

# 安装和升级Firepower在ASA 55xx-X设备的威胁防御

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## 简介

本文描述Firepower威胁防御(FTD)安装、升级和注册步骤在ASA55xx-X设备。

## 先决条件

### 要求

本文档没有任何特定的要求。

### 使用的组件

- ASA5508-X
- ASA5512-X
- 运行6.0.1的FireSIGHT管理中心(FMC) (构建1213)

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。如果您的网络实际,请保证您了解所有命令潜在影响。

## 背景信息

Firepower威胁防御(FTD)是在以下平台可以安装的一个统一的软件镜像：

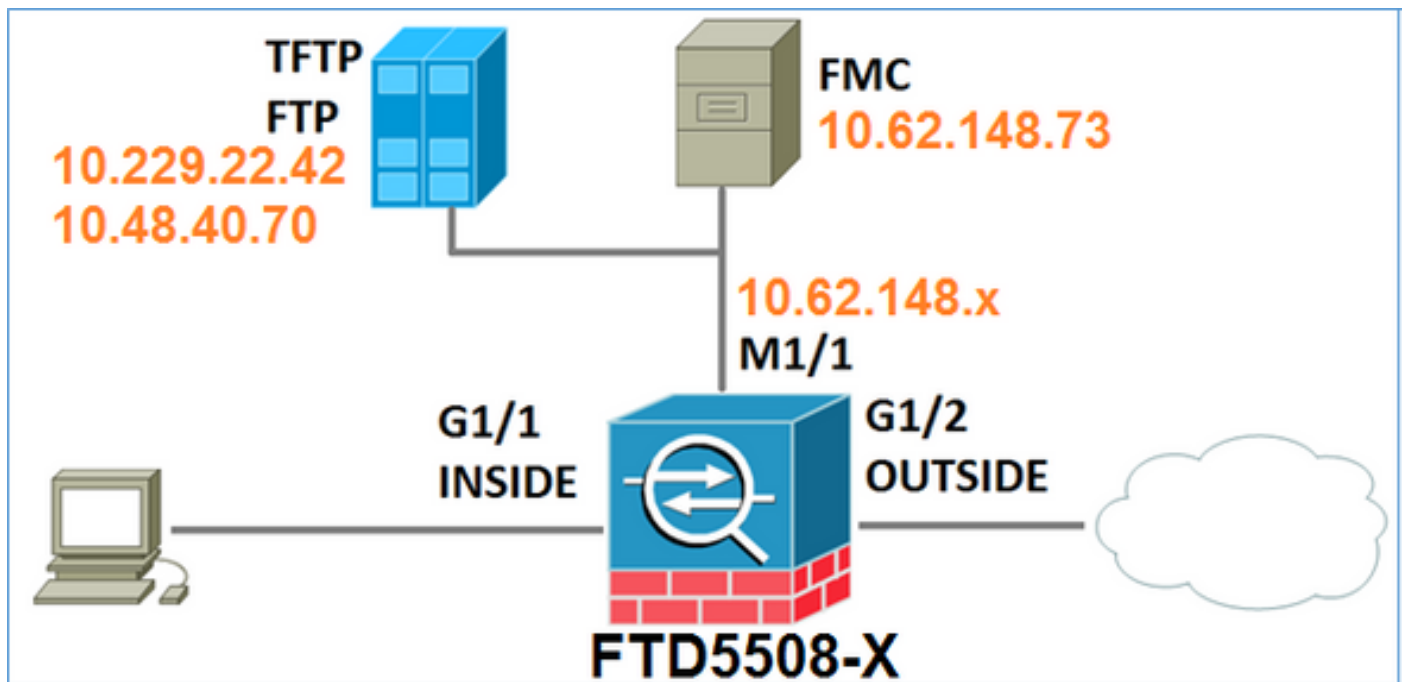
- ASA5506-X , ASA5506W-X , ASA5506H-X , ASA5508-X , ASA5516-X
- ASA5512-X , ASA5515-X , ASA5525-X , ASA5545-X , ASA5555-X
- FPR4100 , FPR9300
- VMware (ESXi)
- 亚马逊网站服务(AW)
- KVM
- ISR路由模块

本文目标是展示：

- FTD版本6.0.0的安装在ASA5508-X和ASA5512-X平台的
- FTD升级程序从版本6.0.0到6.0.1的
- Firepower许可授权的管理中心(FMC)注册和基本

## 配置

### 网络图



### FTD软件下载

导航对下一代防火墙(NGFW) >与FirePOWER Services> ASA 5508-X的ASA与FirePOWER服务并且选择Firepower威胁防御软件：

Download Software Download Cart (0 items) | Feedback Help

Downloads Home > Products > Security > Firewalls > Next-Generation Firewalls (NGFW) > ASA with FirePOWER Services > ASA 5508-X with FirePOWER Services

Select a Software Type:

- ASA Rommon Software
- Adaptive Security Appliance (ASA) Device Manager
- Adaptive Security Appliance (ASA) Software
- Adaptive Security Appliance REST API Plugin
- FirePOWER Services Software for ASA
- Firepower Threat Defense Software

同样ASA5512-X软件。

## 任务1.验证前提条件

验证前提条件在FTD安装前。

### 解决方案

对于FTD安装您使用2镜像：

1. OS镜像(亦称启动镜像) -对于Firepower在ASA5506-X的威胁防御，ASA5506H-X，ASA5506W-X，ASA5508-X，ASA5516-X是\*.lfbff文件。对于Firepower在Saleen (ASA5512-X、ASA5515-X、ASA5525-X、ASA5545-X，ASA5555-X)的威胁防御是\*.cdisk文件。
2. 系统镜像-这是.pkg文件。

在继续进行FTD安装前请验证以下：

- ASA闪存必须有至少3.1 GBytes (3GBytes +大小启动镜像)可用空间
- 启动镜像上载对TFTP server
- 系统镜像上载对HTTP或FTP服务器
- OnASA5506/08/16 ROMMON是1.1.8至少版本

正在验证可用空间：

```
FTD5508X# show flash | i free
7859437568 bytes total (4273819648 bytes free)
```

正在验证镜像：

文件名	说明
ftd-boot-9.6.1.0.lfbff	v6.0.1 Firepower威胁5506/5508/5516的防御启动镜像。 这是清理安装的启动镜像在5506/5508/5516
ftd-boot-9.6.1.0.cdisk	v6.0.1 Firepower威胁ASA的5512/5515/5525/5545/5555防御启动镜像。 这是清理安装的启动镜像在5512/5515/5525/5545/5555
ftd-6.0.0-1005.pkg	v6.0.0 Firepower所有支持的ASA的威胁防御 ： 5506/5508/5512/5515/5516/5525/5545/5555。 这是清理安装的系统镜像

## 任务2.升级ASA5508-X ROMMON

当在前提条件被提及，ASA5506-X、ASA5508-X和ASA5516-X设备必须在ROMMON v1.1.8。如果不然后安装asa5500-firmware-1108.SPA (在思科ASA下载页的联机)。

## 任务需求

升级从1.1.1的ASA5508 ROMMON到1.1.8。

## 解决方案

步骤在[ASA ROMmon升级指南](#)描述。

步骤1.验证现有ROMmon版本：

```
FTD5508X# show module
Mod  Card Type                               Model                               Serial No.
-----
  1 ASA 5508-X with FirePOWER services, 8GE, AC, ASA5508           JAD192100SZ
sfr FirePOWER Services Software Module   ASA5508                             JAD192100SZ

Mod  MAC Address Range                       Hw Version   Fw Version   Sw Version
-----
  1 188b.9d1e.ca7c to 188b.9d1e.ca84  1.0          1.1.1        9.5(2)
sfr 188b.9d1e.ca7b to 188b.9d1e.ca7b  N/A          N/A          5.4.1-211
```

步骤2.Download ROMMON固件到ASA的flash:里

```
FTD5508X# copy ftp://10.48.40.70/ANG/mzafeiro/asa5500-firmware-1108.SPA disk0:asa5500-firmware-1108.SPA
```

```
Address or name of remote host [10.48.40.70]?
```

```
Source filename [ANG/mzafeiro/asa5500-firmware-1108.SPA]?
```

```
Destination filename [asa5500-firmware-1108.SPA]?
```

```
Accessing ftp://10.48.40.70/ANG/mzafeiro/asa5500-firmware-1108.SPA...!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! Done!
```

```
Computed Hash   SHA2: d824bdeecce1308fc64427367fa559e9
              eefe8f182491652ee4c05e6e751f7a4f
              5cdea28540cf60acde3ab9b65ff55a9f
              4e0cfb84b9e2317a856580576612f4af
```

```
Embedded Hash   SHA2: d824bdeecce1308fc64427367fa559e9
              eefe8f182491652ee4c05e6e751f7a4f
              5cdea28540cf60acde3ab9b65ff55a9f
              4e0cfb84b9e2317a856580576612f4af
```

```
Digital signature successfully validated
```

```
Writing file disk0:/asa5500-firmware-1108.SPA...
```

```
!!!!!!!!!!!!
```

```
9241408 bytes copied in 18.890 secs (513411 bytes/sec)
```

步骤3.升级ASA ROMmon镜像：

```
FTD5508X# upgrade rommon disk0:asa5500-firmware-1108.SPA
```

```
Verifying file integrity of disk0:/asa5500-firmware-1108.SPA
```

```
Computed Hash   SHA2: d824bdeecce1308fc64427367fa559e9
              eefe8f182491652ee4c05e6e751f7a4f
              5cdea28540cf60acde3ab9b65ff55a9f
              4e0cfb84b9e2317a856580576612f4af
```

```
Embedded Hash   SHA2: d824bdeecce1308fc64427367fa559e9
              eefe8f182491652ee4c05e6e751f7a4f
              5cdea28540cf60acde3ab9b65ff55a9f
              4e0cfb84b9e2317a856580576612f4af
```

**Digital signature successfully validated**

File Name : disk0:/asa5500-firmware-1108.SPA  
Image type : Release  
Signer Information  
Common Name : abraxas  
Organization Unit : NCS\_Kenton\_ASA  
Organization Name : CiscoSystems  
Certificate Serial Number : 55831CF6  
Hash Algorithm : SHA2 512  
Signature Algorithm : 2048-bit RSA  
Key Version : A

**Verification successful.**

System config has been modified. Save? [Y]es/[N]o: **Y**  
Cryptochecksum: cb47de8a cad3b773 7fc07212 3e76ef4f

2804 bytes copied in 0.260 secs

**Proceed with reload? [confirm]**

\*\*\*  
\*\*\* --- START GRACEFUL SHUTDOWN ---  
\*\*\*  
\*\*\* Message to all terminals:  
\*\*\*  
\*\*\* **Performing upgrade on rom-monitor.**  
Shutting down License Controller  
Shutting down File system

\*\*\*  
\*\*\* --- SHUTDOWN NOW ---  
\*\*\*  
\*\*\* Message to all terminals:  
\*\*\*  
\*\*\* **Performing upgrade on rom-monitor.**  
Process shutdown finished  
Rebooting....  
INIT: Sending processes the TERM signal  
Deconfiguring network interfaces... done.  
Sending all processes the TERM signal...  
Sending all processes the KILL signal...  
Deactivating swap...  
Unmounting local filesystems...  
Rebooting...

