

排除FXOS中的基本配置故障

目录

[简介](#)

[先决条件](#)

[要求](#)

[使用的组件](#)

[背景信息](#)

[机箱信息](#)

[Serial Number](#)

[FXOS版本](#)

[引导加载程序版本](#)

[检查时间](#)

[show clock](#)

[检查Ntp-server](#)

[监控机箱运行状况](#)

[检查环境](#)

[显示故障](#)

[电源问题](#)

[风扇问题](#)

[显示事件](#)

[Show System Reset-reason](#)

[主板电源问题](#)

[逻辑设备](#)

[监控实例](#)

[显示服务器状态](#)

[显示插槽](#)

[显示应用程序实例](#)

[显示逻辑设备](#)

[显示应用实例](#)

[显示应用实例详细信息](#)

[显示资源详细信息](#)

[机箱管理器访问](#)

[访问本地Web服务器](#)

[监控接口](#)

[验证机箱管理IP](#)

[Show Mgmt-port](#)

[在管理接口上设置捕获](#)

[show interface](#)

[显示端口通道](#)

[相关信息](#)

简介

本文档介绍用于帮助确认Cisco安全防火墙可扩展操作(FXOS)基本状态和配置正确性的步骤。

先决条件

要求

思科建议您了解以下内容：

- 思科安全防火墙可扩展操作(FXOS)
- 思科安全防火墙威胁防御(FTD)

使用的组件

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。用于本文的所有设备始于初始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

- 思科安全防火墙可扩展运行4110，版本2.10.(1.179)
- 思科安全防火墙威胁防御，版本7.0.5

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。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

背景信息

思科安全防火墙机箱是用于网络和联系人安全解决方案的下一代平台。逻辑设备允许您运行ASA或思科安全防火墙威胁防御(FTD)应用实例。

根据您的添加的逻辑设备，应用实例类型和版本会得到定义。

机箱信息

此命令有助于获取机箱的整体信息（无论是否所有信息都可操作），这些信息将收集到TAC以便排除机箱错误。

Serial Number

序列号用作机箱的标识符。如果整个机箱都需要RMA，则需要此许可证

```
FPR4110-04-A# scope chassis 1
FPR4110-04-A /chassis # show inventory
Chassis      PID          Vendor          Serial (SN)   HW Revision
-----
1            FPR-4110-K9 Cisco Systems Inc JMX2136L03W  0
```

FXOS版本

```
FPR4110-04-A# show version
```

```
Version: 2.10(1.179)
```

```
Startup-Vers: 2.10(1.179)
```

知道FXOS版本的方法有两种，其中一种包括固件。

```
FPR4110-04-A# show fabric-interconnect firmware
```

```
Fabric Interconnect A:
```

```
Running-Kern-Vers: 5.0(3)N2(4.101.103)
```

```
Running-Sys-Vers: 5.0(3)N2(4.101.103)
```

```
Package-Vers: 2.10(1.179)
```

```
Startup-Kern-Vers: 5.0(3)N2(4.101.103)
```

```
Startup-Sys-Vers: 5.0(3)N2(4.101.103)
```

```
Act-Kern-Status: Ready
```

```
Act-Sys-Status: Ready
```

```
Bootloader-Vers:
```

引导加载程序版本

```
FPR4110-04-A# scope chassis 1
```

```
FPR4110-04-A /chassis # scope server 1
```

```
FPR4110-04-A /chassis/server # scope adapter 1
```

```
FPR4110-04-A /chassis/server/adapter # show version detail
```

```
Adapter 1:
```

```
Running-Vers: 5.10(1.53)
```

```
Package-Vers: 2.10(1.179)
```

```
Update-Status: Ready
```

```
Activate-Status: Ready
```

```
Bootloader-Update-Status: Ready
```

```
Startup-Vers: 5.10(1.53)
```

```
Backup-Vers: 5.10(1.57)
```

```
Bootloader-Vers: 4.0(1.62)
```

