Advanced Deployment with OpenShift – Homework

This is a document to provide the necessary information about running the script which is used to deploy the OpenShift cluster and complete the CICD pipeline which is needed to successfully complete the homework assignment.

Git repository with the homework scripts:

https://github.com/jelenas316/advdephw

Step	Description	Command
1.	Go to root	sudo -i
2.	Clone the git repository	git clone https://github.com/jelenas316/advdephw.git
3.	Run the ansible playbook	ansible-playbook ./advdephw/homework.yaml
4.	Uninstall the cluster (optional)	sh ./advdephw/scripts/uninstall.sh

The homework.yaml script automatically deploys the OpenShift cluster, creates PVs with different sizes (5G and 10G) and creates the different users requested in the assignment. The script also deploys the NodeJS-Mongo-Persistent app as a smoke test to see the ability to deploy a simple app. The CICD pipeline is created in the task-dev project and it is promoted to the task-prod project automatically through the pipeline. In the end the scripts provide two groups with the requested users and creates the limit ranges.

The following table represents the projects, their routes and login credentials:

Service name	Route	Login credentials
gogs	gogs-tasks-dev.apps.23d7.example.opentlc.com	gogs/gogs
jenkins	jenkins-tasks-dev.apps.23d7.example.opentlc.com	andrew/r3dh4t1!
nexus	nexus-tasks-dev.apps.23d7.example.opentlc.com	admin/admin123
sonarqube	sonarqube-tasks-dev.apps.23d7.example.opentlc.com	admin/admin
tasks	tasks-tasks-prod.apps.23d7.example.opentlc.com	
node-js-app	nodejs-mongo-persistent-smoke-test.apps.23d7.example.opentlc.com	

Release version – 3.11.16

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Venue – Garni Hotel Centar, Novi Sad Serbia

