

Configure Secure Access with Catalyst SD-WAN Automated Tunnels for Secure Private Access

Contents

[Introduction](#)

[Background Information](#)

[Network Diagram](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Configure](#)

[Secure Access Configuration](#)

[API Creation](#)

[SD-WAN Configuration](#)

[API Integration](#)

[Configure Policy Group](#)

[Configure Routing](#)

[Verify](#)

[Secure Access - Activity Search](#)

[Secure Access - Events](#)

[Catalyst SD-WAN Manager -Network-Wide Path Insights](#)

[Related Information](#)

Introduction

This document describes how to configure Secure Access with Catalyst SD-WAN Automated Tunnels for Secure Private Access.



Secure Access and Catalyst SDWAN
for Secure Private Access
— with Automated Tunnels —

Background Information

As organizations move beyond traditional perimeter based networks, securely accessing private resources becomes just as important as securing internet traffic. Applications are no longer confined to a single data center, they now live across on-premises environments, public clouds, and hybrid architectures. This shift requires a more flexible and modern approach to private access.

This is where a SASE based architecture and Cisco Secure Access come into play. Instead of relying on legacy VPN concentrators and flat network access, Cisco Secure Access provides private connectivity as a cloud delivered service, combining VPN-as-a-Service (VPNaaS) and Zero Trust Network Access (ZTNA).

For network-level private access, Cisco Secure Access integrates with SD-WAN using automated site-to-site IPsec tunnels. These tunnels allow private traffic to flow securely between Secure Access and on-premises or cloud networks, while keeping security inspection and policy enforcement centralized in the cloud. From an operational perspective, this removes the need to deploy and maintain traditional VPN headends and simplifies scaling as environments grow.

In a VPNaaS model, Secure Access acts as the VPN termination point in the cloud. SD-WAN handles intelligent routing and resiliency with Secure Access and ensures that traffic is protected and governed by consistent security policies before reaching private resources.

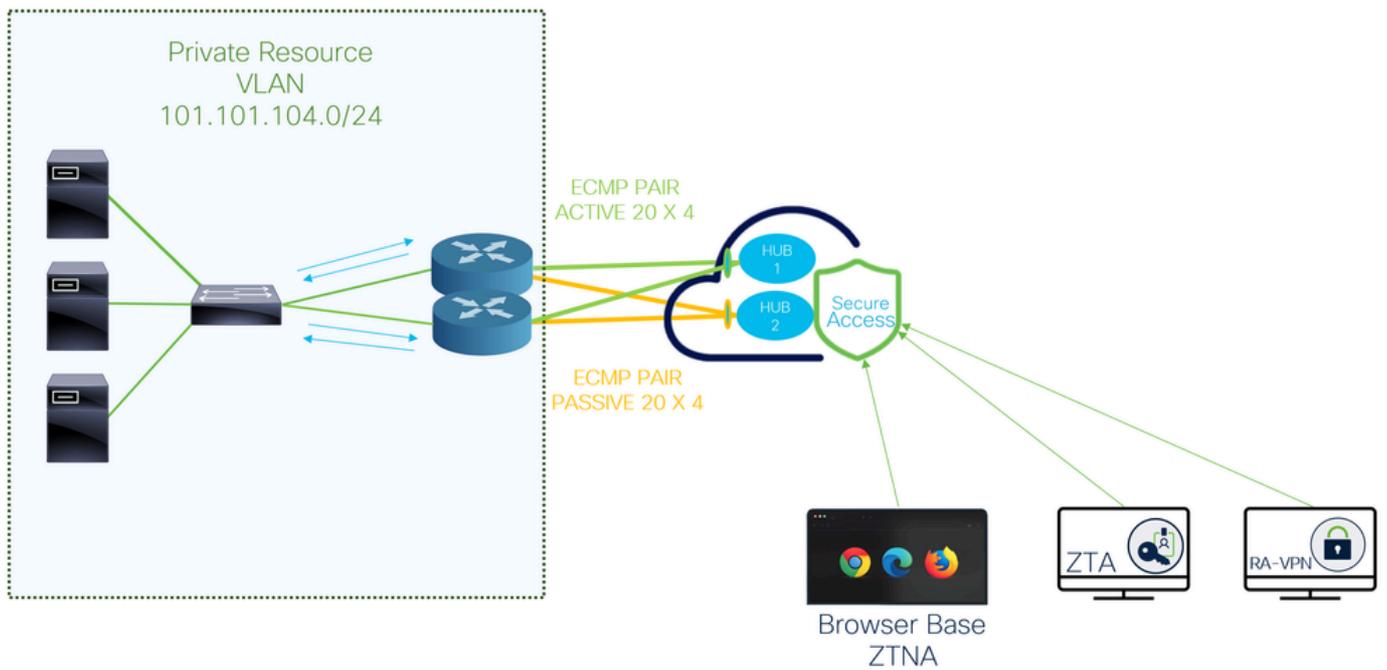
Cisco Secure Access also supports advanced site-to-site tunnel architectures, including multi-regional backhaul. This capability allows organizations to establish tunnels to multiple Secure Access regions simultaneously, providing geographic redundancy and higher availability. By connecting to different regions, traffic can fail over automatically in case of regional outages, latency degradation, or maintenance events.

