

# ماظن لوح ةل وادتمل ةلئسأل ىل ع درل (FXOS) لي غشتل لباقل لي غشتل Firepower

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FXOS ب ةصاخال ا](#)

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رماوأل ا رطس ةهجاو نم ي قطنم ل ا زا هجاو ل \(ل ك ذ ي ل ا ا م و ر ا دص ال او ةني عم ل ا تاهجاو ل ا\)](#)



# FXOS ماظن نم ين ف ضرع عاشن إ كنكمي فيك .س

تاينقت معددي FXOS 2.8.x زارطال إنف، يلالاتلابو. FPRM لامه إ مت 2.8.x رادصلال نم ارابتعا  
طقف ةيصلصلال مداوخلالو لكيهال ضرع.

```
<#root>
```

```
KSEC-FPR4115-2-1(local-mgmt)#
```

```
show tech-support fprm detail
```

```
WARNING: show tech-support fprm detail command is deprecated.  
Please use show tech-support chassis 1 detail command instead.
```

- مكحتلا ةدحوو ئيهاهملالو ةيصلصلال مداوخلالو لكيهال لجس تافل م يلع يوتحي: لكيهال Cisco نم (CIMC) ةلمكتمال ةرادال ي ف مكحتلا ةدحوو (BMC) ةيساسال ةحولال ةرادال ي  
• يتلا ةيطمنال ةدحوو/يصلصلال مداوخلال لجس تافل م يلع يوتحي: ةيطمنال ةدحوو  
• ةقاطال ديدهت دض عافدل زاهج وأ (ASA) فيكتلل لباقلال نامال زاهج اهيف دجاوتي  
(appAgent) لثم تانوكملل تالجس كلذ نمضتوي. (FTD) ةيرانال

show نم ةفلتخم تارادصلال ةثال FXOS ليغشتال ماظن رفوي، 2.8.x لبق ام تارادصلال ي  
ريدمو - فرشملال كرحملال - (MIO) ةرادال جارجال/الخال لجس تافل م يلع FPRM ةمزح يوتحت.  
tech. (ةمدخلال)

عاشن إ show tech-support <option> ليصافات مدختسأ. ةثالثلال مزحلال لك دي لوتب موقت، ةداع  
TAC: ليحتل ةفلتخملال ةثالثلال تالجسلا تاعومجم

```
<#root>
```

```
FPR4140-A# connect local-mgmt
```

```
FPR4140-A(local-mgmt)#
```

```
show tech-support fprm detail
```

```
FPR4140-A(local-mgmt)#
```

```
show tech-support chassis 1 detail
```

```
FPR4140-A(local-mgmt)#
```

```
show tech-support module 1 detail
```

- ةشاشلال يلع تاجرخملال يلع لصحت كن إنف، ليصافاتلا رايج دي دحتب موقت مل اذإ
- tar فل م عاشن إ ليصافاتلا رايج موقوي

ةدلومال تافل ملامسأ نم ققحتلل

<#root>

FPR4140-A(local-mgmt)#

dir techsupport/

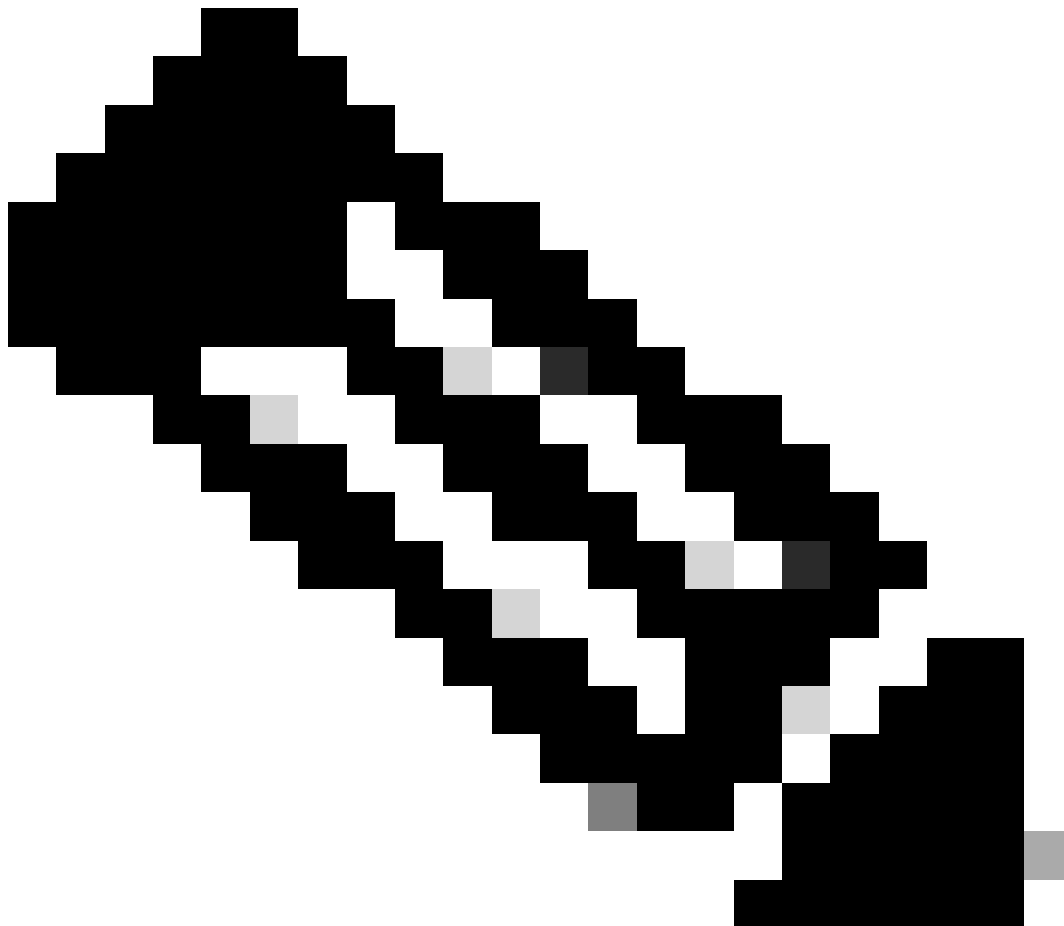
```
1 15595520 Apr 09 17:29:10 2017 20170409172722_FPR4140_FPRM.tar
1 962560 Apr 09 17:32:20 2017 20170409172916_FPR4140_BC1_all.tar
1 7014400 Apr 09 18:06:25 2017 Firepower-Module1_04_09_2017_18_05_59.tar
```

نم ةمزح ري دصت ل CLI:

<#root>

FPR4140-A(local-mgmt)#

```
copy workspace:///techsupport/20170409172722_FPR4140_FPRM.tar ftp|tftp|scp|sftp://username@192.168.0.1/
```

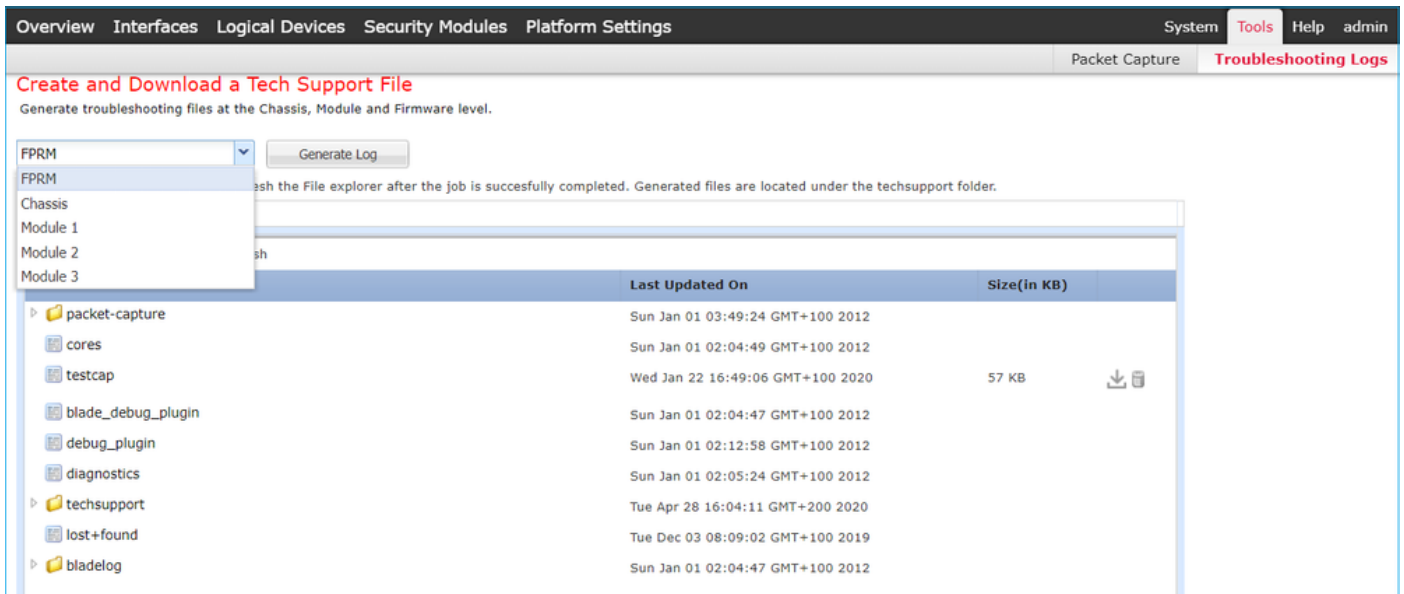


وَأو ASA لثم ةي قطن م ل ةزه ج أ ل ره ظت ، FXOS لي غشت ل م اظن ل ة فاض إ ل اب : ة ظ ح ا ل م

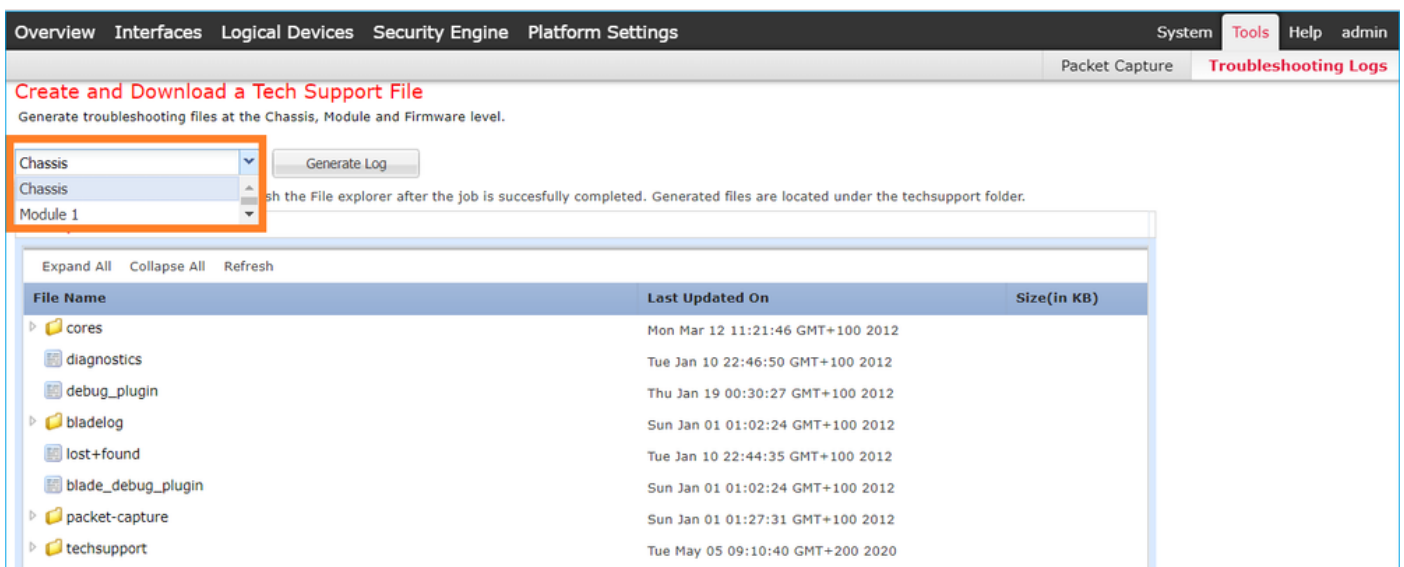
ةددتتم تالكرشلال ةلاحي فو. اهب ةصاخلال ةلصفنملا ينفلال ضرعلال ةيننالكما FTD  
 ضرعلال تالكرش نم ةصاخلال اهتومجم اضيأ ةلاجل لكل نوكي، (MI) تالبيثملا  
 فم فم MI ضرع ايجولونكت معد متي ال، اريخأو. ايجولونكتلاو

مدختسم ةهجاو نم هلبيزنتو FXOS ل ينفلال معدلا عاشنإ رفوتي، 6. FXOS نم اءب  
 فاطخال فاشكتسأ تالچس > تاودأ نمض (FCM) لكيهلا ةرادإل Firepower Chassis Manager  
 اهحالصاو

زارط ةشاشلال لوح FP9300:



زارطال في FP41xx:



لكيهلا ةرادإب صاخلال IP ناووع نم ققحتلال كنكمي فيك. س

# أهري غتو ةب اوبل او يكبش ل ا عانق ل او

ةرادإل ا ةه ا و ن ي و ك ت ن م ق ق ح ت ل ل ق ر ط ة د ع ك ا ن ه

<#root>

FPR4115-2-1#

show fabric-interconnect

Fabric Interconnect:

ID	OOB IP Addr	OOB Gateway	OOB Netmask	OOB IPv6 Address	OOB IPv6 Gateway	Prefix	Operal
A	10.62.184.19	10.62.184.1	255.255.255.0	::	::	64	Operal

وأ

<#root>

FPR4115-2-1#

scope fabric-interconnect a

FPR4115-2-1 /fabric-interconnect #

show

Fabric Interconnect:

ID	OOB IP Addr	OOB Gateway	OOB Netmask	OOB IPv6 Address	OOB IPv6 Gateway	Prefix	Operal
A	10.62.184.19	10.62.184.1	255.255.255.0	::	::	64	Operal

FPR4115-2-1 /fabric-interconnect #

show detail

Fabric Interconnect:

ID: A  
Product Name: Cisco FPR-4115-SUP  
PID: FPR-4115-SUP  
VID: V01  
Vendor: Cisco Systems, Inc.  
Serial (SN): JAD12345NY6  
HW Revision: 0  
Total Memory (MB): 8074  
OOB IP Addr: 10.62.184.19  
OOB Gateway: 10.62.184.1  
OOB Netmask: 255.255.255.0  
OOB IPv6 Address: ::  
OOB IPv6 Gateway: ::  
Prefix: 64  
Operability: Operable  
Thermal Status: Ok  
Ingress VLAN Group Entry Count (Current/Max): 0/500  
Switch Forwarding Path Entry Count (Current/Max): 14/1021

Current Task 1:  
Current Task 2:  
Current Task 3:

IP تادادعإ ريي غتل:

<#root>

FPR4115-2-1#

scope fabric-interconnect a

FPR4115-2-1 /fabric-interconnect #

set out-of-band

gw Gw  
ip Ip  
netmask Netmask

KSEC-FPR4115-2-1 /fabric-interconnect #

set out-of-band ip 10.62.184.19 netmask 255.255.255.0 gw 10.62.184.1

KSEC-FPR4115-2-1 /fabric-interconnect\* #

commit-buffer

مازتلالا لوح:

```
FPR4115-2-1 /fabric-interconnect # commit-buffer verify-only ! verify the change for error
FPR4115-2-1 /fabric-interconnect # commit-buffer ! commit the change
FPR4115-2-1 /fabric-interconnect # discard-buffer ! cancel the change
```

عجار، لي صافاتلا نم دي زمل:

[رماو أ عجرم Cisco Firepower 4100/9300 FXOS](#)

رابتخإ رابتخإ رابتخإ رابتخإ رابتخإ لي غشت متي فيك .س  
FXOS ل لاصتالا

ping رمالا مدختساو ةي لحملا ةرادال (CLI) رماوأل رطس ةهجاو قاطن ىل لقتنا

<#root>

FPR4115-2-1#

connect local-mgmt

FPR4115-2-1(local-mgmt)#

```
ping 10.62.184.1
```

```
PING 10.62.184.1 (10.62.184.1) from 10.62.184.19 eth0: 56(84) bytes of data.  
64 bytes from 10.62.184.1: icmp_seq=1 ttl=255 time=0.602 ms  
64 bytes from 10.62.184.1: icmp_seq=2 ttl=255 time=0.591 ms  
64 bytes from 10.62.184.1: icmp_seq=3 ttl=255 time=0.545 ms  
64 bytes from 10.62.184.1: icmp_seq=4 ttl=255 time=0.552 ms
```

## ةرادإلا ةهجاوب صاخلا MAC ناوع نم ققحتلا متي فيك .س ققاطنلا جراخ

يقاتنلا رمألا مدختساو ةيلاحملا ةرادإلل (CLI) رماوألا رطس ةهجاو قاطنلا لقتنا:

```
<#root>
```

```
FPR4115-2-1#
```

```
connect local-mgmt
```

```
FPR4115-2-1(local-mgmt)#
```

```
show mgmt-ip-debug | begin eth0
```

```
eth0      Link encap:Ethernet  HWaddr 78:bc:1a:e7:a4:11  
          inet addr:10.62.184.19  Bcast:10.62.184.255  Mask:255.255.255.0  
          inet6 addr: fe80::7abc:1aff:fee7:a411/64  Scope:Link  
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
          RX packets:3420589  errors:0  dropped:0  overruns:0  frame:0  
          TX packets:2551231  errors:0  dropped:0  overruns:0  carrier:0  
          collisions:0  txqueue:1000  
          RX bytes:419362704 (399.9 MiB)  TX bytes:1530147643 (1.4 GiB)
```

## جراخ ةرادإلا ةهجاو ليغشت نم ققحتلا كنكمي فيك .س ققاطنلا

A > Show، ةنينبلا ةنينبلا تالصوملا قاطن نمض ليغشتلا ةيلباق لىا ةفاضلاب  
رمألا اذم مادختسا كنكمي:

```
<#root>
```

```
FPR4115-2-1#
```

```
connect local-mgmt
```

```
FPR4115-2-1(local-mgmt)#
```

```
show mgmt-port
```



```
eth0      Link encap:Ethernet  HWaddr 78:bc:1a:e7:a4:11
          inet addr:10.62.184.19  Bcast:10.62.184.255  Mask:255.255.255.0
          inet6 addr: fe80::7abc:1aff:fee7:a411/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3422158 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2552019 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:419611452 (400.1 MiB)  TX bytes:1530247862 (1.4 GiB)
```

في ضوء عم UP نأ طحال . طابترال قاطنل اعز رهظي . رمأل اذه مادختسإ كنكمي ، كلذ نم ال دب  
ي: لال رطسلا

<#root>

FPR4115-2-1#

connect local-mgmt

FPR4115-2-1(local-mgmt)#

show mgmt-ip-debug | begin eth0

```
eth0      Link encap:Ethernet  HWaddr 78:bc:1a:e7:a4:11
          inet addr:10.62.184.19  Bcast:10.62.184.255  Mask:255.255.255.0
          inet6 addr: fe80::7abc:1aff:fee7:a411/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3420589 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2551231 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:419362704 (399.9 MiB)  TX bytes:1530147643 (1.4 GiB)
```

---

تمق اذا ىتح ليغشلتال ديقة لالحال لظت .ةهاولال لوؤسم ةلاح يه UP ةلاح :ةظحال م  
ل، ليغشلتال ةلاح يه ىرخأ ةمهه ةطقن .ةيطمنلل SFP ةدحو وأ يلعفلال لبكلال لصفب  
(ليغشلتال ديقة لخال لوكوتورب) ليغشلتال ديقة طابترالال نأ ينعي امم

