将SD-WAN Nutella盒从Viptela OS迁移到Cisco IOS XE

目录

简介 <u>先决条件</u> 要求 使用的组件 背景 配置 从vManage升级到Cisco cEdge软件 从CLI升级到Cisco cEdge软件Cisco IOS XE 验证 vManage GUI vManage CLI 故障排除

简介

本文档介绍将Nutella Viptela OS迁移到Cisco IOS® XE^的过程。

先决条件

要求

思科建议您了解思科软件定义的广域网(SD-WAN)。

使用的组件

本文档中的信息基于以下软件和硬件版本:

- vManage版本20.6.3
- vBond版本20.6.3
- vSmart版本20.6.3
- ISR1100-4GLTE版本20.4.1.2

用于迁移的软件映像可从软件下载页面获得。

Cisco IOS XE:isr1100be.universalk9.<release>.SPA.bin

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原 始(默认)配置。如果您的网络处于活动状态,请确保您了解所有命令的潜在影响。

꽙톮

本文档的具体要求包括:

• Cisco vManage 20.4.1版或更高版本

•思科集成多业务路由器(ISR)1100和ISR1100X版本20.4.1或更高版本 所列平台支持Viptela OS和Cisco IOS XE之间的迁移:

- 思科ISR1100X-6G
- 思科ISR1100X-4G
- 思科ISR1100-6G
- 思科ISR1100-4G
- Cisco ISR1100-4GLTE(Cisco ISR1100-4GLTENA和Cisco ISR1100-4GLTEGB)

配置

从vManage升级到Cisco cEdge软件

1.在Cisco vManage GUI中,选择Maintenance > Software Repository > Add New Software > vManage,如图所示。

■ Cisco vManage	Select Reso	urce Group+	Maintenance - Software Repository										
				Software Images	Virtual Images	Firmware							
Note: Software version is compatib	ele with specified con	troller version or less											
Q, Search											V		
Add New Software v Remote Server (preferred) vManage									Total Rows: (• 6	3 @		
Remote Server - vManage	ler Version	Software Location	Available SMU Versions	Available Files		Image Type	Architecture	Version Type Name	Updated On				
	No data available												

2.在弹出窗口中,单击Browse,然后单击Upload。

Upload Software to vManage Upload Image (Total:1) isr1100be-universalk9.17.06.03a.SPA.bin × 768.15 MB Drag and Drop File Or 2

Upload

3.上传开始后,不要刷新Web浏览器,如此图所示。



4.在"软件存储库"部分中,验证是否已上传映像(如图所示)。

	Cisco vManage	Select Resource	e Group+		Maintenance -	Software Repository				0	4
					Software Images Virt	tual Images Firmware					
	Note: Software version is comp	patible with specified controlle	er version or less								
	Q, Search									5	7
	Add New Software ~										
1									Total Rows: 3	Ø	ø
	Software Version	Controller Version	Software Location	Available SMU Versions	Image Type	Architecture	Version Type Name	Available Files	Updated On		
	17.06.03a.0.3.1649449105	20.6.x	vmanage	0	Software	x86_64	software	[c1100-universalk9.17.06.03a.SPA.bin]	17 Jun 2022 9:03:44 PM .		
	17.06.03a.0.3.1649420665	20.6.x	vmanage	0	Software	x86_64	software	[Isr1100be-universalk9.17.06.03a.SPA.bin]	17 Jun 2022 9:36:50 PM .		
1	17.04.02.0.2620.1624624	20.4.x	vmanage	0	Software	x86_64	software	[c1100-universalk9.17.04.02.SPA.bin]	17 Jun 2022 9:24:58 PM .		

