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Anuket: Kubernetes Architecture RA2 Orinoco Release

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RA2 releases & scope

v.	Date	Name
1.0-alpha	10 th Jan 2020	Snezka
3.0	15 th May 2020	Baldy
4.0	25 th Sep 2020	Baraque
5.0	29 th Jan 2021	Elbrus
6.0	30 th Jun 2021	Kali
7.0	7 th Dec 2021	Lakelse
8.0	14 th June 2022	Moselle
9.0	13 th Dec 2022	Nile

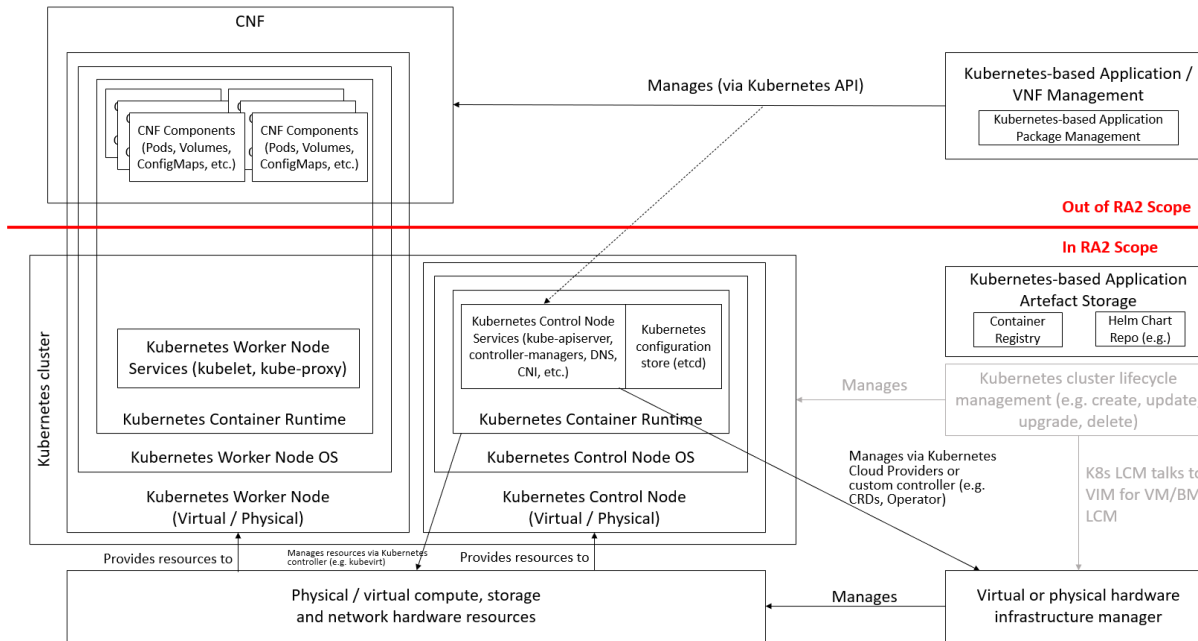
Anuket – Nile: Released

- M0 Start - 2nd August 2022
- M1 Release definition – 16th Aug 22
- M2 Scope Freeze – 13th Sep 22
- M3 Content Freeze – 8th Nov 22
- M4S Proofreading – 6th Dec 22
- M5 Release – 13th Dec 22

RA2 Bogometer

Chapter	Status	Notes
Chapter 01 - Overview	Complete	
Chapter 02 - Architecture Requirements	Lots of SME feedback	Requirements – from RM
Chapter 03 - L2: High Level Architecture	Dickering over the fine points	CaaS building blocks
Chapter 04 - L3: Component Level Architecture	Lots of SME feedback	Specs for clusters: Nodes, sizing, K8s control plane, Networking & plugins, storage, workload reqs.
Chapter 05 - Security Guidance	Lots of SME feedback	Security policies for CaaS
Chapter 06 - Special Interest Group level requirements	Dickering over the fine points	Maps specs to K8s SIG features tested by Functest
Chapter 07 - Gaps, Innovation, and Development	Lots of SME feedback	What's missing from the ecosystem
Appendix A - Guidance For workload isolation (multitenancy) with Kubernetes	Lots of SME feedback	Multitenancy guidance

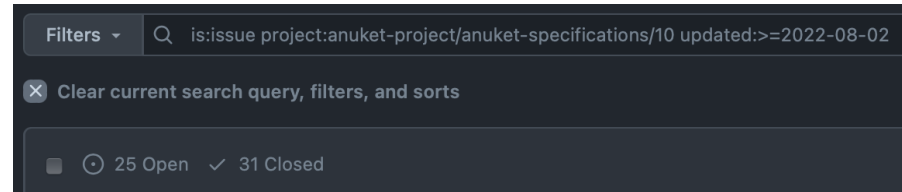
RA2 scope & Nile review



- **Upgrade** to Kubernetes 1.24
- Monitoring & Telemetry
- Progressed CNF workload requirements – alignment with CNCF CNF WG
- API specs for CNI **multiplexers**
- Alignment with Anuket RM – **PaaS** specs
- Updated **APIs** and Feature support (only GA now)

The RA2 project addressed **31 issues** in the Nile release, featuring:

- Update to **K8s 1.25**
- **Monitoring & Telemetry**
- **security requirements**
- Progressed **CNF workload requirements**
- Specifications for Storage requirements
- Updates & Fixes
- API specs for **CNI multiplexer**



RA2 Orinoco – what's coming



- GSMA Publication
 - Editorial work to GSMA-proof the content and structure of RA2 for publication as NG.139
- Update Kubernetes version
 - Bump the Kubernetes version and add/remove new/deprecated features and APIs
 - Check host OS requirements against new K8s releases
- Add features
 - Add specifications on new features for RA2 compliant clusters to implement:
 - e.man requirements
 - NAT
 - Infra monitoring
 - Express Data Path (XDP)
 - Edge node specs and labels
 - PaaS Services
 - Storage requirements
 - Service Mesh
- Modern naming
 - fix terminology across docs
- CaaS Manager
 - specs for caas manager interface
- Functest sync
 - Align testing tables - add new tests
- Fixes
 - clarify gaps, security requirements

Join us!

We aim to accelerate the adoption of telco cloud using open standards and architectures.

We welcome contributors from any background. Feel free to join our meetings, mail us or check the repository.

Weekly meetings – Monday @ 1000 UTC:

<https://wiki.anuket.io/display/HOME/Anuket+Meetings>

Mailing list: <https://lists.anuket.io/g/ra2>

Wiki: <https://wiki.anuket.io/x/QgB>

Docs: https://cnrt.readthedocs.io/en/latest/ref_arch/kubernetes/

GitHub project: <https://github.com/anuket-project/anuket-specifications/projects/10>



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