For example, an organization can establish site-to-site tunnels from its SD-WAN environment to Secure Access regions in London and Germany. Both tunnels remain active, enabling resilient private access across regions and ensuring continuity even if one region becomes unavailable. This multi-regional design strengthens high availability, improves fault tolerance, and aligns with enterprise-grade resilience requirements.

For more granular access, Cisco Secure Access enforces Zero Trust Network Access (ZTNA) model. Instead of granting users broad network connectivity, ZTNA allows access only to specific applications, based on identity, device posture, and context. This approach significantly reduces the attack surface and aligns with Zero Trust principles.

ZTNA access is enabled through a combination of site-to-site tunnels and Resource Connectors. Resource Connectors are lightweight virtual appliances that establish outbound-only connections to Secure Access, meaning private resources never need to be exposed directly to the internet.

Network Diagram



Prerequisites

Requirements

- Secure Access Knowledge
- Cisco Catalyst SD-WAN Manager Release 20.18.2 and Cisco IOS XE Catalyst SD-WAN Release 17.18.2 or later
- Intermediate knowledge of routing and switching
- ECMP Knowledge
- VPN Knowledge
- Since this integration is on controlled availability, you need to submit a TAC case to ask to enable the feature in Cisco Secure Access

Components Used

- Secure Access Tenant
- Catalyst SD-WAN Manager Release 20.18.2 and Cisco IOS XE Catalyst SD-WAN Release 17.18.2
- Catalyst SD-WAN Manager

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configure

Secure Access Configuration

API Creation

In order to create the automated tunnels with Secure Access check the next steps:

Navigate to [Secure Access Dashboard](#).

- Click on Admin > API Keys
- Click on Add
- Choose the next options:
 - Deployments / Network Tunnel Group: Read/Writte
 - Deployments / Tunnels: Read/Writte
 - Deployments / Regions: Read-Only
 - Deployments / Identities: Read-Writte
 - Expiry Date: Never Expire

Key Scope
Select the appropriate access scopes to define what this API key can do.

- Admin 17 >
- Deployments 23 >
- Investigate 2 >
- Policies 25 >
- Reports 17 >

4 selected Remove All

Scope		
Deployments / Identities	Read / Write	✕
Deployments / Network Tunnel Group	Read / Write	✕
Deployments / Tunnels	Read / Write	✕
Deployments / Regions	Read-Only	✕

Network Restrictions *(Optional)*
Optionally, add up to 10 networks from which this key can perform authentications. Add networks using a comma separated list of public IP addresses or CIDRs.

