

Cisco FXOS, IOS XR, NX-OS Cisco Discovery Protocol

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Cisco Discovery Protocol



ID : cisco-sa-20200205-fxn-xos-iosxr-cdp-dos

CVE-2020-3120

Published : 2020-02-05 16:00

Updated : 2020-02-21 20:46

Version : 1.3 (Interim)

CVSS : 7.4

Workarounds : No workarounds available

Cisco IDs : [CSCvr15072](#) [CSCvr15083](#)

[CSCvr15073](#) [CSCvr15078](#) [CSCvr15111](#)

[CSCvr15024](#) [CSCvr15079](#) [CSCvr14976](#)

[CSCvr15082](#)

Cisco FXOS, IOS XR, NX-OS
Cisco Discovery Protocol

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Cisco FXOS, IOS XR, NX-OS
Cisco Discovery Protocol

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Cisco IOS XR Cisco Discovery

Protocol Cisco Discovery

Cisco FXOS NX-OS

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Cisco FXOS IOS XR NX-OS

Protocol

Cisco FXOS Cisco Discovery Protocol

Cisco Discovery Protocol

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Cisco FXOS Cisco Discovery

Protocol

Protocol

Cisco IOS XR Cisco Discovery Protocol

CLI `show running-config | include`

`cdp`

Protocol

Protocol

```
<#root>
```

```
RP/0/RP0/CPU0:ios#
```

```
show running-config | include cdp
```

```
Mon Dec 2 17:00:27.921 UTC
```

```
Building configuration...
```

```
cdp
 cdp
```

```
.
.
.
```

Cisco NX-OS

Cisco Nexus Cisco Discovery Protocol Cisco

```
root@nexus:~# show running-config cdp all | include "cdp enable"  
cdp enable  
cdp enable
```

<#root>

nxos#

```
show running-config cdp all | include "cdp enable"
```

```
cdp enable  
cdp enable
```

Cisco UCS Cisco Discovery Protocol Cisco

```
root@ucs:~# show configuration | egrep "^ scope|enable cdp"  
cdp enable  
cdp enable
```

```
root@ucs:~# show configuration | egrep "^ scope|enable cdp"
```

```
cdp enable  
cdp enable
```

<#root>

ucs-fi#

```
show configuration | egrep "^ scope|enable cdp"
```

```
.
.
scope org
  enable cdp
.
.
scope eth-storage
  enable cdp
.
.
.
```

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ã"ã@ã,čãf%ããã,ãã,||ãfãã®è.,†à¼±æ€šã®ã,ã,è½ă"ã„ã,ã,ãfšãf³ã«è~¼%ã•ã
ã,ã,¹ã,³ã¬ãã"ã®è,,†à¼±æ€šãŒä»¥ã,ã®ã,ã,¹ã,³è½ă"ã«ã¬ã½±éÿã,ã,Žã^ã

- Firepower 1000 ã,ãfªãf¼ã,º
- Firepower 2100 ã,ãfªãf¼ã,º
- Network Convergence Systemi¼^NCSi¼%520 ã,ãfªãf¼ã,º ãf«ãf¼ã,¿

ã,ã,¹ã,³ã¬ãã"ã®è,,†à¼±æ€šãŒ Cisco IOS ã,½ãf•ãf^ã,|ã,šã,čã€ã¼ãÿã
Cisco IOS XE
ã,½ãf•ãf^ã,|ã,šã,čã«ã¬ã½±éÿã,ã,Žã^ãªã,,ã‐ã ‐ã,,ççºèªã—ã¼ã—ãÿã€,

ã>žé¿ç-

ã"ã®è,,†à¼±æ€šã«ã¬¾ã‡|ã™ã,ã>žé¿ç-ã¬ã,ã,šã¼ã>ã,ã€,

ãÿãã—ã€Cisco Discovery Protocol
ã®æ©ÿè½ă,ʼã½¿ç"ã—ãªã,,ãšã®çæš~ã¬ãã"ã®ãf—ãfãf^ã,³ãf«ã,ʼã,ºãfãf¼ãfããfã

