



INTEGRATING CORD and ONAP

January 2018



Background

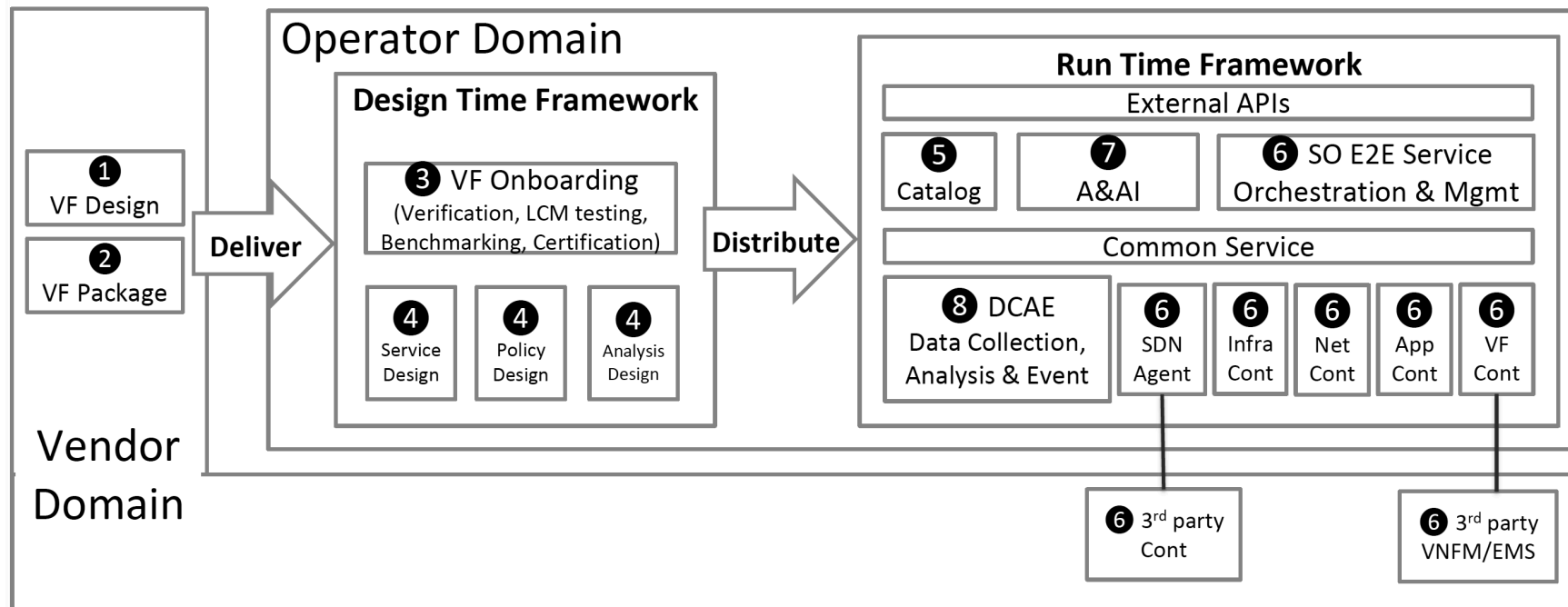
—
NO PREINSTALLED SERVICE

ONAP comes
with
**no preinstalled
service**
—

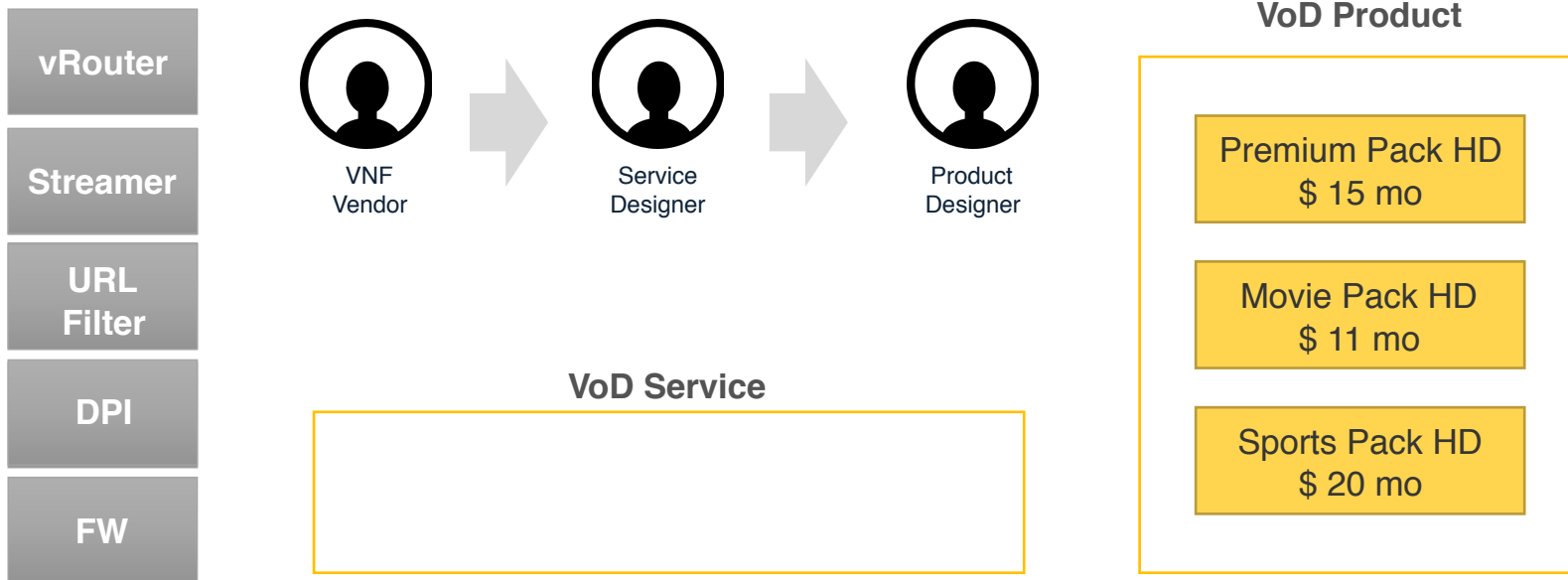
