

SDN RG State of the Nation

Daniel King

IETF 94 Yokohama

A Short History of (almost) Everything SDN RG (1)

- **IETF 84** – Outlined the SDN (RG) Continuum
- **IETF 85** – Seeded some “SDN-hard” Problems
- **IETF 86** – SDN Trends, Experiments and NFV
- **IETF 87** – Novel SDN Applications, Operator Perspectives, State Reduction and Dependable SDNs
- **IETF 88** – Defining SDN in the Context of the IETF, Architectures and Terminology

A Short History of (almost) Everything SDN RG (2)

- **IETF 89** – SDN Hybrid Architectures and SDN Research in Action
- **IETF 90** – Hardware Abstraction, Modeling Languages and Traffic Engineering
- **IETF 91** – Scaling SDN, Blending SDN &NFV, NFV H-W Acceleration, and IoT
- **IETF 92** – Inter-domain SDN, SDN in Mobile Networks
- **IETF 93** – SDN Security

Thus far, we have been a very successful “conference” venue

SDN Research Group Documents

- Software-Defined Networking (SDN): Layers and Architecture Terminology RFC 7426
<https://datatracker.ietf.org/doc/rfc7426/>
- Current document
<https://datatracker.ietf.org/rg/sdnrg/documents/>

draft-abad-sdnrg-sdn-ipsec-flow-protection-01 Software-Defined Networking (SDN)-based IPsec Flow Protection	2015-10-19 19 pages	I-D Exists New
draft-chattopadhyay-sdnrg-multi-party-sdn-trust-01 Multi-party Multi-Domain Trust Architecture Recommendations for SDN Deployment in Carrier Network	2015-09-26 18 pages	I-D Exists
draft-contreras-sdnrg-layered-sdn-04 Cooperating Layered Architecture for SDN	2015-10-19 15 pages	I-D Exists New
draft-eddy-sdnrg-customer-filters-01 Customer-Controlled Filtering Using SDN	2015-08-11 21 pages	I-D Exists
draft-gu-sdnrg-problem-statement-of-sdn-nfv-in-dc-00 Problem statement of SDN and NFV co-deployment in cloud datacenters	2015-06-30 7 pages	I-D Exists
draft-wang-sdnrg-deployment-sdn-vnf-00 Practice of deploying SDN and VNFs in the data center	2015-10-17 12 pages	I-D Exists
draft-xia-sdnrg-nemo-language-05 NEMO (NEtwork MOdeling) Language	2015-10-14 23 pages	I-D Exists
draft-xia-sdnrg-service-description-language-02 Requirements for a Service Description Language and Design Considerations	2015-05-04 7 pages	I-D Exists Expires soon
draft-zhugue-sdnrg-sdn-sdp-00 An SDN Framework with Software-Defined Pricing (SDP)	2015-09-23 10 pages	I-D Exists

SDN RG Moving Forward

- Restate the SDN Challenges?
 - Charter may need a refresh
- Develop a Work Plan?
 - But. We are not a WG.
- SDN RG Tools
 - New charter?
 - Refresh the Wiki?
 - How to (better) utilize the mailing list?
- Ultimately, its all about the **RESEARCH** and how to support you, the research **COMMUNITY!**

SDN RG Initiatives MAY include

- Identify SDN RG sessions
 - Grand Research Challenges
 - Co-located with Academic events
- Incubation program for specific SDN research topics/proposals
 - Allotted RG time
 - Technical support/referrals/reviews
 - Seeding of (suitable) ideas within the IETF
- More Research Group Publications
 - Informational Documents
- Open Source Interaction
- Inter-SDO Cooperation

Open Mic

- This is your research group...
- How can we best facilitate SDN research?
- We need feedback, ideas, and ongoing discussion
- Ideally, dialogue should continue on the list