

Server Virtualisation and Business Continuity solutions



About Us

DefiningIT is a business solution provider specialising in providing solutions to companies based on their requirements. Unlike other IT providers we don't sell hardware and software and then build solutions based around these sales, we spend time in understanding a company's processes before a solution is discussed to ensure that we specify the correct solution.

Business Continuity and Server Virtualisation

DefiningIT has identified that there has been an increasing market over the last two years for business continuity systems and a significant move towards virtual server based systems. Virtual servers provide a more flexible approach to managing IT infrastructures and provide many more options over traditional physical systems when it comes to business continuity.



Over this period we have been aligning ourselves closely with partners who provide solutions in this arena as well as gaining skills in-house.

Accredited Partners

DefiningIT only works with accredited partners and the solutions we deliver are implemented by staff fully qualified in the technology they are deploying. Some of the technologies that we work with and the associated accreditations are listed on the left.

The Result

The solutions we produce using these technologies give customers great flexibility and piece of mind when it comes to business continuity.

Mini Case Study

The Requirement

The client had 30 physical servers each running a specific application at their head office. Their requirements were:

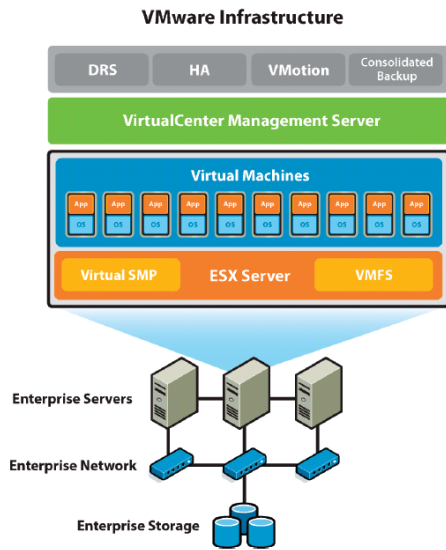
- To reduce their vulnerability to system outage and hardware failure - some of their systems were mission critical and they could only sustain a small period of downtime.
- Provide an environment where systems were load balanced.
- Have all data replicated to another physical site for DR purposes.
- Have all server systems replicated to another physical site for DR purposes.
- Allow the replica data and servers to be turned on at the flick of a switch in a DR situation.

The Solution

The solution implemented used a combination of VMWare's award winning Virtual Infrastructure 3 (VI3) software and HP EVA SAN technology.

A team of new servers were configured with VMWare ESX Server (part of VI3) and connected to an HP EVA SAN. The physical servers were converted to virtual VMWare servers using VMWare Converter and migrated onto the VI3 team. This meant that most of the company's servers were running in a VMWare virtual environment which meant that they could benefit from the other features of VI3. All of the server operating systems and data was stored on the SAN which allowed VMWare's load balancing (DRS) and high availability (HA) features to be used.

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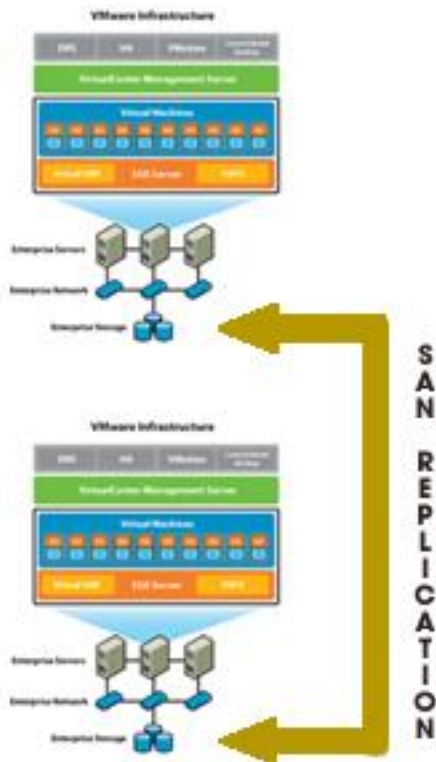
Business Continuity

In this configuration if a physical server running ESX Server, hosting one or more virtual servers were to become over worked due to increased processing (e.g. a database report being generated etc.) VMWare's DRS feature could sense this and using VMotion, automatically move the virtual server affected to another physical ESX Server in the team 'on the fly' with no downtime.

The other great feature which we implemented was VMWare HA (High Availability). As all virtual server data (OS and file data) is stored on the SAN then should a physical ESX Server fail (e.g. power or hardware failure) then VMWare HA would sense this and bring the failed virtual servers which were hosted on the failed physical host up on another physical ESX Server. This means that the failed virtual servers are automatically back up running again in minutes. These features bring considerable power to an IT department when addressing the issue of business continuity.

Your Next Step...

If you have any questions or queries about these technologies or DefiningIT's business continuity solutions then please feel free to contact us.



Full Disaster Recovery

These redundancy features, whilst providing great local continuity, do not provide any benefit should there be a total building loss DR situation, such as flooding or fire. To combat this, all data was replicated to another HP EVA SAN based at another physical site using SAN Replication. At this other site another VI3 infrastructure was configured and connected to the replicas of the virtual servers. Should there be a total building loss then the replicas could be started to allow the business to continue.