



The Standards People

ETSI NFV Conference

Evolving NFV towards the Next Decade
Celebrating the 10th Anniversary of ETSI NFV

Open Infrastructure and
Standards - We Are in This
Together!

Ildikó Váncsa

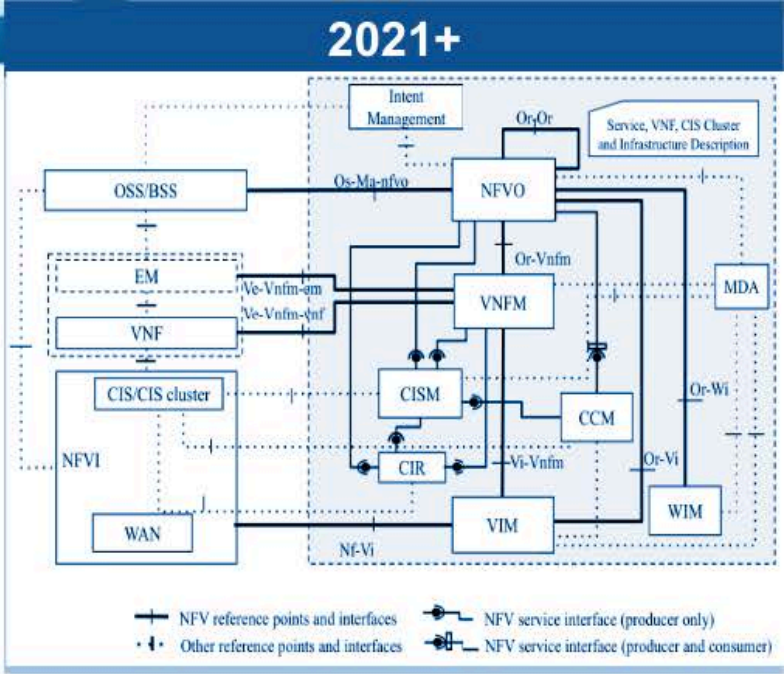
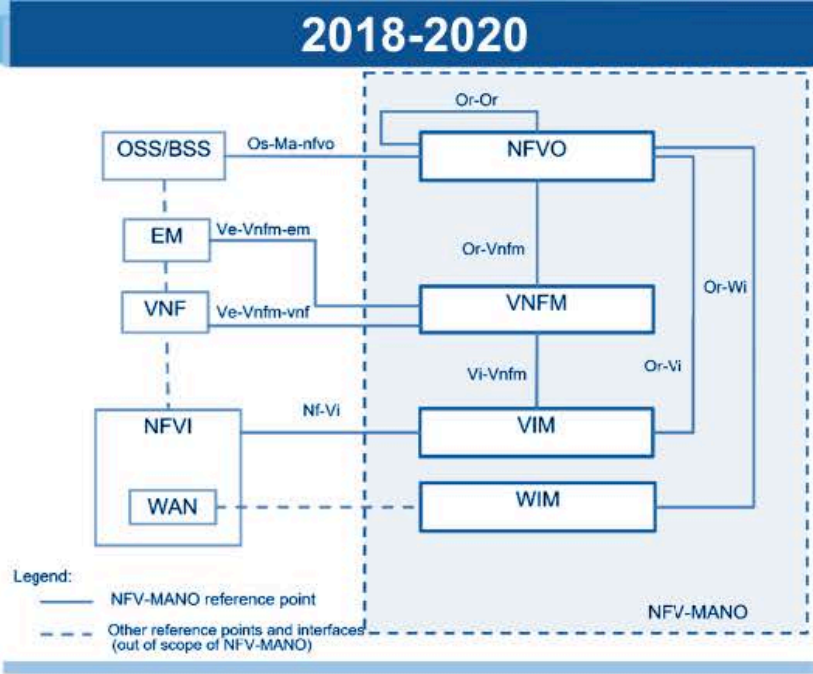
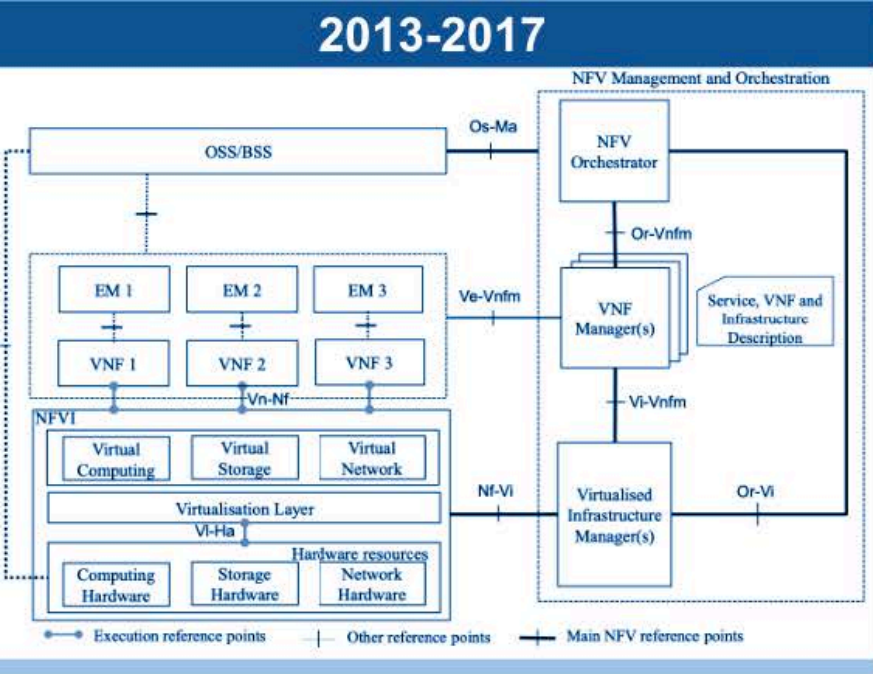
Director of Community, Open Infrastructure Foundation