IP Addresses

For example: 100.10.10.0/24, 1.1.1.1

ADD

CANCEL
CREATE KEY



Note: Optionally, add up to 10 networks from which this key can perform authentications. Add networks using a comma separated list of public IP addresses or CIDRs.

- Click CREATE KEY to finalize the creation of the API Key and Key Secret.

API Key

397766cdb29f43b08ddee3b1d8c04e45
🔗

Key Secret

bfce729cd3e243e281df7271acb12208
🔗



Caution: Copy them before you click ACCEPT AND CLOSE; otherwise, you need to create them again and delete the ones that were not copied.

Then to finalize click ACCEPT AND CLOSE.

SD-WAN Configuration

API Integration

Navigate to Catalyst SD-WAN Manager:

- Click on **Administration** > Settings > Cloud Credentials
- Then click on Cloud Provider Credentials and enable Cisco SSE and fill the API and Organization Settings

The screenshot displays the 'Settings / External Services' page in the Catalyst SD-WAN Manager. The 'Cloud Credentials' section is active, showing configuration options for external services. The 'Cisco SSE' option is checked, while 'Umbrella' and 'Zscaler' are unchecked. The 'Organization Id' field is highlighted with a red border and a 'Field is required' error message. The 'Api Key' and 'Secret' fields are also highlighted with blue borders. The 'Save' and 'Cancel' buttons are visible at the bottom of the configuration area.

- **Organization ID:** You can take that from the URL of your SSE Dashboard <https://dashboard.sse.cisco.com/org/xxxxx>
- **Api Key:** Copy it from the step [Secure Access Configuration](#)
- **Secret:** Copy it from the step [Secure Access Configuration](#)

Then after that click on the Save button.



Note: Before you proceed with the next steps, you need to be sure that the SD-WAN Manager and the Catalyst SD-WAN Edges have DNS resolution and internet access.

To check if the DNS-Lookup is enabled please navigate to:

- Click on **Configuration** > **Configuration Groups**
- Click on the profile of your Edge Devices and edit the **System Profile**

Configuration Groups SD-WAN

Configuration Groups 3 **System Profile** 5 **Transport & Management**

Q Search

Name	Type	Profiles
SPA-AUTO		

Type: Single Router

System Profile

SPA-AUTO

Policy Profile (optional)

Default_Policy_Object_Profile

CLI Add-on Profile (optional)

SPA_Auto_Route-maps

- Then Edit the *Global* option and be sure the option *Domain Resolution* is enabled

SPA-AUTO Edit

Device solution SD-WAN Updated by admin Last updated Feb 06, 2026 12:29:48 AM Shared 1 Group

Q Search

Profile Features

AAA: AAA

Banner: Banner

BFD: BFD

Global: Global

Multi-Region Fabric: MRF

NTP: NTP

Global

Name: Global

Description (optional): Global Description

Services: NAT64: BGP: Authentication: SSH Version: Ether CT:

HTTP Server:

FTP Passive:

ARP Proxy:

HTTPS Server:

Domain Lookup:

RSH/RCP:

Configure Policy Group

Navigate to *Configuration > Policy Groups*:

- Click on Secure Internet Gateway / Secure Service Edge > Add Secure Private Access

Policy Groups

Policy Group 5 Application Priority & SLA 6 NGFW 0 **Secure Internet Gateway / Secure Service Edge 4**

Secure Internet Gateway / Secure Service Edge 4

Q Search Table

Add Secure Internet Gateway (SIG) **Add Secure Internet Access** **Add Secure Private Application Access**

Name	Description	Solution
------	-------------	----------

- Configure a name and click on **Create**

Secure Private Application Access

Name

Description (optional)

Cancel

Create

The next configurations allows you to create the tunnels after you deploy the configuration in your Catalyst SD-WAN Edges:

Configuration

Segment (VPN)



Cisco Secure Access Region



- Configuration
 - Segment (VPN): Choose the VRF that hosts the application(s) to be accessed through Secure Access
 - Cisco Secure Access Region: Choose the region closest to the SD-WAN hub or branch where the applications are hosted

Next, define the tunnel configuration. Tunnels created to the Primary Secure Access Data Center are active, while tunnels created to the Secondary Secure Access Data Center operate as backup.

