

Project 3

Step1: Create two linux instances, Use the first free linux AMI

The screenshot shows the AWS Management Console interface. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main content area displays a table of EC2 instances. Two instances are listed: Linux 1 and Linux 2. Both are in the 'running' state. Below the table, the details for 'Instance: i-03b85f4bb8b7751e (Linux 1)' are shown, including its Public DNS, Instance ID, Instance state, and Instance type.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6
Linux 1	i-03b85f4bb8b7751e	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-18-189-195-109.us-east-2.compute.amazonaws.com	18.189.195.109	-
Linux 2	i-0ca4c12c81a8bdb6c	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-18-220-18-82.us-east-2.compute.amazonaws.com	18.220.18.82	-

Instance: i-03b85f4bb8b7751e (Linux 1) Public DNS: ec2-18-189-195-109.us-east-2.compute.amazonaws.com

Description	Status Checks	Monitoring	Tags
Instance ID	i-03b85f4bb8b7751e	Public DNS (IPv4)	ec2-18-189-195-109.us-east-2.compute.amazonaws.com
Instance state	running	IPv4 Public IP	18.189.195.109
Instance type	t2.micro	IPv6 IPs	-

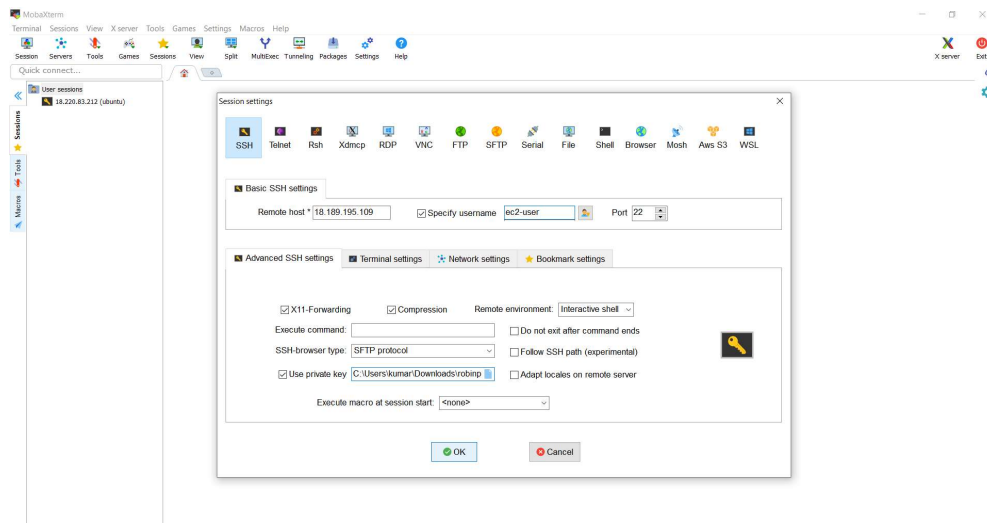
The screenshot shows the AWS Management Console interface. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Limits, Instances, Images, and Elastic Block Store. The main content area displays a table of EC2 instances. Two instances are listed: Linux 1 and Linux 2. Both are in the 'running' state. Below the table, the details for 'Instance: i-0ca4c12c81a8bdb6c (Linux 2)' are shown, including its Public DNS, Instance ID, Instance state, and Instance type.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6
Linux 1	i-03b85f4bb8b7751e	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-18-189-195-109.us-east-2.compute.amazonaws.com	18.189.195.109	-
Linux 2	i-0ca4c12c81a8bdb6c	t2.micro	us-east-2a	running	2/2 checks ...	None	ec2-18-220-18-82.us-east-2.compute.amazonaws.com	18.220.18.82	-

