Service Assurance for Intent-based Networking Architecture

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YANG Modules for Service Assurance

draft-ietf-opsawg-service-assurance-architecture-03
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One Slide Summary

• Issues:
  – When a service degrades, where is the fault? What are the symptoms? What is the root cause?
  – When a network component fails, which services are impacted?

• Service Assurance for Intent-based Networking Architecture proposal:
  – Decompose the problem into smaller components (=subservices)
  – The assurance graph links those subservices to map the service « intent »
  – The subservices are assured independently
  – Infer a service health score

• This complements the end-to-end monitoring
Architecture Draft: Update in v 03

Circular Dependencies

• In version 2, we covered circular dependencies
• In version 3, we integrated an example

We consider a concrete example to illustrate this transformation. Let's assume that Engineer A is building an assurance graph dealing with IS-IS and Engineer B is building an assurance graph dealing with OSPF. The graph from Engineer A could contain the following:

Figure 4: Fragment of assurance graph from Engineer A

The graph from Engineer B could contain the following:

Figure 5: Fragment of assurance graph from Engineer B
Subservice Health Score modeled as union, with “missing”
Existing Implementations

1. DxAgent, Liège University (Benoit Donnet and team), presented at IETF 110
   [https://github.com/Advanced-Observability/dxagent](https://github.com/Advanced-Observability/dxagent)

2. Cisco prototype

3. Huawei prototype
Status

• Thanks to those who provided/will provide feedback (Eliot Lear and others)
• No more open issues
• The authors believe the draft is ready for WGLC