

Week 9 Project: Honeypot

Use these instructions to augment directions for the Code Path Week 9 Honeypot assignment.

Before you begin

Create and Logon to your AWS account: <https://signin.aws.amazon.com/>

Milestone 1: Create MHN Admin VM - AWS Alternative

1. From the **Build a solution** section of the Dashboard, click **Launch a virtual machine**.

Build a solution

Get started with simple wizards and automated workflows.



Launch a virtual machine

With EC2
~2-3 minutes



Build a web app


With Elastic Beanstalk
~6 minutes



Build using virtual servers

With Lightsail
~1-2 minutes

2. Choose the Ubuntu Server 14.04 option.
Note this option is free-tier eligible.

 **Ubuntu Server 14.04 LTS (HVM), SSD Volume Type** - ami-fb32279b

Free tier eligible

Ubuntu Server 14.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Root device type: ebs Virtualization type: hvm

Select

64-bit

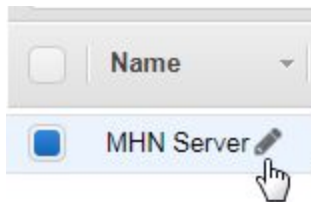
3. Review details. The pre-selected t2.micro system meets criteria for the lab.
4. Click the **Next: Configure Instance Details** button.
5. In the top row header, click **6. Configure Security Group**.
 - a. Update settings for SSH.
 - i. The first row should be prefilled to **SSH** type.
 - ii. Set the source to **My IP**.
 - iii. Add a description, e.g. "SSH for Admin."
 - b. Add a rule for port 80/HTTP.
 - i. Click **Add Rule**.
 - ii. Change the **Type** to **HTTP**.
Observe the **Port Range** changes to **80**.
 - iii. Set the **Source** to **Anywhere**.
 - iv. Add a description, e.g. "Web traffic."
 - c. Add a rule for ingress traffic.
 - i. Click **Add Rule**.
 - ii. Keep the default **Type, Custom TCP Rule**.
 - iii. Change the **Port Range** changes to **3000-10000**.

- iv. Set the **Source** to **Anywhere**.
- v. Add a description, e.g. "Ingress."
- d. Review Settings before continuing.

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
SSH ▾	TCP	22	My IP ▾ 199.16.196.4/32	SSH for Admin
HTTP ▾	TCP	80	Anywhere ▾ 0.0.0.0/0, ::/0	HTTP
Custom TCP ▾	TCP	3000-10000	Anywhere ▾ 0.0.0.0/0, ::/0	Ingress

Add Rule

- e. Note the security group name.
- 6. Click **Review and Launch**.
- 7. Click **Launch**.
- 8. In the pop-up for **Select an existing key pair or create a new key pair**:
 - a. If you have created a key pair for AWS already, choose an existing key pair and follow on-screen instructions.
 - b. If you have have not configured a key pair before, create a key pair:
 - i. Choose the option **Create a new key pair**.
 - ii. Give the Key pair a name, e.g. "AWS_for_HoneyPot."
 - iii. Click Download Key Pair.
 - iv. Save the key to a secure location. For example, on windows c:\users\\.ssh
 - c. If you prefer not to use a key-pair (ill-advised), you may choose that option.
 - d. Click Launch **Instances**.
- 9. Click the View Instances button.
You may need to wait a few minutes for the VM to be created.
- 10. In the table of instances, use the edit icon in the name column and name your VM. This will help with management later.



- 11. Log on to your VM.
 - a. Select the VM if it is not selected.
 - b. Click the **Connect** button at the top of the table to view details.
 - c. Note the address used under **Connect to your instance using its Public DNS**.
 - d. Connect to the VM through a terminal.
 - i. If you are using Windows, you can use Putty. I found the Linux Academy tutorial on [SSH'ing to an EC2 instance via putty](#) very helpful.

Milestone 2: Install the MHN Admin Application

See instructions in CodePath assignment. Once you are connected via a terminal, these are unchanged.

Milestone 3: Create a MHN Honeypot VM

From the Instances page of Amazon:

1. Select the existing VM you created for step 1.
2. Click **Actions > Launch More Like This**.
3. In the Review Instance Details page, click **Edit security groups**.
4. Locate the Security Group you created for your first VM and choose the **Copy to New** link in that row.
5. Update the Custom TCP Rule (ingress traffic)
 - a. Change the **Port Range** changes to **1-10000**.
 - b. Click **Review and Launch**.
6. Click **Launch**.
7. In the pop-up for **Select an existing key pair or create a new key pair**:
 - a. Choose the option for **choose an existing key pair** and follow on-screen instructions to reuse the key pair you set up earlier.
 - b. Click Launch **Instances**.
8. Click the **View Instances** button.

You may need to wait a few minutes for the VM to be created.
9. In the table of instances, use the edit icon in the name column and name your VM, e.g. Dionaea.
10. Log on to your VM.
 - a. Note, if you are using Putty on Windows, you can Load the connection you setup previously, change the DNS and and name, then Save. This will create a new connection.

Milestone 4: Install the Honeypot Application

See instructions in CodePath assignment. Once you are connected via a terminal, these are unchanged.