NMRG Status Report ‘2012

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84th IETF meeting in Vancouver
NMRG History and Statistics

- First unofficial meeting in Lausanne, November 1998
- Formally approved by the IAB in March 1999
- New co-chairs in March 2011
- 28 meetings at various places since formation
- Produced 5 NMRG RFCs
- Involved in 27 other publications by NMRG members
- Currently, 264 subscriptions on the mailing list
Collaboration and discussion forum

Bridging gaps between academia, industry, operators, standards developing organizations (SDOs), ...
- Improve mutual understanding
- Participation of people from different SDOs to exchange viewpoints (ITU, CIM, W3C, IETF, …)

Interactive 1-2 day meetings
- Usually co-located with other events
- Hosted by a supporting institution (low cost)
  - E.g., last meeting at ICT Labs, Saturday after IETF 83
- Presentations followed by intensive detailed discussions
NMRG Projects

- SNMP Evolution (RFC 3430)
- Terminology (RFC 3444)
- SMIng (RFC 3780, RFC 3781)
- Performance of Web Services for Management
- SNMP measurements and trace formats (RFC 5345)
- Management visualization
- NETCONF for constrained devices
- Retrieving knowledge out of NETFLOW/IPFIX flows
Research Challenges

- Software Defined Network (SDN) management
- Autonomic management
- Network-wide safe configuration
- Large-scale network-wide measurements
- Management of virtual network environments (VNEs)
- Management of the Internet of Things (IoT)
- Energy monitoring and management
NMRG Present & Future

- From March 2011
  - Migration of the NMRG website and mailing list to the IETF’s Wiki and mailman
  - 2 meetings (IETF 81 - Quebec and IETF 83 - Paris)

- Challenges:
  - High energy at meetings, but still few movements afterwards
  - Materialize discussions and advancements into IRTF documents

- Work on key research challenges
  - NETFLOW/IPFIX topics has been quite successful (4 meetings)
  - Autonomics and self-management (explosion on the number of managed objects due to network virtualization)
  - Management of complex network environments such as IoT, SDN, cloud datacenter networks, …
Discussion
References I