07/03/2023



History

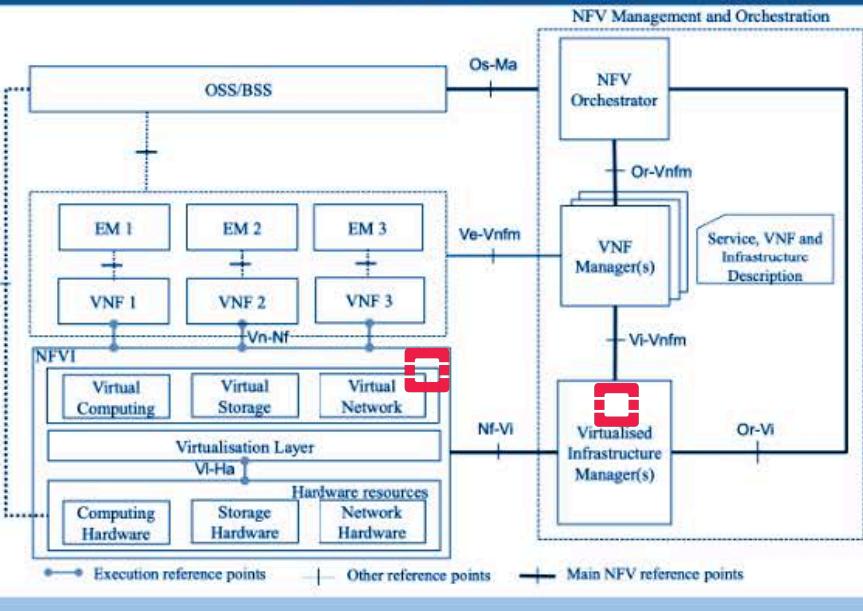
ETSI NFV Evolution



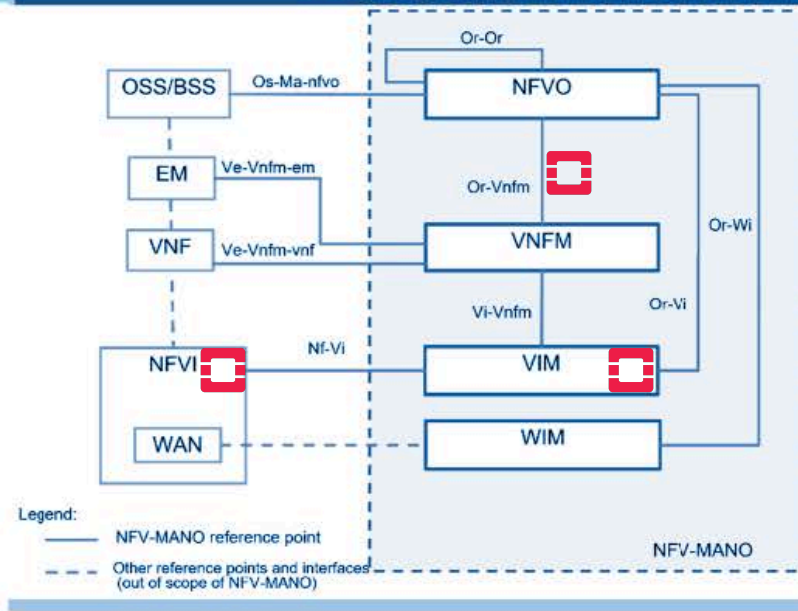
Source: In the Light of Ten Years from the NFV Introductory Whitepaper - <https://www.etsi.org/images/files/ETSIWhitePapers/ETSI-WP-53-In-the-Light-of-Ten-years-from-the-NFV-Introductory-Whitepaper.pdf>

