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The bridge to possible

Leveraging Cisco SDWAN API's to simplify operations and deployments

API first approach for SDWAN

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DEVNET-2205

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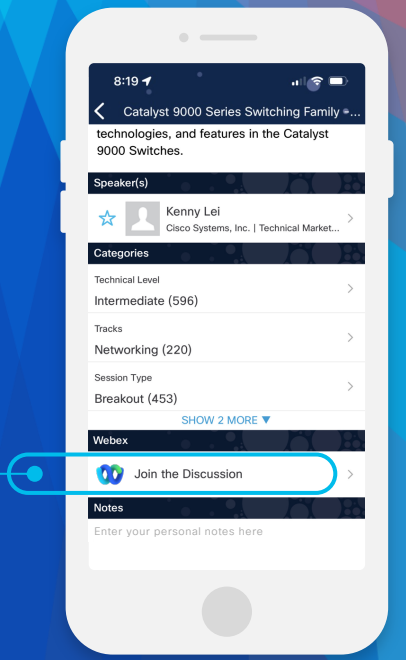

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Agenda

- Introduction to SD-WAN API's
- Use-Cases with SD-WAN API's
- Configuring SASE with SD-WAN using Templates.
- Demo
- Configuring SASE with SD-WAN using API's.
- Demo
- Tools at your disposal.

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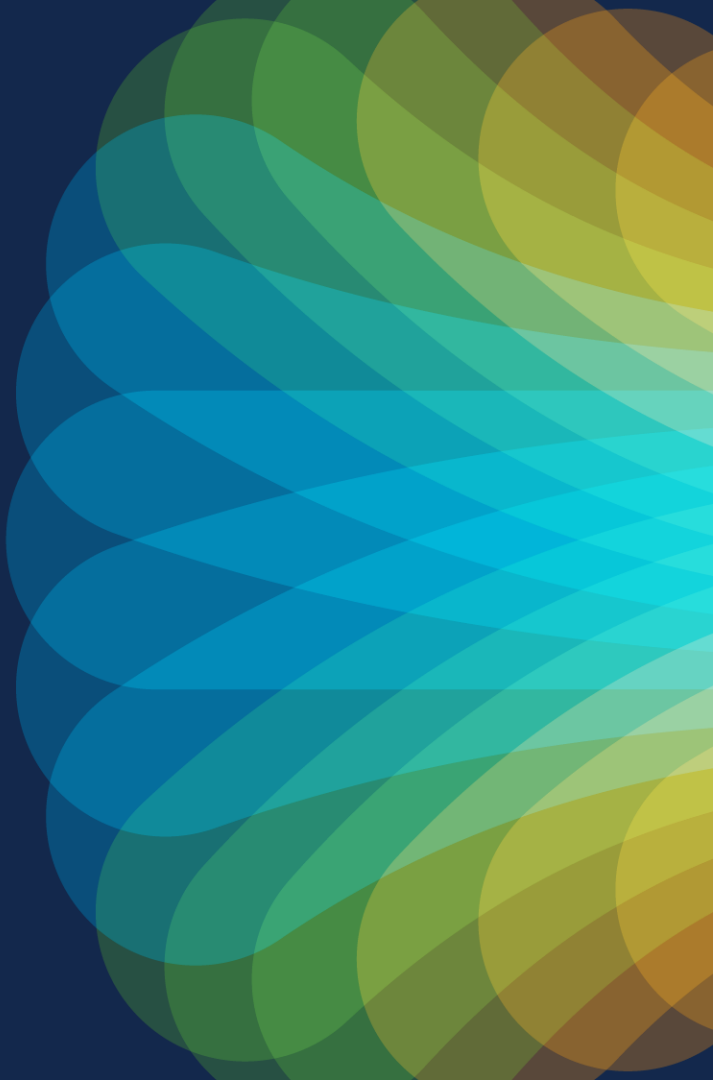
Introduction to SD-WAN API's



