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LFN Developer & Testing Forum

ONAP EMCO Integration

PoC Introduction & Demo on How To Use

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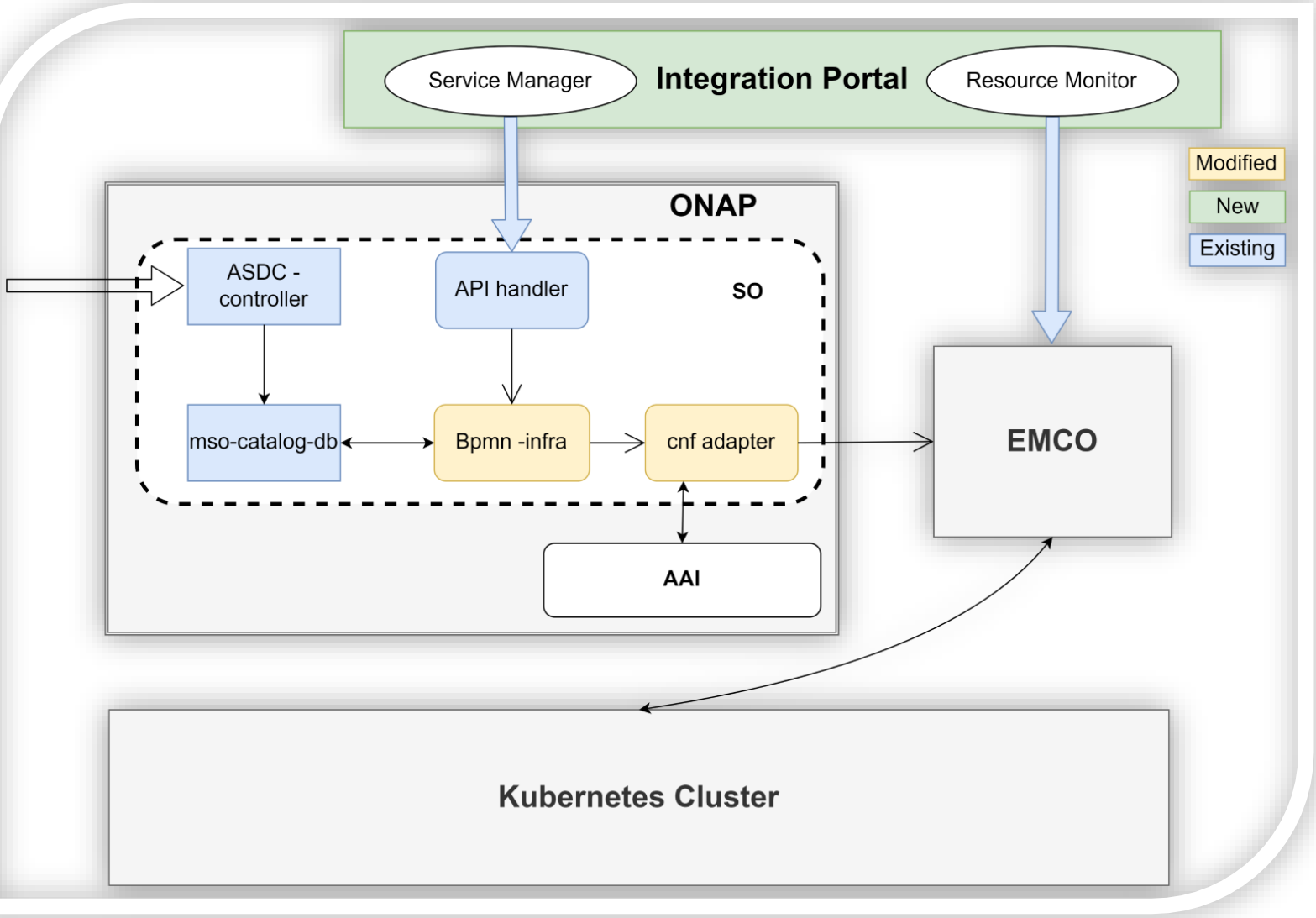
PoC - Key Considerations