---

ةهاولال ةيقتنملا ةلحال طاقسإل:

<#root>

FPR4100-3-A(local-mgmt)#

mgmt-port shut

FPR4100-3-A(local-mgmt)#

show mgmt-ip-debug ifconfig | b eth0

```
eth0      Link encap:Ethernet  HWaddr 58:97:BD:B9:76:EB
          inet addr:10.62.148.88  Bcast:10.62.148.127  Mask:255.255.255.128
          BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:3685870  errors:0  dropped:0  overruns:0  frame:0
          TX packets:7068372  errors:0  dropped:0  overruns:0  carrier:0
```

```
collisions:0 txqueuelen:1000  
RX bytes:295216623 (281.5 MiB) TX bytes:1049391193 (1000.7 MiB)
```

ىخأ ةرم ريكذتللو

```
<#root>
```

```
FPR4100-3-A(local-mgmt)#
```

```
mgmt-port no-shut
```

```
FPR4100-3-A(local-mgmt)#
```

```
show mgmt-ip-debug ifconfig | b eth0
```

```
eth0      Link encap:Ethernet  HWaddr 58:97:BD:B9:76:EB  
          inet addr:10.62.148.88  Bcast:10.62.148.127  Mask:255.255.255.128  
          inet6 addr: fe80::5a97:bdff:feb9:76eb/64  Scope:Link  
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
          RX packets:3685885  errors:0  dropped:0  overruns:0  frame:0  
          TX packets:7068374  errors:0  dropped:0  overruns:0  carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:295218130 (281.5 MiB)  TX bytes:1049391353 (1000.7 MiB)
```

---

يذلل fxos عضو تحت interface mgmt 0 رمألا راهظاوةهجاوولل زجوم ضرع دجوي :ةظحال م  
ىلأ عجرمك اذه مدختست ال .يلاوتلأ ىلع Admin down و لفسأك mgmt0 ةهجاو ضرعي  
لطمع هنا

---

```
<#root>
```

```
FPR-4110-A#
```

```
connect fxos
```

```
FPR-4110-A(fxos)#
```

```
show interface brief | include mgmt0
```

```
mgmt0 --          down  172.16.171.83          --          1500
```

```
FPR-4110-A(fxos)#
```

```
show interface mgmt 0
```

```
mgmt0 is down (Administratively down)
Hardware: GigabitEthernet, address: 5897.bdb9.212d (bia 5897.bdb9.212d)
Internet Address is 172.16.171.83/24
```

```
MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA
auto-duplex, auto-speed
EtherType is 0x0000
1 minute input rate 3080 bits/sec 2 packets/sec
1 minute output rate 0 bits/sec 0 packets/sec
Rx
  977 unicast packets 12571 multicast packets 5229 broadcast packets
  18777 input packets 2333662 bytes
Tx
  0 unicast packets 0 multicast packets 0 broadcast packets
  0 output packets 0 bytes
```

يُرخأ ةرم .نراق نأ تحت ةوق لمع فاقِي| ،بولسأ fxos تحت mgmt0 نراق طوش ضرع تنأ متي نإ  
ل:فسألأب نوكي نأ عجرمك اذه مدختست ال

<#root>

FPR4115-2-1(fxos)#

```
show run interface mgmt0
```

!Command:

```
show running-config interface mgmt0
```

!Time: Tue May 5 14:19:42 2020

version 5.0(3)N2(4.81)

```
interface mgmt0
  shutdown force
  ip address 10.62.184.19/24
```

## FXOS؟ هيجوت لودج نم ققحتلأ ةيفي ك .س

ةرابعلا نأ نم دكأت ،كلذل .ةيضارتفالا تارابعلا ةومجم يلع طقف قاطنلا جراخ ةرادإلا دمتعت  
كانه .ماظنلا إلى لوصولل نوجاتحي نيذلا ءالمعلا لاصلتالاب حمست ةراتخملا ةيضارتفالا  
قاطنلا جراخ ةرادإلل همادختسإ متي ال نكلو ،Connect fxos نمض show ip route vrf all رمأ

## FXOS ل ARP لودج نم ققحتلأ متي في ك .س

طاقتلأ مادختسإ اضيأ كنكمي .FXOS ل (CLI) رمأوالا رطس ةهجاو نم يئرمر ريغ ARP لودج  
تانايبال رورم ةكرح نم ققحتلأ وأو ARP طاقتلأال (ethalyzer) FXOS عضو نمض ةمزحلا

ةرادإلا لىل/انم

اذه .عش يأ لىل طاقتلالا ةيفصت لماع ربيغت كنكمي ARP مزح طاقتلال لىل لاثم اذه  
tcpdump ةيفصت لماعل لاثامم حشرمل

```
<#root>
```

```
fp9300-A#
```

```
connect fxos
```

```
fp9300-A(fxos)#
```

```
ethalyzer local interface mgmt capture-filter arp
```

```
Capturing on eth0
```

```
2016-10-14 18:04:57.551221 00:50:56:85:be:44 -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.240? Tell 172.16.171.112?
2016-10-14 18:04:57.935562 00:12:80:85:a5:49 -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.112? Tell 172.16.171.205?
2016-10-14 18:04:58.167029 00:50:56:85:78:4e -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.205? Tell 172.16.171.1?
2016-10-14 18:04:59.156000 00:50:56:9f:b1:43 -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.1? Tell 172.16.171.1?
2016-10-14 18:04:59.165701 00:50:56:9f:b1:43 -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.1? Tell 172.16.171.205?
2016-10-14 18:04:59.166925 00:50:56:85:78:4e -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.205? Tell 172.16.171.151?
2016-10-14 18:04:59.268168 00:50:56:9f:b1:43 -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.151? Tell 0.0.0.0?
2016-10-14 18:05:00.150217 00:50:56:85:78:4e -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.204? Tell 172.16.171.151?
2016-10-14 18:05:00.268369 00:50:56:9f:b1:43 -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.151? Tell 0.0.0.0?
2016-10-14 18:05:01.150243 00:50:56:85:78:4e -> ff:ff:ff:ff:ff:ff ARP Who has 172.16.171.204? Tell 172.16.171.204?
```

```
10 packets captured
```

```
Program exited with status 0.
```

```
fp9300-A(fxos)#
```

ديعب مدخال لىل هريدصت م ث فلم ي ف طاقتلالا ظفح كنكمي ،كلذ لىل ةفاضإلاب

```
<#root>
```

```
FPR4140-A#
```

```
connect fxos
```

```
FPR4140-A(fxos)#
```

```
ethalyzer local interface mgmt capture-filter arp limit-captured-frames 0 write workspace:///ARP.pcap
```

```
FPR4140-A#
```

```
connect local-mgmt
```

```
FPR4140-A(local-mgmt)#
```

```
dir
```

```
1 23075 Jan 12 13:13:18 2020 ARP.pcap
```

```
FPR4140-A(local-mgmt)#
```

```
copy workspace:///ARP.pcap ftp://anonymous@10.48.40.70/ARP.pcap
```

## FXOS? أطخ ثادحاً نم ققحتلالا ةيفيك .س

show fault: رمألا مدختسأ

<#root>

FPR4115-2-1#

show fault

Severity	Code	Last Transition Time	ID	Description
Major	F0909	2020-04-26T21:19:37.520	554924	default Keyring's certificate is invalid, reason:
Major	F1769	2012-01-19T00:30:02.733	323268	The password encryption key has not been set.
Minor	F1437	2012-01-19T00:30:02.732	32358	Config backup may be outdated

ةروطخلال لىلإ ادانتسا ءاطخالا ةيفصت اضيأ كنكمي:

<#root>

FPR4115-2-1#

show fault ?

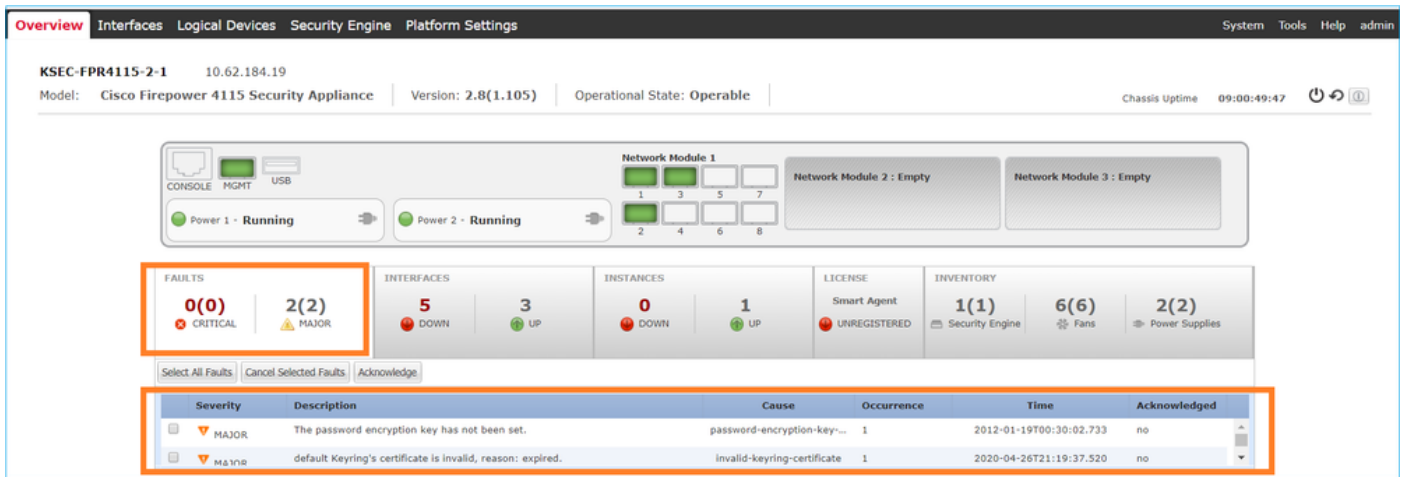
```
0-18446744073709551615 ID
<CR>
> Redirect it to a file
>> Redirect it to a file in append mode
cause Cause
detail Detail
severity Severity
suppressed Fault Suppressed
| Pipe command output to filter
```

FPR4115-2-1#

show fault severity major

Severity	Code	Last Transition Time	ID	Description
Major	F0909	2020-04-26T21:19:37.520	554924	default Keyring's certificate is invalid, reason:
Major	F1769	2012-01-19T00:30:02.733	323268	The password encryption key has not been set.

تامولعم ةحول > FXOS مدختسم ةهجاو لىل ةماع ةرظن نم اضيأ ءاطخالا سفن ةيؤر نكمي  
ءاطخالا:



ماظنل فيضمل مسا ريغت نكمي فيك .س

ماظنل قاطن نمض set name رمأل مادختسإ كنكمي

```
<#root>
```

```
KSEC-FPR4115-2-1#
```

```
scope system
```

```
KSEC-FPR4115-2-1 /system #
```

```
set name new-name
```

Warning: System name modification changes FC zone name and redeploys them non-disruptively  
KSEC-FPR4115-2-1 /system\* #

```
commit-buffer
```

```
KSEC-FPR4115-2-1 /system #
```

```
exit
```

```
new-name#
```

مداخلال ةلاح جارخإ نمض "رتويبمكلال قفاوت مدع ةلاح" يه ام .س  
show?

كلذ حصي و. اهم ادختسإ لبق اهتئيهت ةداعوا اتيح ةتبتمل نامأل ةدحو لىع فرعتال بجي  
RMA. قيرط نع ةدحو نولدتست ام دنع يتح

```
<#root>
```

```
FPR9300#
```

```
show server status
```



Server	Slot Status	Overall Status	Discovery
1/1	Mismatch	Compute Mismatch	Complete
1/2	Equipped	Ok	Complete
1/3	Empty		

FPR9300#

اذه أطخل شح ثوح ي ف ةبس و ح ل ا ق باط م د ع ب ب س ت ي د ق

Service profile ssp-sprof-1 configuration failed due to compute-unavailable,insufficient-resources

ةدوجوم ريغ ةي ط م ن ل ا ة د ح و ل ا ت ن ا ك و ل ا م ك ة ن ر ت ق م ريغ show service-profile ة ل ا ح ض ر ع ت

ر م ا و أ ل ا ر ط س ة ه ج ا و ن م ا ه ب ف ا ر ت ع ا ل ا ب ج ي ت ل ا ت ا و ط خ ل ا

<#root>

scope chassis 1

acknowledge slot <slot#>

commit-buffer

ةي ط م ن ل ا ة د ح و ل ا ي ل ع ف ر ع ت ل ل " ل ك ي ه ل ا ر ي د م " م د خ ت س م ة ه ج ا و م ا د خ ت س ا ك ن ك م ي ، ك ل ذ ن م ا ل د ب و

Security Modules	Hardware State	Service State	Power	Application
Security Module 1	Mismatch	Not-available		Cisco Firepower Threat Defense
Security Module 2	Empty	Not-available		
Security Module 3	Empty	Not-available		

Q. show slot ج ا ر خ ا ي ف "Token mismatch" ي ن ع م ا م .

ا ه ب ف ا ر ت ع ا ل ا د ع ب ن ا م أ ل ا ة د ح و ة ي ه ت ة د ا ع ا م ت ت م ل ه ن ا ي ل ا ك ل ذ ر ي ش ي

<#root>

FPR9300#

scope ssa



scope server 1/1

FPR4140-A /chassis/server #

show inventory storage

Server 1/1:

Name:

User Label:

Equipped PID: FPR4K-SM-36

Equipped VID: V01

Equipped Serial (SN): FLM12345KL6

Slot Status: Equipped

Acknowledged Product Name: Cisco Firepower 4100 Series Extreme Performance Security Engine

Acknowledged PID: FPR4K-SM-36

Acknowledged VID: V00

Acknowledged Serial (SN): FLM12345KL6

Acknowledged Memory (MB): 262144

Acknowledged Effective Memory (MB): 262144

Acknowledged Cores: 36

Acknowledged Adapters: 2

Motherboard:

Product Name: Cisco Firepower 4100 Series Extreme Performance Security Engine

PID: FPR4K-SM-36

VID: V01

Vendor: Cisco Systems Inc

Serial (SN): FLM12345KL6

HW Revision: 0

RAID Controller 1:

Type: SATA

Vendor: Cisco Systems Inc

Model: CHORLEYWOOD

Serial: FLM12345KL6

HW Revision:

PCI Addr: 00:31.2

Raid Support:

OOB Interface Supported: No

Rebuild Rate: N/A

Controller Status: Unknown

Local Disk 1:

Vendor:

Model:

Serial:

HW Rev: 0

Operability: N/A

Presence: Missing

Size (MB): Unknown

Drive State: Unknown

Power State: Unknown

Link Speed: Unknown

Device Type: Unspecified

Local Disk Config Definition:

Mode: No RAID

Description:

Protect Configuration: No

# CLI مع DNS و NTP، كيفية تنزيل إعدادات التثبيت في كس.

دنتسمل اذه نم تاميلعلتال قيبطت. FXOS يساسألما اظنلال ادادع| نمض اذه نيوكت متي  
[FXOS يساسألما اظنلال ادادع](#)

لكيهال تقو ادادع| نم ققحتلل

```
<#root>
```

```
KSEC-FPR4115-2-1#
```

```
show clock
```

```
Tue May 5 21:30:55 CEST 2020
```

```
KSEC-FPR4115-2-1#
```

```
show ntp
```

```
NTP Overall Time-Sync Status: Time Synchronized
```

ديهمتلاب ةصاخلا (CLI) رماوالا رطس ةهجاو نم يلصلنلال مداخال/ةيطمنلال ةدحولل تقوحيضوتل  
ةيلاتلال ةثالثل رماوالا مدختسأ، ةيطمنلال ةدحولل

```
<#root>
```

```
Firepower-module1>
```

```
show ntp peerstatus
```

```
remote local st poll reach delay offset disp
=====
*203.0.113.126 203.0.113.1 2 64 377 0.00006 0.000018 0.02789
```

```
remote 203.0.113.126, local 203.0.113.1
hmode client, pmode mode#255, stratum 2, precision -20
leap 00, refid [192.0.2.1], rootdistance 0.19519, rootdispersion 0.17641
ppoll 6, hpoll 6, keyid 0, version 4, association 43834
reach 377, unreachable 0, flash 0x0000, boffset 0.00006, ttl/mode 0
timer 0s, flags system_peer, config, bclient, prefer, burst
reference time: dbef8823.8066c43a Mon, Dec 5 2016 8:30:59.501
originate timestamp: 00000000.00000000 Mon, Jan 1 1900 2:00:00.000
receive timestamp: dbefb27d.f914589d Mon, Dec 5 2016 11:31:41.972
transmit timestamp: dbefb27d.f914589d Mon, Dec 5 2016 11:31:41.972
filter delay: 0.00008 0.00006 0.00008 0.00009
0.00008 0.00008 0.00008 0.00009
filter offset: 0.000028 0.000018 0.000034 0.000036
0.000033 0.000036 0.000034 0.000041
filter order: 1 2 6 0
4 5 3 7
offset 0.000018, delay 0.00006, error bound 0.02789, filter error 0.00412
```

Firepower-module1>

show ntp association

```
remote          refid          st t when poll reach  delay  offset jitter
=====
*203.0.113.126  192.0.2.1     2 u  37  64  377  0.062  0.018  0.017
```

ind assid status conf reach auth condition last\_event cnt

```
=====
1 43834 961d yes yes none sys.peer 1
```

associd=43834 status=961d conf, reach, sel\_sys.peer, 1 event, popcorn,  
srcadr=203.0.113.126, srcport=123, dstadr=203.0.113.1, dstport=123,  
leap=00, stratum=2, precision=-20, rootdelay=195.190, rootdisp=176.407,  
refid=192.0.2.1,  
reftime=dbef8823.8066c43a Mon, Dec 5 2016 8:30:59.501,  
rec=dbefb27d.f91541fc Mon, Dec 5 2016 11:31:41.972, reach=377,  
unreach=0, hmode=3, pmode=4, hpoll=6, ppoll=6, headway=22, flash=00 ok,  
keyid=0, offset=0.018, delay=0.062, dispersion=0.778, jitter=0.017,  
xleave=0.011,  
filtdelay= 0.08 0.06 0.08 0.10 0.08 0.09 0.08 0.10,  
filtoffset= 0.03 0.02 0.03 0.04 0.03 0.04 0.03 0.04,  
filtdisp= 0.00 0.03 1.04 1.07 2.06 2.09 3.09 3.12

Firepower-module1>

show ntp sysinfo

associd=0 status=0618 leap\_none, sync\_ntp, 1 event, no\_sys\_peer,  
version="ntpd 4.2.6p5@1.2349-o Fri Oct 7 17:08:03 UTC 2016 (2)",  
processor="x86\_64", system="Linux/3.10.62-ltsi-WR6.0.0.27\_standard",  
leap=00, stratum=3, precision=-23, rootdelay=195.271, rootdisp=276.641,  
refid=203.0.113.126,  
reftime=dbefb238.f914779b Mon, Dec 5 2016 11:30:32.972,  
clock=dbefb2a7.575931d7 Mon, Dec 5 2016 11:32:23.341, peer=43834, tc=6,  
mintc=3, offset=0.035, frequency=25.476, sys\_jitter=0.003,  
clk\_jitter=0.015, clk\_wander=0.011

system peer: 203.0.113.126  
system peer mode: client  
leap indicator: 00  
stratum: 3  
precision: -23  
root distance: 0.19527 s  
root dispersion: 0.27663 s  
reference ID: [203.0.113.126]  
reference time: dbefb238.f914779b Mon, Dec 5 2016 11:30:32.972  
system flags: auth monitor ntp kernel stats  
jitter: 0.000000 s  
stability: 0.000 ppm  
broadcastdelay: 0.000000 s  
authdelay: 0.000000 s

time since restart: 1630112  
time since reset: 1630112  
packets received: 157339  
packets processed: 48340  
current version: 48346  
previous version: 0  
declined: 0

```
access denied:          0
bad length or format:   0
bad authentication:     0
rate exceeded:          0
Firepower-module1>
```

