

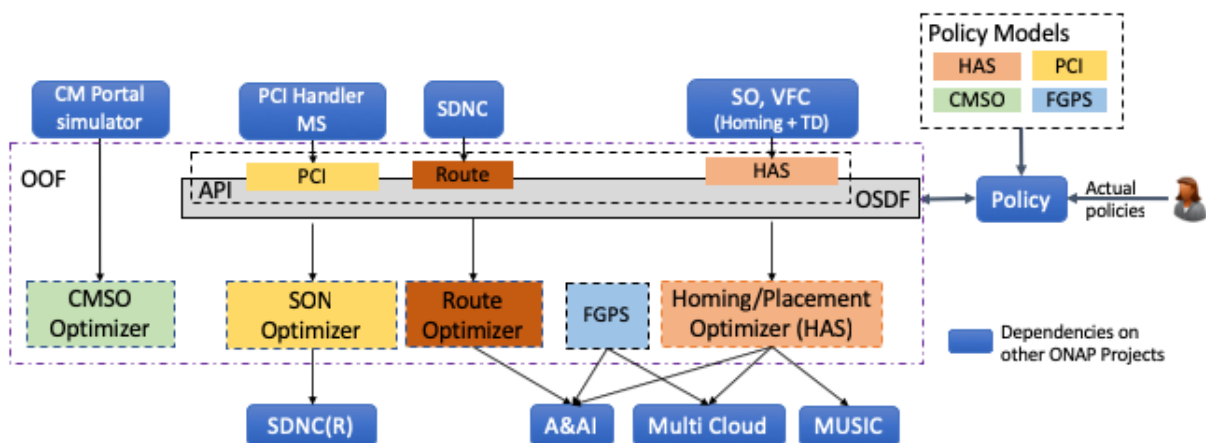
OOF Dublin (R4) Architecture Alignment

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New features in Dublin

- Traffic Distribution
- Fine-Grained Placement Service (F-GPS)
- Extend PCI optimization to include optimization for ANR (Automated Neighbor Relations)

OOF Dependency graph



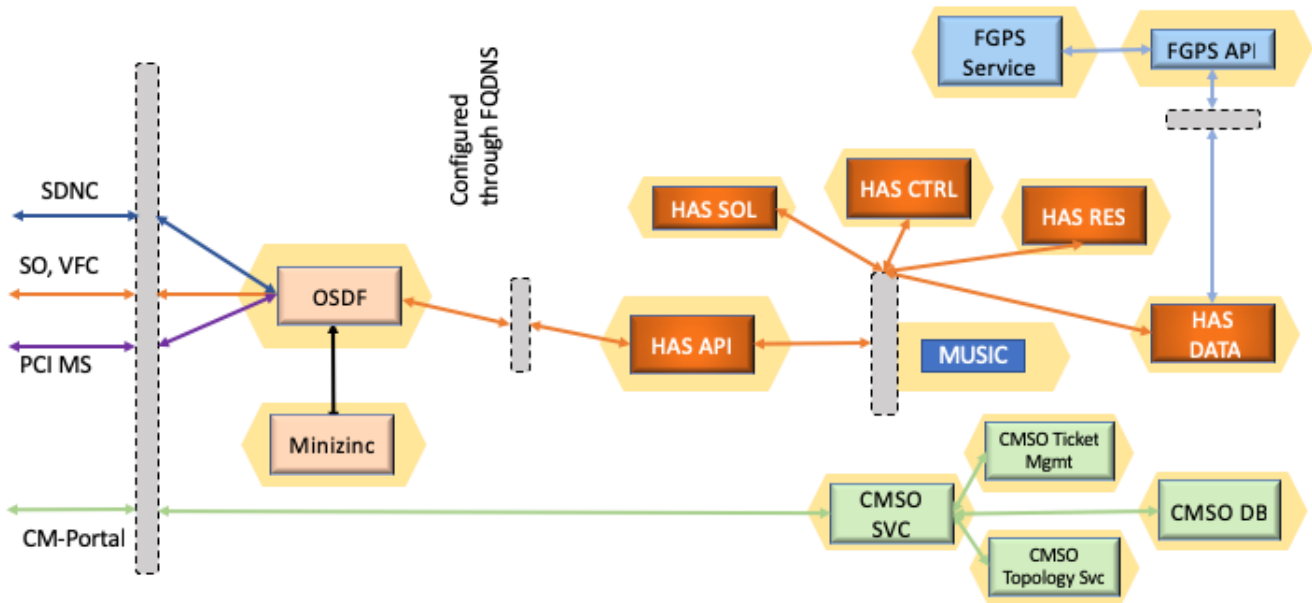
OOF Deployment graph (OOM)