- Keep the changes minimal on ONAP side
  - No new component is needed on ONAP
  - Leverage the existing models, building blocks
  - Existing flows are kept intact
- Leverage the Plug and Play on SO
  - Model driven approach
  - Changes can be used for other integrations like the ETSi, NSSMF,…
- No changes on the EMCO
  - Treated as a blackbox
- Minimal deployment footprint
  - Entire setup is Deployed over a laptop
- Extendable architecture
  - App details are persisted as direct urls
  - Closed loop friendly development

ONAP EMCO Integration



1. Service design

2. OnBoard service design

3. Portal send service instantiation request to orchestrator

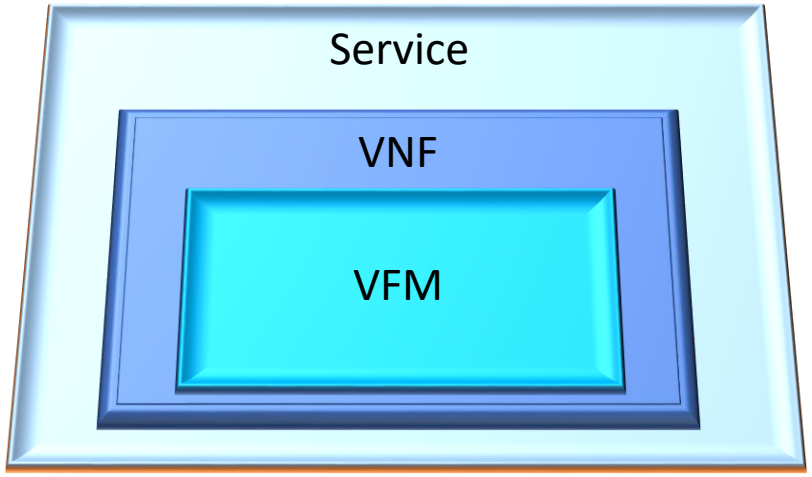
4. Service orchestrator send request to EMCO using macro flow

5. Emco deploy applications to Edge cluster

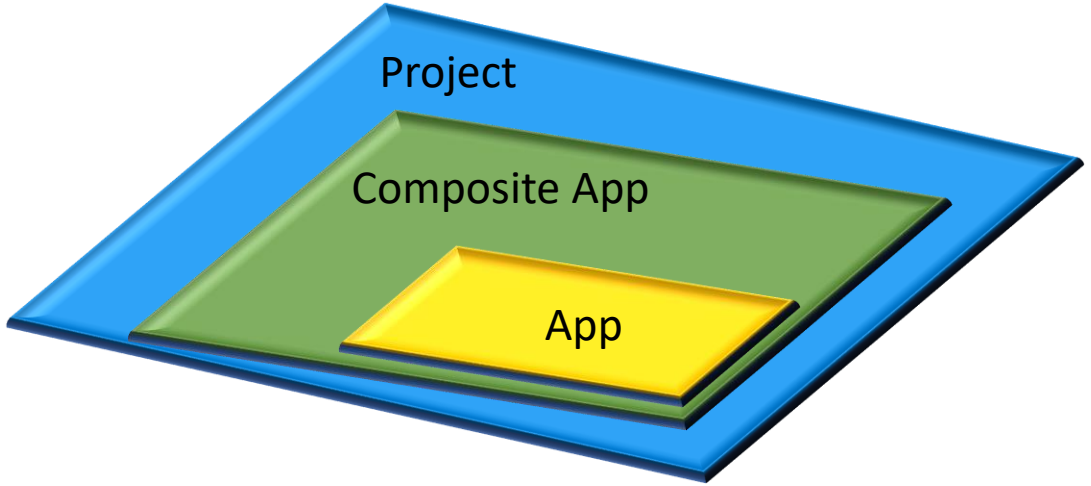
6. Monitor deployed service along with resource information

