



# 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!)



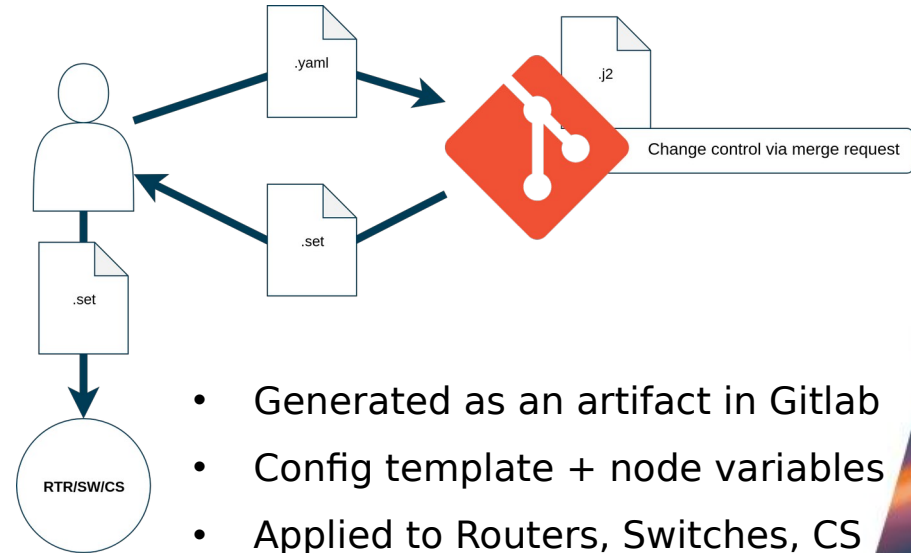
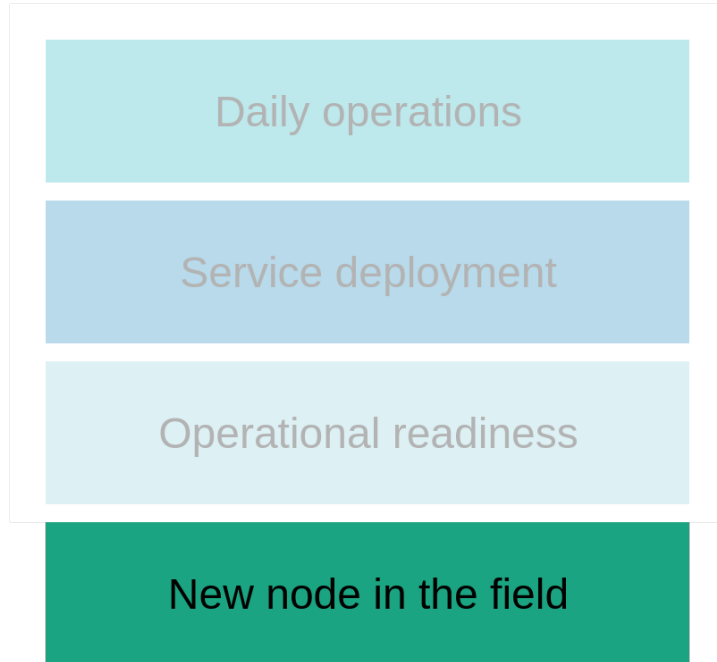
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Tools: Git, Ansible, Jenkins

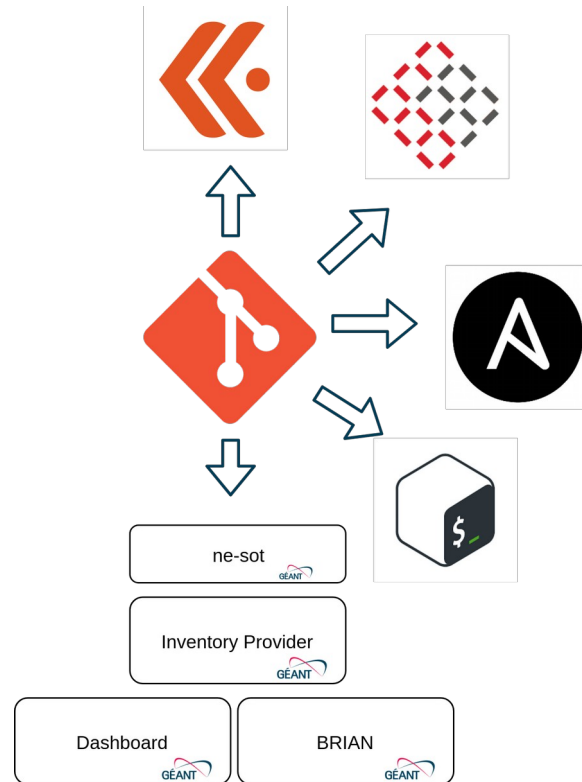
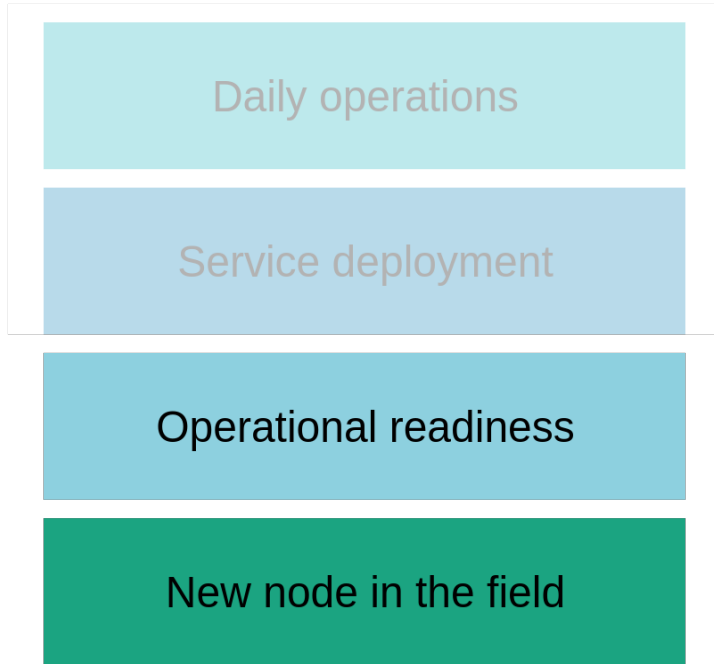