**Cisco FXOS ã,½ãf•ãf^ã,|ã,šã,čãš Cisco Discovery Protocol
ã,¿„,jãš¹ã«ã™ã,«**

Cisco Discovery Protocol ã¬ã«æœ%ãš¹ãŒ-ã•ã,Œã€Cisco FXOS
ã,½ãf•ãf^ã,|ã,šã,čãšãç„,jãš¹ã«ãšãã¼ã>ã,ã€,Cisco FXOS
ã,½ãf•ãf^ã,|ã,šã,čãfªãf¼ã,¹2.1 ä»¥™ãšã¬ã€Cisco Discovery Protocol
ã¬ç®¿ç¿t¼^mgmt0i¼%ããf¼ãf^ãšã®ã¿æœ%ãš¹ãŒ-ã•ã,Œã|ã„,ã¼ã™ã€,

**Cisco IOS XR ã,½ãf•ãf^ã,|ã,šã,čãš Cisco Discovery Protocol
ã,ã,ºããfãf¼ããã«ã«ç„,jãš¹ã«ã™ã,«**

Cisco IOS XR `~/.ssh/ssh-keygen -t rsa -b 4096 -C "Cisco Discovery Protocol" -m -o -f ~/.ssh/id_rsa_cdp`

```
~/.ssh/id_rsa_cdp  
no cdp  
~/.ssh/id_rsa_cdp
```

<#root>

```
RP/0/RP0/CPU0:ios#conf t  
Mon Dec 2 17:58:08.556 UTC  
RP/0/RP0/CPU0:ios(config)#  
  
no cdp
```

```
RP/0/RP0/CPU0:ios(config)#exit  
Uncommitted changes found, commit them before exiting(yes/no/cancel)? [cancel]:  
yes
```

Cisco IOS XR `~/.ssh/ssh-keygen -t rsa -b 4096 -C "Cisco Discovery Protocol" -m -o -f ~/.ssh/id_rsa_cdp`

Cisco IOS XR

```
~/.ssh/id_rsa_cdp  
Cisco Discovery Protocol  
~/.ssh/id_rsa_cdp  
no cdp  
~/.ssh/id_rsa_cdp
```

<#root>

```
RP/0/RP0/CPU0:ios#conf t  
Mon Dec 2 18:00:08.622 UTC  
RP/0/RP0/CPU0:ios(config)#interface GigabitEthernet0/0/0/0  
RP/0/RP0/CPU0:ios(config-if)#  
  
no cdp
```

```
RP/0/RP0/CPU0:ios(config-if)#end  
Uncommitted changes found, commit them before exiting(yes/no/cancel)? [cancel]:  
yes
```

Cisco NX-OS `~/.ssh/ssh-keygen -t rsa -b 4096 -C "Cisco Nexus" -m -o -f ~/.ssh/id_rsa_cdp`

Cisco NX-OS Cisco Discovery Protocol

no cdp enable

```
Cisco NX-OS Cisco Discovery Protocol
Cisco Discovery Protocol
```

```
no cdp enable
no cdp enable
```

```
<#root>
```

```
nxos# conf t
Enter configuration commands, one per line. End with CNTL/Z.
nxos(config)#
```

```
no cdp enable
```

```
nxos(config)# end
nxos# copy running-config startup-config
[#####] 100%
Copy complete.
```

Cisco NX-OS Cisco Discovery Protocol

```
Cisco NX-OS Cisco Discovery Protocol
```

```
Cisco Discovery Protocol
```

```
no cdp enable
no cdp enable
```

```
<#root>
```

```
nxos# conf t
Enter configuration commands, one per line. End with CNTL/Z.
nxos(config)# interface Ethernet1/1
nxos(config-if)#
```

```
no cdp enable
```

```
nxos(config-if)# end
nxos# copy running-config startup-config
[#####] 100%
Copy complete.
```


