# 在C9800-CL上配置控制台端口(托管于ESXi上)

### 目录

<u>简介</u> <u>先决条件</u> <u>要求</u> <u>使用的组件</u> 配置 配置9800-CL端口 配置VM以提供控制台输出 通过Telnet访问虚拟机 验证 故障排除

# 简介

本文档介绍如何在托管于ESXi的Catalyst 9800无线LAN控制器(WLC)上配置控制台端口。

作者:Irving Mancera,思科TAC工程师。

# 先决条件

### 要求

Cisco 建议您了解以下主题:

- Catalyst 9800 WLC
- 9800基本配置知识。

### 使用的组件

- C9800-CL在Cisco IOS®-XE 17.3.2a版上。
- 虚拟环境和虚拟机监控程序。
- •vSphere客户端版本7.0.0.10100。

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。

### 配置

#### 配置9800-CL端口

步骤1.在ESXi上部署虚拟机(VM)后,关闭虚拟机。导航至VM,右键单击以获取菜单,单击 "Power(电源)"箭头并选择"**Power Off(电源关闭**)"。



#### 步骤2.关闭VM后,再次导航至VM,然后右键点击。在弹出的菜单中,选择"编辑设置"。

vm	vSphere	Clier	Actions - C9800-CL-imancera-b	an	ch in all environments					C	? v	Administrator@	CALO.MEX-WI	RELESS.COM	~ ©	
			Power													
		8	Guest OS	⁺;s	Cluster   ACT											
~ 🗗 vo	enter-mex-v	vireles	Snapshots	<b>*</b> 10	nitor Configure	Permissions	Hosts	VMs	Data	astores	Networks	Updates				
~ 🖬	Mex-Wirele:		🛒 Open Remote Console	1	Total Processors:	88							CPU		Free: 193.93 GHz	
~[	🗒 Wireless	Cluste	🚔 Migrate	1	Total vMotion Migrations								Linet: 12 Of City		innerity 207 87 Chie	
_	10.88.1	73.55											Memory		Emer 386 66 GB	
	10.88.1	73.57	Clone		÷											
	10.88.1	73.59	Fault Tolerance										Used: 76.2 GB	1	Capacity: 462.86 GB	
	🚡 10.88.1	73.61	VAL Delfales										Storage		Pree: 7.98 TB	
>	🕨 🔗 Mex-W	/ireles	VM Policies	•									Used: 3.65 TB		Capacity: 11.64 TB	
)	> 🔗 PODS		Template													
)	> 🕞 PROD		Compatibility	, ts						vSphere [	DRS					
	🗗 9800-'															
	li 100-0	CL-A-I	Export System Logs	r	Lift Me	x-Wireless				Tage						
	i-0080 🎼	CL-B-I	🦆 Edit Settings							rays						
	🛱 aberna	lv-98		-						Assigned	Tag	Category		Description		
	AireOS	vwle	Move to folder	ne	ers											
	🚯 C9800	-CL-in	Rename													
	600 million	-CL-in	Edit Notes													
	👘 VMwai	re vCe		ute	es											
	🎼 w10		Tags & Custom Attributes			Value										
			Add Permission													
			Alarms											No iten	ns to display	
										Assign F						
Recent	Tasks	Alarm														

步骤3.在"编辑设置"页上,选择"虚拟硬件"选项卡,然后单击"添加新设备"

<b>vm</b> vSphere Client Me	Edit Settings   C9800-CL-imancera-	b		
	Virtual Hardware VM Options			
✓ ₽ vcenter-mex-wireless.cisco.com			ADD NEW DEVICE	
V 🔄 Mex-Wireless	> CPU		0	
Vireless Cluster	> Memory	32 × GB ×		d: 13.94 GHz Capacity: 207.87 GHz
0.88.173.55				nory Free: 386.66 GB
10.88.173.59	> Hard disk 1			d: 76.2 GB Capacity: 462.86 GB
10.88.173.61	> SCSI controller 0	VMware Paravirtual		age Free: 7.98 TB
> 🖗 Mex-Wireless > 🖗 PODS	> Network adapter 1	VLAN 2670 V	Connected	d: 3.66 TB Capacity: 11.64 TB
	> Network adapter 2		Connected	
	> Network adapter 3	HA VLAN V	Connected	
	> CD/DVD drive 1	Datastore ISO File 🗸	Connected	
	> CD/DVD drive 2	Datastore ISO File v	Connected	
	> Video card			
	VMCI device			
		Has Maturaly		
			CANCEL	

