

Moselle Release Highlights

Project, Workstream, or committee	Best contact for followup questions (Use @ notation)	What has changed?	Why is this significant/beneficial to a user/consumer of Anuket?	Notes, links to more information, etc.
ViNePerf	Sridhar Rao	- Support for Kubernetes dataplane benchmarking - east-west traffic - is added. - Two new tools (stress generator for kubernetes dataplane benchmarking and cloud information collector tool to automate the testing) are added. - Support for building using newer version of DPDK/OVS-DPDK is added. - Minor bug fixes (Qemu build, VPP Build, T-Rex)	- The DPDK-Based East-West dataplane benchmarking, using traffic generators such as T-Rex and DPPD-Prox, will be extremely valuable for testing - The two tools support automation of dataplane benchmarking in kubernetes environment. - Support for newer versions of DPDK is very important to evaluate the switching based on that (DPDK)	
Thoth	Sridhar Rao	6 Models under VM failure prediction is included (4 LSTM-variations, CNN and Decision Tree). - Two research studies (ML Problems and Techniques for NFV and OSS projects for ML in NFV) are included. - Two tools (Model Selector and Data Extractor) are included.	- ModelSelector suggests the best model to start with, based on the data and problem in hand. This can be very useful and save significant time to the users. - The research studies gives the thorough information about the state-of-art for ML in NFV. - The Virtual-Machine FP models improves the performance compared to the existing models.	
Anuket Reference Model	Walter Kozlowski	- Multi-cloud interaction summary table and examples section "Requirements, Reference Architecture & Industry Standards Intersect" added - Single pane requirements added (for Multi-Cloud) - Software supply chain security updated - Regulatory directives for cybersecurity added - Storage: Tenant Reference, storage types, use cases and stereotypes updated - Infrastructure LCM Automation section added - General PaaS Services contents updated (Logging, Monitoring, LB requirements) - Specs for infrastructure monitoring from ETSI GS NFV-TST 008 V3.5.1 added	- Gives Communication Service Providers (CSPs) a base to adopt and sponsor a set of standards that are necessary to support the interactions with Cloud Providers. - Provides CSPs with a minimum set of requirements for operations in a Hybrid, Edge, and Multi-Cloud environment. - Software supply chain security is crucial and is made complex by the greater attack surface provided by the many different supply chains in virtualised, containerised, and edge environments. This section will help the operators to implement the best practices to address these risks. - Provides leading examples of regulatory frameworks relevant for Cloud Infrastructure in the telecom environment. This new section will provide important guidance for the operators. - Provides a relatively simple way for the storage consumer to specify / select their storage needs. - Provides operators with a structured framework and best practice principles for Automation of Infrastructure Life-cycle. - Provides a telecom operator (CSPs) with a set of new or updated requirements for selected non-Telco PaaS Services. - Fleshes out the specs for infrastructure monitoring from ETSI GS NFV-TST 008 V3.5.1, to be used by RA-1 and RA-2.	
Anuket Kubernetes Reference Architecture	Riccardo Gasparetto Stori	- Added CNF workload guidelines, aligned with CNCF CNF certification test list - Added CNF packaging specifications - Added Edge Cloud Hardware requirements - Updated to Kubernetes 1.23 - Added Host OS requirements	- Enables CNF providers to follow industry guidelines to ensure containerised workloads follow cloud native best practices and can run on Anuket compliant cloud infrastructure. These CNFs can be then easily deployed by operators. - Standardised deployment practices include packaging. - Relaxes strict requirements on hardware performance allowing constrained edge deployments - important for 5G. - Kubernetes 1.23, the latest supported release of Kubernetes, includes important new features relevant to telcos such as IPv4/IPv6 Dual-stack, HorizontalPodAutoscaler v2 and Generic Ephemeral Volumes. Support is also extended until Dec. 22. - Host OS requirement allow cloud providers to identify the minimum OS & kernel capabilities required to run Anuket compliant Kubernetes platforms, and leverage the latest security and other improvements.	
OpenStack Reference Architecture	Karine Sevilla	- Addition or update of specifications reference in tables of requirements - Edge : OpenStack services deployment, storage scenarios, image caching considerations - Storage: developments aligned with Reference Model - LCM automation: installers description, automation of underlying resources provisioning	- The reader will easily find details of configurations or specific information with pointers to sections addressing the requirements. It simplifies the use of the specification. - Guidance for edge deployments, including relaxation of - Inputs for the choice of storage solution per workload requirements - Guidance for automation, examples of tools	
R12/Kuberef	Dan Xu	- Align requirements covered in R12 with RA2 Lakelse, and support 16 new requirements in R12. - Did some bug fix and automate some prepare steps in kuberef.	Automated e2e deployment of a reference platform based on RA2 Lakelse on baremetal, infrastructure provider (Equinix Metal) and virtualized infrastructure using opensource tooling.	