SIP Proxy Deployment Guide

Keep Alive for TCP Connections

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Keep Alive for TCP Connections

Starting with version 8.1.100.88, SIP Proxy provides the ability to detect stale TCP connections between SIP Proxy and a SIP device using the TCP keep-alive mechanism. This functionality is recommended for those environments in which SIP endpoints are located behind a firewall that is configured to drop inactive TCP connections silently and without sending any notification to SIP Proxy. If SIP Proxy tries to use a stale connection to initiate a new call or to execute call control, the attempt would fail. As a result, the SIP endpoint is placed to out of service.

When the TCP keep-alive mechanism is enabled, SIP Proxy sends keep-alive packets for all existing SIP connections. If there is no response for a configured time interval, and if there is an active transaction for this connection, SIP Proxy attempts to reopen the connection immediately and re-sends the last SIP request. If the connection does not have an active transaction, then it will be reopened only when a new transaction is initiated. If an attempt to open a connection for an active transaction fails, SIP Proxy releases the call.

For this feature to work with TLS over TCP, the SIP endpoint must be able to accept the connection when SIP Server attempts to reopen it.

The TCP keep-alive mechanism does not replace the active out-of-service check, which should be configured as usual even if the TCP keep-alive feature is enabled.

Feature Configuration

1. Configure TCP keep-alive timeouts for your operating system. You can use the following links for your reference:

    - For Windows, see http://technet.microsoft.com/en-us/library/cc957549.aspx

    - For Linux, see http://tldp.org/HOWTO/TCP-Keepalive-HOWTO/usingkeepalive.html

2. In the **sipproxy** section of the SIP Proxy Application, configure the **sip-enable-tcp-keep-alive** configuration option to enable the TCP keep-alive functionality.

sip-enable-tcp-keep-alive

Default Value: `false`
Valid Values: `true, false`
Changes Take Effect: After SIP Proxy restart

When set to `true`, enables the TCP keep-alive mechanism for all SIP-related connections. Keep-alive timeouts are configured on the operating system level.

Feature Limitation

For Voice over IP Service DNs, SIP Proxy will not attempt to reopen the connection within an active

transaction.