Release Notes for the Cisco SIP Proxy Server Version 1.0 on Solaris

December 18, 2000
This document lists the known problems in the Cisco SIP Proxy Server Version 1.0 and contains information about the Cisco SIP Proxy Server that was not included in the Cisco SIP Proxy Server Administrator Guide.

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Related Documentation

In addition to this release note, use the following publications to learn how to install and use the Cisco SIP Proxy Server:

- *CD Installation Guide for the Cisco SIP Proxy Server on Solaris*—Describes how to install the Cisco SIP Proxy Server software on a Sparc-based server running Solaris 2.6 or later Operating Environment. This document ships with the product CD and is available online at: http://www.cisco.com/univercd/cc/td/doc/product/voice/sipproxy/cdinst/solinst.htm

- *Cisco SIP Proxy Server Administration Guide*—Provides information for network and telephone administrators for understanding, installing, and configuring the Cisco SIP IP phone. This guide is available on the product CD as well as online at: http://www.cisco.com/univercd/cc/td/doc/product/voice/sipproxy/admin/index.htm

Recommended Sun Platforms

The following two Sun Microsystems’ platforms are the recommended platforms on which to run the Cisco SIP Proxy Server:

- Netra T1 AC200 with:
  - 500-MHz UltraSparc IIe processor
  - 1 GB memory
  - Two internal 18 GB SCSI disks
  - Host ID smart card
  - Solaris Operating Environment Version 2.8 or later

- Netra t 1405 with:
  - Four 440-MHz UltraSpac II processors
  - 4 GB memory
  - Two internal 18 GB SCSI disks
  - Solaris Operating Environment Version 2.8 or later
Known Problems in this Release

This section lists the currently known problems in the Cisco SIP Proxy Server, Version 1.0.

Problem: shmem segment tmpnam files are not deleted (CSCdr61706)

Problem Description: Each time the Cisco SIP Proxy Server is started, a file named filexxxxx.sem (where xxxxx is a random string) is created in the /tmp directory. These files do no cause any operational problems but one might want to occasionally delete the files to eliminate clutter.

Recommended Action: None.

Problem: The Cisco SIP Proxy Server does not support SIP and HTTP simultaneously (CSCdr67142)

Problem Description: The Cisco SIP Proxy cannot establish a TCP connection or initiate a HTTP transfer regardless of the specifications for Apache-specific configuration directives that would allow it to do so.

Recommended Action: None. If HTTP support is required, a separate copy of Apache Web Server must be loaded. However, to provide adequate performance and ease of administration, we recommend that you run the Apache Web Server (httpd) and the Cisco SIP Proxy Server (sipd) on separate machines.

Problem: Server Internal Error might be returned in response to a REGISTER request (CSCds02480)

Problem Description: Occasionally, the Cisco SIP Proxy Server returns a “500 Server Internal Error” response to a REGISTER request. This problem occurs primarily during periods of heavy CPU loads and receiving REGISTER requests at a rate equal to or greater than 10 per second. Also, this problem is more likely to occur when running a server farm because the registration information is being updated on multiple machines. This condition is temporary.

Recommended Action: Reissue the SIP REGISTER request.
Problem: Static Registry entry configuration problems (CSCds07314)

Problem Description: Specifying parameters in the Static_REGISTRY_Contact directive of a Static Registry entry causes misreadings by the code. For example, specifying a “12345678@username-solaris.company.com;action=redirect” will cause the code to read the value as “sip:12345678@username-solaris.company.com;action=redirect;user=phone” in because the entry is read as though it is specified as user@host.

Additionally, misspelling the value in the Contact_Age directive of a Static Registry entry might cause the Registry Entry to not be added. For example, if the value for the Contact_Age directive is specified as “Permat” instead of “Permanent” (a valid value), the Static Registry entry will not be added.

Recommended Action: Only enter a Static_REGISTRY_Contact as user@host. Do not add any additional parameters. Also, verify the spelling of the value specified in the Contact_Age directive.

Problem: Cisco SIP Proxy Server does not support SIP message lines that exceed 1024 bytes (CSCds22652)

Problem Description: If an incoming SIP message has a header or Request-URI that exceeds 1024 bytes, the message might be rejected by the server with a “400 Bad Request” response.

Recommended Action: Ensure that messages with headers or Request-URIs greater than 1024 are not sent.
**Problem:** Parsing problems occurring with sipd.conf directives (CSCds32514)

**Problem Description:** Various sipd.conf file directives are not properly range checked. When configuring these parameters, care must be taken to configure them correctly.

Please be aware of the following when configuring the sipd.conf file:

- **ServerType**—If a case-insensitive string other than proxy or redirect, is specified, the server will function as a proxy server.

