# 配置Nexus控制面板协调器将终端从一个DC迁移 到另一个DC

## 目录

## 简介

本文档介绍将终端从一个数据中心迁移到另一个数据中心所需的设计和配置更改。

## 物理拓扑

图1显示了两个数据中心的互连。

图 1:物理拓扑



DC和DR位置具有以应用为中心的基础设施(ACI)。DC和DR位置包含WAN交换机、边界枝叶、主干、站点间网络设备(ISN)、服务器枝叶和连接的终端。

## 逻辑拓扑

图 2:逻辑拓扑



两个站点中配置的逻辑对象:

- 租户生产在DC和DR站点配置。
- DC-VRF-WEB和DC-VRF-APP配置在DC-SITE1中。DR-VRF-WEB和DR-VRF-APP配置在 DR-SITE2中。
- 每个VRF在指向WAN交换机的边界枝叶上配置有本地L3Outs。在指向WAN交换机的边界枝叶 上配置默认路由。
- WAN交换机配置了用于VRF间和DC间通信的静态路由。
- 两个数据中心都配置了本地BD和EPG。DC有DC-BD1-WEB/DC-EPG1-WEB、DC-BD2-WEB/DC-EPG2-WEB和DC-BD-APP/DC-EPG-APP。DR有DR-BD1-WEB/DR-EPG1-WEB、DR-BD2-WEB和DR-BD-APP DR-EPG-APP
- 存在在WEB和APP EPG中连接的终端。
- DC-SITE1和DR-SITE2已添加到Nexus Dashboard Orchestrator。

## 终端迁移前的流量

数据中心中有多种类型的流量:

- EPG内流量
- EPG间流量
- VRF间流量
- DC间流量

EPG内流量

图 3: EPG内流量



DC-EP-1和DC-EP-2之间的通信是EPG内通信,因为两个终端都属于DC-EPG1-WEB。DR-EP-1和 DR-EP-2之间的通信是EPG内通信,因为两个终端都属于DR-EPG1-WEB。

#### EPG间流量

图 4: EPG间流量



DC-EP-1和DC-EP-3分别是DC-EPG1-WEB和DC-EPG2-WEB的一部分,这两个终端之间的通信是 EPG间流量。DR-EP-1和DR-EP-3分别是DR-EPG1-WEB和DR-EPG2-WEB的一部分,这两个终端 之间的通信是EPG间流量。

VRF间流量

图 5: VRF间流量



DC边界枝叶交换机将流量转发到DC WAN交换机,以实现任何VRF间通信。DC WAN交换机用于 VRF间通信。DC-EP-1/EP-2(VRF WEB)通过WAN交换机与DC-EP-4(VRF APP)通信。DR边界枝叶 将流量转发到DR WAN交换机,以便进行VRF间通信。DR WAN交换机用于VRF间通信。DR-EP-1/EP-2(VRF WEB)通过WAN交换机与DR-P-4(VRF APP)通信。

DC间流量

图 6: DC间流量



DC终端和DR终端之间的通信转发到边界枝叶。边界枝叶将流量转发到WAN交换机。WAN交换机用于DC间通信。

## 迁移计划

Nexus Dashboard Orchestrator用于在两个站点之间创建多站点,跨站点和终端的EPG/BD从DC-SITE1迁移到DR-SITE2,

### 方案1创建

通过Nexus Dashboard Orchestrator创建的方案1。

### 图 7:租户模板 — 添加架构

-di-di- csco Nexus Dashboard	🖗 Oxhestrator -	0 1
8 Overview Manage	Manage > Tenant Template	Refresh Austriage
(i), Analyze	Applications L3Out Monitoring Policies Service Device Tenant Policies	
.l₀ Admin	Fibrily abbates	Add Scheme

#### 图 8:添加架构名称

-du-du- cisco Nexus Dashiboard	$\widehat{\Psi}$ Orchestrator –							0	1
<ul> <li>Øverview</li> <li>Manage</li> <li>Analges</li> </ul>	Istange > Terant Templates (Apr Schema-1 View Overview ~	sication) > Schema-1			Refe	gh Auditurp	Crate Key Templa	6 (Sec)	
J <sub>Q</sub> Admin	General Name Scheme-1	Description Schema-1	1	Audit Log Crarad 1	S Deleted D	Updated Ø	Deployed Ø	00er 0	

## 模板 — VRF — 合同 — 扩展创建

在架构1中创建了Template-VRF-Contract-Longed。DC-SITE1和DR-SITE2将属于此模板,租户生 产将与同一模板关联。这是拉伸的模板。VRF和合同必须作为单独模板的一部分,因为这些对象在 其他BD/EPG之间共享。此模板用于将DC-SITE1 VRF和合同延伸到DR-SITE2。

图 9:添加应用模板 — 选择ACI多云

Add Application	n Template	×
1 Select a Temple	ate type Detail Summary	
Select a Templat Let's choose the typ	te Type pe of template you want to work with	
• ***	ACI Multi-Cloud • On-prem ACI fabric to fabric • On-prem ACI fabric to cloud fabric • Cloud fabric to cloud fabric	
• 3=6	NDFG • NX-OS based network	
0 🖪	Cloud Local  Non-stretched template for cloud fabric local BOP-IPv4 connected fabric	

图 10:添加模板名称Template-WEB-VRF-Contract-Longed,选择租户生产

<u> </u>		-0	3	
Select a Template	type	Getail	Summar	r
Details				
vow name the templat	e and select a tenant			
асін. • Оп- • Сіе	Mi Cloud prem ACI fabric to fabric prem ACI fabric to cloud fab- al fabric to cloud fabric	rie -		
HERAL				
Xisplay Name •		Select a Tenant *	•	
Template-WEB-VRF-	Contract-Stretched	Production		9
dernal Name; Templat	le-WEB-VRF-Contract-Stretc Add Dee	negl		
eployment Mode 💮				
Multi-Fabric				
) Autonomous				
				1
莫板 — WEB-VI	RF — 合同 — 扩展 <sup>:</sup>	详细信息		[ Ван
莫板 — WEB-VI d Application	RF — 合同 — 扩展i Template	详细信息		Bac
莫板 — WEB-VI I Application	RF — 合同 — 扩展i Template	详细信息		Bat
t板 — WEB-VI Application	RF — 合同 — 扩展 <sup>;</sup> Template	详细信息 	3	Bat
板— WEB-VI Application	RF — 合同 — 扩展i <b>Template</b>	详细信息 	3 Summary	Det
t板 — WEB-VI Application Setect a Templat	RF — 合同 — 扩展i Template	详细信息 Detail	3 Summary	Bas
使板 — WEB-VI I Application Senerit a Templat	RF — 合同 — 扩展i Template • type • type • type	详细信息 Destail	3 Summary	Bat
版 — WEB-VI Application Enterst a Templat Summary	RF — 合同 — 扩展 Template Template	详细信息 Detail	3 Summary	
版 — WEB-VI Application Entert a Templat Summary Contails Details Template name Template name	RF — 合同 — 扩展 Template Template	详细信息 Detail	Summary	0
表板 — WEB-VI Application Setect a Templat Summary ACIP Color	RF — 合同 — 扩展 Template Template	详细信息 Detail	Gummary	0

导入Template-VRF-Contract-Longed中的VRF-Contract

从DC-SITE1导入DC-VRF-WEB和DC-VRF-WEB-Contract。为EPG间通信和EPG到L3Out通信创建 合同。

图 12:点击Import并选择DC-SITE1

Varage + Tenant Templates (Application) + Schema-1 Schema-1		Rafash AutoLoge Create New Template Service	
	• *******		
		MEGHT - SELECT CH	
		DC-SITE1 DR-SITE2	

