

Proposal & Quotation for FishTank Ltd Regarding Cloud Migration

Thank you for progressing our company to the next stage of consideration for the cloud migration of FishTank Ltd's entire business. In this proposal, we will be having an overview regarding some of the proposed architecture of FishTank Ltd's cloud infrastructure as well as an estimate of price quotation based on the requirements that FishTank Ltd has requested

Cloud Migration Plan (4 Phases)

Task	Week 1							Week 2							Week 3						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Determine Business Goals																					
Examine IT Portfolio																					
Consider Migration Strategies																					
Cloud Architecture Schematic																					
Storage Migration Plan																					
Server Migration Plan (Domain Controller)																					
Server Migration Plan (Web)																					
Server Migration Plan (PETRA App)																					
Server Migration Plan (Database)																					
Server Migration Plan (Print)																					
AWS Configuration																					
Storage Migration																					
Server Migration (Domain Controller)																					
Server Migration (Web)																					
Server Migration (PETRA App)																					
Server Migration (Database)																					
Server Migration (Print)																					
Operation Testing																					
Cloud Support																					

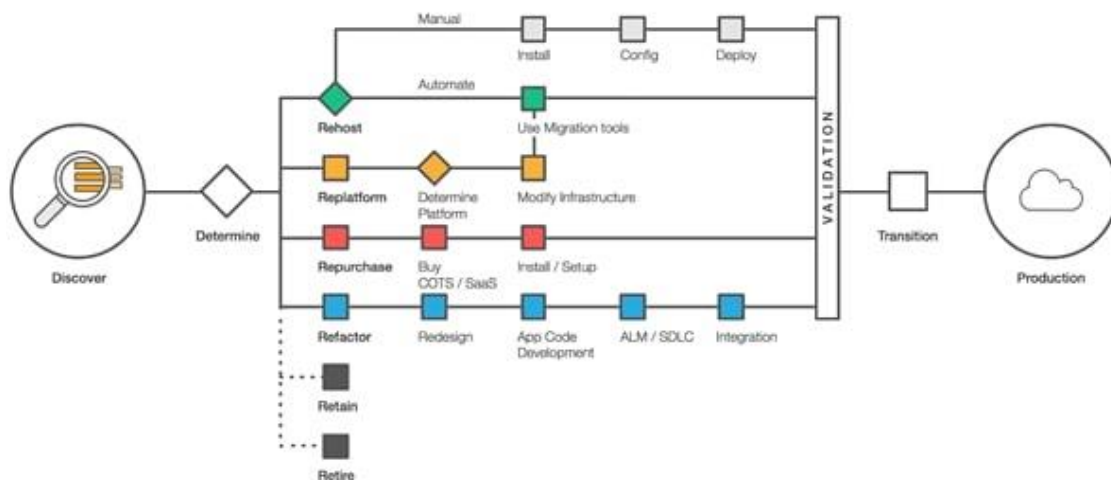
Phase 1
Phase 2/3
Phase 4
Cloud Support

Phase 1: Migration Preparation and Business Planning

- Since FishTank Ltd has decided on fully migrating to cloud, it is very important to have an idea of the business goals to optimise cloud migration for cost, reliability and efficiency. We should also examine the existing IT portfolio and consider migration strategies
- Our company can provide the necessary expertise through our *Business Analysts* and *Cloud Consultants*

Phase 2 & 3: Designing, Migrating, and Validating Applications

- In this phase, we will be creating a detailed cloud architecture schematic and migration plan for the applications, starting with a few apps as Proof of Concept to see which migration strategies and tools are suitable before moving forward with the full migration plan. Migration strategies are as below:

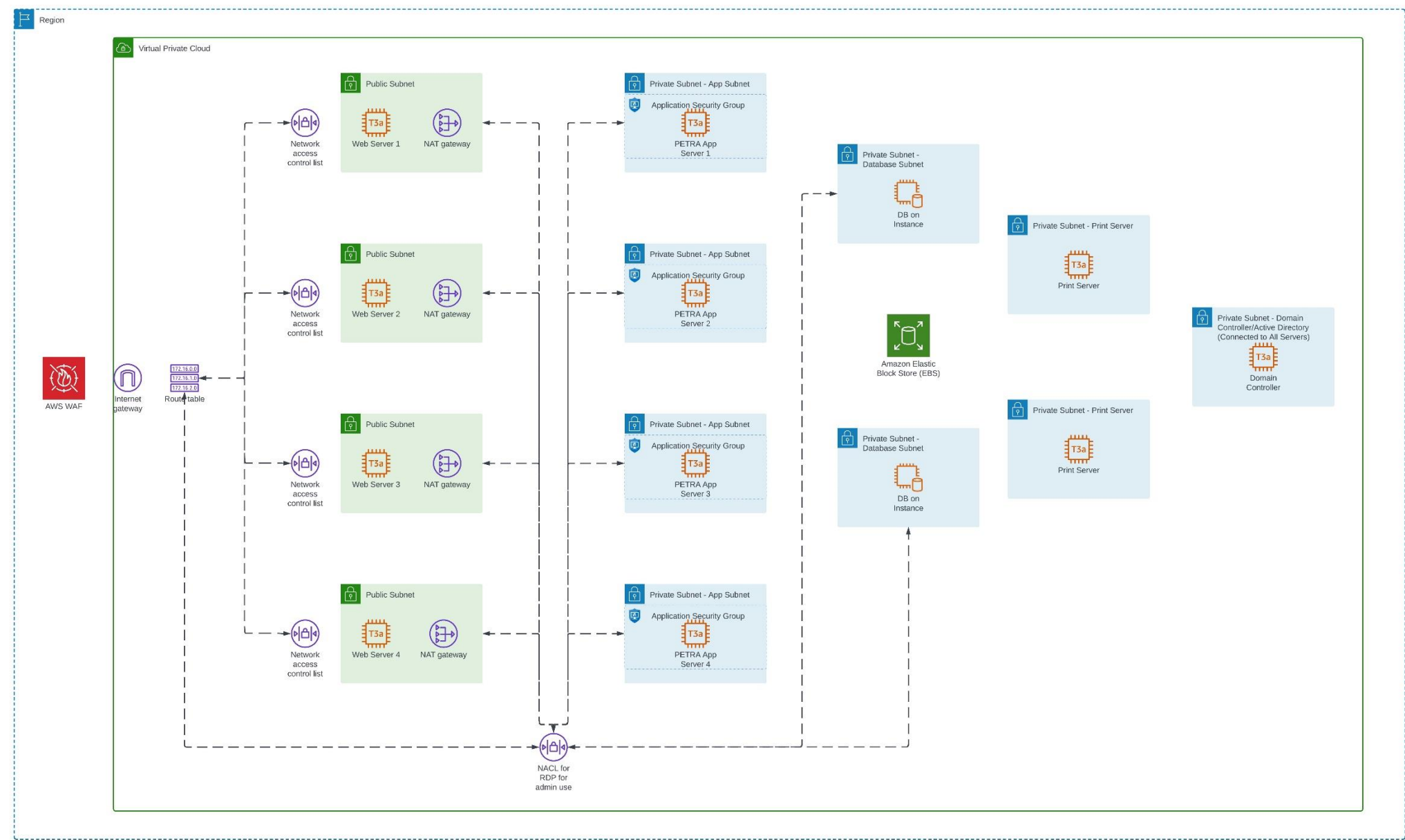


- We would recommend consulting our *Solution Architect* for the cloud architecture schematic and *Server/Database Migration Engineers* for individual application/server/database migration plans and strategies
- They would also be responsible for configuring the relevant AWS Services to prepare for migration

Phase 4: Operate

- As applications are moved to the cloud, FishTank Ltd can start operating them within AWS and turn off old on-premise versions
- During this time, we can offer *First/Second/Third Line Cloud Support* to ensure all issues will be resolved in a timely manner

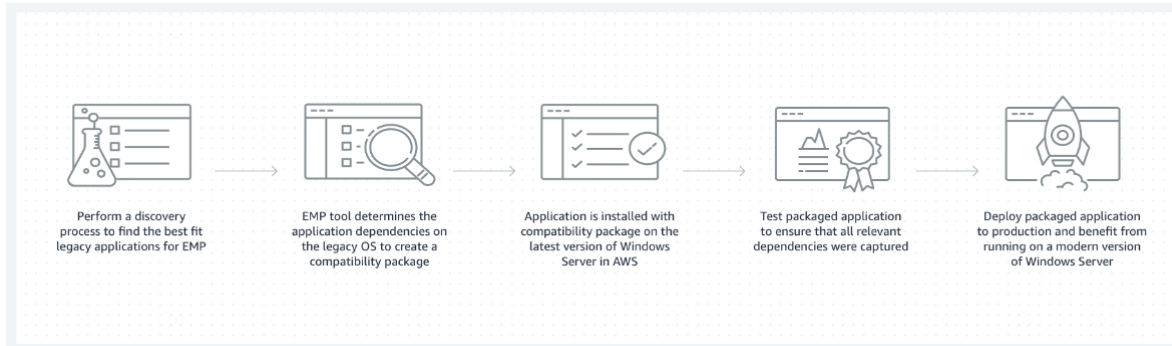
Proposed Design for Cloud Migration Infrastructure



Current PETRA Infrastructure vs Proposed Changes for Cloud

Firstly, we take a look at FishTank Ltd's platform which runs on Microsoft Windows Server 2008 which is out of extended support. AWS has an *End-of-Support Migration Program* (<https://aws.amazon.com/emp-windows-server/>) for Windows Server tool which can either be used as a self-service option or with the help of a trained AWS Professional, in this case, our Server Migration Engineer.

How it works



Next, with the case of Microsoft SQL Server 2012, AWS has a service called AWSEC2-CloneInstanceAndUpgradeSQLServer (<https://docs.aws.amazon.com/systems-manager-automation-runbooks/latest/userguide/automation-awsec2-CloneInstanceAndUpgradeSQLServer.html>) which supports upgrades from SQL Server 2012 to SQL Server 2014, 2016, 2017 or 2019. The upgrade consists of several processes that can take up to 2 hours to complete and is automated which means you can complete the database migration with limited help from our Database Migration Engineer.

