在 Cisco MSE 3375 上安装 CMX 10.5

目录

简介

本文档将指导网络管理员在Cisco 3375 MSE设备上安装Cisco CMX 10.5映像。此流程还包括有关如何设置安装所需的思科集成管理控制器(CIMC)的说明。

无法从CMX 10.2、10.3或10.4升级到10.5。需要全新安装。

"MD5cmx"

10.510.5.0-20610.5.1-26CMX Web""(System)->""(Settings)->""(Upgrade)

为了避免 [CSCvn64747](#) 安装10.5.1-26时，建议先安装10.5.0，然后升级到10.5.1-26

先决条件

要求

思科3375 MSE设备

Cisco CMX 10.5 ISO文件(从https://software.cisco.com下[载](#))

使用的组件

本指南中使用的组件：

- 带CIMC版本4.0(1a)的Cisco 3375
- 思科互联移动体验版本10.5.1-27
- 运行MacOS Mojave和Google Chrome作为Web浏览器的MacBook

安装

CIMC配置和KVM启动

第 1 步 将显示器插入VGA端口，将键盘插入设备背面的USB端口。打开计算机电源。按 F8 在引导屏幕中输入CIMC配置实用程序：

图1.启动屏幕

步骤 2 配置CIMC参数，按 F10 保存并等待45秒以应用更改。按 F5 刷新并验证设置已应用。单击 ESC 退出.

```
Cisco IMC Configuration Utility Version 2.0  Cisco Systems, Inc.
**************************************************************************
NIC Properties
 NIC mode                                  NIC redundancy
  Dedicated:         [X]                     None:              [X]
  Shared LOM:        [ ]                     Active-standby:    [ ]
   Cisco Card:                               Active-active:     [ ]
    Riser1:          [ ]                   VLAN (Advanced)
    Riser2:          [ ]                     VLAN enabled:      [ ]
    MLom:            [ ]                      VLAN ID:          1
  Shared LOM Ext:    [ ]                      Priority:         0
IP (Basic)
 IPV4:               [X]       IPV6:     [ ]
 DHCP enabled        [ ]
 CIMC IP:            10.48.71.11
 Prefix/Subnet:      255.255.255.128
 Gateway:            10.48.71.1
 Pref DNS Server:    0.0.0.0
Smart Access USB
 Enabled             [ ]
**************************************************************************
<Up/Down>Selection    <F10>Save    <Space>Enable/Disable    <F5>Refresh    <ESC>Exit
<F1>Additional settings
```

图2.思科IMC配置实用程序

要从网络访问CIMC，请通过设备背面的管理端口将MSE 3375连接到交换机：
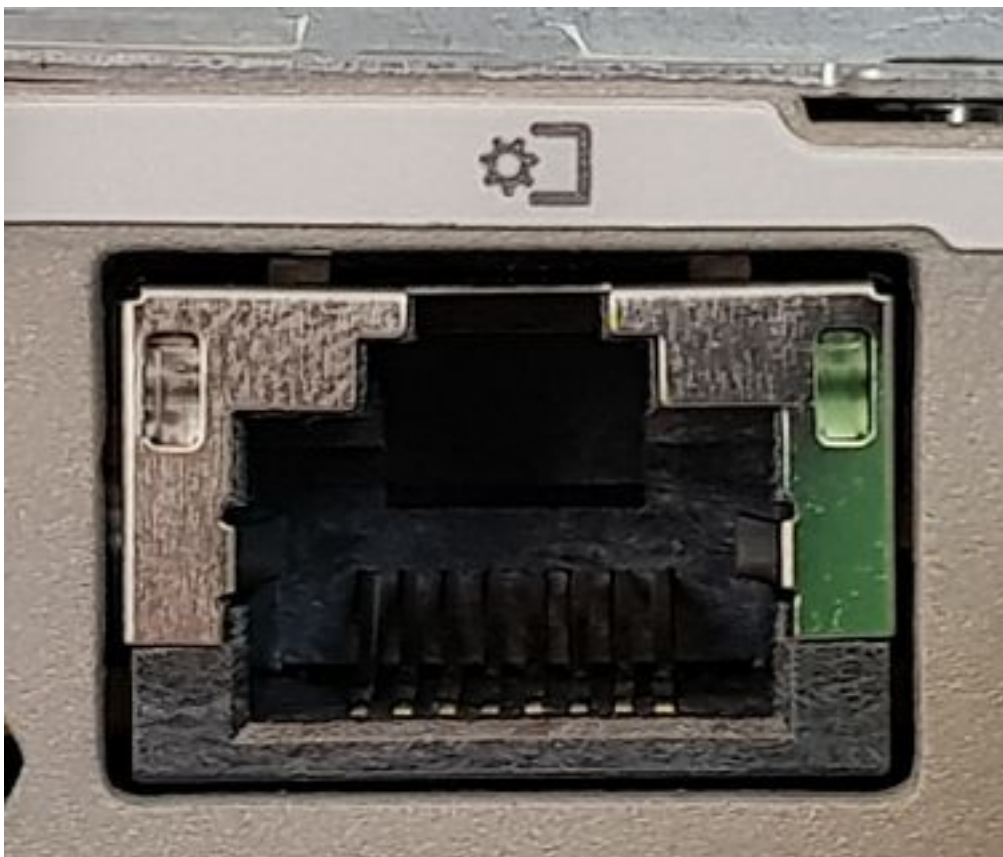
图3.管理端口