图 13:从DC-SITE1中选择合同

Import from DC-SITE1		×
POLICY TYPE	SELECT TO IMPORT Q IMPORT RELATIONS	
APPLICATION PROFILE 0 out of 2	DC-EPG-TO-EPG-APP-CON 1 FILTER	
EPG 0 out of 3	DC-EPG-TO-EPG-WEB-CON	
EXTERNAL EPG 0 out of 2	DC-EPG-TO-L3Out-APP-CON 1 FILTER	
CONTRACT 2 out of 4	DC-EPG-TO-L3Out-WEB-CON	

图 14:从DC-SITE1中选择过滤器

Import from DC-SITE1		×
POLICY TYPE	SELECT TO IMPORT RELATIONS	
APPLICATION PROFILE 0 out of 2	DC-EPG-TO-EPG-APP-FIL	
EPG 0 out of 3	DC-EPG-TO-EPG-WEB-FIL	
EXTERNAL EPG 0 out of 2	DC-EPG-TO-L3Out-APP-FIL	
CONTRACT 2 out of 4	DC-EPG-TO-L3Out-WEB-FIL	
FILTER 2 out of 4		

### 图 15:从DC-SITE1中选择VRF

Import from DC-SITE1				×
POLICY TYPE	SELECT TO IMPORT	Q	IMPORT RELATIONS	
APPLICATION PROFILE 0 out of 2	DC-VRF-APP			
EPO 0 out of 3	C-VRF-WEB			
EXTERNAL EPO 0 out of 2				
CONTRACT 2 out of 4				
FILTER 2 out of 4				
VRF 1 out of 2				

图 16 : 模板 — WEB-VRF — 合同 — 使用VRF和合同信息扩展

Schema-1	iptotes (Application) + 1	chema-1		Rafresh Auto La	p) Crush Rev Traylor) Tractorer
Template Sum	mary				Ealth Tampindan (Tamping Tampindan) (Auto
Type Application	Tenant Production	Compare Status	Associated Fabrics 2 + In Type = 0 - Out of Type 2	Last Action	Deployment Mode Multi-Fabrie
Filter					APONT - 10.001 Create
Contracts M					Create Co
DC-EPO-TO-EPO-W CON	CD-CPO CON	10-L30ur-WEB-			
vers v					Crea
DC-VRF-APP	0C-VRF	WCB			

部署模板 — VRF — 合同 — 延长

点击Deploy Template-VRF-Contract-Longed并选择DC-SITE1和DR-SITE2

图17:向模板 — VRF — 合同 — 拉伸添加交换矩阵



图 18:部署外部同步模板

Deploy Out of Sync Templates				
Pitter by attributes	5			
Template Name	Template Type	Associated Fabrics		
Template-WEB-VRF- Contract-Stretched	Application	<b>T</b> 2		
items found	Re	ws per page 5 $\checkmark$ < 1	>	
		Cancel Deploy Out of Sync Templa	ter	

### 图 19:已完成部署

Manage - Terrant Templates (Applied Schema-1	ation) > Schema-1		Refresh (Audriage) (	(mana fare faregrade)
View Template-WEB-VRF-Co	intract-Stretched ~			
Template Properties •(DC	-SITE1) •(DR-S	ITE2)		
Template Summary				In Template (Depicy Template) (Actor
Type Terrant Application Production	Nampiata Diatos Interne	Associated Fabrics in Syne 2 Out of Syne 0	Last Action Deployment Secondal Last Deployed: Jan 3, 2035 09.07 pm	Deployment. Mode Multi-Fabrie
filter				mangar - SULDET (Frank
Contracts +				Create Co
00-6P0-10-0P0-W68- 00H	DC-EPG-TO-L30wEWEB- CON			
VBPs ×				Grea
DC-VRF-APP	OC-VRF-WEB			

### 图 20:验证两个站点上部署的VRF和合同



### 模板 — EPG1-BD1 — 拉伸创建

在架构1中创建了Template-EPG1-BD1-Streted。DC-SITE1和DR-SITE2已添加到与同一模板关联 的模板和租户 — Production。这是拉伸的模板。此模板用于将DC-EPG1-WEB和DC-BD1-WEB拉 伸到DR-SITE2。

图 21:添加应用模板 — 选择ACI多云

#### Add Application Template

Sele	1 set a Templ	ete type	2 Detail	3 Summary
Select Let's cho	a Templat	e Type se of template you want to work with	1	
۲	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ADI Multi-Cloud • On-prem ACI fabric to fabric • On-prem ACI fabric to cloud fat • Cloud fabric to cloud fabric	ario	
0	<del>3</del> •8	NDFC • NX-OS based network		
0	Ξ	Cloud Local • Non-stretched template for clo	ud fabric local BGP-IPv4 connected fabric	

## 图 22:添加模板名称Template-EPG1-BD1-Proved,选择租户生产

Add Application Template		×
Select a Template type	2	3
Details New name the template and select a tenant		and an and a second
ACI Pluiti-Claud Characteristic to fabric Characteristic to fabric Characteristic to fabric Cloud fabric to cloud fabric		
GENERAL		
Display Name •	Select a Tenant *	
Template-EPG1-801-Stretched	Production	× ~
Internal Name: Template-EPG1-8D1-Stretched Add Description		
Deployment Mode 💮		
Multi-Fabric		
Autonomous		
Cancel		Deck Deck

图 23: Template-EPG1-BD1-Tended Details

Add /	Application Template			ж
	Select a Template type	Detail		mary
5	ummary			
	ACI Multi-Cloud On-prem ACI fabric to fabric On-prem ACI fabric to cloud fabric Cloud fabric to cloud fabric	H0		
	Details			~
	Template name Template EP01-801-Stretched			
	Deployment Mode Multi-Pabrie			
	Tenant Production			
Cancel			Back	Continue to template

在Template-EPG1-BD1-Tended中导入EPG1-BD1

### 从DC-SITE1导入DC-EPG1-WEB和DC-BD1-WEB。

## 图 24:点击Import并选择DC-SITE1

Manage + Tenant Te Schema-1 View Template- Template Preperti	englistes (Application) > 1 EPG1-BD1-Stretched	lohama 1 I v		Refresh AutoLogo	Constr New Temptate Terre Televen
Template Sun Type Application	nmary Tetant Production	Template Status	Associated Faterics • 1-Spor 0 • Out of Spor 0	Last Action	Edit Templete Duploy Templete Artic Deployment Mode Multi-Fabrie
					DC-SITE1 DR-SITE2

图25:从DC-SITE1中选择DC-EPG1-WEB

Import from Do	C-SITE1		x
POLICY TYPE		SELECT TO IMPORT Q IMPORT RELATIONS	
APPLICATION PROFILE	1 out of 2	DC-EPG1-WEB	
EPG	1 out of 3	DC-EPG2-WEB	
EXTERNAL EPG	0 out of 2	DC-EPG-APP	

## 图26:从DC-SITE1中选择DC-BD1-WEB

Import from DC-SITE1			ж
POLICY TYPE	SELECT TO IMPORT	Q IMPORT RELATIONS	
APPLICATION PROFILE 1 out of 2	C-8D1-WE8		
EPO 1 out of 3	C A DC-8D2-WE8		
EXTERNAL EPG 0 out of 2	DC-BD-APP		
CONTRACT 0 out of 4			
PRITER 0 out of 4			
VRF 0 out of 2			
BD 1 out of 3		_	

在DC-BD1-WEB设置中启用L2 Stretch并添加网关IP地址。此模板用于跨站点和在DC-SITE1和DR-SITE2中配置的任播网关延伸BD。

#### 图 27:在DC-BD1-WEB中选择L2 Stretch

DC-BD1-WEB		View Belationship
Linguagess manual sch." Burrands		
Description		
Annotations		
Key	Value	
Create Annotations		
Properties		~
O On-Premises Properties		
Wrtsail Routing & Forwarding 🖪 *		
DC-VRF-WEB		X 😌
L2 Stretch		
er		
Intersite BUM Traffic Allow		
Optimize WAN Bandwidth		
2		
Unicast Bouting		

