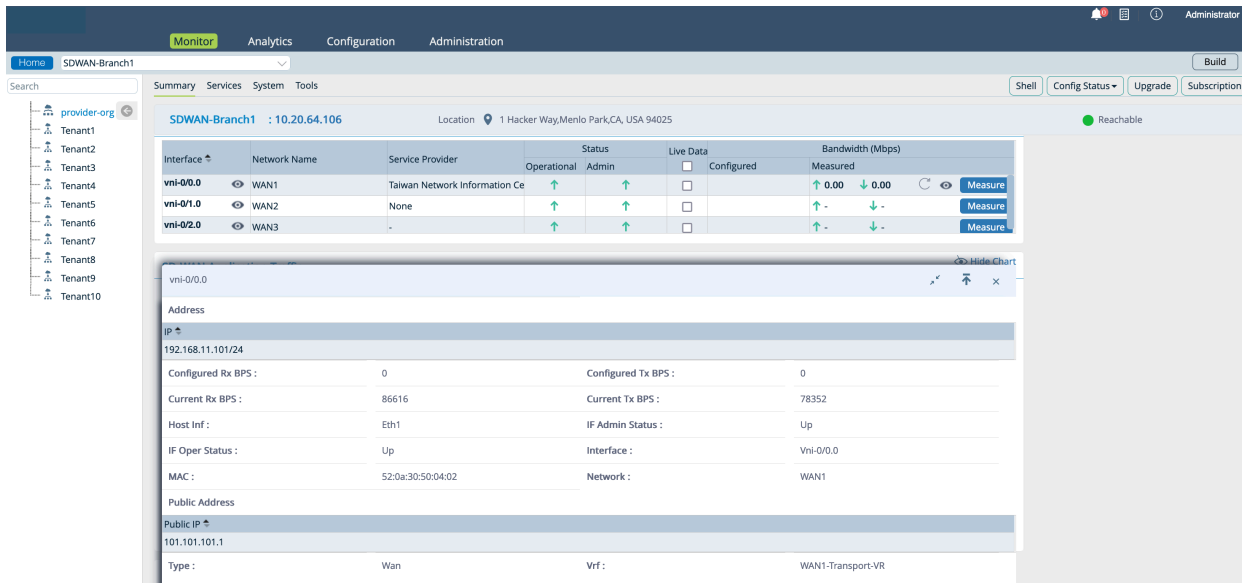
Interface	Network Name	Service Provider	Status		Live Data		Bandwidth (Mbps)		Measure
			Operational	Admin	Configured	Measured	Up	Down	
vni-0/0.0	WAN1	Taiwan Network Information Ce	↑	↑	<input type="checkbox"/>		↑ -	↓ -	Measure
vni-0/1.0	WAN2	None	↑	↑	<input type="checkbox"/>		↑ -	↓ -	Measure
vni-0/2.0	WAN3	-	↑	↑	<input type="checkbox"/>		↑ -	↓ -	Measure

CPE Interfaces

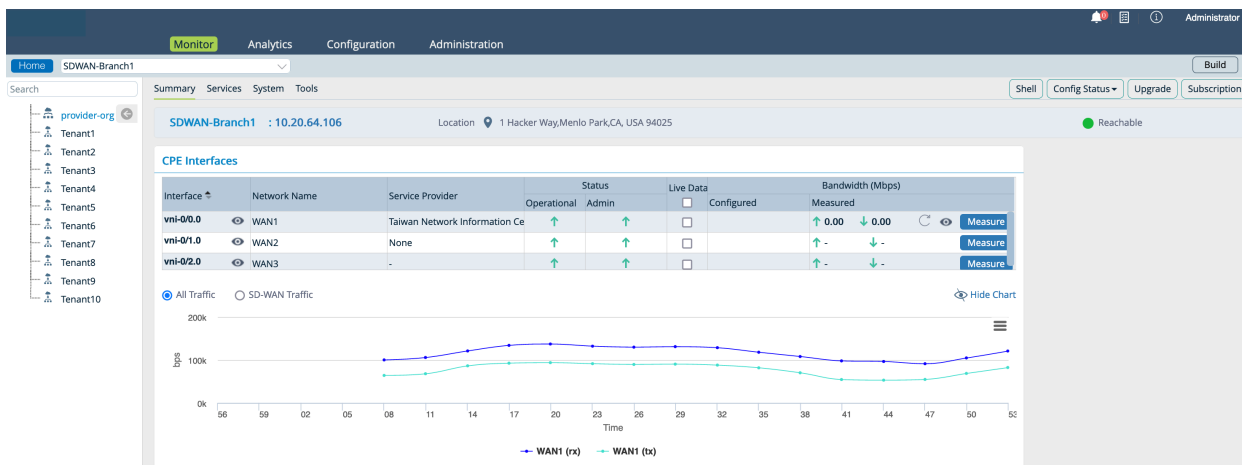
The CPE Interfaces pane displays information about the device's CPE interfaces and the traffic transiting them. You can display transmission data for all traffic or all SD-WAN traffic, and the data is updated every 3 seconds.

This screenshot is a zoomed-in view of the CPE Interfaces section from the previous image. It shows the table with columns for Interface, Network Name, Service Provider, Status (Operational, Admin), Live Data (Configured, Measured), and Bandwidth (Mbps) with up/down arrows and a Measure button for each row.

To view details about an interface, click the Eye icon in the Interface column. The following popup window displays at the bottom of the screen:



Click Live Data to display real-time transmission data, either for all traffic or for SD-WAN traffic only. The data on the graph is updated every 3 seconds.



SD-WAN Application Traffic

The SD-WAN Application Traffic pane displays real-time information about the SD-WAN traffic being transmitted between branches and the SD-WAN traffic that is affected by a policy application rule. Select the following fields to display information:

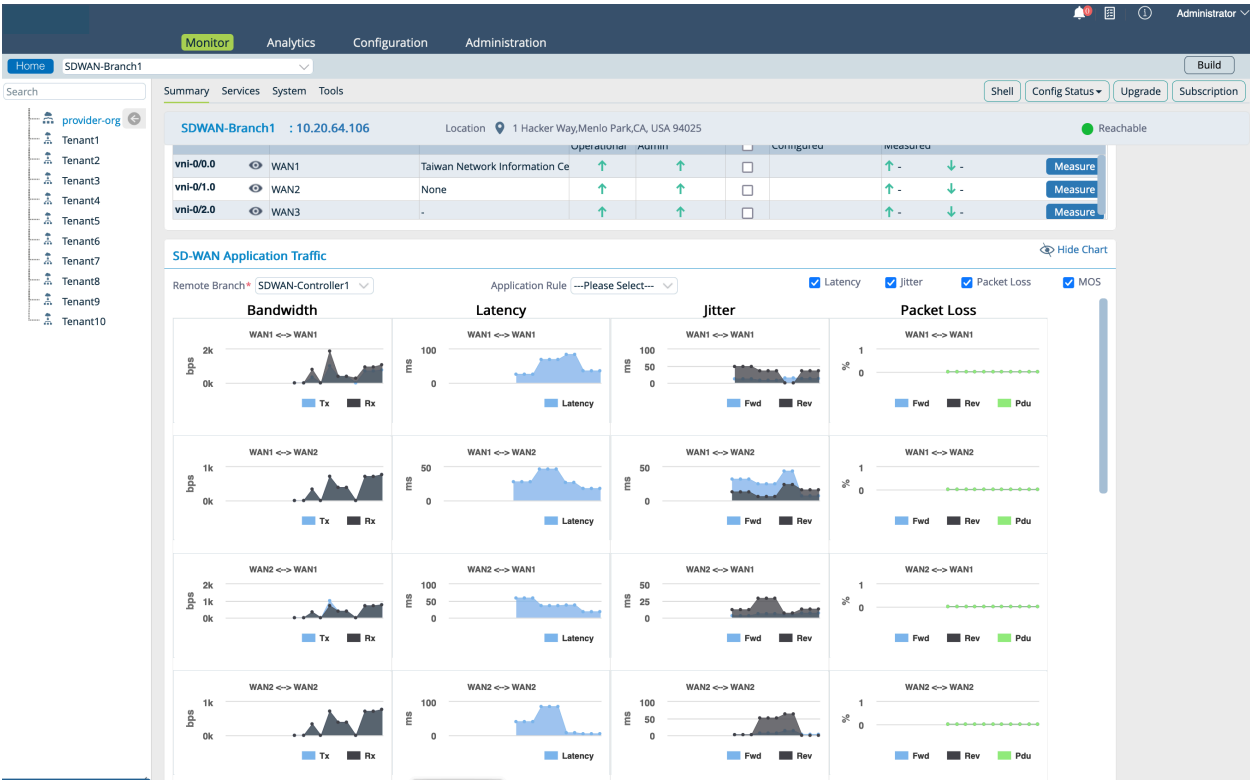
- Remote Branch—Select the SD-WAN branch whose traffic to display. The screen displays traffic for each of that branch's interfaces.
- Application Rule—Select the policy application rule to view traffic affected by the rule.
- Latency—Click to display the interface's latency.
- Jitter—Click to display the interface's jitter.

