

# SIP Performance Benchmarking

draft-ietf-bmwg-sip-bench-term-04  
draft-ietf-bmwg-sip-bench-meth-04

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# Discussion items IETF 80

- ITEM 1: Clarify the algorithm for measuring Sessions Establishment Rate (SER) so that it does not introduce the possibility of oscillation.
- RESOLUTION: Both a natural language- and a pseudocode description of the test algorithm were added.

# Discussion items IETF 80

- ITEM 2: Should causes of failure be recorded?
- RESOLUTION: The test organization performing these tests may want to explore the root cause of the failures. The focus of this work, however, is to identify the fastest session attempt rate the SUT can system can sustain without taking errors and then to identify the maximum number of simultaneous sessions the system can sustain in its steady state. These tests are not designed to identify root causes of the metric values. A test organization may choose to collect many more metrics than are defined in this document, however.

# Discussion items IETF 80

- ITEM 3: Must document the test bed sufficiently that the conditions of test can be replicated and the results of test compared.
- RESOLUTION: Added a new section to the Methodology Document, Section 5.4, that captures characteristics of the platform on which the DUT is running. These characteristics must be duplicated if results of tests are to be compared.

# Discussion items IETF 80

- ITEM 4: Do not stop the test when you observe the first error. Let the test run to completion.
- RESOLUTION: Clarified the test procedure, using both natural-language and pseudocode.

# Discussion items IETF 80

- ITEM 5: Concerns were raised about using more than one system or middle box in the system under test. Concern was that you cannot identify the source of failures in those situations.
- RESOLUTION:
- Added language to the terminology document after figure 8 which illustrates a concatenated system.
- Added language to the methodology document that tells the test organization to record the data required in Section 5 for all the systems included in the black-box under test.

# Terminology Changes

- (1) Added comment related to Figure 8, pointing out that blackbox testing of concatenated DUTs will support comparing the performance of two systems but will be very helpful in getting to the root cause of why one system performs better than another.

# Terminology Changes

- (2) Clarified the definition and the discussion associated with the Session Establishment Rate to read as follows:
- Definition: The maximum session attempt rate at which the DUT/SUT can establish sessions with zero signaling failures during a predetermined time interval.



# Terminology Changes

- (3) Edited definition and discussion associated with Session Capacity as follows:
- Definition: The maximum value of Standing Sessions Count achieved by the DUT/SUT during the steady-state phase of the benchmarking algorithm described in the associated Methodology document.

# Methodology Changes

- (1 and 2) Added a verbose and a pseudo-code version of the algorithm used to measure the Session Establishment Rate.
- (3) Added section 5.4, “Platform Characteristics” to the Section 5 Reporting Format. This section includes parameters of the device on which the DUT is running. These characteristics are needed in order to replicate the conditions under which tests are run.
- (4) Edited tests for SER and SC to include reference to the algorithm.

# Next steps

- -04 could not be submitted before IETF cutoff (sorry).
- However, we will submit shortly after IETF-81 and hold list discussions to ensure completion of the work before IETF-82.