

APPC Casablanca M1 Release Planning

DRAFT PROPOSAL FOR COMMENTS

The content of this template is expected to be fill out for M1 Release Planning Milestone.



Info

Use the "Copy" and "Move" options (available under the ..., top right of this page) to duplicate this template into your project wiki.
Use the Wiki to document the release plan. Don't provide PowerPoint.
Use as much diagrams and flow charts as you need, directly in the wiki, to convey your message.

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Overview

Project Name	Enter the name of the project
Target Release Name	Casablanca Release
Project Lifecycle State	Incubation. Refer to ONAP Charter, section 3.3 Project Lifecycle for further information
Participating Company	AT&T, Intel (need to confirm) , Tech Mahindra, Ericsson

Scope

What is this release trying to address?

The Casablanca Release will be focusing on the following areas:

- Upgrade to Karaf 4
- Upgrade of ODL to Oxygen (CCSDK dependency)
- Migrate DB to use Maria DB with Galera (CCSDK dependency)
- Platform Maturity (i.e., S3P items)
 - Resiliency
 - Level 2 - regression from Beijing, plug close gap on DB resiliency.

- DB Resiliency was a limitation in Beijing due to the Active/Standby nature of MySQL. MariaDB w/Galera provides an active-active clustered configuration, which will support local fail-over.
 - Scalability
 - Level 1 will be a regression run on Casablanca release - anticipate this to be test only
 - Stability
 - Level 1 will be a regression run on Casablanca release - anticipate this to be test only
 - Level 2 requirement is expected to be covered by the Integration team.
 - Security
 - Level 1 definition has changed in Casablanca. Not clear we are achieve Level 1
 - Address outstanding items related to CII Passing Badge:
 - Clearing Critical and Medium Nexus IQ Security alerts **to the extent possible**
 - Addressing 2 other security related items from Passing Badge related to encryption
 - Secure DMaaP topics (**Dependency on DMaaP project**) - **Stretch Goal, not currently committed for Casablanca**
 - DMaaP indicated delivery would be Sept, plus
 - DMaaP story is still not written to enable APPC to assess impact at this stage.
- Support new LCM action Reboot and various other enhancements to existing LCM actions (Tracked under Epic: [APPC-899](#))
- Documentation updates (readthedocs) for Casablanca, such as, but not limited to:
 - LCM API Guide
 - Release Notes
- Code Coverage for CDT (Javascript) - TBD, no commitment at this stage
- Use Cases
 - ConfigScaleOut - Partially supported
 - Support Retrieval of configuration data from AAI instead of having SO pass configuration data in payload - (investigate if we can we reuse the named query)
 - Dependency on SO** to pass the `vf-module-id` of the vDNS instance that must be added.
 - Assumption** is that AAI data needed is available
 - No commitment on Controller Type since requirements are still unclear.
 - Change Management - No Commitment
 - 5G/PNF - No Commitment (although APPC is listed as an impacted component, there does not appear to be any immediate requirement for Casablanca. Items noted are longer road map items)

Use Cases

Describe the use case this release is targeted for (better if reference to customer use case).

The use cases supported in Beijing release will continue to be supported as part of regression assuming all other components do likewise.

APPC will contribute partially to the following use cases as part of the functional requirements.

- Scaling Use Case -**
 - APPC will support retrieving the data to be configured from AAI. This however has a dependency on SO to pass the `vf-module-id` of the vDNS that was instantiated..
 - Discussions around how Controller Type will be handled are still too vague and unclear, so no commitment can be made to support this. APPC will continue to support APPC and SDNC via the Client Library as was done in Beijing.

Minimum Viable Product

Same as was defined for Beijing with the adding of CDT.

Functionalities

List the functionalities that this release is committing to deliver by providing a link to JIRA Epics and Stories. In the JIRA Priority field, specify the priority (either High, Medium, Low). The priority will be used in case de-scoping is required. Don't assign High priority to all functionalities.

