

Module_D1.7_IaaS_Report

Infrastructure creation:

https://github.com/silverstandart/Module_D1/tree/main/IaaS_cloud

Swarm cluster creation:

https://github.com/silverstandart/Module_D1/tree/main/IaaS_socks

1. Prerequisites

git clone https://github.com/silverstandart/Module_D1.git

```
Administrator: Command Prompt

F:\DEV_HOME\Terraform_Projects\D1_7_TEST>git clone https://github.com/silverstandart/Module_D1.git
Cloning into 'Module_D1'...
remote: Enumerating objects: 23, done.
remote: Counting objects: 100% (23/23), done.
remote: Compressing objects: 100% (23/23), done.
remote: Total 23 (delta 6), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (23/23), 1.58 MiB | 1.37 MiB/s, done.
Resolving deltas: 100% (6/6), done.

F:\DEV_HOME\Terraform_Projects\D1_7_TEST>
```

Before running script **1_IaaS_run.bat** please fill variables in **0_Iaas_variables.bat**

```
Administrator: Command Prompt

F:\DEV_HOME\Terraform_Projects\D1_7_TEST\Module_D1\IaaS_cloud>more 0_Iaas_variables.bat
@echo off
rem -----
rem 1_IaaS_run.bat / IaaS DevOps Module D1.7 / 2022_04_27 / ANa
rem -----

rem ----- variable definition START -----
set AND5_yc_service_account_name=infodba
set AND5_yc_cloud_id=b1gfdopk51c4d5reva85
set AND5_yc_folder_id=b1gug0h1o834u3niipmr
rem ----- variable definition END -----

F:\DEV_HOME\Terraform_Projects\D1_7_TEST\Module_D1\IaaS_cloud>
```

```
F:\DEV_HOME\Terraform_Projects\D1_7\0_Iaas_variables.bat - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

0_Iaas_variables.bat 1_IaaS_run.bat 50_terraform_template.tf terraform.tf

1 @echo off
2 rem -----
3 rem 1_IaaS_run.bat / IaaS DevOps Module D1.7 / 2022_04_27 / ANa
4 rem -----
5
6 rem ----- variable definition START -----
7 set AND5_yc_service_account_name=<yc service account name>
8 set AND5_yc_cloud_id=<yc cloud id>
9 set AND5_yc_folder_id=<yc folder id>
10 rem ----- variable definition END -----
11
```

Yandex Cloud Поиск по облачным ресурсам

< Облако

default
Каталог

Дашборд каталога

Сервисные аккаунты

Федерации

Сервисные аккаунты

Фильтр по имени или идентификатору

Имя	Роль
infodba	

Yandex Cloud Поиск по облачным ресурсам

< Стартовая страница

silverstandart
Облако

Обзор

Квоты

Уведомления об инцидентах

Права доступа

Операции

Обзор

Идентификатор..... b1gfdopk51c4d5reva85

Статус..... Active

Имя..... silverstandart

Дата создания..... 16 января 2022, в 08:24

Организация..... silverstandart

Каталоги

Фильтр по имени или ID

Имя	Описание	Статус	Идентификатор	
DE default	—	Active	b1gug0h1o834u3niipmr	...

Run command

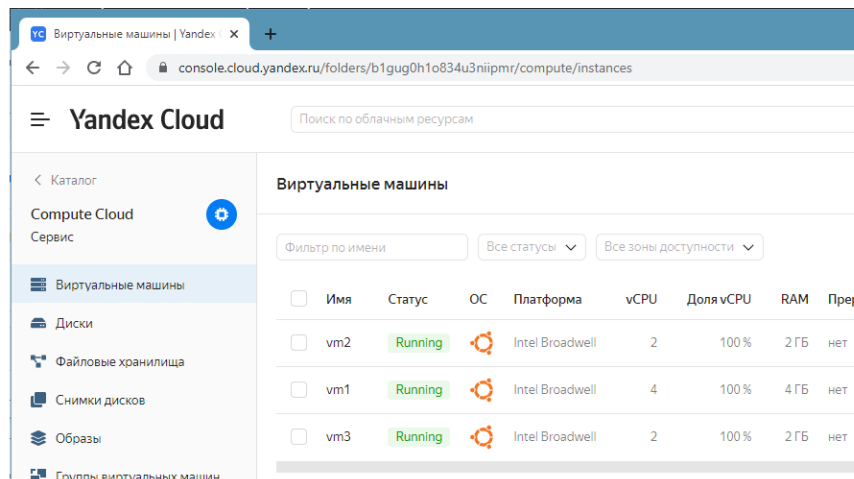
```
yc config set token <your yandex cloud token id>
```