#### 图 28 : 添加网关IP/子网

DC-BD1-WEB	Add New Subnet	×
L3 Multicast L2 Unknown Unicast Plood Hardward	Gateway IP • 192.168.10.1/24 Description	
Unknown Multicast Flooding Flood Optimize IPv6 Unknown Multicast Flo Flood Optimize Multi-Destination Flooding Flood in 80 0r ARP Flooding	Treat as virtual IP address  Treat as virtual IP address  Scope  Private to VRF Advertised Externally  Shared between VRFs  No Default SVI Gateway	
Not Configured Subnets Gateway IP Advanced Settings	Cuerier Cuerier Primery ©	

#### 部署模板 — EPG1-BD1-Longed

点击Deploy Template-EPG1-BD1-Loaded并选择DC-SITE1和DR-SITE2

图29:将交换矩阵添加到Template-EPG1-BD1-Extended

Add Fabrics To Template-EPG1-BD1-Stretched	×
Mame	
CX-APJC-LAB-SITE1	
CX-APJC-LAB-SITE2	
	<b>(%)</b>

## 图 30:部署外部同步模板

Deploy Out of Sy	nc Templates	*	6
The following templates will b	e deployed in the specified	order	
Filter by attributes			
Template Name	Template Type	Associated Fabrics	
Template-EPG1-BD1- Stretched	Application	2	
1 items found	R	wsperpage 5 - < 1 >	
		Cancel Deploy Out of Sync Templates	

图 31:已完成部署

Schema-1			Refresh AutoLoge Crede	tere Terrytote
Template Summary Type Perset Application Production	Templata Status (2) In Senio	Associated Fabrics 	Last Action G Septement Reconnected Last Depleyed, Jan 3, 2005 OF DE pro	pinter (Depiny Templater) (Autom Organyment) Matti Falleria Matti Falleria
Filter				exercise? - SELEC? Create C
Application Profile (PC-WEB				Create Application Profi
EPOs v				Create
00-0P01 W08				
Bridge Domaina 😁				Create Bridge Dr
0C-801-WEB				

## 将DC-EP-1从DC-SITE1迁移到DR-SITE2

在DC-EPG1-WEB的DR-SITE2中配置静态绑定并关联DR-SITE2物理域。将DC-EP-1从DC-SITE1迁移到DR-SITE2。

#### 图 32:DC-SITE1当前学习的DC-EP-1

disco APIC (DC-SITE1)					00	000	000
System Tenants Fabric Virtual Networking J	Productioni dmin Operations Apps	Integrations					
ALL TENENTS   Tener Search Inter a deal	Productors world-plant	verti-posr	veet-pistari				
This object was created by the Nexus Dashboard Dichestration	c. It is recommended to only mor	By this object usin	g the NDO GUI.				
Production 000	· EPG - DC-EPG1-WEB						00
< El Aplicator Poline			Summary	Policy Operational	Stats	Health Fa	uts History
· 🚯 20-409		Client Endpoint	Configured Access 7	loicies Contracts	Controller Dr	nd-Points 0	Depkoyed Leaves
- <b>6</b> 25-40	treater & BLT		_				0.1
<ul> <li>Application DP08</li> <li>20-0707-968</li> </ul>	MACIP	Endpoint Name	Learning Hosting Server	Reportinghtentace	Dreap D	55	Policy Tags
Donaits (155 and Bare Metal)	_		300/08	Name			
> 🔛 Dri Mentes	¥ 1 0000000013.70		leaned	Pod-Uhiode-N2	der la		
<ul> <li>Italic Funs</li> </ul>	1823087070						
Post (Node-102)eth17	Y 567103330001		leaned	Pod-UNode-103	, start,		
Peer (Node-S2)(ett)?	182.968/0.20						
🖬 Static Leafs							
> EFFe Cranel Patra							
Contracts							

图 33:从DC-SITE1删除的DC-EP-1

disco APIC (DC-SITE1)					000	0000
System Tenents Fabric Virtual Networking J	Idmin Operations Apps	Integrations				
ALL TOWARD   Swart Sworts Family Description	Pathopath methodal	user/li-pictel	unert-global			
This abject was created by the Nexus Dashboard Orchestrat	or. It is recommended to only mod	Ply this object usin	pthe NDO GUI.			
Production 0.000	• EPG - DC-EPG1-WEB					00
<ul> <li>Production</li> <li>Material Patient</li> </ul>			Summary	Policy Operational	Stats Health	Faults History
- 🚯 20-47*		Client Endpoints	Configured Access P	vicies Contracts	Controller End-Points	Deployed Lasees
- 🙀 detertita - 🖿 Assistantes (1954	Treative (C) (T)					0 1
- 12 10-090 403	MAC/IP	Endpoint Name	Learning Hosting Server Source	Reportingmenface Controllegeamed)	Encap ESO	Policy Tags
<ul> <li>Consists (Web and Hare-Metals)</li> <li>Consists (Web and Hare-Metals)</li> </ul>	· SAMERICO		learned	Name Pol-Unior-102	. 101-1.	
- 🖬 Sate Paris	102.008.10.20					
Ref Trade (Scientif)						
) 🔛 Fibre Channel Flathe)						
E Contraction						
institution						
Contract Pa						
🖆 Lá L7 IP Address Post						

### 图 34:在DR-SITE2中添加物理域

dpic (DR-SITE2)				(	0000000
System Texants Fabric Virtual Network	ing Admin Operations A	lops Integrations			
ALL TOANTS   Terror Search June of Sect.	control Parabalitati unel-picter	userili-gidal   odo-aach			
This object was created by the Nexus Dashboard	Orchestrator. It is recommended to only	modify this object using the ND	0.901		
Production 000	Domains (VMs and Bare-Metals)				0
Production					0 ± %-
<ul> <li>         • Epicates repair      </li> <li>         • Epicates repair      </li> <li>         • Application DVs     </li> </ul>	<ul> <li>Donał Type Deploym Resolut</li> </ul>	50 Allow Primary Port Micro- YLAN Encap Segment	Switching Drcap Ci Mode Mode W	s Enhance: Custom fun Lag EPG Policy Name	NSKT IFAM DHCP IFAM API Gateway Server Brabled Mode Address Annexis
< 12 0C-0707-008	unt these		setter Auto O	-2	Manag. 0000 0000 Fater
Domaine (MMa and Bare Metals)					
) 🔛 BPG Manbara					
2 martine and a second					
> 📑 Fibre Channel Pathol					
E Contracto					
E Date Engent					
) 🔛 Suevers					
Line in the second seco					
GA12 P Address Fool					

图 35:在DR-SITE2中添加静态绑定

Deploy Static EPG on PC, V	PC, or Interface
STEP 1 - Static Link	1. Static Link 2. Configure PTP
Path Type:	Port Direct Port Channel Virtual Port Channel
Pagades	5/TE2+L104 (Node=104)
Patri	with1/2
Port Encap (or Secondary VLAN for Micro-Seg):	VLAN V 1406
Deployment Immediacy:	Immediate On Demand
Primary VLAN for Micro-Seg:	VLAN 😔 merger Value
Made	Trunk Trunk (Native) Access (Untagged)
Hühtl <sup>b</sup> Snoop Static Group:	= +
	Group Address Source Address
MLD Snoop Static Group:	· · · ·
	Group Address Source Address
_	Previous Cancel Next