اهال صإو دنن سمل اذه اطاخأ فاشك تس او NTP نم ققحتل لوج لى صافتلا نم ديزمل  
[تاداعلا هذه اطاخأ فاشك تس او اهنم ققحتل او \(NTP\) ةكشلا تقو لو كوتورب تاداعلا نيوك ت](#)  
[FirePOWER FXOS ةزهجأ لىل ع اهل صإو](#)

## HTTP لىك وو لىك ذل صى خرتلا دادعإ نكمى فىك .س

دنت سمل اذه عجار .ASA لى قطنم لاهل لاج فى FXOS لىك لىل ع لىك ذل صى خرتلا مزلى  
[ASA لى صى خرتلا ةرادا](#): لى صافتلا نم ديزم لىل ع لوصحلل

صى خرتلا لاجل جارخا ج ذومن لىل ام فى:

```
<#root>
```

```
FPR4115-2-1#
```

```
scope license
```

```
FPR4115-2-1 /license #
```

```
show license all
```

```
Smart Licensing Status
```

```
=====
```

```
Smart Licensing is ENABLED
```

```
Registration:
```

```
Status: REGISTERED
```

```
Smart Account: BU Production Test
```

```
Virtual Account: TAC-BETA
```

```
Export-Controlled Functionality: Not Allowed
```

```
Initial Registration: SUCCEEDED on Dec 15 14:41:55 2015 PST
```

```
Last Renewal Attempt: SUCCEEDED on Dec 23 09:26:05 2015 PST
```

```
Next Renewal Attempt: Jun 21 07:00:21 2016 PST
```

```
Registration Expires: Dec 23 06:54:19 2016 PST
```

```
License Authorization:
```

```
Status: AUTHORIZED on Apr 07 15:44:26 2016 PST
```

```
Last Communication Attempt: SUCCEEDED on Apr 07 15:44:26 2016 PST
```

```
Next Communication Attempt: May 07 15:44:25 2016 PST
```

```
Communication Deadline: Jul 06 15:38:24 2016 PST
```

```
License Usage
```

```
=====
```

No licenses in use

Product Information

=====

UDI: PID:FPR9K-SUP,SN:JAD123456AB

Agent Version

=====

Smart Agent for Licensing: 1.4.1\_rel/31

ليدبك وأ:

<#root>

fp9300-A#

connect local-mgmt

fp9300-A(local-mgmt)#

show license all

Smart Licensing Status

=====

Smart Licensing is ENABLED

Registration:

Status: REGISTERED

Smart Account: Cisco Internal

Virtual Account: Escalations

Export-Controlled Functionality: Allowed

Initial Registration: SUCCEEDED on Feb 10 18:55:08 2016 CST

Last Renewal Attempt: SUCCEEDED on Oct 09 15:07:25 2016 CST

Next Renewal Attempt: Apr 07 15:16:32 2017 CST

Registration Expires: Oct 09 15:10:31 2017 CST

License Authorization:

Status: AUTHORIZED on Sep 20 07:29:06 2016 CST

Last Communication Attempt: SUCCESS on Sep 20 07:29:06 2016 CST

Next Communication Attempt: None Communication Deadline: None

Licensing HA configuration error:

No Reservation Ha config error

License Usage

=====

No licenses in use

Product Information

=====

UDI: PID:FPR9K-SUP,SN:JAD190800VU

Agent Version

=====

Smart Agent for Licensing: 1.6.7\_rel/95

## CLI مع Syslog لكشي نأ فيك .س

تادنتس مالا هذه نم ققحت

- [FirePOWER FXOS ةزهجأ ىلع Syslog نيوكت](#)
- [Syslog ىس اس ا ل م اظن ل ا ت ا د ا د ع ا : FXOS نيوكت ل ل ي ل د](#)

## FirePOWER ةزهجأ ىلع SNMP نيوكت متي فيك .س

تادنتس مالا اذه نم ققحت ل ا : [FirePOWER NGFW ةزهجأ ىلع SNMP نيوكت](#)

## نم ةمدختس مالا SSL ةداهش ل ادبتس ا / تي ب ث ت ةي فيك .س لكي ه ل ا ر ي د م ل ب ق

تادنتس مالا اذه دعاسي نأ نكمي : [FXOS لكي ه ةرادال اب قو و م ةداهش تي ب ث ت](#)

## اهحالص او تانايب ل ا ق ف د ت ا ط خ ا ف ا ش ك ت س ا ن ك م ي فيك .س FPR9300 لكي ه ل ا ل خ نم

تادنتس مالا هذه نم ققحت

- [ةمزح ل ا ل خ د م : ا ه ح ا ل ص ا و Firepower ت ا ن ا ي ب ر ا س م ا ط خ ا ف ا ش ك ت س ا ن م 1 ة ل ح ر م ل ا](#)
- [ة م ا ع ة ر ط ن : ا ه ح ا ل ص ا و Firepower ت ا ن ا ي ب ر ا س م ا ط خ ا ف ا ش ك ت س ا](#)
- [ة ك ب ش ل ا ت ا ل ك ش م ف ا ش ك ت س ا ل \( Firepower ة ي ا م ح ر ا د ج \) Firepower Firewall ت ا ط ق ل ل ي ل ح ت ل ا ع ف ل ك ش ب ا ه ح ا ل ص ا و](#)

## لكي ه ل ل MAC نيوانع لودج ضرع ةي فيك .س

ر م ا و ا ل ا ه ذ ه ن م ي ا م د خ ت س ت FP41xx و FP93xx ة م ظ ن ا ل ة ب س ن ل ا ب

```
<#root>
```

```
FPR4115-2-1#
```

```
connect fxos
```

```
FPR4115-2-1(fxos)#
```

```
show l2-table
```

Ingress	MAC	Vlan	Class	VlanGrp	Status	Dst
Eth1/1	78bc.1ae7.a45e	101	1	0	present	1



```

Veth776      78bc.1ae7.a45e 101 1 0      present 1
Po1          0100.5e00.0005 1001 1 0     present 1
Po1          0100.5e00.0006 1001 1 0     present 1
Po1          78bc.1ae7.a44e 1001 1 0     present 1
Po1          ffff.ffff.ffff 1001 63 0    present 1

```

FPR4115-2-1(fxos)#

**show mac address-table**

Legend:

\* - primary entry, G - Gateway MAC, (R) - Routed MAC, O - Overlay MAC  
age - seconds since first seen,+ - primary entry using vPC Peer-Link

VLAN	MAC Address	Type	age	Secure	NTFY	Ports/SWID.SSID.LID
* 1001	0100.5e00.0005	static	0	F	F	Eth1/1
* 1001	0100.5e00.0006	static	0	F	F	Eth1/1
* 1001	78bc.1ae7.a44e	static	0	F	F	Eth1/1
* 1001	ffff.ffff.ffff	static	0	F	F	Eth1/1
* 101	78bc.1ae7.a45e	static	0	F	F	Eth1/1
* 101	78bc.1ae7.a46f	static	0	F	F	Veth776
* 4047	0015.a501.0100	static	0	F	F	Veth864
* 4047	0015.a501.0101	static	0	F	F	Veth1015
* 4043	78bc.1ae7.b000	static	0	F	F	Eth1/10
* 4043	78bc.1ae7.b00c	static	0	F	F	Eth1/9
* 1	0015.a500.001f	static	0	F	F	Veth887
* 1	0015.a500.002f	static	0	F	F	Veth1018
* 1	0015.a500.01bf	static	0	F	F	Veth905
* 1	0015.a500.01ef	static	0	F	F	Veth1019

## لماذا لا تظهر MAC في واجهات الشبكة؟

رماً اذہ تلمعتسا

<#root>

FPR4115-2-1#

**connect fxos**

FPR4115-2-1(fxos)#

**show interface mac-address**

Interface	Mac-Address	Burn-in Mac-Address
Ethernet1/1	78bc.1ae7.a417	78bc.1ae7.a418
Ethernet1/2	78bc.1ae7.a417	78bc.1ae7.a419
Ethernet1/3	78bc.1ae7.a417	78bc.1ae7.a41a
Ethernet1/4	78bc.1ae7.a417	78bc.1ae7.a41b
Ethernet1/5	78bc.1ae7.a417	78bc.1ae7.a41c
Ethernet1/6	78bc.1ae7.a417	78bc.1ae7.a41d
Ethernet1/7	78bc.1ae7.a417	78bc.1ae7.a41e
Ethernet1/8	78bc.1ae7.a417	78bc.1ae7.a41f

Ethernet1/9	78bc.1ae7.a417	78bc.1ae7.a420
Ethernet1/10	78bc.1ae7.a417	78bc.1ae7.a421
Ethernet1/11	78bc.1ae7.a417	78bc.1ae7.a422
Ethernet1/12	78bc.1ae7.a417	78bc.1ae7.a423
port-channel1	78bc.1ae7.a417	78bc.1ae7.a41a
port-channel48	78bc.1ae7.a417	0000.0000.0000
mgmt0	78bc.1ae7.a411	78bc.1ae7.a411
Vethernet690	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet691	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet692	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet693	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet694	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet695	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet696	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet697	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet698	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet699	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet700	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet774	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet775	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet776	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet777	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet778	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet779	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet861	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet862	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet863	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet864	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet887	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet905	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet906	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet1015	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet1018	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet1019	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet1020	78bc.1ae7.a417	78bc.1ae7.a417
Vethernet1021	78bc.1ae7.a417	78bc.1ae7.a417

## FXOS (MIO) فرشم ىلع رورملا ةم لك دادرتسإ متي فيك .س

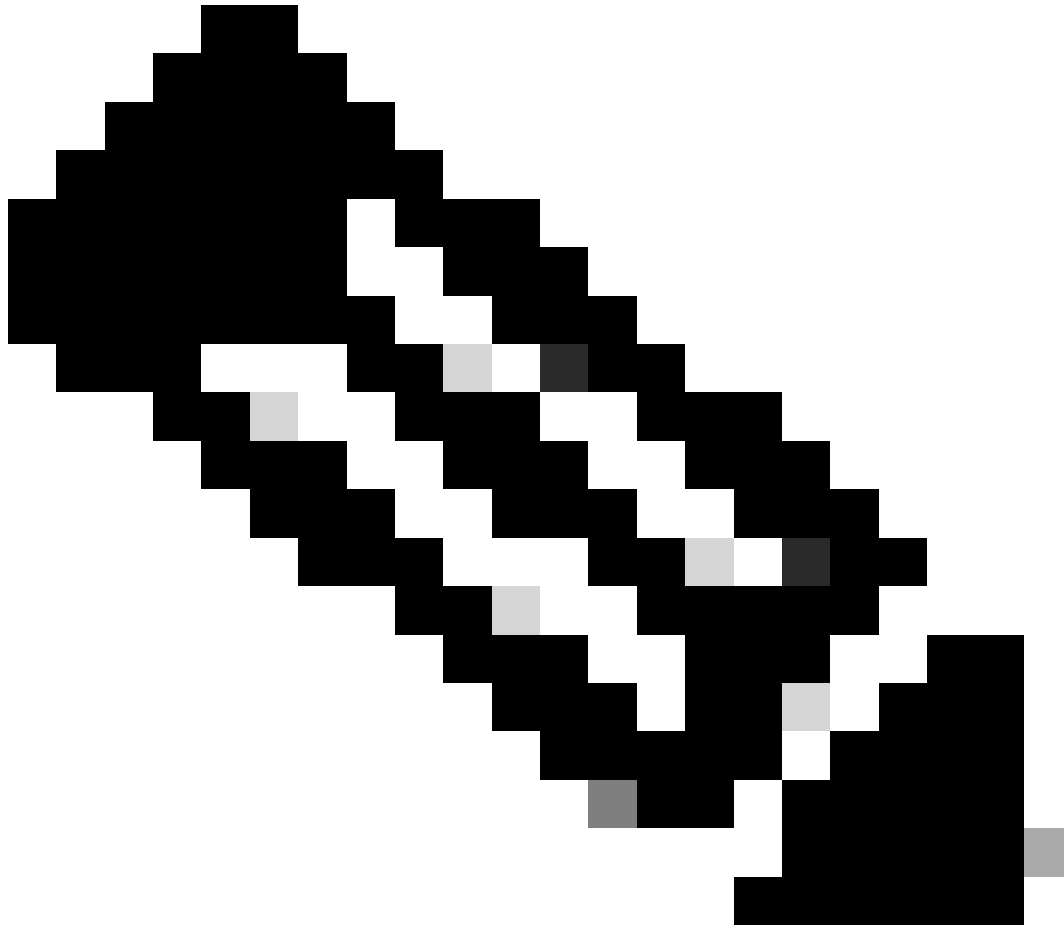
[دادرتسإ عارج](#): دنن تسمل اذه مدختسأ FP9300 و FP41xx ىلع رورملا ةم لك دادرتسإ تاءارجال  
[9300/4100 ةلسلسلا نم FirePOWER ةزهجال رورملا ةم لك](#)

## ASA يقطنملا زاهجال ىلع رورملا ةم لك دادرتسإ متي فيك .س وَأ FTD؟

ةي لمع مادختساب .ىرخأ ةرم زاهجال ديهتم كمزلي ،يقطنملا زاهجال رورم ةم لك طبض ةداعال  
رتوي بمكلا ليغشت ديهتم ماظن لوكتورب في ثراوكلا دعب تانايبلا دادرتسإ  
ةي لاتل رصانعل نم يا ريغت كنكمي (BOOTSTRAP):

- ةئدابلا لوط ، IPv6 ، ةباوبلا ، ةكبشلا عانق ، IP - IP ةرادا ASA/ FTD
- رورم ةم لك ASA
- DNS ، ةيامجال رادج عضو ، شحبال تالاجم ، FMC IP ، رورملا ةم لك ، FTD ليحست حاتفم ، FQDN

- ڀرھ اظلال IP ، ٽيڊابال لوط ، ٽرابع ، netmask ، ASA ، ٽومجمل IP عمجت



رتوي بمكلا ليغشت ديهمت ماظن لوكوتورب دادرستسا ٽي لمع ذي فننت بجي : ٽظحال م  
ي قطنم زاهج ليمحت ٽداعا بلطتي هنال (MW) ٽنايصال راطا ي ف

## 1 لاثم

لقتنا . ي قطنم زاهج ٽصاخلا bootstrap تاداعا ريحتل FXOS مدختسم ٽهجاو مادختسا كنكمي  
زاهجال رحو ، ٽي قطنملا ٽزهجالا بيوبتلا ٽمالع ىلا

Overview Interfaces **Logical Devices** Security Engine Platform Settings System Tools Help admin



Editing - mzafeiro\_FTD1 Save Cancel

Standalone | Cisco Firepower Threat Defense | 6.6.0.90

**Data Ports**

- Ethernet1/4
- Ethernet1/5
- Ethernet1/6
- Ethernet1/7
- Ethernet1/8
- Port-channel1**

**Decorators**

Port-channel1  ————— 

**Select this**

**FTD - 6.6.0.90**  
Ethernet1/1  
Click to configure

ةم لكلا ت ت ب ث:

## Cisco Firepower Threat Defense - Bootstrap Configuration

General Information **Settings** Agreement

Management type of application instance:	<input type="text" value="FMC"/>	Set: Yes
Search domains:	<input type="text"/>	
Firewall Mode:	<input type="text" value="Routed"/>	Set: Yes
DNS Servers:	<input type="text"/>	
Fully Qualified Hostname:	<input type="text"/>	
Password:	<input type="password" value="....."/>	Set: Yes
Confirm Password:	<input type="password" value="....."/>	
Registration Key:	<input type="text"/>	Set: Yes
Confirm Registration Key:	<input type="text"/>	
Firepower Management Center IP:	<input type="text"/>	
Firepower Management Center NAT ID:	<input type="text"/>	
Eventing Interface:	<input type="text"/>	

رہطت ةلاسرلا هذہ ظفحب موقت نأ درجب

## Bootstrap Settings Update Confirmation



Updating the bootstrap settings from the Firepower Chassis Manager is for disaster recovery only; we recommend that you instead change bootstrap settings in the application. To update the bootstrap settings from the Firepower Chassis Manager, click **Restart Now**: the old bootstrap configuration will be overwritten, and the application will restart. Or click **Restart Later** so you can manually restart the application at a time of your choosing and apply the new bootstrap settings (**Logical Devices > Restart**).

**Note:** For FTD, if you change the management IP address, be sure to change the device IP address in **FMC (Devices > Device Management > Device tab > Management area)**. This task is not required if you specified the NAT ID instead of the device IP address in FMC.

Restart Now

Restart Later

Cancel

2 لاثم

ةداعتس/رييغت ةم لك ASA enable لى لاثم اذه

```
<#root>
```

```
FP4110-A#
```

```
scope ssa
```

```
FP4110-A /ssa #
```

```
show logical-device
```

```
Logical Device:
```

Name	Description	Slot ID	Mode	Oper State	Templa
asa		1	Standalone	Ok	asa

```
FP4110-A /ssa #
```

```
scope logical-device asa
```

```
FP4110-A /ssa/logical-device #
```

```
scope mgmt-bootstrap asa
```

```
FP4110-A /ssa/logical-device/mgmt-bootstrap #
```

```
show config
```

```
enter mgmt-bootstrap asa
  create bootstrap-key-secret PASSWORD
  !   set value
  exit
  enter ipv4 1 default
    set gateway 172.16.171.1
    set ip 172.16.171.226 mask 255.255.255.0
```

```
exit
exit
```

```
FP4110-A /ssa/logical-device/mgmt-bootstrap #
```

```
enter bootstrap-key-secret PASSWORD
```

```
FP4110-A /ssa/logical-device/mgmt-bootstrap/bootstrap-key-secret #
```

```
set value
```

```
Value: <enter new enable password in here>
```

```
Warning: Bootstrap changes are not automatically applied to app-instances. To apply the changes, please
```

```
FP4110-A /ssa/logical-device/mgmt-bootstrap/bootstrap-key-secret* #
```

```
commit-buffer
```

```
FP4110-A /ssa/logical-device/mgmt-bootstrap/bootstrap-key-secret #
```

```
top
```

```
FP4110-A#
```

```
scope ssa
```

```
FP4110-A /ssa #
```

```
scope slot 1
```

```
FP4110-A /ssa/slot #
```

```
scope app-instance asa
```

```
FP4110-A /ssa/slot/app-instance #
```

```
clear-mgmt-bootstrap
```

```
Warning: Clears the application management bootstrap. Application needs to be restarted for this action
```

```
FP4110-A /ssa/slot/app-instance* #
```

```
commit-buffer
```

```
FP4110-A /ssa/slot/app-instance #
```

```
restart
```

```
FP4110-A /ssa/slot/app-instance* #
```

```
commit-buffer
```

ةديدجال enable رورم ةم لك مدختساو هب لاصتالا لبق تنرتنإلاب ASA لاصتا نم ققحت.

<#root>

FP4110-A /ssa/slot/app-instance #

show

Application Instance:

App Name	Admin State	Oper State	Running Version	Startup Version	Profile Name	Cluster State
asa	Enabled	Online	9.9.1.76	9.9.1.76		Not Applicable

FP4110-A /ssa/slot/app-instance #

FXOS مَدْخَتْ سَمَلْ ةِي لِحَالِ رورمَلْ ةَمَلْ كِ رِي غَتْ ةِي فَيْ كِ .س  
(admin لَثَمَلْ لِي بَسْ يَلْعَ)?

