

DEMOS - R7 Guilin Demos

Submission is open till 29 Jan 2021.

The ONAP TSC will review the demo submissions and select up to three of their favorites. No specific guidelines on technical merit vs. ease of understanding, etc. are provided.

Award Winners

[Control Loop automation using ONAP](#)

[Shared and Non shared Slice order processing by core NSSMF](#)

[E2E Network Slicing demo based on Guilin deliverables](#)

Teams or individuals wishing to submit their demo(s) for consideration must add their entry to the table below

Demo Name	Demo Details	Demo Materials
OVP Automation DevOps: Agile Adoption in CT Industry	<p>Description: With the introduction of software-based network elements(VNF) in the telecommunications industry, the agility of new network services and their upgrade frequency has increased. This has increased the need for end-to-end automated test solutions to improve the quality and test efficiency of network service and its VNF elements. Various phases involved in testing include test topology design, test environment deployment, test execution, and test result reporting and analysis ,the automation across all phases becomes an challenge DevOps task for operators and vendors. LFN has brought OPNFV Verification Program (OVP) - open source, community-led compliance and verification program, collaborate to integrate framework and test cases among OPNFV, CNTT, ONAP communities along with required commercial systems to demonstrate the readiness and availability of commercial VNF & NFVI products and services. In this demonstration, will leverage ONAP SDC, ONAP VF-C, and OVP VTP projects to build DevOps for OVP end-to-end VNF and Network service testing which helps to address those challenges . Finally, the certified VNFs are published into VNF marketplace, and operators can further incubate their 5G ecology along with AI and edge technologies.</p> <p>Demo Team :</p> <p>China Mobile, Huawei, Spirent, Aarnanetworks</p> <p>Yan Yang user-67d6f @Dai qiang</p> <p>Projects :</p> <p>SDC,VNFSDK,CLI,VFC</p> <p>Demo Date: ONES (Sep 28-30)</p> <p>Logistics :</p>	<p>Slides : OVP Automation -DevOps-ONES-v1.1.pdf</p> <p>Recording : OVP Automation -DevOps-ONES.mp4</p> <p>Wiki Page: ONES 2020 Demo</p>
Control Loop automation using ONAP Award Winner	<p>Description:</p> <p>Network transformation requires infrastructure to be self-healing & self-optimizing. Control Loop Automation plays a fundamental role in achieving the vision of self healing networks, zero-touch provisioning & automated service and resource management.</p> <p>In this demo, we will be showing how ONAP components can be integrated with Operator specific components to perform the full control loop automation. Thereby proving that ONAP is not just an open source platform to perform network automation but also serves as a guiding architecture for solving the use cases of next generation physical & virtual networks.</p> <p>The ONAP components used in the demo are Policy Framework, CDS, A&AI & DMAAP.</p> <p>Demo Team : Ram Krishna Verma(Ericsson) Bruno Sakoto (Bell Canada)</p> <p>Projects: Policy Framework, CDS, A&AI & DMAAP</p> <p>Demo Date: 28 Sep 2020 29 Sep 2020 30 Sep 2020</p> <p>Logistics : ONES Conference (LFN Demo Booth)</p>	<p>Slides : ONES_NA_2020_Control_Loop_Demo.pptx</p> <p>Recording : Control Loop automation using ONAP.mp4</p> <p>Wiki Page: 2020-09-28 ONES - Control Loop automation using ONAP</p>

E2E Slicing - DCAE Microservices (Guilin release)

Description : DCAE in Guilin release introduced Slice Analysis and Data Exposure MS. Both MS were instrumental in supporting E2E Slicing usecase which is critical for ONAP to support industry evolution toward 5G networks. Along with existing DCAE MS (VEScollector, DataFile, PM-mapper), these new services enabled ONAP support/management of RAN, core, and transport through Network Slice Subnet Management Function (NSSMF)

Host/Presenter Team : Vijay Venkatesh Kumar dhebeha mj Swaminathan Seetharaman, LUK AI, LIN MENG

Projects : DCAE

Demo Date : 04 Nov 2020

Logistics : DCAE weekly meeting

Slice
Analysis
MS

- Wiki : <http://wiki.onap.org/pages/viewpage.action?pageId=92998809>
- Release documentation : <http://wiki.onap.org/projects/onap-dcaegen2/en/latest/sections/services/slice-analysis-ms/index.html>
- Recording: https://wiki.onap.org/download/attachments/93000324/DCAE_Weekly_11042020.mp4?version=1&modificationDate=1605029241000&api=v2 (~2:45 - 24.00)

Data
Exposure
MS

- Wiki : <http://wiki.onap.org/display/DW/DCAE+R7+Data+Extraction+Service>
- Release documentation : <https://docs.onap.org/projects/onap-dcae/en2/en/latest/sections/services/datalake-handler/index.html>
- Recording: https://wiki.onap.org/download/attachments/93000324/DCAE_Weekly_11042020.mp4?version=1&modificationDate=1605029241000&api=v2 (24.00 - 45.00)

Intent-based Network - An Vertical Industry Use Case (Guilin PoC)

Description : Intent was introduced in Guilin PoC to demonstrate automatic provisioning management for smart warehouse management industry. The demo leveraged intent framework to do intent management at different levels, translating business intent into network intent and further translating network intent into corresponding ONAP operations. The need of increasing the output volume of warehouse management industry was finally satisfied by intent fulfillment. Benefiting from the existing ONAP components (such as NRM restful executor and provisioning MnS simulator) and model driven characteristic, it is very easy to integrate the intent handling into ONAP.