## 图 36:在DR-SITE2中学习的DC-EP-1

APIC (DR-SITE2)					000	0000
System Tenants Fabric Virtual Netwo	ning Admin Operatio	ins Apps 1	megrations			
ALL TOWARDS   Second Second Particle of Asian	sound Productor 1	unti-polar i unerti	igenar   concast-m			
This object was created by the Nexus Deshboar	d Örchestrator. It is recommende	ed to unity modify this	object using the NDO GUI.			
Production 0.9.0	P EPO - DC-EPOS-WEB					00
			Sum	nary Policy Operation	a Stats Health	Faults History
- 🛱 (C-H)		Cite	nt Endpoints Configured	Access Policies Contracts	Controller End-Points	Deployed Leaves
1 🔤 Application (PDs	Sec. 2. 218					A 4
~ 🎇 po-etroneete	A 10010 100 1001 1					
Domains (Mits and Bare Wetsin)	MAC/IP	Endpoint: Name	Source Hosting Server	Reporting Interface Controller (learned)	Group ESO	Policy Taga
) 🔛 (PC Merclary				Name		
States Parts	+C+E0574 (90)		64768	PSE \$4686 1943.	Van 1	
Part (Num to Carry)	100.101.10.10					
· Ba Dave Connect Burlant						
in Static Endpoint						
) 🛄 Balanda						
CH-Christel Ph						
CALCH P Address Post						

#### DC-EP-1迁移后的物理设计

DC-EP-1已连接到DR-SITE2服务器枝叶。

图 37: DC-EP-1迁移后的物理设计



DC-EP-1迁移后的逻辑设计

DC-EP-1已连接到DR-SITE2服务器枝叶。DC-EPG1-WEB、DC-BD1-WEB和DC-VRF-WEB在DC-SITE1和DR-SITE2之间延伸。

图 38: DC-EP-1迁移后的逻辑设计



DC-EP-1迁移后的EPG内流量

图 39: DC-EP-1迁移后的EPG内流量



DC-EP-1和DC-EP-2之间的通信是EPG内部通信,因为两个终端都属于DC-EPG1-WEB。此通信通 过DC ISN进行,通过DR ISN多站点/重叠链路。

DC-EP-1和DC-EP-2之间的ping响应

图 40: DC-EP-1和DC-EP-2之间的ping响应

```
# ping 192.168.10.20 source 192.168.10.10 vrf site-1
PING 192.168.10.20 (192.168.10.20) from 192.168.10.10: 56 data bytes
64 bytes from 192.168.10.20: icmp_seq=0 ttl=254 time=2.592 ms
64 bytes from 192.168.10.20: icmp_seq=1 ttl=254 time=1.931 ms
64 bytes from 192.168.10.20: icmp_seq=2 ttl=254 time=1.89 ms
64 bytes from 192.168.10.20: icmp_seq=3 ttl=254 time=2.063 ms
64 bytes from 192.168.10.20: icmp_seq=4 ttl=254 time=1.989 ms
--- 192.168.10.20 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 1.89/2.092/2.592 ms
```

## 从主干路由表

从DR-SP-01/DR-SP-02的DC-EP-1学习到DC-SP-01/DC-SP-02。

图 41:从主干路由表

DC-EP-1是在DC-SITE1-SP-01中从DR-SITE2-SP-01获取的

DC-SITE1-SP-01# show bgp l2vpn evpn vrf overlay-1

Route Distinguisher: 1:49905577			
*>e[2]:[0]:[0]:[48]:[4c4e.35f4.79c1]:[0]:[0.0.0.0]/216			
172.16.0.13	0	65002	1
<pre>*&gt;e[2]:[0]:[0]:[48]:[4c4e.35f4.79c1]:[32]:[192.168.10.10]/272</pre>			
172.16.0.13	0	65002	i

DR-SITE2-SP-01重叠单播TEP IP

DR-SITE2-SP-01# show ip int vrf overlay-1

lo5, Interface status: protocol-up/link-up/admin-up, iod: 86, mode: dci-ucast IP address: 172.16.0.13, IP subnet: 172.16.0.13/32 IP broadcast address: 255.255.255.255 IP primary address route-preference: 0, tag: 0

Template-EPG2-BD2-Site1创建

一旦DC-EPG2-WEB和DC-BD2-WEB成为Nexus控制面板协调器的一部分,DC-EP-1和DC-EP-3之间就会发生EPG间通信。

在架构1中创建了Template-EPG2-BD2-Site1。DC-SITE1已添加到与同一模板关联的模板和租户— Production。这是特定于站点的模板。此模板用于导入Template-EPG2-BD2-Site1,用于DC-EP-1和DC-EP-3之间的通信。

DC-EP-1和DC-EP-3通信要求DC-EPG2-BD2必须是Nexus控制面板协调器的一部分。

图 42: DC-EP-1和DC-EP-3无法通信

# ping 192.168.20.10 source 192.168.10.10 vrf site-1
PING 192.168.20.10 (192.168.20.10) from 192.168.10.10: 56 data bytes
Request 0 timed out
Request 1 timed out
Request 2 timed out
Request 3 timed out
--- 192.168.20.10 ping statistics --5 packets transmitted, 0 packets received, 100.00% packet loss

图 43:添加应用模板 — 选择ACI多云

#### Add Application Template

Select (	1 et a Templa a Templat	2 Detail	3 Summary
©	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ACI Multi-Cloud  On-prem ACI fabric to fabric On-prem ACI fabric to cloud fabric Cloud fabric to cloud fabric	
0	BeB	NDFC • N00-DS based network	
0	Ħ	Cloud Local  Non-stretched template for cloud fabric local BGP-IPv4 connected fabric	

图 44:添加模板名称Template-EPG2-BD2-Site1,选择租户生产

		(3)
Select a Template type	Detail	Summary
Details		
Now name the template and select a temant		
AGI Hulti-Gloud On-prem AGI fabric to fab On-prem AGI fabric to cloud Cloud fabric to cloud fabri	erto aud faderic ico	
GENERAL		
Display Name *	Select a Tenant *	
Template-EPG2-8D2-Site1 Internal Name: Template-EPG2-8D2-Site1	dd Description	×
Deployment Mode		
Autonomous		
		( Beech

图 45 : Template-EPG2-BD2-Site1详细信息

Ы.

$\odot$	$-\odot$	
Select a Template type	Detail	Summary
Summary		
ACI Multi-Cloud On-prem ACI fabric to fab	ric	
On-prem ACI fabric to cloud fabric     Cloud fabric to cloud fabric	ud febric ic	
Details		~
Template name Template-EP02-802-Site1		
Deployment Mode Multi-Fabric		
Tenard Production		

#### 在Template-EPG2-BD2-Site1中导入EPG2-BD2

### 从DC-SITE1导入DC-EPG2-WEB和DC-BD2-WEB。

## 图 46:点击Import并选择DC-SITE1

Schema-1				Rafash (Auth Logs) (Count	ten tenpinte
View Template-	EP02-802-Site1 +				
Template Properti					
Template Sur	nmary			Edit Transf	-
Type Application	Transit Production	Temptote Status C Messentab	Associated Fabrics	Last Action Viplant Last Deproyed: Jan 6, 2025 09:47 pm	Depinyment Mode Multi-Fabric
Filter				DC-SITE DR-SITE	APPORT - SELECT Counts

#### 图47:从DC-SITE1中选择DC-EPG2-WEB

## Import from DC-SITE1

POLICY TYPE	SELECT TO IMPORT Q IMPORT RELATIONS
APPLICATION PROFILE 1 out of 2	DC-EPG1-WEB
EPG Tout of J	DC-EPG2-WEB
EXTERNAL EPG 0 out of 2	DC-EPG-APP

X

### 图48:从DC-SITE1中选择DC-BD2-WEB

Import	from DC	-SITE1					×
POLICY	TYPE			ECT TO IMPORT	Q	 IMPORT RELATION	
APPLIC	ATION PROFILE	1 out of 2	• •	DC-BD1-WEB			
EP-G		1 out of 3	•	DC-BD2-WEB			
EXTER	UAL EP-0	0 out of 2		DC-BD-APP 1 VRF			
CONTR	ACT	0 out of 4					
FILTER		0 out of 4					
VIIP		0 out of 2					
80		1 out of 3					
							Import

