APPC Dublin 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.

Overview

Project Name	Enter the name of the project
Target Release Name	Dublin Release
Project Lifecycle State	Incubation. Refer to ONAP Charter, section 3.3 Project Lifecycle for further information
Participating Company	AT&T, Tech Mahindra, Ericsson, Orange, IBM

Scope

What is this release trying to address?

The Dublin Release will be focusing on the following areas:

- Upgrade of ODL to Fluorine SR2 (CCSDK dependency)
- Platform Maturity (i.e., S3P items) https://wiki.onap.org/display/DW/Dublin+Release+Platform+Maturity
    - Green color Target level (details see Platform Maturity below)
    - Performance: **Level 1, Level 2 (Stretch)**
        - Level 1: baseline performance criteria identified and measured (such as response time, transaction/message rate, latency, footprint, etc. to be defined on per component)
        - Level 2: performance improvement plan created

- unzip feature.zip during building docker.
- Remove un-used bundles from CCSDK's odlsli - depends on CCSDK
- Stability: **Level 1 (remain test coverage 50%)**
  - Level 1**:** 72 hour *component*-level soak test (random test transactions with 80% code coverage; steady load)
  - Level 2: 72 hour *platform*-level soak test (random test transactions with 80% code coverage; steady load)
  - Configuration Enhancement https://wiki.onap.org/display/DW/APPC+Configuration+Enhancement - Stretch goal
- Resiliency: **Level 2**
  - Level 2: support automated failure detection & rerouting
    - within a single geographic site
    - stateless components: establish baseline measure of failed requests for a component failure within a site
    - stateful components: establish baseline of data loss for a component failure within a site
  - OOM: move to variable for database's user/password
  - CSIT OOM - Integration team
- Security: **Level 1, level 2 (Stretch)**
  - Level 1: CII Passing badge
    - Including no critical and high known vulnerabilities > 60 days old
  - Level 2: CII Silver badge, plus:
    - All internal/external system communications shall be able to be encrypted: there is http internal connection between CDT and APPC, we need to find the resource to migrate from http to https.
    - All internal/external service calls shall have common role-based access control and authorization using CADI framework.
- Scalability: **Level 1**
  - Level 1: supports single site horizontal scale out and scale in, independent of other component
  - APPC does not support dynamic cluster configuration in k8s only support static cluster configuration
  - Clustering env with downstream: netconf, ansible
  - Using Alpine linux distribution docker image as base.
- Manageability: **Level1, Level 2 (Stretch)**
  - Level 2:
    - A component can be independently upgraded without impacting operation interacting components
    - Component configuration to be externalized in a common fashion across ONAP projects
    - ~~All application logging to adhere to~~ ~~ONAP Application Logging Specification v1.2~~
    - ~~Implement guidelines for a minimal container footprint - See~~ ~~this presentation~~ ~~and follow the~~ ~~Container Image Minimization Guidelines~~
- Usability: **Level 1**
  - Level 1:
    - User guide created
    - Deployment documentation
    - API documentation
    - Adherence to coding guidelines

- Documentation updates (readthedocs) for Dublin, such as, but not limited to:
  - LCM API Guide
  - Release Notes
  - CDT GUI Guide
- Code Coverage for CDT (Javascript) - TBD, no commitment at this stage
- Use Cases
  - Closed Loop / Integrate automation test
  - Change Management - APPC will continue supporting it.

