Last year we spent around £100,000 on setting up a virtualised server infrastructure using a product known as VMware ESX server.

Following a very successful 12 months where we have begun to virtualise some of the major university systems, more systems will follow in 2009/10.

Our very conservative financial projections show that by the end of the 2009/10 financial year, we will have saved around £80,000 in replacement hardware costs and will have also covered our original £100,000 outlay. This saving will grow by roughly £5,000 for each server we virtualise and don’t have to replace in the future.

There are currently 43 virtual servers in live service. Examples of some of the systems which are already on the virtual infrastructure are:

- Wisdom
- Library system
- Timetabling (Celcat)
- E-mail
- Epurchase
- Virtual campus tour
- Local Asset Register
- WYLLN website
- Conference booking system

The following systems are next on the list to be considered for virtualisation.

**Active Directory**
We are currently in the process of migrating some of the Domain Controllers (DC) to the VMware server cluster. At Queensgate the intention is to have 3 virtual and 1 physical DCs. We will also retain a physical DC at each of Oldham and Barnsley.

**DHCP**
This currently resides on two physical servers, one for staff and one for students. Both of these will be virtualised in the next few weeks onto new virtual servers.

**LCMS**
This system currently comprises 6 physical servers. There is a plan underway to virtualise all of these servers. If the virtualisation is successful this would save an estimated £49,000 in replacement hardware costs.

**The Following systems are being considered for virtualisation.**

**ASIS**
The servers which host ASIS are due to be replaced in October 2009. We will shortly be making decisions as to whether we can virtualise ASIS or whether we need to continue to host this application on physical servers for the foreseeable future.

**Mobile Home/Desktop**
This system is currently being reviewed by the Infrastructure Review Group with a view to assessing it’s suitability for virtualisation.