Cisco IOS XR 5.2, 6.4, 6.5, 6.6, 7.0	Platform	SMU
5.2.5	NCS6K	ncs6k-5.2.5.CSCvr78185
6.4.2	ASR9K-PX	asr9k-px-6.4.2.CSCvr78185
	CRS-PX	hfr-px-6.4.2.CSCvr78185
6.5.3	ASR9K-PX	asr9k-px-6.5.3.CSCvr78185
	ASR9K-X64	asr9k-x64-6.5.3.CSCvr78185
	NCS540	ncs540-6.5.3.CSCvr78185
	NCS560	ncs560-6.6.25.CSCvr78185
	NCS5K	ncs5k-6.5.3.CSCvr78185
	NCS5500	ncs5500-6.5.3.CSCvr78185
6.6.12	XR9K	xrv9k-6.5.3.CSCvr78185
	IOS XR	iosxrwd-6.6.12.CSCvr78185
6.6.25	NCS560	ncs560-6.6.25.CSCvr78185
7.0.1	NCS540L	ncs540l-7.0.1.CSCvr78185

Cisco IOS XR 5.2, 6.4, 6.5, 6.6, 7.0 SMU

[Cisco IOS XR Software Maintenance Updates \(SMUs\)](#)

MDS 9000 SMU: [CSCvr15073](#)

Cisco NX-OS	SMU
5.2	6.2(29)
6.2	6.2(29)
7.3	8.4(1a)
8.1	8.4(1a)
8.2	8.4(1a)
8.3	8.4(1a)
8.4	8.4(1a)

VMware vSphere Nexus 1000 Virtual Edge: [CSCvr15078](#)

Cisco NX-OS ã,½ãf•ãf^ã,lã,šã,čãf^ãf^ãf^1/4ã,¹	ã"ã®è,,tã¼±æ€šã«ã³/4ã™ã,æœ€ã^ã®ä¿æfãf^ãf^ãf
5.2	5.2(1)SV5(1.3)

Microsoft Hyper-Vã'ã'Nexus 1000Vã,¹ã,ããfãfãi¼šCSCvr15078

Cisco NX-OS ã,½ãf•ãf^ã,lã,šã,čãf^ãf^ãf^1/4ã,¹	ã"ã®è,,tã¼±æ€šã«ã³/4ã™ã,æœ€ã^ã®ä¿æfãf^ãf^ãf
5.2 ã,^ã,Šã%o	ä¿æfãf—ãfã,°ãf©ãfããã,ã,Šã³/4ãã>ã,"¹
5.2	ä¿æfãf—ãfã,°ãf©ãfããã,ã,Šã³/4ãã>ã,"¹

1. Microsoft Hyper-Vã'ã'Cisco Nexus

1000Vã,¹ã,ããfãfãã®ã,½ãf•ãf^ã,lã,šã,čãfãf^ãf^ãf^1/4ã,¹ãÇçµ,ã°tã—ã³/4ã—ãÿã€,

VMware vSphereã'ã'Nexus 1000Vã,¹ã,ããfãfãi¼šCSCvr15078

Cisco NX-OS ã,½ãf•ãf^ã,lã,šã,čãf^ãf^ãf^1/4ã,¹	ã"ã®è,,tã¼±æ€šã«ã³/4ã™ã,æœ€ã^ã®ä¿æfãf^ãf^ãf
5.2 ã,^ã,Šã%o	5.2 (1) SV3 (4.1 b)
5.2	5.2 (1) SV3 (4.1 b)

ã,¹ã,¿ãf³ãf%ã,čãfãf³NX-OSãfãf^1/4ãf%ã®Nexus

3000ã,ãf^ãf^1/4ã,°ã,¹ã,ããfãfãããŠã,^ã³Nexus

9000ã,ãf^ãf^1/4ã,°ã,¹ã,ããfãfããi¼šCSCvr14976

Cisco NX-OS ã,½ãf•ãf^ã,lã,šã,čãf^ãf^ãf^1/4ã,¹	ã"ã®è,,tã¼±æ€šã«ã³/4ã™ã,æœ€ã^ã®ä¿æfãf^ãf^ãf
7.0(3)I ã,^ã,Šã%o	7.0(3)I7(8)i¼^2020 å¹' 2 æœ~i¼%ã³/4ãÿãé©ã^fãª SMU¹
7.0(3)I	7.0(3)I7(8)i¼^2020 å¹' 2 æœ~i¼%ã³/4ãÿãé©ã^fãª SMU¹
7.0(3)F2	9.3(2)
9.2	9.3(2)
9.3	9.3(2)