Epics





Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
APPC-1036	ConfigScaleOut support for Casablanca		Jun 28, 2018	Feb 20, 2019		Unassigned	None		CLOSED	Done
APPC-993	Documentation updates - R3		Jun 10, 2018	Jul 10, 2019		Unassigned	None		CLOSED	Done
APPC-992	Resiliency Support & Testing - R3		Jun 10, 2018	Jun 18, 2019		Unassigned	None		CLOSED	Done
APPC-991	Migrate to MariaDB plus Galera		Jun 10, 2018	Feb 20, 2019		Unassigned	None		CLOSED	Done
APPC-	ODL Upgrade for R3		May 30,	Feb 20,		Unassigned	None		CLOSED	Done

937			2018	2019						
APPC-899	Add support for new LCM Action Reboot and enhancement existing LCM actions		May 15, 2018	Feb 20, 2019	Jun 04, 2018	Unassigned	None	=	CLOSED	Done
APPC-881	Code Coverage for Casablanca (R3) Release		May 05, 2018	Feb 20, 2019		Unassigned	None	=	CLOSED	Done
APPC-804	Platform Hardening - R3		Mar 28, 2018	Feb 20, 2019		Unassigned	None	=	CLOSED	Done
APPC-770	Security - R3		Mar 21, 2018	Feb 20, 2019		Unassigned	None	=	CLOSED	Done

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Stories

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
APPC-1130	Controller Design Studio GUI - CDS Controller Blueprint Creation and Management including artifact model, component model, connectivity model, and dg modeling in "Controller Design Studio" mS.		Jul 01, 2018	Aug 06, 2018		Unassigned	None	=	CLOSED	Duplicate
APPC-1128	Controller Design Studio GUI - CDS Data Dictionary Creation and Management in "Controller Design Studio" mS		Jul 01, 2018	Aug 06, 2018		Unassigned	None	=	CLOSED	Duplicate
APPC-1114	Bug in the GetTemplateConfig_Chef directed graph		Jul 30, 2018	Sep 18, 2018		Unassigned	None	=	CLOSED	Done
APPC-1068	Add feature in Design Services to support Reboot lcm command		Jul 11, 2018	Jul 12, 2018		Unassigned	None	=	CLOSED	Done
APPC-1058	Support retriving configuration data from AAI for ConfigScaleOut use case		Jul 11, 2018	Aug 09, 2018		Unassigned	None	^	CLOSED	Done
APPC-1044	Adding feature in AAI client to support reboot lcm command		Jul 02, 2018	Jul 09, 2018		Unassigned	None	=	CLOSED	Done
APPC-1035	Release Notes updates for Casablanca		Jun 28, 2018	Dec 14, 2018		Unassigned	None	=	CLOSED	Done
APPC-1034	Update APPC LCM API Guide for Casablanca		Jun 28, 2018	Jul 27, 2018		Unassigned	None	=	CLOSED	Done
APPC-1025	Assess CDT - Nexus Build Report		Jun 21, 2018	Jul 10, 2019		Unassigned	None	=	CLOSED	Done
APPC-1018	Assess appc - Nexus Build Report		Jun 16, 2018	Sep 26, 2018		Unassigned	None	=	CLOSED	Done
APPC-1017	Assess appc-deployment - Nexus Build Report		Jun 16, 2018	Jul 10, 2019		Unassigned	None	=	CLOSED	Done
APPC-1016	Improve resiliency of APPC by storing critical information in DB instead of property files		Jun 15, 2018	Jul 02, 2018		Unassigned	None	=	CLOSED	Done
APPC-1015	Enhance Ansible support by enabling granular parsing of response messages		Jun 15, 2018	Jun 29, 2018		Unassigned	None	=	CLOSED	Done

APPC-1014	Netconf Adapter – Extract Configuration Using <data> tag as per Netconf standard instead of <Configuration> tag : supports both <data> and < Configuration >		Jun 15, 2018	Jul 02, 2018	Unassigned	None	=	CLOSED	Done
APPC-1013	Support UpgradePreCheck and UpgradePostCheck responses with Payload which contain detailed status coming from VNF		Jun 15, 2018	Aug 06, 2018	Unassigned	None	=	CLOSED	Done
APPC-1012	Support HealthCheck response with Payload which contains detailed status coming from VNF		Jun 15, 2018	Jun 29, 2018	Unassigned	None	=	CLOSED	Done
APPC-1011	Enhance Rebuild action to include the Snapshot Id as Optional Field In LCM API Request		Jun 15, 2018	Jun 29, 2018	Unassigned	None	=	CLOSED	Done
APPC-1010	Support Multiple Templates For Configure and ConfigModify for VNFs with VNFC level templates		Jun 15, 2018	Sep 14, 2018	Unassigned	None	=	CLOSED	Done
APPC-941	Test Bulkload 1		May 31, 2018	May 31, 2018	Unassigned	None	=	CLOSED	Done
APPC-939	Upgrade APPC to Oxygen ODL version		May 30, 2018	Aug 16, 2018	Unassigned	None	^	CLOSED	Done

