5G Use Cases in R6 Frankfurt

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R6 5G-SPECIFIC USE CASES (Frankfurt Release)

Release 6 will be a "normal" release but with an extended M1 from June to Aug 29.

TITLE	DESCRIPTION	CATEGORY	WIKI
5G SERVICE MODELING & CREATION	Defining and Modeling a 5G Service for Design Time and use by other 5G Use Cases. Defining the Platform Data & Information model and PNF Resource for a 5G RAN.	5G FCAPS Discovery 5G Operational	5G RAN SERVICE MODELING & DEFINITION in R6 Frankfurt
OOF SON ENHANCEMENTS	Optimization and OOF SON development. Dublin Carry-over items. OOF (SON). SDN-R Network. Policy Control Loop Coordination.	5G Operational Optimization	OOF (SON) in R5 El Alto, OOF (SON) in R6 Frankfurt
Configuration & Persistency Service	Run-time configuration data persistency (Run Time Config DB/MariaDB).	5G CM (FCAPS)	CONFIGURATION & PERSISTENCY SERVICE
NETWORK TOPOLOGY MANAGEMENT	5G Network Topology Management. 5G Network representation and management.	5G Operation	NETWORK TOPOLOGY MANAGEMENT (R7 GuiLin)
PERFORMANCE MEASUREMENTS	Performance Measurements Use Cases (including Bulk PM, RT PM and PM Dictionary)	Data Collection 5G FCAPS	PERFORMANCE MEASUREMENTS USE CASES: Bulk, RT, Dictionary
BULK PM (PERFORMANCE MEASUREMENTS)	Performance Measurements 5G RAN Bulk Upload. The main proposed addition is PM control capability. Partially 5G Specific, and Partially "Generic". Can be evolved for use with generic PNFs (beyond 5G)	Data Collection 5G FCAPS	5G Bulk PM in Frankfurt/R6
5G PM DICTIONARY (PERFORMANCE MEASUREMENTS)	Support for handling & support for PM Dictionary & PM Schema (from standards). Eventually other PNFs will support faults, but right now 3GPP specific formatting is used in the PM artifact. Can be evolved for use with generic PNFs (beyond 5G)	PNF Support Data Collection 5G FCAPS	FM META DATA & PM DICTIONARY in R6 Frankfurt
5G FM META DATA (FAULT MANAGEMENT)	Support for handling FM Meta Data. Eventually other PNFs will support faults but right now 3GPP specific formatting is used in the FM. Can be evolved for use with generic PNFs (beyond 5G)	PNF Support Data Collection 5G FCAPS	FM META DATA & PM DICTIONARY in R6 Frankfurt

NETWORK SLICING END-TO-END NETWORK SLICING MANAGEMENT	Advanced 5G functionality, for Network Slicing development and early steps in long-lead development. (CMCC) LIN MENG Lingli Deng Advanced 5G functionality, Management of Network Slicing development	5G Operational Optimization	NETWORK SLICING PoC in R6 Frankfurt (Obsolete)
MOBILITY STANDARDS STANDARDS HARMONIZATION WITH ONAP	There are many standards ORAN and 3GPP harmonization with ONAP. O1, A1 definitions. Encoding protocol to use. ORAN repository (proprietary to ORAN)		MOBILITY STANDARDS HARMONIZATION WITH ONAP
5G NRM (Network Resource Model) CONFIGURATION	Configuration Management (CM Notify/ Update) using RESTful (HTTPS) Interface.	5G CM (F**C**AP S)	5G Network Resource Model (NRM) Configuration in R6 Frankfurt

5G U/C COMMITMENTS BY PROJECT:

The following table indicates commitment by project. The impacts have been accepted and are supported by the PTL of each ONAP Platform component and corresponding Jira Tickets are in place. There are three states:

N/A = A "N/A" means that there is no interaction, no dependency, and no work for that Use Case for that component.

? = A "?" means that there is not final commitment from the PTL for that project, and no Jira ticket exists yet.

YES = This means that (1) **PTL INFORMED & COMMITTED** - has agreed to support the changes needed for that Use Case, (2) **DEVELOPMENT SUPPORT** - there is development (company) support (3) **JIRA TICKETS** - and a Jira ticket exists. Please see the corresponding WIKI page for that Use Case to find out more details on impact, PTL support and Jira Ticket(s).

