Resolución de problemas para FMC - HA

Contenido

Introducción

Este documento describe cómo resolver problemas comunes de sincronización en un conjunto de alta disponibilidad (HA) para Firepower Management Center (FMC).

Prerequisites

Requirements

Cisco recomienda que tenga conocimiento de los siguientes temas:

- FMC - Requisitos de configuración de HA
- Conocimiento básico de Linux shell.

Componentes Utilizados

- FMCv para VMware en la versión 7.2.8.

La información que contiene este documento se creó a partir de los dispositivos en un ambiente de laboratorio específico. Todos los dispositivos que se utilizan en este documento se pusieron en funcionamiento con una configuración verificada (predeterminada). Si tiene una red en vivo, asegúrese de entender el posible impacto de cualquier comando.

Antecedentes

La configuración inicial del laboratorio utilizado para este documento cumple los requisitos de la

configuración inicial básica de FMC-HA.

- Dos CSP con la misma capacidad o versión de hardware.
- Dos FMC que ejecutan la misma versión de software, actualización de reglas de intrusión, base de datos de vulnerabilidades y paquete ligero de seguridad.
- Dos CSP con las licencias correspondientes.

Antes de comenzar

- Asegúrese de que el administrador tenga acceso a ambos CSP.
- Asegúrese de que el administrador tenga acceso a los dispositivos FTD gestionados por el FMC.

Comandos para Troubleshooting

Comandos de Troubleshooting de FMC.

Para validar la conectividad entre los dispositivos FMC, el usuario puede ejecutar estos comandos.

<#root>

> expert

admin@firepower:~$

sudo su

root@firepower:/Volume/home/admin#

ping xx.xx.18.102

```
PING xx.xx.18.102 (xx.xx.18.102) 56(84) bytes of data.
64 bytes from xx.xx.18.102: icmp_seq=1 ttl=64 time=0.533 ms
64 bytes from xx.xx.18.102: icmp_seq=2 ttl=64 time=0.563 ms
64 bytes from xx.xx.18.102: icmp_seq=3 ttl=64 time=0.431 ms
^C
--- xx.xx.18.102 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 59ms
rtt min/avg/max/mdev = 0.431/0.509/0.563/0.056 ms
```

root@firepower:/Volume/home/admin#

netstat -an | grep 8305

```
tcp 0 0 xx.xx.18.101:8305 0.0.0.0:* LISTEN
tcp 0 0 xx.xx.18.101:8305 xx.xx.18.253:48759 ESTABLISHED
tcp 0 0 xx.xx.18.101:8305 xx.xx.18.254:53875 ESTABLISHED
tcp 0 0 xx.xx.18.101:8305 xx.xx.18.254:49205 ESTABLISHED
tcp 0 0 xx.xx.18.101:60871 xx.xx.18.253:8305 ESTABLISHE
```

ping <peer-ip-address> Este comando se puede utilizar para verificar el alcance entre ambos dispositivos.