Showing 20 out of 30 issues

Longer term roadmap

The long term road map is to achieve all the goals outlined in the approved project proposal; to be fully model and standards driven, be agnostics and make no assumptions about the network. Support configuration and lifecycle management of VNF/VNFC in a generic fashion so that on-boarding any new VNF/VNFC is just a matter of configuration and data. Longer term items include:

- Align to the controller architecture proposed as part of ONAP by the architecture team.
- Work with SDNC team to converge on a single controller design tool
- Support different types of clouds, currently only support Openstack;

Release Deliverables

Indicate the outcome (Executable, Source Code, Library, API description, Tool, Documentation, Release Note...) of this release.

Deliverable Name	Deliverable Description	Deliverable Location
"App-c Image" Docker Container	Executable	Docker images available on nexus3
Java Source Code	The Java code for the main App-c components.	appc Git repository
Deployment Scripts	Linux shell scripts and Maven pom files used to generate the Docker containers.	appc/deployment Git repository
Directed Graph Xml Files (DGs)	Xml files define the directed graphs which are installed to database during startup and are used to determine actions taken by app-c	appc/deployment Git repository
Yang Model Files	Yang files are used to define the...	appc Git repository
Property Files	Property files are used to define values that may need to be changed depending on the environment app-c is run in.	appc Git repository

CDT tool	an APP-C Design Tool enabling VNF owners to create templates and other artifacts used by APP-C Configure actions (used to apply a post-instantiation configuration) as well as other life cycle commands	appc/cdt Git repository
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Sub-Components

List all sub-components part of this release.

Activities related to sub-components must be in sync with the overall release.

Sub-components are repositories and are consolidated in a single centralized place. Edit the [Release Components name for your project](#) in the centralized page.

ONAP Dependencies

List the other ONAP projects you depend on.

APPC depends on the the following components as part of the general ONAP architecture:

- **SDC**: Rest based interface exposed by SDC. APPC receives notifications from SDC on VNF information. SDC team provides an SDC Listener, which is used by APPC. (Currently we have no use case for this, although supported)
- **AAI**: APPC retrieves and updates VNF data from/to AAI.
- **DMaaP**: Message bus for communication with other components in the solution (SDC, DCAE, MSO, Portal, OOM)
- **CCSDK** - APPC currently gets ODL & DB package from CCSDK; CCSDK and APPC currently must align on ODL version.
- **AAF** - AAF is used for ODL API authorization
- **MultiVIM** - APPC can access Openstack via MultiVIM or CPD-PAL. MultiVIM is optional for APPC at this stage. Support of MultiVIM is limited to the Generic_Restart action only.

For the Casablanca release, APPC has dependencies on the following three projects for specific deliverables:

- **CCSDK** - - Oxygen ODL & MariaDB plus Galera
- **SO** - for scale out scenario to deliver the correct data to retrieve AAI information
- **AAI** - for named query to return the applicable data (Action: Need to discuss with AAI if they will provide named query or expand name query provided in Amsterdam.

