

# 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

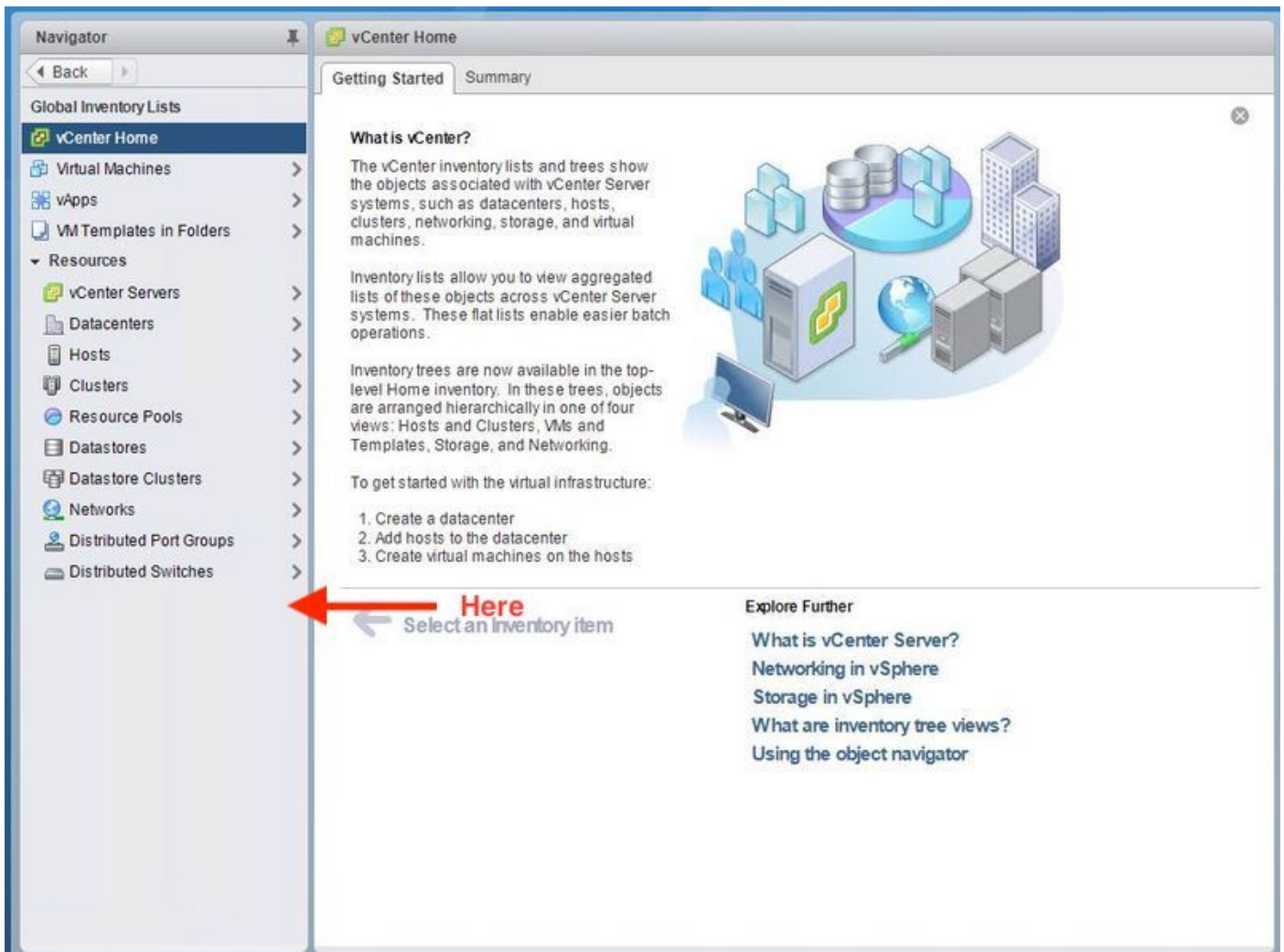
本文中的資訊係根據以下軟體和硬體版本：

- 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。

```
root@hx-8-scvms-02:~# stcli cluster info | grep domain
id: domain-c122
vCenterClusterId: domain-c122
root@hx-8-scvms-02:~#
```

