

# Kali Release Highlights

Project, Workstream, or Committee	Best contact for follow-up questions	New Features and Capabilities  (approximately one paragraph summary)	What is the significance of the Kali Release for your users, and to Anuket overall?  (approximately one paragraph summary)	Notes, links to more information, etc.
AIRSHIP Installer	<a href="#">James Gu</a>	Airship Installer Kali release contains a number of bug fixes and enhancements.	The Kali release brings enhanced support of OpenStack provider network and QOS in the Anuket RI-1 and further alignment to the RC-1 policy settings. As a result, the RC compliance level has increased significantly.	
Barometer	<a href="#">Emma Foley</a>	<p>Testing and build tools were developed and updated to do the following:</p> <ul style="list-style-type: none"> <li>* A new reference container was added for the collectd-6.0 version, which is under development and represents a big API change that is not backwards compatible. This reference build should facilitate porting the plugins that were previously developed by the Barometer project.</li> <li>* Updated to the stable version of collectd to collectd 5.12.</li> <li>* Removed duplication in the three existing containers (stable, latest and experimental).</li> </ul>	The Kali release is the first one since becoming part of Anuket, and focusses on changes that will make testing and integrating easier.	<p>Release notes in progress</p> <p><a href="https://gerrit.opnfv.org/gerrit/c/barometer+/72704">https://gerrit.opnfv.org/gerrit/c/barometer+/72704</a></p>
CIRV-SDV	<a href="#">Sridhar Rao</a>	<ul style="list-style-type: none"> <li>Validating Openstack Security Checklist</li> <li>Implement CNTT PDF - GUI tool to create PDF</li> <li>Implement Updates to PDF based on Elbrus Release</li> </ul>	Support Openstack Security Checklist validation against different openstack deployments - Airship, Triple-O, Fuel, etc.	<a href="#">CIRV: Kali Release - Jira (anuket.io)</a>
Functest	<a href="#">Cedric Ollivier</a>	<p>Functest Kali was released 7 May 2020. It's worth mentioning that this branch is still active (security fixes, code improvement, etc..)</p> <p><a href="https://lists.opnfv.org/g/opnfv-tech-discuss/message/24151">https://lists.opnfv.org/g/opnfv-tech-discuss/message/24151</a></p>	<p>Functest is, more than ever, a collection of state-of-the-art virtual infrastructure test suites, including automatic VNF testing. It includes about 3000+ functional tests and 3 hours upstream API and dataplane benchmarks. It's completed by Virtual Network Function deployments and testing to ensure that the platforms meet Network Functions Virtualization requirements.</p> <p><a href="https://www.linkedin.com/pulse/opnfv-xtesting-functest-c%C3%A9dric-ollivier">https://www.linkedin.com/pulse/opnfv-xtesting-functest-c%C3%A9dric-ollivier</a></p> <p>Functest actively support OpenStack and Kubernetes testing, respectively from Train to Wallaby and from v1.18 to v1.21.</p>	

ViNePERF	<a href="#">Sridhar Rao</a>	<ul style="list-style-type: none"> <li>• Dataplane performance testing for various internal (within cloud) and external (pod to pod) scenarios</li> <li>• Support Reporting for Openstack and K8S Scenarios</li> <li>• Support for latest versions of Different Linux Flavors</li> </ul>	<p>The ViNePERF project is focusing on ways to keep its automated, standards-compliant, testing platform relevant as the industry evolves. In Kali Release, ViNePerf has added support for</p> <ol style="list-style-type: none"> <li>1. Kubernetes dataplane performane benchmarking for North-South Traffic - Single Pod and Multipod.</li> <li>2. Enhance reporting to support both Openstack and Kubernetes</li> <li>3. Support for Fedora 33, Ubuntu 20.04,</li> <li>4. Newer Software versions support included: DPDK:20.05, OVS:2.14.0, VPP:21.01</li> </ol>	<a href="https://wiki.anuket.io/x/u4Z0">https://wiki.anuket.io/x/u4Z0</a>
Reference Model	<a href="#">Walter Kozlowski</a>	<ul style="list-style-type: none"> <li>• New flexible, hierarchical model (infrastructure profiles and extensions, workload profiles and flavours) to support evolving technologies and a variety of deployment styles</li> <li>• Hybrid Multi-Cloud model (Data Centre to Central Office, to Edge), including Telco Edge Model</li> <li>• Abstraction and normalisation of hardware acceleration</li> <li>• New security requirements including IaC Security, DevSecOps best practices for Infrastructure, Zero Trust, Open Source Software Security</li> </ul>	<p>Driving Anuket Reference Model and hence Reference Architectures, Compliance and Implementations projects (as well as other Anuket projects) to support currently predominant real-life implementations, where multiple technologies and deployment styles (e.g. IaaS, CaaS, PaaS, Edge, use of public clouds) need to co-exist and be securely and efficiently managed. This is driven by the move towards containerisation and motivated mainly by 5G, Edge and IoT use cases. This work in RM was done in a strong collaboration with other Anuket streams, and with external organisations including LFN XGVELA and ODIM projects, GSMA OP (Operator Platform), GSMA 5GST (5G Security Taskforce), CNCF and ORAN (Open RAN Alliance). Even more intensive collaboration efforts are planned for the upcoming Lakelse release.</p>	
Reference Arch 1	<a href="#">Pankaj Goyal</a>	<ul style="list-style-type: none"> <li>• Cloud Topology changes including Distributed control and Edge Content</li> <li>• Major enhancements to the Security Requirements aligned with RM</li> <li>• Aligned with the hierarchical profiles introduced in RM</li> <li>• Changes to address concerns, for example, in the areas of networking</li> </ul>	<p>The Reference Architecture for IaaS orchestrated by OpenStack now includes major enhancements to the security requirements and practices, and coverage of cloud topologies including the Edge.</p>	