ءَارْجَالْ اذْه مَدْخَتْ سَأْ:

<#root>

FP4110-1-A#

scope security

FP4110-1-A /security #

show local-user

User Name	First Name	Last name
-----------	------------	-----------

admin

FP4110-1-A /security #

enter local-user admin

FP4110-1-A /security/local-user #

set password

Enter a password:

Confirm the password:

FP4110-1-A /security/local-user\* #

commit-buffer

FP4110-1-A /security/local-user #

FXOS؟ ضِي فَيْ خَتْ مَتْ يْ فَيْ كِ .س

رَادِصْ إِضْفَخْ Cisco نَمْ ةَمَوْعْ دَمَلْ ةَدِي حَوْلْ ةَقِي رَطَلْ .اِي مَسْر FXOS رَوْصْ لِي لَقَتْ مَعْدْ مَتْ يْ اَلْ  
[Firepower ةِي قَرْتَلْ رَاسِمِ](https://www.cisco.com/wwww/firepower/4100/9300) يْ فَيْ قَتْوَمْ اذْهَوْ .زَاهَجَلْ لْ ةَلْمَاكْ ةَرَوْصْ ةَدَاعِ | ذِي فَنَتْ يْ هِ FXOS نَمْ ةَرَوْصْ  
[4100/9300](https://www.cisco.com/wwww/firepower/4100/9300)

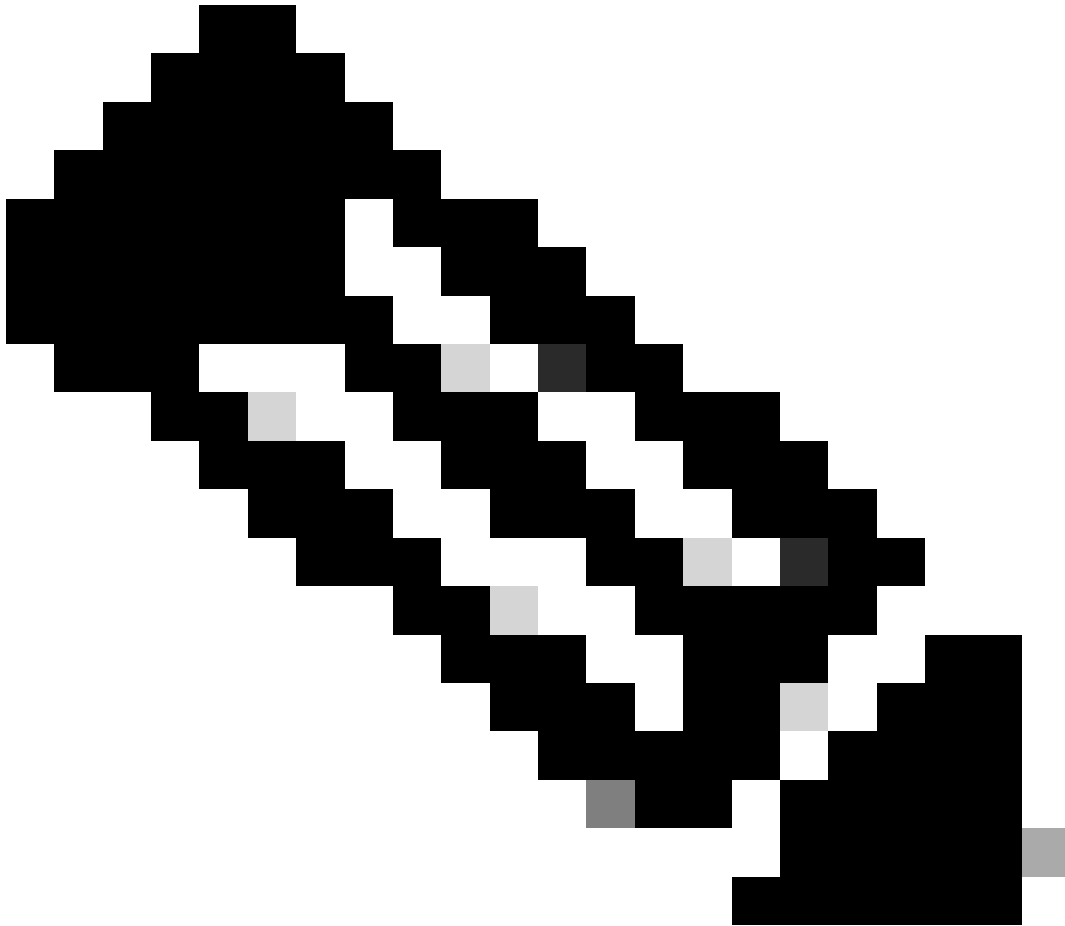


## فيقطنم لاسا زاغ ةيقرت/ضفخ كنكمي فيك .س

فيقطنم زاغل ةروصل لادصل اشي دحت: [Chassis Manager ربح لاسا رادصل ةيقرت/ضفخل](#)

رادصل اشي دحت: اذله نيوكتل لاد مسق مدخت س أ، (CLI) رم اوألا رطس ةهجاو ربح ريغت لل  
[فيقطنم زاغل ةروصل لادصل](#)

---



ليغشت ديعي هناف، رم اوألا رطس ةهجاو لعل تقؤم لاد نلابل مازتل لالاد ربحم ب: ةطحال م  
ديعي هناف، قفاوم لعل طغضت نأ ربحم هناف، لاونم لاد سفن لعل وو. ةيطنم لاد ةدحول  
ايودي هليغشت ةداع لاد ةجاج دجوت ال. ةيطنم لاد ةدحول لاد ليغشت

---

## ةهجاو CLI ربح FXOS ةيقرت ةلاح نم ققحت لاد متي فيك .س (رم اوألا رطس)

"زاغ" ةلاح لاد تانوكم لاد عيجم لصت نأ ربحم ب ةيقرت لاد لادم لاد متي

```
<#root>
```

```
FP9300#
```

```
scope system
```

```
FP9300 /system #
```

```
show firmware monitor
```

```
FPRM:
```

```
Package-Vers: 2.0(1.37)
```

```
Upgrade-Status: Ready
```

```
Fabric Interconnect A:
```

```
Package-Vers: 2.0(1.23)
```

```
Upgrade-Status: Upgrading
```

```
Chassis 1:
```

```
Server 1:
```

```
Package-Vers: 2.0(1.23)
```

```
Upgrade-Status: Ready
```

```
Server 2:
```

```
Package-Vers: 2.0(1.23)
```

```
Upgrade-Status: Upgrading
```

ىرخأ ةديفم رماوأ

```
<#root>
```

```
FP9300 /firmware/auto-install #
```

```
show fsm status
```

```
FP9300 /firmware/auto-install #
```

```
show fsm status expand
```

رطس ةهجاو نم يقطنم ل زاهج ل لمحت ةداع ك نكمي فيك .س  
FXOS ب ةصاخ ل (CLI) رماوأل

ةهجاو ل لوصول متي مل اذا . FCM مدختسم ةهجاو مدختس إيه ةلضفم ل ةقيرط ل  
رماوأل هذه مدختس اف ، ناك ب بس يأل مدختس مل

```
<#root>
```

```
#
```

```
scope chassis 1
```

```
/chassis #  
scope server 1/1
```

```
/chassis/server #  
reset ?
```

```
hard-reset-immediate Perform an immediate hard reset
```

```
hard-reset-wait Wait for the completion of any pending management oper
```

```
/chassis/server #  
commit-buffer
```

بب س رخ آو FXOS لك به لي غشت تقو نم ققحت لا فيك .س  
ل لي محت لا ة داع إل

نم FXOS ة يور كن كم ي . FXOS ع بتت دوجو ة لاج ي ف ادي فم FXOS لم ع تقو نم ققحت لا دع ي  
رم أوألا رطس ة هجاو نم وأ (FCM) (UI) مدخت س مل ا ة هجاو

```
<#root>
```

```
FPR9K-1-A#
```

```
connect fxos
```

```
FPR9K-1-A(fxos)#
```

```
show system uptime
```

```
System start time: Sun Sep 25 09:57:19 2016  
System uptime: 28 days, 9 hours, 38 minutes, 14 seconds  
Kernel uptime: 28 days, 9 hours, 38 minutes, 41 seconds  
Active supervisor uptime: 28 days, 9 hours, 38 minutes, 14 seconds
```

رمأ اذه لم عت سي بب س لي محت ة داع رخ آ تدح ، in order to لك لذ ي لع ة والع

```
<#root>
```

```
FPR9K-1-A(fxos)#
```

```
show system reset-reason
```

----- reset reason for Supervisor-module 1 (from Supervisor in slot 1) ---

1) At 212883 usecs after Fri Oct 21 22:34:35 2016

Reason: Kernel Panic

Service:

Version: 5.0(3)N2(3.02)

2) At 106690 usecs after Thu May 26 16:07:38 2016

Reason: Reset Requested by CLI command reload

Service:

Version: 5.0(3)N2(3.02)

اذهب مق، FPR2100 لي غشت تقول ب س ن ل اب:

1. "show tech-support fprm detail" وعوم جمل ال يل ع ل ص ح ا "

2. عم ز ح ل ا ت ا ي و ت ح م ج ا ر خ ت س ا .

3. tmp/inventory\_manager.xml ف ل م ل ا ن م ق ق ح ت .

ي ن ا و ث ل ا ب ل ي غ ش ت ل ا ت ق و ر ه ط ي ل ا خ د ا ك ا ن ه :

<#root>

tmp/inventory\_manager.xml:

<uptime>151</uptime>

يل ع ة ر ف و ت م ل ا ص ر ق ل ا ة ح ا س م ن م ق ق ح ت ل ا م ت ي ف ي ك . س .  
FXOS?

"ل م ع ل ا ة ح ا س م " ا ض ي ا ي م س ي :

<#root>

FPR9K-1-A#

connect local-mgmt

FPR9K-1-A(local-mgmt)#

dir

1 29 Sep 25 09:56:22 2016 blade\_debug\_plugin

1 19 Sep 25 09:56:22 2016 bladelog

1 16 Aug 05 15:41:05 2015 cores

```

1 2841476 Apr 26 14:13:12 2016 d
2 4096 Dec 01 10:09:11 2015 debug_plugin/
1 31 Aug 05 15:41:05 2015 diagnostics
1 2842049 Feb 23 03:26:38 2016 dp
1 18053120 Feb 23 11:10:19 2016 fpr9k-1-0-sam_logs_all.tar
1 18176000 Feb 23 11:10:43 2016 fpr9k-1-1-sam_logs_all.tar
1 19302400 Feb 23 11:11:07 2016 fpr9k-1-2-sam_logs_all.tar
1 16312320 Feb 23 11:06:53 2016 fpr9k-1-3-sam_logs_all.tar
1 2841476 Feb 22 18:47:00 2016 fxos-dplug.5.0.3.N2.3.13.67g.gSSA
2 4096 Aug 05 15:38:58 2015 lost+found/
1 25 Dec 01 11:11:50 2015 packet-capture
1 18493440 Feb 23 10:44:51 2016 sam_logs_all.tar
2 4096 Sep 14 11:23:11 2016 techsupport/

```

```

Usage for workspace://
4032679936 bytes total
324337664 bytes used
3503489024 bytes free

```

<#root>

```
FPR9K-1-A(local-mgmt)#
```

```
dir volatile:/
```

```
1 66 Oct 27 08:17:48 2016 xmlout_5816
```

```

Usage for volatile://
251658240 bytes total
4096 bytes used
251654144 bytes free

```

ضرعې جارخال اذه نأ ظحال (flash). ةتقؤملا ديهمتلا ةركاذل ةيلاخال ةحاسملا نم ققحتلل اهمادختساو لمعلا ةحاسم مجح اضيأ:

<#root>

```
FPR9K-1-A#
```

```
scope fabric-interconnect a
```

```
FPR9K-1-A /fabric-interconnect #
```

```
show storage
```

```

Storage on local flash drive of fabric interconnect:
  Partition      Size (MBytes)  Used Percentage
  -----
  bootflash      106490         9
  opt             3870           2
  spare           5767           1
  usbdrive        Nothing        Empty
  workspace       3845           9

```

# عنصم لآ تاداعإ ىلإ FXOS نىوك ت طبض ةداعإ ةىفك .س ةىضارتفالآ

رمأ اذه تلمعتسا

```
<#root>
```

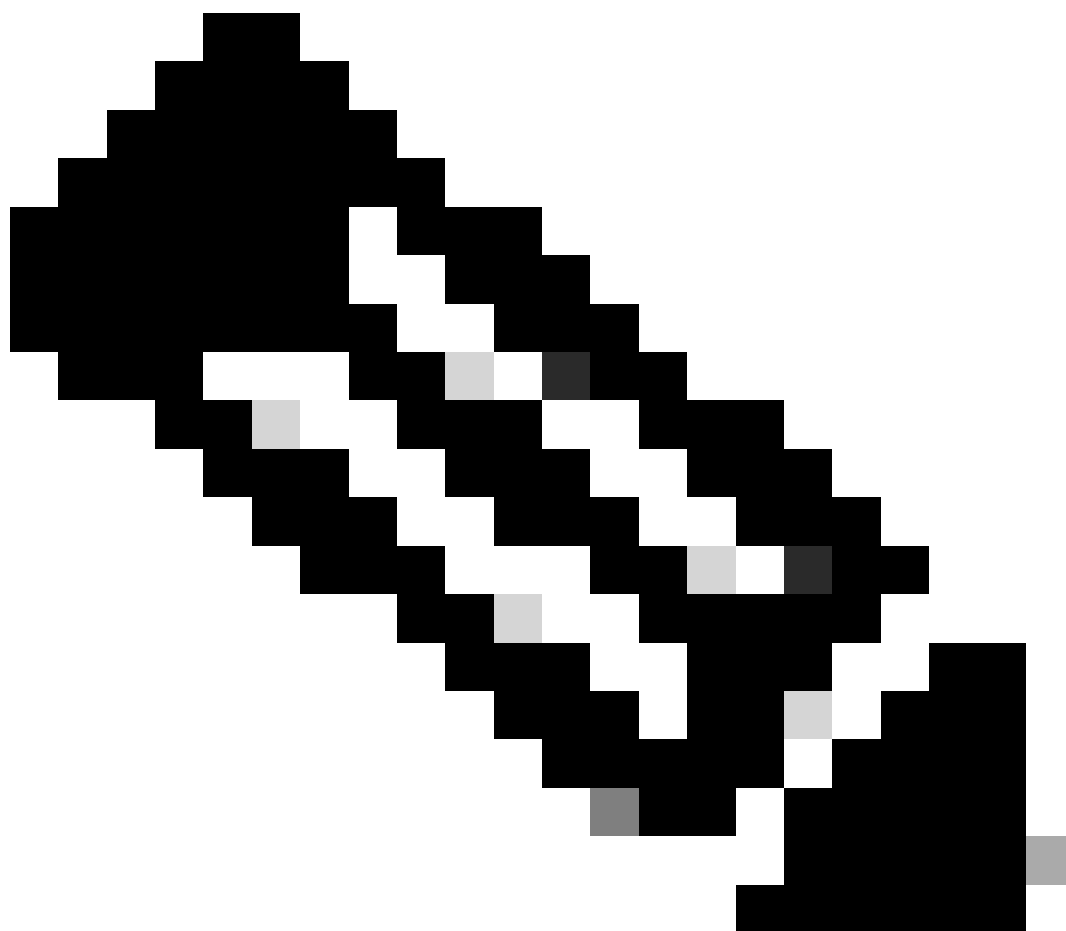
```
FPR9K-1-A#
```

```
connect local-mgmt
```

```
FPR9K-1-A(local-mgmt)#
```

```
erase configuration
```

---



---

ناونع كلذ في فامب، لمكالب نيوكتل الالازو ماظنل ديهمت ةداعل اذ يذوي: ةظحال ممتي، ماظنل ديهمت ةداعل درجمب. مكحت ةدحو ليصوت نم دكأت، كلذل. ةرادالاب صاخال IP ةرادالاب نيوكت تامولعم لالخال ةداعل كنكمي و دادعال قيبطت لئغشت

---

لالثم

```
<#root>
```

```
FPR9K-1#
```

```
connect local-mgmt
```

```
FPR9K-1(local-mgmt)#
```

```
erase configuration
```

```
All configurations are erased and system must reboot. Are you sure? (yes/no):
```

```
yes
```

```
Removing all the configuration. Please wait....
```

```
/bin/rm: cannot remove directory `/bootflash/sysdebug//tftpd_logs': Device or resource busy
```

```
sudo: cannot get working directory
```

```
sudo: cannot get working directory
```

```
Configurations are cleaned up. Rebooting....
```

```
...
```

```
System is coming up ... Please wait ...
```

```
System is coming up ... Please wait ...
```

```
2016 Oct 28 06:31:00 %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Starting bcm_attach - bcm_usd
```

```
System is coming up ... Please wait ...
```

```
2016 Oct 28 06:31:06 %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Finished bcm_attach... - bcm_usd
```

```
2016 Oct 28 06:31:07 %$ VDC-1 %$ %USER-0-SYSTEM_MSG: Enabling Filter on CPU port - bcm_usd
```

```
System is coming up ... Please wait ...
```

```
2016 Oct 28 06:31:11 switch %$ VDC-1 %$ %VDC_MGR-2-VDC_ONLINE: vdc 1 has come online
```

```
System is coming up ... Please wait ...
```

```
nohup: appending output to `nohup.out'
```

```
----- Basic System Configuration Dialog -----
```

```
This setup utility guides you through the basic configuration of the system. Only minimal configuration including IP connectivity to the Fabric interconnect and its clustering mode is performed through these steps.
```

```
Type Ctrl-C at any time to abort configuration and reboot system.
```

```
To back track or make modifications to already entered values, complete input till end of section and answer no when prompted to apply configuration.
```

```
You have chosen to setup a new Security Appliance. Continue? (y/n):
```

ديهمت ماظن لوكوتورب نيوكت نم ققحتل اذ في فيك. س.  
(كلذ اذ اذ و رادصال او ةني عمل اذ اذ اول) رتوي بمكل لئغشت  
ماظن ب ةصاخال (CLI) رماوالا رطس ةهجاو نم يقطنم ل اذ اول  
لئغشت ل FXOS؟

<#root>

FPR4100-3-A#

scope ssa

FPR4100-3-A /ssa #

show configuration

```
scope ssa
  enter logical-device FTD4150-3 ftd 1 standalone
    enter external-port-link Ethernet16_ftd Ethernet1/6 ftd
      set decorator ""
      set description ""
      set port-name Ethernet1/6
    exit
    enter external-port-link Ethernet17_ftd Ethernet1/7 ftd
      set decorator ""
      set description ""
      set port-name Ethernet1/7
    exit
    enter external-port-link Ethernet18_ftd Ethernet1/8 ftd
      set decorator ""
      set description ""
      set port-name Ethernet1/8
    exit
    enter mgmt-bootstrap ftd
      enter bootstrap-key DNS_SERVERS
        set value 192.0.2.100
      exit
      enter bootstrap-key FIREPOWER_MANAGER_IP
        set value 10.62.148.57
      exit
      enter bootstrap-key FIREWALL_MODE
        set value routed
      exit
      enter bootstrap-key FQDN
        set value FTD4150-3.lab.com
      exit
      enter bootstrap-key SEARCH_DOMAINS
        set value lab.com
      exit
      enter bootstrap-key-secret PASSWORD
!        set value
      exit
      enter bootstrap-key-secret REGISTRATION_KEY
!        set value
      exit
      enter ipv4 1 firepower
        set gateway 10.62.148.1
        set ip 10.62.148.89 mask 255.255.255.128
      exit
    exit
    set description ""
    set res-profile-name ""
  exit
scope slot 1
```



```

enter app-instance ftd
  enable
  set startup-version 6.0.1.1213
  exit
  set log-level info
exit
scope app asa 9.12.4.12
  set-default
exit
scope app ftd 6.0.1.1213
  accept-license-agreement
  set-default
exit
exit

```

لداعي اذه:

Application	Version	Management IP	Gateway	Management Port	Status
FTD	6.0.1.1213	10.62.148.89	10.62.148.1	Ethernet1/7	

Ports:

Data Interfaces: Ethernet1/6 Ethernet1/8

نوكي) 'all' ةيساسأل ةمكلل ةفاضاب مقف، FXOS عي مج نيوكت ةيؤري ف بغرت تنك اذإ (ةلويوط تاحفص ةدع جارخالإ:

<#root>

FPR4100-3-A /ssa #

show configuration all

# تاهجاو (ةلأحلا ،ذفنملا عون) ةلأح نم ققحتلا ةيفيك .س . FXOS?

<#root>

FPR4100-3-A#

scope eth-uplink

FPR4100-3-A /eth-uplink #

scope fabric a

FPR4100-3-A /eth-uplink/fabric #

show interface

Interface:

Port Name	Port Type	Admin State	Oper State	State Reason
Ethernet1/1	Data	Disabled	Admin Down	Administratively down
Ethernet1/2	Data	Disabled	Admin Down	Administratively down
Ethernet1/3	Data	Disabled	Admin Down	Administratively down
Ethernet1/4	Data	Disabled	Sfp Not Present	Unknown
Ethernet1/5	Data	Disabled	Admin Down	Administratively down
Ethernet1/6	Data	Enabled	Up	
Ethernet1/7	Mgmt	Enabled	Up	
Ethernet1/8	Data	Enabled	Up	

FPR4100-3-A /eth-uplink/fabric #

لداعي اذه:

The screenshot displays the FXOS web interface. At the top, there are navigation tabs: Overview, Interfaces (selected), Logical Devices, Security Engine, and Platform Settings. On the right, there are links for System, Tools, Help, and admin. Below the navigation, there is a hardware status section showing Network Module 1 with ports 1-8, Network Module 2 (Empty), and Network Module 3 (Empty). Below this is a table of all interfaces.