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

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。

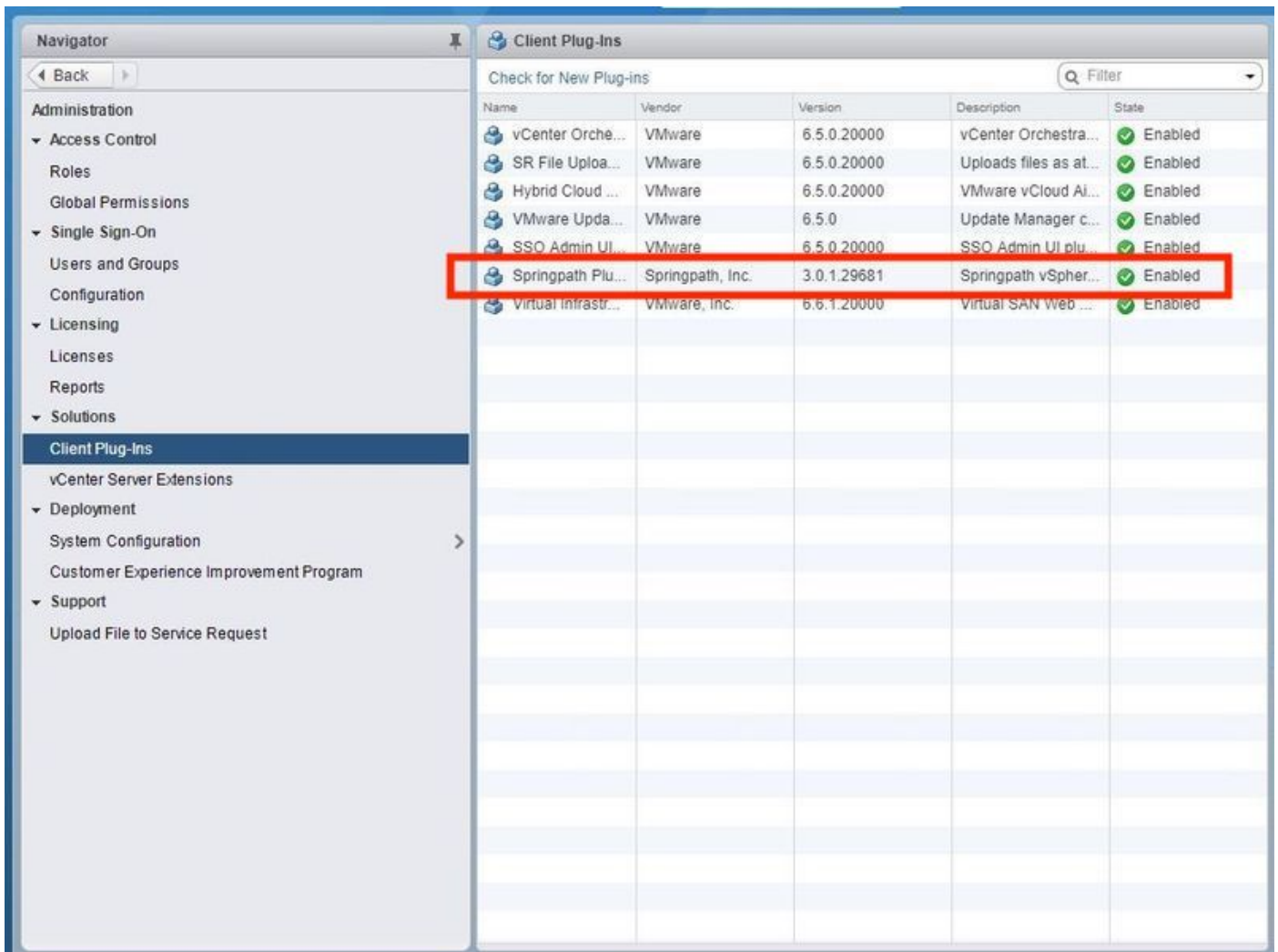
檢查新外掛之前：

Client Plug-Ins

Check for New Plug-ins

Name	Vendor	Version	Description	State
vCenter Orchestrat...	VMware	6.5.0.20000	vCenter Orchestrator pl...	Enabled
SR File Upload Plu...	VMware	6.5.0.20000	Uploads files as attach...	Enabled
Hybrid Cloud Mgr P...	VMware	6.5.0.20000	VMware vCloud Air Hy...	Enabled
VMware Update M...	VMware	6.5.0	Update Manager client	Enabled
SSO Admin UI plugin	VMware	6.5.0.20000	SSO Admin UI plugin	Enabled
Virtual Infrastructure	VMware, Inc.	6.6.1.20000	Virtual SAN Web Client...	Enabled