步骤 3 在Chrome Web浏览器中，转到 http://<cimc_ip_address>。首次登录时，默认用户名为*admin*。默认密码为*password*。如果您运行的是CIMC 4.0(1a)版本，则登录屏幕将如下所示：
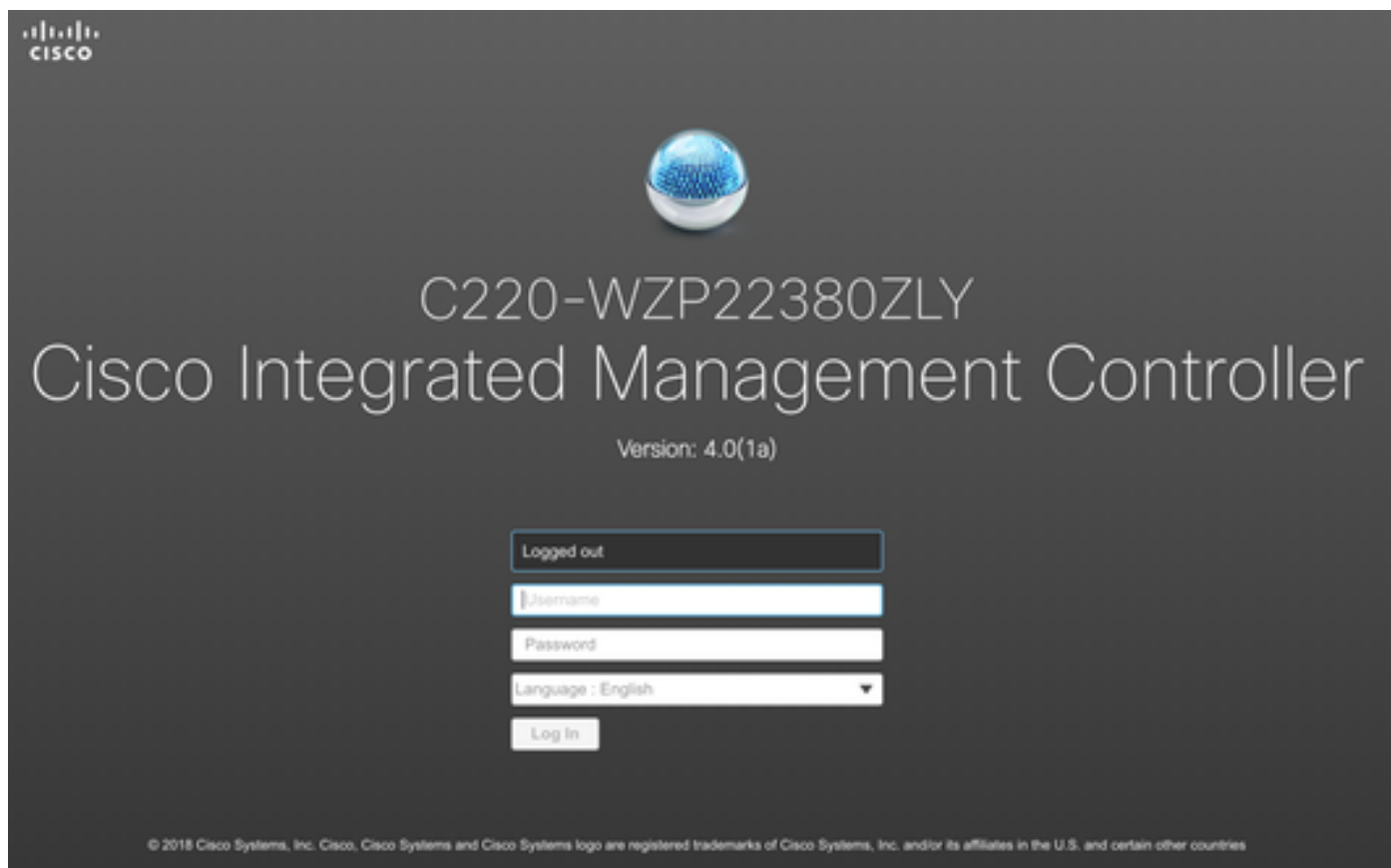
图4. CIMC登录屏幕

第4步登录后，按右上角的"启动KVM控制台"。CIMC v4支持HTML和基于Java的KVM。运行基于Java的KVM需要Java版本1.6.0_14或更高版本。本教程将使用HTML文档。