ONAP

Cloud Infra

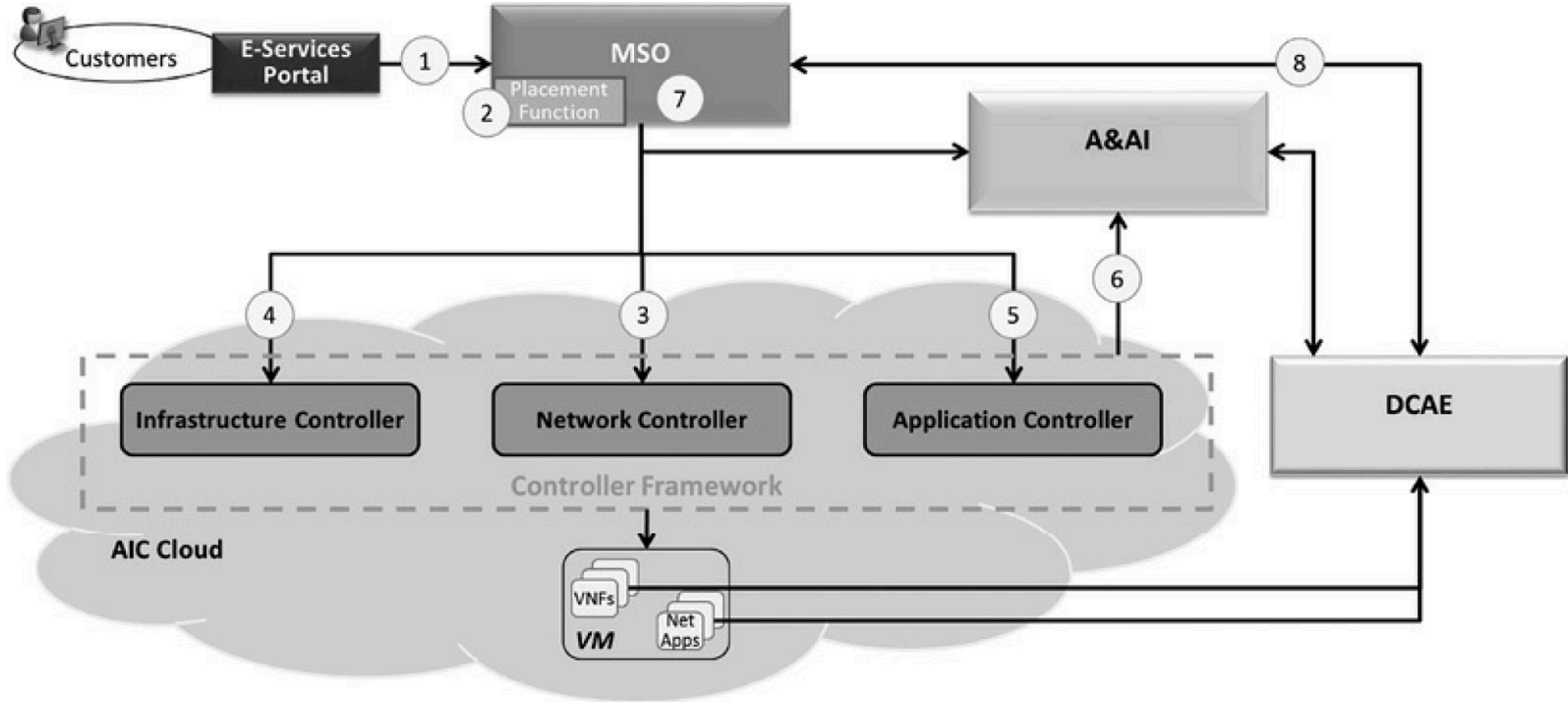
Onboarding - Design - Execution - Runtime Flow



IN OTHER WORDS...



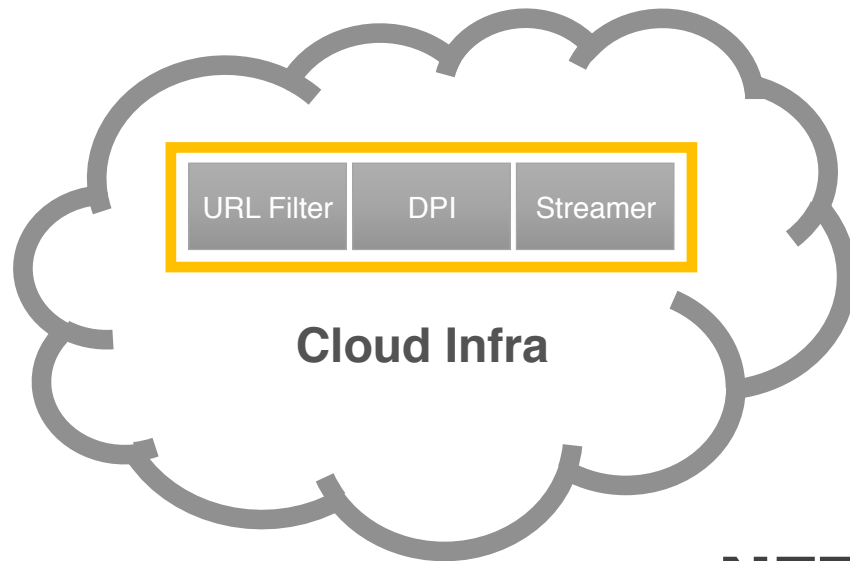
Service Instantiation High Level Use Case



