NAF
NETWORK AUTOMATION FORUM

ALTEPRO

GitOps the Hard Way

Rebuilding a Source of Truth for an EVPN Fabric (Three Times)

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AUTOCON 5

THE NETWORK AUTOMATION CONFERENCE

CRA DC Migration



BEFORE:

- Legacy DC services
- Unicast + multicast variants
- No service catalog
- Knowledge in people and configs

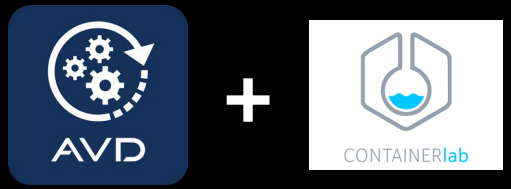
AFTER:

- EVPN/VXLAN fabric
- Explicit service model
- Fabric & Service SOT
- CI driven changes

· 2 DCs · ~40 ARISTA switches · automated from day one

False Confidence

- Dual-DC fabric in Containerlab: running after a few days
  - ARISTA AVD – ready to use YAML data model



“Maybe AVD will do all the work for us?”

Before Migration: Define the Service Model

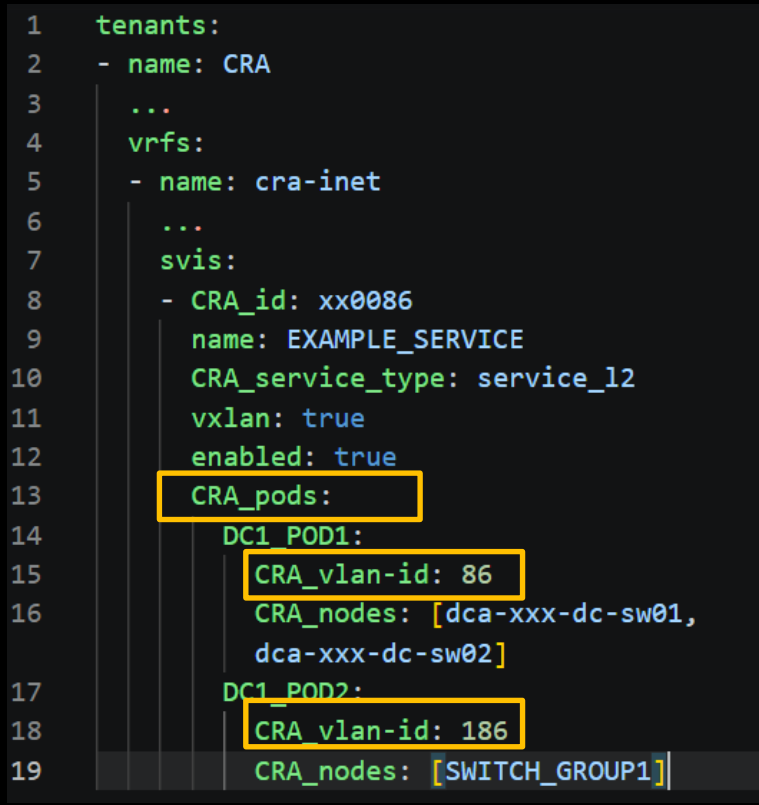
There was no catalog to import. We built one with CRA.

- 1. Define service catalog
  - types / variables / model schema
- 2. Fill migration workbench
  - existing services → structured rows in xlsx
- 3. Design migrator.py
  - xlsx → CRA service YAML (service SOT)

The Model Fought Back

- service identity = global
- VLAN/VNI mapping = POD-local

→ CRA SOT abstraction
→ translator.py
→ AVD data model



From Service Model to Config: Two Phases

- **Phase 1: Migration** *(make migration possible)*



Phase 2: Day 2 Operations *(make operations safe)*

- *Operator edits*



CRA **SOT**
service intent

AVD data model
config data

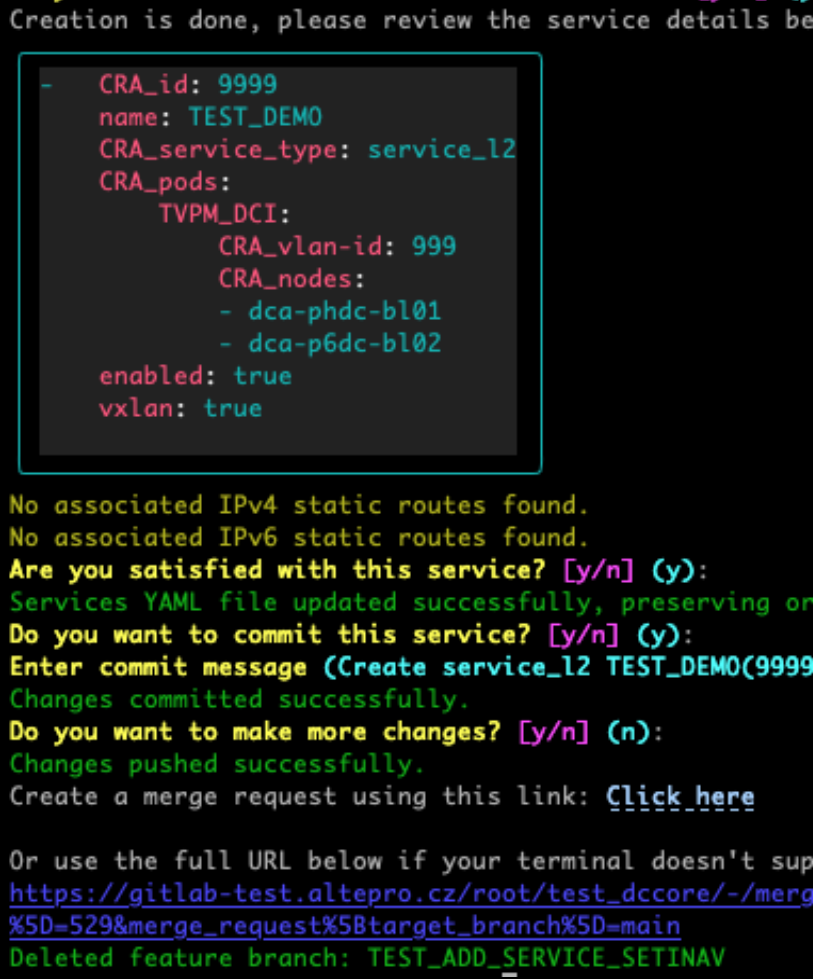
change
control

fabric

```
CI pipeline:  validate    · translate     · build     · deploy
Day 2 tools:  avd-editor · avd-validator · avd-finder
```

One Year Later

- The editor helped. The validator mattered.
- Operators run it daily
  - guided editor or YAML
  - Git/MR workflow
  - avd-finder became essential
- Cleaner data + mindset change



edit → commit → MR → validate → translate → build → deploy

What We Learned

Not three rewrites → Three levels of understanding.

- Fabric is easy → legacy services are hard to model
- Service intent needs its own abstraction
- SOT → validation → workflow

We didn't just hand over a fabric.
We built a way to run it safely — every day


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Questions?

CI Workflow (backup slide)

