

Documentation

User Story 4: Setup a web server

Description:

This guide is for a Macbook user from Neue Fische.

Condition: User Story 1, 2 and 3 are completed.

Code: <https://github.com/Rami2028/Team1/blob/main/EC2.tf>

Task 1: Request latest AMI-Id for the respective region

We are requesting the AMI id that our EC2 instance should have. The AMI should be the latest version of the Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type. There are 2 ways to find this Id.

- Preferred: Request one in the code
- or manually look it up in the AWS Management Console

The code to request the AMI-Id is like this:

```
#Select newest AMI-id
data "aws_ami" "latest_amazon_linux" {
  most_recent = true

  filter {
    name = "name"
    values = ["amzn2-ami-hvm-*-x86_64-gp2"]
  }

  filter {
    name = "virtualization-type"
    values = ["hvm"]
  }

  owners = ["amazon"] # Amazon
}
```

The code will request the latest AMI (most recent). In the filter we request for an Amazon Linux 2 AMI (HVM).

If you want to search for the AMI ID in the AWS Management Console, follow these steps:

- AWS Management Console login
- Open the Service EC2
- Open in the left navigation bar: AMI Catalog

- Search for: 'Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type'
- Copy the first ami-id (something like this): 'ami-0ea832bf7873542df'

Task 2: Create a web server using AWS EC2 service with the attributes like Instance Type, Keypair, Storage, etc., and use the script from User story 3 for the user data section.

You can create an EC2 with this code. In the code you use the latest AMI-Id. When you copied the AMI Id in the AWS Management Console you can paste it in the code with ". So like this: ami ="ami-0ea832bf7873542df"

Then you can choose the instance type (like t2.micro), the key:name ("vockey"), your subnet and your security group. When you want to use wordpress you should add user-data with the script of User Story 3.

You can add the provisioner code.snippet. This will create a file allinstancedetails with Instance Type, Instance Id, Public DNS and AMI Id.

```
###Create EC2
resource "aws_instance" "deham6demo"{
ami = data.aws_ami.latest_amazon_linux.id
instance_type = "t2.micro"
key_name = "vockey"
vpc_security_group_ids = [aws_security_group.devVPC_sg_allow_ssh_http.id]
subnet_id = aws_subnet.devVPC_public_subnet1.id
tags = {
Name = "terraforml8_ec2_for_public_subnet1_az1"
}
user_data = file("user-data.sh")
provisioner "local-exec"{
command = "echo Instance Type=${self.instance_type},Instance ID=${self.id},Public
DNS=${self.public_dns},AMI ID=${self.ami} >> allinstancedetails"
}
}
```

You need to customize the code to make it work for you:


- replace the security group with your own
- replace the subnet with your own
- replace the security group with your own

Verify Solution:

When you run the code, you can see your instance in the EC2 service in the AWS Management Console.

Instances (7) Info							Refresh	Connect	Instance state ▾	Actions ▾	Launch Instance
<input type="text" value="Find instance by attribute or tag (case-sensitive)"/>											
<input type="checkbox"/>	Name ▾	Instance ID	Instance type ▾	Status check	Alarm status						
<input type="checkbox"/>	terraform18_ec2_for_public_subnet1_az1	i-095d66c9a738c0ef2	t2.micro	2/2 checks passed	No alarms	+					

If you select your instance, copy the public IP and paste it into the browser, you will need to see it:



Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Do not worry, you can always change these settings later.

Site Title

Username

Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password

&O5TFive0mZBOUBqfK

Strong

[Hide](#)

Important: You will need this password to log in. Please store it in a secure location.

Your Email

Double-check your email address before continuing.

Search engine visibility

☐ Discourage search engines from indexing this site

It is up to search engines to honor this request.

[Install WordPress](#)