ONAP OOM GUI based installer

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Problem Statement

- Despite all the simplifications, users tell us that OOM is too difficult to use.
- This is a barrier to more widespread use of ONAP, especially amongst those that are new to ONAP (both VNF vendors and CSPs).
Proposed Solution

- Deploy ONAP using GUI based installer
- Fully automated, using a model-driven approach
- Visual representation of deployment progress
- (Future) Options to upgrade/downgrade/patch updates and other LCM features
GUI Installer Goals

- Create a UI app for ONAP installation
- Can provide a visual representation of the state and other aspects of installation like host information etc.
- Provide a REST interface for all operations
- Package the installer in a way that it is simple to install on a Jump Host
- Support both bare metal and cloud-based deployment
- Support model-driven installation, where user/administrator can select the model of deployment
  - The models should be defined in a JSON format, with the simplest model being all-in-one deployment on a single bare metal server
GUI Installer Block Diagram

Browser → Request from browser (80)

CLI → Read API Call (8000)

Serve Static Web Content (ReadJS)
Proxy Request To App Server

NGINX

Web Server Container

Jump Host

Node.js
Express.js Server
Auth and Session Management
Real API and Routes
Ansible Scripts

MongoDB
DB Container

Docker

ONAP Cluster
Openstack Cluster
Component Details

- Docker and docker-compose: To deploy application containers
- NGINX: To provide static web content and to serve as REST server proxy for UI
- ReactJS: Used to create GUI for the installer
- ExpressJS: Serves as REST interface for the installer
- Ansible: Used to deploy ONAP/Openstack on the target server
- MongoDB: Used to store all the user related information like credentials, token etc and all the deployment related information like state of the deployment, host IP addresses and so on
Model-0 Description (Demo-0)

- Simple model to deploy ONAP (for development purposes)
- No HA features
- Assumes Openstack is already installed on the SAME bare-metal server where ONAP installation will be done
- Jump host VM (or host) where the installer will run should have docker installed on it
- Deploys a 3-node ONAP cluster using QEMU/KVM VMs
• Feedback on the concept and approach?
  - We feel this fits well with OOM dashboards for post-deployment health monitoring
• Please join us if you are interested in collaborating