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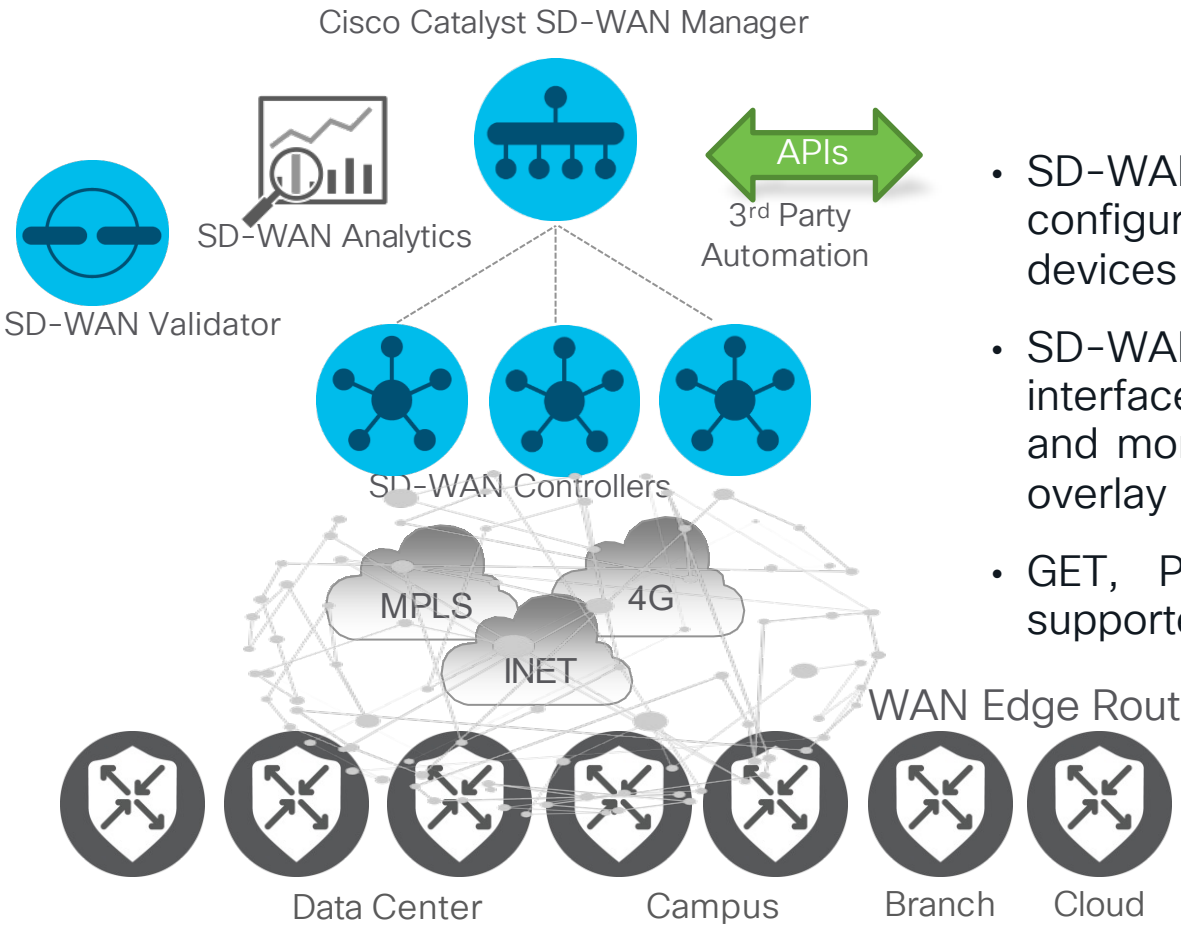

- SD-WAN Manager uses NetConf for configuring and managing edge devices.
- SD-WAN Manager uses REST API interface for controlling, configuring, and monitoring the Cisco devices in an overlay network.
- GET, PUT, POST, DELETE methods supported.

