

部署HyperFlex远程插件-部署指南

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简介

本文档介绍如何部署思科HyperFlex远程插件设备。

前提条件

要求

思科建议您了解以下主题：

- HyperFlex
- vCenter
- 网络
- DNS

使用的组件

本文档中的信息基于以下软件和硬件版本：

- HyperFlex Connect 5.0.2d
- Hyperflex标准集群

- VMware vCenter , 8.0.2.00100
- VMware ESXi、 7.0.3、 21930508
- 思科HyperFlex远程插件设备3.0.0.1173
- WinSCP 6.1.1(内部版本13736)

本文档中执行的步骤是根据特定实验环境中的设备创建的。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。

背景信息

vSphere客户端远程vCenter插件架构旨在将插件功能集成到vSphere客户端中，而无需在vCenter Server内部运行。这提供了插件隔离，并支持扩展在大型vSphere环境中运行的插件。

本地插件和远程插件之间的主要区别在于本地插件在vCenter上存储其所有文件，而远程插件在设备中存储这些文件。

从vSphere 8.0.0开始，vSphere版本中支持的唯一架构是远程插件。

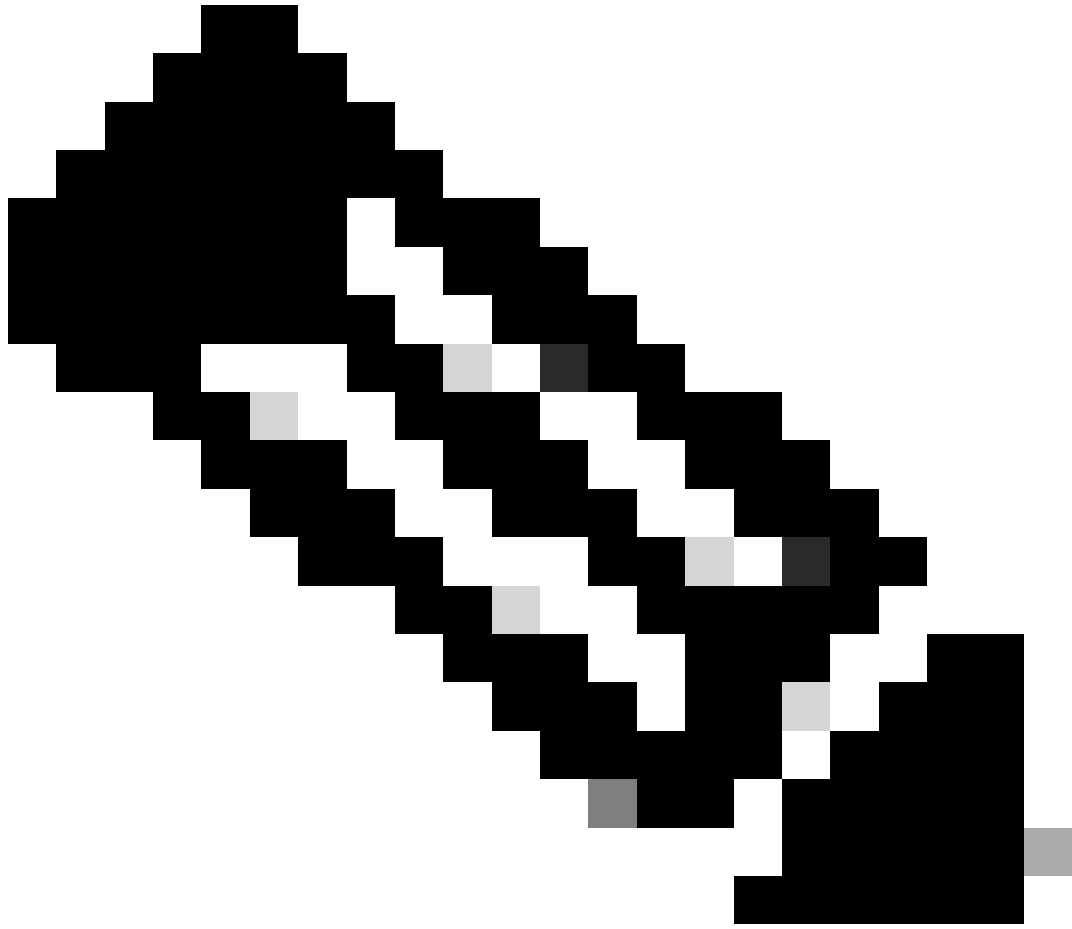
表 1.思科Hyperflex远程插件设备兼容性列表

vCenter插件版本	思科Hyperflex版本	ESXi版本	vCenter版本
3.0.0 及更高版本	4.0 (2f)及以上版本	6.7 u3及更高版本	7.0及更高版本

部署是基于OVA的安装，使用思科安全Linux映像。

Cisco Hyperflex远程插件可通过两种方式完成。

- 通过vCenter进行部署。
- 直接在独立ESXi主机上部署。



注意：推荐的部署方法是通过vCenter

部署后，设备的配置如表2和表3所述。

表 2.VM硬件配置

CPU	1 个 vCPU
内存	8 GB
硬盘1	48.83 GB
网络适配器	1

表 3.VM软件配置

访客操作系统	Ubuntu Linux 20.04.6 LTS思科安全Linux
兼容性	ESXi 6.7 U2虚拟机
VMware工具	open-vm-tools 11.3.0.29534 (build-18090558)

步骤

步骤1:从[思科软件下载站点](#)下载适用于VMware vCenter的Cisco HyperFlex HTML插件OVA。

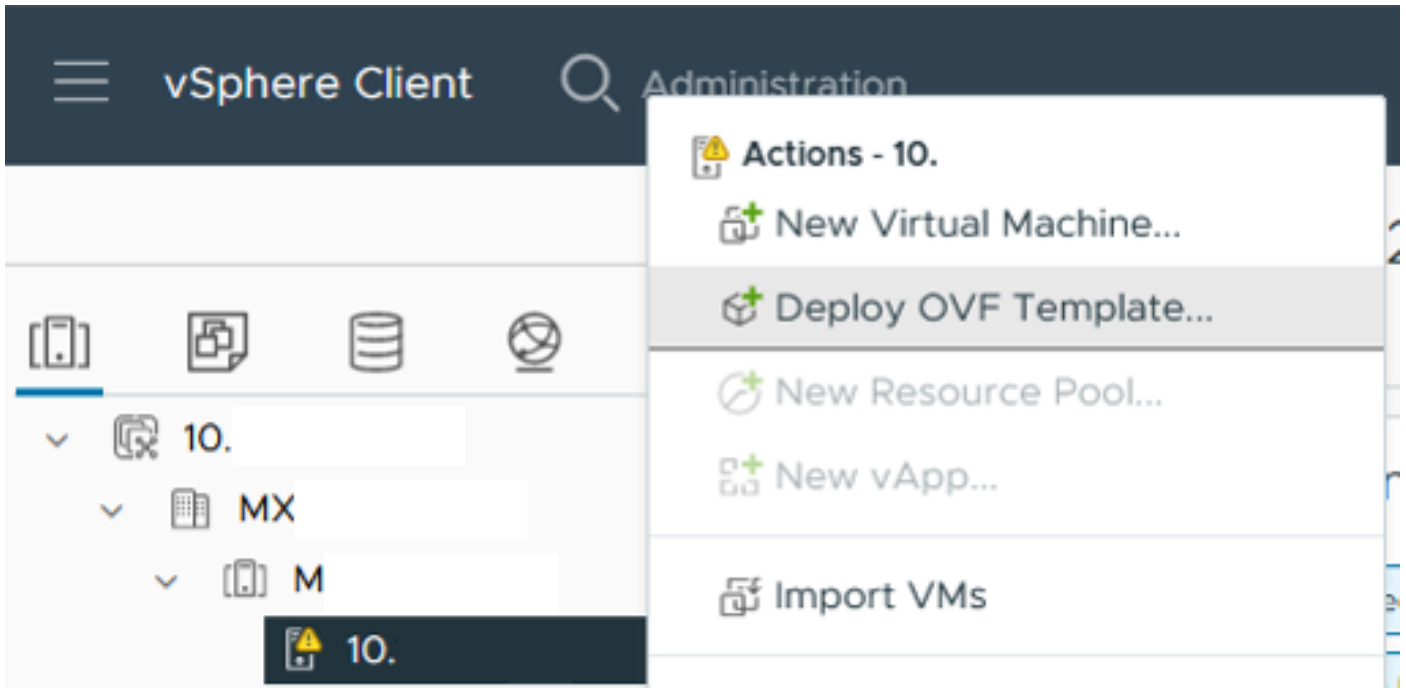
为此，请导航下载主页>超融合基础设施> Hyperflex HX数据平台> Hyperflex远程vCenter插件-3.0.0。

The screenshot shows the Cisco Software Download page for HyperFlex HX Data Platform Release 3.0.0. The page includes a search bar, navigation tabs (Products & Services, Support, How to Buy, Training & Events, Partners, Employees), and a table of file information for the Remote vCenter plugin OVA for Hyperflex HTML5-remote-plugin-Appliance-3.0.0-1173.ova, released on 21-Dec-2023 with a size of 1227.59 MB.

