# Reference Architecture 1 OpenStack Release Selection

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# RA1 OpenStack Release

- OpenStack baseline release is Train since CNTT Baraque release, September 2020

- Triggering events for new release selection
  - Complete change in OpenStack architecture: OpenStack, OpenStack Service, API
  - New OpenStack features required for workloads
  - Major Security fix
  - Current OpenStack release entered « Extended Maintenance » 18 months ago

# OpenStack releases status

Train release should enter « Extended Maintenance » phase soon

|  | Status | Initial release Date | Next Phase |
|---|---|---|---|
| **Train** | Maintained | 2019-10-16 | Extended Maintenance estimated 2021-05-12 |
| **Ussuri** | Maintained | 2020-05-13 | Extended Maintenance estimated 2021-11-12 |
| **Victoria** | Maintained | 2020-10-14 | Extended Maintenance estimated 2022-04-18 |
| **Wallaby** | Maintained | 2021-04-14 | Extended Maintenance estimated 2022-10-14 |

Functest ready for Ussuri, Victoria and Wallaby

RedHat OSP 19 LTS should rely on Wallaby (RH OSP16, Feb. 2020, Train)

# RM requirements Evolution

- Requirements introduced with Kali to be incorporated in RA1
  - Support for Hardware Acceleration: major trigger
  - Edge Cloud: gRPC protocol…
  - Security features
  - Automation and LCM

# Which features of interest for Lakelse?

OpenStack Release Highlights:
https://wiki.anuket.io/display/VE/Anuket+RA1-+OpenStack+Releases+Highlights

| OpenStack Services | Ussuri | Victoria | Wallaby |
|---|---|---|---|
| Cyborg | Full integration with Nova, API v2 | Accelerator drivers added: Intel QAT and Inspur FPA<br>Program API for FPGA | Accelerator drivers added:<br>Intel Nic, Inspur NVMeSSD<br>Shelve/Unshelve opérations<br>vGPU |
| Nova | Support for creating servers with accelerator devices via Cyborg | Pinned and Floating CPUs within the same mova server<br>Servers with TPM devices | Support improved for accelerators<br>UEFI Secure Boot with Libvirt driver<br>Support vDPA with libvirt driver |
| Neutron | OVN driver in-tree Neutron ML2 drivers | Flat networks added for DVR | New subnet type network:routed for BGP advertize |
| Octavia | Load balancers in specific AZ (for edge) | | gRPC  protocol<br>SCTP load balancing |