https://docs.versa-networks.com/Secure_SD-WAN/03_Troubleshooting/Monitor_VOS_Devices_in_Real_Time

Updated: Wed, 23 Oct 2024 08:07:15 GMT

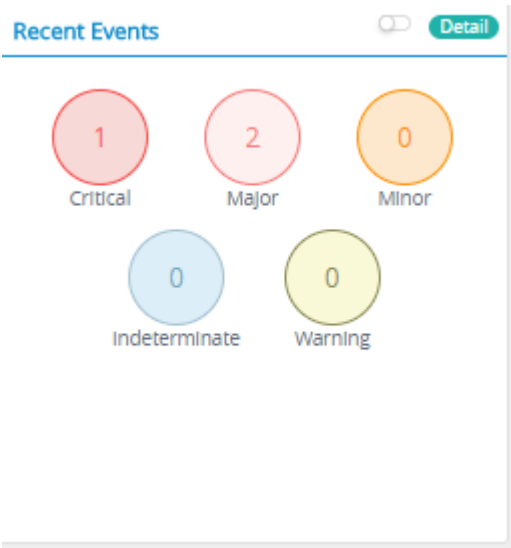
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- Packet Loss—Click to display the interface's packet loss.
- MOS—Click to display the interface's MOS values.



Recent Events

The Recent Events pane displays the recent events and alarms that have occurred on the VOS device, showing a summary of all alarms by severity level—critical, major, minor, indeterminate, and warning.



Click the **Detail** Details button to display the events and alarms in tabular format.

<input type="checkbox"/>	Device Name	Organization Name	Alarm Type	Handling State	Severity	Status Change Time	Alarm Text	Serial Number
<input type="checkbox"/>	Site2Branch2	Provider	cpu utilization		critical	Fri, Jun 08 2018, 09:18	CPU utilization (100%) has crossed a hard limit, system m...	Site2Branch2
<input type="checkbox"/>	Site2Branch2	Provider	nexthop-down		critical	Thu, Jun 07 2018, 18:28	NextHop 172.16.255.1/801 Transport VR is down	Site2Branch2
<input type="checkbox"/>	DC2-Hub2	Provider	nexthop-down		critical	Thu, Jun 07 2018, 18:27	NextHop 172.16.255.1/801 Transport VR is down	DC2-Hub2
<input type="checkbox"/>	DC2-Hub2	Provider	nexthop-down		critical	Thu, Jun 07 2018, 18:27	NextHop 172.16.255.1/802 Transport VR is down	DC2-Hub2
<input type="checkbox"/>	Site2Branch1	Provider	nexthop-down		critical	Thu, Jun 07 2018, 18:20	NextHop 172.16.255.2/801 Transport VR is down	Site2Branch1
<input type="checkbox"/>	Site1Branch1	Provider	cpu utilization		critical	Wed, Jun 06 2018, 19:20	CPU utilization (99%) has crossed a hard limit, system m...	Site1Branch1
<input type="checkbox"/>	Site2Branch1	Provider	cpu utilization		critical	Wed, Jun 06 2018, 19:09	CPU utilization (99%) has crossed a hard limit, system m...	Site2Branch1

Click the slider at the top of the pane to have the events and alarms statistics automatically update every 10 seconds.

VOS Device Health Monitor

The Health Monitor pane displays health-related information about the VOS device showing the following:

- Configuration Sync Status—Whether the configuration on the VOS device is in sync with the configuration in the Director node's database
- Reachability Status—Whether the VOS device is reachable from the Director node
- Service Status—Status of the services running on the VOS device
- Interfaces—Number of interfaces that are up (green) and down (red)
- BGP Adjacencies—Number of BGP peering sessions that are up (green) and down (red)
- IKE Status—Number of IKE connections that are up (green) and down (red)
- Paths—Number of SD-WAN paths that are up (green) and down (red)

Health Monitor

Config Sync Status

IN_SYNC

Reachability Status

REACHABLE

Service Status

GOOD

Interfaces

3

0

BGP Adjacencies

4

0

IKE Status

2

0

Paths

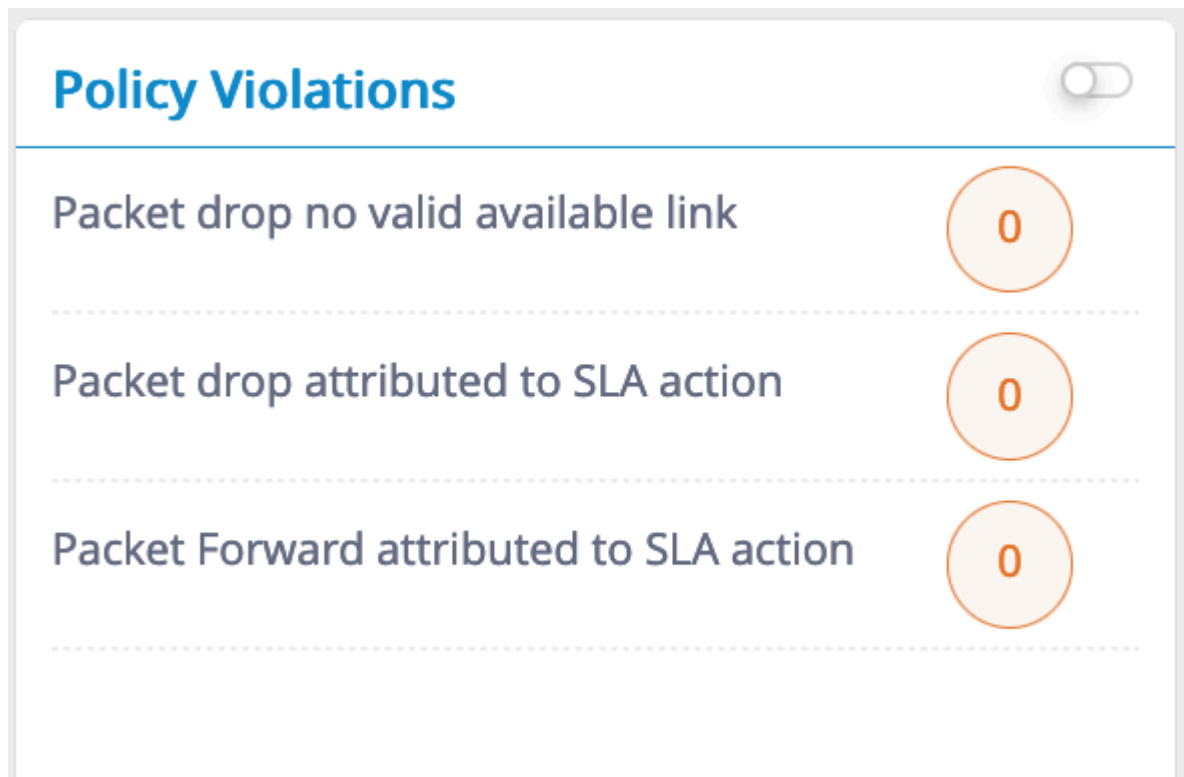
10

0

Click the slider at the top of the pane to have the health statistics automatically update every 10 seconds.