File Information	Release Date	Size
Remote vCenter plugin OVA for Hyperflex HTML5-remote-plugin-Appliance-3.0.0-1173.ova Advisories	21-Dec-2023	1227.59 MB

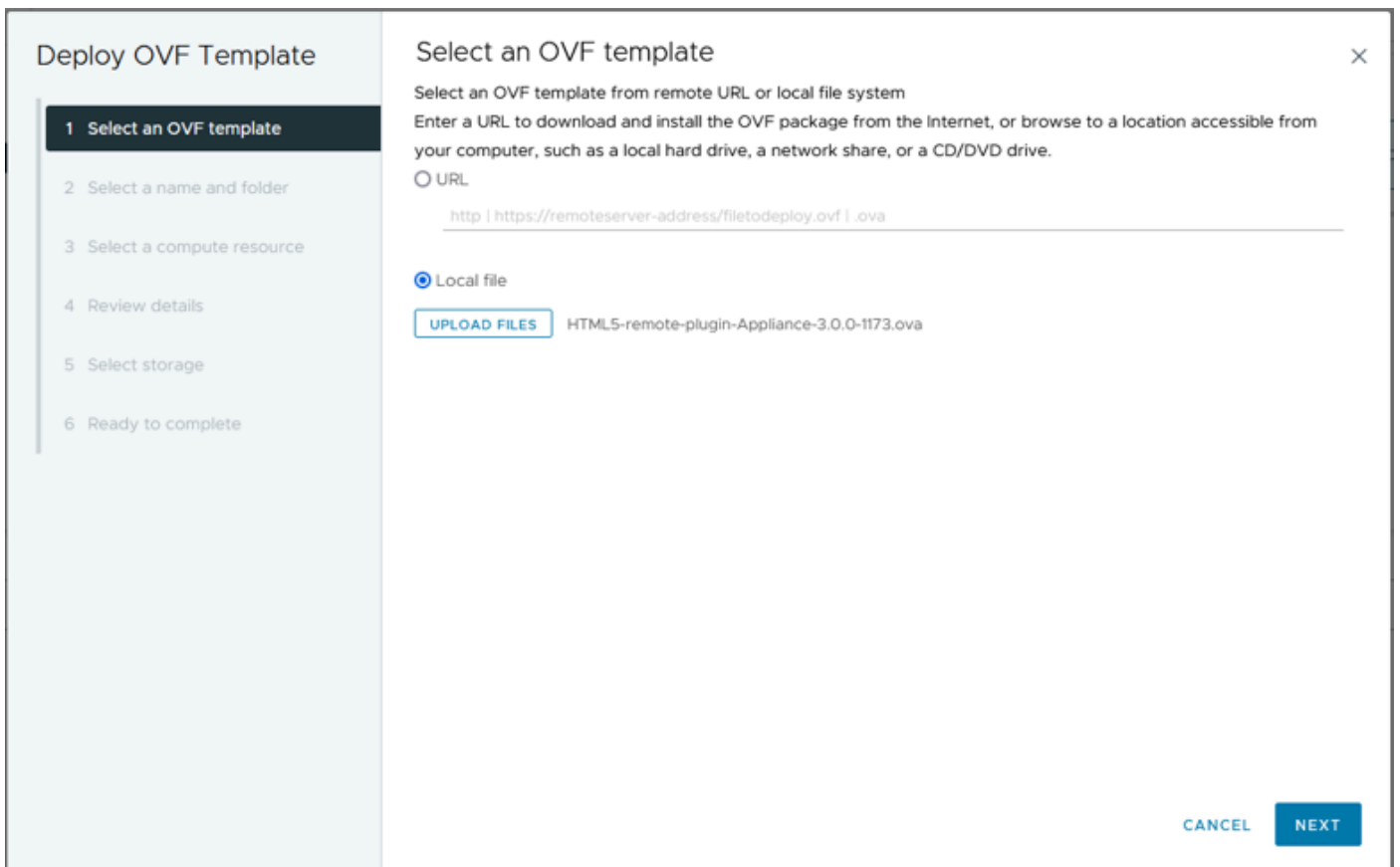
Cisco 下载网站

第二步：登录vCenter，然后选择要部署远程插件设备的主机。右键点击主机，然后点击部署OVF模板(Deploy OVF Template)



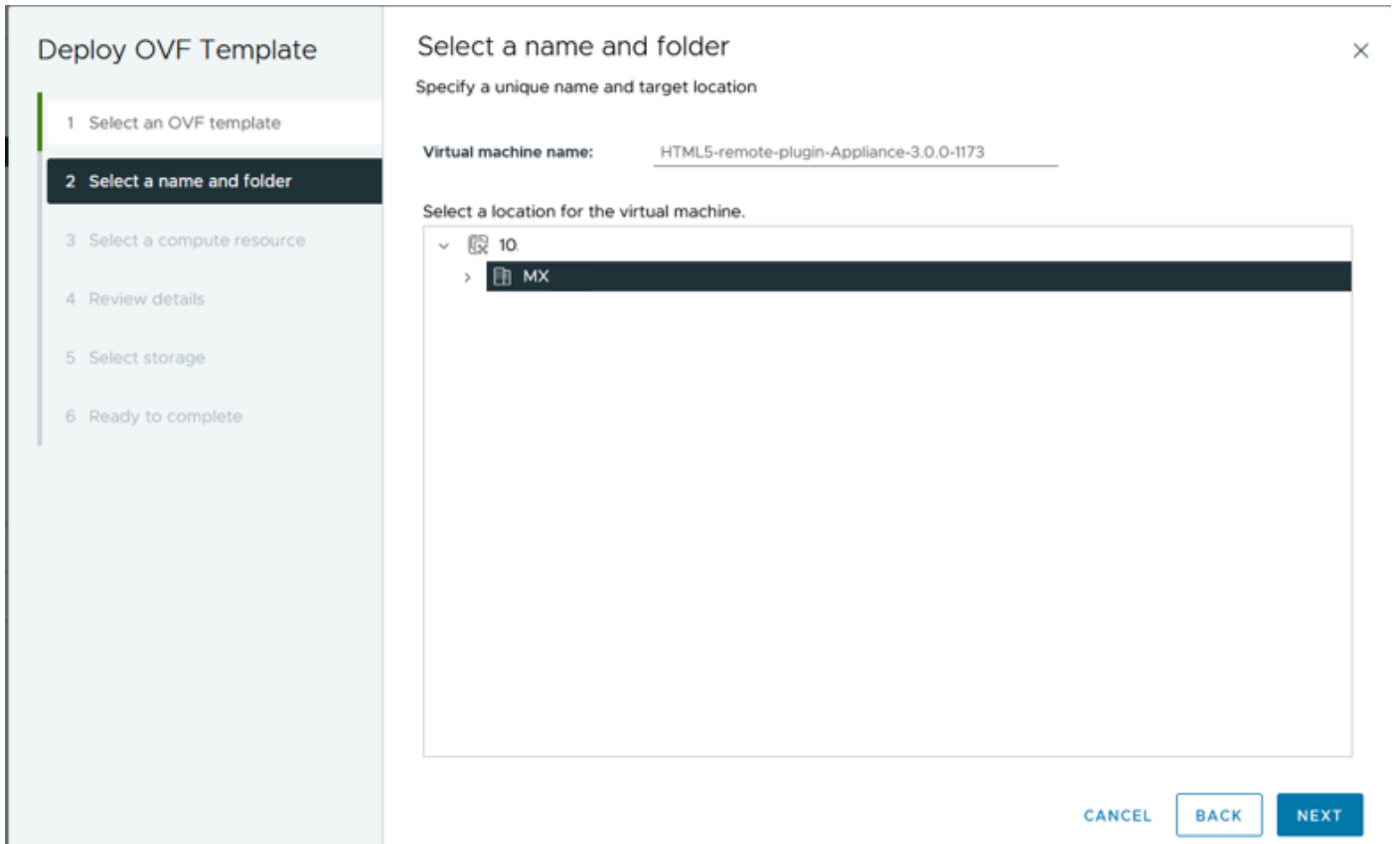
部署OVF模板

第三步：选择“本地文件”选项并上传HTML5-remote-plugin-Appliance-3.0.0-1173.ova文件，然后单击下一步。



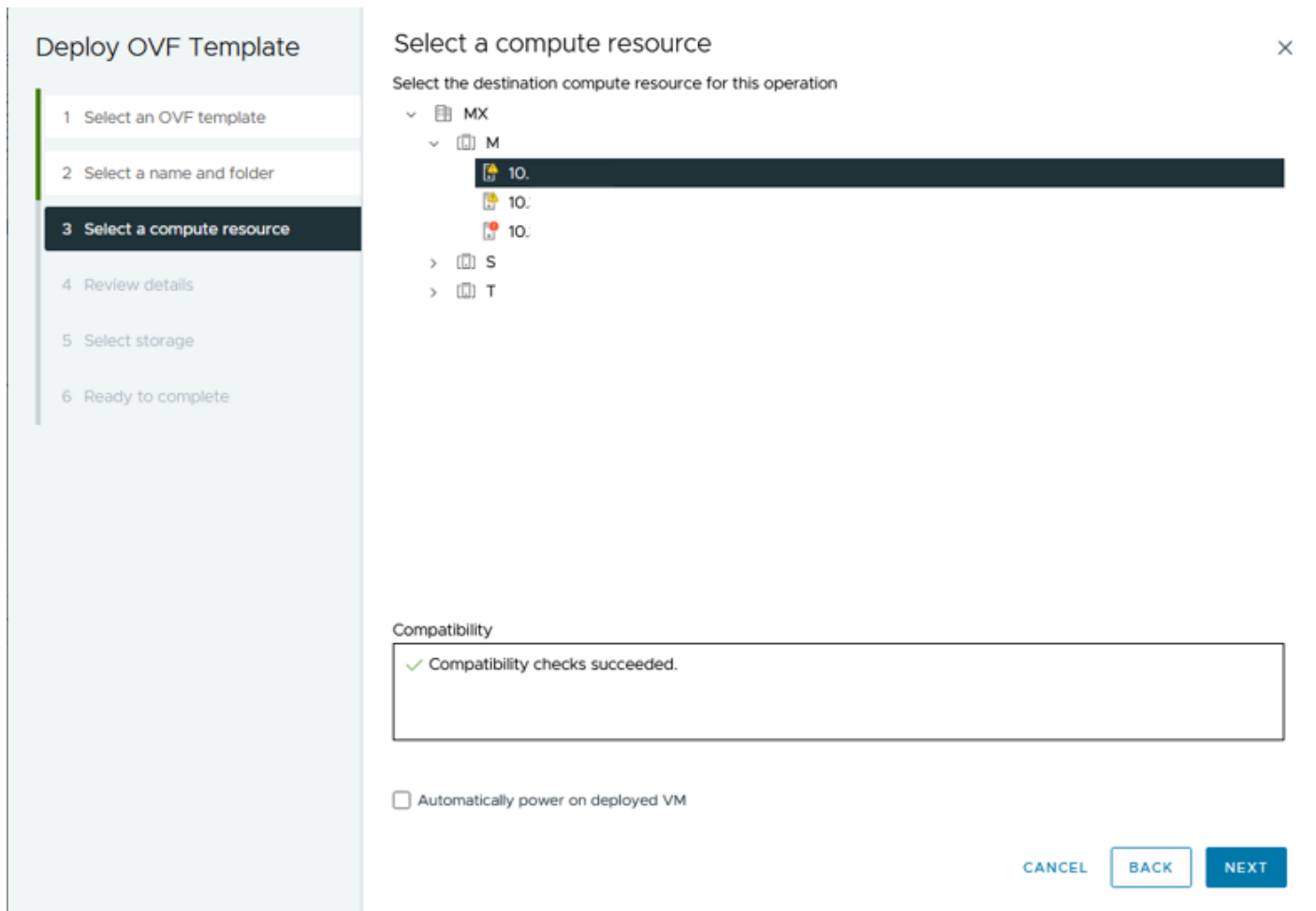
选择OVF模板

第四步：选择虚拟机的名称，为虚拟机选择位置，然后单击下一步。



选择VM名称和文件夹

第五步：选择用于部署的服务器（ESXi主机），点击下一步。



选择服务器

第六步：在Review details (查看详细信息) 部分，您会看到以下警告：

- OVF包包含高级配置选项，这会带来潜在的安全风险。查看高级配置选项。单击“下一步”接受高级配置选项。
- 证书不受信任。


您可以安全忽略这些警告，单击忽略，然后单击下一步


Deploy OVF Template

- Select an OVF template
- Select a name and folder
- Select a compute resource
- Review details**
- Select storage
- Select networks
- Ready to complete

Review details

Verify the template details.