Under Tunnel Configuration click **+ Add Tunnel**:

Tunnel Configuration

+ Add Tunnel

Tunnel

BASIC SETTINGS

Interface Name(1..255) <input type="text" value="ipsec101"/>	Description <input type="text" value="<system default>"/>
Tunnel Source Interface <input type="text" value="Auto"/>	Tunnel Route-Via Interface <input type="text" value="Auto"/>
Data Center <input checked="" type="radio" value="Primary"/> Primary <input type="radio" value="Secondary"/>	

Advanced Settings

GENERAL

Shutdown <input type="text" value="false"/>	TCP MSS <input type="text" value="1350"/>
IP MTU <input type="text" value="1390"/>	DPD Interval <input type="text" value="10"/>

- Tunnel
 - **Interface Name:** Specify tunnel name, it is automatically updated each time a new tunnel is added
 - **Tunnel Source Interface:** You do not need to change this setting. When left as *Auto*, the system automatically creates a loopback interface with a /31 mask.
 - **Tunnel Route-Via Interface:** You do not need to change this setting. By default, it uses the first NATed physical WAN interface on the edge router, but it can be changed if a specific WAN interface is required
 - **Data Center:** Select *Primary* or *Secondary* accordingly. If the primary tunnel is already configured, select *Secondary*. In normal scenarios, one tunnel can be configured as *Primary* and another as *Secondary*
 - **Advanced Settings**
 - **IP MTU:** Use 1390
 - **TCP MSS:** Use 1350



Note: If you want to create multiple tunnels to enable ECMP and increase tunnel capacity, you can configure up to 10 active/10 backup tunnels per router. This provides up to 10 × 4 Gbps per NTG.

Interface Name	Description	Tunnel Source Interface	Tunnel Route-Via Interface	Data Center	Action
ipsec101		Auto	Auto	Primary	
ipsec102		Auto	Auto	Secondary	
ipsec103		Auto	Auto	Primary	
ipsec104		Auto	Auto	Secondary	
ipsec105		Auto	Auto	Primary	
ipsec106		Auto	Auto	Secondary	
ipsec107		Auto	Auto	Primary	
ipsec108		Auto	Auto	Secondary	
ipsec109		Auto	Auto	Primary	
ipsec110		Auto	Auto	Secondary	
ipsec111		Auto	Auto	Primary	
ipsec112		Auto	Auto	Secondary	
ipsec113		Auto	Auto	Primary	
ipsec114		Auto	Auto	Secondary	
ipsec115		Auto	Auto	Primary	
ipsec116		Auto	Auto	Secondary	
ipsec117		Auto	Auto	Primary	
ipsec118		Auto	Auto	Secondary	
ipsec119		Auto	Auto	Primary	
ipsec120		Auto	Auto	Secondary	

MAXIMUM OF 10 TUNNELS PER HUB
 10 x 1 Primary
 10 x 1 Secondary



Note: If deploying multiple tunnels per router, ensure that the transport interface can sustain the aggregate bandwidth of all active tunnels combined. For example, if two tunnels are expected to carry up to 1 Gbps each, the transport link must support at least 2 Gbps of throughput.

Once the tunnels are configured, proceed with the BGP configuration.

BGP Routing

BGP ASN ⓘ

In Route Policy

Out Route Policy

- **BGP Routing**
 - **BGP ASN:** Specify AS number for the SD-WAN hub. The AS 64512 is reserved for Secure Access and can not be used. For more information about BGP, see
 - **In Route Policy:** The system automatically creates this inbound route policy with a deny all statement

to prevent routing issues. It must be manually modified through a CLI Add-On Template to allow/deny the appropriate routes.