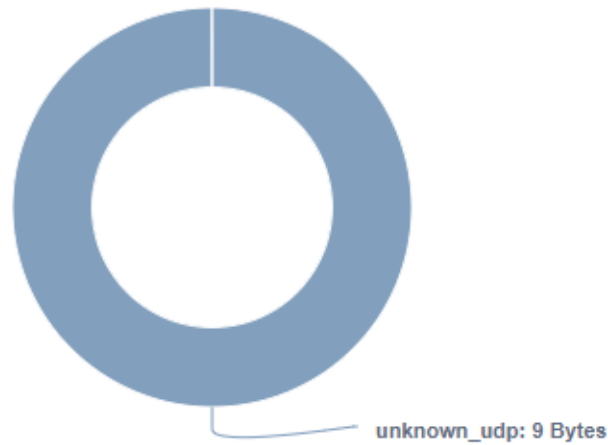
Policy Violations

The Policy Violations pane displays the number of SD-WAN policy violations that occurred on the VOS device.



Appliance Activity

The Appliance Activity pane displays the top applications that are going through the VOS device

Top Applications
Sessions

Click the **Detail** button to display the VOS device activity in tabular format.

Click the Tool icon to change the units to use to display VOS device activity:

- Sessions
- Transactions
- Total bytes forward
- Total bytes reverse

Services Tab

The services section is a quick way to get information from a branch device without having to login to the CLI and run a command. This is useful for operations teams to track down an issue as well as for daily operational tasks which can include looking at traffic flows, or seeing the health of IPsec tunnels. The items show in the services section fall under two categories Services and Networking.

This section describes the services that you can monitor from this tab.

SD-WAN

- Sites—All the SD-WAN sites this specific branch has connectivity to.

Services

SDWAN

NGFW

CGNAT

IPSEC

Sessions

Networking

Interfaces

Routes

BGP

OSPF

OSPFv3

BFD

DHCP

DNS Stats

COS

VRRP

LEF

ARP

IP-SLA

Endpoints

PIM

IGMP

Aggregate Traffic

Application Metrics

Forwarding Profiles

Policies

Sessions

Sites

SLA End To End Paths

SLA Metrics

SLA Paths

Transport Paths

Web Proxy

Search

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▼

Site Name	Management IP	Type	Up Time	Connectivity Status	Controller
SDWAN-Branch1	10.1.64.106	local	1d:2h:13m:30s	-	no
SDWAN-Branch2	10.1.64.104	remote	1d:2h:11m:21s	Connected	no
SDWAN-Branch4	10.1.64.108	remote	1d:2h:11m:21s	Connected	no
SDWAN-Branch5	10.1.64.101	remote	1d:2h:11m:21s	Connected	no
SDWAN-Controller1	10.1.64.1	remote	1d:2h:11m:21s	Connected	yes
SDWAN-Controller2	10.1.64.2	remote	1d:2h:11m:21s	Connected	yes

- **Aggregate Traffic**—From the branch you are on to another branch or a controller, you can look at the aggregate amount of traffic that has traversed over the encrypted or plain-text tunnels.

Aggregate Traffic

Application Metrics

Forwarding Profiles

Policies

Sessions

Sites

SLA End To End Paths

SLA Metrics

SLA Paths

Transport Paths

Web Proxy

SDWAN-Branch2

Search

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▼

Ptvi Index	Encap Type	Rx Pkts	Rx Bytes	Tx Pkts	Tx Bytes
1246	plaintext	0	0	0	0
1247	encrypted	114756	20654224	114756	20654224

- **Access Circuits**—From the branch you are on to another branch or a controller, you can look at each transport and see how much data has traversed over the plain-text or encrypted tunnels.

Services

SD-WAN

CGNAT

NGFW

IPSEC

Sessions

Interfaces

Routes

BGP

OSPF

OSPFv3

BFD

DHCP

DNS

VRRP

LEF

ARP

IP-SLA

Networking

Sites

Aggregate Traffic

Access Circuits

SLA Paths

SLA Metrics

Policies

Forwarding Profiles

Sessions

SD-WAN-Branch2

Search

Local Acti Name	Remote Acti Name	Encap Type	Local IP	Remote IP	Rx Pkts	Rx Bytes	Tx Pkts	Tx Bytes
BBI	BBI	plaintext	10.2.0.194	10.2.0.195	0	0	0	0
MPLS	MPLS	plaintext	10.2.0.194	10.2.0.195	0	0	0	0
BB1	BB1	encrypted	10.2.64.194	10.2.64.195	140000	28297100	4	720
MPLS	MPLS	encrypted	10.2.64.194	10.2.64.195	0	0	148347	28342480

98

- **SLA Paths**—From the branch you are on to another branch or a controller, you can look at what the current SLA paths by forwarding class to see if they are up, the last time they flapped and whether adaptive monitoring is active.

Aggregate Traffic

Application Metrics

Forwarding Profiles

Policies

Sessions

Sites

SLA End To End Paths

SLA Metrics

SLA Paths

Transport Paths

Controller1

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Path Handle	Fwd Class	Local WAN Link	Remote WAN Link	Local WAN Link ID	Remote WAN Link...	Adaptive Monito...	Conn State	Flaps	Last Flapped
70144	fc_nc	MPLS	MPLS	1	2	disable	up	2	4d14h09m
73984	fc_nc	Internet	Internet	2	1	disable	up	648	1d10h51m

- **SLA Metrics**—From the branch you are on to another branch or a controller, what the current SLA metrics are between the devices.

Aggregate Traffic Application Metrics Forwarding Profiles Policies Sessions Sites SLA End To End Paths SLA Metrics SLA Paths Transport Paths										
Controller1 Search III ▼										
Path Handle ↕	Fwd Class	Local WAN Link	Remote WAN Li...	Local WAN Link ...	Remote WAN Li...	Two Way Delay(...	Fwd Delay Var(...	Rev Delay Var(...	PDU Loss Ratio(...	Fwd Loss
70144	fc_nc	MPLS	MPLS	1	2	2	8	8	0.0	0.0
73984	fc_nc	Internet	Internet	2	1	2	7	7	0.0	0.0

- Policies—How many times a policy has been hit and the transmit and receive bytes/packets.
- Forwarding Profiles—The screen displays the forwarding profile statistics. The data includes the profile name, hit count, valid link drop count, SLA fail drop count, SLA fail forward count, and turn redirect count.

Aggregate Traffic Application Metrics Forwarding Profile Policies Sessions Sites SLA End To End Paths SLA Metrics SLA Paths Transport Paths Web Proxy

Search

☰ | ▼ | Clear


Name ↕	Hit Count	No Valid Link Drop Count	SLA Fail Drop Count	SLA Fail Fwd Count	Turn Redirect Count
Default-FP	0	0	0	0	0
yahoo-forwarding-profile	0	0	0	0	0

- Sessions—Active number of SD-WAN sessions going through the local VOS device.

