Anuket: Kubernetes Architecture RA2 Orinoco Release

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RA2 releases & scope

| v.	Date	Name
1.0-alpha	10th Jan 2020	**Snezka**
3.0	15th May 2020	**Baldy**
4.0	25th Sep 2020	**Baraque**
5.0	29th Jan 2021	**Elbrus**
6.0	30th Jun 2021	**Kali**
7.0	7th Dec 2021	**Lakelse**
8.0	14th June 2022	**Moselle**
9.0	13th Dec 2022	**Nile**
10.0	27th June 2023	**Orinoco**

Anuket – Orinoco
- M0 Start – 10th Jan 23
- M1 Release definition – 1st Feb 23
- M2 Scope Freeze – 1st Mar 23
- M4 Content Freeze – 2nd May 23
- M4S Proofreading – 6th Jun 23
- M5 Release – 27th Jun 23

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
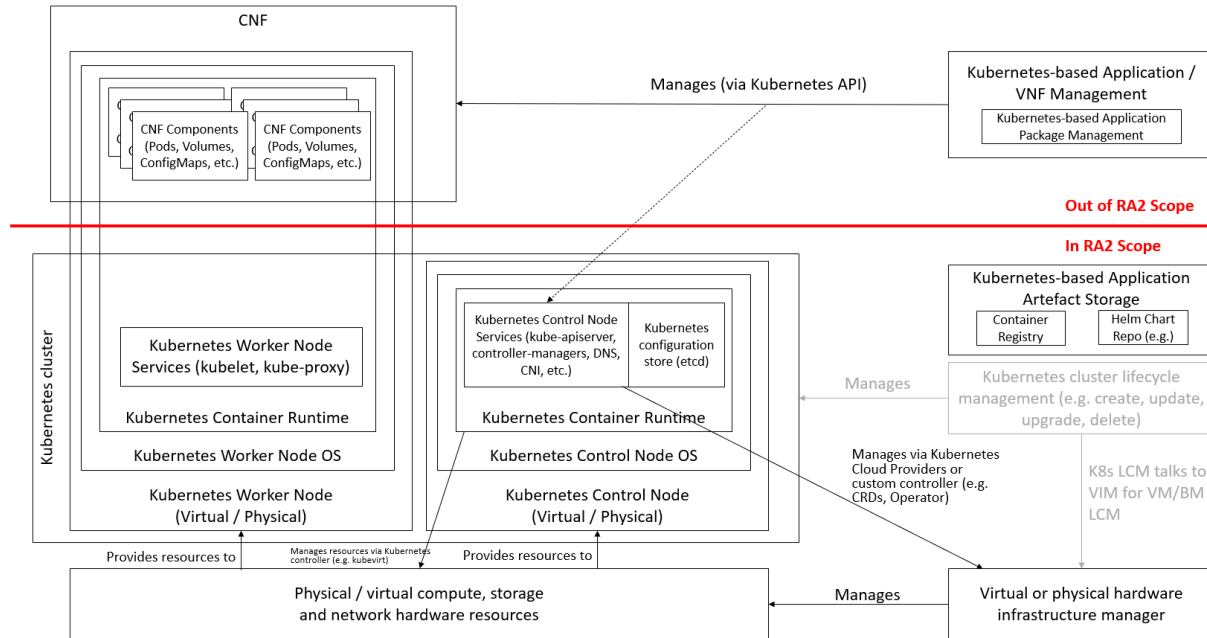
RA2 Orinoco release