Reference Arch 2	<a href="#">Riccardo Gasparetto Stori</a>	<ul style="list-style-type: none"> <li>• Explicit definition of Kubernetes release, and API policy</li> <li>• Define mandatory features as part of the new Special Interest Group requirements chapter, aiding automatic conformance testing</li> <li>• Update to K8s 1.21</li> <li>• Added custom resources and controllers</li> <li>• Added device plugins and accelerators</li> <li>• Differentiating CaaS-on-VM versus Bare Metal deployments</li> </ul>	<p>Enabling operators to deploy cloud native Kubernetes platforms for use by network functions, supporting capabilities required by Telco applications and ensuring conformance to industry standards.</p> <p>Enabling Network Function developers to ensure Telco applications can consume cloud native Kubernetes platforms capabilities in a standardised fashion.</p>	
Reference Conformance 1	<a href="#">Cedric Ollivier</a>	<ul style="list-style-type: none"> <li>• no change as RA1 remain unchanged about OpenStack API (see existing RC1 test cases)</li> <li>• Although Functest is fully integrated, no new test cases published by the other test frameworks</li> </ul>	<a href="#">Cedric Ollivier</a> Could we rather list key successful RC1 experiences? It would be a much stronger marketing message for our enduser	
Reference Conformance 2	<a href="#">Cedric Ollivier</a>	<ul style="list-style-type: none"> <li>• add all new Kubernetes Special Interest Group test cases from Functest</li> <li>• add netperf</li> </ul>	<a href="#">Cedric Ollivier</a> Could we rather list key successful RC2 experiences? It would be a much stronger marketing message for our enduser	
Reference Installer 1	<a href="#">James Gu</a>	Kali release contains a number of bug fixes and enhancements.	The Kali release brings enhanced support of OpenStack provider network and QOS in the Anuket RI-1 as well as further alignment between RI-1 and RC-1 in policy settings.	
Reference Installer 2 / Kuberef	<a href="#">Rihab Bandy</a> <a href="#">James Gu</a>	<ul style="list-style-type: none"> <li>• Update of Kubernetes components and addition of new features introduced in RA2</li> <li>• Updated RI2 Cookbook to support deployment of new RA2/RM requirements</li> <li>• Added support for RI2 deployment on multiple OS (CentOS and Ubuntu based)</li> </ul>	Automated e2e deployment of a reference platform based on new versions of RA2/RM on baremetal and infrastructure provider (Equinix Metal) using opensource tooling.	<a href="#">Anuket RI2 Documentation</a> <a href="#">RI2 Kuberef Code Repository</a> <a href="#">Intel's BMRA tooling</a>
Community Coordination Committee  (Overview DOCS)  <a href="#">Cedric Ollivier</a> I don't see why it's part of release highlights. Do we plan to include TSC, Working Groups, TAC, MAC, Board, etc.?	<a href="#">Scot Steele</a>	<ul style="list-style-type: none"> <li>• The newly-formed CCC took on its first task to assist with community coordination: the preparation of overall documentation for projects participating in the Kali Release.</li> </ul>		