Subject: AWS Funda

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Document No.

Prepare Enterprise Cloud Virtual Server in AWS

Requirement:

Task 01: You need to prepare 1 Server to be accessed by multiple teams with different keys.

Steps to solve:

1. Create Lock & Key using SSH-Keygen using using rename

    id_rsa—>key

    Id_rsa.pub—>lock.pub

2. Order EC2 server
    a. key pair= Import Generated Lock to Keypair
    b. security Group(Firewall) - Inbound Rule=All traffic, Anywhere
    c. AMI: ubuntu
    d. Instance type: t2.micro
3. Connect using AWS console(website)
4. Append lock.pub→ authorized_keys

~/.ssh/authorized_keys

5. Connect server using ssh

    Command & use key

Requirement

Task 02) Create a Key Pair using AWS CLI

Steps to solve:

1. Open a terminal or command prompt
2. Run the following command to create a new key pair

    aws ec2 create-key-pair --key-name MyKeyPair --output text > MyKeyPair.pem

 Replace MyKeyPair with your desired key pair name

The command will create a new key pair and save the private key material into the MyKeyPair.pem file

3. Make sure to set restricted permissions on the .pem file for security

    chmod 400 MyKeyPair.pem

Requirement:

Task 03: how to Import an Existing Key Pair:

Steps to solve:

1. Sign in to the AWS Management Console.
2. Navigate to the EC2 service.
3. In the navigation pane, click on "Key Pairs" under the "Network & Security" section.
4. Click on the "Import Key Pair" button.
5. Provide a unique name for the key pair in the "Key pair name" field.
6. In the "Public key contents" field, paste the contents of your existing public key. The public key should be in OpenSSH format (typically starts with "ssh-rsa" or "ssh-ed25519") or PEM format (starts with "-----BEGIN PUBLIC KEY-----").
7. Click the "Import Key Pair" button to import the existing key pair. AWS will validate the public key and add it to your key pairs list.

Using CLI

1. Open a terminal or command prompt
2. Run the following command to import the existing key pair

aws ec2 import-key-pair --key-name MyKeyPair --public-key-material file://path/to/public_key.pub

Replace MyKeyPair with the desired key pair name, and path/to/public_key.pub with the actual path to your existing public key file.

3. AWS will validate the public key and import it as a key pair in your AWS account. If successful, you'll see the key pair details in the command output

Remember to replace MyKeyPair and path/to/public_key.pub with your own values when using the CLI method.

Requirement:

Task 04: Associate Key Pair with EC2 Instance

Steps to solve:

1. Sign in to the AWS Management Console.
2. Go to the EC2 service.
3. Launch a new EC2 instance or select an existing instance.
4. During the instance launch or after selecting the instance, locate the "Step 3: Configure Instance" section.
5. In the "Step 3: Configure Instance" section, find the "Network" tab and expand the "Advanced Details" section.
6. Look for the "Key pair" field and click on the "Choose an existing key pair" option.
7. From the dropdown menu, select the desired key pair that you want to associate with the instance.

8. Continue with the instance launch or any other required configurations, and then proceed to launch or update the instance.
9. Once the EC2 instance is running, it will be associated with the selected key pair. You can now securely connect to the instance using the private key corresponding to the chosen key pair.
10. Note: If you are associating a key pair with an existing instance, you may need to stop and start the instance for the changes to take effect.

Requirement:

Task 05: Delete a Key Pair

Steps to solve:

To delete a key pair in AWS, follow these steps:

1. Sign in to the AWS Management Console.
2. Go to the EC2 service.
3. In the navigation pane, click on "Key Pairs" under the "Network & Security" section.
4. Select the key pair that you want to delete from the list.
5. Click on the "Actions" button above the key pairs list.
6. From the dropdown menu, choose "Delete Key Pair."
7. A confirmation dialog will appear. Review the key pair name to ensure it is the correct one, as deletion is irreversible.
8. Click "Delete" to confirm and delete the selected key pair.
9. After confirming the deletion, the key pair will be removed from your AWS account. Note that deleting a key pair does not affect any instances associated with that key pair unless the instances are using that key pair for SSH/RDP access.
10. Make sure to update any instances or resources using the deleted key pair with an alternate access method or a different key pair to ensure continued access to your instances.