



Donagh Quish, Network Administrator, eircom and Marcus Doran, Avocent Sales Manager, Ireland inspect the Avocent KVM installation

Case Study: **eircom combines analogue and digital for data centre command and control**

“Together, the AMX and DS Series comprise the most user friendly network management solution we have seen. The overall solution provides significant benefits for the large-scale data centre operator. The choice of analogue or digital, or a combination of both, provides very adequately for our needs now and in the future.”

*Donagh Quish
Network Administrator, eircom*

● *eircom* is Ireland’s leading communications company, providing a full portfolio of voice, data and Internet solutions over one of the most technologically advanced networks in the world.

Offering hosting services to the Irish Market since 1997 from three centres – Dublin City Centre, Dundrum and the Citywest Business Campus – *eircom* offers customers the ideal environment in which to house their business-critical hardware while providing a range of IT solutions that allows them to get on with running their business. The company is uniquely positioned to combine service offerings in Hosting, ISP services and Telecommunications network services into a single managed solution offering

The challenge

eircom’s data centre facilities comprise centralised banks of over 400 servers across multiple platforms including Dell, Compaq and Sun running a mixture of operating systems including NT, Windows 2000 and various flavours of Unix. The systems run hundreds of differing applications including exchange email servers, SQL and Oracle database servers, remedy fault logging database servers and pumpkin call centre traffic analysis servers.

Each centre has 24/7 monitoring and operates in a highly secure environment. Constant vigilance is maintained on both an automated and operator-initiated basis. System-wide checks take place at frequent intervals including analysis of performance metrics, minesweeper implementations and firewall monitoring.

To meet its advanced network management needs and to provide scalability for the future, *eircom* has combined a range of Avocent’s analogue and digital KVM switching solutions – the AMX and DS Series. Avocent’s XP range of modular matrix KVM switching systems are also used extensively and these are being integrated successfully with the new combined analogue and digital installation.

The solution

eircom implemented the powerful Avocent AMX analogue matrix switching solution at its Dundrum data centre and Avocent’s DSR™ digital switching solution at the company’s multimedia data centre at Citywest.

Avocent’s AMX matrix switching solution is designed to support growing server installations allowing simultaneous control and operation of multiple servers independently of each other.

It intelligently facilitates multi-user, multi-platform and multi-rack server environments with end-to-end CAT 5 connectivity for access from the desk to the server.

The AMX5000 is a 32-port main switching box connecting to clients across a CAT 5 interface. The matrix switch allows access from a single point or simultaneous access for up to eight users throughout the data centre. The AMX5100 is a desktop user station that connects the client to the AMX5000. Avocent's OSCAR® on-screen management tool then allows for convenient switching between devices or AMXWorks (an advanced Java-based system administration tool) allowing for centralised administration. The AMX solution can drive servers up to 1,000 feet away from the controllers' desks.

KVM over IP: the missing piece for server management

eircom also deployed Avocent's feature rich DS and DSR lines to provide remote access across TCP/IP connections. The company deployed the DS1800 digital KVM over IP solution at its Dundrum data centre to interface with the analogue XP solution already in place and to provide remote access. *eircom* also deployed six DSR KVM over IP switches (comprising of DSR1161, 2161 and 4160 appliances) at its Citywest multimedia data centre. This provides both local and remote access.

The DS1800 allows *eircom* IT managers to remotely access multiple racks of servers through an Ethernet connection. Video processing and compression algorithms minimise the required network bandwidth to transmit keyboard, video, and mouse (KVM) signals. The DSR KVM over IP switches enable access and control of up to 16 servers per unit either at the rack or from any location over standard IP connections. The DSR range uses DSRIQ smart cabling for an all CAT 5 solution to and from the rack.

Both the DS and DSR solutions feature the easy to use DSView Graphical User Interface (GUI). This is a client-side Windows application providing secure Click and Connect™ connections to any connected device, using IP connections and DES encryption.

Secure access: anytime, anywhere

Donagh Quish, Network Administrator at *eircom* explains that up to 40 of *eircom*'s network management staff have remote access using the DSView interface. "This level of accessibility can be increased where required. DSView provides an overall view of all connected servers. Through NT domain authentication, authorised users can identify and troubleshoot problems and shut down or reboot servers if necessary. The majority of issues are usually resolved remotely and direct intervention at the rack is increasingly rare. Each main server room also has a remote station as an additional back-up."

Using DSAuth user authentication software and the DSAdmin GUI, the network manager can easily validate requests for access to individual servers. DSAuth automatically stores user domains, permissions, topology and per-device contact information. The DS series also has NT security features which was one of the main reasons for its selection by *eircom*.

About Avocent

Avocent is the leading worldwide supplier of KVM switching and connectivity solutions that provide IT managers with access and control of multiple servers and network datacentre devices. Avocent was formed in July 2000 by the merger of leading industry innovators Cybex Computer Products Corporation and Apex Inc. Avocent's KVM solutions are distributed by the world's largest server manufacturers and installed in Fortune 100 companies around the world.

Headquartered in Huntsville, Alabama, Avocent has locations in Redmond, Washington; Sunrise, Florida; Chelmsford, Massachusetts; Austin, Texas; Shannon, Ireland; London; Steinhagen, Germany; Tokyo; China; and Singapore. For more information about Avocent products, visit www.avocent-europe.com.



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