排除VMWare vCenter的HyperFlex外掛問題

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簡介

本文檔介紹對HyperFlex群集全新安裝/部署或升級到版本3.0(1c)後發生的HyperFlex外掛問題進行故 障排除的步驟。

必要條件

需求

思科建議您瞭解以下主題:

- 思科HyperFlex
- VMWare vCenter

採用元件

本文中的資訊係根據以下軟體和硬體版本:

- HyperFlex版本3.0(1c)
- UCS C240M5
- VMWare vCenter 6.0或6.5

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。

疑難排解步驟

步驟1.驗證您是否在vCenter Web客戶端上未看到HyperFlex外掛。導航到Home > Global Inventory List,然後檢查外掛是否在vCenter中可見。此外掛應正好位於Distributed Switches的下方,如下圖 所示。



步驟2.確保vCenter登入使用者具有完全管理許可權。

步驟3.檢查從vCenter ping HX Cluster Management IP是否有效(CMIP)。

步驟4.檢查對CMIP的ping操作是否間歇性執行,以隔離重複的IP問題。

步驟5.驗證是否已通過vCenter管理對象瀏覽器(MOB)安裝該外掛。 執行此步驟之前,請先找出群集 域ID。為了收集群集域ID,請將Secure Shell(SSH)傳送到CMIP並運行此命令**D"stcli cluster info |** grep -i domain」,如圖所示。



步驟6。在此例中,您可以看到,域ID是**c122**。現在,導航到vCenter MOB,並檢查是否存在此外 掛的擴展。為此,請登入**https://<vCenter IP或FQDN>/mob**。

導航到**屬性部分下的content>extensionManager**,然後選擇**(更多……)**。在清單的底部,您將看 到兩個springpath擴展。其中一個包括之前收集的域ID。

Managed Object Type: ManagedObjectReference:ExtensionManager Managed Object ID: ExtensionManager

Properties

NAME	түре	VALUE	
extensionList	Extension[]	extensionList["com.vmware.vim.sms"]	Extension
	K2157.5	extensionList["com.vmware.vim.vsm"]	Extension
		extensionList["VirtualCenter"]	Extension
		extensionList["com.vmware.vim.stats.report"]	Extension
		extensionList["com.vmware.vim.sps"]	Extension
		extensionList["com.vmware.vim.vcha"]	Extension
		extensionList["hostdiag"]	Extension
		extensionList["com.vmware.vim.ls"]	Extension
		extensionList["com.vmware.vim.eam"]	Extension
		extensionList["com.vmware.rbd"]	Extension
		extensionList["com.vmware.ovf"]	Extension
		extensionList["com.vmware.vmcam"]	Extension
		extensionList["com.vmware.cl"]	Extension
		extensionList["com.vmware.vsan.health"]	Extension
		extensionList["com.vmware.vcenter.iso"]	Extension
		extensionList["com.vmware.vcIntegrity"]	Extension
		extensionList["com.springpath.sysmgmt"]	Extension
		<pre>extensionList["com.springpath.sysmgmt.domain-c122"] (less)</pre>	Extension

步驟7。若要進一步驗證HyperFlex外掛是否已安裝在vCenter Web客戶端上,請導航到**首頁>管理 >解決方案>客戶端外掛**。

如果您在表中沒有看到HyperFlex(Springpath外掛),請按一下**檢查新外掛**下。如果存在 Springpath外掛,則應填充該外掛。這將需要幾分鐘時間。

檢查新外掛之前:

Navigator I	👌 Client Plug-Ins				
A Back	Check for New Plug-ins			(Q Filter 🔹
Administration Access Control Roles Global Permissions Single Sign-On Users and Groups Configuration Licensing Licenses Reports Solutions Client Plug-Ins vCenter Server Extensions Deployment System Configuration Customer Experience Im Support Upload File to Service Re	Name Vicenter Orchestrat SR File Upload Plu Hybrid Cloud Mgr P VMware Update M SSO Admin UI plugin Virtual Infrastructure Virtual Infrastructure	Vendor VMware VMware VMware VMware VMware, Inc.	Version 6.5.0.20000 6.5.0.20000 6.5.0 6.5.0 6.5.0 6.5.1.20000 6.6.1.20000	Description VCenter Orchestrator pl., Uploads files as attach., VMware vCloud Air Hy., Update Manager client SSO Admin UI plugin Virtual SAN Web Client.,	State State State Enabled Enabled Enabled Enabled Enabled State Enabled State Enabled State Enabled State Enabled State Enabled State Enabled State Enabled State Enabled State Stat

檢查新外掛後:

Navigator I 🗳 Clie	nt Plug-Ins			
Back P Check f	or New Plug-ins	Q Fi	(Q Filter -)	
Administration Check f Administration Name Access Control S R I Roles Global Permissions Global Permissions S R I Single Sign-On View Users and Groups S SC Configuration S SC Licensing S of the second	or New Plug-ins Vendor Inter Orche VMware File Uploa VMware File Uploa VMware Vare Upda VMware 0 Admin UL VMware 10 Admin UL Springpath 10 Infrastr VMware, If 11 Infrastr	Version 6.5.0.20000 6.5.0.20000 6.5.0 6.5.0 6.5.020000 1. Inc. 3.0.1.29681 1C. 6.6.1.20000 1. Inc. 1.20000 1. Inc. 1.200000 1. Inc. 1.20000 1. Inc. 1.20000 1. Inc.	Q Fil Description vCenter Orchestra Uploads files as at VMware vCloud Ai Update Manager c SSO Admin UI plu Springpath vSpher Virtual SAN Web Virtual SAN Web	Iter

步驟8.重新啟動vSphere Web客戶端服務(vsphere-client服務)。

Windows上的vCenter伺服器

- 1. 在運行vCenter Server的Windows系統上開啟「伺服器管理器」。
- 2. 導覽至Configuration > Services。
- 3. 選擇VMware vSphere Web Client, 然後按一下Restart。

vCenter伺服器裝置

- 1. 使用SSH作為根使用者登入到vCenter Server裝置。
- 2. 停止vSphere Web客戶端服務並運行以下命令之一。vCenter Server 6.0:**服務vsphere-client** stopvCenter Server 6.5:service-control — 停止vsphere-client
- 3. 藉助這些命令,重新啟動vSphere Web客戶端服務。vCenter Server 6.0:**服務vsphere-client** startvCenter Server 6.5:service-control — **啟動vsphere-client**

實驗vCenter Server裝置的命令輸出:

Command> service-control --stop vsphere-client Perform stop operation. vmon_profile=None, svc_names=['vsphere-client'], include_coreossvcs=False, i nclude_leafossvcs=False Successfully stopped service vsphere-client Command> service-control --start vsphere-client Perform start operation. vmon_profile=None, svc_names=['vsphere-client'], include_coreossvcs=False, include_leafossvcs=False 2018-08-23T22:02:56.9392 Service vsphere-client Successfully started service vsphere-client

步驟9.從vCenter刪除extensionList ["com.springpath.sysmgmt"] mob。

附註:請確保僅刪除未使用的域ID。如果刪除不正確的域ID,群集將離線。從步驟5中收集正確的域ID。此外,還可以從vCenter Hosts & Clusters檢視中刪除集群,刪除移動項,然後在vCenter中重新建立集群,最後重新註冊該集群。如有疑問,請先開啟TAC SR,然後再繼續。

