Cisco Secure Access SD-WAN Integration with HPE Aruba Networking EdgeConnect

About Secure Access SD-WAN Integration with HPE Aruba Networking EdgeConnect

Integrating HPE Aruba Networking EdgeConnect (formerly Silver Peak) SD-WAN with Secure Access lets you leverage a powerful cloud-native security fabric. By establishing a remote network tunnel, you redirect branch traffic through Cisco's global security infrastructure, enabling advanced protection for all internet-bound activities, SaaS platforms, and public-facing partner apps.

Whether you are connecting a single branch to one gateway or orchestrating a complex mesh of multiple sites and gateways, Secure Access provides consistent, high-performance security across your entire SD-WAN fabric.

Prerequisites

Full Admin account in Secure Access

Configure a Secure Access network tunnel group

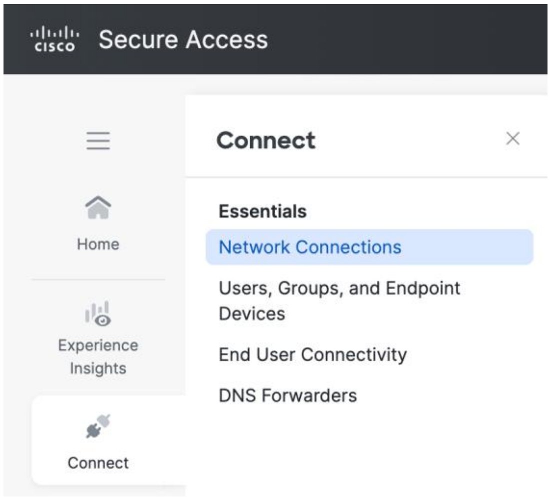
Configure Secure Access to connect to the EdgeConnect device.

Procedure

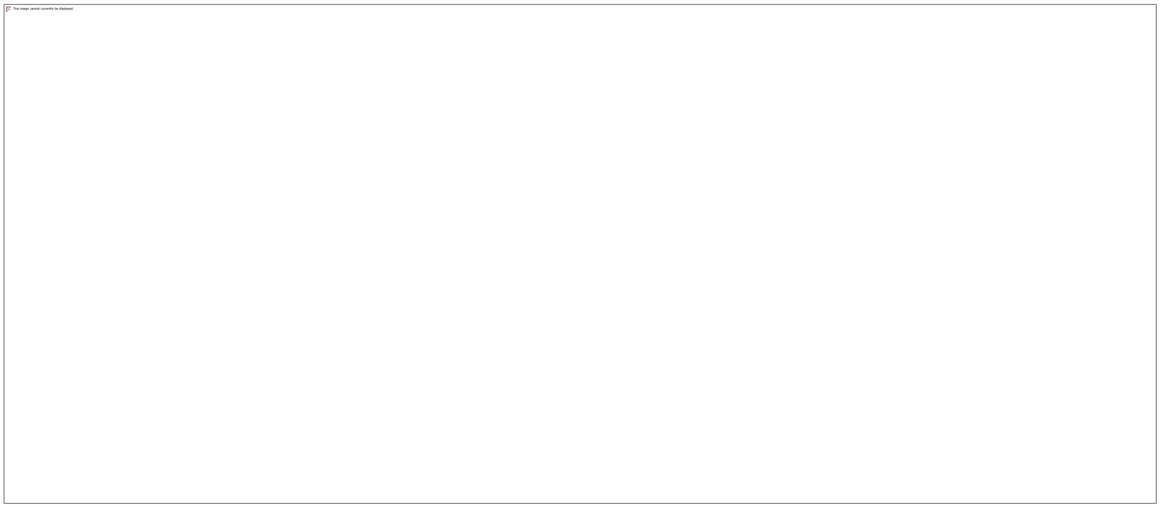
Step 1. Navigate to your Secure Access organization:

https://dashboard.sse.cisco.com

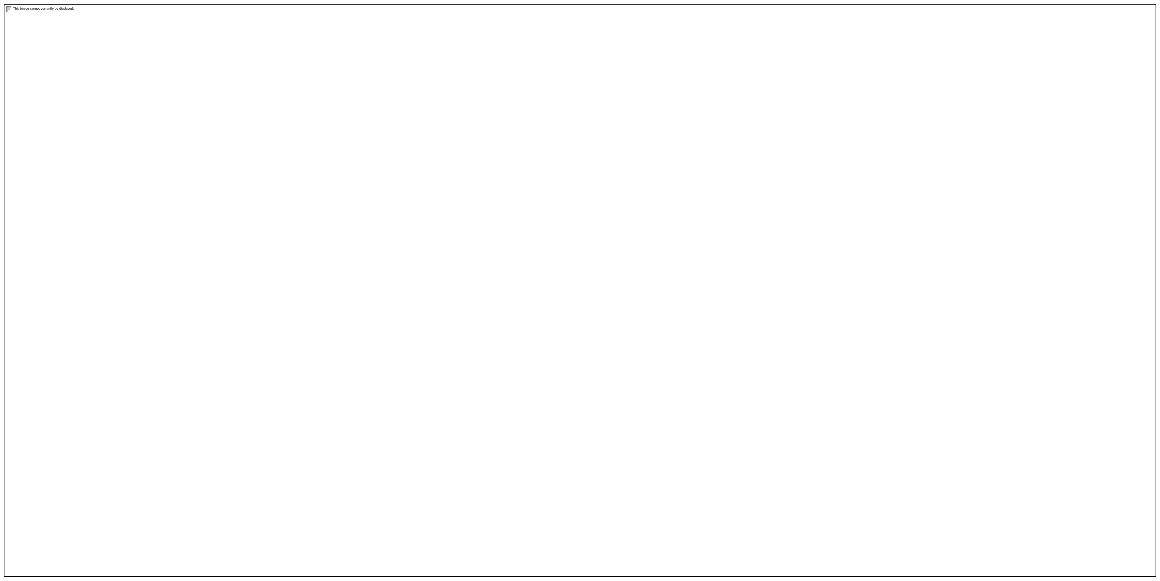
Step 2. Choose **Connect > Network Connections**.



Step 3. Click **Network Tunnel Groups** and click **Add**.



Step 4. On the **General Settings** page, enter the following values.



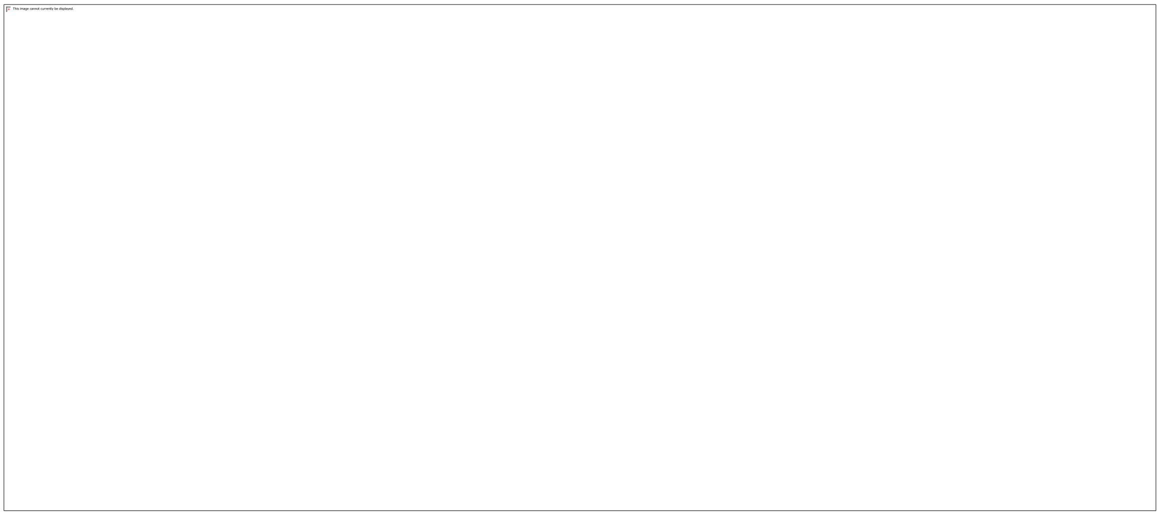
Tunnel Group Name—Enter a meaningful name for the tunnel group.