- **Out Route Policy:** The system create this outbound route policy with a deny all statement to avoid routing problems. It must be manually edited through a CLI Add-On Template to allow/deny the appropriate routes.



Warning: Starting November 2025, all newly created Secure Access organizations use the public ASN 32644 by default for BGP peering in network tunnel groups. Existing organizations established prior to November 2025 continue to use the private ASN 64512 that was previously reserved for Secure Access BGP peers. If the private AS number 64512 is assigned to a device on your network, it not be able to peer with a network tunnel group configured for Peer (Secure Access) BGP AS 64512.

The next BGP and route-map configuration is automatically created for every BGP neighbor after you Deploy the new policy in your Policy Group.

```
route-map SPA_Auto-In deny 65534
  description Default Deny Configured from Secure Private Application Access feature
route-map SPA_Auto-Out deny 65534
  description Default Deny Configured from Secure Private Application Access feature
```

```
R104#sh run | s r b
router bgp 65000
  bgp log-neighbor-changes
  !
  address-family ipv4 vrf 10
    neighbor 169.254.0.3 remote-as 64512
    neighbor 169.254.0.3 activate
    neighbor 169.254.0.3 send-community both
    neighbor 169.254.0.3 route-map SPA_Auto-In in
    neighbor 169.254.0.3 route-map SPA_Auto-Out out
  ...
  maximum-paths 32
exit-address-family
```

After this, click **Save** and proceed with the policy deployment to bring the tunnels up.

- Click on **Configuration > Policy Groups**
- Choose under your **Policy > Secure Service Edge > Secure Private Application Access** and click on the recent profile created for SPA.
- Click **Deploy** to finalize

Policy Groups

Policy Group 5 Application Priority & SLA 6 NGFW 0 Secure Internet Gateway / Secure Service Edge 4 DNS Security 0

+ Add Policy Group Export Import

Q Search

Name	Description	Solution	Number of Policies	Number of Devices	Devices Up to Date	Source
SPA-Auto						
SIA_SIG	--	sd				Import
Site-102	SIA Manual + SPA Manual	sd				User

Policy Group Details for SPA-Auto:

Policy Group Name: SPA-Auto

Description (optional):

Application Priority: Select one

NGFW: Select one

DNS Security: Select one

Secure Service Edge: Secure Internet Access / Secure Internet Gateway

Secure Internet Access / Secure Internet Gateway: SIA-AUTO

Secure Private Application Access: SPA-Auto

Device Solution: Type sdwan

Deployment: Associated 1 device

Buttons: Save, Deploy

To verify insecure Access, perform the next steps:

- Click on Connect > Network Connections

TUNNEL ESTABLISHMENT

eu-central-1

Review and edit this network tunnel group. Details for each IPsec tunnel added to this group are listed including which tunnel hub it is a member of. Help

Summary

Region: Europe (Germany) | Routing Type: Dynamic Routing (BGP) | Device Type: Catalyst SD-WAN | Device BGP AS: 65000 | Last Status Update: Feb 08, 2026 10:12 PM | Peer (Secure Access) BGP AS: 64512 | BGP Peer (Secure Access) IP Addresses: 193.254.0.9, 193.254.0.5, 2d54-a648-bc723-6d70000120 | Multihop BGP Addresses: -- | Multihop TTL: --

MAX 20 TUNNELS PER DEVICE CONNECTED TO THE NETWORK TUNNEL GROUP

10 X 1 Primary Hub

10 X 1 Secondary Hub

Primary Hub

10 Active Tunnels

Tunnel Group ID: eu-central-1@235169-601683089-us-cisco.com | Data Center: us-east-1-1 | IP Address: 3.120.45.23 2603:5004:80:20c::1/01

Secondary Hub

10 Active Tunnels

Tunnel Group ID: eu-central-1@235169-601683089-us-cisco.com | Data Center: us-east-1-1-0 | IP Address: 18.156.145.74 2603:5004:80:20c::1/01

