

JOBSHEET 13

CLOUD SERVERLESS



Arranged By:

Rajendra Rakha Arya Prabaswara

(1941720080/21)

PROGRAM STUDI D-IV TEKNIK INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG



Practicum 1

(Hello World Fuction)

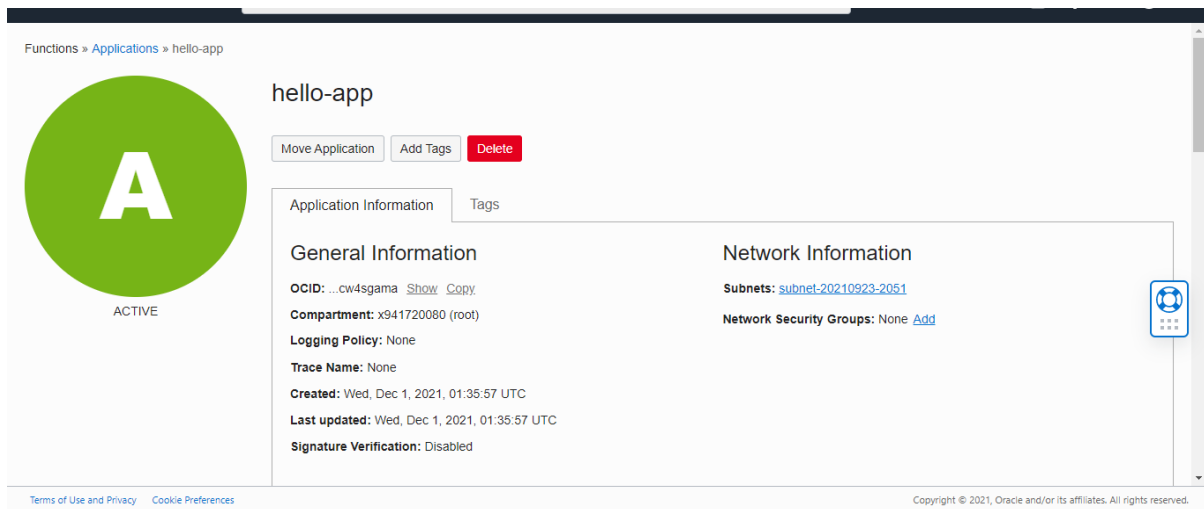
1. Create Application and Function

- Login to Oracle and navigate to Developer Services Menu → Application

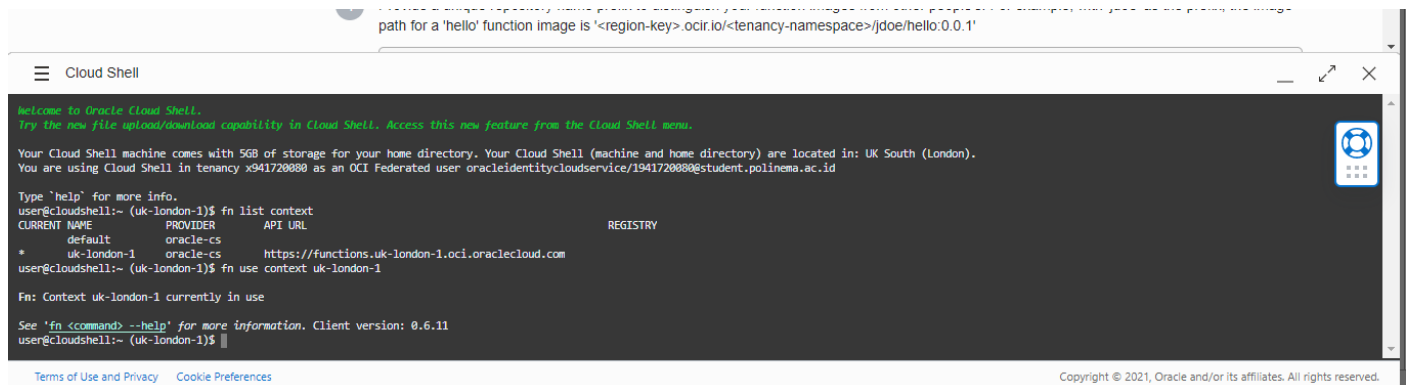
- Click Create Application , fill the form and click Create