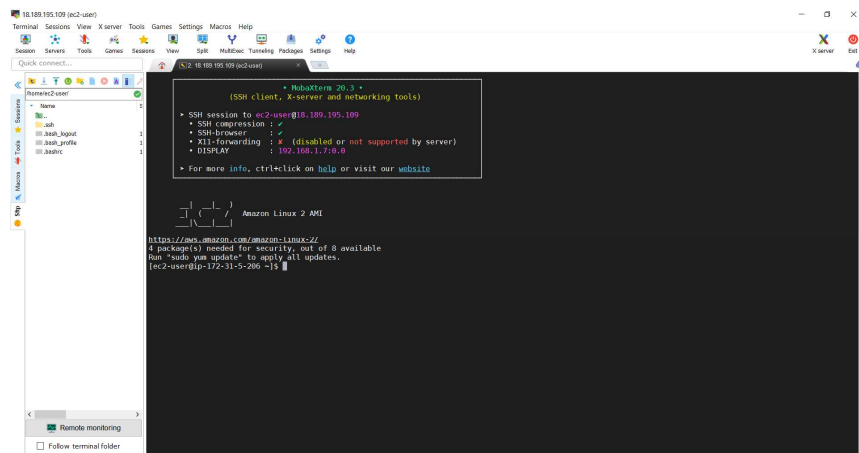
Instance: i-0ca4c12c81a8bdb6c (Linux 2) Public DNS: ec2-18-220-18-82.us-east-2.compute.amazonaws.com

Description	Status Checks	Monitoring	Tags
Instance ID	i-0ca4c12c81a8bdb6c	Public DNS (IPv4)	ec2-18-220-18-82.us-east-2.compute.amazonaws.com
Instance state	running	IPv4 Public IP	18.220.18.82
Instance type	t2.micro	IPv6 IPs	-
Finding	Opt-in to AWS Compute Optimizer for recommendations.	Elastic IPs	-

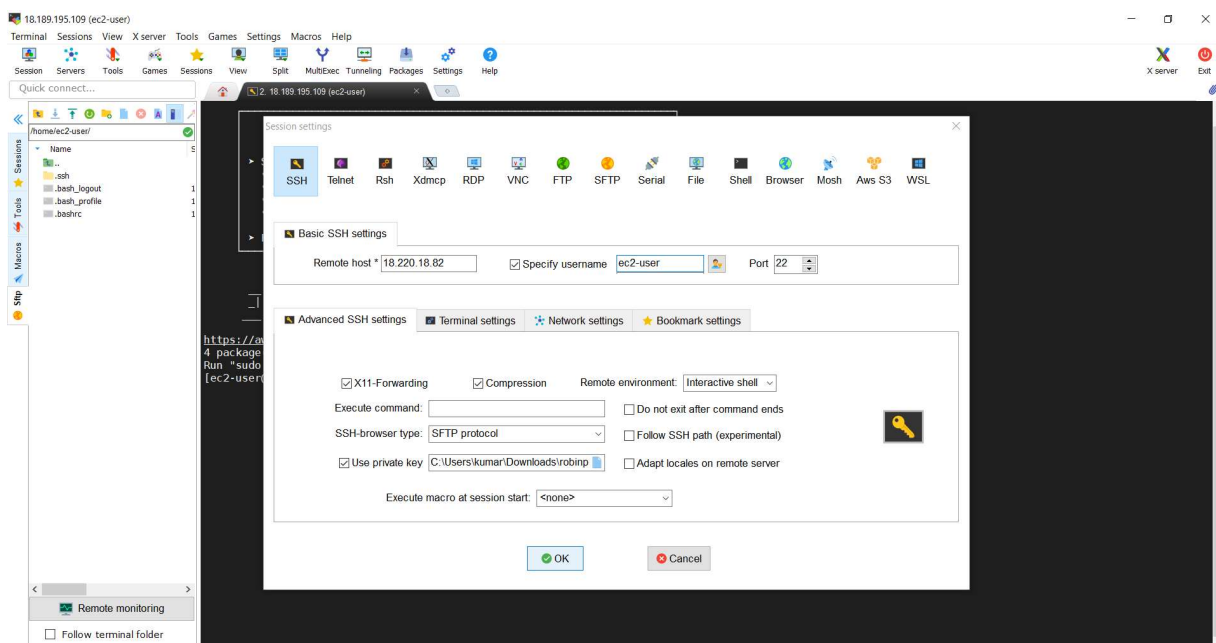
Step2: Launch both instances using MobaXterm