Configure Routing

Navigate to Configure > Configuration Groups

- Click on your Configuration Group and Create/Edit your CLI Add-on Profile

Configuration Groups SD-WAN

Configuration Groups 3 System Profile 5 Transport & Management Profile 6 Policy Profile 1 Service Profile 4 CLI Add-on Profile 3 UC Voice Profile 0 Other Profile 1

Q Search Last Updated Status Create Configuration Group Export Import

Name	Type	Profiles	Provisioning Status	Sync Devices / Associated Devices	Source	Updated By	Last Updated On
SPA-AUTO	Single Router				Sourced from User	Updated by admin	Updated Feb 11, 2026, 9:05:14 AM

Configuration Group Details for SPA-AUTO:

Type: Single Router

System Profile: SPA-AUTO

Policy Profile (optional): Default_Policy_Object_Profile

CLI Add-on Profile (optional): SPA_Auto_Route-maps

Transport & Management Profile: SPA-SIA-Auto_WAN

Service Profile (optional): SPA-SIA-Auto_LAN

Deployment: Associated 1 device, Provisioning 1 out of sync

Buttons: Save, Deploy

To allow BGP routes exchange, use the previously configured **In Route Policy** and **Out Route Policy**. You can find a basic example for the CLI Add-On route configuration. This template provides a starting point and must be customized as needed:

```
ip bgp-community new-format
ip prefix-list ALL-ROUTES seq 5 permit 0.0.0.0/0 le 32

route-map SPA_Auto-In permit 10
match ip address prefix-list ALL-ROUTES
route-map SPA_Auto-In deny 65534
description Default Deny Configured from Secure Private Application Access feature

route-map SPA_Auto-Out permit 10
match ip address prefix-list ALL-ROUTES
description Default Deny Configured from Secure Private Application Access feature
route-map SPA_Auto-Out deny 65534
description Default Deny Configured from Secure Private Application Access feature

router bgp 65000
bgp log-neighbor-changes
!
address-family ipv4 vrf 10
network 172.16.104.0 mask 255.255.255.0
```



Warning: Careful planning is required when defining the networks permitted in and out through BGP route-maps. Permitting all routes, as shown in the example above, can introduce unintended routing behavior. For optimal deployment, explicitly specify only the necessary networks in your route-maps to ensure controlled and predictable routing outcomes

Now you can proceed to [Deploy the changes](#)

To verify if BGP routes are received in [Secure Access](#), check the next steps:

- Click on [Connect](#) > [Network Connections](#) > [Network Tunnel Groups](#) and select the NTG name

ROUTING ESTABLISHMENT

The screenshot displays the Cisco Secure Access configuration page. On the left, a sidebar contains navigation options like Home, Experience Insights, Connect, Resources, Secure, Monitor, Investigate, Admin, and Workflows. The main content area is divided into sections: Primary Hub (10 Active Tunnels), Secondary Hub (10 Active Tunnels), and Network Tunnels. The Network Tunnels table lists 7 primary tunnels, with 'Primary 1' highlighted. A detailed view for 'Primary 1 (131130)' is shown on the right, including SPI In/Out, IKE parameters (State: ESTABLISHED, Age: 141464 sec), Encryption Algorithm (AES-CBC-256), and Routing information (Client Routes: 172.16.104.0/24).



Note: In this example, the corporate user subnet 172.16.104.0/24 is advertised to Secure Access through BGP. This allows proper routing between Catalyst SD-WAN and the SSE environment.

The same policy can be applied to both WAN edges in the Catalyst SD-WAN hubs, resulting in 20 active tunnels and 20 standby tunnels. The total number of tunnels depends on how many are configured on each edge. Any router connected to both Secure Access hubs (Hub 1 and Hub 2) forms an ECMP pair across all established tunnels.

For example, if Catalyst SD-WAN Edge 1 has 10 tunnels and Catalyst SD-WAN Edge 2 has 10 tunnels, Secure Access forms ECMP across the 20 active tunnels. The same behavior applies to the secondary SSE hub.

