

R8 Honolulu Use Cases & Requirements

The following page describes the major use cases and key requirements targeted to the Honolulu Release

HISTORY OF USE CASE PORTAL PAGES

RELEASE	WIKI PAGE
R6 Frankfurt Release Use Case Portal	Release 6 (Frankfurt) proposed use cases and functional requirements
R7 Guilin Release Use Case Portal	Guilin (R7) - Use Cases (and Requirements in Use Cases)
Use Case Realization R6 Portal Page	Release 6 (Frankfurt) proposed use cases and functional requirements
Use Case Realization R6 Portal Page	Use Case Realization Meeting Register MoM

5G USE CASES & REQUIREMENTS IN R8 (HONOLULU)

5G Use Case Team (Monthly) Meeting Notes & recordings: [5G Use Case Team Meetings](#)

USE CASE / REQUIREMENT	DESCRIPTION	WIKI LINK
5G Service Modeling	Defining and modeling a 5G Service (in Design Time) and the associated Modeling (Platform information & data model). This is driven by 3GPP TS28.540 and TS28.541, the 5G NRM. Development of a concept of a Registry Service used in CPS	R8 5G Service Modeling
5G SON Use Case	Optimization and SON functions for 5G RAN which provide for self-optimization, self-healing and self-configuration	R8 5G SON use case
ONAP/3GPP & O-RAN Alignment: Standard Defined VES	The capability to receive, validate and process standards defined notifications encapsulated in VES events in ONAP. VES 7.2	R8 ONAP/3GPP & O-RAN Alignment: Standard Defined VES
End to End Network Slicing	5G Network Slicing defines slices to be used in 5G RAN systems. Network Slicing is a long-lead multi-release development.	R8 E2E Network Slicing use case
Smart Operator Intent Translation in UI based on IBN - R8 5G Slicing Support	A lightweight and high-cohesion Nature Language Processing (NLP) function is proposed to add in the UUI project, in order to translate the network operation engineers' text/voice intents to the suitable slicing parameters quickly and decrease the manual configurations.	Smart Operator Intent Translation in UI based on IBN - R8 5G Slicing Support
Support for Vertical Industry	Support for Vertical Industry. Intent framework is a system that helps to implement and operate networks that can improve network availability and agility. It takes a high-level business goal (intent) as input, converts it to the necessary network configurations and applies the network changes via network automation and/or network orchestration. Continuously monitoring the status of the network under control, the system validates in real time that the intent is being met, and can take corrective actions when desired intent is not met.	Support for Vertical Industry
Intent Based Networking	Support for Intent Framework and Intent Modeling. (add description)	Support for Intent Framework and Intent Modeling
ONAP/3GPP & O-RAN Alignment: A1 Adapter and Policy Management Extension	A1 Adapter and Policy Management Extension. This requirement enhances the A1 interface capabilities provided in Rel 6 as part of 5G/ORAN & 3GPP Standards Harmonization requirement (REQ-38) and extended in Rel 7 with the introduction of A1 policy management. O-RAN has defined A1 interface specification in the context of the management of 5G RAN elements to provide intent based policies for optimization of the RAN network performance. Planned enhancements for Rel 8 include support of new A1 interface version in alignment to O-RAN alliance and common logging/audit.	O-RAN A1 Policies in ONAP (Overall) R8 A1 Adapter and Policy Management Extension (Honolulu)

MAJOR USE CASES & REQUIREMENTS IN R8 (HONOLULU)