**Rom image verified correctly**

Cisco Systems ROMMON, Version 1.1.01, RELEASE SOFTWARE  
Copyright (c) 1994-2014 by Cisco Systems, Inc.  
Compiled Mon 10/20/2014 15:59:12.05 by builder

Current image running: Boot ROM0  
Last reset cause: PowerCycleRequest  
DIMM Slot 0 : Present  
DIMM Slot 1 : Present  
**INFO: Rommon upgrade state: ROMMON\_UPG\_START (1)**  
INFO: Reset code: 0x00002000

**Firmware upgrade step 1... Looking for file 'disk0:asa5500-firmware-1108.SPA' Located 'asa5500-firmware-1108.SPA' @ cluster 856765.**

#####

Image base 0x77014018, size 9241408

**LFBFF signature verified.**

Objtype: lfbff\_object\_rommon (0x800000 bytes @ 0x77014238)

Objtype: lfbff\_object\_fpga (0xd0100 bytes @ 0x77814258)

INFO: FPGA version in upgrade image: 0x0202

INFO: FPGA version currently active: 0x0202

INFO: The FPGA image is up-to-date.

**INFO: Rommon version currently active: 1.1.01. INFO: Rommon version in upgrade image: 1.1.08.**

Active ROMMON: Preferred 0, selected 0, booted 0

Switching SPI access to standby rommon 1.

**Please DO NOT reboot the unit, updating ROMMON..... INFO: Duplicating machine state..... Reloading now as step 1 of the rommon upgrade process... Toggling power on system board... Rom image verified correctly**

Cisco Systems ROMMON, Version 1.1.01, RELEASE SOFTWARE

Copyright (c) 1994-2014 by Cisco Systems, Inc.

Compiled Mon 10/20/2014 15:59:12.05 by builder

Current image running: Boot ROM0

Last reset cause: RP-Reset

DIMM Slot 0 : Present

DIMM Slot 1 : Present

INFO: Rommon upgrade state: ROMMON\_UPG\_START (1)

INFO: Reset code: 0x00000008

Active ROMMON: Preferred 0, selected 0, booted 0

**Firmware upgrade step 2...**

Detected current rommon upgrade is available, continue rommon upgrade process

Rommon upgrade reset 0 in progress

Reloading now as step 2 of the rommon upgrade process...

Rom image verified correctly

**Cisco Systems ROMMON, Version 1.1.8, RELEASE SOFTWARE**

Copyright (c) 1994-2015 by Cisco Systems, Inc.

Compiled Thu 06/18/2015 12:15:56.43 by builders

Current image running: \*Upgrade in progress\* Boot ROM1

Last reset cause: BootRomUpgrade

DIMM Slot 0 : Present

DIMM Slot 1 : Present

INFO: Rommon upgrade state: ROMMON\_UPG\_START (1)

INFO: Reset code: 0x00000010

PROM B: stopping boot timer

Active ROMMON: Preferred 0, selected 0, booted 1

INFO: Rommon upgrade state: ROMMON\_UPG\_TEST

!!  
!! Please manually or auto boot ASAOS now to complete firmware upgrade !!  
!!

Platform ASA5508 with 8192 Mbytes of main memory

MAC Address: 18:8b:9d:1e:ca:7c

Use BREAK or ESC to interrupt boot.  
Use SPACE to begin boot immediately.

Located '.boot\_string' @ cluster 859024.



Mod	Card Type	Model	Serial No.
1	ASA 5508-X with FirePOWER services, 8GE, AC,	ASA5508	JAD192100SZ
sfr	FirePOWER Services Software Module	ASA5508	JAD192100SZ

Mod	MAC Address Range	Hw Version	Fw Version	Sw Version
1	188b.9d1e.ca7c to 188b.9d1e.ca84	1.0	1.1.8	9.5(2)
sfr	188b.9d1e.ca7b to 188b.9d1e.ca7b	N/A	N/A	5.4.1-211

### 任务3.安装在ASA55xx-X的FTD启动镜像

#### 任务需求

配置在ASA5508-X的FTD启动镜像ftd-boot-9.6.1.0.lfbff。

#### 解决方案

有超过一要执行此的方法。这是第一个：

#### 方法1.从ROMMON。

步骤1.重新加载ASA并且输入ROMmon模式：

```
FTD5508X# reload
Proceed with reload? [confirm]
FTD5508X#

***
*** --- START GRACEFUL SHUTDOWN ---
Shutting down isakmp
Shutting down webvpn
Shutting down sw-module
Shutting down License Controller
Shutting down File system

***
*** --- SHUTDOWN NOW ---
Process shutdown finished
Rebooting.....
INIT: Sending processes the TERM signal
Deconfiguring network interfaces... done.
Sending all processes the TERM signal...
Sending all processes the KILL signal...
Deactivating swap...
Unmounting local filesystems...
Rebooting... y
Rom image verified correctly

Cisco Systems ROMMON, Version 1.1.8, RELEASE SOFTWARE
Copyright (c) 1994-2015 by Cisco Systems, Inc.
Compiled Thu 06/18/2015 12:15:56.43 by builders

Current image running: Boot ROM1
Last reset cause: PowerCycleRequest
DIMM Slot 0 : Present
DIMM Slot 1 : Present

Platform ASA5508 with 8192 Mbytes of main memory
```





```
ifup: interface lo already configured Using IPv4 address: 10.62.148.62
Using IPv6 address: fe80::1a8b:9dff:fe1e:ca7b
Using DNS server: 10.62.145.72
Using default gateway: 10.62.148.100
INIT: Starting system message bus: dbus.
Starting OpenBSD Secure Shell server: sshd
generating ssh RSA key...
generating ssh ECDSA key...
generating ssh DSA key...
done.
Starting Advanced Configuration and Power Interface daemon: acpid.
acpid: starting up

acpid: 1 rule loaded

acpid: waiting for events: event logging is off

Starting ntpd: done
Starting syslog-ng:.
Starting crond: OK
```

**Cisco FTD Boot 6.0.0 (9.6.1.)**

Type ? for list of commands

firepower-boot>

在ASA5512/15/25/45/55步骤是相同的与仅差异启动镜像名称：

```
rommon #0> ADDRESS=10.62.148.10
rommon #1> SERVER=10.229.22.42
rommon #2> GATEWAY=10.62.148.1
rommon #3> IMAGE=ftd-boot-9.6.1.0.cdisk
```

**方法2. 从ASA模式。**

**步骤1: 从ASA EXEC模式(没有ROMMON)复制FTD启动镜像到ASA flash:里**

```
ciscoasa# copy ftp://10.48.40.70/ANG/mzafeiro/ftd-boot-9.6.1.0.lfbff flash
```

**步骤2.删除所有ASA镜像从磁盘：**

```
ciscoasa# delete flash:asa*
```

**在删除asa镜像以后的闪存内容：**

```
ciscoasa# show flash
```

```
--#-- --length-- -----date/time----- path
 131 33          May 20 2016 09:27:28 .boot_string
   11 4096       Mar 03 2016 11:48:34 log
 154 16767     May 20 2016 09:23:48 log/asa-appagent.log
 155 465       Mar 03 2016 11:54:58 log/asa-ssp_ntp.log
   21 4096       Jun 10 2015 06:45:42 crypto_archive
   22 4096       Jun 10 2015 06:46:00 coredumpinfo
   23 59         Jun 10 2015 06:46:00 coredumpinfo/coredump.cfg
 134 25627616  Dec 01 2015 04:01:58 asdm-752.bin
 135 52563     Feb 09 2016 02:49:58 system.cfg
 136 25028660  Feb 09 2016 02:50:28 asdm-751-112.bin
 137 38409858  Feb 09 2016 02:51:14 anyconnect-win-3.1.10010-k9.pkg
 138 25629676  Feb 09 2016 04:38:10 asdm-752-153.bin
 151 100308208 May 20 2016 09:39:57 ftd-boot-9.6.1.0.lfbff <--
```

**步骤3.Reload ASA。它从FTD启动镜像启动：**

```
Located 'ftd-boot-9.6.1.0.lfbff' @ cluster 45093.
```

```
#####
..
LFBFF signature verified.
INIT: version 2.88 booting
..
        Cisco FTD Boot 6.0.0 (9.6.1.)
            Type ? for list of commands
firepower-boot>
```

## 任务4.安装在ASA55xx-X的FTD系统镜像

在ASA5508-X的安装FTD系统镜像。

### [解决方案](#)

```
firepower-boot> setup
```

```
        Welcome to Cisco FTD Setup
        [hit Ctrl-C to abort]
        Default values are inside []
```

```
Enter a hostname [firepower]: FTD5508
Do you want to configure IPv4 address on management interface?(y/n) [Y]:
Do you want to enable DHCP for IPv4 address assignment on management interface?(y/n) [Y]: N
Enter an IPv4 address: 10.62.148.29
Enter the netmask: 255.255.255.128
Enter the gateway: 10.62.148.1
Do you want to enable DHCP for IPv4 address assignment on management interface?(y/n) [N]: Enter
an IPv4 address [10.62.148.29]: Enter the netmask [255.255.255.128]: Enter the gateway
[10.62.148.1]: Do you want to configure static IPv6 address on management interface?(y/n) [N]:
Stateless autoconfiguration will be enabled for IPv6 addresses. Enter the primary DNS server IP
address: 173.38.200.100
Do you want to configure Secondary DNS Server? (y/n) [n]: y
Enter the secondary DNS server IP address: 144.254.71.184
Do you want to configure Local Domain Name? (y/n) [n]:
Do you want to configure Search domains? (y/n) [n]:
Do you want to enable the NTP service? [Y]:
Enter the NTP servers separated by commas [203.0.113.126]: 171.68.38.65
Please review the final configuration:
Hostname:                FTD5508
Management Interface Configuration

IPv4 Configuration:      static
    IP Address:          10.62.148.29
    Netmask:              255.255.255.128
    Gateway:              10.62.148.1

IPv6 Configuration:      Stateless autoconfiguration

DNS Configuration:
    DNS Server:
                            173.38.200.100
                            144.254.71.184

NTP configuration:
    171.68.38.65
```

#### CAUTION:

You have selected IPv6 stateless autoconfiguration, which assigns a global address based on network prefix and a device identifier. Although this address is unlikely to change, if it does change, the system will stop functioning correctly. We suggest you use static addressing instead.

Apply the changes?(y,n) [Y]:

Configuration saved successfully!

Applying...

Done.

Press ENTER to continue...

firepower-boot>

验证与FTP服务器的连接：

firepower-boot> ping 10.229.22.42

PING 10.229.22.42 (10.229.22.42) 56(84) bytes of data.

64 bytes from 10.229.22.42: icmp\_seq=1 ttl=124 time=1.30 ms

64 bytes from 10.229.22.42: icmp\_seq=2 ttl=124 time=1.32 ms

64 bytes from 10.229.22.42: icmp\_seq=3 ttl=124 time=1.45 ms

^C

--- 10.229.22.42 ping statistics ---

3 packets transmitted, 3 received, 0% packet loss, time 2002ms

rtt min/avg/max/mdev = 1.302/1.360/1.458/0.075 ms

安装系统程序包：

firepower-boot> system install ftp://10.229.22.42/ftd-6.0.0-1005.pkg

```
##### WARNING #####
# The content of disk0: will be erased during installation! #
#####
```

Do you want to continue? [y/N] y

Erasing disk0 ...