检查时间

```
FPR4110-04-A# connect fxos
```

```
FPR4110-04-A(fxos)# show system uptime
```

```
System start time: Mon Oct 23 16:45:36 2023
```

```
System uptime: 98 days, 1 hours, 49 minutes, 36 seconds
```

```
Kernel uptime: 98 days, 1 hours, 40 minutes, 19 seconds
```

```
Active supervisor uptime: 98 days, 1 hours, 49 minutes, 36 second
```

show clock

```
FPR4110-04-A# show clock  
Tue Jan 30 17:07:50 EST 2024
```

检查Ntp-server

```
FPR4110-04-A# scope system  
FPR4110-04-A /system # scope services  
FPR4110-04-A /system/services # show ntp-server  
NTP server hostname:  
Name Time      Sync Status  
-----  
172.16.254.131 Time Synchronized
```

监控机箱运行状况

以下命令可帮助您对机箱硬件状态进行故障排除。

检查环境

```
FPR4110-04-A# scope chassis 1  
FPR4110-04-A /chassis # show environment expand detail  
Chassis 1:  
Overall Status: Power Problem  
Operability: Operable  
Power State: Redundancy Failed  
Thermal Status: Ok
```

```
PSU 1:  
Threshold Status: N/A  
Overall Status: N/A  
Operability: N/A  
Power State: Off  
Thermal Status: OK  
Voltage Status: N/A
```

```
PSU 2:  
Threshold Status: OK  
Overall Status: Operable  
Operability: Operable  
Power State: On  
Thermal Status: OK  
Voltage Status: OK
```

Tray 1 Module 1:

Threshold Status: OK
Overall Status: Operable
Operability: Operable
Power State: On
Thermal Status: OK
Voltage Status: OK

Fan Module Stats:

Ambient Temp (C): 27.000000

Fan 1:

Threshold Status: OK
Overall Status: Operable
Operability: Operable
Power State: On
Thermal Status: OK
Voltage Status: OK

Fan 2:

Threshold Status: OK
Overall Status: Operable
Operability: Operable
Power State: On
Thermal Status: OK
Voltage Status: OK

...

Server 1:

Name:
User Label:
Overall Status: Ok
Operability: Operable
Oper Power: On

Adapter 1:

Threshold Status: N/A
Overall Status: Operable
Operability: Operable
Power State: On
Thermal Status: N/A
Voltage Status: N/A

Motherboard:

Threshold Status: OK
Overall Status: N/A
Operability: N/A
Oper Power: On
Power State: Ok
Thermal Status: OK
Voltage Status: OK
CMOS Battery Voltage Status: Ok
Mother Board Power Usage Status: Ok

Motherboard Temperature Statistics:

Motherboard Front Temperature (C): 19.000000
Motherboard Rear Temperature (C): 26.000000

Memory Array 1:

Threshold Status: N/A

Overall Status: N/A
Operability: N/A
Power State: N/A
Thermal Status: N/A
Voltage Status: N/A

DIMMs:

DIMM Threshold Status Overall Status Operability Power State Thermal Status Voltage Status

1 N/A Operable N/A N/A OK N/A
2 N/A Removed N/A N/A N/A N/A
3 N/A Removed N/A N/A N/A N/A
4 N/A Operable N/A N/A OK N/A
5 N/A Removed N/A N/A N/A N/A
...

CPU 1:

Threshold Status: N/A
Overall Status: Operable
Operability: Operable
Power State: N/A
Thermal Status: OK
Voltage Status: N/A

