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/thednd1992/ocp_advanced_deployment_homework.git

Step	Description	Command
1	Login to VM	ssh -i ~/.ssh/id_rsa djordje.gajisin-devoteam.com@bastion.6a28.example.opentlc.com
2	Switch to root user	sudo -i
3	Clone the Git repository	git clone https://github.com/thednd1992/ocp_advanced_deployment_homework.git
4	Run the ansible playbook	ansible-playbook ./ocp_advanced_deployment_homework/homework.yaml
5	Uninstall the cluster	sh ./ocp_advanced_deployment_homework/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.6a28.example.opentlc.com	gogs/gogs
jenkins	jenkins-tasks-dev.apps.6a28.example.opentlc.com	andrew/r3dh4t1!
nexus	nexus-tasks-dev.apps.6a28.example.opentlc.com	admin/admin123
sonarqube	sonarqube-tasks-dev.apps.6a28.example.opentlc.com	admin/admin
tasks	tasks-tasks-prod.apps.6a28.example.opentlc.com	
node-js-app	nodejs-mongo-persistent-smoke-test.apps.6a28.example.opentlc.com	

Release version: 3.11.16

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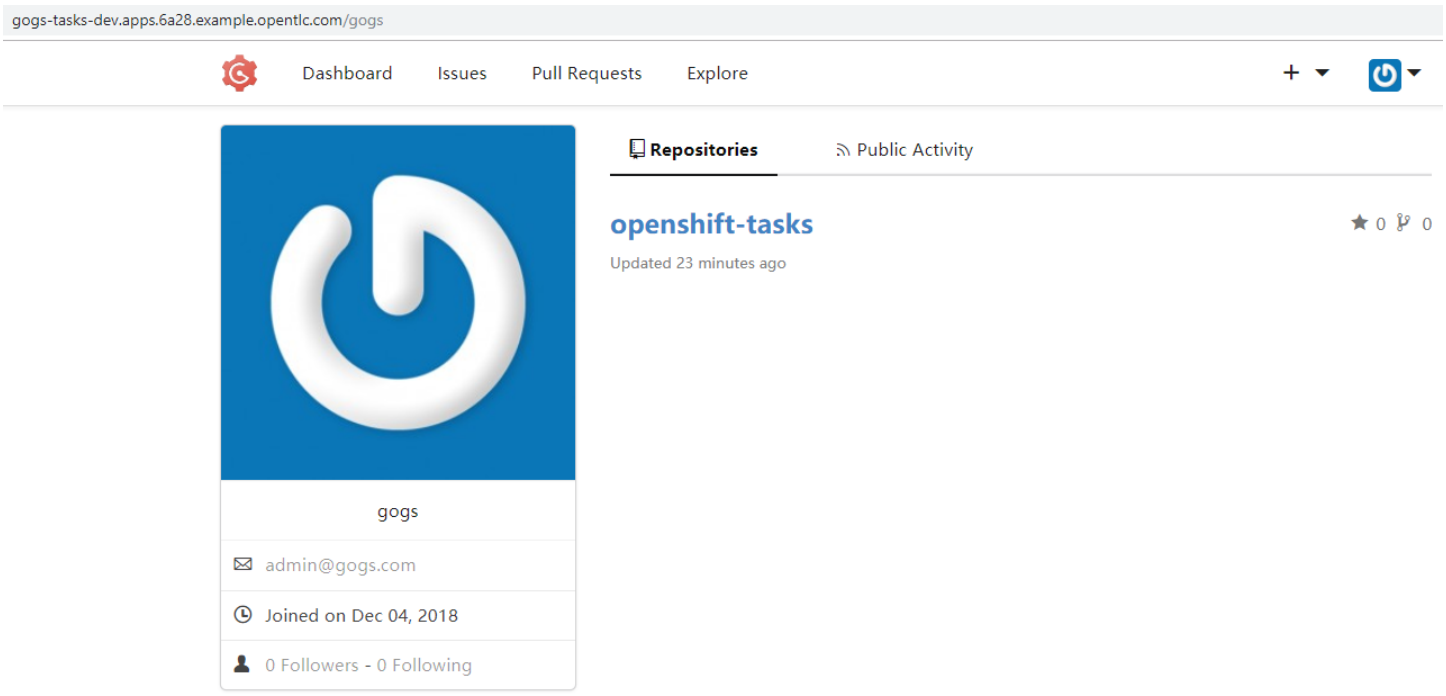
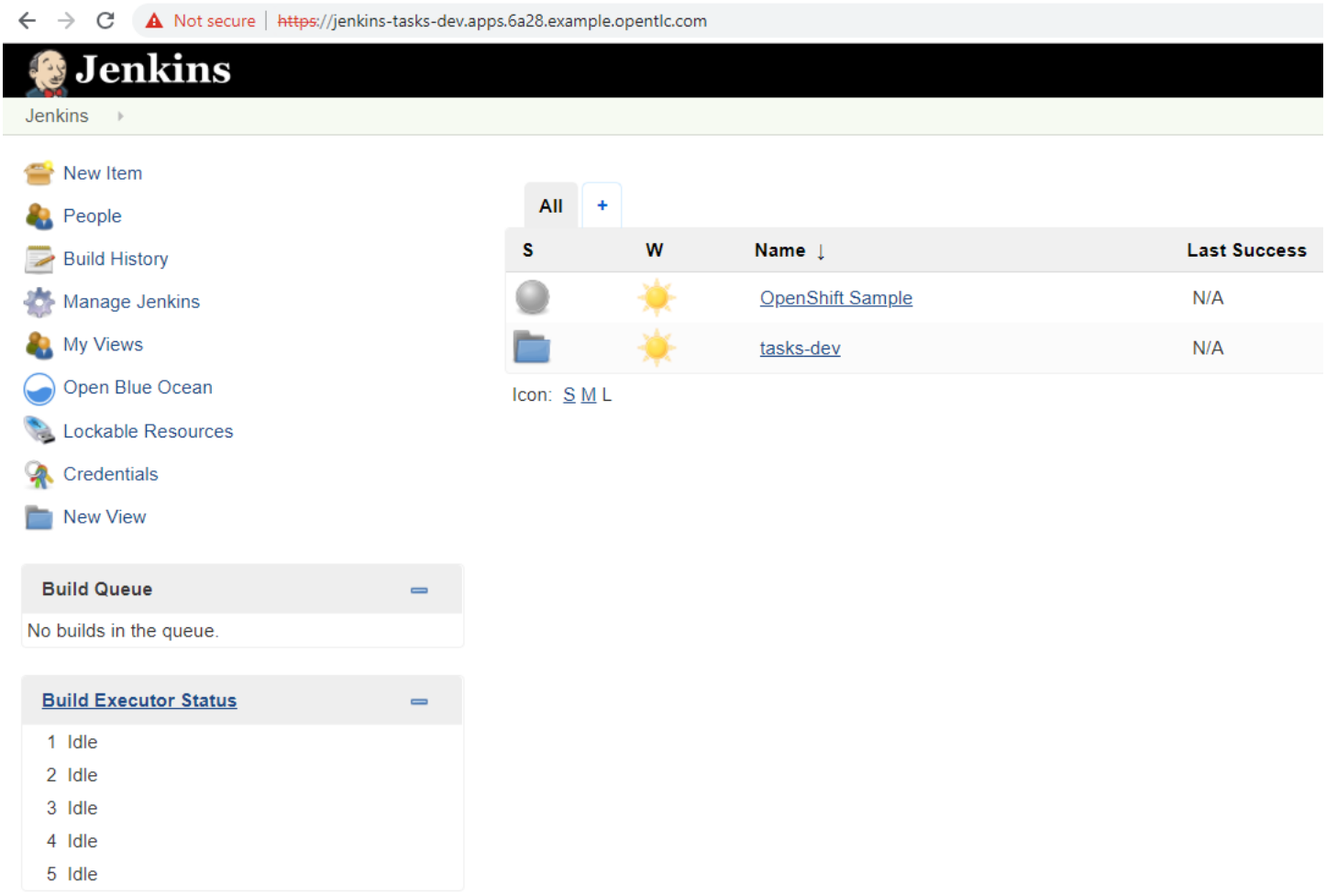
Venue: Garni Hotel Centar, Novi Sad, Serbia

Participant: Djordje Gajisin (djordje.gajisin@devoteam.com)