Network Tunnel Groups

A network tunnel group provides a framework for establishing tunnel redundancy and high availability. Connect tunnels to the hubs within a network tunnel group to securely control user access to the Internet and private resources. [Help](#)

Search: eu-central-1 | Region: [v] | Status: [v] | 1 Tunnel Group | [+ Add](#)

Network Tunnel Group	Status	Region	Primary Hub Data Center	Primary Tunnels	Secondary Hub Data Center	Secondary Tunnels
eu-central-1 Catalyst SDWAN	● Connected	Europe (Germany)	sse-euc-1-1-1	20	sse-euc-1-1-0	20

Verify

in order to verify if the traffic is going through Cisco Secure Access, navigate to Events OR Activity Search OR Network-Wide Path Insights and filter by your tunnel identity:

Secure Access - Activity Search

Navigate to Monitor > Activity Search :

Activity Search

FILTERS Advanced CLEAR Saved Searches

IP ADDRESS 172.16.104.11 X **IDENTITY** Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com) X Restore to

4 Total Viewing activity from Feb 17, 2026 11:27 AM to Feb 18, 2026 11:27 AM Page: 1 Resu

Request	Source	Rule Identity	Destination	Destination IP	Destination Port
FW	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)		172.16.104.11:3389	3389
FW	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)		172.16.104.11:3389	3389
FW	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)		172.16.104.11:3389	3389
ZTA CLIENTLESS	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)	Alejandro Ruiz Sanchez (alejarui) (alejarui@cisco.com)	PC-site-104	172.16.104.11:3389	3389

Secure Access - Events

Navigate to Monitor>Events:

Events Schedule report Export CSV

Lists events triggered by access requests made by your organization's sources. Find out where your users are going and how your rules impact their access to requested destinations. [Help](#)

Events 1 total

DNS 0 Web 0 Firewall 0 IPS 0 ZTA Clientless 1 ZTA Client-based 0 Decryption 0

Status Select status... Last 24 hours Saved searches Restore

Event Type: ZTA Clientless OR DNS Reset all

Event Type	Status	Event ID	Source	Destination	Reason Code	Rule Name	Time
ZTA Clientless	Allowed	c662e2b5df2ac6fc	Alejandro Ruiz Sanchez...	PC-site-104	-	SITE-104-RDP	Feb 18, 2026 10:26 AM

Source

AD Users: Alejandro Ruiz Sanchez...
Source IP:
Location:
Browser: Firefox 147.0
Operating system: Mac OS X 10.15

Connection

Type: ZTA

Endpoint Posture

Status: Compliant
Posture profile: System provided (frow...

Security Controls

ZTA Clientless
Action: Allowed
Ingress region: —
Tunnel type: HTTP2
Resource connector group: —
Egress IP: —
Datacenter: —
Firewall (3)

Destination

FQDN: PC-site-104
Resource/Application Name: PC-site-104
Destination IP: 172.16.104.11
Destination Port: 3389
Application Category: Private Resource
Application Protocol: RDP-TCP

Rows per page 30 1-1 of 1 < 1 >



Note: Be sure you have your default policy with logging enabled, by default is disabled.

Catalyst SD-WAN Manager - Network-Wide Path Insights

Navigate to Catalyst SD-WAN Manager:

- Click on Tools> Network-Wide Path Insights
- Click on New Trace

Traces & Tasks | **New Trace** | New Auto-on Task | How to Get Started | FAQ | Administration Setting | SD-WAN | SD Routing

Enable DNS Domain Discovery

Trace Name: SPA | Trace Duration(minutes): 60

Filters

Select Site(branch site only)*: SITE_104 | VPN*: 1VPN(5)X

Source Address/Prefix: | Destination Address/Prefix: 172.16.104.0/24

Application | Application Group

Please select one or more applications

Advanced Filters | Monitor Settings | Grouping Fields | Synthetic Traffic

Cancel | Start

- Trace Name: (Optional) Specify Trace name
- Site: Choose the site where the private resource is located
- VPN: Choose the VPN ID where the private resource is located
- Source/Destination Address: (Optional) Enter the IP or leave it on blank to capture all the traffic filtered based on site and VPN chosen