显示故障

故障列表显示安全防火墙平台上发现的所有硬件问题，有助于获得活动故障和已清除故障的摘要。

故障按时间顺序显示。严重程度反映故障的重要性，说明中会提供简要概述。请重点关注严重程度、时间戳和说明。故障严重程度由高到低依次为：

- 关键
- 重大
- Minor (轻微)
- 警告
- 信息/条件
- 已清除

FPR4110-04-A# show fault

Severity Code Last Transition Time ID Description

Major F0276 2023-12-14T18:26:29.505 507308 ether port 2/2 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected
Major F0276 2023-11-13T14:07:37.720 221350 ether port 1/1 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected

```
Info F0279 2023-11-13T14:07:37.720 446504 ether port 1/7 on fabric interconnect A oper state: sfp-not-present
Major F0276 2023-11-07T08:10:50.143 434090 ether port 1/6 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected
Major F0276 2023-11-07T08:10:49.941 434081 ether port 1/5 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected
Major F0282 2023-07-31T17:52:04.764 201600 lan port-channel 7 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:51:03.325 201446 lan port-channel 4 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:49:00.451 201281 lan port-channel 2 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:42:34.236 200638 lan port-channel 1 on fabric interconnect A oper state: failed, reason: No operational members
Major F0909 2023-06-19T14:02:55.642 99113 default Keyring's certificate is invalid, reason: expired.
Warning F1781 2012-01-11T02:21:44.215 90296 The password encryption key has not been set.
Info F0461 2011-12-31T21:32:43.448 35793 Log capacity on Management Controller on server 1/1 is very-low
Major F0408 2011-12-31T21:32:32.787 35497 Power state on chassis 1 is redundancy-failed
Warning F0528 2011-12-31T21:32:32.787 35498 Power supply 1 in chassis 1 power: off
Minor F1437 2011-12-31T21:31:08.462 32663 Config backup may be outdated
FPR4110-04-A#
```

可以根据原因、详细信息、严重程度或抑制的故障过滤故障。

```
FPR4110-04-A# show fault ?
0-18446744073709551615 ID
<CR>
> Redirect it to a file
>> Redirect it to a file in append mode
cause Cause
detail Detail
severity Severity
suppressed Fault Suppressed
| Pipe command output to filter
```

```
FPR4110-04-A# show fault severity major
Severity Code Last Transition Time ID Description
```

```
-----
Major F0276 2023-12-14T18:26:29.505 507308 ether port 2/2 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected
Major F0276 2023-11-13T14:07:37.720 221350 ether port 1/1 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected
Major F0276 2023-11-07T08:10:50.143 434090 ether port 1/6 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected
Major F0276 2023-11-07T08:10:49.941 434081 ether port 1/5 on fabric interconnect A oper state: link-down, reason: Link failure or not-connected
Major F0282 2023-07-31T17:52:04.764 201600 lan port-channel 7 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:51:03.325 201446 lan port-channel 4 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:49:00.451 201281 lan port-channel 2 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:42:34.236 200638 lan port-channel 1 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:41:34.673 200660 lan port-channel 3 on fabric interconnect A oper state: failed, reason: No operational members
Major F0408 2011-12-31T21:32:32.787 35497 Power state on chassis 1 is redundancy-faile
```

电源问题

对于电源问题，“Voltage Problem (电压问题)”状态表示存在问题。

```
FPR4110-04-A# scope chassis 1
FPR4110-04-A /chassis # show psu
```

PSU:
PSU Type Wattage (W) Overall Status

1 DV 0 N/A
2 DV 1100 Operable

风扇问题

如果存在热故障，很可能是冷却/风扇的合理硬件问题，也可能是软件缺陷引起的误报。如果风扇状态为“无法运行”或“已降级”，请与TAC联系以获取进一步帮助。

FPR4110-04-A# scope chassis 1
FPR4110-04-A /chassis # show fan-module
Fan Module:
Tray Module Overall Status

1 1 Operable
1 2 Operable
1 3 Operable
1 4 Operable
1 5 Operable
1 6 Operable

显示事件

检查应用故障的FXOS非常重要，以了解问题是否出在刀片本身，或应用是否因软件相关问题无法启动。

FPR4110-04-A# scope chassis
FPR4110-04-A /chassis # scope server
FPR4110-04-A /chassis/server # scope fxos
FPR4110-04-A /chassis/server/fxos # show event
Creation Time ID Code Description

