



OCAS

Operator Cloud Automation Solution

T-ELS SSQ One Automation
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OCAS – Declarative orchestration of Network Functions

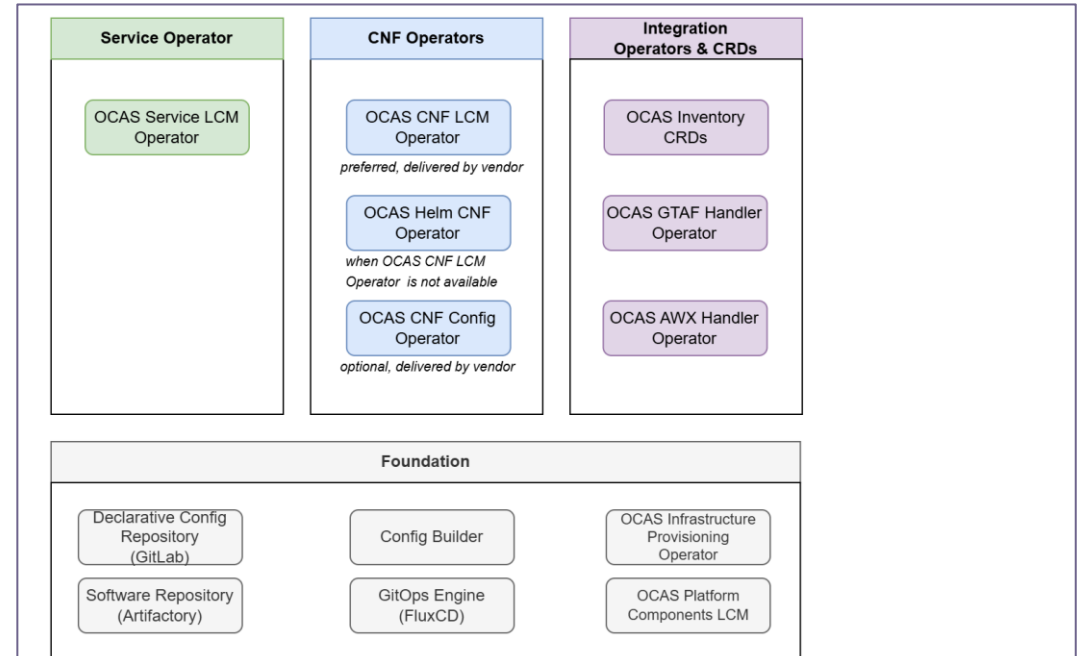
Problem

- **Need for cost efficient automation solutions for CNF LCM and configurations in multi-vendor networks**
- **Comprehensive automation for complex CNFs is typically found in supplier automation silos**
- **Integration into CSP ecosystem requires custom solutions**

Solution

Kubernetes Operator (based) Cloud Automation Solution

- **A suite of k8s operators which manage the CNF LC e2e**
- **Well defined interfaces for CNF LCM operators from vendors**
- **Declarative and intent-driven network operations**
- **Optimized CNF delivery process**



CNF LCM: handles internal CNF procedures and dependencies

Service LCM: orchestrates compositions of multiple CNFs and their external dependencies

