在CUCM中从GUI配置备份和恢复

目录

<u>简介</u> <u>先决条件</u> <u>要用景置份复障关</u> <u>面份复障关</u> <u>相关</u> <u>相关</u>

简介

本文档介绍从图形用户界面(GUI)在Cisco Unified Communications Manager(CUCM)中备份和恢复功能的基础知识和所需设置。

先决条件

要求

Cisco 建议您了解以下主题:

- Cisco Unified Communications Manager
- 安全文件传输协议 (SFTP)

使用的组件

本文档中的信息基于以下软件版本:

• 思科统一通信管理器10.5.2.15900-8版

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。

背景信息

灾难恢复系统(DRS)可从CUCM管理中调用,它为集群中的所有服务器提供完整的数据备份和恢复 功能。DRS允许您定期执行自动或用户调用的数据备份。

DRS恢复其自己的设置(备份设备和计划设置),作为平台备份/恢复的一部分。DRS备份并恢复 drfDevice.xml和drfSchedule.xml文件。当服务器使用这些文件恢复时,您无需重新配置DRS备份设 备和计划。 灾难恢复系统包括以下功能:

- •用于执行备份和恢复任务的用户界面
- 具有备份和恢复功能的分布式系统架构
- 定时备份
- 将备份存档到物理磁带驱动器或远程SFTP服务器

灾难恢复系统包含两个关键功能:主代理(MA)和本地代理(LA)。 主代理与本地代理协调备份和恢复 活动。系统自动激活集群中所有节点上的主代理和本地代理。

CUCM集群(这涉及CUCM节点和思科即时消息和在线状态(IM&P)服务器)必须满足以下要求:

- •打开端口22以建立与SFTP服务器的通信
- 已验证IPsec和Tomcat证书未过期。要验证证书的有效性,请导航至Cisco Unified OS Administration > Security > Certificate Management

注意:要重新生成IPSec和Tomcat证书,请使用"过程"在CUCM中重新生成证书

•确保数据库复制已完成设置,且不显示来自CUCM发布服务器和IM&P发布服务器的任何错误或 不匹配。

SFTP服务器设置必须满足以下要求:

- •登录凭证可用
- 必须可从CUCM服务器访问
- •执行恢复时,文件将包含在所选路径中

配置

备份

灾难恢复系统执行集群级备份,这意味着它将CUCM集群中所有服务器的备份收集到中央位置,并 将备份数据归档到物理存储设备。

步骤1.创建保存数据的备份设备;导航至Disaster Recovery System > Backup > Backup Device。

步骤2.选择"**添加新"**;定义备份设备名称并输入SFTP值,如图所示。选择保存。

cisco	Disaster Recovery System For Cisco Unified Communications Soluti	n ons
Backup 🔻	Restore * Help *	
Backup Do	evice	
📄 Save	Back	
Status-		
Statu	is:Ready	
Backup	levice name	
Backup d	levice name"	BackupDevice1
Select D	estination*	
Network	Directory	
	Host name/IP address	10.1.89.107
	Path name	/
	User name	administrator
	Password	•••••
Number o	f backups to store on Network Directory	2 ~
Save Ba	ack	

步骤3.创建和编辑备份计划以备份数据。导航至**备份>调度程序**。

步骤4.定义计划名称。选择Device Name(设备名称),然后根据您的场景(如图所示)检查 Features(功能)。

ababi	Disaster Recovery System	Navigation Disaster Rec
cisco	For Cisco Unified Communications Solutions	admin Search Document
Backup *	Restore * Help *	
scheduler		
Save	🤣 Set Default 📄 Disable Schedule 📄 Enable Schedule 👍 Back	
-Status -		
Statu	::Ready	
Scheduk	Name	
Schedule	iame* DailyBackUp	
Select Ba	ckup Device	
Device Na	me* BackupDevice1 ~	
Select Fe	atures *	
	CAR UCM	C PLM

步骤5.根据您的场景配置定时备份,如图所示。

- Start Backup at* -					
Date	2019 ~ Jun ~	18 ~	Time	00 V Hour	00 ~ Minute
Frequency*					
Once Daily Oweekly					
	Monday	Tuesday	Wednesday		Thursday
	Friday	Saturday	Sunday		
O Monthly					

步骤6.选择Save并注意图中所示的警告。选择OK以继续。

The DRS Backup archive encryption depends on the current security password. During a restore, you could be prompted to enter this security	password if this password
has been changed.	