netstat -an | grep 8305 Este comando muestra los dispositivos conectados al puerto 8305.
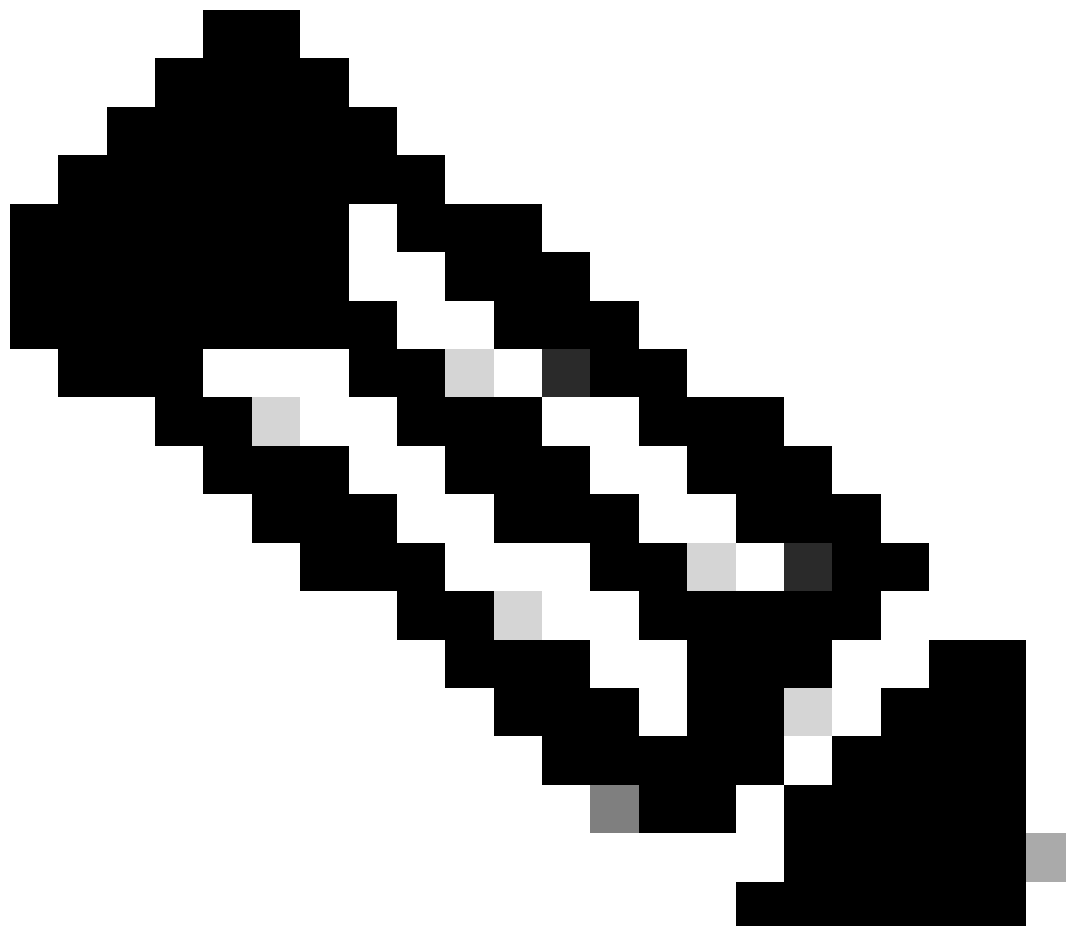
Nota: El puerto 8305 es el puerto predeterminado configurado en los dispositivos Firepower para establecer el canal de comunicación con el FMC.

Para validar la configuración de configuración de FMC-HA, el usuario también puede ejecutar el script Troubleshoot_HADC.pl. Esto resulta especialmente útil en los siguientes casos:

- Cuando se degrade el estado sanitario de la integración FMC-HA.
- Si falta el acceso a la interfaz gráfica de usuario (GUI) de FMC de uno de los dispositivos, pero el acceso a FMC-CLI sigue funcionando y es accesible.

<#root>

```
> expert

admin@firepower:~$

sudo su

root@firepower:/Volume/home/admin#

troubleshoot_HADC.pl

*************** Troubleshooting Utility **************

1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit

*************************************************************
Enter choice:
```

comandos de Troubleshooting de FTD

La resolución de problemas de conectividad del FTD al FMC-HA permite al usuario validar la conectividad de los dispositivos que deben registrarse en ambos FMC o cuando el HA está degradado, y muestra la advertencia "Degraded - Synchronization incomplete (This Management Center has less devices registered)" (Degradado - Sincronización incompleta (este Management Center tiene menos dispositivos registrados).

 A partir del nivel de actualización del FTD, el usuario puede ejecutar estos comandos para validar la comunicación con el FMC.