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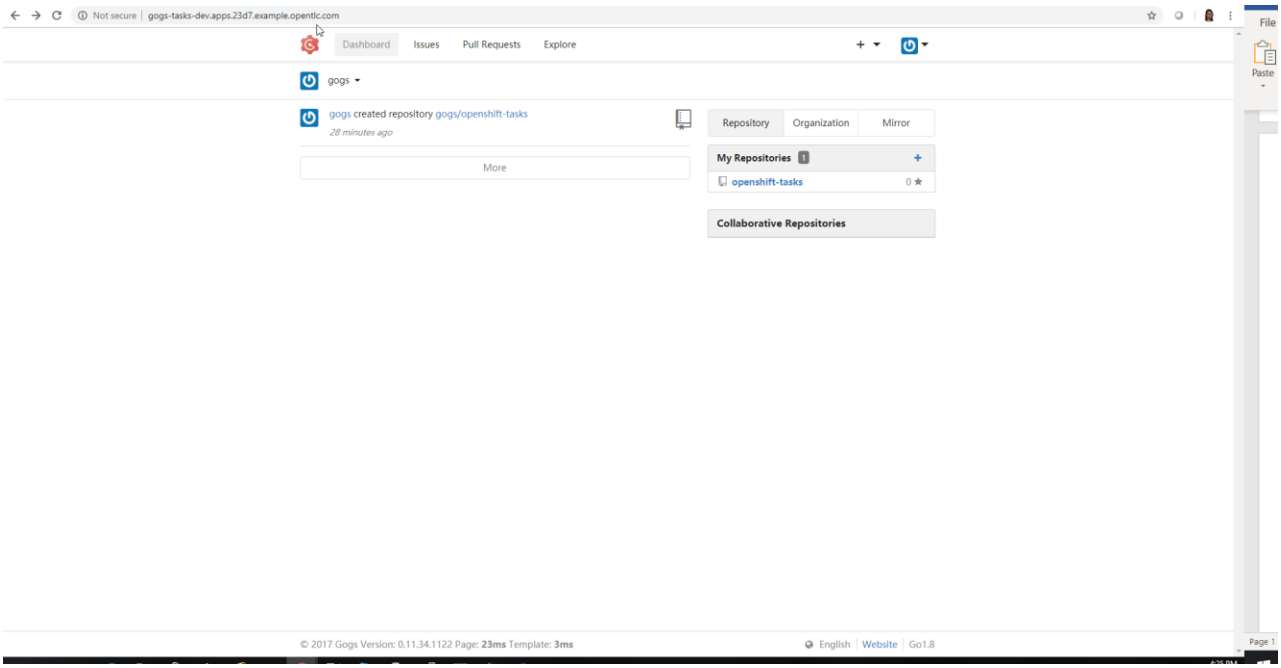
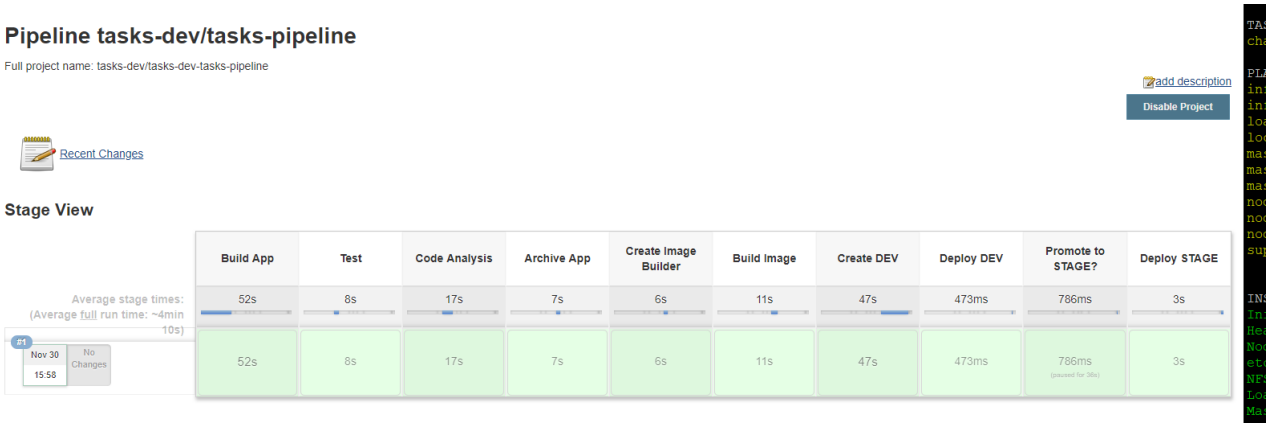
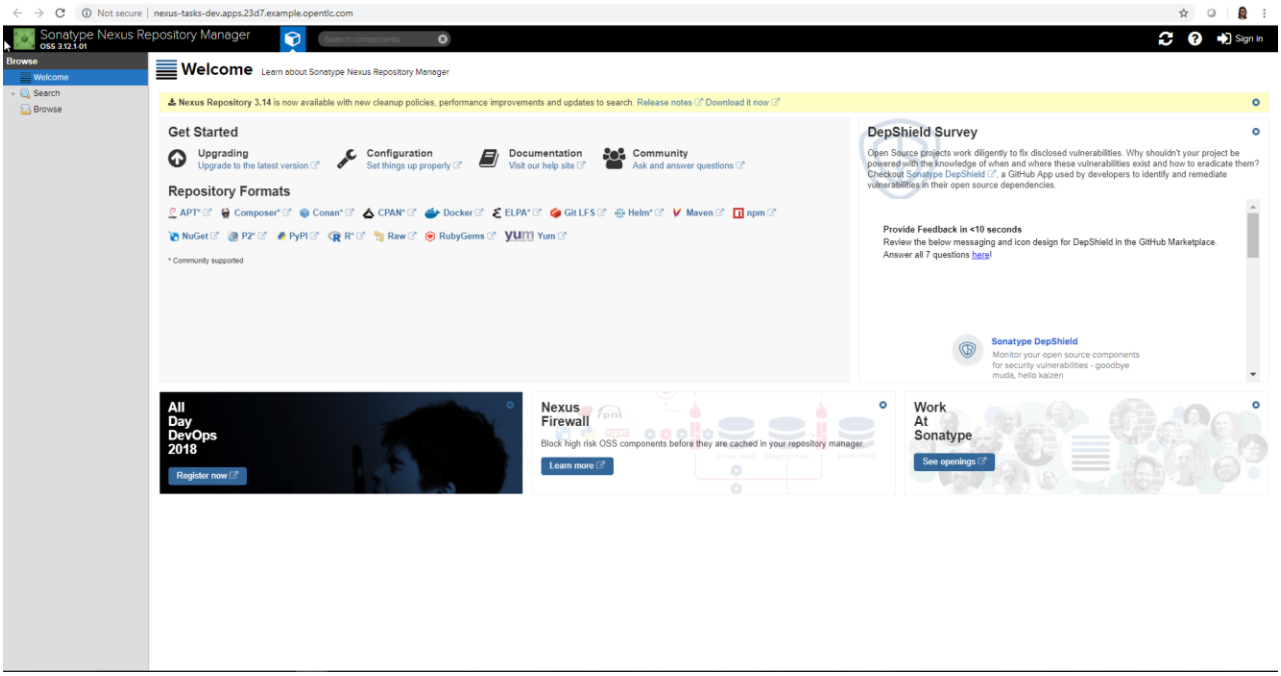
Gogs