图5.启动KVM控制台

如果浏览器中的弹出窗口被阻止，请确保按链接转发：
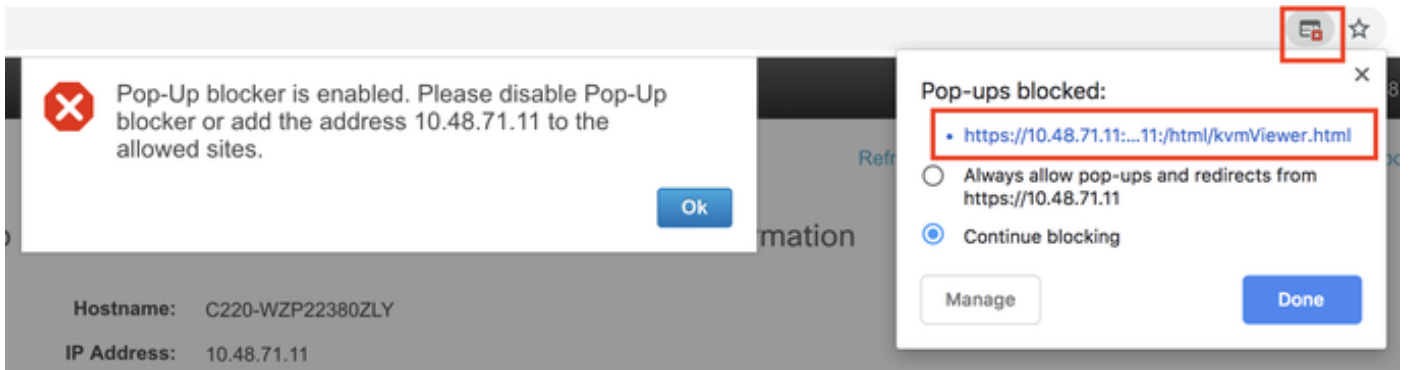
图6.阻止弹出窗口

第5步启动KVM后，按Virtual Media(虚拟媒体)并激活虚拟设备。激活虚拟设备后，下拉菜单将展开，并显示其他选项。按MAP CD/DVD以映射CMX 10.5 ISO文件：
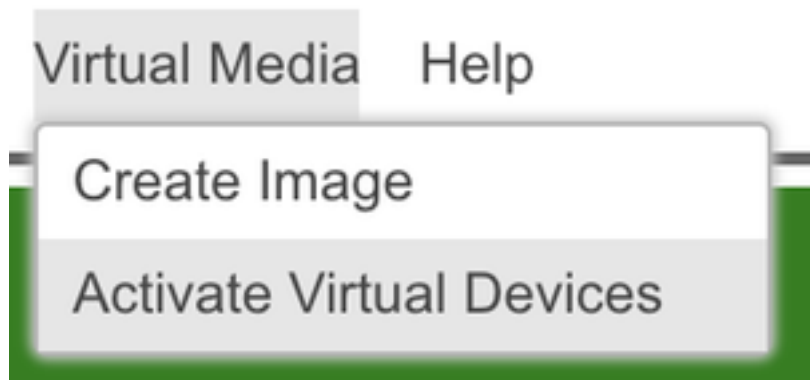
图7.激活虚拟设备
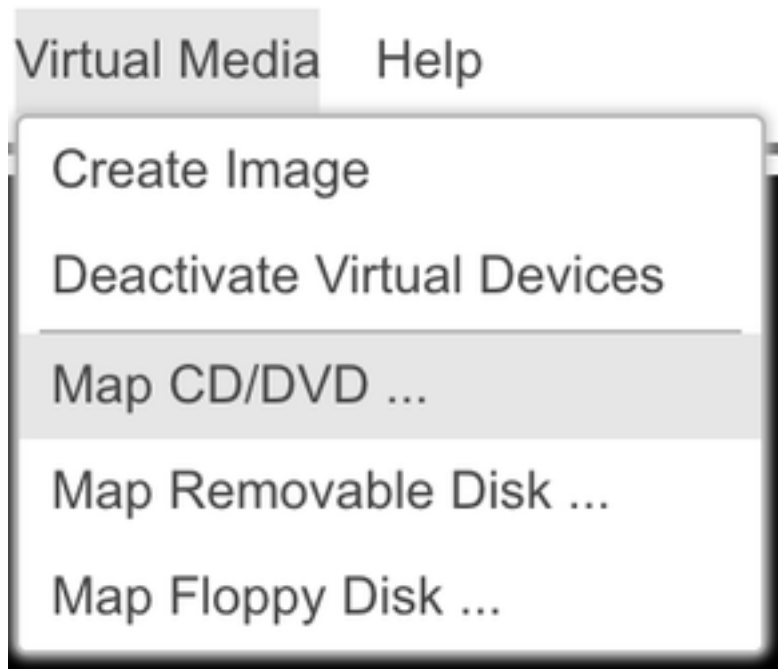
图8.映射CD/DVD

第6步导航到并选择下载的CMX映像，然后按映射驱动器。按下后，"虚拟媒体"菜单将再次展开，以显示映射的映像：
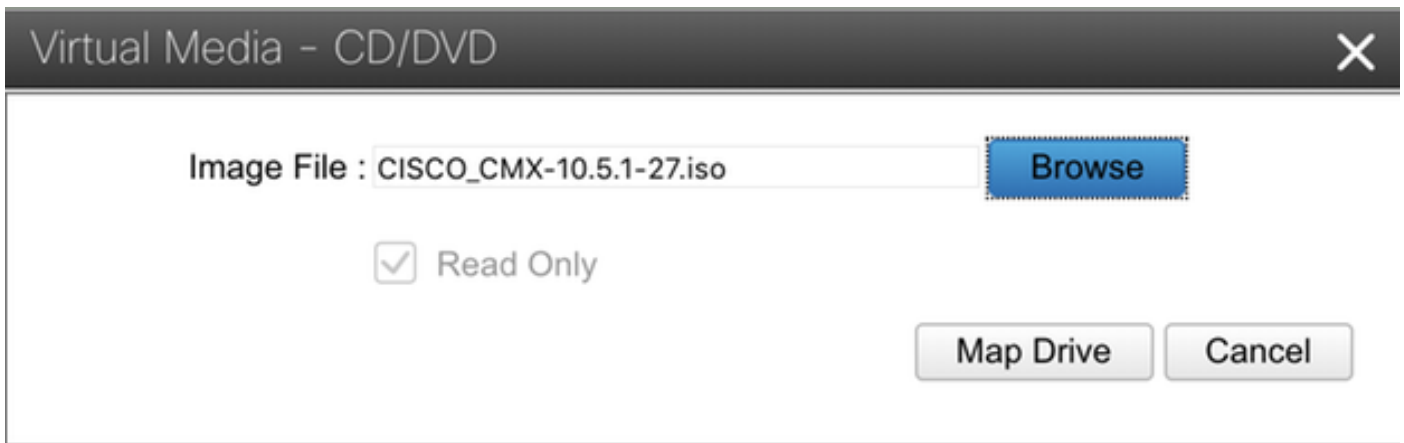
图9.映射驱动器