Verifying

Enter credentials to authenticate with ftp server

Username: ftp

Password:

Verifying Downloading Extracting

<-- Here give it some time (~10 min)

Package Detail

Description:	Cisco ASA-NGFW 6.0.0-1005 System Install
Requires reboot:	Yes

Do you want to continue with upgrade? [y]: <-- Press Enter

Warning: Please do not interrupt the process or turn off the system.

Doing so might leave system in unusable state.

Starting upgrade process ...

Populating new system image <-- Here give it some time (~5 min)

Reboot is required to complete the upgrade. Press 'Enter' to reboot the system. <-- Press Enter

Broadcast message from root@firepowStopping OpenBSD Secure Shell server: sshdstopped  
/usr/sbin/sshd (pid 1963)

Stopping Advanced Configuration and Power Interface daemon: stopped /usr/sbin/acpid (pid 1967)  
acpid: exiting

acpid.

Stopping system message bus: dbus.

Stopping ntpd: stopped process in pidfile '/var/run/ntp.pid' (pid 2055)

done

Stopping crond: OK

Deconfiguring network interfaces... done.

Sending all processes the TERM signal...

Sending all processes the KILL signal...

Deactivating swap...

Unmounting local filesystems...

Rebooting... Ÿ  
Rom image verified correctly

Cisco Systems ROMMON, Version 1.1.8, RELEASE SOFTWARE  
Copyright (c) 1994-2015 by Cisco Systems, Inc.  
Compiled Thu 06/18/2015 12:15:56.43 by builders

Current image running: Boot ROM1  
Last reset cause: PowerCycleRequest  
DIMM Slot 0 : Present  
DIMM Slot 1 : Present

Platform ASA5508 with 8192 Mbytes of main memory  
MAC Address: 18:8b:9d:1e:ca:7c

Use BREAK or ESC to interrupt boot.  
Use SPACE to begin boot immediately.

Located '.boot\_string' @ cluster 186016.

#  
Attempt autoboot: "boot disk0:os.img"  
Located 'os.img' @ cluster 160001.

#####  
LFBFF signature verified.  
INIT: version 2.88 booting  
Starting udev  
Configuring network interfaces... done.  
Populating dev cache  
Detected PID ASA5508.  
Found device serial number JAD192100SZ.  
Found USB flash drive /dev/sdb  
Found hard drive(s): /dev/sda  
fsck from util-linux 2.23.2  
dosfsck 2.11, 12 Mar 2005, FAT32, LFN  
/dev/sdb1: 7 files, 26064/1919063 clusters

=====  
Use ESC to interrupt boot and launch boot CLI.  
Use SPACE to launch Cisco FTD immediately.  
Cisco FTD launch in 20 seconds ...  
Running on kenton  
Mounting disk partitions ...  
Initializing Threat Defense ... [ OK ]  
Starting system log daemon... [ OK ]  
Flushing all current IPv4 rules and user defined chains: ...success  
Clearing all current IPv4 rules and user defined chains: ...success  
Applying iptables firewall rules:  
Flushing chain `PREROUTING'  
Flushing chain `INPUT'  
Flushing chain `FORWARD'  
Flushing chain `OUTPUT'  
Flushing chain `POSTROUTING'  
Flushing chain `INPUT'  
Flushing chain `FORWARD'  
Flushing chain `OUTPUT'  
Applying rules succeeded  
Flushing all current IPv6 rules and user defined chains: ...success

```
Clearing all current IPv6 rules and user defined chains: ...success
Applying iptables firewall rules:
Flushing chain `PREROUTING'
Flushing chain `INPUT'
Flushing chain `FORWARD'
Flushing chain `OUTPUT'
Flushing chain `POSTROUTING'
Flushing chain `INPUT'
Flushing chain `FORWARD'
Flushing chain `OUTPUT'
Applying rules succeeded
Starting nscd...
mkdir: created directory '/var/run/nscd' [ OK ]
Starting , please wait...grep: /ngfw/etc/motd: No such file or directory
...complete.
Firstboot detected, executing scripts
Executing S01reset_failopen_if [ OK ]
Executing S04fix-httpd.sh [ OK ]
Executing S05set-mgmt-port [ OK ]
Executing S06addusers [ OK ]
Executing S07uuid-init [ OK ]
Executing S09configure_mysql [ OK ]
```

\*\*\*\*\* Attention \*\*\*\*\*

Initializing the configuration database. Depending on available system resources (CPU, memory, and disk), this may take 30 minutes or more to complete.

\*\*\*\*\* Attention \*\*\*\*\*

```
Executing S10database [ OK ]
Executing S12install_infodb [ OK ]
Executing S15set-locale.sh [ OK ]
Executing S16update-sensor.pl [ OK ]
Executing S19cert-tun-init [ OK ]
Executing S20cert-init [ OK ]
Executing S21disable_estreamer [ OK ]
Executing S25create_default_des.pl [ OK ]
Executing S30init_lights_out_mgmt.pl [ OK ]
Executing S40install_default_filters.pl [ OK ]
Executing S42install_default_dashboards.pl [ OK ]
Executing S43install_default_report_templates.pl [ OK ]
Executing S44install_default_app_filters.pl [ OK ]
Executing S45install_default_realms.pl [ OK ]
Executing S47install_default_sandbox_EO.pl [ OK ]
Executing S50install-remediation-modules [ OK ]
Executing S51install_health_policy.pl [ OK ]
Executing S52install_system_policy.pl [ OK ]
Executing S53change_reconciliation_baseline.pl [ OK ]
Executing S70update_sensor_objects.sh [ OK ]
Executing S85patch_history-init [ OK ]
Executing S90banner-init [ OK ]
Executing S95copy-crontab [ OK ]
Executing S96grow_var.sh [ OK ]
```

\*\*\*\*\* Attention \*\*\*\*\*

Initializing the system's localization settings. Depending on available system resources (CPU, memory, and disk), this may take 10 minutes or more to complete.

\*\*\*\*\* Attention \*\*\*\*\*

```
Executing S96localize-templates [ OK ]
```

```
Executing S96ovf-data.pl [ OK ]
Executing S97compress-client-resources [ OK ]
Executing S97create_platinum_forms.pl [ OK ]
Executing S97install_cloud_support.pl [ OK ]
Executing S97install_geolocation.pl [ OK ]
Executing S97install_ssl_inspection.pl [ OK ]
Executing S97update_modprobe.pl [ OK ]
Executing S98check-db-integrity.sh [ OK ]
Executing S98htaccess-init [ OK ]
Executing S99correct_ipmi.pl [ OK ]
Executing S99start-system [ OK ]
Executing S99z_db_restore [ OK ]
Firstboot scripts finished.
Configuring NTP... [ OK ]
Model reconfigure detected, executing scripts
Pinging mysql
Found mysql is running
Executing 45update-sensor.pl [ OK ]
Executing 55recalculate_arc.pl [ OK ]
Starting xinetd:
Mon Mar 14 18:28:11 UTC 2016
Starting MySQL...
Pinging mysql
Pinging mysql, try 1
Found mysql is running
Running initializeObjects...
Stopping MySQL...
Killing mysqld with pid 10993
Wait for mysqld to exit\c
done
Mon Mar 14 18:28:21 UTC 2016
Starting sfid... [ OK ]
Starting Cisco ASA5508-X Threat Defense, please wait...No PM running!
...started.
INIT: Starting system message bus: dbus.
Starting OpenBSD Secure Shell server: sshd
generating ssh RSA key...
generating ssh ECDSA key...
generating ssh DSA key...
done.
Starting Advanced Configuration and Power Interface daemon: acpid.
Starting crond: OK
Mar 14 18:28:26 ciscoasa SF-IMS[11490]: [11490] init script:system [INFO] pmmon Setting affinity
to 5-7...
pid 11486's current affinity list: 0-7
pid 11486's new affinity list: 5-7
Mar 14 18:28:26 ciscoasa SF-IMS[11492]: [11492] init script:system [INFO] pmmon The Process
Manager is not running...
Mar 14 18:28:26 ciscoasa SF-IMS[11493]: [11493] init script:system [INFO] pmmon Starting the
Process Manager...
Mar 14 18:28:26 ciscoasa SF-IMS[11494]: [11494] pm:pm [INFO] Using model number 75K

Cisco ASA5508-X Threat Defense v6.0.0 (build 1005)
ciscoasa login:
Compiled on Sat 07-Nov-15 16:13 PST by builders

Total NICs found: 13
i354 rev03 Gigabit Ethernet @ irq255 dev 20 index 08 MAC: 188b.9d1e.ca7c
ivshmem rev03 Backplane Data Interface @ index 09 MAC: 0000.0001.0002
en_vtun rev00 Backplane Control Interface @ index 10 MAC: 0000.0001.0001
en_vtun rev00 Backplane Int-Mgmt Interface @ index 11 MAC: 0000.0001.0003
en_vtun rev00 Backplane Ext-Mgmt Interface @ index 12 MAC: 0000.0000.0000

INFO: Unable to read firewall mode from flash
```

Writing default firewall mode (single) to flash

INFO: Unable to read cluster interface-mode from flash

Writing default mode "None" to flash

Verify the activation-key, it might take a while...

Failed to retrieve permanent activation key.

Running Permanent Activation Key: 0x00000000 0x00000000 0x00000000 0x00000000 0x00000000

The Running Activation Key is not valid, using default settings:

Licensed features for this platform:

Maximum Physical Interfaces	: Unlimited	perpetual
Maximum VLANs	: 50	perpetual
Inside Hosts	: Unlimited	perpetual
Failover	: Active/Active	perpetual
Encryption-DES	: Enabled	perpetual
Encryption-3DES-AES	: Disabled	perpetual
Security Contexts	: 2	perpetual
GTP/GPRS	: Disabled	perpetual
AnyConnect Premium Peers	: 4	perpetual
AnyConnect Essentials	: Disabled	perpetual
Other VPN Peers	: 100	perpetual
Total VPN Peers	: 100	perpetual
Shared License	: Disabled	perpetual
AnyConnect for Mobile	: Disabled	perpetual
AnyConnect for Cisco VPN Phone	: Disabled	perpetual
Advanced Endpoint Assessment	: Disabled	perpetual
Total UC Proxy Sessions	: 320	perpetual
Botnet Traffic Filter	: Disabled	perpetual
Cluster	: Disabled	perpetual
VPN Load Balancing	: Enabled	perpetual

Encryption hardware device : Cisco ASA Crypto on-board accelerator (revision 0x1)

Cisco Adaptive Security Appliance Software Version 99.1(3)194

\*\*\*\*\* Warning \*\*\*\*\*

This product contains cryptographic features and is subject to United States and local country laws governing, import, export, transfer, and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute, or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return the enclosed items immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to [export@cisco.com](mailto:export@cisco.com).

\*\*\*\*\* Warning \*\*\*\*\*

... output omitted ...

Reading from flash...

!
Cryptochecksum (changed): 6129864f 6298b553 75f279ea e547792b

INFO: Power-On Self-Test in process.

.....

INFO: Power-On Self-Test complete.



