

Cisco IOS, 1/2 af af a, la, sa, ca @ Network Time Protocol af a, af af a @ e, ta 1/4 ae eS



af, ca f%af a, ma, af af ID : cisco-sa-

[CVE-2009-](#)

20090923-ntp

[2869](#)

af a...-e-ca-¥ : 2009-09-23 16:00

af af a, af sa f 1.1 : Final

CVSS a, 1a, 3a, c : [7.8](#)

af ze zc- : No Workarounds available

Cisco af a, ID : [CSCsu24505](#) [CSCsv75948](#)

ae-¥ae-e a za «a, a, ca f...a af a-af e ca za «a, a, ca zYa-fa @ e za...-a 1/4 a

ae, ei

Network Time Protocol(NTP)af af a, af sa f(v4)a, a, maf af af a TM a, Cisco

IOS a, 1/2 af af a, la, sa, ca «a-af e c%a 1a sa @ NTP af a, af af a, af a | c ta a-af af a, ma, 1a

a, a, 1a, 3a-af a @ e, ta 1/4 ae eS a «a-3/4 a | a TM a, a, 1/2 af af a, la, sa, ca, ca ff af-af af af a, af af af a

af a @ e, ta 1/4 ae eS a, e 1/2 ae, a TM a, a ze zc-af ce a, a, sa 3/4 a TM a e,

af a @ a, ca f%af a, ma, af af a-af e <https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20090923-ntp> a sa...-e-ca-a, ce a | a, a 3/4 a TM a e,

af 1/4 s 2009 a 1 9 ae ^23 ae-¥a @ Cisco

IOS a, a, af ¥ af a f ta, fa, ca f%af a, ma, af af af af a f%af a...-e-ca «a-af e 11 a» af a @ a, a, af ¥ af a a» af a @ a, ca f%af a, ma, af af a-af e Cisco IOS

a, 1/2 af af a, la, sa, ca @ e, ta 1/4 ae eS a «a-3/4 a | a TM a, a, a @ a sa e 1 a» af a-af e Cisco

Unified Communications Manager

af a @ e, ta 1/4 ae eS a «a-3/4 a | a TM a, a, a @ a sa e TM a e, a, a, ca f%af a, ma, af af a «a-af e a a a

a e ca...a @ a...-e-ca f af a, a-af e ae-ja @ af af a, a @ a e ce Cisco Event Response:

Semiannual Cisco IOS Software Advisory Bundled Publication a e a «a, a, sa 3/4 a TM a e,

http://www.cisco.com/web/about/security/intelligence/Cisco_ERP_sep09.html

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Cisco

IOSã,½ãf•ãf^ã,|ã,šã,çãf†ãf❖ã,¤ã,¹ã❖-ã€❖NTPv4ã,¹ã,µãf❖ãf¼ãf^ã❖-ã€❖NTPã❖®ã<•ã½œã❖€È

IOSã,½ãf•ãf^ã,|ã,šã,çã❖šã❖-ã€❖NTPã❖-ãf†ãf•ã,©ãf«ãf^ã❖šã❖-æœ%ãš¹ã❖«ã❖ªã❖£ã❖|ã❖

ãf†ãf❖ã,¤ã,¹ã❖€NTPv4ã,¹ã,µãf❖ãf¼ãf^ã❖-ã❖|ã❖,,ã,ã❖ã❖©ã❖†ã❖ã,¹çç°èª❖ã❖™ã,ã❖«ã❖ªã❖

peer 127.0.0.1 version

?ã,¹ã...¥ãš>ã❖-ã❖¾ã❖™ã€,ã†°ãš>ã❖«ã,ªãf-ã,ãfšãf³ã❖¨ã❖-ã❖|çªã❖4ã❖€ã❖«ã❖¾ã,€ã❖

IOSã,½ãf•ãf^ã,|ã,šã,çãfªãfªãf¼ã,¹ã,¹ã®ÿè;€ã❖-ã❖|ã❖,,ã,ã,ã,¹ã,³ãf†ãf❖ã,¤ã,¹ã,¹çªã❖-ã❖|ã❖

<#root>

Router#

configure terminal

Router(config)#

ntp peer 127.0.0.1 version ?