### 图 49:导入与DC-EPG2-WEB关联的合同

#### View Relationship

DC-	EPG:	2-WEB
-----	------	-------

Common Properties	· · · · · · · · · · · · · · · · · · ·
Display Name *	
0C-0P02-W08	
Depkyed Name DC-0702-WDB	
Description	
Annotations	
Key Value	
Create Annotations	
Contracts	
Name	
DO-EPG-TO-LEOW-WEB-CON	4.0
Type provider	V 8
DC-EPG-TO-EPG-WEB-CON	
Type provider	V 8
DC-EPG-TO-L3Out-WEB-CON	
Type consumer	0° B
DC-EPG-TO-EPG-WEB-CON	. Ó
Topie consumer	0'8

#### 部署模板 — EPG2-BD2-Site1

点击Deploy Template-EPG2-BD2-Site1并选择DC-SITE1

图50:将交换矩阵添加到模板 — EPG2-BD2-Site1



#### 图 51:部署外部同步模板

### Deploy Out of Sync Templates

The following templates will be deployed in the specified order

#### **Out of Sync Templates**

Template Name	Template Type	Associated Fabrics
Template-EPG2-BD2-Site1	Application	1
the second se		Rowsperpage 5 V (1)

> 1

图 52:已完成部署

Schema-1				Rafrash AutoLoga Create C	tere Template Rose Roberts
Template Properti	•• (DC-S	ITE1)			
Template Sun	nmary			Edit Yong	tate (Deptoy Temptate) (Activ
Type Application	Tenant Production	Template Diatus (27 In Sym)	Associated Fabrics • In Spre. 1 • Out of Spre. 0	Last Action () Deployment Successful Last Deployed, Jan 3, 2025 10/26 pm	Deployment Node Multi-Pateric
Filter					MPORT - 10,007 Create
Application Profile	DC-WEB				Create Application Prof
EPGs *					Great
DC-EPG2-WEB					
Bridge Domaina					Create Bridge E
DC-802-WE8					

#### 图 53: DC-EPG2-WEB部署在两个站点

在DR-SITE2中创建的DC-EPG2-WEB的影子EPG



### EP-1迁移后的EPG间流量

图 54: EP-1迁移后的EPG间流量



DC-EP-1和DC-EP-3之间的通信是EPG间通信,因为两个终端分别属于DC-EPG1-WEB和DC-EPG2-WEB。此通信通过DC ISN进行,以进行DR ISN多站点/重叠链路。

DC-EP-1和DC-EP-3之间的ping响应

图 55: DC-EP-1和DC-EP-3之间的ping响应

	# ping	192.168.	20.10	source 192	2.168.10.	10 vrf s	ite-1	
PING 192.	168.20.	.10 (192.	168.2	0.10) from	192.168.	10.10: 5	6 data	bytes
64 bytes	from 15	92.168.20	. 101	icmp_seq=0	ttl=252	time=1.4	98 ms	
64 bytes	from 15	92.168.20	1.101	icmp_seq=1	ttl=252	time=1.2	55 ms	
64 bytes 1	from 15	92.168.20	101	icmp_seq=2	ttl=252	time=1.1	29 ms	
64 bytes	from 19	92.168.20	1.101	icmp_seq=3	ttl=252	time=1.0	84 ms	
64 bytes	from 15	92.168.20	1.101	icmp_seq=4	ttl=252	time=1.5	37 ms	
192.10	68.20.1	10 ping s	tatis	tics				
5 packets	transe	nitted, 5	i pack	ets receive	d, 0.00%	packet	loss	
round-trip	p min/a	avg/max =	1.08	4/1.3/1.537	ms			

Template-WEB-L3Out-Site1创建

在架构1内创建了Template-Web-L3Out-Site1。DC-SITE1已添加到模板,并与同一模板关联的租户 生产。这是特定于站点的模板。此模板用于DC-EP-1 VRF间和DC间通信。

图 56:添加应用模板 — 选择ACI多云

Add Appl	ication	Template	×
Sele	1 ct a Templa	te type Detail Summary	
Select : Let's cho	a Templati	e of template you want to work with	
۲	9 77 77 77 77	AGI Hulti-Gloud  On-prem ACI fabric to fabric On-prem ACI fabric to cloud fabric Cloud fabric to cloud fabric	
0	308	NDFC - NX-OS based network	
0	E	Cloud Local  Non-stretched template for cloud fabric local BGP-IPv4 connected fabric	

Figure 57:添加模板名称Template-WEB-L3Out-Site1,选择租户生产

#### Add Application Template

Select a Template type	2 Detail	3 Summary
Dotalls		
ACI Multi-Cloud On-prem ACI fabric to fabric On-prem ACI fabric to cloud fabric Cloud fabric to cloud fabric	ic	
OENERAL Display Name	Select a Tenant *	
Template-WEB-L3Out-Site1	Production	ж 😔
Internal Name: Template-WEB-L3Out-Site1 Add Des	cription	
Deployment Mode () Multi-Fabric Autonomous		
		Back

#### Figure 58:Template-WEB-L3Out-Site1详细信息

Select a Template type	Detail	- 3 Summary
Summary		
AGI Multi-Cloud     On-prem ACI fabric to fabri     On-prem ACI fabric to cloud     Cloud fabric to cloud fabric	0 I febric	
Details		~
Template name Template-WEB-L3Out-Site1		
Deployment Mode Mutti-Fabrie		
Production		

#### 在Template-WEB-L3Out-Site1中导入外部EPG和L3Out

在Template-WEB-L3Out-Site1中导入外部EPG和L3Out

图 59:点击Import并选择DC-SITE1

Schema-1		Refresh Austrians Create New Template Servicionne
Template Properties		
Template Summary Type Tenant Te Application Production	mplate Status Associated Fabrics	Edit Template Deploy Template Action Last Action Deployment Mode Q Updated Multi-Fabric
图60:从DC-SITE1选择EXT-APF	P-EPG	DC-SITE1 DR-SITE2
Import from DC-SITE1		x
POLICY TYPE	SELECT TO IMPORT	IMPORT RELATIONS
APPLICATION PROFILE 0 out of 2	EXT-APP-EPG DC-ARP-LSOUT 2 CONTRACT • 1 VRF • 1 LSOUT	
EPG 0 out of 3	EXT-WEB-EPG CONTRACT • 1 VRF • 1 L3OUT	
EXTERNAL EPG 1 out of 2		

## Figure 61 : 从DC-SITE1中选择DC-APP-L3Out

Im	port from DC	S-SITE1					×
	APPLICATION PROFILE	0 out of 2	1 L30 com	ut im piete	port into Application Template will only import empty L3 s config.	Out container and not	
	EP-0	0 out of 3		•	DC-APP-LSOut 1 VRF		
	EXTERNAL EPG	1 out of 2		•	DC-WEB-L3Out 1 VRF	-	
	CONTRACT	0 out of 4					
	FILTER	0 out of 4					
	A Kite	0 out of 2					
	80	0 out of 3					
	LSOUT	1 out of 2					

Import

Figure 62:导入与EXT-WEB-EPG关联的合同

在DR-SITE2中创建的EXT-WEB-EPG与应用的DC合同的阴影。

#### EXT-WEB-EPG

#### View Relationship

Virtual Routing & Forwarding 🗮 *	
DC-VIIF-WEB	Xv
Contracts	
Name	
OC-EPO-TO-L30M-WEB-CON	0.0
Type, provider	0.0
DC-EPO-TO-L30vir-WEB-CON	2.0
Type: consumer	0 0
Add Contract	
* Select Fabric Type 🔘	
ON-PROM CLOUD	
On-Premises Properties	
L30vr	
DC-WB8-L3Out	Xv
Subnets	
Prefix/Prefix Length	
0.0.0.0/0	08
O Add Subvet	
	-