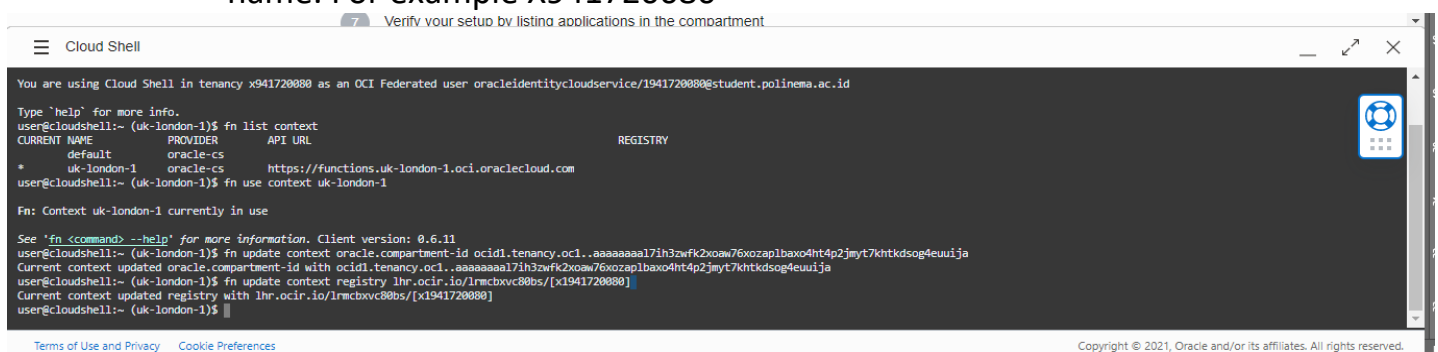
- Result After Click Create Button



- Follow the steps given by cloud
- Activate Cloud Shell with click Launch Cloud Shell button , Wait until built is done.

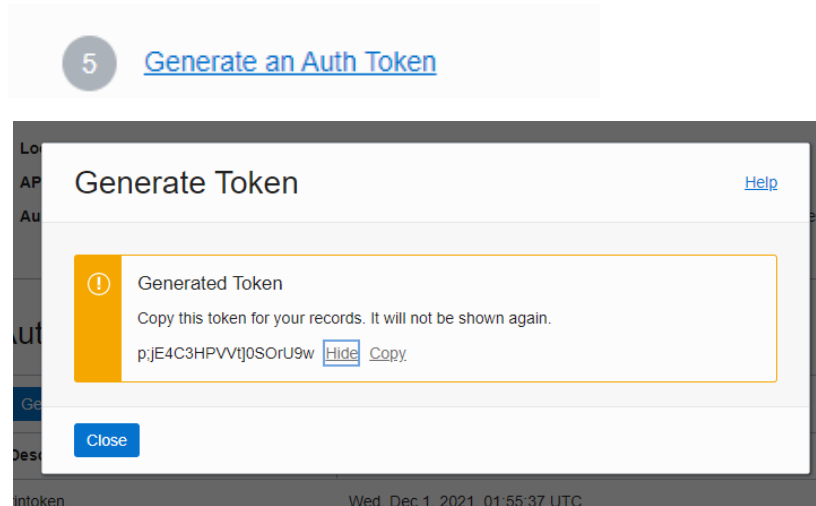


- Follow step by step by copying the command and then pasting it into cloudshell terminal.
- Change value of [repo-name-prefix] with username / repository name. For example X941720080





- Generate Token with click the button and fill the form description for ex: (faas) and save → **(p;jE4C3HPVVtj0SOrU9w)**