- **Sip_Token_Port**—If an alphanumeric string beginning with a non-numeric character (for example, port22734) is specified, a syntax error will be reported and the server will not load. If an alphanumeric string beginning with a numeric character is specified, the trailing non-numeric characters are ignored and the leading numeric value is used. For example, if 22734port is specified, the Cisco SIP Proxy Server will operate using the value 22734.

- **PrimaryRadiusAuthIp**—If an invalid IP address is specified, the server loads but is unable to communicate with the radius server.

- **SecondaryRadiusAuthIp**—If an invalid IP address is specified, the server loads but is unable to communicate with the radius server.

- **PrimaryRadiusAcctIp**—If an invalid IP address is specified, the server loads but is unable to communicate with the radius server.

- **SecondaryRadiusAcctIp**—If an invalid IP address is specified, the server loads but is unable to communicate with the radius server.

- **PrimaryRadiusAuthPort**—If an alphanumeric string beginning with a non-numeric character is specified, the value zero is used. If an alphanumeric string beginning with a numeric character is specified, the trailing non-numeric characters are ignored and the leading numeric value is used.

- **PrimaryRadiusAcctPort**—If an alphanumeric string beginning with a non-numeric character is specified, the value zero is used. If an alphanumeric string beginning with a numeric character is specified, the trailing non-numeric characters are ignored and the leading numeric value is used.

- **SecondaryRadiusAuthPort**—This directive is currently unused. The PrimaryRadiusAuthPort value is used for the secondary value.
- DebugFlag (second DebugFlag argument per module)—If this directive is set to Off, the debug flag for that component will not be enabled. The first DebugFlag directive is for the component and no error checking is performed to ensure that it is a valid component. Any value will be accepted for the DebugFlag directive, therefore the component must be present for any debugging to be enabled.

- Cisco_Routing_Shared_Memory_Address—If an alphanumeric string beginning with a non-numeric character is specified, the Cisco SIP Proxy Server will attempt to use address 0 and fail. If an alphanumeric string beginning with a numeric character is specified, trailing non-numeric characters are ignored and the leading numeric value is used.

- Cisco_Registry_Shared_Memory_Address—If an alphanumeric string beginning with a non-numeric character is specified, the Cisco SIP Proxy Server will attempt to use address 0 and fail. If an alphanumeric string beginning with a numeric character is specified, trailing non-numeric characters are ignored and the leading numeric value is used.

- Cisco_Routing_Remote_Update_Port—If an alphanumeric string beginning with a non-numeric character is specified, the Cisco SIP Proxy Server will attempt to use address 0. If an alphanumeric string beginning with a numeric character is specified, trailing non-numeric characters are ignored and the leading numeric value is used.

- Cisco_Routing_Max_DB_Age_on_Boot—If an alphanumeric string beginning with a non-numeric character is specified, the Cisco SIP Proxy Server will attempt to use address 0. If an alphanumeric string beginning with a numeric character is specified, trailing non-numeric characters are ignored and the leading numeric value is used.

- Cisco_Registry_Max_DB_Age_on_Boot—If an alphanumeric string beginning with a non-numeric character is specified, the Cisco SIP Proxy Server will attempt to use address 0. If an alphanumeric string beginning with a numeric character is specified, trailing non-numeric characters are ignored and the leading numeric value is used.

- MasterServerIpAddress—If an invalid IP address is specified, a connection with the NAM will not be established.

- Cisco_Number_Services_Shared_Memory_Address—The Number Services (numserv) module is disabled in Cisco SIP Proxy Server Version 1.0. Therefore, any value specified in this directive is ignored.
Known Problems in this Release

- Cisco_Number_Services_Remote_Update_Port—The Number Services (numserv) module is disabled in Cisco SIP Proxy Server Version 1.0. Therefore, any value specified in this directive is ignored.

- Cisco_Number_Services_Max_DB_Age_on_Boot—The Number Services (numserv) module is disabled in Cisco SIP Proxy Server Version 1.0. Therefore, any value specified in this directive is ignored.

- Static_Number_Services_ContactPort—The Number Services (numserv) module is disabled in Cisco SIP Proxy Server Version 1.0. Therefore, any value specified in this directive is ignored.

**Recommended Action:** None.

**Problem:** TCB age-off timer bug might exist during requests or response retransmission (CSCds42804)

**Problem Description:** During the retransmission of requests or responses, a sipd child process with a Transaction Control Block (TCB) lock could crash after the age-off timer for that TCB has started. While this problem has never occurred, it is possible. If this problem should occur, the process that handles the age-off timer for the TCB will hang until it is restarted by the child process. There is no method of identifying a process that is in this state.