Use Cases

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

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

- Closed Loop / Integrate automation test
- Change Management (will be done by Orange team)

Minimum Viable Product

Same as was defined for Casablanca, but with the adding of increasing better performance for starting application, geo-redundancy etc. For details, please see above on S3P section

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

Key	Summary	T	Created	Updated	Assignee	Reporter	P	Status	Resolution
APPC-1442	Change Management Use Case: Distribute Traffic	⚡	Feb 18, 2019	Jul 10, 2019	Unassigned	None	=	CLOSED	Done
APPC-1285	R4 - Change Management Use Case Support	⚡	Dec 18, 2018	Jun 05, 2019	Unassigned	None	=	CLOSED	Done
APPC-1284	R4 - Closed Loop Use Case Support	⚡	Dec 18, 2018	Jun 05, 2019	Unassigned	None	=	CLOSED	Done
APPC-1282	R4 - Platform Hardening	⚡	Dec 18, 2018	May 28, 2019	Unassigned	None	=	CLOSED	Done
APPC-1276	R4 - Security	⚡	Dec 17, 2018	May 28, 2019	Unassigned	None	=	CLOSED	Done
APPC-1275	R4 - Documentation	⚡	Dec 17, 2018	Jul 10, 2019	Unassigned	None	=	CLOSED	Done
APPC-1180	Controller Design Studio - Design Time Enhancement	⚡	Aug 30, 2018	May 24, 2019	Unassigned	None	=	CLOSED	Done

7 issues

Stories

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
APPC-1597	achieve CII Badging passing level for Dublin	🔖	May 07, 2019	Jun 05, 2019		Unassigned	None	⌃⌃	CLOSED	Done
APPC-1551	Use https for CDT communication	🔖	Mar 20, 2019	Jul 10, 2019		Unassigned	None	=	CLOSED	Done
APPC-1511	Multiple Ansible servers support for CDT	🔖	Feb 28, 2019	Mar 19, 2019		Unassigned	None	=	CLOSED	Done
APPC-1510	Analysis on CDT Repo	🔖	Feb 28, 2019	Mar 04, 2019		Unassigned	None	=	CLOSED	Done
APPC-1503	Run appc as non-root user	🔖	Feb 26, 2019	Aug 23, 2019		Unassigned	None	=	CLOSED	Done
APPC-1384	Fix logging configuration	🔖	Feb 04, 2019	Jun 05, 2019		Unassigned	None	⌃	CLOSED	Done
APPC-1336	Pre-install appc features during docker build	🔖	Jan 18, 2019	Jan 31, 2019		Unassigned	None	=	CLOSED	Done
APPC-1309	Support service level creation of CDT templates and corresponding APIs	🔖	Jan 08, 2019	May 01, 2019		Unassigned	None	=	CLOSED	Done
APPC-1277	ODL upgrade to Flourine SR2	🔖	Dec 17, 2018	Jul 10, 2019		Unassigned	None	=	CLOSED	Done
APPC-1258	Support clustered configuration for the odl-netconf-topology package	🔖	Nov 29, 2018	Jul 10, 2019		Unassigned	None	⌃	CLOSED	Done
APPC-1131	Enhance existing screen for existing APP-C models.	🔖	Jul 01, 2018	Jul 10, 2019		Unassigned	None	=	CLOSED	Done

11 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 LCM action	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
Parent Repo	The repository for the parents pom files.	appc/parents Git repository

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.

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 Dublin+Architecture.

