

Lab 3 - AWS Security and AWS Monitoring

Completion Screenshot

Item 1 (10 Marks)

IAM Lab Completion Screenshot

Please add at least one screenshot of your final step in the lab report. The screenshot(s) should clearly demonstrate the completion of the lab task.

Item 2 (10 Marks)

AWS CloudWatch Lab Completion Screenshot

Please add at least one screenshot of your final step in the lab report. The screenshot(s) should clearly demonstrate the completion of the lab task.

Activity: Overview of IAM

Instructions: Refer to the following sites to complete this activity about the AWS Identity and Access Management (IAM) service:

- IAM Identities (Users, Groups, and Roles): <https://docs.aws.amazon.com/IAM/latest/UserGuide/id.html>
- Creating IAM Policies: https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_create.html

Item 3 (15 Marks)

Definitions

In the following table, define each term.

Term	Definition
Root user	
User	

Term	Definition
Role	
Group	
Policy	

Item 4 (10 Marks)

Answer the following questions.

Question 1

What is the difference between a group and a user?

Question 2

When might you use IAM roles and temporary security credentials instead of using the long-term credentials associated with an IAM user?

Item 5 (10 Marks)

Best practices

Use the Security Best Practices in IAM page at <https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html> to complete the following table. List four best practices and explain why each of them are important.

#	Best Practice	Why Is It Important
1		
2		
3		
4		

Activity: CloudTrail, CloudWatch, and AWS Config

Instructions: Use the provided websites and do your own research to answer the questions on this worksheet.

- Amazon CloudWatch Overview: <https://aws.amazon.com/cloudwatch>
- AWS CloudTrail Overview: <https://aws.amazon.com/cloudtrail>
- AWS Config Overview: <https://aws.amazon.com/config>
- Amazon Simple Notification Service (Amazon SNS) Overview: <https://aws.amazon.com/sns>

Item 6 (45 Marks)

1. What is CloudWatch? What does CloudWatch monitor? (5 Marks)
2. What does CloudTrail do? (5 Marks)
3. Why is CloudTrail helpful for security? (5 Marks)
4. What does Amazon SNS do? What can Amazon SNS be used for? (5 Marks)
5. What does AWS Config do? (5 Marks)
6. How does AWS Config send alerts? (5 Marks)
7. Compare and contrast CloudWatch, CloudTrail, and AWS Config. How are they similar? How are they different? Give an example of when each service would be the most useful. (15 Marks)

Item 7 (0 Marks)

Set an alarm for your account if you receive an email about your usage exceeding \$0.10. This will remind you to stop any unnecessary services.