

Cisco

# IOS 15.4(2)M



20080516-rootkits  
2008-05-16 16:00  
2014-04-09 12:43  
3.4 : Final  
No Workarounds available  
Cisco ID :

2008-05-16 16:00

2014-04-09 12:43

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No Workarounds available  
Cisco ID :

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2014-04-09 12:43  
No Workarounds available  
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IOS, 1/2 af af a, | a, sa, ca @ e ^ c » ae, a z sa, a ^ 3 e ^ c » a m - a @ af af af 1/4 af % a e,

è c ^ 3 a « a m a, a | a a Ž Cisco Guide to Harden Cisco IOS

Devices a @ a @ a @ Centralize Log Collection and

Monitoring a @ (http://www.cisco.com/en/US/tech/tk648/tk361/technologies\_tech\_note09186a0080120f48.shtml#

Best

Practices a @ (http://www.cisco.com/en/US/tech/tk648/tk361/technologies\_tech\_note09186a0080120f48.shtml#lo

### Cisco IOS, af; af 1/4 a, af a, ja, maf « a @ c c ° e a

af affaf af af 1/4 a, c @ i c t e ... a a af affaf af af 1/4 a, af taf a, ma, 1 a s a 1/2 c " a a, ca | a

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ae - j a @ e ... a s a a Cisco

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### MD5 af a, ja, maf « ae ae e 1/4 ae Y e f 1/2 a @ a 1/2 c " "

Cisco

IOS, 1/2 af af a, | a, sa, ca af af af 1/4 a, 12.2(4)T a s a, a ^ 3 12.0(22)S a s e z 1/2 a s a a, ca Y MD5 af a, ja, maf « ae

IOS, 1/2 af af a, | a, sa, ca, maf; af 1/4 a, af a, ja, maf « a @ MD5 af affa, af fa, e ^ c @ — a s a a a 3/4 a m ae

IOS, maf; af 1/4 a, a @ MD5 af affa, af fa ae m a ce ae ± a s a a, ca, < a a e a, a, 1 a, 3 a ce a a 3/4 a

ae 3 1/4 s MD5 af a, ja, maf « ae ae e 1/4 ae Y e f 1/2 a a Cisco

IOS af taf a, ma, 1 a « a z a ~ a a, ca | a, a, < Cisco

IOS, 1/2 af af a, | a, sa, ca, maf; af 1/4 a, a @ ae ' a ^ ae s a, ' af a, saffa, a m a, a ' a ^ a « a @ a z 1/2 c " "

MD5 af a, ja, maf « ae ae e 1/4 ae Y e f 1/2 a, ' a 1/2 c " a — a Y MD5 af affa, af fa @ e ^ c @ — a " ae ae e 1/4 a a

<#root>

verify /md5

filesystem:filename [md5-hash]

af affaf af af 1/4 a, c @ i c t e ... a a verify

/md5 c % a ^ c @ EXEC a, 3 af za f 3 af % a a, ' a 1/2 c " a — a | a af taf a, ma, 1 a @ Cisco

IOS af a, ja, maf « a, a, 1 af taf a « a z a ~ a a, ca | a, a, < a, maf; af 1/4 a, af a, ja, maf « a @ ae ' a ^ ae s a, ' c c

IOS af taf a, ma, 1 a s verify /md5 a, 3 af za f 3 af % a a, ' a 1/2 c " a m a, < ae - 1 ae 3 a, ' c c ° a — a 3/4 a m ae,

<#root>

router#

verify /md5 disk0:c7301-jk9s-mz.124-10.bin

.....<output truncated>.....Done!

verify /md5 (disk0:c7301-jk9s-mz.124-10.bin) = ad9f9c902fa34b90de8365c3a5039a5b

router#

af afaf^af af%4a, ç®;ç tè€...ã ã€ verifyã, 3ãfžãf3ãf%ã «MD5ãfãffã,ãf¥ã,'æE#ã®šã™ã,ã

<#root>

router#

verify /md5 disk0:c7301-jk9s-mz.124-10.bin ad9f9c902fa34b90de8365c3a5039a5b

.....<output truncated>.....Done!

