

# Cisco IOS SIP Session Initiation Protocol Denial of Service (DoS) Vulnerability



**Severity:** High  
**Product:** Cisco SIP

**CVE-2009-2870**

**Published:** 2009-09-23 16:00

**Version:** SIP 1.1 : Final

**CVSS:** 7.8

**Workarounds:** No Workarounds available

**Cisco ID:** [CSCsx25880](#)

**Summary:** A Denial of Service (DoS) vulnerability exists in the SIP Session Initiation Protocol (SIP) implementation in Cisco IOS Unified Border Element (UBE) software versions 1.1 and earlier. An attacker can exploit this vulnerability to cause a Denial of Service (DoS) condition by sending a SIP INVITE message with a large number of headers. The vulnerability is caused by a buffer overflow in the SIP header processing code. The vulnerability is rated as High severity (CVSS 7.8). No workarounds are available.

## Details

Cisco IOS SIP Session Initiation

Protocol (SIP) in Cisco Unified Border

Element (UBE) software versions 1.1 and earlier. An attacker can exploit this vulnerability to cause a Denial of Service (DoS) condition by sending a SIP INVITE message with a large number of headers. The vulnerability is caused by a buffer overflow in the SIP header processing code. The vulnerability is rated as High severity (CVSS 7.8). No workarounds are available.

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For more information, see the [Cisco Security Advisory](https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20090923-sip) <https://sec.cloudapps.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20090923-sip>.

**References:** Cisco

IOS SIP Session Initiation Protocol (SIP) Denial of Service (DoS) Vulnerability

Cisco IOS

Unified Border Element (UBE) software versions 1.1 and earlier

Unified Communications Manager

Denial of Service (DoS) condition by sending a SIP INVITE message with a large number of headers.

**Additional Information:** Cisco Event Response:

Semiannual Cisco IOS Software Advisory Bundled Publication

[http://www.cisco.com/web/about/security/intelligence/Cisco\\_ERP\\_sep09.html](http://www.cisco.com/web/about/security/intelligence/Cisco_ERP_sep09.html)