INFO: Starting HW-DRBG health test...

INFO: HW-DRBG health test passed.

INFO: Starting SW-DRBG health test...

INFO: SW-DRBG health test passed.

Cisco ASA5508-X Threat Defense v6.0.0 (build 1005)

firepower login: **admin**

Password: <-- **Admin123**

**You must accept the EULA to continue.**

**Press <ENTER> to display the EULA:**

**... EULA is displayed - output is omitted**

END USER LICENSE AGREEMENT

**Please enter 'YES' or press to AGREE to the EULA:**

System initialization in progress. Please stand by.

You must change the password for 'admin' to continue.

Enter new password:

Confirm new password:

You must configure the network to continue.

You must configure at least one of IPv4 or IPv6.

**Do you want to configure IPv4? (y/n) [y]: Do you want to configure IPv6? (y/n) [n]:**

Configure IPv4 via DHCP or manually? (dhcp/manual) [manual]:

Enter an IPv4 address for the management interface [192.168.45.45]: **10.62.148.29**

Enter an IPv4 netmask for the management interface [255.255.255.0]: **255.255.255.128**

Enter the IPv4 default gateway for the management interface []: **10.62.148.1**

Enter a fully qualified hostname for this system [firepower]: **FTD5508**

Enter a comma-separated list of DNS servers or 'none' []: **173.38.200.100,144.254.71.184**

Enter a comma-separated list of search domains or 'none' []:

If your networking information has changed, you will need to reconnect.

For HTTP Proxy configuration, run 'configure network http-proxy'

**Configure firewall mode? (routed/transparent) [routed]:**

Configuring firewall mode ...

Update policy deployment information

- add device configuration

You can register the sensor to a Firepower Management Center and use the Firepower Management Center to manage it. Note that registering the sensor to a Firepower Management Center disables on-sensor Firepower Services management capabilities.

When registering the sensor to a Firepower Management Center, a unique alphanumeric registration key is always required. In most cases, to register a sensor to a Firepower Management Center, you must provide the hostname or the IP address along with the registration key.

'configure manager add [hostname | ip address ] [registration key ]'

However, if the sensor and the Firepower Management Center are separated by a NAT device, you must enter a unique NAT ID, along with the unique registration key.

'configure manager add DONTRESOLVE [registration key ] [ NAT ID ]'

Later, using the web interface on the Firepower Management Center, you must use the same registration key and, if necessary, the same NAT ID when you add this sensor to the Firepower Management Center.

>

**提示：**您能使用noconfirm选项配置镜像。在那种情况下您不在安装时得到提示。

```
firepower-boot>system install noconfirm ftp://10.229.22.42/ftd-6.0.0-1005.pkg
```

在FTD 6.1.x和在您上为管理模式(本地请得到提示与远程)。

For HTTP Proxy configuration, run 'configure network http-proxy'

```
Manage the device locally? (yes/no) [yes]: no
```

```
Configure firewall mode? (routed/transparent) [routed]:
```

本地传送方式=仅可适用在ASA55xx-X设备。您管理从Firepower设备管理器(FDM)的FTD。

远程模式=您管理从FMC的FTD

## 验证

```
> show version
```

```
-----[ FTD5508 ]-----  
Model : Cisco ASA5508-X Threat Defense (75) Version 6.0.0 (Build 1005)  
UUID : 8c3f4b7e-ea11-11e5-94f1-f3a55afb51a3  
Rules update version : 2015-10-01-001-vrt  
VDB version : 252  
-----
```

```
>
```

ASA5512/15/25/45/55的系统镜像安装是相同的如上所述。

## 任务5.寄存器对FMC的FTD

使用以下设置，注册FTD到FMC服务器：

主机	10.62.148.29
显示名称	FTD5508
注册密钥	cisco
组	无
访问控制策略	FTD5508
访问控制策略基础策略	无
访问控制策略默认操作	阻塞所有流量

## 解决方案

步骤1.On FTD指定FMC服务器：

```
> configure manager add 10.62.148.73 cisco
```

```
Manager successfully configured.
```

```
Please make note of reg_key as this will be required while adding Device in FMC.
```

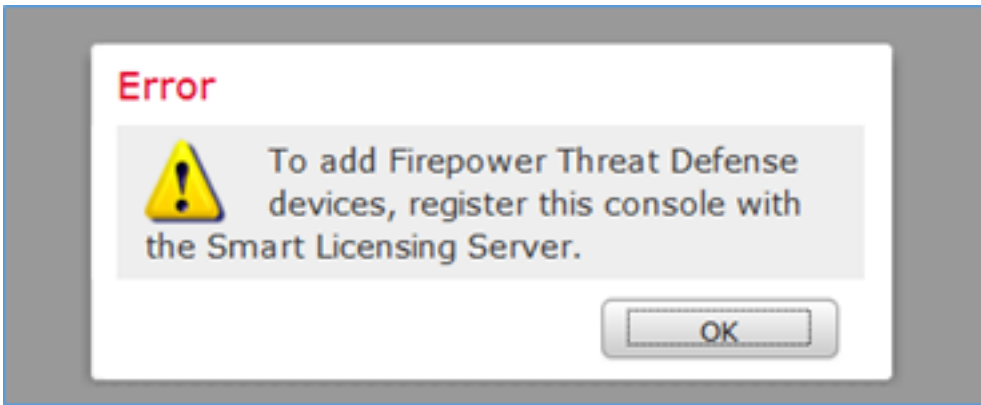
```
> show managers
```

```
Host : 10.62.148.73  
Registration Key : ****  
Registration : pending  
RPC Status :  
Type : Manager  
Host : 10.62.148.73  
Registration : Pending
```

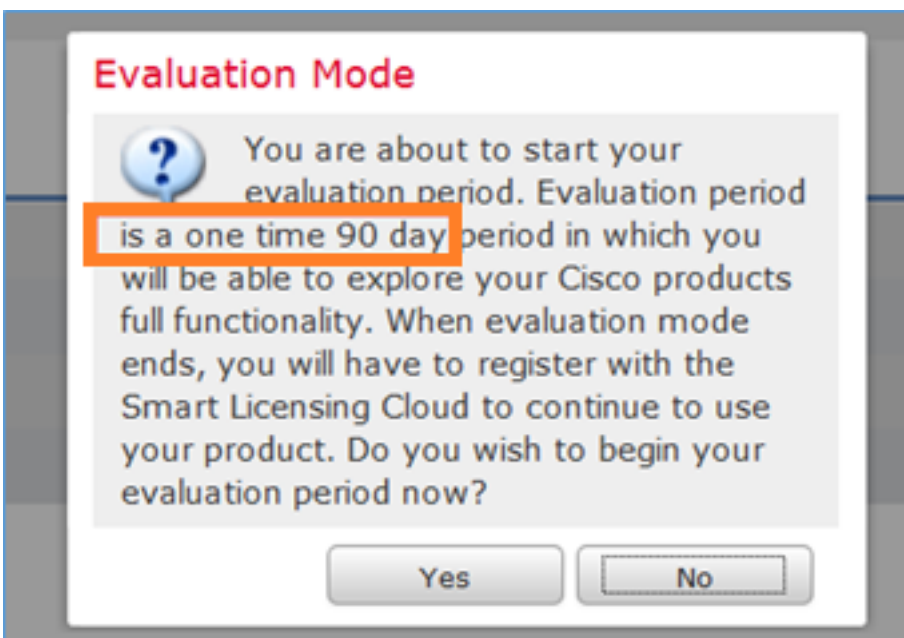
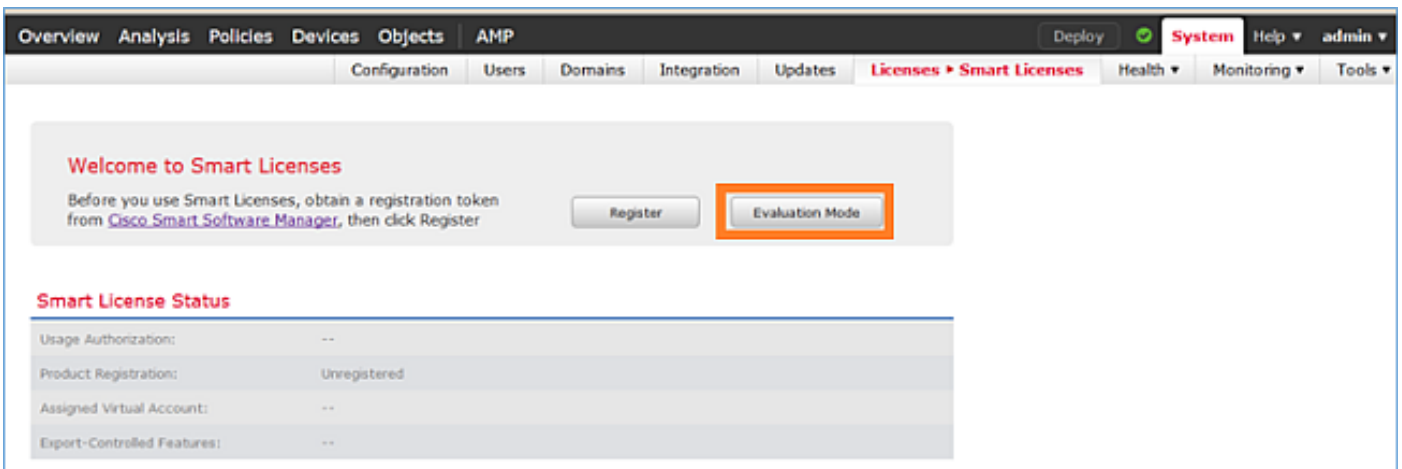
```
>
```

