

Overview

Costos is an online training provider.

Existing Environment

The existing environment for Costos currently consists of the following resources

- An on-premise data centre that hosts an Active Directory forest named costos.com
- The Active Directory contains users from different departments - IT, Finance, HR
- The following table shows the On-premise infrastructure. All servers are running in a virtualized environment

On-premise server name	Type of Virtualization	Virtual Machine name
costos-ser1	VMware vCenter server	demovm
costos-ser2	Hyper-V host	demovm-test

- There are 2 web applications that are hosted on the On-premise environment. The overall details of the web applications are given below
 - Programming Language - .Net
 - Average memory used for each application – 1 GB

Proposed Environment

- Costos is looking towards purchasing an Azure subscription and setting up their environment in Azure
- The Virtual Machines need to have a central location for storage of files. They would connect to these file shares using SMB.
- All applications and Virtual Machines need to be migrated onto Azure
- One of the web applications which will be hosted in Azure Web Apps needs to be mapped to a custom domain of costos-quiz.com in Azure.
- Active Directory users need to be synched onto Azure AD
- The following Virtual Networks and subnets are going to be setup in Azure

Virtual Network name	Address space
costos-net1	10.0.0.0/16
costos-net2	20.0.0.0/16

Subnet name	Virtual Network name	Address space
SubnetA	costos-net1	10.0.1.0/24
SubnetB	costos-net2	20.0.1.0/24

Technical Requirements

- The Instances for the underlying Web applications should be able to scale up to 5 instances
- The migrated Virtual Machines in Azure should be able to communicate to the Internet on port 8080
- A workflow should be in place for demovm when it is migrated onto Azure. The IT Administrative staff needs to be notified on any changes that occur on this Virtual Machine
- Minimize costs wherever possible
- There should be an encrypted connection between the On-premise data centre and the Virtual Network costos-net2
- A custom role needs to be defined known as costosrole which will be based on the reader role.