Deployment Graph

POD

K8S Load Balancer

Container



1

S3P Updates [blocked URL](#)

S3P – per repo

	Optimization Service Design Framework (OSDF)	Homing and Allocation Service (HAS)
Performance	Level 1	
Stability	Level 1	
Resiliency	Level 2; OSDF is stateless; clients retry requests if OSDF container crashes or times-out. Clients manage timeouts.	Level 3; HAS provides Active/Active resiliency across multiple sites
Security	CII Passing Badging – No critical security and licensing issues [CII Passing Badge] Increase Code coverage from >50% to >55%	
Scalability	Level 1	Level 2
Manageability	Level 1; with some progress on adherence to Logging v1.2 spec	
Usability	Level 1	

OOF repos in Dublin

Repo	Status
optf/cmso	seed-code upstreamed in Casablanca, POC
optf/has	part of ONAP releases since Beijing release
optf/fgps	seed-code being upstreamed in Dublin, POC
optf/osdf	part of ONAP releases since Beijing release

IM/DM Alignment

Service and Resource Info, from: AAI

Network Topology for CM: AAI

HPA Flavors/Capabilities/CapacityInfo, from : AAI

Policy Models (homing, PCI) from: Policy

Infrastructure Metrics Info (capacity), from: MultiCloud

Cloud agnostic Intent Info, from: MultiCloud

AZ level capacity Info, from: MultiCloud (for F-GPS)

PCI configuration data(not yet a part of SDC model)

Provided APIs

Service Orchestrator (Homing, Traffic Distribution): <https://wiki.onap.org/pages/viewpage.action?pageId=25435066> (*updated for Traffic Distribution*)

Change Management Simulator: https://wiki.onap.org/display/DW/CMSO+API+v1_v2 (*updated*) – <https://wiki.onap.org/display/DW/New+CMSO+APIs+in+Dublin>

PCI Handler MS: <https://wiki.onap.org/display/DW/PCI+Optimization+API> (*updated for joint ANR optimization*)

SDNC: <https://wiki.onap.org/display/DW/Route+Optimization>

HAS -- FGPS: <https://wiki.onap.org/display/DW/FGPS+Dependencies+and+APIs> (*new*)

Consumed APIs

[AAI REST API Documentation - Casablanca](#), CMSO, TD and FGPS expect to use existing AAI interfaces.

MultiCloud: https://docs.onap.org/en/latest/submodules/multicloud/framework.git/docs/specs/multicloud_resource_capacity_check.html (*updated API for F-GPS*)

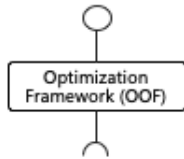
MUSIC: Casablanca API

SDNC(R) Config DB: https://wiki.onap.org/download/attachments/28382769/SDNC_ConfigDB_API_Ver2.json?api=v2 (*updated API for PCI/ANR*)

Provided/Consumed Interfaces

Optimization Framework – R4

- Service Orchestrator (SO)
- Change Management Portal
- SDNC
- PCI Handler MS



- Policy Interface
- Inventory Service Interface
- Service/Policy Models Interface
- Infrastructure Metrics Interface
- MUSIC REST API interface
- Config data interface, SDNC(R)

Definition:

- ONAP Optimization Framework (OOF) enables easy creation of optimization applications by leveraging a policy-driven, declarative approach, that supports different specializations (applications) with specific domain and optimization needs.
- Current scopes include (but are not limited to) VNF placement support via Homing and Allocation Service (HAS) with different use cases, change management scheduling service, Route Optimization, and PCI Optimization.

Provided Interfaces:

- Placement Optimization Interface
 - Provides functionality for the Service Orchestrator to enable optimized homing/placement of Services
- Traffic Distribution Interface
 - Provides functionality for the Service Orchestrator to identify optimal traffic distribution end points during scale in/out
- PCI Optimization Interface
 - Provides functionality for PCI Allocation to minimize conflicts and confusion
- Route Optimization Interface
 - Provides functionality for path/route optimization given a topology
- Change Management Portal Interface
 - Provides functionality for calculating schedules that satisfy time constraints and conflicts [CM scheduling use case]

Consumed Interfaces:

- Policy Interface, from: Policy
- Inventory Service Interface, from: AAI
- Service/Policy Models Interface, from: SDC
- Infrastructure Metrics Interface, from: MultiCloud
- MUSIC REST API Interface, from : MUSIC
- Config data interface for PCI optimization, from : SDNC(R)

Consumed Models:

- Policy Models (homing, PCI), from: SDC
- Infrastructure Metrics Models, from: MultiCloud

Attachments



OOF-Dublin-Arch...ure-Review.pptx