步骤7.创建备份计划后,选择启用计划,如图所示。

Scheduler	
🔜 Save 🤣 Set Default 🔘 Di	isable Schedule 🗼 Enable Schedule 🖕 Back
⊂ Status	
Disabled	
- Schedule Name	
Schedule Name*	DailyBackUp

步骤8.等待状态更改为Enabled(如图所示)。

cisco	Disaster Recovery System For Cisco Unified Communications Solutions							
Backup 👻	Restore 👻	Help 🔻						
Scheduler								
Save	🤣 Set Def	ault 🛑	Disable Schedule	Enable Schedule	Back			
Status –	ed							
Schedule	e Name Name*			DailyBackUp				

步骤9.如果需要手动备份,请导航至"备份">"手动备份"。

步骤10.选择Device Name(设备名称),并根据您的场景检查Features(功能),如图所示。

Disaster Recovery System For Cisco Unified Communications Solutions	
Backup - Restore - Help -	
Manual Backup	
Start Backup Estimate Size Estimate Size Clear All	
Status Status:Ready	
Select Backup Device	_
Device Name* BackupDevice1 ~	
Select Features *	_
 ✓ CDR_CAR ✓ UCM ✓ PLM 	

步骤11.选择Start Backup(开始备份),操作显示在进行中,如图所示。

ciece racts	ster Recovery Syst	em viere			Bartyster Administration	Chanter Record Spinster, 19 100
Tailing + Tentes 1						
Sockup Status						
Q 😑 :	Cancel					
Balan Ø taskap openet	te in program for server \$100%	(11111), pieces work. 🖓				
Hading details Ter Plename Deckup Device: Operation: Penamings Comp	2017-05-08 NETWORK DECUP	63-53 X ar				0
Basters	Secul	Colgenarit	Maller	Read **	Not line	Lag Ma
15,8	0.009910938	ILM NORN?		A.Fire	Fue Jun 28 82-333 28-027 2829	
75,8	0.4079/10048	IL/O DOTATION				
0,8	GUORER	EUM-INCENT				
D/N	0.0408	EUM-SERVER.		-	-	
Month .			Canod Bachua			

步骤12. O手动备份完成后,将显示完成消息,如图所示。

ente	Disaster Reco	wery System				Komprise Class admin Search Do
laby - N	dan - Heb -					
lackup Wat						
Q	Canal					
Ø some	ic Backup Campionst.					
Railog det	a h					
Ter Hinnaris Becksp-Des	• 1510	2018-06-18-01-12-28. NETWORK	lar.			
Percentriqu	Completer	BADIO.# 180%				
Fashers	Genue	Component	Set as	Result **	Wart Texe	Log File *
PLM	CUONVISIO	CLM-AGOM	180	SPOCESS	Tue Jan 18 00.53136 007 2009	2018-85-18-03-53-38 & cucevitieuk pirs eine agentiop
PLH	CUONVERSE	ELM SERVER.	180	SBCCESS.	Tue Jan 18:00:53-38 03T 2009	2018-05-18-03-33-38. https://www.silen.etm.server.ing
PL/1	0.0110	ELM-ROOM	880	SPOCESS	Tue Jun 18 00 53:31 037 2019	2018-00-18-03-53-30 is caused also also apendice
PL.H	0.0418	ILM BEFORE	180	RECORD.	Top Jun 18 00:333-32 037 2009	2010 DO 10 DO 52 DO 10 Incord 0, physical and providing
Part with				1	Carcol Backup	

步骤13.要估计SFTP设备使用的备份tar文件的大小,请选择Estimate Size,如图所示。

Backup ▼ Restore ▼ Help ▼
Manual Backup
Start Backup 🚺 Estimate Size 🔛 Select All
_ Status
Status:Ready
Select Backup Device
Device Name* BackupDevice1 ~
Select Features *
□ CDR_CAR □ UCM ☑ PLM

步骤14.预估大小显示如图所示

Back	up ·	•	Restore	٠	Help 🔻		
Mani	ual	Ba	ckup				
۲	su	art E	Sackup	۲	Estimate Size	Select All	Clear All
-Sta	etu: Es	s— tim	ated ba	ckup	size successfu	Illy: Estimated s	ize of backup for selected feature(s) is 0.195 MB.

注意:"估计大小"功能是根据先前成功的备份计算的,如果自上次备份后配置发生更改,则可 能会有所不同。

步骤15.要在备份运行时检查备份的状态,请导航至备份>备份状态,如图所示。

cisce ,	Disaster Reco	wery System				Respire Dare
antop w Ha	nine = 16p =					
achag Mata						
a talest	Cervel					
Kalka						
(i) 100,000	I BACKUP COMPARED					
and any other	alla -					
Tar Filman		3077-08-38-83-13-30				
Oation Des	icer	NETWORK				
Qualities.		ANCHIP				
Percetage	Compleme:	308%				
failure	Server	Component	Status.	Acres **	SAUT TIME	tog tile."
PS N	EXCM/SEM.IB	BUR-AGEN?	3118	WATCHING	Two loss 18 83-333-30 CDT 2818	2022-OR 38 03 53 30 h second bolk alter stry agent but
PON .	0004019.8	DUR-SERVER	204	9000195	Tee Jun 18-43(53):30 CDF 2413	2029-06-35-03-53-30 h. correctionsh pite, elm-pervening
PUN	CUKINDO .	BUR-AGENT	228	BACK SHOW	Tax has 18 \$3,53,31 CDT 2818	2009-DE-28-02-02-02 & sacro20 pile altry speed log
COLUMN STATE	CUCH10	8.8-SEIM88	108	500255	Tae Jun 18 83-53-32 CDT 2818	2020-DE 18-03-53-30 h. secret20 pile. electronolog
1.14						