USE CASE / REQUIREMENT	DESCRIPTION	WIKI LINK
PNF Plug and Play	The PNF Plug and Play Use Case allows a PNF to register with ONAP using a pnfRegistration VES Event. This is expected to be used for installation & commissioning a network that is to be managed by ONAP. When this event is received, the PNF Registration Handler (PRH) processes this event to complete the registration by updating the corresponding A&AI entry for the expectant PNF. The PRH was developed specifically for this use case. Once registered, ONAP can interoperate with the PNF and perform LCM or FCAPS (OA&M) operations in addition to other actions. This Use Case was originally started in in R2 Beijing and functionality has been continually improved since then.	R8 PNF Plug and Play Use Case
Certificate Management Protocol v2	The Certificate Management Protocol (CMP) is an Internet protocol used for obtaining X.509 digital certificates in a public key infrastructure (PKI). It is described in RFC 4210 and is one of two protocols so far to use the Certificate Request Message Format (CRMF), described in RFC 4211, with the other protocol being Certificate Management over CMS (CMC), described in RFC 5273. An obsolete version of CMP is described in RFC 2510, the respective CRMF version in RFC 2511. CMP messages are encoded in ASN.1, using the DER method and usually transported over HTTP. CMP (Certificate Management Protocol) Server & Client (completed in R6)	R8 Certificate Management Protocol
Configuration Persistence Service	The Configuration Persistence Service is a Common Data Layer Service providing database functionality to persist network element run-time information. CPS will perform key DB operations such as syncing data with xNFs. CPS enables OSS configuration, optimization and E2E LCM operations. It will be a new Platform Component in R8. Team meeting page: Configuration Persistence Service Meeting Notes & Recordings	Configuration Persistence Service (CPS) for R8 Honolulu
ETSI Alignment	ETSI Alignment Use Case	R8 ETSI Alignment
xNF Software Upgrade	PNF Software Upgrade enhancement In Rel 6 (REQ-84) and Rel 7 (REQ-324), PNF sw upgrade requirement in ONAP has progressed covering both with/without schema updates. A schema update in relation to a xNF software upgrades is a routine for network upgrade to support new xNF features, improve efficiency or increase xNF capacity on the field, and to eliminate bugs. This use case provides to ONAP an advantage in orchestrating and managing the Life Cycle of a Network Services in-line with business and service objectives. In Rel 8, the feature will be enhanced with PNF sw version management during sw upgrade procedure.	
Bulk PM/ PM Data Control	Bulk PM / PM Data Control Improvements PM data collection control provides 5G network operators with a dynamic and more efficient way to configure performance measurement collection on a selected subset of PNFs/VNFs in the network and complements the existing PM data collection and processing capabilities in ONAP/DCAE. An initial version has been delivered in Rel 6 (REQ-129) then enhanced in Rel 7 (REQ-381). Planned enhancements for Rel 8 intend to improve the (PMSH) subscription management about subscription update.	

SUPPORTING DOCUMENTATION & PRESENTATION

Description	File or Wiki Link

OVERVIEWS, DEMOS & SLIDES

The following are Links to Overviews, Demos and Summary Slides for each of the major use cases:

USE CASE	OVERVIEW & SUMMARY SLIDES	RECORDING & DEMOS
General ONAP Use Cases Overview	Overview Slides: ONAP-UseCaseOverview_202103Mr08v2BenC.pdf	Overview slides for All ONAP Major Use Cases
R8 Use Cases Overview	Overview Slides: R8-PnP_IPv4v6_CMPv2_StndDefVES-202010Oc12.pdf	R8 Overview slides for selected Use Cases
OOF SON PCI	Overview Slides: ONAP_OOF_SON_R7_Scope_2020_09_16.pptx	Use Case Realization Call: June 17, 2020
5G SERVICE MODELING	Overview Slides: R8-5GServiceCreation_2020Sp14v5.pdf	R8_5GServiceModeling_202008Ag31.mp4