Region—Select the one closest to your SD-WAN infrastructure.

Device Type—**Other**.

Step 5. Click **Next**.

Step 6. On the **Tunnel ID and Passphrase** page, enter the following values.



Tunnel ID Format—Click **Email** or **IP Address**.

For an email, enter the tunnel name you assigned to the tunnel group. Secure Access will format it as *tunnel_id@org-hub*-sse.cisco.com.

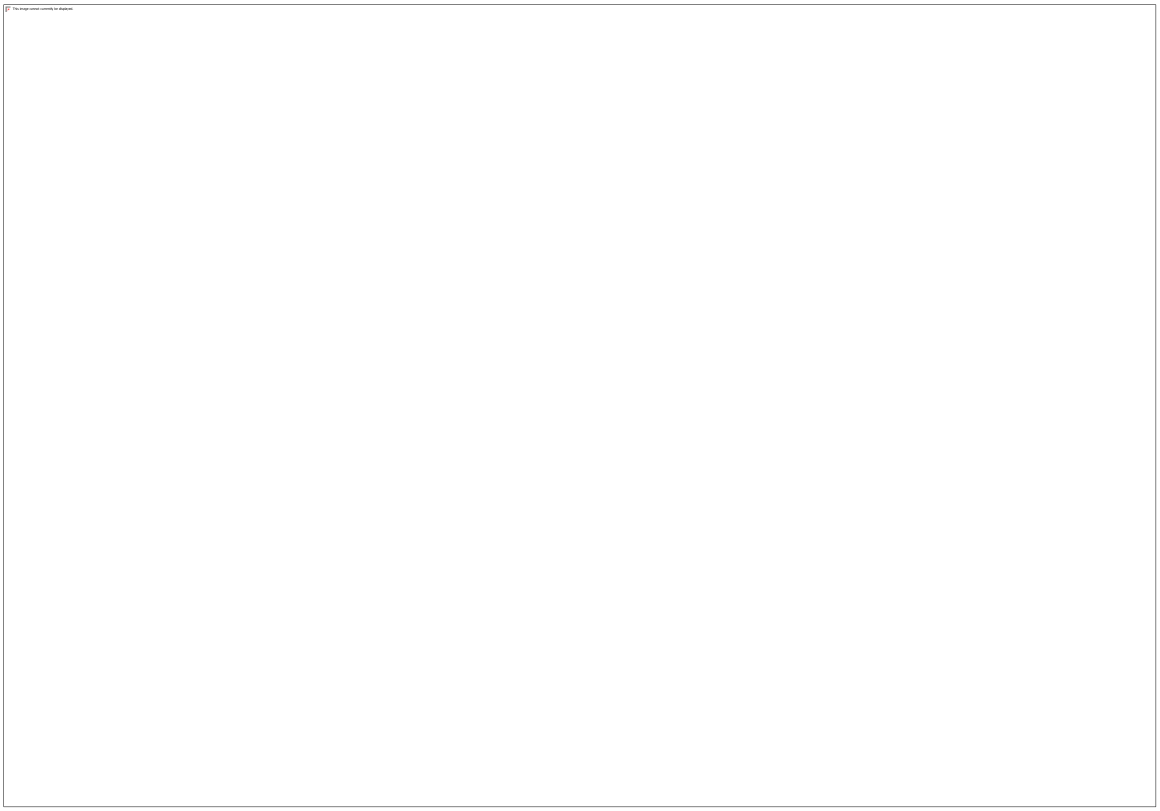
For an IP address, tunnel IDs require both a primary and a secondary IP address. You can specify either IPv4 or IPv6.