<#root>

>

```
ping system xx.xx.18.102

PING xx.xx.18.102 (xx.xx.18.102) 56(84) bytes of data.
64 bytes from xx.xx.18.102: icmp_seq=1 ttl=64 time=0.595 ms
64 bytes from xx.xx.18.102: icmp_seq=2 ttl=64 time=0.683 ms
64 bytes from xx.xx.18.102: icmp_seq=3 ttl=64 time=0.642 ms
64 bytes from xx.xx.18.102: icmp_seq=4 ttl=64 time=24.4 ms
```

```
64 bytes from xx.xx.18.102: icmp_seq=5 ttl=64 time=11.4 ms
^C
--- xx.xx.18.102 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 128ms
rtt min/avg/max/mdev = 0.595/7.545/24.373/9.395 ms


> show managers


Type : Manager
Host : xx.xx..18.101
Display name : xx.xx..18.101
Version : 7.2.8 (Build 25)
Identifier : fc3e3572-xxxx-xxxx-xxxx-39e0098c166c
Registration : Completed
Management type : Configuration and analytics

Type : Manager
Host : xx.xx..18.102
Display name : xx.xx..18.102
Version : 7.2.8 (Build 25)
Identifier : bb333216-xxxx-xxxx-xxxx-c68c0c388b44
Registration : Completed
Management type : Configuration and analytics



> sftunnel-status


SFTUNNEL Start Time: Mon Oct 14 21:29:16 2024

Both IPv4 and IPv6 connectivity is supported
Broadcast count = 5
Reserved SSL connections: 0
Management Interfaces: 2
eth0 (control events) xx.xx..18.254,
tap_nlp (control events) 169.254.1.2,fd00:0:0:1::2

***********************

**RUN STATUS****xx.xx..18.102*************
Key File = /var/sf/peers/bb333216-xxxx-xxxx-xxxx-c68c0c388b44/sftunnel-key.pem
Cert File = /var/sf/peers/bb333216-xxxx-xxxx-xxxx-c68c0c388b44/sftunnel-cert.pem
CA Cert = /var/sf/peers/bb333216-xxxx-xxxx-xxxx-c68c0c388b44/cacert.pem
Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
ChannelA Connected: Yes, Interface eth0
Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
ChannelB Connected: Yes, Interface eth0
Registration: Completed.
IPv4 Connection to peer 'xx.xx..18.102' Start Time: Tue Oct 15 00:38:43 2024 UTC
IPv4 Last outbound connection to peer 'xx.xx..18.102' via Primary ip/host 'xx.xx..18.102'

PEER INFO:
sw_version 7.2.8
sw_build 25
Using light registration
Management Interfaces: 1
eth0 (control events) xx.xx..18.102,
Peer channel Channel-A is valid type (CONTROL), using 'eth0', connected to 'xx.xx..18.102' via 'xx.xx..
Peer channel Channel-B is valid type (EVENT), using 'eth0', connected to 'xx.xx..18.102' via 'xx.xx..18
```

```
************************

**RUN STATUS****xx.xx..18.101*************
Key File = /var/sf/peers/fc3e3572-xxxx-xxxx-xxxx-39e0098c166c/sftunnel-key.pem
Cert File = /var/sf/peers/fc3e3572-xxxx-xxxx-xxxx-39e0098c166c/sftunnel-cert.pem
CA Cert = /var/sf/peers/fc3e3572-xxxx-xxxx-xxxx-39e0098c166c/cacert.pem
Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
ChannelA Connected: Yes, Interface eth0
Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
ChannelB Connected: Yes, Interface eth0
Registration: Completed.
IPv4 Connection to peer 'xx.xx..18.101' Start Time: Mon Oct 14 21:29:15 2024 UTC
IPv4 Last outbound connection to peer 'xx.xx..18.101' via Primary ip/host 'xx.xx..18.101'

PEER INFO:

sw_version 7.2.8
sw_build 25
Using light registration
Management Interfaces: 1
eth0 (control events) xx.xx..18.101,
Peer channel Channel-A is valid type (CONTROL), using 'eth0', connected to 'xx.xx..18.101' via 'xx.xx..
Peer channel Channel-B is valid type (EVENT), using 'eth0', connected to 'xx.xx..18.101' via 'xx.xx..18

************************
**RPC STATUS****xx.xx..18.102*************
'uuid' => 'bb333216-xxxx-xxxx-xxxx-c68c0c388b44',
'uuid_gw' => '',
'last_changed' => 'Wed Oct 9 07:00:11 2024',
'active' => 1,
'name' => 'xx.xx..18.102',
'ip' => 'xx.xx..18.102',
'ipv6' => 'IPv6 is not configured for management'

**RPC STATUS****xx.xx..18.101*************
'uuid_gw' => '',
'uuid' => 'fc3e3572-xxxx-xxxx-xxxx-39e0098c166c',
'last_changed' => 'Mon Jun 10 18:59:54 2024',
'active' => 1,
'ip' => 'xx.xx..18.101',
'ipv6' => 'IPv6 is not configured for management',
'name' => 'xx.xx..18.101'

Check routes:
No peers to check
```

ping system <fmc-IP> Para generar un ICMP, siga desde la interfaz de administración de FTD.

show managers Este comando enumera la información de los administradores donde está registrado el dispositivo.

sftunnel-status Este comando valida el canal de comunicación establecido entre los dispositivos. Este canal recibe el nombre de sftunnel.

Los comandos para verificar la conectividad en el nivel raíz del FTD son los mismos que el FMC. En el caso del FTD, no incluye un script que permita validar la comunicación con el FMC, pero es

posible comprobar la información generada durante el proceso de registro en el /ngfw/var/log/action.log.

