Common NFVI Telco Taskforce

Antwerp Face-To-Face Sessions

RA Chapter 03: OpenStack High Level Architecture
RA Chapter 04: OpenStack IaaS Cloud Architecture

Ian Gardner, Vodafone Group

Karine Sevilla, Orange

Mehmet Toy, Verizon

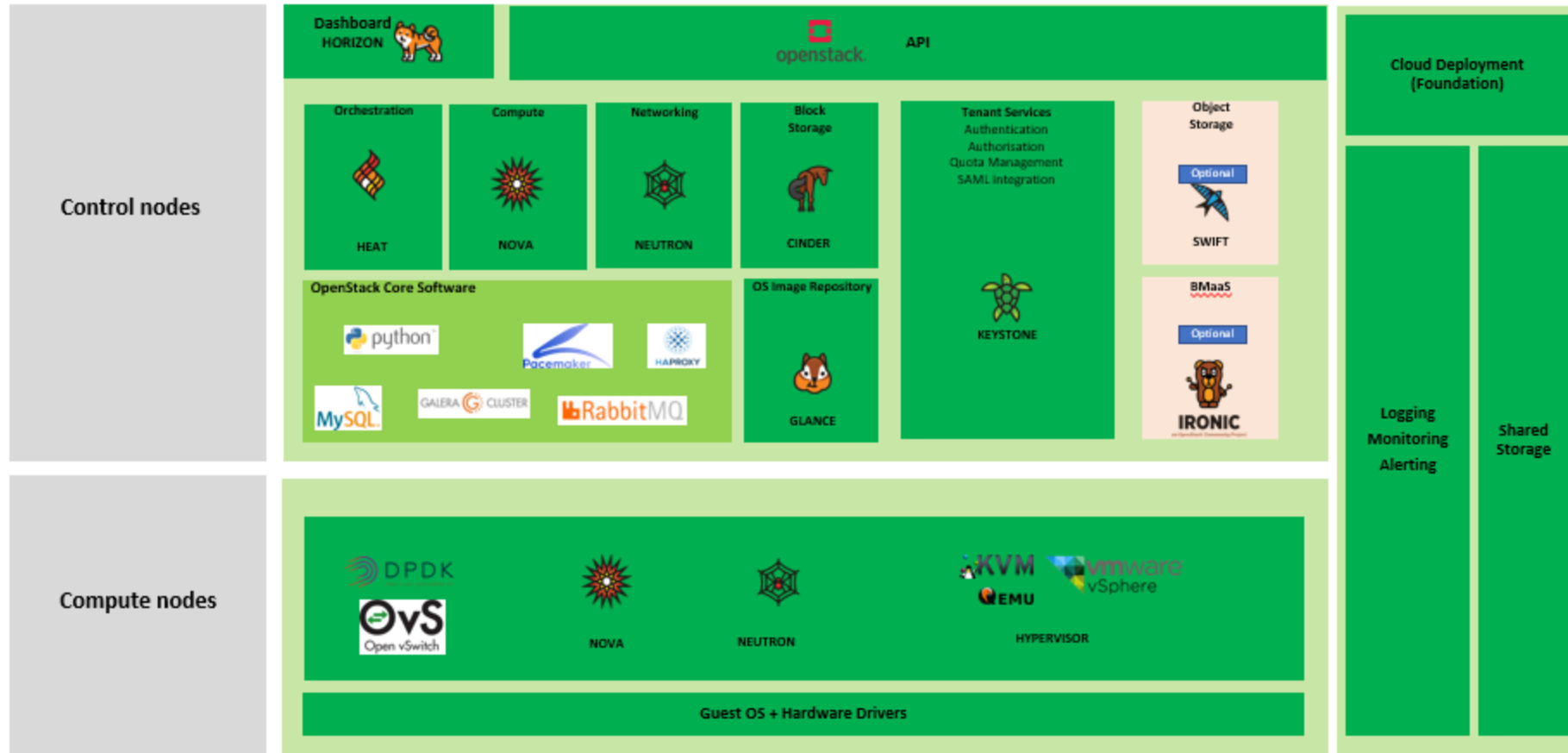Pankaj Goyal, AT&T

Samuel Hellec, Orange

September 2019

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Agenda

› Core NFVI Software Services

› NFVI Software Services Topology

› Core OpenStack Services

› Cloud Topology Considerations

› Cloud Operationalisation Other Considerations

› Logging and Monitoring Framework

Core NFVI Software Services

Review Chapter Content