Passphrase—Enter a passphrase between 16 and 64 characters in length. The passphrase must contain at least one upper-case letter and one number. The passphrase can't include any special characters.

Confirm Passphrase—Re-enter your passphrase to confirm.

Step 7. Click **Next**.

Step 8. On the **Routing** page, set the following values.



(Optional) **Network Address Translation (NAT)**—To use NAT, check **Enable NAT / Outbound only**. If you check this option, the routing settings are disabled.

(Optional) **Internet Protocol Version Setting for Routing**—Check **Enable IPv6 Routing in addition to IPv4**.

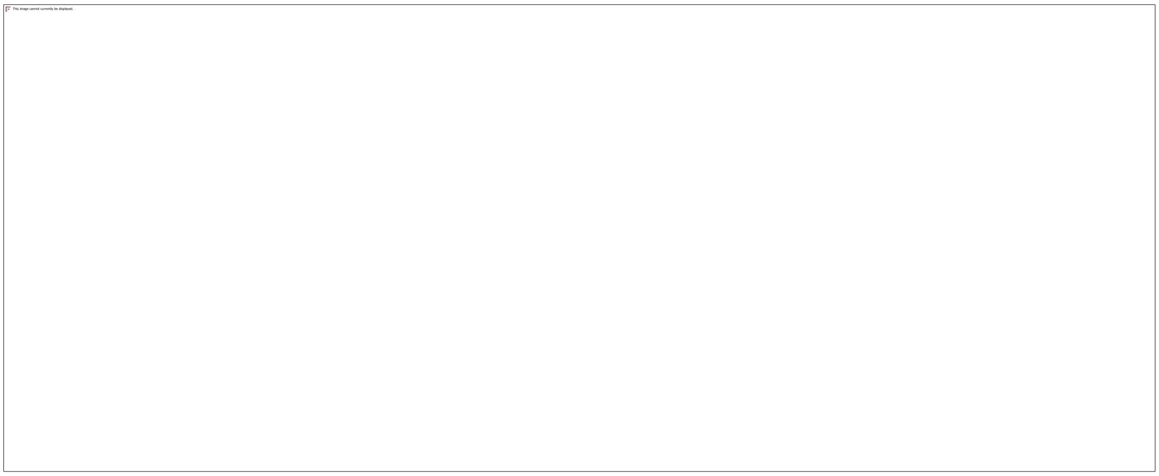
Click a **Routing** option for this tunnel group:

Static routing—Manually add IP Address subnets (IPv4 and IPv6) for this tunnel group separated by commas and then click **Add**. You can click **Add** multiple times until you add all the subnets you need. Add all public and private address ranges used internally by your organization.

Dynamic routing—Use this option for BGP. Enter the SD-WAN **Device AS Number**. If you enabled IPv6 routing, check one or both **Enable IPv4** and **Enable IPv6**. Under **Advanced Settings**, you can enable other options.

Step 9. Click **Save**.

Step 10. On the **Data for Tunnel Setup** page, review the information and click **Done**.



This page shows the primary and secondary tunnel IDs and data center IP addresses that you should use when you set up the tunnels on your branch devices. You can view these later by choosing **Connect > Network Connections**, clicking **Network Tunnel Groups**, and then choosing **View Details** for your network tunnel group. You can't view the passphrase later, so be sure to note the passphrase in a safe place.

Configure EdgeConnect for IPSec tunnels

Configure the IPSec tunnel for EdgeConnect to enable the redundant connections to Secure Access.

Procedure

Step 1. In the HPE Aruba Networking SD-WAN Orchestrator, choose **Configuration > Networking > Tunnels > Tunnels.**

Step 2. Click the edit icon for the device to which you want to add the tunnel.

Step 3. On the **Tunnels** dialog box, click **Passthrough**, and then click **Add Tunnel**.