NOTE: The CTRLR column includes CC-SDK, CDS, SDN-C, APP-C. Including what used to be SDN-R has been under the SDN-C "umbrella".

Use Case	SDC	VID	Portal	SO	AAI ESR	CTRLR	DCAE	OOF	Policy	CLAMP	DMaaP	AAF	VNF SDK	REQTS	Model S/C	OOM	VIM	Pomba	CIA	CLI	Consul	VF-C
Bulk PM	N/A	N/A	N/A	YES	N/A	N/A	YES	N/A	YES	YES	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FM PM Dict	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OOF PCI	N/A	N/A	N/A	N/A	N/A	YES	YES	YES	YES	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Slicing	YES	N/A	N/A	YES	YES	YES	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ORAN Harmonize	N/A	N/A	N/A	N/A	N/A	YES	YES	N/A	N/A	N/A	YES	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Licensing Managmt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5G NRM	N/A	N/A	N/A	YES	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	
RunTime DB	N/A	N/A	N/A	N/A	YES	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5G Service Modeling	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A

REQ = VNF Requirements Project. The VNF-RQTS project applies to both VNFs and PNFs. A "YES" here means that there are new requirements for the vendors.

Model S/C = Modelling Subcommittee. This U/C impacts the ONAP Platform Information and/or Data Model.

Ctrlr = This includes all of the controllers in ONAP including SDN-C, SDN-R, APP-C and VF-C

⭐ Stretch Goal (N/A) but if extra resources are available some changes may be made.

Note (1): x

Note (2): x

5G USE CASE ASSESSMENT:

The following table was to assess whether use cases are related to 5G (are 5G specific) or whether they are general PNF use cases.

The General PNF use cases have been moved to their own wiki: General PNF Support Use Cases

TITLE	Requirement / Platform Enhancement vs E2E Use Case	5G Specific

5G SERVICE MODELING	Requirement / Platform Enhancement	5G Specific
BULK PM	Requirement / Platform Enhancement * Could be evolved eventually to be PNF & domain generic.	5G Specific *
5G FM META DATA & 5G PM DICTIONARY	Requirement / Platform Enhancement * Could be evolved eventually to be PNF & domain generic.	5G Specific *
OOF SON ENHANCEMENTS	Requirement / Platform Enhancement	5G Specific
NETWORK SLICING	E2E Use Case	5G Specific
MOBILE SERVICE CHAINING	Requirement / Platform Enhancement	General
PNF USE CASES: (General PNF Support Use Cases)		
PNF / PNF PRE-ONBOARDING & ONBOARDING Use Case	Requirement / Platform Enhancement	General
PNF / CONFIGURATION WITH NETCONF	Requirement / Platform Enhancement	General
PNF / PNF PLUG AND PLAY	E2E Use Case	General
PNF / PNF S/W UPGRADE	Requirement / Platform Enhancement	General

5G Use Case MEETINGS:

Links to the 5G Meetings & recordings:

DATE	MEETING	LINK
08 Aug 2019	5G U/C Network Slicing R6 Proposal (Shankar/Swami)	5G Use Case Meeting notes for August 8, 2019
15 Aug 2019	5G U/C Meeting Aug 15, 2019	5G Use Case Meeting notes for August 15, 2019
22 Aug 2019	5G U/C Meeting Aug 22, 2019	5G Use Case Meeting notes for August 22, 2019
05 Sep 2019	Presentation Preparation for Antwerp	Antwerp Subcommittee F2F 5G U/C Presentation preparation Sept 5 2019
12 Sep 2019	5G U/C Meeting Sept 12, 2019	5G Use Case Meeting notes for Sept 12, 2019
19 Sep 2019	5G Use Case Meeting Sept 19 2019	5G Use Case Meeting notes for Sept 19, 2019
03 Oct 2019	5G Use Case Meeting Oct 3 2019	5G Use Case Meeting notes for Oct 3, 2019
10 Oct 2019	M1 Release Discussion	5G Use Case Meeting notes for Oct 10, 2019
17 Oct 2019	M1 Release discussion, Network Slicing Presentation	5G Use Case Meeting notes for Oct 17, 2019
24 Oct 2019	M1 Release discussion	5G Use Case Meeting notes for Oct 24, 2019
31 Oct 2019	M1 Release discussion	5G Use Case Meeting notes for Oct 31, 2019
07 Nov 2019	M1 Release discussion	5G Use Case Meeting notes for Nov 07, 2019
14 Nov 2019	5G Discussion	5G Use Case Meeting notes for Nov 14, 2019
21 Nov 2019	5G Service Modeling discussion	5G Use Case Meeting notes for Nov 21, 2019
05 Dec 2019	5G Discussion	5G Use Case Meeting notes for Dec 05, 2019
12 Dec 2019	5G Discussion	5G Use Case Meeting notes for Dec 12, 2019
19 Dec 2019	5G Discussion	5G Use Case Meeting notes for Dec 19, 2019
02 Jan 2020	M2 Discussion	5G Use Case Meeting notes for Jan 02, 2020
09 Jan 2020	M2 Discussion	5G Use Case Meeting notes for Jan 09, 2020
16 Jan 2020	(No Meeting due to Prague DDF)	(No Meeting due to Prague DDF)
23 Jan 2020	5G Discussion	5G Use Case Meeting notes for Jan 23, 2020
30 Jan 2020	5G Discussion	5G Use Case Meeting notes for Jan 30, 2020

