OAV@Geant

TNC_21 OAV BoF

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Why looking at OAV?

Geant IP/MPLS network now:
• 35 Juniper MXs nodes and growing (and switches, CS etc...)
• About 19K (on average) lines of configuration per node
• New deployments for GN4-3N network

Use case:
• Routers and services deployment
• Configuration management

Users:
• Geant Engineers
Goals

• Maintain single source(s) of truth
• Separate data and business logic from vendor CLI
• Simplify procedures
• Integrate change tracking in the normal workflow
• Roll out the new GN4-3N network (yes, it is happening!)
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Tools: Git, Ansible, Jenkins
Deploying a new node: base config

- Generated as an artifact in Gitlab
- Config template + node variables
- Applied to Routers, Switches, CS
Deploying a new node: populate tools

- Daily operations
- Service deployment
- Operational readiness
- New node in the field
Deploying services

- Standalone playbooks to deploy services:
  - CFS: R&E access/IAS access/MDVPN
  - RFS: Backbone links/private peer
Keep configuration consistent

- Daily operations
- Service deployment
- Operational readiness
- New node in the field
Service modeling: SPA integration

• Service playbooks use local data (unrelated to golden config)
• Modelling services is a necessary step
• SPA has an inventory component, we want to integrate it with Ansible
Thanks!