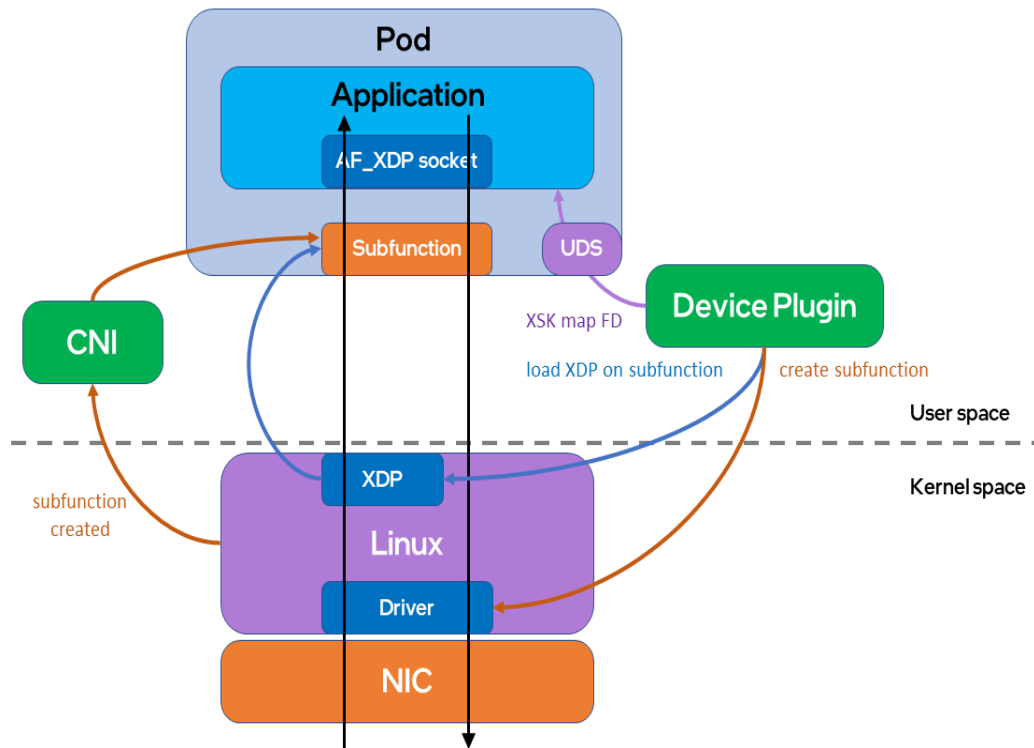The RA2 project addressed **20 issues** in the Orinoco release, featuring:

- Update to **K8s 1.26**
- **Kernel** requirements
- **AF_XDP** architecture
- **GSMA** doc output
- External **BibTEX** bibliography
- Finalised conversion MD to **RST**
- Various Updates & Fixes
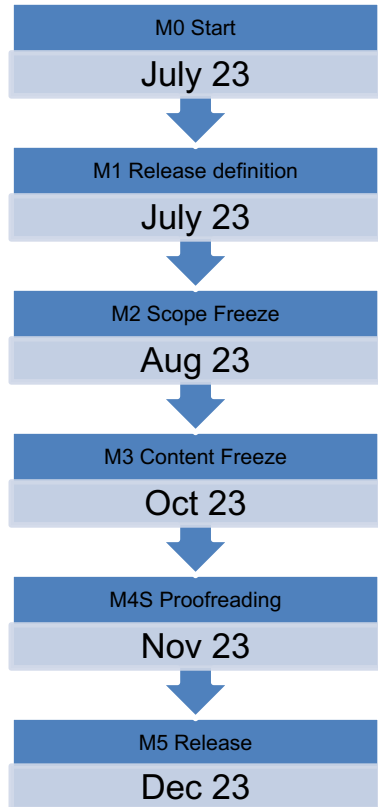
Address Family for XDP (AF_XDP)

Added text with diagrams to RM Ch3, 4 and 10, and RA2 Ch3, explaining:
- Applications written for AF_XDP, with DPDK, or with VPP
- Bare metal or virtualized
- Device Plugin and CNI

Still to come: RA2 spec

RA2 Pieman – what's coming

Milestone	Date
M0 Start	July 23
M1 Release definition	July 23
M2 Scope Freeze	Aug 23
M3 Content Freeze	Oct 23
M4S Proofreading	Nov 23
M5 Release	Dec 23

- Update Kubernetes version
  - 1.27? 1.28?
- Add features
  - NAT
  - Infra monitoring
  - Edge node specs and labels
  - PaaS Services
  - Storage requirements
  - Service Mesh
- CaaS Manager
  - specs for caas manager interface

- Functest sync
  - Align testing tables - add new tests
- Fixes
  - clarify gaps, security requirements
- Anything else?

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://cntt.readthedocs.io/en/latest/ref_arch/kubernetes/**
GitHub project: **https://github.com/anuket-project/anuket-specifications/projects/10**