# Instalar e atualizar o Firepower Threat Defense em dispositivos ASA 55xx-X

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# Introduction

Este documento descreve os procedimentos de instalação, atualização e registro do Firepower Threat Defense (FTD) em dispositivos ASA55xx-X.

# Prerequisites

# Requirements

Não existem requisitos específicos para este documento.

# **Componentes Utilizados**

As informações neste documento são baseadas nestas versões de software e hardware:

- ASA5508-X
- ASA5512-X
- FireSIGHT Management Center (FMC) executando 6.0.1 (build 1213)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. Se a rede estiver ativa, certifique-se de que você entenda o impacto potencial de qualquer comando.

# Informações de Apoio

O FTD é uma imagem de software unificada que pode ser instalada nestas plataformas:

- ASA5506-X, ASA5506W-X, ASA5506H-X, ASA5508-X, ASA5516-X
- ASA5512-X, ASA5515-X, ASA5525-X, ASA5545-X, ASA5555-X
- FPR4100, FPR9300
- VMware (ESXi)
- Amazon Web Services (AWS)
- KVM
- Módulo de roteador ISR

O objetivo deste documento é demonstrar:

- A instalação do FTD versão 6.0.0 na plataforma ASA5508-X e ASA5512-X
- O procedimento de atualização do FTD da versão 6.0.0 para a 6.0.1
- Registro do Firepower Management Center (FMC) e licenciamento básico

# Configurar

# Diagrama de Rede



# Download do software FTD

Navegue até **Firewalls de próxima geração (NGFW) > ASA com FirePOWER Services > ASA** 5508-X com FirePOWER Services e selecione Firepower Threat Defense Software:



Da mesma forma para o software ASA5512-X.

### Tarefa 1. Verifique os pré-requisitos

Verifique os pré-requisitos antes da instalação do FTD.

Solução:

Para a instalação do FTD, você usa duas imagens:

- Imagem do SO (imagem de inicialização AKA) Para Firepower Threat Defense no ASA5506-X, ASA5506H-X, ASA5506W-X, ASA5508-X, ASA5516-X é um arquivo \*.lfbff. Para o Firepower Threat Defense on Saleen (ASA5512-X, ASA5515-X, ASA5525-X, ASA5545-X, ASA555-X) é um arquivo \*.cdisk.
- 2. Imagem do sistema Este é um arquivo .pkg.

Antes de prosseguir com a instalação do FTD, verifique o seguinte:

- A memória flash ASA deve ter pelo menos 3,1 GBytes (3 GBytes + tamanho da imagem de inicialização) de espaço livre
- A imagem de inicialização é carregada em um servidor TFTP
- A imagem do sistema é carregada em um servidor HTTP ou FTP
- NoASA5506/08/16, o ROMMON é pelo menos a versão 1.1.8

Verifique o espaço livre:

FTD5508X# **show flash | i free** 7859437568 bytes total (4273819648 bytes free) Verifique estas imagens:

Nome do arquivo	<b>Descrição</b>
ftd-boot-9.6.1.0.lfbff	Defense para 5506/5508/5516. Esta é a imagem de inicialização para a instalação limpa no 5506/5508/5516
ftd-boot-9.6.1.0.cdisk	v6.0.1 Imagem de inicialização do Firepower Threat Defense para ASA 5512/5515/5525/5545/5555. Esta é a imagem de inicialização para a instalação limpa no 5512/5515/5525/5545/5555
ftd-6.0.0-1005.pkg	Defesa contra ameaças Firepower v6.0.0 para todos os ASAs compatíveis:

## Tarefa 2. Atualize o ROMMON ASA5508-X

Como mencionado nos pré-requisitos, os dispositivos ASA5506-X, ASA5508-X e ASA5516-X devem estar no ROMMON v1.1.8. Caso contrário, instale o asa5500-firmware-1108.SPA (disponível na página de download do Cisco ASA).

Requisito da tarefa:

Atualize o ROMMON ASA5508 de 1.1.1 para 1.1.8.

