Imperial College Union
Web Server Upgrades (imperialcollegeunion.org)
A paper by the President

Background

Imperial College Union operates two sets of servers for web-hosting: two for clubs and societies (*heeps*, due to be retired, and *dougal*, which is new), and two for imperialcollegeunion.org.

Currently imperialcollegeunion.org is run off, pinky and perky, which were purchased in May 2006. One is used to run the live site and the other runs the database that underpins the site.

In late September and early October of 2009 the site experienced considerably higher traffic than ever before causing the site to consistently crash. This resulted in the site being down for extended periods of time. Our web developers managed to solve this issue by removing the stage and development versions of the site that we use to test and deploy updates, changes and bug fixes. Since then we have been running only the live version of the site. As such we have not been able to make any changes to the site's code including a number of necessary bug fixes.

Solution

The long-term solution to this problem is to replace one or both of our servers that currently run the website. Generally the lifetime of a server that is used for 'business critical' applications is three years. As such we should be looking to replace these servers soon even if they were still fit-for-purpose. Any server that is replaced could be easily be reused for other online systems that we currently run.

The three options, put forward by our web developers, are as follows:

1. One new server for both web and DB

If ICU chose to go down this route there would be a speed upgrade for the website but there is the risk of hardware failure issues as we rely on a single server.

Cost: £1,690.00 exc. VAT and shipping

2. Two new servers, one web, one DB

This would provide a big speed boost for the website and help future proof ICU's hosting, but is a more expensive option than option 1.

We would deploy the two existing servers to run internal services (e.g. club management/budgeting and the web ticketing system, both of which are becoming more heavily used).

Cost: £3,380.00 exc. VAT and shipping

3. One new web server, one old server for DB

This could be a good cost effective option but there is the potential of DB issues as the web server will be much faster. It has been suggested that if we did choose this option, we should have 1 new web server, 1 DB, and 1 backup server.

Cost: £1,690.00 exc. VAT and shipping

Decision Required: To select option 1, 2 or 3 and allocate cost + 10% from the Executive Reserve, in case costs vary between quote and payment.