Network Telemetry Framework

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Recap the Network Telemetry Framework

Different monitoring entity & object
Different data source
Different data export location

Management Plane Telemetry
Device configuration and operation status
NETCONF
gRPC

Control Plane Telemetry
Routing protocol, RIB
BMP

Data Plane Telemetry
User traffic
iOAM
sFLOW

External Data Telemetry
Social event, App info
Clarify the Purpose and Scope of the Draft

- Show the trend and clarify misunderstandings
  - Not only for management plane, but also for control plane and data plane
  - Not only for data export (e.g., streaming), but also for data generation, processing, encoding, storage, and analysis
- Map existing protocols/techniques and identify challenges/gaps
- Not mean to deprecate conventional OAM, but to complement it and enhance network visibility and operation
  - Acknowledge that protocol/technique is also evolving
What’s new

- Revise and restructure based on comments and suggestions from Adrian Farrel, Randy Presuhn, Uri Blumenthal, Daniel King, Joe Clarke, and many others
  - Add a new introduction section
  - SNMP trap notification with two references
  - Interaction between different planes
  - Many other minor modifications
- Evolution of Network Telemetry System
  - Static $\rightarrow$ Dynamic $\rightarrow$ Interactive $\rightarrow$ Closed-loop
Discussion and Next Steps

- Discussion
  - Is this work useful?
  - What need to be modified or corrected?
  - What else need to be included?
- TBD
  - Security considerations
- Call for WG adoption