Seeing as how the PETRA system is heavily customized based on Microsoft's COTS Dynamics CRM platform, we will run these apps on AWS EC2 instances according to the specifications currently being used.

We will be using a Virtual Private Cloud, along with appropriate Security Groups and Network Access Control Lists to ensure all data is only being transmitted to and from the intended sources and destinations in place of the Cisco Network Switches. Alongside this will be an AWS Web Application Firewall which will act in place of the Cisco Firewall.

For the rest of the PETRA Assets, we have included a breakdown of all listed PETRA assets and the proposed cloud alternatives along with the projected monthly costs based on the central UK AWS region which is located in London. We have also included a list of the projected manpower that has been quoted based on the estimated project timeline in page 1 of the proposal.

In total, the **Labour Costs** will amount to around **£23,400** for the entire duration of the cloud migration, which is subject to change as work may take shorter or longer depending on circumstances. The projected **Monthly Costs** will amount to around \$3,314.46 or equal to **£2,605.19** as of 5.00pm on 1 Feb 2024.

Please refer to the last page of the document for the full breakdown of all price quotations.

Table of Current Assets vs Proposed Cloud Alternatives and Projected Monthly Costs

Asset Tag	Type	Description	Current Assets				Proposed Cloud Alternatives (Hosted in London for UK customers)						
			Operating System	CPU	Memory	Storage	AWS Service	Operating System	CPU	Memory	Storage	Monthly Cost from (USD)	
S001	Server	Domain Controller	Windows Server 2012	2	4GB	30GB	Amazon EC2 t3a.m	Windows Server 2019	2	4GB	30GB	\$33.13	
N001	Firewall	Firewall	Cisco	-	-	-	AWS WAF	-	-	-	-	\$32.00	
SAN01	SAN	Shared Storage	HP MSA	-	-	4TB	AWS EBS	-	-	-	4TB	\$217.09	
S002	Server	Web Server 1	Windows Server 2008	2	4GB	30GB	Amazon EC2 t3a.m	Windows Server 2019	2	4GB	30GB	\$33.13	
S003	Server	Web Server 2	Windows Server 2008	2	4GB	30GB	Amazon EC2 t3a.m	Windows Server 2019	2	4GB	30GB	\$33.13	
S004	Server	Web Server 3	Windows Server 2008	2	4GB	30GB	Amazon EC2 t3a.m	Windows Server 2019	2	4GB	30GB	\$33.13	
S005	Server	Web Server 4	Windows Server 2008	2	4GB	30GB	Amazon EC2 t3a.m	Windows Server 2019	2	4GB	30GB	\$33.13	
S006	Server	PETRA App Server 1	Windows Server	4	8GB	100GB	Amazon EC2 t3a.xl	Windows Server 2019	4	16GB	100GB	\$131.59	
S007	Server	PETRA App Server 2	Windows Server	4	8GB	100GB	Amazon EC2 t3a.xl	Windows Server 2019	4	16GB	100GB	\$131.59	
S008	Server	PETRA App Server 3	Windows Server	4	8GB	100GB	Amazon EC2 t3a.xl	Windows Server 2019	4	16GB	100GB	\$131.59	
S009	Server	PETRA App Server 4	Windows Server	4	8GB	100GB	Amazon EC2 t3a.xl	Windows Server 2019	4	16GB	100GB	\$131.59	
N002	Switch	Network Switch	Cisco	-	-	-	Amazon VPC	-	-	-	-	\$231.48	
N003	Switch	Network Switch	Cisco	-	-	-	-	-	-	-	-	-	
S010	Server	Print Server	Windows Server 2012	2	4GB	30GB	Amazon EC2 t3a.m	Windows Server 2019	2	4GB	30GB	\$63.36	
S011	Server	Print Server	Windows Server 2012	2	4GB	30GB	Amazon EC2 t3a.m	Windows Server 2019	2	4GB	30GB	\$63.36	
S012	Server	Database	MS SQL Server 2012	8	16GB	1TB	Amazon EC2 t2.2xl	MS SQL Server 2019	8	16GB	1TB	\$1,007.58	
S013	Server	Database	MS SQL Server 2012	8	16GB	1TB	Amazon EC2 t2.2xl	MS SQL Server 2019	8	16GB	1TB	\$1,007.58	
											Total Monthly Cost		\$3,314.46

Table of Proposed Labour and Projected Costs

Role	Rate (per day)	Duration (Days)	Total
Business Analyst	£400.00	2	£800.00
Cloud Consultant	£2,000.00	2	£4,000.00
Solution Architect	£1,000.00	3	£3,000.00
Server Migration Engineer	£650.00	9	£5,850.00
Database Migration Engineer	£750.00	4	£3,000.00
First/Second line Cloud Support	£250.00	5	£1,250.00
Third Line Cloud Support	£350.00	5	£1,750.00
Total Labour Cost			£19,650.00