

Session I

1.1. Select and launch instances for the application

1.1.1. Select providers

- AWS
- Openstack

1.1.2. Choose instances based on your application requirements and providers offer

<https://aws.amazon.com/ec2/pricing/on-demand/>

1.2. Launch the AWS instance

1.2.1. Go to <https://signin.aws.amazon.com/console> and sign in to the Console

Enter credentials.

1.2.2. Find EC2 service in AWS Management Console and click Launch instance button.

1.2.3. Select AMI:

Ubuntu Server 18.04 LTS (HVM)

1.2.4. Choose an Instance Type:

t2.xlarge

1.2.5. Add Tags

select “click to add Name tag” and enter your instance name (e.g.yourname-apliaction) as a value

1.2.6. Configure Security Group

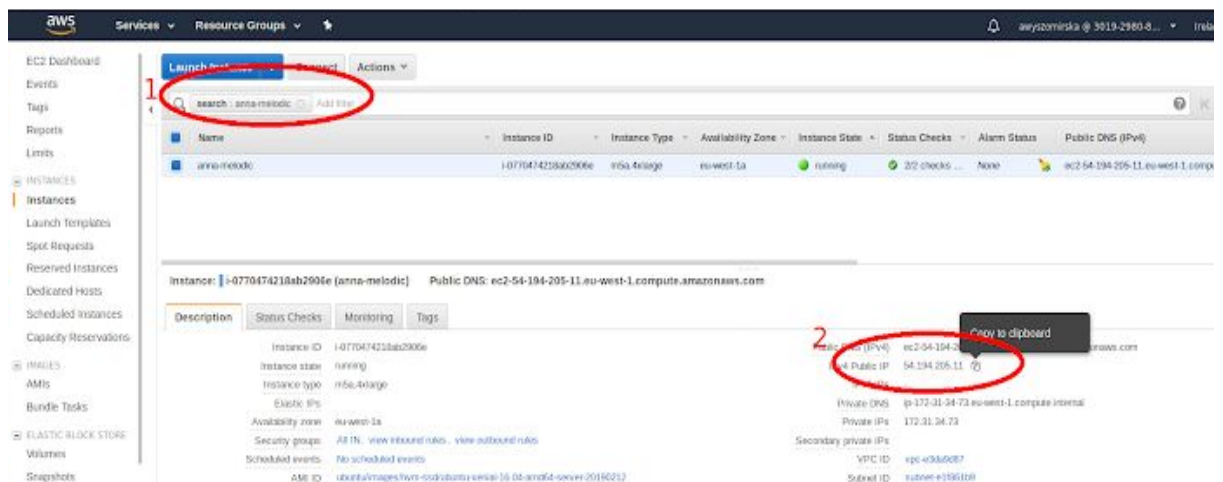
Create a new security group and Add Rule:

| Type | Protocol | Port Range | Source |
|------------|----------|------------|-----------|
| Custom TCP | TCP | 3306 | 0.0.0.0/0 |
| Custom TCP | TCP | 9999 | 0.0.0.0/0 |

1.2.7. Review and Launch

1.2.8. Create a new key pair, enter name and **Download Key Pair**. **Find location of the file, it is necessary to login the machine.**

1.2.9. View Instances, type your instance name, select the instance and copy public IP



1.3. Launch the Openstack instance

1.3.1. Log in to Openstack and select launch instance

Launch Instance ✕

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Flavors manage the sizing for the compute, memory and storage capacity of the instance.

Allocated

| Name | VCPUS | RAM | Total Disk | Root Disk | Ephemeral Disk | Public |
|---------|-------|------|------------|-----------|----------------|--------------------|
| > small | 2 | 1 GB | 10 GB | 10 GB | 0 GB | Yes ⬇ |

Available 8 Select one

✕

| Name | VCPUS | RAM | Total Disk | Root Disk | Ephemeral Disk | Public |
|--------------|-------|-------|------------|-----------|----------------|--------------------|
| > MEL_tiny | 1 | 1 GB | 10 GB | 10 GB | 0 GB | No ⬆ |
| > tiny | 2 | 1 GB | 10 GB | 10 GB | 0 GB | Yes ⬆ |
| > medium | 4 | 4 GB | 10 GB | 10 GB | 0 GB | Yes ⬆ |
| > large | 8 | 8 GB | 10 GB | 10 GB | 0 GB | Yes ⬆ |
| > xlarge | 8 | 16 GB | 10 GB | 10 GB | 0 GB | Yes ⬆ |
| > MEL_medium | 4 | 16 GB | 60 GB | 60 GB | 0 GB | No ⬆ |
| > MEL_large | 8 | 32 GB | 80 GB | 80 GB | 0 GB | No ⬆ |
| > MEL_xlarge | 8 | 64 GB | 10 GB | 10 GB | 0 GB | No ⬆ |

✕ Cancel
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Launch Instance

1.3.2. Fill Instance Name (e.g.yourname-database), choose the following option:

| option | value |
|-------------------|-------------|
| Availability Zone | Blade |
| Image | ubuntu-1604 |
| Security Group | default |

1.3.3. Key Pair - Create New Key Pair, save on your disk and launch instance

1.3.4. Associate Floating IPs, which will be needed for log in to the instance

1.3.5. Configure security groups
Open ports: 3306 9999

1.4. Install the application

- 1.4.1. If you are a Linux/ Mac OSX user, find the directory with Key Pair and use command

```
chmod 600 {{nameOfKey.pem}}
```

- 1.4.2. Open the Terminal and login to the Melodic machine:

```
ssh -i {{nameOfKey}} ubuntu@{{MELODIC-IP}}
```

- 1.4.3. Follow this command

1.4.3.1. Database

```
wget
https://s3-eu-west-1.amazonaws.com/melodic.testing.data/MySQLDB.sh
h && chmod +x ~/MySQLDB.sh

~/MySQLDB.sh install

~/MySQLDB.sh configure

~/MySQLDB.sh start
```

1.4.3.2. Application

```
sudo apt-get update --fix-missing && sudo apt-get install
openjdk-8-jre-headless

wget
https://s3-eu-west-1.amazonaws.com/melodic.testing.data/ccgrid/AP
P.sh && chmod +x ~/APP.sh
```

Set database public IP in field PUBLIC_ComponentPortDbReq=""

```
~/APP.sh install  
  
printenv >> ~/env.txt && ~/APP.sh start
```

1.5. Test the application+

- 1.5.1. Let's do a simple test if application works properly, Save name and e-mail to the database

<http://{{application-ip-host}}:9999/demo/add?name=Name&email=ccgrid@test.com>

- 1.5.2. Check if it has been saved.

<http://{{application-ip-host}}:9999/demo/all>