

## **Title: Project Cost Development**

### **MEETING 1: PROGRESS REPORT**

**(Group name - domain area: client name)**

**Group KeepAlive - Car Manufacturer – Proton**

#### **GROUP MEMBERS (MAXIMUM 6 PERSONS IN A GROUP)**

1. Muhammad Izham Bin Norhamadi (B032020039)
2. Ahmad Sha Herizam Bin Tahir (B032020009)
3. Muhammad Rifqi Bin Ramlan (B032020028)
4. Muhammad Imran Bin Rosli (B032020043)
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Date: 6/11/2021

## 1.0 INTRODUCTION

- Example: If at Implementation Stage of IDS Server, what kind of service of IDS? Is it threat detection or threat monitoring? How long it is going to take to develop the IDS? How many talent / staff for developing the IDS? How much it cost to pay the talent per hour and how much cost involved to buy the part of the IDS system.
- Figure 2 illustrates the WBS of the project.

Our project revolved around setting up the E-mail server as well as the appropriate services to go along with it. This project purpose is to provide our company employees secured way for exchanging email whether from inside or outside of our network. The time allocated for the completion of this project is estimated around 95 of working days. There are around 12 employees from our company that has been appointed as database administrator and network engineer as our talent resources in order to assist us to complete this project. The estimated cost to finish this project is around RM43,000 funded by our company.

Our project also setup a SpamTitan as security services with the various features in SpamTitan for our company. SpamTitan is for email protection by blocking spam, viruses, malware, ransomware, and links to malicious websites from your emails. The time allocated to install this service only take approximately one hour. The cost of this service is RM 4 per user for each month.