2024-01-25T14:09:32.783 588408 E4197910 [FSM:STAGE:END]: Waiting for install license complete from blade 1/1(FSM-STAGE:sam:dme:OsControl
2024-01-25T14:09:32.783 588409 E4197611 [FSM:STAGE:SKIP]: Reboot blade 1/1(FSM-STAGE:sam:dme:OsControllerInitOS:RebootHostAfterUpgra
2024-01-25T14:09:32.783 588410 E4197611 [FSM:STAGE:END]: Reboot blade 1/1(FSM-STAGE:sam:dme:OsControllerInitOS:RebootHostAfterUpgra
2024-01-25T14:09:32.783 588411 E4197612 [FSM:END]: Init OS on blade 1/1(FSM:sam:dme:OsControllerInitOS)
2024-01-25T14:09:32.783 588412 E4197612 [FSM:STAGE:END]: (FSM-STAGE:sam:dme:OsControllerInitOS:success)
2024-01-25T14:09:32.782 588405 E4197909 [FSM:STAGE:STALE-SUCCESS]: Request for upgrade to blade 1/1(FSM-STAGE:sam:dme:OsControllerIn
2024-01-25T14:09:32.782 588406 E4197909 [FSM:STAGE:END]: Request for upgrade to blade 1/1(FSM-STAGE:sam:dme:OsControllerInitOS:Request
2024-01-25T14:09:32.782 588407 E4197910 [FSM:STAGE:SKIP]: Waiting for install license complete from blade 1/1(FSM-STAGE:sam:dme:OsControl
2024-01-25T14:09:32.773 588404 E4197909 [FSM:STAGE:ASYNC]: Request for upgrade to blade 1/1(FSM-STAGE:sam:dme:OsControllerInitOS:Requ
2024-01-25T14:09:32.768 588401 E4197609 [FSM:STAGE:END]: Request for upgrade to blade 1/1(FSM-STAGE:sam:dme:OsControllerInitOS:Request
2024-01-25T14:09:32.768 588402 E4197610 [FSM:STAGE:SKIP]: Waiting for upgrade complete from blade 1/1(FSM-STAGE:sam:dme:OsControllerIni
2024-01-25T14:09:32.768 588403 E4197610 [FSM:STAGE:END]: Waiting for upgrade complete from blade 1/1(FSM-STAGE:sam:dme:OsControllerIni
FPR4110-04-A /chassis/server/fxos #

Show System Reset-reason

对于意外应用/设备重新加载，请验证是否存在任何进程(FTD)的核心，并使用show crash命令检查ASA/Lina crashinfo。如果它们不存在，则问题可能与FXOS相关，并可使用FXOS关键字进行路由。

```
FPR4110-04-A# connect fxos
FPR4110-04-A(fxos)# show system reset-reason
---- reset reason for Supervisor-module 1 (from Supervisor in slot 1) ---
1) No time
Reason: Unknown
Service:
Version: 5.0(3)N2(4.101)

2) No time
Reason: Unknown
Service:
Version: 5.0(3)N2(4.101)
...
```

主板电源问题

```
FPR4110-04-A# scope chassis 1
FPR4110-04-A /chassis # scope server 1/1
FPR4110-04-A /chassis/server # show fsm status
```

```
Slot: 1
Server: sys/chassis-1/blade-1
```

```
FSM 1:
Remote Result: Not Applicable
Remote Error Code: None
Remote Error Description:
Status: Nop
Previous Status: Turnup Success
Timestamp: 2023-10-23T16:48:19.299
Try: 0
Flags: 0
Progress (%): 100
Current Task:
```

```
FSM 2:
Status: Nop
Previous Status: Identify Success
Timestamp: 2023-10-23T16:47:33.592
Try: 0
Progress (%): 100
Current Task:
```

```
FSM 3:
Status: Nop
Previous Status: Configure Success
```

Timestamp: 2023-10-23T16:48:16.739

Try: 0

Flags: 0

Progress (%): 100

Current Task:

```
FPR4110-04-A /chassis/server # show fault
```

```
Severity Code Last Transition Time ID Description
```

```
-----  
Info F0461 2011-12-31T21:32:43.448 35793 Log capacity on Management Controller on server 1/1 is very-low
```

逻辑设备

如背景信息中所述，逻辑设备允许您运行ASA或FTD应用实例。

以下是一些用于确认机箱中安装的应用实例状态的命令。

监控实例

显示服务器状态

查看插槽和发现状态。

```
FPR4110-04-A# show server status
```

```
Server Slot Status Overall Status Discovery
```

```
-----  
1/1 Equipped Ok Complete
```

显示插槽

查看日志级别、管理状态和插槽的可操作状态。

```
FPR4110-04-A# scope ssa
```

```
FPR4110-04-A /ssa # show slot
```

```
Slot:
```

```
Slot ID Log Level Admin State Oper State
```

```
-----  
1 Info Ok Online
```

显示应用程序实例

查看名称、版本、作者、支持的部署类型、CSP类型以及是否使用默认应用。

```
FPR4110-04-A# scope ssa
FPR4110-04-A /ssa # show app
Name Version Author Supported Deploy Types CSP Type Is Default App
-----
ftd 7.0.4-55 cisco Native,Container Application No
ftd 7.0.5-72 cisco Native,Container Application Yes
```

