
# AI for Network Management

## Summary of Activities, Draft Updates

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**NMRG @ IETF 105**

**Thursday, July 25, 2019（令1）**

# Updates on Intelligent Reasoning (I)

- Reworked from the general application of AI to NM.
  - How can we step forward beyond ML?
  - How should AI be introduced in NM?
  - How would AI be really exploited?
- Remarked the involvement of external events:
  - Control plane – network itself.
  - Management plane – environment beyond the boundaries of the network.
- Exploiting intelligent reasoning:
  - Reason actions from external events.

# Updates on Intelligent Reasoning (II)

- Introduced the gaps and standardization issues:
  - Methods from different providers/vendors must be able to coexist and work together, either directly or by means of a translator.
  - They must, however, use the same concepts, albeit using different naming, so they actually share a common ontology.
  - Information retrieval must be assessed for quality so that the outputs from AI reasoning, and thus management solutions, can be reliable.
  - Ontological concepts must be consistent so that the types and qualities of information that is retrieved from a system or object are as expected.
  - The protocols used to communicate (or disseminate, or publish) the information must respond to the constraints of their target usage.
- Relation to other initiatives:
  - ENI...

# Call to NMRG

- Refine design principles for automated NM solutions:
  - Extend the management plane to events occurring beyond the boundaries of the managed network.
- Formalized formats for the management of DIKW:
  - Within and outside a DB, cooperating with ETSI/ENI.
  - Including telemetry information.
  - In coordination with the formalization of intent.
- Design and validate protocols and interfaces for exchanging DIKW.

**Anybody interested?**

# Thanks for Your Attention

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# Questions?

– EOF –