Aggregate Traffic Application Metrics Forwarding Profiles Policies Sessions Sites SLA End To End Paths SLA Metrics SLA Paths Transport Paths

Search

⋮

SD-WAN Session Count	SD-WAN Session Created	SD-WAN Session Closed
0 	0	0

To search for SD-WAN sessions, click the eyeball and supply one of the following criteria:

- Source IP address/prefix
- Source port
- Destination IP address/prefix
- Destination port
- Protocol
- Predefined application
- Predefined URL category

Session Filter

Session Search Criteria

Session Type

SDWAN

Source IP Address/Prefix

Source Port

Destination IP Address/Prefix

Destination Port

Protocol

Predefined Application

Predefined URL Category

Reset

Filter

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CGNAT

- Rules—Hit count, forward packet/byte count and reverse packet/byte count for configured rules.

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IP-SLA

Endpoints

PIM

IGMP

Pools Rules Sessions

Rules

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III

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◀ 1 ▶

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Name	Hit Count	Forward Pkt Count	Forward Byte Count	Reverse Pkt Count	Reverse Byte Count
DIA-Rule-Tenant1-LAN-VR-WAN1	0	0	0	0	0
DNAT-WAN1-Inbound	0	0	0	0	0
RFC_1918_NoTranslate	0	0	0	0	0

- Pools—Usage of configured pools.

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DHCP

DNS Stats

COS

VRRP

LEF

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Pools Rules Sessions

Pools

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III

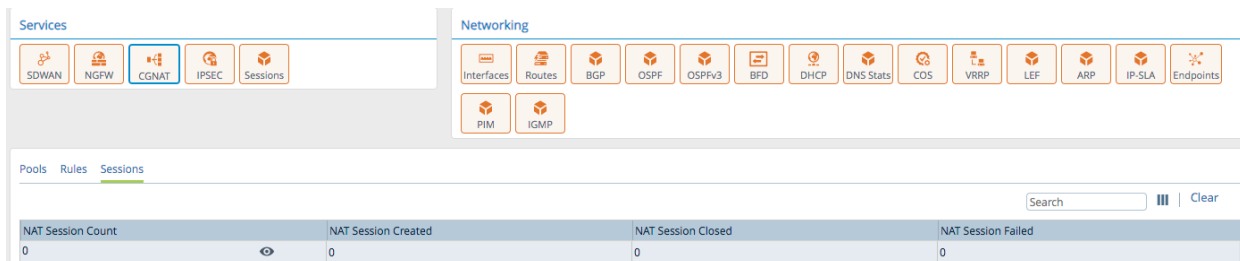
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◀ 1 ▶

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Pool Usage	Range Low	Range Name	Name	Range High	Any Alloc Failures	Provider Org	Any Free Failures	Routing Instance
0.0			DIA-Pool-WAN1		0	provider-org	0	WAN1-Transport-VR
0.0	172.16.11.10	range-WAN1-Inbound	DNAT-WAN1-Inbound	172.16.11.10	0	provider-org	0	Tenant1-LAN-VR
0.0	10.10.12.20	range-DNAT-44	DNAT_test	10.10.12.20	0		0	

- Sessions—NAT sessions created.



To search for CGNAT sessions, click the eyeball and supply one of the following criteria:

- Source IP address/prefix
- Source port
- Destination IP address/prefix
- Destination port
- Protocol
- Predefined application
- Predefined URL category

NGFW

- Zone Protection—Displays statistics about zone protection profiles.

Name	TCP Flood Sessions Dropped	UDP Flood Sessions Dropped	ICMP Flood Sessions Dropped	ICMP6 Flood Sessions Dropped	SCTP Flood Sessions Dropped	OIP Flood Sessions Dropped
Zone-protection-profile1	0	0	0	0	0	0

- DDoS—Displays the DDoS policy details.

Rule Name	Hit Count	Forward Pkt Count	Forward Byte Count	Reverse Pkt Count	Reverse Byte Count	Hit Rate	Inactive Session Count
access-policy-rule-1	0	0	0	0	0	0	0
Rule1	0	0	0	0	0	0	0

- Decryption—Displays decryption filter, with the following choices.
 - Global—Displays all the decryption data within the associated organization.
 - Profile—Displays the decryption data associated with user-defined profiles.
 - Policy—Displays the decryption data associated with user-defined policies.

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Anti Virus

Decryption

DoS Policies

File Filtering

IP Filtering

Persistent Action

Policies

Security Packages

Sessions

URL Filtering

User Identification

Vulnerability

Vulnerability Signature

Web Proxy

Zone Protection

Global

Search

|||

▼

Clear

Name	Err Sess Connect	Err Svc Connect	SSL Adc Sess	SSL APP Err	SSL Close	SSL Create	SSL Decrypt	SSL Encrypt	SSL Events	SSL Free	SSL Prxy Ignore	SSL Prxy Sess	SSL Prxy URL Lo...	SSL No Cfg	SSL Pkts
global-stats	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- **Policy**—Displays the hit count, forward packet/byte count, reverse packet/byte count, hit rate and inactive session count for configured NGFW rules.

Services

Networking

Anti Virus Decryption DoS Policies File Filtering IP Filtering Persistent Action Policies Security Packages Sessions URL Filtering User Identification Vulnerability Vulnerability Signature Web Proxy Zone Protection

Access-policy-1

Search

Clear

Rule Name	Hit Count	Forward Pkt Count	Forward Byte Count	Reverse Pkt Count	Reverse Byte Count	Hit Rate	Inactive Session Count
access-policy-rule-1	0	0	0	0	0		

websites.

- Antivirus—Select the antivirus type, scanning profile, and profile type from the drop-down lists.

The screenshot shows the 'Antivirus' configuration page. At the top, there are two tabs: 'Services' and 'Networking'. Under 'Services', there are icons for SDWAN, NGFW (selected), CGNAT, IPSEC, and Sessions. Under 'Networking', there are icons for Interfaces, Routes, BGP, OSPF, OSPFv3, BFD, DHCP, DNS Stats, COS, VRRP, LEF, ARP, IP-SLA, and Endpoints. Below these tabs, there is a navigation bar with various security and network management options. The main content area shows a 'Predefined Profile' dropdown set to 'Scan Web and Email Traffic' and a 'predefined-protocol' dropdown. Below this, there is a table showing protocol statistics.

protocol	av-flows-blocked	av-flows-allowed	av-num-ctx-switch
http	0	0	0
ftp	0	0	0
smtp	0	0	0
imap	0	0	0
pop3	0	0	0
mapi	0	0	0

- Vulnerability—Select the type of vulnerability profile from the drop-down list to view details:
 - User Defined—Refers to profiles as defined by an administrator.
 - Pre Defined—Refers to system-defined profiles.
 - Sessions—Refers to vulnerable sessions during the current system uptime.

The screenshot shows the 'Sessions' page in the Versa Networks management interface. At the top, there are two tabs: 'Services' and 'Networking'. Under 'Services', there are icons for SDWAN, NGFW (selected), CGNAT, IPSEC, and Sessions. Under 'Networking', there are icons for Interfaces, Routes, BGP, OSPF, OSPFv3, BFD, DHCP, DNS Stats, COS, VRRP, LEF, ARP, IP-SLA, and Endpoints. Below these tabs, there is a navigation bar with various security and network management options. The main content area shows a table with session statistics.

VSN ID	Session Count	Session Created	Session Closed	NAT Session Co...	NAT Session Cr...	NAT Session Clo...	Session Failed	Session Count ...	TCP Session Co...	UDP Session Co...	ICMP Session C...	Other Session C...
0	0	11051	11051	0	0	0	0	1000000	0	0	0	0

- Vulnerability Signature—Look into a profile or rule to see which vulnerabilities it is protecting against.