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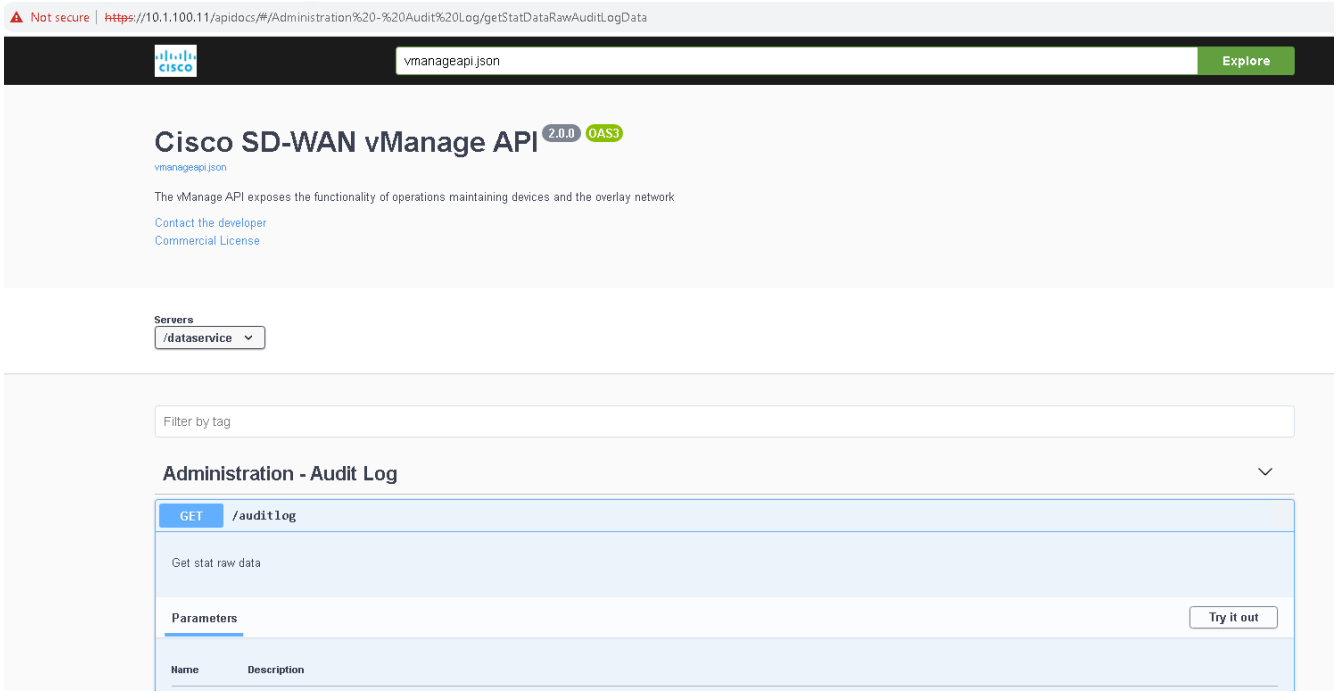

- Built-in API Documentation – https://<vmanage-ip:port>/apidocs
- Test API calls can be tried out from swagger UI
- API Documentation: https://developer.cisco.com/docs/sdwan/

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URI Structure

https://

- Protocol over which data is sent between client and server

Server or Host

- Resolves to the IP and port to which to connect

Resource

- The location of the data or object of interest

Parameters

- Details to scope, filter, or clarify a request. Often optional.

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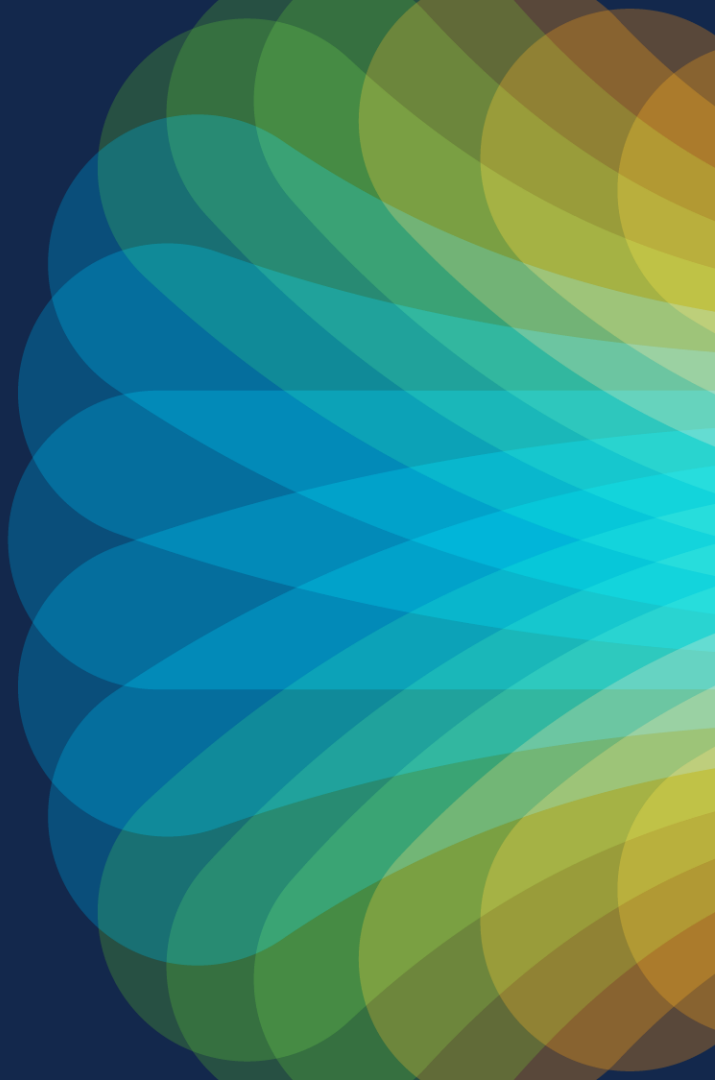
Use-Cases with SD-WAN API's



Problem Landscape with SDWAN

- Time Consuming and Error-prone Manual Configuration.
- Vendor Interoperability.
- Lack of Visibility and Control.

