在UCS中心将本地服务配置文件迁移到全局的配 置指南

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简介

本文档介绍如何将本地服务配置文件迁移到全局或域意外从中心注销

先决条件

要求

Cisco 建议您了解以下主题:

- 思科统一计算系统
- UCS中心
- 将本地配置文件迁移到全局配置文件的步骤

在下面的步骤中,假设最具挑战性的使用案例,从具有远程存储引导LUN的SAN引导,这些LUN已 分区到每个服务配置文件中的目标启动器(WWPN)。迁移期间,ID必须保持不变。

使用的组件

本文档中的信息基于以下软件和硬件版本:

- •思科统一计算系统管理器(UCSM)
- 交换矩阵互联(FI)
- 在ESXi VM上运行的UCS中心

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。如果您使用的是真实网络,请确保您已经了解所有命令的潜在影响。

迁移步骤

1. 记录本地SP的池ID/策略/VLAN/VSAN/模板

2. 在UCS中心中重新创建所有ID/策略/VLAN/VSAN/模板和GLOBAL-SP。

3. 向UCS中心注册UCSM。

4. 将本地配置文件迁移到全局配置文件。

5. 验证ID是否是新GLOBAL-SP中特定分区服务器的正确ID。

6. 将GLOBAL-SP关联到指定服务器。

7. 从SAN LUN启动服务器。

步骤1.记录本地SP的池ID/策略/VLAN/VSAN/模板,如下突出显示。

UCS-FI # scope org / UCS-FI /org # show service-profile status Service Profile Name Server Assignment Association Power State Op State _____ 1/3 Assigned Associated SP01 On Ok UCS-FI /org # scope service-profile **SP01** UCS-FI /org/service-profile # show detail Service Profile: Service Profile Name: SP01 Boot Policy: LocalDisk BIOS Policy: ESX_BIOS Host f/w Policy: global-default Local Disk Policy: LocalDisk Maintenance Policy: UserAck Power Policy: PowerCap Stats Policy: TemThreshold Scrub Policy: global-default UCS-FI /org/service-profile # show identity Service Profile Name: SP01 UUID Suffix Pool: P_1 Dynamic UUID: c9fe0fd0-d051-11e3-00ff-000000000101 VNIC FC Node: WWNN Pool: P_N_1 Dynamic WWNN: 20:FF:00:25:B5:00:01:01 UCS-FI /org/service-profile # show vnic identity vNIC: Name Type Fabric ID Dynamic MAC Addr ESX_Dat_A1 Ether A 00:25:B5:0A:04:01 ESX_Dat_A2 Ether A 00:25:B5:0A:04:02

ESX_Dat_A3 Ether A 00:25:B5:0A:04:03 ESX_Dat_A4 Ether A 00:25:B5:0A:04:04 vHBA: Type Fabric ID Dynamic WWPN Name _____ ____ ESX_FCDat_A1 Fc А 20:FF:00:25:B5:0A:04:01 A 20:FF:00:25:B5:0A:04:02 ESX_FCDat_A2 Fc 20:FF:00:25:B5:0B:04:01 ESX FCDat B1 Fc в UCS-FI /org/service-profile # show vnic ESX_Vcon detail vNIC: Adapter Policy: global-VMWare QoS Policy: ESX_QoS Network Control Policy: CDP_EN Stats Policy: TemThreshold UCS-FI /org/service-profile # show vhba ESX_SB_A1 detail vHBA:

Adapter Policy: global-VMWare

Stats Policy: G-TemThreshold

步骤2.在UCS中心中重新创建所有ID/策略/VLAN/VSAN/模板和GLOBAL-SP。

- 创建全局池、策略、VLAN、VSAN、vNIC模板、vHBA模板、LAN
- 连接策略、SAN连接策略、全局服务配置文件模板和全局服务配置文件。
- 在UCS Manager中创建与本地定义的VSAN具有相同ID的全局VSAN时,请确保全局名称是唯一的,在VSAN名称前考虑一个"G—",并确保新创建的全局VSAN上的FCoE VLAN IDsan完全匹配在相应本地VSAN上配置的FCoE VLAN ID。如果VSAN ID相同,而FCoE ID不同,则全局服务配置文件关联时会引发故障。
- ●创建全局SP将从其各自的全局ID池分配新的UUID、MAC、WWNN和WWPN。
- 将这些新策略应用到新的全局模板。
- •从模板部署全局服务配置文件SP01_GP
- 将WWNN/WWPN/MAC设置为新的全局配置文件SP01_GP以保留相同的ID

注意:创建全局SP将从其各自的全局ID池分配新的UUID、MAC、WWNN和WWPN。

有关如何通过CLI分配ID的信息,请参阅配置指南

```
UCS-CENTRAL# connect resource-mgr
UCS-CENTRAL(resource-mgr)# scope org /
UCS-CENTRAL(resource-mgr) /org # scope service-profile SP01_GP
UCS-CENTRAL(resource-mgr) /org/service-profile # set identity dynamic-wwnn
20:FF:00:25:B5:00:01:01
UCS-CENTRAL(resource-mgr) /org/service-profile # commit-buffer
UCS-CENTRAL(resource-mgr) /org/service-profile # scope vnic ESX_Dat_A1
UCS-CENTRAL(resource-mgr) /org/service-profile/vnic # set identity dynamic-mac 00:25:B5:0A:04:01
UCS-CENTRAL(resource-mgr) /org/service-profile/vnic* # commit-buffer
UCS-CENTRAL(resource-mgr) /org/service-profile # scope vhba ESX_FCDat_A1
UCS-CENTRAL((resource-mgr) /org/service-profile # scope vhba ESX_FCDat_A1
UCS-CENTRAL((resource-mgr) /org/service-profile/vhba # set identity dynamic-wwpn
20:FF:00:25:B5:0A:04:01
CODVQUCSCEN01(resource-mgr) /org/service-profile/vhba* # commit-buffer
```

```
利用简单的UCS Central PowerTool脚本交换或分配原始(正确分区)WWPN和其他ID。这些ID是
已创建全局池的一部分,一旦正确分配这些ID,ID Universe将反映"使用中"状态。
```

