# Network Virtualization Overlays (NVO3)

## NVO3 Meeting,

## IETF 90,
## Toronto

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# Administrivia

- Blue Sheets

- Note takers + Jabber Scribe

- Mailing List:

  General Discussion: nvo3@ietf.org

  To Subscribe: nvo3-request@ietf.org

  In Body: subscribe your_email_address

  Archive: http://www.ietf.org/mail-archive/web/nvo3/index.html

# Meeting Objectives
# (Priority order)

- Progress current milestones

- Discuss revisions to charter and next steps

- See http://tools.ietf.org/wg/nvo3/charters for more information.

# Agenda -1

Chairs update and bashing [30min]

0.00 - Introduction (WG-chairs) - [5 minutes]
-  Agenda bashing, note-well, (WG-chairs) –

0.05 - WG update (WG Chairs) - [10min]
-  WG Progress, Draft Status,

0.15 - WG charter and milestones - [15min]
-  WG charter update, milestones

# Agenda - 2

00:30 Topics [120 min]

1. NVO3 OAM requirement (Liang Xia) - [10 min]
(<http://tools.ietf.org/id/draft-ashwood-nvo3-oam-requirements-01.txt>)

2. Yang for NVo3 OAM (Tissa Senvirathne) - [10min]
(<http://tools.ietf.org/html/draft-tissa-nvo3-yang-oam-00>)

3. VN auto-provisioning requirements (Zhongyu Gu) -  [5 min]
(<http://datatracker.ietf.org/doc/draft-gu-nvo3-auto-provisioning-reqs/>)

4. VDP Gap Analysis for use as a VM to NVE protocol (Joe Pelissier) - [10min]
(<http://datatracker.ietf.org/doc/draft-pt-nvo3-vdp-vm2nve-gap-analysis/>)

5. Problem Statement for VxLAN Performance Test (Vic Liu) - [10min]
(<http://tools.ietf.org/html/draft-liu-nvo3-ps-vxlan-perfomance>)

6. Network virtualization edge (NVE) data plane interoperability functionality (Lucy Yong) - [10min]
(<http://datatracker.ietf.org/doc/draft-yong-nvo3-nve>)

# Agenda - 3

7. NVO3 Layer 2 Gateway (Liang Xia) - [10 min]
(<http://datatracker.ietf.org/doc/draft-xia-nvo3-l2gw/>)

8. NVO3 Anycast Layer 3 Gateway (Weiguo) - [10min]
(<http://datatracker.ietf.org/doc/draft-hao-nvo3-anycast-gw/>)

9. supporting applications specific multicast traffic (Linda Dunbar) - [10 min]
(<https://datatracker.ietf.org/doc/draft-ghanwani-nvo3-app-mcast-framework/>)

10. NVO3 Overlay P2MP Ping (Liang Xia) - [5 min]
(<http://tools.ietf.org/id/draft-xia-nvo3-overlay-p2mp-ping-00.txt>)

11. Network as a Service Architecture (Vic Liu/ Frank) - [5 min]
(<http://www.ietf.org/internet-drafts/draft-liu-nvo3-naas-arch-01.txt>)

12. NVE auto-discovery  protocol (Zhongyu Gu) - [5 min]
(<http://datatracker.ietf.org/doc/draft-gu-nvo3-virt-edge-auto-discovery/>)

13. VXLAN GPE  (Paul Quinn) - [10min]
(<http://tools.ietf.org/html/draft-quinn-vxlan-gpe-03>)

# Milestones

Done - Problem Statement submitted for IESG review

Done ~~Nov 2013~~ - Framework document submitted for IESG review

Nov 2014 ~~Dec 2013~~ - Data plane requirements submitted for IESG review

Nov ~~Feb~~ 2014 - Operational Requirements submitted for IESG review

Nov ~~Feb~~ 2014 - Control plane requirements submitted for IESG review

~~Mar 2014 - Gap Analysis submitted for IESG review~~

Nov 2014 – Use Cases submitted for IESG review

Nov 2014 – Architecture submitted for IESG review

Nov ~~Apr~~ 2014 - Recharter or close Working Group

# Document Status - 1

- New RFCs
  - None yet

- RFC Editors Queue
  - draft-ietf-nvo3-overlay-problem-statement
    - Mis-ref to draft-ietf-nvo3-framework
  - draft-ietf-nvo3-framework

# Document Status - 2

- draft-ietf-nvo3-dataplane-requirements
  - Completed WG Last Call
  - Further comments received
  - Waiting for update before progressing
- draft-ietf-nvo3-nve-nva-cp-req
  - Ready for WG LC?
- draft-ietf-nvo3-hpvr2nve-cp-req-00
  - New WG draft

# Document Status - 3

- draft-ietf-nvo3-use-case
  - On-going – WG LC?
- draft-ietf-nvo3-mobility-issues
  - On-going – WG LC?
- draft-ietf-nvo3-gap-analysis
  - On-going…
- draft-ietf-nvo3-security-requirements
  - On-going – WG LC?
- draft-ietf-nvo3-arch
  - On-going

# Routing Area Status

# NVO3 Recharter

- Wrap-up what we can
  - PS and FW already in Editor's Queue.
  - Requirements & Use-case: Publish
  - Gap Analysis: Park
  - Architecture: Develop in parallel with Solutions
- Re-charter to work on Solutions
  - Based on existing Architecture
  - Market has already been deploying stuff…

# Work "Home"

- Protocol extensions will be developed in the appropriate respective WGs
  - E.g. BGP/MPLS L3VPN services
- NVO3 will work on documenting protocols that enable one or more interoperable DCVPN solution(s), within the following scope:
  - Based on Architecture draft
  - Centralized NVA
    - Logically centralized, federated, etc.
  - IP-based data plane

# Scope of Protocol Development

- Based on Architecture draft
- Centralized NVA
  - Logically centralized (fewer NVAs than NVEs…)
  - Distributed functions are not prohibited, as augmentation in centralized environment
  - Precisely how/where to split is up for discussion
- IP-based data plane at NVE layer
  - Control Plane MUST support an IP data plane (something over IP) for NVE-NVE tunnels – e.g. this is the "O3" in "NVO3"
  - MPLS and other protocols MAY be supported in the underlay

# Work "Home" – To Be Clear

- What lies in NVO3?
  - New solutions:
    - Applicability Statement in NVO3
    - Protocol specification in NVO3
  - Existing IETF protocols
    - Applicability Statement in respective WG(s)
    - Protocol extensions in respective WG(s)
  - Non-IETF protocols developed by another SDO
    - Applicability Statement in NVO3
    - Protocol specifications and/or extensions in that SDO
  - Non-IETF protocols developed elsewhere
    - Applicability Statement in NVO3
    - Protocol specifications and/or extensions may be developed in NVO3 if the authors agree

# Next Steps

- Chairs post draft charter text / milestones to the list by next week

- Discuss on the list

- Revised charter adopted by Honolulu