Benchmarking SDN Controller Performance

draft-ietf-bmwg-sdn-controller-benchmark-term-01
draft-ietf-bmwg-sdn-controller-benchmark-meth-01

95th IETF, Buenos Aires

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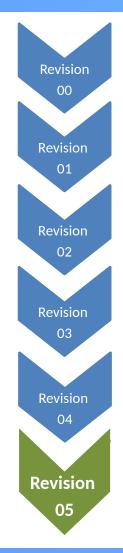Mark Tassinari
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$DN

Software Defined Networking

Objective

- Develop a comprehensive set of tests for benchmarking SDN controllers for

  - ✓ Performance

  - ✓ Scalability

  - ✓ Reliability and

  - ✓ Security

- Define metrics and methodology to assess/evaluate SDN controllers

- Provide a standard mechanism to measure and compare the performance of various controller implementations

History

Revision 00
- Submitted in March 2014 (OpenFlow Specific) (draft-bhuvan-bmwg-of-controller-benchmarking-00)
- Presented initial version in IETF-90 meeting

Revision 01
- Submitted in October 2014 (Protocol Agnostic) (draft-bhuvan-bmwg-of-controller-benchmarking-01)
- Presented the revised version in IETF-91 meeting

Revision 02
- Submitted in March 2015 (Split into Terminology and Methodology Drafts) (draft-bhuvan-bmwg-sdn-controller-benchmark-term-00) (draft-bhuvan-bmwg-sdn-controller-benchmark-meth-00)
- Presented the revised version in IETF-92 meeting

Revision 03
- Submitted in July 2015 (Addressing review comments from IETF 92 meeting) (draft-bhuvan-bmwg-sdn-controller-benchmark-term-01) (draft-bhuvan-bmwg-sdn-controller-benchmark-meth-01)
- Presented the revised version in IETF-93 meeting

Revision 04
- Submitted in October 2015 (Successful Call for Adoption) (draft-ietf-bmwg-sdn-controller-benchmark-term-00) (draft-ietf-bmwg-sdn-controller-benchmark-meth-00)

Revision 05
- Submitted in March 2016 (Addressing comments from IETF 94) (draft-ietf-bmwg-sdn-controller-benchmark-term-01) (draft-ietf-bmwg-sdn-controller-benchmark-meth-01)

Revision 05 - Updates

- **Thank you everyone for the support and feedback on this draft**

- **Changes Highlight**
  Terminology Document:
    - Removed some of terms definition (e.g., SDN Nodes) that are already defined in RFC 7426 (SDN: Layers and Architecture Terminology) and added references for that RFC.
    - Added Test Setup (Section 3)

  Methodology Document:
    - Added requirements for Test Emulator Requirements (Section 4.3) and added some texts for Test Repeatability (Section 4.7).

  ### We are still considering a solution for comments received from Marius G in IETF 94 about summarizing test results in terms of Average vs Median .

Next Steps

- Other Comments?

- Consider for IESG Review??

Thank You!!!

The authors of

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