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Step4: Host html login webpage on both servers

18.189.195.109 (ec2-user)

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

home/ec2-user/

- Name
- ...
- .ssh
- .bash_logout
- .bash_profile
- .bashrc

Remote monitoring

Follow terminal folder

Dependency Installed:

```
apr.x86_64 0:1.6.3-5.amzn2.0.2
generic-logos-httpd.noarch 0:18.0.0-4.amzn2
mailcap.noarch 0:2.1.41-2.amzn2
apr-util.x86_64 0:1.6.1-5.amzn2.0.2
httpdfilesystem.noarch 0:2.4.43-1.amzn2
mod_http2.x86_64 0:1.15.3-2.amzn2
```

Complete!

```
[root@ip-172-31-5-206 ec2-user]# cd /var/www/html
bash: cd /var/www/html: No such file or directory
[root@ip-172-31-5-206 ec2-user]# cd /var/www/html
[root@ip-172-31-5-206 html]# pwd
/var/www/html
[root@ip-172-31-5-206 html]# vi index.html

[1]+ Stopped vi index.html
[root@ip-172-31-5-206 html]# vi index.html

[2]+ Stopped vi index.html
[root@ip-172-31-5-206 html]# vi index.html
[root@ip-172-31-5-206 html]# more index.html
<form action="action_page.php" method="post">
  <div class="imgcontainer">
    
  </div>
  <div class="container">
    <label for="uname"><b>Username</b></label>
    <input type="text" placeholder="Enter Username" name="uname" required>
    <label for="psw"><b>Password</b></label>
    <input type="password" placeholder="Enter Password" name="psw" required>
    <button type="submit">Login</button>
    <label>
      <input type="checkbox" checked="checked" name="remember"> Remember me
    </label>
  </div>
  <div class="container" style="background-color:#f1f1f1">
    <button type="button" class="cancelbtn">Cancel</button>
    <span class="psw">Forgot <a href="#">password?</a></span>
  </div>
</form>
[root@ip-172-31-5-206 html]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@ip-172-31-5-206 html]#
```

18.220.18.82 (ec2-user)

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

home/ec2-user/

- Name
- ...
- .ssh
- .bash_logout
- .bash_profile
- .bashrc

Remote monitoring

Follow terminal folder

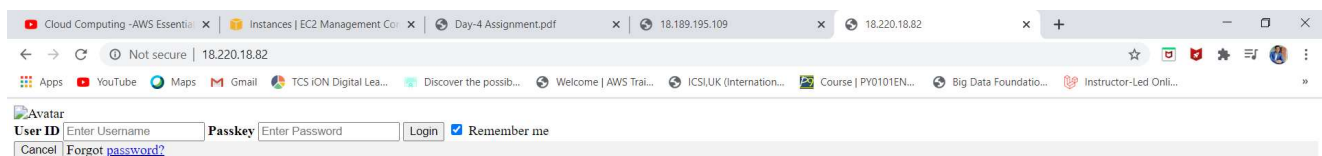
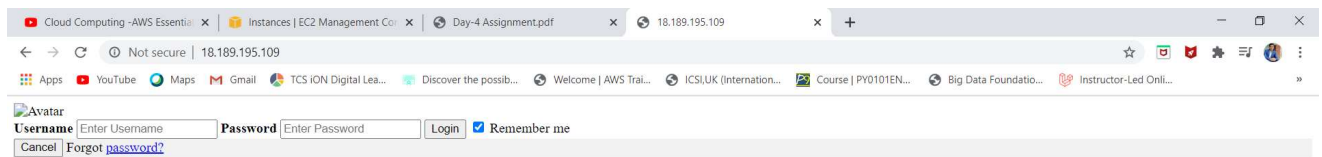
Dependency Installed:

```
apr.x86_64 0:1.6.3-5.amzn2.0.2
apr-util.x86_64 0:1.6.1-5.amzn2.0.2
apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
generic-logos-httpd.noarch 0:18.0.0-4.amzn2
httpdfilesystem.noarch 0:2.4.43-1.amzn2
httpd-tools.x86_64 0:2.4.43-1.amzn2
mailcap.noarch 0:2.1.41-2.amzn2
mod_http2.x86_64 0:1.15.3-2.amzn2
```

