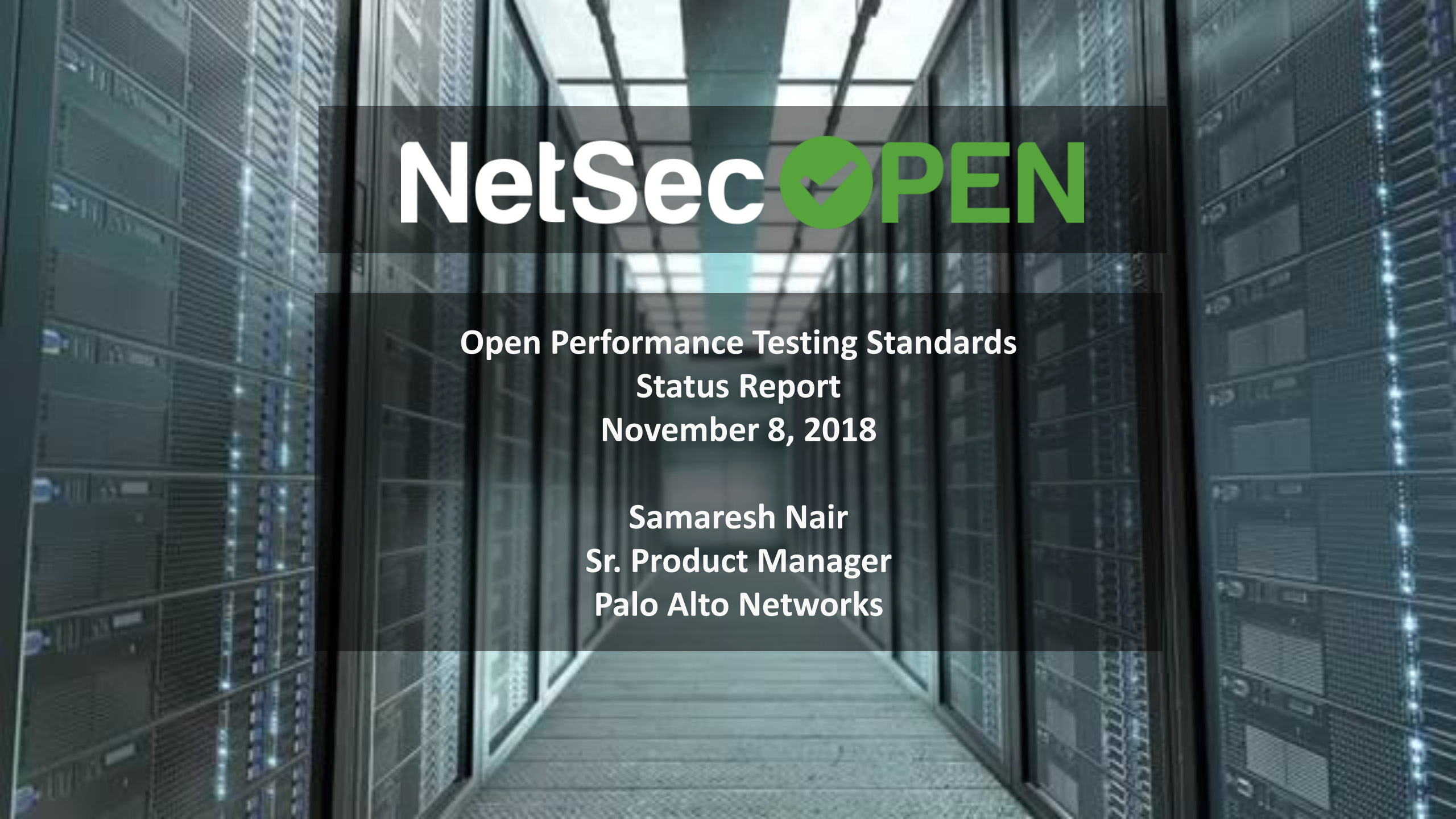

Open Performance Testing Standards Status Report

November 8, 2018

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Status - Draft Standard

- Version 5 of the draft standard going through review
  - Section 1 through 4 have been reviewed in depth – changes being made and an update will be submitted after IETF 103
- Proof of concept testing against this version has started
- Al Morton has called for adoption

Proof of Concept Testing Steps (I)

- Configure DUT to detect targeted CVEs
- Enable all security inspection functions on the DUT
- Tun on logging – normal logging level

Note: This configuration must persist throughout testing

Proof of Concept Testing Steps (II)

- CVE list determined by searching the National Vulnerability Database as follows
  - CVSS Version: 2
  - CVSS V2 Metrics: AV:N/Au:N/I:C/A:C
    - AV=Attack Vector, Au=Authentication, I=Integrity and A=Availability
  - CVSS V2 Severity: High (7-10)
  - Start date of 01/01/2010 with an end date of 04/30/2018
- CVE search resulted in almost 1,200 unique CVEs
- Common coverage in both test tools uses brought the total down to 430 CVEs
- Public list made up 400 CVEs and private list is 30 CVEs
  - Private used is used by test labs to ensure DUTs are not configured to just the public list

Proof of Concept Testing Steps (III)

Order of Tests

- 7.1 Throughput Performance with NetSecOPEN Traffic Mix
- Security Effectiveness tests as outlined previously
  - Background traffic rate of 50% of the result from 7.1 set
- 7.2 TTCP/HTTP Connections Per Second
- 7.3 HTTP Transactions per Second
- 7.4 TCP/HTTP Transaction Latency
- 7.5 HTTP Throughput
- 7.6 Concurrent TCP/HTTP Connection Capacity
- 7.7 TCP/HTTPS Connections per Second
- 7.8 HTTPS Transactions per Second
- 7.9 HTTPS Transaction Latency
- 7.10 HTTPS Throughput
- 7.11 Concurrent TCP/HTTPS Connection Capacity

Proof of Concept Goals

- Verify test plan is supportable by all test tools
- Identify where changes to draft standard may be needed
- Assess competence of labs to conduct tests
  - Will result in list of NetSecOPEN approved test labs

Who is involved:

- Three test labs – EANTC, UL and UNH-IOL
- Two test tool vendors – Ixia and Spirent
- 5+ security product vendors

Proof of Concept Targets

- Complete POC testing before the end of November
- Analyse results and making any necessary changes to draft standard early December
- Submit updated draft to BMWG early December

POC Test Results:

- At the request of test participants (labs and DUT vendors) results are being kept private
- Areas of differences between test tools have been identified
  - Goal will be to produce configuration guidance for the test tools in order to make test results comparable

A Request

We need your help to move this forward. Please commit on the mailing list to reviewing this draft.

Thank you.

THANK YOU