Step 4. On the **General** tab, set the following values:

Table 1. **General** tab values

Field	Value
Alias	Specify the name of the tunnel.
Mode	**IPSec**
IPSec Suite B Preset	Keep the default option, **None**.
Admin	Shows whether the tunnel has been set to admin **up** or **down**.
Local IP / Interface	Specify the EdgeConnect internet WAN interface IP address.

Field	Value
Remote IP / Hostname	Specify the Secure Access primary data center IP address. You can view this tunnel information in Secure Access. Choose **Connect > Network Connections**, click **Network Tunnel Groups**, and then choose **View Details** for your network tunnel group.
NAT	Keep the default option, none.
Peer/Service	Enter the name of the service.
Auto Max BW Enabled	Check the check box to enable it.
Max BW Kbps	This field auto-populates based on your WAN bandwidth cap.

Step 5. Click the **IKE** tab, and set the following values:

Table 2. **IKE** tab values

Field	Value
Pre-Shared Key	Enter the passphrase you set when you added the network tunnel group in Secure Access.
Authentication Algorithm	**SHA-256**
Encryption Algorithm	**AES-256**
Diffie-Hellman Group	**14**
Rekey interval/lifetime	Keep the default value (360 minutes).
Dead Peer Detection	**Delay time: 10** **Retry count: 3**
Local IKE Identifier	Enter the Secure Access primary tunnel group ID. You can view this tunnel information in Secure Access. Choose **Connect > Network Connections**, click **Network Tunnel Groups**, and then choose **View Details** for your network tunnel group.
Remote IKE Identifier	Enter the Secure Access secondary tunnel group ID. You can view this tunnel information in Secure Access. Choose **Connect > Network Connections**, click **Network Tunnel Groups**, and then choose **View Details** for your network tunnel group.
Phase 1 Mode	It is set to **Aggressive** by default and cannot be changed.
IKE Version	**IKEv2**

Step 6. Click the **IPSec** tab, and set the following values:

Table 3. **IPSec** tab values

Field	Value
Authentication algorithm	**SHA-1**

Field	Value
Encryption algorithm	**Auto**
IPsec anti-replay window	**Disable**
Rekey interval/lifetime	Accept the default value.
Perfect forward secrecy group	Accept the default value.

Step 7. Click **Save**.

Create the Business Intent Overlay (BIO)

Use the Business Intent Overlays (BIOs) tab to create separate, logical networks that are individually customized to your applications and requirements within your network.

Procedure

Step 1. In the HPE Aruba Networking SD-WAN Orchestrator, choose **Configuration > Overlays & Security > Business Intent Overlays**.

Step 2. Select the BIO policy that has the **Breakout Traffic to Internet & Cloud Services** settings to direct traffic to Secure Access.

Step 3. In the **Match** field, select **Overlay ACL.**

Step 4. Click the edit icon next to the **ACL** field.

Step 5. Click **Add Rule.**

Step 6. Click **Match Criteria**, select **Others**, and then click **Save.**

Step 7. Ensure traffic permission is set to **Permit** and click **Apply**

Configure Route Mapping

Create an access list for interesting traffic

Procedure

Step 1. In the HPE Aruba Networking SD-WAN Orchestrator, choose **Configuration > Templates & Policies > ACLs > Access Lists**, and then and click **Add**.

Step 2. Click **Add Rule**, click **Match Criteria**, and then select **Other**.

Step 3. Click **Save**.

Step 4. Confirm that traffic permission is set to **Permit** and click **Apply**.

Create a Route Map

Procedure

Step 1. In the HPE Aruba Networking SD-WAN Orchestrator, choose **Configuration > Templates & Policies > Policies > Route Policies** and click **Add Map.**

Step 2. Click **Add Rule** and then click **Match Criteria.**

Step 3. Select **ACL** and from the drop-down list to choose the ACL created in the previous step.

Step 4. Click **Set Actions** and add the following:

Destination Type–Passthrough Tunnel

Destination–tunnel to Umbrella

Fallback–pass-through

Step 5. Click **Save**, and then click **Apply.**

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