 The OVF package contains advanced configuration options, which might pose a security risk. Review the advanced configuration options below. Click next to accept the advanced configuration options.

 The certificate is not trusted. [Ignore](#)

Publisher	TrustID EV Code Signing CA 4 (Invalid certificate)
Download size	1.2 GB
Size on disk	3.3 GB (thin provisioned) 48.8 GB (thick provisioned)
Advanced configuration	virtualhw.productcompatibility = hosted nvram = ovf:/file/file2

CANCEL BACK NEXT

检查详细信息

步骤 7.选择Datastore并选择磁盘格式（精简调配或密集调配），点击下一步

Deploy OVF Template

- Select an OVF template
- Select a name and folder
- Select a compute resource
- Review details
- Select storage**
- Select networks
- Ready to complete

Select storage

Select the storage for the configuration and disk files

Encrypt this virtual machine ⓘ

Select virtual disk format: Thin Provision

VM Storage Policy: Datastore Default

Disable Storage DRS for this virtual machine

	Name	Storage Compatibility	Capacity	Provisioned	Free	T
<input checked="" type="radio"/>	Production	--	1 TB	903.41 GB	964.84 GB	N
<input type="radio"/>	SpringpathDS-F(--	3.5 GB	3.45 GB	54 MB	V
<input type="radio"/>	sql	--	1 GB	0 B	1 GB	N
<input type="radio"/>	test	--	1 GB	0 B	1 GB	N

Manage Columns | Items per page: 10 | 4 items

Compatibility

✓ Compatibility checks succeeded.

CANCEL BACK NEXT

选择Datastore

步骤 8选择VM网络接口的端口组，然后点击下一步

Deploy OVF Template

- Select an OVF template
- Select a name and folder
- Select a compute resource
- Review details
- Select storage
- Select networks**
- Ready to complete

Select networks

Select a destination network for each source network.

Source Network	Destination Network
VM Network	vm-network

Manage Columns 1 item

IP Allocation Settings

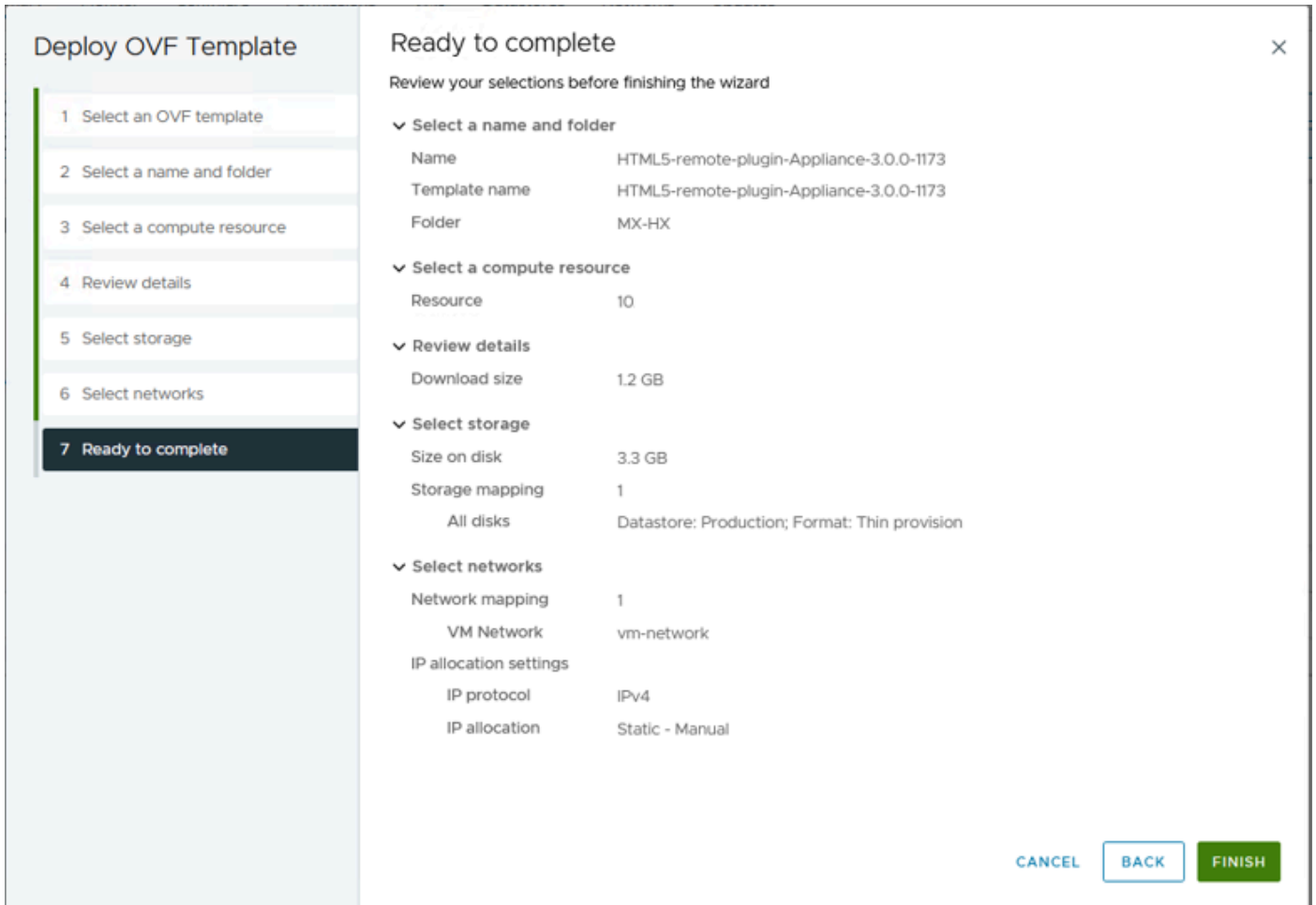
IP allocation: Static - Manual

IP protocol: IPv4

CANCEL BACK NEXT

选择网络

步骤 9请在完成向导之前查看您的选择，然后单击Finish。



查看您的选择

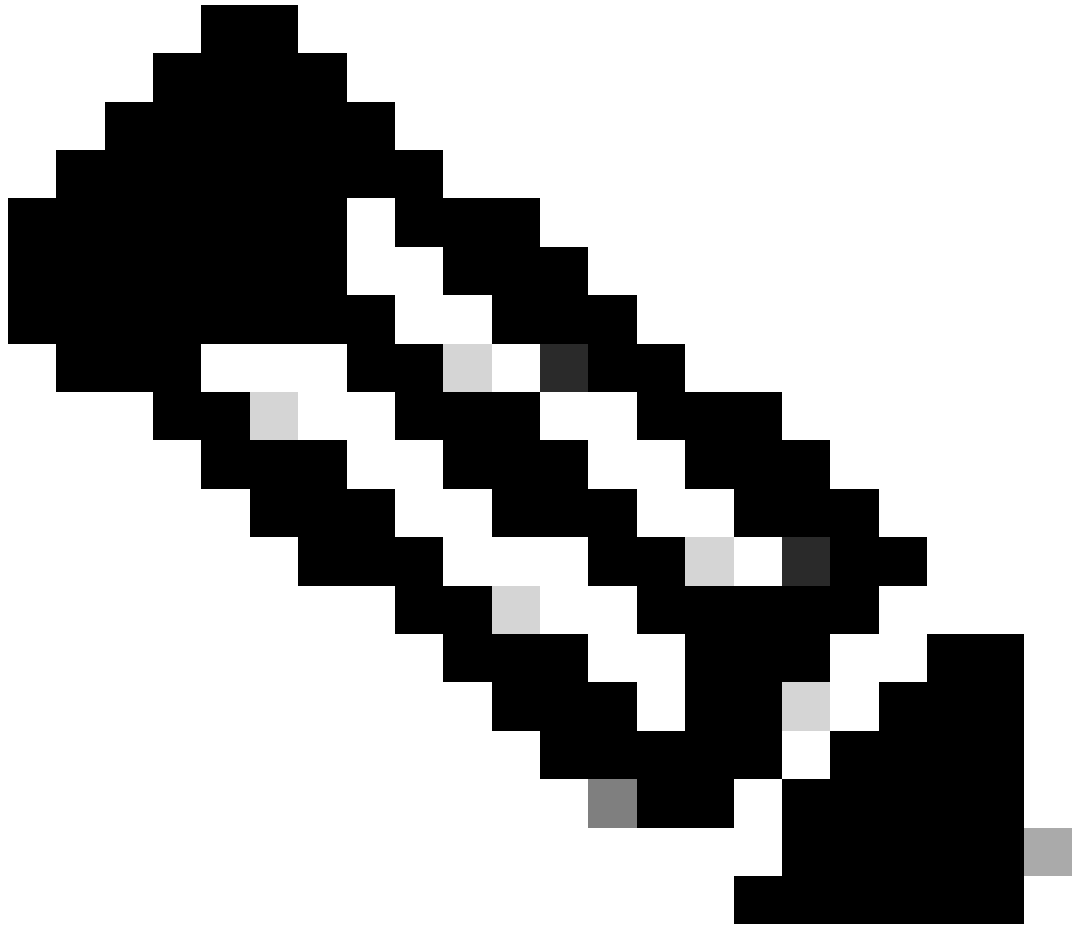
步骤 10 观看“vCenter最近任务”选项卡的进度

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Server
Deploy OVF template		52%		VSPHERE.LOCAL\vpwxd-extensio n-dc39a92e-cfba-45de-be6f-167 ce912088f	9 ms	01/31/2024, 2:24:04 P M		10
Import OVF package		53%		vsphere.local\Administrator	52 ms	01/31/2024, 2:23:28 PM		10
Import OVF package		0%		vsphere.local\Administrator	94 ms	01/31/2024, 2:23:06 PM		10
Import OVF package		Completed		vsphere.local\Administrator	62 ms	01/31/2024, 2:10:36 PM	01/31/2024, 2:20:39 PM	10

