Openshift Training by Alexander Kolin

Podman, OpenShift CLI (oc), and Git Cheat Sheet

Podman Commands

Container Management

- `podman ps` – List running containers
- `podman ps -a` – List all containers
- `podman run -d --name mycontainer myimage` – Run a container in detached mode
- `podman start mycontainer` – Start a stopped container
- `podman stop mycontainer` – Stop a running container
- `podman rm mycontainer` – Remove a container
- `podman logs mycontainer` – View container logs
- `podman exec -it mycontainer bash` – Execute a command in a running container - with bash similar to ssh

Image Management

- `podman images` – List all images
- `podman pull myimage` – Pull an image from a registry
- `podman build -t myimage .` – Build an image from a Dockerfile
- `podman tag myimage myregistry.com/myimage:latest` – Tag an image
- `podman commit container-id myimage` – commit container changes to an image
- `podman push myregistry.com/myimage:latest` – Push an image to a registry
- `podman rmi myimage` – Remove an image

OpenShift CLI (oc) Commands

Login and Configuration

- `oc login --token=<token> --server=<server>` – Login to OpenShift
- `oc new-project myproject` – Create a new project
- `oc project myproject` – Switch to a project
- `oc status` – Show project status

Working with Pods

- `oc get pods` – List all pods
- `oc describe pod mypod` – Show detailed information about a pod
- `oc logs mypod` – Show logs of a pod
- `oc apply -f file.yaml mypod` – create a pod/deployment/service...
- `oc delete pod mypod` – Delete a pod
- `oc exec -it pod -- bash or -- sh` – Execute a command in a running container - with bash similar to ssh

Deployments and Services

- `oc get deployments` – List all deployments
- `oc get svc` – List all services
- `oc expose svc myservice` – Create a route to a service
- `oc get routes` – List all routes

Scaling and Rolling Updates

- `oc scale deployment myapp --replicas=3` – Scale an application
- `oc rollout status deployment myapp` – Check rollout status
- `oc rollout undo deployment myapp` – Rollback to the previous deployment

Git Commands

Basic Git Commands

- `git init` – Initialize a new repository
- `git clone <repo>` – Clone a repository
- `git status` – Show the status of the working directory
- `git add .` – Stage all changes
- `git commit -m "Message"` – Commit staged changes
- `git push origin main` – Push changes to the remote repository
- `git pull origin main` – Pull latest changes from the remote repository

Branching & Merging

- `git branch` – List all branches
- `git branch mybranch` – Create a new branch

- `git checkout mybranch` – Switch to a branch
- `git merge mybranch` – Merge a branch into the current branch
- `git branch -d mybranch` – Delete a branch

Reverting Changes

- `git reset --hard HEAD~1` – Reset to the previous commit
- `git revert <commit>` – Revert a specific commit
- `git stash` – Stash changes temporarily
- `git stash pop` – Apply the latest stashed changes