Server Consolidation, Automated Disaster Recovery and Data Protection

Challenges

- Aging physical server estate
- Multiple complex data replication technologies in use
- Managing and testing an effective business continuity plan within a diverse compute environment
- Difficulties in testing and executing disaster recovery plans
- Performance and capacity limits reached with existing storage solution
- Complex application and file storage provisioning
- Different retention policies for backup jobs at local and recovery sites

SAXIS Solution

EMC VNX5300 Fibre Channel block and NAS storage

A VNX5300 was deployed at the production site in Victoria and the recovery site at Waterloo. FAST Cache acceleration was used to provide high performance storage for the VMware hosts. Windows shares run directly from the VNX and exisiting files were migrated along with their security permissions.

EMC RecoverPoint Continuous Remote Replication

Using the VNX's integrated write-splitter, RecoverPoint clusters replicate all writes to the recovery site without impacting performance of the SAN or overloading the WAN link. The remote RecoverPoint cluster provides both point-in-time restores and failover options.

VMware vSphere and vCenter Site Recovery Manager

vSphere at each site now runs nearly all of the server infrastructure including many recently migrated physical servers. With full RecoverPoint integration, Site Recovery Manager provides push-button fail-over and fail-back, and non-disruptive testing.

Background

Angel Trains is one of the UK's leading train leasing companies. It has been an owner and lessor of rolling stock for more than sixteen years, during which time it has earned an enviable record as a consistent, professional, innovative and large scale investor in trains.

Angel Trains is enthusiastic about finacing and delivering high quality, modern assets to its customers. They have invested £3.2 billion in new rolling stock and refurbishments.

EMC Data Domain

DD620 appliances at both sites are configured as targets for a single Backup Exec 2012 server. DD Boost works with the Backup Exec De-duplication engine to offload much of the de-duplication process to the media server which increases throughput. The engine also manages replication of the off-site copy allowing Backup Exec to seamlessly restore from either the local or remote copy.

> " *There were just too many physical servers so we needed to virtualise as much as we could and make the process as painless as possible.*
> *In addition the business could no longer be confident that in the event of a disaster it could reliably recover, we needed the process to be streamlined so we can easily test our business continuity plan on a regular basis.*

Benefits

- Significant reduction in physical servers and increase in storage capacity
- Local site high availability and downtime avoidance
- Increased confidence in the business continuity plan as DR tests can be regularly performed non-disruptively
- Managing and testing an effective business continuity plan within a diverse compute environment
- Manual management of workloads is complicated due to performance and capacity requirements
- Resources required to provision applications and storage

> " *The solutions were easy to deploy and Data Domain was integrated and up and running with Backup Exec within two or three days.*
> *A second Data Domain box was installed at our recovery facility which has enabled off-site copies of backup jobs to be automatically created. This has given us peace of mind in respect of recovering backup data in the event of a disaster.*
>
> **Russell Apted**
> **IT Manager,**
> **Angel Trains**

At a glance…

Company Size	51-200 employees
Industry	Transportation Leasing
Applications	Microsoft Exchange, SQL and SharePoint
	Oracle
Previous Environment	EMC CLARiiON CX3-40 with Fibre Channel connected physical servers
	Double-Take host based continuous replication for disaster recovery
Solution	Virtualisation
	Storage
	Continuous Data Protection
	Disaster Recovery
	Data Protection
Technology Highlights	EMC VNX5300 (Fibre Channel block and NAS storage)
	EMC RecoverPoint Continuous Remote Replication (CRR)
	EMC Data Domain DD620 with DD Boost for Backup Exec VMware vSphere
	VMware vCenter Site Recovery Manager
	Symantec Backup Exec 2012

About us

SAXIS delivers infrastructure solutions to match your needs and budget

We are not just a technology reseller, we are specialists that deliver high quality, well planned IT solutions to maximise your return on investment. Our role is to listen, understand and help you with an on-going strategy that will address the key IT challenges of your organisation.

We have a proven track record of delivering IT solutions across the UK from medium to large organisations. Our customer references clearly demonstrate how we have helped many organisations to reduce cost and boost productivity with high quality IT solutions and support.   SAXIS. Complex IT Problems, Simply Solved.