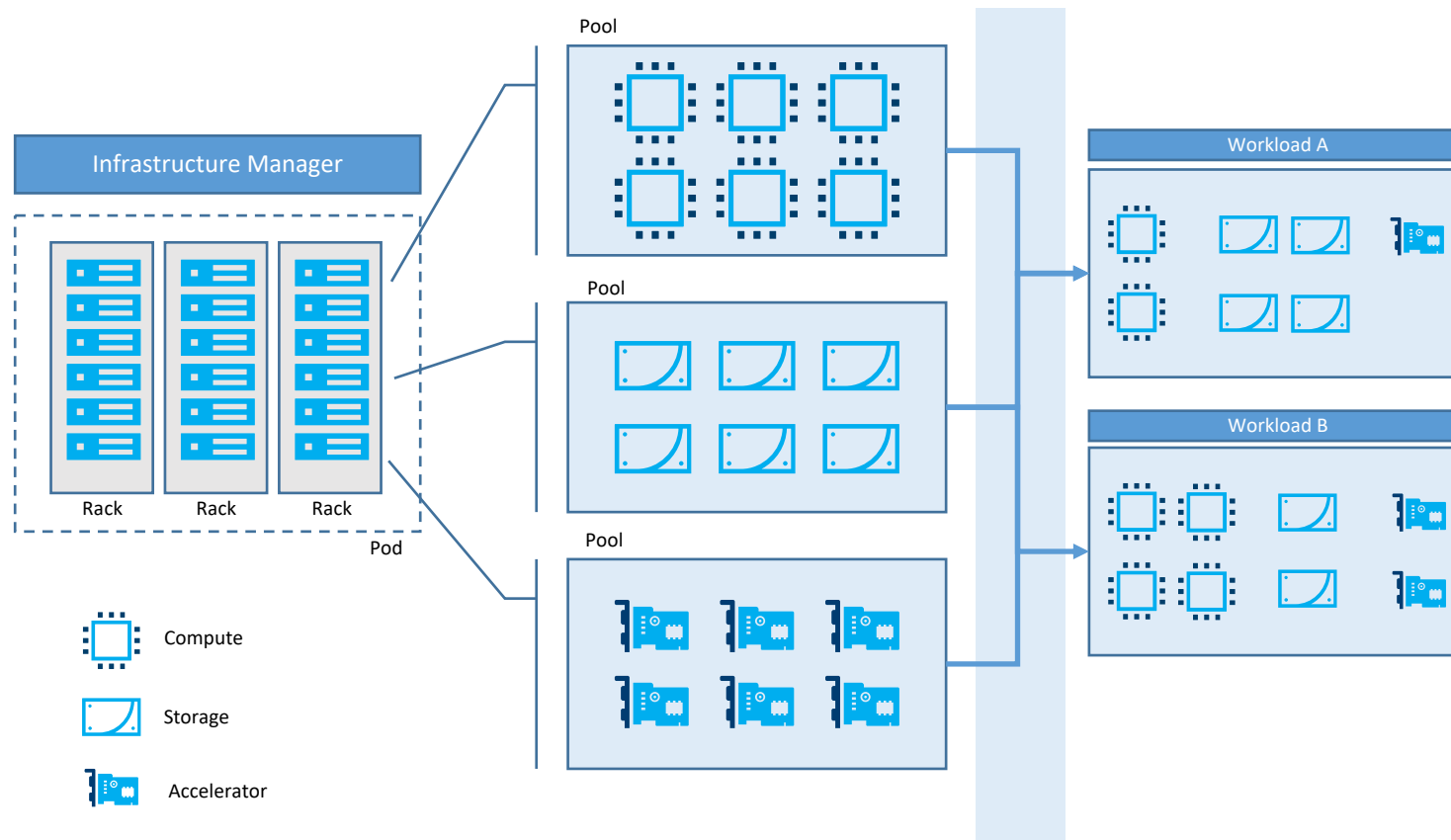




Composable Disaggregated Infrastructure (CDI) Support

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Composable Disaggregated Infrastructure (CDI) Overview