檢查新外掛後：



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. umon_profile=None, suc_names=['vsphere-client'], include_coreossvcs=False, include_leafossvcs=False
Successfully stopped service vsphere-client
Command> service-control --start vsphere-client
Perform start operation. umon_profile=None, suc_names=['vsphere-client'], include_coreossvcs=False, include_leafossvcs=False
2018-08-23T22:02:56.939Z Service vsphere-client state STOPPED
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

o

**STEP-1: Copy the string in the circle**

NAME	TYPE	VALUE
client	ExtensionClientInfo[]	<a href="#">client</a>
company	string	"Springpath, Inc."
description	Description	<a href="#">description</a>
eventList	ExtensionEventTypeInfo[]	<a href="#">eventList</a>
extendedProductInfo	ExtExtendedProductInfo	<a href="#">extendedProductInfo</a>
faultList	ExtensionFaultTypeInfo[]	Unset
healthInfo	ExtensionHealthInfo	Unset
key	string	<u>com.springpath.sysmgmt</u>
lastHeartbeatTime	dateTime	"2016-11-09T14:14:25.439-08:00"
managedEntityInfo	ExtManagedEntityInfo[]	Unset
ovfConsumerInfo	ExtensionOvfConsumerInfo	Unset
privilegeList	ExtensionPrivilegeInfo[]	Unset
resourceList	ExtensionResourceInfo[]	Unset

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

NAME	TYPE	VALUE
extensionList	Extension[]	<a href="#">extensionList["com.vmware.vim.inventoryservice"]</a> Extension <a href="#">extensionList["com.vmware.vim.sms"]</a> Extension <a href="#">extensionList["com.vmware.vim.vsm"]</a> Extension <a href="#">extensionList["VirtualCenter"]</a> Extension <a href="#">extensionList["com.vmware.vim.stats.report"]</a> Extension <a href="#">(more...)</a>

**Methods**

RETURN TYPE	NAME
Extension	<a href="#">FindExtension</a>
string	<a href="#">GetPublicKey</a>
ExtensionManagerIpAllocationUsage[]	<a href="#">QueryExtensionIpAllocationUsage</a>
Entity[]	<a href="#">QueryManagedBy</a>
void	<a href="#">RegisterExtension</a>
void	<a href="#">SetExtensionCertificate</a>
void	<a href="#">SetPublicKey</a>
void	<u><a href="#">UnregisterExtension</a></u>
void	<a href="#">UpdateExtension</a>