Services

SDWAN

NGFW

CGNAT

IPSEC

Sessions

Networking

Interfaces

Routes

BGP

OSPF

OSPFv3

BFD

DHCP

DNS Stats

COS

VRRP

LEF

ARP

IP-SLA

Endpoints

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Anti Virus

Decryption

DoS Policies

File Filtering

IP Filtering

Persistent Action

Policies

Security Packages

Sessions

URL Filtering

User Identification

Vulnerability

Vulnerability Signature

Web Proxy

Zone Protection

Pre Defined

Search

Clear

Name

All Anomaly Rules

All Attack Rules

Client Protection

Database Profile

ICS Profile

Lateral Movement Detection

Linux OS Profile

MAC OS Profile

Malware Profile

Server Protection

Versa Branch Profile

Versa Recommended Profile

Windows OS Profile

To see which signature ID is associated with a policy, click view:

Versa Recommended Profile - Signature

Signature Id	Name	Reference Type	Reference Id
1100326070	"Apple Safari Right-to-Lef...	"cve"	"CVE-2010-0049"
1100511020	"Microsoft Windows Mail ...	"cve"	"CVE-2010-0816"
1100825090	"FLOWBITS: Adobe Shock...		
1101012380	"Microsoft Windows Com...	"cve"	"CVE-2010-2746"
1111018130	"FLOWBITS: cdr file"	"tsl"	"TSL20111018-13"
1120514050	"FLOWBITS: Adobe Photo...	"tsl"	"TSL20120514-05"

- Security Package—Display the security package details, including the installation date, version, flavor, release date, update type, and installation status.

Services

SDWAN

ADC

NGFW

IPSEC

Sessions

Networking

Interfaces

Routes

BGP

OSPF

OSPFv3

BFD

DHCP

COS

VRRP

LEF

ARP

IP-SLA

Zone Protection

DoS Policies

Decryption

Policies

IP Filtering

URL Filtering

Anti Virus

Vulnerability

Vulnerability Signature

Security Packages

Sessions

User Identification

Search

Clear

Install Date

Version

Api Version

Flavor

Release Date

Update Type

Install Status

2018-01-1821:30:25

1137

11

premium

2018-01-05

full

Success

2018-10-2613:50:32

1486

11

premium

2018-10-26

full

Success

2019-01-1217:09:11

1573

11

premium

2019-01-09

full

Success

- Sessions—Display NGFW session details, including the total number of NGFW sessions, number of sessions created, number of sessions closed, total number of NAT sessions, number of NAT sessions created, number of NAT sessions closed, and number of NAT sessions failed.

IPsec

- Overview—IPsec details for the local VOS device.

Services

SDWANNGFWCGNATIPSECSessions

Networking

InterfacesRoutesBGP OSPF OSPFv3BFD DHCP DNS StatsCOSVRRP LEF ARP IP-SLAEndpointsPIMIGMP

Branch To BranchIKE HistoryIKE Security AssociationIPSec HistoryIPSec Security AssociationOverviewProfile Statistics

Search

|||

▼

Clear

Inbound Statistics												
ESP/AH Bytes	AH Packets	Anti-replay failu...	Anti-replay failu...	Packets droppe...	Packets droppe...	Packets droppe...	Packets droppe...	Packets droppe...	Packets droppe...	ESP Packets	IKE packets	IKE Packets - Tri...
67896099	0	0	0	0	0	0	0	0	0	0	32	32

- Branch to Branch—Connection details from the perspective of an IPsec profile.

Services

SDWANNGFWCGNATIPSECSessions

Networking

InterfacesRoutesBGP OSPF OSPFv3BFD DHCP DNS StatsCOSVRRP LEF ARP IP-SLAEndpointsPIMIGMP

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SDWAN-Controller1-Profile

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Peer Addr	Inbound SPI	In Bytes Rate	Outbound SPI	Out Bytes Rate	Cipher	Up Time	Next Rekey Time	Tunnel Status
10.1.0.108	0x501b006c	167	0x505b006a	0	aes-gcm	1d04h10m	01:33:53	UP
10.1.0.104	0x501b0068	171	0x505b006a	0	aes-gcm	1d04h10m	01:33:53	UP
10.1.0.101	0x501b0065	182	0x505b006a	0	aes-gcm	1d04h10m	01:33:53	UP

- IKE History—IKE history from the perspective of an IPsec profile.

Services

SDWANNGFWCGNATIPSECSessions

Networking

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Tunnel ID	Remote Gateway	VSN	IKE Version	Local Gateway	Local SPI	Remote SPI	Cipher	Authentication	Vpn Type	Flags
2	10.1.0.1	0	v2	10.1.0.106	0x2005f292c14d1ed	0x2006afffa91171	aes256-cbc	hmac-sha256-128	branch-sdwan	P I

- IKE Security Associations—IKE SA details from the perspective of an IPsec profile.

Services

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NGFW

CGNAT

IPSEC

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Routes

BGP

OSPF

OSPFv3

BFD

DHCP

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ARP

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IPsec History

IPsec Security Association

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||| ▾

Tunnel ID ▴	Remote Gateway	VSN	IKE Version	Local Gateway	Local SPI	Remote SPI	Cipher	Authentication	Vpn Type	Flags
2	10.1.0.1	0	v2	10.1.0.106	0x2005f292c14d1ed	0x2006afffad91171	aes256-cbc	hmac-sha256-128	branch-sdwan	P I

- IPsec History—IPsec history from the perspective of an IPsec profile.

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BGP

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Local Addr ↕	Peer Addr	Last Status	Last Status Timestamp
10.1.0.106	10.1.0.1	<div>Active (Rekey)</div>	2019-11-20T09:16:41.898236-08:00

- IPsec Security Associations—IPsec SA details from the perspective of an IPsec profile.

Services

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Routes

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OSPF

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IPSec History

IPSec Security Association

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Peer Addr	Inbound SPI	In Bytes Rate	Outbound SPI	Out Bytes Rate	Cipher	Up Time	Next Rekey Time	Tunnel Status
10.1.0.1	0x2002ea7	129	0x20064a2	0	aes-gcm	1d04h25m	00:07:39	UP

- Profile Statistics—Profile statistics on the local VOS device from the perspective of an IPsec profile.

Services

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Networking

Interfaces

PIM

Routes

IGMP

BGP

OSPF

OSPFv3

BFD

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IPSec History

IPSec Security Association

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SDWAN-Controller1-Profile

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Clear

Inbound Statistics

ESP/AH Bytes	AH Packets	Anti-replay failu...	Anti-replay failu...	Packets droppe...	Packets droppe...	Packets droppe...	Packets droppe...	Packets droppe...	Packets droppe...	Packets droppe...	ESP Packets	IKE packets	IKE Packets - Tri...	Packets
13339693	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sessions

Displays session tables for SD-WAN, CGNAT, and NGFW and allows you to search across all the tables.

Networking

- **Interfaces**—Displays the WAN and LAN interface statistics with respect to the organization associated with the device. The table shows the latest cumulative values at the time of polling after the interface is activated, unless a clear operation is performed. The packets per second (pps) and bits per second (bps) counters average over a maximum of 30 seconds. The pps and bps numbers represent the observable rate of a stable flow. For example, if the traffic drops to zero at the 20th second, the value of these averages drops to zero as well, and so the values of the first 20 seconds are not used to calculate the rate.

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NGFW

CGNAT

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Interfaces

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OSPFv3

BFD

DHCP

DNS Stats

COS

VRRP

LEF

ARP

IP-SLA

Endpoints

PIM

IGMP

Search

1

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Interface	VRF	Host INF	Rx Packets	Rx pps	Rx Bytes	Rx Errors	Rx BPS	Tx Packets	Tx pps	Tx Bytes	Tx Errors	Tx BPS
vni-0/0.0	WAN1-Transport-VR	eth1	3232902	33	1081937432	0	88800	3319830	32	1342955818	0	98168
vni-0/1.0	WAN2-Transport-VR	eth2	2331785	21	920951044	0	64840	2375202	23	902307024	0	70256
vni-0/2.0	WAN3-Transport-VR	eth3	1099872	9	423571100	0	30152	1142322	10	436846258	0	31752

To drill down to display the configured IP address, VRF, and interface status and type, click the eyeball.

vni-0/0.0			
Address			
IP			
192.168.21.101/24			
Configured Rx BPS :	0	Configured Tx BPS :	0
Current Rx BPS :	56776	Current Tx BPS :	69440
Host Inf :	Eth1	IF Admin Status :	Up
IF Oper Status :	Up	Interface :	Vni-0/0.0
MAC :	52:0a:30:50:05:02	Network :	WAN1
Public Address			
Public IP			
192.168.21.101			
Type :	Wan	Vrf :	WAN1-Transport-VR

- **Routes**—Display the IPv4 or IPv6 routes in a routing instance.