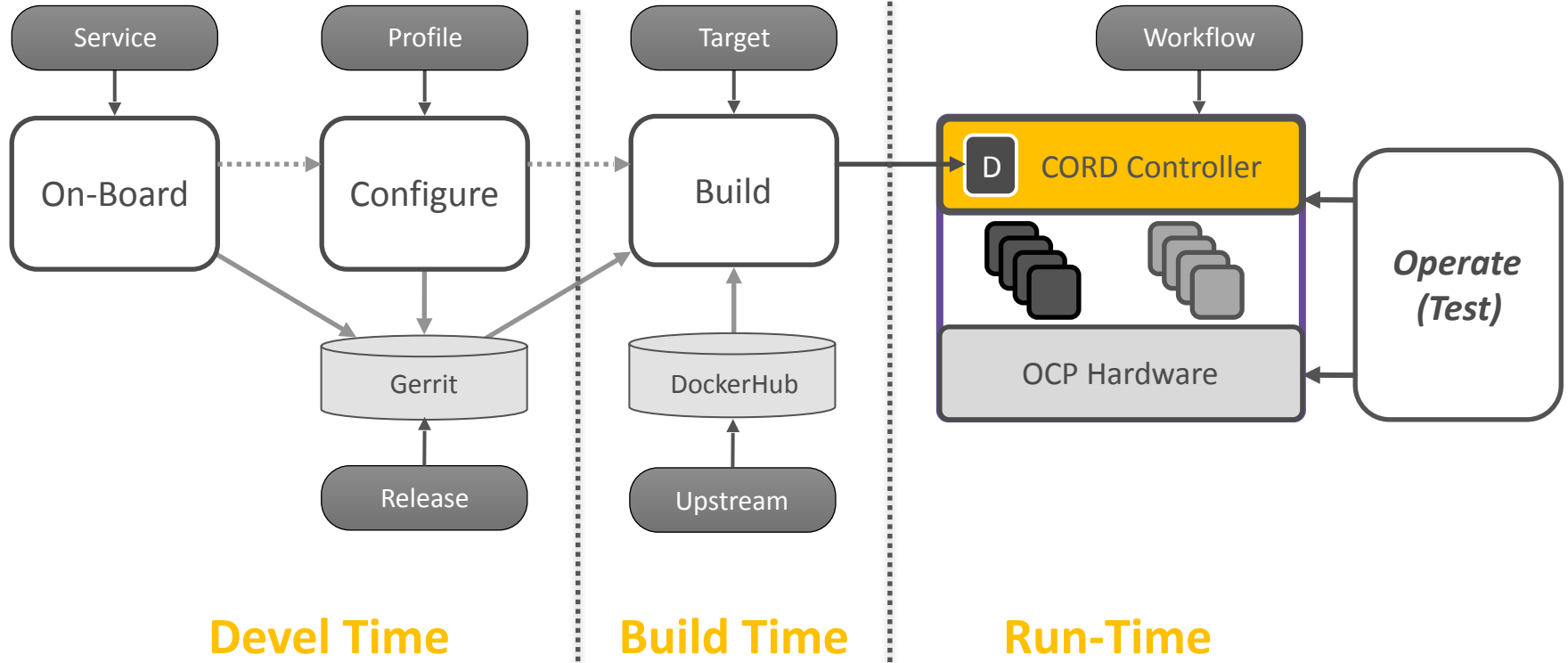
SERVICES ARE DYNAMICALLY INSTANTIATED

ONAP onboards
and intantiates
VNFs
dynamically

ONAP



CORD's Multi-Stage Pipeline

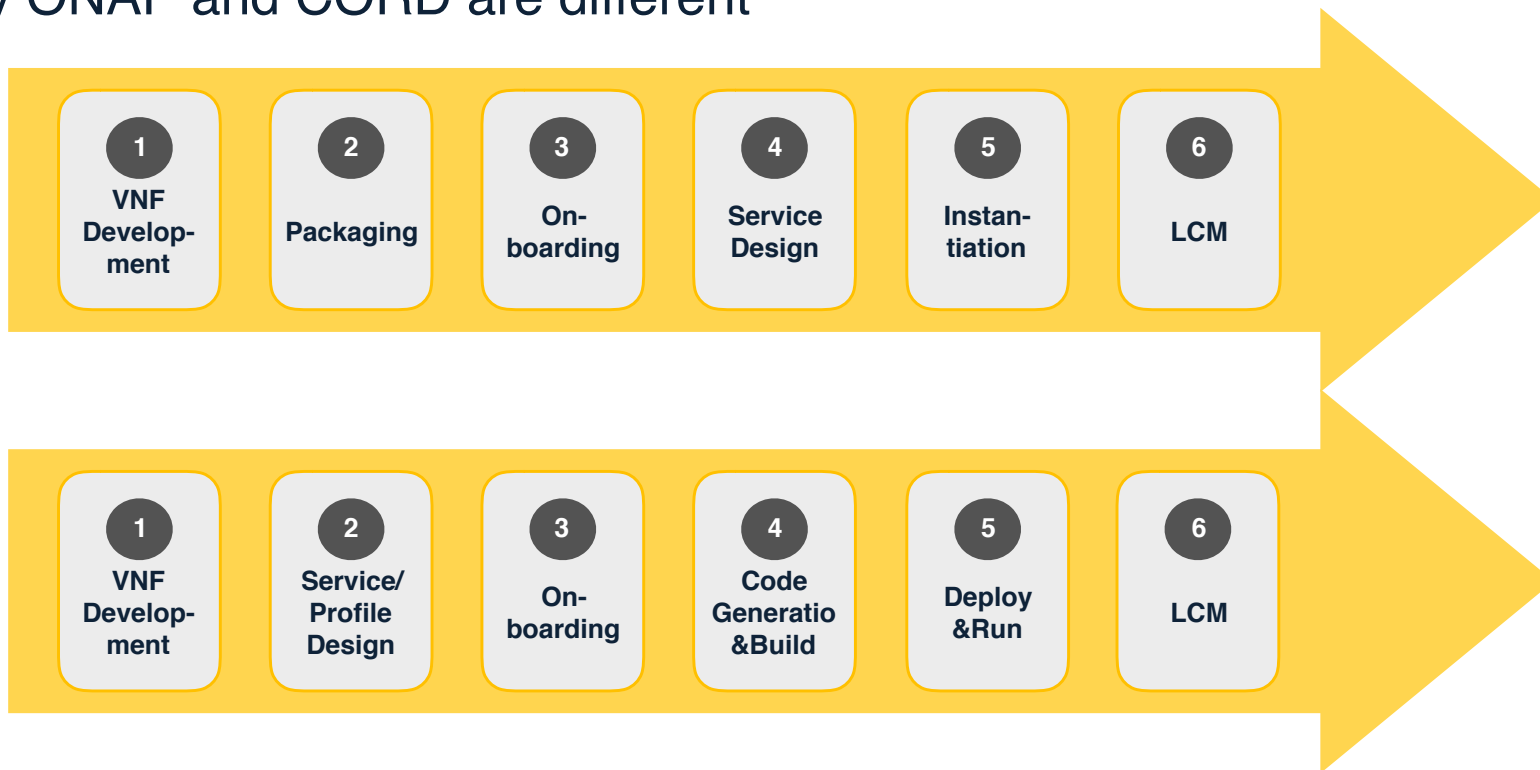


Dev Time

Build Time

Run-Time

Today ONAP and CORD are different



ONAP vs CORD (today)

	CORD	ONAP
VNF Design and Development	Community	3rd parties
VNF Onboarding	@ development time	HEAT & TOSCA
Service Design	@ development time	Micro Services Based
Service Onboarding	@ deployment time / Runtime	@ Runtime
Service Provisioning	@ Runtime	@ Runtime
Service LCM	@ Runtime	@ Runtime