Solução:

O procedimento é descrito no Guia de atualização do ROMMON do ASA.

Etapa 1. Verifique a versão ROMMON existente:

FTD55	508X# <b>show module</b>			
Mod	Card Type		Model	Serial No.
1	ASA 5508-X with FirePOWER service	s, 8GE, AC,	ASA5508	JAD192100SZ
sfr	FirePOWER Services Software Modul	е	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

Etapa 2.Baixe o firmware ROMMON no flash do ASA:

```
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-
Computed Hash SHA2: d824bdeecee1308fc64427367fa559e9
                    eefe8f182491652ee4c05e6e751f7a4f
                    5cdea28540cf60acde3ab9b65ff55a9f
                    4e0cfb84b9e2317a856580576612f4af
Embedded Hash
             SHA2: d824bdeecee1308fc64427367fa559e9
                    eefe8f182491652ee4c05e6e751f7a4f
                    5cdea28540cf60acde3ab9b65ff55a9f
                    4e0cfb84b9e2317a856580576612f4af
```

#### Digital signature successfully validated

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

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

#### Etapa 3. Atualize a imagem do ROMMON ASA:

#### FTD5508X# upgrade rommon disk0:asa5500-firmware-1108.SPA Verifying file integrity of disk0:/asa5500-firmware-1108.SPA

Computed	Hash	SHA2:	d824bdeecee1308fc64427367fa559e9
			eefe8f182491652ee4c05e6e751f7a4f
			5cdea28540cf60acde3ab9b65ff55a9f
			4e0cfb84b9e2317a856580576612f4af
Embedded	Hash	SHA2:	d824bdeecee1308fc64427367fa559e9
			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 'asa5500firmware-1108.SPA' @ cluster 856765.

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 ROMO Last reset cause: RP-Reset DIMM Slot 0 : Present DIMM Slot 1 : Present INFO: Rommon upgrade state: ROMMON\_UPG\_START (1) INFO: Reset code: 0x0000008 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 Use BREAK or ESC to interrupt boot. Use SPACE to begin boot immediately.

Located '.boot\_string' @ cluster 859024.

# Attempt autoboot: "boot disk0:/asa952-lfbff-k8.SPA" Located 'asa952-lfbff-k8.SPA' @ cluster 818273.

\*\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\*\* \*\*\*\* LFBFF signature verified. INIT: version 2.88 booting Starting udev Configuring network interfaces... done. Populating dev cache dosfsck 2.11, 12 Mar 2005, FAT32, LFN There are differences between boot sector and its backup. Differences: (offset:original/backup) 65:01/00 Not automatically fixing this. Starting check/repair pass. /csco\_config "." is missing. Can't fix this yet. /csco\_config "..." is missing. Can't fix this yet. Starting verification pass. /csco\_config "." is missing. Can't fix this yet. /csco\_config ".. " is missing. Can't fix this yet. /dev/sdb1: 182 files, 849380/1918808 clusters dosfsck(/dev/sdb1) returned 0 IO Memory Nodes: 1 IO Memory Per Node: 499122176 bytes Global Reserve Memory Per Node: 314572800 bytes Nodes=1 Processor memory 3807834603 LCMB: got 499122176 bytes on numa-id=0, phys=0x1b8000000, virt=0x2aaaaae00000 LCMB: HEAP-CACHE POOL got 314572800 bytes on numa-id=0, virt=0x2aaac8a00000

```
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

Rom-monitor was successfully upgraded.
```

•••

Verifique:

Você pode usar o comando show module para verificar a versão do software ROMMON:

FTD55 Passv	508X> <b>enable</b> vord:			
FTD55	508X# show module			
Mod 	Card Type		Model	Serial No.
1 sfr	ASA 5508-X with FirePOWER services FirePOWER Services Software Module	s, 8GE, AC, e	ASA5508 ASA5508	JAD192100SZ JAD192100SZ
Mod 	MAC Address Range	Hw Version	Fw Version	Sw Version
1 sfr	188b.9dle.ca7c to 188b.9dle.ca84 188b.9dle.ca7b to 188b.9dle.ca7b	1.0 N/A	<b>1.1.8</b> N/A	9.5(2) 5.4.1-211

## Tarefa 3. Instale a imagem de inicialização do FTD no ASA55xx-X

Requisito de tarefa:

Instale a imagem de inicialização FTD ftd-boot-9.6.1.0.lfbff no ASA5508-X.