**STEP-2: Click Here**

**Managed Object Reference: ExtensionManager**  
Managed Object ID: ExtensionManager  
Method: UnregisterExtension

**void UnregisterExtension**

Parameters

NAME	TYPE	VALUE
extensionKey (required)	string	<u>com.springpath.sysmgmt</u>

**STEP-3: Paste the value, then Click unregister extension ----->**

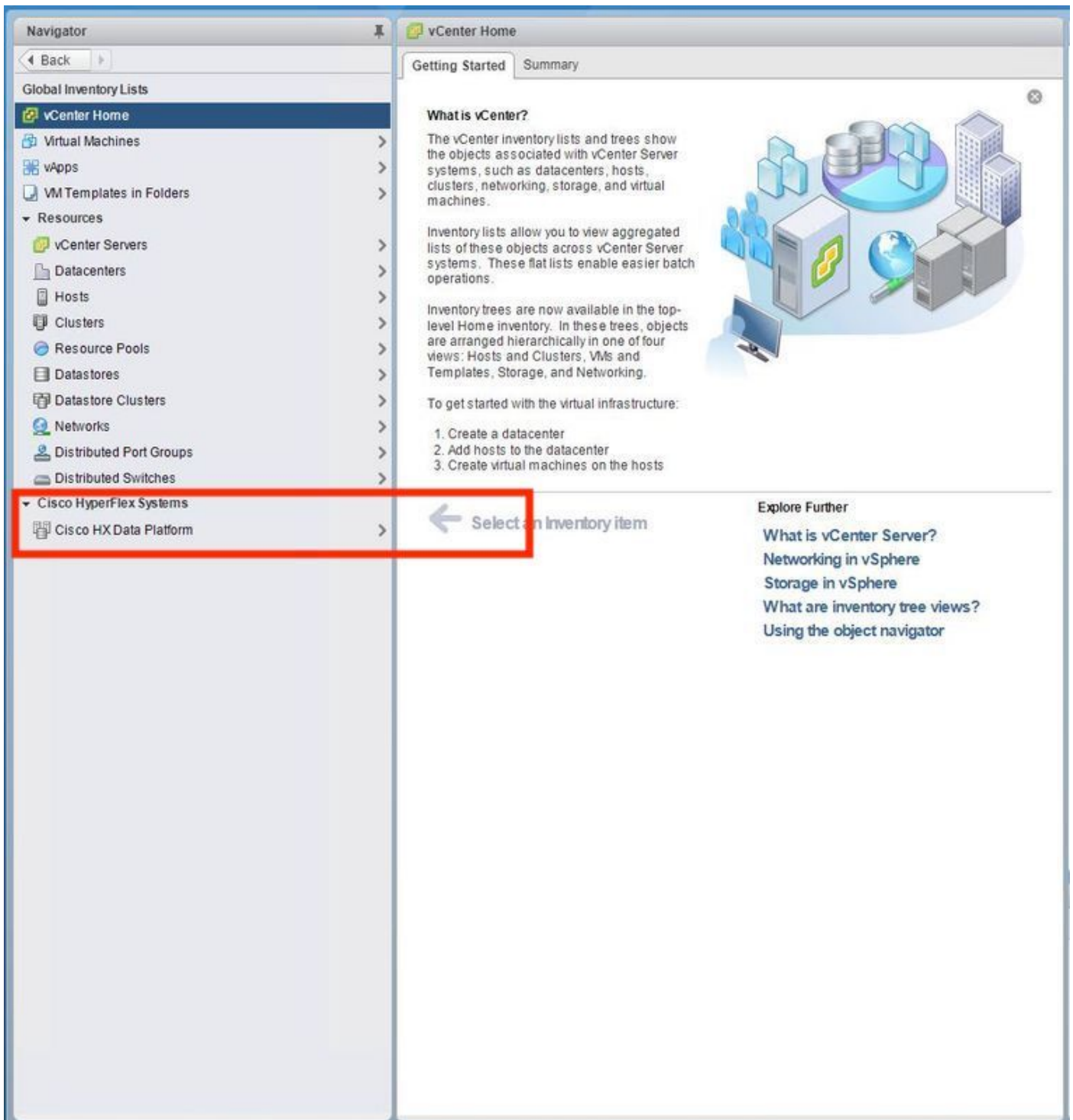
步驟10.將HX群集重新註冊到同一個vCenter。

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。



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://[redacted]/plugins/stGui-1.0.zip --no-check-certificate
--2018-08-28 21:55:18-- https://[redacted]plugins/stGui-1.0.zip
Connecting to [redacted]:443... connected.
Unable to establish SSL connection.
hyperflex-vcenter:/var/log/vmware/vsphere-client/logs # wget https://[redacted]/plugins/stGui-1.0.zip --no-check-certificate
--2018-08-28 21:59:07-- https://[redacted]/plugins/stGui-1.0.zip
Connecting to [redacted]:443... connected.
Unable to establish SSL connection.
hyperflex-vcenter:/var/log/vmware/vsphere-client/logs # curl -v https://[redacted]/plugins/stGui-1.0.zip
* About to connect() to [redacted] port 443 (#0)
* Trying [redacted]... connected
* Connected to [redacted] ([redacted]) port 443 (#0)
* successfully set certificate verify locations:
*   CAfile: none
*   Cpath: /etc/ssl/certs/
* SSLv3, TLS handshake, Client hello (1):
* Unknown SSL protocol error in connection to [redacted]:443
* Closing connection #0
curl: (35) Unknown SSL protocol error in connection to [redacted]:443
hyperflex-vcenter:/var/log/vmware/vsphere-client/logs #

```

步驟13. 瀏覽至 <https://vCenterIPAddress/mob> then login `asadministrator@vsphere.local`.

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。

NAME	TYPE	VALUE																														
Home																																
Data Object Type: <b>ExtensionServerInfo[]</b> Parent Managed Object ID: <b>ExtensionManager</b> Property Path: <b>extensionList["com.springpath.sysmgmt"].server</b>																																
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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 — <https://kb.vmware.com/s/article/1011641>
2. Hyperflex storfs捆綁包 — <https://www.cisco.com/c/en/us/support/docs/hyperconverged-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-1          70000096 100001 200001  
com.storvisor.sysmgmt.service.ThriftServiceAccess          Failed to get cluster name  
when 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  
com.storvisor.sysmgmt.service.ThriftServiceAccess.isValidAccess(ThriftServiceAccess.java:228)  
  
    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 ) : <https://mycase.cloudapps.cisco.com/case>