#### 部署模板 — WEB-L3Out-Site1

点击Deploy Template-WEB-L3Out-Site1并选择DC-SITE1

Figure 63:将交换矩阵添加到Template-WEB-L3Out-Site1



#### 图64:部署同步模板

#### **Deploy Out of Sync Templates**

The following templates will be deployed in the specified order

#### Out of Sync Templates

emplate Na	me	Template Type	Associated Fabrics
emplate-WE	B-L3Out-Site1	Application	1
ems found		Row	rs per page 🛛 🗸 🧃 🔅
ure 65:已完	成部署		Gancel Deploy Out of Sync Template
hema-1			Befresh Autil Lean Create See Tempters
hema-1 w Template-Wi nplate Properties	• CX-APJC-LAB-S	TTES	Refresh (Autt Legn) (Create New Temptate) See 157
hema-1 w Template-Wi mplate Properties Template Summ	<ul> <li>CX-APJC-LAB-S</li> <li>ary</li> </ul>	men	Bathraph (Audit Lings) Croate New Temptate (Level 144)
hema-1 w Template-Wi nplate Properties Template Summ	IB-L3Out-Site1 ~ • CX-ARJC-LAB-S ary Tenant Production	Template Associated Fabrics Status (Car of S	Rethresh Autt Logo Croste New Tempters Scot 14 Edit Tempters Deployment Last Action Deployment Multi-Fabric 2025 11:15 pm
hema-1 w Template-Wi nplate Properties Template Summ Type Application	IB-L3Out-Site1 ~ • CX-ARJC-LAB-Si ary Tenant Production	Template Associated Fabrica Status Cor of S	Rethresh Autt Logo Croste New Tempters Scott Sc Edit Tempters Organization Last Action Deployment Decomminat Last Deployment Decomminat Last Deployment Decomminat Last Deployment Decomminat Last Deployment Decomminat Last Deployment Decomminat Multi-Pabric Multi-Pabric
hema-1 w Template-Wi nplate Properties Template Summ Type Application	IB-L3Out-Site1 ~ • CX-ARJC-LAB-S ary Tenant Production	TER Status Charlen Template Status Charlen Template Status Charlen	Refresh Autt Lage Counte New Tempters Exc 14 Edit Tempters Last Action Deployment Mode Multi-Fabric 2025 11 15 pm
hema-1 w Template-Wi splate Properties Template Summ Type Application	IB-L3Out-Site1 ~ • CX-ARJC-LAB-S ary Tenant Production	TER Status Controls In Sproc Controls Controls	Refresh Kerti Logo Counte New Tempters Ecci 10 Edit Tempters Deployment Last Action Deployment Mode Multi-Pabric 2025 10 15 pm Refor - SUICT Create

#### 检验DC-VRF-WEB的DR服务器枝叶中的路由

DC-VRF-WEB的DR服务器枝叶中安装的静态路由。

图 66:检验DC-VRF-WEB的DR服务器枝叶中的路由



the second site of a free of a second site of a second si

## DC-EP-1迁移后的VRF间流量





DC-EP-1使用DC-WEB-L3Out与DC-EP-4通信。流量从DR-ISN流到DC-ISN多站点链路,从DC-ISN流到DC-SP-01/DC-SP-02以及从DC-SP流到DC-BL。DC-BL-01/DC-BL-02将流量转发到DC-WAN交换机以进行VRF间路由。

DC-EP-1和DC-EP-4之间的ping响应

图 68: DC-EP-1和DC-EP-4之间的ping响应

```
# ping 192.168.30.10 source 192.168.10.10 vrf site-1
PING 192.168.30.10 (192.168.30.10) from 192.168.10.10: 56 data bytes
64 bytes from 192.168.30.10: icmp_seq=0 ttl=249 time=1.781 ms
64 bytes from 192.168.30.10: icmp_seq=2 ttl=249 time=1.288 ms
64 bytes from 192.168.30.10: icmp_seq=2 ttl=249 time=1.288 ms
64 bytes from 192.168.30.10: icmp_seq=3 ttl=249 time=1.116 ms
64 bytes from 192.168.30.10: icmp_seq=4 ttl=249 time=1.135 ms
--- 192.168.30.10 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 1.116/1.587/2.617 ms
5ITE2-EPI#
```

## DC-EP-1迁移后的DC间流量

图 69: DC-EP-1迁移后的DC间流量



DC-EP-1使用DC-WEB-L3Out与DR终端通信。流量从DR-ISN流向DC-ISN多站点链路、DC-ISN流向DC-SP-01/DC-SP-02流向DC-SP流向DC-BL。DC-BL-01/DC-BL-02将流量转发到DR终端的DC-WAN交换机。

DC-EP-1和DR-EP之间的ping响应

图 70: DC-EP-1和DR-EP之间的ping响应

#### 迁移剩余终端

剩余终端迁移后的物理设计

将剩余终端从DC迁移到DR DC-EPG1-WEB后,物理图发生了相应更改。

图 71:所有终端从DC迁移到DR后的物理设计



DC-EPG1-WEB、DC-BD1-WEB和DC-VRF-WEB已在DC和DR站点之间展开。DC剩余终端从DC迁移到DR站点。

图 72:恢复终端迁移后的逻辑设计



剩余终端迁移后的EPG内流量

图 73:剩余终端迁移后的EPG内流量



DC-EP-1和DC-EP-2之间的通信是EPG内部通信,因为两个终端都属于DC-EPG1-WEB。此通信直 接在DR站点内发生。

EPG间、VRF间和DC间流量流仍然类似于DC-EP-1迁移。

#### 从DC站点取消部署模板 — EPG1-BD1-Stretched

所有终端都从DC迁移到DC-EPG1-WEB的DR站点。DC站点中不需要DC-EPG1-WEB和DC-BD1-WEB。从DC站点取消部署Template-EPG1-BD1-Loaded,这将从站点1删除EPG和BD。

图 74: 点击取消部署模板(Undeploy Template)

Schema-1				Refresh Aud	R Loga Courts New Template 1	(here
View Template-I	EPG1-8D1-Stretche	d v				
Template Propertie	• DC-SIT	E1 •DR-S	ITE2			
Template Sum	nmary				Add/Remove Fabrics	Activ
Type	Tenant Production	Template Status	Associated Fabrics	Last Action	Disassociate Fabric	
Addressed		an tank	2 • Out of Sync 0	Last Deployment 1	Clone Template	
				2025-05-07 pm	Undepicy Template	
					Delete Template 🔺	
Eller					View Deployed Configuration	
					View Deployment Dependencies	
Anniheation Profile	DC-WIR				View Deployment Plan	n Prof
and the second second second					Reconcile Configuration Drifts	
					View Version History	Const
EP-Gs *					Roll Back Version	
DC-EPG1-WEB					Tag	
Bridge Domains	×				Create	Dridge C

图 75:选择DC-SITE1并点击undeploy

#### Undeploy Template-EPG1-BD1-Stretched

Undeploying this any functionality	s template will permenantly remove applied policies from selected fabric. Review and take measure to prevent r loss.
ibrie C-SITE1	~
Plan DC-SITE1	OCreated ODeleted OModified OExisting @Shadow
	View Payload Download Payload
O teraid user?-glob	al

从DC站点取消关联模板 — EPG1-BD1-Streted

此步骤将Template-EPG1-BD-Stretched从DC站点分离。

#### 图 76:点击取消关联模板(Disassociate Template)

Schema-1				Refresh Aut	Loga Create New Template Level	(frame)
View Template-I Template Propertie		H. FE1 •DR-S	ITE2			
Template Sur	umary			ſ	Add/Remove Fabrics	Arts
Type Application	Tenant Production	Temptate Ditatus C Dut Of Sys	Associated Fabrica • In Spice 1 • Out of Spice 1	Lest Action Lest Deployed: 2005-05:11 pm	Disessesiate Fabric Clane Template Undeploy Template	
Filter					View Deployed Configuration View Deployment Dependencies	Create
Application Profile	OC-WEB				Reconcile Configuration Drifts View Version History	Creat
00-6P01-W68				l	Tag	
Bridge Domains					Create	bridge C

图 77:取消选中DC-SITE1

Undept

#### Add Fabrics To Template-EPG1-BD1-Stretched



#### 图 78: DC-SITE2 Template-EPG1-BD1-Longed的一部分

Schema-1				Refresh Audit Loge Co	sate New Template Save Scheme
View Template-EPO	01-BD1-Stretche	d v			
Template Properties	•DR-SI	TE2			
Template Summ	ary			140	Temptate (Depicy Temptate) (Actio
Type Application	Tenant Production	Template Status @ Intigen	Associated Fabrics • In Sync 1 • Out of Sync 0	Last Action G Undeployment Successful Last Deployed: Jan 4, 2025 01:30 am	Deployment Mode Multi-Fabric
Filter					sarcer - SELECT Create
Application Profile DC	-wt0				Create Application Prof
EPOs -					Creat
DC-0201-W08					
Bridge Domains Y					Create Bridge D

从DC取消部署Template-EPG1-BD1-Loaded后的逻辑设计

取消部署模板后,DC-EPG1-WEB和DC-BD1-WEB不是DC站点的一部分。

图 79: 取消部署模板后的逻辑设计

ж

ÓN.