Verificación

Para la siguiente topología, la comunicación entre los pares FMC-HA y el FTD01 se puede validar utilizando los comandos descritos anteriormente.
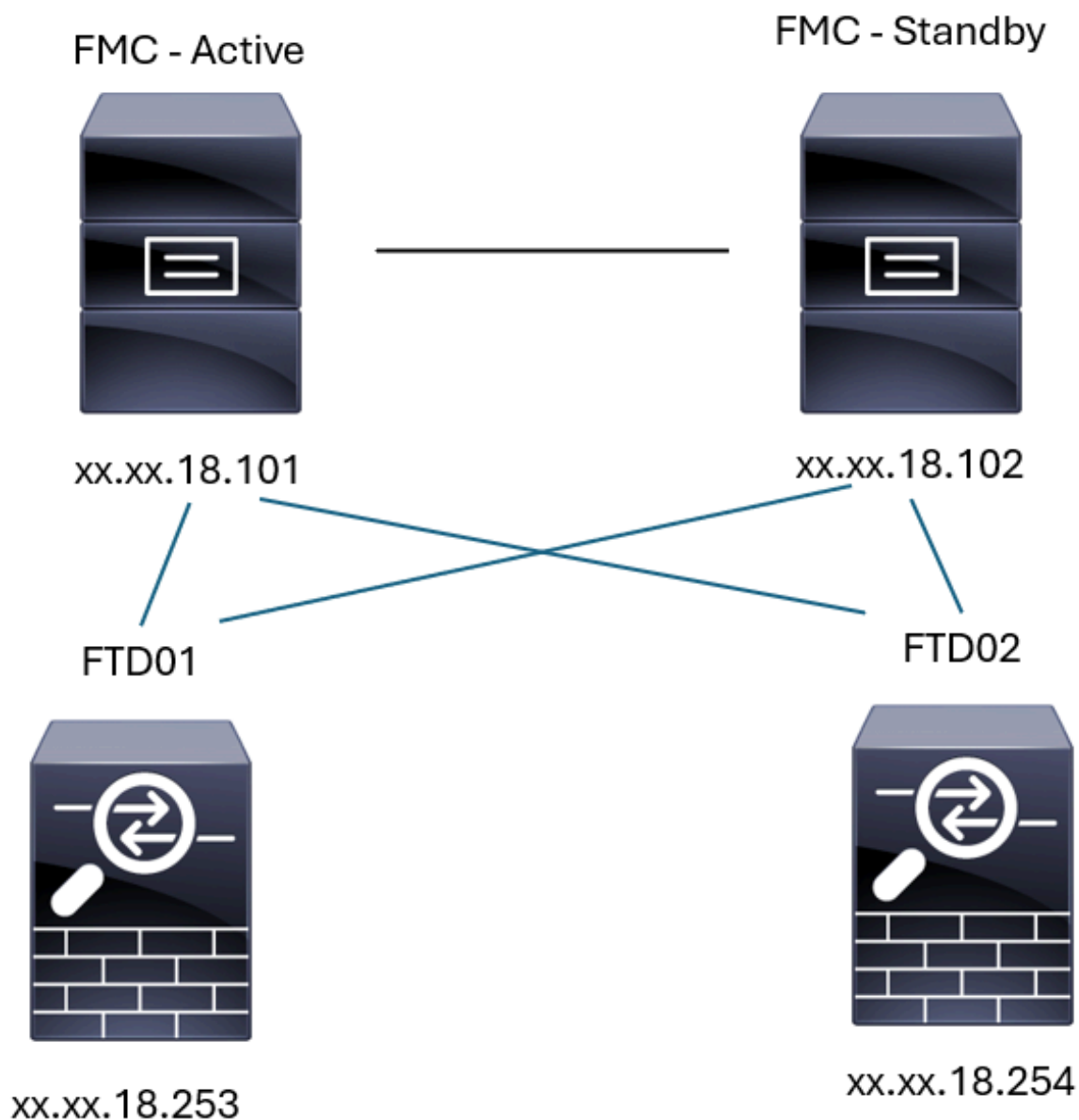
Topología FMC-HA

Validación FMC - HA

Para esta validación, las directrices básicas para establecer un FMC-HA también se pueden validar utilizando el comando show version.