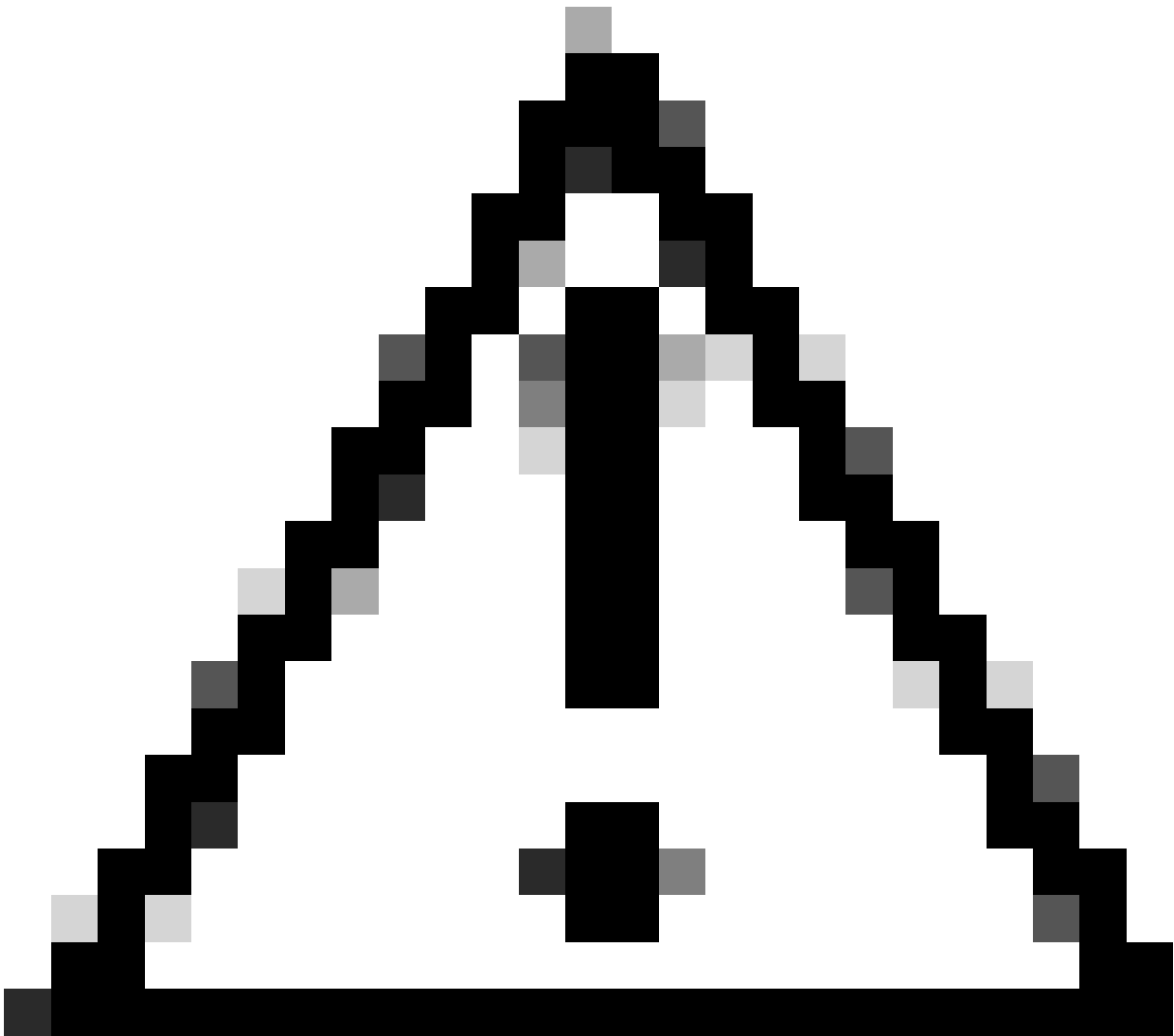
vCenter最近任务

步骤 11 打开Hyperflex远程插件虚拟设备的电源。在初始启动过程出现登录提示后，请使用这些凭证登录。

- 默认用户名：vcp-admin
- 默认密码：C^scohxplugin@1984



注意：不支持创建其他用户或使用root用户。



注意：要访问Web GUI，需要更改默认密码。否则，您将收到以下错误消息：

出于安全原因，禁用使用出厂默认密码登录。请通过ssh登录/控制台更改出厂默认密码，然后尝试使用新密码登录。

```
RemotePlugin3
##### WARNING!!! #####
##### READ THIS BEFORE ATTEMPTING TO LOGON #####
#
# This System is for the use of authorized users only. Individuals
# using this computer without authority, or in excess of their
# authority, are subject to having all of their activities on this
# system monitored and recorded by system personnel. In the course
# of monitoring individuals improperly using this system, or in the
# course of system maintenance, the activities of authorized users
# may also be monitored. Anyone using this system expressly
# consents to such monitoring and is advised that if such
# monitoring reveals possible criminal activity, system personnel
# may provide the evidence of such monitoring to law enforcement
# officials. You cannot copy, disclose, display or otherwise
# communicate the contents of this server except to other Cisco
# employees who have been authorized to access this server.
#
##### Confidential Information #####
hx-vcp-appliance login:
```

控制台登录屏幕

配置管理IP地址

默认情况下，设备从分配vnic的端口组/VLAN中可用的DHCP服务器获取IP地址。

登录设备后，您可以找到分配的IPv4地址。

```
hx-vcp-appliance login: vcp-admin
Password:
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.4.0-146-generic x86_64)

* Documentation:  https://help.ubuntu.com
* Management:     https://landscape.canonical.com
* Support:        https://ubuntu.com/advantage

System information as of Tue 30 Jan 2024 06:26:19 AM UTC

System load:  0.18          Processes:           129
Usage of /:   10.3% of 47.27GB Users logged in:   0
Memory usage: 13%          IPv4 address for ens33: 192
Swap usage:   0%
```

当前IP地址

建议为虚拟设备配置静态IP地址。为此，请使用hx-ip-address-change命令并按照配置向导进行操作。

```
vcp-admin@hx-vcp-appliance:~$ hx-ip-address-change
Do you want to set Static IP (or) Dynamic IP address (Options: static / dynamic )? static
Enter IP address(e.g., 192.168.1.2): 10.
Enter Subnet Mask bits (bits for 255.255.248.0 is 21): 24
Enter Gateway address: 10.
Enter DNS server addresses separated by comma and spaces (e.g., 8.8.8.8, 8.8.4.4): 10.
vcp-admin@hx-vcp-appliance:~$
```

更改IP地址

使用ifconfig命令验证已配置的IP地址。

```
Last login: Tue Jan 30 06:47:43 UTC 2024 from 192 on pts/0
vcp-admin@hx-vcp-appliance:~$ ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192. netmask 255.255.255.0 broadcast 192.
    inet6 fe80::20c:29ff:fe09:cba prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:09:0c:ba txqueuelen 1000 (Ethernet)
    RX packets 110 bytes 9520 (9.5 KB)
    RX errors 0 dropped 56 overruns 0 frame 0
    TX packets 52 bytes 4912 (4.9 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    loop txqueuelen 1000 (Local Loopback)
    RX packets 48 bytes 4112 (4.1 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 48 bytes 4112 (4.1 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

vcp-admin@hx-vcp-appliance:~$
```

验证IP地址

更改密码

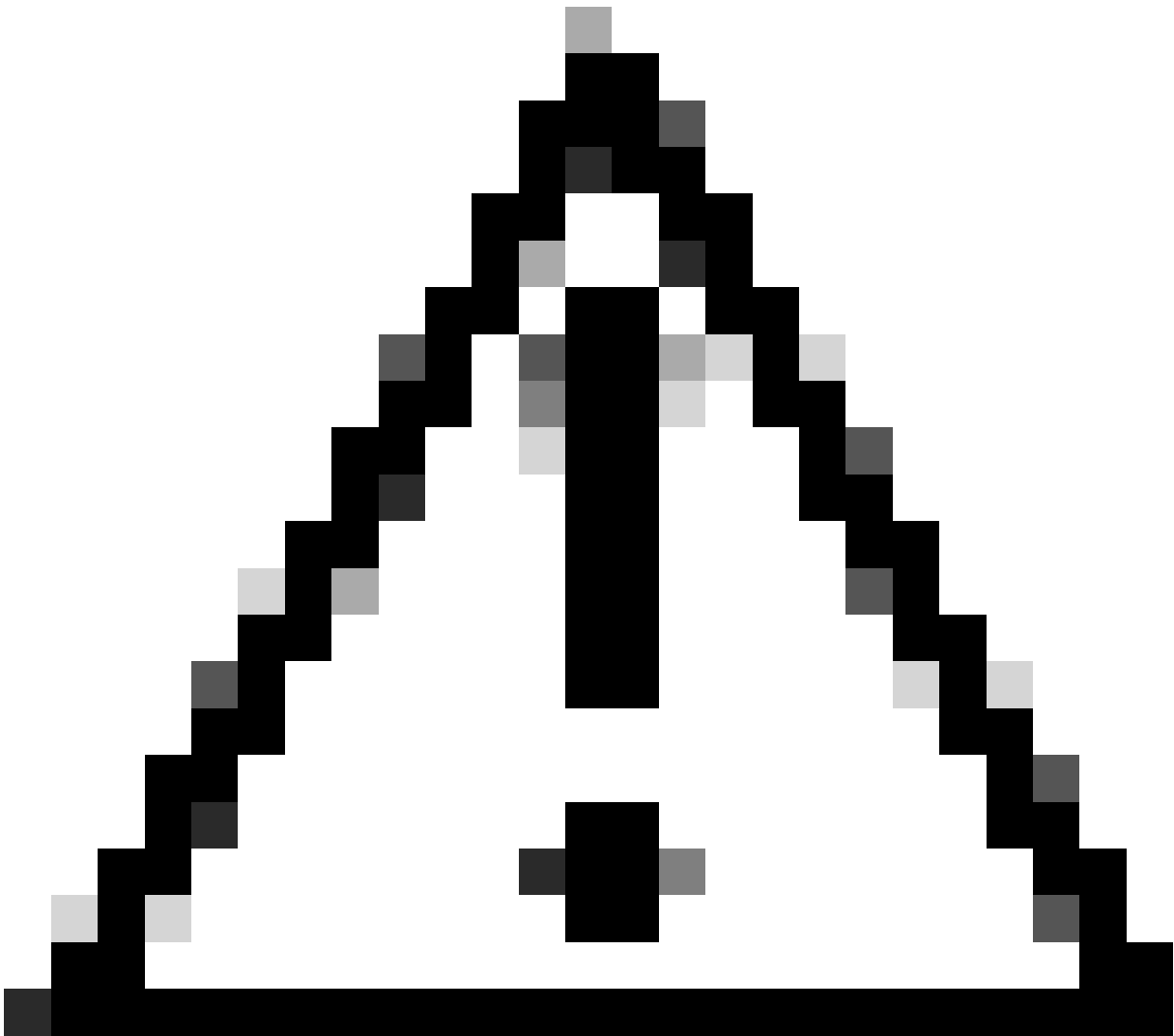
您可以使用命令passwd vcp-admin更改用户vcp-admin的当前密码，请提供当前密码和新密码。

```
Last login: Mon Dec 18 14:15:53 UTC 2023 from 10 on pts/0
vcp-admin@hx-vcp-appliance:~$ passwd vcp-admin
Changing password for vcp-admin.
Current password:
New password:
Retype new password:
passwd: password updated successfully
```