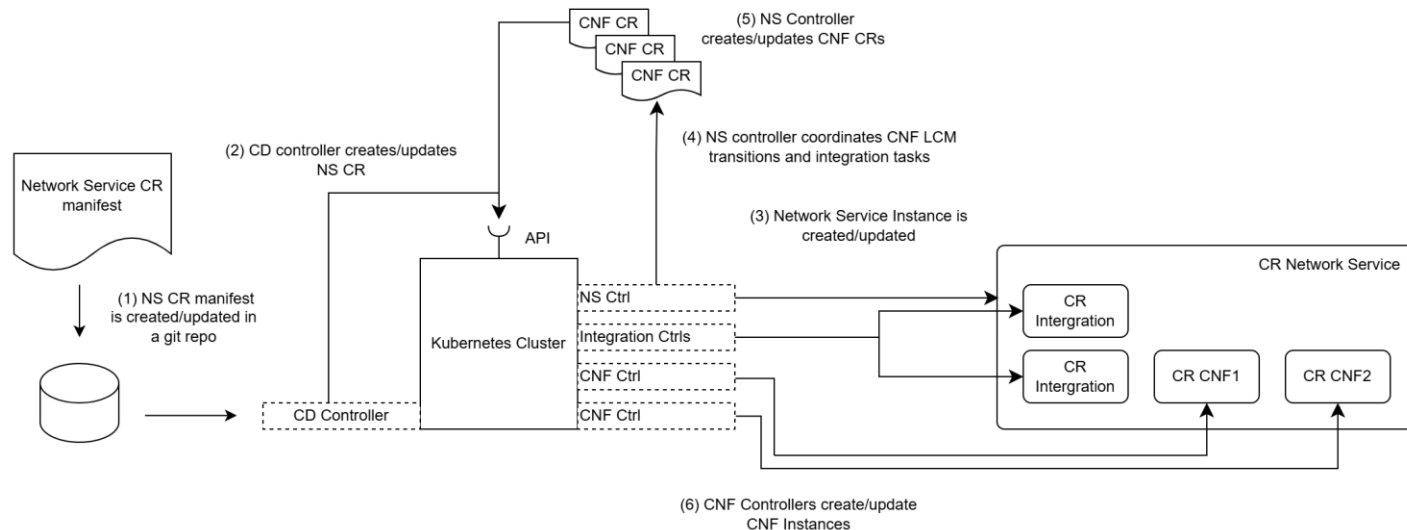
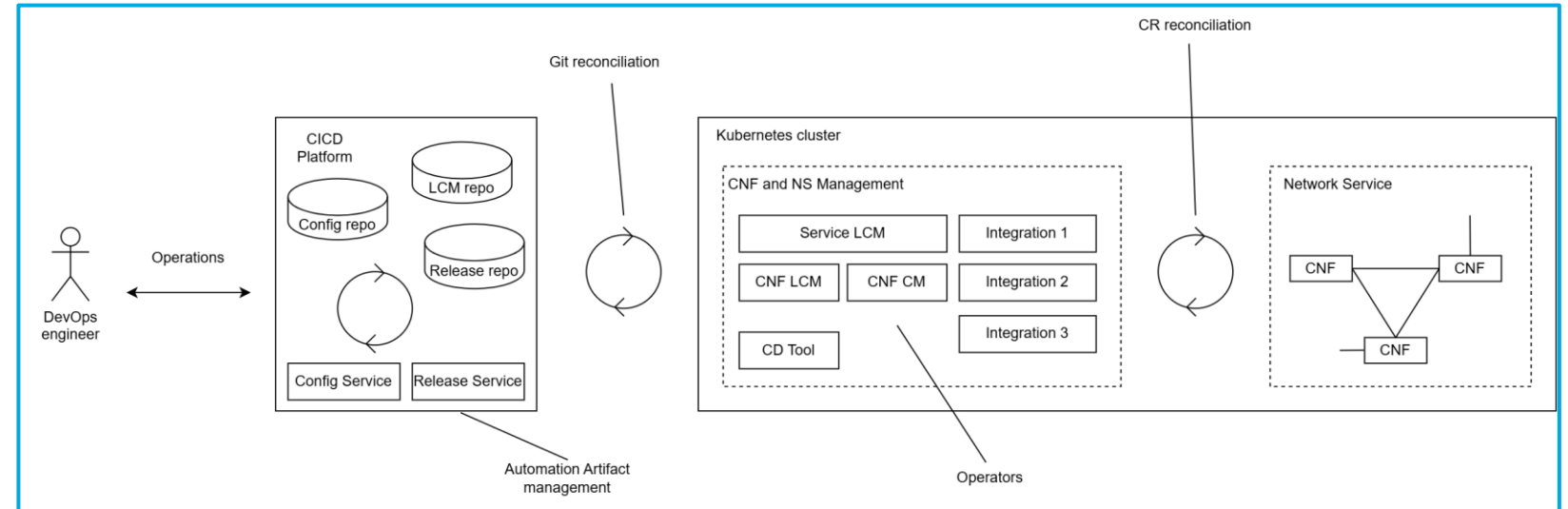
Integration operators: execute tasks for integration of the CNF in the environments

ConfigBuilder: generates executable automation artefacts from generic vendor deliveries

OCAS – Declarative orchestration of Network Functions

OCAS used in a typical GitOps setup

- CI/CD services hydrate generic artefacts from the suppliers and create site-specific ones
- DevOps defines the desired network state in OCAS service manifest in git
- OCAS brings the NS into the desired state



Declarative Network Operations with OCAS

- CNF Supplier LCM operator is integrated with OCAS
- OCAS Service manifest is the model describing the NS LCM behaviour
- OCAS Service dynamically generates CNF LCM CRs within the cluster