ONAP/ORAN 3GPP STNDDEF VES	Overview Slides: vF2F stndDefined Event in ONAP 2020-06-24 v3.pptx vDDF 03 Feb 2021 : LFN-ONAP-vF2F-VES_OPENAPI_MANAGER.pptx	202101Fb03ONAPORANHarmonizationStndDefVES.mp4 202101Fb03ONAPORANHarmonizStndDefVES_audio.m4a
ONAP/ORAN 3GPP A1 POLICY	Overview Slides: 20200624 LFN DTF ONAP-A1 Adaptor JohnKeeney.pdf	
E2E NETWORK SLICING	Overview Slides: ONAP_E2E_Network_Slicing_slides.pptx	Use Case Realization Call: April 01, 2020 vDDF 13 Oct 2020 E2E_Network_Slicing_use_case_Oct_13.mp4
BULK PM: PM CONTROL	Overview Slides:	
PNF PLUG AND PLAY	Overview Slides: PNFPlugnPlayR7GuiLin_09Sp242020v13.pdf	Use Case Realization Call: February 19, 2020
xNF (PNF/VNF) SOFTWARE UPGRADE	Overview Slides: PNF SoftwareUpgrade Schema update to ONAP Arch.pdf 22 Mar 2021 : 202103Mr22_xNFSoftwareUpdatetoONAP.pdf	202103Mr22-xNFSoftwareUpgrade-video.mp4 202103Mr22-xNFSoftwareUpgrade-audio.m4a
CONFIG & PERSIST SERVICE	Overview Slides: ConfigurationPersistencySvcDDF_10Jy2020v8a.pdf Overview Slides in DDF: ConfigurationPersistenceSvcDDF_202010Oc15v13.pdf	Use Case Realization Call: May 27, 2020 Demo at DDF 15 Oct 2020 : 202010Oc15-CPSDDF_Talk-Demo.mp4 202010Oc15-CPSDDF_Talk-DemoAudio.m4a
CMP v2	Overview Slides: PNF Registration Enhancements for Security v1.pptx Overview Slides 08 Mar 2021: 202103Mr08-UCR Presentation CMPv2.pptx	202103Mr08-UCRCMPv2Video.mp4 202103Mr08-UCRCMPv2Audio.m4a
LICENSING MANAGEMENT	Overview Slides: ONAP license mgmt - ArchCom Guilin - 202005My26.pptx	Use Case Realization Call: September 4, 2019
MDONS	Overview Slides: MDONS_ONAP_R6_XinMiao-updt.pptx	Use Case Realization Call: December 04, 2019
ETSI ALIGNMENT	Overview Slides: Guilin ETSI-Alignmentv1.pdf	Use Case Realization Call: Oct 21, 2020
INTENT BASED NETWORKING	Overview Slides: 20210208_Intent Framework and Intent Modeling_UCRealization.pdf	Use Case Realization Call: Feb 8, 2021 202102Fb08-IntentBasedNtwkUseCase_Video.mp4 202102Fb08-IntentBasedNtwkUseCaseAudio.m4a
VERTICAL INDUSTRY MANAGEMENT	Overview Slides: ONAP R8 PoC Support for Vertical Industry_202101Ja14.pdf	Use Case Realization Call: Jan 14, 2020
CCVPN	Overview Wiki: CCVPN Use Case (Dublin)	
Broadband Service Use Case	Overview Wiki: BBS Broadband Service Use Case (Dublin)	
5G NRM Network Resource Model	Overview Wiki: 5G Network Resource Model (NRM) Configuration in R6 Frankfurt	

USEFUL LINKS

The following table has useful links:

REFERENCE LINK	WIKI URL
Use Case Way of Working	ONAP Use Case / Requirements Teams Process Way of Working (WoW)
Architecture Way of Working	ONAP Architecture Team Process
Modeling Way of Working	Proposed ONAP Release Process Updates for Information and Data Modeling
R7 Requirements Proposal Page	Guilin release - functional requirements proposed list
R8 Requirements Proposal Page	Honolulu release - functional requirements proposed list

Business Driver Template	Business Driver Template for Use Cases
Use Case Template (R8 Use Case Template)	R8 Use Case
R7 MODELING Planning Page	ONAP R7 Modeling High Level Requirements
R8 MODELING Planning Page	ONAP R8 Modeling High Level Requirements
MODELING Generic Information Element Template	Generic Information Element Template
MODELING CURRENT ACTIVITY STATUS	Modeling Current Activity Status
ARCHITECTURE Review Template	R7 Guilin Architecture Review (template) - functional requirements
ARCHITECTURE Review Process	Project Architectural Review Requirements and Process (Draft)
ONAP Project & Component Lifecycle	ONAP Project and Component Lifecycle
Release Planning R8	Release Planning: Honolulu
REQ-1	blocked URLREQ-1 - ONAP Requirement Template TO DO
R7 Release Tracking Page Jira Dashboard	Guilin Release Requirements
R8 Release Tracking Page Jira Dashboard -	Project Status in Honolulu Release
R8 Jira Dashboard	Honolulu Release Requirements
R7 Use Case Realization MOM	R7 Use Case Realization Meetings MoM
R6 Use Case Realization MOM	Release 6 (Frankfurt) proposed use cases and functional requirements
ONAP Calendar	https://lists.onap.org/groups