更改密码

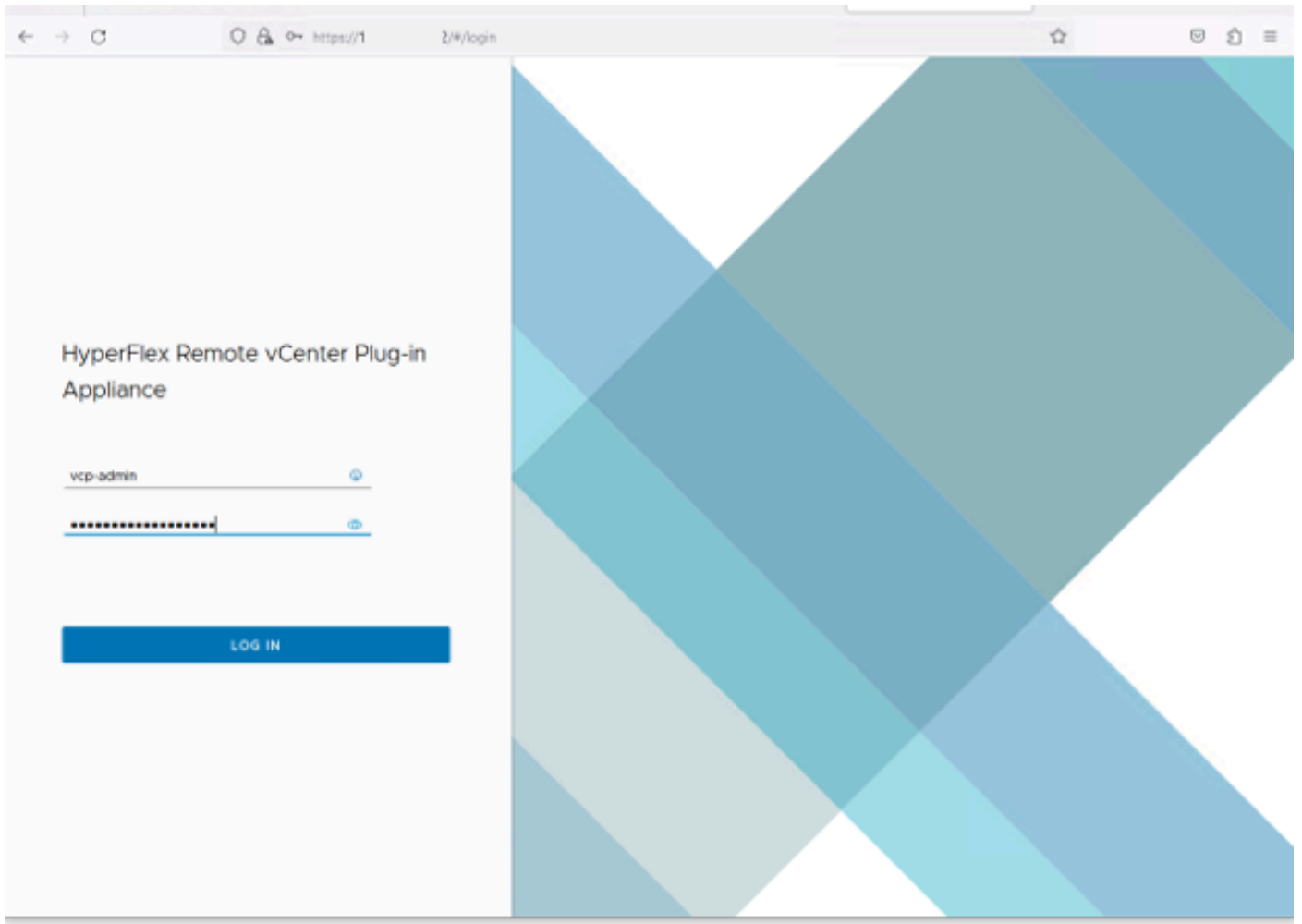
注册vCenter

将vCenter注册到Cisco Hyperflex远程插件设备基于用户界面。

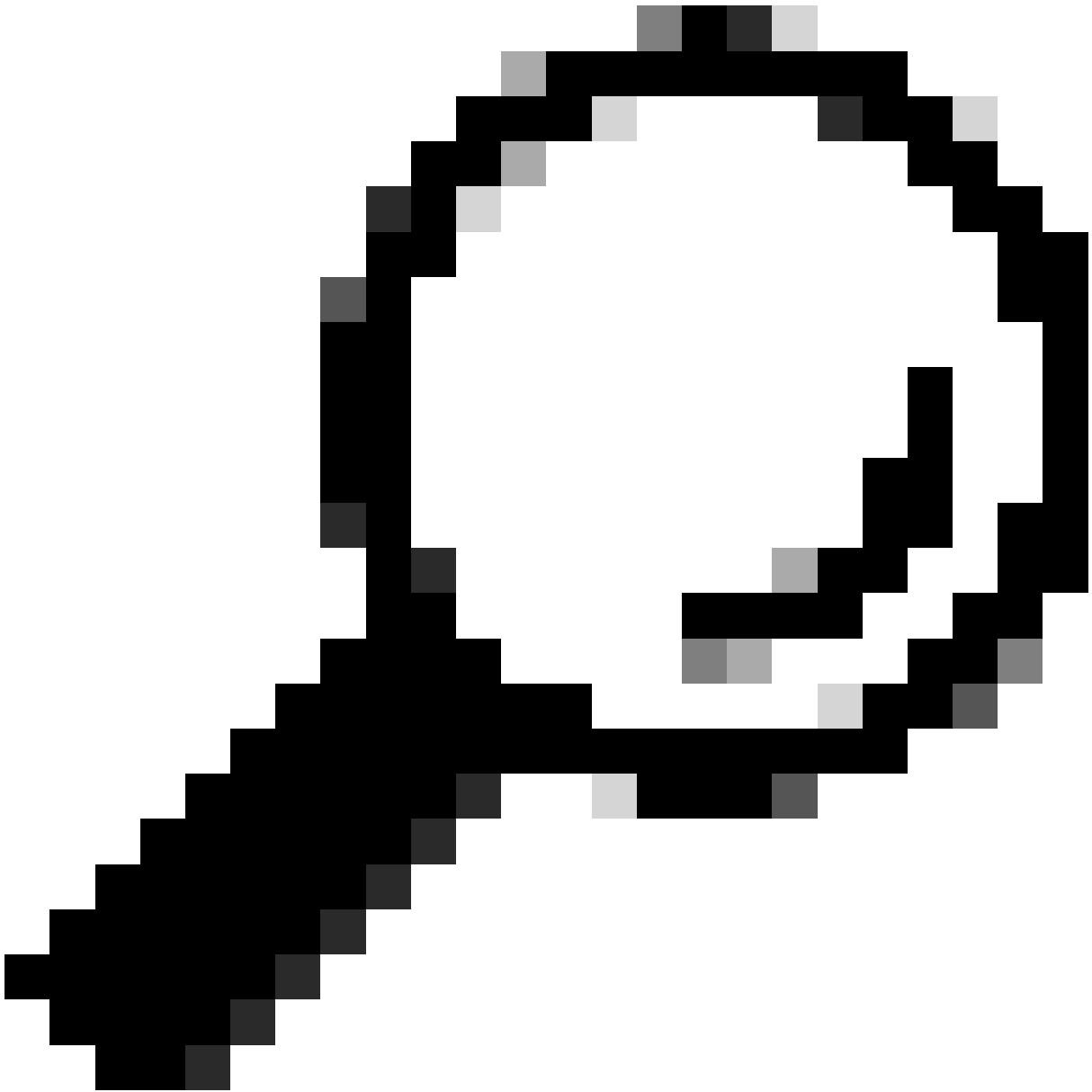


注意：具有活动防火墙的用户需要验证端口433、9443和22是否打开以及是否允许流量在vCenter和远程插件设备之间传入或传出。

步骤1:在浏览器中输入IP (<https://ip>)以打开插件服务器管理UI。使用vcp-admin用户和您当前的新密码登录。

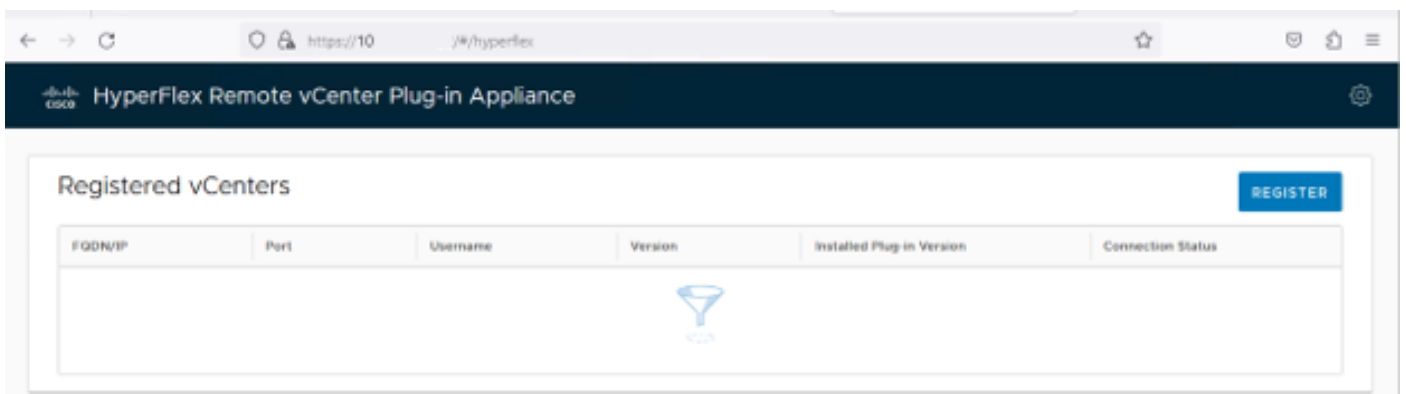


Hyperflex远程vCenter插件设备登录屏幕



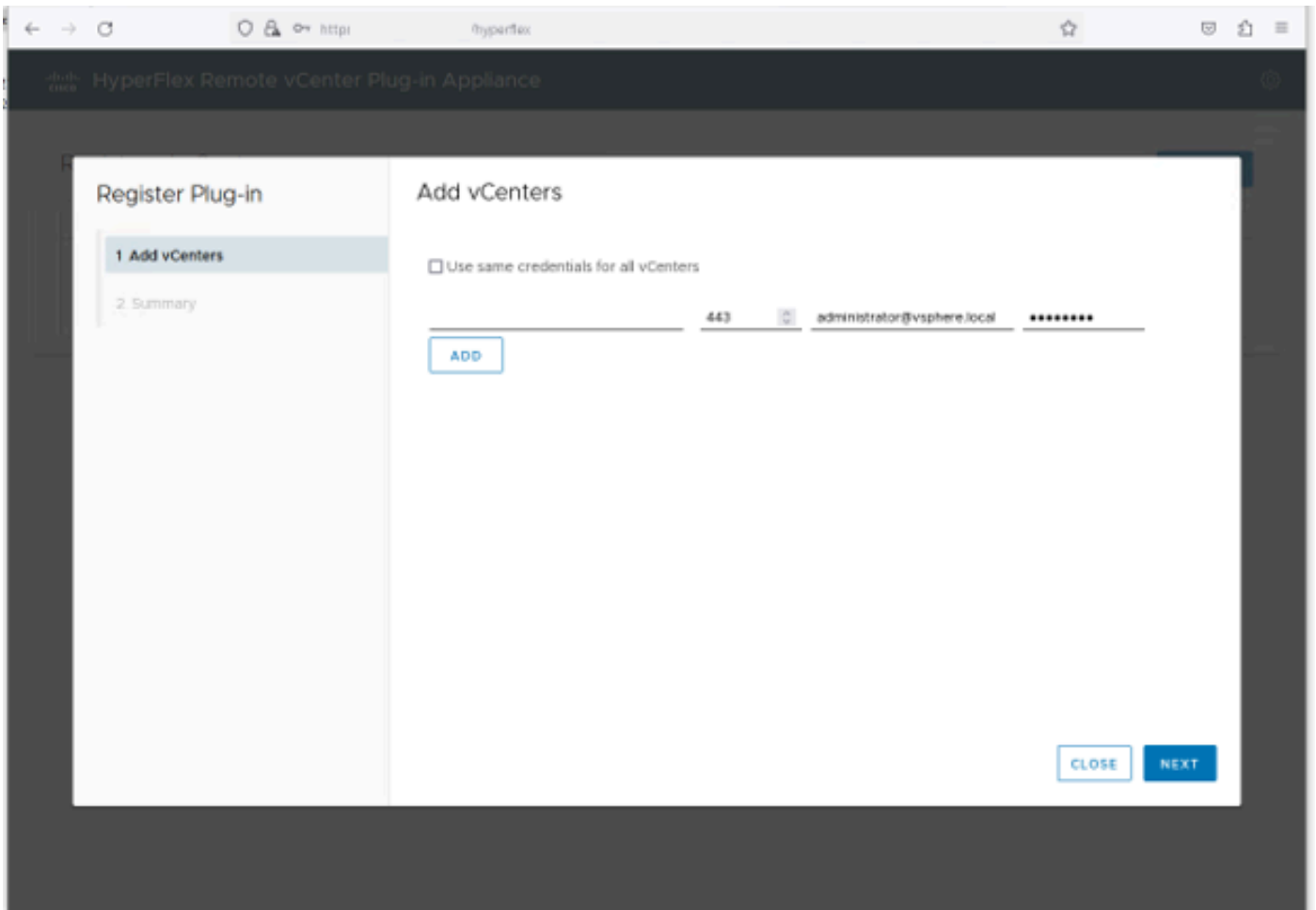
提示：要验证当前应用版本和受支持的vCenter版本，请在成功登录后点击屏幕右上角的齿轮。

步骤2..登录后，请点击主控制面板上的REGISTER按钮。



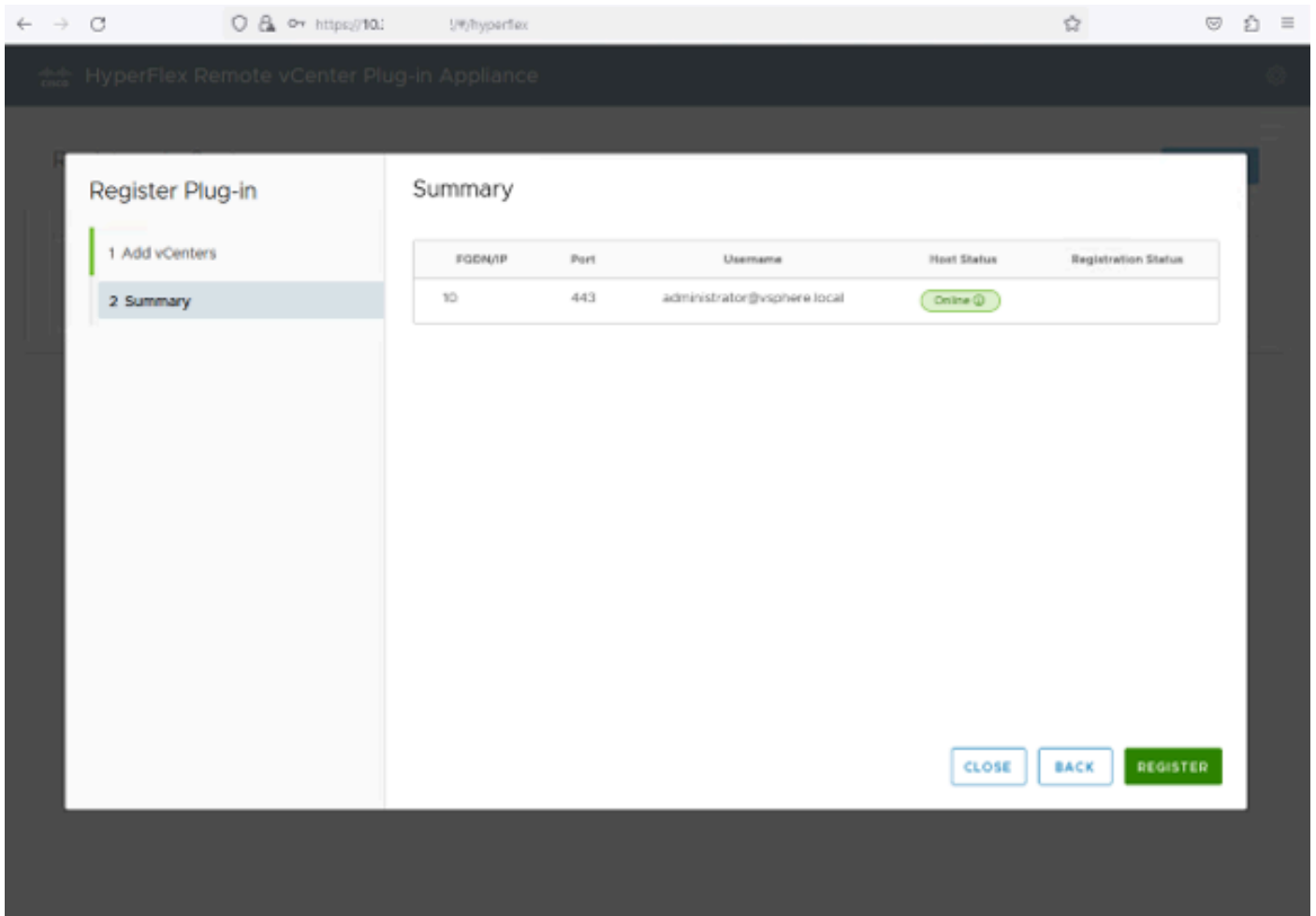
主控制面板