步骤16.要查阅系统中执行的备份过程,请导航至"备份">"历史记录",如图所示。

CSOD For Charles	ecovery Syst	ann -					Rospiter Deate-Receipt	And Date
laing + Restor + 169 +								
adag History								
Farbach								0
	And a state of the local division of the loc	dam da balancia		Andrea Anter			And the second s	
to character	And and a state of	The second se	and the second se	ALC: NOT ALC: ALC: ALC: ALC: ALC: ALC: ALC: ALC:	The sea	manager and manager rep	A DESCRIPTION OF THE PARTY OF T	THE REAL PROPERTY AND A
2011-00-18-03-51-57.5w	SCINCH.	Tell Ann 28 (20.52.82 (27.2819	BARCENS	PROVAL	20.5.2.13900-8	AUX NO. OF CO.		
1013-00-13-03-11-07.5w 2013-00-13-03-11-07.5w 2013-00-13-03-11-03.5w	\$1790K	Tao Jan 39 (11.52 8) (17 2019 Tao Jan 20 (11.52 8) (17 2019	SACESS	RINGERS, ROMAN	20.5.2.13908-8	8,8 8,8		
2012-00-18-03-51-57.5ar 2012-00-18-03-51-57.5ar 2012-00-18-03-53-58.5ar 7681-00-18-03-57-58.5ar	NUTRON NUTRON	Tan Jan 28 (2) 52 83 (2) 77 2818 Tan Jan 28 (2) 52 83 (2) 7217 Tan Jan 28 (2) 53 84 (2) 7 2818	SACCESS BLOCENS FRICE	NINAL NINAL SOEDARD Debilering	20.5.2.13000-0 20.5.2.13000-0	101 101		

恢复

DRS主要恢**复drfDevice.xml**和**drfSchedule.xml**文件。但是,当执行系统数据恢复时,您可以选择集 群中需要恢复的节点。

注意:必须已配置备份设备(SFTP服务器),才能从中检索tar文件并使用这些文件恢复系统 。

步骤1.导航至Disaster Recovery System > Restore > Restore Wizard。

步骤2.如图所示,选择Device Name,该Device Name存储要用于恢复的备份文件。选择 Next(下 一步)。

cisco	Disaster Recovery System For Cisco Unified Communications Solutions
Backup 🔻	Restore - Help -
Step1 Res	tore - Choose Backup device
Next	Cancel
Status -	s:Ready
Select B	ackup Device
Device Na	me* Not Selected Vot Selected
Next Ca	SFTP_1 BackupDevice1

步骤3.从显示的可用文件列表中选择备份文件,如图所示。所选备份文件必须包含要恢复的信息。

CISCO For Cisco Unified	ecovery System
Backup 🍷 Restore 🍷 Help 📍	
Step2 Restore - Choose the	e Backup Tar File
<table-cell-rows> Back 📫 Next 🙆 Ca</table-cell-rows>	ancel
Status:Ready	
Select Backup Archive**—	
Select Backup File*	Tar file list 🗸 🗸 🗸
	Tar file list
Back Next Cancel	2019-06-18-03-51-57
back Next Cancel	2019-06-18-03-53-30

步骤4.从可用功能列表中,选择需要恢复的功能,如图所示。

cisco	Disaster Recovery System For Clace Unified Communications Solutions			
lacha = 8	testore - Help -			
Rep3 Kento	re - Select the type of Restore			
de last	🔢 Swiect.Nit 🥅 Chear All 📫 Nort 🙆 Cance	<i>i</i>		
Matur				
() Status	Ready			
Select Fee	tares*			
Backed up	components in TAR:			
	Feature		Server	
PUR		CUCMV109U8		ELM-AGENT
PLH		CUCHV105UB		ELM-SERVER
PLM		CUCH10		ELM-AGENT
PLH		CUCH10		ELM-SERVER