1. Cisco NX-

OSã,½ãf•ãf^ã,lã,šã,čãf^ãf^ãf^1/4ã,¹7.0(3)I7(5)ãã7.0(3)I7(6)ããããŠã,^ã³7.0(3)I7(7)ããšã½¿ç"ãéf½

[Cisco NX-OS ã,½ãf•ãf^ã,lã,šã,čã® Cisco Discovery Protocol](#)

[ããããŠãã,ãf^ãf^ãf^1/4ãf^ã,³ãf^1/4ãf%ã®ÿè;Çã®è,,tã¼±æ€šãi¼^Cisco NX-OS Software](#)

Cisco Discovery Protocol Remote Code Execution

Vulnerability CVE-2017-15715 Cisco Nexus 3600 - SMU exploit details including OS Release and command snippets.

Cisco.com Software Center SMU

Exploit URL: https://www.cisco.com/c/en/us/.../SMU.../

- 1. [Cisco.com] Browse All...
2. [IOS and NX-OS Software] > [NX-OS] > [NX-OS Software] > [Switches] > [Data Center Switches]
3. [NX-OS Software] > [SMU] > [Software Maintenance Upgrades (SMU)]
4. [NX-OS Software] > [SMU] > [Software Maintenance Upgrades (SMU)]

CSCvr09175-n9k_ALL-1.0.0-<NX-

OS_Release>.lib32_n9000.rpm Cisco NX-OS 7.0(3)I7(6) SMU Bootflash: file details

SMU file details and bootflash path

- 1. install add bootflash:<SMU_filename> activate
2. install commit

Cisco NX-OS 7.0(3)I7(6) SMU file details

<#root>

nx-os#

install add bootflash:CSCvr09175-n9k_ALL-1.0.0-7.0.3.I7.6.lib32_n9000.rpm activate

nx-os#

install commit

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Nexus 5500ã Šã, ^ã³5600ãf—ãf©ãffãf^ãf•ã, ©ãf¼ãfã,¹ã, ðãffãfã “ Nexus 6000ã, ãfããf¼ã, °ã,¹ã, ðãffãfã :CSCvr15079

Cisco NX-OS ã,½ãf•ãf^ã,lä,šã, çãfããfãf¼ã,¹	ã “ã®è,, tã¼±æ€šã «ã³¼ã™ã, <æœ€ã^ã®ã çæ£ãfããfããf
7.1 ã, ^ã, Šã%o	7.3(6)N1(1)
7.1	7.3(6)N1(1)
7.3	7.3(6)N1(1)

Nexus 7000ã, ãfããf¼ã, °ã,¹ã, ðãffãfã :CSCvr15073

Cisco NX-OS ã,½ãf•ãf^ã,lä,šã, çãfããfãf¼ã,¹	ã “ã®è,, tã¼±æ€šã «ã³¼ã™ã, <æœ€ã^ã®ã çæ£ãfããfããf
6.2 ã, ^ã, Šã%o	6.2 (24)
6.2	6.2 (24)
7.2	7.3(5)D1(1)
7.3	7.3(5)D1(1)
8.0	8.2(5)
8.1	8.2(5)
8.2	8.2(5)
8.3	8.4(2) i¼^2020 å¹ 5 æœ i¼%ã³¼ã ÿã ¯é©ã^†ãª SMU¹
8.4	8.4(2) i¼^2020 å¹ 5 æœ i¼%ã³¼ã ÿã ¯é©ã^†ãª SMU¹

