Configure SD-WAN Edge Router with Configuration Groups

Contents

Introduction
Prerequisites
Requirements
Components Used
Background Information
Configurations
Verification
Related Information

Introduction

This document describes how to Configure Cisco SD-WAN Edge Routers with Configuration Groups.

Prerequisites

Cisco recommends that you have knowledge of these topics:

• Cisco Software-Defined Wide Area Network (SD-WAN)

Requirements

- Cisco vManage
- Cisco WAN Edge router

Components Used

The information in this document is based on these software and hardware versions:

- Cisco vManage version 20.9.3.2
- Cisco WAN Edge router version 17.9.3a

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.

Background Information

Workflows are a library of guided workflows which consist of certain steps to perform specific tasks. They are designed to overcome the challenges faced with feature templates. In large network deployments, there is a huge number of feature templates deployed, making them harder to manage. Additionally, managing feature templates manually can be a slow and tedious process. Another limitation is that feature templates

are device-specific, which limits their reusability.

With guided workflows, you simplify the configuration process by providing step-by-step instructions to the user. Configuration components can be reused across an entire device family, instead of being specific to one device model. Furthermore, you can group devices based on shared configurations.

Configurations

Navigate to **Workflows > Quick Connect**.

Cisco SD-WAN					Mon	tor - Overview			△ ≡ ⊘ 0
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Select Quick Connect

Navigate to Create Configuration group.

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Select Create Configuration Group

Enter the Name and Description for Configuration Group.

Create Configurati	on Group
We's guide you through the requi	ed settings to quickly configure your WAN. We'll also recommend smart defaults along the w
tune	-
San_Jose_Branch	
en faurCoartha	ultus -
Description (Optional)	
San Jose Branch.	

Enter Name and Description

Create new basic profiles.

Site Computations		
Configuration Groups begin with smart default settings pre-populated for the user. You can modify or add	J to these settings as you wish.	X Collapse Al 0 to
 Site Type 		
Configuration Group Type Singler Router	Diz-internet Re MPLS	
	Edge Device	
	V9N - Guest Access	
	VPN - Carporate VPN, - Payntere Processing	
	VPN - Physical Security	
v o Site Settings 🕐		
Local Boyes Access*		
Conditioners Access.		
Local Bonce Access* (adv)	o be displayed where a successful login to the device IMOTO/Message-of-the-Day)	

Add Basic Profile

Create WAN and LAN profiles. You can choose multiple WAN and LAN interfaces.

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WAN Interfaces () OnCP State Surgent ture territor Cetor* territor Cetor* territor Show Advanced Inductor Name* Exc. Exc.	•	
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WAN and LAN Profile

Verify the summary of profiles and create configuration group.

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	v Configuration Group ter			
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	Description	San Jone Branch		
	Site Configuration			
	- Site Type Los			
	Configuration Group Type	Single Router		
	- Site Settings Las			
	MOTD Message	System Default		
	Login Message	System Default		
	LOCAL DEVICE ACCESS			
	Default Pasaword	(ladmin_password!)		
	- WAN Interfaces un			
	TRANSPORT 1			
	Name	Internet		
	1920	puble-internet		
	P Address	Static		
	Shaping Rate (Chini)	System Default		
	- WAN Routing Lat			
	WAN Routing	Static IPv4		
	v LAN & Service VPN Profile	Let		
	SERVICE VPN 1			
	Name	Corporate Users		
	1991	1.0		
C sat			Bath I	Create Configuration Group

Summary

Associate the Devices to Configuration group.



Associate Devices to Configuration Group

Select the devices you want to add to the San_Jose_Branch configuration group.

	🖗 Select Responsi Group+				*0			
Choos Select the Available	se devices devices you would like to add to the San_Jose_B Devices (10)	ranch configuration group						
Q. Saat	rut Table							v
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	\$81002+05.JAD234204KR	ASR1032-HX	BBVA_DC_rEdge		10 50 50 52	502	04841DA9	
0 19	#4131.K9-FD0201717N8	(084321	:Edge1		10.10.10.200	200	C914DA	
0 0	1115-4PWA-#GL21499352	C1111-BPW*	BBIR,Branch,cEdge		10.50.30.51	501	01502808	
0 0	SR-5489C82528056093-C917-888F08488482	CSR1000v					6644052011#344455732089921#12087	
	SK-240056245-9695-8572-9144-570968264823	CBDDDV					0x31515110x3546825467cz5x256x0x542	
0 .	#4331.W3-FD0200210H8	(584331)	c6ope2		10.10.10.201	200	ANDAND	
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Select the Device

Review the information for the devices to be added. You can deploy now or later.

