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Lab 2

IST 615

**Introduction to AWS IAM**

The purpose of this lab is to gain a better understanding of AWS Identity and Access Management (IAM). IAM is a web service that enables AWS customers to manage users and user permissions. By completing this lab I will gain the knowledge to centrally manager users, security credentials and permissions.

**Task 1: Explore the Users and Groups**

I explored the Users and groups that have been previously created in IAM

**Purpose:** the purpose of this console was to gain familiarity with the predefined managed policies associated with a user’s permissions.

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**Task 2: Add users to Groups**

I added users-1, users-2, and user-3 to the s3-support group, EC2-Support Group, and EC2-Admin Group respectively.

**Purpose:** the purpose of this console was to understand how to add a user’s to a specific group where they will inherit the groups defined permissions.

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**Task 3: Sign-In and Test Users**

I signed in with user-1, user-2, and user-3 and tested there various EC2 permissions. This included being able to view instances, stop instances, and list buckets.

**Purpose:** the purpose of this console was to test the permissions of each IAM User

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# Build your VPC and Launch a Web Server

The purpose of this lab is to use Amazon Virtual Private Cloud (VPC) to create a VPC and add additional components to produce a customized network. Additionally, this lab creates security groups for EC2 instances, which will be configured and customized to run web servers and launch into the VPC.

**Task 1: Create Your VPC**

I created a VPC using the defined characteristics in the lab including VPC name, Availability Zone, Public subnet name, Availability Zone, Private subnet name, and Elastic IP Allocation ID.

**Purpose:** the purpose of this console was to use the VPC Wizard to create a VPC and Internet Gateway and two subnets in a single availability zone.

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**Task 2: Create Additional Subnets**

I created two subnets using defined VPC ID, Subnet name, availability zone, and Ipv4 CIDR block. I then created subnet associations for each subnet that I created.

**Purpose:** the purpose of this console was to create two additional subnets in a second Availability Zone. This is useful for creating resources in multiple Availability Zones to provide High Availability.

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**Task 3: Create a VPC Security Group**

I created a security group and manually configured the Security group name, description, and VPC. I then created an inbound rule associated with the security group.

**Purpose:** The purpose of this console is to create a VPC security group, that acts as a virtual firewall.

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**Task 4: Launch a Web Server Instance**

I created a new EC2 instance. To successfully complete this I had to name the instance, choose an AMI from which to create the instance, choose an instance type, select the key pair to associate with the instance, configure network settings, configure storage, and configure a script to run on the instance when it launches.

**Purpose:** The purpose of this console is to launch an Amazon EC2 instance into the new VPC

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