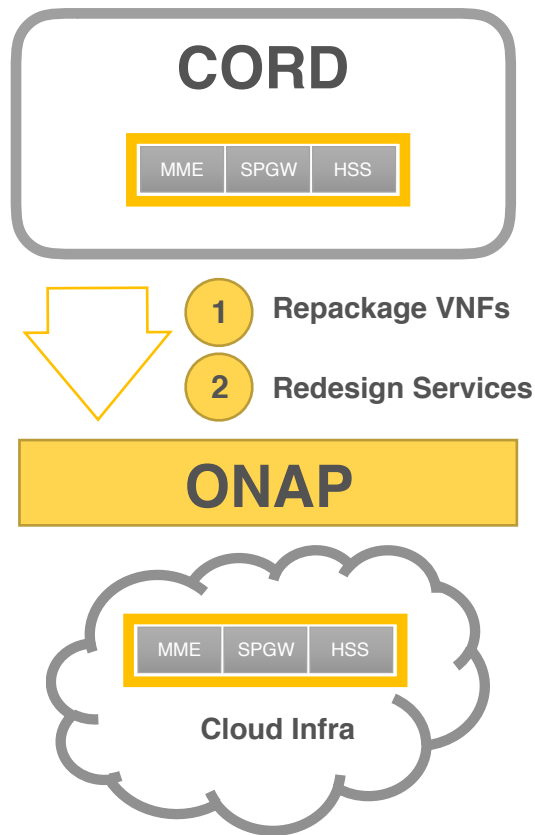


HOW TO INTEGRATE

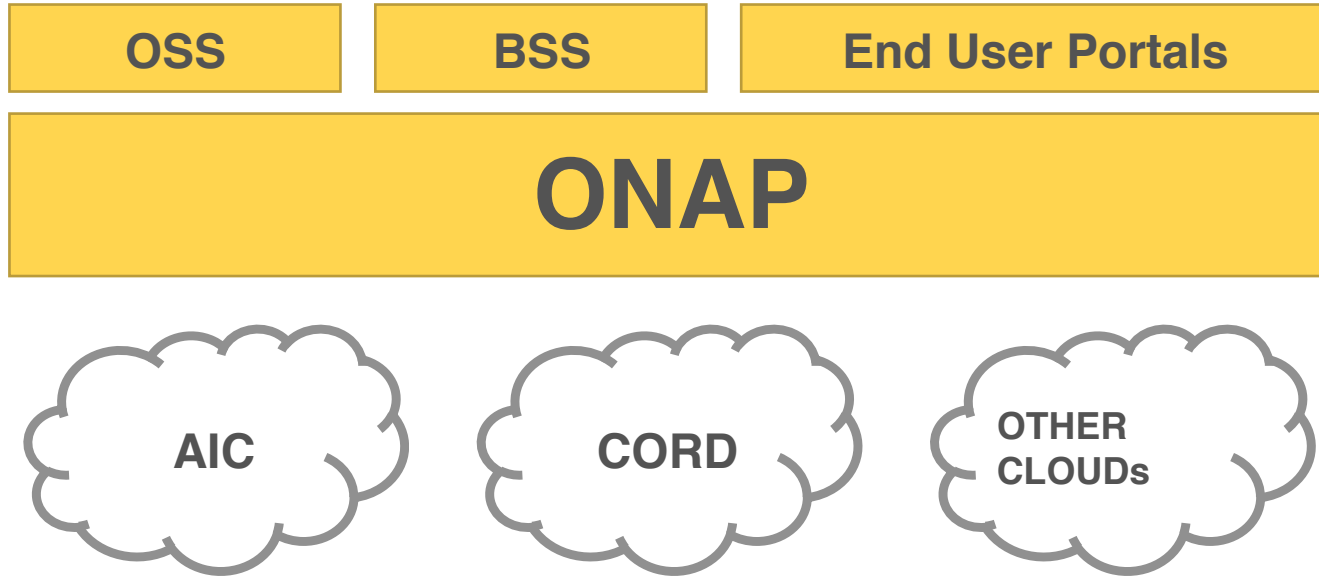
OPTION 1: Port Services to ONAP

Not a preferable option
**this will make us loose
all the CORD's values (ie. maturity
CORD has today)**

It is uncertain how
**ONAP can handle
Controller App Based VNFs**



OPTION 2: Autonomous CORD



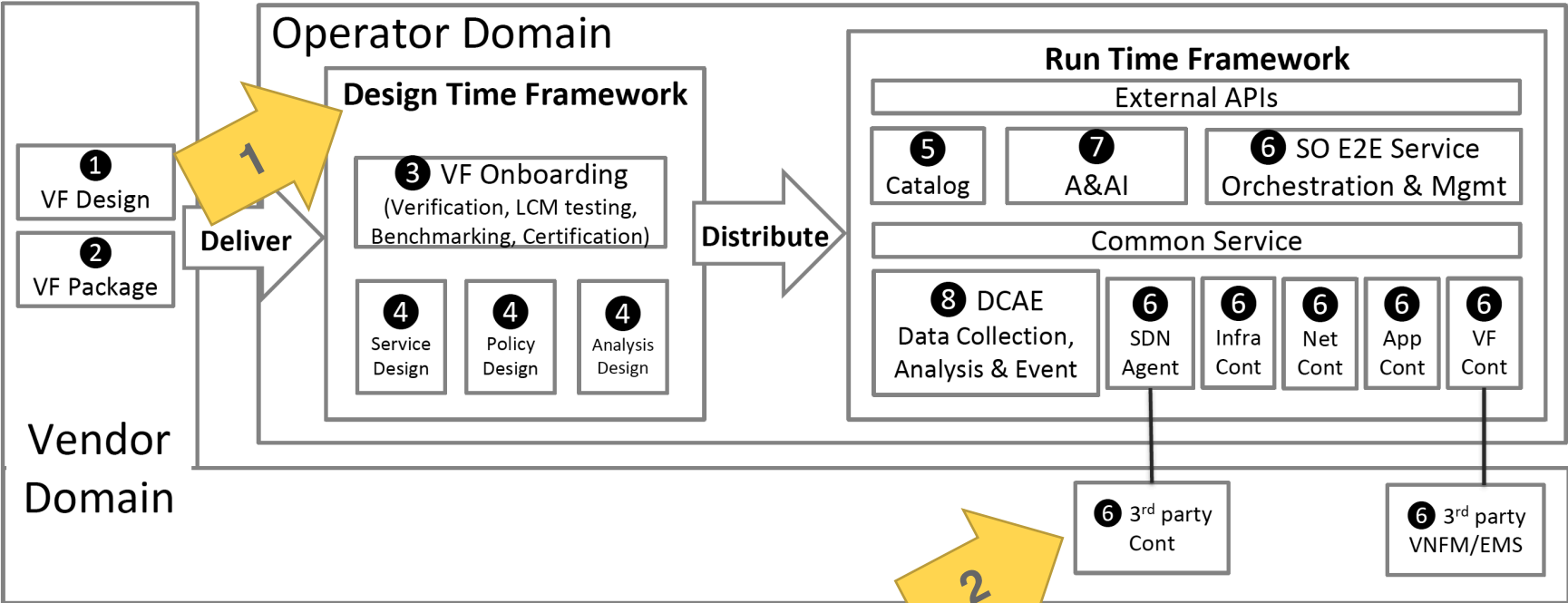


A PHASED APPROACH

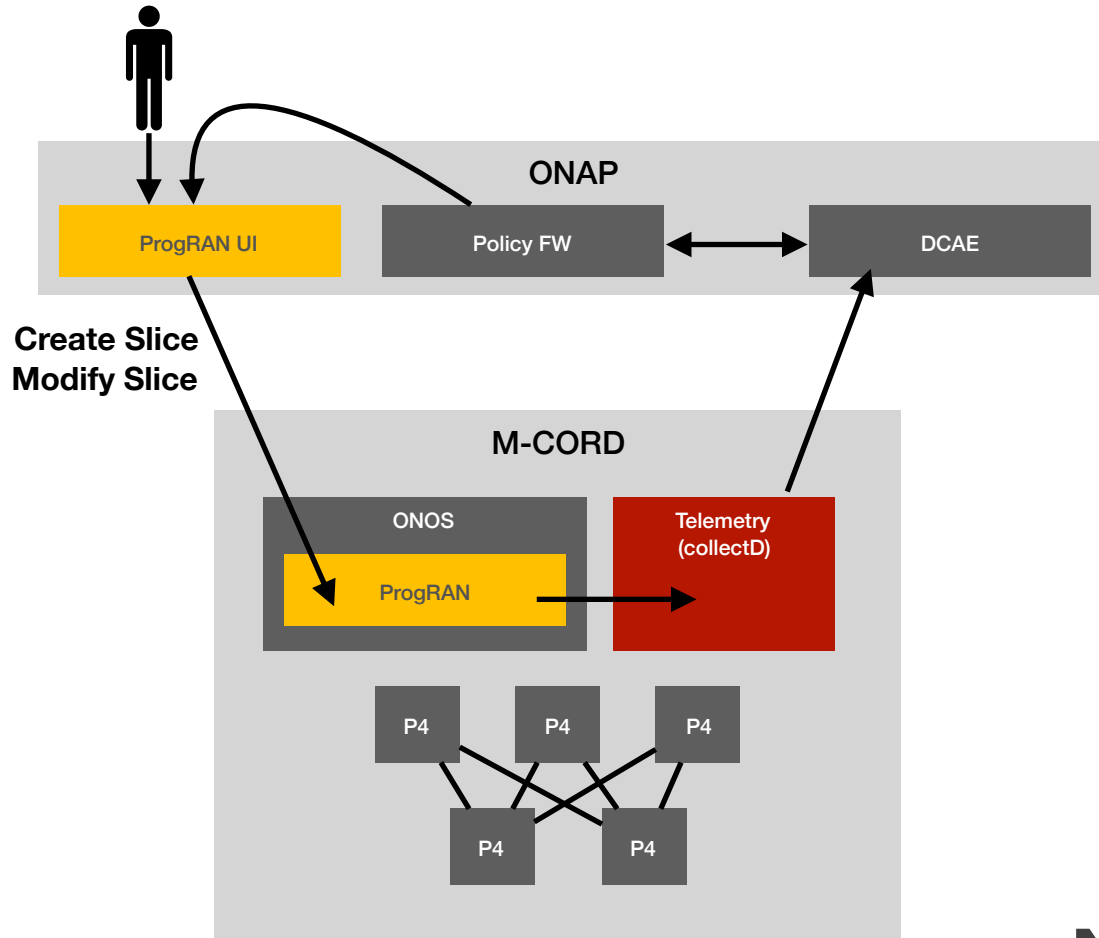
A PHASED APPROACH WITH FOUR STAGES

- 1 Loose integration e.g. MWC Demo
- 2 XoS as of Today, ONAP as of Today
- 3 XoS with dynamic onboarding, ONAP as of Today
- 4 XoS with or without dynamic onboarding, ONAP with ECD