Start the trace

Locate the traffic flow and click *View* on the **Insights** column

INSIGHTS | Selected trace: SPA (Trace Id: 192)

Applications | Active Flows | **Completed Flows** | expand a flow/domain to load data for 'INSIGHT - ADVANCED VIEWS':

Filter | Destination IP: 172.16.104.11 | Search by Domain, Application, Readout, etc. | Readout Legend: Error, Warning, Information, ThousandEyes, Synthetic Traffic, PCAP Replay

Overall 621 flows traced, 1 flows traced during Feb 18, 2026 10:33:56 AM to Feb 18, 2026 10:49:02 AM | Total Rows: 1

Start - Update Time	Flow ID	Insights *	VPN	Source IP	Src Port	Destination IP	Dest Port	Protocol	DSCP Upstream/Downstream	Application	App Group	Domain	ART CND(ms)/SND(ms) *	User	User Group	Security Gr
10:47:32 AM-11:33:23 AM	143	View	10			172.16.104.11	3389	TCP	DEFAULT + / DEFAULT +	ms-wbt	other	Unknown	R104: 27/1	Unkn...	Unknown	N/A->N/A

The *routing Insights* column display the candidate paths and display the IPsec tunnels to Secure Access

Trace: SPA (ID: 192), Flow ID: 143 (Application:ms-wbt)

Upstream (From 15645 to 172.16.104.11:3389)

Hop 0 - Edge Name: R104

IP Lookup on VPN 10

Destination Addr:
172.16.104.11
Match Route:
172.16.104.11/32

Route Info
Source: adjacent
Distance: 0
Metric: 0

Routing Candidate Paths: 1

SERVICE LAN
Local Interface: GigabitEthernet3

Path Decided By:

routing

Final Path:

SERVICE LAN
Local Interface: GigabitEthernet3

Downstream (From 172.16.104.11:3389 to .15645)

Hop 0 - Edge Name: R104

IP Lookup on VPN 10

Destination Addr:

Match Route:
/32

Route Info
Source: bgp (external)
Distance: 20
Metric: 0
Received From:
Peer: 169.254.0.41
Uptime: 1d07h
Peer: 169.254.0.35
Uptime: 1d07h
Peer: 169.254.0.31
Uptime: 1d07h
Peer: 169.254.0.27
Uptime: 1d07h
Peer: 169.254.0.23
Uptime: 1d07h
Peer: 169.254.0.21
Uptime: 1d07h
Peer: 169.254.0.15
Uptime: 1d07h
Peer: 169.254.0.13
Uptime: 1d07h

Routing Candidate Paths: 10

SERVICE LAN
Local Interface: Tunnel17000111

SERVICE LAN
Local Interface: Tunnel17000109

SERVICE LAN
Local Interface: Tunnel17000103

SERVICE LAN
Local Interface: Tunnel17000101

Path Decided By:

NAT

Final Path:

NAT DIA
Local Color: BIZ_INTERNET
Local Interface: GigabitEthernet1

NAT Translate Source
Pre-NAT
Addr:192.168.4.111
Port:4500
Post-NAT
Addr:192.168.0.105
Port:5079

Related Information

- [Cisco Technical Support & Downloads](#)
- [Cisco Secure Access Help Center](#)
- [Cisco SASE Design Guide](#)
- [Configure Secure Access with SD-WAN Automated Tunnels for Secure Internet Access](#)
- [Cisco Catalyst SD-WAN Security Configuration Guide, Cisco IOS XE Catalyst SD-WAN Release 17.x](#)

- [Cisco SASE Solution: Cisco Catalyst SD-WAN integrated with Cisco Secure Access At-a-Glance](#)