## 2.0 Work Breakdown Structure (WBS)

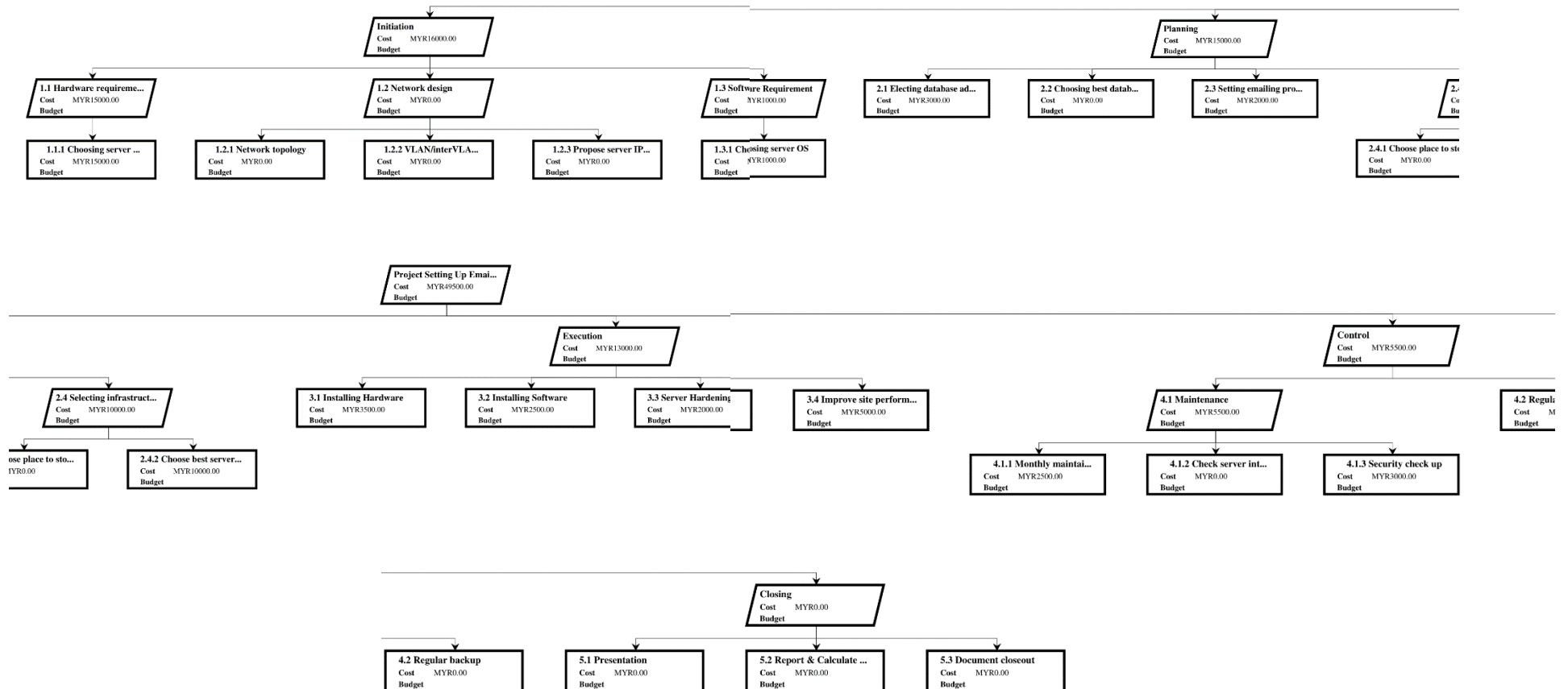


Figure 2: Work Breakdown Structure

### 3.0 GANTT CHART

- In initiation phase, it takes only 10 days because the phase consists of general task like choosing server and routers, making network design and choosing which OS need to be install in the server.
- In planning phase, it takes 7 days. It consist of task that need a short time to do for example electing database administrators.
- Execution phase take the longest time which is 56 days, and the 2 task that hogging the time taken is installing hardware and improve site performance that taking a total of 42 days.
- Control consist of many maintenance task such as monthly maintenance, check server integrity and security check up and it need 15 days to completed.
- The last phase is closing that only take 9 days.

