# 在 Cisco MSE 3365 上安装 CMX 10.5

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# 简介

本文档将指导网络管理员在 MSE 3365 设备上安装 Cisco CMX 10.5。此流程还包括有关如何设置 安装所需的思科集成管理控制器(CIMC)的说明。

**注意:无法从CMX 10.2、10.3或10.4升级到10.5。需要全新安装。** 如果尝试直接升级,将弹 出以下错误消息:

MD5不匹配,看起来cmx文件已损坏。请下载新内容并重试。

从10.5版本升级到更新版本(例如从10.5.0-206升级到10.5.1-26)可以从GUI完成 :System(系统) — > Settings(设置) — > Upgrade(升级)

为避免在安装10.5.1时<u>打到CSCvn64747</u>,建议先安装10.5.0,然后升级到10.5.1。

# 先决条件

#### 要求

思科MSE 3365。

Cisco CMX 10.5 ISO文件。

#### 使用的组件

本指南中使用的组件:

- •带CIMC版本2.0(3i)的思科MSE 3365,
- •思科互联移动体验版本10.5.0-206。
- 运行MacOS Mojave和Google Chrome作为Web浏览器的MacBook。



#### CIMC配置和KVM启动

步骤1插入显示器和键盘。启动计算机。按F8进入CIMC配置:

#### 图1.启动屏幕



Press <F2> Setup, <F6> Boot Menu, <F7> Diagnostics, <F8>Cisco IMC Configuration, <F12> Network Boot

Bios Version : C220M4.2.0.3d.0.111120141447 Platform ID : C220M4

Cisco IMC IPv4 Address : 10.48.39.239 Cisco IMC MAC Address : 78:BA:F9:ED:8F:68

Processor(s) Intel(R) Xeon(R) CPU E5–2650 v3 @ 2.30GHz Total Memory = 64 GB Effective Memory = 64 GB Memory Operating Speed 2133 Mhz Entering CIMC Configuration Utility...

**第2步**配置CIMC参数,按F10保存并等待45秒以应用更改。按F5刷新并验证设置是否已应用。单击 ESC退出。

图2. Cisco CIMC配置实用程序



要从网络访问CIMC,请通过设备背面的管理端口将MSE 3365连接到交换机。

#### 图3.管理界面



**第3步**在Chrome Web浏览器中,转到http://<cimc\_ip\_address>。如果需要Adobe Flash player运行 的权限,请按**"获取Adobe flash player**"并**"允许**:

图4.启动CIMC接口



第4步首次登录时,默认用户名为admin。默认密码为password。

图5. CIMC GUI访问

-ih-ih- cisco	Cisco Integrated Management Controller czor-FcH1915Haw Wester: 34(0)	Username admin Passeuro: Log In Cantel
62008-2014, C	iece: Systems, Inc. Ad rights reserved.	

**第5步按**"Launch KVM **Console(启动KVM控**制台)"**,然后**确定。如果运行CIMC v2(图5),则运行 KVM需要Java版本1.6.0\_14或更高版本。

# 图6.在CIMC v2上启动KVM控制台

cisco Cisco Integra	ated Managemen	nt Controller		Cisco IMC Hostname: Logged in as:	C220-FCH1915349W admin@10.61.78.71	
Overall Server Status	C   J J      0	0				Log Out
Good	Server Summary					
Server Admin Storage	Actions	Server Properties		1		
Summary	Power On Server	Product Name:				
Inventory	Power Off Server	Serial Number:	The Kild Means requires Inc. 1.6.0.14 or			
Sensors	Shut Down Server	PID:	higher for proper functioning. It seems that			
Remote Presence	Composition	UUID:	you have either not installed Java or has Java lower than 1.6.0_14. Would you still			
BIOS		BIOS Version:	like to continue?			
Power Policies	Hard Reset Server	Description:				
Faults and Logs	Launch KVM Console	Server Status	OK Cancel			
Troubleshooting	Turn On Locator LED	Power State:				
		Overall Server Status:	Good			
		Temperature:	Good			
		Overall DIMM Status:	Good			
		Power Supplies:	Good			
		Fans:	Good			
		Locator LED:	() orr			
		Overall Storage Status:	Good			
		Server Utilization				
		Overall Utilization (%):	2			
		CPU Utilization (%):	1			
		Memory Utilization (%):	•			
		IO Utilization (%)	•			2
					Save Changes Reset	Values