Home			CTED 4 - Complete dates in the							
Data Object Type	Extension		STEP-1: Copy the string in the	2 cuircle						
Parent Managed Object ID: ExtensionManager Property Path: extensionList["com.springpath.sysmgmt"]					Home					
Properties					Managed Object Type: ManagedObjectReference:ExtensionManager Managed Object ID: ExtensionManager					
NAME	ТҮРЕ		VALUE							
client	ExtensionClie	entInfo[]	o[] <u>client</u>		Properties					
company		string	g "Springpath, Inc." NAME TYPE VA		VA	LUE				
description	De	scription	description		extensionList	Extension[]	extension		t["com.vmware.vim.inventorvservice"]	Extension
eventList	ExtensionEventTy	/peInfo[]	eventList			ex ex		xtensionList["com.vmware.vim.sms"] Extension xtensionList["com.vmware.vim.vsm"] Extension vensionList["VitrualCenter"] Extension		
extendedProductInfo	ExtExtendedPro	ductInfo	extendedProductInfo							
faultList	ExtensionFaultTy	/peInfo[]	Unset				ext	<pre>ktensionList["com.vmware.vim.stats.report"] Extension</pre>		Extension
healthInfo	ExtensionHe	ealthInfo	Unset				<u>(m</u>	ore)		
key		string	com.springpath.sysmgmt5		1					
lastHeartbeatTime		dateTime	"2016-11-09T14:14:25.439	9-08:00"	Methods					
managedEntityInfo	ExtManagedEnt	tityInfo[]	Unset		RETURN TYPE				NAME	
ovfConsumerInfo	ExtensionOvfConsu	umerInfo	Unset		E			tension	FindExtension	
privilegeList	privilegeList ExtensionPrivilegeInfo[]		Unset					string <u>GetPublicKey</u>		
resourceList	t ExtensionResourceInfo[]		Unset		ExtensionManagerIpAllocationUsage[]		<u>QuervExtensionIpAllocationUsage</u>			
server	ExtensionSer	🗋 Mana	Managed Object Browser - Google Chrome – 🔲		- 0	×	Entity[]	<u>QueryManagedBy</u>		
shownInSolutionManager		A beeps			ethod=unregisterExtension			void	RegisterExtension	
solutionManagerInfo	ExtSolutionMar							void	SetExtensionCertificate	
subjectName		Man	anaged Object Type:					void	SetPublicKey	
taskList ExtensionTaskT		Mar	Managed Object ID: ExtensionManager			annanager			UnregisterExtension	
type		Me	ethod: UnregisterExtension				void	UpdateExtension		
version		-					_		[]	
		void	UnregisterExtensi	on					11	
									L	
Parameters NAME			eters						STED-2: Click Here	
			TYPE VALUE			STEP-2. Click Here				
		exten	sionKey (required) string	com.springpath.sysn	ngmt					
						Invoke Metho	d			
						۸				
STEP-3: Paste the value, then C unregister extention>				lick	42					
				ention>		- 11				

步驟10.將HX群集重新註冊到同一個vCenter。

運行這些命令將HX重新註冊到vCenter。

root@ucs-stctlvm-116-1:~# stcli cluster reregister --vcenter-datacenter DATACENTER --vcenter-cluster <CLUSTER> --vcenter-url <vCenterIP> --vcenter-user <USER> 步驟11.等待vSphere Web客戶端服務聯機,然後再重新登入,此過程大約需要5到10分鐘。

登入後,您應該能夠看到Cisco Hyperflex Systems下的Cisco HX Data Platform。

Navigator	📴 vCenter Home
Back	Getting Started Summary
Global Inventory Lists	0
2 vCenter Home	What is vCenter?
🔁 Virtual Machines	The vCenter inventory lists and trees show
😹 vApps	systems, such as datacenters, hosts,
VM Templates in Folders	clusters, networking, storage, and virtual
	induines.
🕼 vCenter Servers	Inventory lists allow you to view aggregated lists of these objects across vCenter Server
Datacenters	systems. These flat lists enable easier batch
Hosts	
U Clusters	level Home inventory. In these trees, objects
C Resource Pools	are arranged hierarchically in one of four views: Hosts and Clusters, Wis and
Datastores	Templates, Storage, and Networking.
Datastore Clusters	To get started with the virtual infrastructure:
Q Networks	1. Create a datacenter
A Distributed Port Groups	2. Add hosts to the datacenter
Distributed Switches	3. Create virtual machines on the nosts
	Explore Further
PCisco HX Data Platform	What is vCenter Server?
	Networking in vSphere
	Storage in vSphere
	What are inventory tree views?
	Using the object navigator
Territoria de la construcción de la	

