Cloud Computing Introductory Lab

Task 1 – Create Cloud Service Accounts

This module is all based around cloud services and technologies. You will eventually have hands on experience interacting with and utilising services offered provided by the two major cloud service providers Amazon and Google (sorry Microsoft).

Therefore, utilise this lab to create user accounts for:

- Amazon Web Services (AWS)
- Google Cloud Platform (GCP)

You will need a valid credit card to sign up for these services, however fear not we will only be utilising the free tier services offered by both vendors. Both amazon and google offer a free level of services so that aspiring cloud developers and practitioners can practice and learn how to use either platforms.

AWS offers 12 months of "free tier" services and GCP offers 300 of free "credit" that you can use to learn. You just need be vigilant that you do not leave services running when you are done with them, so that you do not incur charges.

Task 2 – Cost out a Private Cloud Server

For you to understand the costs involved with setting up servers and datacentres you are going to act as the purchasing department for the next big internet start-up "FaceChat". As you would have gathered from the name, FaceChat are a company that wants to offer a service that combines the functionality of Facebook and Snapchat (good luck with that).

They envisage that their user base will eventually exceed that of Facebook (optimism). However, they will scale up their data centres as and when required. Initially they require **5** high powered servers that they will accommodate on site within one of the spare rooms on their premises. The hardware team have specified the following hardware requirements for each of the servers:

- Intel Xeon 8180 Octacosa-core Processor X5
- Dell PowerEdge R940 128GB Memory (RAM) X5
- Samsung 860 PRO 4 TB Internal SSD (total of 1 petabyte (pb) required. 1pb = 1000tb)
- Socket 3647 compatible motherboard (e.g. Gigabyte Mainboard MD71-HB0) X5
- 2u server case X5

To house all this equipment:

 APC NetShelter CX 38U Secure Soundproof & Air Conditioned Server Room in a Box Enclosure (specifically this one)

How much do FaceChat have to invest to implement the above server requirements?