



Disaster Recovery & Virtualisation of Systems gives peace-of-mind to C&C



BUSINESS CHALLENGE

C&C Group had found their existing server IT Infrastructure was becoming increasingly difficult to maintain and data centre space was becoming an issue. Current disaster recovery procedures for each individual system meant a lot of time was required to compile and schedule testing with application team and vendors. To implement traditional fault tolerance of existing IT systems would have almost doubled the amount of physical servers in the Infrastructure. C&C Group needed a solution to overcome existing limitations without loss of reliability and manageability.

CUSTOMER OVERVIEW

C&C Group plc is a leading manufacturer, marketer and distributor of branded beverages in Ireland and the UK. C&C manufactures the leading Irish cider brand, Bulmers, and the premium international cider brand, Magners, for export to the United Kingdom, the United States and Continental Europe. C&C also recently acquired the Tennent's beer brand which is primarily sold in Scotland and Northern Ireland. The company also distributes a number of beer brands in the Scottish, Irish and Northern Irish markets. C&C is headquartered in Dublin and its manufacturing operations are based in Clonmel, Co. Tipperary and Glasgow, Scotland. C&C is listed on the Irish and London Stock Exchanges

INDUSTRY

Food & Beverage

ORGANISATION SIZE

1000+

C&C Group engaged with their Enterprise IT partner, PFH to examine how virtualisation could make a difference to the overall operations of the data centre. Disaster Recovery of systems was to be a major factor in the design process. PFH recommended that the C&C Group implement a VMware vSphere solution. It conducted a VMware Capacity Planning exercise which produced a detailed analysis of the existing physical server Infrastructure. This analysis and report allowed PFH to size a solution which would allow C&C Group to consolidate majority of their physical servers to virtual systems running in a consolidated high performance environment. VMware have proven to be the market leader in virtualisation hypervisor space and have a richer, more stable feature set compared to rival competitors in the hypervisor market.

SOLUTION

PFH presented C&C Group with a virtualisation solution which was based on VMware vSphere running on new HP DL380 G6 high performance



servers. The solution also included HP Storageworks EVA4400 fibre channel SAN (Storage Area Network). Disaster Recovery requirements stated critical business systems were to be recoverable at a remote location with minimal recovery time and complexity. The solution includes a production VMware vSphere HA/DRS Cluster at the main data centre in Clonmel, allowing for replication of critical VM's (Virtual Machines) to a DR VMware vSphere cluster at a remote location.

The project implementation started in January 2010 with the installation of new HP server and storage hardware for their production and DR environments. PFH and C&C Group IT staff reviewed the results of the VMware Capacity Planning report and compiled a schedule allowing systems to be converted from physical with virtual machines (P2V Process).

To consolidate existing physical systems to virtual machine the native VMware vConverter tool was used to migrate all systems into the new VMware vSphere Cluster. Once existing physical systems were migrated and made live in the new virtual environment, they immediately took advantage of the HA (High Availability) feature within VMware vSphere. This HA feature allows for quick recovery of virtual systems to another VMware vSphere host in the event of a failure to the active host where the virtual machines reside. To balance virtual machine loads across all vSphere hosts, DRS (Distributed Resource Scheduler) was enabled. In the event of a virtual machine requiring more CPU or Memory resources, VMware vSphere cluster will automatically decide which host best suits the processing needs and the virtual machine will be migrated to this host using the VMotion live migration feature. VMotion is a key feature to the VMware vSphere environment and allows for instant live migration of a virtual machine between physical VMware vSphere hosts without end users losing access to the running systems.

Double-Take Software was chosen to replicate critical VMs between the Production and DR environments. Double-Take Availability provides data protection, ensures minimal data loss and enables immediate recovery from any system outage. Double-Take Availability continuously captures changes as they happen and replicates those changes to a virtual machine at the DR location. Real-time replication means that data is consistent and up to date at the DR site. In the event of a situation that calls for DR plan to be enacted, C&C Group IT can bring the critical DR virtual servers online with all data being up to date.

CORE TECHNOLOGIES USED

- VMware vSphere 4.1
- 4 x HP DL380 G6 Hosts with 64GB RAM in each Dual Quad Core Xeon X5560 in Production site
- HP Storageworks EVA4400 Dual Controller SAN with online and FATA storage in Production site
- 3 x HP DL380 G6 Hosts with 64GB RAM in each Dual Quad Core Xeon X5560 in DR site
- HP Storageworks EVA4400 Dual Controller SAN with online and FATA storage in DR site
- Quest vRanger Pro 4.5
- Double-Take Availability 5
- Double-Take Back-up 5

CUSTOMER BENEFITS

C&C Group to date has consolidated approx 80% of all legacy wintel systems to the new VMware vSphere Cluster. Power and cooling requirements have been dramatically reduced in the datacentre which contributes to a greener IT environment in Clonmel. Critical systems are now protected on many different levels with VMware vSphere HA/DRS, Quest vRanger Pro backup and Double-Take replication software. The IT team now has a single pane view of the entire virtual environment, which allows them to monitor and respond to alerts immediately.