第三步：点击注册按钮添加vCenter信息，以便部署远程插件。为IP地址、端口（默认为443）和vCenter用户名提供执行部署的足够权限。单击“下一步”



添加vCenter

第四步：如果系统能够使用提供的信息访问vCenter，则系统会执行连接测试并显示为联机。要继续注册，请点击绿色的REGISTER按钮

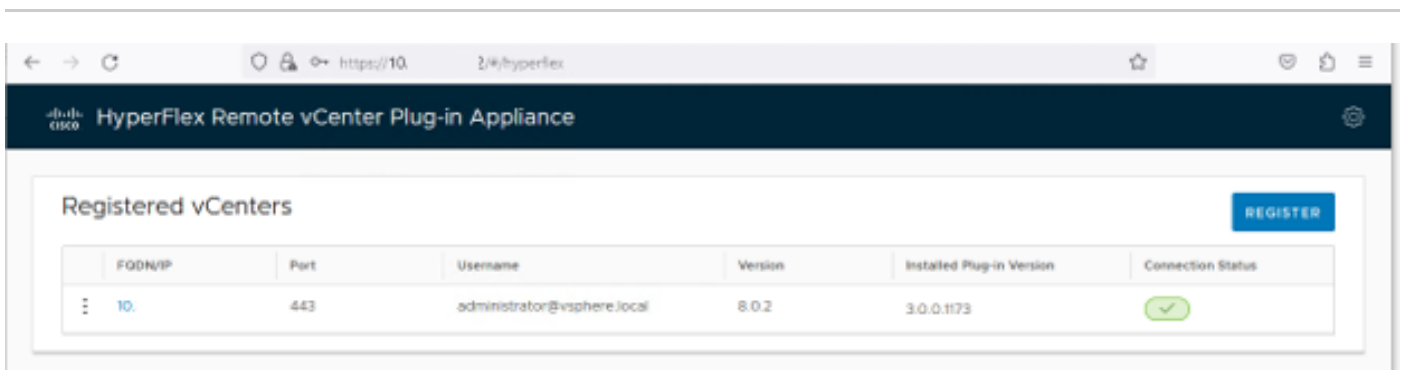


添加vCenter摘要

第五步：确认已配置的vCenter在已注册vCenter列表中。



注意：如果您希望更新当前安装在已注册vCenter上的已安装插件版本或取消注册vCenter，请单击已注册vCenter左侧的三个圆点菜单。



已注册的vCenter

第六步：在vCenter中验证插件已成功部署。两个任务可见并标记为已完成。“下载插件”和“部署插件”。

Summary **Monitor** Configure Permissions Datacenters Hosts & Clusters VMs Datastores Networks Linked vCenter Server Systems Extensions Updates