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Use-Cases with SD-WAN API's

- Standardization of sites.
- Ease of deployment.
- Ease of management.
- Opens Ability to Integrate with 3rd party apps.
- Save Time and Simplify Operations.
- Save Operational Cost.

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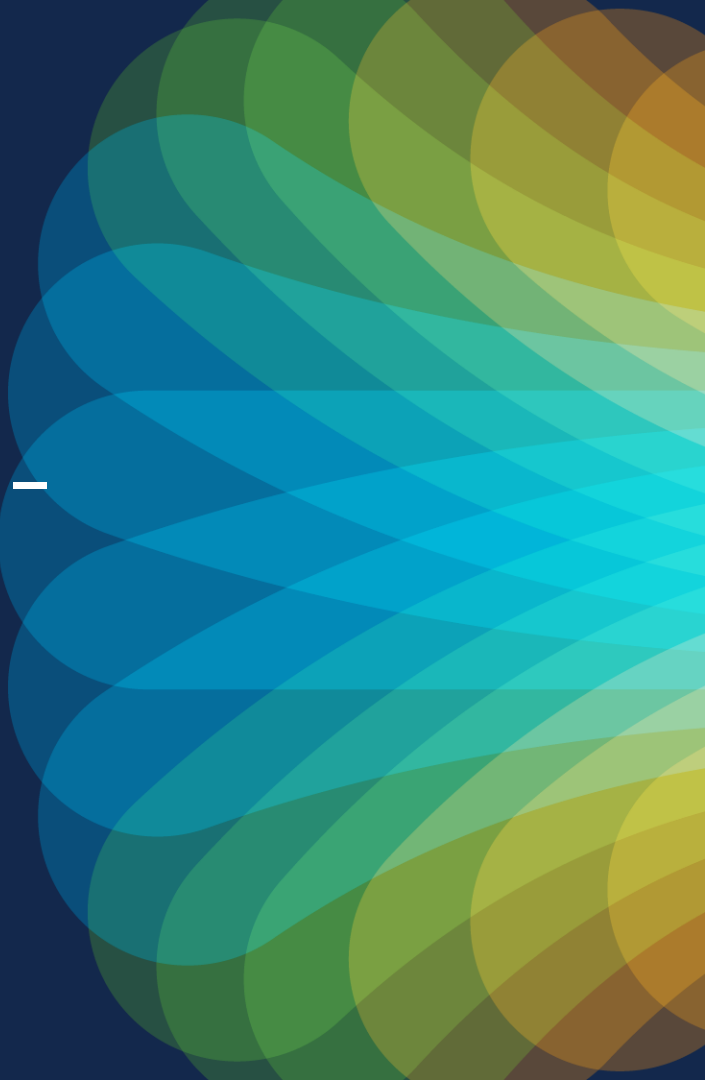
Configuring SASE with SD-WAN using Templates.



