

IAB Workshop: Next Era of Network Management Operations (NEMOPS)

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RFC 3535, Overview of the 2002 IAB Network Management Workshop

The IAB organized a workshop in June 2002 to establish a dialog between network operators and protocol developers, and to guide IETF when working on network management protocols.

2. Network Management Technologies
 - 2.1 SNMP / SMI / MIBs
 - 2.2 COPS-PR / SPPI / PIBs
 - 2.3 CIM / MOF / UML / PCIM
 - 2.4 CLI / TELNET / SSH
 - 2.5 HTTP / HTML
 - 2.6 XML
3. Operator Requirements
4. SNMP Framework Discussions
5. Consolidated Observations
6. Recommendations

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RFC 3535 (In)Direct Outcomes

- NETCONF
 - RESTCONF
 - CORECONF
 - YANG data modeling language
 - Etc.
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- => NETCONF, NETMOD, and other WGs

In summary: New protocol (NETCONF) and new data model (YANG)

NMOP Working Group: 4 Experiments

The current topics of focus for the working group are:

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

It's time to review where we are (again)

An(other) IAB Workshop

Next Era of Network Management Operations (NEMOPS)

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Objectives:

- **Review the outcomes** and results of the 2002 workshop (current deployments, state of the art) and **identify any operational barriers** that prevent these technologies from being widely implemented (limitations, hurdles).
- **Sketch new requirements** for future network management operations in a collaborative manner with the industry, network operators, and protocol engineers.
- Develop a **plan of action and recommendations** for the IETF.

Interested participants in this area are invited to submit position papers on the workshop topics.

IAB Workshop Proposal: Topics

Discussion topics:

- Tooling, opensource, experimentation, proof of concept, multi-vendor interoperability test (e.g., EANTC), and system integration
- Data consistency to support richer observability (Data & Knowledge)
- Integration issues with the business layer
- Automation, orchestration, and autonomy
- ... **etc** ...

Outreach efforts:

- Information and requirement gathering sessions.
- RIPE, NANOG, APRICOT, AutoConn, etc.

- Datatracker : <https://datatracker.ietf.org/group/nemopsws/>
- E-mail list: nemops-interest@iab.org
- Workshop Dates: 2024-12-03, 2024-12-04, 2024-12-05
- Program Committee:
 - Wes Hardaker, Qin Wu, Suresh Krishnan,
 - Benoît Claise, Mohamed Boucadair
 - Mahesh Jethanandani, Dhruv Dhody
- Feel free to contact them: nemops-workshop-pc@iab.org.