Portfolio (Part 2): Analysis, Design, and Implementation of a Network Security Solution

Total Weight: 80% of the module

How You Will Be Assessed

All marks for **Part 2** are awarded based on your:

- **PowerPoint presentation**
- **Live demonstration**
- **Responses to questions during the demo**

The **report is NOT marked**. It is used **only as evidence** of the practical work completed. Some tasks (e.g. installation) may be evidenced using screenshots and do **not** need to be demonstrated live.

Student Name	SANJAY KUMAR UNKILI
Module name /Code	ACCA7032 ENS
First Marker	Munya
Second Marker	

Generic Assessment Criteria	**Marks Available**	**Marks awarded**
1. Cognitive and Intellectual Skills – 5% **(Security Thinking and Justification)** This section assesses your ability to **think critically about enterprise network security** beyond the core implementation tasks. You will be assessed on your ability to: Identify **additional security features or controls** that could further improve the security posture of the network Clearly explain why these features are appropriate in an enterprise environment Demonstrate awareness of **security best practices, risks, and mitigation strategies** **NB:** This section focuses on security **reasoning and justification only**	**5**	**2**

2. Practical Application Skills – 50% This section assesses your ability to **apply technical skills to secure an enterprise network** using GAIA appliances.		

2.1 GAIA Architecture and Deployment – 20%
 	
You will be assessed on:
 	
• Correct deployment and configuration of:
  o A-GW
  o A-SMS
  o A-GUI
• Appropriate IP addressing and user/profile configuration
• Correct licensing of the Check Point Security Management Server
• Successful connectivity between the Swansea Network and A-SMS
 	
Installation may be evidenced via **screenshots** and explained during the demo.
You are **not expected** to reinstall or rebuild systems live.
	20	**18**

2.2 Firewall Rules and Security Policies – 20% You will be assessed on: • Design and implementation of **inbound and outbound firewall rules** • Logical rule structure aligned with **enterprise security best practices** • Correct allowing and blocking of relevant services (e.g. ICMP, HTTP, FTP, SSH) • Clear explanation and validation of policy behaviour during the live demo	**20**	**4**
2.3 Additional Security Features – 10% ***(Application to Your Network)*** You will be assessed on how well you **apply additional security concepts to your specific network design**.	**10**	**1**

You must:
 	
• Either:
  ○ **Implement** additional security features where feasible, **or**
  ○ Clearly **map and justify proposed security features** within your network
• Clearly distinguish between:
  ○ **Implemented features**, and
  ○ **Proposed (Not Implemented) features**
• Explain how these features integrate with:
  ○ Existing firewall rules
  ○ Network topology and traffic flows
 	
This section focuses on **practical application and system-level understanding**, not abstract ideas.		

3. Transferable Skills for Life and Professional Practice – 25% This section assesses **professional practice, communication, and demonstration skills** during the live assessment.		

3.1 Live Demonstration and Validation – 15%
 	
You will be assessed on:
 	
• Delivery of a clear and well-structured live demonstration
• Effective use of the PowerPoint to support the demo
• Appropriate judgement in deciding:
  ○ What is demonstrated live, and
  ○ What is evidenced via screenshots
• Ability to validate configurations and security behaviour during the demo
	15	**10**

3.2 Professional Communication and Responses to Questions – 10% You will be assessed on: • Clear, professional technical communication • Confidence and clarity when explaining configurations and decisions	**10**	**5**

• Accurate and well-reasoned responses to questions • Ability to justify design and security choices under questioning Responses to questioning are used **throughout the assessment** to validate understanding.		
Total	**80**	**40**

Feedback/Comments:

Part 1 marks 10/20
Part 2 marks 40/80

Total **50/100 Pass**

It is good that you managed to implement at least two internal networks. Your main strength was the deployment of the Check Point architecture, although you did not update the device licences. Your security policy was not sufficiently developed; consequently, you were unable to implement any additional security features.

In addition, your answers demonstrated a limited understanding of Check Point concepts, as you were unable to answer most of the questions.

In future assignments and throughout your university studies, you will need to put in more effort to achieve good grades.