- Paste the token as Password and make sure process of authentication is Success

```
user@cloudshell:~ (uk-london-1) $ docker login -u 'lrmcbxvc80bs/oracleidentitycloudservice/1941720080@student.polinema.ac.id' lhr.ocir.io
Current context updated registry with lhr.ocir.io/lrmcbxvc80bs/[x1941720080]
user@cloudshell:~ (uk-london-1) $ docker login -u 'lrmcbxvc80bs/oracleidentitycloudservice/1941720080@student.polinema.ac.id' lhr.ocir.io
Password:
WARNING! Your password will be stored unencrypted in /home/user/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
user@cloudshell:~ (uk-london-1) $
```



- Follow Step by Step until you Successfully display 'Hello World'

- fn list apps
- fn init --runtime java hello-java
- ls
- cd hello-java
- fn -v deploy --app hello-app
- fn invoke hello-app hello-java

OUTPUT

```
Cloud Shell

Parts: [lhr.ocir.io lrmcbxvc80bs x941720080 hello-java:0.0.5]
Pushing lhr.ocir.io/lrmcbxvc80bs/x941720080/hello-java:0.0.5 to docker registry...The push refers to repository [lhr.ocir.io/lrmcbxvc80bs/x941720080/hello-java]
4f468edbe260: Pushed
5d7a1f3eb39d: Pushed
1ec04da31c53: Pushed
dc91c7f32900: Pushed
c723d986d7fd: Pushed
e078ccbbc71d: Pushed
62763247decf: Pushed
2bf2b8c78141: Pushed
e8b689711f21: Pushed
0.0.5: digest: sha256:946bf90819d1fd374eae48e6afca8c83148249d6f49fef1d205814f0a56260d5 size: 2206
Updating function hello-java using image lhr.ocir.io/lrmcbxvc80bs/x941720080/hello-java:0.0.5...
Successfully created function: hello-java with lhr.ocir.io/lrmcbxvc80bs/x941720080/hello-java:0.0.5
user@cloudshell:hello-java (uk-london-1)$ fn invoke hello-app hello-java
Hello, world!
user@cloudshell:hello-java (uk-london-1)$
```

-
- Navigate to Function menu to see details available function

ORACLE Cloud

Search for resources, services, and documentation

UK South (London)

Resources

Getting Started

Functions

Configuration

Signature Verification

Metrics

Logs

Functions

Create Function

Name	Image	Image Digest	Invoke endpoint	Last updated
hello-jav a	lhr.ocir.io/lrmcbxv c80bs/x94172008 0/hello-java:0.0.5	sha256:946bf90819d1fd374ea e48e6afca8c83148249d6f49fef 1d205814f0a56260d5	https://rdrcw4sgama.uk-london-1.functions.oci.oraclecloud.co m/20181201/functions/ocid1.fnfunc.oc1.uk-london-1.aaaaaaa avisdtijnfoinyjwboiz2g5rcza3y6ulz6yrow6hu7c4ymwnkwa/act ions/invoke	Wed, Dec 1, 2021, 02:4 9:44 UTC

Showing 1 Item < 1 of 1



Practicum 2

(Calling Function)

1. In addition to using fn, FaaS functions can also be called using oci-cli.
2. Copy invoke endpoint then call with format below :

➔ **oci raw-request --http-method POST --target-uri
https://rdrcw4sgama.uk-london-
1.functions.oci.oraclecloud.com/20181201/functions/ocid1.f
nfunc.oc1.uk-london-
1.aaaaaaaavisdtijnfoinyjwboiz2g5rcza3y6ulz6yrrow6hu7c4y
rmwnkwa/actions/invoke**

```
bash: Bbci: command not found
user@cloudshell:~ (uk-london-1)$ oci raw-request --http-method POST --target-uri https://rdrcw4sgama.uk-london-1.functions.oci.oraclecloud.com/20181201/functions/ocid1.fnfunc.oc1.uk-london-1.aaaaaaaavisdtijnfoinyjwboiz2g5rcza3y6ulz6yrrow6hu7c4yrmwnkwa/actions/invoke
{
  "data": "Hello, world!",
  "headers": {
    "Content-Length": "13",
    "Content-Type": "text/plain",
    "Date": "Wed, 01 Dec 2021 02:59:36 GMT",
    "Fn-Call-Id": "01FNSYXRAQ18T071GZJ000878P",
    "Fn-Fdk-Runtime": "java/OpenJDK 64-Bit Server VM 11.0.13",
    "Fn-Fdk-Version": "fdk-java/1.0.142 (jvm=OpenJDK 64-Bit Server VM, jvmv=11.0.13)",
    "Opc-Request-Id": "B48348BF1E3542AFA32D09FE2DA88628/01FNSYXR3X00000000000PW44/01FNSYXR3X00000000000PW45"
  },
  "status": "200 OK"
}
user@cloudshell:~ (uk-london-1)$
```