# Deploying a new node: base config





# Deploying a new node: populate tools





# Deploying services

Daily operations

Service deployment

Operational readiness

New node in the field

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



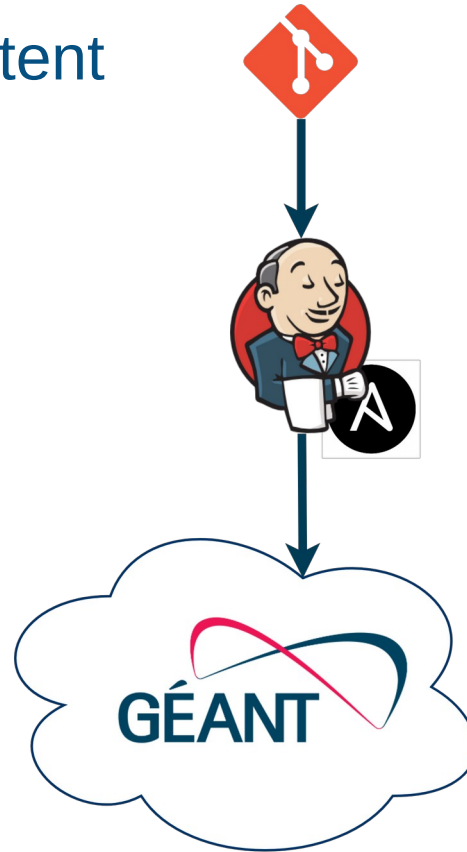
## Keep configuration consistent

Daily operations

Service deployment

Operational readiness

New node in the field

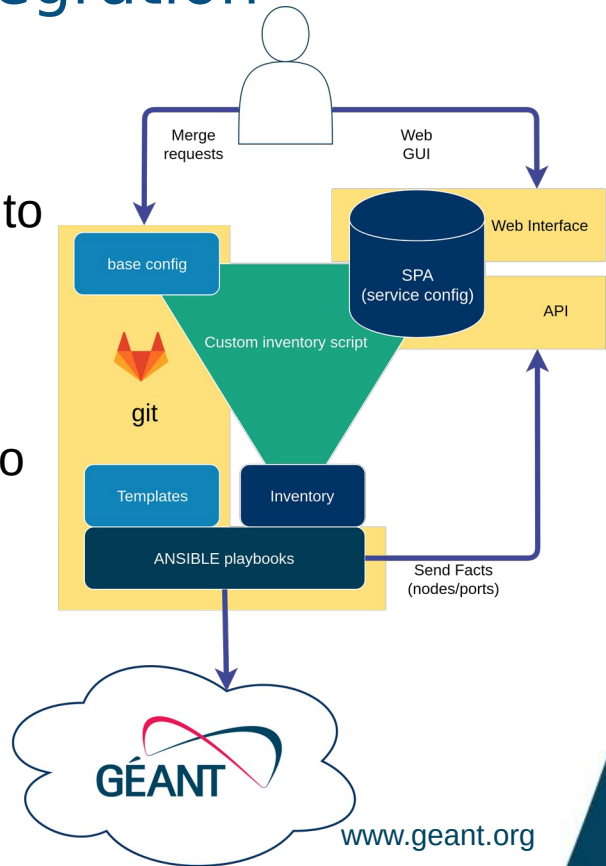






# Service modeling: SPA integration

- 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!

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