CIMC v3(图6)支持HTML5接口,不需要Java。

# 图7.基于HTML的KVM



如果您决定使用基于HTML的KVM,则必须启用弹出窗口或点击链接以手动打开弹出窗口。

#### 图8.启用弹出窗口

	🖬 🌣
Pop-Up blocker is enabled. Please disable Pop-Up blocker or add the address bdsol-aci20-c240m4-1 to the allowed sites.	<ul> <li>Pop-ups blocked:</li> <li>https://bdsol-aci20-c4-1:/html/kvmViewer.html</li> <li>Always allow pop-ups and redirects from https:// bdsol-aci20-c240m4-1</li> </ul>
	Continue blocking
C240-FCH1933V245	Manage Done
10.48.31.157	
FC:BD:1D:09:2B:64	

**第6步**启动KVM后,按"虚拟媒体"**并激活**"虚**拟设备"**。激活虚拟设备后,下拉菜单将展开,并显示其他选项。按"MAP CD/DVD"以映射ISO文件:

#### 图9.映射虚拟介质

Ś	Cisco Virtual KVM Console	File	View	Macros	Tools	Power	Virtual Media	Help	
••	•						Create Im	age	KVM Console
							Activate V	irtual Devices	
	- + - 1 (D) D +				4		Map CD/D	VD	
11	ntellKJ Boot	- Al	gen	t GE	V1	.5.3	Map Rem	ovable Disk	
C	opyright (C)	1	997	-201	4,	Int	Map Flop	oy	un

**第7步选**择下载的CMX映像,然后按**Map Device**。按下后,"虚拟媒体"菜单将再次展开,以显示映 射的映像:

图10.映射虚拟介质

ver	Virtual Media	Help	🔉 🖸 📀
		10.48.39.239 - KVM Console	
•		Virtual Media - Map CD/DVD	
	Drive/Image File:	CISCO_CMX-10.5.0-206.is ≎ ✓ Read Only	Browse
		Map Device	Cancel

图11.下拉菜单将展开并显示映射的映像文件名

Virtual Media	Help											
Create Im	Create Image											
🗸 Activate V	'irtual Devices											
CISCO_CM Map Remo Map Flopp	MX-10.5.0-206.iso Mapped to CD/DVD ovable Disk oy											

**第8步检**查映像是否正确连接后,转到"Power(电源)"**选**项卡,并选**择"Reset System(warm boot)**(重置计算机)"。在启动过程中,按**F7**开始安装映射的映像:

图12. KVM的电源选项





### CMX映像安装

**第1步选**择Install CMX using current console(使用当前控制台安装CMX)继续安装。选择后,安装脚本将开始加载:

图14. CMX安装方法选择



#### 图15. CentOS安装脚本跟踪



**第2步安**装程序启动后,它会要求确认。键入**yes**,然后按**Enter键**继续安装。"是"可能出现在左上角 :

图16.继续安装的提示可能未对齐



# 图17.按下Enter键后,安装将开始

• • •		10.48.39.239 - KVM Consol	8
	<ol> <li>(x) Installation source (Local media)</li> <li>(x) Installation Destination (Oustom partitioning selected)</li> </ol>	<ol> <li>fxl Software selection (Hinimal Install)</li> <li>fxl Kdump</li> <li>(Kdump is enabled)</li> </ol>	Exit Code: 8x81 RAID18 virtual
	<ol> <li>[] Metwork configuration</li> </ol>	<ol> <li>8) [ ] User creation</li> </ol>	
	(Not connected)	(No user will be created)	UD 8 (target id: 8) success
			in the stanger fail of sacross
	Progress		Exit Code: 8x98
	Setting up the installation environme	nt Set Read Policy to Adaptive ReadAbead	on Adapter B. UD B. (tarnet id: B) success
	Creating disklabel on /dev/sda	set near rolley to maptive nearmena	on mapter 6, VØ 6 (target 1a: 6) success
			Exit Code: 0
	Creating xfs on /dev/sda2		
	Creating xfs on /dev/sda5	Set Cache Policy to Direct on Adapter	8, VD 8 (target id: 8) success
	Creating swap on /dev/sda6		Exit Code: 8x88
	Constitue of a second state and st		
	ether RAID18 is configured properly		**ICSt W
	Creating xfs on /dev/sda1		
	±	RAID18 virtual drive configured and w	working
	Running pre-installation scripts		Modify grub configuration for naming interfa
	Starting package installation process		
	Preparing transaction from installat	on source	
	Installing libgcc (1/293)		
	Installing grub2-common (2/293)		
	Installing setup (4/293)		
	Installing filesystem (5/293)		
	Installing basesystem (6/293)		
	Installing grub2-pc-modules (7/293)		
	Installing bind-license (8/293)		
	Installing firewalld-filesystem (18/	931	
	Installing tzdata (11/293)		
	Installing glibc-common (12/293)		
	Installing nss-softokn-freebl (13/29)	;)	
	Installing glibc (14/293)		
	Installing Hibstdc++ (15/293)		
	Installing bash (17/293)		
	Installing libsepol (18/293)		
	Installing pere (19/293)		

