

Flash Prez @NMOP

IETF#121, Dublin

A YANG Template Framework (Robert Peschi)

[draft-rajaram-netmod-yang-cfg-template-framework](#)

Issue:

- YANG models for large scale systems don't scale !
- Need solution to scale-up models for use in embedded systems

Proposal:

- Optimize the YANG model structure + reduce data store size using a **template technique**
- Useful in case many instances of the same configuration are replicated with limited config variations (e.g. hardware sub-system replicated many times)

Why NMOP:

- Scalability is an operational issue
- Draft addresses managing the complexity of large-scale network configurations
- Draft does not require NETCONF / YANG enhancements

Next steps / expectations:

- NMOP to provide insights based on deployment experience
- Gain feedback and support
- Collaborate on developing pragmatic solutions based on modular and scalable YANG modules

AI based Network Management Agent (NMA): Concepts & Architecture (Xing Zhao)

<https://datatracker.ietf.org/doc/draft-zhao-nmop-network-management-agent/>

Issue:

When introducing AI for network management, how to integrate AI and deal with the relationship with the existing network management entity is the key issue. This draft is to provide feasible solution of introducing AI to network management and effectively promote the mature application of AI in network management.

Proposal:

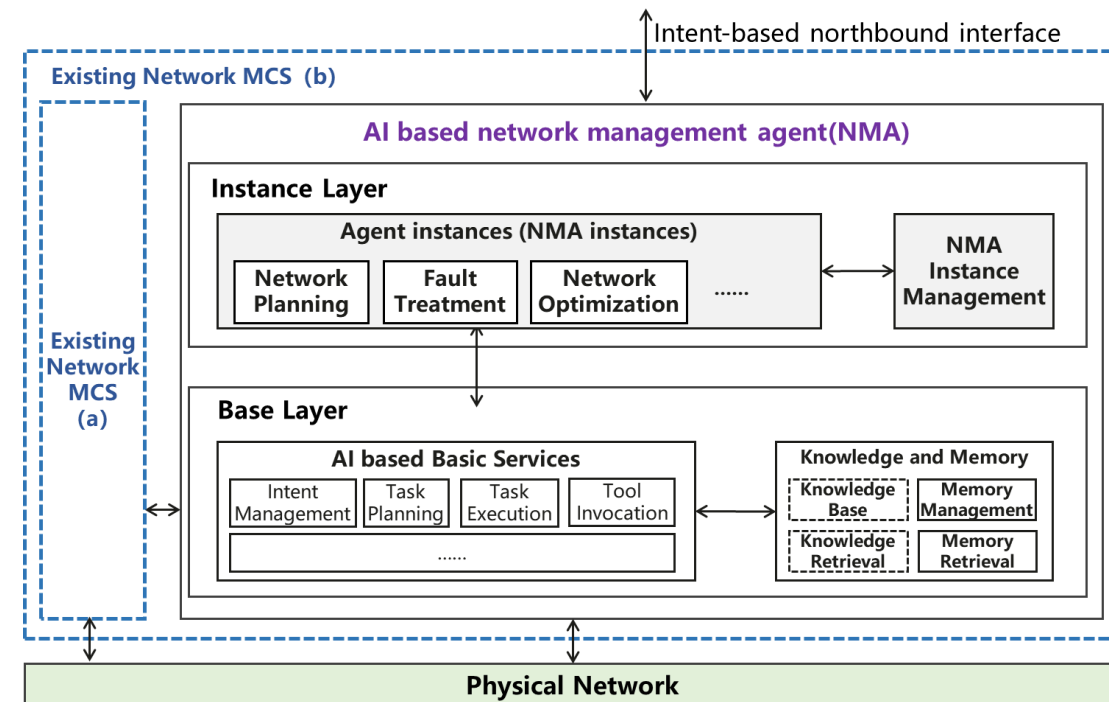
- Concept of AI based network management agent (NMA)
- Basic definition and reference architecture of NMA
- Relationship of NMA with traditional network controller or other network management entity by exploring the deployment mode of NMA.
- Common processing flow.
- Typical application scenarios.

Why NMOP:

The document is directly related to network management area and is consistent with the scope of NMOP.

Next steps /expectations:

Any feedbacks or contributions from NMOP are sincerely welcome!



NETCONF YANG-Push Observability (Rob Wilton)

- YANG Push standardized as RFC 8639, RFC 8641, 5 years ago
- Much more industry traction now (i.e., running code)
- But the running code doesn't match the specification
- RFC solution isn't optimized for observability requirements
- Hence, gathering interest in **YANG Push Lite**:
 - **Optimized version of YANG Push for observability**
 - **Same base idea, similar config & paradigm, removes features/complexity**
 - **Maybe a bit more alignment towards gNMI functionality**
- Presenting in **NETCONF**
- **Meetings planned after IETF 121. Can we move fast?**

A Teaser on the Coming ETSI TC DATA (Diego Lopez)

- Intended to address open data infrastructures
 - Support the autonomous use of data by agent applications
 - And by any other data-driven technology
 - FAIR principles: **F**indable, **A**ccessible, **I**nteroperable, **R**eusable
 - Data governance: Access control, consistency, privacy preservation
- Consider the three dimensions
 - *Connectivity*: data transported through space - Data in transit
 - *Storage*: data transported through time - Data at rest
 - *Compute*: data acted upon - Data in process
- *A group working directly to the data management at service level, and creating best practices for the data management for the groups that are working at network level*
 - Direct connection with modeling activities in NMOP
 - Digital map, serialization, provenance, incidents...
 - And seeking for an active collaboration

