

為每個站點配置具有不同呼叫號碼的Cisco Emergency Responder三級冗餘

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簡介

本文檔介紹如何為Cisco Emergency Responder(CER)配置三級冗餘，其中主CER伺服器 and 輔助CER伺服器均不再可用。 它允許使用Cisco Unified Communications Manager(CUCM)的組織內的每個站點繼續使用不同的呼叫號碼(也稱為緊急位置標識號(ELIN))，而不是使用同一ELIN路由的所有對公共安全接入點(PSAP)的呼叫。

必要條件

需求

思科建議您瞭解：

- 思科緊急回應端(CER)
- 思科整合通訊管理員(CUCM)

三級冗餘的一個前提條件是，首先為您的CER版本配置[Cisco Emergency Responder管理指南](#)中記錄的主和輔助CER伺服器。

採用元件

本檔案中的資訊是根據以下軟體版本（但也適用於其他版本）：

- 思科整合通訊管理員(CUCM)版本12.5.1.11900-146(12.5(1)SU1)
- 思科緊急回應端(CER)版本12.5.1.19000-38(12.5(1)SU1)

本文中的資訊是根據特定實驗室環境內的裝置所建立。 文中使用到的所有裝置皆從已清除（預設）的組態來啟動。 如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

設定

各種[Cisco Emergency Responder Administration Guides](#)中記錄的配置允許通過CER集群（帶有第二個CER伺服器）對CER進行輔助冗餘。 如果第二個CER伺服器也關閉了，或者與兩個CER伺服

器之間的CUCM連線不起作用，那麼CUCM仍然可以配置為使用基於呼叫者物理位置的呼叫號碼，通過完全相同的SIP中繼將呼叫重新路由到PSAP(911)。

附註：此配置示例假設每個物理位置也在CUCM中配置了自己的裝置池。另外還假設CER已首先配置為使用CER提供的ELIN的路由模式10.911。

如果兩個CER都關閉，則可以使用以下路由模式將呼叫路由到PSAP，每個位置都有特定的11.911路由模式和呼叫號碼。即，如果CER 911 CTI路由點(RP911)發生故障，則必須將其配置為將呼叫路由到CER 912 CTI路由點(RP912)。如果同樣失敗，則將其配置為路由到11911。

CER 912 CTI路由點(RP912)的目錄號碼配置了以下來電轉駁和呼叫代答設定：

Call Forward and Call Pickup Settings		Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy				Use System Default
Forward All	<input type="checkbox"/> or			< None >
Secondary Calling Search Space for Forward All				Cer-911-CSS
Forward Busy Internal	<input type="checkbox"/> or	11911		Cer-911-CSS
Forward Busy External	<input type="checkbox"/> or	11911		Cer-911-CSS
Forward No Answer Internal	<input type="checkbox"/> or	11911		Cer-911-CSS
Forward No Answer External	<input type="checkbox"/> or	11911		Cer-911-CSS
Forward No Coverage Internal	<input type="checkbox"/> or	11911		Cer-911-CSS
Forward No Coverage External	<input type="checkbox"/> or	12911		Cer-911-CSS
Forward on CTI Failure	<input type="checkbox"/> or	11911		Cer-911-CSS
Forward Unregistered Internal	<input type="checkbox"/> or	11911		Cer-911-CSS
Forward Unregistered External	<input type="checkbox"/> or	11911		Cer-911-CSS
No Answer Ring Duration (seconds)				
Call Pickup Group				< None >

為每個位置建立本地路由組，例如

Local Route Group Names	
Save	
Status: Ready	
Name *	Description
Standard Local Route Group	Standard Local Route Group
Springfield CER Down RG	Springfield CER Failover RG
Chattanooga CER Down RG	Chattanooga CER Down RG
ColoSprings CER Down RG	ColoSprings CER Down RG
Oakland CER Down RG	Oakland CER Failover RG
Jefferson CER Down RG	Jefferson CER Down RG
Mission CER Down RG	Mission CER Down RG
Add Row	

建立CER-Down-RL路由清單並新增先前配置的本地路由組：

Route List Configuration

Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Status

Status: Ready

Route List Information

Registration: Registered with Cisco Unified Communications Manager [REDACTED]
 IPv4 Address: [REDACTED]
 Device is trusted
 Name*: CER-Down-RL
 Description: Used for CER down scenarios
 Cisco Unified Communications Manager Group*: Sub-[REDACTED]

Enable this Route List (change effective on Save; no reset required)
 Run On All Active Unified CM Nodes

Route List Member Information

Selected Groups**

- Springfield CER Down RG(Local Route Group)
- Oakland CER Down RG(Local Route Group)
- Chattanooga CER Down RG(Local Route Group)
- ColoSprings CER Down RG(Local Route Group)
- Jefferson CER Down RG(Local Route Group)

