DCAE R2 M0 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.

- 1 Overview
- 2 Scope
  - 2.1 What is this release trying to address?
  - 2.2 Use Cases
  - 2.3 Minimum Viable Product
  - 2.4 Functionalities
    - 2.4.1 Epics
    - 2.4.2 Stories
  - 2.5 Longer term roadmap
- 3 Sub-Components
- 4 Architecture
  - 4.1 High level architecture diagram
  - 4.2 Platform Maturity
  - 4.3 API Incoming Dependencies
  - 4.4 API Outgoing Dependencies
  - 4.5 Third Party Products Dependencies
- 5 Testing and Integration Plans
- 6 Gaps
- 7 Known Defects and Issues
- 8 Risks
- 9 Resources
- 10 Release Milestone
- 11 Team Internal Milestone
- 12 Documentation, Training
- 13 Other Information
  - 13.1 Vendor Neutral
  - 13.2 Free and Open Source Software

Overview

Project Name	Enter the name of the project
Target Release Name	Beijing
Project Lifecycle State	Incubation
Participating Company	AT&T, Huawei, Cloudify, Cisco, Tech Mahindra, Netcracker, ZTE

Scope

What is this release trying to address?

The DCAE Beijing release has two primary objectives: 1. improving platform maturity; 2. supporting use cases.

In addition, DCAE will add support for more analytics platform(s): PNDA, Flink, Prometheus; and enhancements for DCAE platform, analytics and collection.

Use Cases

From R1:

- vFW/vDNS,

- Residential Broadband vCPE,
- vVoLTE

From R2:

- VNF Scale Out: Reuse capability/components for R1 use cases. No additional impact.
- Hardware Platform Enablement In ONAP No DCAE impact needed for supporting this use case. Will follow and plan how to use in future release (e.g. additional collection and analytic).

Minimum Viable Product

The MVP of DCAE for R2 will include the necessary subcomponents supporting the primary objectives: meeting platform maturity goals and supporting the use cases.

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
DCAE GEN2-390	PNF PnP - PNF Registration Handler		Mar 12, 2018	Jul 10, 2019		Unassigned	None	=	CLOSED	Done
DCAE GEN2-346	R2 DCAE-Controller to stop merging policies into app config and deliver the whole policy body objects to component		Feb 15, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-254	R2 - Refactor code for facilitating easier ingestion		Jan 17, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-247	R2 DCAE Supporting Platform Maturity Usability Requirements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-246	R2 DCAE Supporting Platform Maturity Manageability Requirements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-245	R2 DCAE Supporting Platform Maturity Scalability Requirements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-244	R2 DCAE Supporting Platform Maturity Security Requirements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-243	R2 DCAE Supporting Platform Maturity Resilience Requirements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-242	R2 DCAE Supporting Platform Maturity Stability Requirements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-235	R2 DCAE VES Enhancements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-234	R2 DCAE Platform Enhancements		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-233	R2 DCAE Design Time Support: tools (DCAE CLI, TOSCA lab) and documentation		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Won't Do

DCAE GEN2-232	R2 MSB Integration: MSB API registration and proxy		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-231	R2 DCAE Deployment Enhancements: Supporting reduced-footprint deployments, network cloud deployment (i.e. multi-tiered sites, edge vs central).		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-230	R2 DCAE Component Containerization and Kubernetes Support: Continuous evolution of DCAE components for better containerization, and Kubernetes support.		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-229	R2 CSIT Testing: Supporting CSIT testing for R2		Jan 08, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done
DCAE GEN2-222	R2-Beijing release complaince		Jan 03, 2018	Jul 24, 2018		Unassigned	None	=	CLOSED	Done

17 issues

Stories

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
DCAEGEN2-514	docker stats memory values are misleading		May 18, 2018	May 21, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-477	Bring up a dcae postgres instance as part of OOM installation		Apr 27, 2018	May 02, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-465	SNMP Trap collector startup error		Apr 21, 2018	May 02, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-461	Create health check for use with OOM/Kubernetes DCAE deployment		Apr 20, 2018	May 02, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-449	policy-handler to accept CLAMP policy-updates		Apr 17, 2018	Apr 24, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-438	dcaepolicyplugin and onap-dcae-dcaepolicy-lib in cloudify to discover consul under consul:8500 instead of localhost:8500		Apr 09, 2018	Apr 17, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-434	DCAE heat deployment support		Apr 06, 2018	Apr 19, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-428	Deployment support for K8S		Apr 03, 2018	Jul 23, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-425	update blueprints for k8s-based postgres		Mar 29, 2018	Apr 27, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-421	Provide scripts to create a DCAE bootstrap container		Mar 27, 2018	Apr 19, 2018		Unassigned	None	=	CLOSED	Done

DCAEGEN2-419	dcaepolicyplugin to use dns to discover policy-handler under k8s		Mar 26, 2018	Apr 09, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-417	OOM Deployment		Mar 25, 2018	May 02, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-415	dockerplugin to pick up onap-dcae-dacepolicy-lib that parses configAttributes		Mar 23, 2018	Mar 26, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-414	parse the configAttributes string into json in onap-dace-dcaepolicy-lib		Mar 23, 2018	Mar 23, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-413	parse configAttributes in policy_filter in dcaepolicyplugin		Mar 23, 2018	Mar 23, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-411	Update component blueprints to use Kubernetes plugin		Mar 22, 2018	May 11, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-410	Develop a Cloudify DCAE Kubernetes plugin		Mar 22, 2018	Mar 27, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-409	Support additional topics for VESCollector		Mar 22, 2018	Mar 23, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-405	Blueprints template for new services		Mar 20, 2018	Mar 27, 2018	Unassigned	None	=	CLOSED	Done
DCAEGEN2-404	policy-handler to use dns to discover the deployment-handler		Mar 19, 2018	Mar 26, 2018	Unassigned	None	=	CLOSED	Done

Showing 20 out of 68 issues

Longer term roadmap

DCAE is the collection and analytics platform serving ONAP. The value of DCAE lies in the number of types of data being collected, the number of analytics algorithms, the number of open/close control loops, and how well/easy they are supported for ONAP uses.