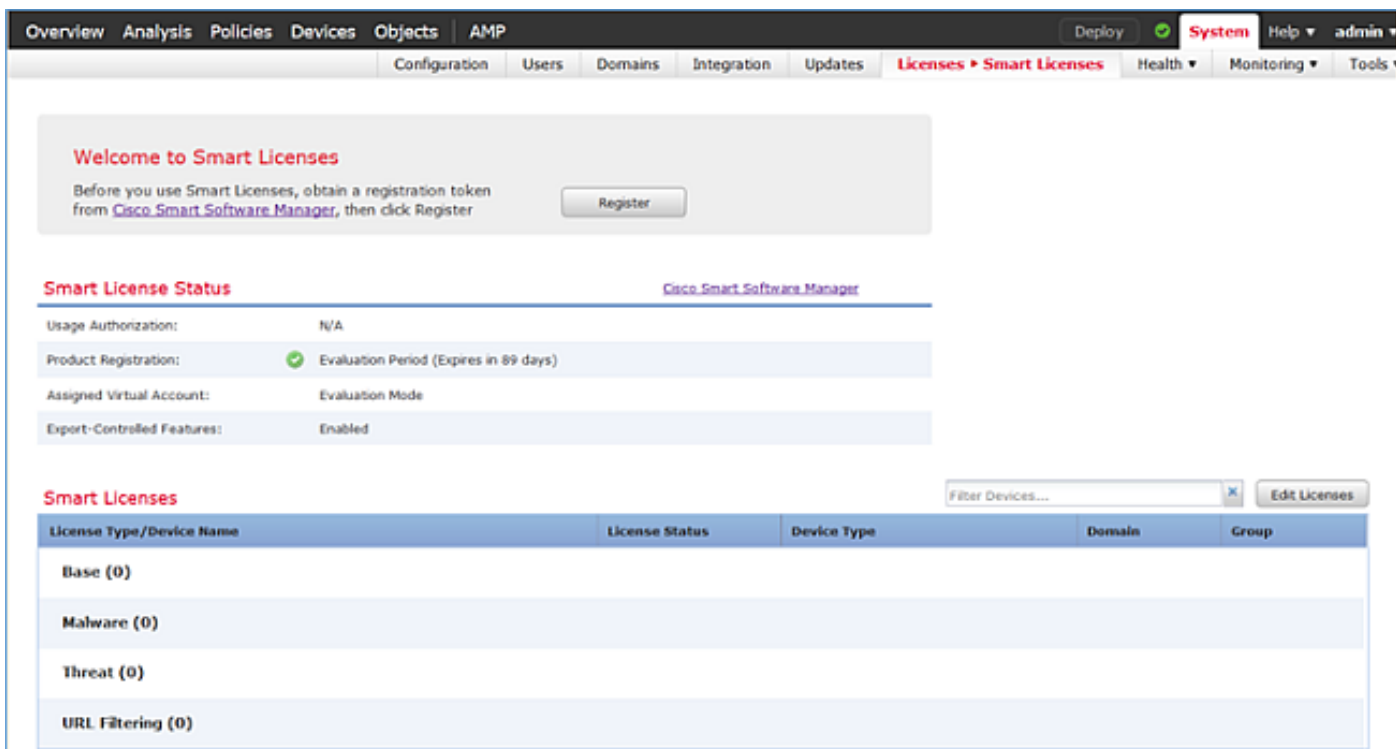
添加您需要注册FMC用巧妙的许可授权的服务器的FTD的步骤2.Before。如果尝试添加FTD设备

, 不用有一个聪明的许可证您收到以下错误 :

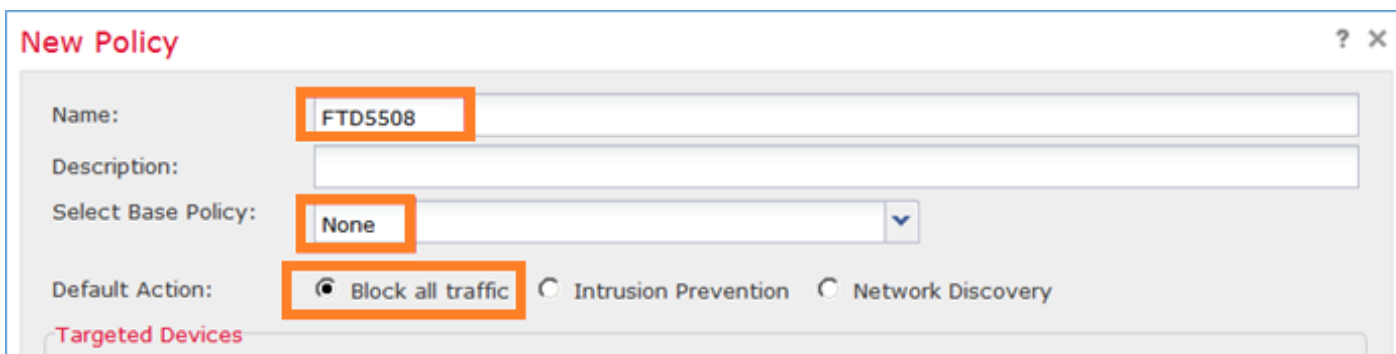
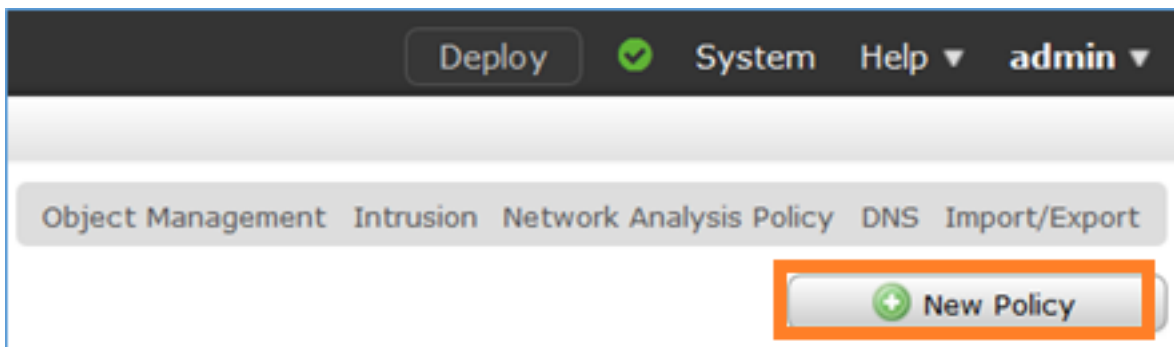
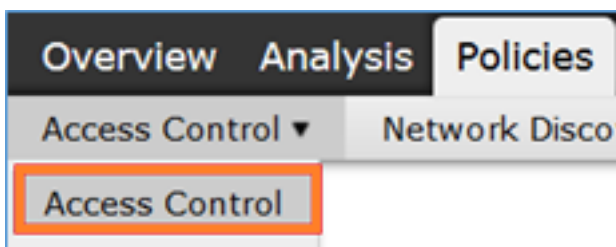


您能选择评估模式。这允许您使用FTD 90天，不用即要求强加密的功能(VPN)。

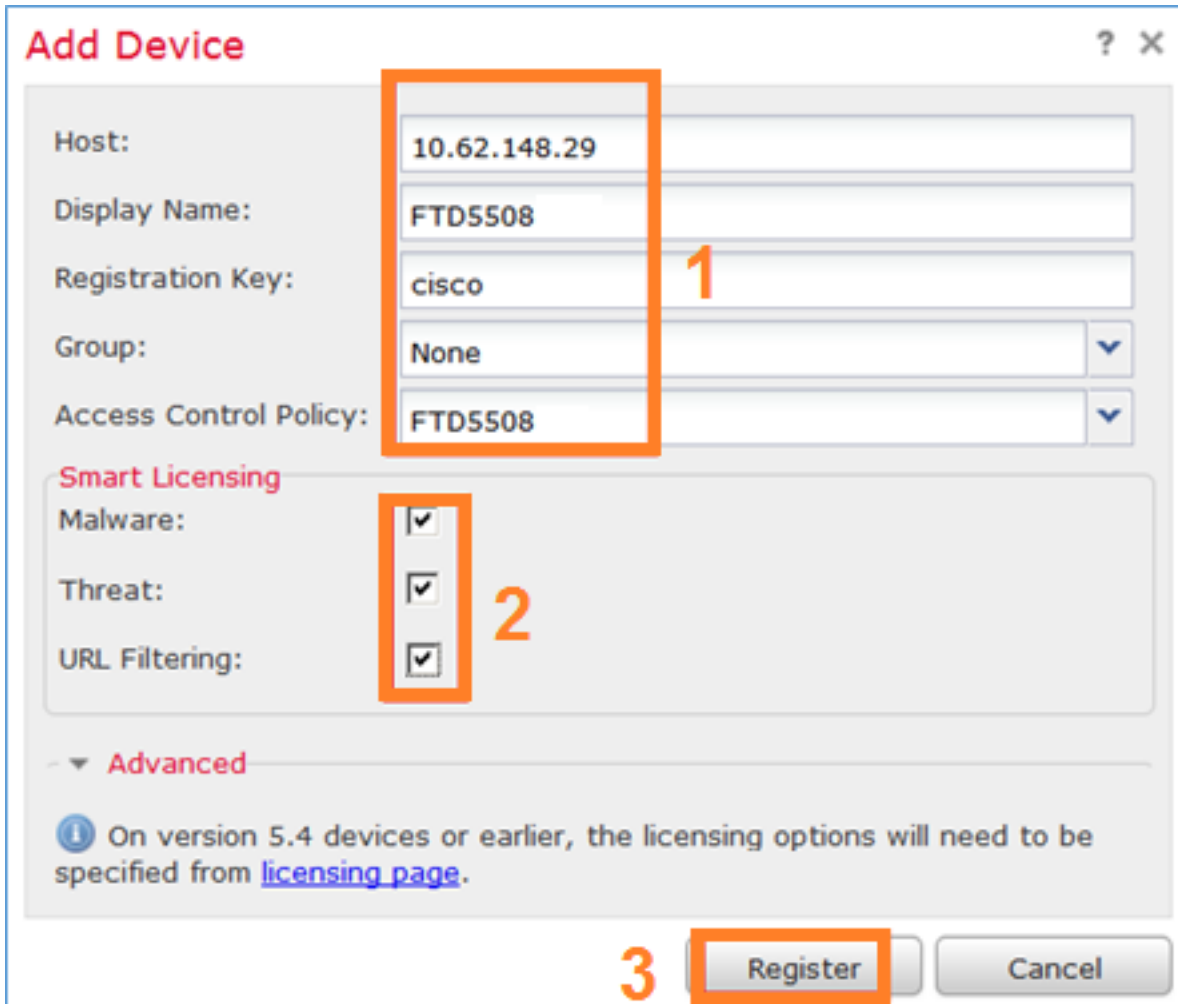
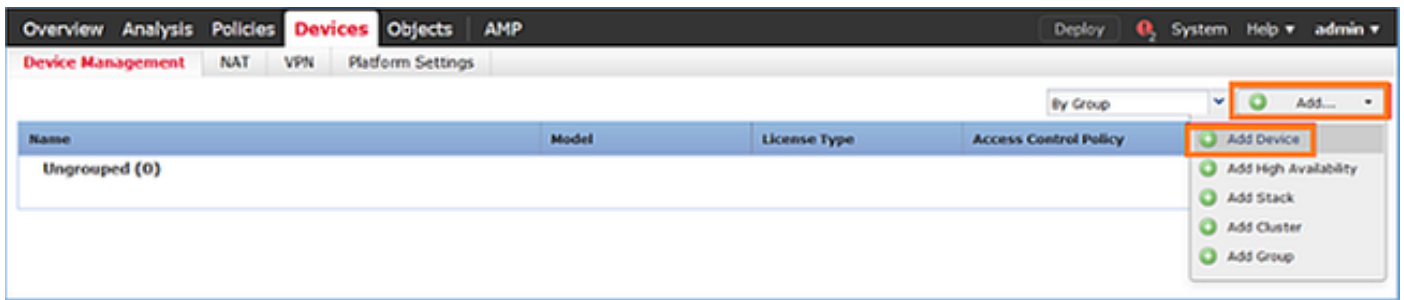