Architecture

High level architecture diagram

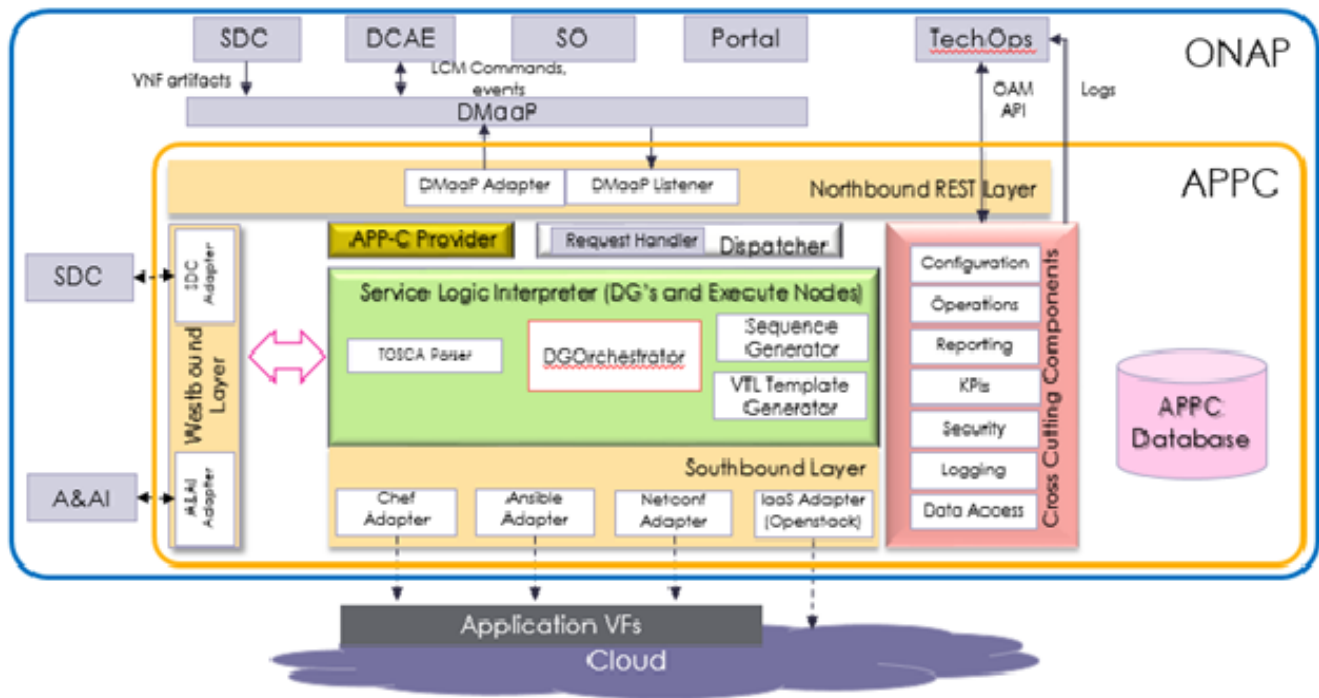
At that stage within the Release, the team is expected to provide more Architecture details describing how the functional modules are interacting.

Indicate where your project fit within the [ONAP Architecture diagram](#).

Block and sequence diagrams showing relation within the project as well as relation with external components are expected.

Anyone reading this section should have a good understanding of all the interacting modules.

For details on the APPC architecture, refer to the [APPC User Guide](#).



Platform Maturity

Referring to [CII Badging Security Program](#) and [Platform Maturity Requirements](#), fill out the table below by indicating the actual level, the targeted level for the current release and the evidences on how you plan to achieve the targeted level.

Area	Actual Level	Targeted Level for current Release	How, Evidences	Comments
Performance	0	0		<ul style="list-style-type: none"> 0 -- none 1 -- baseline performance criteria identified and measured 2 & 3 -- performance improvement plans created & implemented
Stability	1 - project team 2 - Integration team Integration team did a 72 hour test in Beijing	1 - project team 2 - Integration team Assume Integration team will address Level 2 - 72 hour test in Casablanca		<ul style="list-style-type: none"> 0 -- none 1 -- 72 hours component level soak w/random transactions 2 -- 72 hours platform level soak w/random transactions 3 -- 6 months track record of reduced defect rate
Resiliency	2	2 In Casablanca we will address Resiliency at the DB level since that was a constrain in Beijing. this will be possible with the move to Maria DB w/Galera		<ul style="list-style-type: none"> 0 -- none 1 -- manual failure and recovery (< 30 minutes) 2 -- automated detection and recovery (single site) 3 -- automated detection and recovery (geo redundancy)
Security	1	<p>1? Partial</p> <p>Level 1 definitions in Casablanca where changed.</p> <p>Unclear if we can meet Level 1 at this time based on Open Questions:</p> <ol style="list-style-type: none"> How do we handle false positives and third party issues reported in NexusIQ; <ol style="list-style-type: none"> We will tackle Criticals first and then address mediums as time permit How do we deal with contiguously retaining no critical or high known vulnerabilities > 60 days when we are on a 6 month release cycle 		<ul style="list-style-type: none"> 0 -- none 1 -- CII Passing badge + 50% Test Coverage 2 -- CII Silver badge; internal communication encrypted; role-based access control and authorization for all calls 3 -- CII Gold