After the initial R1 deliverables, starting from R2, DCAE will focus more on this long term roadmap by starting to add support for more analytics platforms (e.g. PDNA, Flink, Prometheus, etc); more collection apparatus.

Release Deliverables

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

Deliverable Name	Deliverable Description
	To fill out

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.

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 Archiecture 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.

Platform Maturity

Refering 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	1	1		• 0 -- none • 1 – baseline performance criteria identified and measured • 2 & 3 – performance improvement plans created & implemented
Stability	1	2		• 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	1	1+		• 0 – none • 1 – manual failure and recovery (< 30 minutes) • 2 – automated detection and recovery (single site) • 3 – automated detection and recovery (geo redundancy)
Security	0	1		• 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
Scalability	0	1		• 0 – no ability to scale • 1 – single site horizontal scaling • 2 – geographic scaling • 3 – scaling across multiple ONAP instances
Manageability	0	1		• 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	1		• 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 model distribution API	API for retrieving TOSCA model of close loop		To fill out	Link toward the detailed API description

Policy Engine	API for retrieving configuration policy updates			
A&AI	API invoked for information enhancements			
DMaaP Message Router	API for topic publish / subscribe			
DMaaP Bus Controller	DMaaP Bus Controller is a part of DMaaP that provides topic provisioning; this is the API for topic provisioning. (TBD based on AAF availability)			

- 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)
VES Ingestion	API for VNFs to send VES data	Date for which the API is reviewed and agreed	To fill out	Link toward the detailed API description
DCAE Deployment Handler	NB API for invoking the deployment of DCAE subcomponents			
DCAE Inventory	API for Add/Delete DCAE copy's TOSCA models			

- 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
OpenStack		
Cloudify Manager		
Consul		
CDAP		
Hadoop		
PNDA		
Flink		

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.

- 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
DCAEGEN2-725	parameter missing from vcpe demo envs		Aug 22, 2018	Nov 30, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-590	problem during vFW Closed Loop		Jul 06, 2018	Nov 30, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-532	unit-test fails on policy-handler on get /gc/stats after shutdown of the web-server		May 24, 2018	May 24, 2018		Unassigned	None	^	CLOSED	Done
DCAEGEN2-512	DCAE bootstrap should register Holmes components in Consul		May 16, 2018	May 17, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-511	Config fetch issue from CBS for Holmes		May 16, 2018	May 17, 2018		Unassigned	None	^	CLOSED	Done
DCAEGEN2-510	OOM DCAE Cloudify Manager deployed TCA using an old tag		May 16, 2018	May 16, 2018		Unassigned	None	^^	CLOSED	Done
DCAEGEN2-508	In OOM deployment Inventory pod startup wait time not long enough		May 14, 2018	May 21, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-507	Allow OOM to set custom docker registry (proxy)		May 14, 2018	May 15, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-506	VES configuration update from Consul not working		May 14, 2018	May 14, 2018		Unassigned	None	^	CLOSED	Done
DCAEGEN2-502	Message Router preconfigured topics do not work		May 11, 2018	May 16, 2018		Unassigned	None	^	CLOSED	Done
DCAEGEN2-501	TCA bails on Config provided in R1 format		May 11, 2018	May 11, 2018		Unassigned	None	^	CLOSED	Done
DCAEGEN2-500	deployment-handler fails to bring node-instances from cloudify manager		May 10, 2018	May 11, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-497	K8s blueprint for inventory-api/servicechange-handler missing default docker tags		May 09, 2018	May 09, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-496	k8s bootstrap script has hard-coded reference to 'dcae' namespace		May 08, 2018	May 14, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-495	policy handler blueprint default image version is incorrect		May 08, 2018	May 09, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-494	containers do not restart in Heat deployment		May 08, 2018	May 11, 2018		Unassigned	None	^	CLOSED	Done
DCAEGEN2-493	DCAE fails health check on OOM deployment		May 07, 2018	May 14, 2018		Unassigned	None	^^	CLOSED	Duplicate
DCAEGEN2-491	on deployment-handler - increase the allowed size of the incoming message for policy-update		May 07, 2018	May 09, 2018		Unassigned	None	=	CLOSED	Done
DCAEGEN2-490	[LF] Missing released dcaegen2.platform/policy-handler:2.4.1 for dep-policy-handler		May 07, 2018	May 14, 2018		Unassigned	None	^	CLOSED	Done

DCAEGEN2-489	Blueprint deployment times out		May 04, 2018	May 05, 2018		Unassigned	None		CLOSED	Done

Showing 20 out of 57 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
	To fill out	To fill out

- # 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 he 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.

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.