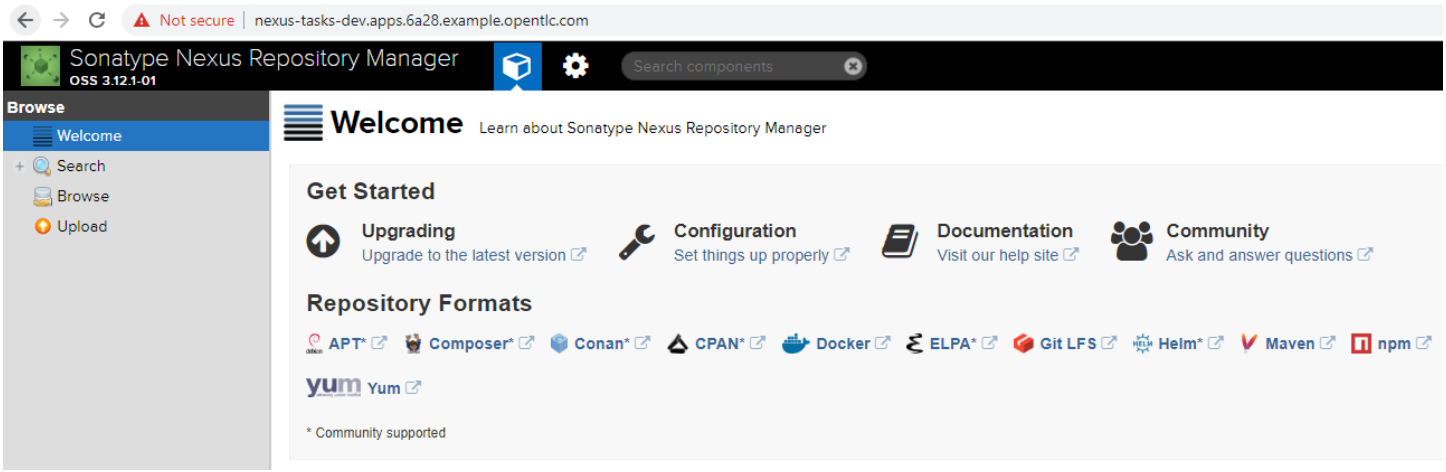
Gogs


gogs-tasks-dev.apps.6a28.example.opentlc.com/gogs
Dashboard
Issues
Pull Requests
Explore
Repositories
Public Activity
openshift-tasks
0 0
Updated 23 minutes ago
gogs
admin@gogs.com
Joined on Dec 04, 2018
0 Followers - 0 Following