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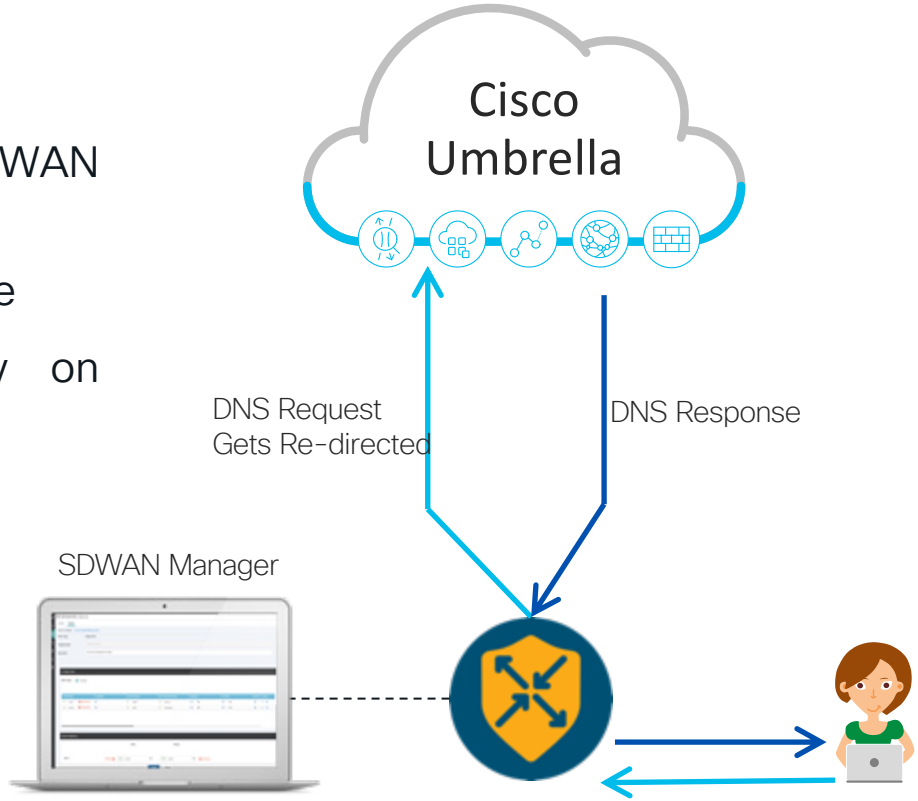
DNS Redirection to Umbrella Steps

- Perform Umbrella Registration
- Configure DNS Security Policy on SDWAN Manager
- Attach DNS Security policy to Template
- Map Network Identity DNS Policy on Umbrella



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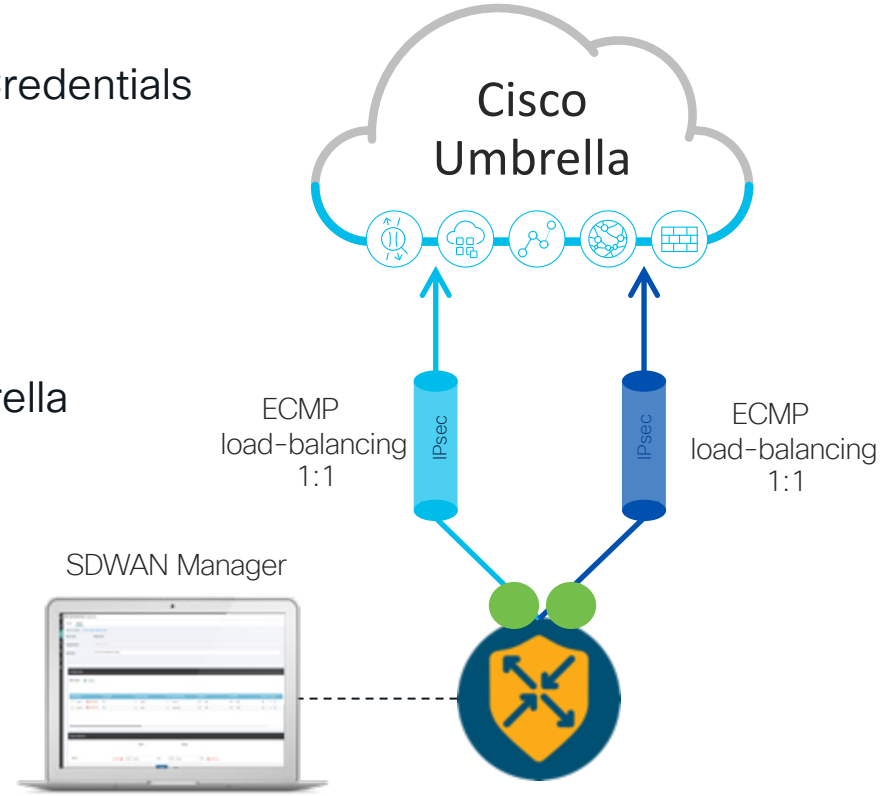
Umbrella SIG Integration Steps

- Configure Feature Template for SIG-Credentials
- Configure SIG-Tunnel Templates
- Map templates to device Template
- Add service route in Service VPN
- Map policies to IPSEC tunnels in Umbrella