		3. Addressing ALL communication has dependency on other projects, such as DMaaP, and dependency alignment does not fit schedule.		
Scalability	1	1		<ul style="list-style-type: none"> 0 – no ability to scale 1 – single site horizontal scaling 2 – geographic scaling 3 – scaling across multiple ONAP instances
Manageability	1	<p>1</p> <p>Recommendation for Casablanca is Level 2; however, Level 2 requirements are unclear and cannot be committed to.</p>		<ul style="list-style-type: none"> 1 – single logging system across components; instantiation in < 1 hour 2 – ability to upgrade a single component; tracing across components; externalized configuration management
Usability	1	<p>1</p> <p>Recommendation for Casablanca is Level 2; however, we cannot meeting Level 2</p> <p>All new API's must adhere to the ONAP API Common Versioning Strategy and Documentation Guidelines; - There was an issue with ODL & API version - need to investigate further</p> <p>Swagger 2.0 - We dependent on what ODL Oxygen for API documentation and they dictate version of Swagger used, currently looked like v1.2</p> <p>E2E tutorial ???</p>		<ul style="list-style-type: none"> 1 – user guide; deployment documentation; API documentation 2 – UI consistency; usability testing; tutorial documentation

• API Incoming Dependencies

List the API this project is expecting from other projects.

Prior to Release Planning review, Team Leads must agreed on the date by which the API will be fully defined. The API Delivery date must not be later than the [release API Freeze date](#).

Prior to the delivery date, it is a good practice to organize an API review with the API consumers.

API Name

	API Description	API Definition Date	API Delivery date	API Definition link (i.e.swagger)
SDC	REST API	Currently Available, but needs to be updated to use onap.org	TBD	Link toward the detailed API description
AAI	REST API	Needs further discussion: New named query to retrieve data for ScaleOut or does APPC need to build the query??	TBD	
CCS DK	OpenDayLight, SLI, AAI Client, dblib	End of June	TBD	
DMaaP	API to publish/subscribe to events sent for VNF/VM action requests.	Will DMaaP be providing support for secure topics?	TBD	DMaaP API
AAF	Application Authorization Framework	Currently Available	Currently Available	

• API Outgoing Dependencies

API this project is delivering to other projects.

API Name

	API Description	API Definition Date	API Delivery date	API Definition link (i.e.swagger)
NB Interface	REST API			<p>Link toward the detailed API description</p> <p>https://onap.readthedocs.io/en/latest/submodules/appc.git/docs/APPC%20LCM%20API%20Guide/APPC%20LCM%20API%20Guide.html</p>

• Third Party Products Dependencies

Third Party Products mean products that are mandatory to provide services for your components. Development of new functionality in third party product may or not be expected.

List the Third Party Products (OpenStack, ODL, RabbitMQ, Elasticsearch, Crystal Reports, ...).

Name

	Description	Version
ODL	OpenDaylight controller platform	Oxygen
Docker	Docker container host	1.12
MariaDB	data base container	TBD

In case there are specific dependencies (Centos 7 vs Ubuntu 16. Etc.) list them as well.

• Testing and Integration Plans

Provide a description of the testing activities (unit test, functional test, automation,...) that will be performed by the team within the scope of this release.

Describe the plan to integrate and test the release deliverables within the overall ONAP system.

Confirm that resources have been allocated to perform such activities.

- CSIT tests added as part of R1 will continue to be supported in R3
- Pairwise testing will be done in the WindRiver Dev lab similar to what was done in R3.
- Epics are created to track testing activities to address Platform Maturity items.

• Gaps

This section is used to document a limitation on a functionality or platform support. We are currently aware of this limitation and it will be delivered in a future Release.

List identified release gaps (if any), and its impact.

Gaps identified	Impact
To fill out	To fill out

• Known Defects and Issues

Provide a link toward the list of all known project bugs.

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
APPC-1178	Incorrect Jira link	🔴	Aug 17, 2018	Sep 06, 2018		Unassigned	None	==	CLOSED	Cannot Reproduce
APPC-1141	CDT PD template failed to save	🔴	Aug 10, 2018	Sep 19, 2018		Unassigned	None	==	CLOSED	Done
APPC-1047	Blocker issue reported by sonar for A "NullPointerException" could be thrown:	🔴	Jul 05, 2018	Jul 11, 2018		Unassigned	None	==	CLOSED	Done
APPC-1046	Fix blocker issues reported by sonarcube for appc project	🔴	Jul 04, 2018	Jul 10, 2018		Unassigned	None	==	CLOSED	Done
APPC-1042	Originator-id size is too small in DB	🔴	Jul 02, 2018	Sep 20, 2018		Unassigned	None	==	CLOSED	Done
APPC-1006	APPC CDT Tool Documentation doesn't reflect the correct URL and OOM Port	🔴	Jun 14, 2018	Jun 28, 2018		Unassigned	None	⏴	CLOSED	Done