<2-4> NTP version number

æ¬;ã❖®ã¾ã❖-ã€❖NTPv4ã,¹ã,µãf❖ãf¼ãf^ã❖-ã❖|ã❖,,ã❖ªã❖,,Cisco

IOSã,½ãf•ãf^ã,|ã,šã,çãfªãfªãf¼ã,¹ã,¹ã®ÿè;€ã❖-ã❖|ã❖,,ã,ã,ã,¹ã,³ãf†ãf❖ã,¤ã,¹ã,¹çªã❖-ã❖|ã❖

<#root>

Router(config)#

ntp peer 127.0.0.1 version ?

<1-3> NTP version number

ãf†ãf❖ã,¤ã,¹ã❖«NTPã❖€È¨ãšã❖ªã,€ã❖|ã❖,,ã,ã❖ã❖©ã❖†ã❖ã,¹çç°èª❖ã❖™ã,ã❖«ã❖ªã❖-ã€❖

running-config | include

ntpã€,ã†°ãš>ã❖ã,ªœ¬;ã❖®ã❖,,ã❖šã,€ã❖ã❖ã❖®ã,³ãfžãf³ãf%ã❖€è¸"ã❖ªã,€ã❖ÿã'ã❖^ã€❖ã❖

- ntp master <any following commands>
- ntp peer <any following commands>
- ntp server <any following commands>
- ntp broadcast client
- ntp multicast client

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<#root>

```
router#  
show running-config | include ntp  
ntp peer 192.168.0.12
```

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<#root>

```
router#  
show running-config | include ntp  
router#
```

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ãfãfãf¼ã,1ã,ççºãã™ã,ã«ã¬ã€ãf‡ãfã,ã,1ã«ãfã,ºã,ããfã—ã| show
versionã,³ãfzãf³ãf%ã,'ä½;ã£ã|ã€ã,ã,1ãf‡ãf
ãfãfšãf¼ã,'è;çºã—ã¼ã™ã€,"Internetwork Operating System Software"ã€"Cisco
IOS Software"ã,ã,ã,,ã¬ã€ã,Œã,%ã«éjžã¼¼ã™ã,ã,ã,1ãf‡ãf
ãfãfšãf¼ã«ã,^ã£ã|ãf‡ãfã,ã,1ãš Cisco IOS
ã,½ãfãfã,|ã,šã,çãŒç¼ãfã—ã|ã,,ã,ã"ã"ã,ççºããšã¼ã™ã€,
ããã®ã¼Œã«ã,ããf;ãf¼ã,ãããŒæ¬ã¼šã®é—"ã«è;çºã•ã,Œã€ç¶šã,,ã|
"Version"ã Cisco IOSã,½ãfãfã,|ã,ã,ç
ãfãfãf¼ã,1ããŒè;çºã•ã,Œã¼ã™ã€,ã»ã®ã,ã,1ã,³
ãf‡ãfã,ã,1ãšã¬ã€show version
ã,³ãfzãf³ãf%ãŒã~ãœ"ã—ãªã<ã£ãŸã,šã€ã^Ÿã®ãºãšãŒã€è;çºã•ã,Œã€Ÿã

ã»Ÿã,ã®ä¼ã¬ã€Cisco è½ã"ã«ã|ã€IOSãfãfãf¼ã,1 12.3(26)
ãŒç¼ãã•ã—ã€ããã®ã,ããf;ãf¼ã,ãããŒŒ C2500-IS-L
ãšã,ã,ã"ã"ã,ççºã—ã|ã,,ã¼ã™ã€:

<#root>

Router#

show version

Cisco Internetwork Operating System Software
IOS (tm) 2500 Software (C2500-IS-L), Version 12.3(26), RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright © 1986-2008 by cisco Systems, Inc.
Compiled Mon 17-Mar-08 14:39 by dchih

<output truncated>

Cisco IOS Software, 2500 Software (C2500-IS-L), Version 12.3(26), RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright © 1986-2008 by cisco Systems, Inc.
Compiled Mon 17-Mar-08 14:39 by dchih

<#root>

Router#

show version

Cisco IOS Software, 1841 Software (C1841-ADVENTERPRISEK9-M), Version 12.4(20)T, RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright © 1986-2008 by Cisco Systems, Inc.
Compiled Thu 10-Jul-08 20:25 by prod_rel_team

<output truncated>

Cisco IOS Software, 1841 Software (C1841-ADVENTERPRISEK9-M), Version 12.4(20)T, RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright © 1986-2008 by Cisco Systems, Inc.
Compiled Thu 10-Jul-08 20:25 by prod_rel_team