Assignment

(Deploy Function)

1. Choose 1 fuction from → <https://github.com/oracle/oracle-functions-samples.git>
2. Type Syntax below :

→ `fn init --runtime java oci-list-instances-java`
→ `ls`
→ `cd oci-list-instances-java`

```
Cloud Shell

user@cloudshell:~ (uk-london-1)$ cd hello-java
user@cloudshell:hello-java (uk-london-1)$ ls
func.yaml  pom.xml  src
user@cloudshell:hello-java (uk-london-1)$ cd src
user@cloudshell:src (uk-london-1)$ ls
main  test
user@cloudshell:src (uk-london-1)$ cd ../../
user@cloudshell:~ (uk-london-1)$ ls
hello-java
user@cloudshell:~ (uk-london-1)$ fn init --runtime java list-OCI-Compute
Creating function at: ./list-OCI-Compute
Function boilerplate generated.
func.yaml created.
user@cloudshell:~ (uk-london-1)$ ls
hello-java  list-OCI-Compute
user@cloudshell:~ (uk-london-1)$ cd list-OCI-Compute
user@cloudshell:list-OCI-Compute (uk-london-1)$
```

→ Check File Java the Folder ->
src/main/java/com/example/fn/ComputeInstancesList.java
→ [COPY THIS JAVA CODE](#) into ComputeInstancesList.java
→ Nano ComputeInstancesList.java
→ Cd
→ `fn invoke hello-app hello-jav`

Resources		Functions				
Getting Started		Create Function				
Functions		Name	Image	Image Digest	Invoke endpoint	Last updated
Configuration		list-oci-co mpute	lhr.ocir.io/lrmcbxvc 80bs/x941720080/ list-oci-compute:0. 0.2	sha256:946bf90819d1fd374ea e48e6afca8c83148249d6f49fe f1d205814f0a56260d5	<a href="https://rdcrw4sgama.uk-london-1.functions.oraclecloud.com/20181201/functions/ocid1.fnfunc.oc1.uk-london-1.aaaaa
aaa4xyky4e2c5qhmekzindqauhtqr4xbds2ga2fqdxebciyuu
elna/actions/invoke">https://rdcrw4sgama.uk-london-1.functions.oraclecloud.c om/20181201/functions/ocid1.fnfunc.oc1.uk-london-1.aaaaa aaavisdtijfoinyjwboiz2g5rcza3y6ulz6yrrrow6hu7c4yrmwnkw a/actions/invoke	Wed, Dec 1, 2021, 03:3 6:19 UTC
Signature Verification		hello-java	lhr.ocir.io/lrmcbxvc 80bs/x941720080/ hello-java:0.0.5	sha256:946bf90819d1fd374ea e48e6afca8c83148249d6f49fe f1d205814f0a56260d5	<a href="https://rdcrw4sgama.uk-london-1.functions.oraclecloud.com/20181201/functions/ocid1.fnfunc.oc1.uk-london-1.aaaaa
aaavisdtijfoinyjwboiz2g5rcza3y6ulz6yrrrow6hu7c4yrmwnkw
a/actions/invoke">https://rdcrw4sgama.uk-london-1.functions.oraclecloud.c om/20181201/functions/ocid1.fnfunc.oc1.uk-london-1.aaaaa aaavisdtijfoinyjwboiz2g5rcza3y6ulz6yrrrow6hu7c4yrmwnkw a/actions/invoke	Wed, Dec 1, 2021, 02:4 9:44 UTC
Metrics		Showing 2 Items < 1 of 1 >				
Logs						
Traces						
Tag filters						