Interface	Type	Admin Speed	Operational Speed	Application	Operation State	Admin State
MGMT	Management					Enabled
Port-channel48	cluster	10gbps	indeterminate		admin-down	Disabled
Ethernet1/1	data	10gbps	10gbps		admin-down	Disabled
Ethernet1/2	data	10gbps	10gbps		admin-down	Disabled
Ethernet1/3	data	10gbps	10gbps		admin-down	Disabled
Ethernet1/4	data	10gbps	10gbps		sfp-not-present	Disabled
Ethernet1/5	data	1gbps	1gbps		admin-down	Disabled
Ethernet1/6	data	1gbps	1gbps	FTD	up	Enabled
Ethernet1/7	mgmt	1gbps	1gbps	FTD	up	Enabled
Ethernet1/8	data	1gbps	1gbps	FTD	up	Enabled

ة (CPU) ة يزك رمل ة عمل ة دحو نم ققحت ل ة فيك .س  
للكيهل لىل ع ة ركاذل ا مادخت ساو

```
<#root>
```

```
FPR9K-2-A#
```

```
connect fxos
```

```
FPR9K-2-A(fxos)#
```

```
show system resources
```

```
Load average: 1 minute: 1.60 5 minutes: 1.30 15 minutes: 1.15  
Processes : 967 total, 1 running  
CPU states : 1.8% user, 1.1% kernel, 97.1% idle  
Memory usage: 16326336K total, 4359740K used, 11966596K free
```

---

نيزاهج لة بس نلاب ىتح افلتخم جارخإلا يف رهاظلا يلامجالا نوكي نأ نكمي :ةظحالم  
يذلا رحلا رمألا جارخإ نم يلامجالا ذخأ متي ،ددحم لكشبو .جذومنلا سفن إلا ناي متني  
/proc/meminfo نم هرودب هذخأ متي

---

ةركاذلا صحفتل

<#root>

FPR4100-8-A /fabric-interconnect #

show detail

Fabric Interconnect:

ID: A

Product Name: Cisco FPR-4140-SUP

PID: FPR-4140-SUP

VID: V02

Vendor: Cisco Systems, Inc.

Serial (SN): FLM12345KL6

HW Revision: 0  
Total Memory (MB): 8074  
OOB IP Addr: 10.62.148.196  
OOB Gateway: 10.62.148.129  
OOB Netmask: 255.255.255.128  
OOB IPv6 Address: ::  
OOB IPv6 Gateway: ::  
Prefix: 64  
Operability: Operable  
Thermal Status: Ok  
Current Task 1:  
Current Task 2:  
Current Task 3:

(ةي ل ع ف ة رك اذ = RES) ةي ل ع ل ل ة رك اذ لا مادختسا نم ق قحت لا نم ق قحت لا

<#root>

FPR4100-2-A-A#

connect local-mgmt

FPR4100-2-A-A(local-mgmt)#

show processes

Cpu(s): 8.0%us, 4.2%sy, 3.9%ni, 83.8%id, 0.0%wa, 0.0%hi, 0.1%si, 0.0%st

Mem: 8267648k total, 3866552k used, 4401096k free, 288k buffers

Swap: 0k total, 0k used, 0k free, 1870528k cached

PID	USER	PR	NI	VRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
5024	root	-2	0	354m	114m	34m	R	43	1.4	7976:51	/isan/bin/bcm_usd
1096	root	20	0	10352	3992	3332	S	0	0.0	0:00.28	sshd: admin@pts/1
1140	root	20	0	117m	78m	53m	S	0	1.0	0:00.42	/isan/bin/ucssh --ucs-mgmt -p admin
1856	root	20	0	2404	632	512	S	0	0.0	2:29.32	/nuova/bin/cmcmmon -f /etc/cmcmmon.conf
1859	root	20	0	23804	1932	1532	S	0	0.0	1427:47	dmsvr -F
1860	root	20	0	2244	472	404	S	0	0.0	0:00.01	/sbin/hotplug2 --persistent --set-rules-fi
1861	root	20	0	57116	10m	6552	S	0	0.1	7:28.76	/isan/sbin/sysmgr -V
1864	root	20	0	14044	4136	1072	S	0	0.1	1:06.19	rsyslogd -c3 -i/var/run/rsyslogd.pid
4909	root	20	0	3568	1100	876	S	0	0.0	0:00.48	/isan/sbin/xinetd -syslog local7 -loop 250
4911	root	20	0	58232	12m	6152	S	0	0.2	18:39.24	/isan/sbin/syslogd -d -n -m 0 -r
4912	root	20	0	20076	3532	2368	S	0	0.0	0:00.02	/isan/bin/sdwrapd
4913	root	21	1	2756	300	192	S	0	0.0	0:00.04	/usr/sbin/in.tftpd -l -c -s /bootflash
4914	root	20	0	58312	17m	8724	S	0	0.2	13:45.34	/isan/bin/pfm
4937	root	20	0	2208	332	272	S	0	0.0	0:00.01	/sbin/klogd -2 -x -c 1
4939	root	20	0	26692	4656	3620	S	0	0.1	0:24.01	/isan/bin/vshd

...

ح م ل ت:

1. ضرع ل ةي ل ع ل ل ة رك اذ جارخ ا عي م ح ت
2. زاهج ي ل ع ف ل م ي ف ت ا ج ر خ م ل ا ق ص ل ا Linux (cat > top.log)
3. دوم ع ي ل ا ا د ا ن ت س ا ف ل م ل ا ز ر ف RES

اذك هو ، ل ا MBite ، ل ا GBite ل ا م كل رهظي اذهو

```
<#root>
```

```
mzafeiro@MZAFEIRO-JA2YS:$
```

```
cat top.log | sort -v -k 6
```

```
1954 root      20   0 1645m 1.6g 1372 S  0.0 20.7 793:32.99 dmserver
7556 root      20   0  207m  9.8m 6184 S  0.0  0.1  73:52.25 udld
5563 root      20   0  333m  9.8m 7032 S  0.0  0.1   5:08.65 cdpd
5523 root      20   0  327m 103m  28m S  0.0  1.3   0:12.38 afm
24040 daemon    23   3  592m 115m  33m S  0.0  1.5  74:56.57 httpd
5329 root      -2   0  384m 132m  29m S  9.4  1.7 27130:09 bcm_usd
5317 root      20   0  401m 150m  35m S  0.0  1.9  33:19.05 fwm
5625 root      24   4  450m 179m  35m S  0.0  2.3 275:38.25 svc_sam_statsAG
5614 root      23   3  495m 247m  54m S  0.0  3.2 355:59.95 svc_sam_dme
21688 root      20   0  2672 1080  880 S  0.0  0.0   3:15.29 ntpd
8819 root      35  15 2408 1084  748 R  5.6  0.0   0:00.06 top
```

ههجاول لابق تسال اول اس رال زا ه عون نم ققحت ل اة فيك .س  
للكيهل؟

رمأل اذه مدختسأ 4100/9300 Firepower في

```
<#root>
```

```
FPR9K-2-A#
```

```
connect fxos
```

```
FPR9K-2-A(fxos)#
```

```
show interface e1/3 transceiver details
```

```
Ethernet1/3
```

```
transceiver is present
type is 1000base-T
name is CISCO-METHODE
part number is SP7041-R
revision is
serial number is FLM12345KL6
nominal bitrate is 1300 MBit/sec
Link length supported for copper is 100 m
cisco id is --
cisco extended id number is 4
```

```
DOM is not supported
```

```
FPR9K-2-A(fxos)#
```

يه تاجرخل مال ناف، ةيئوضلا فاي لال ةلاح في

<#root>

FPR4100-1-A(fxos)#

show interface e1/1 transceiver details

Ethernet1/1

transceiver is present  
type is 10Gbase-SR  
name is CISCO-JDSU  
part number is PLRXPL-SC-S43-CS  
revision is 1  
serial number is FLM12345KL6  
nominal bitrate is 10300 MBit/sec  
Link length supported for 50/125um OM2 fiber is 82 m  
Link length supported for 62.5/125um fiber is 26 m  
Link length supported for 50/125um OM3 fiber is 300 m  
cisco id is --  
cisco extended id number is 4

Calibration info not available

رمال اذه مدختسأ Firepower 1000/2100 في

<#root>

FPR2100#

scope fabric-interconnect

FPR2100 /fabric-interconnect #

show inventory expand detail | egrep ignore-case "Port|Xcvr"

...

Slot 1 Port 13:

Xcvr: 10 Gbase SR  
Xcvr Model: PLRXPL-SC-S43-C  
Xcvr Vendor: Cisco Systems, Inc.  
Xcvr Serial: ABCD1234

Slot 1 Port 14:

Xcvr: 10 Gbase SR  
Xcvr Model: PLRXPL-SC-S43-C  
Xcvr Vendor: Cisco Systems, Inc.  
Xcvr Serial: VWXY1234

Slot 1 Port 15:

Xcvr: Non Present  
Xcvr Model:  
Xcvr Vendor:  
Xcvr Serial:

Slot 1 Port 16:

Xcvr: Non Present  
Xcvr Model:  
Xcvr Vendor:  
Xcvr Serial:





Acknowledged Serial (SN): FLM12345KL6  
Acknowledged Memory (MB): 262144  
Acknowledged Effective Memory (MB): 262144  
Acknowledged Cores: 36  
Acknowledged Adapters: 2

Server 1/2:

Equipped Product Name: Cisco Firepower 9000 Series High Performance Security Module  
Equipped PID: FPR9K-SM-36  
Equipped VID: V01  
Equipped Serial (SN): FLM12345KL6  
Slot Status: Equipped  
Acknowledged Product Name: Cisco Firepower 9000 Series High Performance Security Module  
Acknowledged PID: FPR9K-SM-36  
Acknowledged VID: V01  
Acknowledged Serial (SN): FLM12345KL6  
Acknowledged Memory (MB): 262144  
Acknowledged Effective Memory (MB): 262144  
Acknowledged Cores: 36  
Acknowledged Adapters: 2

Server 1/3:

Equipped Product Name: Cisco Firepower 9000 Series High Performance Security Module  
Equipped PID: FPR9K-SM-36  
Equipped VID: V01  
Equipped Serial (SN): FLM12345KL6  
Slot Status: Equipped  
Acknowledged Product Name: Cisco Firepower 9000 Series High Performance Security Module  
Acknowledged PID: FPR9K-SM-36  
Acknowledged VID: V01  
Acknowledged Serial (SN): FLM12345KL6  
Acknowledged Memory (MB): 262144  
Acknowledged Effective Memory (MB): 262144  
Acknowledged Cores: 36  
Acknowledged Adapters: 2

1 ي ل ص ن ل ل م د ا خ ل / ا ل م د ا خ ل / ا ل م د ا خ ل = 1/1 م د ا خ ل

2 ي ل ص ن ل ل م د ا خ ل / ا ل م د ا خ ل / ا ل م د ا خ ل = 1/2 م د ا خ ل

3 ي ل ص ن ل ل م د ا خ ل / ا ل م د ا خ ل / ا ل م د ا خ ل = 1/3 م د ا خ ل

FPR41xx زارط PIDs:

- FPR4K-SM-12 = FPR4110
- FPR4K-SM-24 = FPR4120
- FPR4K-SM-36 = FPR4140
- FPR4K-SM-44 = FPR4150
- FPR4K-SM-24S = FPR4115
- FPR4K-SM-32S = FPR4125
- FPR4K-SM-44S = FPR4145

<chassis-id/blade-id>: م د ا خ ل ا ق ا ط ن ن م ض ي ر خ ا ت ا م و ل ع م ي ل ع ل و ص ح ل ا اض ي ا ك ن ك م ي

<#root>

FP9300-A#

scope server 1/1

FP9300-A /chassis/server #

show inventory

```
<CR>
>      Redirect it to a file
>>    Redirect it to a file in append mode
adapter Adapter
bios    Bios
board   Board
cpu     Cpu
detail  Detail
expand  Expand
memory  Memory
mgmt    Mgmt
storage Storage
|       Pipe command output to filter
```

FP9300-A /chassis/server #

show inventory storage

Server 1/1:

```
Name:
User Label:
Equipped PID: FPR9K-SM-36
Equipped VID: V01
Equipped Serial (SN): FLM12345PBD
Slot Status: Equipped
Acknowledged Product Name: Cisco Firepower 9000 Series High Performance Security Module
Acknowledged PID: FPR9K-SM-36
Acknowledged VID: 01
Acknowledged Serial (SN): FLM67890PBD
Acknowledged Memory (MB): 262144
Acknowledged Effective Memory (MB): 262144
Acknowledged Cores: 36
Acknowledged Adapters: 2
Motherboard:
  Product Name: Cisco Firepower 9000 Series High Performance Security Module
  PID: FPR9K-SM-36
  VID: V01
  Vendor: Cisco Systems Inc
  Serial (SN): FLM12345KL6
  HW Revision: 0
```

```
RAID Controller 1:
  Type: SAS
  Vendor: Cisco Systems Inc
  Model: UCSB-MRAID12G
  Serial: FLM12345KL6
  HW Revision: C0
  PCI Addr: 01:00.0
  Raid Support: RAID0, RAID1
  OOB Interface Supported: Yes
  Rebuild Rate: 30
  Controller Status: Optimal
```

Local Disk 1:

Product Name:  
PID:  
VID:  
Vendor: TOSHIBA  
Model: PX02SMF080  
Vendor Description:  
Serial: FLM12345KL6  
HW Rev: 0  
Block Size: 512  
Blocks: 1560545280  
Operability: Operable  
Oper Qualifier Reason: N/A  
Presence: Equipped  
Size (MB): 761985  
Drive State: Online  
Power State: Active  
Link Speed: 12 Gbps  
Device Type: SSD

Local Disk 2:

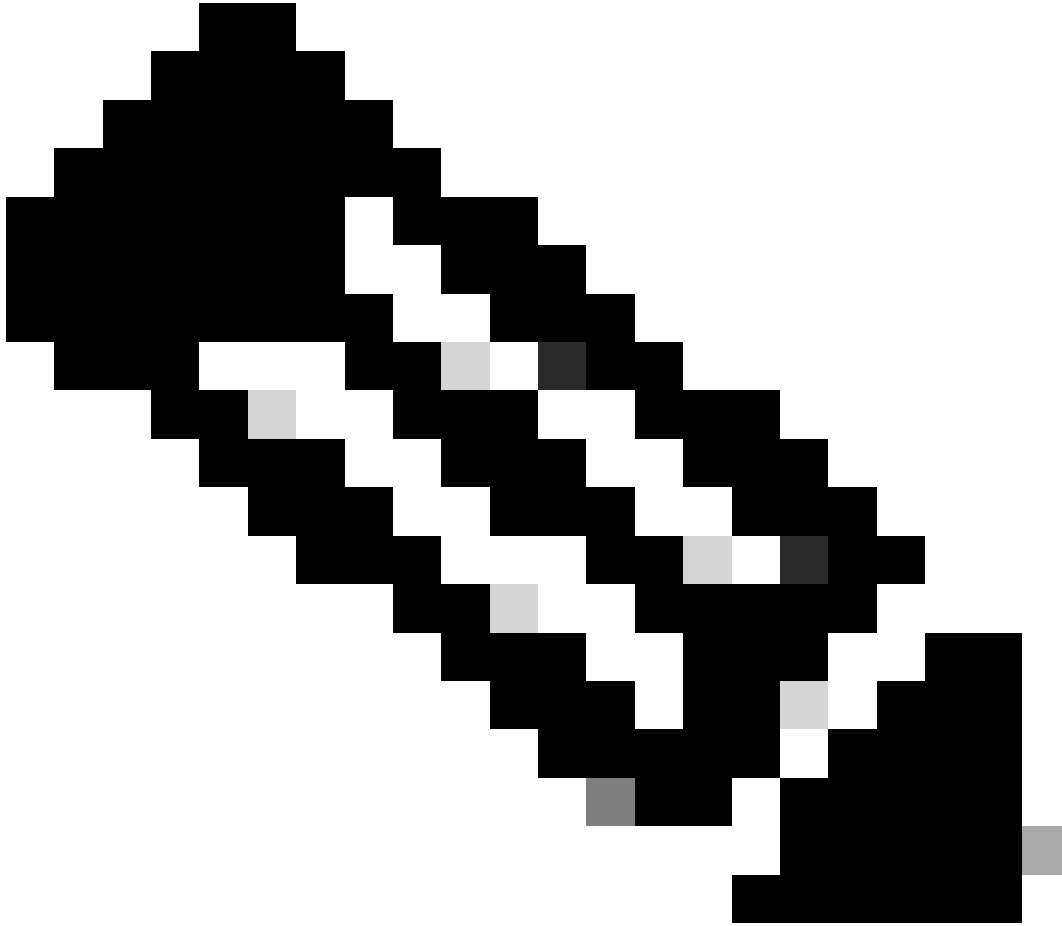
Product Name:  
PID:  
VID:  
Vendor: TOSHIBA  
Model: PX02SMF080  
Vendor Description:  
Serial: FLM12345KL6  
HW Rev: 0  
Block Size: 512  
Blocks: 1560545280  
Operability: Operable  
Oper Qualifier Reason: N/A  
Presence: Equipped  
Size (MB): 761985  
Drive State: Online  
Power State: Active  
Link Speed: 12 Gbps  
Device Type: SSD

Local Disk Config Definition:

Mode: RAID 1 Mirrored  
Description:  
Protect Configuration: Yes

Virtual Drive 0:

Type: RAID 1 Mirrored  
Block Size: 512  
Blocks: 1560545280  
Operability: Operable  
Presence: Equipped  
Size (MB): 761985  
Lifecycle: Allocated  
Drive State: Optimal  
Strip Size (KB): 64  
Access Policy: Read Write  
Read Policy: Normal  
Configured Write Cache Policy: Write Through  
Actual Write Cache Policy: Write Through  
IO Policy: Direct  
Drive Cache: No Change



