



Cardiff University

INTRODUCTION

Cardiff University is an ambitious and innovative university located in Cardiff, Wales, UK. The 26 academic schools at the university are divided into three colleges: Arts, Humanities, and Social Sciences; Biomedical and Life Sciences; and Physical Sciences and Engineering. The University houses 7,500 students from more than 100 countries.

"CRESTRON ALLOWS CARDIFF UNIVERSITY TO CONTINUE TO BUILD ON OUR SUCCESSES. CRESTRON TECHNOLOGY SUPPORTS THE DELIVERY OF A UK-LEADING CURRICULUM FOR LIFE SCIENCES' STUDENTS AND SIGNIFICANTLY INCREASES THE CAPACITY FOR BOTH UNDERGRADUATE AND POSTGRADUATE TEACHING IN BIO-INFORMATICS, COMPUTER MODELLING BASED APPROACHES, AND DATA-DRIVEN BIOLOGY."

Pete Dunsire

*Senior AV/IT Project Manage Instructional,
Cardiff University*



THE CHALLENGE

Cardiff University recently increased its capacity for progressive and innovative teaching with the opening of a brand-new e-Learning and e-Assessment Facility (eLEAF). As eLEAF offers a relatively new teaching approach for Cardiff University, they wanted complete flexibility, as well as the ability to expand in the future. Pete Dunsire, Senior AV/IT Project Manager at Cardiff University had an idea of how eLEAF was going to operate, but wanted the system to be able to evolve based on feedback of both students and staff. An important additional requirement was ensuring the solution met the university's environmental standards.

THE SOLUTION

Since they have successfully worked together on several projects in the past, full-service AV integrator Reflex and Cardiff University teamed up to bring the eLEAF facility to life. The facility, consisting of 165 workstation computers and multifunctional zoning and sliding partition walls, accommodates a range of activities, from training and private study to small and large group teaching and practical classes integration to facilitate a better audio and video experience for the students outside the classroom, as well as a better in-room experience for faculty to control this new technology.

"CRESTRON'S TECHNOLOGY DOES EVERYTHING WE ARE LOOKING FOR AND CONTINUES TO IMPROVE THROUGH UPDATES. IT IS FULLY SCALABLE AND READY TO BE BUILT UPON WHEN WE ARE READY."

Pete Dunsire

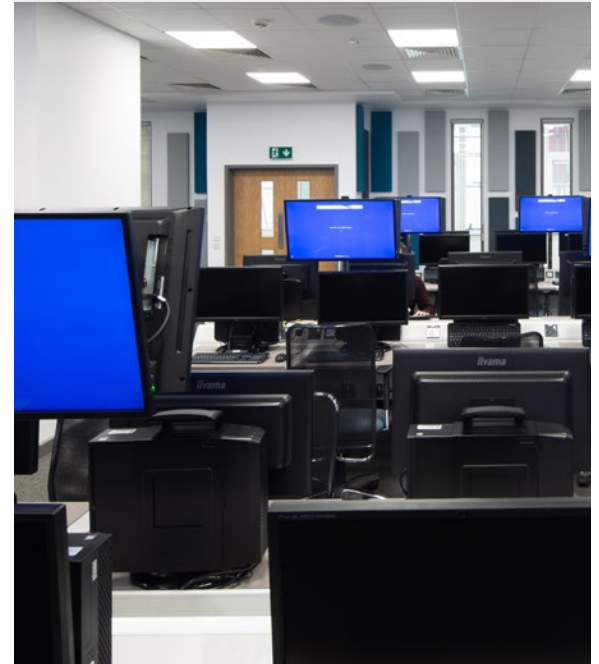
*Senior AV/IT Project Manager Instructional,
Cardiff University*

THE TECHNOLOGY

Given the advantages of an AV-over-IP approach for this project, and the extensive – and positive – experience Cardiff University has with Crestron technology, integrator Reflex suggested a system based on Crestron DM NVX® AV-over-IP. DM NVX offers users significant benefits in flexibility and simplicity over a traditional dedicated AV matrix solution. And since DM NVX can be installed by using the university's own structured cabling and data network, the installation was also greatly simplified, and the cost was kept to a minimum.

DM NVX encoder/decoders formed the basis of the AV distribution. Crestron amplifiers and switchers were also used as part of the solution, along with Crestron touch screens and control processors to provide convenient control for the lecturer. Occupancy sensors are used to identify if the room is in use.

For configuration, control and management of the AV network, Cardiff University implemented Crestron DM NVX Director™ virtual switching appliance. The solution manages large networks of DM NVX devices, routing AV signals, and simplifying integration with one or more Crestron control systems. The DM NVX Director provides the virtual equivalent of a hardware-based DM matrix switcher for easy central management. The DM NVX Director virtually emulates the functionality of a traditional hardware based DigitalMedia™ matrix switcher, routing high-quality 4K streaming AV signals throughout a room, building, or campus. It effectively eliminates the need for a physical switcher, providing the virtual equivalent running on the AV network.



"OUR STAFF AND STUDENTS ARE EXTREMELY HAPPY WITH HOW INTUITIVE AND USER FRIENDLY THE TECHNOLOGY IS. THE AV/IT DEPARTMENT APPRECIATES THE FLEXIBILITY AND HOW EASILY IT CAN BE MANAGED AND DEPLOYED.."

Pete Dunsire

*Senior AV/IT Project Manager Instructional,
Cardiff University*



RESULTS

The new facility represents a capital investment from Cardiff University and is indicative of its commitment to expanding opportunities for independent learning, progressive teaching, and cutting-edge research. The facility offers students and lecturers access to an interactive AV system, huddle working pods, multimedia communications, and imaging facilities, which increase opportunities for interactive teaching activities and enhance the overall student learning experience.

"IT IS VITAL THAT WE PROVIDE STUDENTS WITH OPPORTUNITIES TO VISUALISE, INTERACT AND ANALYSE THIS DATA, AND THE TECHNOLOGY HOUSED IN ELEAF WILL FACILITATE OUR TEACHING OF THESE NEW EMERGING AREAS OF BIOLOGY."

Pete Dunsire

*Senior AV/IT Project Manage Instructional,
Cardiff University*

Featured Products

DM NVX® 4K60 4:4:4 HDR Network AV
Encoder/Decoder
DM-NVX-350

DM NVX Director™ Virtual Switching
Appliance for 80 Endpoints
DM-XIO-DIR-80

7 in. Touch Screen
TSW-760

3-Series® Control System
CP3

4x1 4K HDMI® Switcher
HD-MD4X1-4K-E

1-to-2 4K HDMI® Distribution Amplifier
HD-DA2-4K-E

Dual-Technology Occupancy Sensor
GLS-ODT-C-CN

Remote Temperature and
Relative Humidity Sensor
C2N-RTHS