ETSI NFV Evolution

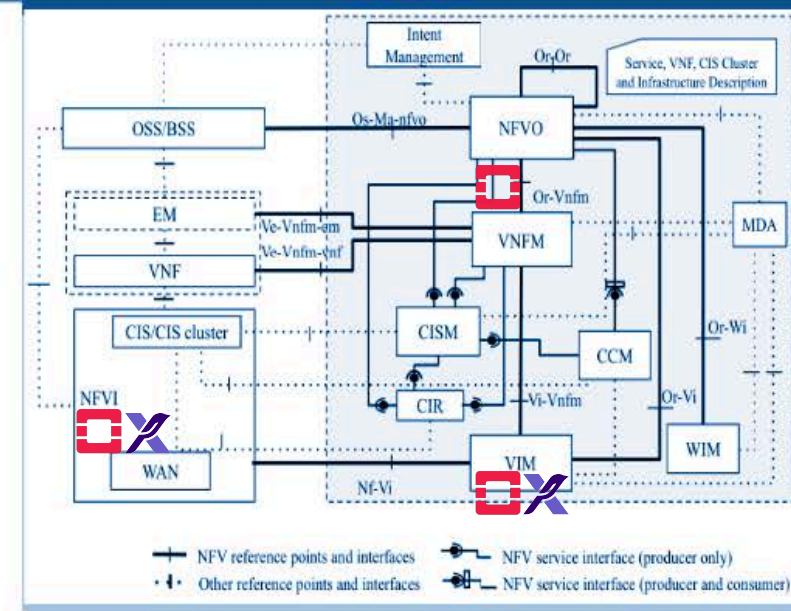
2013-2017



2018-2020



2021+



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Open Collaboration

Software and Standards Over the Past Decade

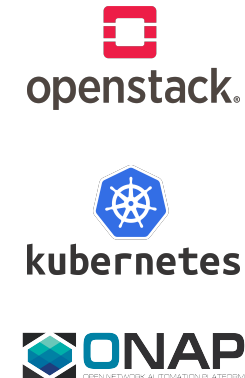
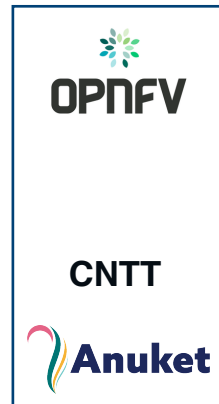
Key to Evolving Standards and Technology

- Open source software development enables innovation and accelerates adoption
- De-facto standard APIs and interfaces aren't always enough
- Interoperability - an ongoing challenge that calls for consensus

Integration and Testing

Standards

Software Development



2010

2023



OpenStack from A to Z

Austin - 2010 October

Bexar - 2011 February

Cactus - 2011 April

Diablo - 2011 September

Essex - 2012 April

Folsom - 2012 September

Grizzly - 2013 April

Havana - 2013 October

Icehouse - 2014 April

Juno - 2014 October

Kilo - 2015 April

Liberty - 2015 October

Mitaka - 2016 April

Newton - 2016 October

Ocata - 2017 February

Pike - 2017 August

Queens - 2018 February

Rocky - 2018 August

Stein - 2019 April

Train - 2019 October

Ussuri - 2020 May

Victoria - 2020 October

Wallaby - 2021 April

Xena - 2021 October

Yoga - 2022 March

Zed - 2022 October

Antelope - 2023 March - Estimated

Bobcat - 2023 October - Estimated

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OpenStack Antelope Highlights

Release is scheduled for the week of March 20th!