	①	Name	Duration	Start	Finish	Predecessors	Cost	Resource Needed
1		Project Setting Up Email Server	95 days	11/1/21 8:00 AM	3/11/22 5:00 PM		MYR49500.00	
2		Initiation	8 days	11/1/21 8:00 AM	11/10/21 5:00 PM		MYR16000.00	
3		1.1 Hardware requirement	2 days	11/1/21 8:00 AM	11/2/21 5:00 PM		MYR15000.00	
4		1.1.1 Choosing server and routers	2 days	11/1/21 8:00 AM	11/2/21 5:00 PM		MYR15000.00	Server
5		1.2 Network design	6 days	11/3/21 8:00 AM	11/10/21 5:00 PM		MYR0.00	
6		1.2.1 Network topology	2 days	11/3/21 8:00 AM	11/4/21 5:00 PM	4	MYR0.00	Network simulator software ...
7		1.2.2 VLAN/interVLAN requirement	2 days	11/5/21 8:00 AM	11/8/21 5:00 PM	6	MYR0.00	
8		1.2.3 Propose server IP address	2 days	11/9/21 8:00 AM	11/10/21 5:00 PM	7	MYR0.00	Server IP Address
9		1.3 Software Requirement	2 days	11/9/21 8:00 AM	11/10/21 5:00 PM		MYR1000.00	
10		1.3.1 Choosing server OS	2 days	11/9/21 8:00 AM	11/10/21 5:00 PM		MYR1000.00	Operating System ISO
11		Planning	7 days	11/11/21 8:00 AM	11/19/21 5:00 PM		MYR15000.00	
12		2.1 Electing database administrators	1 day	11/11/21 8:00 AM	11/11/21 5:00 PM	10	MYR3000.00	Administrator
13		2.2 Choosing best database relational system	1 day	11/12/21 8:00 AM	11/12/21 5:00 PM	12	MYR0.00	ERD
14		2.3 Setting emailing protocols	1 day	11/15/21 8:00 AM	11/15/21 5:00 PM	13	MYR2000.00	Email Protocol
15		2.4 Selecting infrastructure and hard...	4 days	11/16/21 8:00 AM	11/19/21 5:00 PM		MYR10000.00	
16		2.4.1 Choose place to store servers	2 days	11/16/21 8:00 AM	11/17/21 5:00 PM	14	MYR0.00	Server base location
17		2.4.2 Choose best servers rack	2 days	11/18/21 8:00 AM	11/19/21 5:00 PM	16	MYR10000.00	Server racks
18		Execution	56 days	11/22/21 8:00 AM	2/7/22 5:00 PM		MYR13000.00	
19		3.1 Installing Hardware	14 days	11/22/21 8:00 AM	12/9/21 5:00 PM	17	MYR3500.00	Hardware manual
20		3.2 Installing Software	7 days	12/10/21 8:00 AM	12/20/21 5:00 PM	19	MYR2500.00	Software installation guide
21		3.3 Server Hardening	7 days	12/21/21 8:00 AM	12/29/21 5:00 PM	20	MYR2000.00	Manual
22		3.4 Improve site performance	28 days	12/30/21 8:00 AM	2/7/22 5:00 PM	21	MYR5000.00	Network engineer
23		Control	15 days	2/8/22 8:00 AM	2/28/22 5:00 PM		MYR5500.00	
24		4.1 Maintenance	14 days	2/8/22 8:00 AM	2/25/22 5:00 PM		MYR5500.00	
25		4.1.1 Monthly maintainance	7 days	2/8/22 8:00 AM	2/16/22 5:00 PM	22	MYR2500.00	CMMS
26		4.1.2 Check server integrity	4 days	2/17/22 8:00 AM	2/22/22 5:00 PM	25	MYR0.00	CMMS
27		4.1.3 Security check up	3 days	2/23/22 8:00 AM	2/25/22 5:00 PM	26	MYR3000.00	SIEM (qradar)
28		4.2 Regular backup	1 day	2/28/22 8:00 AM	2/28/22 5:00 PM	27	MYR0.00	Comet Backup
29		Closing	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM		MYR0.00	
30		5.1 Presentation	1 day	3/1/22 8:00 AM	3/1/22 5:00 PM	28	MYR0.00	Documentation
31		5.2 Report & Calculate all costs	7 days	3/2/22 8:00 AM	3/10/22 5:00 PM	30	MYR0.00	Documentation
32		5.3 Document closeout	1 day	3/11/22 8:00 AM	3/11/22 5:00 PM	31	MYR0.00	Documentation

