

# **ONAP Short Overview**

**Pavel Paroulek**

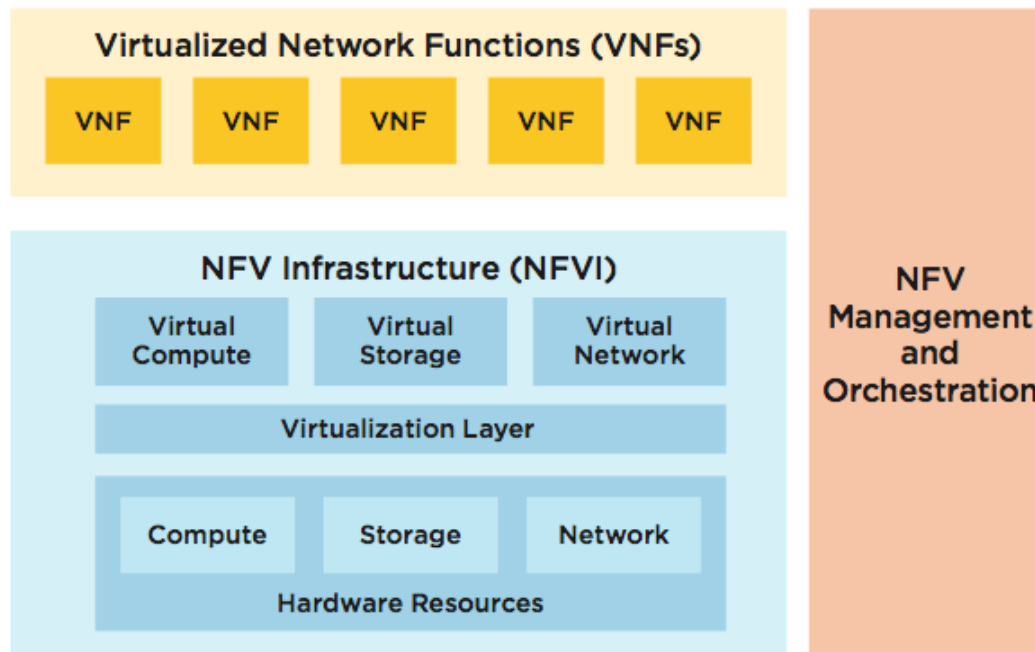
**2019**

# What is ONAP

- ONAP is the platform above the infrastructure layer
- launched in 2017 by Linux Foundation with AT&T, China Mobile and other vendors
- merge of ECOMP and Open-O projects
- VNF/SDN solution

# What is a VNF?

- Service consist of VNFs which consist of VFs
- services modeled in TOSCA



Adapted from ETSI publication GS NFV 002: Network Functions Virtualization (NFV); Architectural Framework