Template-VRF-Contract-Site2创建

在架构1中创建了Template-VRF-Contract-Site2。DR-SITE2已添加到与同一模板关联的模板和租户 — Production。这是特定于站点的模板。此模板用于将DC-EPG1-WEB和DC-BD1-WEB的DR站点 的VRF和合同关联。

图80:添加应用模板 — 选择ACI多云

Add Application	Template	>
Select a Temple	te type	3 Summary
Select a Templat Let's choose the typ	e Type e of template you want to work with	
• ***	AGI Hulti-Gloud • On-prem ACI fabric to fabric • On-prem ACI fabric to cloud fabric • Cloud fabric to cloud fabric	
<ul> <li>⇒€</li> </ul>	NDFC • NO-OS based network	
0 🔳	Cloud Local • Non-stretched template for cloud fabric local BGP-IPv4 connect	ted fabric

Figure 81:添加模板名称Template-VRF-Contract-Site2,选择租户生产

Add	Application Template		×
	Select a Template type Detail	• 3 Summary	
0	Details Now name the template and select a tenant		
	ACI Multi-Cloud On-prem ACI fabric to fabric On-prem ACI fabric to cloud fabric Cloud fabric to cloud fabric		
0	DENERAL		
	Template-VRF-Contract-Site2 Template-VRF-Contract-Site2 Add Description	reduction	× ∨
0	Deployment Mode  O Multi-Fabric Autonomous		
Cancel			Back Next

Figure 82:Template-VRF-Contract-Site2详细信息

## Add Application Template



#### Cancel

Back Continue to template

在Template-VRF-Contract-Site2中导入VRF-Contract

从DR-SITE2导入DR-VRF-WEB和DR-VRF-WEB合同。

图83:单击"导入"并选择DR-SITE2

Schema-1			Refresh (Auth Loga) (Create New Template) (Loss Schwarz			
View Template-1 Template Propertie	VRF-Contract-Site2	t <del>v</del>				
Template Sum	mary				Dill Template Deptoy Template	Actions
Type Application	Tenant Production	Template Status O Unessociated	Associated Fabrics • In Sync = 0 • Out of Sync 0	Last Action	Deployment Mode Multi-Patric	
				D	C-SITE1 R-SITE2	Create Of

## Figure 84:从DR-SITE2中选择合同

port from [	DC-SITE1		
APPLICATION PROFI	LE 0 out of 3	DC-EPG-TO-EPG-WEB-CON	
EP6	0 out of 4	DC-EPG-TO-L3Out-WEB-CON	
EXTERNAL EPG	0 out of 4	DR-EPG-TO-EPG-APP-CON	
CONTRACT	2 out of 6	DR-EPG-TO-EPG-WEB-CON 1 FILTER	
FILTER	2 out of 6	DR+EPG+TO+L3Out+APP+CON 1 FILTER	
VRF	0 out of 4	DR-EPG-TO-L3Out-WEB-CON 1 FILTER	
80	0 out of 4		
LIOUT	0 out of 4		

Figure 85:选择Filter from DR-SITE2

## Import from DC-SITE1

APPLICATION PROFILE	0 out of 3		DC-EPG-TO-EPG-WEB-FIL	
EP-0	0 out of 4		DC-EPG-TO-L3Out-WEB-FIL	
EXTERNAL EPO	0 out of 4		DR-EPG-TO-EPG-APP-FIL	
CONTRACT	2 out of 6	¥.	DR-EPG-TO-EPG-WEB-FIL	
FLTER	2 out of 6		DR-EPG-TO-L3Out-APP-FIL	
FLTER	2 out of 6 0 out of 4		DR-EPG-TO-L3Out-APP-FIL DR-EPG-TO-L3Out-WEB-FIL	
PRITER VRF	2 out of 6 0 out of 4 0 out of 4		DR-EPG-TO-L3Out-APP-FIL DR-EPG-TO-L3Out-WEB-FIL	

Figure 86:从DR-SITE2中选择VRF

Import

## Import from DC-SITE1

APPLICATION PROFILE	0 out of 3	0	DC-VRF-APP	
EPO	0 out of 4		DC-VRF-WEB	
EXTERNAL EPO	0 out of 4		DR-VRF-APP	
CONTRACT	2 out of 6	2	DR-VRF-WEB	
FILTER	2 out of 6			
VRF	1 out of 4			
10	0 out of 4			
LIOUT	0 out of 4			

Import

#### 图 87:包含VRF/合同信息的模板 — WEB-VRF-Contract-Site2

Schema-1	Refresh Aveil Logs Create New Template Bave Scheme
	O · De office i
Film	naroar - SELECT Create
Contracts *	Create Cr
DR-EPG-TO-EPG-WEB-CON CON	
VRFs *	Crea
DR-VRF-WEB	
Filters 👻	Creat
DR-EPO-TO-EPO-WEB-FIL DR-EPO-TO-L3Ov/-WEB- FIL	

部署Template-VRF-Contract-Site2

点击Deploy Template-VRF-Contract-Site2并选择DR-SITE2

图88:将交换矩阵添加到Template-VRF-Contract-Site2

#### Add Fabrics To Template-VRF-Site2



×

Figure 90:已完成部署

Schema-1				Refresh Andr Loge	Create New Template
Type Application	Tenant Production	Template Status (2 in Symc)	Associated Fabrics 1 In Syne 1 Out of Syne 0	Last Action Copleyment Seccessful Last Deployed: Jan A, 2025 0157 am	Depityment. Micce Multi-Fabrio
Filter					MPORT - SELECT Create
Contracts ~					Create Co
DR-EPG-TO-EPG-V	VEB-CON CON	0-10-L30xt-WEB-			
VRFs					Crea
DR-VRF-IME8					
Filters -					Creat
DR-EPG-TO-EPG-V	00-67 Fil,	G-TO-L3Out-WEB-			

## 将DR-VRF-WEB关联到DC-BD1-WEB

从之前创建的Template-EPG1-BD1-Loaded将DR-VRF-WEB关联到DC-BD1-WEB。DC-BD1-WEB是DR-SITE2的一部分。

### 图 91:点击Template-EPG1-BD1-Longed

Schema-1				Refresh AutoLoga Court	New Templala Bara Bahama
View Template-EP01-BD1	-Stretched ~				
Template Properties • D	R-SITE2	2.			
Template Summary				6 din Tee	uplate Douplacy Template Auto
Type Tenar Application Predu	nt 1 estion 2	Tomplate Datus Ø <b>in Syne</b>	Associated Fabrics  U Stync 1  Cut of Sync 8	Lott Action Strategrayment Successful Lott Deployed: Jan 4, 2025 01:36 am	Deployment Mode Multi-Patric
Filter					server - SELECT Create
Application Profile DC-WEB					Create Application Prof
EPGs *					Creat
DC-DPG1-W(B					
Bridge Domains 👻					Create Bridge D