Issues and Alarms
All Issues
Triggered Alarms
Tasks and Events
Tasks
Events
Sessions
Security
vCenter Server
Interoperability
Cloud Native Storage
Container Volumes
Skyline Health

Tasks

EXPORT COPY TO CLIPBOARD FILTER

Task Name	Target	Status	Details	Initiator	Queued For	Start Time	Completion Time	Execution Time
Deploy plug-in	10	Completed	Cisco HyperFlex (com.cisco.hx:3.0.0.1173)	vsphere-webclient-db39a92e-cfba-45de-be6f-167ce9120881@vsphere.local	122 ms	01/27/2024, 2:30:23 AM	01/27/2024, 2:30:23 AM	553 ms
Download plug-in	10	Completed	Cisco HyperFlex (com.cisco.hx:3.0.0.1173)	vsphere-webclient-db39a92e-cfba-45de-be6f-167ce9120881@vsphere.local	38 ms	01/27/2024, 2:30:22 AM	01/27/2024, 2:30:23 AM	474 ms

Task Name Download plug-in
Status Completed
Initiator vsphere-webclient-db39a92e-cfba-45de-be6f-167ce9120881@vsphere.local
Target 10
Server 10
Details Cisco HyperFlex (com.cisco.hx:3.0.0.1173)
Related events:

Date Time	Description
01/27/2024, 2:30:22 AM	Task: Download plug-in

验证vCenter中的部署任务

步骤 7. 验证插件是否已在“vCenter管理客户端插件”选项卡下注册。您可以看到，插件的类型为 Remote，并且已成功部署。

← → ↻ http://ui/app/admin/plugins/list

< 1/2 > There are expired or expiring licenses in your inventory. [MANAGE YOUR LICENSES](#)

vSphere Client Search in all environments Administrator@VSPHERE.LOC

Local plugins are deprecated in vSphere. To learn more about the new remote plugin architecture, please read the dedicated KB article.

Administration
Access Control
Roles
Global Permissions
Licensing
Licenses
Solutions
Client Plugins
vCenter Server Extensio...
Deployment
System Configuration
Customer Experience Im...
Client Configuration
Support
Upload File to Service R...
Single Sign On
Users and Groups
Configuration
Certificates
Certificate Management

Client Plugins

ADD

Name	Type	Status	VMware Certified	Vendor
Cisco HyperFlex	Remote	Deployed	Yes	Cisco Systems, Inc.
VMware vCenter Server Lifecycle Manager	Remote	Deployed	Yes	VMware, Inc.
VMware vSphere Lifecycle Manager Client	Remote	Deployed	Yes	VMware, Inc.
VMware vSphere Lifecycle Manager	Local	Deployed	Yes	VMware, Inc.

验证插件是否已安装

步骤8..要在vSphere UI中查看Cisco HyperFlex HTML5插件选项，请注销并重新登录到vCenter。再次登录后，请右键单击您的Hyperflex集群，在底部找到Cisco Hyperflex插件

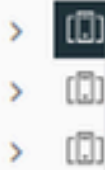


M



10

MX



Actions - M

- Add Hosts...
- New Virtual Machine...
- New Resource Pool...
- Deploy OVF Template...
- New vApp...
- Import VMs
- Storage >
- Host Profiles >
- Edit Default VM Compatibility...

Recer

Assign vSAN Cluster License...

Task Name

Settings

Status



Move To...

Rename...

Tags & Custom Attributes >

Add Permission...

Alarms >

Summary

Monit

Services

- vSphere DRS
- vSphere Availabili

Configuration

Quickstart

- General
- Key Provider
- VMware EVC
- VM/Host Groups
- VM/Host Rules
- VM Overrides
- I/O Filters
- Host Options
- Host Profile

Licensing

- vSAN Cluster

消息。将鼠标悬停在红框上较短时间，即会显示错误消息的描述。在此图像中，您可以看到由于版本不兼容而将VM Remote插件与Vcenter集成的失败消息示例

Summary

FQDN/IP	Port	Username	Host Status	Registration Status
192.	443	administrator@vsphere.local	Online 🟢	Failed 🔴

vCenter version 6.7.0 - 22509751 is not supported. The remote plugin is supported with vCenter version 7.0 and later.

vCenter版本不兼容

其他帮助

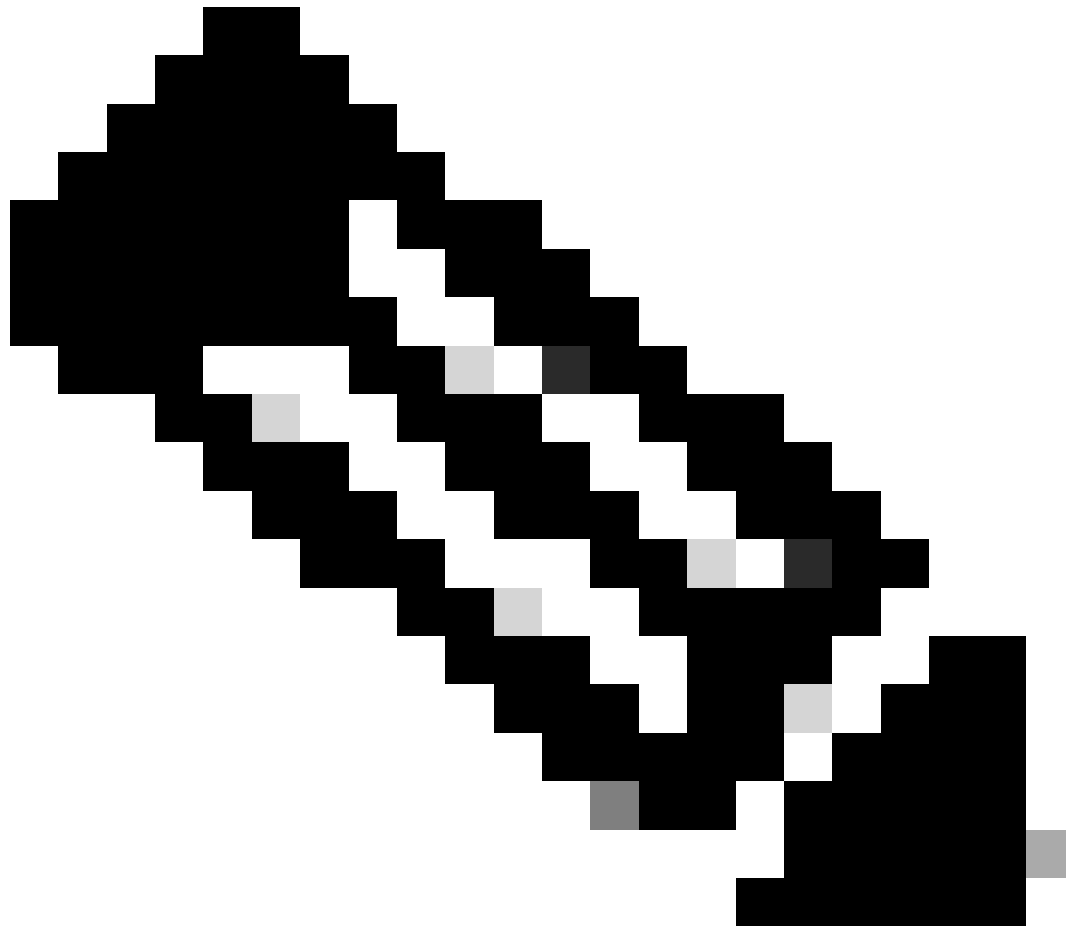
如果您需要有关实施或集成的其他支持，您必须联系思科TAC并附加必要的日志文件。

支持捆绑包生成

只有在思科Hyperflex远程插件虚拟设备中至少注册了一个vCenter时，支持捆绑包生成才可用。

目前，支持捆绑包生成是通过命令行进行的。您需要登录设备的控制台（或使用SSH）并运行命令 `hx-plugin-supportbundle`，默认情况下，支持捆绑包保存在 `/var/log/plugin_support/` 目录中。