Complete!

```
[root@ip-172-31-7-146 ec2-user]# cd /var/www/html
[root@ip-172-31-7-146 html]# pwd
/var/www/html
[root@ip-172-31-7-146 html]# vi index.html
[root@ip-172-31-7-146 html]# more index.html
<form action="action_page.php" method="post">
  <div class="imgcontainer">
    
  </div>
  <div class="container">
    <label for="uname"><b>User ID</b></label>
    <input type="text" placeholder="Enter Username" name="uname" required>
    <label for="psw"><b>Passkeys</b></label>
    <input type="password" placeholder="Enter Password" name="psw" required>
    <button type="submit">Login</button>
    <label>
      <input type="checkbox" checked="checked" name="remember"> Remember me
    </label>
  </div>
  <div class="container" style="background-color:#f1f1f1">
    <button type="button" class="cancelbtn">Cancel</button>
    <span class="psw">Forgot <a href="#">password</a></span>
  </div>
</form>
[root@ip-172-31-7-146 html]# service start httpd
The service command supports only basic LSB actions (start, stop, restart, try-restart, reload, force-reload, status). For other actions, please try to use sy
stemctl.
[root@ip-172-31-7-146 html]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@ip-172-31-7-146 html]#
```

Step5: Check if the application is deployed on both servers by copy pasting the public ip of the servers into the browser.



Step 6: Create an application Load balancer with the above two instances as targets

The screenshot shows the AWS Management Console interface for creating a new Load Balancer. The left sidebar contains navigation links for various AWS services, including Images, Elastic Block Store, Network & Security, Load Balancing, and Auto Scaling. The main content area displays the 'Create Load Balancer' wizard. The 'Basic configuration' section is expanded, showing the following details:

Property	Value
Name	LetsUpgradeELB
ARN	arn:aws:elasticloadbalancing:us-east-2:042943542085:loadbalancer/app/LetsUpgradeELB/f5834926f4697589
DNS name	LetsUpgradeELB-1904169203.us-east-2.elb.amazonaws.com (A Record)
State	active

The bottom of the console shows the Windows taskbar with various application icons and the system clock indicating 3:27 PM on 8/24/2020.

The screenshot shows the AWS Management Console interface for the 'LetsUpgradeTarget' page. The left sidebar contains navigation links for various AWS services, including Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, Elastic Block Store, Network & Security, and Load Balancing. The main content area displays the 'LetsUpgradeTarget' configuration page. The 'Basic configuration' section shows the following details:

Property	Value
Target type	instance
Protocol : Port	HTTP : 80
VPC	vpc-0496346f
Load balancer	LetsUpgradeELB

The 'Registered targets' section shows a list of two registered targets:

Instance ID	Name	Port	Zone	Status	Status details
i-03b85f4bb8bf7751e	Linux 1	80	us-east-2a	healthy	
i-0ca4c12c81a8bdb6c	Linux 2	80	us-east-2a	healthy	

The bottom of the console shows the Windows taskbar with various application icons and the system clock indicating 3:27 PM on 8/24/2020.

Step7: Check the functioning of ELB

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Avatar

User ID Enter Username Passwordkey Enter Password Login Remember me

Cancel Forgot password?

Type here to search

3:26 PM 8/24/2020

Cloud Computing -AWS x EC2 Management Console x Day-4 Assignment.pdf x 18.189.195.109 x 18.220.18.82 x letsupgradeelb-1904169203 x + -

Not secure | letsupgradeelb-1904169203.us-east-2.elb.amazonaws.com

Avatar

Username Enter Username Password Enter Password Login Remember me

Cancel Forgot password?

Type here to search

3:27 PM 8/24/2020