Modeling Mapping

ONAP Model



EMCO Model

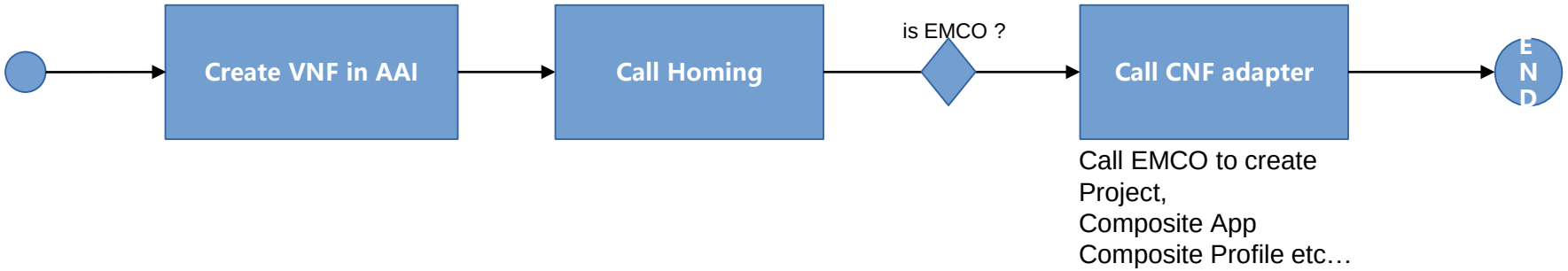


Flow Mapping

	Macro flow seq		Emco API used	
	AssignServiceInstanceBB			
	AssignVnfBB		Create Project Create Composite App (name and description)	
	AssignVfModuleBB		Add app (Upload Helm chart)	
	ControllerExecutionBB [vnf, config-assign]	CBA (Future)	Enriched CNF file	
isHelm	CreateVfModuleBB	request		
	ActivateVfModuleBB	state change in aai	Insert in AAI heat stack ID	rollback
	ControllerExecutionBB [vnf, config-deploy]			
	ActivateVnfBB	Aai state change	Create and activate of Composite App	If fails
	ActivateServiceInstanceBB			