图10.映射的CMX映像

第7步检查映像是否正确连接后，转至"电源"选项卡，并选择重置系统（热启动）以重置设备。在启动过程中，按F7开始安装映射的映像：
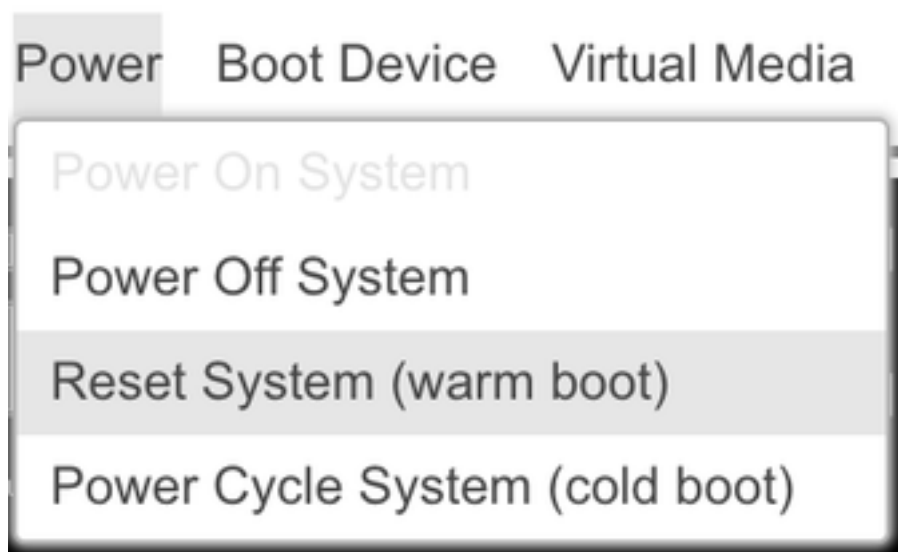
图11.重新启动设备

```
..|..|..|..
CISCO

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Press <F2> BIOS Setup : <F6>  Boot Menu : <F7>  Diagnostics
Press <F8>  CIMC Setup : <F12>  Network Boot
Bios Version : C220M5.4.0.1c.0.0627180916
Platform ID  : C220M5

Processor(s) Intel(R) Xeon(R) Gold 5118 CPU @ 2.30GHz
Total Memory  = 64 GB Effective Memory = 64 GB
Memory Operating Speed 2400 Mhz
M.2 SWRAID configuration is not detected. Switching to AHCI mode.

Cisco IMC IPv4 Address : 10.48.71.11
Cisco IMC MAC Address : 70:6D:15:96:38:78

Diagnostics requested. System looks for SDU bootable in Flex Util/Virtual Media
```

图12. CIMC启动选择菜单

CMX映像安装

第 1 步 选择 使用当前控制台安装CMX 继续安装。选择后，安装脚本将开始加载：


```
                    Select Install Method

 Install CMX using Serial
 Install CMX using current console






              Press [Tab] to edit options
```

图13.继续安装当前KVM

```
[   OK   ] Unmounted /mnt/sysimage/dev/shm.
[   OK   ] Failed unmounting /mnt/sysimage/opt.
[   OK   ] Unmounted Configuration File System.
[   OK   ] Unmounted Temporary Directory.
[   OK   ] Unmounted /mnt/sysimage/tmp.
[   OK   ] Unmounted /mnt/sysimage/boot.
[   OK   ] Unmounted /mnt/sysimage/proc.
[   OK   ] Unmounted /mnt/sysimage/var.
[   OK   ] Unmounted /mnt/sysimage/home/cmxadmin.
[   OK   ] Stopped target Swap.
           Deactivating swap /dev/sda6...
           Unmounting /mnt/sysimage/dev...
[   OK   ] Deactivated swap /dev/disk/by-uuid/11290e53-1a2b-4dac-999f-1f08402f141e.
[   OK   ] Deactivated swap /dev/disk/by-path/pci-0000:67:00.0-scsi-0:2:0:0-part6.
[   OK   ] Deactivated swap /dev/disk/by-id/wwn-0x6cc167e972f8078023d7ac322e6f950a-part6.
[   OK   ] Deactivated swap /dev/disk/by-id/scsi-36cc167e972f8078023d7ac322e6f950a-part6.
[   OK   ] Deactivated swap /dev/sda6.
[   OK   ] Unmounted /mnt/sysimage/mnt/cmx.
[   OK   ] Unmounted /mnt/sysimage/sys/fs/selinux.
           Unmounting /mnt/sysimage/sys...
[   OK   ] Unmounted /mnt/sysimage/run.
[   OK   ] Unmounted /mnt/sysimage/dev.
[   OK   ] Unmounted /mnt/sysimage/sys.
           Unmounting /mnt/sysimage...
[   OK   ] Failed unmounting /mnt/sysimage.
[   OK   ] Reached target Unmount All Filesystems.
[   OK   ] Stopped target Local File Systems (Pre).
[   OK   ] Stopped Create Static Device Nodes in /dev.
           Stopping Create Static Device Nodes in /dev...
           Stopping Monitoring of LVM2 mirrors, snapshots etc. using dmeventd or progress polling...
[   OK   ] Stopped Remount Root and Kernel File Systems.
           Stopping Remount Root and Kernel File Systems...
[   OK   ] Stopped Collect Read-Ahead Data.
           Stopping Collect Read-Ahead Data...
[   OK   ] Stopped Monitoring of LVM2 mirrors, snapshots etc. using dmeventd or progress polling.
           Stopping LVM2 metadata daemon...
[   OK   ] Stopped LVM2 metadata daemon.
[   OK   ] Started Restore /run/initramfs.
[   OK   ] Reached target Shutdown.
dracut Warning: Killing all remaining processes
Rebooting.
```
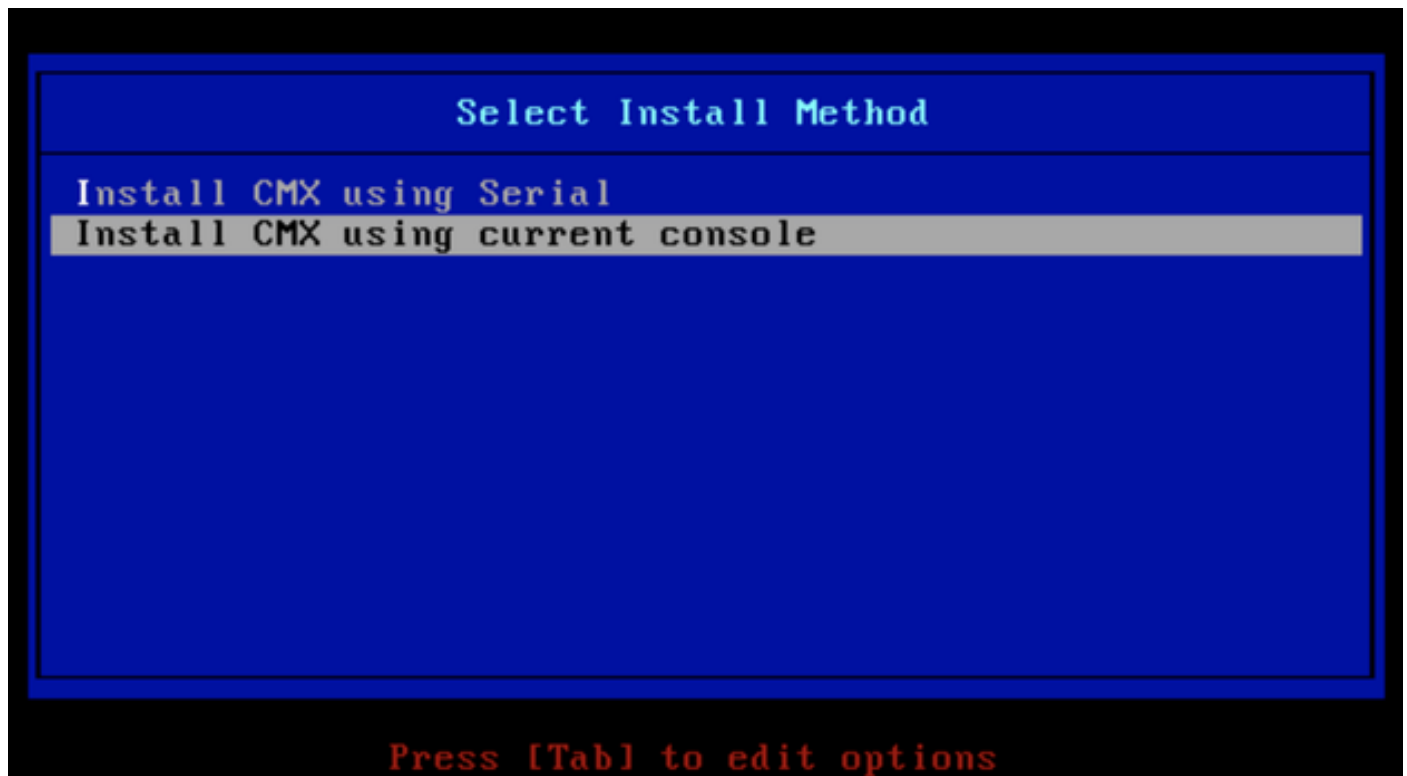
图14. CentOS安装脚本跟踪

