



JISC RSC Scotland South & West Case Study @ Barony College

Server Virtualisation

Ian Linwood - IT Services Manager at Barony College near Dumfries has managed a server convergence project that not only made significant savings, but also enhanced IT service delivery in the process.



About the Institution

Barony College is a land-based college set in a stunning 288 hectare estate in the south west of Scotland. Barony provides programs in agriculture, animal care, engineering, equine studies, fisheries studies, forestry and horticulture. For over 25 years students from across the UK and overseas have been attracted to study part-time, full time or residentially.

The Challenge

When Ian joined Barony he inherited an ageing IT infrastructure that was in urgent need of updating. With over 30 legacy servers that were no longer able to run the latest versions of Windows server, the result of which meant that the demands of staff and students were not being met. Services were unreliable as hard drives regularly broke down and applications were running slow or failing altogether, as software could not be updated on the legacy hardware.

As there was no warranty available, Ian spent much of his time maintaining the equipment himself rather than doing more beneficial activities such as enhancing IT services.

The cost of replacing the legacy servers was proving to be prohibitively expensive so Ian sought alternatives without the high cost of ownership associated with so much hardware.

The Activity

With some investigation Ian discovered that using Server Virtualisation (namely the VMware suite of products), the cost of server ownership could be vastly reduced. He then went about building a business case to present to senior management.

Over a 5-year period the traditional server cost of replacement and ownership came to £75,000 including the cost of power consumption and running air conditioning.

With a 3 server cluster creating a virtual environment to host all 30 servers, the cost of ownership over the same 5-year period was brought down to £30,000 including power consumption.

A total saving of £35,000 over 5-years (£15,000 of that being energy savings alone)

The Outcomes

John Hammonds the Technical Support Officer has observed that with VMware a new development or testing server can be easily created in half an hour where as before server hardware would have to have been procured in a tender process, this means new services can be developed and tested as required. Disaster recovery backups are made automatically overnight and stored in another building across the network. John Hammonds suggests that the testing of anti virus products and systems updates reduces the risk of live services being interrupted if something goes wrong as can happen during an update. Owning less hardware also increases reliability, and simplifies the infrastructure resulting in a more robust service as automatic failover and system redundancy is built into the design. The Barony user community has already fed back that they are experiencing a much more stable & reliable service.

Lessons Learned

Ian downloaded the free trial version to try out physical to virtual conversion and found that services were more stable and performed better in a virtual environment. With a single management console that summarizes all servers' performance on one screen it is easy to see how systems are coping with the workload.

This project was too risky to implement without in-depth expertise therefore a third party consultancy was engaged to implement and handover as a complete system.

Useful Links

Listen to the Interview; <http://bit.ly/gDootQ>