APPC-977	Procedures needed for enabling AAF support in OOM		Jun 06, 2018	Jul 02, 2018	Unassigned	None	=	CLOSED	Done
APPC-973	Fix delimiter string for xml-download CDT action		Jun 05, 2018	Jun 28, 2018	Unassigned	None	=	CLOSED	Done
APPC-940	APPC CDT Tool is not updating appc_southbound properties with the URL supplied for REST		May 30, 2018	Oct 29, 2018	Unassigned	None	=	CLOSED	Done
APPC-934	APPC client library always passing APPC in cambria partition		May 25, 2018	May 30, 2018	Unassigned	None	^	CLOSED	Done
APPC-932	Correct validation checks for Configuration Params		May 25, 2018	May 26, 2018	Unassigned	None	^	CLOSED	Done
APPC-929	LCM API - ConfigScaleOut-Payload parameter to be mandatory - "true"		May 24, 2018	Jun 06, 2018	Unassigned	None	=	CLOSED	Done
APPC-917	Authentication Error for REST healthcheck		May 22, 2018	May 28, 2018	Unassigned	None	^	CLOSED	Done
APPC-912	MalformedChunkCodingException in MDSALStoreImpl.getNodeName		May 17, 2018	Sep 20, 2018	Unassigned	None	=	CLOSED	Done
APPC-892	Cntl+4 to highlight and replace feature- Textbox is accepting space and able to submit without giving any value		May 11, 2018	Jul 30, 2018	Unassigned	None	v	CLOSED	Done

15 issues

• Risks

List the risks identified for this release along with the plan to prevent the risk to occur (mitigation) and the plan of action in the case the risk would materialized (contingency).

Risk identified	Mitigation Plan	Contingency Plan
ODL upgrade to Oxygen & DB to MariaDB - depends on CCSDK projects	CCSDK team has started work early on these two dependencies; They are currently telling us they plan to have these ready at start of Casablanca.	Fall back to Nitrogen & MySQL (same as Beijing)
SO dependency to delivery needed data to support the ScaleOut use case - need to provide vf-module-id of the vDNS scaled?		Continue using the flow as designed in Beijing
APPC needs data to be in AAI in order to support the ConfigScaleOut use case for retrieval of the configuration data. Either SDNC (or SO) must write this data into AAI after the instantiation event happens.		Continue using the flow as designed in Beijing
DMaaP support of Secure Topics?		

• Resources

Fill out the [Resources Committed to the Release](#) centralized page.

• Release Milestone

The milestones are defined at the [Release Level](#) and all the supporting project agreed to comply with these dates.

• Team Internal Milestone

This section is optional and may be used to document internal milestones within a project team or multiple project teams. For instance, in the case the team has made agreement with other team to deliver some artifacts on a certain date that are not in the release milestone, it is recommended to provide these agreements and dates in this section.

It is not expected to have a detailed project plan.

Date	Project	Deliverable
To fill out	To fill out	To fill out

• Documentation, Training

- Highlight the team contributions to the specific document related to the project (Config guide, installation guide...).
- Highlight the team contributions to the overall Release Documentation and training asset
- High level list of documentation, training and tutorials necessary to understand the release capabilities, configuration and operation.
- Documentation includes items such as:
 - Installation instructions
 - Configuration instructions
 - Developer guide
 - End User guide
 - Admin guide
 - ...



Note

The Documentation project will provide the Documentation Tool Chain to edit, configure, store and publish all Documentation asset.

Documentation updates planned for Beijing release are tracked under Documentation Epic: [APPC-993](#)

Other Information

• Vendor Neutral

If this project is coming from an existing proprietary codebase, ensure that all proprietary trademarks, logos, product names, etc. have been removed. All ONAP deliverables must comply with this rule and be agnostic of any proprietary symbols.

• Free and Open Source Software

FOSS activities are critical to the delivery of the whole ONAP initiative. The information may not be fully available at Release Planning, however to avoid late refactoring, it is critical to accomplish this task as early as possible.

List all third party Free and Open Source Software used within the release and provide License type (BSD, MIT, Apache, GNU GPL,...).

In the case non Apache License are found inform immediately the TSC and the Release Manager and document your reasoning on why you believe we can use a non Apache version 2 license.

Each project must edit its project table available at [Project FOSS](#).

Charter Compliance

The project team comply with the [ONAP Charter](#).