

SIP Load Tester

SIP, WebRTC, H.264, H.263, VP8, HD Video and Audio



OVERVIEW

The Valid8 SIP Load Tester is capable of simulating and testing several devices individually or in parallel and is scalable to fit your needs.

WHAT IT CAN DO FOR YOU

SIP is a set of standards that define the protocols for audio-visual communication sessions over IP. They are both widely implemented by voice and videoconferencing equipment manufacturers.

The Valid8 VoIP Load Tester allows you to test phones, Endpoints, SBCs, Servers, PBXs, Gateways, and test load and feature interaction for audio and video. It enables continuous route testing through the network to report quality and find issues. It is useful for small and large carriers: ILECs, CLECs, ASPs, ISPs, as well as enterprise customers. It automates deterministic verification of routes and phone numbers across VoIP networks, saving time and increasing effectiveness and coverage of testing. Rules are set up in the tool to cycle through multiple network destinations and phone numbers according to the test plan. It reports on media received, call connect time, call duration, jitter, packet loss. It verifies equipment is working and configured as it should and helps check that SLAs are being met.

FEATURES

- Measure Key Performance Indicators (KPIs) such as number of simultaneous sessions and Busy Hour Call Attempts (BHCA)
- Check voice, video calls
- Registration load
- RTP media file playback
- Report on media received, call connect time, call duration, jitter, packet
 loss
- Generate valid and invalid/negative messages and call-scenarios
- Supports sending invalid responses including malformed, dropped and misordered packets
- Alerts and notifications
- Background SIP traffic
- Background data traffic (iMix)

WHY IT'S DIFFERENT

- Software based solution can be run on high-end customer hardware/VM to achieve better performance, or in the Cloud (e.g. Amazon AWS) for maximum versatility
- Web-based Graphical User Interface provides customer with intuitive, easy access via browser
- API's used (REST, HTTP) enable automated testing using test tools.
- Emulated nodes behave exactly as true real nodes, due to Finite State Machine architecture
- Testing is scalable across multiple cores and multiple systems





SUBSYSTEMS

SIP Client, SIP Server, SIP Registrar



KPIs

- Call Attempts
- Call Successes
- Call Failures
- Calls per second (CPS)
- Call setup time
- Call tear down time
- Media Tx Packets (audio)
- Media Rx Packets (audio)
- MOS/PESQ score * optional

Configurable Parameters

- ICall session length
- Concurrent calls/endpoints
- BHCA/CPS

AUTOMATION API

User commands can be fully automated using REST API. This includes performing all test control functions as well as collecting results and metrics.



SCRIPTING

The application's subsystems can be edited directly in the browser using Javascript or by using the graphical tools seen below. The Message Workshop allows for creating of test scenarios directly from the hex stream of a remote capture, while the Graphical Editor allows for creating customized call scenarios by dragging and dropping the call flow to meet your test needs



USE CASES

SIP SERVER UNDER TEST

For testing the SIP Server, the Valid8 Tester can generate SIP calls to test performance and stability.

Supported Scenarios:

- REGISTER
- INVITE Audio/Video calls
- MESSAGE
- UPDATE
- PRACK

SIP CLIENT UNDER TEST

For testing the SIP Client, the Valid8 Tester can generate SIP calls to test performance and stability.

Supported Scenarios:

- REGISTER
- INVITE Audio/Video calls
- MESSAGE
- UPDATE
- PRACK

FIREWALL UNDER TEST

GTP, SCTP, S1-AP Firewall

Supported Scenarios:

- Invalid version
- Invalid IEs/AVPs
- Invalid TIDs
- Invalid UE IDs



SUMMARY OF SPECIFICATIONS

SPECIFICATIONS

Update in Progress

PRODUCT DETAILS

SIP Load Tester