Solução:

Há mais de um método para fazer isso. Aqui está o primeiro:

Método 1. Do ROMMON

Etapa 1. Recarregue o ASA e entre no modo ROMMON:

```
FTD5508X# reload

Proceed with reload? [confirm]

FTD5508X#

***

*** --- START GRACEFUL SHUTDOWN ---

Shutting down isakmp

Shutting down webvpn

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... 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. Boot interrupted.

rommon 1 >

#### Etapa 2. Definir configurações básicas de rede:

```
rommon 1 > ADDRESS=10.62.148.29
rommon 2 > SERVER=10.229.22.42
rommon 3 > GATEWAY=10.62.148.1
rommon 4 > IMAGE=ftd-boot-9.6.1.0.lfbff
rommon 5 > netmask 255.255.255.128
rommon 6 > ping 10.229.22.42
Sending 10, 32-byte ICMP Echoes to 10.229.22.42 timeout is 4 seconds
?!!!!!!!!!
Success rate is 90 percent (9/10)
rommon 7 > sync
rommon 8 > tftpdnld
         ADDRESS: 10.62.148.29
         NETMASK: 255.255.255.128
         GATEWAY: 10.62.148.1
         SERVER: 10.229.22.42
          IMAGE: ftd-boot-9.6.1.0.1fbff
         MACADDR: 18:8b:9d:1e:ca:7c
       VERBOSITY: Progress
          RETRY: 40
       PKTTIMEOUT: 7200
         BLKSIZE: 1460
        CHECKSUM: Yes
           PORT: GbE/1
         PHYMODE: Auto Detect
Receiving ftd-boot-9.6.1.0.1fbff from
10.229.22.42
```

!!!!!!!!!!!!!!!!!!!!!!!! .. output omitted .. File reception completed. Boot buffer bigbuf=348bd018 Boot image size = 100308208 (0x5fa94f0) bytes 100308208 [image size] 781dde41844d750f8c0db1cd1e1e164f [MD5 signaure] 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 Launching boot CLI ... Configuring network interface using static IP Bringing up network interface. Depending on your network, this might take a couple of minutes when using DHCP... 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>

No ASA5512/15/25/45/55, o procedimento é o mesmo com diferença apenas no nome da imagem de inicialização:

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

Método 2. Do modo ASA

Etapa 1. No modo exec do ASA (sem ROMMON), copie a imagem de inicialização do FTD na memória flash do ASA:

ciscoasa# copy ftp://10.48.40.70/ANG/mzafeiro/ftd-boot-9.6.1.0.1fbff flash Etapa 2. Exclua as imagens do ASA do disco:

ciscoasa# delete flash:asa\* O conteúdo da flash após a exclusão das imagens do ASA:

ciscoa	iscoasa# <b>show flash</b>					
#	length		date/t:	ime	path	
131	33	May 2	0 2016	09:27:28	.boot_string	
11	4096	Mar 0	3 2016	11:48:34	log	
154	16767	May 2	0 2016	09:23:48	log/asa-appagent.log	
155	465	Mar 0	3 2016	11:54:58	log/asa-ssp_ntp.log	
21	4096	Jun 1	0 2015	06:45:42	crypto_archive	
22	4096	Jun 1	0 2015	06:46:00	coredumpinfo	
23	59	Jun 1	0 2015	06:46:00	coredumpinfo/coredump.cfg	
134	25627616	Dec 0	1 2015	04:01:58	asdm-752.bin	
135	52563	Feb 0	9 2016	02:49:58	system.cfg	
136	25028660	Feb 0	9 2016	02:50:28	asdm-751-112.bin	
137	38409858	Feb 0	9 2016	02:51:14	anyconnect-win-3.1.10010-k9.pkg	
138	25629676	Feb 0	9 2016	04:38:10	asdm-752-153.bin	

151 100308208 May 20 2016 09:39:57 ftd-boot-9.6.1.0.1fbff <--

Etapa 3.Recarregue o ASA. Ele é inicializado a partir da imagem de inicialização FTD:

firepower-boot>

### Tarefa 4. Instale a imagem do sistema FTD no ASA55xx-X

Instale a imagem do sistema FTD no ASA5508-X.

#### Solução

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
CAUTTON:
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>
Verifique a conectividade com o servidor FTP:
```