- Software defined infrastructure
- Disaggregated pools of compute, storage and network resources
- Dynamically composable into systems based on declarative definitions
- Based on open, industry standards

Project Description

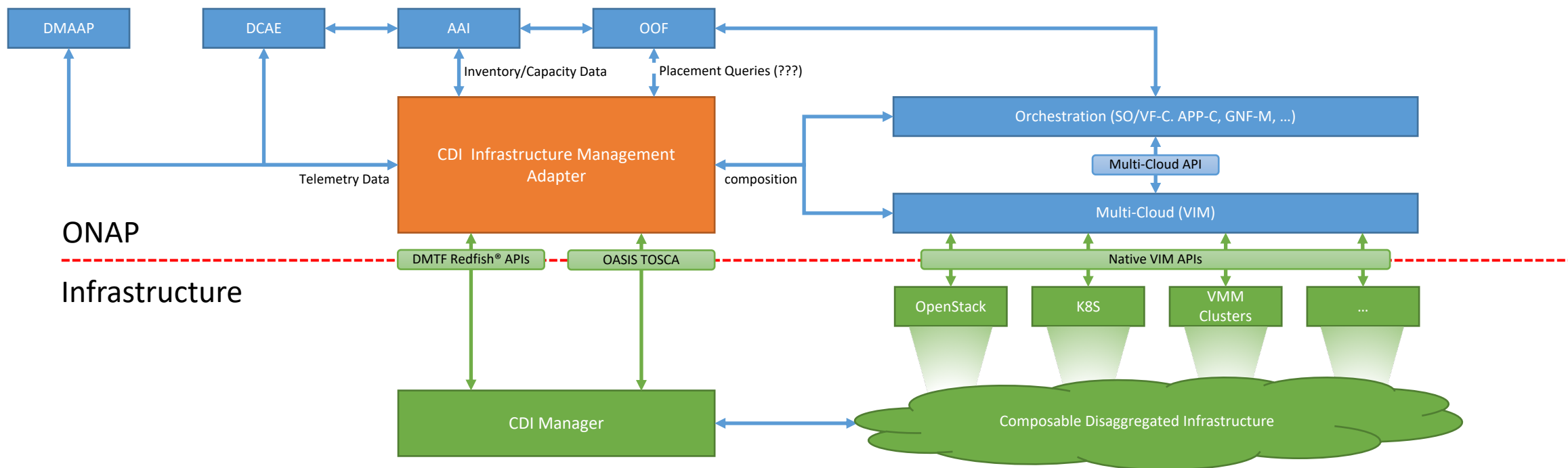
- Enable use of CDI infrastructure for deployment of virtual network functions and services (core and edge)
- Use Cases
 - Dynamic composition of virtualized infrastructure resources
 - On-demand instantiation of new virtualized infrastructure instances
 - On-demand scaling of existing virtualized infrastructure
 - Dynamic balancing of resources between virtualized infrastructure instances
- Benefits
 - On-demand dynamic creations of optimal compute resources, as needed
 - Automated orchestration of infrastructure resource management tasks
 - Direct access to infrastructure telemetry and capacity data
 - Ease-of-use
 - TCO Reduction

Scope

Deliverables	MVP
DMTF Redfish® API adapter (management/composition)	Yes
Redfish® API based automated resource composition and instantiation	Yes
Redfish® API based automated IaaS (OpenStack) composition and scaling	-
Redfish® API based automated PaaS (K8S) composition and scaling	-
TOSCA based resource, IaaS and PaaS composition and instantiation	-
AAI integration (inventory/capacity information)	Yes
DCAE integration (telemetry)	-
Orchestration integration (composition/scaling)	-
Multi-Cloud integration (infrastructure adaptation)	Yes
OOF integration (optimization)	-
HPA support	-

- Composition focus is on compute, storage and acceleration resource elements
- PNFs are out of scope
- Initial IaaS/PaaS automation focus is on OpenStack and K8S

Architectural Alignment - ONAP



Architectural Alignment - External

- Alignment with external standards
 - DMTF Redfish ® API (<https://www.dmtf.org/standards/redfish>)
- Dependencies on other open source projects
 - None