**OPENSHIFT**

* We can use Openshift using CLI, (known as OC), Web console or Rest API.
* If we are not logging in for any particular environment and want Openshift web for practice, then we should have minishift (VM) installed. Now we will provide IP on this VM and port as 8443.
* To use OC, we should have Openshift CLI installed locally and then (in folder where OC.exe present) we need to login to our Openshift environment as:

***oc login***

It will as for the address of our Openshift server followed by username and password. By default, it will be on 8443 port (same we have for BeeLine env), so the command would be:

Openshift-[url](https://ildelocpbln01-master.corp.amdocs.com) ashvansh password

* To create a new project from CLI:

***oc new-project project\_name***

* To read information using the API, access Openshift API at url of Openshift cluster followed by ***oapi*** and the version of api(v1) followed by group(users) that we need to query then add an authorization header and specify a bearer token (token can be find out using ***oc whoami -t*** command.

Curl <https://localhost:8043/oapi/v1/users> \ -H “Authorization: Bearer token\_string”

* **Projects:** A large Kubernetes cluster can host lot of pods, 100 of deployments with various services and end points configured. Same large infrastructure can be shared by various team working on different applications. To reduce the conflicts as similar name space of service by two teams and set the work who will/can do what, it allows us to manage access to resources for various users.
* Openshift came with by default user management features and differentiate them based on:

Regular users: development and deployment: Developers

System user: use to interacting with infra: cluster admin ex- system:admin, system:master

Service accounts: create service to communicate between various services within out application.

* Whenever we make any changes in code it is automatically build and deploy in target environment without any manual intervention using webhook.
* Webhook is event notification technique that sends an http POST request to a predefine URL.
* Webhook need to be configured in GIT repository. (need to provide OpenShift URL). Take this URL from build configurator under build section.

**Abbreviation**

* **OC:** Openshift CLI
* **OKD:** Origin Community Distribution