步驟12.如果此操作不起作用,請檢查外掛是否可從VCSA SSH控制檯下載。此測試用於隔離任何防 火牆、埠問題或證書問題。

使用wget:

sup-ucs-vc:~ # wget https://<CMIP>/plugins/stGui-1.0.zip —no-check-certificate

使用Curl:

sup-ucs-vc:~ # curl-v https://<CMIP>/plugins/stGui-1.0.zip

hyperflex-vcenter:/var/log/vmware/vsphere-client/logs # wget https://lowecolog/plugins/stGui					
-1.0.zipno-check-certificate					
2018-08-28 21:55:18 https://101001001000000000000000000000000000					
Connecting to 10.00.70.102:443 connected.					
Unable to establish SSL connection.					
hyperflex-vcenter:/var/log/vmware/vsphere-client/logs # wget https://identicality/plugins/stGui					
-1.0.zipno-check-certificate					
2018-08-28 21:59:07 https://10.00.70.102/plugins/stGui-1.0.zip					
Connecting to 10.00.00.002:443 connected.					
Unable to establish SSL connection.					
hyperflex-vcenter:/var/log/vmware/vsphere-client/logs # curl -v https://efreenter./plugins/st					
Gui-1.0.zip					
* About to connect() to ###################################					
* Trying 10.00.10.102 connected					
* Connected to 100000000000000000000000000000000000					
* successfully set certificate verify locations:					
* CAfile: none					
CApath: /etc/ssl/certs/					
* SSLv3, TLS handshake, Client hello (1):					
* Unknown SSL protocol error in connection to 10,00,70,102;443					
* Closing connection #0					
curl: (35) Unknown SSL protocol error in connection to 10:00:70:102:443					
hyperflex-vcenter:/var/log/vmware/vsphere-client/logs #					

步驟13.瀏覽至<u>https://vCenterIPaddress/</u>mobthen login <u>asadministrator@vsphere.local</u>。

導航到Content>Extension > ExtensionManager >extensionList ["com.springpath.sysmgmt"] > Server

應該這樣看。ExtensionServerInfo顯示給定HX群集的相同URL/IP。這應該與CMIP的IP相同。

Home	Home								
Data Pare Prop	Data Object Type: ExtensionServerInfo[] Parent Managed Object ID: ExtensionManager Property Path: extensionList["com.springpath.sysmgmt"].server								
Propert	ies								
NAME	ТҮРЕ	VALUE							
[0]	ExtensionServerInfo	ansionServerInfo NAME TYPE VALUE							
		adminEmail	string[]	"admin@springpathinc.com"					
		company	string	"Springpath, Inc."					
		description	Description	NAME TYPE VALUE					
				label string "1297828382378014114:7656544413023044243"					
				summary string "hx-2-cluster"					
		serverThumbprint	string	"28:71:47:9A:C0:58:72:40:C0:E7:9A:DB:39:2A:A3:1A:FD:97:BF:D7"					
		type	string	"springpath-cluster"					
		url	string	"https://www.stMar"					
[1]	ExtensionServerInfo	NAME	ТҮРЕ	VALUE					
		adminEmail	string[]	"admin@springpathinc.com"					
		company	string	"Springpath, Inc." Same IP					
		description	Description	NAME TYPE VALUE					
				label string "HyperFlex Data Platform"					
				summary string "Manages Springpath storage"					
		serverThumbprint	string	"28:71:47:9A:C0:58:72:40:C0:57:9A:DB:39:2A:A3:1A:FD:97:BF:D7"					
		type	string	"vsphere-client-serenity"					
		url	string	"https://					