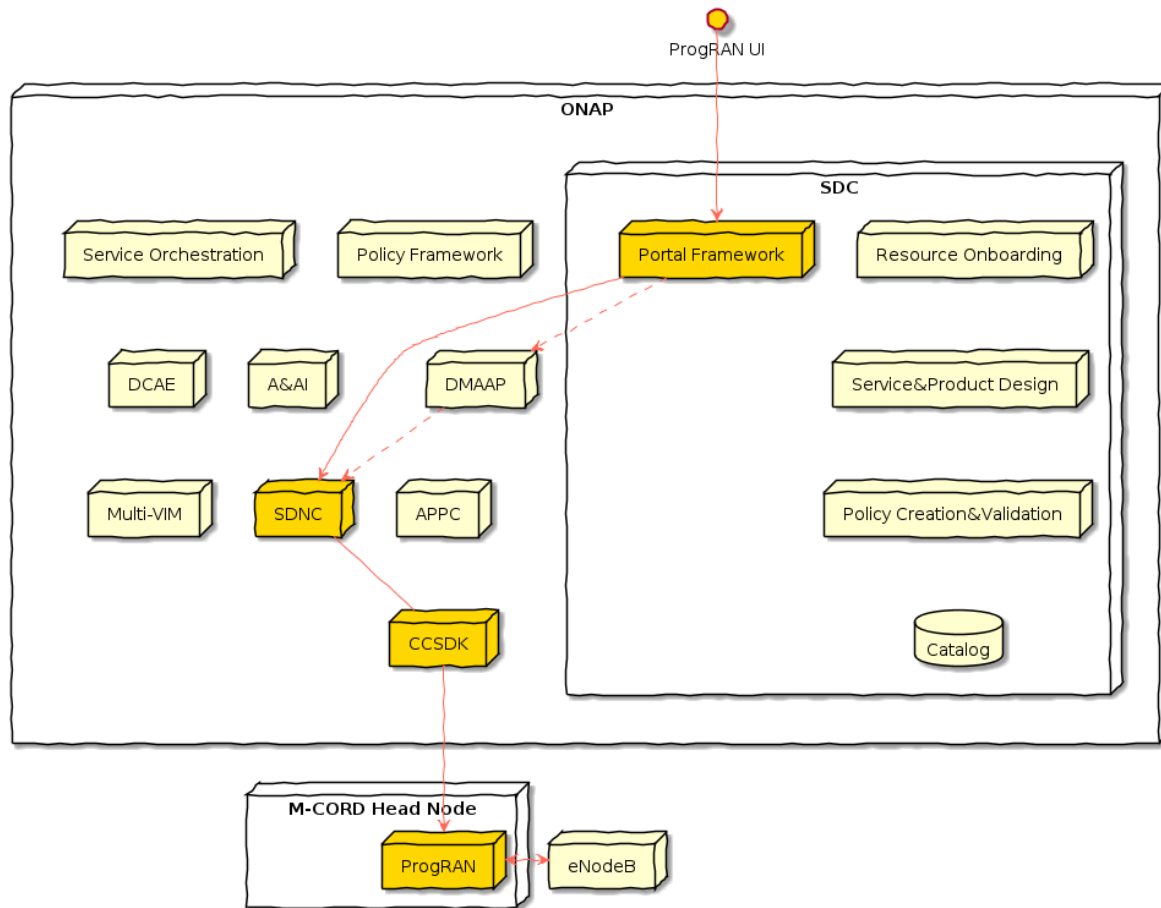
STAGE 1, Loose integration (e.g. MWC Demo)



