

## CISCO VOICE AND DATA NETWORK ENABLES 21ST CENTURY NETWORKING

**Aston University - a pioneer in technology for education - has deployed a Cisco IP communications network to support voice, video and data services around its campus and improve education.**

### Ageing network and telephone systems

Aston University - located on a single campus in the centre of Birmingham - has a prestigious track record for academic achievement. The Times Good University Guide 2005 ranked Aston as 22 out of 99 UK universities and placed the Aston Business School 3rd for business and management studies.

Aston has become a leading academic institution, not just because of its teaching excellence, but also for ICT (Information Communications Technology) infrastructure investment. The Times ranked Aston 16th highest for spending on student facilities and one of the most successful investments has been the university's ICT network. The previous network and phone system had been running for 15-25 years. They were unreliable and unable to support the kinds of applications needed for modern education. For example, the cost of maintaining the network was increasing every year. Aston realised that they could significantly improve education, administration and communication by changing the network infrastructure.



Aston carried out a comprehensive project tender and Cisco Systems was selected for the University's ICT network. "Of all the vendors, Cisco made a considerable investment in time and effort to get to know us and understand the challenges we faced," says Fahri Zihni, Aston University's new IT director. "Cisco technology and its ability to integrate voice, video and data effectively into a single network, led us to choose Cisco. The company has now become one of our most trusted advisors."

### EXECUTIVE SUMMARY

#### CUSTOMER NAME

- Aston University

#### INDUSTRY

- Education

#### BUSINESS CHALLENGE

- Demand for e-learning from students
- Maintain leading position in university education
- Support research and collaboration
- Improve decision making
- Replace a 25-year-old voice and data network

#### NETWORK SOLUTION

- Campus-wide Cisco video, voice and data network

#### BUSINESS VALUE

- Delivers flexible e-learning and web-enabled applications that enhance the student experience
- Supports modern devolved administrative processes through improved access to information
- Extension mobility enables more effective use of staff time
- Helps generate additional income by supporting new services

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### UK's first university to deploy integrated voice, video and data

As a result of its innovative approach, vision and the deployment of Cisco technology, Aston was the first university in the UK to deploy a fully-converged voice, video and data network across the entire institution.

Aston has replaced its entire analogue video, data and telephone systems with a Cisco IPC (IP Communications) solution. This comprises over 300 Cisco switches, 1600 Cisco IP telephone handsets, Cisco CallManager and Cisco IPCC (IP Contact Centre), in a resilient configuration offering quality of service and high bandwidth. The network supports 1700 PCs and provides over 7000 network outlets.

One of the key requirements of the network is the capability to broadcast TV and video. Today it supports twenty TV channels and annual graduation ceremonies are now broadcast live around the university. For example, the inauguration of Aston's Chancellor, Sir Michael Bett was broadcast live across the university campus and into Centenary Square in the centre of Birmingham. The university is planning to use unified messaging so students and staff who have individual accounts for coursework and communication on the network, can access email and voice messages from any device connected to the network.

The Cisco IPC solution was deployed by global services company, Damovo, a Cisco Gold Certified Partner. Working together, Cisco and Damovo ensured the whole project was delivered on time and within budget.

### Cisco delivers Ferrari-like applications

Zihni likens the Cisco network infrastructure to a road system, "Cisco has transformed communication at Aston from a dirt track with pot holes into a super-fast highway over which we can deliver Ferrari-like applications. Cisco has enabled us to achieve a high-quality, state-of-the-art standard of modern education. With Cisco we're buying a piece of the future."

The Cisco network is already starting to help improve teaching and learning at Aston by providing much faster and more reliable access to educational information such as the university's e-learning environment. It is encouraging the further adoption of virtual learning environments and related technologies, thus promoting a fully interactive and flexible learning development approach.

### Streamlining the Clearing Process

Aston University has adopted Cisco's IPCC contact centre software which allows the flexible creation of virtual contact centres that can expand or decrease to meet demand," says Mike Roberts, Aston's Head of Corporate Information Systems. "Aston faces some unusual communications challenges, as do other academic institutions. After the final secondary school exam results have been released, huge numbers of potential students call the University to check whether they have a place. Previously, Aston would have to set up a small co-located team to field these calls.

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**Fahri Zihni**  
IT Director  
Aston University

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Cisco IPCC enables the Clearing & Confirmation telephone number - which can now be just one number instead of several - to be routed to specific staff across the institution. Staff who used to relocate to a dedicated call centre room can stay at their own desk and take calls. "This means staff don't have to move, but are available immediately during peak periods, irrespective of where they are located," says Roberts.

"A key feature of the network is the ability to deliver real-time services such as telephony, TV and video," said Dennis Mottram, Head of Network Strategy. "The Cisco network means that students can access both live and archived video material from anywhere around the campus to support teaching and learning." The University has a dedicated business unit, Aston Media, that produces a wide range of video content for university and business training and students can access relevant material via the network. A key element is the capability to use the network to deliver content to Aston students and partners via the regional network, which interconnects educational institutions.

Zihni says, 'What the Cisco solution enables us to do is improve academic and support services. Media rich learning, teaching and research materials can now be provided over the network. It also proves that academic departments, support services and external suppliers can work collectively and collaboratively to achieve common aims and objectives and deliver success.



Cisco technology helped Aston become the first university in the UK to deploy a fully-converged voice, video and data network across the entire institution.



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