步骤4.在Add New Device (添加新设备)菜单上,选择Serial Port

				×
vm vSphere Client Me	Edit Settings   C9800-CL	-imancera-b		
	Virtual Hardware VM Options			
II D 8 9			ADD NEW DEVICE	
✓	> CPU		Disks, Drives and S	
✓ Mex-Wireless ✓ I Wireless Cluster	> Memory	× GB ×	Hard Disk Existing Hard	
10.88.173.55	> Hard disk 1		RDM Disk	d: 13.73 GHz Capachy: 207.87 GHz nory Free: 388.66 GB
<ul> <li>10.88.173.57</li> <li>10.88.173.59</li> </ul>	> SCSI controller 0	VMware Paravirtual	CD/DVD Drive	d: 76.2 GB Capacity: 462.86 GB
☐ 10.88.173.61 >	> Network adapter 1	VLAN 2670 🗸	Controllers NVMe Contr	d. 3.66 TB Capacity: 11.64 TB
	> Network adapter 2		SATA Contro SCSI Controll	
后 9800-1	> Network adapter 3	HA VLAN ~	USB Controll Other Devices	
錄 9800-CL-A-luisgzm ଜ 9800-CL-B-luisgzm	> CD/DVD drive 1	Datastore ISO File 🗸 🗸	PCI Device Serial Port	
品 abernalv-9800-1 品 AireOS vWLC	> CD/DVD drive 2	Datastore ISO File V	Network Network Ada	
E C9800-CL-imancera-A	> Video card			
WWware vCenter Server7	VMCI device			
🕞 w10	Participant 4	Has Maturada		
			CANCEL	
Recent Tasks Alarms				

**注意:**在VM上,首先配置的串行端口用作控制台端口,而第二个串行端口用作辅助端口。要 使用控制台端口,您需要同时具备这两个端口。

步骤5.配置第一个串行端口

第5.1步从Serial Port下拉列表中,选择Use Network,然后选中Connected复选框。

第5.2步对于Status,选中Connect At Power On复选框。

第5.3步从Direction下拉列表中,选择Server。

第5.4步在Port URI字段中,键入telnet://<VM所在主机的ip地址>:1892。

步骤6.重复步骤1至步骤5.4,添加第二个串行端口作为辅助端口运行。确保在步骤5.4中为aux端口 使用不同的telnet端口号。

		Bienvenido al cluster de virtualizacion d	e Mex-Wireless. Por favor asegurate de leer y seguir la	as reglas.			×
	E COROO (	dit Settings   c9800-cL-imancera-	A				
	Gr C3800-0	> CD/DVD drive 2	Datastore ISO File v	Connected			
✓	Summary MC	> Video card					
		VMCI device					
		<ul> <li>Serial port 1</li> </ul>	Use Network 🗸 🗹 Connected				
		Status	💟 Connect At Power On				
	Ref. restored to real restored to real restored to real restored to real restored to real restored to real restored to read restored to read restored to read restored to read r		Server v				
			telnet://10.88.173.61:1894				
			Use Virtual Serial Port Concentrator				
		I/O Mode	Vield CPU on poll				
	LAUNCH REM	<ul> <li>Serial port 2</li> </ul>	Use Network 🗸 🗹 Connected				
	LAUNCH W	Status	Connect At Power On				
			Server v				
	VM Hardwa		telnet://10.88.173.61:1893				
			Use Virtual Serial Port Concentrator				
		I/O Mode	Vield CPU on poll				
		> Other	Additional Hardware				
	Network adapti CD/DVD drive 1		40.4	CANCEL			
			40.1 GB used allocated				
Recent Tasks Alarms							$\sim$

**注意:**在HA部署中,您可以将这些端口号用于串行线路 — 1892(控制台VM1)、1891(AUX VM1)、1894(控制台VM2)和1893(AUX VM2)。

#### 配置VM以提供控制台输出

在VM上配置串行端口后,您需要打开VM电源并通过vSphere的Web控制台或远程控制台访问VM。 VM正确启动后,您需要输入命令platform console serial**,然**后执行写**入内**存,如图所示。

```
imancera-b#config
Sep 28 13:47:31.248: %SYS-5-CONFIG_I: Configured from console by console
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
imancera-b(config)#platform console serial
imancera-b(config)#
```

#### 通过Telnet访问虚拟机

打开首选项的终端仿真程序,并指向在终端仿真程序上使用Telnet的串行端口,如图所示。

注意:切记指向第一个串行端口的端口号以访问控制台。

## 验证

您可以使用logging console config命令在C9800-CL上启用控制台日志记录,并使用WLC的任何功 能或特性来生成系统日志以测试控制台日志记录。但是,控制台日志记录最有益的两种使用案例是

•在独立模式下捕获9800-CL的启动日志

•捕获9800CL成对用于高可用性(HA)的状态化切换(SSO)事件的日志。

在本示例中,9800-CL的启动日志在连接到串行控制台的终端仿真器上可见

\*Sep 29 15:31:05.460: %IOSXEB00T-4-FACTORY\_RESET: (rp/0): This was not selected via cli. Rebooting like normal