for more info <https://cloud.yandex.com/en/docs/iam/operations/iam-token/create>

2. Infrastructure creation

1_iaaS_run.bat

Result



```
Administrator: Command Prompt
yandex_compute_instance.vm1: Still creating... [20s elapsed]
yandex_compute_instance.vm2: Still creating... [20s elapsed]
yandex_compute_instance.vm3: Still creating... [20s elapsed]
yandex_compute_instance.vm2: Creation complete after 23s [id=fhm0qg5lctu0jncablml]
yandex_compute_instance.vm3: Creation complete after 23s [id=fhmouetn8k8suafdi3ts]
yandex_compute_instance.vm1: Creation complete after 26s [id=fhmcg7p16e0vu7ig72n9]

Apply complete! Resources: 5 added, 0 changed, 0 destroyed.

Outputs:
external_ip_address_vm1 = "51.250.88.39"
external_ip_address_vm2 = "51.250.87.203"
external_ip_address_vm3 = "51.250.82.38"
internal_ip_address_vm1 = "192.168.10.23"
internal_ip_address_vm2 = "192.168.10.9"
internal_ip_address_vm3 = "192.168.10.27"
F:\DEV_HOME\Terraform_Projects\D1_7_TEST\Module_D1\IaaS_cloud>
```

```
rem as a result you can get these machines
external_ip_address_vm1 = "51.250.88.39"
external_ip_address_vm2 = "51.250.87.203"
external_ip_address_vm3 = "51.250.82.38"
internal_ip_address_vm1 = "192.168.10.23"
internal_ip_address_vm2 = "192.168.10.9"
internal_ip_address_vm3 = "192.168.10.27"
```

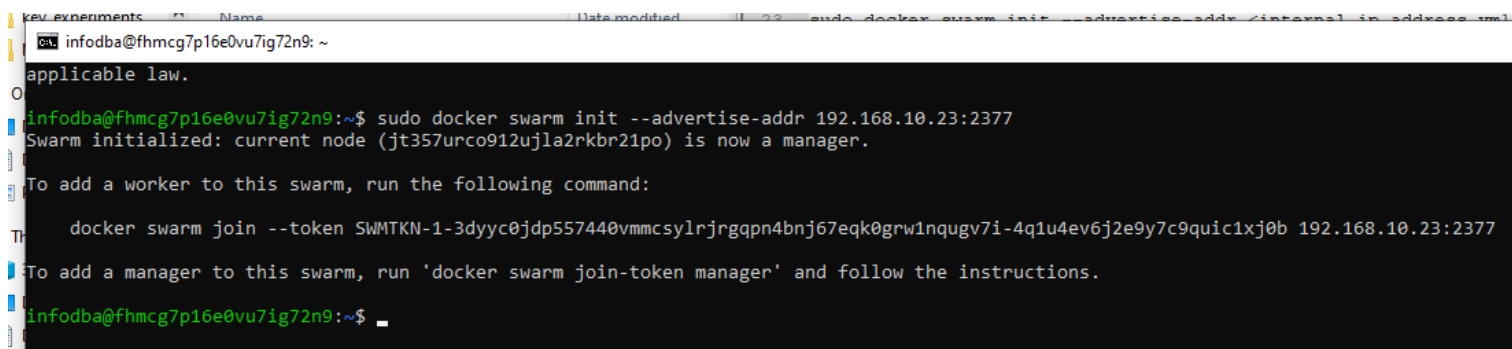
3. Swarm cluster creation

Please replace **external_ip_address_vm1** **internal_ip_address_vm1** and run commands

```
cd processing_folder
```

```
ssh.exe -i infodba_key infodba@<external_ip_address_vm1> -o "StrictHostKeyChecking no"
```

```
sudo docker swarm init --advertise-addr <internal_ip_address_vm1>:2377
```