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 Instale o pacote do sistema:

firepower-boot> ping 10.229.22.42

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

 Do you want to continue? [y/N]  ${\boldsymbol{y}}$ 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 successed Flushing all current IPv6 rules and user defined chains: ...success Clearing all current IPv6 rules and user defined chains: ...success Applying ip6tables 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 successed 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 ] [ OK ] Executing S04fix-httpd.sh Executing S05set-mgmnt-port [ OK 1 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 \*\*\*\*\*\*\*\*

S10database	[	OK	]
S12install_infodb	[	OK	]
S15set-locale.sh	[	OK	]
S16update-sensor.pl	[	OK	]
S19cert-tun-init	[	OK	]
S20cert-init	[	OK	]
S21disable_estreamer	[	OK	]
S25create_default_des.pl	[	OK	]
S30init_lights_out_mgmt.pl	[	OK	]
S40install_default_filters.pl	[	OK	]
S42install_default_dashboards.pl	[	OK	]
S43install_default_report_templates.pl	[	OK	]
S44install_default_app_filters.pl	[	OK	]
S45install_default_realms.pl	[	OK	]
S47install_default_sandbox_E0.pl	[	OK	]
S50install-remediation-modules	[	OK	]
S51install_health_policy.pl	[	OK	]
S52install_system_policy.pl	[	OK	]
S53change_reconciliation_baseline.pl	[	OK	]
S70update_sensor_objects.sh	[	OK	]
S85patch_history-init	[	OK	]
S90banner-init	[	OK	]
S95copy-crontab	[	OK	]
S96grow_var.sh	[	OK	]
	S10database S12install_infodb S15set-locale.sh S16update-sensor.pl S19cert-tun-init S20cert-init S21disable_estreamer S25create_default_des.pl S30init_lights_out_mgmt.pl S40install_default_filters.pl S42install_default_dashboards.pl S43install_default_report_templates.pl S44install_default_realms.pl S45install_default_realms.pl S47install_default_sandbox_E0.pl S50install-remediation-modules S51install_health_policy.pl S52install_system_policy.pl S52cinstall_system_policy.pl S70update_sensor_objects.sh S85patch_history-init S90banner-init S95copy-crontab S96grow_var.sh	S10database[S12install_infodb[S15set-locale.sh[S16update-sensor.pl[S19cert-tun-init[S20cert-init[S21disable_estreamer[S25create_default_des.pl[S30init_lights_out_mgmt.pl[S40install_default_filters.pl[S42install_default_report_templates.pl[S43install_default_realms.pl[S45install_default_realms.pl[S47install_default_sandbox_E0.pl[S50install-remediation-modules[S51install_health_policy.pl[S70update_sensor_objects.sh[S85patch_history-init[S96grow_var.sh[	S10database[OKS12install_infodb[OKS15set-locale.sh[OKS16update-sensor.pl[OKS19cert-tun-init[OKS20cert-init[OKS21disable_estreamer[OKS25create_default_des.pl[OKS30init_lights_out_mgmt.pl[OKS40install_default_filters.pl[OKS42install_default_report_templates.pl[OKS43install_default_realms.pl[OKS45install_default_realms.pl[OKS47install_default_realms.pl[OKS50install-remediation-modules[OKS51install_health_policy.pl[OKS52install_system_policy.pl[OKS70update_sensor_objects.sh[OKS90banner-init[OKS96grow_var.sh[OKS96grow_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 [						
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 [ (						
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	Mon Mar 14 18:28:11 UTC 2016					
Starting MySQL						
Pinging mysql						
inging mysql, try 1						
'ound 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 sfifd ... [ 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.9dle.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 @ index 12 MAC: 0000.0000.0000 en\_vtun rev00 Backplane Ext-Mgmt Interface 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. The Running Activation Key is not valid, using default settings: Licensed features for this platform: Maximum Physical Interfaces : Unlimited perpetual : 50 perpetual : Unlimited perpetual Maximum VLANs Inside Hosts Failover : Active/Active perpetual Encryption-DES : Enabled perpetual Encryption-3DES-AES : Disabled perpetual : 2 Security Contexts perpetual perpetual : Disabled GTP/GPRS AnyConnect Premium Peers perpetual : 4 : Disabled AnyConnect Essentials perpetual Other VPN Peers : 100 perpetual Total VPN Peers : 100 perpetual