06 Feb 2020	5G Discussion	5G Use Case Meeting notes for Feb 06, 2020
13 Feb 2020	5G Discussion	5G Use Case Meeting notes for Feb 13, 2020
20 Feb 2020	5G Discussion	5G Use Case Meeting notes for Feb 20, 2020
27 Feb 2020	5G Discussion	5G Use Case Meeting notes for Feb 27, 2020
05 Mar 2020	5G Discussion	5G Use Case Meeting notes for Mar 4, 2020
19 Mar 2020	5G Discussion	5G Use Case Meeting notes for Mar 19, 2020
26 Mar 2020	5G Discussion	5G Use Case Meeting notes for Mar 26, 2020
02 Apr 2020	5g discussion	5G Use Case Meeting notes for Apr 2, 2020
09 Apr 2020	5G Discussion	5G Use Case Meeting notes for Apr 9, 2020
16 Apr 2020	5G Discussion	5G Use Case Meeting notes for Apr 16, 2020
23 Apr 2020	NO MEETING	https://events.linuxfoundation.org/lfn-technical-meetings-spring/ https://wiki.lfnetworking.org/display/LN/2020+April+Virtual+Technical+Event
30 Apr 2020	5G Discussion	

SUPPORTING DOCUMENTS:

Document	File
Use Case Template	Use Case Tracking Template
Use Case Analysis (from U/C realization Calls) / Sept 17 2019	 R6Frankfurt-Use...31Jy2019v3.xlsx

Use Case Overview & Summary for R6	5GUseCase-R6F...Sep2019v3.pdf

R5 El Alto Release

EUAG has decided that R5 El Alto will be a "maintenance/technical debt" release.

https://wiki.lfnetworking.org/display/LN/EUAG+2019-04-09+meeting+minutes

The El Alto release will be shortened (3-month cycle) and focused on internal (tech) debt and defect backlogs. And every 5th ONAP release will be a maintenance release.

PTLs had taken short cuts to meet deadlines, working but want to make the platform more robust. PTL driven code fixes and code hardening.

S/W Enhancements (e.g. GUI enhancements) would be pushed to R6. Feature enhancements would be pushed to R6

R5 will be focused on Refactoring, JIRA backlog reduction, vulnerability issues, Test Coverage, Test Automation (CI/CD pipeline), Deployment procedure, Documentation.

R5 - Security Scans, scan code reports sent to PTL for major things to fix. Vulnerabilities have been built. Vulnerability management process. Security gates checklist.

SUMMARY: There will be no new Software development for new functionality in R5; but there will be Jira tickets worked on (PCI/SON); and modeling work for 5G RAN.

TITLE	DESCRIPTION	CATEGORY	WIKI
PCI/SON ENHANCEMENTS	Optimization and PCI (SON) development. Dublin Carry-over items will be worked in R5. There are two Jira tickets open for SDN-C.	5G Operational Optimization	OOF (SON) in R5 El Alto, OOF (SON) in R6 Frankfurt
5G SERVICE MODELING	Defining and Modeling a 5G Service for Design Time and use by other 5G Use Cases. Defining the Platform Data & Information model and PNF Resource for a 5G RAN.	5G FCAPS Discovery 5G Operational	