**第3步在**安装过程中,提示符将显示"**Performing installation setup tasks(执行安装后设置任务**)"。这 要求用户按**Enter**以继续安装过程,该过程大约需要20-30分钟:

#### 图18.提示信息



## CMX初始设置

第1步安装完成后,计算机将自动重新启动。这次,**启动时不要按任何键**:

图19.启动过程将继续,无需任何用户输入

Press <f2> Setup, <f6> Boot Menu, <f7> Diagnostics, <f8>Cisco IMC Configuration,         <f12> Network Boot         Bios Version : C220M4.2.0.3d.0.111120141447         Platform ID : C220M4         Cisco IMC IPv4 Address : 10.48.39.239         Cisco IMC MAC Address : 78:BA:F9:ED:8F:68         Processor(s) Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz         Total Memory = 64 GB Effective Memory = 64 GB         Memory Operating Speed 2133 Mhz</f12></f8></f7></f6></f2>	10.48.39.239 - KVM Console
<pre>Press <f2> Setup, <f6> Boot Menu, <f7> Diagnostics, <f8>Cisco IMC Configuration, <f12> Network Boot</f12></f8></f7></f6></f2></pre> Bios Version : C220M4.2.0.3d.0.111120141447 Platform ID : C220M4 Cisco IMC IPv4 Address : 10.48.39.239 Cisco IMC MAC Address : 78:BA:F9:ED:8F:68 Processor(s) Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz Total Memory = 64 GB Effective Memory = 64 GB Memory Operating Speed 2133 Mhz	
<pre>Press <f2> Setup, <f6> Boot Menu, <f7> Diagnostics, <f8>Cisco IMC Configuration, <f12> Network Boot</f12></f8></f7></f6></f2></pre> Bios Version : C220M4.2.0.3d.0.111120141447 Platform ID : C220M4 Cisco IMC IPv4 Address : 10.48.39.239 Cisco IMC MAC Address : 78:BA:F9:ED:8F:68 Processor(s) Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz Total Memory = 64 GB Effective Memory = 64 GB Memory Operating Speed 2133 Mhz	ıılıılı cısco
Bios Version : C220M4.2.0.3d.0.111120141447 Platform ID : C220M4 Cisco IMC IPv4 Address : 10.48.39.239 Cisco IMC MAC Address : 78:BA:F9:ED:8F:68 Processor(s) Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz Total Memory = 64 GB Effective Memory = 64 GB Memory Operating Speed 2133 Mhz	Press <f2> Setup, <f6> Boot Menu, <f7> Diagnostics, <f8>Cisco IMC Configuration, <f12> Network Boot</f12></f8></f7></f6></f2>
Cisco IMC IPv4 Address : 10.48.39.239 Cisco IMC MAC Address : 78:BA:F9:ED:8F:68 Processor(s) Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz Total Memory = 64 GB Effective Memory = 64 GB Memory Operating Speed 2133 Mhz	Bios Version : C220M4.2.0.3d.0.111120141447 Platform ID : C220M4
Processor(s) Intel(R) Xeon(R) CPU E5–2650 v3 @ 2.30GHz Total Memory = 64 GB Effective Memory = 64 GB Memory Operating Speed 2133 Mhz	Cisco IMC IPv4 Address : 10.48.39.239 Cisco IMC MAC Address : 78:BA:F9:ED:8F:68
	Processor(s) Intel(R) Xeon(R) CPU E5–2650 v3 @ 2.30GHz Total Memory = 64 GB Effective Memory = 64 GB Memory Operating Speed 2133 Mhz

第2步使用顶部显示的默认凭证(cmxadmin/cisco)登录CMX:



第3步系统将提示您更改根用户和cmxadmin用户的密码。必须满足密码规范:

# 图21.设置Cisco CMX密码

10.48.39.239 - KVM Console **\*\*** Adding default swap space **\*\*** Password Specification \*\* Password must have 8 to 20 alphanumeric characters... \*\* ... starting with an alpha character \*\* Password must contain a digit and must also contain... \*\* ...digit keys special characters Setting new password for \*root\* Password: Confirm: Password changed successfully for root Setting new password for \*cmxadmin\* Password: Confirm:

**第4步**配置网络参数。要应用网络设置,需要可访问网关和DNS。如果它们不可用,系统将提示您 再次配置网络参数。如果它们可访问,则会重新启动保持连接服务。在此过程中,**请勿按Enter**!!!

图22.初始设置时的网络配置

10.48.39.239 - KVM Console

\*\*\*\*\*\*\*\* Configuring Network... \*\*\*\*\*\* \*\*\*\*\*\* Please enter hostname: cmx-wlaaan Please enter IP address: 10.48.71.41 Please enter netmask: 255.255.255.128 Please enter gateway: 10.48.71.5 Please enter DNS server: 10.48.71.33 Please enter search domain name: cmxwlaaan.cisco.com Are the network settings correct?: yes Stopping keepalived service Verify keepalived service has been stopped Successfully stopped the keepalived service. Starting keepalived service

图23.如果网关无法访问,网络配置提示将出现

Restarting network... Pinging 127.0.0.1.... Success Pinging 10.48.71.41.... Success Pinging .... Failed Error: The network is not configured properly Do you want to configure the network again?: \_

**第5步重**新启动保活服务后,安装将提示输入NTP服务器IP地址、区域和国家/地区。如果未使用 NTP,提示符将跳至时区和时间/日期配置。

图24. NTP和时区配置

10.48.39.239 - KVM Console

Restarting network... Pinging 127.0.0.1.... Success Pinging 10.48.71.41..... Success Pinging 10.48.71.5.... Success Network configuration completed successfully Checking if the machine meets required specification... ----+---------\* | Check | Minimum Required | Actual | Result | i Memory i 24GB 1 63GB ł --+ I CPU 18 1 20 . . . | Disk | 150GB . 1167GB . i hostname i RFC Compliant Hostname i cmx-wlaaan i 🗉 🛛 i +----+----+-----\_\_\_\_ Configuring NTP Server... Please enter the NTP server name (blank for no NTP server) []: 10.48.71.33 Setting ntp server 10.48.71.33 Configuring Timezone and date... Please identify a location so that time zone rules can be set correctly. Please select a continent or ocean. 1) Africa Americas 3) Antarctica 4) Arctic Ocean 5) Asia 6) Atlantic Ocean Australia 8) Europe 9) Indian Ocean 10) Pacific Ocean 11) none - I want to specify the time zone using the Posix TZ format. #? 8\_

图25.国家/地区选择

Please select a country.

1)	Albania		18)	Guernsey
2)	Andorra		19)	Hungary
3)	Austria		20)	Ireland
4)	Belarus		21)	Isle of Man
5)	Belgium		22)	Italy
6)	Bosnia & H	lerzegovina	23)	Jersey
- 7)	Britain (l	JK)	24)	Latvia
8)	Bulgaria		25)	Liechtenste
9)	Croatia		26)	Lithuania
10)	Czech Repu	ublic	27)	Luxembourg
11)	Denmark		28)	Macedonia
12)	Estonia		29)	Malta
13)	Finland		30)	Moldova
14)	France		31)	Monaco
15)	Germany		32)	Montenegro
16)	Gibraltar		33)	Netherlands
17)	Greece		34)	Norway
#?!	5			
The	following	information	has	been given:

- 35) Poland
- 36) Portugal
- 37) Romania
- 38) Russia
- 39) San Marino
- 40) Serbia
- 41) Slovakia
- 42) Slovenia
- 43) Spain

ein

- 44) Sweden
- 45) Switzerland
- 46) Turkey
- 47) Ukraine
- 48) Vatican City
- 49) Åland Islands

Belgium

Therefore TZ='Europe/Brussels' will be used. Local time is now: Mon Dec 17 22:08:50 CET 2018. Universal Time is now: Mon Dec 17 21:08:50 UTC 2018. Is the above information OK? 1) Yes 2) No #? 1 The Timezone selected is Europe/Brussels

The current time is Mon Dec 17 21:08:58 UTC 2018

Enter Date (YYYY-mm-dd hh:mm:ss) (blank to sync with ntp): []:

**第6步下**一步提示将要求您选择是否需要磁盘加密。CLI设置在此结束,保留的配置将通过CMX Web界面(GUI)完成。

图26.磁盘加密设置

# CMX节点安装

通过https://<cmx\_ip\_address>:1984访问CMX GUI。端口1984仅在初始设置或升级期间使用。

第1步使用cmxadmin用户和之前配置的密码登录。

#### 图27. CMX GUI节点安装登录

← → C A Not Secure   https://10.48.71.41:1984/#login	\$ ۵	0	- 174	8	C 🖂	•	=	Ø	:	
ultulti cax cisco										
	Welcome to the CMX Installation									
	cmxadmin									
	Sign in									
	© 2018 Cisco Systems, Inc.									