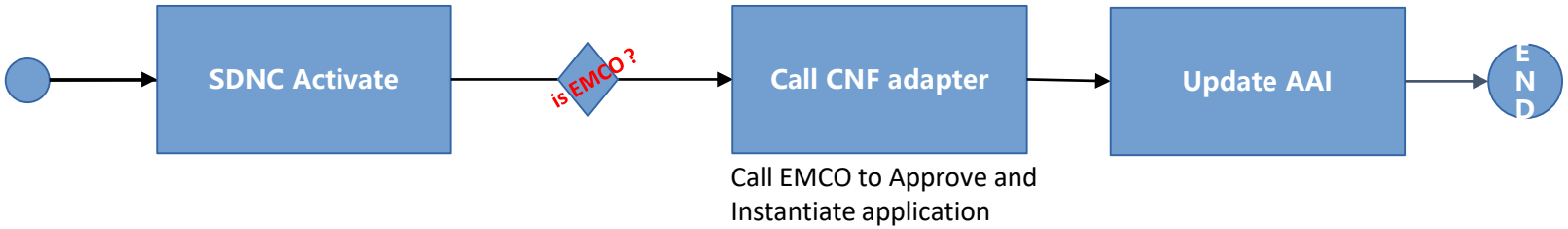
BPMN: Macroflow Workflow

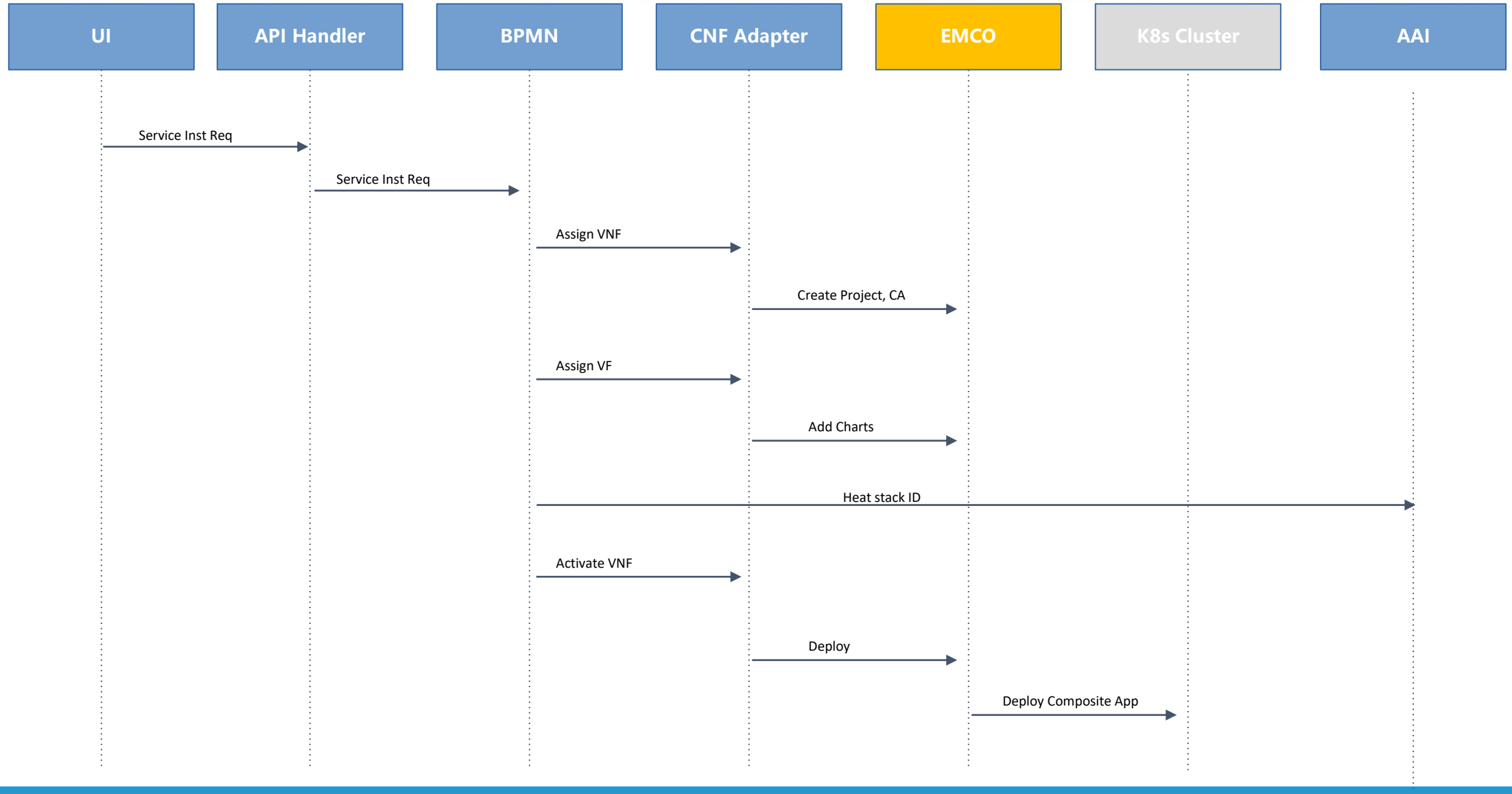
Assign VNF



Assign VF

Activate VNF




UI
API Handler
BPMN
CNF Adapter
EMCO
K8s Cluster
AAI
Service Inst Req
Service Inst Req
Assign VNF
Create Project, CA
Assign VF
Add Charts
Heat stack ID
Activate VNF
Deploy
Deploy Composite App

Future Steps – Kohn++

- CDS integration in the usecase
  - Helm enrichment
  - CNF Upgrade
- Intent driven
  - Deployment
  - OOF to enrich the Homing and placement ?
- Leverage the EMCO features through the functional flow
- 5G super blueprint
- Control Loop flows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