ضرع ضرعي، RAID مدختست ال اهنأل ارظنو، FP41xx ةيساسألأ ةمظنألأ يف :ةظحالم  
يسيرلأ ببسلا لثمتي .ةفورعم ريغ اهنأل يلع مكحتلا ةدحو ةلاح نوزخملأ نيزخت  
نم ةعونصم ةركاذب دوزم صارقأ كرحم مادختسإ يف RAID ةينقت معدت ال اهلجج يف ذلأ  
(ةراضلا جماربلأ نيزخت ةمزح) MSP لثم ىرخأ فئاطول يئانثلا (SSD) ةبلص تانوكم  
FTD جمانرب يف يقطنم زاهج ىلع

---

مدختسملأ ةهجاو نم FTD وأ ASA ةروص فذح ةيفيك .س  
FXOS؟ لىغشتلا ماظنل CLI و (GUI) ةيموسرلا

FCM جمانربل (GUI) ةيموسرلا مدختسملأ ةهجاو نم

ة:رورال فذو شيدحت > مازنللا للاقننا ،ةيموسررلا مدختسملا ةهجاو نم فذلل

System					
Configuration Licensing Updates User Man					
Available Updates <span>Refresh</span> <span>Upload Image</span> <span>Filter..</span>					
Image Name	Type	Version	Status	Build Date	
fxos-k9.2.0.1.23.SPA	platform-bundle	2.0(1.23)	Not-Installed	05/18/2016	
fxos-k9.2.0.1.37.SPA	platform-bundle	2.0(1.37)	Not-Installed	06/11/2016	
fxos-k9.2.0.1.86.SPA	platform-bundle	2.0(1.86)	Installed	10/15/2016	
fxos-k9.2.0.1.4.SPA	platform-bundle	2.0(1.4)	Not-Installed	04/06/2016	
cisco-ftd.6.0.1.1213.csp	ftd	6.0.1.1213	Not-Installed	03/19/2016	
cisco-ftd.6.1.0.330.csp	ftd	6.1.0.330	Installed	08/26/2016	
cisco-asa.9.6.1.csp	asa	9.6.1	Not-Installed	03/18/2016	

## م FXOS CLI

<#root>

FPR4100#

scope ssa

FPR4100 /ssa #

show app

Application:

Name	Version	Description	Author	Deploy Type	CSP Type	Is Default App
asa	9.6.1	N/A	cisco	Native	Application	Yes
ftd	6.0.1.1213	N/A	cisco	Native	Application	No
ftd	6.1.0.330	N/A	cisco	Native	Application	Yes

FPR4100 /ssa #

delete app asa 9.6.1

FPR4100 /ssa\* #

commit

FPR4100 /ssa #

show app

Application:

Name	Version	Description	Author	Deploy Type	CSP Type	Is Default App
ftd	6.0.1.1213	N/A	cisco	Native	Application	No
ftd	6.1.0.330	N/A	cisco	Native	Application	Yes

؟رم اوألا رطس ةهجاو نم FXOS رادصا نم ققحتلا ةيفيك .س

ةياغل هذه قيقحتل قرط عضب كانهو

ةقيرطالا 1

<#root>

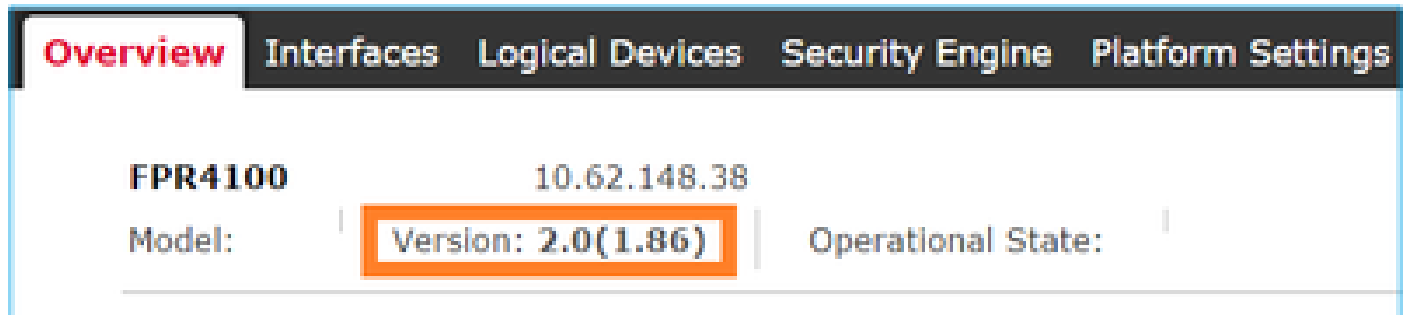
FPR4100#

show fabric-interconnect firmware

Fabric Interconnect A:

Running-Kern-Vers: 5.0(3)N2(4.01.65)  
Running-Sys-Vers: 5.0(3)N2(4.01.65)  
Package-Vers: 2.0(1.86)  
Startup-Kern-Vers: 5.0(3)N2(4.01.65)  
Startup-Sys-Vers: 5.0(3)N2(4.01.65)  
Act-Kern-Status: Ready  
Act-Sys-Status: Ready  
Bootloader-Vers:

ةرادإلا ةدحول (GUI) ةيموسرلا مدختسملا ةهجاو نم هتيؤر نكمي يذلا عيشلا س فن وه اذهو  
ةيلارديفلا (FCM):



The screenshot shows the GUI for FPR4100 with the following details:

- Overview | Interfaces | Logical Devices | Security Engine | Platform Settings
- FPR4100 | 10.62.148.38
- Model: | Version: 2.0(1.86) | Operational State:

ةيناثلا ةقيرطالا

<#root>

FP4145-1#

show version

Version: 2.6(1.192)  
Startup-Vers: 2.6(1.192)

# (MTU) ل قنل ل صقأل دحل ءدحو نم ققحتل نكمي فيك .س FXOS؟ ل ع تاهاولل

لكشب اهنكمت متي يتي ل مجحلا ءريبك تاراطإل معدب Firepower 4100/9300 لكه زي متي  
رماً اذه عم MTU نراقل تصحف عي طتسي تنأ .ي ضارتفا

```
<#root>
```

```
FPR9K-1-A#
```

```
connect fxos
```

```
FPR9K-1-A(fxos)# show hardware internal bcm-usd info phy-info all
```

```
+-----+-----+-----+
| port phy info                                     |
+-----+-----+-----+
front-port : 1          asic-port : 125      sfp installed : yes
  enable : ena          speed : 1G          autoneg : on
  interface : (10)XFI   duplex: half      linkscan : sw
  pause_tx : 0x0        pause_rx : 0x0
```

```
max frame : 9216
```

```
local_advert : 0x20      remote_advert : 0x420    port_40g_enable : 0
local_fault : 0x1        remote_fault : 0x0
xcvr sfp type : (1)PHY_SFP_1G_COPPER
```

```
TSC4 registers:
```

```
txfir(0xc252):0x0000    txdrv(0xc017):0x0000    lane(0x9003):0x1b1b
```

```
Asic 56846 Registers
```

```
signal_detect(1.0x81d0):0x0000    link_status(1.0x81d1):0x0000
rx_link_state(1.0x0):0x0000        pcs_rx_tx_fault(1.0x0008):0x0000
pcs_block_status_0x20(1.0x20) :0x0000
pcs_block_status_0x21(1.0x021) : 0x0000
transmitter_reg(1.0x8000):0x0000    micro_ver(1.0x81f0):0x0000
```

fxos: رمأل ءقبط يفي (MTU) ل قنل ل صقأل دحل ءدحو نم ققحت ،كلذ نم الءب

```
<#root>
```

```
KSEC-FPR4112-4#
```

```
connect fxos
```

```
<output is skipped>
```

```
KSEC-FPR4112-4(fxos)#
```

```
show interface ethernet 1/1
```

```
Ethernet1/1 is up
Dedicated Interface
```

Hardware: 1000/10000 Ethernet, address: 14a2.a02f.07c0 (bia 14a2.a02f.07c0)  
Description: U: Uplink

MTU 9216 bytes

, BW 1000000 Kbit, DLY 10 usec

## ةتبتثل اتاقيبتل نم ققحتل نكمي فيك .س

ليصفت عيسوت ناكم قش ضرع كلذ دعبو ssa لاجم رمال لمعتسي CLI لكيلهال نم

ضرع لكيلهال نمض sam\_techsupportinfo دربم يلعتتسأتنك عيطتسي تامولعملال سفن  
ةمزح ينف.

<#root>

```
`scope ssa`  
`show slot expand detail`
```

Slot:

Slot ID: 1  
Log Level: Info  
Admin State: Ok  
Operational State: Online  
Disk State: Ok  
Clear Log Data: Available

Application Instance:

Application Name: asa  
Admin State: Enabled  
Operational State: Online  
Running Version: 9.6.2  
Startup Version: 9.6.2  
Hotfixes:  
Externally Upgraded: No  
Cluster Oper State: Not Applicable  
Current Job Type: Start  
Current Job Progress: 100  
Current Job State: Succeeded  
Clear Log Data: Available  
Error Msg:  
Current Task:

App Attribute:

App Attribute Key: mgmt-ip  
Value: 0.0.0.0

App Attribute Key: mgmt-url  
Value: https://0.0.0.0/

Heartbeat:

Last Received Time: 2017-03-15T10:25:02.220  
Heartbeat Interval: 1  
Max Number of Missed heartbeats Permitted: 3



Resource:

Allocated Core NR: 46  
Allocated RAM (KB): 233968896  
Allocated Data Disk (KB): 20971528  
Allocated Binary Disk (KB): 174964  
Allocated Secondary Disk (KB): 0

Heartbeat:

Last Received Time: 2017-03-15T10:25:00.447  
Heartbeat Interval: 5  
Max Number of Missed heartbeats Permitted: 3

Monitor:

OS Version: 9.6(1.150)  
CPU Total Load 1 min Avg: 48.110001  
CPU Total Load 5 min Avg: 48.110001  
CPU Total Load 15 min Avg: 48.110001  
Memory Total (KB): 264377600  
Memory Free (KB): 236835112  
Memory Used (KB): 27542488  
Memory App Total (KB): 233968896  
Disk File System Count: 5  
Blade Uptime: up 1 day, 6:56  
Last Updated Timestamp: 2017-03-15T10:24:10.306

Disk File System:

File System: /dev/sda1  
Mount Point: /mnt/boot  
Disk Total (KB): 7796848  
Disk Free (KB): 7694456  
Disk Used (KB): 102392

File System: /dev/sda2  
Mount Point: /opt/cisco/config  
Disk Total (KB): 1923084  
Disk Free (KB): 1734420  
Disk Used (KB): 90976

File System: /dev/sda3  
Mount Point: /opt/cisco/platform/logs  
Disk Total (KB): 4805760  
Disk Free (KB): 4412604  
Disk Used (KB): 149036

File System: /dev/sda5  
Mount Point: /var/data/cores  
Disk Total (KB): 48061320  
Disk Free (KB): 43713008  
Disk Used (KB): 1906892

File System: /dev/sda6  
Mount Point: /opt/cisco/csp  
Disk Total (KB): 716442836  
Disk Free (KB): 714947696  
Disk Used (KB): 1495140

هجاو نم ذفنم لة انق نيوكت نم ققحت ل انكمي فيك .q

# FXOS؟ رم اوألا رطس

ذفنملا ةانق نم ققحتلا رماوأ

1 مقرر صحتلا

لكيهلا ىلع ايلح اهنىوكت مت يتلا ذفنملا ةانق نم ققحتلل:

```
<#root>
```

```
FPR9K-1-A#
```

```
connect fxos
```

```
FPR9K-1-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
11	Po11(SU)	Eth	LACP	Eth1/4(P) Eth1/5(P)
15	Po15(SD)	Eth	LACP	Eth1/6(D)
48	Po48(SU)	Eth	LACP	Eth1/2(P) Eth1/3(P)

```
-----
```

2 مقرر صحتلا

يقطنم زاهجلا صصخملا Port-Channels نم ققحتلل:

```
<#root>
```

```
FPR9K-1-A#
```

```
scope ssa
```

```
FPR9K-1-A /ssa #
```

```
show configuration
```

```
scope ssa
  enter logical-device ftd_682021968 ftd "1,2,3" clustered
    enter cluster-bootstrap
      set chassis-id 1
      set ipv4 gateway 0.0.0.0
      set ipv4 pool 0.0.0.0 0.0.0.0
      set ipv6 gateway ::
      set ipv6 pool ::
      set virtual ipv4 0.0.0.0 mask 0.0.0.0
      set virtual ipv6 :: prefix-length ""
    !
  set key
```

```

        set mode spanned-etherchannel
        set name 682021968
        set site-id 0
    exit
    enter external-port-link Ethernet11_ftd Ethernet1/1 ftd
        set decorator ""
        set description ""
        set port-name Ethernet1/1
    exit
    enter external-port-link PC11_ftd Port-channel11 ftd
        set decorator ""
        set description ""
        set port-name Port-channel11
    exit
    enter external-port-link PC48_ftd Port-channel48 ftd
        set decorator ""
        set description ""
        set port-name Port-channel48
    exit

```

### 3 مقرر صحف ال

ذفنم لكك ذفنم المة انق رورم ة كرح تا يئ اصح | نم ق قحت لل

<#root>

FPR9K-1-A(fxos)#

show port-channel traffic interface port-channel 11

ChanId	Port	Rx-Ucst	Tx-Ucst	Rx-Mcst	Tx-Mcst	Rx-Bcst	Tx-Bcst
11	Eth1/4	62.91%	0.0%	58.90%	49.99%	100.00%	0.0%
11	Eth1/5	37.08%	0.0%	41.09%	50.00%	0.0%	0.0%

### 4 مقرر صحف ال

ذفنم ذفنم-ة انق لي صافات ي ق قحت لل

<#root>

FPR9K-1-A(fxos)#

show port-channel database interface port-channel 11

```

port-channel11
  Last membership update is successful
  2 ports in total, 2 ports up
  First operational port is Ethernet1/4
  Age of the port-channel is 0d:20h:26m:27s
  Time since last bundle is 0d:18h:29m:07s
  Last bundled member is Ethernet1/5
  Ports:  Ethernet1/4      [active ] [up] *
          Ethernet1/5      [active ] [up]

```

## 5 مقرر صحف ال

ي: لجم ال LACP ماطن فرعم نم ققحت لل

```
<#root>
```

```
FPR9K-1-A(fxos)#
```

```
show lacp system-identifier
```

```
32768,b0-aa-77-2f-81-bb
```

## 6 مقرر صحف ال

LACP ةلح تامال ع عم ثبلا ةزهجأل LACP ماطن فرعم نم ققحت لل

```
<#root>
```

```
FPR9K-1-A(fxos)#
```

```
show lacp neighbor
```

```
Flags: S - Device is sending Slow LACPDUs F - Device is sending Fast LACPDUs  
A - Device is in Active mode P - Device is in Passive mode
```

```
port-channel11 neighbors
```

```
Partner's information
```

Port	Partner System ID	Partner Port Number	Age	Partner Flags
Eth1/4	32768,4-62-73-d2-65-0	0x118	66828	FA
	LACP Partner	Partner		Partner
	Port Priority	Oper Key		Port State
	32768	0xb		0x3d

```
Partner's information
```

Port	Partner System ID	Partner Port Number	Age	Partner Flags
Eth1/5	32768,4-62-73-d2-65-0	0x119	66826	FA
	LACP Partner	Partner		Partner
	Port Priority	Oper Key		Port State
	32768	0xb		0x3d

## 7 مقرر صحف ال

ذفنم ال ةانق ثح تاظوفحم نم ققحت لل

```
<#root>
```

```
FPR9K-1-A(fxos)#
```

```
show port-channel internal event-history all
```

Low Priority Pending queue: len(0), max len(1) [Thu Apr 6 11:07:48 2017]  
High Priority Pending queue: len(0), max len(16) [Thu Apr 6 11:07:48 2017]  
PCM Control Block info:  
pcm\_max\_channels : 4096  
pcm\_max\_channel\_in\_use : 48  
pc count : 3  
hif-pc count : 0  
Max PC Cnt : 104  
Load-defer timeout : 120

=====

PORT CHANNELS:

2LvPC PO in system : 0

port-channel11

channel : 11  
bundle : 65535  
ifindex : 0x1600000a  
admin mode : active  
oper mode : active  
fop ifindex : 0x1a003000  
nports : 2  
active : 2  
pre cfg : 0  
l1l : 0x0 (0)  
l1f : 0x0  
iod : 0x78 (120)  
global id : 3  
flag : 0  
lock count : 0  
num. of SIs: 0  
ac mbrs : 0 0  
l1cp graceful conv disable : 0  
l1cp suspend indiv disable : 1  
pc min-links : 1  
pc max-bundle : 16  
pc max active members : 32  
pc is-suspend-minlinks : 0  
port load defer enable : 0  
l1cp fast-select-hot-standby disable : 0  
ethpm bundle lock count : 0  
bundle res global id : 2

Members:

Ethernet1/4 [bundle\_no = 0]

Ethernet1/5 [bundle\_no = 0]

port-channel external lock:

Lock Info: resource [eth-port-channel 11]

type[0] p\_gwrap[(nil)]

FREE @ 246108 usecs after Wed Apr 5 14:18:10 2017

type[1] p\_gwrap[(nil)]

FREE @ 436471 usecs after Wed Apr 5 16:15:30 2017

type[2] p\_gwrap[(nil)]

FREE @ 436367 usecs after Wed Apr 5 16:15:30 2017

0x1600000a

internal (ethpm bundle) lock:

Lock Info: resource [eth-port-channel 11]

type[0] p\_gwrap[(nil)]

FREE @ 246083 usecs after Wed Apr 5 14:18:10 2017

type[1] p\_gwrap[(nil)]

FREE @ 610546 usecs after Wed Apr 5 16:19:04 2017

type[2] p\_gwrap[(nil)]

FREE @ 610437 usecs after Wed Apr 5 16:19:04 2017

0x1600000a

>>>>FSM: <eth-port-channel 11> has 194 logged transitions<<<<<

- 1) FSM:<eth-port-channel 11> Transition at 557291 usecs after Wed Apr 5 16:04:27 2017  
Previous state: [PCM\_PC\_ST\_WAIT\_REL\_RESRC]  
Triggered event: [PCM\_PC\_EV\_REL\_RESRC\_DONE]  
Next state: [PCM\_PC\_ST\_INIT]
- 2) FSM:<eth-port-channel 11> Transition at 49036 usecs after Wed Apr 5 16:07:18 2017  
Previous state: [PCM\_PC\_ST\_INIT]  
Triggered event: [PCM\_PC\_EV\_L2\_CREATE]  
Next state: [PCM\_PC\_ST\_WAIT\_CREATE]
- 3) FSM:<eth-port-channel 11> Transition at 49053 usecs after Wed Apr 5 16:07:18 2017  
Previous state: [PCM\_PC\_ST\_WAIT\_CREATE]  
Triggered event: [PCM\_PC\_EV\_L2\_CREATED]  
Next state: [PCM\_PC\_ST\_CREATED]

## 8 مقرر صحف ال

ادج ةري ب ك تاج رخم حي حصت ال مزح لك جت ني

<#root>

FPR9K-1-A(fxos)#

debug l2p all