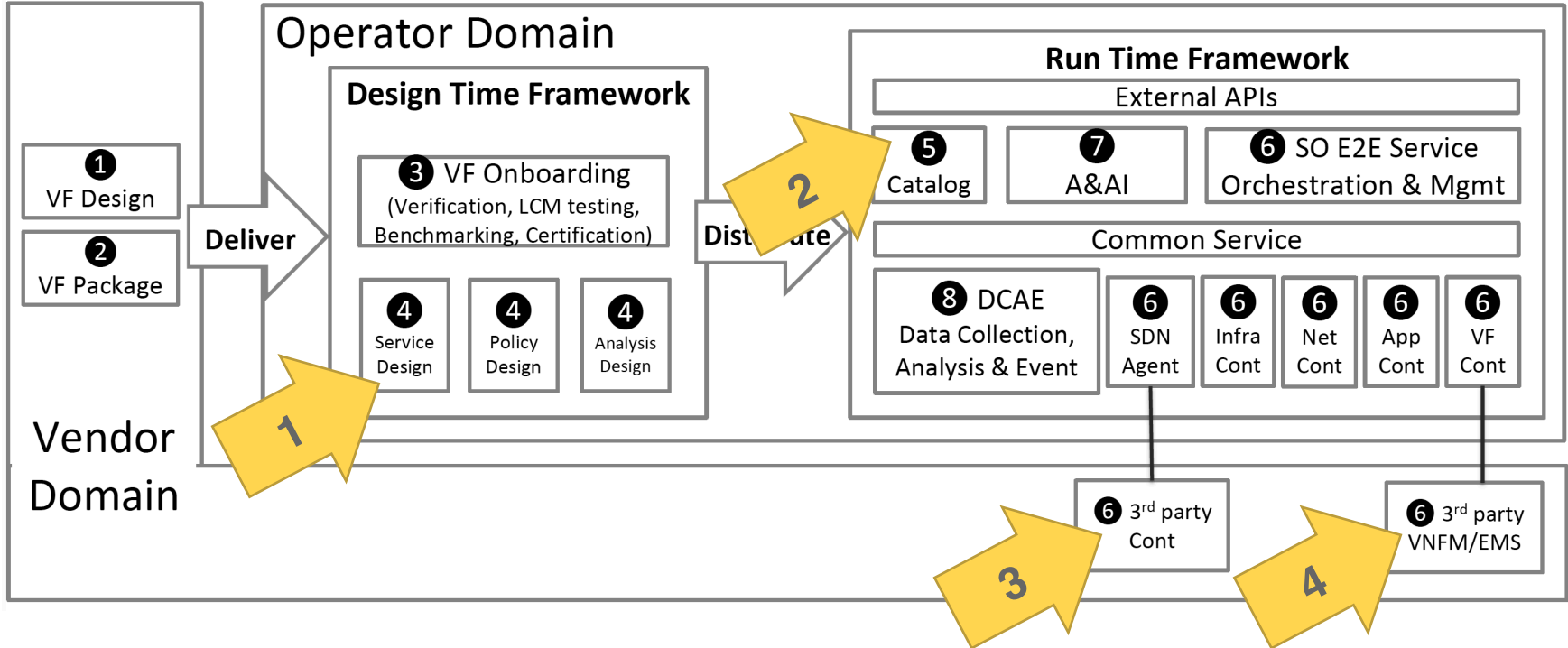
MWC Demo



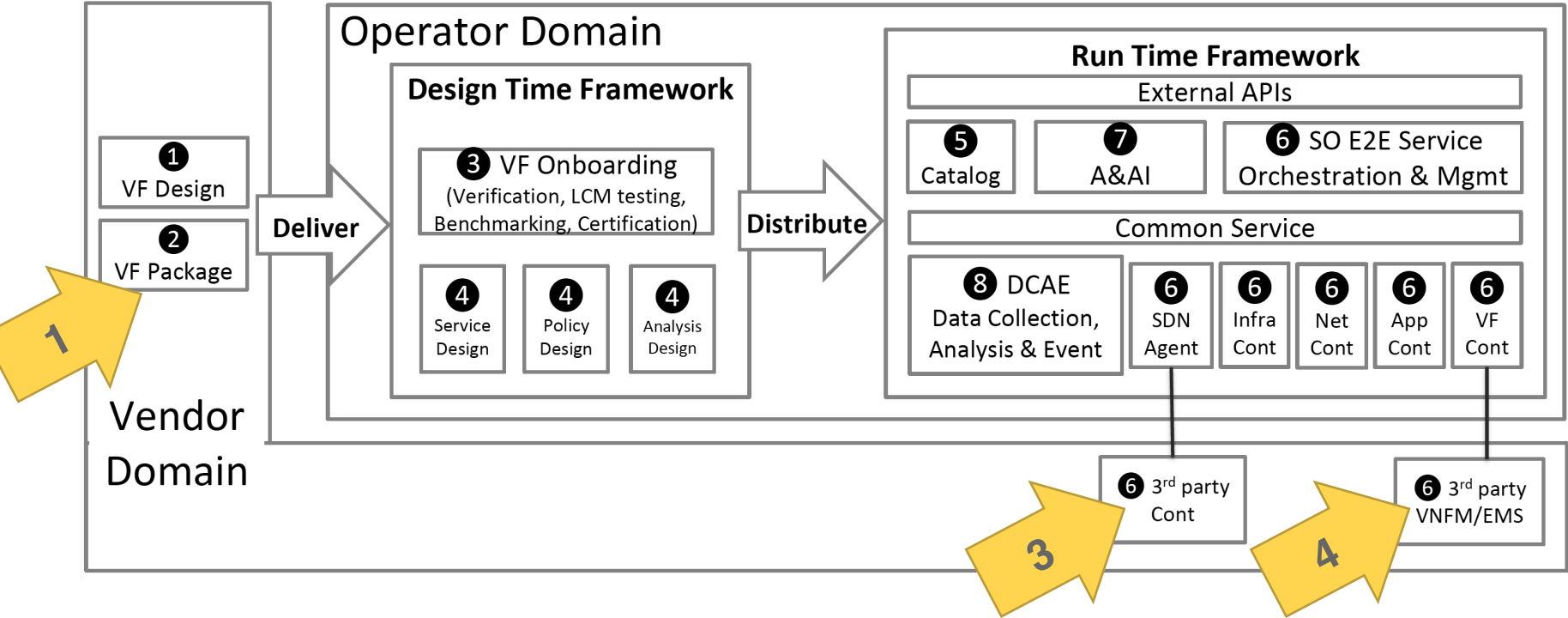
MWC Demo



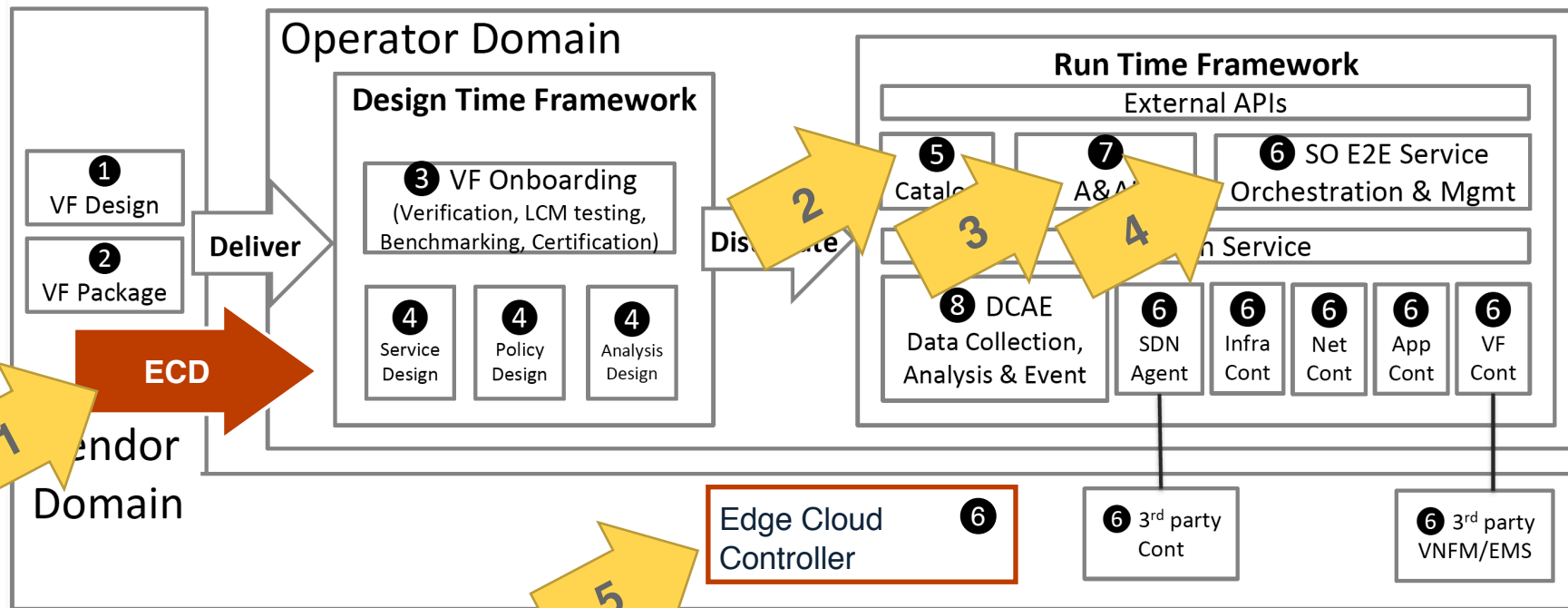
STAGE 2, Full integration (ONAP remains as is, MultiVIM can be used)