显示逻辑设备

```
FPR4110-04-A# scope ssa
FPR4110-04-A /ssa # show logical-device

Logical Device:
Name Description Slot ID Mode Oper State Template Name
-----
FTD1 1 Standalone Ok ftd
```

显示应用实例

在插槽范围下使用show app-instance查看应用实例的运行状态的完整信息。

此命令特别有助于创建或升级应用程序实例，如它在运行状态（如果它正在安装或联机）和正在运行的软件版本中所示。

```
FPR4110-04-A# scope ssa
FPR4110-04-A /ssa # scope slot 1
FPR4110-04-A /ssa/slot # show app-instance
Application Instance:
App Name Identifier Admin State Oper State Running Version Startup Version Deploy Type Turbo Mode Profile Name Cluster State Cluster Role
-----
ftd FTD1 Enabled Online 7.0.5-72 7.0.5-72 Native No Not Applicable None
```

显示应用实例详细信息

```
FPR4110-04-A# scope ssa
FPR4110-04-A /ssa # show app-instance detail
```

```
App Name: ftd
Identifier: FTD1
Slot ID: 1
Admin State: Enabled
Oper State: Online
Running Version: 7.0.5-72
Startup Version: 7.0.5-72
```

Deploy Type: Native
Profile Name:
Cluster State: Not Applicable
Cluster Role: None
Current Job Type: Start
Current Job Progress: 100
Current Job State: Succeeded
Clear Log Data: Available
Error Msg:
Hotfixes:
Externally Upgraded: No
FPR4110-04-A /ssa #

显示资源详细信息

查看应用程序实例的资源分配。

```
FPR4110-04-A# scope ssa  
FPR4110-04-A /ssa # scope slot 1  
FPR4110-04-A /ssa/slot # enter app-instance ftd FTD1  
FPR4110-04-A /ssa/slot/app-instance # show resource detail
```

Resource:

Allocated Core NR: 22
Allocated RAM (MB): 52096
Allocated Data Disk (MB): 128685
Allocated Binary Disk (MB): 3907
Allocated Secondary Disk (MB): 0

机箱管理器访问

访问本地Web服务器

默认情况下，安全防火墙威胁防御4100/9300机箱拒绝对本地Web服务器的所有访问。您必须使用每个IP块允许的服务的列表配置IP访问列表。

IP访问列表支持以下协议：

-

HTTPS

-

SNMP

•

SSH

```
FPR4110-04-A# scope system
FPR4110-04-A /system # scope services
FPR4110-04-A /system/services # show ip-block
```

```
Permitted IP Block:
IP Address Prefix Length Protocol
-----
0.0.0.0 0 https
0.0.0.0 0 snmp
```

命令**enter**用于配置新条目。

```
FPR4110-04-A /system/services # enter ?
dns Domain Name Server hostname
ip-block Permitted IP Block
ipv6-block Permitted IPv6 Block
ntp-server NTP server hostname
ssh-host SSH Server public keys
```

```
FPR4110-04-A /system/services # enter ip-block ?
a.b.c.d IP Address
```

```
FPR4110-04-A /system/services # enter ip-block 0.0.0.0 ?
0-32 Prefix Length
```

```
FPR4110-04-A /system/services # enter ip-block 0.0.0.0 0 ?
https Https
snmp Snmp
ssh Ssh
```

```
FPR4110-04-A /system/services/ # enter ip-block 0.0.0.0 0 ssh
FPR4110-04-A /system/services/ip-block* # commit-buffer
FPR4110-04-A /system/services/ip-block # up
FPR4110-04-A /system/services # show ip-block
```

```
Permitted IP Block:
IP Address Prefix Length Protocol
-----
0.0.0.0 0 https
0.0.0.0 0 snmp
0.0.0.0 0 ssh
```

监控接口

验证机箱管理IP

```
FPR4110-04-A# show fabric-interconnect
```

```
Fabric Interconnect:
```

```
ID OOB IP Addr OOB Gateway OOB Netmask OOB IPv6 Address OOB IPv6 Gateway Prefix Operability Ingress VLAN Group Entry Count (Current/Ma
```

```
-----  
A 172.16.244.72 172.16.244.65 255.255.255.192 :: :: 64 Operable 0/500 53/102
```

```
Show Mgmt-port
```

