如何在没有KVM的情况下运行UCS C系列诊断工 具?

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简介

本文档介绍如何在命令行模式下运行思科统一计算系统(UCS)诊断工具,而不使用内核虚拟机 (KVM)。

它利用局域网串连(SOL)功能与诊断工具连接。

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先决条件

要求

Cisco 建议您了解以下主题:

- 兼容诊断工具:诊断工具映像可从思科软件下载网站下载特定服务器型号。
- 应在思科集成管理控制器(CIMC)上启用安全外壳(SSH),并允许在网络中使用。

使用的组件

本文档中的信息基于以下软件和硬件版本:

- UCS C240-M4
- •服务器固件:4.0(2f)
- UCS C系列诊断工具版本6.0(2a)

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

步骤1.启用解决方案

局域网串行(SoL)是一种机制,它使受管系统串行端口的输入和输出能够通过IP上的SSH会话重定向 。

- 1. 登录CIMC并导航至Compute > Remote Management > Serial over LAN。
- 2. 启用LAN串行。
- GUI:



CLI :

Server# scope sol Server /sol # set enabled yes Server /sol *# set baud-rate 115200 Server /sol *# commit

步骤2.将诊断ISO映射为CIMC映射的vMedia卷。

- 1. 导航至计算>远程管理>虚拟媒体。
- 2. 在Cisco-IMC映射vMedia下,添加新映射。
- 3. 在"添加新映射"弹出窗口中,填写的详细信息以创建映射。
 - 注意: 使用HTTP安装类型,还有其他选项,如SMB和NFS。

GUI:

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确保映射状态显示"**确定**",且映射状态**为"映射**"。这意味着CIMC已映射ISO,并可以使用此ISO启动 服务器。

步骤3.配置引导顺序,将Cisco CIMC映射的vDVD设置为引导设备

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- 1. 导航至计算> BIOS > 配置引导顺序
- 2. 向下滚动到底部,单击"Configure Boot order(配置引导顺序)"。
- 3. 屏幕上弹出一个窗口,导航至"高级"选项卡。
- 4. 在"添**加引导设备"**下,选择"添加虚拟媒体"。
- 5. 另一个窗口弹出,用于填写"添加虚拟媒体"信息。
- 6. 输入所需的名称,在子类型下拉菜单中,选择CIMC MAPPED DVD。
- 7. 将订单保持为1 Priority 并保存更改。

CIMC GUI:



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User Management	Add USB													
Networking	Add Virtual Media Add PCHStorage													
Communication Services	Add UEFISHELL													
Security Management	Add SD Card Add NVME													
Event Management														
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或者:如果不想更改引导顺序,请**将一次引导顺序**配置为**CIMC映射的DVD**。这允许diag-ISO在下 次重新引导时引导,而不考虑配置的引导顺序。

现在,SoL已启用,诊断ISO映射为CIMC映射DVD,并配置引导顺序,准备启动到CIMC IP的 SSH会话,并**连**接主机以重新定向SSH输出。

- 1. 重新打开服务器电源以启动诊断测试工具;由于诊断工具已安装在CIMC映射vDVD上并将其配置为第一个引导设备(或一次性引导设备),因此诊断测试应自动引导
- 2. SSH到CIMC IP。



3.运行connect host,通过SSH(SOL)连接到服务器串行控制台。

P 10.106.42.12 - PuTTY	-	×
login as: admin		\sim
admin@10.106.42.12's password:		
C220-FCH2018V1AG# connect host		
CISCO Serial Over LAN:		
Press Ctrl+x to Exit the session		

4.等待输出重定向到SOL(SSH会话),请注意,当服务器执行bios post和diag工具在后台启动时 ,SSH屏幕上可能看不到任何活动。启动诊断工具后,将显示最终用户许可协议屏幕(EULA),即 SOL(SSH会话)上的输出。 诊断工具在实验室中花了3-5分钟才启动。

🛃 10.106.42.12 - PuTTY \times x UCS Rack Server Diagnostics v6.0.2a x You must accept the End-User License Agreement X x to continue. Declining will reboot Server. х х > <Show EULA> < Decline > < Accept

5.接受EULA(选中"接**受"**后,按Enter键或按**Accept**键)后,它将获得**diag#**命令行。可用命令如此图 所示。



注意:确保网络中允许SOL配置中使用的SSH端口。

验证

UCS机架式服务器诊断v6.0.2a

左键和右键单击滚动条,分别向下和向上滚动

媒体?随时查看可用命令/子命令列表

diag#?

Cimc	cimc tests
clear	clear commands
comprehensive	comprehensive test suite
cpu	cpu tests
gui	enter GUI mode
memory	memory tests
pci	pci tests
quick	quick test suite
reboot	reboot the server
saveusb	save logs to USB drive
server	server information
show	show information
smbios	show smbios information

diag# show

analysis	show test analysis
cpu	show /proc/cpuinfo
ecc	show ecc info
ipmi	show ipmi sensor info
log	show test log
memory	show /proc/memory
performance	show processor perf ctr monitor info
sel	show sel log
spd	show dimm spd info
status	show test status
temperature	show system temperature info
version	blade diagnostics software version

要检查Dlag工具版本:

diag# show version
6.0.2a