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.
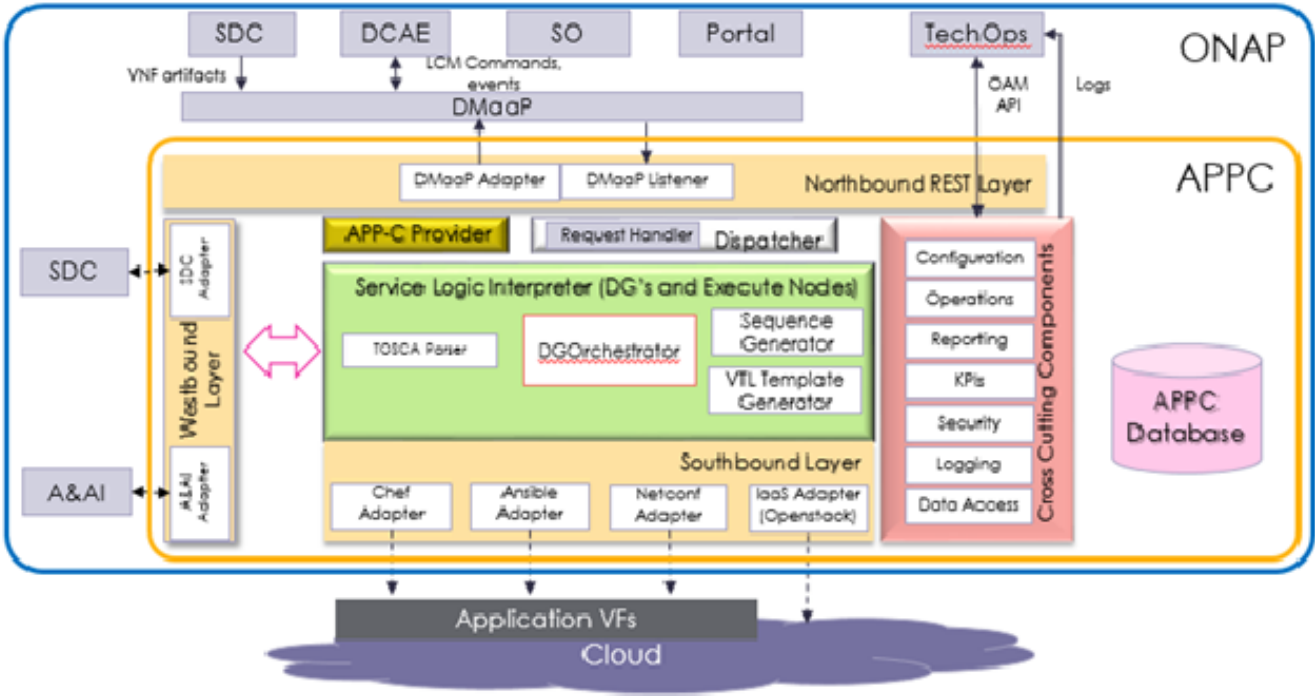
Platform Maturity

Refering to CII Badging Program and S3P, 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
Perfor mance	0	1 2 - Stretch goal	**APPC-1310** - Getting issue details... STATUS APPC performance testing	
Stability	1 - project team 2 - Integratio n team	1 - project team but we may not reach 80% code coverage 2 - Integration team Assume Integration team will address Level 2 - 72 hour test in Dublin		*current (1/13/19) code coverage is 67.9% • **Level 0:** none beyond release requirements • **Level 1:** 72 hour *component*-level soak test (random test transactions with 80% code coverage; steady load)
Resilie ncy	2	2		
Security	1	1, 2 (partial, please see the comments)		there is http internal connection between CDT and APPC, we need to find the resource to migrate from http to https.
Scalabil ity	1	1		

Manag eability	1	1, 2(partial, please see the comments, APPC will comply two items on level 2)		• **Level 2:** ◦ A component can be independently upgraded without impacting operation interacting components ◦ Component configuration to be externalized in a common fashion across ONAP projects ◦ ~~All application logging to adhere to ONAP Application Logging Specification v1.2~~ ◦ ~~Implement guidelines for a minimal container footprint~~
Usability	1	1		Recommendation for Casablanca is Level 2; however, we cannot meeting Level 2 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 TBD - Swagger 2.0 - We dependent on what ODL Fluorine for API documentation and they dictate version of Swagger used, currently looked like

• 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	TBD	
AAI	REST API	Currently Available	TBD	
CCSDK	OpenDayLight, SLI, AAI Client, dblib	End of March	TBD	
DMaaP	API to publish/subscribe to events sent for VNF/VM action requests.	Currently Available	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			Link toward the detailed API description APPC API Guide

• 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	Fluorine SR2
Docker	Docker container host	1.12
MariaDB	data base container	10.1.11