**Recommended Action:** None.
Problem: The Cisco Proxy Server requires the /etc/irs.conf to properly function (CSCds51189)

Problem Description: If the irs.conf file does not exist in the /etc/ directory, the Cisco SIP Proxy Server will hang without displaying an error message.

Recommended Action: Verify that the irs.conf file /etc/irs.conf file exists and if not, create the file and ensure that it includes the following contents:

```
passwd nis
passwd nis
passwd nis
passwd nis
group local continue,merge
```

Problem: Syntax error message line number is incorrect and only the first syntax error is reported (CSCds52504)

Problem Description: When a syntax error occurs in the sipd.conf file, the line number reported in the syntax error message is incorrectly reported. The number that appears in the syntax error message is always the last line of the sipd.conf file and not the line in which the error occurred. In addition, only the first syntax error in the sipd.conf file is reported.

Recommended Action: None.
**Problem:** Certain configurations cause the Cisco SIP Proxy Server to erroneously return a SIP 400 response instead of a SIP 404 response (CSCds70275)

**Problem Description:** sipd.conf file directives configured as follows, ServerType Redirect, Cisco_Registry Off, and SipResolveLocalContactsInRedirectMode Off, cause the Cisco SIP Proxy Server to send a “400 Bad Request” with a “Server mode conflicts with request-Disposition” request line response when it should send a “404 Not Found” response.

This problem occurs because when a SIP INVITE request is received by the proxy and fails a registry lookup (for example, the module is disabled). The proxy attempts to do a route lookup and sees that SipResolveLocalContactsInRedirectMode is set to Off.

**Recommended Action:** None.

**Problem:** Static routes targets that are not resolvable are not processed (CSCds73342)

**Problem Description:** If a static route entry is not resolvable, it is not processed. For example, if two static routes to a target are configured as gw1.domain.com and gw2.domain.com and the gw1.domain.com route has a higher priority and weight, it is selected. However, if the attempt to resolve gw1.domain.com fails, the Cisco SIP Proxy server does not try the second route, gw2.domain.com. However, if gw1.cisco.com is resolvable but down, the Cisco SIP Proxy Server will try the route until it has exhausted its retransmission attempts and then it will try gw2.domain.com.

**Recommended Action:** Ensure that the static route target entries are resolvable. Static routes should be IP address or FQDNs that can be resolved via a DNS lookup.

**Problem:** The “include” directive does not work for some block configuration directives (CSCds73530)

**Problem Description:** Block configuration directives (for example, <StaticRouteID> and <StaticRegistryID>) cannot be placed in a separate file and “included” in the sipd configuration file. Static routes and static registry entries must be defined in the main sipd.conf file.

**Recommended Action:** None.
Problem: On rare occasions, the Cisco SIP Proxy Server might fail to send some messages (CSCds74923)

**Problem Description:** When running on the Solaris 2.6 Operating Environment, on rare occasions the Cisco SIP Proxy Server might fail to send some messages during periods of heavy retransmission and retransmission timers simultaneously expiring. If this condition occurs, the following message is logged in the error_log file “Error trying to create UDP socket.” This condition indicates that either the next hop server is down or the network is overloaded.

**Recommended Action:** None.

Problem: Starting the Cisco SIP Proxy Server (sipd) process directly can cause multiple sipd processes to start (CSCds82140)

**Problem Description:** Not using the sipdctl script to start the Cisco SIP Proxy Server can cause problems if another copy of sipd is already running. If another set of sipd processes are already running, directly starting the Cisco SIP Proxy Server will start additional sipd processes. The additional sipd processes will then consume memory and might impact the original sipd processes.

**Recommended Action:** Always start the Cisco SIP Proxy Server using the sipdctl script (issue ./sipdctl start from the server directory).

Admendments to the Documentation

This section contains information that was not included in the *Cisco SIP Proxy Server Version 1.0 Administrator Guide* or the *CD Installation Guide for the Cisco SIP Proxy Server on Solaris*.

Installing the Cisco SIP Proxy Server Software

The installation procedure documented in the “Installing the Cisco SIP Proxy Server Software” section describes how to install the Cisco SIP Proxy Server in such a manner that it will run as root when started. The user id will be landv and the group will be 25.
For security purposes, create a user ID and group under which to run the Cisco SIP Proxy Server before installing the software. If you have already installed the Cisco SIP Proxy Server software as root user, change the ownership of the directory and ensure that you have write privilege to the logs directory.

Also, the Cisco SIP Proxy Server on Solaris image name as it appears on the product CD is sip-server-1.0-solaris.tar.gz.

Obtaining Documentation

World Wide Web


Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

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