步驟14.如果伺服器移動輸出未顯示相同的URL DNS名稱,例如,如果[**0]ExtensionServerInfo** 和 [**1]ExtensionServerInfo**是兩個獨立的URL DNS名稱,則可能是問題並導致問題。 查詢作為群集管理IP的URL。在CtrlVM中驗證DNS,然後執行以下步驟:

- 從HX群集禁用DNS。SSH到任何儲存CtrlVM
- •驗證DNS伺服器:#stcli services dns show (獲取DNS伺服器的IP)
- 停止DNS:#stcli services dns remove ---dns <DNS server IP>
- •驗證DNS已停止:#stcli services dns show
- 從vCenter中刪除extensionList ["com.springpath.sysmgmt"]駭客(如步驟9所述)。
- •將HX群集重新註冊到vCenter(如步驟10所述)。
- 從Web客戶端註銷並重新登入。驗證外掛是否顯示。
- 將DNS伺服器新增回hx群集:#stcli services dns add ---dns <DNS server IP>
- 驗證DNS伺服器是否正在運行:#stcli services dns show

日誌分析

日誌收集

1. vCenter日誌 — <u>https://kb.vmware.com/s/article/1011641</u>

2. Hyperflex storfs捆綁包 — <u>https://www.cisco.com/c/en/us/support/docs/hyperconverged-</u> infrastructure/hyperflex-hx-data-platform/210831-Visual-guide-to-collect-Tech-Support-fil.html

錯誤消息示例

1.如果vCenter與HX Cluster stMgr存在通訊問題,請檢查vCenter virgo日誌並查詢消息。

2. VCSA Virgo日誌位置:/var/log/vmware/vsphere-client/logs/vsphere_client_virgo.log

3.檢查stMgr日誌位置:**/var/log/springpath/stMgr.log**並查詢與Hyperflex群集或vCenter外掛對應的 錯誤消息或失敗消息。

出現問題的示例日誌:

stMgr failed to return a simple cluster name,

[2016-11-15T19:48:40.542Z] [WARN] pool-9-thread-170000096 100001 200001com.storvisor.sysmgmt.service.ThriftServiceAccessFailed to get cluster namewhen checking for cluster access. org.apache.thrift.transport.TTransportException:java.net.UnknownHostException: cisco-storage-cluster.com

at org.apache.thrift.transport.THttpClient.flush(THttpClient.java:356)

- at org.apache.thrift.TServiceClient.sendBase(TServiceClient.java:65)
- at com.storvisor.sysmgmt.StMgr\$Client.send_getName(StMgr.java:1308)
- at com.storvisor.sysmgmt.StMgr\$Client.getName(StMgr.java:1301)

at

at

com.storvisor.sysmgmt.service.util.StorvisorServerCacheForceUpdaterThread.call(StorvisorServerCa cheForceUpdaterThread.java:28) at

com.storvisor.sysmgmt.service.util.StorvisorServerCacheForceUpdaterThread.call(StorvisorServerCa cheForceUpdaterThread.java:12)

at java.util.concurrent.FutureTask.run(Unknown Source)

at java.util.concurrent.ThreadPoolExecutor.runWorker(Unknown Source)

at java.util.concurrent.ThreadPoolExecutor\$Worker.run(Unknown Source)

at java.lang.Thread.run(Unknown Source)

Caused by: java.net.UnknownHostException: cisco-storage-cluster.com

at java.net.AbstractPlainSocketImpl.connect(Unknown Source)

at java.net.SocksSocketImpl.connect(Unknown Source)

at java.net.Socket.connect(Unknown Source)

at sun.security.ssl.SSLSocketImpl.connect(Unknown Source) 4.開啟思科TAC SR(如果這無用):<u>https://mycase.cloudapps.cisco.com/case</u>