5.导航到"维护" > **Software Upgrade** > WAN Edge部分。选中**Hostname**复选框以选择设备,然后单 击**Upgrade**。

😑 Cisco vManage 🔗	Select Resource Group -		Maintenance · Software			0	4		
		•	WAN Edge Controller vManage	Firmware					
Q, Search									7
1 Rows Selected Upgrade	Upgrade Virtual Image Activate V	irtual Image Delete Virtual Image	Activate Deactivate Delete	Available Software Set De	efault Version				
Device Group All 🗸							Total Rows: 1	g 7	@
Je Hostname System IP	Chassis Number	Site ID Device Model	Reachability Current Version	Available Versions Default	Version Available SMUs	Available Services	Up Since		
🥑 💮 vedge_nutella	ISR1100-4GLTENA	100 ISR 1100 4GLTE*	(Vig reachable 20.4.1.2	19.2.1 20.1.3 20.1.3		0	17 Jun 2022 6:33:00 PM	CDT	

- 6.单击vManage单选按钮。
- 7.在Version下拉列表中,选择Cisco IOS XE映像。
- 8.选中激活并重新引导复选框和确认复选框。
- 9.单击Upgrade。

Software Upgrade

Remote Server - vManage

Platform Version vEdge-x86 17.06.03a.0.3.164942066 ✓ ✓ Activate and Reboot This is a migration trigger. Once device is upgraded, user must

manually switch the device from the Devices page. Check 'Confirm' to continue.

Confirm



Cancel

10.设备开始升级过程并需要几分钟。您可以在"任务"视图中验证成功完成。

=	Cisco vManage	Select Resource Group+							: 0	4
Softv	vare Install 🕑 Validation Success							nitiated By: admin		
Total	Task: 1 In Progress : 1									
Q	Search									∇
								Total Rows:	1 8	۵
Θ	Status	Message	Hostname	System IP	Site ID	Device Type	Device Model	vManage IP		
Θ	O In progress	Device: Downloading http://1.1	💮 vedge_nutella	1.1.1.100	100	WAN Edge	ISR 1100 4GLTE* (Viptela OS)	1.1.1.1		
	18-3un-2022 2:39:47 UTC) Curren 18-3un-2022 2:39:47 UTC) Upgra 18-3un-2022 2:39:47 UTC) Confa 18-3un-2022 2:39:47 UTC) Softs 18-3un-2022 2:39:47 UTC) Softs 18-3un-2022 2:39:53 UTC) Conne 18-3un-2022 2:39:53 UTC) Device	nt active partition: 20.4.1.2 de Requested for SW version : 17 guring upgrade confirm timer to : ner image: isrl1000e-universalk9 are image download may take upto tion Instance: 6, Color: bir-in :: Downloading http://l.l.l.1:00	.06.03a.0.3.1649420665 15 minutes 17.06.03a.SPA.bin 40 minutes ternet 80/software/package/isr1100be-um	iversalk9.17.06.03a.5PA.bin?dev	iceId=1.1.1.100				< <	

=	Cisco vManage	Select Resource Group+						0	0	4
Q	Search									V
								Total Rows:	ø	٢
Θ	Status	Message	Hostname	System IP	Site ID	Device Type	Device Model	vManage IP		
Θ	Success	Operation status verification done.	💮 vedge_nutella	1.1.1.100	100	WAN Edge	ISR 1100 4GLTE* (Viptela OS)	1.1.1.1		
	[18-Jun-2022 3:02:56 UTC] ([18-Jun-2022 3:03:26 UTC] ([18-Jun-2022 3:03:56 UTC] ([18-Jun-2022 3:03:56 UTC] ([18-Jun-2022 3:04:26 UTC] ((28/60) Operation status being verifi (29/60) Operation status being verifi (30/60) Operation status being verifi (31/60) Operation status being verifi	ed by vflanage ed by vflanage ed by vflanage ed by vflanage						^	
	[18-Jun-2022 3:04:56 UTC] ([18-Jun-2022 3:05:27 UTC] ((32/60) Operation status being verifi (33/60) Operation status being verifi	ed by vManage ed by vManage							
	[18-Jun-2022 3:05:57 UTC] ((34/60) Operation status being verif:	ed by vflanage						*	

