

2022-01-11 - Anuket: RA-1 (OpenStack based) What's next?

Topic Leader(s)

- [Karine Sevilla](#)
- [Pankaj Goyal](#)
- [Ildiko Vancsa](#)

Topic Overview

60 minutes

The intent is to solicit inputs for RA-1 in order to adjust the content of Moselle release.

Topics of interest: what else, acceleration, Telco edge cloud, multi-cloud/hybrid cloud, storage, and automation

Slides & Recording



YouTube

Live Interactive Session

Slides: [LFN-DDTF-2022-01-11-RA1.pdf](#)

Recording: [LFN-DDTF-2022-01-Anuket-RA1.mp4](#)

Agenda

- Status of Lakelse release and scope of what is covered
- Brainstorm on what needs to be included/modified in RA-1
- Acceleration: feedbacks required on the use of Cyborg and on the support of accelerators like FPGA, smartNIC or GPU
- Telco edge cloud
- Multi-cloud/hybrid cloud
- Storage: solutions beyond CEPH
- Automation: Cloud provisioning, LCM

Minutes

Quick presentation on RA-1 Lakelse Release

Acceleration

- [Walter Kozlowski](#) Add Cyborg to RI and RC?
- [Beth Cohen](#) HW Acceleration in private cloud. What are we doing, for example, for crypto?
- [John Hartley](#) HW Acceleration at Edge is absolutely necessary
 - pls see Edge below
- [Riccardo Gasparetto Stori](#) RA2 has some requirements on HW acceleration
- [Riccardo Gasparetto Stori](#) use k8s for scheduling of resource requests, consumption and management incl scaling. Plugins for acceleration devices. Examples: encryption acceleration.
- [Karine Sevilla](#) we need use cases to justify further work on HW ACceleration in RA1. Use case with compute intensive requirements can be a candidate.

Edge

- Is OpenStack relevant for the Edge?
- [Ildiko Vancsa](#) What constitutes Edge?
- [Beth Cohen](#) VZN has several products at the Edge incl. OpenStack at the Edge. Minimal OSTK on 1 or 2 cores.
 - Another product, K8s on OpenStack allowing customers to run their workloads.
 - Retail, manufacturing, small office environments
 - Tenant management is the tricky point
- [Beth Cohen](#) [Ildiko Vancsa](#) Windriver deploys services with OpenStack at the edge
- [John Hartley](#) wind river are significant contributor to starlingX project
- Gaps: Tools for deployment, config, updates, ...

- HW disaggregation is still hard
- Testing and verification support for HW and service chains

Hybrid and multi-cloud

- [Pankaj Goyal](#) should RA1 deal with hybrid/multi-cloud
 - or just keep to private/on-prem specs
- [John Hartley](#) Anuket to orchestrate hybrid multi-cloud
- [Karine Sevilla](#) We must check if services orchestration within a hybrid multi cloud environment is addressed by other communities, such as ONAP
- [Beth Cohen](#) It can be a cross communities topic
- [Walter Kozlowski](#) [John Hartley](#) RM should address orchestration at least for network, interactions needed between RM and RAs
- [John Hartley](#) Check ETSI documents on network orchestration
- [Karine Sevilla](#) No feedback from the audience on OMNI project adoption
- [Ildiko Vancsa](#) OMNI doesn't seem to be active, the last changes in the repo were ~3 years ago

Storage

- [Cedric Ollivier](#):
 - From an API point of view, we don't deal with CEPH but storage features exposed by the API
 - CNNT RC1 was also verified vs the default backend used in OpenStack gates
- [John Hartley](#) Should see how Storage Model from RM can be achieved with RA-1 architecture.

Automation

- This is a key component that I think has been overlooked.
- [Karine Sevilla](#) Lack of time to address automation during the session

Action Items