步骤5.选择要应用恢复的节点,如图所示。

chel. Disaster Recovery System	Recipitor Denter Record Splan - 80
The first and the second	and provide and oper
Negel Boolars - Fluid Manufag for Review	
🗰 fait 🔮 baise 🥝 (and	
(P mountain)	
Rening	
* Restarci() FUR have been adulted for restars. Solid One servers on which these features read to be restared. Once the solidion has been reade, restarce will over the solidion feature will be been.	while the data or the destination server and all the samling data for
time forge Accessed	
Das Sing Reations: Reform a one-sing numbers of entite cluster.	
File incoping clock	
C Perform für integrity oberå anleg Util i Ressage Digest	
fedent the Servers to be nestand for each feature!	
- 5.8	
C 00403868 C 00409	
Balk Restort Canad	

注意:一步还原允许在已重建或新安装发布服务器时恢复整个群集。仅当选择用于恢复的备份 文件是群集的备份文件且选择用于恢复的功能包括在发布方和订户节点注册的功能时,此选项 才可见。

步骤6.选择Restore以启动进程,并且Restore状态会更新,如图所示。

cisco	Disaster Re	Covery System					
Backup 👻	Restore - Help -						
Restore St	atus						
Refres	h						
Status Reading backup from media							
Restore o	letails						
Tar Filena Backup D Operation	ame:)evice: n:	2019-06-18-03-53-30.tar NETWORK RESTORE					
Percentag	ge Complete:	0%					

步骤7.要验证还原的状态,请导航至"还原">**"当前状态**",如图所示

cete ,	Disaster Reco	overy System				Resignion Charles
lacko + Re	nos w Help w					
leaters Stat						
O neur						
Baden Ø Annorm	www.20/04/188	R), ploase math N				
Roture det	-					
Tar Menani Bockap Onv Operations	ei Kak	2013-00-08-03-53-58 NETWORK RESTORE	-			
Percentage	Congilitati	58%				
Peakers	Borwar	Component	Marbon.	Board ***	Mark Now	Cog Pile ¹
PLH	CLOWERSER	ELH AGENT	908	50,002555	Thu Jan 28 03 49:51 CET 2019	2019-06-22-83-09-29-r memolileuk alm ein agentike
PLR	0.0911588	ELM-SERVER.		Adve	Thu Jun 38 03 89:51 CET 2019	
faturals						

步骤8.完成后,将状态更改恢复为SUCCESS,如图所示。

shah I	Disaster Reco	ivery System					NevigeTest 2448
cures 1	or Clace Delfled Care	munications Solutions					admin 1 Seatch.Do
Tankap = Har	alase = 16dg =						
leston Hat							
Ø 1.111							
9454							
O Second	i : Noture Conglisted.						
Bestart Bro	aired .						
Concept of the local division of the local d	start the senserico (C) have restared system	CHVIDERE before performente to be in 1975 mode, p	ting the rank of	estore for charges has been exable	to take effect. In case of a cluster, restart th 6, but has not taken effect yet, FDM read	entite cluster. I will be active only after next reboot.	
Bestare det	uda .						
Ter Piletane		2021-08-18-03-00-20	lar'				
Oadog Des	Koe:	NETWORK.					
Operation		RESTORE					
Percentage	Complete:	308%					
fasters.	Server .	Empower	Status	Acres 11	titlen Brief		tog tile "
PUN	DUCH/SDILIB	BUR MART	2/26	BACCERS	Thus June 218-02-029, 513 (229) 20229	2019-04-20-02-09-29 / Galery	libels play whice agent is
DIN	DUCM/109/8	ELM-SERVER	104	SUCCESS	The last 28-03 (09:51 CBT 2019	2015-06-20-03-89-38 r carrie	that pis an analy

步骤9.要使更改生效,必须重新启动系统,如图所示:



提示:确保遵循支持的步骤以重新启动系统关闭<u>或重新启动系统</u>

步骤10.要查阅系统中执行的恢复过程,请导航至"恢复">"历史记录",如图所示



故障排除

本部分提供了可用于对配置进行故障排除的信息。

如本文中前文所述:

CUCM集群(这涉及CUCM节点和思科即时消息和在线状态(IM&P)服务器)必须满足以下要求:

- •打开端口22以建立与SFTP服务器的通信
- 已验证IPsec和Tomcat证书未过期。要验证证书的有效性,请导航至Cisco Unified OS Administration > Security > Certificate Management

注意:要重新生成IPSec和Tomcat证书,请使用"过程"<u>在CUCM中重新生成证书</u>

- •确保数据库复制已完成设置,且不显示来自CUCM发布服务器和IM&P发布服务器的任何错误或 不匹配。
- 验证服务器与SFTP服务器之间的可达性。
- 使用命令show network cluster验证集群中的所有服务器是否都经过身份验证。

当报告备份或恢复故障并需要进一步帮助时,必须收集此日志集并与技术支持中心(TAC)共享:

- 思科DRF主日志
- 思科DRF本地日志
- DRF Current Status页面中的故障日志
- 问题的时间戳

相关信息

• <u>支持的SFTP服务器</u>