Cost	Resource Needed	31 Oct 21							7 Nov 21							14 Nov 21							21 Nov 21							28 Nov 21							5 Dec 21						
		F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T
MYR49500.00																																											
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MYR15000.00																																											
MYR15000.00	Server																																										
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MYR0.00	Network simulator software ...																																										
MYR0.00																																											
MYR0.00	Server IP Address																																										
MYR1000.00																																											
MYR1000.00	Operating System ISO																																										
MYR15000.00																																											
MYR3000.00	Administrator																																										
MYR0.00	ERD																																										
MYR2000.00	Email Protocol																																										
MYR10000.00																																											
MYR0.00	Server base location																																										
MYR10000.00	Server racks																																										
MYR13000.00																																											
MYR3500.00	Hardware manual																																										
MYR2500.00	Software installation guide																																										
MYR2000.00	Manual																																										
MYR5000.00	Network engineer																																										
MYR5500.00																																											
MYR5500.00																																											
MYR2500.00	CMMS																																										
MYR0.00	CMMS																																										
MYR3000.00	SIEM (qradar)																																										
MYR0.00	Comet Backup																																										
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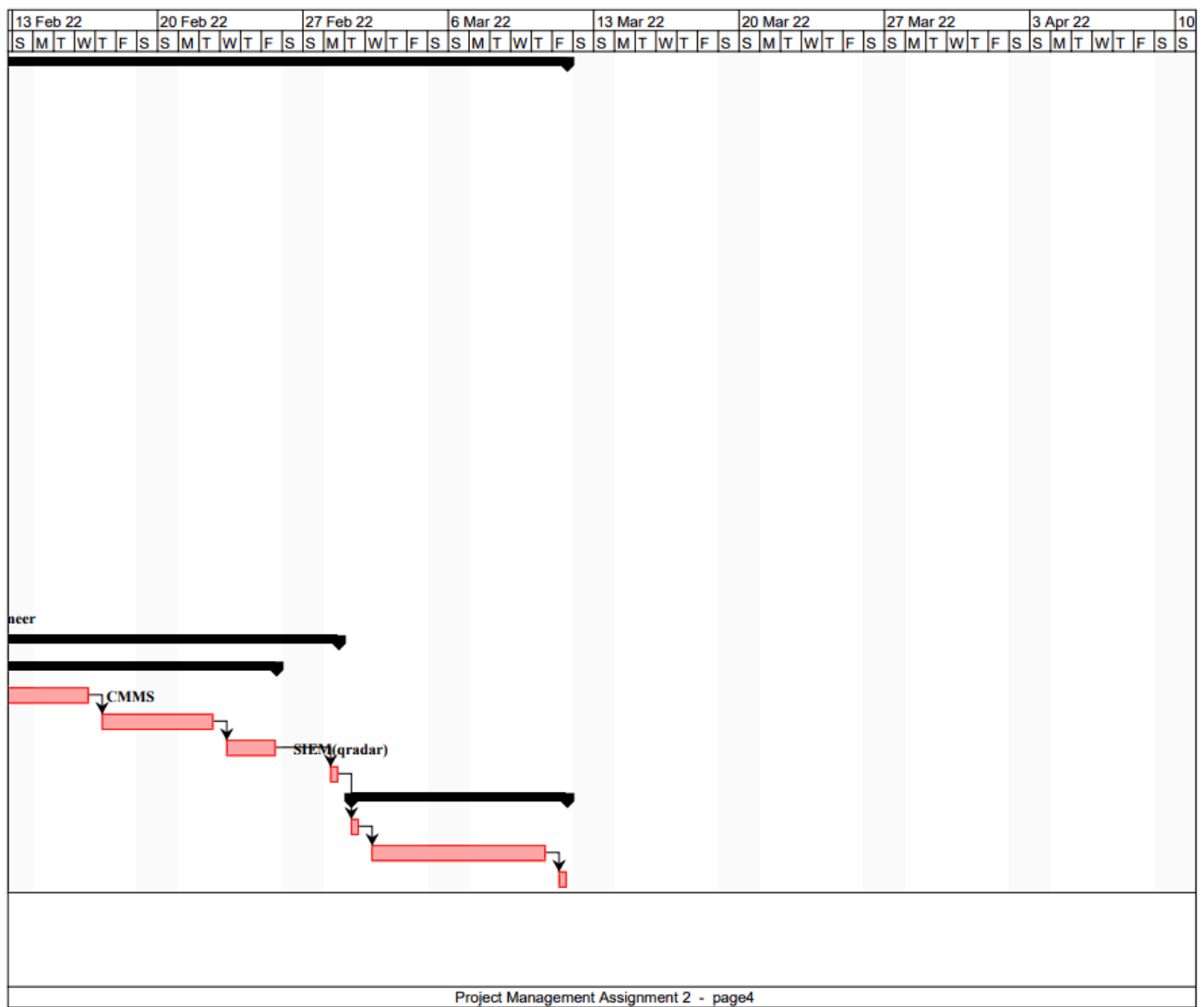
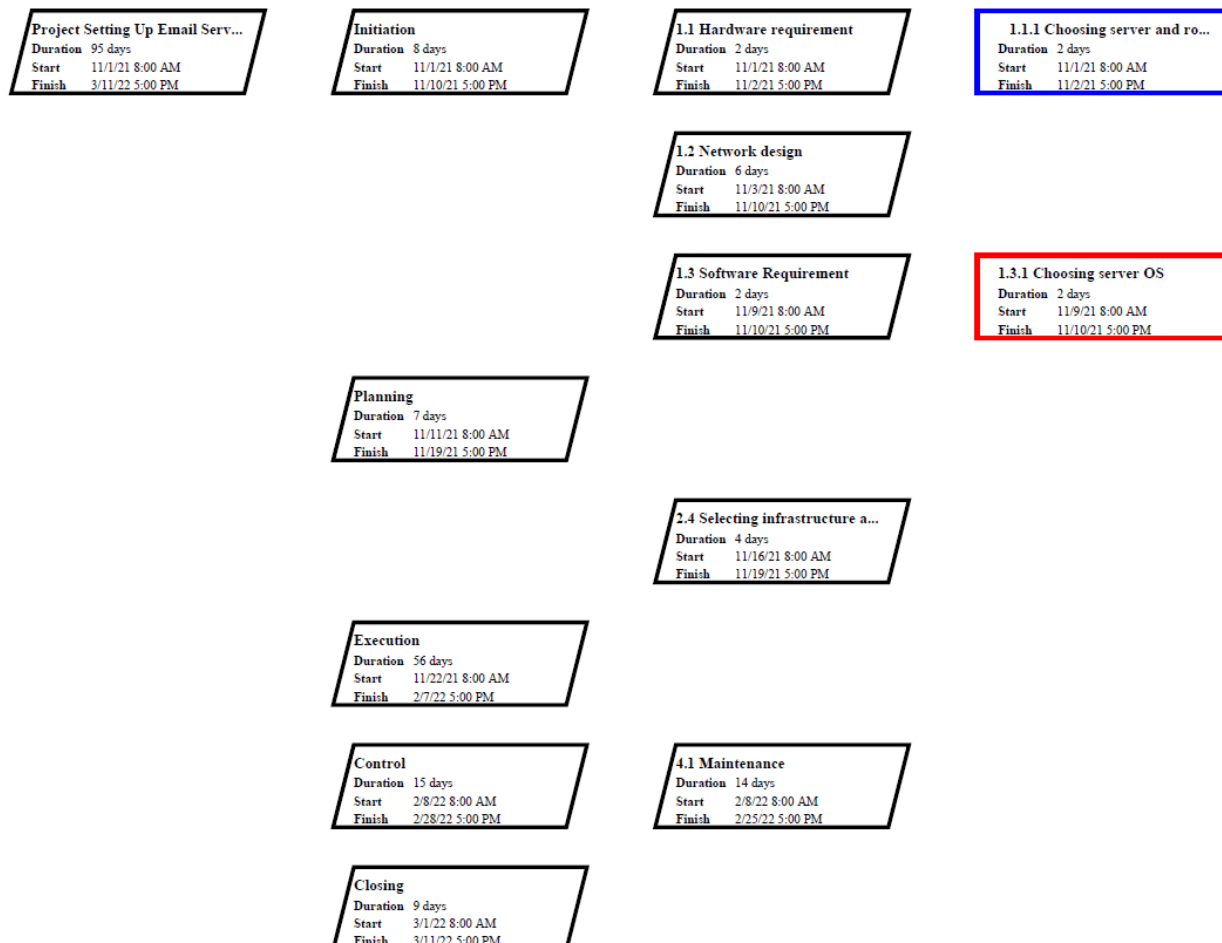
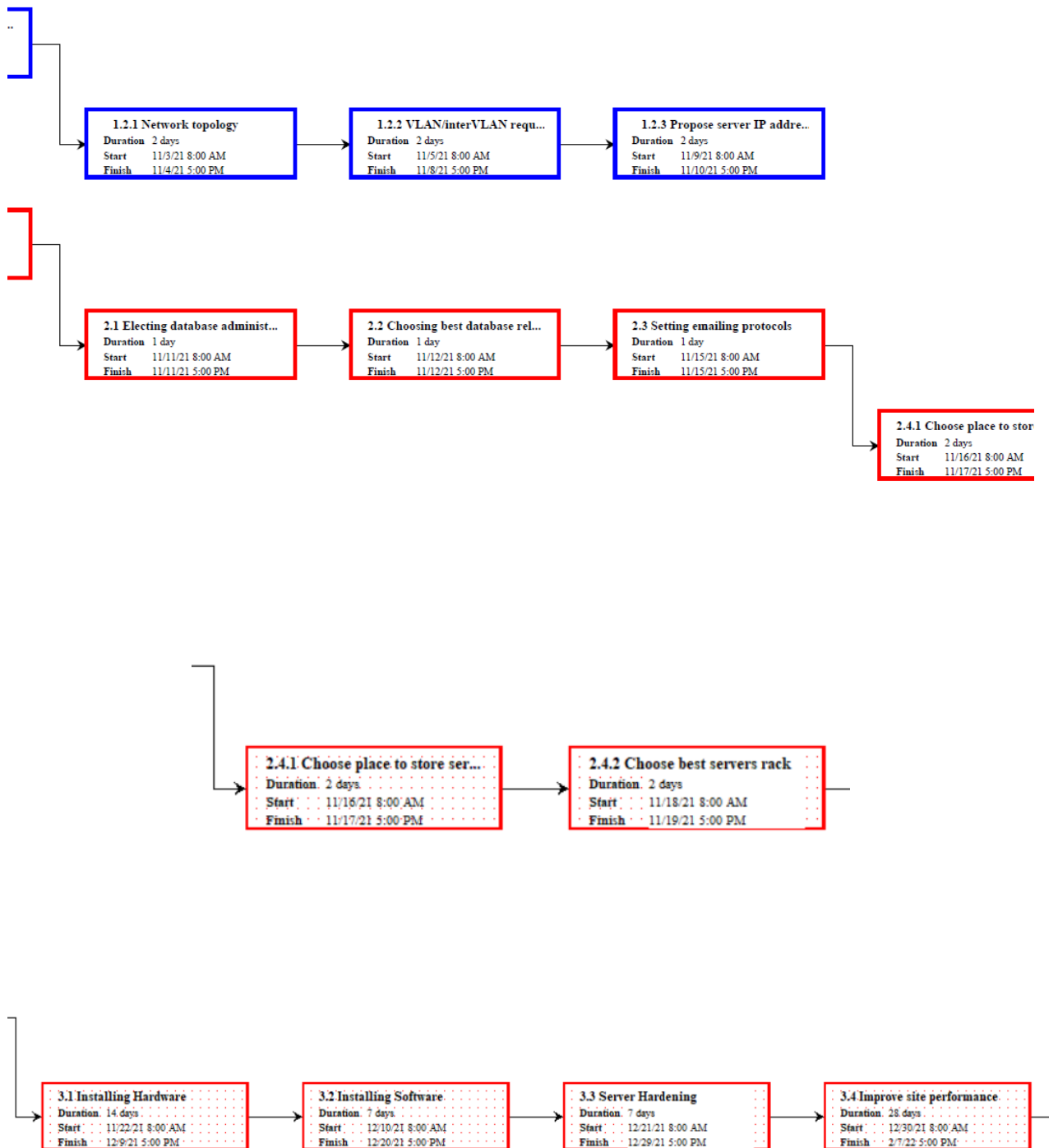