Services

Networking

provider-org-Control-VR IPv4

Dest Prefix	Interface Name	Protocol	Age	Next Hop
+0.0.0.0/0	ptvi40	BGP	1d00h10m	10.20.64.1
+0.0.0.0/0	ptvi41	BGP	1d00h10m	10.20.64.2
+10.0.2.0/24	ptvi40	BGP	1d00h10m	10.20.64.1
+10.0.34.0/24	ptvi40	BGP	1d00h10m	10.20.64.1
+10.0.66.0/24	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.0.1/32	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.0.1/32	ptvi41	BGP	1d00h10m	10.20.64.2
+10.1.0.2/32	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.0.2/32	ptvi41	BGP	1d00h10m	10.20.64.2
+10.1.0.101/32	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.0.101/32	ptvi41	BGP	1d00h10m	10.20.64.2
+10.1.0.104/32	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.0.104/32	ptvi41	BGP	1d00h10m	10.20.64.2
+10.1.0.106/32	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.0.106/32	ptvi41	BGP	1d00h10m	10.20.64.2
+10.1.0.108/32	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.0.108/32	ptvi41	BGP	1d00h10m	10.20.64.2
+10.1.64.1/32	ptvi40	BGP	1d00h10m	10.20.64.1
+10.1.64.1/32	ptvi41	BGP	1d00h10m	10.20.64.2
+10.1.64.2/32	ptvi40	BGP	1d00h10m	10.20.64.1

- BGP—Display the BGP neighbor adjacencies in a routing instance.

Services

Networking

provider-org-Control-VR

Neighbor IP	Sel Local Address	Sel Local Addr	Sel Local Port	Remote Addr Ty...	Sel Remote Port	Local Address T...	Local Addr	State	Total Sent Pref...	Total Received ...	Established Time	Local Port	Remote Port	Total Received ...	Total Tran
10.20.64.1	ipv4	10.20.64.106	0	ipv4	0	ipv4	10.20.64.106	Established	5	195	1d00h13m	42019	179	3517	3379
10.20.64.2	ipv4	10.20.64.106	0	ipv4	0	ipv4	10.20.64.106	Established	5	192	1d00h13m	42023	179	3518	3376

- OSPF—Display the OSPF neighbor adjacencies in a routing instance.

Services

Networking

Tenant1-LAN-VR

Neighbor Address	OSPF Instance	IF Name	Router ID	Operational Status	Priority	State
11.1.1.2	3015	vni-0/1.1	11.0.0.1	Up	1	FULL

- OSPFv3—Display the OSPFv3 neighbor adjacencies in a routing instance.

- Interface view

Services

Networking

Tenant1-LAN-VR Interfaces

IF Name	Ospf3 Process	Ospf3 Instance ID	State	Area	Designated Router	Backup Designated Router
vni-0/1.1	3015	1	BDR	0.0.0.0	11.0.0.1	1.1.1.1

https://docs.versa-networks.com/Secure_SD-WAN/03_Troubleshooting/Monitor_VOS_Devices_in__Real_Time

Updated: Wed, 23 Oct 2024 08:07:15 GMT

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- Neighbor View

Services				Networking													
SDWAN	CGNAT	IPSEC	Sessions	Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRPP	LEF	ARP	IP-SLA	Endpoints
Tenant1-LAN-VR				Neighbor													
				Search													
Neighbor ID	Process ID	IF Name	Nbr Inst ID	Priority	State	Dead	Area										
11.0.0.1	3015	vni-0/1.1	1	1	FULL	33	0.0.0.0										

- BFD—Display BFD adjacencies in a routing instance.

Services				Networking													
SDWAN	CGNAT	IPSEC	Sessions	Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRPP	LEF	ARP	IP-SLA	Endpoints
Tenant1-LAN-VR																	
				Search													
Session Index	Interface Index	Peer IP	State	In Pkts	Out Pkts												
1	10	11.1.1.2	up	460	459												

- DHCP—Display the DHCP active leases, lease history, and DHCP statistics.

- Active Leases

Services				Networking													
SDWAN	IPSEC	Sessions		Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRPP	LEF	ARP	IP-SLA	Endpoints
Active Leases				Lease History													
				Statistics													
				Search													
Serial Number	IP Address	HW Address	Client ID	Valid Lifetime	Expires	Interface	Hostname	From Pool	Trans ID								
33	11.214.1.28	00:0b:ab:f7:35:d5		86400	2019/11/20 18:43:21	vni-0/2.0		0	2410033920								
31	11.214.1.4	00:0c:29:f7:77:39		86400	2019/11/20 17:02:36	vni-0/2.0	Director-Primary.ATM.local	0	207110481								
35	11.214.1.29	54:b6:64:2d:6c:85	01:54:b6:64:2d:6c:85	86400	2019/11/21 02:37:32	vni-0/2.0	DESKTOP-MUTURLA.ATM.lo...	0	3156077062								

- Lease History

Services				Networking													
SDWAN	IPSEC	Sessions		Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRPP	LEF	ARP	IP-SLA	Endpoints
Active Leases				Lease History													
				Statistics													
				Search													
Serial Number	IP Address	HW Address	Client ID	Valid Lifetime	Expires	Interface	Hostname	From Pool	Trans ID								
1	11.214.1.2	00:0c:29:ee-2c:d8		86400	2019/10/23 08:13:37	vni-0/2.0	versa-flexvnt.ATM.local	0	3262539635								
2	11.214.1.2	00:0c:29:ee-2c:d8		86400	2019/10/23 08:13:37	vni-0/2.0	versa-flexvnt.ATM.local	0	3589918477								
3	11.214.1.2	00:0c:29:ee-2c:d8		86400	2019/10/23 08:13:37	vni-0/2.0	versa-flexvnt.ATM.local	0	669015341								
4	11.214.1.6	00:0c:29:ee-2c:d8		86400	2019/10/24 08:16:23	vni-0/2.0	versa-flexvnt.ATM.local	0	4274958113								
5	11.214.1.8	00:0c:29:c0:f0:12		86400	2019/10/23 09:07:45	vni-0/2.0	versa-flexvnt.ATM.local	0	465315597								

- DHCP Statistics

Services			Networking														
SDWAN	IPSEC	Sessions	Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRRP	LEF	ARP	IP-SLA	Endpoints	PIM
Active Leases			Lease History														
Interface			DHCP														
Name	ACK Msg Cnt	Bulk Lease Que	Decline Msg Cnt	Discover Msg Cnt	Inform Msg Cnt	Lease Active Ms	Lease Query Ms	Lease Query Do	Lease Unassign	Lease Unknown	NAK Msg Cnt	Offer Msg Cnt	Release Msg Cnt	Request Msg Cnt	Relay Resp Ign		
vi-0/2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
vi-0/3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
vni-0/0.0	0	0	0	54	0	0	0	0	0	0	0	0	0	454	0		
vni-0/1.0	0	0	0	54	0	0	0	0	0	0	0	0	0	454	0		
vni-0/2.0	476	0	0	54	0	0	0	0	0	0	33	49	0	1781	0		

- CoS—Display QoS and CoS information.

