

Council of the Isles of Scilly IT Server Replacement

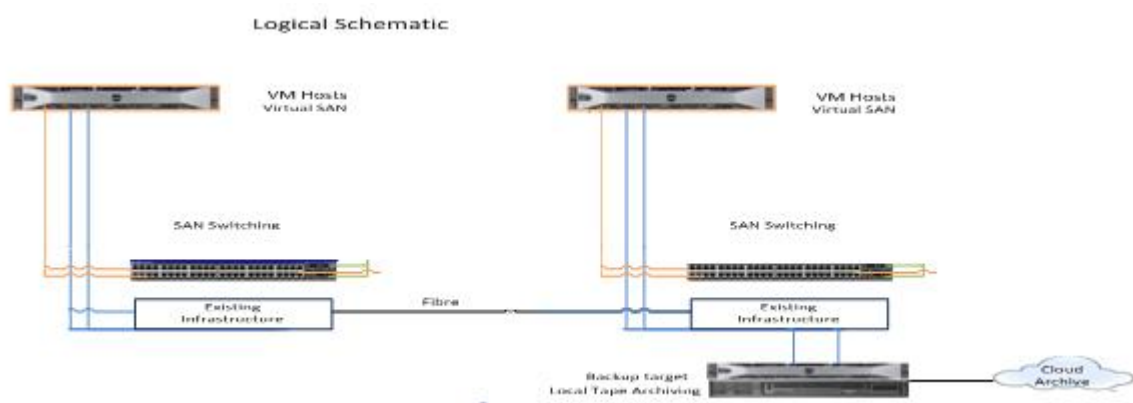
Introduction

The Council of the Isles of Scilly (CIOS) is seeking to appoint a supplier for the provision of two replacement servers and one backup server.

Requirement overview

We are looking to over haul our server installation for the CloS, migrating most of our physical servers to Virtual Machines (VMs). The solution we are looking for will be a Software-defined data-centre based on a highly resilient distributed architecture, addressing server and storage scalability through virtualisation.

This will consist of two physical servers, situated in different sites, connected via a 200m fibre LAN connection. The server estate storage pool will be resilient, both within each host and across the new server estate as a whole. This will be achieved via a RAID 6 array within each host and across both hosts using Virtual SAN/VSA to stripe data using a network RAID 1 array. This will in turn require dedicated VSAN/VSA switching and redundancy, offering high-speed, low-latency communication channels between the VMs and the virtualised storage pool



2 Physical Hosts running and replicating 19 distributed Virtual Machines with 15 Microsoft Windows 2012 with 2 Virtual SANs, tape back-up for local offsite archiving and cloud archiving for non-sensitive aged data.

Location

Please note our geographical location with regards to packaging and shipping, as well as the limitation to next day support.

Detailed requirements

2x VM Host Machines each consisting of:		
Description	No.	Additional Information
Server grade Processor with minimum pass mark score of 9958	x2	CPUbenchmarktest.net (updated 4th feb)
64GB RAM		
Server grade 300GB 12G 15K SAS HDD	x2	(These will be RAID1 for the host system)

		OS)
Server grade 12TB of usable storage,		(after RAID6 configuration)
4 port 1Gb Ethernet controller		(for connectivity with the domain network)
2 port FIO controller		(provision for VSAN/VSA)
Power Supply Unit	x2	
Rack mount and rail kit		
<u>Backup Server</u>		
Server grade Processor with minimum pass mark score of 4594		CPUbenchmarktest.net (updated 4th feb)
8Gb RAM		
Server grade 4TB 7.2k HDD	x 8	
2 Port 1Gb Ethernet Adapter		
<u>Tape Autoloader</u>		
A tape autoloader system suitable for unattended secondary backup of data, virtual machines and long term data archiving.		
<u>Autoloader - Rack Mountable</u>		
LTO-5 or above Data tapes	x7	This system should be set up and able to work with zero day to day interaction, i.e. full automation of backups on a weekly/monthly/quarterly/yearly cycle. Transparent encryption of backups would be preferred
Cleaning cartridge		
Hi density SAS connection cable to link to backup server		
<u>Switches Dedicated to VSA/VSAN:</u>		
Switch capable of handling the workload created by a VSA/VSAN build to the above specification.	x2	Each switch should be able to cope with the full workload, should the other fail.
		Switches will be expected to be fitted with fibre modules capable of a 300m reach @ 10Gbe, as well as allowing for potential addition to our server estate, should we wish to expand in future years.
<u>Licensing and provision</u>		
VM host OS 2 processor qualified	x2	
Additional software to provide full functionality if required		
Backup server OS 2 processor qualified		
VSA license 10TB 5 years	x2	
<u>Installation and configuration</u>		
Install & configuration of VM host operating system and replication between the two hosts		
Setup & configuration of VSA/VSAN		
<u>UPS</u>		
A UPS system, suitable to cover both the servers as specified above and the incumbent servers specified below		

<u>Incumbent Servers</u>				
Make	Model	CPU	RAM	# discs
Dell	Poweredge T310	1*Xeon X3440 @ 2.53ghz	32GB	4
Dell	Poweredge T420	2* Xeon E5 2430 @ 2.20ghz	32GB	3
Dell	Poweredge T110 II	1*Xeon E3-1220 @ 3.10ghz	8GB	2
Dell	Poweredge R310	1*Core i3 550 @ 3.20ghz	8GB	2
Dell	Poweredge T320	1* Pentium 1403 @ 2.60ghz	12GB	6

The CloS are currently operating a Microsoft environment.

Evaluation of quotation

The CloS will appoint the most economically advantageous tender to supply the goods and related services as set out in the Quotation Opportunity form.

The three quality questions will be specifically marked on:-

Q1

- How the solutions individual components will provide synergies resulting in long term value for money and quality performance
- the identification and explanation of software capabilities including any beneficial applications that may enable Council to consolidate existing software packages including but not limited to antivirus, patching & backup etc.
- Compatibility with incumbent software.
- How your solution will compliment of the knowledge of the current ICT staff

Q2

- Understanding of the project and VM host OS and the storage pool configuration
- Supplier demonstrates clear and concise understanding of the complete solution required
- Outline project plan for implementation

Q3

- The company understand the geographical location of the customer and its constraints.

- The company has demonstrated a track record of supplying complete solutions with successful delivery