Network Management Operations (nmop) WG

July 26, 2024

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I E T F

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IETF 120 Meeting Tips

In-person participants

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- Use Meetecho (usually the "Meetecho lite") client to:
  - join the mic queue
  - participate in shows of hands
- *Keep audio and video off if not using the onsite version.*
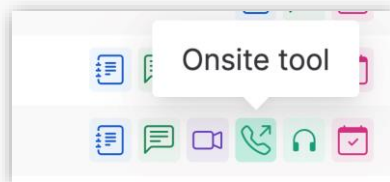
Remote participants

- Make sure your audio and video are off unless you are chairing or presenting during a session.
- Use of a headset is strongly recommended.

Agenda

Slot	Priority Label	Topic	Presenters
13:00 - 13:05		Agenda Bashing & Introduction	Chairs
13:05 - 13:30	P1	YANG-Push to Message Broker Integration	Thomas
13:30 - 13:50	P2	NMOP Terminology	Adrian
13:50 - 14:10	P2	Anomaly detection: Experiments & Roadmap	Thomas/Pierre/Vincenzo
14:10 - 14:25	P3	Digital Map Concepts & Requirements	Olga
14:25 - 14:30	P4	NEMOPS Workshop	Chairs
14:30 - 14:45	P4	Updates to Operators Requirements	Luis
14:45 - 15:55		Knowledge Graphs	Nacho
14:55 - 15:00		Wrap-up & Future Meetings	Chairs

Documents Status

Active Internet-Drafts (3 hits)

draft-ietf-nmop-yang-message-broker-integration-03
An Architecture for YANG-Push to Message Broker Integration
23 pages 2024-07-03   I-D Exists
New WG Document
May 2024

draft-ietf-nmop-network-incident-yang-01
A YANG Data Model for Network Incident Management
42 pages 2024-06-28   I-D Exists
New WG Document
May 2024

draft-ietf-nmop-terminology-01
Some Key Terms for Network Incident and Problem Management
13 pages 2024-06-10   I-D Exists
WG Document
Jun 2024

Milestones

Date	Milestone	Associated documents
Dec 2025	Submit NMOP Terminology to the IESG	
Dec 2025	Submit Network Incident Management to the IESG	
Dec 2025	Submit Network Anomaly Management to the IESG	
Sep 2025	Submit Architecture for YANG-Push to Message Broker Integration to the IESG	
Sep 2024	Adopt a document on updated operators requirements	
Sep 2024	Adopt a document on network anomaly management	

A plan will be discussed during this session

Done milestones

Date	Milestone	Associated documents
Done	Adopt a terminology document for anomaly and incident management	draft-ietf-nmop-terminology
Done	Adopt a document on network incident management	draft-ietf-nmop-network-incident-yang
Done	Adopt a document describing how to integrate YANG Push with Apache Kafka	draft-ietf-nmop-yang-message-broker-integration

Liaison Statements

Date	From	To	Deadline	Title
2024-05-22	ETSI-ISG-ZSM	nmop		Liaison response to LS/r on "IETF_NMOP_WG_Reply_to_the_ETSI_ISG_ZSM_LS_on_Network" (ETSI ISG ZSM- ZSM(24)000101)
2024-05-07	nmop	TMFORUM	2024-07-15 **Action needed**	IETF Network Management OPerations Working Group LS to TMF on "TMF724A Incident Management API Profile"
2024-04-26	nmop	ETSI		NMOP WG Reply to the ETSI ISG ZSM LS on Network Digital Twin
2024-04-23	nmop	ITU-T-SG-13	2024-07-20 **Action needed**	Response to "LS on initiation of a new work item ITU-T Y.FunArch-INSA-FL"

Interim Meetings: Past & Future

Future Meetings

Meeting	Date	
interim-2024-nmop-02	2024-09-11 16:00-18:00 CEST	← Anomaly detection

Past Meetings (within the last four years)

Meeting	Date	
interim-2024-nmop-01	2024-06-04 16:00-18:00 CEST	← Digital Map

- *Another interim is likely to be scheduled before IETF#121 (likely on Digital Map)*
- *Drop us an email if you have comments/suggestions about interims*

IETF#120 Hackathons

- [Validate Configured Subscription YANG-Push Publisher Implementations](#)
- [Antagonist (ANomaly TAGging ON hISTorical data)](#)
- [Digital Map for ISIS and OSPF](#)
- [Implement find relationship solution with Augmented-by list in ietf-yang-library](#)

Big thanks to all champions for their dedication and reporting to the WG!