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```
Router# show processes | include SIP
149 Mwe 40F48254 4 1 400023108/24000 0 CCSIP_UDP_SOCKET
150 Mwe 40F48034 4 1 400023388/24000 0 CCSIP_TCP_SOCKET
```

<#root>

Router#

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150 Mwe 40F48034 4 1 400023388/24000 0 CCSIP_TCP_SOCKET
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150 Mwe 40F48034 4 1 400023388/24000 0 CCSIP_TCP_SOCKET
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<#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 (c) 1986-2008 by cisco Systems, Inc.  
Compiled Mon 17-Mar-08 14:39 by dchih

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ADVENTERPRISEK9-M ãšã€Cisco IOS ã,½ãf•ãf^ã,|ã,šã,çãfªãfªãf¼ã,¹ 12.4(20)T  
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<#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 (c) 1986-2008 by Cisco Systems, Inc.  
Compiled Thu 10-Jul-08 20:25 by prod\_rel\_team

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Cisco

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Paper: Cisco IOS Reference Guideã€ãšçç°èªãšãã¾ã™ã€,<http://www.cisco.com/warp/public/620/1.html>

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| Affected<br>12.0-Based<br>Releases                     | First Fixed Releaseã;®æEã•ã,CEãÿæ |
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| Affected<br>12.1-Based<br>Releases                     | First Fixed Releaseã;®æEã•ã,CEãÿæ |
| è²ã½“ã™ã,<12.1ãf™ãf¼ã,¹ã®ãfªãfªãf¼ã,¹ã-ã,ã,Šã¾ã>ã,“ã€, |                                   |
| Affected<br>12.2-Based<br>Releases                     | First Fixed Releaseã;®æEã•ã,CEãÿæ |
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| Affected<br>12.3-Based<br>Releases                     | First Fixed Releaseã;®æEã•ã,CEãÿæ |
| 12.3   | è,†ã¼±æ€§ãªã—                     |
| 12.3B  | è,†ã¼±æ€§ãªã—                     |

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| 12.3BC  | è,,†å¼±æ€§ãªãª— |
| 12.3BW  | è,,†å¼±æ€§ãªãª— |
| 12.3EU  | è,,†å¼±æ€§ãªãª— |
| 12.3JA  | è,,†å¼±æ€§ãªãª— |
| 12.3JEA | è,,†å¼±æ€§ãªãª— |
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| 12.3TPC | è,,†å¼±æ€§ãªãª— |
| 12.3VA  | è,,†å¼±æ€§ãªãª— |
| 12.3XA  | è,,†å¼±æ€§ãªãª— |
| 12.3XB  | è,,†å¼±æ€§ãªãª— |

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| 12.3XC | è,,†å¼±æ€§ãªãª— |
| 12.3XD | è,,†å¼±æ€§ãªãª— |
| 12.3XE | è,,†å¼±æ€§ãªãª— |
| 12.3XF | è,,†å¼±æ€§ãªãª— |
| 12.3XG | è,,†å¼±æ€§ãªãª— |
| 12.3XI | è,,†å¼±æ€§ãªãª— |
| 12.3XJ | è,,†å¼±æ€§ãªãª— |
| 12.3XK | è,,†å¼±æ€§ãªãª— |
| 12.3XL | è,,†å¼±æ€§ãªãª— |
| 12.3XQ | è,,†å¼±æ€§ãªãª— |
| 12.3XR | è,,†å¼±æ€§ãªãª— |
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| 12.3XU | è,,†å¼±æ€§ãªãª— |
| 12.3XW | è,,†å¼±æ€§ãªãª— |
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| 12.4JDD | è,,†â¼±æ€§ãªã—   |
| 12.4JK  | è,,†â¼±æ€§ãªã—   |
| 12.4JL  | è,,†â¼±æ€§ãªã—   |
| 12.4JMA | è,,†â¼±æ€§ãªã—   |
| 12.4JMB | è,,†â¼±æ€§ãªã—   |
| 12.4JX  | è,,†â¼±æ€§ãªã—   |
| 12.4MD  | è,,†â¼±æ€§ãªã—   |
| 12.4MDA | è,,†â¼±æ€§ãªã—   |
| 12.4MR  | 12.4(19)MR3  |
| 12.4SW  | è,,†â¼±æ€§ãªã—   |
| 12.4T   | 12.4(24)T1<br>12.4(15)T10<br>12.4(20)T3<br>12.4(22)T2  |
| 12.4XA  | è,,†â¼±æ€§ãªã,Š(æœĚâ^ªª®ä¿®æĚã <a href="#">12.4T</a> ) |

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| 12.4XB | è,,†â¼±æ€§ã,ã,Š(æœ€â^ã®ä¿®æfã <a href="#">12.4T</a> ) |
| 12.4XC | è,,†â¼±æ€§ã,ã,Š(æœ€â^ã®ä¿®æfã <a href="#">12.4T</a> ) |
| 12.4XD | è,,†â¼±æ€§ã,ã,Š(æœ€â^ã®ä¿®æfã <a href="#">12.4T</a> ) |
| 12.4XE | è,,†â¼±æ€§ã,ã,Š(æœ€â^ã®ä¿®æfã <a href="#">12.4T</a> ) |
| 12.4XF | è,,†â¼±æ€§ã <sup>a</sup> ã—                           |
| 12.4XG | è,,†â¼±æ€§ã <sup>a</sup> ã—                           |
| 12.4XJ | è,,†â¼±æ€§ã,ã,Š(æœ€â^ã®ä¿®æfã <a href="#">12.4T</a> ) |



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| 12.4XW | è,,†ã¼±æ€§ã,ã,Š(æœ€ã^ã®ä¿®æ£ã 12.4T)                         |
| 12.4XY | è,,†ã¼±æ€§ã,ã,Š(æœ€ã^ã®ä¿®æ£ã 12.4T)                         |
| 12.4XZ | è,,†ã¼±æ€§ã,ã,Š(æœ€ã^ã®ä¿®æ£ã 12.4T)                         |
| 12.4YA | è,,†ã¼±æ€§ã,ã,Š(æœ€ã^ã®ä¿®æ£ã 12.4T)                         |
| 12.4YB | 12.4(22)YB1  |
| 12.4YD | è,,†ã¼±æ€§ãªã—   |
| 12.4YE | è,,†ã¼±æ€§ãªã—   |



## 翻訳について

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