<#root>

FMC Active

```
>

show version


------------------[ firepower ]-------------------
Model                   : Secure Firewall Management Center for VMware (66) Version 7.2.8 (Build 25)
UUID                    : fc3e3572-xxxx-xxxx-xxxx-39e0098c166c
Rules update version    : 2023-11-29-001-vrt
LSP version             : lsp-rel-20231129-1200
VDB version             : 395
---------------------------------------------------

> expert


admin@firepower:~$

sudo su



root@firepower:/Volume/home/admin#

ping xx.xx.18.102


PING xx.xx.18.102 (xx.xx.18.102) 56(84) bytes of data.
64 bytes from xx.xx.18.102: icmp_seq=1 ttl=64 time=0.385 ms
64 bytes from xx.xx.18.102: icmp_seq=2 ttl=64 time=0.433 ms
64 bytes from xx.xx.18.102: icmp_seq=3 ttl=64 time=0.606 ms
64 bytes from xx.xx.18.102: icmp_seq=4 ttl=64 time=0.480 ms
64 bytes from xx.xx.18.102: icmp_seq=5 ttl=64 time=0.524 ms
^C
--- xx.xx.18.102 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 84ms
rtt min/avg/max/mdev = 0.385/0.485/0.606/0.079 ms

root@firepower:/Volume/home/admin#

netstat -an | grep 8305


tcp       0       0 xx.xx.18.101:8305       xx.xx.18.254:53875       ESTABLISHED
tcp       0       0 xx.xx.18.101:8305       xx.xx.18.102:38239       ESTABLISHED ------ communication es
tcp       0       0 xx.xx.18.101:8305       xx.xx.18.254:49205       ESTABLISHED
tcp       0       0 xx.xx.18.101:8305       xx.xx.18.253:34865       ESTABLISHED
tcp       0       0 xx.xx.18.101:60871      xx.xx.18.253:8305        ESTABLISHED
tcp       0       0 xx.xx.18.101:8305       xx.xx.18.102:42253       ESTABLISHED ------ communication es

root@firepower:/Volume/home/admin#

troubleshoot_HADC.pl


****************  Troubleshooting Utility  **************
 1    Show HA Info Of FMC
 2    Execute Sybase DBPing
 3    Show Arbiter Status
 4    Check Peer Connectivity
 5    Print Messages of AQ Task
```

```
  6    Show FMC HA Operations History (ASC order)
  7    Dump To File: FMC HA Operations History (ASC order)
  8    Last Successful Periodic Sync Time (When it completed)
  9    Print HA Status Messages
 10    Compare active and standby device list
 11    Check manager status of standby missing devices
 12    Check critical PM processes details
 13    Get Remote Stale Sync AQ Info
 14    Help
  0    Exit
*************************************************************
Enter choice: 1

HA Enabled: Yes
This FMC Role In HA: Active - Primary
Status out put: vmsDbEngine (system,gui) - Running 5093
In vmsDbEngineStatus(): vmsDbEngine process is running at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize/
Sybase Process: Running (vmsDbEngine, theSybase PM Process is Running)
Sybase Database Connectivity: Accepting DB Connections.
Sybase Database Name: csm_primary
Sybase Role: Active


****************  Troubleshooting Utility  **************
  1    Show HA Info Of FMC
  2    Execute Sybase DBPing
  3    Show Arbiter Status
  4    Check Peer Connectivity
  5    Print Messages of AQ Task
  6    Show FMC HA Operations History (ASC order)
  7    Dump To File: FMC HA Operations History (ASC order)
  8    Last Successful Periodic Sync Time (When it completed)
  9    Print HA Status Messages
 10    Compare active and standby device list
 11    Check manager status of standby missing devices
 12    Check critical PM processes details
 13    Get Remote Stale Sync AQ Info
 14    Help
  0    Exit
*************************************************************
Enter choice: 4
Peer UUID [Enter 'Return' For HA Peer(no UUID required)]:

Peer Is Connected
$VAR1 = {
          'vip' => '',
          'model_id' => 'E',
          'ip' => 'xx.xx.18.102',
          'persistent' => 0,
          'sw_version' => '7.2.8',
          'last_changed' => 1728457211,
          'active' => 1,
          'uuid' => 'bb333216-xxxx-xxxx-xxxx-c68c0c388b44',
          'upgrade_version' => '',
          'reg_state' => 0,
          'model_number' => '66',
          'primary_mgr' => 0,
          'name' => 'xx.xx.18.102',
          'uuid_gw' => '',
          'ipv6' => undef,
          'vip_local' => '',
          'priority' => 0,
          'reg_key' => '',
```

```
             'vnet' => undef,
             'role' => 0,
             'mgmt_mac_address' => '00:50:56:B3:D1:07'
          };

*************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
*************************************************************
Enter choice: 8

------------------------- Last periodic sync time details ----------------------------------

Last successful sync completed at: Wed Oct 16 16:44:23 2024 UTC
Current time: Wed Oct 16 16:46:34 2024 UTC
Last successful sync completed '2 minutes 11 seconds' ago.

------------------------- Last periodic sync time details end ----------------------------------

*************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
*************************************************************
Enter choice: 9

SYNC_ACTIVE: 1 at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line 494, <STDIN> line 5.
Sybase state :  at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line 701.
Sybase state :  at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line 801.
Sync status : at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line 802.
------------------------- FMC HA status messages start ----------------------------------

Status: Healthy

------------------------- FMC HA status messages end ----------------------------------
*************** Troubleshooting Utility **************
1 Show HA Info Of FMC
```

```
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
****************************************************************
Enter choice: 10

Fetching standby missing device information...
Devices are in sync.

**************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
****************************************************************
Enter choice: 0
Thank you
```