步骤 2 安装程序后 首先，它会要求确认。输入 **是** 然后按 **输入**继续安装。"是"可能出现在左上角：

图15.继续安装的提示可能未对齐

```
*Disable PD Fail history so no manual intervention required in rebuilding dropped volume**
===============================================================================  **Changes drive in state Unconfigured-
Installation              **Ignore errors in case drives are already good**
                                                        RAID10 virtual drive sucessfully created
 1) [x] Language settings           2) [x] Time settings                        Now configur
        (English (United States))          (America/Los_Angeles timezone)
 3) [x] Installation source         4) [x] Software selection
        (Local media)                     (Minimal Install)operly**
 5) [x] Installation Destination    6) [x] Kdump
        (Custom partitioning selected)    (Kdump is enabled)       RAID10 virtual drive configured and working...
 7) [ ] Network configuration       8) [ ] User creation                        Modify g
        (Not connected)                   (No user will be created)
===============================================================================
===============================================================================
Progress
Setting up the installation environment
.
Creating disklabel on /dev/sda
.
Creating xfs on /dev/sda2
.
Creating xfs on /dev/sda5
.
Creating swap on /dev/sda6
.
Creating xfs on /dev/sda3
.
Creating xfs on /dev/sda1
.
Running pre-installation scripts
.
Starting package installation process
Preparing transaction from installation source
Installing libgcc (1/293)
Installing grub2-common (2/293)
Installing centos-release (3/293)
Installing setup (4/293)
Installing filesystem (5/293)
Installing basesystem (6/293)
Installing grub2-pc-modules (7/293)
Installing bind-license (8/293)
Installing ncurses-base (9/293)
Installing firewalld-filesystem (10/293)
Installing tzdata (11/293)
Installing glibc-common (12/293)
```

图16.按下Enter键后，安装将开始

第3步CMX安装过程大约需要20-30分钟：

```
Running post-installation scripts
Mounted /dev/cdrom
            Sun Jan 20 14:11:26 PST 2019
                            Copying CMX Image file to base location
                                        This may take 20-30 minutes....please wait.
..
```

图17.安装需要20-30分钟

CMX初始设置

第1步安装完成后，计算机将自动重新启动。这次，启动时不要按任何键。

第2步使用顶部显示的默认凭证(cmxadmin/cisco)登录CMX:

图18. 首次登录

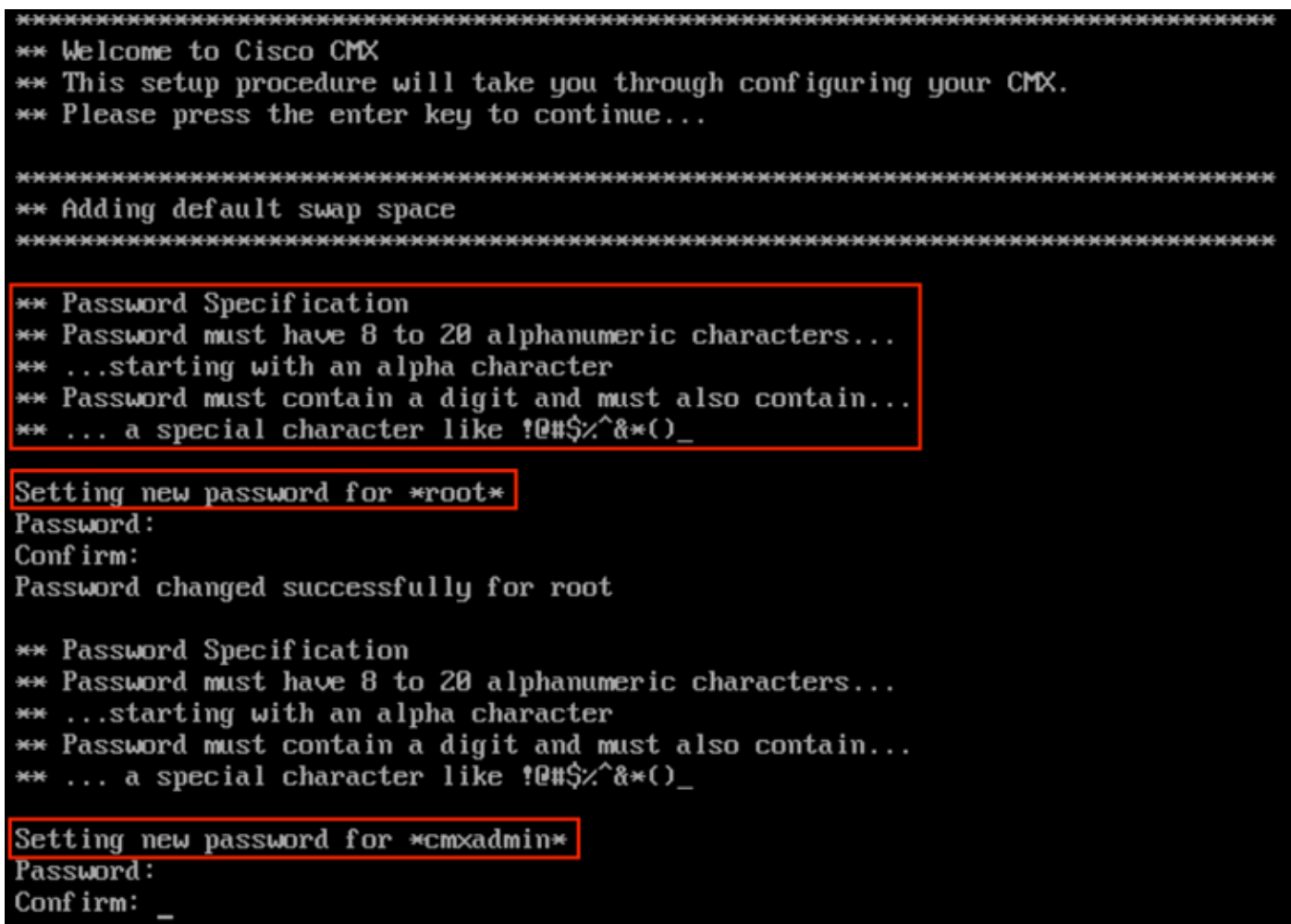**第3步** 系统将提示您更改根用户和cmxadmin用户的密码。必须满足密码规范：

图19. 更改根和cmxadmin密码

第4步 配置网络参数。要应用网络设置，需要可访问网关和DNS。如果它们不可用，系统将提示您再次配置网络参数。如果它们可访问，则会重新启动保持连接服务。在此过程中，请勿按Enter!

```
Please enter hostname: mse-3375-1
Please enter IP address: 10.48.39.240
Please enter netmask: 255.255.255.0
Please enter gateway: 10.48.39.5
Please enter DNS server: 10.48.39.5
Please enter search domain name: mse33751
Are the network settings correct?: yes
Stopping keepalived service
Verify keepalived service has been stopped
Successfully stopped the keepalived service.
Starting keepalived service
```

图20.网络参数设置


```
Restarting network...
Pinging 127.0.0.1..... Success
Pinging 10.48.71.63..... Success
Pinging 10.48.71.5..... Failed
Error: PING 10.48.71.5 (10.48.71.5) 56(84) bytes of data.
From 10.48.71.63 icmp_seq=1 Destination Host Unreachable
From 10.48.71.63 icmp_seq=2 Destination Host Unreachable
From 10.48.71.63 icmp_seq=3 Destination Host Unreachable
From 10.48.71.63 icmp_seq=4 Destination Host Unreachable

--- 10.48.71.5 ping statistics ---
4 packets transmitted, 0 received, +4 errors, 100% packet loss, time 3004ms
pipe 3

The network is not configured properly
Do you want to configure the network again?: yes
```

图21.如果网关无法访问，网络配置提示将出现

第5步重新启动保活服务后，安装将提示输入NTP服务器IP地址、区域和国家/地区。如果未使用NTP，提示符将跳至时区和时间/日期配置：

```
Restarting network...
Pinging 127.0.0.1..... Success
Pinging 10.48.39.240..... Success
Pinging 10.48.39.5..... Success
Network configuration completed successfully
*********************************************************************************
Checking if the machine meets required specification...
*********************************************************************************

+-----------+------------------------+-------------+----------+
|   Check   |    Minimum Required    |   Actual    |  Result  |
+===========+========================+=============+==========+
| Memory    | 24GB                   | 63GB        | ■        |
+-----------+------------------------+-------------+----------+
| CPU       | 8                      | 24          | ■        |
+-----------+------------------------+-------------+----------+
| Disk      | 150GB                  | 1882GB      | ■        |
+-----------+------------------------+-------------+----------+
| hostname  | RFC Compliant Hostname | mse-3375-1  | ■        |
+-----------+------------------------+-------------+----------+

*********************************************************************************
Configuring NTP Server...
*********************************************************************************
Please enter the NTP server name (blank for no NTP server) []: _
```

图22. NTP配置

```
*******************************************************************************
Configuring Timezone and date...
*******************************************************************************
Please identify a location so that time zone rules can be set correctly.
Please select a continent or ocean.
 1) Africa
 2) Americas
 3) Antarctica
 4) Arctic Ocean
 5) Asia
 6) Atlantic Ocean
 7) Australia
 8) Europe
 9) Indian Ocean
10) Pacific Ocean
11) none - I want to specify the time zone using the Posix TZ format.
#? 8
Please select a country.
 1) Albania             18) Guernsey           35) Poland
 2) Andorra             19) Hungary            36) Portugal
 3) Austria             20) Ireland            37) Romania
 4) Belarus             21) Isle of Man        38) Russia
 5) Belgium             22) Italy              39) San Marino
 6) Bosnia & Herzegovina 23) Jersey            40) Serbia
 7) Britain (UK)        24) Latvia             41) Slovakia
 8) Bulgaria            25) Liechtenstein      42) Slovenia
 9) Croatia             26) Lithuania          43) Spain
10) Czech Republic      27) Luxembourg         44) Sweden
11) Denmark             28) Macedonia          45) Switzerland
12) Estonia             29) Malta              46) Turkey
13) Finland             30) Moldova            47) Ukraine
14) France              31) Monaco             48) Vatican City
15) Germany             32) Montenegro         49) Åland Islands
16) Gibraltar           33) Netherlands
17) Greece              34) Norway
#? 5_
```