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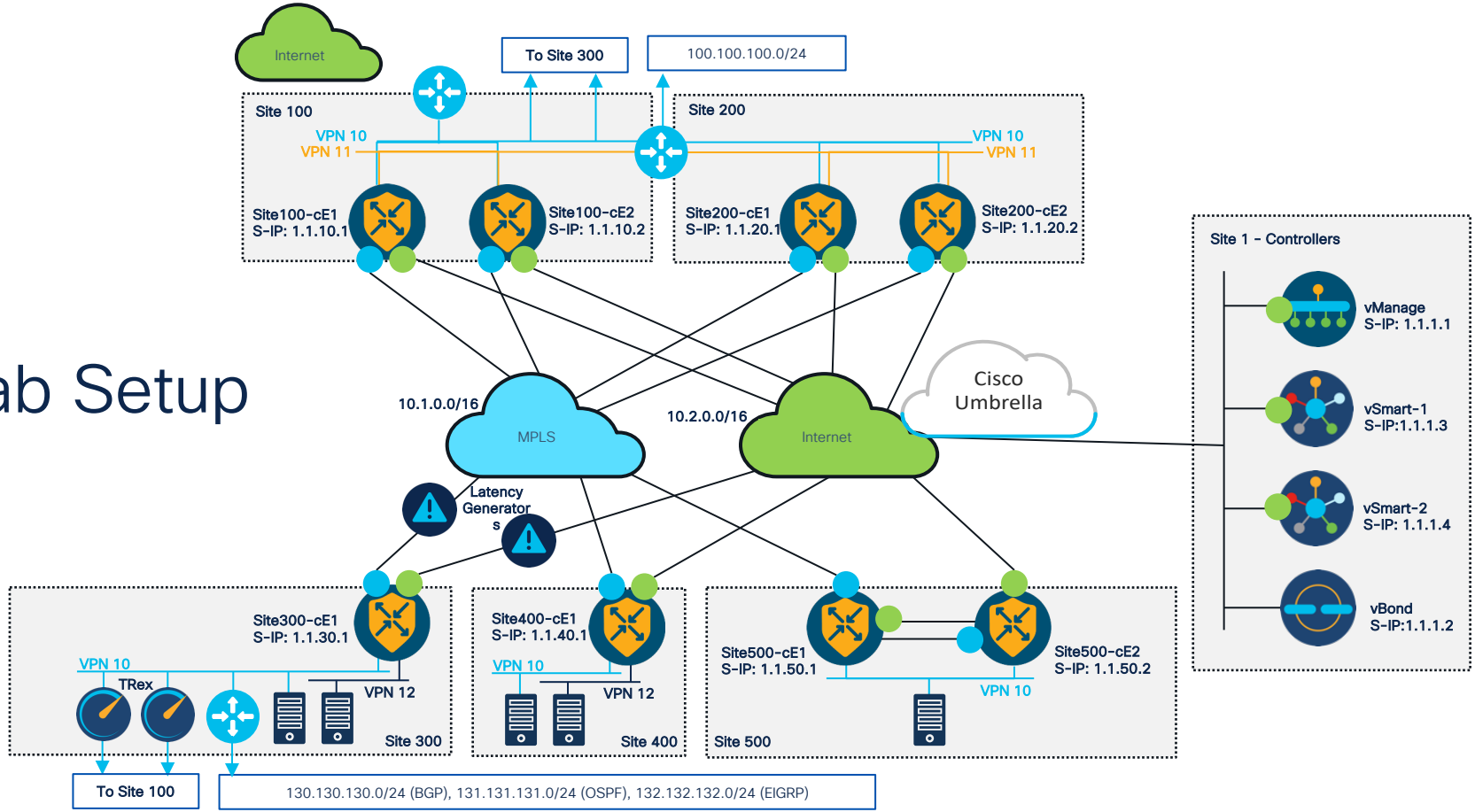
Lab Setup



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Demo

Challenges faced during Manual Configuration.

- Multiple Touch Points.
- Time Consuming.
- Error Prone.
- Repetitive Configuration due to Templates.

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Configuring SASE with SD-WAN using API's.