```
2017 Jul 11 10:42:23.854160 l2p: l2p_pkt_parse_pdu(569): l2p_pkt_parse_pdu: got packet from actorpor
2017 Jul 11 10:42:23.854177 l2p: l2p_pkt_compute_port_params(1163): Ethernet1/3(0x1a002000): pa aggre
2017 Jul 11 10:42:23.854190 l2p: l2p_pkt_compute_port_params(1170): p_e1=(8000, 2-0-0-0-0-1, 136, 800
2017 Jul 11 10:42:23.854198 l2p: l2p_pkt_compute_port_params(1172): p_e1_pkt=(8000, 2-0-0-0-0-1, 136,
2017 Jul 11 10:42:23.854207 l2p: l2p_utils_get_obj_type_from_ifidx(390): l2p_utils_get_obj_type_from
2017 Jul 11 10:42:23.854218 l2p: Malloc in fu_fsm_event_new@./utils/fsmutils/fsm.c[5317]-ty[1]0x9bf71
2017 Jul 11 10:42:23.854228 l2p: l2p_utils_cr_fsm_event(572): Called from l2p_utils_create_fsm_event
2017 Jul 11 10:42:23.854237 l2p: Malloc in fu_fsm_event_pair_new@./utils/fsmutils/fsm.c[5327]-ty[2]0x
2017 Jul 11 10:42:23.854248 l2p: fu_fsm_execute_all: match_msg_id(0), log_already_open(0)
2017 Jul 11 10:42:23.854257 l2p: Malloc in fu_fsm_event_new@./utils/fsmutils/fsm.c[5317]-ty[1]0x9bf71
2017 Jul 11 10:42:23.854268 l2p: fu_fsm_execute: (Ethernet1/3)
2017 Jul 11 10:42:23.854275 l2p:      current state [LACP_ST_PORT_MEMBER_COLLECTING_AND_DISTRIBUTING_EN
2017 Jul 11 10:42:23.854283 l2p:      current event [LACP_EV_PARTNER_PDU_IN_SYNC_COLLECT_ENABLED_DISTRI
2017 Jul 11 10:42:23.854291 l2p:      next state      [FSM_ST_NO_CHANGE]
2017 Jul 11 10:42:23.854304 l2p: l2p_proto_get_state(969): IF Ethernet1/3(0x1a002000): end PartnerEnd
2017 Jul 11 10:42:23.854314 l2p: l2p_proto_record_pdu(2266): Recording PDU for LACP pkt on IF Etherne
2017 Jul 11 10:42:23.854325 l2p: l2p_proto_set_state(900): IF Ethernet1/3(0x1a002000): Set end ActorE
2017 Jul 11 10:42:23.854335 l2p: l2p_proto_get_state(969): IF Ethernet1/3(0x1a002000): end PartnerEnd
2017 Jul 11 10:42:23.854344 l2p: l2p_proto_update_ntt(2211): updateNTT called for IF Ethernet1/3(0x1a
2017 Jul 11 10:42:23.854355 l2p: l2p_proto_get_state(969): IF Ethernet1/3(0x1a002000): end ActorEnd(1
2017 Jul 11 10:42:23.854362 l2p: l2p_timer_start_w_chgd_time(681): l2p_timer_start_w_chgd_time: star
2017 Jul 11 10:42:23.854377 l2p: l2p_timer_start(637): Timer Started: Timer_Arg ([rid type IF-Rid: if
2017 Jul 11 10:42:23.854386 l2p: l2p_timer_start(638): Timer period=15 seconds
2017 Jul 11 10:42:23.854396 l2p: Free ptr in fu_fsm_execute@./utils/fsmutils/fsm.c[1091] for addr 0x9
2017 Jul 11 10:42:23.854408 l2p: fu_fsm_execute_all: done processing event LACP_EV_PARTNER_PDU_IN_SYNC
2017 Jul 11 10:42:23.854419 l2p: fu_mts_drop ref 0x9bf7320 opc 90117
2017 Jul 11 10:42:23.854434 l2p: fu_fsm_execute_all: MTS_OPC_NET_L2_RX_DATA_HDR(msg_id 2623696) droppe
2017 Jul 11 10:42:23.854445 l2p: fu_fsm_engine_post_event_processing
2017 Jul 11 10:42:23.854453 l2p: end of while in fu_fsm_engine
```

```
2017 Jul 11 10:42:23.854461 lACP: fu_handle_process_hot_plugin_msg: Entered the function line 143
2017 Jul 11 10:42:23.854468 lACP: begin fu_fsm_engine: line[2357]
2017 Jul 11 10:42:24.361501 lACP: lACP_pkt_encode_pdu_helper(770): lACP_pkt_encode_pdu_helper: pkt_len=
2017 Jul 11 10:42:24.361530 lACP: lACP_pkt_encode_pdu_helper(797): lACP_pkt_encode_pdu_helper: if_idx=E
2017 Jul 11 10:42:24.361542 lACP: lACP_debug_wrapper_t1(1718): Executing [mcecm_api_is_pc_mcec]
2017 Jul 11 10:42:24.361551 lACP: lACP_debug_wrapper_t1(1718): input: if_index = [0x16000000]
2017 Jul 11 10:42:24.361559 lACP: lACP_debug_wrapper_t1(1718): Executing [mcecm_cache_is_pc_mcec]
2017 Jul 11 10:42:24.361568 lACP: lACP_debug_wrapper_t1(1718): output:0
2017 Jul 11 10:42:24.361589 lACP: lACP_pkt_encode_pdu_helper(842): 0x1a002000: Set short_timeout to per
2017 Jul 11 10:42:24.361599 lACP: lACP_pkt_encode_pdu_helper(879): lACP_pkt_encode_pdu_helper: actor-po
2017 Jul 11 10:42:24.361612 lACP: lACP_pkt_encode_pdu_helper(906): lACP_pkt_encode_pdu_helper: if_idx=E
2017 Jul 11 10:42:24.361624 lACP: lACP_pkt_encode_pdu_helper(910): lACP_pkt_encode_pdu_helper: if_idx=E
2017 Jul 11 10:42:24.361636 lACP: lACP_net_tx_data(206): lACP_net_tx_data: Sending buffer with length 1
2017 Jul 11 10:42:24.361648 lACP: lACP_net_tx_data(215): 01 01 01 14 ffff
2017 Jul 11 10:42:24.361658 lACP: lACP_net_tx_data(215): ffff
2017 Jul 11 10:42:24.361668 lACP: lACP_net_tx_data(215): 00 00 00 02 14 ffff
2017 Jul 11 10:42:24.361678 lACP: lACP_net_tx_data(215): ffff
2017 Jul 11 10:42:24.361689 lACP: lACP_net_tx_data(215): 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.361700 lACP: lACP_net_tx_data(215): 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.361710 lACP: lACP_net_tx_data(215): 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.361721 lACP: lACP_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 10:42:24.361753 lACP: lACP_proto_get_state(969): IF Ethernet1/3(0x1a002000): end PartnerEnd
2017 Jul 11 10:42:24.361764 lACP: lACP_proto_restart_tx_timer(1802): lACP_proto_restart_tx_timer: got e
2017 Jul 11 10:42:24.361773 lACP: lACP_proto_restart_tx_timer(1825): lACP_proto_restart_tx_timer: flag
2017 Jul 11 10:42:24.361782 lACP: lACP_timer_start_w_chgd_time(681): lACP_timer_start_w_chgd_time: star
2017 Jul 11 10:42:24.361798 lACP: lACP_timer_start(637): Timer Started: Timer_Arg ([rid type IF-Rid: if
2017 Jul 11 10:42:24.361807 lACP: lACP_timer_start(638): Timer period=1 seconds
2017 Jul 11 10:42:24.361820 lACP: lACP_pkt_encode_pdu_helper(770): lACP_pkt_encode_pdu_helper: pkt_len=
2017 Jul 11 10:42:24.361833 lACP: lACP_pkt_encode_pdu_helper(797): lACP_pkt_encode_pdu_helper: if_idx=E
2017 Jul 11 10:42:24.361841 lACP: lACP_debug_wrapper_t1(1718): Executing [mcecm_api_is_pc_mcec]
2017 Jul 11 10:42:24.361849 lACP: lACP_debug_wrapper_t1(1718): input: if_index = [0x16000000]
2017 Jul 11 10:42:24.361857 lACP: lACP_debug_wrapper_t1(1718): Executing [mcecm_cache_is_pc_mcec]
2017 Jul 11 10:42:24.361865 lACP: lACP_debug_wrapper_t1(1718): output:0
2017 Jul 11 10:42:24.361879 lACP: lACP_pkt_encode_pdu_helper(842): 0x1a003000: Set short_timeout to per
2017 Jul 11 10:42:24.361888 lACP: lACP_pkt_encode_pdu_helper(879): lACP_pkt_encode_pdu_helper: actor-po
2017 Jul 11 10:42:24.361899 lACP: lACP_pkt_encode_pdu_helper(906): lACP_pkt_encode_pdu_helper: if_idx=E
2017 Jul 11 10:42:24.361910 lACP: lACP_pkt_encode_pdu_helper(910): lACP_pkt_encode_pdu_helper: if_idx=E
2017 Jul 11 10:42:24.361920 lACP: lACP_net_tx_data(206): lACP_net_tx_data: Sending buffer with length 1
2017 Jul 11 10:42:24.361930 lACP: lACP_net_tx_data(215): 01 01 01 14 ffff
2017 Jul 11 10:42:24.361940 lACP: lACP_net_tx_data(215): ffff
2017 Jul 11 10:42:24.361950 lACP: lACP_net_tx_data(215): 00 00 00 02 14 00 00 00 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.361960 lACP: lACP_net_tx_data(215): 00 00 00 00 00 00 03 10 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.361971 lACP: lACP_net_tx_data(215): 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.361981 lACP: lACP_net_tx_data(215): 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.361991 lACP: lACP_net_tx_data(215): 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
2017 Jul 11 10:42:24.362001 lACP: lACP_net_tx_data(247): Ethernet1/4(0x1a003000): Tx LACP PDU len: 110
2017 Jul 11 10:42:24.362022 lACP: lACP_proto_get_state(969): IF Ethernet1/4(0x1a003000): end PartnerEnd
2017 Jul 11 10:42:24.362032 lACP: lACP_proto_restart_tx_timer(1802): lACP_proto_restart_tx_timer: got e
2017 Jul 11 10:42:24.362042 lACP: lACP_proto_restart_tx_timer(1825): lACP_proto_restart_tx_timer: flag
2017 Jul 11 10:42:24.362050 lACP: lACP_timer_start_w_chgd_time(681): lACP_timer_start_w_chgd_time: star
2017 Jul 11 10:42:24.362062 lACP: lACP_timer_start(637): Timer Started: Timer_Arg ([rid type IF-Rid: if
```

## فرط

هه جاو يقى قلتت ، لاثم لال لى بس يقى لى . ريظن لال نم LACP مزح يقى قلتت تنك اذا ام ققحت  
Ethernet1/3 مزح LACP ، و نك لال Ethernet1/4 no:

```
2017 Jul 11 10:42:25.641920 lacp: lacp_net_get_pkt_info(746): Packet received on phy_if_idx Ethernet1/3
2017 Jul 11 10:42:25.641937 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU 1
```

## 9 مقرر صحف ال

ي درفل ا عضولا يف اهنكلو، ذفنملا اناق يف اوضع Ethernet1/4 ةهجالا دعت، جارخال اذه يف (لوجملا بناج يل ع قلع عم):

<#root>

ciscofcm01-A(fxos)#

```
show lacp internal event-history interface ethernet 1/4
```

>>>>FSM: <Ethernet1/4> has 549 logged transitions<<<<<<

- 1) FSM:<Ethernet1/4> Transition at 385779 usecs after Wed Jul 5 13:13:03 2017  
Previous state: [LACP\_ST\_PORT\_IS\_DOWN\_OR\_LACP\_IS\_DISABLED]  
Triggered event: [LACP\_EV\_CLNUP\_PHASE\_II]  
Next state: [LACP\_ST\_PORT\_IS\_DOWN\_OR\_LACP\_IS\_DISABLED]
- 2) FSM:<Ethernet1/4> Transition at 955546 usecs after Wed Jul 5 13:13:03 2017  
Previous state: [LACP\_ST\_PORT\_IS\_DOWN\_OR\_LACP\_IS\_DISABLED]  
Triggered event: [LACP\_EV\_LACP\_ENABLED\_AND\_PORT\_UP]  
Next state: [LACP\_ST\_DETACHED\_LAG\_NOT\_DETERMINED]
- 3) FSM:<Ethernet1/4> Transition at 962224 usecs after Wed Jul 5 13:13:10 2017  
Previous state: [LACP\_ST\_DETACHED\_LAG\_NOT\_DETERMINED]  
Triggered event: [LACP\_EV\_RECEIVE\_PARTNER\_PDU\_TIMED\_OUT]  
Next state: [FSM\_ST\_NO\_CHANGE]
- 4) FSM:<Ethernet1/4> Transition at 963838 usecs after Wed Jul 5 13:13:13 2017  
Previous state: [LACP\_ST\_DETACHED\_LAG\_NOT\_DETERMINED]  
Triggered event: [LACP\_EV\_RECEIVE\_PARTNER\_PDU\_TIMED\_OUT]  
Next state: [FSM\_ST\_NO\_CHANGE]
- 5) FSM:<Ethernet1/4> Transition at 964002 usecs after Wed Jul 5 13:13:13 2017  
Previous state: [LACP\_ST\_DETACHED\_LAG\_NOT\_DETERMINED]  
Triggered event: [LACP\_EV\_RECEIVE\_PARTNER\_PDU\_TIMED\_OUT\_II\_INDIVIDUAL]  
Next state: [LACP\_ST\_INDIVIDUAL\_OR\_DEFAULT]
- 6) FSM:<Ethernet1/4> Transition at 735923 usecs after Wed Jul 5 13:13:36 2017  
Previous state: [LACP\_ST\_INDIVIDUAL\_OR\_DEFAULT]  
Triggered event: [LACP\_EV\_UNGRACEFUL\_DOWN]  
Next state: [LACP\_ST\_PORT\_IS\_DOWN\_OR\_LACP\_IS\_DISABLED]

## 10 مقرر صحف ال

نوكي امنيب PortChannel1 يف وضع وليغشت ال دي ق Ethernet1/3 ةهجالا نوكت، جارخال اذه يف Ethernet1/4 ل سري Ethernet1/3 نأ ظحال. ي درفل ا عضولا يف PortChannel1 يف وضع هنا مغر Ethernet1/4 tx: ال طوق (rx) ل سري Ethernet1/4 نأ ريغ، طبر (rx) ملت سيو



<#root>

ciscofcm01-A(fxos)#

debug lacp pkt

```
ciscofcm01-A(fxos)# 2017 Jul 11 11:04:05.278736 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
2017 Jul 11 11:04:05.602855 lacp: lacp_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 11:04:05.983134 lacp: lacp_net_tx_data(247): Ethernet1/4(0x1a003000): Tx LACP PDU len: 110
2017 Jul 11 11:04:06.249929 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
2017 Jul 11 11:04:06.602815 lacp: lacp_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 11:04:06.992812 lacp: lacp_net_tx_data(247): Ethernet1/4(0x1a003000): Tx LACP PDU len: 110
2017 Jul 11 11:04:07.163780 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
2017 Jul 11 11:04:07.602814 lacp: lacp_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 11:04:08.002817 lacp: lacp_net_tx_data(247): Ethernet1/4(0x1a003000): Tx LACP PDU len: 110
2017 Jul 11 11:04:08.102006 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
2017 Jul 11 11:04:08.612810 lacp: lacp_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 11:04:09.002811 lacp: lacp_net_tx_data(247): Ethernet1/4(0x1a003000): Tx LACP PDU len: 110
2017 Jul 11 11:04:09.091937 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
2017 Jul 11 11:04:09.622810 lacp: lacp_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 11:04:10.002807 lacp: lacp_net_tx_data(247): Ethernet1/4(0x1a003000): Tx LACP PDU len: 110
2017 Jul 11 11:04:10.004411 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
2017 Jul 11 11:04:10.632806 lacp: lacp_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 11:04:10.854094 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
2017 Jul 11 11:04:11.002789 lacp: lacp_net_tx_data(247): Ethernet1/4(0x1a003000): Tx LACP PDU len: 110
2017 Jul 11 11:04:11.642807 lacp: lacp_net_tx_data(247): Ethernet1/3(0x1a002000): Tx LACP PDU len: 110
2017 Jul 11 11:04:11.714199 lacp: lacp_net_process_rx_data(480): Ethernet1/3(0x1a002000): Rx LACP PDU len: 110
```

دنتسمل اذه نم ققحت، ةيفاضا تامولعم ىلع لوصحلل

show جارخا نم FXOS ةمزح رادصا ىلع روثعلا كنكمي فيك .س  
tech?

1 ةقيرطال

فلم حتفا مث FPRM\_A\_TechSupport.tar.gz فلم تايوتحم جرختسي FPRM tar فلم يفي  
ةمزحلال ةيآنع شحباو sam\_techsupportinfo

```

sam_techsupportinfo
80148 `top`
80149 `scope fabric-interconnect a`
80150 `show firmware`
80151 Fabric Interconnect A:
80152     Running-Kern-Vers: 5.0(3)N2(4.11.74)
80153     Running-Sys-Vers: 5.0(3)N2(4.11.74)
80154     Package-Vers: 2.1(1.77)
80155     Startup-Kern-Vers: 5.0(3)N2(4.11.74)
80156     Startup-Sys-Vers: 5.0(3)N2(4.11.74)
80157     Act-Kern-Status: Ready
80158     Act-Sys-Status: Ready
80159     Bootloader-Vers:
80160
80161 `show fan detail`
80162 `show psu detail`
80163 `show storage detail`
80164
Find result - 24 hits
Search "Package-Vers" (24 hits in 1 file)
C:\Users\mzafeiro\Desktop\Tech_docs\FXOS\FXOS show-tech new\20170502134149_FPR4140_FPRM\sam_techsupportinfo (24 hits)
Line 80154:      Package-Vers: 2.1(1.77)
Line 116366:    Package-Vers: 2.1(1.77)
Line 116372:    Package-Vers: 2.1(1.77)
Line 116378:    Package-Vers: 2.1(1.77)
Line 116385:    Package-Vers: 2.1(1.77)

```

</root>

FPR4140-A#

show fabric-interconnect firmware

```

Fabric Interconnect A:
  Running-Kern-Vers: 5.0(3)N2(4.11.74)
  Running-Sys-Vers: 5.0(3)N2(4.11.74)
  Package-Vers: 2.1(1.77)
  Startup-Kern-Vers: 5.0(3)N2(4.11.74)
  Startup-Sys-Vers: 5.0(3)N2(4.11.74)
  Act-Kern-Status: Ready
  Act-Sys-Status: Ready
  Bootloader-Vers:

```

دیناثل اوقی رطال

فلم حت فا م ث FPRM\_A\_TechSupport.tar.gz. فلم تايوتحم جرتسي FRPM tar فلم ي ف  
 /var/sysmgr/sam\_logs/svc\_sam\_dme.log ن ع ثحب او InPlatformVersion:

```

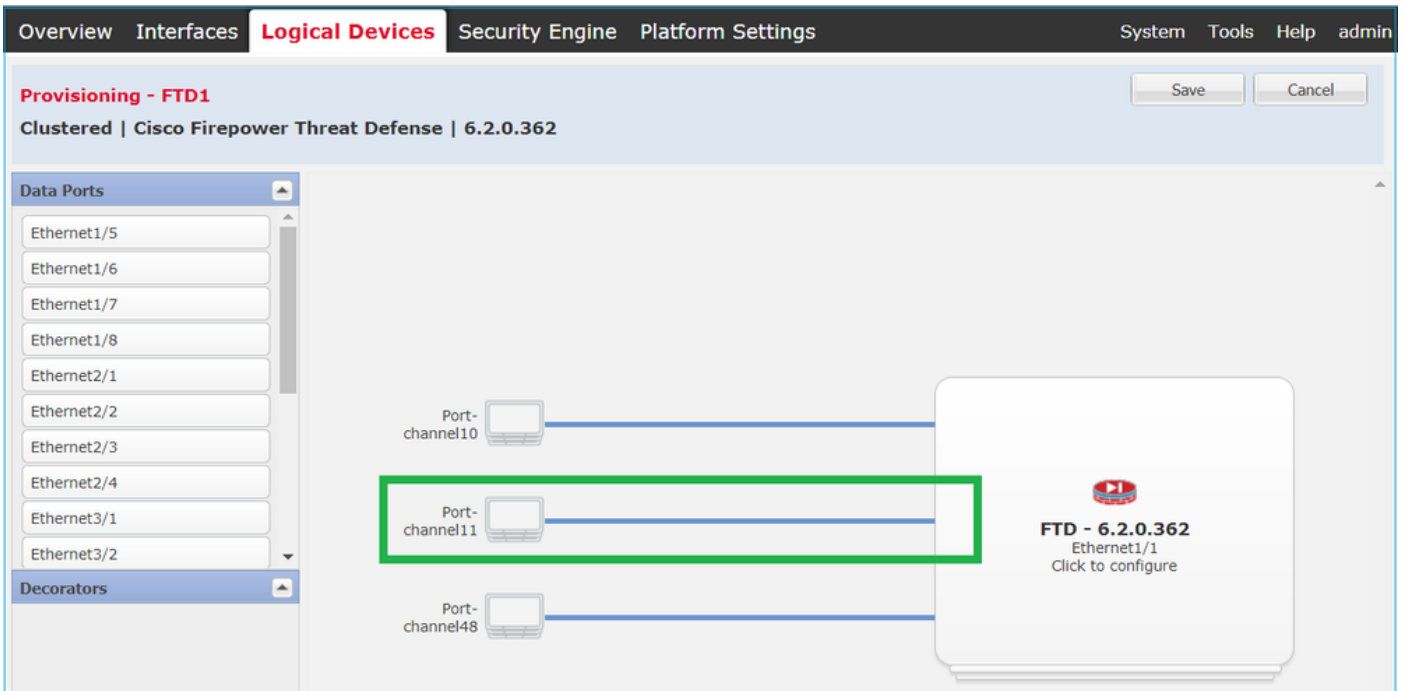
svc_sam_dme.log
1932 id="0"
1933 name=""
1934 operState="on"
1935 rns="health-led"/>
Find result - 14 hits
Search "aInPlatformVersion" (14 hits in 1 file)
C:\Users\mzafeiro\Desktop\Tech_docs\FXOS\FXOS show-tech new\20170502134149_FPR4140_FPRM\var\sysmgr\sam_logs\svc_sam_dme.log.1 (14 hits)
Line 93795: [INFO][0x67902b90][May 2 11:28:33.313][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 100200: [INFO][0x67902b90][May 2 11:33:01.801][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 118594: [INFO][0x67902b90][May 2 11:38:01.801][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 121788: [INFO][0x67902b90][May 2 11:43:01.800][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 122311: [INFO][0x67902b90][May 2 11:48:01.801][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 122842: [INFO][0x67902b90][May 2 11:53:01.801][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 123381: [INFO][0x67902b90][May 2 11:58:01.800][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 123939: [INFO][0x67902b90][May 2 12:03:01.800][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 124476: [INFO][0x67902b90][May 2 12:08:01.800][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 125107: [INFO][0x67902b90][May 2 12:13:01.801][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 125650: [INFO][0x67902b90][May 2 12:18:01.801][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 126202: [INFO][0x67902b90][May 2 12:23:01.800][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 126749: [INFO][0x67902b90][May 2 12:28:01.801][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)
Line 127307: [INFO][0x67902b90][May 2 12:33:01.800][app_sam_dme:isApplicat] isApplicationSupported: aInAppName ftd aInAppVersion 6.1.0.330, aInPlatformVersion 2.1(1.77)

```

تامولعم رشن ب (MIO) جارخال/الخالإا ةدحو موقت فيك .س  
يلصنللا مداخللا قيبطت لىلإ (ةلازالا/ةفاضللا) ةهجالا  
(FTD، ASA)؟

MIO قيبطت ليمع نوكم مدختسي وهو

MIO نم FTD ل ةديج ذفنم ةانق صيصخت دنع ،لاثملا ليبس لىع



FTD قيبطت لىك وءاطخأ حىحصت حضوي

```
<#root>
```

```
firepower#
```

```
debug app-agent 255
```

```
appagent : part 0 : ftd_001_JAD19500BAB0Z690F2.interfaceMapping.update
appagent : part 1 : ssp-xml:3
appagent : part 2 : 7
appagent : part 3 : appAG
appagent : part 4 : <interfaceMappingConfigUpdateRequest><interfaceMapping action="insert"><externalPort
<bladeVNIC>22</bladeVNIC></internalPort></interfaceMapping></interfaceMappingConfigUpdateRequest>
appagent : Process the request message
appagent : It is an update request command
appagent : Invoke request msg handler for cmd interfaceMapping.update
appagent : Processing InterfaceMapping Update Message
appagent : Creating Interface Mapping Structure.
appagent : Processing the tag externalPort.
appagent : =====
appagent : PortName=Port-channel11
appagent : ftw capability=0
appagent : no available ftw peers
appagent : cleaning external_port_ftw_peers_t
```



l9:

<#root>

FP4120-5-A#

connect local-mgmt

FP4120-5-A(local-mgmt)#

show license all

Smart Licensing Status

=====

Smart Licensing is ENABLED

Registration:

Status: UNREGISTERED

Export-Controlled Functionality: Not Allowed

License Authorization:

Status: No Licenses in Use

License Usage

=====

No licenses in use

Product Information

=====

UDI: PID:FPR-4120-SUP,SN:JAD19500BAB

l9:

<#root>

FP4120-5-A#

scope license

FP4120-5-A /license #

show license all

Smart Licensing Status

=====

Smart Licensing is ENABLED

Registration:

Status: UNREGISTERED

Export-Controlled Functionality: Not Allowed

License Authorization:  
Status: No Licenses in Use

License Usage  
=====

No licenses in use

Product Information  
=====

UDI: PID:FPR-4120-SUP,SN:JAD19500BAB

ةعونصم ةركاذب دوزملا صارقألا كرحم ليديبت كنكمي له .س  
نفلتخم FXOS يلكيه نيّب (SSD1) ةبلص تانوكم نم

أو FTD لاثملا لبيس يلع) قيبتللا ةروص يلع SSD1 يوتحي .ال يه ةرصتخملا ةباجإلا  
رهظتو ةدحول رهظت نلف ،فلتخم للكيهب هليصوتب تمقو للكيهل نم SSD1 تذخأ اذا (ASA).  
ءاطخألا هذه:

F1548 2017-11-08T11:36:40.095 زارط يلصنلا مداخلل ةجرح لادبتسا ةيلمع نع فشكلا مت  
1 ةحتفلا ي ف 427280

Severity	Description	Cause	Occurrence	Time	Acknowledged
CRITICAL	Blade swap detected on slot 1	blade-swap	1	2017-11-08T11:36:40.095	no

ةقباطتم ريغ ةيطمنلا نامألا ةدحو ةروص

Application	Version	Management IP	Gateway	Management Port	Status
FTD	6.2.2.81	10.62.148.194	10.62.148.129	Ethernet1/1	Security module image mismatch

Attributes:  
Cluster Operational Status: not-applicable  
Firepower Management IP: 10.62.148.194  
Management URL : https://10.62.148.75/  
HA-ROLE : standalone  
UUID : 8b8557b2-ba50-11e7-85f9-958a43b079f6

1/1 مداخل يلع دوقم 1 يلحملا صرقلا

Severity	Description	Cause	Occurrence	Time	Acknowledged
MAJOR	Local disk 1 missing on server 1/1	equipment-missing	2	2017-11-08T10:40:43.122	no

لكيهللا ةقاط كالهتسا نم ققحتلا نكمي فيك .س

show environment summary: رمألا مادختسا كنكمي ،FXOS 2.2.1 رادصا نم لاجلا وه امك

<#root>

FPR4100-1 /chassis #

show environment summary

Chassis INFO :

Total Power Consumption: 440.000000  
Inlet Temperature (C): 21.000000  
CPU Temperature (C): 39.000000  
Last updated Time: 2018-07-01T09:39:55.157

PSU 1:

Type: AC  
Input Feed Status: Ok  
12v Output Status: Ok  
Overall Status: Operable

PSU 2:

Type: AC  
Input Feed Status: N/A  
12v Output Status: N/A  
Overall Status: Removed

FAN 1

Fan Speed RPM (RPM): 12110  
Speed Status: Ok  
Overall Status: Operable

FAN 2

Fan Speed RPM (RPM): 12110  
Speed Status: Ok  
Overall Status: Operable

FAN 3

Fan Speed RPM (RPM): 12100  
Speed Status: Ok  
Overall Status: Operable

عجارج، تامولعملال نم دي زمل

[لكي هلا عمال س قب قارم](#)

bootloader رادصا نم ققحتال نكمي فيك .س

<#root>

FPR-4110-7-A#

scope chassis 1

FPR-4110-7-A /chassis #

scope server 1

FPR-4110-7-A /chassis/server #

scope adapter 1

FPR-4110-7-A /chassis/server/adapter #

show version detail

Adapter 1:  
Running-Vers: 5.3(1.91)  
Package-Vers: 2.3(1.88)  
Update-Status: Ready  
Activate-Status: Ready  
Bootloader-Update-Status: Ready  
Startup-Vers: 5.3(1.91)  
Backup-Vers: 5.3(1.48)  
Bootloader-Vers: MF-111-234949

## bootloader؟ قرت مت فيك .س

نامأل زاخ في حداف أطخ يقلت ماظنل رهظي دق ،ثدح رادصا وأ FXOS 2.3.1.58 تيبتت دع  
ةبولطم لوحملل ةتباتل جماربلل ةقرت نأ ل ريشي امم كب صاخلا

Critical F1715 2017-05-11T11:43:33.121 339561 Adapter 1 on Security Module 1 requires a critical firmware

طابترالا اذه لىل عديهمتلا ليمحت ةأ ةقرت عارجا فصومتى

[https://www.cisco.com/c/en/us/td/docs/security/firepower/pxos/pxos231/release/notes/pxos231\\_rn.html#pgf173826](https://www.cisco.com/c/en/us/td/docs/security/firepower/pxos/pxos231/release/notes/pxos231_rn.html#pgf173826)

رايخلا مادختسا ةلواحم كنكمي ،ديهمتلا ليمحت ةأ ةقرت ءانثا لىلاتلا أطخلا تهجاو اذا  
"ضرف".

<#root>

FPR-4110-7-A#

scope chassis 1

FPR-4110-7-A /chassis #

scope server 1

FPR-4110-7-A /chassis/server #

scope adapter 1/1/1

FPR-4110-7-A /chassis/server/adapter #

show image

Name Type Version

-----  
fxos-m83-8p40-cruzboot.4.0.1.62.bin Adapter Boot 4.0(1.62)

fxos-m83-8p40-vic.4.0.1.51.bin Adapter 4.0(1.51)





```
FPR-4115-A /security/default-auth* #
```

```
commit-buffer
```

```
FPR-4115-A /security/default-auth #
```

```
show detail
```

```
Default authentication:
```

```
Admin Realm: Local
```

```
Operational Realm: Local
```

```
Web session refresh period(in secs): 600
```

```
Idle Session timeout(in secs) for web, ssh, telnet sessions: 3600
```

```
Absolute Session timeout(in secs) for web, ssh, telnet sessions: 0
```

```
Serial Console Idle Session timeout(in secs): 3600
```

```
Serial Console Absolute Session timeout(in secs): 3600
```

```
Admin Authentication server group:
```

```
Operational Authentication server group:
```

```
Use of 2nd factor: No
```

## ل كيهال فرشم ىلإ ةهجوم ال LACP مزح طاقتلل ةيفيك .س (مكحتلل ىوتسم)؟

لخاد Firepower 4100/9300 (control-plane) ل كيهال فرشم ىلإ ةهجوم ال LACP مزح نيمضت متي ةيلخاد ال hi-دراول ةهجاو ىلع اهطاقتلل نكمي و ةدحمل مزحلاب صاخلل تانايبل مسق في مكحتلل لوكوتورب تانايب تادحو تاياب تادحو نيمضت متي. ethanalyzer رمال مادختساب IEEE ناوع) 01 80 C2 0000 02 ميقلل تاذ تايابل تادحو نم اءب (LACP) تاطابل راللا عي مت تانايبل مسق ةياهن ىتح (802.3 Slow\_Protocols\_Multicast):

```
<#root>
```

```
firepower#
```

```
connect fxos
```

```
...
```

```
firepower(fxos)#
```

```
ethanalyzer local interface inbound-hi limit-captured-frames 10000 limit-frame-size 9000 detail
```

```
Capturing on 'eth4'
```

```
Frame 1: 188 bytes on wire (1504 bits), 188 bytes captured (1504 bits) on interface 0
```

```
Interface id: 0 (eth4)
```

```
Interface name: eth4
```

```
Encapsulation type: Ethernet (1)
```

```
Arrival Time: Dec 5, 2023 09:16:06.736180828 UTC
```

```
[Time shift for this packet: 0.000000000 seconds]
```

```
Epoch Time: 1701767766.736180828 seconds
```

```
[Time delta from previous captured frame: 0.000000000 seconds]
```

```

[Time delta from previous displayed frame: 0.000000000 seconds]
[Time since reference or first frame: 0.000000000 seconds]
Frame Number: 1
Frame Length: 188 bytes (1504 bits)
Capture Length: 188 bytes (1504 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:vlan:ethertype:data]
Ethernet II, Src: 02:10:18:a3:4f:f5 (02:10:18:a3:4f:f5), Dst: 58:97:bd:b9:36:4e (58:97:bd:b9:36:4e)
Destination: 58:97:bd:b9:36:4e (58:97:bd:b9:36:4e)
Address: 58:97:bd:b9:36:4e (58:97:bd:b9:36:4e)
.... ..0. .... = LG bit: Globally unique address (factory default)
.... ..0. .... = IG bit: Individual address (unicast)
Source: 02:10:18:a3:4f:f5 (02:10:18:a3:4f:f5)
Address: 02:10:18:a3:4f:f5 (02:10:18:a3:4f:f5)
.... ..1. .... = LG bit: Locally administered address (this is NOT the factory default)
.... ..0. .... = IG bit: Individual address (unicast)
Type: 802.1Q Virtual LAN (0x8100)
802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 4048
000. .... = Priority: Best Effort (default) (0)
....0 .... = DEI: Ineligible
.... 1111 1101 0000 = ID: 4048
Type: Unknown (0xde08)

```

Data (170 bytes)

```

0000 b8 50 20 04 00 00 00 00 00 00 00 00 00 81 00 .P .....
0010 00 00 00 00 00 04 09 04 cd 00 00 00 00 00 00 .....
0020 00 00 00 00 00 00 00 00 00 00 00 00 00 00

```

```

01 80 .....

```

0030

```

c2 00 00 02 58 97 bd b9 36 51 88 09 01 01 01 14 ....X...6Q.....

```

0040

```

80 00 58 97 bd b9 36 4d 00 28 80 00 00 44 3f 00 ..X...6M.(...D?.

```

0050

```

00 00 02 14 80 00 00 17 df d6 ec 00 00 33 80 00 .....3..

```

0060

```

02 2c 3d 00 00 00 03 10 00 00 00 00 00 00 00 ..,=.....

```

0070

```

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....

```

0080

```

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....

```

0090

```

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....

```

00a0

00 00 00 00 00 00 00 00 00 00

.....  
Data: b8502004000000000000000000000000081000000000000040904...

تنتز نإلإ ىلع تاودأ مادختساب PCAP ىلإ ةيرشعلا ةيسادسلا غيرفت ليوتحت نكمي

## صارقألا تاكرحم تامولعم ىلع روثعلا كنكمي فيك .س ةبلص تانوكم نم ةعونصم ةركاذب ةدوزملا

نم ةعونصم ةركاذب ةدوزملا صارقألا تاكرحم لة لخدلا لكيله ل فرشم تامولعم رفوتت  
workaround/solution م سقلا ، 1 ةوطخلا في ةروكذملا FXOS تارادصا عيمج في ةبلص تانوكم  
في [FN72077](#):

<#root>

KSEC-FPR4112-4 #

scope chassis 1

KSEC-FPR4112-4 /chassis #

show sup version detail

SUP FIRMWARE:

ROMMON:

Running-Vers: 1.0.15

Package-Vers: 1.0.18

Activate-Status: Ready

Upgrade Status: SUCCESS

FPGA:

Running-Vers: 2.00

Package-Vers: 1.0.18

Activate-Status: Ready

SSD:

Running-Vers: MU03

Model: Micron\_M500IT\_MTFDDAT128MBD

ةبلص تانوكم نم ةعونصم ةركاذب ةدوزملا صارقألا تاكرحم ل (يلصن م داخ) نامألا كرحم:

<#root>

KSEC-FPR4112-4#

show server storage detail

Server 1/1:

<output skipped>

RAID Controller 1:

Type: SATA

Vendor: Cisco Systems Inc

Model: FPR4K-PT-01

Serial: JAD260508TZ

HW Revision:

PCI Addr: 00:31.2

Raid Support:

OOB Interface Supported: No

Rebuild Rate: N/A

Controller Status: Unknown

Local Disk 1:

Vendor: INTEL

Model: SSDSC2KG48

Serial: PHYG109603PA480BGN

HW Rev: 0

Operability: Operable

Presence: Equipped

Size (MB): 400000

Drive State: Online

Power State: Active

Link Speed: 6 Gbps

Device Type: SSD

Local Disk 2:

Vendor: INTEL

Model: SSDSC2KG96

Serial: PHYG143301JG960CGN

HW Rev: 0

Operability: Operable

Presence: Equipped

Size (MB): 800000

Drive State: Online

Power State: Active

Link Speed: 6 Gbps

Device Type: SSD

Local Disk Config Definition:

Mode: No RAID

Description:

Protect Configuration: No

## ة (FXOS) لادلا تالوحم لتاعومجم نيوك تة فيكس .

نم ققحت لاو ة لادلا FirePOWER تالوحم يقبت ونم آلا ة امحلا راج نيوك تة لاقم لا لا عحرا  
اهت حص.

## عجارم لا

- رادص لا، Cisco Firepower 4100/9300 FXOS نم آلا ة امحلا راج لك ه ريم نيوك تة لاد  
[2.14\(1\)](#)

- [2.14\(1\) رادص، ا، ا، Cisco Secure FXOS ل Firepower 4100/9300 CLI، ني وكت ليلد](#)
- [Cisco Firepower 4100/9300 FXOS رماو أعجم](#)
- [اهت حص نم ق قحت ل، او ة نم آ، ا، ة ل خ اد ل، ا، FirePOWER تال وجم تا ع ومجم ني وكت](#)

ةمچرتل هذه لوج

ةللأل تاي نقتل نمة ومة مادختساب دن تسمل اذة Cisco تمةرت  
ملاعلاء انء مء مء نمة دختسمل معد و تمة مء دقتل ةر شبل او  
امك ةق قء نوك ت نل ةللأل ةمچرت لصف أن ةظحال مء ءرء. ةصاأل مء تءل ب  
Cisco ةللخت. فرتمة مچرت مء دقء ةللأل ةل فارتحال ةمچرتل عم لاعل او  
ىل إأمءءاد ءوچرلاب ةصوء و تامةرتل هذه ةقء نء اهءل وئس م Cisco  
Systems (رفوتم طبارل) ةلصلأل ةزىل ءن إل دن تسمل