Verified (disk0:c7301-jk9s-mz.124-10.bin) = ad9f9c902fa34b90de8365c3a5039a5b

router#

af afaf^af af%4a, ç®;ç tè€...ã <ã,%ã 2ã¾ã •ã,ãã ÿMD5ãfãffã,ãf¥ããã€ MD5ãfã,ã

<#root>

router#

verify /md5 disk0:c7301-jk9s-mz.124-10.bin 0c5be63c4e339707efb7881fde7d5324

.....<output truncated>.....Done!

%Error verifying

disk0:c7301-jk9s-mz.124-10.bin

Computed signature = ad9f9c902fa34b90de8365c3a5039a5b

Submitted signature = 0c5be63c4e339707efb7881fde7d5324

router#

ã%ã è¨¨ã ®ã¾ã šã ã€ verify /md5ã, 3ãfžãf3ãf%ã «ã,ã,šã€ Cisco

IOSã,ããf;ãf%4ã,ãf•ã,ã;ã,ããf«ã¨¨ã½"ã ®MD5ãfãffã,ãf¥ããã€ è¨¨ç®—ã •ã,ãã |è;¨çªã •ã,ãã

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief (http://www.cisco.com/en/US/docs/ios/fundamentals/ps6350\_TSD\_Products\_Configuration\_Guide\_Chapter.html)

IOS>show ip interface brief

Cisco

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

- file verify auto
- copy [/erase] [/verify | /noverify] source-url destination-url
- reload [warm] [/verify | /noverify] [text | in time [text] | at time [text] | cancel]

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief (http://www.cisco.com/en/US/)

file verify auto

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

IOS>show ip interface brief

</root>

router#

configure terminal

router(config)#

```
file verify auto
router(config)#
exit
router#
```

**file verify**

```
auto reload /verify
IOS verify auto
IOS
```

```
File Validation Verification
IOS
```

<#root>

```
router#
verify disk0:c7301-jk9s-mz.124-10.bin
```

Verifying file integrity of disk0:c7301-jk9s-mz.124-10.bin

.....<output truncated>.....Done!

Embedded Hash MD5 :

0C5BE63C4E339707EFB7881FDE7D5324

Computed Hash MD5 :

0C5BE63C4E339707EFB7881FDE7D5324

CC0 Hash MD5 :

AD9F9C902FA34B90DE8365C3A5039A5B

Signature Verified

router#

ä,šë~ã®å†°åšãšã~ã€3ã¤ã®MD5ãffã,ãf¥ã€ã€verifyã,ãfžãf³ãf%ã«ã,^ã£ã



- **IOS** `configure flashdisk` `copy flash: c7301-jk9s-mz.124-10.bin scp://10.1.1.1:22/cisco user c7301-jk9s-mz.124-10.bin`
- **IOS** `verify flashdisk` `verify flashdisk md5 c7301-jk9s-mz.124-10.bin`
- **IOS** `verify flashdisk sha256 c7301-jk9s-mz.124-10.bin`

IOS Security Configuration

Guide ([http://www.cisco.com/en/US/docs/ios/security/configuration/guide/12\\_4/sec\\_12\\_4\\_book.html](http://www.cisco.com/en/US/docs/ios/security/configuration/guide/12_4/sec_12_4_book.html))

Verification ([http://www.cisco.com/en/US/docs/ios/sec\\_user\\_services/configuration/guide/sec\\_image\\_verifctn](http://www.cisco.com/en/US/docs/ios/sec_user_services/configuration/guide/sec_image_verifctn))

## Cisco

**IOS** `configure flashdisk` `copy flash: c7301-jk9s-mz.124-10.bin scp://10.1.1.1:22/cisco user c7301-jk9s-mz.124-10.bin`

IOS `verify flashdisk` `verify flashdisk md5 c7301-jk9s-mz.124-10.bin`

IOS `verify flashdisk sha256 c7301-jk9s-mz.124-10.bin`

IOS `verify flashdisk sha256 c7301-jk9s-mz.124-10.bin`

IOS `verify flashdisk sha256 c7301-jk9s-mz.124-10.bin`

IOS `verify flashdisk sha256 c7301-jk9s-mz.124-10.bin`

IOS `verify flashdisk sha256 c7301-jk9s-mz.124-10.bin`

```
<#root>
```

```
router#
```

```
copy flash:c7301-jk9s-mz.124-10.bin scp://10.1.1.1:22/cisco user c7301-jk9s-mz.124-10.bin
```

```
Address or name of remote host []? 10.1.1.1
```

```
Destination username [cisco]? user
```

```
Destination filename [c7301-jk9s-mz.124-10.bin]?
```

```
Writing c7301-jk9s-mz.124-10.bin
```

```
Password:
```

!

sink: C0644 28905508 c7301-jk9s-mz.124-10.bin

!!!!<output truncated>!!!!

