

VERSION 1.0

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UNICO INFRASTRUCTURE DESIGN

USING AZURE HOSTING

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INTRODUCTION

The hosting of these servers will be done on Microsoft Azure. The total number of virtual machines to be deployed will be six.

SERVERS

1. DATABASE SERVERS

We shall have two highly available SQL servers. The virtual machine for database servers shall be a D14 virtual machine

These two machines will be set up on a Windows server failover cluster so as to permit the deployment of SQL AlwaysOn Availability.

The Following Software will run on the machine:

- a) Windows Server 2012 R2
- b) SQL server 2014.

2. APPLICATION SERVERS

This virtual machine for the Application Server will be an A6 Virtual Machine.

The Following Software will run on the Machine:

- a) Windows 2012 R2
- b) NAV Application Server

*All instances of NAV will be hosted on this machine.

3. WEB SERVER

The Web Server will run on an A6 Virtual Machine. This machine will run Windows Server 2012 R2 with the following software components and roles:

- a) Sacco Members Portal
- b) SimuSacco Web Service Bridge (Sacco mobile application)
- c) Microsoft Dynamics NAV web client
- d) IIS 7.5
- e) PHP 5.4

4. ACTIVE DIRECTORY MACHINE

Active Directory will run on a D3 Virtual Machine.

This machine will run Windows Server 2012 R2 with the following server roles

- a) Active Directory Domain Services
- b) Domain Naming Service
- c) Active Directory Certificate Services

5. FILE SHARE WITNESS

File Share Witness will run on an A3 Virtual Machine. This machine will be used as windows server failover clustering node for the SQL high availability servers.

This machine will run Windows Server 2012 R2 with the following server roles:

- a) Windows Server Failover Clustering

EMAIL, OFFICE AND SHAREPOINT

We will use office 365 for Email and SharePoint. The recommended setup would be the Enterprise E3 plan.

NOTES ON INSTALLATION

- All authentication to the end users shall be done using form authentication
- We shall require certificates for NAV click once deployment, internet portal, NAV web client and mobile app
- NAV will use NavUserPassword Credential type
- All machines deployed here should have the same affinity group, virtual network, subnet, cloud service and use the same storage account

LAYOUT DIAGRAM

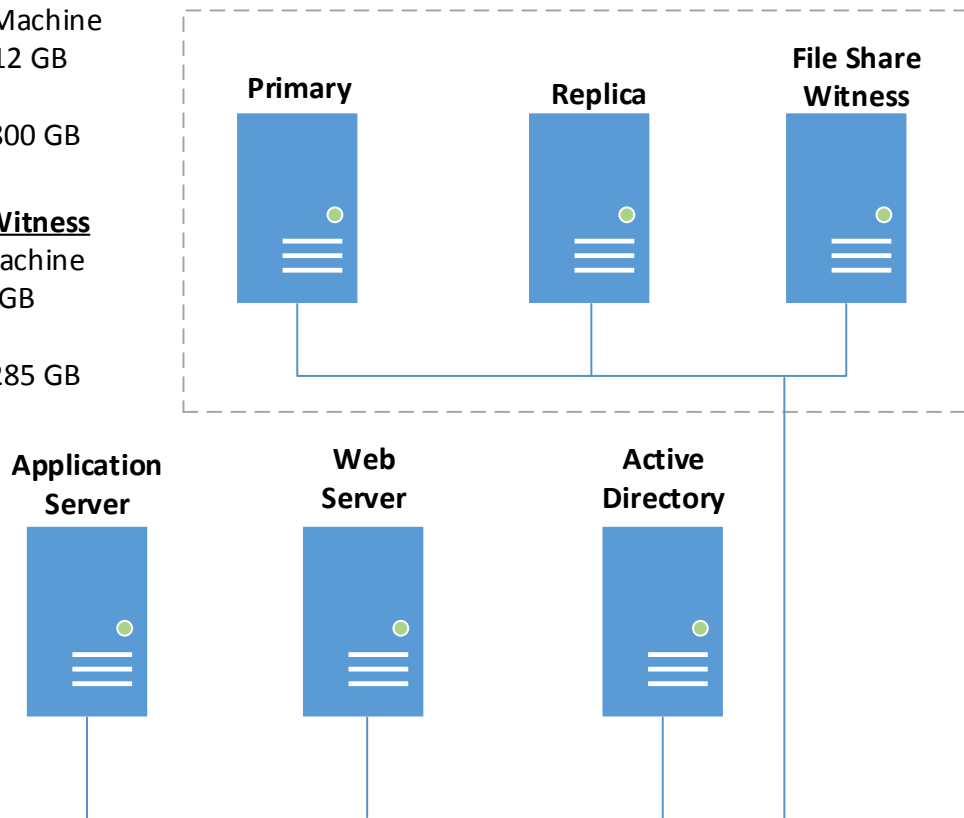
Database Server

Azure D14 Machine
Memory: 112 GB
Cores: 16
Hard Disk: 800 GB

File Share Witness

Azure A3 Machine
Memory: 7 GB
Cores: 4
Hard Disk: 285 GB

Database Cluster



Application Server

Azure A6 Machine
Memory: 28 GB
Cores: 4
Hard Disk: 285 GB

Web Server

Azure A6 Machine
Memory: 28 GB
Cores: 4
Hard Disk: 285 GB

Active Directory

Azure D3 Machine
Memory: 14 GB
Cores: 4
Hard Disk: 200 GB