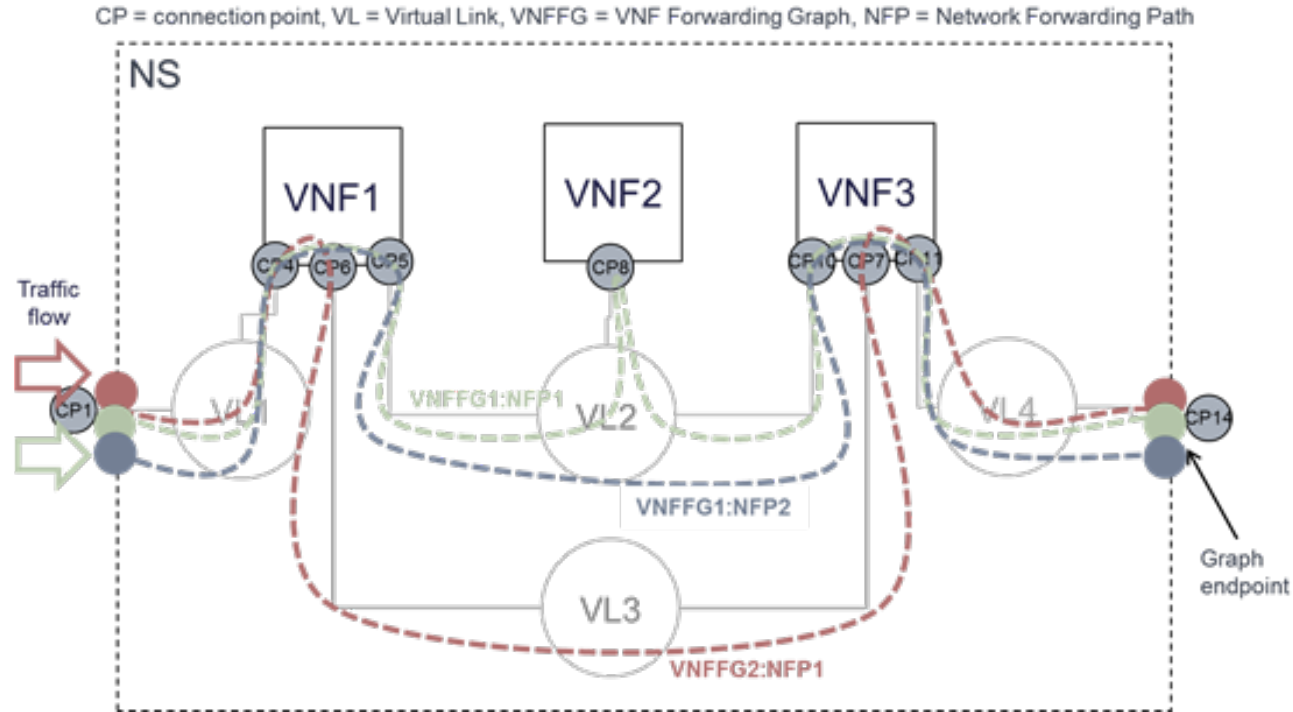
STAGE 3, Full integration (ONAP remains as is, MultiVIM based)



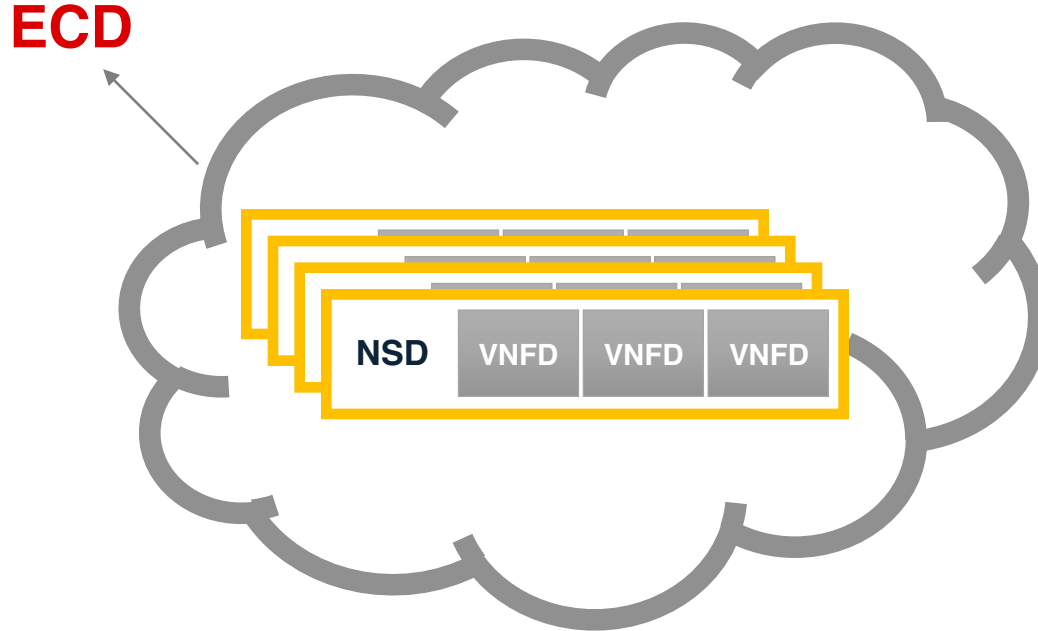
STAGE 4, the ECD (Extended MultiVIM with EC Controller)



