

Open Source MANO

OSM#12 Ecosystem Day Welcome!

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Mark Beierl - OSM TSC member

Dec 1, 2021 - OSM#12



Welcome to the OSM#12 Ecosystem Day !

Logistics:

- Please enter your **name** in **G2M**
- Use a **headset**
- **Mute** yourself during the presentations
Unmute for questions
Or type them in the chat
- Slides are available in the **wiki**:

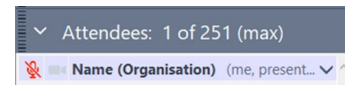
https://osm.etsi.org/wikipub/index.php/OSM12_Ecosystem_Day

- Talks are being **recorded** and will be posted on [YouTube](#)
- Follow us and share your thoughts on social media:


@OpenSourceMANO #OSMEcosystemDay

OSM12 Ecosystem Day

Wednesday December 1st (2 - 5:30 pm CET)



Agenda for today !!

- 2:00-2:25 pm CET **Welcome to the OSM#12 Ecosystem Day & Release ELEVEN pre-view** by OSM MARCOM
 - 2:25-2:50 pm CET **Demonstration of P4-Based In-Band Telemetry for OSM-Orchestrated 4G/5G Testbeds by SimulaMET** (Simula Metropolitan Centre for Digital Engineering)
 - 2:50-3:15 pm CET **Demonstration of MEC Applications deployment with OSM by Whitestack & University of Bologna**
 - 3:15-3:40 pm CET **Demonstration of debugging mode for Charmed OSM by Canonical**
 - 3:40-3:45 pm CET **Group Picture!**
 - 3:45-4:10 pm CET **Coffee Break**
- 
- 4:10-4:35 pm CET **Marketplace-driven 5G network slices among multiple operators by 5GZORRO**
 - 4:35-5:00 pm CET **TEOSM - An Overview by Tata Elxsi**
 - 5:00-5:25 pm CET **Demonstration of PaaS-driven Interoperation between OSM and Kubernetes-based Edge Platforms by Intracom Telecom**
 - 5:25-5:30 pm CET **OSM#12 Ecosystem Day Wrap-up by OSM MARCOM**

OSM Release ELEVEN preview



SOL004 and SOL007 package formats



Brand-new support for Google Cloud

- Completing the infrastructure support for 3 largest public clouds



Fine-grained operations in CNFs

- Start and stop services
- Run one-shot commands
- Files API



Better coordination across PNFs, VNFs, and CNFs

- Enhanced data exchange between NFs in the NS.



CNF monitoring from Kubernetes metrics

- Metrics collection from K8s clusters in centralized Grafana dashboard.



Enhanced installation process

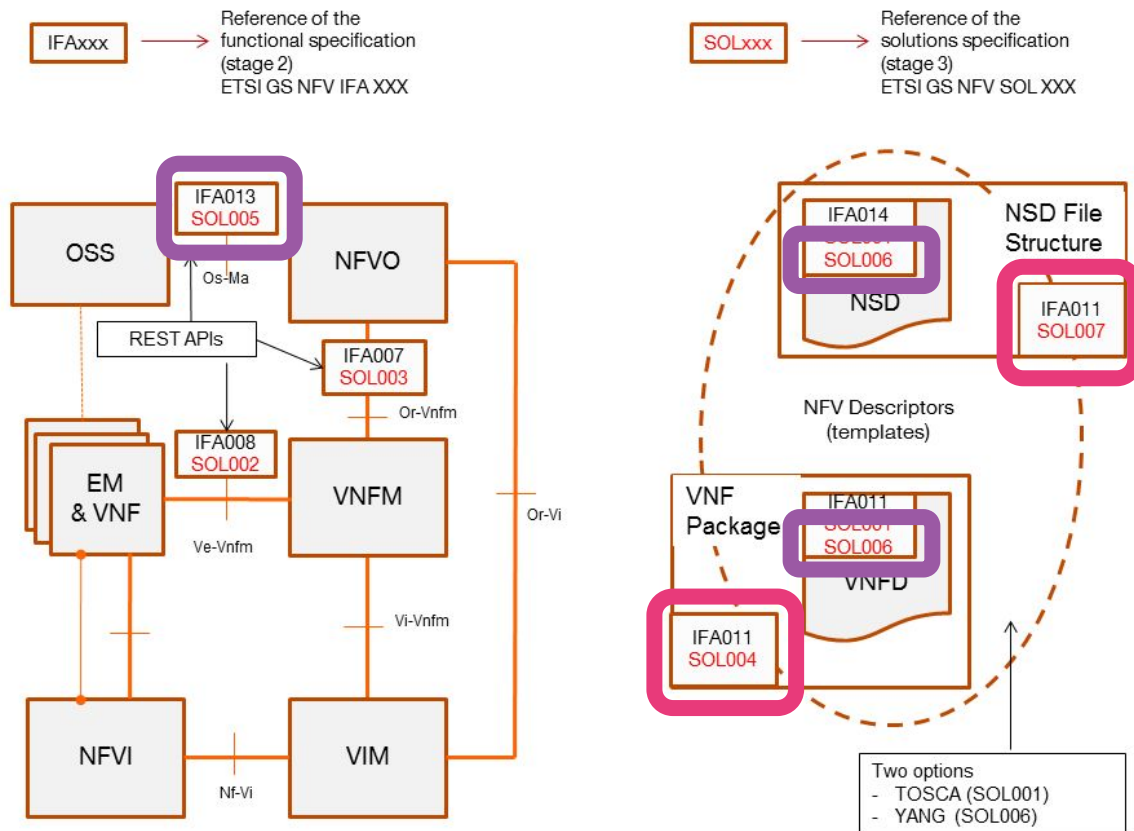
- Support of Ubuntu 20.04 and better tracking of the installation process.