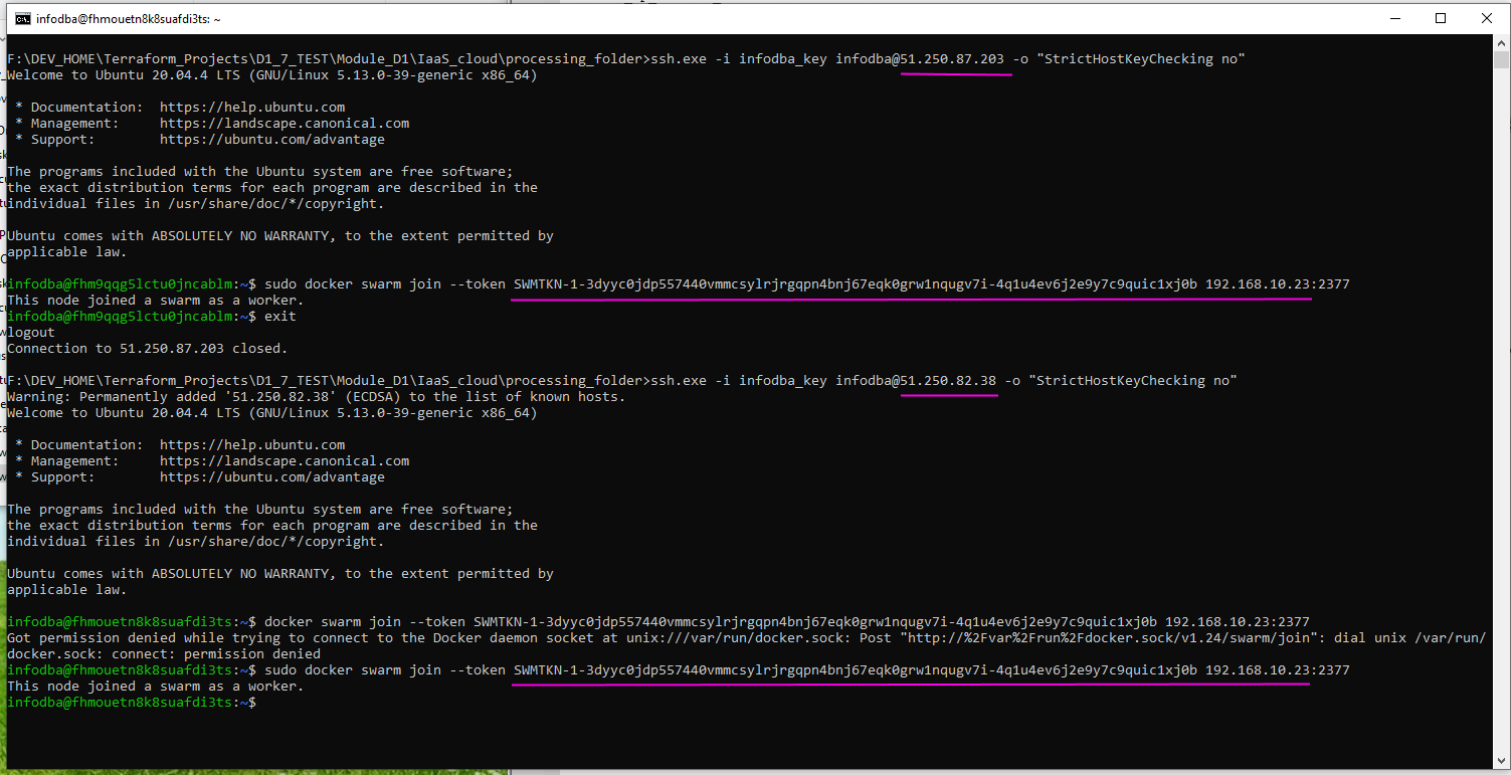
Please store this command. This command needs to be executed in machine **vm2** and **vm3** In my case it is

```
sudo docker swarm join --token SWMTKN-1-3dyyc0jdp557440vmmc sylrjrgqpn4bnj67eqk0grw1nqugv7i-4q1u4ev6j2e9y7c9quic1xj0b 192.168.10.23:2377
```

```
please replace <external_ip_address_vm2> <external_ip_address_vm3> <docker swarm join command above> and run commands
ssh.exe -i F:/DEV_HOME/Terraform_Projects/D1_7/processing_folder/infodba_key infodba@<external_ip_address_vm2> -o "StrictHostKeyChecking no"
sudo <docker swarm join command above>
exit

ssh.exe -i F:/DEV_HOME/Terraform_Projects/D1_7/processing_folder/infodba_key infodba@<external_ip_address_vm3> -o "StrictHostKeyChecking no"
sudo <docker swarm join command above>
exit
```