<#root>

FMC Standby

```
>
```

show version

```
------------------[ firepower ]-------------------
Model                   : Secure Firewall Management Center for VMware (66) Version 7.2.8 (Build 25)
UUID                    : bb333216-xxxx-xxxx-xxxx-c68c0c388b44
Rules update version    : 2023-11-29-001-vrt
LSP version             : lsp-rel-20231129-1200
VDB version             : 395
--------------------------------------------------

> expert
```

```
admin@firepower:~$

sudo su


root@firepower:/Volume/home/admin#

ping xx.xx.18.101


PING xx.xx.18.101 (xx.xx.18.101) 56(84) bytes of data.
64 bytes from xx.xx.18.101: icmp_seq=1 ttl=64 time=0.402 ms
64 bytes from xx.xx.18.101: icmp_seq=2 ttl=64 time=0.482 ms
64 bytes from xx.xx.18.101: icmp_seq=3 ttl=64 time=0.452 ms
64 bytes from xx.xx.18.101: icmp_seq=4 ttl=64 time=0.490 ms
64 bytes from xx.xx.18.101: icmp_seq=5 ttl=64 time=0.519 ms
^C
--- xx.xx.18.101 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 123ms
rtt min/avg/max/mdev = 0.402/0.469/0.519/0.039 ms

root@firepower:/Volume/home/admin#

netstat -an | grep 8305


tcp        0      0 xx.xx.18.102:8305      xx.xx.18.254:50373      ESTABLISHED
tcp        0      0 xx.xx.18.102:8305      xx.xx.18.253:42083      ESTABLISHED
tcp        0      0 xx.xx.18.102:59439     xx.xx.18.254:8305       ESTABLISHED
tcp        0      0 xx.xx.18.102:36751     xx.xx.18.253:8305       ESTABLISHED
tcp        0      0 xx.xx.18.102:38239     xx.xx.18.101:8305       ESTABLISHED ------ communication es
tcp        0      0 xx.xx.18.102:42253     xx.xx.18.101:8305       ESTABLISHED ------ communication es

root@firepower:/Volume/home/admin#

root@firepower:/Volume/home/admin#

troubleshoot_HADC.pl


*************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
***************************************************************
Enter choice: 1

HA Enabled: Yes
This FMC Role In HA: Standby - Secondary
Status out put: vmsDbEngine (system,gui) - Running 29652
In vmsDbEngineStatus(): vmsDbEngine process is running at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize/
```

```
Sybase Process: Running (vmsDbEngine, theSybase PM Process is Running)
Sybase Database Connectivity: Accepting DB Connections.
Sybase Database Name: csm_secondary
Sybase Role: Standby

*************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
*****************************************************************
Enter choice: 4
Peer UUID [Enter 'Return' For HA Peer(no UUID required)]:

Peer Is Connected
$VAR1 = {
          'vnet' => undef,
          'upgrade_version' => '',
          'uuid_gw' => '',
          'name' => 'xx.xx.18.101',
          'primary_mgr' => 1,
          'sw_version' => '7.2.8',
          'persistent' => 0,
          'model_number' => '66',
          'last_changed' => 1718045994,
          'reg_key' => '',
          'active' => 1,
          'reg_state' => 0,
          'model_id' => 'E',
          'vip' => '',
          'mgmt_mac_address' => '00:50:56:B3:E1:57',
          'vip_local' => '',
          'ip' => 'xx.xx.18.101',
          'priority' => 0,
          'uuid' => 'fc3e3572-xxxx-xxxx-xxxx-39e0098c166c',
          'role' => 0,
          'ipv6' => undef
        };

*************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
```

```
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
***************************************************************
Enter choice: 8

------------------------- Last periodic sync time details ---------------------------------

Last successful sync completed at: Wed Oct 16 16:46:06 2024 UTC
Current time: Wed Oct 16 16:47:35 2024 UTC
Last successful sync completed '1 minute 29 seconds' ago.

------------------------- Last periodic sync time details end ------------------------------

**************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
***************************************************************
Enter choice: 9

SYNC_ACTIVE: 1 at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line 494, <STDIN> line 5.
Found running Synchronization task: Initializing at /usr/local/sf/lib/perl/5.24.4/SF/Transaction/HADC.p
Sybase state :  at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line 701.
Sybase state :  at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line 801.
Sync status :Synchronization Task In-progress  at /usr/local/sf/lib/perl/5.24.4/SF/Synchronize.pm line
Found running Synchronization task: Initializing at /usr/local/sf/lib/perl/5.24.4/SF/Transaction/HADC.p

------------------------- FMC HA status messages start -----------------------------------

Status: Synchronization Task In-progress

------------------------- FMC HA status messages end ------------------------------------

**************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
```

```
0 Exit
******************************************************************
Enter choice: 10

Fetching standby missing device information...
Devices are in sync.

*************** Troubleshooting Utility **************
1 Show HA Info Of FMC
2 Execute Sybase DBPing
3 Show Arbiter Status
4 Check Peer Connectivity
5 Print Messages of AQ Task
6 Show FMC HA Operations History (ASC order)
7 Dump To File: FMC HA Operations History (ASC order)
8 Last Successful Periodic Sync Time (When it completed)
9 Print HA Status Messages
10 Compare active and standby device list
11 Check manager status of standby missing devices
12 Check critical PM processes details
13 Get Remote Stale Sync AQ Info
14 Help
0 Exit
******************************************************************
Enter choice: 0
Thank you
```