: Disabled

: Disabled

AnyConnect for Cisco VPN Phone : Disabled

perpetual

perpetual

perpetual

Shared License

AnyConnect for Mobile

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

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. ... 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 <-- Admin123 Password: You must accept the EULA to continue. Press

#### ... 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.

**Tip**: Você pode usar a opção **noconfirm** para instalar a imagem. Nesse caso, você não será avisado durante a instalação.

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

No FTD 6.1.x ou superior, você é solicitado a fornecer o modo de gerenciamento (local ou remoto).

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

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

Modo local = Aplicável somente em dispositivos ASA55xx-X. Você gerencia o FTD do Firepower Device Manager (FDM).

Modo remoto = Você gerencia o FTD do FMC

## Verificação

> show version	
[ E	'TD5508 ]
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

>

A instalação da imagem do sistema no ASA5512/15/25/45/55 é a mesma acima.

## Tarefa 5. Registrar o FTD no FMC

Registrar FTD no servidor FMC usando as seguintes configurações:

Host	10.62.148.29
Nome de exibição	FTD5508
Chave de registro	cisco
Grupo Nenhum	
Política de controle de acesso	FTD5508
Política básica de controle de acesso	Nenhum
Ação padrão da política de controle de acesso	Bloquear todo o tráfego

Solução

Etapa 1.No FTD, especifique o servidor FMC:

> <b>configure manager add 10.62.148.73 cisco</b> Manager successfully configured.					
Please make note of reg_key as this will be required while adding Device in FMC.					
> show managers					
Host	: 1	10.62.148.73			
Registration Key	: *	* * * *			
Registration	: <b>r</b>	pending			
RPC Status	:				
Туре	: 1	Manager			
Host	: 1	10.62.148.73			
Registration	: I	Pending			

>

Etapa 2.Antes de adicionar o FTD, você precisa registrar o FMC no Smart Licensing Server. Se você tentar adicionar um dispositivo FTD sem ter uma Smart License, obterá o seguinte erro:



Você pode escolher o Modo de Avaliação. Isso permite que você use o FTD por 90 dias sem recursos que exigem criptografia forte (por exemplo, VPN).

Overview	Analysis	Policies	Devices	Objects	AMP					Deplo	/ O s	ystem Help 🔻	admin v
			0	Configuration	Users	Domains	Integration	Updates	Licenses + :	Smart Licenses	Health •	Monitoring •	Tools •
Wel Befo from	Icome to S re you use Si Gisco Smart License Sta	Smart Licens mart Licens L Software I	censes es, obtain a Manager, th	a registration t en click Regis	token ter	Regis	iter	Evaluation Mode					
Usage Au	thorization:												
Product R	tegistration:		Unreg	istered									
Assigned	Virtual Account	it:											
Export-Co	ontrolled Featu	rest											

Evaluation Mode						
You are about to start your evaluation period. Evaluation period						
is a one time 90 day period in which you will be able to explore your Cisco products full functionality. When evaluation mode ends, you will have to register with the Smart Licensing Cloud to continue to use your product. Do you wish to begin your evaluation period now?						
Yes						