1. Cisco NX-OSã,½ãf•ãf^ã,lä,šã, çãfããfãf¼ã,¹8.4(1)ã Šã ¯ã€ã n7000-s2-dk9.8.4.1.CSCvs27997.binã€ã n7700-s2-dk9.8.4.1.CSCvs27997.binã€ã Šã, ^ã³n7700-s3-dk9.8.4.1.CSCvs27997.binã®SMUã, ä½ç”ã Šããã³¼ã™ã€, Cisco NX-OSã,½ãf•ãf^ã,lä,šã, çãfããfãf¼ã,¹ 8.3 ã,¹ã®ÿè; Æã—ã |ã,,ã,ã Šã®çæš~ã ¯ã€ã Cisco NX-OSã,½ãf•ãf^ã,lä,šã, çãfããfãf¼ã,¹ 8.4(1)ã «ã, çãffãf—ã, ãf—ãf¼ãf%ã—ã |ãã, %oé©ã^†ãª SMUã, é©ç”ãã™ã,ã “ã”ã,¹ã Šã<šã,ã—ã³¼ã™ã€,

Cisco Nexus 7000 [Cisco NX-OS](#)

[SMU](#)

[Nexus 7000 Series NX-OS System Management Configuration Guide](#)

[Performing Software](#)

[Maintenance Upgrades](#)

[Nexus 9000 Series NX-OS System Management Configuration Guide](#)

Cisco NX-OS	
13.1	13.2(9b)
13.1	13.2(9b)
13.2	13.2(9b)
14.0	14.2(1j)
14.1	14.2(1j)
14.2	14.2(1j)

UCS

[Cisco UCS 6200 Series](#)

Cisco UCS	
3.2	3.2(3n)
3.2	3.2(3n)
4.0	4.0 (4g)

[Cisco MDS](#)

[Cisco MDS 9000 Series](#)

[VMware](#)

[Cisco Nexus 1000V](#)

[Cisco Nexus 3000 Series Switches](#)

[Cisco Nexus 5500 Series](#)

[Cisco Nexus 5500 Series](#)

[Cisco Nexus 5500 Series](#)

[Cisco Nexus 5600 af—af©affaf^af•a,©af¼af ä, 1ä,mafäaf](#)

[Cisco Nexus 6000 Series Switches](#)

[Cisco Nexus 7000 Series Switches](#)

[Cisco Nexus 9000 Series Switches](#)

[ACI afca¼af%oa](#) © Cisco Nexus 9000 ä,äfaaf¼ä, ° ä, 1ä,mafäaf

Cisco UCS

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Cisco Product Security Incident Response

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Cisco PSIRT ä«ä-,,ä>ä,%oa,CEä|ä,,ä¾ä>ä,"ä€,

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URL

<https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20200205-fxnxs-iosxr-cdp-dos>

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1.3	ä½ç"ä-èf½äªæœéâ^ä©äž©æfæ,^äžafafaf¼ä,1ä©èi"ä,æ'æ-°ä€,
1.2	âœ"ä—äªä,, FXOS 2.5 ä,â%šé™ªä€,è,,tä¼±æ€šä©ä,ä,<è½â"äšä,æf...â ±ä,æ'æ-°ä€,
1.1	Cisco FXOS äšä,^ä³ Cisco UCS af•ä,;äf-äfaäffä, ä,maf³ä,¼af¼ä,³äfä,äf^ä©äšä,^ä³ Cisco UCS af•ä,;äf-äfaäffä, ä,maf³ä,¼af¼ä,³äfä,äf~ä©çš»è;CEä,ªä Virtual Edge for VMware vSphere ä©è,,tä¼±æ€šä©ä,ä,<äfaafaf¼ä,1ä"æœéâ^ä©äž©æfæ,^äžafafaf¼ä,1ä
1.0	âžä...-é-äfaafaf¼ä,1

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æœ-ã,çãf%ãfã,ã,ã,ã,ãfã@æf...å±ãŠã,^ã³ãfãfã,ã@ã½ç””ã«é-çã™ã,«è²-ä»ã@ä,€
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翻訳について

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