Comunicación del FTD a la validación del FMC-HA

<#root>

```
>

 show version


------------------[ firepower ]------------------
Model                   : Cisco Firepower Threat Defense for VMware (75) Version 7.2.4 (Build 165)
UUID                    : 7064913a-xxxx-xxxx-xxxx-803aefd05d2c
LSP version             : lsp-rel-20231129-1200
VDB version             : 395
--------------------------------------------------

>

ping system xx.xx.18.101

------ ping to FMC-Active
PING xx.xx.18.101 (xx.xx.18.101) 56(84) bytes of data.
64 bytes from xx.xx.18.101: icmp_seq=1 ttl=64 time=14.1 ms
64 bytes from xx.xx.18.101: icmp_seq=2 ttl=64 time=27.8 ms
64 bytes from xx.xx.18.101: icmp_seq=3 ttl=64 time=26.1 ms
64 bytes from xx.xx.18.101: icmp_seq=6 ttl=64 time=55.7 ms
64 bytes from xx.xx.18.101: icmp_seq=7 ttl=64 time=39.9 ms
64 bytes from xx.xx.18.101: icmp_seq=8 ttl=64 time=38.9 ms
^C
--- xx.xx.18.101 ping statistics ---
```

```
8 packets transmitted, 6 received, 25% packet loss, time 76ms
rtt min/avg/max/mdev = 14.081/33.733/55.658/13.069 ms


>

ping system xx.xx.18.102

------ ping to FMC-Active
PING xx.xx.18.102 (xx.xx.18.102) 56(84) bytes of data.
64 bytes from xx.xx.18.102: icmp_seq=1 ttl=64 time=23.9 ms
64 bytes from xx.xx.18.102: icmp_seq=2 ttl=64 time=23.10 ms
64 bytes from xx.xx.18.102: icmp_seq=3 ttl=64 time=0.425 ms
64 bytes from xx.xx.18.102: icmp_seq=4 ttl=64 time=6.88 ms
64 bytes from xx.xx.18.102: icmp_seq=5 ttl=64 time=10.5 ms
^C
--- xx.xx.18.102 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 70ms
rtt min/avg/max/mdev = 0.425/13.131/23.969/9.380 ms


>

show managers


Type                    : Manager
Host                    : xx.xx.18.101
Display name            : xx.xx.18.101
Version                 : 7.2.8 (Build 25)
Identifier              : fc3e3572-xxxx-xxxx-xxxx-39e0098c166c
Registration            : Completed
Management type         : Configuration and analytics

Type                    : Manager
Host                    : xx.xx.18.102
Display name            : xx.xx.18.102
Version                 : 7.2.8 (Build 25)
Identifier              : bb333216-xxxx-xxxx-xxxx-c68c0c388b44
Registration            : Completed
Management type         : Configuration and analytics


>

sftunnel-status


SFTUNNEL Start Time: Mon Oct 14 21:29:16 2024
        Both IPv4 and IPv6 connectivity is supported
        Broadcast count = 17
        Reserved SSL connections: 0
        Management Interfaces: 2
        eth0 (control events) xx.xx.18.254,
        tap_nlp (control events) 169.254.1.2,fd00:0:0:1::2
***********************

**RUN STATUS****xx.xx.18.102************ ------------------------------------- sftunnel information
        Key File     = /var/sf/peers/bb333216-xxxx-xxxx-xxxx-c68c0c388b44/sftunnel-key.pem
        Cert File    = /var/sf/peers/bb333216-xxxx-xxxx-xxxx-c68c0c388b44/sftunnel-cert.pem
        CA Cert      = /var/sf/peers/bb333216-xxxx-xxxx-xxxx-c68c0c388b44/cacert.pem
        Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
        ChannelA Connected: Yes, Interface eth0
        Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
        ChannelB Connected: Yes, Interface eth0
        Registration: Completed.
        IPv4 Connection to peer 'xx.xx.18.102' Start Time: Wed Oct 16 15:06:23 2024 UTC
```

```
         IPv4 Last outbound connection to peer 'xx.xx.18.102' via Primary ip/host 'xx.xx.18.102'

PEER INFO:
        sw_version 7.2.8
        sw_build 25
        Using light registration
        Management Interfaces: 1
        eth0 (control events) xx.xx.18.102,
        Peer channel Channel-A is valid  type (CONTROL), using 'eth0', connected to 'xx.xx.18.102' via
        Peer channel Channel-B is valid  type (EVENT), using 'eth0', connected to 'xx.xx.18.102' via 'x

***********************

**RUN STATUS****xx.xx.18.101************* ------------------------------------- sftunnel information o
        Key File     = /var/sf/peers/fc3e3572-xxxx-xxxx-xxxx-39e0098c166c/sftunnel-key.pem
        Cert File    = /var/sf/peers/fc3e3572-xxxx-xxxx-xxxx-39e0098c166c/sftunnel-cert.pem
        CA Cert      = /var/sf/peers/fc3e3572-xxxx-xxxx-xxxx-39e0098c166c/cacert.pem
        Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
        ChannelA Connected: Yes, Interface eth0
        Cipher used = TLS_AES_256_GCM_SHA384 (strength:256 bits)
        ChannelB Connected: Yes, Interface eth0
        Registration: Completed.
        IPv4 Connection to peer 'xx.xx.18.101' Start Time: Mon Oct 14 21:29:15 2024 UTC

PEER INFO:
        sw_version 7.2.8
        sw_build 25
        Using light registration
        Management Interfaces: 1
        eth0 (control events) xx.xx.18.101,
        Peer channel Channel-A is valid  type (CONTROL), using 'eth0', connected to 'xx.xx.18.101' via
        Peer channel Channel-B is valid  type (EVENT), using 'eth0', connected to 'xx.xx.18.101' via 'x

***********************

**RPC STATUS****xx.xx.18.101*************
  'name' => 'xx.xx.18.101',
  'last_changed' => 'Mon Jun 10 18:59:54 2024',
  'uuid_gw' => '',
  'ip' => 'xx.xx.18.101',
  'ipv6' => 'IPv6 is not configured for management',
  'active' => 1,
  'uuid' => 'fc3e3572-xxxx-xxxx-xxxx-39e0098c166c'

**RPC STATUS****xx.xx.18.102*************
  'name' => 'xx.xx.18.102',
  'last_changed' => 'Wed Oct  9 07:00:11 2024',
  'uuid_gw' => '',
  'ip' => 'xx.xx.18.102',
  'ipv6' => 'IPv6 is not configured for management',
  'active' => 1,
  'uuid' => 'bb333216-xxxx-xxxx-xxxx-c68c0c388b44'

Check routes:
No peers to check
```