用户可以指定vCenter FQDN或IP地址以继续生成支持捆绑包。



注意：生成支持捆绑包需要来自所选vCenter的根用户凭证。

步骤1:通过SSH登录HyperFlex远程插件虚拟设备，登录并运行hx-plugin-supportbundle命令，这将生成包含vCenter日志和Hyperflex远程插件设备日志的tar文件

```
vcp-admin@hx-vcp-appliance: ~
login as: vcp-admin
vcp-admin@10      's password:
Last login: Sat Jan 27 08:22:43 2024
vcp-admin@hx-vcp-appliance:~$ hx-plugin-supportbundle
To download vCenter support bundle root credentials are required. You can skip t
he support bundle generation and continue with appliance logs.
Do you wish to continue?(Y/N):Y
Enter vCenter hostname/ip to download Support bundle:10.
Enter vCenter password for root user:
-----
Support Bundle Script Execution Started - Thu 01 Feb 2024 07:51:44 PM UTC
-----
Trying To Connect to vCenter using root credentials...

Connected to 10.
Downloading vCenter Logs...

ssh runs in FIPS mode
FIPS mode initialized

VMware vCenter Server 8.0.2.00100

Type: vCenter Server with an embedded Platform Services Controller

Copying generated bundle from vCenter path

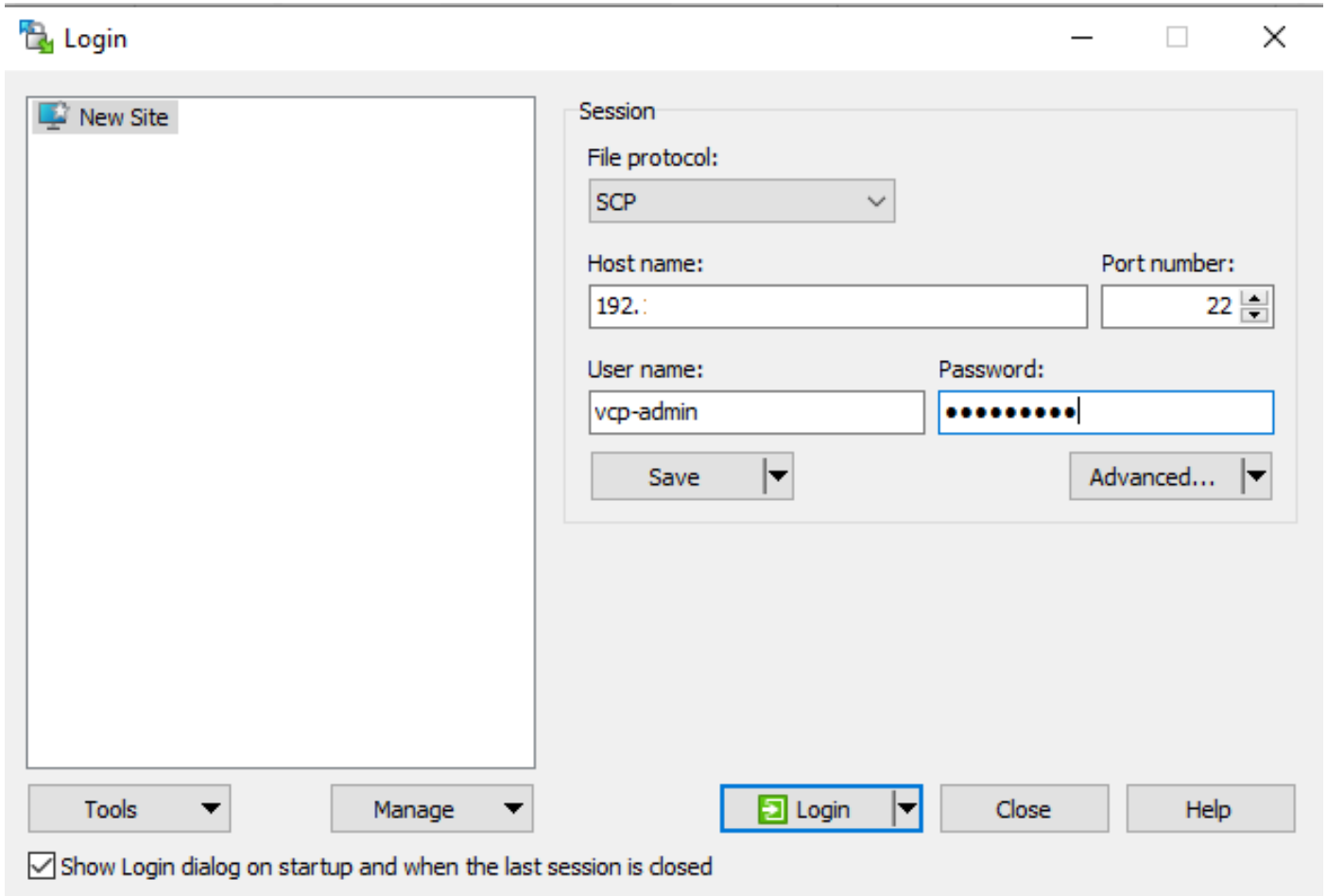
Reset bash shell for vCenter

Do you want to specify the target directory for creating support bundle?(y/n):n
Creating support bundle: hx-plugin-support-bundle.zip
tar: Removing leading `/' from member names
27.7MiB 0:00:01 [18.2MiB/s] [ <=> ]
hx plug-in support bundle has been generated successfully at /var/log/plugin_sup
port/hx-plugin-support-bundle-
                                -01-02-2024-19.52.15.tar.gz
vcp-admin@hx-vcp-appliance:~$
```

支持捆绑包生成

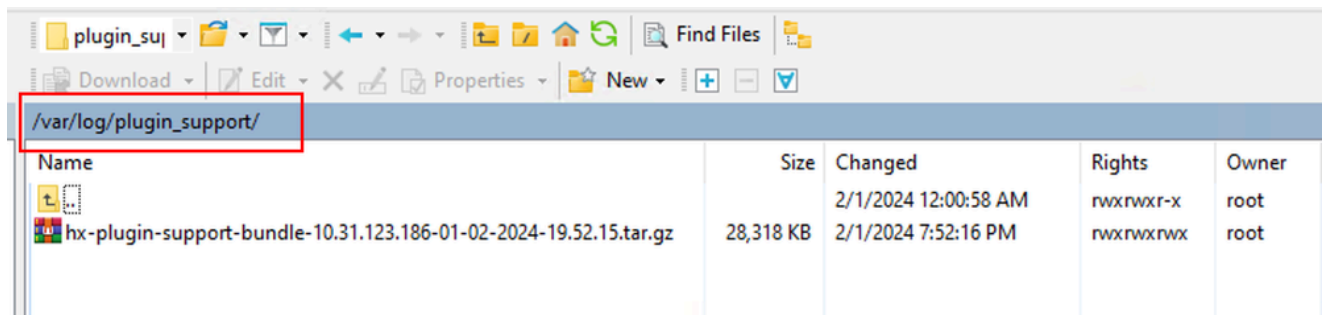
第二步：建立与VM远程插件的SCP连接，为此，您可以使用WinSCP等软件

- 文件协议：SCP
- 主机名：[[ip.address.remotepluginappliance]
- 端口号：22
- 用户名：vcp-admin
- 密码：[your-configured-password]



SCP连接参数

第三步：导航到/var/log/plugin_support/目录并下载支持捆绑包文件。



支持捆绑包位置

从Cisco HyperFlex远程插件设备手动收集日志

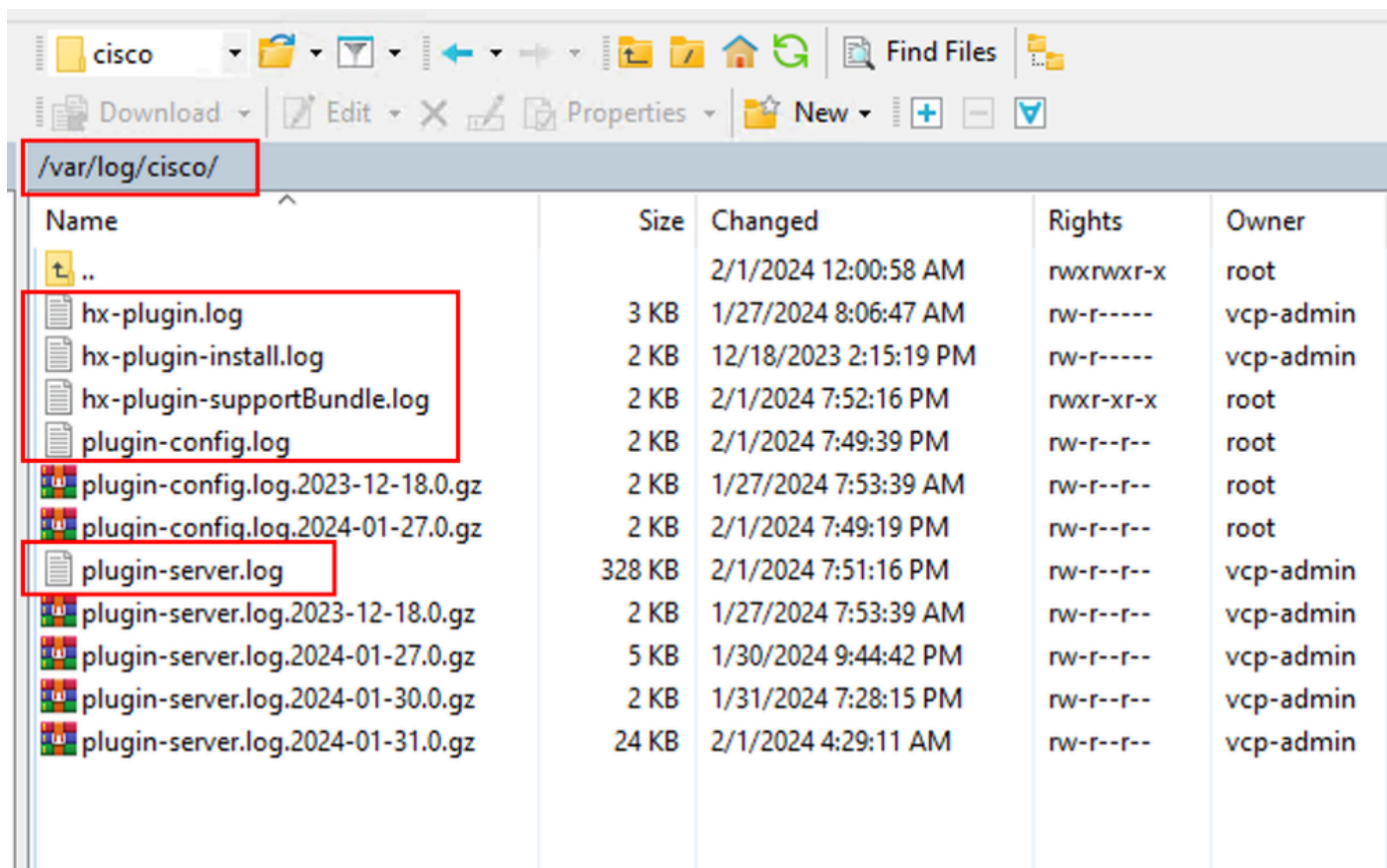
如果无法在设备中注册任何vCenter，则无法生成支持捆绑包。需要手动收集日志文件。

步骤1:建立与VM远程插件的SCP连接，为此，您可以使用WinSCP等软件

- 文件协议：SCP
- 主机名：[ip.address.remotepuginappliance]
- 端口号：22
- 用户名：vcp-admin
- 密码：[your-configured-password]

第二步：登录后，您自动发现自己位于/home/vcp-admin路径中，然后转到根目录，再转到指定的路径以收集这些日志文件：

- /var/log/auth.log
- /var/log/audit/audit.log
- /var/log/cisco/hx-plugin.log
- /var/log/cisco/hx-plugin-install.log
- /var/log/cisco/plugin-config.log
- /var/log/cisco/plugin-server.log



思科日志位置

第三步：将日志文件上传到您的当前服务请求。将文件上传到案例的步骤位于“相关信息”部分的“客户文件上传到思科技术支持中心”链接。

相关信息

[向思科技术支持中心上传客户文件](#)

[Support Case Manager](#)

[思科HyperFlex数据平台管理指南5.5版](#)

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