28905508

bytes copied in 22.280 secs (1297375 bytes/sec)  
router#

2ç•ªç>®ã❖®æŽ`å¥`ã,ªãf—ã,·ãfšãf³ã❖`ã€❖ã❖•ã,%ã❖«ã,»ã,ãf¥ãfªãftã,£ãf-ãf™ãf«ã,´é«~ã,❖ã,«ã,,ã❖  
IOSã,½ãf•ãf^ã,|ã,šã,çã,à½¿ç"ã❖—ã❖|ã€❖Cisco  
IOSãf†ãf❖ã,ªã,¹ã,´ã¿jé ¼ã❖šã❖❖ã,«ã´æ%ã€ã❖ã,ã%ããt❖èµ·ãã❖—ã❖¾ã❖™ã€ç®¿ç❖tè€...ã❖`ã❖  
systemã,ªãfãf¹¼ãf❖ãf«ã,³ãf³ãf•ã,£ã,®ãf¥ãf-ãf¼ã,·ãfšãf³ã,³ãfžãf³ãf%ã,´ã½¿ç"ã❖—ã❖|ã❖"ã❖®ã,¿ã

<#root>

router#

configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

router(config)#

boot system ftp c7301-jk9s-mz.124-10.bin 10.1.1.1

router(config)#

end

router#

copy running-config startup-config

Destination filename [startup-config]?

Building configuration...

[OK]

router#

reload

ãf❖ãffãf^ãf^ãf¼ã,ãf†ãf❖ã,ªã,¹ã❖ææ£ã,ã❖ªCisco

IOSã,ªãf¿ãf¼ã,ã❖šãt❖èµ·ãã❖•ã,æã❖Ÿã,%ãã€❖ãf❖ãffãf^ãf^ãf¼ã,ç®¿ç❖tè€...ã❖`verifyã,³ãfžãf

IOSã,½ãf•ãf^ã,|ã,šã,çã,ªãf¿ãf¼ã,ã,´ãfªãfçãf¼ãf^ãf•ã,ã,ªãf«ã,µãf¼ãf❖ã❖«ã,³ãf"ãf¼ã❖—ã❖|ã€❖ã

ã,ªãf•ãf©ã,ªãf³ã,ªãf¿ãf¼ã,ãf•ã,ã,ªãf«ã

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```
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IOSã,ªãf;ãf¼ã,ãf•ã,;ã,ªãf«ã ☞ ☞MD5ãf☞ãffã,ãf¥ã,'çç°èª ☞ã☞šã☞☞ã☞¼ã☞™ã€ã,ã☞"ã☞☞ã,^ã☞ãfã☞  
Windowsãf—ãf©ãffãf^ãfã,©ãf¼ãfã ☞☞ã'ã☞^ã☞fsumã€☞MD5summerã€☞ã☞šã,^ã☞³WinMD5ã☞  
IOSã,ªãf;ãf¼ã,ãf•ã,;ã,ªãf«ã ☞☞ã,µã,ªã,°ã☞¯ã€☞Linuxã☞šã,^ã☞³BSDã,ªãfšãfãf¼ãfãfã,£ãf³ã,°ã,ã,¹ã  
Windowsãf—ãf©ãffãf^ãfã,©ãf¼ãfã ☞☞šã☞dirã,³ãfžãf³ãf%ãã,'ã½ç"ã☞—ã☞|ã☞-ã¼—ã☞šã☞☞ã☞  
æ¬;ã☞☞ã¼ã☞¯ã€☞Linuxãf™ãf¼ã,¹ã☞☞ã,ã,¹ãftãfã ☞☞MD5è`^ç☞—ã☞`ãf•ã,;ã,ªãf«ã,µã,ªã,°è;`çª☞
```

<#root>

\$  
\$