Figure 3: Gantt Chart

## 4.0 NETWORK DIAGRAM







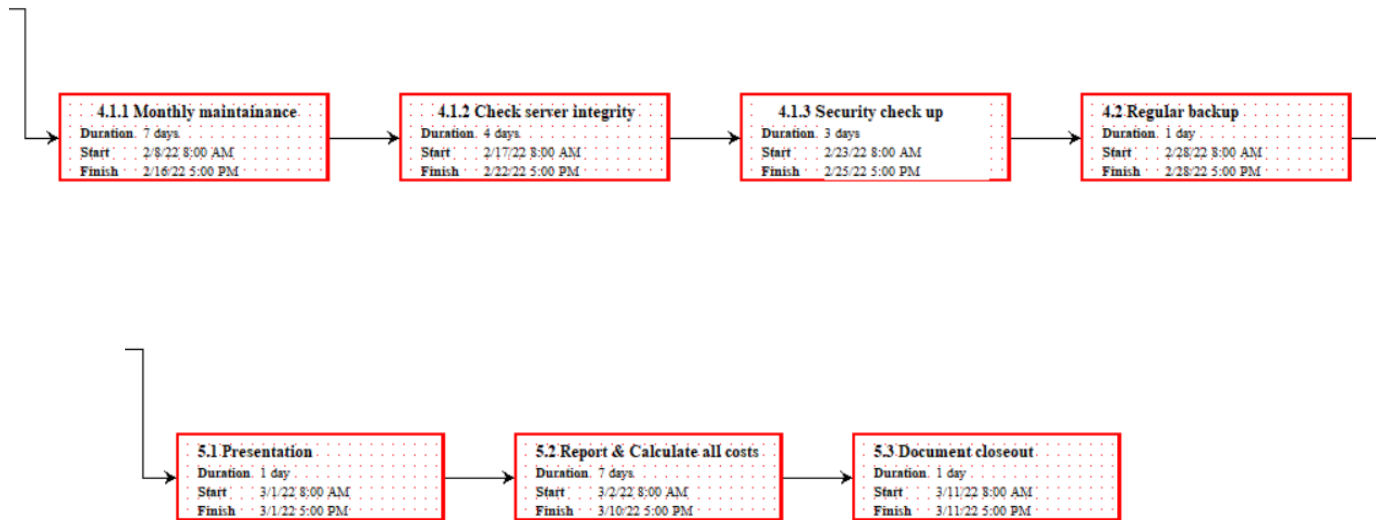


Figure 4: Network Diagram

## 5.0 TASK USAGE

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	Name	Work	Duration	Start		20 Feb 22							27 Feb 22											
						M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F
	Server Rack	57,600,000	2 days	11/18/21 8:00 AM	Work																			
18	Execution	448 hours	56 days	11/22/21 8:00 AM	Work																			
19	3.1 Installing Hardware	0 hours	14 days	11/22/21 8:00 AM	Work																			
	Hardware	403,200,000	14 days	11/22/21 8:00 AM	Work																			
20	3.2 Installing Software	0 hours	7 days	12/10/21 8:00 AM	Work																			
	Software Installation	201,600,000	7 days	12/10/21 8:00 AM	Work																			
21	3.3 Server Hardening	0 hours	7 days	12/21/21 8:00 AM	Work																			
	Server Hardening	201,600,000	7 days	12/21/21 8:00 AM	Work																			
22	3.4 Improve site perform	224 hours	28 days	12/30/21 8:00 AM	Work																			
	Network engineer	224 hours	28 days	12/30/21 8:00 AM	Work																			
23	Control	120 hours	15 days	2/8/22 8:00 AM	Work	h	8h	8h	8h	8h	8h	0h	0h	8h	8h	8h	8h	8h	0h	0h	8h			
24	4.1 Maintenance	112 hours	14 days	2/8/22 8:00 AM	Work	h	8h	8h	8h	8h	8h	0h	0h	8h	8h	8h	8h	8h						
25	4.1.1 Monthly mainte	0 hours	7 days	2/8/22 8:00 AM	Work	h	0h	0h	0h															
	CMMS	201,600,000	7 days	2/8/22 8:00 AM	Work	0	28,800...	28,800...	28,800...															
26	4.1.2 Check server i	32 hours	4 days	2/17/22 8:00 AM	Work					8h	8h	0h	0h	8h	8h									
27	4.1.3 Security check	0 hours	3 days	2/23/22 8:00 AM	Work										0h	0h	0h							
	SIEM(adar)	86,400,000	3 days	2/23/22 8:00 AM	Work										28,800...	28,800...	28,800...							
28	4.2 Regular backup	8 hours	1 day	2/28/22 8:00 AM	Work															8h				
29	Closing	72 hours	9 days	3/1/22 8:00 AM	Work																8h	8h	8h	8h
30	5.1 Presentation	8 hours	1 day	3/1/22 8:00 AM	Work															8h				
31	5.2 Report & Calculate al	56 hours	7 days	3/2/22 8:00 AM	Work																	8h	8h	8h