这只是UCS Central PowerTools脚本的一个示例,并非思科正式支持的产品。请自担风险使用,在 投入生产前先在实验室进行测试。请根据您的Global-SP设置、组织、ID、策略等编辑脚本。

有关详细信息,请参阅指南

Change To (from Local SP) UUID: dc81c8de-3b00-11e5-0000-0000000025 Change To (from Local SP) MAC for vnic0: 00:25:B5:00:00:25 Change To (from Local SP) MAC for vnic1: 00:25:B5:00:00:26 Change To (from Local SP) WWNN ID: 20:00:00:25:B5:00:00:25 Change To (from Local SP) WWPN for A Fabric: 20:00:00:25:B5:AA:00:25 Change To (from Local SP) WWPN for B Fabric: 20:00:00:25:B5:BB:00:25 Start-UcsCentralTransaction \$mo = Get-UcsCentralOrg -Name root | Add-UcsCentralServiceProfile -Name "SP01_GP" -ModifyPresent -Uuid "0909ac8a-2411-11e4-0000-181401000099" \$mo_1 = \$mo | Add-UcsCentralVnic -ModifyPresent -Name "eth0" -Addr "00:25:B5:0A:04:01" \$mo_2 = \$mo | Add-UcsCentralVnic -ModifyPresent -Name "eth1" -Addr "00:25:B5:0A:04:02" \$mo_3 = \$mo | Add-UcsCentralVhba -ModifyPresent -Name "fc0" -Addr "20:FF:00:25:B5:0A:04:01" \$mo_4 = \$mo | Add-UcsCentralVhba -ModifyPresent -Name "fc1" -Addr "20:FF:00:25:B5:0A:04:02" \$mo_5 = \$mo | Add-UcsCentralVnicFcNode -ModifyPresent -Addr "20:01:00:25:B5:14:01:99" Complete-UcsCentralTransaction Start-UcsCentralTransaction \$mo = Get-UcsCentralOrg -Name root | Add-UcsCentralServiceProfile -Name "SP01_GP" -ModifyPresent -Uuid derived

\$mo_1 = \$mo | Add-UcsCentralVnic -ModifyPresent -Name "eth0" -Addr derived \$mo_2 = \$mo | Add-UcsCentralVnic -ModifyPresent -Name "eth1" -Addr derived \$mo_3 = \$mo | Add-UcsCentralvhba -ModifyPresent -Name "fc0" -Addr derived \$mo_4 = \$mo | Add-UcsCentralvhba -ModifyPresent -Name "fc1" -Addr derived \$mo_5 = \$mo | Add-UcsCentralVnicFcNode -ModifyPresent -Addr pool-derived

对要手动分配的每个ID重复上述步骤

步骤3.向UCS中心注册UCSM。



步骤4.将本地配置文件迁移到全局配置文件。

- 使用本地SP正常关闭服务器
- 取消关联本地SP
- 删除本地SP((将已分配的ID恢复到未使用状态的池中)

有关如何在UCSM中管理服务配置文件的详细信息,请参阅配置指南

步骤5.检验新的全局配置文件。

UCS-FI /org # show service-profile status Central(resource-mgr) /org/service-profile # show identity

步骤6.将GLOBAL-SP关联到指定服务器。

请参阅配置指南,了解如何从中心关联SP

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步骤7.在分配新的Global-SP后,从SAN LUN启动服务器

检查服务器是否能通过KVM控制台从SAN启动

| A PDC-F08-QA / root / CODPQEVPHTN01 (Chassis - 1 Server - 3) - KVIM Console(Launched By: a | imin) 💿 🖬 🛋 | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| File View Macros Tools Virtual Media Help | | | | | | | | |
| State Consider Descenter | | | | | | | | |
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| VMware ESXi 5.5.0 (VMKernel Release Build 4345813) | | | | | | | | |
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| Download tools to manage this host from: http://CODPQEVPHIMB1/ | | | | | | | | |
| http://10.102.33.57/ (STATIC) | | | | | | | | |
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| GF2> Custonize System/View Logs GF12> Shut Down/Restart | | | | | | | | |
| | [10. 102. 32. 165] admin] (0.4 fps] (0.001 KB/s] NUM] 🖉 | | | | | | | |
| Connected to 19: 10.102.32.165 | System Time: 2016-11-17T12:25 | | | | | | | |

相关信息

• UCSM配置指南

http://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-central-software/products-installation-and-configuration-guides-list.html

• 核心最佳实践

https://communities.cisco.com/servlet/JiveServlet/downloadBody/66619-102-3-120435/UCS%20Central%20Operations%20and%20Best%20Practice%20Guide.pdf

- 中央配置指南
 <u>http://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-manager/products-installation-and-configuration-guides-list.html</u>
- PowerTools套件 https://communities.cisco.com/docs/DOC-37154