Overview Analysis Policies De	evices Objects AM	P		De	ploy O System	n Help 🔻 admin 🔻
	Configuration	Users Domains	Integration Upda	tes Licenses + Smart License	5 Health • M	Ionitoring • Tools
Welcome to Smart Licen: Before you use Smart Licenses, o from <u>Cisco Smart Software Mana</u>	Ses obtain a registration token 1ger, then click Register	Register				
Smart License Status		1	Sisco Smart Software Mana	pit		
Usage Authorization:	N/A					
Product Registration:	Evaluation Period (Expires in	89 days)				
Assigned Virtual Account:	Evaluation Mode					
Export-Controlled Features:	Enabled					
Smart Licenses				Filter Devices	×	Edit Licenses
License Type/Device Name		License	Status Device	Туре 1	Jomain G	roup
Base (0)						
Mahware (0)						
Threat (0)						
URL Filtering (0)						

Etapa 3. No FMC, primeiro crie a política de controle de acesso que será usada pelo FTD. Navegue até **Políticas > Controle de acesso** e selecione **Nova política**:

Overview A	Analysis Policies	
Access Contro	I   Network Disco	
Access Contro	1	
	Deploy 🤗 System Help 🔻 admin 🔻	
Object Managem	nent Intrusion Network Analysis Policy DNS Import/Export	
	New Policy	
New Policy		? ×
Name:	FTD5508	
Description:		
Select Base Policy:	None	
Default Action:	Block all traffic     O Intrusion Prevention     O Network Discovery	
Targeted Devices		

Em seguida, adicione o dispositivo FTD:

Overview Analysis	Policies Devices Obje	cts AMP		Deploy 0, S	iystem Help 🔻 admin 🔻
Device Management	NAT VPN Platform Se	ettings			
				By Group	▼ O Add •
Name		Model	License Type	Access Control Policy	Add Device
Ungrouped (0)					<ul> <li>Add High Availability</li> <li>Add Stack</li> </ul>
					<ul> <li>Add Cluster</li> <li>Add Group</li> </ul>

Add Device			?	×					
Host:	10.62.148.29								
Display Name:	FTD5508								
Registration Key:	cisco	1							
Group:	None		~						
Access Control Policy:	FTD5508		~						
Access Control Policy: FTD5508 Smart Licensing Malware: Threat: URL Filtering: Advanced									
On version 5.4 devices specified from licensing	On version 5.4 devices or earlier, the licensing options will need to be specified from <u>licensing page</u> .								
	3	Register Cano	el						

No final do FTD, uma política é implantada:



Para verificar o que está acontecendo em segundo plano, ao adicionar o dispositivo FTD, habilite o **pigtail** no FMC e no FTD.

No FMC:

No FTD:

> pigtail

**Note**: Se o status da interface de gerenciamento FTD estiver inoperante, certifique-se de que o valor de confreg seja 0x1.

## Tarefa 6. Atualizar o FTD

Nesta tarefa, atualize o FTD de 6.0.0 para 6.0.1.

	Versão	Nome do arquivo
imagem de FTD inicial	Versão 6.0.0 (Build 1005)	ftd-6.0.0-1005.pkg
imagem FTD de destino	Versão 6.0.1 (Build 1213)	Cisco_FTD_Upgrade-6.0.1-1213.sh

### Solução

Etapa 1. Carregue a imagem FTD no FMC:



Product Updates	Rule Updates	Geolocation Updates	
		Cu	rrently running software version: 6.0.1
		Updates	1
		Upload sof	tware updates and patches here.
		Package	Browse No file selected.