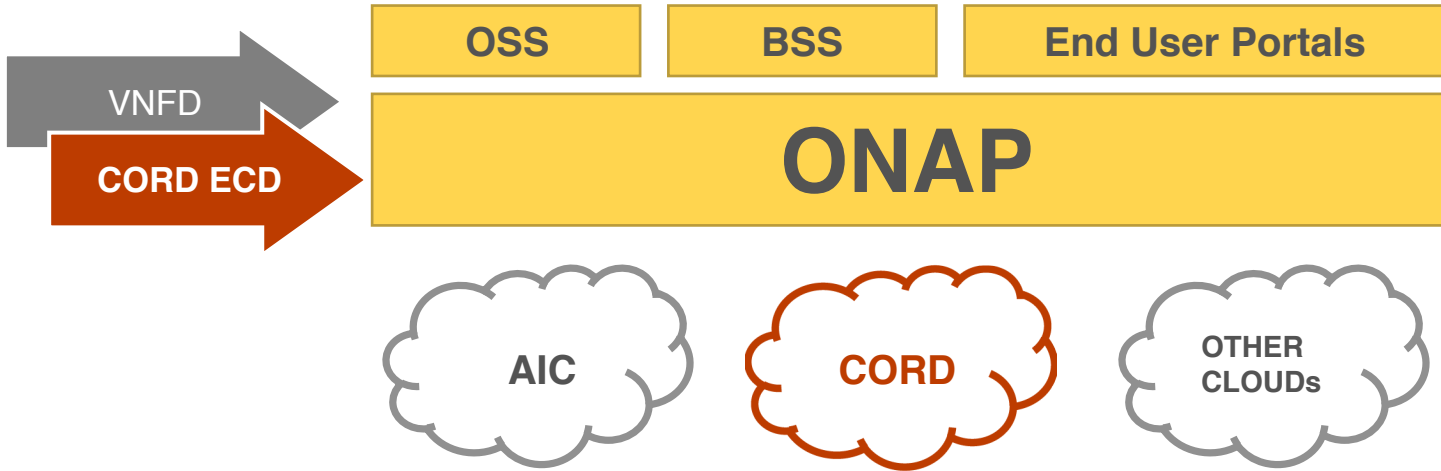
NETWORK SERVICE



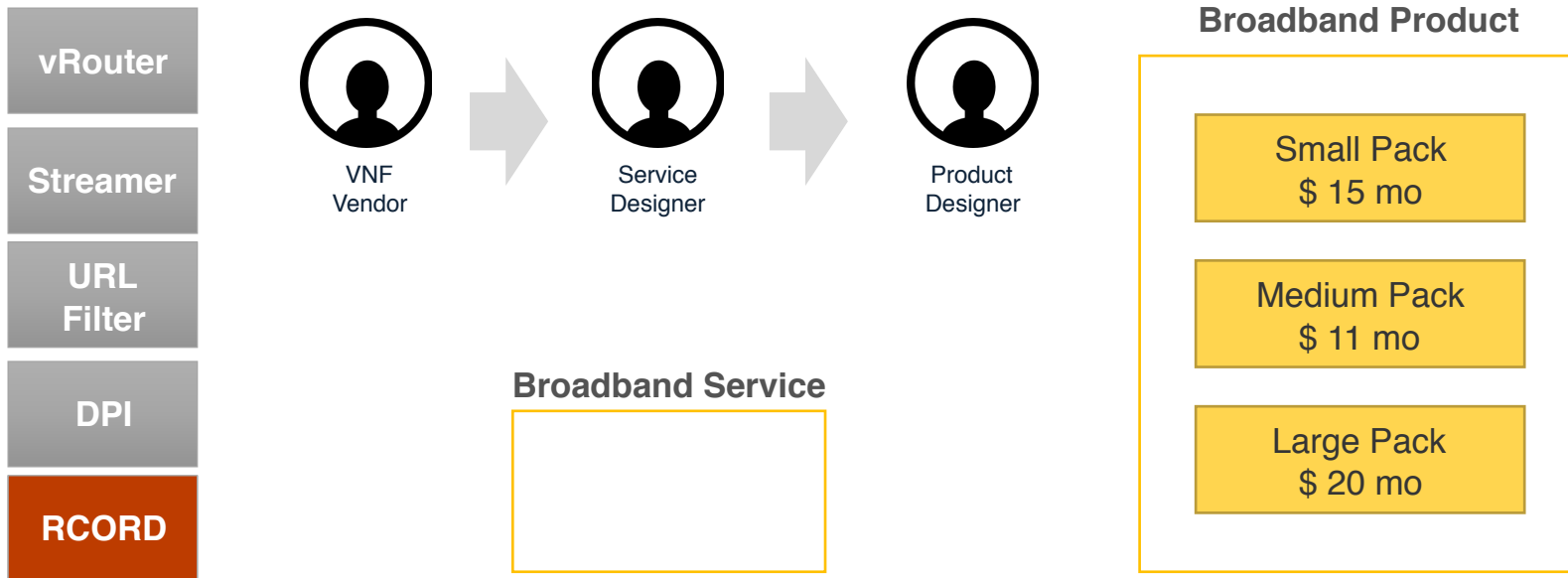
The Edge Cloud Descriptor

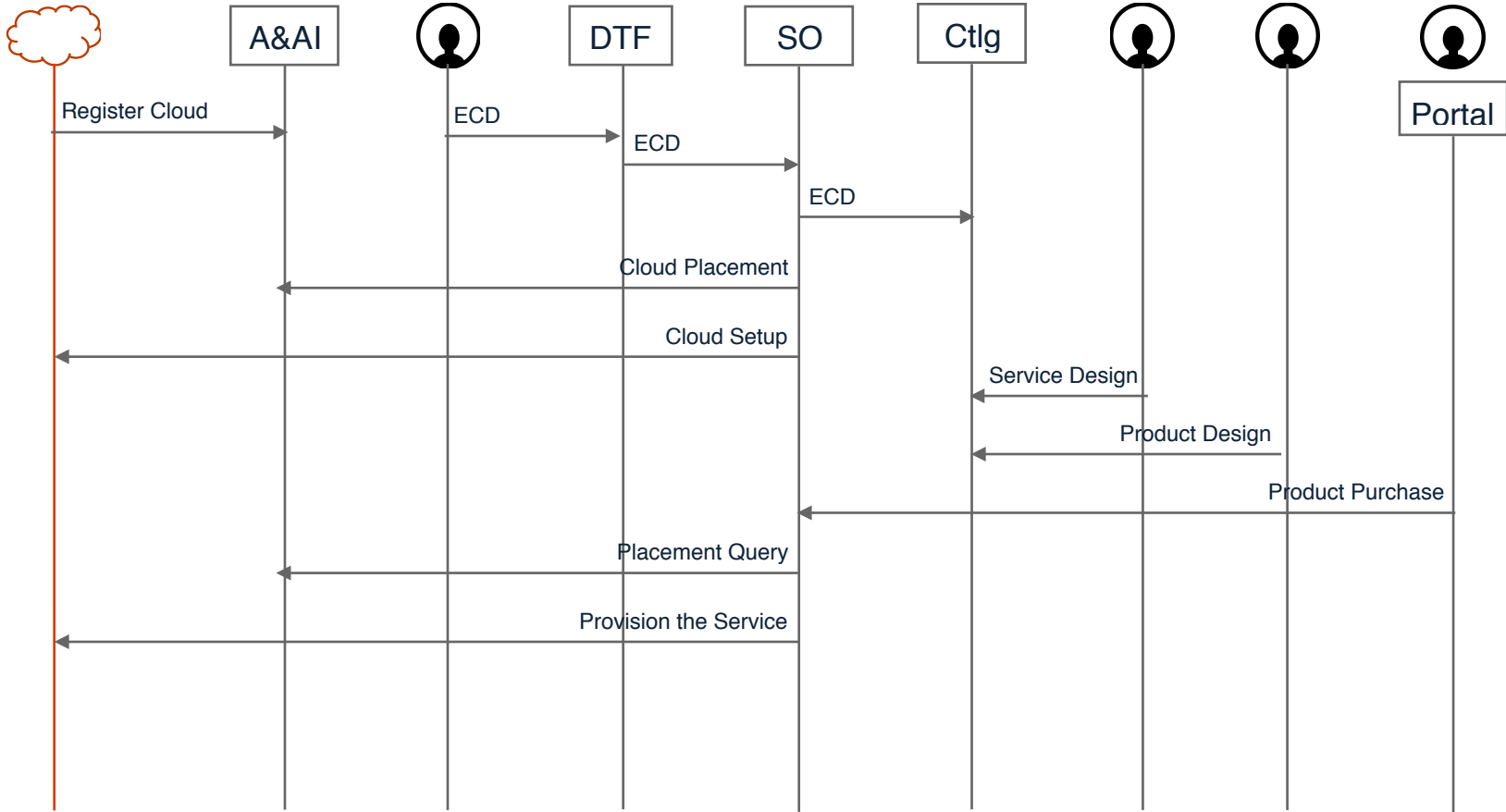


ECD Describes a whole Edge Cloud



IN OTHER WORDS...





Summary - 4 Stage Approach

Stages	Effort	Comments
1. Quick & Dirty integration - MWC Demo	S	Basic UI and SDNC integration.
2. Integration with the least impact on ONAP and CORD	M	CORD hacks to show up as a “Service” in ONAP. Integration with the VNF Controller and SDNC in ONAP. Little or no change to ONAP.
3. Deep integration with ONAP, leverage Multi VIM	L	ONAP understands the CORD VNFs as its native package. CORD to support dynamic onboarding. Significant MultiVIM adaptation work to convert ONAP package to CORD.
4. Introduce new native ONAP “Edge Cloud” Descriptor	XXL	Deep integration with all components of ONAP (A&AI, DCAE, E2E SO etc.) New EdgeCloud Controller in ONAP. Also align CORD to these changes.



THANK YOU