```
md5sum c7301-jk9s-mz.124-10.bin
ad9f9c902fa34b90de8365c3a5039a5b
c7301-jk9s-mz.124-10.bin
$
$
ls -l c7301-jk9s-mz.124-10.bin
-r--r--r-- 1 user user
28905508
May 16 15:17 c7301-jk9s-mz.124-10.bin
$
```

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<#root>

\$  
\$

```
md5 c7301-jk9s-mz.124-10.bin
MD5 (c7301-jk9s-mz.124-10.bin) =
ad9f9c902fa34b90de8365c3a5039a5b
$
$
ls -l c7301-jk9s-mz.124-10.bin
-r--r--r-- 1 user user
28905508
May 16 21:36 c7301-jk9s-mz.124-10.bin
```

\$

æ¬;ã@ä¼ã-ã€Windowsã,ã,¹aftãfãSã®fsumãf!ãf!ãf†ã,£ãfªãf†ã,£ã"dirã,³ãfžãf³ãf%ã®ã

<#root>

C:\>

**fsum -md5 c7301-jk9s-mz.124-10.bin**

SlavaSoft Optimizing Checksum Utility - fsum 2.52.00337  
Implemented using SlavaSoft QuickHash Library <www.slavasoft.com>  
Copyright (C) SlavaSoft Inc. 1999-2007. All rights reserved.

; SlavaSoft Optimizing Checksum Utility - fsum 2.52.00337 <www.slavasoft.com>  
;  
; Generated on 05/20/08 at 00:01:13  
;

**ad9f9c902fa34b90de8365c3a5039a5b**

\*c7301-jk9s-mz.124-10.bin

C:\>

C:\>

**dir c7301-jk9s-mz.124-10.bin**

Directory of C:\

05/20/2008 00:10 AM

28,905,508

c7301-jk9s-mz.124-10.bin  
1 File(s) 28,905,508 bytes

0 Dir(s) 1,207,291,904 bytes free

C:\>

æ³Y¹¼sfsumãf!ãf!ãf†ã,£ãfªãf†ã,£ã®ã½çç""ã-èª-æ~Žã®ãçã,ç®çš,,ãã-ã|ãŠã,Šã€ã

### Cisco IOS Upgrade Plannerã, 'ä½çç""ã-ãYã,ªãfjãf¼ã,ãfª,jã,ªãf«æf...ã ±

Cisco

IOSã,½ãfªãf^ã,ã,šã,çã,ªãfjãf¼ã,,ã®MD5ãfãffã,ãfªã""ãfª,jã,ªãf«ã,µã,ªã,ªã,ã,ãŽé»ã-ãYã,

IOS Upgrade

Plannerãf,,ãf¼ãf«ãã,ã,%ãæãã¼ããã,ã,ã,ã,ãf...ã ±ã, 'ä½çç""ã-ã|ã€ã,ªãfjãf¼ã,ã®ãçjé¼ã

IOS Upgrade

Plannerãf,,ãf¼ãf«ããã-æœ%ããŠããCisco.comã,çã,«ã,|ãf³ãf^ãããÇã¿...è|ããŠã€ãã...-é-ãã

IOS Upgrade Planner  
 Release  
 Size  
 MD5

Release	Size
12.4.10	28905508
MD5	ad9f9c902fa34b90de8365c3a5039a5b



ãf ¼ã,ãfã³	èª~æž
æ”¹è” 2.2	ãfªãf³ã, ^ã, Æã, ’äç @æ£
æ”¹è” 2.1	ãfªãf³ã, ^ã, Æã, ’äç @æ£
æ”¹è” 2.0	ãf™ã, ¹ãf^ãf—ãf©ã, ^ãfã, £ã, ¹ã @ãt...ã®¹ã, ’ãª«ã, €ã€Æè½ãš æf...ã ±ã€ã, »ã, ^ã, .ã
æ”¹è” 1.0	ã^ ç% ^ãfªãfªãf¼ã, ¹

ã^ç””è! ç´,,

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æœªã, çãf%ãfã, ðã, ¶ãfªã ®æf...ã ±ã Šã, ^ã³ãfªãf³ã, ^ã ®½çç””ã «é-çã™ã, <è²-ã»ã ®ã, €  
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æœªã, çãf%ãfã, ðã, ¶ãfªã ®è”~èç°ãt...ã®¹ã «é-çã —ã |æf...ã ±é...ã çjã ® URL  
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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。