



The Knowledge Network

## **RENOWNED ENGINEERING INSTITUTION CHOOSES AMD PROCESSOR-BASED SERVERS**

*In modernising its customer relations management system the Institution of Engineering and Technology chose AMD processor-based server equipment.*

### **Challenge:**

- Computerise an archaic paper-based membership records system
- Integrate numerous disparate PCs and databases into one cohesive customer relations management system
- Boost performance and achieve best data throughput to minimise complaints from members

### **Solution:**

- Conducted feasibility study to appraise benefits of various competing server and software platforms
- Prepared in-house benchmarking process to accurately assess specific performance advantages of AMD Opteron™ processor-based servers
- Embarked on phased upgrade plan, installing AMD Opteron processor-powered HP ProLiant servers

### **Impact:**

- 150,000 membership records successfully migrated to a single, integrated database
- Data throughput considerably higher than expected, with no bottlenecks

- Committed to further investment, with additional AMD Opteron processor-based servers being installed to enable new projects

### **Setting the scene: Past, present and future**

The Institution of Engineering and Technology (IET) is Europe's prominent professional engineering society, with more than 150,000 members across the continent and beyond. A not-for-profit organisation, its declared mission is to represent the profession of electrical, electronic, manufacturing and systems engineering and related sciences, as well as acting as the voice for the same in matters of public concern.

The Institution has been serving its members for well over a century, though over the decades both the organisation and its name have evolved to reflect changing times. It began life in 1871 as Society of Telegraph Engineers but in 2006 became the IET, following a merger of the Institution of Electrical Engineers (IEE) with the Institution of Incorporated Engineers (IIE). The full history of the IET can be explored at [www.theiet.org](http://www.theiet.org).

To prepare for a bright future, the newly-formed Institution was determined to bring its membership system up to date. The records had for years been managed using a mix of paper and individual PCs – not fit for a modern organisation.

### **Challenge: Swapping paper for power**

Alan Gray, IT technical architect with the IET, realised he faced a mammoth job when confronted with the prospect of modernising the Institution's membership database. Over many years, various disparate systems had evolved at the IET for dealing with the membership issues. The existing systems worked but all were in desperate need of updating. Put another way, trying to manage a membership of 150,000 (and growing) with a bunch of disjointed PCs and a load of paper-based records really wasn't going to cut it for much longer.

"There was just so much paper in the system," explains Gray, "and it was resulting in inconsistencies in the membership records. In my role I'm constantly looking at new systems and hardware releases and a modern customer relations management (CRM) system was a must-have."

But though apparently easy to summarise, the problem was going to be far from simple to solve. As well as the paper records, previous attempts to computerise matters had led to over 20 PCs running a collection of broadly un-integrated databases and management tools. Bringing all this together in order to create a consistent and reliable CRM system able to serve the IET and its membership long into the future would take considerable effort – not to mention lots of computing power.

**Solution: Benchmark for the best**

But just how would the IET go about turning 150,000 unorganised membership records into a dependable, integrated customer relations management system fit for the modern world? To be sure, when creating a system to deal with people equipped with the high level of technical savvy typically possessed by the average IET member, it doesn't pay to make mistakes. Clearly, the team in charge couldn't afford to make the wrong choices.

For Gray and his colleagues, the renewal process began around three years ago, with a feasibility study. As part of this, Gray organised and conducted an exhaustive in-house benchmarking process. This took in a variety of different server and software platforms, including the AMD Opteron™ processor-based equipment that would ultimately form the backbone of the IET's new CRM setup.

"I met representatives from AMD at an industry symposium," remembers Gray, "and they explained to me the architecture of AMD Opteron processors. From our discussion, I decided that it would be worth our while investigating AMD processor-based servers."

The IET wishes the detail of its benchmarking process to remain confidential. However, the Institution was sufficiently impressed by the results turned in by the AMD Opteron processor-based servers tested by Gray's team to authorise a significant investment in the new customer relations management system. As part of this process, the IET purchased and installed 16 HP ProLiant BL465c server blades, powered by AMD Opteron processors. These were used for system testing and development. Later, AMD Opteron processor-powered HP ProLiant DL385 servers

were commissioned from a hosting company to support the IET's CRM system as it went live.

### **Impact: Fast throughput, no bottlenecks**

The IET's entire membership database of 150,000 records is now off paper and safely installed in a customer relations management system powered by AMD Opteron processor-based servers. As noted, the Institution wishes to keep its benchmarking procedures and results private but there is no doubt in the mind of IT technical architect Alan Gray that the choice of AMD Opteron processor-based servers was the right one.

"Since implementing the new AMD processor-powered CRM, the number of complaints from members has decreased," Gray says. "However, that's a spurious baseline, because any system would've been better than what we had before. What has really surprised us, though, is that we were expecting bottlenecks to appear – but they didn't. Indeed, once a few minor software bugs had been ironed out, everything has proved very smooth and the throughput provided by the AMD-based servers is making us more than satisfied."

Buoyed by the success of its first AMD Opteron processor-based server project, the IET intends to continue its investment in AMD technology. The Institution believes that the architecture of AMD's processors are the right choice for its future. As Gray explains: "This first phase was something of a suck-it-and-see period for us. But there are another couple of projects on the go at present and it is my intention to use AMD-based servers for these as well."

### **About AMD**

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