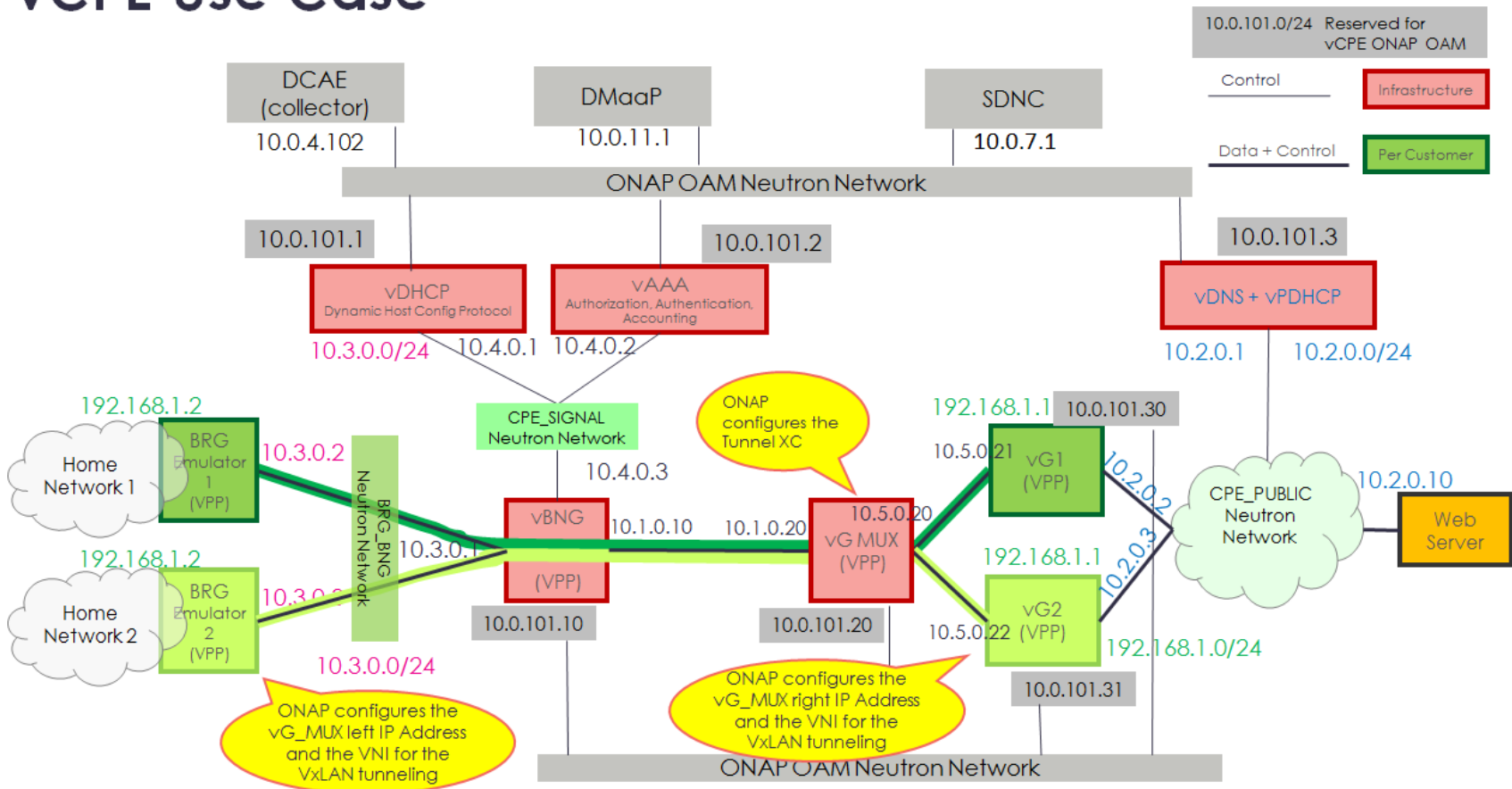
HIGH LEVEL NFV FRAMEWORK

# Real-world example vCPE

- virtualizes connectivity and broadband services for enterprises and individuals
- Internet access, IPTV, VoIP
- routers, set-top boxes, VPNs, DHCPs, firewalls
- VNFs representing the network elements hosted at customer site or externally (e.g. cloud)