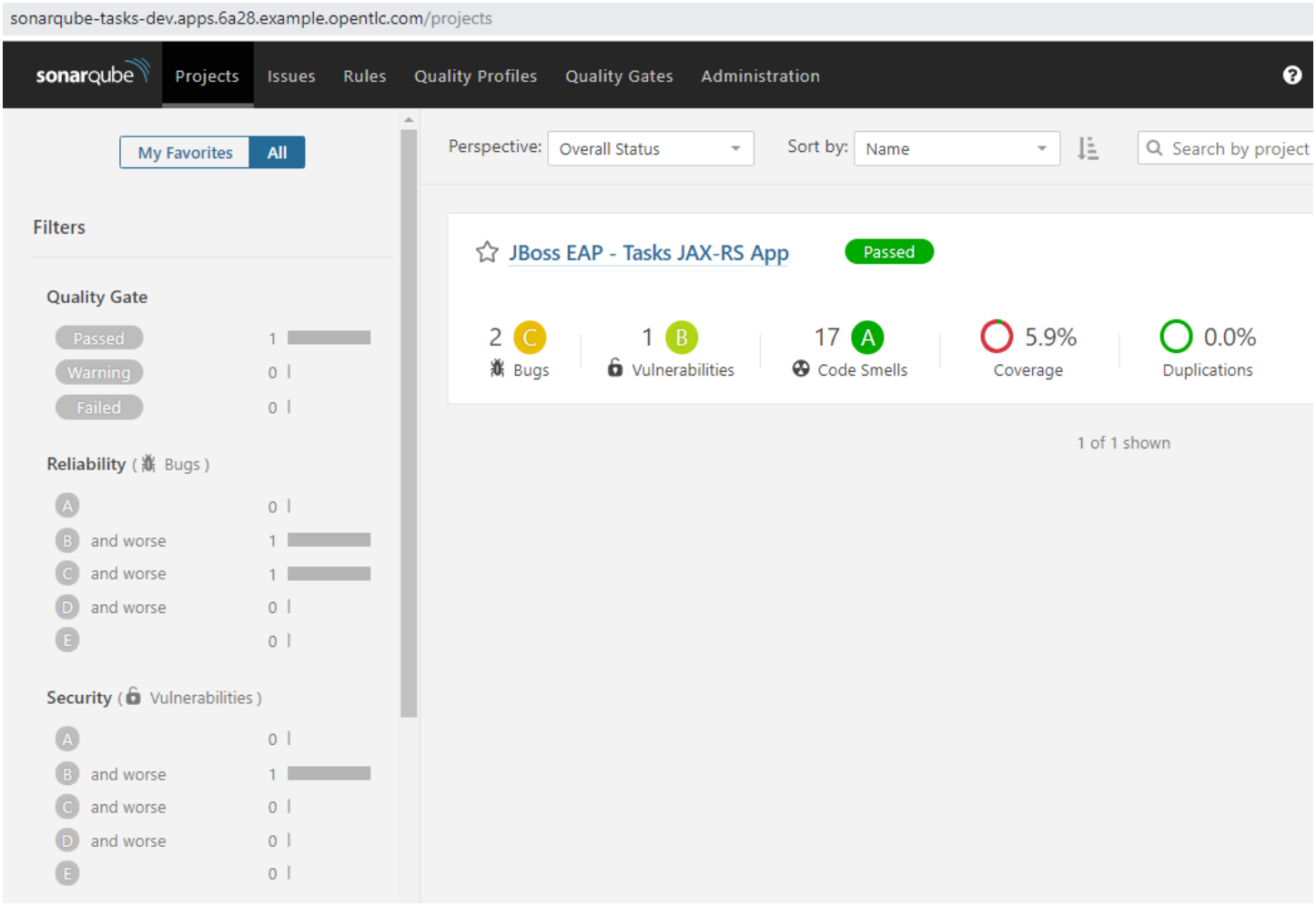
Jenkins


Not secure
https://jenkins-tasks-dev.apps.6a28.example.opentlc.com
Jenkins
Jenkins
New Item
People
Build History
Manage Jenkins
My Views
Open Blue Ocean
Lockable Resources
Credentials
New View
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
3 Idle
4 Idle
5 Idle
All
+
S
W
Name ↓
Last Success
OpenShift Sample
N/A
tasks-dev
N/A
Icon: S M L