图23.时区和日期配置

第6步系统将提示您确认输入的信息。如果选择"否",系统将返回NTP配置提示:

```
The following information has been given:

        Belgium

Therefore TZ='Europe/Brussels' will be used.
Local time is now:      Mon Jan 21 00:11:16 CET 2019.
Universal Time is now:  Sun Jan 20 23:11:16 UTC 2019.
Is the above information OK?
1) Yes
2) No
#?
```

图24. NTP配置

步骤 6 下一个提示将要求您选择是否要进行磁盘加密。KVM设置在此结束,其余配置将通过CMX Web界面(GUI)完成:

磁盘加密是GDPR合规性的要求之一。有关CMX GDPR合规性的完整信息可在此链接上找到。

图25.磁盘加密提示

加密后，驱动器无法解密。

CMX节点安装

第1步通过https://<cmx_ip_address>:1984访问CMX GUI。端口1984仅在初始设置或升级期间使用。使用cmxadminuser和之前配置的密码登录：
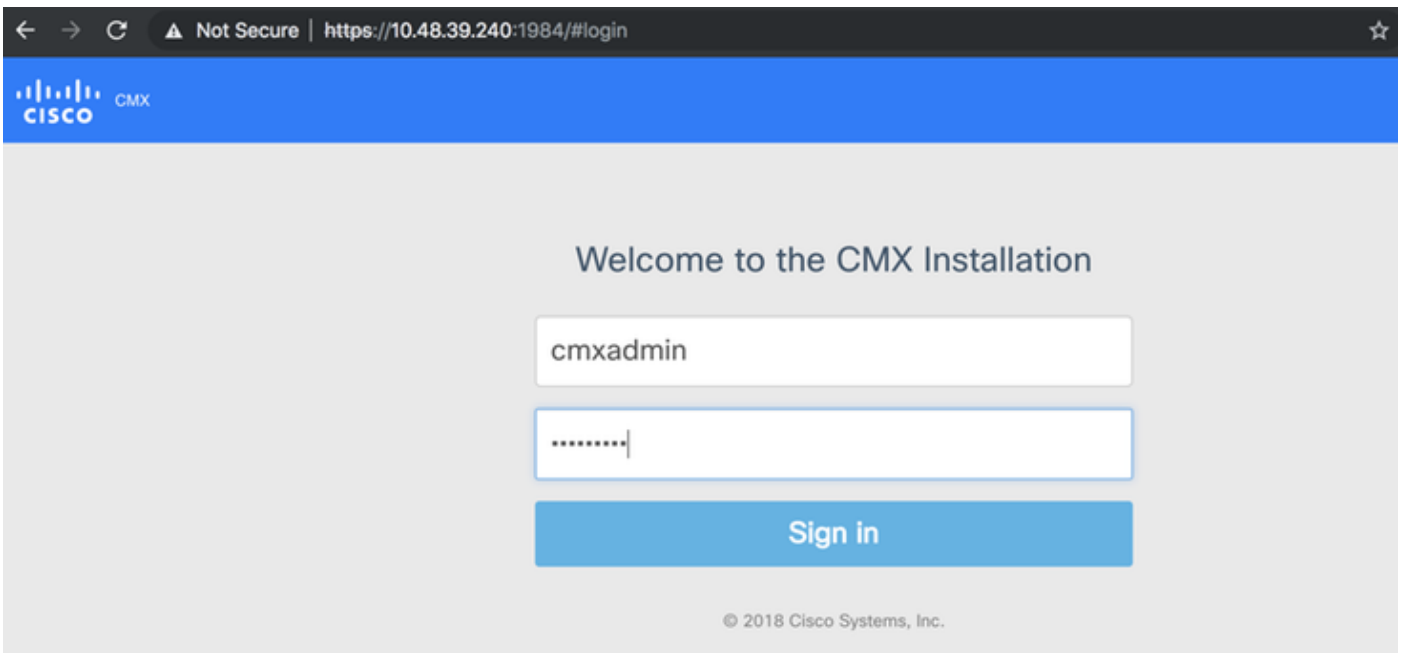
图26. CMX GUI节点安装登录