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Summar Review the left	y	devices to be add	ed You can deploy ne	nu or later			
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Exit							Back Save
mmary							

Provision the device with configuration group.



Provision the Device

Select Devices to Deploy.

Edge Devices (1)									
Q. Search Table									
1 selected Associate Devices									
Chassis Numbers	Hostname	Tags	System IP	Site ID	Device Status	Added by Rule	Last Configured	Up To Date	Unsupported Features
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							Rems per	page 25 v	1-1of1 12 2

Select Devices to Deploy

Add and review the device specific configuration.

E Cisco SD-WAN	Select Resource C	irnup v	Deploy Configuration Group			
Add and We've autoger Modify them a	d Review Devi merated minimal configurat s needed and directly edit	ce Configuration	devices.			
Q Search					ې Import 🖞	Export
ISR4451-X/K9-FOC20468TWU Branch_1	101.101.101.109	Device Information Site Id* 1001	System (P* 101.101.101.109		Roback Tener (rec)* 300	
		Host Namo* Branch_1	admin_password*	SHOW	vpn_0_public_internet_if* GigabitEthernet0/0/0 Value can be selected or edited	
		vpn_0_public-internet_if_ip* 10.201.180.242	vpr_0_public-internet_if_subnet* 255.255.255.128	×	vpm_0_static_ipv4_metwork_addr* 0.0.0.0	
		vpn_0_static_jpv4_nexthep_ipaddr+ 10.201.180.129	vpn_0_static_ipv4_subnet* 0.0.0.0	۵,	vpn_10_if_0+ GigabitEthernet0/0/2	

0.0.0.0

vpn_10_if_0_subnet 255.255.0.0

Back

Review

Exit

Add and Review

Verify the Configuration pushed with CLI Preview and Deploy.

10.201.180.129

vpn_10.,if_0_ipaddr 10.10.1.1

≡ Cisco S	D-WAN	💮 Select Re	source Group)*		Deplo	y Configuration Gr	oup						
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ľ	Selected D	evices (1)	Preview CLI	Edit										
	Device ID •		Site Id •	System IP •	Rollback Timer (sec) •	Host Name+	admin_password+	vpn_0_public-internet_if+	vpn_0_public-internet_if_ip+	vpn_0_public-internet_if_subnet+	vpn_0_static_ipv4	_network_addr+	vpn,	,0_stati
	ISR4451-X/K	FOC20468TWU	1001	101.101.101.109	300	Branch_1		GigabitEthernet0/0/0	10.201.180.242	255.255.255.128	0.0.0.0		10.5	201.18
	4									items per page: 25	¥ 1-1	of1 <	< >	

Exit



Verify the Configuration with CLI Preview and Deploy

Verification

View Deployment Status.



View Deployment Status

Navigate to **Configuration > Devices > Verify the Assigned Configuration Group**.

E Cisco SD-WAN	Select Re	esource Group+				Configuration	· Devices					0	Ξ	0 4
						WAN Edge	List Controllers							
Q, Search														V
Change Mode 🖂 . Upload WA	N Edge List E	xport Bootstrep Confi	iguration Sync Sm	hart Account	Add PAYG W	(AN Edges						Total Rows: 20	a	+ 63
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Assigned Config Group

Navigate to **Configuration > Templates > Configuration Groups**.

E Cisco SD-WAN	Select Resource Group+	Configuration	- Templates				0	≡ ⊚ ¢
		Configuration Groups Feature Profi	les Device Templates	Feature Templates				
Configuration Groups (2)								0
Q Search Table								∇
Add Configuration Group							As of: Sep 26, 2023 03:04	IPM 📿
Name	Description	De	vice Solution Numb	er of Devices Devices	Up to Date Number of Feature Profile	Updated By	Last Updated On 👃	Actions
San_Francisco	San_Francisco	sd	lwan T	1	.4	admin1	Sep 26, 2023, 2:45:16 PM	
RCH_Branch	Richardson Site	sc	twan 1	1	4	admin1	Sep 25, 2023, 7:43:16 AM	

Configuration Groups

This captures the configuration template attached and device status.

<#root>

Branch_1#show sdwan system status

Personality: vEdge Model name: ISR4451-X/K9 Device role: cEdge-SDWAN Services: None

vManaged: true

<----- Managed by vManage

Commit pending: false

Configuration template: San_Francisco

<----- Configuration Group Attached
Chassis serial number: FJC2104D0PQ</pre>

Related Information

Configuration Groups and Feature Profiles