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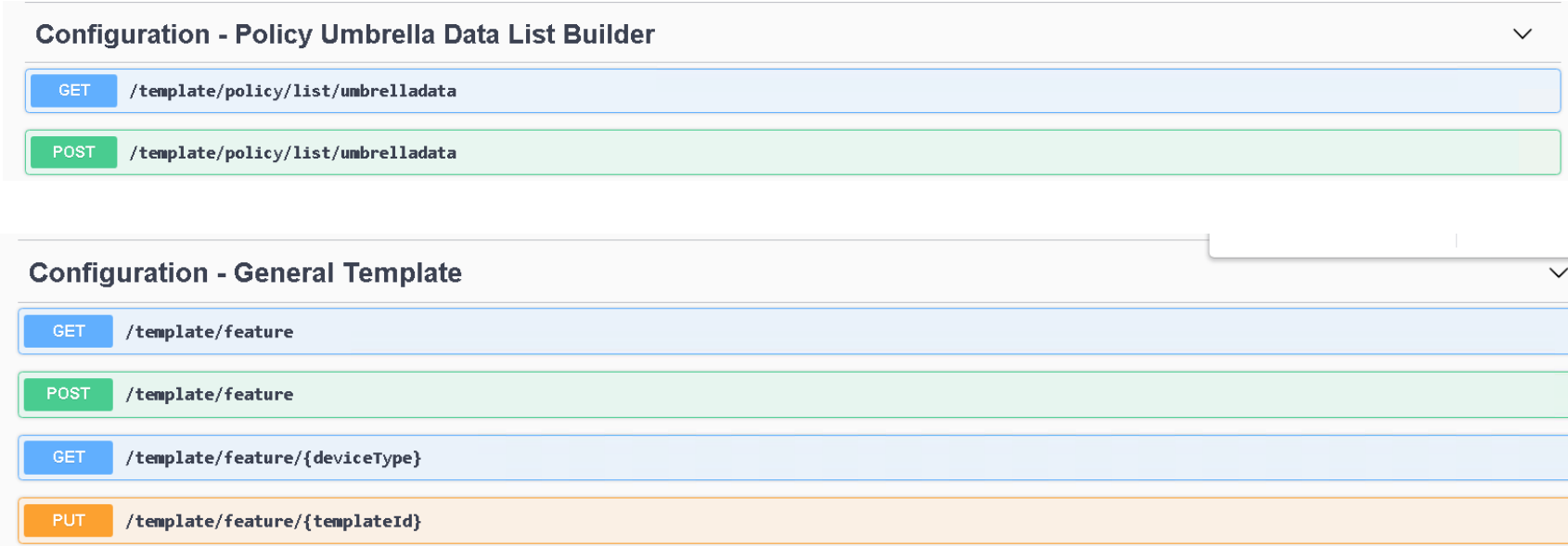
Some API's used for Umbrella SASE Integration



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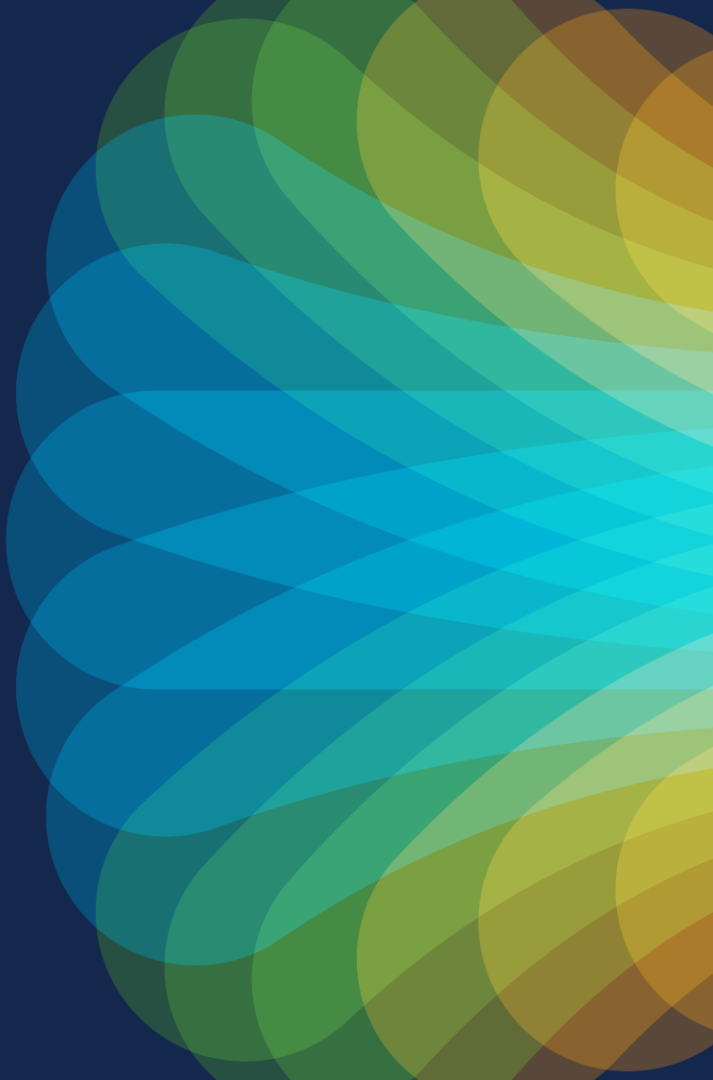
Demo