Nota: Si falta la información sftunnel de uno de los FMC, esto puede indicar que la comunicación con el administrador está comprometida

---

<#root>

FTD root level troubleshoot

> expert

admin@firepower:~$

sudo su

root@firepower:/home/admin#

netstat -an | grep 8305

```
tcp       0       0 xx.xx.18.254:8305        xx.xx.18.102:59439      ESTABLISHED ------ communication es
tcp       0       0 xx.xx.18.254:49205       xx.xx.18.101:8305       ESTABLISHED ------ communication es
tcp       0       0 xx.xx.18.254:50373       xx.xx.18.102:8305       ESTABLISHED ------ communication es
tcp       0       0 xx.xx.18.254:53875       xx.xx.18.101:8305       ESTABLISHED ------ communication es

root@firepower:/home/admin#

cat /ngfw/var/log/action_queue.log | less


Oct 16 15:06:50 firepower ActionQueueScrape.pl[4166]: Waiting for light registration to complete on dev
erl/5.24.4/SF/PeerManager/RegistrationCL.pm line 1805.
Oct 16 15:06:50 firepower ActionQueueScrape.pl[4166]: Found Registered peer with name xx.xx.18.102 (bb3
Oct 16 15:06:50 firepower ActionQueueScrape.pl[4166]: Found peer with name xx.xx.18.102 - update DB at
Oct 16 15:06:50 firepower ActionQueueScrape.pl[4166]: Found Registered peer with name xx.xx.18.101 (fc3
```