NMRG Status Report ‘2015

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92nd IETF meeting in Dallas
Outline

- History
- “Business model”
- Research challenges
- Present & future
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
- 35 meetings at various places since formation
- Produced 6 NMRG RFCs -> going to 8
- Currently, 272 subscriptions on the mailing list
NMRG “Business Model”

- Collaboration and discussion forum

- Meetings during IETFs: 1 or 2 slots
  - Promote key topics
    - Flow-based measurements
    - Autonomic management
  - Feedback from the IETF audience

- Interim meetings: 1-2 day meetings
  - Co-located with other events
  - Hosted by a supporting institution (low cost)
    - E.g., last meeting together with CNSM 2014 in Rio
  - Presentations followed by intensive detailed discussions

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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)
- Retrieving knowledge out of NETFLOW/IPFIX flows
- Autonomic management (ANIMA)
Research Challenges

- Large-scale network-wide measurements
- Management of the Internet of Things (IoT)
- Management of complex network environments such as IoT, SDN, cloud datacenter networks, ...
- Autonomic management
NMRG Present & Future

- ANIMA “spin-off”
  - 3 meetings in autonomic management to mature ANIMA basis

- Flow-based measurement
  - 5 meetings, next one to be held in Prague

- Applied Networking Research Prize
  - Misbah Uddin (IETF 91)
  - Idilio Drago (IETF 88)
Challenges:

- Lack of transparency
  - Meetings for 2015 planned out of a poll on the mailing list
- Limited interactions with the research community
  - Moved the interim meeting from CNSM to NOMS/IM
- Few actions before and after meetings
  - Stimulate discussed around actual documents
Work on key research topics
- Software Defined Networking (SDN) management
- Network Functions Virtualization (NFV) management
- Security management
- Management of/using ICN
- Policy-based service management (e.g., from SUPA)
Discussion