#### 图 92:将DR-VRF-WEB关联到DC-BD1-WEB

DC-BD1-WEB		View Relationshi
Annotations		*
Key	Value	
Create Annotations		
Properties		A
O On-Premises Properties		
Virtual Routing & Forwarding 📕		
DR-VRF-WED		$\mathbf{X} \sim \mathbf{I}$
L2 Stretch		
<b>a</b>		
Intensite BUM Traffic Allow		
e		
Optimize WAN Bandwidth		
Unicast Routing		
L3 Multicast		

## 将DR-Contracts应用于DC-EPG1-WEB

#### 将DR-Contract应用于DC-EPG1-WEB,DC-EPG1-WEB使用DR合同从DC-EPG1-WEB进行通信 ,用于DC间、VRF间和EPG间。DC-EPG1-WEB是DR-SITE2的一部分

#### 图 93:从DC-EPG1-WEB删除DC-Contracts

DC-EPG1-WEB	View Relationsh
Common Properties	~
Display Name *	
DC-EPG1-WEB	
Deproyed Name, DC-(PD1-WEB	
Description	
Annotations	
Key Value	
Create Annotations	
Contracts	
Name	
DC-EPG-TO-L3Out WEB-CON	
Type: provider	0 8
DC-EPG-TO-EPG-WEB-CON	4.0
Type: provider	0 8
DO-EPG-TO-L30us-WEB-CON	A 0
Type: consumer	0 8
DC-EPG-TO-EPG-WEB-CONR	A 0
Type: consumer	0 8
A 10070000	

### 图 94:在DC-EPG1-WEB中添加DR-Contracts

DC-EPG1-WEB		View Relationship
Display Name *		
DC-EPG1-WEB		
Deptyped Name DC-GPG1-WEB		
Description		
Annotations		
Kay	Value	
Contracts		
Name		
DR-EPG-TD-EPG-WEB-CON		08
Type, Concome		
Tener sensitier		08
DR-EPO-TD-L30v/-WEB-CON		
Type: consumer		08
DR-EPO-TD-L30ve-WEB-CON		
Type: provider		0 8
O Add Contract		
EPG Type		
Australian Review		
		Cit.

## Figure 95:模板 — EPG1-BD1 — 延伸信息

Schema-1				Refresh AutoLogs Con	to New Surgicity Direct Difference
Template Propertie	DR-SI	TE2			
Template Sur	mary			644 T	mplate Deploy Template Actions
Type Application	Tenant Production	Template Status O Out Of Syn	Associated Fabrics In Sync I Out of Sync 1	Last Action 2 Updated Last Deployed: Jan 4, 2025 01:52 am	Deployment Mode Multi-Fabric
Filter					MORT - SULCT Create O
Application Profile	DC-WEB				Create Application Profile
EPGs ¥					Create
DC-EPG1-WEB					
Bridge Domains	÷				Create Bridge Do
DC-801-WE8					

### Figure 96:部署外部同步模板

# **Deploy Out of Sync Templates**

The following templates will be deployed in the specified order

## **Out of Sync Templates**

Filter by attributes		
Template Name	Template Type	Associated Fabrics
Template-EPG1-BD1- Stretched	Application	1
1 items found		Rows per page 5 ~ (1)
		Cancel Deploy Out of Sync Templates

Figure 97:已完成部署

Schema-1				Refresh AutoLega Cours New Template Sen Science		
Template Sur	mary			Edit Ter	updatas (Degelory Tamoplatas) (Activ	
Type Application	Tenant Production	Template Status Ø <b>In Spre</b>	Associated Fabrics I in Sync 1 Out of Sync 0	Last Action Deployment Successful Last Deployed: Jan 4, 2025 02:02 am	Deployment Mode Multi-Fabric	
Filter					APORT - SELECT Create	
Application Profile	OC-WEB				Create Application Prof	
EPOs 👻					Creat	
DC-EPG1-WEB						
Bridge Domains	*				Create Bridge C	
00-801-WE8						

## DC-Endpoint-1流量

DC-Endpoint-1开始使用DR-L3Out-WEB与DC端点进行通信。此通信需要更改WAN交换机上的路由。

## 图 98:DC-Endpoint-1流量



#### DC-EP-1和DC/DR-EP之间的ping响应

#### 图 99: DC-EP-1和DC-EP-2之间的ping响应

# ping 192.168.38.10 source 192.168.10.10 vrf site-1 Pines 192.168.38.18 (192.168.30.10) from 192.168.10.10: 56 data bytes 64 bytes from 192.168.30.10: icmp\_seq=0 ttl=249 time=2.406 ms 64 bytes from 192.168.38.18: icmp\_seq=1 ttl=249 time=1.05 ms 64 bytes from 192.168.30.10: icmp\_seq=2 ttl=249 time=1.063 ms 64 bytes from 192.168.30.10: icmp\_seq=3 ttl=249 time=1.08 ms 64 bytes from 192.168.30.10: icmp\_seq=4 ttl=249 time=0.987 ms --- 192.168.30.10 ping statistics -5 packets transmitted, 5 packets received, 0.00% packet loss round-trip min/avg/max = 0.987/1.317/2.406 ms SITE2-EP1# SITE2-EP1# ping 192.168.11.10 source 192.168.10.10 vrf site-1 PING 192.168.11.18 (192.168.11.18) from 192.168.18.18: 56 data bytes Request 0 timed out 64 bytes from 192.168.11.10: icmp\_seq=1 ttl=252 time=1.439 ms 64 bytes from 192.168.11.10: icmp\_seq=2 ttl=252 time=0.993 ms 64 bytes from 192.168.11.10: icmp\_seq=3 ttl=252 time=1.615 ms 64 bytes from 192.168.11.10: icmp\_seq=4 ttl=252 time=1.107 ms - 192.168.11.10 ping statistics -5 packets transmitted, 4 packets received, 20.00% packet loss round-trip min/avg/max = 0.993/1.208/1.615 ms SITE2-EP1# SITE2-EP1# ping 192.168.21.10 source 192.168.10.10 vrf site-1 PING 192.168.21.18 (192.168.21.18) from 192.168.18.18: 56 data bytes 64 bytes from 192.168.21.10: icmp\_seq=0 ttl=252 time=1.491 ms 64 bytes from 192.168.21.10: icmp\_seq=1 ttl=252 time=1.593 ms 64 bytes from 192.168.21.10: icmp\_seq=2 ttl=252 time=1.016 ms 64 bytes from 192.168.21.10: icmp\_seq=3 ttl=252 time=1.01 ms 64 bytes from 192.168.21.10: icmp\_seq=4 ttl=252 time=1.048 ms ---- 192.168.21.10 ping statistics ----5 packets transmitted, 5 packets received, 0.00% packet loss round-trip min/avg/max = 1.01/1.231/1.593 ms SITE2-EP1# ping 192.168.31.10 source 192.168.10.10 vrf site-1 PING 192.168.31.10 (192.168.31.10) from 192.168.10.10: 56 data bytes 64 bytes from 192.168.31.10: icmp\_seq=0 ttl=249 time=1.353 ms 64 bytes from 192.168.31.10: icmp\_seq=1 ttl=249 time=1.129 ms 64 bytes from 192.168.31.10: icmp\_seq=2 ttl=249 time=1.014 ms 64 bytes from 192.168.31.10: icmp\_seq=3 ttl=249 time=1.485 ms 64 bytes from 192.168.31.10: icmp\_seq=4 ttl=249 time=1.347 ms - 192.168.31.10 ping statistics -

5 packets transmitted, 5 packets received, 0.00% packet loss round-trip min/avg/max = 1.014/1.265/1.485 ms

#### 关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言,希望全球的用户都能通过各 自的语言得到支持性的内容。

请注意:即使是最好的机器翻译,其准确度也不及专业翻译人员的水平。

Cisco Systems, Inc. 对于翻译的准确性不承担任何责任,并建议您总是参考英文原始文档(已提供 链接)。