Soon available at:
osm.etsi.org

... and other improvements in usability and stability derived from the learnings of latest OSM production deployments

SOL004 & SOL007



VIM plugin for Google Cloud

PROJECT

Packages

Instances

NS Instances

VNF Instances

PDU Instances

NetSlice Instances

Operational Dashboard

SDN Controller

VIM Accounts

K8s

OSM Repositories

WIM Accounts

ADMIN

Projects

Users

NS Instances

init

running / configured

failed

scaling

Entries 10

Name	Identifier	Nsd name	Operational Status	Config Status	Detailed Status	Actions
<input type="text" value="Name"/>	<input type="text" value="Identifier"/>	<input type="text" value="Nsd name"/>	<input type="text" value="Select"/>	<input type="text" value="Select"/>	<input type="text" value="Detailed Status"/>	
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pcf-elasticsearch-gcp1	68300ee6-c38b-4a4a-8d24-6531a13dc2ae	elasticsearch_ns	<div></div>	<div></div>	Done	<div><div></div><div></div><div></div><div></div><div>Action</div></div>
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pcf-prometheus-openstack1	e2b49f55-f597-4980-8996-ffe5d7497717	prometheus_suite_ns	<div></div>	<div></div>	Done	<div><div></div><div></div><div></div><div></div><div>Action</div></div>

Bonus: Google Cloud as K8s Cluster

Kubernetes Engine

Clusters

Workloads

Services & Ingress

Applications

Configuration

Storage

Object Browser

Migrate to containers

Config Management

Workloads

REFRESH

+ DEPLOY

DELETE

Cluster

Namespace

RESET

SAVE

occne-kibana

OK

Deployment

1/1

occne-infra

pcf-cluster-gcp1

occne-prometheus-alertmanager

OK

Deployment

1/1

occne-infra

pcf-cluster-gcp1

occne-prometheus-kube-state-metrics

OK

Deployment

1/1

occne-infra

pcf-cluster-gcp1

occne-prometheus-node-exporter

OK

Daemon Set

3/3

occne-infra

pcf-cluster-gcp1

occne-prometheus-pushgateway

OK

Deployment

1/1

occne-infra

pcf-cluster-gcp1

occne-prometheus-server

OK

Deployment

1/1

occne-infra

pcf-cluster-gcp1

occne-tracer-jaeger-agent

OK

Daemon Set

3/3

occne-infra

pcf-cluster-gcp1

occne-tracer-jaeger-collector

OK

Deployment

1/1

occne-infra

pcf-cluster-gcp1

occne-tracer-jaeger-query

OK

Deployment

1/1

occne-infra

pcf-cluster-gcp1

pcf11-appinfo

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-oc-binding

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-oc-diam-connector

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-oc-diam-gateway

OK

Stateful Set

1/1

occnnp

pcf-cluster-gcp1

pcf11-occnnp-chf-connector

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-occnnp-config-server

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-occnnp-egress-gateway

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-occnnp-ingress-gateway

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-occnnp-nrf-client-nfdiscovery