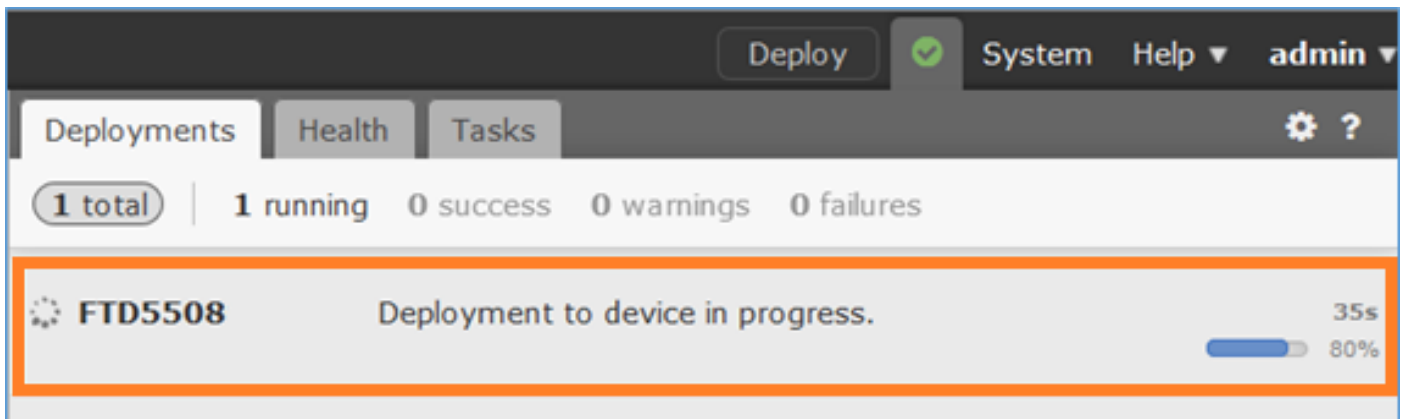
第三步：在FMC首先请创建将由FTD使用的访问控制策略。导航到**策略>访问控制**并且选择**新的策略**：



然后请添加FTD设备：



在FTD新增内容结束时策略被实施：



检查什么在背景发生，当添加在FMC和FTD时的FTD设备enable (event)猪尾。

在FMC：

```
admin@fs4k:~$ sudo pigtail
```

```
*****  
*****  
** Displaying logs: ACTQ HTTP DCSM VMSS MOJO NGFW NGUI VMSB TCAT DEPL MSGS USMS  
*****  
*****
```

在FTD :

```
> pigtail
```

```
*****  
** Displaying logs: HTTP ACTQ DCSM VMSS MOJO NGUI NGFW TCAT VMSB DEPL USMS MSGS  
*****
```

注意：如果FTD Managment接口状态发生故障请保证confreg值是0x1。

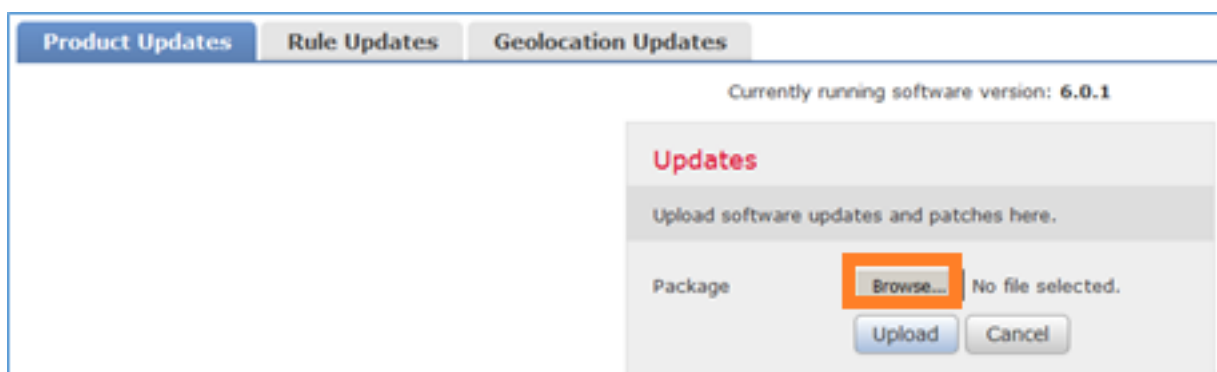
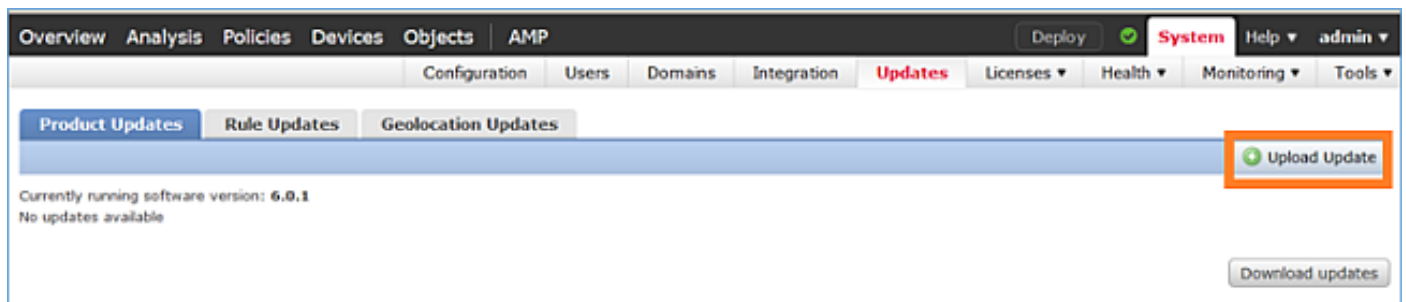
## 任务6.升级FTD

在从6.0.0的此任务升级FTD到6.0.1。

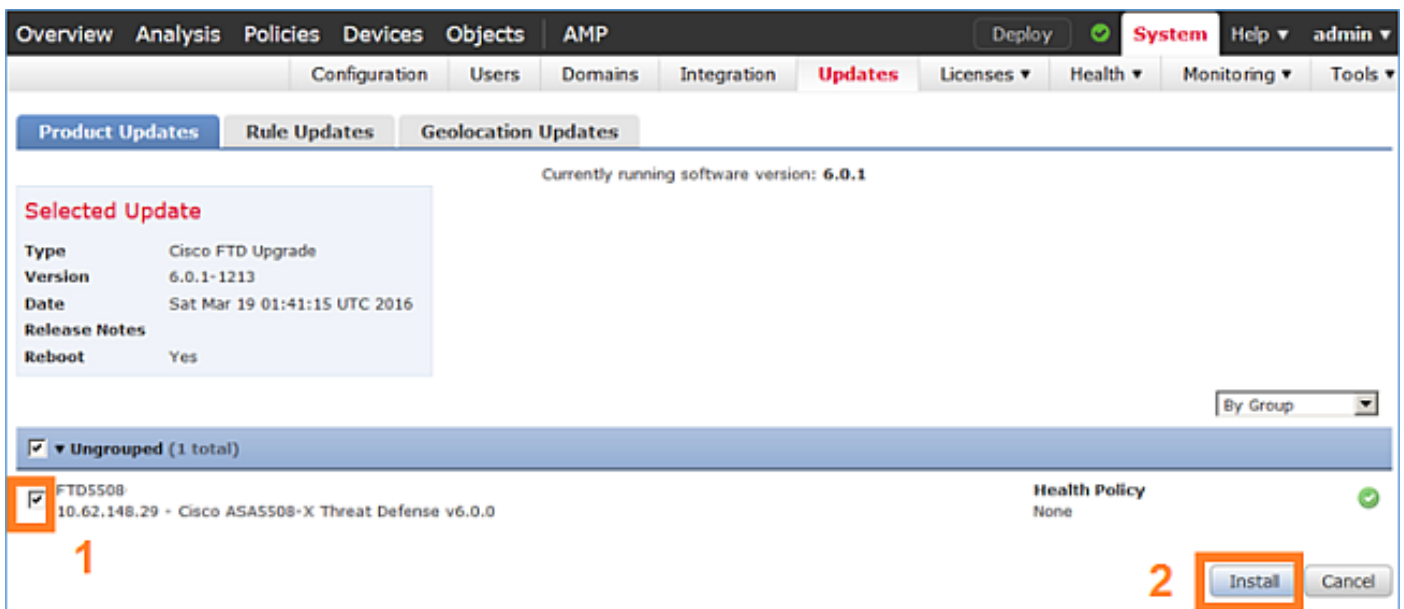
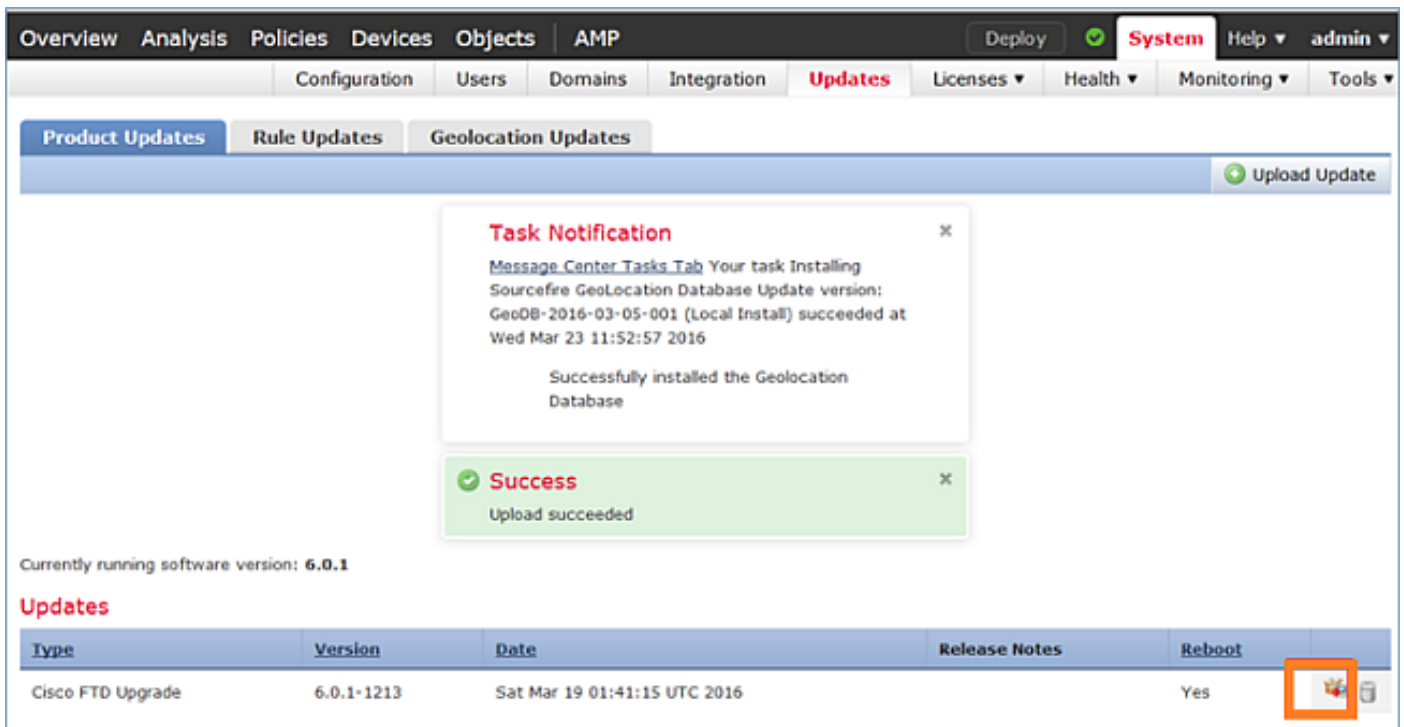
	version	文件名
最初的FTD镜像	版本6.0.0 (构建1005)	ftd-6.0.0-1005.pkg
目标FTD镜像	版本6.0.1 (构建1213)	Cisco_FTD_Upgrade-6.0.1-1213.sh