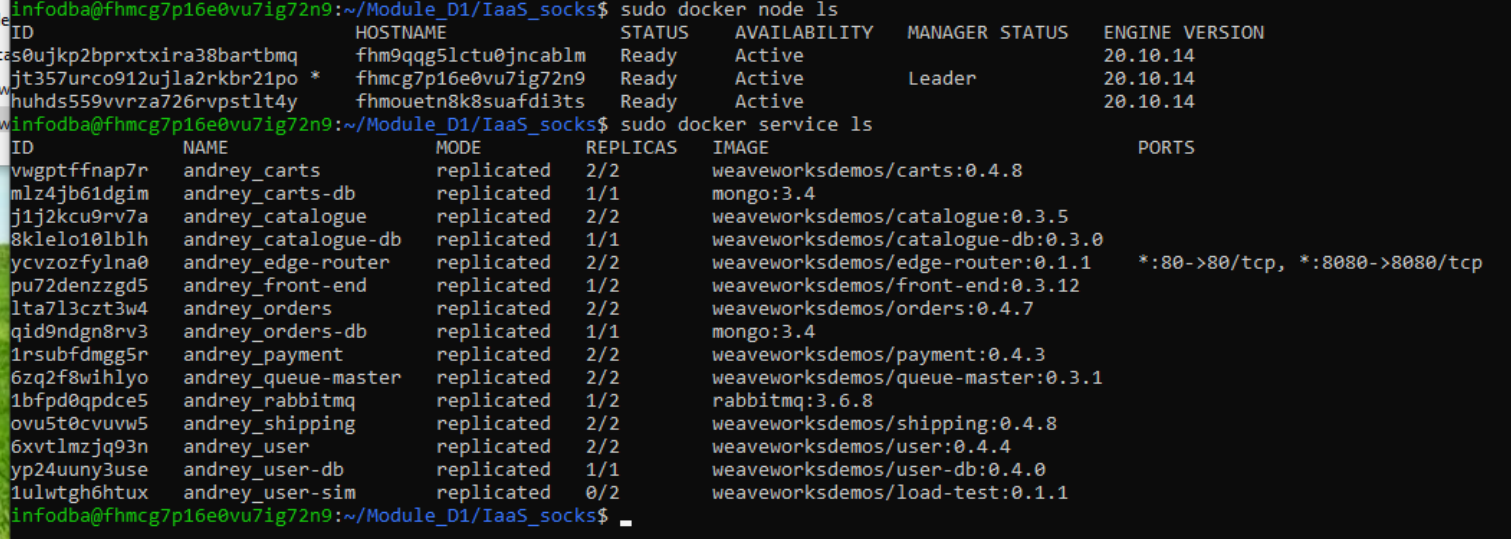
result



Replace <external_ip_address_vm1> and run

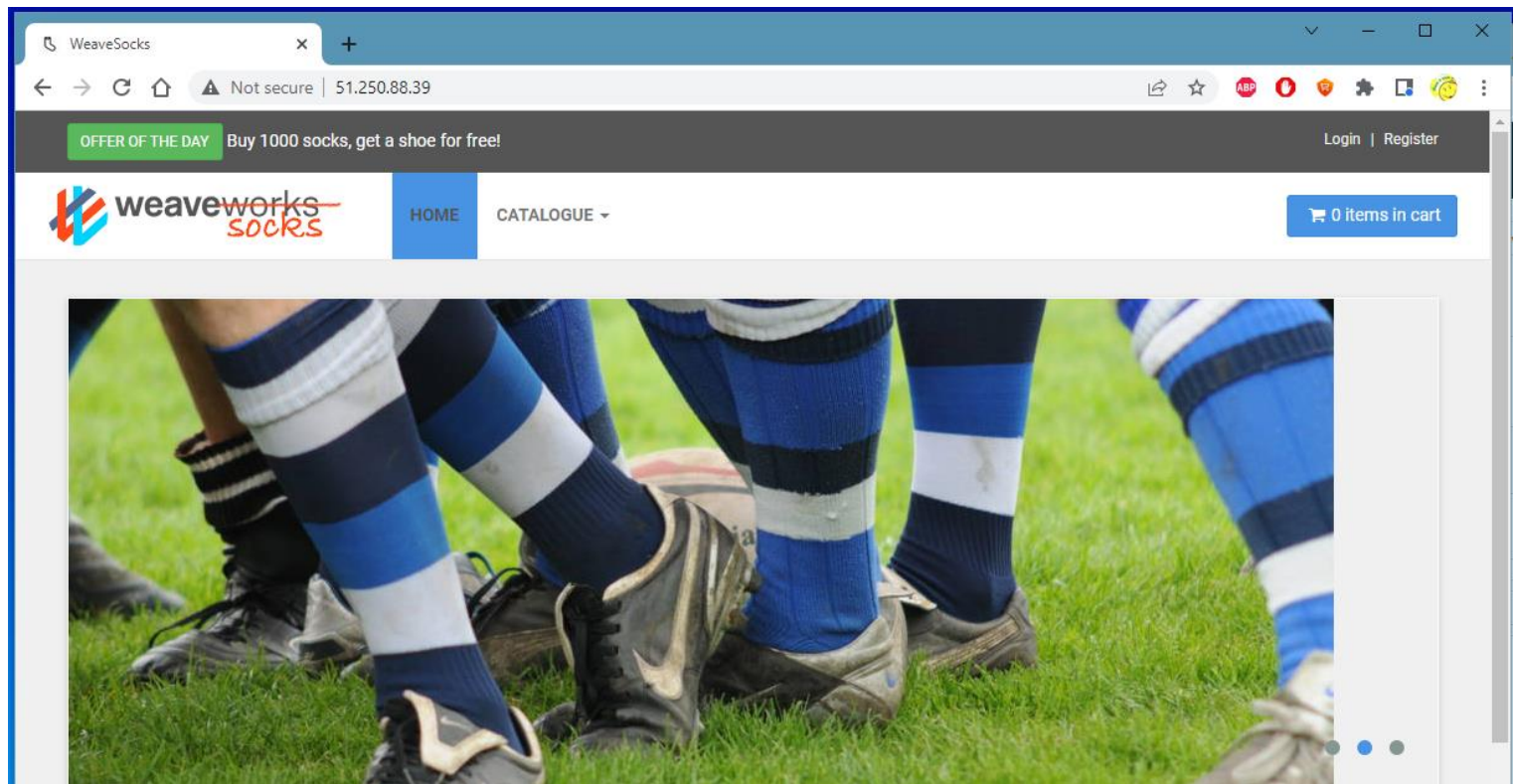
```
ssh.exe -i infodba_key infodba@<external_ip_address_vm1> -o "StrictHostKeyChecking no"
sudo docker node ls
git clone https://github.com/silverstandart/Module_D1.git
cd ./Module_D1/laaS_socks/
sudo chmod 777 1_run.sh
sed -i -e 's/\r$//' 1_run.sh
./1_run.sh
sudo docker service ls
```

result



And now site available on link http://<external_ip_address_vm1>

For me it is <http://51.250.88.39>



4. IaaS Uninstall

Run and type **yes**

```
2_iaaS_destroy.bat
```