

# NETWORK STATE COLLECTION, CORRELATION & ANALYTICS WORKING GROUP 2015



Open Networking  
USER GROUP

## ONUG Network State Collection, Correlation and Analytics Top 9 Requirements

1. A Network State **Collection function** to support collecting state data from SDN Controllers and Data Plane Elements with a scalability of at least 1000 devices and/or endpoints.
2. A Network **State Correlation function** to support state information aggregation, formatting, storage and correlation for a wide range of SDN Controllers and Data Plane Elements that can scale to tens of thousands of metrics support.
3. A Network **State Correlation function** to support state information aggregation, formatting, storage and correlation for a wide range of **compute and storage** devices, services and software modules.
4. A network state **database** to store data that is collected and accessible across the enterprise via network analytics function.
5. A **Network State Analytics** function to support **big-data analytics** and algorithms.
6. A **Network State Analytics** function to integrate with **orchestration systems** to take action on the analytic result.
7. A Network State “**Pretty Amazing Stuff**” (PAS) function to support Network State Collection, Correlation and Analytics extensibility through additional information and open interfaces.
8. An set of **Open southbound** and **northbound** interfaces for state information transfer between **Network State Collection, Correlation to Analytics Functions** to support state information transfer.
9. An **Open API or Interface** between **orchestration systems** and “**Pretty Amazing Stuff**” (PAS) Function to support automated orchestration/ configuration of Network Analytic results.

## **ONUG Network State Collection, Correlation and Analytics Top 9 Use Cases**

1. Query Optimal Service Function or Workload Location
2. Query Assessment of Service Function or Workload Modification
3. Query Real-Time Configuration Analytics
4. Query Real-Time Topology Analytics
5. Query Predictive Analytics
6. Query Real-Time Performance Analytics
7. Query Real-Time Fault Analytics
8. Query Real-Time Security Analytics
9. Measure SLA Compliance