- QoS Policy—Layer 2 through Layer 4 QoS policies and their hit count, forward packets/bytes, dropped packets/bytes.

Services			Networking														
SDWAN	IPSEC	Sessions	Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRRP	LEF	ARP	IP-SLA	Endpoints	IGMP
App QoS Policies			Interfaces														
QoS Policies																	

- AppQoS Policy—Layer 2 through Layer 7 QoS policies and their hit count, forward packets/bytes, dropped packets/bytes.

Services					Networking												
SDWAN	NGFW	CGNAT	IPSEC	Sessions	Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRRP	LEF	ARP	IP-SLA
App QoS Policies					Interfaces											QoS Policies	
Default-Policy																	

- Interfaces—CoS interface details. The details include the transmitted and received packets, number of transmitted packets per second, number of transmitted packets dropped, number of received packets per second, number of received packets dropped, number of transmitted bytes per second, and the number of bytes dropped in transmission.

Services					Networking												
SDWAN	NGFW	CGNAT	IPSEC	Sessions	Interfaces	Routes	BGP	OSPF	OSPFv3	BFD	DHCP	DNS Stats	COS	VRRP	LEF	ARP	IP-SLA
App QoS Policies					Interfaces											QoS Policies	

- VRRP—Display details about VRRP active and backup, configured priority, and VIP address.

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Summary ▾

- Log Export Functionality (LEF)—Display the status and statistics about configured LEF devices and groups.

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Routes

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Endpoints

PIM

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LEF-Collector-log_collector1 ▾

Status ▾

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|||

▼

Clear

VSN ID	Source IP	Source Port	Destination IP	Destination Port	Routing Instance	Status	Pending Msgs
2	10.20.64.106	1121	10.20.64.1	1234	provider-org-Control-VR	Established	0

- Status

Summary

Services

System

Tools

Shell

Config Status ▾

Upgrade

Subscription

SDWAN-Controller1 : 10.40.198.236

Location 2953 Bunker Hill Lane, Santa Clara, CA, USA 95054

● Reachable

Services

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Collector Groups

Collectors

LEF-Collector-Analytics-1 ▾

Status ▾

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Clear

VSN ID	Source IP	Source Port	Destination IP	Destination Port	Routing Instance	Status	Pending Msgs	Flaps	Last Flapped
2	169.254.0.3	1030	10.20.64.1	1234	Analytics-VR	Established	0	3	1w4d10h

- Statistics

Summary Services System Tools Shell Config Status Upgrade Subscription

SDWAN-Controller1 : 10.40.198.236 Location 2953 Bunker Hill Lane, Santa Clara, CA, USA 95054 Reachable

Services

SDWAN IPSEC Sessions

Networking

Interfaces Routes BGP OSPF OSPFv3 BFD DHCP DNS Stats COS VRRP LEF

ARP IP-SLA Endpoints IGMP dot1x

Collector Groups Collectors

LEF-Collector-Analytics-1 Statistics Search ||| ▼ Clear

Message Sent	Message Batched	Message Flushed	Template Mess...	Template Mess...	Flow Mon V4 Ba...	Flow Mon V6 Ba...	Flow Mon Gene...	Flow Mon HTTP...	Flow Mon Dns L...	Mon Stats Logs
66663	66642	0	18	0	0	0	0	0	0	17545

- ARP—Display ARP information for a routing instance.

Services

SDWAN CGNAT IPSEC Sessions

Networking

Interfaces Routes BGP OSPF OSPFv3 BFD DHCP DNS Stats COS VRRP LEF

ARP IP-SLA Endpoints PIM IGMP

Tenant1-LAN-VR Search ||| ▼ Clear

IP	Interface	Hwaddr	Type	Age
14.1.1.1	vni-0/4.1	52:54:00:57:b4:72	local	permanent
13.1.1.1	vni-0/3.1	52:54:00:27:fd:46	local	permanent
12.1.1.1	vni-0/2.1	52:54:00:e8:e9:8e	local	permanent
11.1.1.1	vni-0/1.1	52:54:00:55:b1:f0	local	permanent
11.1.1.2	vni-0/1.1	52:54:00:dfa7:f9	remote	00:59:55

- IP SLA—Display state, address, routing instance, interval, and threshold for a configured IP SLA.

Services

SDWAN NGFW CGNAT IPSEC Sessions

Networking

Interfaces Routes BGP OSPF OSPFv3 BFD DHCP DNS Stats COS VRRP LEF

ARP IP-SLA Endpoints PIM IGMP

Search ||| ▼

Name	Address	Vrf	Tenant	State	Type	Interval	Threshold	Last Flapped	Source Interface	Sub Type
Monitor-168-19...	192.168.11.1	WAN1-Transpor...	provider-org	Inactive	icmp	3	5	13:11:50	vni-0/0.0	layer2-loopb...

System Tab

The system tab displays the following information about the local VOS device.

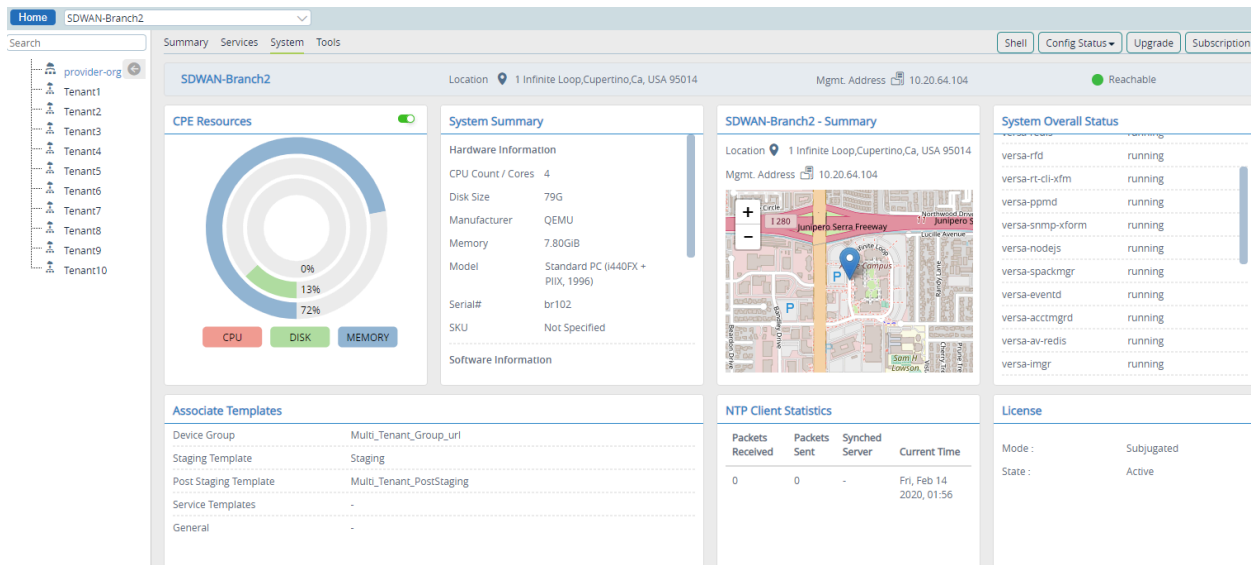
- CPE Resources—CPU, disk, and memory usage for all the CPE resources.
- Firmware Summary—Hardware and software details.
- Device Summary—Device location and address.

https://docs.versa-networks.com/Secure_SD-WAN/03_Troubleshooting/Monitor_VOS_Devices_in__Real_Time