Demo Team : Huawei, China Telecom

Projects : Intent Framework (External), A&AI, CCSDK/CDS, Provisioning MnS Provider (Simulator in Integration), Assisted System (e.g. CMDB, External)

Demo Date : 22 Nov 2020

Logistics : Requirements Subcommittee Meeting

Slides : [Guilin IBN POC__An Vertical Industry Use Case.pdf](#)

Recording : https://wiki.onap.org/display/DW/November+22%2C+2020?preview=/93002020/93002026/202011Nov23Req-zoom_0.mp4

Wiki Page: <https://wiki.onap.org/display/DW/Intent-Based+Network#IntentBasedNetwork-GuilinIntent-BasedNetworkPoC%E2%9A9AAnVerticalIndustryUseCase>

<p>Shared and Non shared Slice order processing by core NSSMF</p> <p>Award Winner</p>	<p>Description :</p> <p>As part of the 5G slicing use case, the core NSSMF shall be instantiating / configuring a 5G core service (which typically would comprise of AMF, SMF and UPF CNFs) as part of shared and non shared slice order processing.</p> <p>All the fundamental building blocks are realized as part of this use case demonstration. This includes core NSSMF, integration with ExtAPI and invoking day2 configurations for a 5G core NS.</p> <p>In order to demonstrate this use case, a dummy AMF, SMF and UPF helm charts are created. The configurations applied to these CNFs during instantiation and later as part of day 2 configurations comprise of S-NSSAI and the configuration mechanism is assumed to be configmap type of k8s.</p> <p>The sample service and CDS CBA artifacts used in this demo could be referred to and extended to instantiate and configure various other vendor's 5G core CNF workloads.</p> <p>Features:</p> <ul style="list-style-type: none"> • Sample 5G Core NS instantiation using the Macro flow through NBI Automation. • Instantiation, Day0, Day1 and Day2 configuration with help of SO, SDNC, Multicloud (k8s-plugin) and CDS to configure slice parameters (Ex.S-NSSAI) • Usage of two SO workflows - Macro POST (Service Instantiation) and PUT (Modify Config) operations. <p>Demo Team : Thamlur Raju Vamshi Krishna Namilikonda Aniello Paolo Malinconico Sanchita Pathak Aleem Raja Milind Jalwadi</p> <p>Projects : Ex-API, SO, CDS and Multi-cloud (k8splugin)</p> <p>Demo Date : Oct-19-20 and Nov-09-20</p> <p>Logistics : DTAG Lab</p>	<p>Slides : Please refer to Wiki page specified below for the overview and detailed steps to execute the demo</p> <p>Recording : E2E Network Slicing Meeting Notes for Oct 12, 2020 – DT Demo (32:00 - 58:00)</p> <p>E2E Network Slicing Meeting Notes for Nov 9th, 2020 – RT Demo (21:42 - 39:00)</p> <p>Wiki Page: 5GC Instantiation and Modify Config flow through CDS</p>
<p>E2E Network Slicing demo based on Guilin deliverables</p> <p>Award Winner</p>	<p>Description : This demo will provide the first E2E network slicing demo including RAN , Transport and Core domain. The architecture of this demo is CSMF+NSMF+ External RAN NSSMF+Internal TN NSSMF + External Core NSSMF from the 3GPP Defined management function perspective. Besides the enhancement of the E2E Network slice design, creation, activation, deactivation and termination function, external RAN NSSMF simulator and internal Transport NSSMF are developed, which guarantee the realistic E2E Network Slicing practice from RAN domain to CN domain by enabling basic slice subnet design, creation, activation, deactivation and termination in the RAN , Core and Transport domains.</p> <p>Demo Team : Zhang Min HE TENGJIAO LUKAI Henry Yu LIN MENGyaoguang wang Swaminathan Seetharaman, krishna moorthy</p> <p>Projects : SDC, U-UI, A&AI, SO, SDN-C</p> <p>Demo Date : Feb 2nd, 2021 (LFN DTF)</p> <p>Logistics : CMCC Lab</p> <p>Note: This will be firstly showed to the public at E2E Network Slicing Session in LFN DTF during Feb 2nd to Feb 4th, but we've already published it on ONAP wiki page.</p>	<p>Slides : E2E Network Slicing Demoshow based on Guilin Deliverable s.pdf</p> <p>Recording : UI Operation Guidance for Guilin</p> <p>Wiki Page: Operation Guidance for Option2</p>

<h2>CCVPN - Transport Slicing Demo of Guilin</h2>	<p>Description : We evolved the CCVPN use case in Guilin to provide a Transport Slicing solution which is used to support the E2E Network Slicing use case. While the E2E Network Slicing demo intends to show the e2e orchestration/interactions among NSMF and NSSMFs which take place at the service management layer. This demo is more focused on showing the network configurations at the control- and data-plane layer that take place during the TN NSSI operations. We demonstrate four TN NSSI operations: Allocate, Activate, Deactivate, and Deallocate.</p> <p>This is the first open source transport slicing solution based on ETSI ZSM and IEFT standards. It is an example that shows the collaboration between ONAP and SDOs may bring good results. We will have a live demo, and our purpose is to receive real-time feedback from the community (in order to improve our work) and promote the collaboration between ONAP and SDOs.</p> <p>Demo Team : Henry Yu @Jun Sun Hesam Rahimi user-14b30 @Chris JanzLIN MENG Zhang Min Swaminathan Seetharaman</p> <p>Projects : SO, SDN-C, A&AI</p> <p>Demo Date : Feb 4th, 2021 (LFN DTF)</p> <p>Logistics : Huawei Canada OSCC Lab</p>	<p>Slides : Transport slicing demo Feb-2021-DDF v0.1.pptx</p> <p>Recording : 2021-02-04 - ONAP: CCVPN - Transport Slicing Demo of Guilin</p> <p>Wiki Page: 2021-02-04 - ONAP: CCVPN - Transport Slicing Demo of Guilin</p>
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