确定管理接口的状态。

```
FPR4110-04-A# connect local-mgmt
```

```
FPR4110-04-A(local-mgmt)#
```

```
FPR4110-04-A(local-mgmt)# show mgmt-port
```

```
eth0 Link encap:Ethernet HWaddr 50:0f:80:8e:a5:cd
```

```
inet addr:172.16.244.72 Bcast:172.16.244.127 Mask:255.255.255.192
```

```
inet6 addr: fe80::520f:80ff:fe8e:a5cd/64 Scope:Link
```

```
inet6 addr: fe80::520f:80ff:fe8e:a5cd/64 Scope:Link
```

```
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
```

```
RX packets:7359566 errors:0 dropped:0 overruns:0 frame:0
```

```
TX packets:1147585 errors:0 dropped:0 overruns:0 carrier:0
```

```
collisions:0 txqueuelen:1000
```

```
RX bytes:1735874306 (1.6 GiB) TX bytes:360530127 (343.8 MiB)
```

Ping可用于测试连接。

```
FPR4110-04-A(local-mgmt)# ping 172.16.244.65
```

```
PING 172.16.244.65 (172.16.244.65) from 172.16.244.72 eth0: 56(84) bytes of data.
```

```
64 bytes from 172.16.244.65: icmp_seq=1 ttl=254 time=1.15 ms
```

```
64 bytes from 172.16.244.65: icmp_seq=2 ttl=254 time=1.38 ms
```

```
^C
```

```
--- 172.16.244.65 ping statistics ---
```

```
6 packets transmitted, 6 received, 0% packet loss, time 12ms
```

```
rtt min/avg/max/mdev = 1.146/1.364/1.479/0.122 ms
```

```
FPR4110-04-A(local-mgmt)#
```

在管理接口上设置捕获

在机箱(MIO)管理接口上启用捕获 (仅适用于FP41xx/FP93xx)。默认情况下，它仅捕获10个数据包。

```
FPR4110-04-A# connect fxos
FPR4110-04-A(fxos)# ethanalyzer local interface mgmt
Capturing on 'eth0'
1 2024-01-30 16:15:56.149887591 fe80::6a9e:bff:fed5:678c → ff02::2 ICMPv6 70 Router Solicitation from 68:9e:0b:d5:67:8c
2 2024-01-30 16:15:56.635897727 80:b7:09:32:f2:a0 → ff:ff:ff:ff:ff:ff ARP 60 Who has 172.16.244.65? Tell 172.16.244.106
3 2024-01-30 16:15:56.650081622 c4:72:95:76:df:97 → 01:80:c2:00:00:00 STP 60 RST. Root = 0/12/2c:31:24:b1:6b:00 Cost = 4 Port = 0x8017
4 2024-01-30 16:15:57.170356692 172.16.244.72 → 172.16.254.131 NTP 90 NTP Version 3, client
5 2024-01-30 16:15:57.234298977 172.16.254.131 → 172.16.244.72 NTP 90 NTP Version 3, server
6 2024-01-30 16:15:58.656444769 c4:72:95:76:df:97 → 01:80:c2:00:00:00 STP 60 RST. Root = 0/12/2c:31:24:b1:6b:00 Cost = 4 Port = 0x8017
7 2024-01-30 16:15:59.170382028 172.16.244.72 → 172.16.254.131 NTP 90 NTP Version 3, client
8 2024-01-30 16:15:59.233556065 172.16.254.131 → 172.16.244.72 NTP 90 NTP Version 3, server
9 2024-01-30 16:15:59.352654266 0.0.0.0 → 255.255.255.255 DHCP 368 DHCP Discover - Transaction ID 0x328ec1b7
10 2024-01-30 16:16:00.150684560 fe80::6a9e:bff:fed5:678c → ff02::2 ICMPv6 70 Router Solicitation from 68:9e:0b:d5:67:8c
10 packets captured
Program exited with status 0
```