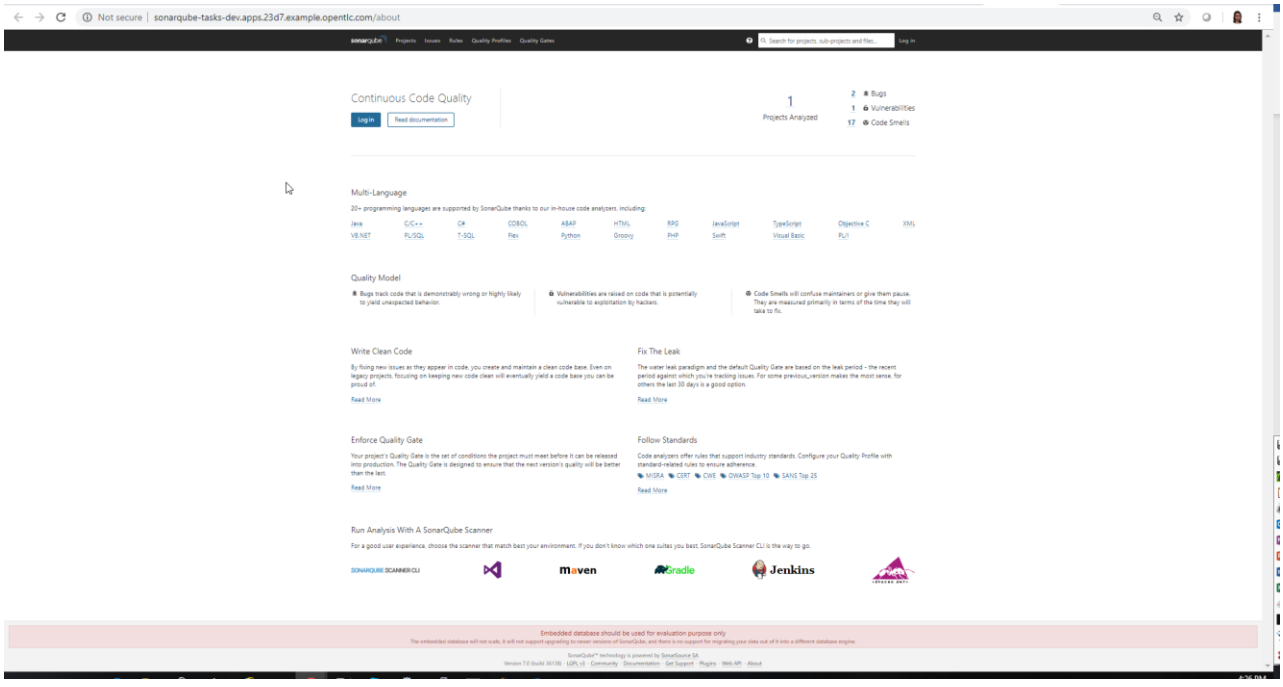
Jenkins



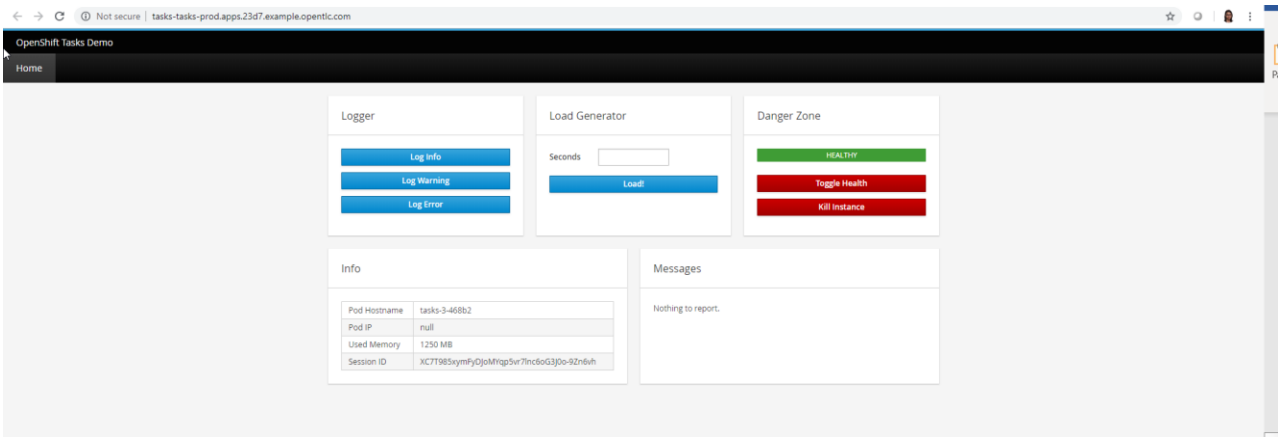
Nexus



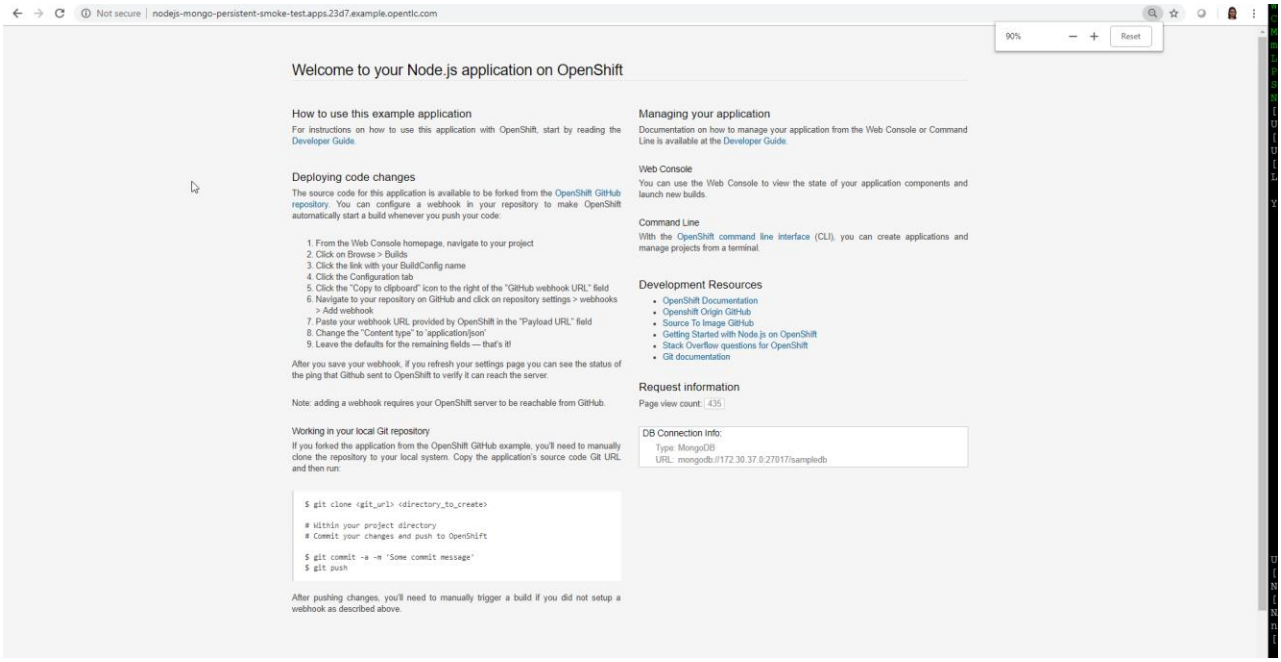
Sonarqube



Task-prod



Nodejs-mongo-persistent



Putty

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PLAY RECAP *********************************************************************
infranode1.23d7.internal    : ok=173  changed=44   unreachable=0    failed=0
infranode2.23d7.internal    : ok=173  changed=44   unreachable=0    failed=0
loadbalancer1.23d7.internal : ok=60   changed=13   unreachable=0    failed=0
localhost                   : ok=66   changed=23   unreachable=0    failed=0
master1.23d7.internal       : ok=1288 changed=454  unreachable=0    failed=0
master2.23d7.internal       : ok=357  changed=121  unreachable=0    failed=0
master3.23d7.internal       : ok=357  changed=121  unreachable=0    failed=0
node1.23d7.internal         : ok=172  changed=43   unreachable=0    failed=0
node2.23d7.internal         : ok=172  changed=43   unreachable=0    failed=0
node3.23d7.internal         : ok=172  changed=43   unreachable=0    failed=0
support1.23d7.internal      : ok=58   changed=8    unreachable=0    failed=0


INSTALLER STATUS ***************************************************************
Initialization                  : Complete (0:01:13)
Health Check                    : Complete (0:00:24)
Node Bootstrap Preparation      : Complete (0:04:55)
etcd Install                    : Complete (0:01:18)
NFS Install                     : Complete (0:00:12)
Load Balancer Install           : Complete (0:00:20)
Master Install                  : Complete (0:06:20)
Master Additional Install       : Complete (0:01:03)
Node Join                       : Complete (0:00:50)
Hosted Install                  : Complete (0:01:08)
        The use of NFS for the core OpenShift Container Platform components is n
ot recommended, as NFS (and the NFS Protocol) does not provide the proper consis
tency needed for the applications that make up the OpenShift Container Platform
infrastructure.
Cluster Monitoring Operator     : Complete (0:00:49)
Web Console Install             : Complete (0:00:25)
Console Install                 : Complete (0:00:22)
Metrics Install                 : Complete (0:02:27)
metrics-server Install          : Complete (0:00:52)
Logging Install                 : Complete (0:03:45)
Prometheus Install              : Complete (0:00:47)
Service Catalog Install         : Complete (0:01:54)
Node Problem Detector Install   : Complete (0:00:11)
[root@bastion ~]#
```