White Paper: Cisco IOS Reference Guide

Cisco IOS Software, 1841 Software (C1841-ADVENTERPRISEK9-M), Version 12.4(20)T, RELEASE SOFTWARE (fc3)

- NTPv4
- Simple NTP (SNTP)
- Cisco IOS XE
- Cisco IOS XR

Cisco IOS Software, 1841 Software (C1841-ADVENTERPRISEK9-M), Version 12.4(20)T, RELEASE SOFTWARE (fc3)

© 2008

White Paper: Cisco IOS Reference Guide

[ietf-ntp-ntp4-proto-11](#)

NTPv4, Cisco

IOS, NTP, Cisco

<#root>

Router#

show running-config | include ntp

```
ntp peer 192.168.0.254 version 2
ntp peer 192.168.0.1 version 2
Router#
```

IOS and NX-OS Software - Performing Basic System

Management, http://www.cisco.com/en/US/docs/ios/nmtgmt/configuration/guide/nm_basic_sys_manage.html#wp1001170

Cisco Bug ID

CSCsu24505, CSCsv75948, Vulnerabilities and Exposures (CVE) ID, CVE-2009-2869, Bug ID

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ntp peer 192.168.0.254 version 2

ntp peer 192.168.0.1 version 2

NTP, Cisco

Reverse Path

Forwarding, Cisco

!--- Configure trusted peers for allowed access

```
access-list 1 permit 171.70.173.55
```

```
!--- Apply ACE to the NTP configuration
```

```
ntp access-group peer 1
```

è!â‘Ši/4šNTP ACLâⓂè“â@ššâ«â¿œâ~â|â€Cisco Bug ID [CSCsw79186](https://cisco.com/bug/CSCsw79186)(ç™»é€²

âf!âf¼â,¶!â°,ç”)â«æ³”æ,,â—â|ââââââ•â,,â€,NTPv4â,µâf¼âfâNTPv3â,âf©â,â,çâ

NTPâ,çâ,â,»â,¹â,³âf³âf^âfâf¼âf«â,°âf«âf¼âf—âⓂè©³ç’°â«ââââ,,â|â—â€æ¬ââⓂâfâf³â,

Basic System

Managementâ€â”â,,â†â,¿â,ââf^âf«âⓂâf%â,âfâfjâf³âf^â,â,â,ç...šâ—â|ââââââ•â

http://www.cisco.com/en/US/docs/ios/netmgmt/configuration/guide/nm_basic_sys_manage.html#wp1034942

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è!â‘Ši/4šâ”âⓂè,,†â¼±æ€šâⓂæ©ÿèf½â—âf^âf©âf³â,¹âfâf¼âf^â”â—â|UDPâ,â½¿ç”â

RPF â,â½µç”â™â,ââ”â”â,,âšâçšâ,â—â¾â™â€,

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âf†âfâ,â,â,¹â,â,¿âf¼â,²âffâf^â”â—ââÿè”±â—â™â¹âââšâ—âââ,,âf^âf©âf•â,£âffâ

```
!---
!--- Feature: Network Time Protocol (NTP)
!---
```

```
access-list 150 permit udp TRUSTED_SOURCE_ADDRESSES WILDCARD
INFRASTRUCTURE_ADDRESSES WILDCARD eq 123
```

```
!--- Note: If the router is acting as a NTP broadcast client
!--- via the interface command "ntp broadcast client"
!--- then broadcast and directed broadcasts must be
!--- filtered as well. The following example covers
!--- an infrastructure address space of 192.168.0.X
```

```
access-list 150 permit udp TRUSTED_SOURCE_ADDRESSES WILDCARD
host 192.168.0.255 eq ntp
access-list 150 permit udp TRUSTED_SOURCE_ADDRESSES WILDCARD
host 255.255.255.255 eq ntp
```

```
!--- Note: If the router is acting as a NTP multicast client
!--- via the interface command "ntp multicast client"
!--- then multicast IP packets to the mutlicast group must
```

!--- be filtered as well. The following example covers
!--- a NTP multicast group of 239.0.0.1 (Default is
!--- 224.0.1.1)

```
access-list 150 permit udp TRUSTED_SOURCE_ADDRESSES WILDCARD  
host 239.0.0.1 eq ntp
```

!--- Deny NTP traffic from all other sources destined
!--- to infrastructure addresses.

```
access-list 150 deny udp any  
INFRASTRUCTURE_ADDRESSES WILDCARD eq 123
```