Ethanalyzer也可用于传入界面。选项为高优先级或低优先级日志。

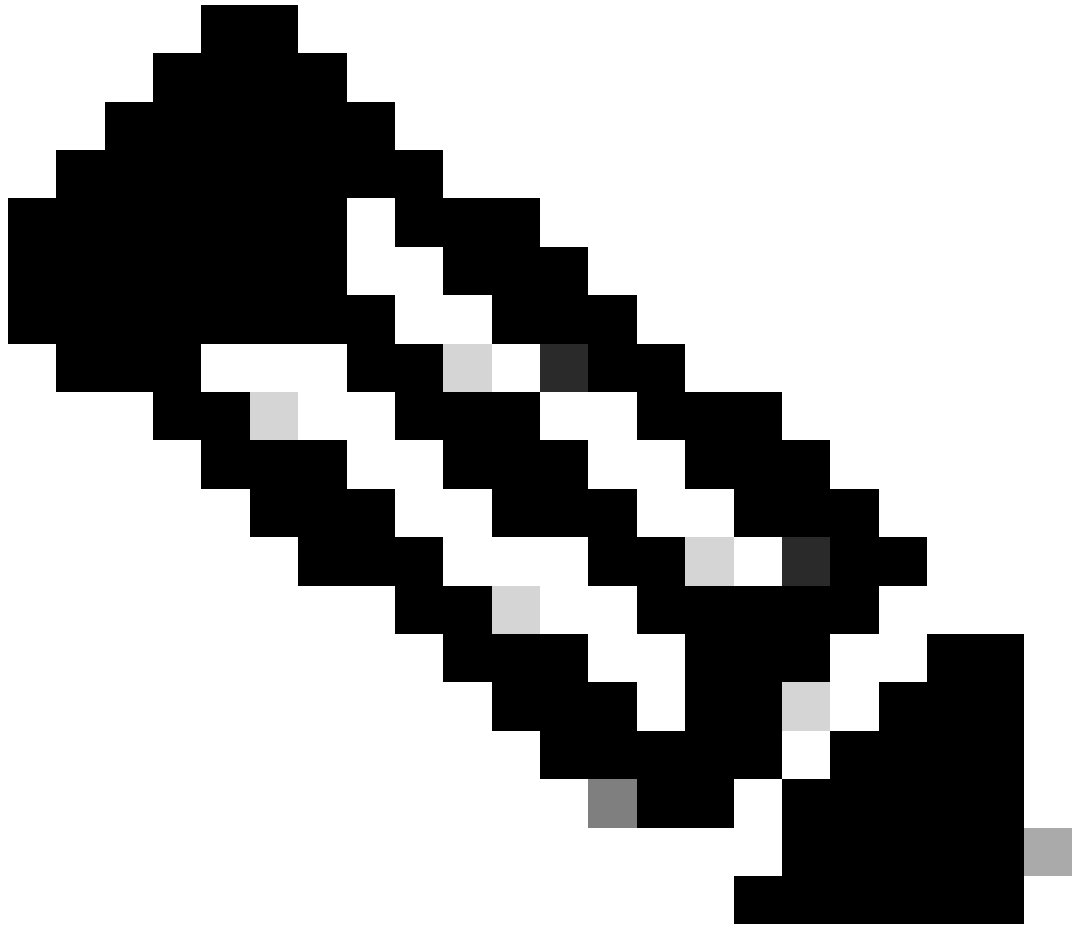
```
FPR4110-04-A(fxos)# ethanalyzer local interface ?
inbound-hi Inbound(high priority) interface
inbound-low Inbound(low priority) interface
mgmt Management interface
```

可以对捕获使用过滤器。

```
FPR4110-04-A(fxos)# ethanalyzer local interface ?
inbound-hi Inbound(high priority) interface
inbound-low Inbound(low priority) interface
mgmt Management interface
```

```
show interface
```

此命令显示机箱中接口的列表和当前状态，简要说明每种可操作状态的原因。



注意：充当端口通道中端口的接口不出现在此列表中。

```
FPR4110-04-A# scope eth-uplink
FPR4110-04-A /eth-uplink # scope fabric a
FPR4110-04-A /eth-uplink/fabric # show interface
```

Interface:

Port Name	Port Type	Admin State	Oper State	Allowed Vlan	State Reason
-----------	-----------	-------------	------------	--------------	--------------

Ethernet1/1	Data	Enabled	Link Down	All	Link failure or not-connected
-------------	------	---------	-----------	-----	-------------------------------

Ethernet1/2	Data	Disabled	Admin Down	All	Administratively down
-------------	------	----------	------------	-----	-----------------------

Ethernet1/3	Data	Enabled	Up	All	Port is enabled and up
-------------	------	---------	----	-----	------------------------

Ethernet1/4	Data	Enabled	Up	All	Port is enabled and up
-------------	------	---------	----	-----	------------------------