**第2步选**择CMX节点类型(Location或Presence)。 请注意,以后无法更改。选择后,等待配置和 启动完成。

#### 图28. CMX GUI节点选择



# 图29. CMX配置安装

← → C ▲ Not Secure	https://10.48	<b>3.71.41</b> :1984							¢	• 🗉	0 5	- 11	8.3	: 🖂		0	:
cisco																	
	Welcome to the CMX Installation																
	0	Node Type	>0	Services	) ()	Configuration	0	Startup	>	5	Finish						
							Statu	s Console									
				<ul> <li>✔ Cache_6383</li> <li>ฬ Cache_6384</li> <li>ฬ Cache_6385</li> <li>Gateway</li> <li>ฬ Consul</li> <li>ฬ Confd</li> <li>ฬ Database</li> <li>ฬ Cache_6378</li> <li>ฬ Cache_6378</li> <li>ฬ Cache_6381</li> <li>ฬ Cache_6381</li> <li>ฬ Cache_6381</li> <li>ฬ Cache_6381</li> </ul>			Clesspywe     Influxdb     Cassandra     Metrics     Haproxy     Configurat     Iodocs     Analytics     Location     Matabeng     Nmspib     Connect     Hyperlocat	orker in ine									
					Configu	ring Cassand	ra										

图30. CMX启动服务

← → C ▲ Not Secure   h	ttps://10.48.	<b>71.41</b> :1984							$\dot{\mathbf{x}}$	۵ (		0 5	H	20	8	Ø	) :
cisco cax																	
				Welcome	e to t	he CMX In	stallation										
	_			weiconne	5 10 1		Stallation		_		_	_					
	0	Node Type	> 2	Services	3	Configuration	0	Startup		6	1	linish					
													1				
							State	us Console									
				- Casha 6202													
				Cache_6384			Qiesspyv	vorker									
				Cache_6385			Cassandr	а									
				Gateway			O Metrics										
				<ul> <li>Consul</li> </ul>			P Haproxy										
				<ul> <li>Confd</li> </ul>			Configura	tion									
				Database			<ul> <li>Iodocs</li> </ul>										
				Gache_6378			Analytics 9 Location										
				Cache 6380			Matlaben	aine									
				Cache_6381			A Nmsplb										
				Cache_6382			Connect										
							Hyperloca	tion									
						13%											
					Starte	d Cassandra											

## 第3步按Please click以继续设置

## 图31. CMX安装完成

Welcome to the CMX Installation											
0	Node Type	2	Services	3	Configuration	4	Startup	>6	Finish		
			Cache_6383 Cache_6384 Cache_6385 Gateway Consul Confd Database Cache_6378 Cache_6379 Cache_6380 Cache_6381 Cache_6381 Cache_6382	se click	100% c to continue	<ul> <li>✓ Qlesspyn</li> <li>♥ Influxdb</li> <li>♥ Cassand</li> <li>♥ Metrics</li> <li>♥ Haproxy</li> <li>♥ Configur</li> <li>✓ Iodocs</li> <li>ℜ Analytics</li> <li>♥ Location</li> <li>♥ Matlaber</li> <li>♣ Nmsplb</li> <li>♥ Connect</li> <li>♥ Hyperloca</li> </ul>	tus Console worker Ira ation s ngine t ation				
			Pleas	se click	to continue	setup					

安装过程现已完成。您现在被重定向到设置助手以完成节点的特定配置(映射导入、与无线控制器 和邮件服务器配对)。

图32. CMX基本设置助手

← → C ▲ Not Secure   M	tps://10.48.71.41/configure/#das	hboard	× 📬 🗄	1 o 🖓 🔛 🗑 🖬 I 🔘 E
cisco 10.5.0-206	SETUP ASSISTANT	୧ ୫୬ ବ ୪%	<b>Å</b>	admin ~
				ard Alerts Patterns Metrics
	Introduction	Welcome to CMX		
System at a Glar	Set New Password	Please proceed through this setup assistant to get your	system up and running.	© Settings
Node IP Address	Maps and Controllers			Memory CPU
	Mail Server			
cmx-wlaaan 10.48.71.4	O Done!			14.60% 1.41%
Coverage Details				
Access Points		□ D	o not show setup again Cancel	Next System Time
Placed Missing Active AP AP AP	AP Campus Build	ling Floor Zone Total Client Client	Tag Tag Interferer AP	Client Total Mon Dec 17 22:18:17
0 0 0	0	0 0 0	0 0 0 0	0 0