Add Route Group

Removed Groups***

Route List Details

- [Springfield CER Down RG\(Local Route Group\)](#)
- [Oakland CER Down RG\(Local Route Group\)](#)
- [Chattanooga CER Down RG\(Local Route Group\)](#)
- [ColoSprings CER Down RG\(Local Route Group\)](#)
- [Jefferson CER Down RG\(Local Route Group\)](#)
- [Mission CER Down RG\(Local Route Group\)](#)

按一下Route List Details下每個本地路由組的連結 — 從上面的路由清單中逐個按一下 — 並為每個本地路由組新增不同的Calling Party Transform Mask:

Route List Detail Configuration

 Save

Status

 Status: Ready

Route List Member Information

Route Group Springfield CER Down RG

Calling Party Transformations

Use Calling Party's External Phone Number Mask*

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Party Number Type*

Calling Party Numbering Plan*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Number Type*

Called Party Numbering Plan*

Route List Detail Configuration

 Save

- Status

 Status: Ready

- Route List Member Information

Route Group Oakland CER Down RG

Calling Party Transformations

Use Calling Party's External Phone Number Mask*

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Party Number Type*

Calling Party Numbering Plan*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Number Type*

Called Party Numbering Plan*

Save

...並繼續處理上述CER-Down-RL路由清單中的所有剩餘路由組。

對於以下路由模式，當CER伺服器啟動時，10.911會將呼叫直接傳送到通常的SIP「頭端」路由清單(在本例中為PSTN-RL)。11.911將呼叫傳送到CER-Down-RL (用於三級冗餘)：

<input type="checkbox"/>	10.911	Outbound 911 calls	CER-911-PT	PSTN-RL
<input type="checkbox"/>	11.911	Outbound 911 CER Down	CER-911-PT	CER-Down-RL

接下來，導航到每個裝置池，並為每個站點僅設定一個本地路由組。這些指向常規的SIP「頭端」路由組(在本例中為CUBE ITSP PSTN路由組)。無需配置更多路由組，因為它使用了在路由清單/路由組掩碼設定中應用掩碼的此組：

Device Pool Configuration

 Save  Delete  Copy  Reset  Apply Config  Add New

Cisco Unified Communications Manager Group*	Sub-52	▼
Calling Search Space for Auto-registration	< None >	▼
Adjunct CSS	< None >	▼
Reverted Call Focus Priority	Default	▼
Intercompany Media Services Enrolled Group	< None >	▼
MRA Service Domain	< None >	▼

Roaming Sensitive Settings

Date/Time Group*	CST-DTG	▼
Region*	G711-Region	▼
Media Resource Group List	SpringfieldCC-MRGL	▼
Location	SpringfieldCC-LOC	▼
Network Locale	< None >	▼
SRST Reference*	Disable	▼
Connection Monitor Duration***		
Single Button Barge*	Default	▼
Join Across Lines*	Default	▼
Physical Location	< None >	▼
Device Mobility Group	< None >	▼
Wireless LAN Profile Group	< None >	▼ View Details

Local Route Group Settings

Standard Local Route Group	< None >	▼
Springfield CER Down RG	CUBE ITSP PSTN Route Group	▼
Chattanooga CER Down RG	< None >	▼
ColoSprings CER Down RG	< None >	▼
Oakland CER Down RG	< None >	▼
Jefferson CER Down RG	< None >	▼
Mission CER Down RG	< None >	▼

Device Pool Configuration

Save Delete Copy Reset Apply Config Add New

Device Pool Name* ChattanoogaCC-DP

Cisco Unified Communications Manager Group* Sub-14

Calling Search Space for Auto-registration < None >

Adjunct CSS < None >

Reverted Call Focus Priority Default

Intercompany Media Services Enrolled Group < None >

MRA Service Domain < None >

Roaming Sensitive Settings

Date/Time Group* EST-DTG

Region* G711-Region

Media Resource Group List ChattanoogaCC-MRGL

Location ChattanoogaCC-LOC

Network Locale < None >

SRST Reference* Disable

Connection Monitor Duration***

Single Button Barge* Default

Join Across Lines* Default

Physical Location < None >

Device Mobility Group < None >

Wireless LAN Profile Group < None > [View Details](#)

Local Route Group Settings

Standard Local Route Group < None >

Springfield CER Down RG < None >

Chattanooga CER Down RG CUBE ITSP PSTN Route Group

ColoSprings CER Down RG < None >

Oakland CER Down RG < None >

Jefferson CER Down RG < None >

Mission CER Down RG < None >

...並繼續處理其餘的所有裝置池。

驗證

為了進行測試，首先確保每個裝置池都有一個電話，然後禁用兩個CER伺服器。

這適用於單個CER-911-PT分割槽和單個CER-911-CSS呼叫搜尋空間(CSS)。

附註：從PSAP回叫到每個ELIN的呼叫通常必須使用轉換模式作為字首913，並通過CTI路由點將呼叫路由回到CER。如果CER已關閉，則CTI路由點的來電轉駁設定必須已配置有「Onsite security number」（根據《思科緊急響應程式管理指南》）。

疑難排解

目前尚無適用於此組態的具體疑難排解資訊。