Benchmarkeding SDN Controller Performance

draft-ietf-bmwg-sdn-controller-benchmark-term-02
draft-ietf-bmwg-sdn-controller-benchmark-meth-02

96th IETF, Berlin

Bhuvaneswaran Vengainathan,
Anton Basil
Veryx Technologies

Mark Tassinari
Hewlett-Packard

Sarah Banks
VSS Monitoring

Vishwas Manral
Nano Sec
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

- OpenFlow Specific
  - Presented in IETF-90
- Protocol Agnostic
  - Presented in IETF-91
- Split into Terminology & Methodology Drafts
  - Presented in IETF-92
- Successful Call for Adoption
  - Presented in IETF-94
- Review Comments from IETF-92
- Review Comments from IETF-94
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- draft-ietf-bmwg-sdn-controller-benchmark-meth-02
Revision 06 - Updates

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

- Changes Highlight
  **Terminology Document:**
  - Revised the following test metrics definition to include measurement start and stop criteria as per Al Morton’s feedback

<table>
<thead>
<tr>
<th>Performance</th>
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<th>Reliability</th>
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</thead>
<tbody>
<tr>
<td>Network Topology Discovery Time</td>
<td>Proactive Path Provisioning Time</td>
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<tr>
<td>Asynchronous Message Processing Time</td>
<td>Reactive Path Provisioning Rate</td>
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<tr>
<td>Reactive Path Provisioning Time</td>
<td>Network Topology Change Detection Time</td>
<td></td>
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<tr>
<td>Control Sessions Capacity</td>
<td>Controller Failover Time</td>
<td></td>
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<tr>
<td>Network Discovery Size</td>
<td>Network Re-Provisioning Time</td>
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**Methodology Document:**
- Reflected the changes made for test metrics definition in the terminology document.
Need to Discuss

- Need to address Al's feedback on the test methodology – Asynchronous Message Processing Rate ([draft-ietf-bmwg-sdn-controller-benchmark-meth-02](draft-ietf-bmwg-sdn-controller-benchmark-meth-02))
  - Current Methodology – Measures the response rate with/without packet loss
  - Proposed Methodology - Measure the response rate without any packet loss like RFC 2544 Throughput Test
Next Steps

- Other Comments?
- Consider for IESG Review??
Thank You!!!

The authors of

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