

Image Manager

- 1 Declined by TSC as a stand-alone project TSC 2018-01-04. Recommended as a component of Active and Available Inventory Project
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Declined by TSC as a stand-alone project TSC 2018-01-04. Recommended as a component of Active and Available Inventory Project

Project Name:

- Proposed name for the project: Image Manager

Project description:

Image Manager provides a reliable, logically centralized, user-friendly image management for ONAP at both the design time and run time. The managed objects include VM images, Docker images and software packages. By using image manager, ONAP users can upload images to ONAP system, manage images via Image Manager portal and distribute images to target VIMs on demand.

- **Usability:**

ONAP modules can't get the image information easily at both the design time and run time because images are scattered in the VIMs. Image Manager addresses this problem by providing a centralized image catalog view and APIs for the other modules to access image information.

- **Manageability:**

It's very hard for ONAP user to figure out what images have been used by ONAP platform or uploaded to the VIMs. Image Manager addresses this challenge by providing a UI portal for ONAP user to manage images, including browse/upload/update/delete/distribute images.

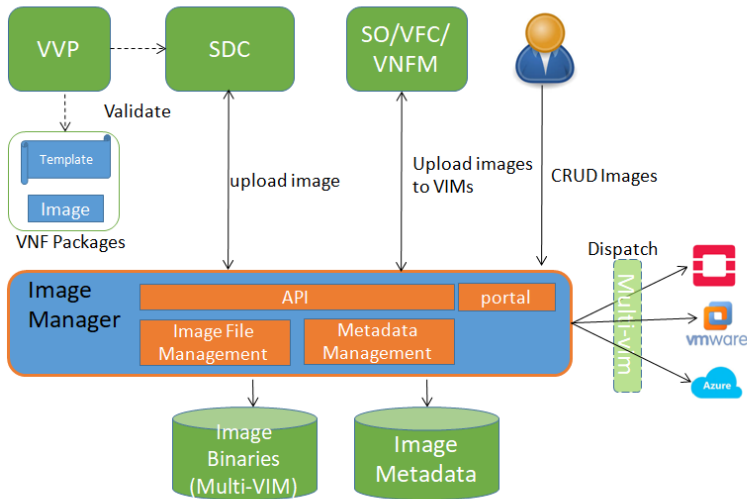
- **Performance:**

Currently, If an image needs to be uploaded to multiple VIMs, it has to be done separately and manually via the VIM portals, which is inefficient (imagine there might be thousands of edge clouds). Image manager addresses this issue by providing a centralized view and the images can be distributed to multiple VIMs via the Image Manager portal, which is much more efficient.

Scope:

- Provide logically centralized management for images used by ONAP system, which includes VM image, Docker image, and application package.
- Provide APIs to upload images to ONAP system.
- Provide APIs to access the image catalog and image information in ONAP system.
- Provide a UI portal in which the ONAP user can upload/update/delete/distribute images.

Architecture Alignment:



❑ SDC upload image to Image Manager when onboarding a Vendor VNF package, which has already been validated by VVP.

❑ SDC query image information when designing VNFs.

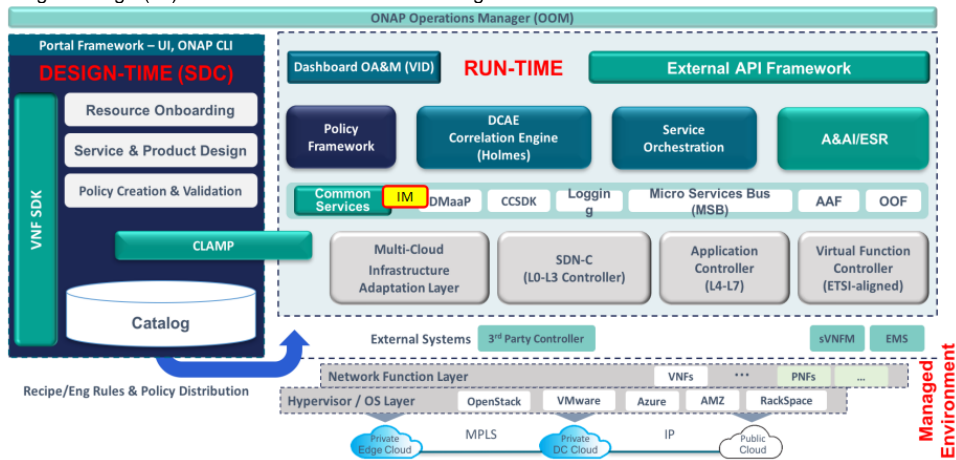
❑ Orchestration modules call Image Manager to upload images to the destination VIMs before instantiation. Image Manager updates the image-VIM relationship.

❑ ONAP user can CRUD images via Image Manager portal.