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-1628	Alpine does not support ps -p used in Karaf shell	🔴	Jun 16, 2019	Jul 11, 2019		Unassigned	None	=	CLOSED	Done
APPC-1626	APPC startODL.sh doesnt filter BusyBox ps correctly	🔴	Jun 16, 2019	Jun 19, 2019		Unassigned	None	=	CLOSED	Done
APPC-1619	ModifyConfig Response to Policy has null Status	🔴	May 31, 2019	Jun 06, 2019		Unassigned	None	^	CLOSED	Done
APPC-1618	Restart fails with Rule executor not available error	🔴	May 29, 2019	Jun 05, 2019		Unassigned	None	^	CLOSED	Done
APPC-1614	Failure in retrieving VNF Hierarchy in vCPE closed loop restart	🔴	May 23, 2019	Aug 12, 2023		Unassigned	None	^	CLOSED	Done
APPC-1612	InventoryNames parameter support for APPC Ansible LCM	🔴	May 22, 2019	Aug 12, 2023		Lukasz Rajewski	Lukasz Rajewski	^	CLOSED	Done
APPC-1611	VNF_DG_MAPPING and PROCESS_FLOW_REFERENCE tables are empty	🔴	May 20, 2019	Aug 12, 2023		Unassigned	None	^	CLOSED	Done
APPC-1610	Config vFW Netconf URI should be stream-count: stream-count intead of sample-plugin:pg-streams	🔴	May 20, 2019	Aug 12, 2023		Unassigned	None	≫	CLOSED	Done
APPC-1604	APPC Not Picking up Mesasges from Dmaap	🔴	May 15, 2019	Aug 12, 2023		Unassigned	None	≫	CLOSED	Done
APPC-1600	APPC DB doesn't have any artifact for "artifact-type"="APPC-CONFIG"	🔴	May 08, 2019	May 17, 2019		Unassigned	None	^	CLOSED	Done
APPC-1594	VNF type creation issues with CDT	🔴	May 02, 2019	May 03, 2019		Unassigned	None	^	CLOSED	Not a Bug
APPC-1593	CDT doesn't push info to DB	🔴	May 02, 2019	May 21, 2019		Unassigned	None	^	CLOSED	Done

APPC-1592	APPC returns UnknownHostException during Netconf operations	🔴	May 02, 2019	May 06, 2019	Unassigned	None	≫	CLOSED	Done
APPC-1589	Cvaas directory is not mounted in docker image	🔴	May 01, 2019	May 02, 2019	Unassigned	None	=	CLOSED	Done
APPC-1583	ansible user privileges problem	🔴	Apr 25, 2019	May 08, 2019	Unassigned	None	∧	CLOSED	Done
APPC-1581	Health check sporadic timeout	🔴	Apr 23, 2019	Apr 30, 2019	Unassigned	None	∧	CLOSED	Done
APPC-1577	Ansible Server playbook execution does not work	🔴	Apr 18, 2019	Apr 30, 2019	Unassigned	Lukasz Rajewski	∧	CLOSED	Done
APPC-1576	FileParameters content is wrongly processed	🔴	Apr 17, 2019	Aug 12, 2023	Lukasz Rajewski	Lukasz Rajewski	≫	CLOSED	Done
APPC-1574	FileParameters not supported for Ansible LCM action	🔴	Apr 16, 2019	Apr 18, 2019	Lukasz Rajewski	Lukasz Rajewski	=	CLOSED	Done
APPC-1548	MariaDB 10.2.4 adds "ROWS" as an SQL keyword	🔴	Mar 19, 2019	Mar 21, 2019	Unassigned	None	=	CLOSED	Done

Showing 20 out of 55 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 Fluorine - depends on CCSDK projects		Fall back to Nitrogen

- # 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 erecommended 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**
>
> APPC will follow requirement by documentation team based on the APPC release capacities.

Documentation updates planned for Dublin release are tracked under Documentation Epic: **APPC-1275** - Getting issue details... `STATUS`

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.