Network Management Operations (nmop) WG

July 26, 2024

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 - join the mic queue
 - participate in shows of hands
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- Use of a headset is strongly recommended.



Agenda

Slot	Priority Label	Торіс	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 ☐		I-D Exists WG Document May 2024
☐ draft-ietf-nmop-network-incident-yang-01 ☐ A YANG Data Model for Network Incident Management		I-D Exists 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 202	5 Submit NMOP Terminology to the IESG	
Dec 202	5 Submit Network Incident Management to the IESG	
Dec 202	5 Submit Network Anomaly Management to the IESG	
Sep 202	5 Submit Architecture for YANG-Push to Message Broker Integration to the IESG	
Sep 202	4 Adopt a document on updated operators requirements	will be discussed during this session
Sep 202	4 Adopt a document on network anomaly management	will be discussed during this session

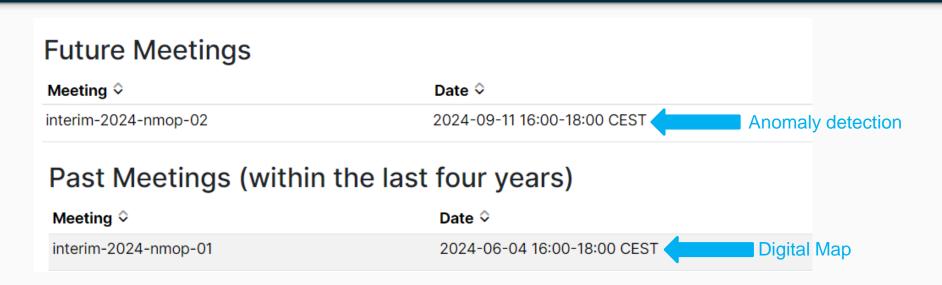
Done milestones

Date ♀ Milestone ♀	Associated documents \Diamond
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
Adopt a document describing how to integrate YANG Push with Apache Kafka	draft-ietf-nmop-yang-message-broker-integration

Liaison Statements

Date ♀	From 🗘	То ≎	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 <u>IETF Network Management OPerations Working Group LS to TMF on "TMF724A Incident Management API Profile"</u> Action needed
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 Response to "LS on initiation of a new work item ITU-T Y.FunArch-INSA-FL" Action needed

Interim Meetings: Past & Future



- 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

Three of current WG's priorities are covered by hackathons, with on site participants

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)
- O 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)



Covered by Hackathons, with on site participants

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:
 - o draft-netana-nmop-network-anomaly-architecture
 - draft-netana-nmop-network-anomaly-semantics
 - o draft-netana-nmop-network-anomaly-lifecycle
- IETF 120 Hackathon: Atagonist Experiment

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?