	Name	Work	Duration	Start		M	T	W	T	F	S
	Server Rack	57,600,000	2 days	11/18/21 8:00 AM	Work						
18	Execution	448 hours	56 days	11/22/21 8:00 AM	Work						
19	3.1 Installing Hardware	0 hours	14 days	11/22/21 8:00 AM	Work						
	Hardware	403,200,000	14 days	11/22/21 8:00 AM	Work						
20	3.2 Installing Software	0 hours	7 days	12/10/21 8:00 AM	Work						
	Software Installation	201,600,000	7 days	12/10/21 8:00 AM	Work						
21	3.3 Server Hardening	0 hours	7 days	12/21/21 8:00 AM	Work						
	Server Hardening	201,600,000	7 days	12/21/21 8:00 AM	Work						
22	3.4 Improve site perform	224 hours	28 days	12/30/21 8:00 AM	Work						
	Network engineer	224 hours	28 days	12/30/21 8:00 AM	Work						
23	Control	120 hours	15 days	2/8/22 8:00 AM	Work						
24	4.1 Maintenance	112 hours	14 days	2/8/22 8:00 AM	Work						
25	4.1.1 Monthly mainte	0 hours	7 days	2/8/22 8:00 AM	Work						
	CMMS	201,600,000	7 days	2/8/22 8:00 AM	Work						
26	4.1.2 Check server i	32 hours	4 days	2/17/22 8:00 AM	Work						
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28	4.2 Regular backup	8 hours	1 day	2/28/22 8:00 AM	Work						
29	Closing	72 hours	9 days	3/1/22 8:00 AM	Work	8h	8h	8h	8h	8h	
30	5.1 Presentation	8 hours	1 day	3/1/22 8:00 AM	Work						
31	5.2 Report & Calculate al	56 hours	7 days	3/2/22 8:00 AM	Work	8h	8h	8h	8h		
32	5.3 Document closeout	8 hours	1 day	3/11/22 8:00 AM	Work						8h

Figure 5: Task Usage Table

## 6.0 RESOURCES

		Name	Cost Per Use	Type	Initials	Accrue At
1		Server	MYR15000.00	Material	S	Prorated
2		Operating System ISO	MYR4000.00	Material	O	Prorated
3		Database Administrator	MYR3000.00	Work	A	Prorated
4		Email Protocol	MYR2000.00	Material	E	Prorated
5		Server Rack	MYR1500.00	Material	S	Prorated
6		Hardware	MYR3500.00	Material	H	Prorated
7		Software Installation	MYR2500.00	Material	S	Prorated
8		Server Hardening	MYR1000.00	Material	S	Prorated
9		Network engineer	MYR5000.00	Work	N	Prorated
10		CMMS	MYR2500.00	Material	C	Prorated
11		SIEM(qradar)	MYR3000.00	Material	S	Prorated

Figure 6: Resource Table

## 7.0 CONCLUSION

Lesson learned during implementation:

1. Work in a team and have a good decision-making
2. Get new information while working with new implemented software
3. Recognize weaknesses of software and server to be paid attention to.
4. Difficult to determine the suitable place to store hardware.

Strategy to protect the assets and talents in the organization from harmful cybercrimes.

1. Always keep the equipment up to date.
2. Keep maintenance of software and server in regular basis.
3. Implement multi-factor authentication before accessing the system.
4. Install security measure digitally and physically for the software and hardware.

In conclusion, implementing a big project need to have a well-prepared plan to ensure the flow of works are being manage properly phase by phase. This is why a simple diagram such as Gannt Chart is extremely important to make sure every works is well executed within the given time. This is also to make sure every aspect of a project can be managed properly such as cost, condition of hardware and assets. This will impact positively toward the management of the project while also team member can gain new knowledge while implementing it and overcome any obstacles along the way. Having these obstacles can teach all the team member to have an organized strategies to make sure every properties and assets is maintains and saves from any type of cybercrimes.

**Assessment: [Meeting 1] – (5%) – [PO7, TS1]**