## 解决方案

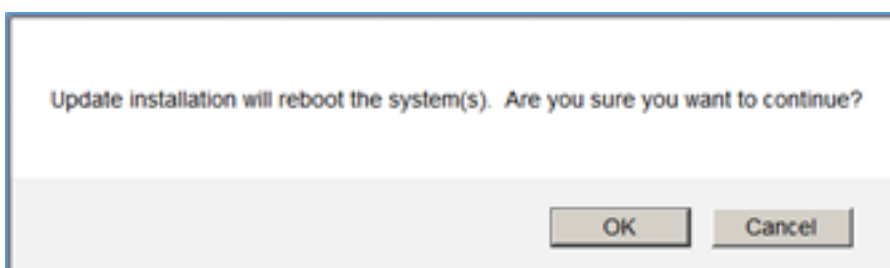
步骤1.上载FTD镜像到FMC :



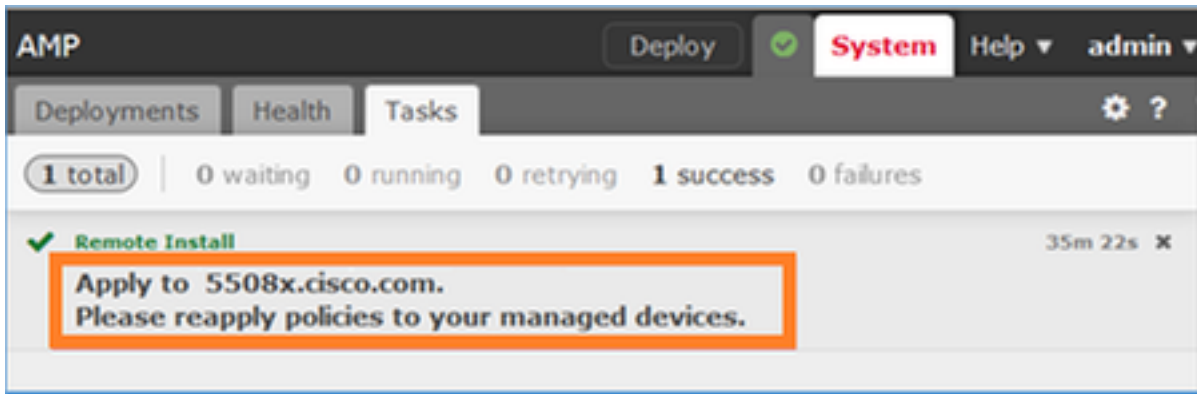
步骤2.配置FTD镜像 :



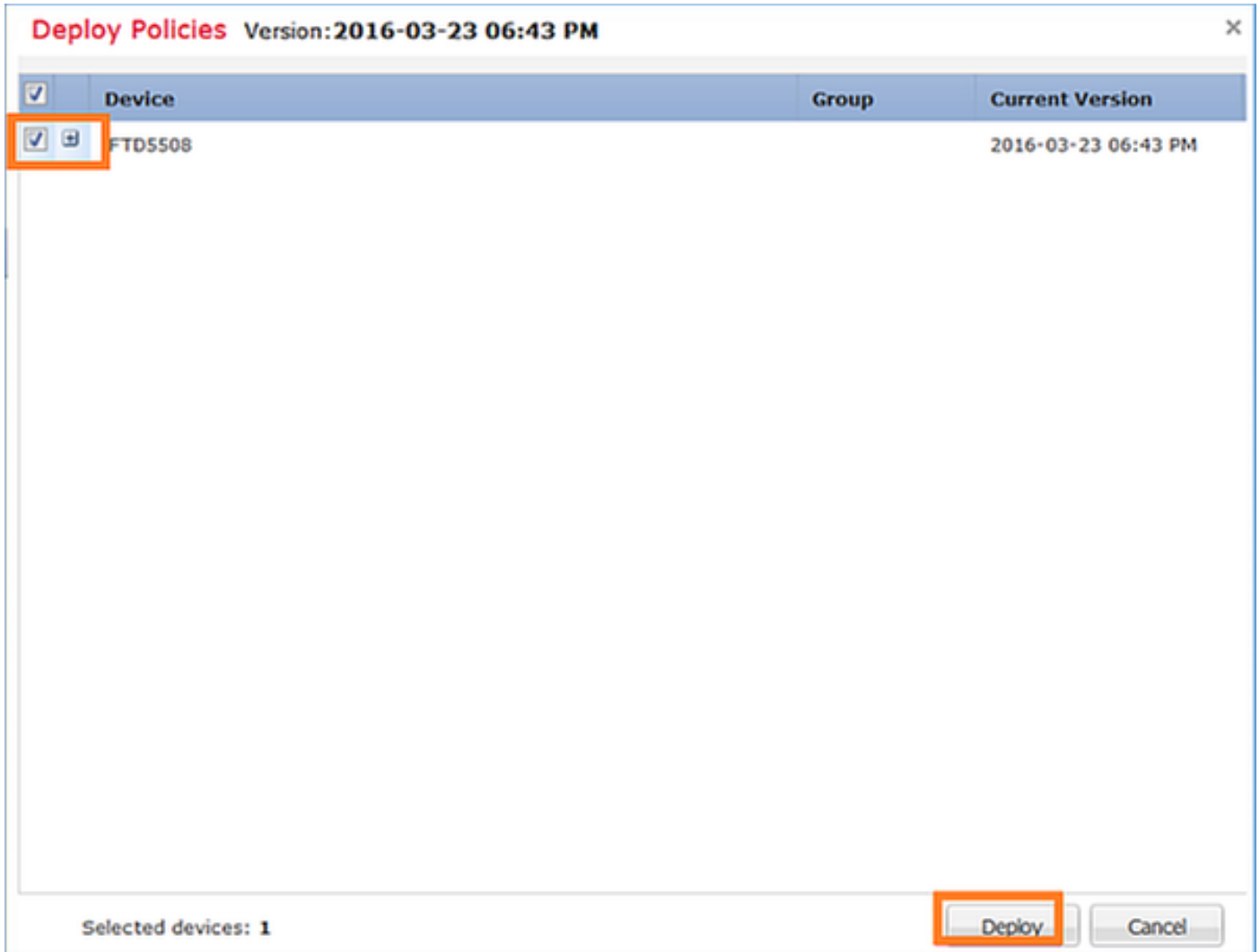
关于FTD重新加载的一警告显示：



升级在这种情况下花费了大约35分钟。因为它如下所示，有需要重新应用策略：



实施策略：



## 验证

在FTD升级以后：

```
> show version
-----[ FTD5508 ]-----
Model                : Cisco ASA5508-X Threat Defense (75) Version 6.0.1 (Build 1213)
UUID                 : 53b44806-f0f4-11e5-88cc-c72c24d24877
Rules update version : 2016-03-04-001-vrt
VDB version          : 259
-----
>
```



## 任务7.连接和从莉娜引擎CLI模式分开

输入到莉娜CLI模式，然后从它断开。

### 解决方案

从FTD CLISH模式类型以下命令：

```
> system support diagnostic-cli
Attaching to ASA console ... Press 'Ctrl+a then d' to detach.
Type help or '?' for a list of available commands.
```

```
firepower>
firepower> enable
Password: <-- by default empty (null)
firepower#
```

当在以上的消息被提及，断开连接(请分开)从FTD莉娜控制台类型CTRL+ a然后按d：

```
firepower# <- 'Ctrl+a then d' Console connection detached.
admin@FTD5508:~$
```

## 任务8.重新镜像现有FTD安装

### 需求

再镜像现有FTD镜像并且安装版本6.1.0-330

### 解决方案

此任务假设，有FTD设备运行代码6.0.1.x，并且为那里任何原因是需要再镜像它(即不可恢复的数据库损坏，不允许软件升级等)的灾难性缺陷。

### 概略的步骤

1. 兼容性校验。
2. 从FMC的撤消注册FTD。
3. 重新加载FTD设备并且输入BootCLI。
4. 运行设置向导。
5. 配置FTD系统镜像。
6. 注册FTD到FMC。

## 详细步骤

步骤1: 检查Firepower版本注释并且保证您要使用的FTD镜像是与FMC兼容。如果不是升级首先FMC。

步骤2.未注册(删除)从FMC的FTD。此步骤是需要的，因为，在其UUID更改并且不可能再后注册的FTD重新镜像，但是必须从临时被添加。

步骤3.重新加载FTD设备并且输入BootCLI。因为已经有一现有FTD镜像安装FTD启动镜像安装可以被跳过：

```
> reboot
This command will reboot the system. Continue?
Please enter 'YES' or 'NO': YES

Broadcast message: Stopping Cisco ASA5506-X Threat Defense.....ok
Shutting down sfisd... [ OK ]
Clearing static routes
Unconfiguring default route [ OK ]
Unconfiguring address on br1 [ OK ]
Unconfiguring IPv6 [ OK ]
Downing interface [ OK ]
Stopping nscd... [ OK ]
Stopping system log daemon... [ OK ]
Stopping Threat Defense ...
cp: cannot stat '/etc/ssh': No such file or directory
Stopping system message bus: dbus.
rmdir: failed to remove directory '/etc': Directory not empty [ OK ]
Un-mounting disk partitions ...

...
Device root is still in use.
mdadm: Cannot get exclusive access to /dev/md0:Perhaps a running process, mounted filesystem or
active volume group?
Stopping OpenBSD Secure Shell server: sshdstopped /usr/sbin/sshd (pid 4209)
.
Stopping Advanced Configuration and Power Interface daemon: stopped /usr/sbin/acpid (pid 4213)
acpid: exiting

acpid.
Stopping system message bus: dbus.
Deconfiguring network interfaces... ifdown: interface br1 not configured
done.
Sending all processes the TERM signal...
Sending all processes the KILL signal...
Deactivating swap...
Unmounting local filesystems...
Rebooting... y
Rom image verified correctly
```

Compiled Thu 06/18/2015 12:15:56.43 by builders

Current image running: Boot ROM0  
Last reset cause: PowerCycleRequest  
DIMM Slot 0 : Present

Platform ASA5506 with 4096 Mbytes of main memory  
MAC Address: 84:3d:c6:1a:cf:39

Use BREAK or ESC to interrupt boot.  
Use SPACE to begin boot immediately.

Located '.boot\_string' @ cluster 260275.