11.导航到配置 > 设备,然后单击WAN边缘列表选项卡。

12.在显示屏的右侧,单击(...)更多操作,然后选择"迁移设备"。

≡ Ci	sco vManage	O Select Resource Gr	oup+		Configuration · Devices						0 4
					WAN Edge List Controllers						
Q s	earch										Y
Change	Mode V Uploa	d WAN Edge List Export Bo	Serial No./Token	nc Smart Account Add PAYG V	WAN Edges	Subject SUDI serial #	Hostname	System IP	Total I Site ID	Rows: 8	G 7@
\odot	ISR 1100 4GLT	ISR1100-4GLTENA-		NA	NA		Router	1.1.1.100	100	CLI	
\odot	ASR1001-X			. NA	NA				Running Local Cr	Configuration	on
\odot	vEdge Cloud			NA	Jun 09 06:07:23 2032 UTC				Delete V Copy Cr	VAN Edge	
\bigcirc	vEdge Cloud			. NA	NA		**		Generate	e Bootstrap	Configuration
\bigcirc	CSR1000v			NA	NA				Template	a Log	
\bigcirc	vEdge Cloud			NA	NA		**			CLI	
\bigcirc	CSR1000v			. NA	NA					CLI	
Ø	CSR1000v			NA	NA					CLI	

13.在"迁移设备"对话框中,单击**是**以确认迁移。

Migrate Device

Device will be switched to cEdge, incase of vEdge to cEdge switch all vEdge stats, events history & configs will be lost. For new Nutella devices the OS change will be persisted Are you sure you want to migrate the Device?



注意:升级后,设备只有基本配置来建立与SD-WAN重叠的控制连接。您可以使用 vManage添加其他配置。

从CLI升级到Cisco cEdge软件Cisco IOS XE

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本节适用于Cisco ISR1100和ISR1100X版本20.4.1或更高版本。

1.在vEdge路由器上传输映像isr1100be.universalk9.<release>.SPA.bin。

Router# request software install http/ftp/directory path (<u>http://,ftp://,scp://,/</u>)> reboot 2.重新启动后,检验控制连接是否已建立。

Router#s	thow s	dwan control cos	nnections											
						PEER		PEER			CONTR	OLLER		
PEER	PEER	PEER	SITE	DOMAIN	PEER	PRIV	PEER	PUB			GROUP			
TYPE	PROT	SYSTEM IP			PRIVATE IP	PORT	PUBLIC IP	PORT	ORGANIZATION	LOCAL COLOR	PROXY	STATE	UPTIME 1	Ð
vsmart	dtls	1.1.1.3				12546		12546		default	No	up	0:00:00:24	
vbond	dtls	0.0.0.0				12346		12346		default		up	0:00:00:28	
vmanage	dtls					12946		12946		default	No	up	0:00:00:26	

3.确保升级已确认。

Router#request platform software sdwan software upgrade-confirm

验证

使用本部分可确认配置能否正常运行。

vManage GUI

导航到管理>维护>软件升级。在当前版本列中验证版本。设备显示Cisco IOS XE OS。

≡ Cisco vMar	nage 🖓	Select Resource Grou	₽.₩		Maintenance ·	Software Up	grade				\bigcirc	≡ 0
				(w	(AN Edge Controller	vManage Fir	mware					
Q Search												
0 Rows Selected												(
Device Group All 🗸											Total Rows: 1	Ø.
Hostname	System IP	Chassis Number	Site ID	Device Model	Reachability Curre	nt Version 4	vailable Versions	Default Version	Available SMUs	Available Services	Up Since	
Router	1.1.1.100	ISR1100-4GLTEP	IA 100	ISR 1100 4GLTEN/	A (Creachable 17.06	k03a.0.3		17.06.03a.0.3	0	0	17 Jun 2022 10:04:00	PM CDT

vManage CLI

输入命令 show romvar 验证迁移在MIGRATION_STATUS上是否成功。

```
Router#show romvar
ROMMON variables:
PS1 = rommon ! >
CRYPTO_BI_THPUT = 10000
RET_2_RTS =
BOOT = bootflash:packages.conf,1;
DEVICE_MANAGED_MODE = controller
RANDOM_NUM = 342435660
BSI = 0
RET_2_RCALTS =
MIGRATION_STATUS = SUCCESS<<<<<<<>BIS_MODE = 2
```



本部分提供的信息可用于对配置进行故障排除。

验证Cisco IOS XE中的日志:

bootflash:migrationlogs 验证vEdge中的日志:

etc/Viptela/vedgemigration.cfg

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。

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