<https://releases.openstack.org/antelope/highlights.html>

Designate - multi-tenant DNSaaS

- Designate zones can now be shared across multiple projects

Nova - Compute

- Ability to manage the power consumption of dedicated CPUs

Neutron - Networking as a Service

- Implementation of the secure role-based access control (sRBAC)
- Support of Neutron dynamic routing with ML2/OVN

Tacker - Generic VNFM and NFVO

- AutoHeal and AutoScale triggered by an external monitoring tools such as Prometheus without NFVO
- CNF auto scale via performance management threshold interface
- Update network configuration via Change Current VNF Package API

The Power of Collaboration



OpenStack Summit Barcelona

- OPNFV Doctor & OpenStack Vitrage Demo
- Mobile infrastructure on stage
- Live call with failover
 - Call didn't drop after cutting the cable
 - Successful collaboration of standards and open source projects

ETSI NFV and OpenInfra at the Project Teams Gathering



Project Teams Gathering (PTG), Denver

- In-person discussion between OpenStack contributors and ETSI ISG NFV representatives
- Closing the feedback loop and accelerating conversations
- Takeaways
 - Gaps in the open source software and APIs
 - Standards and software-development languages need to converge more
 - Real life examples and applicability need to be provided to open source communities for context

OpenInfra Project Teams Gathering

→ March 27-31, Online Event

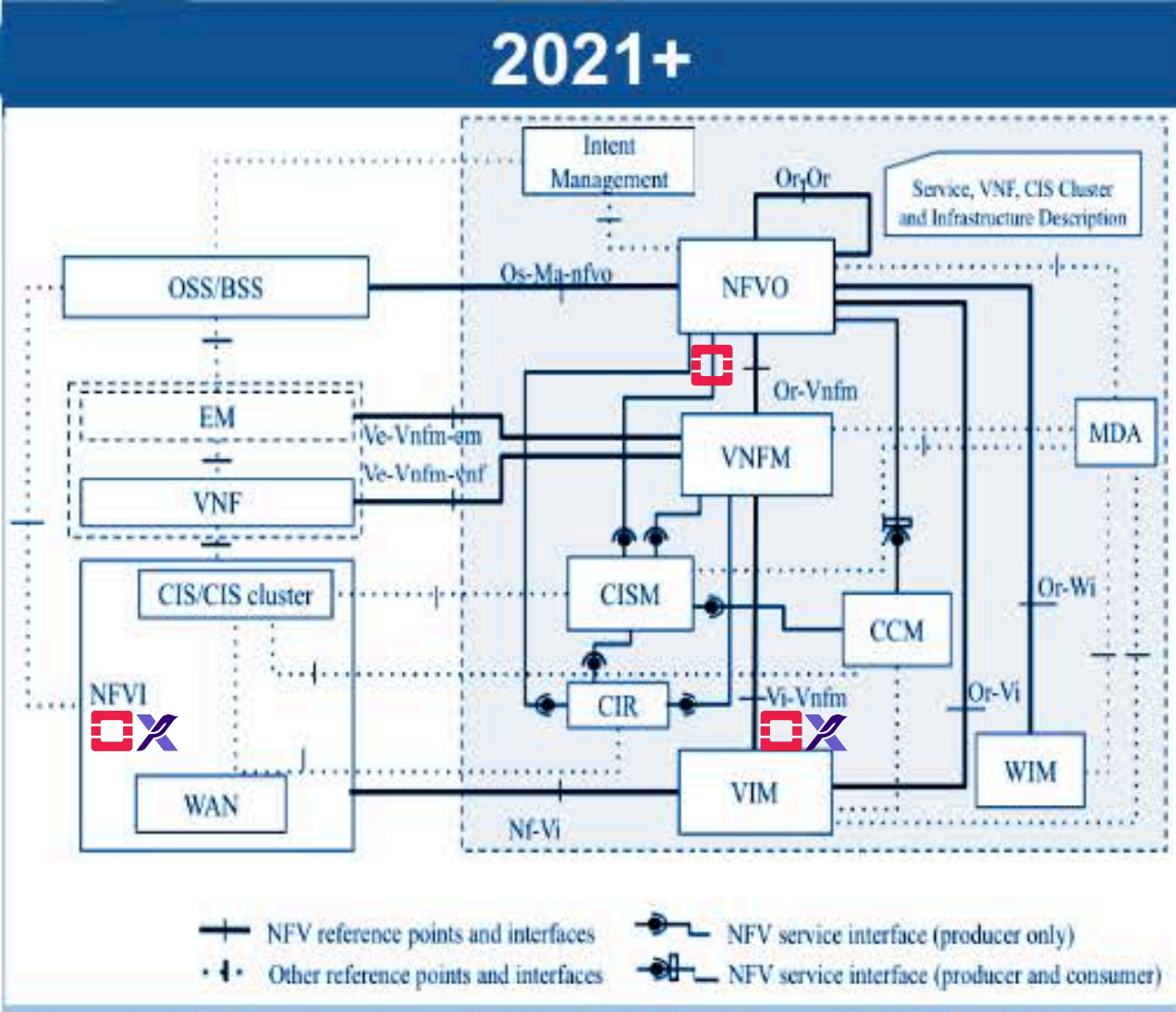
- Contributor-focused event to plan roadmap and discuss release priorities and further technical topics
- Registration is open!



