Network Measurement Intent

draft-yang-nmrg-network-measurement-intent-00

https://datatracker.ietf.org/doc/draft-yang-nmrg-network-measurement-intent/
Intent based network framework

draft-irtf-nmrg-ibn-concepts-definitions-02

Recognize/generate intent → Translate/refine

Learn/planning/render → Configure/provision

Validate

Analyse aggregate

Monitor/observe

Report

Abstract
Network measurement intent

- Based on user/network operator's demand for network status
- Automatic collection of network status information on demand

- Taking the performances of busy network measurement intent as an example

- Determine the network busy time of the day based on historical data learned by AI.
- Determine the content need to be measured

Based on the required measurement content
Based on equipment support degree

Determine the measurement

Verify whether the measurement scheme is feasible.
Network measurement intent

- Determine whether the network is busy

  YES

  Perform automatic network deployment, such as in CLI mode.

  • The network measurement data is collected automatically.

- Verify whether the threshold meets the requirement
- Verify whether the network measurement intent is satisfied

Either of the two conditions is not satisfied

  • Report the result
  • Modify the network measurement intent
Benefits

• **Automation:** Realize automatic network measurement and automatic analysis of measurement results

• **Intelligence:** Realize intelligent anomaly detection, anomaly prediction and automatic repair when the measurement result is not in conformity with the expectation

• **Closed-loop control:** Continuous optimization of network measurement results based on network measurement intent
Next Steps

• To refer IBN reference framework, then update the manuscript and refine the implementation steps in the corresponding functions.

• To work with IBN use case team, then incorporate this case into the coming draft of IBN use case.

• Looking forward to the comments, suggestions and questions.

Thanks!