@all: Feel free to reach out the teams or propose new experiments

Misc.

- Open Mic (*if time permits*)

Appendix: Session Goals

Initial WG Priorities: Reminder

- The current topics of focus for the working group are:

  - NETCONF/YANG Push integration with Apache Kafka & time series databases (P1)
  - Anomaly detection (P2.A) and incident management (P2.B)
  - Issues related to deployment/usage of YANG topology modules (e.g., to model a Digital Map) (P3)
  - Consider/plan an approach for updating RFC 3535-bis (collecting updated operator requirements for IETF network management solutions) (P4)

Priority I

2. NETCONF/YANG Push Integration (25 min)

Goals:

- Experiment status update
- Share pending issues
- Next steps

2.1 An Architecture for YANG-Push to Message Broker Integration (20 min)

- *Presenter*: Thomas Graf
- *Reading Material*: draft-ietf-nmop-yang-message-broker-integration
- *IETF 120 Hackathon*: YANG-Push Publisher Implementation Tests

2.2 Q&A (5 min)

Priority II.B

3. Anomaly Detection and Incident management (40 min)

Goals:

- Sync on the approach/rationale and discuss issues related to NMOP terminology
- Report the outcome of the side meeting on NMOP terminology
- Structure the anomaly detection work & agree on a roadmap for the items to be delivered

3.1 Some Key Terms for Network Incident and Problem Management (20 min)

- *Presenters*: Adrian
- *Reading Material*: draft-ietf-nmop-terminology

3.2 Anomaly Detection (20 min)

3.2.2 An Architecture for a Network Anomaly Detection Framework (15 min)

- *Presenters*: Thomas Graf, Pierre Francois, and Vincenzo Riccobene
- *Reading Material*:
  - draft-netana-nmop-network-anomaly-architecture
  - draft-netana-nmop-network-anomaly-semantics
  - draft-netana-nmop-network-anomaly-lifecycle
- *IETF 120 Hackathon*: Atagonist Experiment

3.2.3 Q&A (5 min)

Priority III

4. Issues Related to Deployment/Usage of YANG Topology Modules (15 min)

Goals:

- Share status update
- Agree on the next steps

4.1 Digital Map: Concepts & Requirements (10 min)

- *Presenters*: Olga Havel
- *Reading Material*: draft-havel-nmop-digital-map-concept
- *IETF 120 Hackathon*: Digital Map for ISIS and OSPF

4.2 Q&A (5 min)

Priority IV

5. Collecting Updated Operator Requirements for IETF Network Management Solutions (20 min)

Goals:

- Updates on the NEMOPS IAB Workshop
- Updates and Plans to meet NMOP-specific charter item, especially the following milestone:

> Sep 2024 Adopt a document on updated operators requirements

5.1 NEMOPS IAB Workshop (5 min)

- *Presenter*: Chairs
- *Reading material*: Workshop Proposal

5.2 An Update of Operators Requirements on Network Management Protocols and Modelling (15 min)

- *Presenter*: Luis
- *Reading material*: draft-boucadair-nmop-rfc3535-20years-later
- *Discussion*: Whether this will be submitted as a contribution to NEMOPS or reflect starting point to build NMOP-specific consensus.

Misc.

6. Misc.

6.1 Knowledge Graphs for YANG-based Network Management (10 min)

- *Presenter*: Ignacio Dominguez Martinez-Casanueva
- *Reading Material*: draft-marcas-nmop-knowledge-graph-yang
- *Discussion*: Share plans for experiments, hackathons, link with other items/current WG priorities, etc.

🔗 7. Next Meetings & Wrap-up (All) (5 min)

- Next scheduled interim: September 11 (anomaly detection)
- *Discussion*: Preference to have other interims? Monthly interims dedicated to each items?