Event information at <https://openinfra.dev/ptg/>

Evolution Path

ETSI NFV Now



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LINUX

Open source **operating system** standard

OPENSTACK

Open source **cloud** standard

KUBERNETES

Open source **container orchestration** standard

INFRASTRUCTURE

LINUX

Open source **operating system** standard

OPENSTACK

Open source **cloud** standard

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INFRASTRUCTURE



- a LOKI Architecture Example

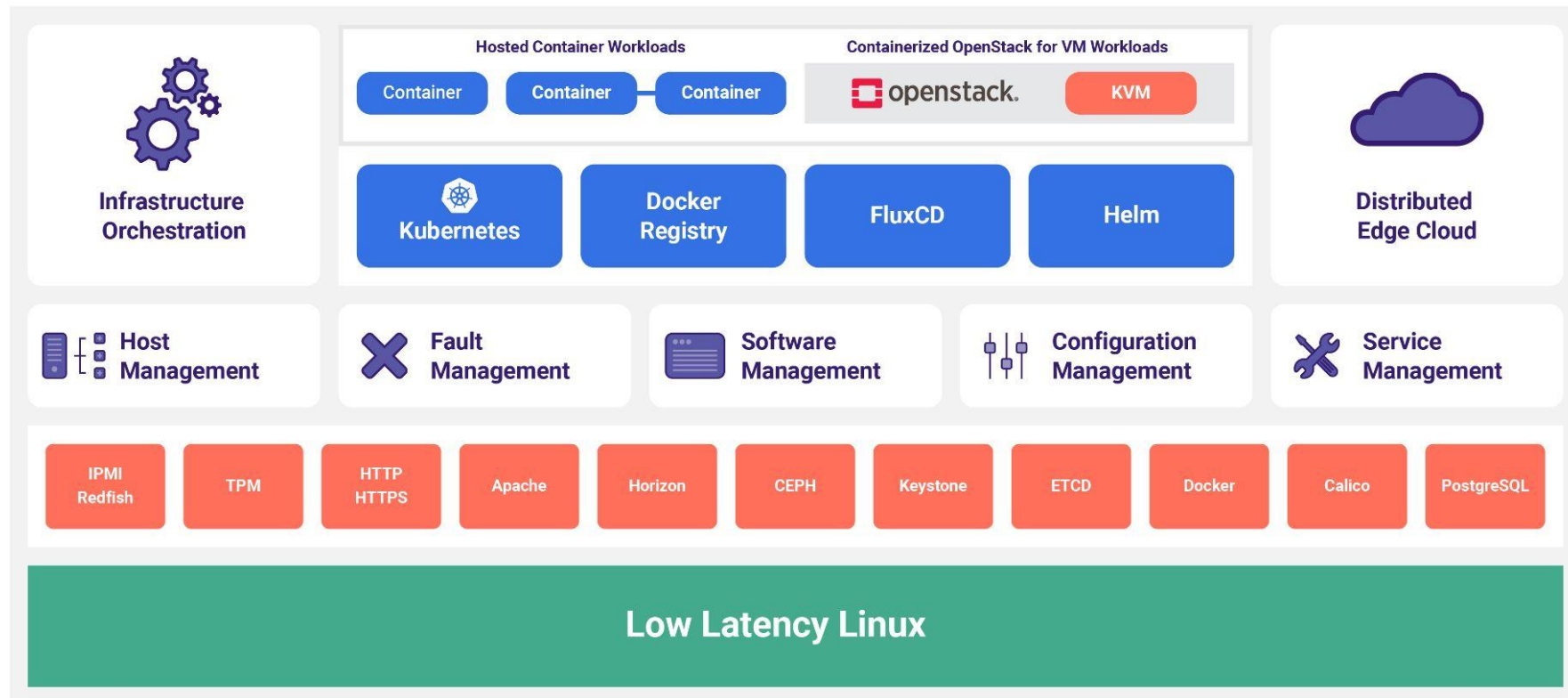
STARLINGX

StarlingX provides a **deployment-ready, scalable, highly reliable** edge infrastructure software platform

StarlingX platform services focus on

- **Easy deployment**
- **Low touch manageability**
- **Rapid response to events**
- **Fast recovery**
- **Distributed Cloud architecture**

Currently **running in production** at large telecom operators such as **T-Systems, Verizon, Vodafone, KDDI**, and more.



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VANCOUVER!

→ JUNE 13-15, 2023

 OpenInfra
SUMMIT > VANCOUVER '23

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openinfra.dev/summit





Thank You!