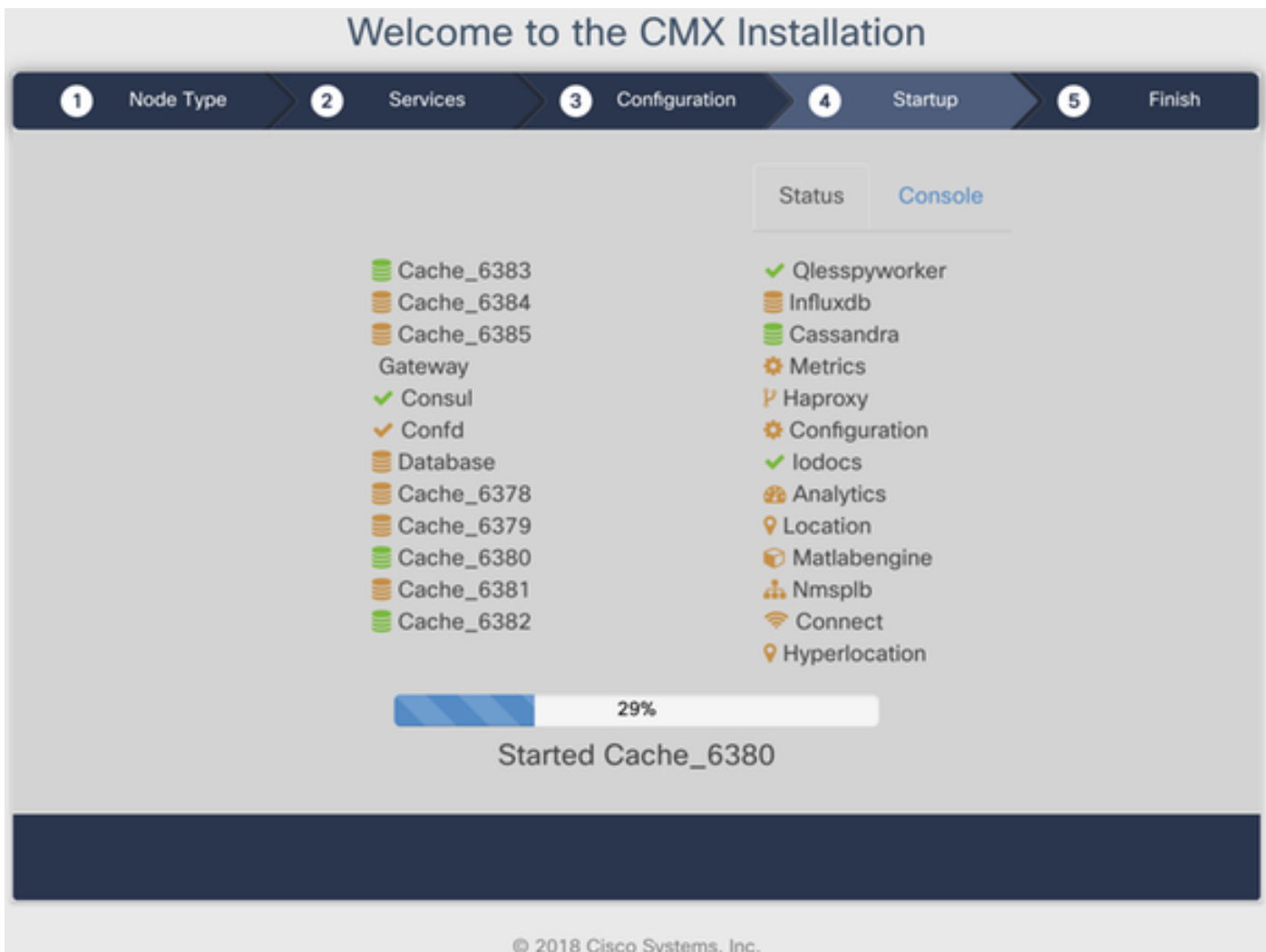**第2步**选择CMX节点类型（Location或Presence）。 请注意，以后无法更改。选择后，等待配置和启动完成：

图27. CMX节点类型选择

图28.启动过程

第3步按Please click以继续设置：

步骤 4 安装过程现已完成。您将被重定向到设置助手以完成节点的特定配置（映射导入、与无线控制器配对以及邮件服务器设置）：
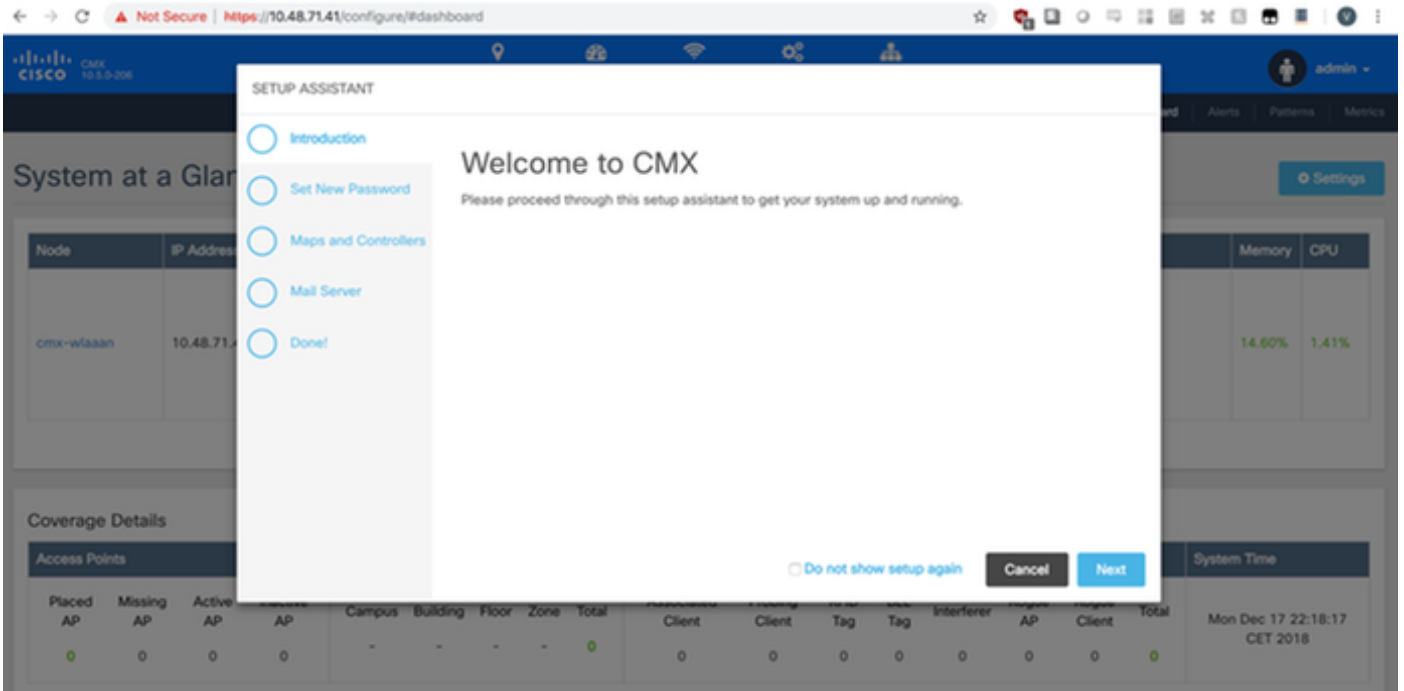
设置完成后，请确保清除浏览器cookie和缓存。不执行此操作可能会导致某些CMX网页为空。

图29.CMX设置助手