Tools at your disposal



Tools

- DCLOUD/SDWAN POC TOOL
  - Custom Topology

  https://dcloud2-sng.cisco.com/content/demo/494776?returnPathTitleKey=content-view
  - Pre-Build Dual DC Topology

  https://dcloud2-sng.cisco.com/content/demo/488086?returnPathTitleKey=content-view
- GPSA

  https://salesconnect.cisco.com/globalpartnerengineering/s/global-partner-solution-advisors
- GVSE

  https://gve-devnet.cisco.com

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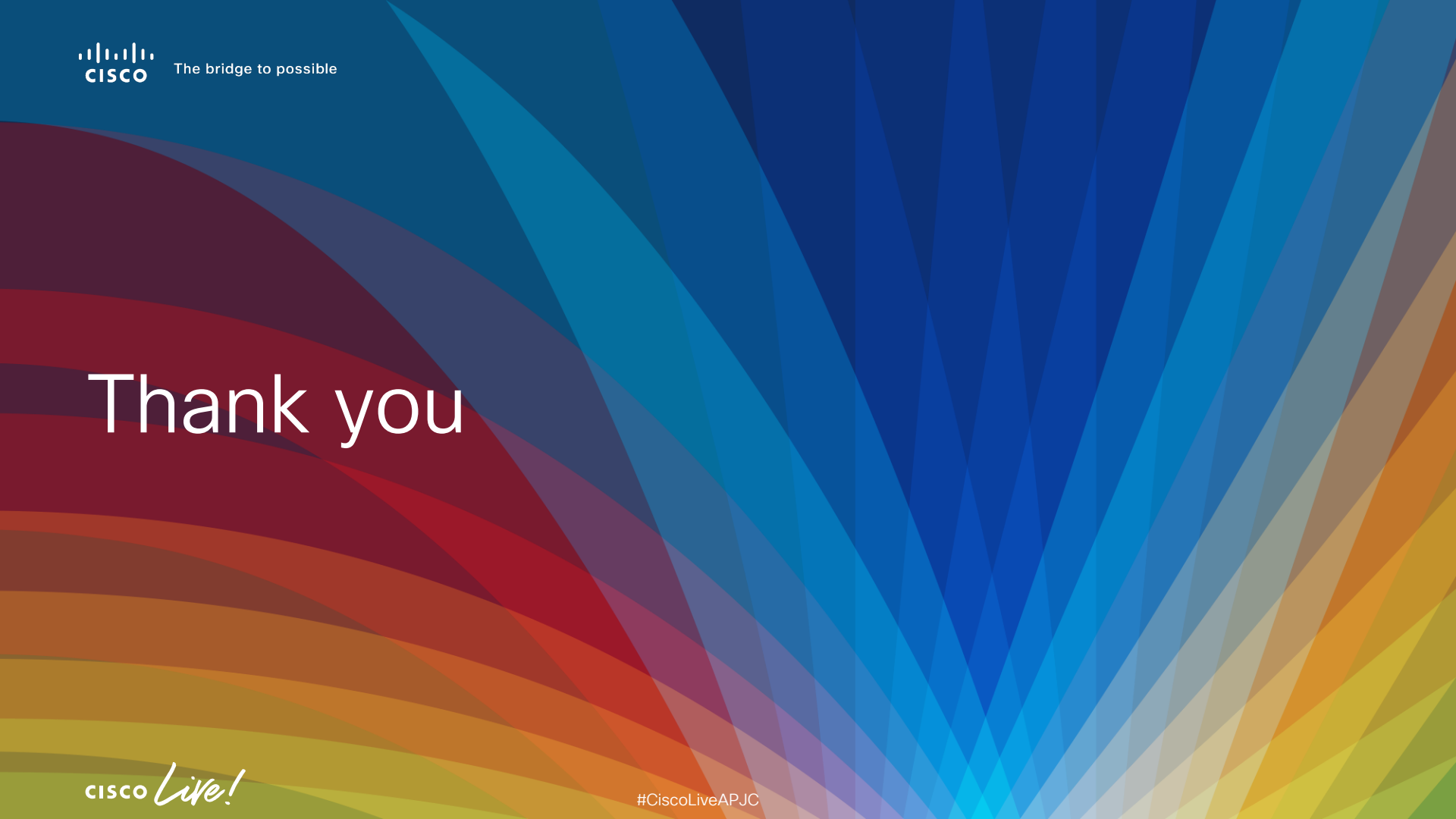
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