Ethernet1/5 Data Enabled Link Down All Link failure or not-connected
Ethernet1/6 Data Enabled Link Down All Link failure or not-connected
Ethernet1/7 Data Enabled Sfp Not Present All Unknown
Ethernet1/8 Mgmt Enabled Up All Port is enabled and up
Ethernet2/2 Data Enabled Link Down All Link failure or not-connected
Ethernet2/5 Data Disabled Sfp Not Present All Unknown
Ethernet2/6 Data Disabled Sfp Not Present All Unknown
Ethernet2/7 Data Disabled Sfp Not Present All Unknown
Ethernet2/8 Data Disabled Sfp Not Present All Unknow

如前所述，故障表示在安全防火墙平台上发现的任何硬件问题。您可以检查不同范围中的故障，缩小每个范围中的问题范围。此示例显示以太上行链路中的故障。

```
FPR4110-04-A# scope eth-uplink
FPR4110-04-A /eth-uplink # show fault
Severity Code Last Transition Time ID Description
-----
Major F0727 2024-01-29T20:31:54.282 597025 lan Member 2/3 of Port-Channel 1 on fabric interconnect A is down, membership: down
Major F0727 2024-01-29T20:31:54.282 597023 lan Member 2/4 of Port-Channel 1 on fabric interconnect A is down, membership: down
Major F0282 2023-07-31T17:52:04.764 201600 lan port-channel 7 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:51:03.325 201446 lan port-channel 4 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:49:00.451 201281 lan port-channel 2 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:42:34.236 200638 lan port-channel 1 on fabric interconnect A oper state: failed, reason: No operational members
Major F0282 2023-07-31T17:41:34.673 200660 lan port-channel 3 on fabric interconnect A oper state: failed, reason: No operational member
```

显示端口通道

这显示机箱中配置的端口通道数量及其常规状态。

您可以移动到特定端口通道范围以获取成员信息。

如果您看到port-channel发生故障，请与TAC联系以获取进一步帮助，因为这是端口信道发生故障的示例。

```
FPR4110-04-A# scope eth-uplink
FPR4110-04-A /eth-uplink # scope fabric a
FPR4110-04-A /eth-uplink/fabric # show port-channel
Port Channel:
Port Channel Id Name Port Type Admin State Oper State Port Channel Mode Allowed Vlan State Reason
-----
1 Port-channel1 Data Enabled Failed Active All No operational members
2 Port-channel2 Data Enabled Failed Active All No operational members
3 Port-channel3 Data Enabled Failed Active All No operational members
4 Port-channel4 Data Enabled Failed Active All No operational members
7 Port-channel7 Data Enabled Failed Active All No operational members

FPR4110-04-A /eth-uplink/fabric # scope port-channel 1
FPR4110-04-A /eth-uplink/fabric/port-channel # show member

Member Port:
```

Port Name Membership Oper State State Reason

Ethernet2/3 Down Sfp Not Present Unknown
Ethernet2/4 Down Sfp Not Present Unknown

使用命令**show port-channel summary**查看设备上的所有端口信道及其成员

```
FPR4110-04-A# connect fxos  
FPR4110-04-A(fxos)# show port-channel summary
```

Flags:

D - Down

P - Up in port-channel (members)

I - Individual H - Hot-standby (LACP only)

s - Suspended r - Module-removed

S - Switched R - Routed

U - Up (port-channel)

M - Not in use. Min-links not met

Group Port-Channel Type Protocol Member Ports

1 Po1(SD) Eth LACP Eth2/3(D) Eth2/4(D)
2 Po2(SD) Eth NONE --
3 Po3(SD) Eth NONE --
4 Po4(SD) Eth NONE --
7 Po7(SD) Eth NONE --

相关信息

- [生成FXOS故障排除文件](#)
- [回答Firepower可扩展操作系统\(FXOS\)常见问题](#)
- [配置Firepower设备上的NTP设置并对其进行故障排除](#)
- [配置并验证Firepower设备上的端口通道](#)

关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言，希望全球的用户都能通过各自的语言得到支持性的内容。

请注意：即使是最好的机器翻译，其准确度也不及专业翻译人员的水平。

Cisco Systems, Inc. 对于翻译的准确性不承担任何责任，并建议您总是参考英文原始文档（已提供链接）。