# Etapa 2. Instale a imagem FTD:

Overview	Analysis	Policies	Devices	Objects	AMP			Dep	loy 🛛 🛇	System	Help 🔻	admin 🔻
		Conf	iguration	Users	Domains	Integration	Updates	Licenses v	• Healt	h▼ Mo	nitoring 🔻	Tools •
Product (	Jpdates	Rule Upd	lates (	Geolocation	Updates							
											🔾 Uploa	d Update
				Task Messa Source GeoB Wed M	Notificati a Center Ta: fre GeoLoca 2016-03-05- ar 23 11:52: Successfully Database	ON <u>sks Tab</u> Your task tion Database Upo 001 (Local Install 57 2016 installed the Geo	Installing late version: ) succeeded at location	×				
			Succ Upload	ess succeeded			×					
Currently runn	ing software	version: 6.0.	1									
Updates												
Туре		Ve	rsion	Date				Release N	iotes	Re	boot	
Cisco FTD U	pgrade	6.0	.1-1213	Sat M	ar 19 01:41:1	15 UTC 2016				Yes	1	<b>1</b>

Overview	Analysis	Policies	Devices	Objects	AMP			Deploy	0	System	Help 🔻	admin 🔻
		C	onfiguration	Users	Domains	Integration	Updates	Licenses <b>v</b>	Health	<ul> <li>Mor</li> </ul>	nitoring 🔻	Tools •
Product (	Updates	Rule Upd	lates G	Geolocation	Updates							
					Currently run	ning software versi	on: 6.0.1					
Selected	Update											
Type Version Date Release Not Reboot	Cisco F1 6.0.1-1: Sat Mar tes Yes	TD Upgrade 213 · 19 01:41:15	UTC 2016								By Group	
🔽 🔻 Ungro	uped (1 total	)										
FTD5508 10.62.14	8.29 - Cisco /	ASA5508-X T	hreat Defens	e v6.0.0				He	alth Poli 10	cy		٢
1										2	Install	Cancel

Um aviso sobre a recarga do FTD é mostrado:

Update installation will reboot the system(s).	Are you sure you want to continue?
	OK Cancel

A atualização neste caso levou cerca de 35 minutos. Como mostrado abaixo, é necessário reaplicar a política:

AMP				Deploy	۲	System	Help 🔻	adm	in v
Deployments	Health	Tasks						٠	?
1 total 0	waiting (	running	0 retrying	1 succes	ss	0 failures			
✓ Remote Inst	511				_		35	m 22s	×
Apply to S Please rea									
Apply to S Please rea	5508x.cisc	o.com. es to you	ır managed	devices.			35	m 22s	>

## Implante as políticas:

Deploy Policies Version: 2016-03-23 06:43 PM						
	Device	Group	Current Version			
<b>V</b> (	B FTD5508		2016-03-23 06:43 PM			
	Selected devices: 1		Deploy Cancel			

Verificação

>

## Tarefa 7. Conectar e remover do modo CLI do mecanismo LINA

Entre no modo CLI do LINA e desconecte-se dele.

### Solução

No modo FTD CLISH, digite o seguinte comando:

> 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#</pre>

Como mencionado na mensagem acima, para desconectar (desconectar) do console do LINA do FTD, digite CTRL + a e pressione d:

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

### Tarefa 8. Recriar uma instalação FTD existente

Requisito

Recrie a imagem FTD existente e instale a versão 6.1.0-330

### Solução

Esta tarefa pressupõe que há um dispositivo FTD executando o código 6.0.1.x e por quaisquer motivos que sejam necessários para recriá-lo (por exemplo, corrupção irrecuperável do banco de dados, defeito catastrófico que não permite atualização de software, etc.).

### Resumo das etapas

- 1. Verificação de compatibilidade.
- 2. Cancele o registro do FTD da FMC.
- 3. Recarregue o dispositivo FTD e digite BootCLI.
- 4. Execute o assistente de configuração.
- 5. Instale a imagem do sistema FTD.
- 6. Registre o FTD no FMC.

### Etapas detalhadas

Etapa 1. Verifique as notas de versão do Firepower e certifique-se de que a imagem FTD que você deseja usar seja compatível com o FMC. Se não atualizar o FMC primeiro.

Etapa 2. Cancelar registro (excluir) do FTD da FMC. Essa etapa é necessária, pois após a recriação do FTD, seu UUID é alterado e não pode ser registrado novamente, mas precisa ser adicionado do zero.