# Real-world example vCPE

## vCPE Use Case



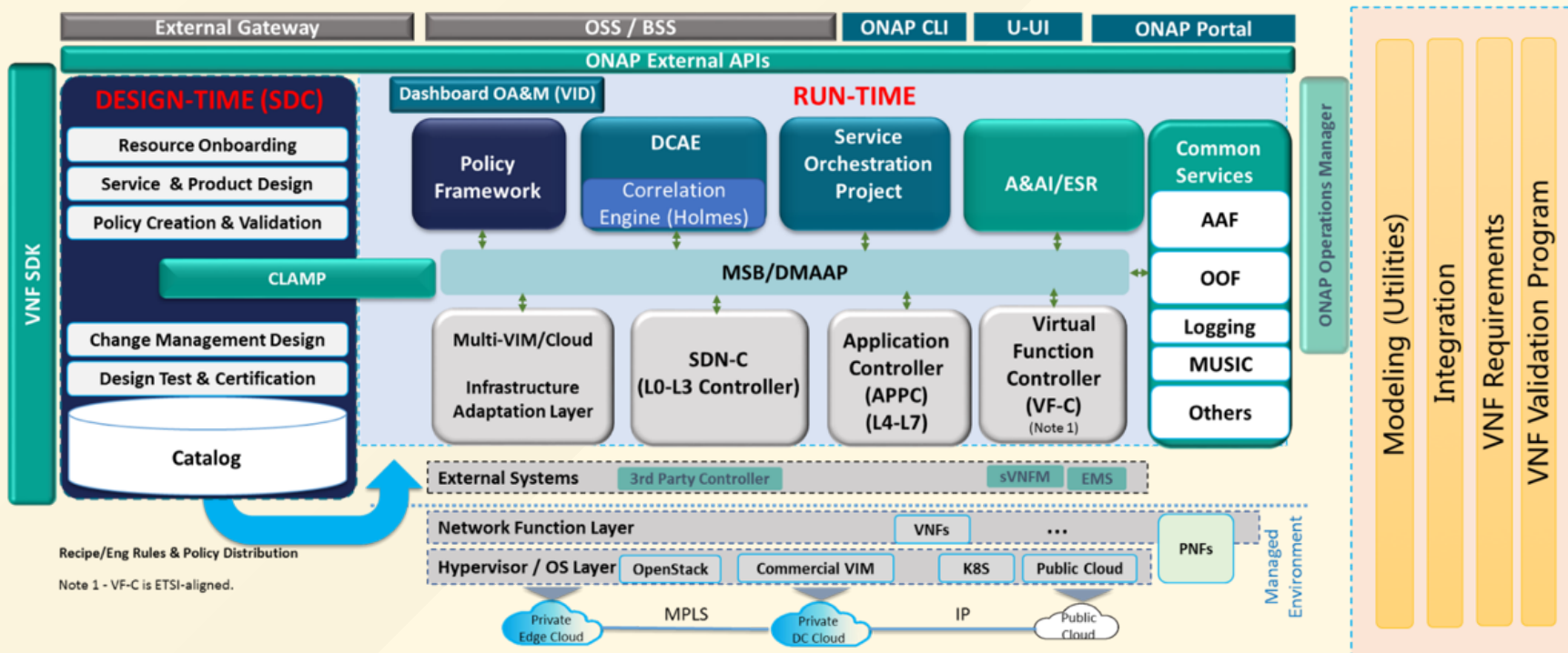
# Design time environment

- VNF validation
- service design
- analytics
- policy (access control, affinity)
- workflows (business processes e.g. upgrades)

# Run time environment

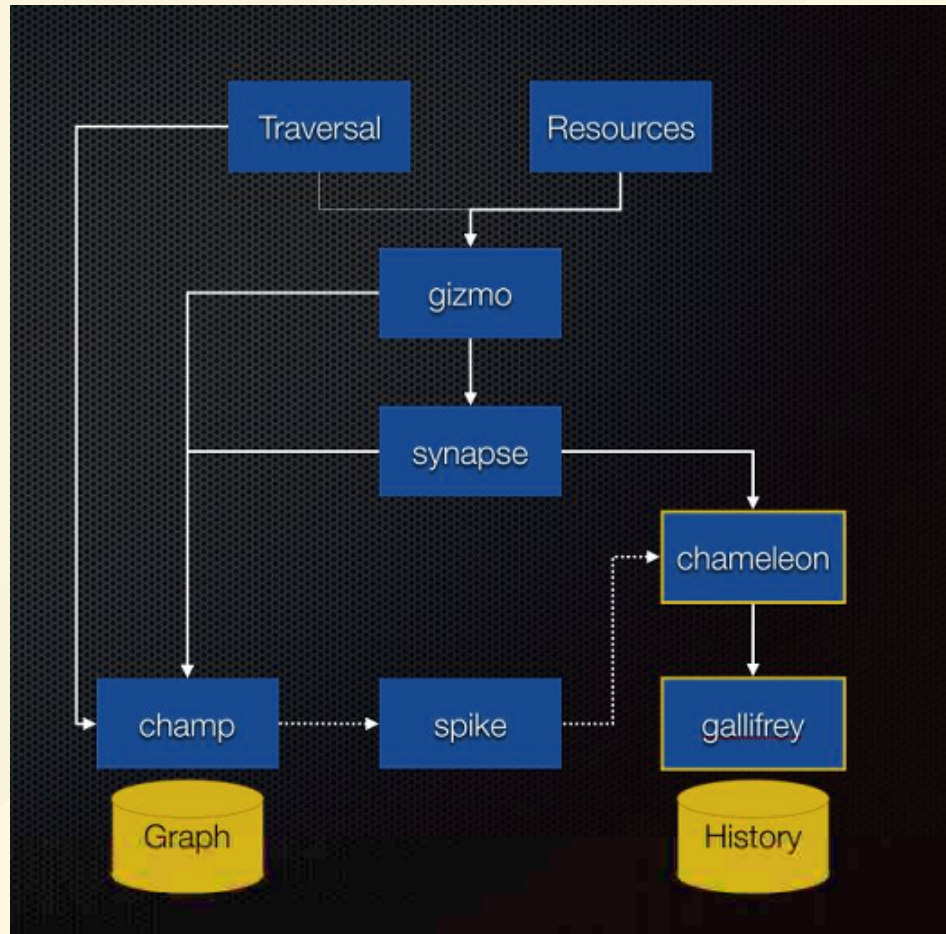
- Service orchestration (mapping service <-> VNFs)
- VNF Controller (lifecycle of VNFs like deployment, configuration, self-healing, scaling)
- SDN Controller
- Data collection and analytics
- Inventory Storage

# ONAP architecture





# Inventory system architecture



**Questions?**