#  
Attempt autoboot: "boot disk0:"  
Located 'os.img' @ cluster 235457.

#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####  
#####

LFBFF signature verified.  
INIT: version 2.88 booting  
Starting udev  
Configuring network interfaces... done.  
Populating dev cache  
Detected PID ASA5506.  
Found device serial number JAD2034008E.  
Found USB flash drive /dev/sdb  
Found hard drive(s): /dev/sda  
fsck from util-linux 2.23.2  
dosfsck 2.11, 12 Mar 2005, FAT32, LFN  
/dev/sdb1: 42 files, 24805/1798467 clusters

=====  
**Use ESC to interrupt boot and launch boot CLI.**  
**Use SPACE to launch Cisco FTD immediately.**  
**Cisco FTD launch in 23 seconds ...** < Press ESC to enter BootCLI

Launching boot CLI ...  
Configuring network interface using DHCP  
Bringing up network interface.  
Depending on your network, this might take a couple of minutes when using DHCP...  
ifup: interface lo already configured  
Using IPv6 address: fe80::863d:c6ff:fe1a:cf38  
IPv4 address not assigned. Run 'setup' before installation.  
INIT: Starting system message bus: dbus.  
Starting OpenBSD Secure Shell server: sshd  
generating ssh RSA key...  
generating ssh ECDSA key...  
generating ssh DSA key...  
done.  
Starting Advanced Configuration and Power Interface daemon: acpid.

```
acpid: starting up
acpid: 1 rule loaded
acpid: waiting for events: event logging is off

Starting ntpd: done
Starting syslog-ng:[2017-01-14T11:20:33.699619] Connection failed; fd='15',
server='AF_INET(127.128.254.1:514)', local='AF_INET(0.0.0.0:0)', error='Network is unreachable
(101)'
[2017-01-14T11:20:33.699704] Initiating connection failed, reconnecting; time_reopen='60'
.
Starting crond: OK
```

```
        Cisco FTD Boot 6.0.0 (9.6.2.)
        Type ? for list of commands
firepower-boot>
```

#### 步骤4.Run设置向导和集基本网络参数：

```
firepower-boot>setup
```

```
        Welcome to Cisco FTD Setup
        [hit Ctrl-C to abort]
        Default values are inside []
```

```
Enter a hostname [firepower]: FTD5506
Do you want to configure IPv4 address on management interface?(y/n) [Y]: Y
Do you want to enable DHCP for IPv4 address assignment on management interface?(y/n) [Y]: n
Enter an IPv4 address: 10.48.66.83
Enter the netmask: 255.255.255.128
Enter the gateway: 10.48.66.1
Do you want to configure static IPv6 address on management interface?(y/n) [N]: N
Stateless autoconfiguration will be enabled for IPv6 addresses.
Enter the primary DNS server IP address: 192.168.0.1
Do you want to configure Secondary DNS Server? (y/n) [n]: n
Do you want to configure Local Domain Name? (y/n) [n]: n
Do you want to configure Search domains? (y/n) [n]: n
Do you want to enable the NTP service? [Y]: n
Please review the final configuration:
Hostname:                FTD5506
Management Interface Configuration

IPv4 Configuration:      static
    IP Address:          10.48.66.83
    Netmask:             255.255.255.128
    Gateway:             10.48.66.1

IPv6 Configuration:      Stateless autoconfiguration

DNS Configuration:
    DNS Server:          192.168.0.1

NTP configuration:       Disabled
```

#### CAUTION:

You have selected IPv6 stateless autoconfiguration, which assigns a global address based on network prefix and a device identifier. Although this address is unlikely to change, if it does change, the system will stop functioning correctly.

We suggest you use static addressing instead.

```
Apply the changes?(y,n) [Y]:      Y
Configuration saved successfully!
Applying...
Restarting network services...
Done.
Press ENTER to continue...
firepower-boot>
```

## 步骤5. Verify连接用(的服务器FTP , HTTP等)包含FTD系统镜像和开始安装 :

```
firepower-boot>ping 10.48.40.70
PING 10.48.40.70 (10.48.40.70) 56(84) bytes of data.
64 bytes from 10.48.40.70: icmp_seq=1 ttl=64 time=555 ms
64 bytes from 10.48.40.70: icmp_seq=2 ttl=64 time=0.465 ms
64 bytes from 10.48.40.70: icmp_seq=3 ttl=64 time=0.511 ms
--- 10.48.40.70 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2000ms
rtt min/avg/max/mdev = 0.465/185.466/555.424/261.599 ms

firepower-boot > system install noconfirm ftp://anonymous:cisco@10.48.40.70/ftd-6.1.0-330.pkg

##### WARNING #####
# The content of disk0: will be erased during installation! #
#####

Do you want to continue? [y/N] y
Erasing disk0 ...
Verifying
Downloading
Extracting
Package Detail
      Description:          Cisco ASA-FTD 6.1.0-330 System Install
      Requires reboot:      Yes

Warning: Please do not interrupt the process or turn off the system.
Doing so might leave system in unusable state.

Starting upgrade process ...
Populating new system image

... output omitted ...
Firstboot detected, executing scripts
Executing S01reset_failopen_if                [ OK ]
Executing S01virtual-machine-reconfigure      [ OK ]
Executing S02aws-pull-cfg                      [ OK ]
Executing S02configure_onbox                   [ OK ]
Executing S04fix-httpd.sh                      [ OK ]
Executing S05set-mgmt-port                     [ OK ]
Executing S06addusers                          [ OK ]
Executing S07uuid-init                         [ OK ]
Executing S08configure_mysql                   [ OK ]

***** Attention *****

      Initializing the configuration database. Depending on available
      system resources (CPU, memory, and disk), this may take 30 minutes
      or more to complete.

***** Attention *****
```

```
Executing S09database-init [ OK ]
Executing S11database-populate [ OK ]
Executing S12install_infodb [ OK ]
Executing S15set-locale.sh [ OK ]
Executing S16update-sensor.pl [ OK ]
Executing S19cert-tun-init [ OK ]
Executing S20cert-init [ OK ]
Executing S21disable_estreamer [ OK ]
Executing S25create_default_des.pl [ OK ]
Executing S30init_lights_out_mgmt.pl [ OK ]
Executing S40install_default_filters.pl [ OK ]
Executing S42install_default_dashboards.pl [ OK ]
Executing S43install_default_report_templates.pl [ OK ]
Executing S44install_default_app_filters.pl [ OK ]
Executing S45install_default_realms.pl [ OK ]
Executing S47install_default_sandbox_EO.pl [ OK ]
Executing S50install-remediation-modules [ OK ]
Executing S51install_health_policy.pl [ OK ]
Executing S52install_system_policy.pl [ OK ]
Executing S53change_reconciliation_baseline.pl [ OK ]
Executing S70remove_casuser.pl [ OK ]
Executing S70update_sensor_objects.sh [ OK ]
Executing S85patch_history-init [ OK ]
Executing S90banner-init [ OK ]
Executing S95copy-crontab [ OK ]
Executing S96grow_var.sh [ OK ]
Executing S96install_vmware_tools.pl [ OK ]
```

\*\*\*\*\* Attention \*\*\*\*\*

Initializing the system's localization settings. Depending on available system resources (CPU, memory, and disk), this may take 10 minutes or more to complete.

\*\*\*\*\* Attention \*\*\*\*\*

```
Executing S96localize-templates [ OK ]
Executing S96ovf-data.pl [ OK ]
Executing S97compress-client-resources [ OK ]
Executing S97create_platinum_forms.pl [ OK ]
Executing S97install_cas [ OK ]
Executing S97install_cloud_support.pl [ OK ]
Executing S97install_geolocation.pl [ OK ]
Executing S97install_ssl_inspection.pl [ OK ]
Executing S97update_modprobe.pl [ OK ]
Executing S98check-db-integrity.sh [ OK ]
Executing S98htaccess-init [ OK ]
Executing S98is-sru-finished.sh [ OK ]
Executing S99correct_ipmi.pl [ OK ]
Executing S99start-system [ OK ]
Executing S99z_db_restore [ OK ]
Executing S99_z_cc-integrity.sh [ OK ]
Firstboot scripts finished.
Configuring NTP... [ OK ]
fatattr: can't open '/mnt/disk0/.private2': No such file or directory
fatattr: can't open '/mnt/disk0/.ngfw': No such file or directory
Model reconfigure detected, executing scripts
Pinging mysql
Found mysql is running
Executing 45update-sensor.pl [ OK ]
Executing 55recalculate_arc.pl [ OK ]
Starting xinetd:
Sat Jan 14 12:07:35 UTC 2017
Starting MySQL...
```

```
Pinging mysql
Pinging mysql, try 1
Pinging mysql, try 2
Found mysql is running
Running initializeObjects...
Stopping MySQL...
Killing mysqld with pid 22354
Wait for mysqld to exit\c
done
Sat Jan 14 12:07:57 UTC 2017
Starting sfid... [ OK ]
Starting Cisco ASA5506-X Threat Defense, please wait...No PM running!
...started.
... output omitted ...
firepower login: admin
Password: < Admin123
You must accept the EULA to continue.
Press <ENTER> to display the EULA:
END USER LICENSE AGREEMENT

...

Please enter 'YES' or press <ENTER> to AGREE to the EULA:

System initialization in progress. Please stand by.
You must change the password for 'admin' to continue.
Enter new password:
Confirm new password:
You must configure the network to continue.
You must configure at least one of IPv4 or IPv6.
Do you want to configure IPv4? (y/n) [y]:
Do you want to configure IPv6? (y/n) [n]:
Configure IPv4 via DHCP or manually? (dhcp/manual) [manual]:
Enter an IPv4 address for the management interface [192.168.45.45]: 10.48.66.83
Enter an IPv4 netmask for the management interface [255.255.255.0]: 255.255.255.128
Enter the IPv4 default gateway for the management interface [192.168.45.1]: 10.48.66.1
Enter a fully qualified hostname for this system [firepower]: FTD5506
Enter a comma-separated list of DNS servers or 'none' []: 192.168.0.1
Enter a comma-separated list of search domains or 'none' []:
If your networking information has changed, you will need to reconnect.
For HTTP Proxy configuration, run 'configure network http-proxy'

Manage the device locally? (yes/no) [yes]: no
Configure firewall mode? (routed/transparent) [routed]:
Configuring firewall mode ...

Update policy deployment information
- add device configuration
- add network discovery
- add system policy

You can register the sensor to a Firepower Management Center and use the
Firepower Management Center to manage it. Note that registering the sensor
to a Firepower Management Center disables on-sensor Firepower Services
management capabilities.

When registering the sensor to a Firepower Management Center, a unique
alphanumeric registration key is always required. In most cases, to register
a sensor to a Firepower Management Center, you must provide the hostname or
the IP address along with the registration key.
'configure manager add [hostname | ip address ] [registration key ]'
```

```
However, if the sensor and the Firepower Management Center are separated by a
NAT device, you must enter a unique NAT ID, along with the unique registration
```

key.

```
'configure manager add DONTRESOLVE [registration key ] [ NAT ID ]'
```

Later, using the web interface on the Firepower Management Center, you must use the same registration key and, if necessary, the same NAT ID when you add this sensor to the Firepower Management Center.

## 步骤6.寄存器FTD到FMC里

```
> configure manager add 10.62.148.50 cisco
```

Manager successfully configured.

Please make note of reg\_key as this will be required while adding Device in FMC.

```
> show managers
```

```
Host                : 10.62.148.50
Registration Key     : ****
Registration         : pending
RPC Status          :
```

在FMC请导航对设备>设备管理为了添加FTD设备。

在添加FTD以后到FMC里您需要：

- 重新配置设备设置类似接口和路由
- 重新配置的策略类似VPN和QoS
- 重新应用以前已应用策略和设置类似访问控制策略、NAT和平台设置

## 相关信息

- [安装和升级指南](#)
- [再镜像思科ASA或Firepower威胁防御设备](#)
- [技术支持和文档 - Cisco Systems](#)