Etapa 3. Recarregue o dispositivo FTD e digite BootCLI. Como já existe uma imagem FTD instalada, a instalação da imagem de inicialização FTD pode ser ignorada:

> reboot			
This command will reboot the system. Continue?			
Please enter 'YES' or 'NO': <b>YES</b>			
Prosdesst moccaeStopping Cisco ASA5506_V Throat Defense			
Chutching down afield	r	OV	1
Shutting down stild	L	OK	1
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... 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 ROMO 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>

#### Etapa 4. Execute o assistente de configuração e defina os parâmetros básicos de rede:

```
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

-	conriguración.	blucic	
	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>
```

**Etapa 5.**Verifique a conectividade com o servidor (FTP, HTTP etc.) que contém a imagem do sistema FTD e inicie a instalação:

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

Do you want to continue? [y/N] **y** Erasing disk0 ... Verifying Downloading Extracting Package Detail Cisco ASA-FTD 6.1.0-330 System Install Description: 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 [ OK ] Executing S01reset\_failopen\_if [ OK ] Executing S01virtual-machine-reconfigure Executing S02aws-pull-cfg [ OK 1 Executing S02configure\_onbox [ OK ] [ OK ] Executing S04fix-httpd.sh Executing S05set-mgmnt-port [ OK ] Executing S06addusers [ OK ] Executing S07uuid-init [ OK ] [ OK ] Executing S08configure\_mysql \*\*\*\*\*\*\*\*\*\* Attention \*\*\*\*\*\*\*\* Initializing the configuration database. Depending on available system resources (CPU, memory, and disk), this may take 30 minutes or more to complete. \*\*\*\*\*\*\*\*\* Attention \*\*\*\*\*\*\*\* [ OK ] Executing S09database-init 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 1 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 Γ OK 1 Executing S45install\_default\_realms.pl [ OK 1 Executing S47install\_default\_sandbox\_E0.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 1 [ OK ] Executing S70update\_sensor\_objects.sh Executing S85patch\_history-init [ OK ] Executing S90banner-init [ OK ] Executing S95copy-crontab [ OK ] [ OK ] Executing S96grow\_var.sh [ OK ] Executing S96install\_vmware\_tools.pl

\*\*\*\*\*\*\*\* 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 \*\*\*\*\*\*\*\*\* [ OK ] Executing S96localize-templates 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 1 [ OK ] Executing S97install\_ssl\_inspection.pl Executing S97update\_modprobe.pl [ OK ] Executing S98check-db-integrity.sh [ OK ] Executing S98htaccess-init [ OK ] [ OK ] Executing S98is-sru-finished.sh Executing S99correct\_ipmi.pl [ OK ] Executing S99start-system Γ OK 1 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 ] [ OK ] Executing 55recalculate\_arc.pl Starting xinetd: Sat Jan 14 12:07:35 UTC 2017 Starting MySQL... Pinging mysgl Pinging mysql, try 1 Pinging mysql, try 2 Found mysql is running Running initializeObjects... Stopping MySQL... Killing mysqld with pid 22354 Wait for mysgld to exit\c done Sat Jan 14 12:07:57 UTC 2017 Starting sfifd... [ 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]: 255.255.128 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.

#### Etapa 6. Registrar o FTD no FMC

#### > 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.

> snow managers		
Host	:	10.62.148.50
Registration Key	:	* * * *
Registration	:	pending
RPC Status	:	

No FMC, navegue até Devices > Device Management para adicionar o dispositivo FTD.

Depois de adicionar o FTD à FMC, você precisa:

Reconfigure as configurações do dispositivo como Interfaces e Roteamento

- Reconfigurar políticas como VPN e QoS
- Reaplique as políticas e configurações aplicadas anteriormente, como Política de controle de acesso, NAT e Configurações da plataforma

# Informações Relacionadas

- Guias de instalação e atualização
- Nova imagem do dispositivo Cisco ASA ou Firepower Threat Defense
- <u>Suporte Técnico e Documentação Cisco Systems</u>