Updated: Wed, 23 Oct 2024 08:07:15 GMT

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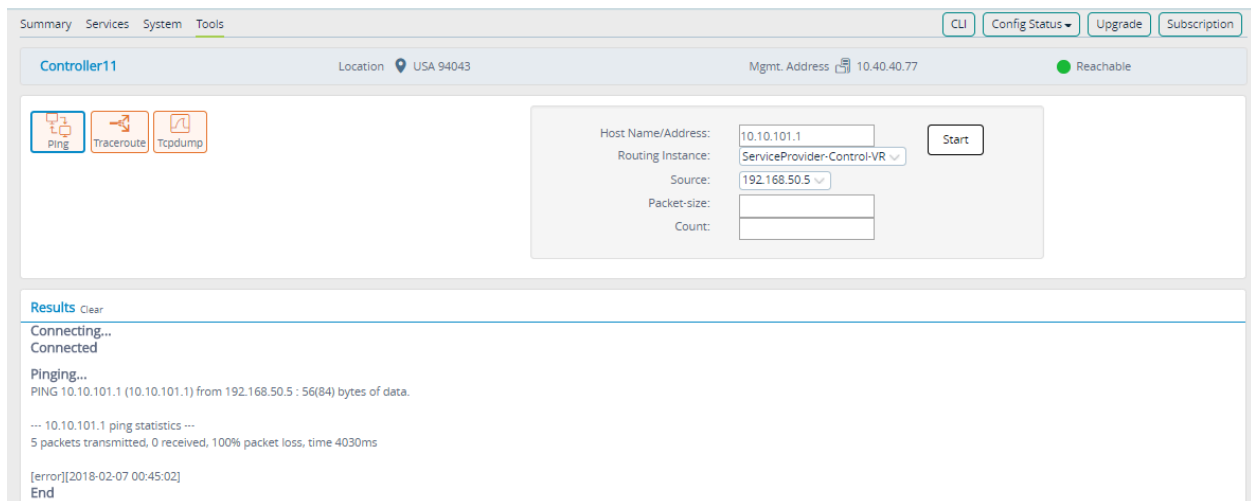
- System Overall Status—Status of all processes running on the VOS device.
- Associate Templates—Name of the templates associated with the VOS device.
- NTP Client Statistics—NTP statistics.
- License—License mode and status.



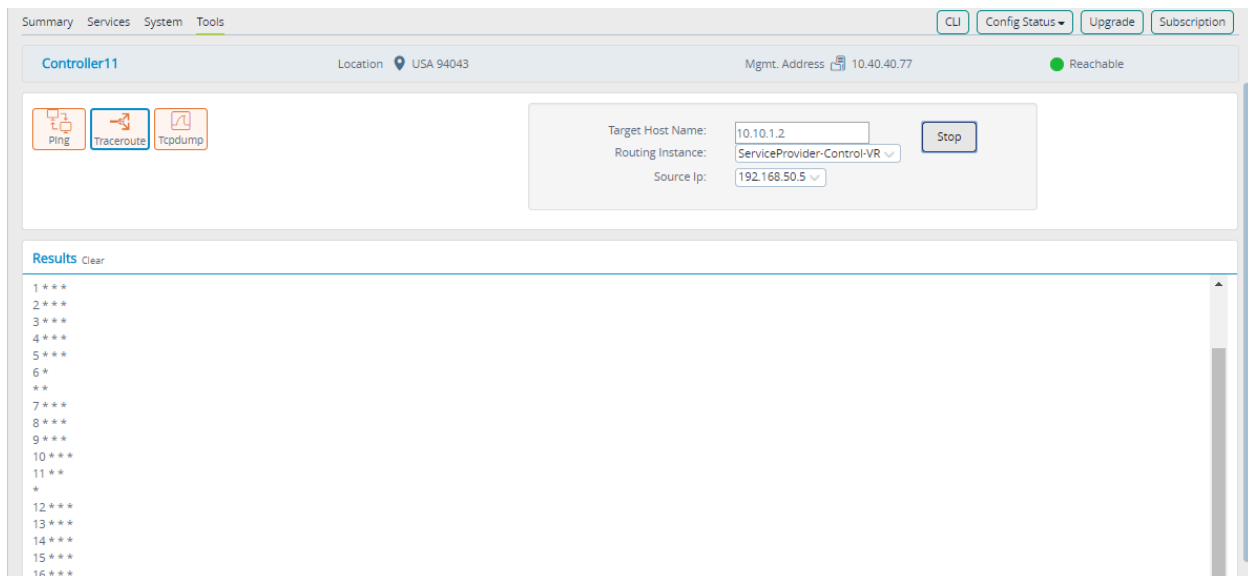
Tools Tab

You can access the following troubleshooting process from the Monitor tab:

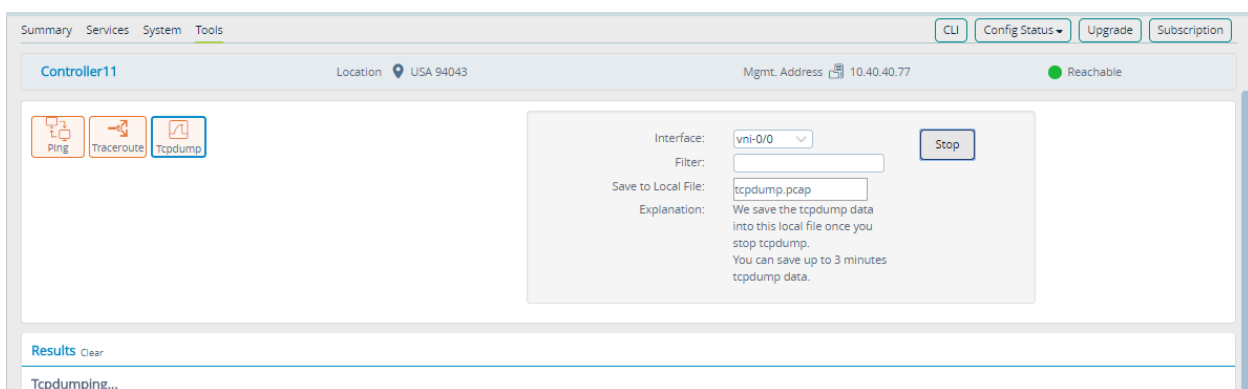
- Ping



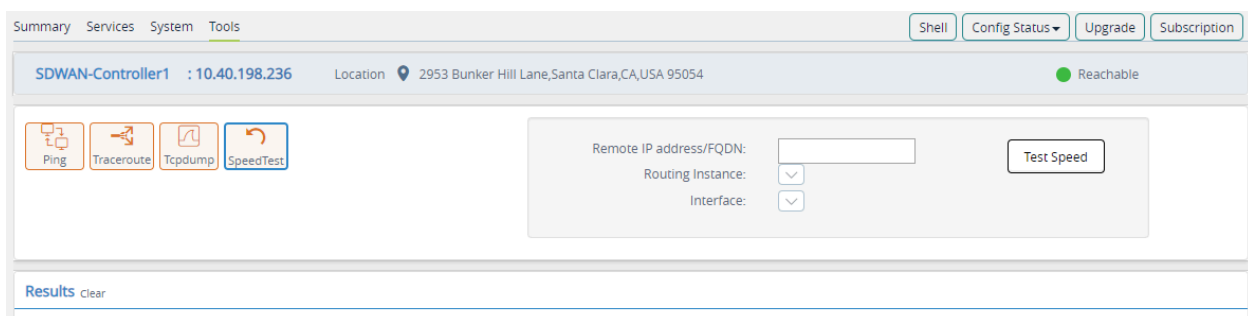
- Traceroute



- **TCPDump**—You run `tcpdump` from the monitor tab using the standard `tcpdump` command syntax. When the `tcpdump` operation complete, a `.pcap` file is downloaded to the local workstation.



- **Speed Test**—A device can be set up as a speed-test server and from the local VOS device you can run a speed test to test the link.



Supported Software Information

Releases 20.2 and later support all content described in this article.

Additional Information

[Monitor and Manage Devices in Customer Organizations](#)

[Monitor VOS Devices and Organizations](#)