OK

Deployment

1/1

occnnp

pcf-cluster-gcp1

pcf11-occnnp-nrf-client-nfmanagement

OK

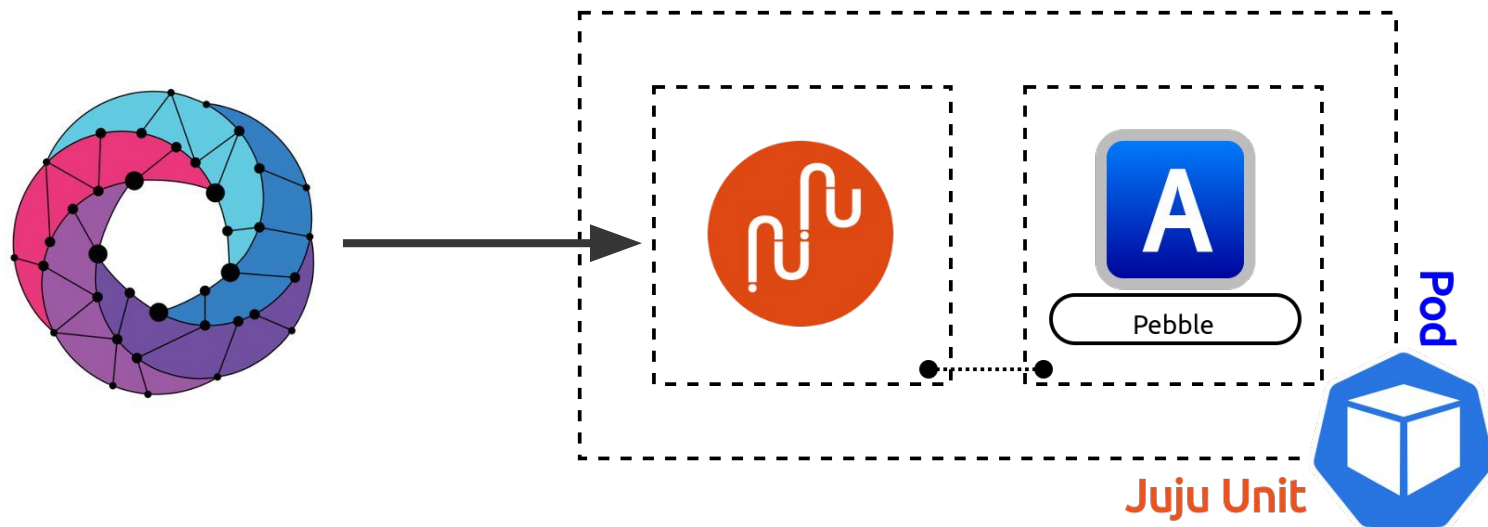
Deployment

1/1

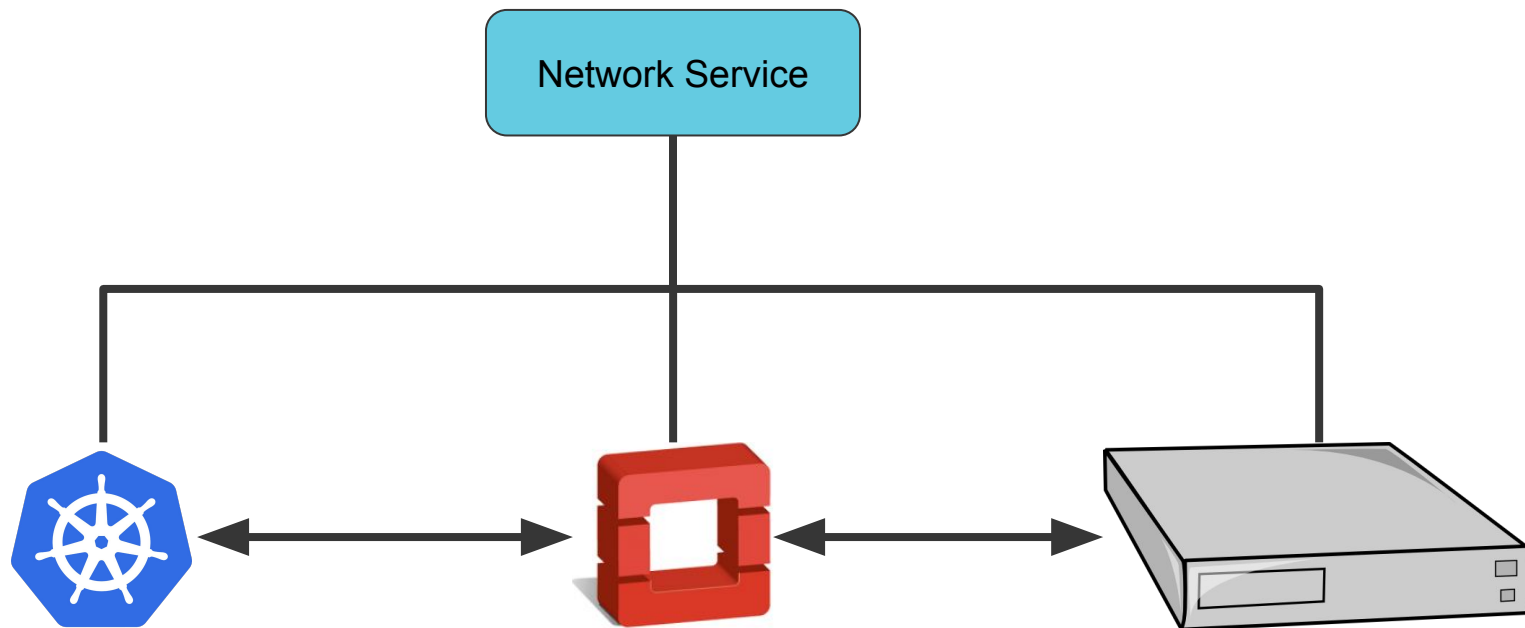
occnnp

pcf-cluster-gcp1

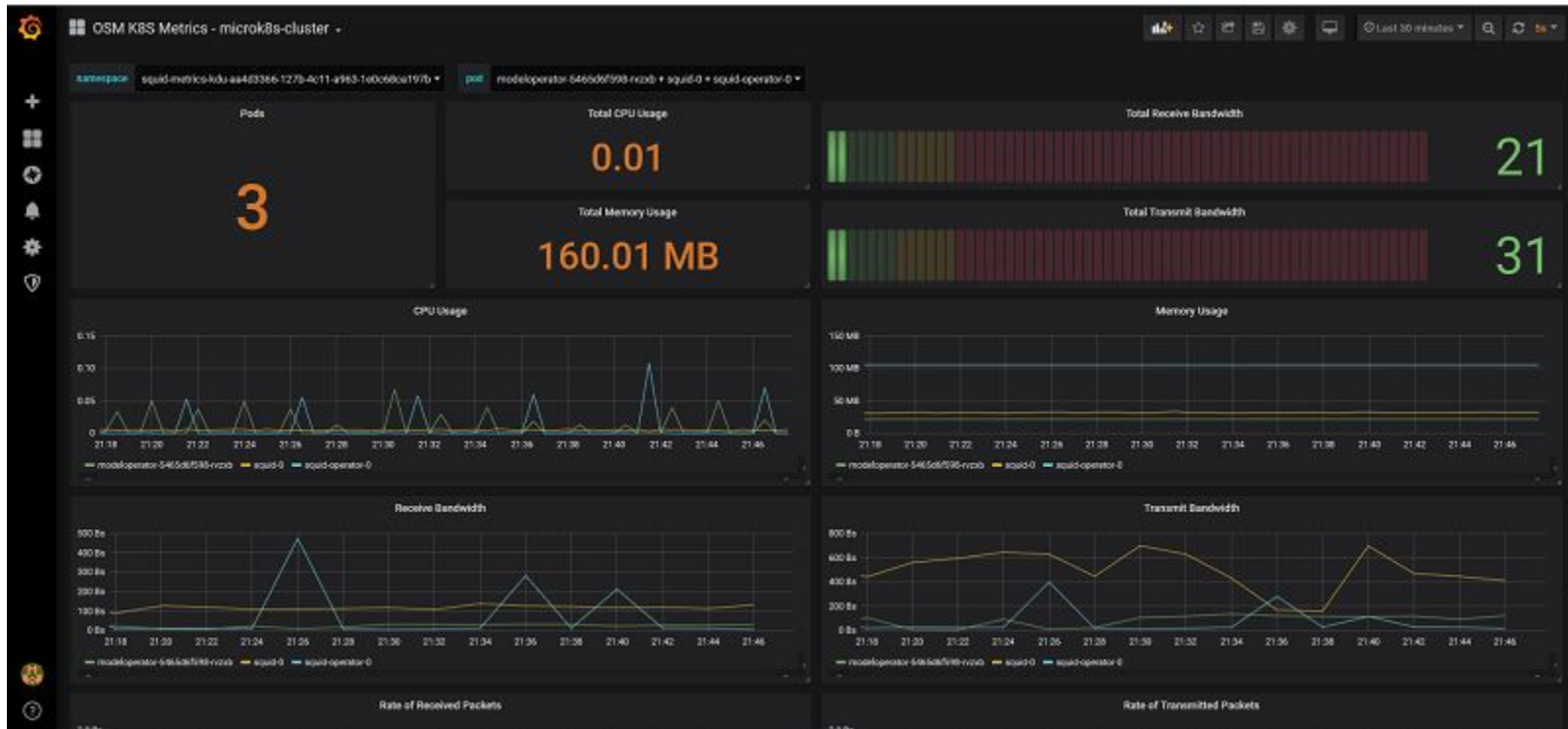
Fine-grained operations in CNFs

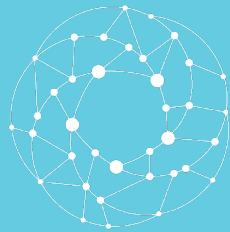


Integration across PNF, VNF, and CNFs



CNF Monitoring of Kubernetes





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Thank you
Questions?