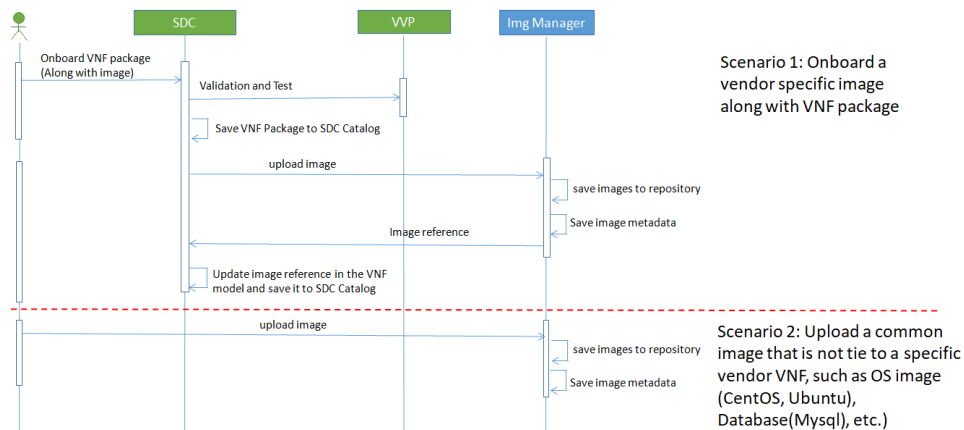
❑ Image storage : Image Manager will leverage the storage capability provided by Multi-VIM. The stored binaries include VM image, docker image, software packages.

❑ Image Metadata: Image Manager will use MariaDB for metadata. The metadata includes uuid, name, description, format, version, vendor, deploy location, Image-VIM relationship, etc.

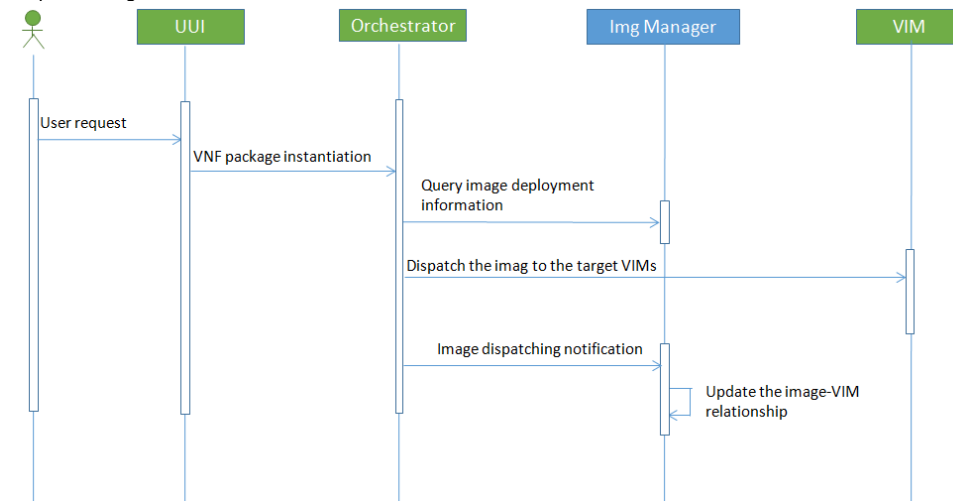
- How does this project fit into the rest of the ONAP Architecture?
 - Image Manager(IM) is a common service across design time and run time.



Onboard images to ONAP system:



Dispatch images to VIMs:



- What other ONAP projects does this project depend on?
 - Multi-VIM
 - MSB
 - Integration
- How does this align with external standards/specifications?
 - APIs/Interfaces - OpenAPI/Swagger
 - Information/data models - Swagger JSON
- Are there dependencies with other open source projects?
 - APIs/Interfaces - MariaDB

Other Information:

- link to seed code (if applicable)
- Vendor Neutral
 - All proprietary trademarks, logos, product names, will be removed when submitting the seed codes.
- Meets Board policy (including IPR)

Use the above information to create a key project facts section on your project page

Key Project Facts:

Primary contact: li.zi30@zte.com.cn zhao.huabing@zte.com.cn

Facts	Info
PTL (first and last name)	
Jira Project Name	Image Manager
Jira Key	IM
Project ID	Image Manager
Link to Wiki Space	

Release Components Name:

Note: refer to existing [project for details](#) on how to fill out this table

Components Name	Components Repository name	Maven Group ID	Components Description
Image Manager	im	im	Image Manager

Resources committed to the Release:

Note 1: No more than 5 committers per project. Balance the committers list and avoid members representing only one company.

Note 2: It is critical to complete all the information requested, that we help to fast forward the onboarding process.

Role	First Name Last Name	Linux Foundation ID	Email Address	Location
PTL				
Committers				
	Zi Li		li.zi30@zte.com.cn	
	Tao Shen		shentao@chinamobile.com	
	Hu Yuan		yuan.hu1@zte.com.cn	
Contributors				
	Bo Lv		lv.bo163@zte.com.cn	
	Qihui Zhao		zhaoqihui@chinamobile.com	
	Luman Wang		wanglm.bri@chinatelecom.cn	
	Chen Yan		chenyan.bri@chinatelecom.cn	
	Eric Debeau		eric.debeau@orange.com	
	Kaiyue Wang		wangkaiyue@chinamobile.com	