!--- Permit/deny all other Layer 3 and Layer 4 traffic in
!--- accordance with existing security policies and
!--- configurations. Permit all other traffic to transit the
!--- device.

```
access-list 150 permit ip any any
```

!--- Apply access-list to all interfaces (only one example
!--- shown)

```
interface fastEthernet 2/0  
ip access-group 150 in
```

Protecting Your Core: Infrastructure Protection Access Control

http://www.cisco.com/en/US/tech/tk648/tk361/technologies_white_paper09186a00801a1a55.shtml

•

UDP, RPF

IOS

12.0S, 12.2SX, 12.2S, 12.3T, 12.4, 12.4T, CoPP

CoPP

!--- Feature: Network Time Protocol (NTP)

```
access-list 150 deny udp TRUSTED_SOURCE_ADDRESSES WILDCARD
any eq 123
```

```
!--- Deny NTP traffic from all other sources destined
!--- to the device control plane.
```

```
access-list 150 permit udp any any eq 123
```

```
!--- Permit (Police or Drop)/Deny (Allow) all other Layer3 and
!--- Layer4 traffic in accordance with existing security policies
!--- and configurations for traffic that is authorized to be sent
!--- to infrastructure devices
!--- Create a Class-Map for traffic to be policed by
!--- the CoPP feature
```

```
class-map match-all drop-udp-class
match access-group 150
```

```
!--- Create a Policy-Map that will be applied to the
!--- Control-Plane of the device.
```

```
policy-map drop-udp-traffic
class drop-udp-class
drop
```

```
!--- Apply the Policy-Map to the
!--- Control-Plane of the device
```

```
control-plane
service-policy input drop-udp-traffic
```

```
CoPP CoPP permit"
(ACE)
policy-
deny"
policy-
Cisco
IOS
```

```
policy-map drop-udp-traffic
class drop-udp-class
police 32000 1500 1500 conform-action drop exceed-action drop
```


Releases	
<p>è©2â½“ã™ã, < 12.1 ãf™ãf¼ã,1ã®ãfããfãf¼ã,1ã-ã,ã,Šã¾ãã,“ã€,</p>	
Affected 12.2-Based Releases	First Fixed Release
<p>â½±éÿ;ã, 'ã—ã'ã, < 12.2 ãf™ãf¼ã,1ã®ãfããfãf¼ã,1ã-ã,ã,Šã¾ãã>ã,“ã€,</p>	
Affected 12.3-Based Releases	First Fixed Release
<p>è©2â½“ã™ã, < 12.3 ãf™ãf¼ã,1ã®ãfããfãf¼ã,1ã-ã,ã,Šã¾ãã>ã,“ã€,</p>	
Affected 12.4-Based Releases	First Fixed Release
12.4	è,†â¼±æ€§ãã—
12.4GC	è,†â¼±æ€§ãã—
12.4JA	è,†â¼±æ€§ãã—
12.4JDA	è,†â¼±æ€§ãã—
12.4JDC	è,†â¼±æ€§ãã—
12.4JDD	è,†â¼±æ€§ãã—

12.4XD	è,,†å¼±æ€§ãªãª—
12.4XE	è,,†å¼±æ€§ãªãª—
12.4XF	è,,†å¼±æ€§ãªãª—
12.4XG	è,,†å¼±æ€§ãªãª—
12.4XJ	è,,†å¼±æ€§ãªãª—
12.4XK	è,,†å¼±æ€§ãªãª—
12.4XL	è,,†å¼±æ€§ãªãª—
12.4XM	è,,†å¼±æ€§ãªãª—
12.4XN	è,,†å¼±æ€§ãªãª—
12.4XP	è,,†å¼±æ€§ãªãª—
12.4XQ	è,,†å¼±æ€§ãªãª—
12.4XR	è,,†å¼±æ€§ãªãª—
12.4XT	è,,†å¼±æ€§ãªãª—
12.4XV	è,,†å¼±æ€§ãªãª—
12.4XW	è,,†å¼±æ€§ãªãª—

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翻訳について

シスコは世界中のユーザにそれぞれの言語でサポート コンテンツを提供するために、機械と人による翻訳を組み合わせて、本ドキュメントを翻訳しています。ただし、最高度の機械翻訳であっても、専門家による翻訳のような正確性は確保されません。シスコは、これら翻訳の正確性について法的責任を負いません。原典である英語版（リンクからアクセス可能）もあわせて参照することを推奨します。