GNU GRUB version 0.97 (638K lower / 3143488K upper memory)

VMLC = packages.conf
Use the ^ and v keys to select which entry is highlighted.
Press enter to dout the selected op, or it is a command-time.
The highlighted entry will be booted automatically in 1 seconds.
Booting 'WALC - packages.conf'
oot (hdg.g)
riesystem type is extris, partillem type was errel /package.com/ mr rostv/dev/ram max_topo64 MARDMARE=virtual quiet cons
ter SR_D00Tebootflashtpackages.conf alculation SVd-1 habtdoo
W-1 hash:
Calculates // <i>PM033113ecTTM01TTYSc20e1.dB04M9033X34</i> TEC expected // 79633113/Bcff8ef1f992218204f8c
ackage header rev 3 structure detected
acconcing sover man come
calculated 79533046:864962b:8644633:93145327:65297b6c exected 79533046:864962b:86446331:93145327:65297b6c
ackage type:0x7531, flagsi0x0
[Linu-blnage, setup=043-08), size=04060260] [insrd 0 0:70510800, 0:2550100 0:05101
TREVERSE & REP VERSE. Caralderly Versions and the solution to be for double the
DOCADDO
Sep 20 15:31:29.882: %IOSXE8007-4-800T_SRC: (rp/8): Checking for grub upgrade
Sep 29 15:31:38.112: AJOXXEB00T-4-800T SRC: (rs/8): Checking grub versions 1.1 vs 1.1
se 29 15:31:38.118: %IOSXE800T-4-800T SRC: (rs/8): Bootloader upgrade not necessary.
aiting for remote chassis to join
hassis number is 1 Li chassis in the stack have been discovered. Accelerating discovery
ep 29 1511r49.511 r49MM-3-PROC_DMPTX_DEEC_FILE: R40/s: pap: Empty executable used for process bt_logger
p zy 151150.971 i 1999-9700_EMPT_EXEC_TLE: RA/s: pup: Empty executable used for process to _logger
ep 29 15:12:e4.245: sMMA-3-MOC_DMTY_DXEC_FILE: RA/s: pys: Empty executable used for process bi_logger
py is juint
Restricted Rights Legend
se, duplication, or disclosure by the Government is
ubject to restrictions as set forth in subparagraph
c) or the Lommercial Computer Sortware – Hestrictee Tiphts clause at FAR sec. 52:227-19 and subparagraph
c) (1) (ii) of the Rights in Technical Data and Computer offuner claume an DBADS ser. 252 2227aBJ
Cisco Systems, Inc. 179 West Tasman Drive
San Jose, California 95134-1786
isco IOS Software (Amsterdam), C9808-CL Software (C9808-CL-K9_IOSXE), Version 17.3.2a, RELEASE SOFTWARE (fcS)
echnical Support: http://www.cisco.com/techsupport
wpriage (v) iso-zeco y cisco systems, inc. opiled Sta (3-Mor-28 22t4 8) m prote
his software version supports only Smart Licensing as the software licensing mechanism.

# 故障排除

问题:在终端仿真器上,输出与控制台不匹配。

```
Jsername: imancera
Password:
grep: /usr/binos/conf/packages.conf: No such file or directory
Patch present –
[?1limancera-b(diag)#
```

**解决方案:**检查终端仿真器是否指向映射到控制台的端口。在这种情况下,使用映射到AUX端口的端口。

问题:启动日志不完整,只显示日志的一部分。

%IOSXEB00T-4-PART\_VERIFY: (local/local): Verifying partition table for device /dev/bootflash... %IOSXEB00T-4-PART\_VERIFY: (local/local): Selected MBR v1 partition layout. \*Sep 29 15:31:29.882: %IOSXEB00T-4-B00T\_SRC: (rp/0): Checking for grub upgrade \*Sep 29 15:31:30.112: %IOSXEB00T-4-B00T\_SRC: (rp/0): Checking grub versions 1.1 vs 1.1 \*Sep 29 15:31:30.118: %IOSXEB00T-4-B00T\_SRC: (rp/0): Bootloader upgrade not necessary. Waiting for remote chassis to join Chassis number is 1 All chassis in the stack have been discovered. Accelerating discovery Sep 29 15:31:50.991: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:31:52.074: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:20.7764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:07.764: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:11.527: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:11.527: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29 15:32:11.527: %PMAN-3-PROC\_EMPTY\_EXEC\_FILE: R0/0: pvp: Empty executable used for process bt\_logger Sep 29

解决方案:输入platform console serial 命令,如步骤2所示。