NFVI Software Services Topology

Technology Agnostic Requirements

Reference Model

Reference Architecture

Review Chapter Content

4
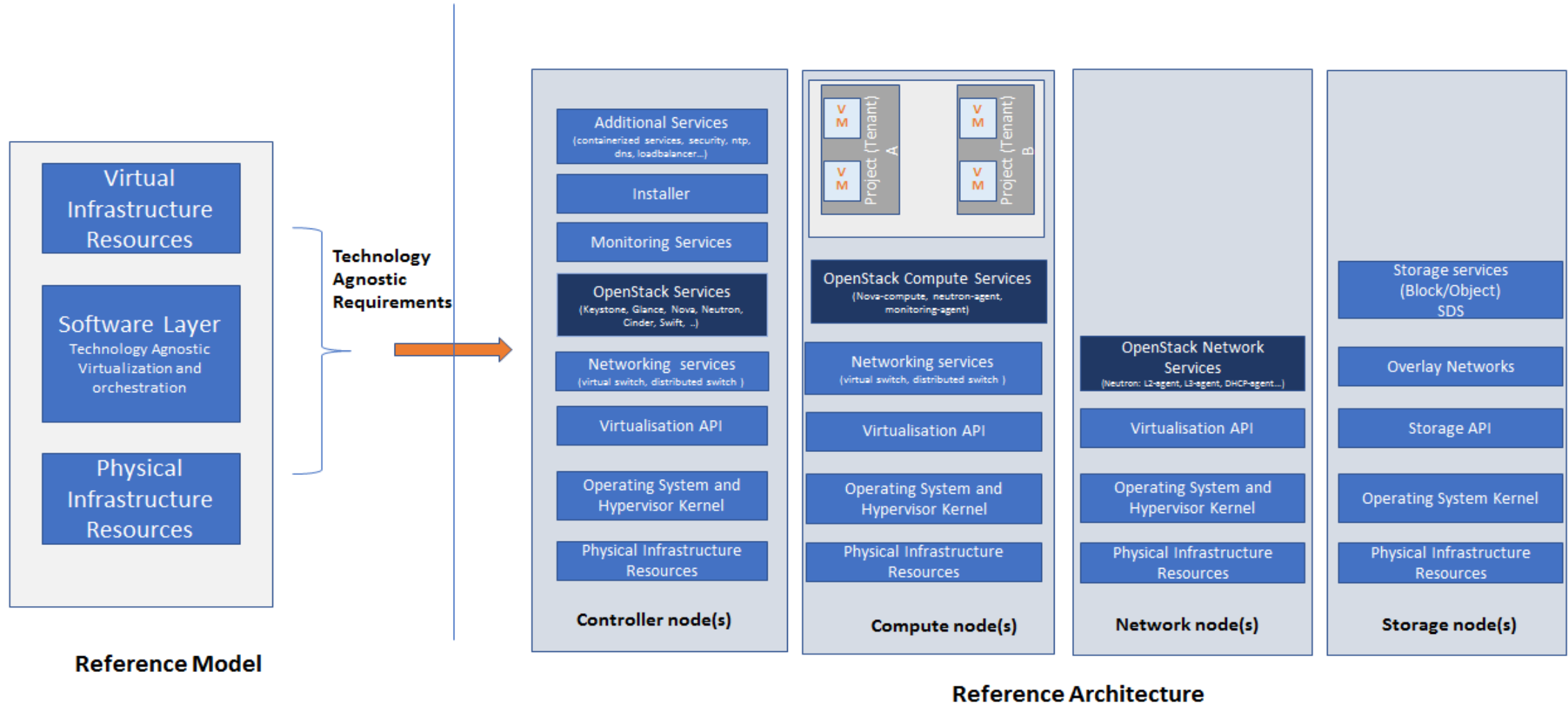
Core OpenStack Services

Service	Description	Deployed on Controller Nodes	Deployed on Compute Nodes
Keystone	the authentication service	X	
Glance	the image management service	X	
Cinder	the block storage management service	X	
Swift	the Object storage management service	X	X
Neutron	the network management service	X	X
Nova	the compute resources management service	X	X
Ironic	the Bare Metal Provisioning service	X	X
Heat	the orchestration service	X	
Horizon	the WEB UI service	X	