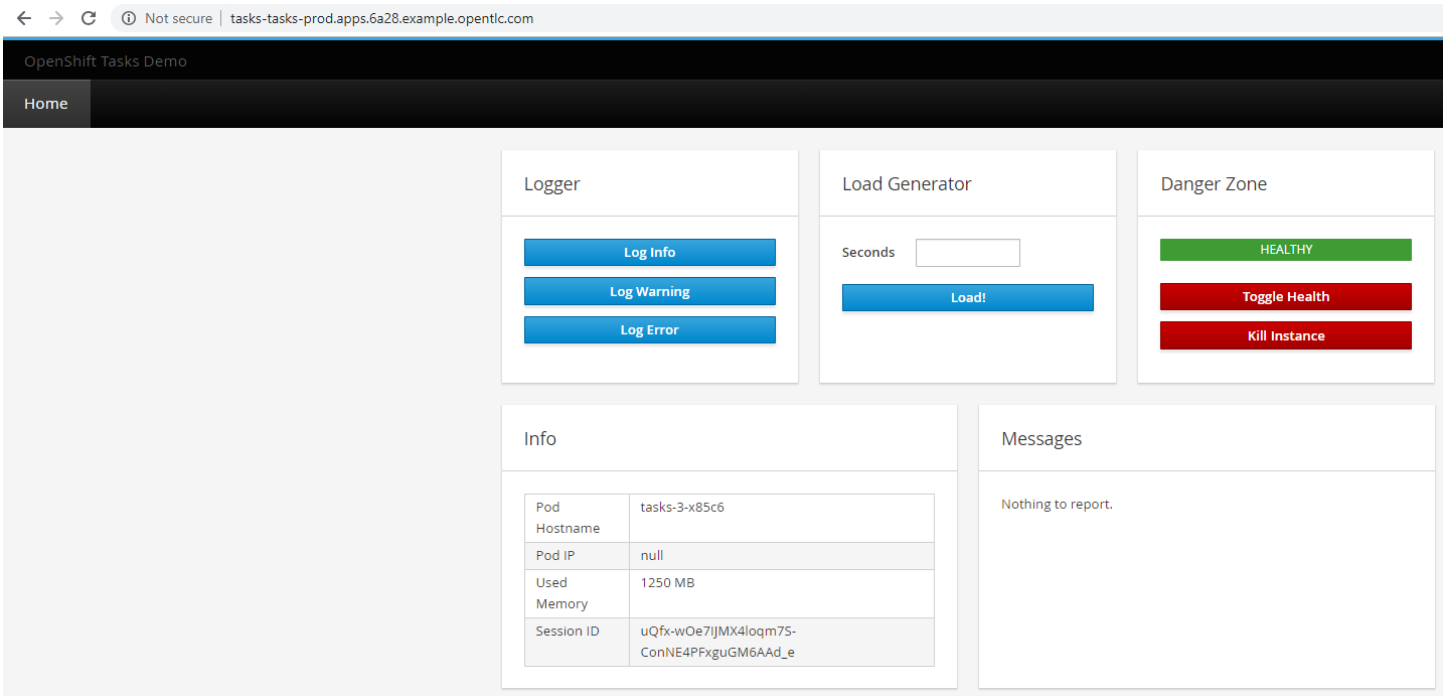
Nexus


Not secure | nexus-tasks-dev.apps.6a28.example.opentlc.com
Sonatype Nexus Repository Manager
OSS 3.12.1-01
Search components
Browse
Welcome
Search
Browse
Upload
Welcome
Learn about Sonatype Nexus Repository Manager
Get Started
Upgrading
Upgrade to the latest version
Configuration
Set things up properly
Documentation
Visit our help site
Community
Ask and answer questions
Repository Formats
APT*
Composer*
Conan*
CPAN*
Docker
ELPA*
Git LFS
Helm*
Maven
npm
Yum
* Community supported

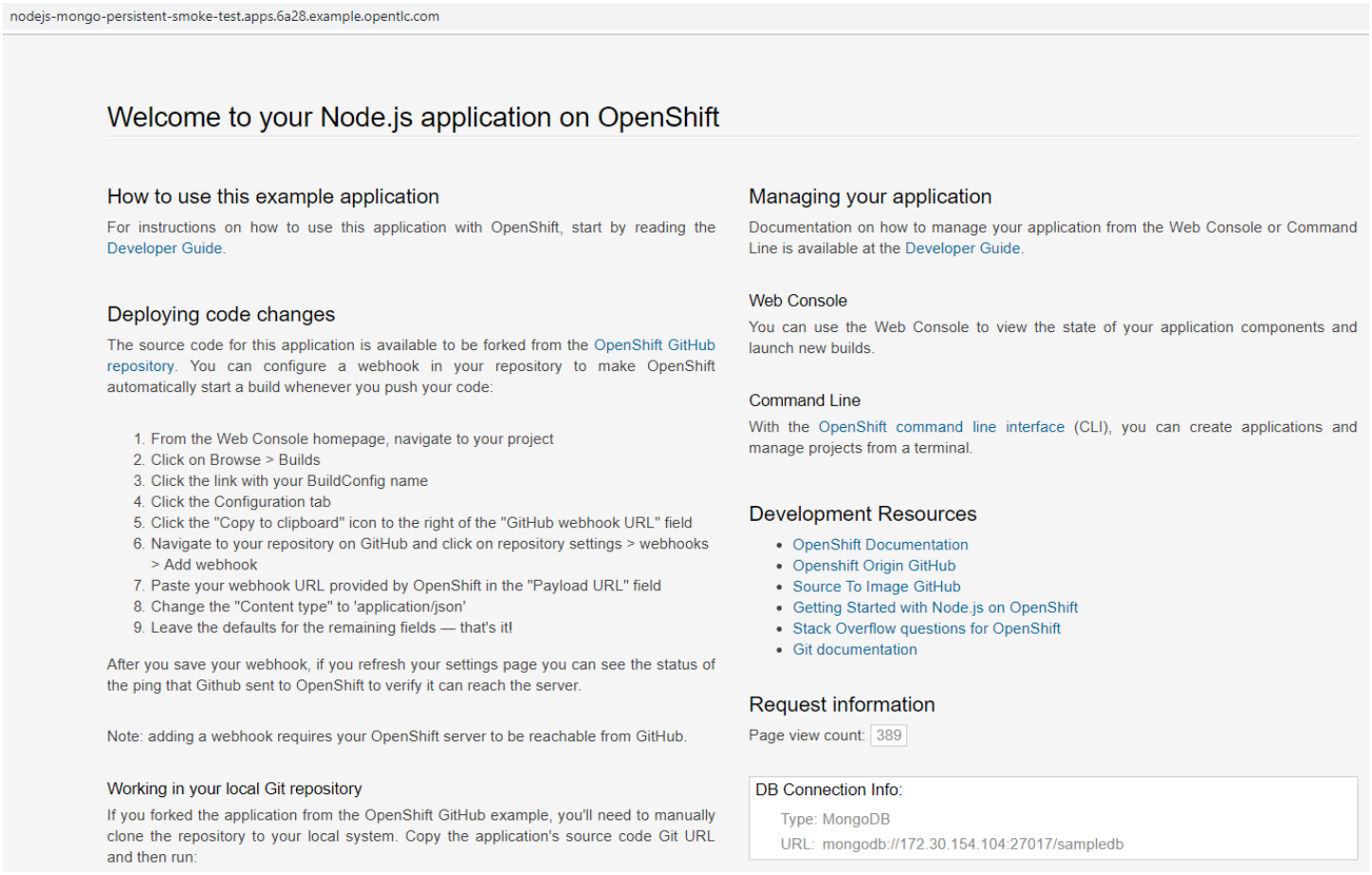
SonarQube


sonarqube-tasks-dev.apps.6a28.example.opentlc.com/projects
sonarqube
Projects
Issues
Rules
Quality Profiles
Quality Gates
Administration
My Favorites
All
Filters
Quality Gate
Passed 1
Warning 0
Failed 0
Reliability (Bugs)
A 0
B and worse 1
C and worse 1
D and worse 0
E 0
Security (Vulnerabilities)
A 0
B and worse 1
C and worse 0
D and worse 0
E 0
Perspective: Overall Status
Sort by: Name
Search by project
JBoss EAP - Tasks JAX-RS App
Passed
2 C Bugs
1 B Vulnerabilities
17 A Code Smells
5.9% Coverage
0.0% Duplications
1 of 1 shown

Task-prod


Not secure | tasks-tasks-prod.apps.6a28.example.opentlc.com
OpenShift Tasks Demo
Home
Logger
Log Info
Log Warning
Log Error
Load Generator
Seconds
Load!
Danger Zone
HEALTHY
Toggle Health
Kill Instance
Info
Pod Hostname
tasks-3-x85c6
Pod IP
null
Used Memory
1250 MB
Session ID
uQfx-wOe7IJMX4loqm7S-ConNE4PFxguGM6AAd_e
Messages
Nothing to report.

Nodejs-mongo-persistent



Git Bash

```
PLAY RECAP *********************************************************************************************************************************************************
infranode1.6a28.internal    : ok=176  changed=80   unreachable=0    failed=0
infranode2.6a28.internal    : ok=176  changed=80   unreachable=0    failed=0
loadbalancer1.6a28.internal : ok=60   changed=17   unreachable=0    failed=0
localhost                   : ok=66   changed=24   unreachable=0    failed=0
master1.6a28.internal       : ok=1266 changed=488  unreachable=0    failed=0
master2.6a28.internal       : ok=362  changed=165  unreachable=0    failed=0
master3.6a28.internal       : ok=362  changed=165  unreachable=0    failed=0
node1.6a28.internal         : ok=175  changed=79   unreachable=0    failed=0
node2.6a28.internal         : ok=175  changed=79   unreachable=0    failed=0
node3.6a28.internal         : ok=175  changed=79   unreachable=0    failed=0
support1.6a28.internal      : ok=60   changed=14   unreachable=0    failed=0


INSTALLER STATUS ***************************************************************************************************************************************************
Initialization               : Complete (0:00:59)
Health Check                 : Complete (0:00:18)
Node Bootstrap Preparation   : Complete (0:05:58)
etcd Install                 : Complete (0:01:12)
NFS Install                  : Complete (0:00:14)
Load Balancer Install        : Complete (0:00:20)
Master Install               : Complete (0:05:32)
Master Additional Install    : Complete (0:00:59)
Node Join                    : Complete (0:00:47)
Hosted Install               : Complete (0:01:06)
        The use of NFS for the core OpenShift Container Platform components is not recommended, as NFS (and the NFS Protocol) does not provide th
e proper consistency needed for the applications that make up the OpenShift Container Platform infrastructure.
Cluster Monitoring Operator  : Complete (0:01:18)
Web Console Install          : Complete (0:00:24)
Console Install              : Complete (0:00:26)
Metrics Install              : Complete (0:02:25)
metrics-server Install       : Complete (0:00:53)
Logging Install              : Complete (0:03:24)
Prometheus Install           : Complete (0:00:45)
Service Catalog Install      : Complete (0:01:50)
[root@bastion ~]# exit
logout
[djordje.gajisin-devoteam.com@bastion ~]$
```