Review Chapter Content

Cloud Topology Considerations

› Network Fabric follows the standard spine-leaf topology

› Host Aggregates, Availability Zones

› Multiple Pools/Single Pool of Hardware Resources

Review Chapter Content

Cloud Operationalization Other Considerations

› Logging and Monitoring Framework

› Telemetry (not MVP)

› Security (not MVP: RM Chapter 7)

› Operations (not MVP: RM Chapter 9)

› Life Cycle Management (not MVP: RM Chapter 9)

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Monitoring and Logging Framework
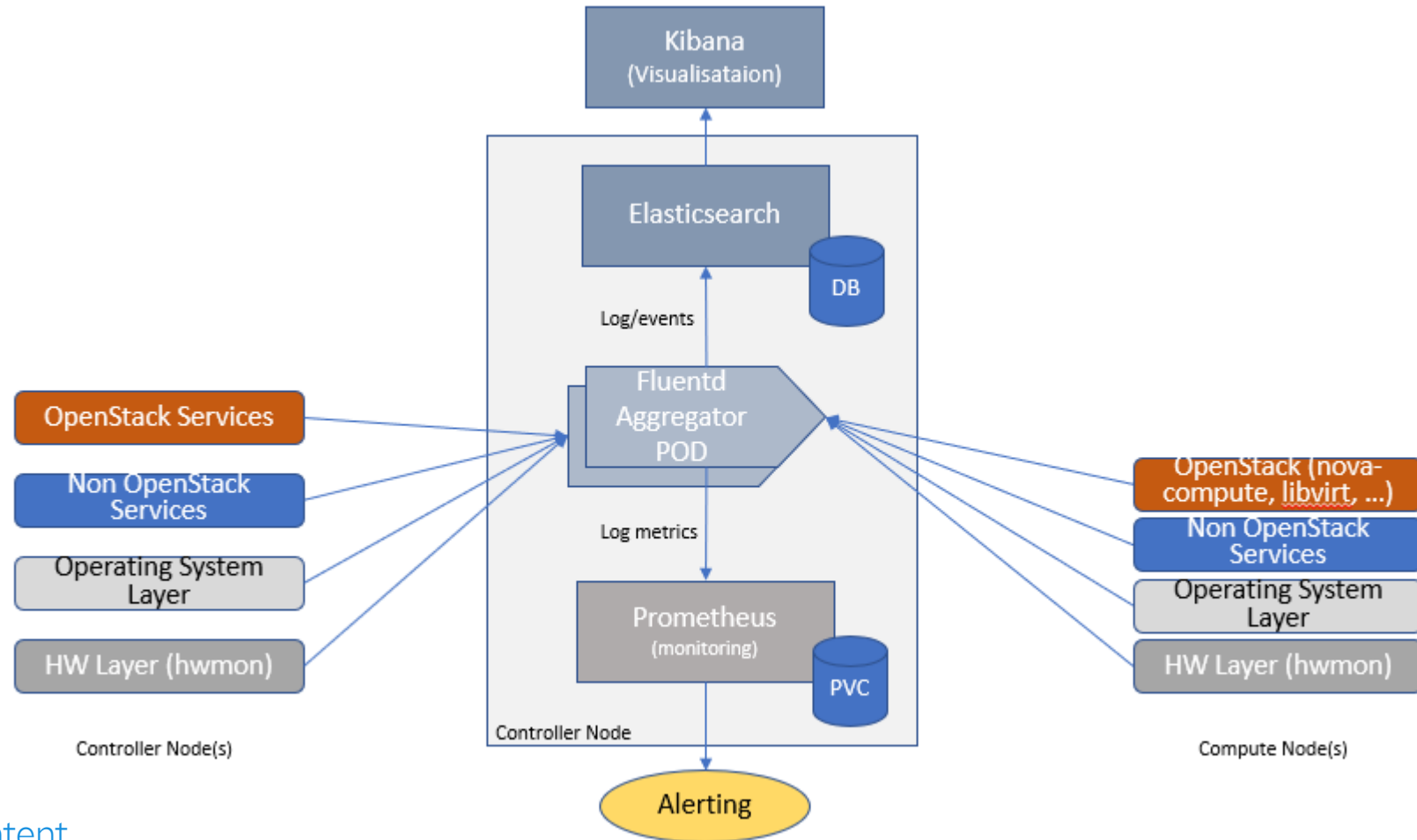
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Appendix