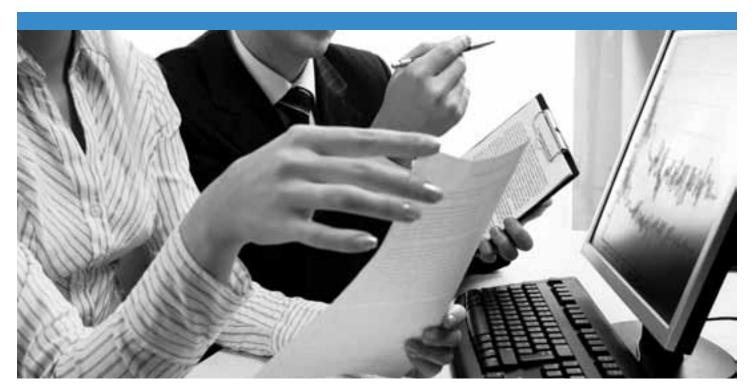


>>> Education



0118 965 6150 | www.blackbox.co.uk/education



Our commitment to you.

The Black Box Experience is all about passion for providing the best services, the best products and the best return on our clients' budget.

When you buy from Black Box Network Services, you put a mature, worldwide organisation with more than 35 years of experience to work for you. Black Box is the largest independent provider of voice and data network services with deep roots in networking products. Clients in 141 countries depend on Black Box for complete business communications networks from design and products through to installation and support.

Black Box offer:

- Free 24/7/365 Tech Support over the phone.
- More than 12,000 products such as KVM, Cables, Cabinets, LAN, WAN, Digital Signage, PLUS third party products.
- · Special pricing programs tailored to you.
- Custom build products, from a simple cable to a complex switching solution.

Our goal is very simple: we want you to consider Black Box an important part of your business!

The Black Box Team

Smart IT solutions for education.

Education has moved beyond the chalkboard into the computer age. Today's high-tech resources require the right tools to use efficiently in a classroom setting. It's one thing to have high-tech, it's quite another to use it in a timely and cost-effect way. Laptop computers, for instance, are an invaluable classroom tool. But it's not enough to have laptops, they must also be distributed, collected, stored, transported, charged and protected — all without monopolising valuable classroom time. Black Box has the solution to this and many other classroom challenges. To learn more go to www.blackbox.co.uk/education.

Including:

- Improve communications and emergency notification.
- · Cut equipment costs with virtualisation.
- · Protect, store and charge laptops.
- · Safeguard your network and premises.



Digital signage and multimedia

iCOMPEL™

- The easiest way to alert and inform students and staff
- Integrated hardware/software devices.
- Includes FREE layouts to customise with your school's logo.
- Works right out of the box.

Wireless Video Presentation System II (VPS II)

- Simplify presentations in large classrooms.
- Wirelessly send video and audio to a projector from a laptop.
- The instructor controls access by all participants.



Desktop computer virtualisation and laptop storage

VirtuaCore™ Desktop Virtualisation Computer Sharing

- Save thousands of pounds annually.
- Turn one CPU into two or four fully functioning workstations.
- Cut hardware, energy, and IT support costs, too.
- Not a thin client technology.

Laptop Carts

- Store, charge, and transport up to 32 17" laptops.
- Easy to roll from room to room.
- Recharge laptops overnight with built-in power strips.



Learn more at www.blackbox.co.uk/goto/education



Network security and optimisation

Veri-NAC™

- Control who can connect to your school's network.
- Vulnerability management and network access control.
- Agentless and non-inline design improves ROI and is easy to use.

Intelli-Pass™

- Fingerprint identification system for securing school data enclosures and centres.
- Lock opens only when an authorised user touches the scanner.



Cabling Solutions

Structured Cabling

- CAT5e/6 Solid Bulk Cable:
 - -GigaBase® CAT5e PVC & LSZH.
 - -GigaTrue® CAT6 PVC & LSZH.
- Shielded coax cable for CATV, CCTV, and security systems.

LockPORT[™] Locking Patch Cables

- Secure your ports from unauthorised access and accidental disconnects.
- CAT5e/6 and LC—LC Fibre.
- Choice of colours and lengths.



Case Study: University of Sheffield.

The University of Sheffield was opening a brandnew, state-of-the-art building called the Information Commons (IC), a meeting and communications hub for students that has more than 1300 study spaces, 500 fully networked PCs, and a library with more than 100,000 volumes.

Because the IC was designed to make the most of the latest technologies and be a cutting-edge building, the internal signage was a crucial element of the design. The university wanted to use digital signage to deliver both media-rich content and general information to everyone using the building. In fact, the university decided it didn't want to add traditional signage until after the building had been open for some time.

University of Sheffield AV manager lan Knowles reviewed the range of potential solutions and knew he wanted a digital signage installation to target all users of the building — staff, students, and visitors.

Because the IC encompasses six floors, the system selected had to be flexible and robust. The digital signage would need to display multiple channels of content with both local and remote control capability. Plus, he determined that authorised staff on terminals throughout the six floors of the IC would need to make

local browser-based text updates. In addition, all the new AV equipment needed to be successfully networked with existing infrastructure and previous installations.

Mr. Knowles chose a system comprised of (18) iCOMPEL™ units from Black Box Network Services, combined with (18) Samsung LCD panels to provide a network of remote — and locally — controlled display sources.

The installation was completed in three working days, and all the digital displays were showing content shortly after. The project has given the IC a unique method of communicating with staff, students, and visitors. The dynamic display system with multiple channel applications carries the relevant messages very effectively and does so 24/7, providing the university with a 21st-century facility.

"Digital signage targets all users of the building — staff, student or visitor — equally, with relevant information for all."

Ian Knowles,

AV Manager, University of Sheffield

Read more at www.blackbox.co.uk

Case Study: Swanmore College of Technology.

The Background

The Swanmore College of Technology, a public secondary school serving 1300 students in Southampton, Hampshire, sought a suitable medium for communicating valuable information. The college, as the central school in a network that includes separate feeder schools wanted a solution that was modern, efficient, cost-effective and manageable both locally within the individual schools and centrally. Specifically the school wanted:

- Screens at the central site and within each of the nine feeder schools.
- Network connectivity between the main college location and the feeder schools, including FTP and proxy server access.
- The ability to control and create layouts for the feeder schools from a central location.

The Solution

The school chose the Black Box iCOMPEL™ system. Primarily, it was selected because it supports the ability to set up different zones with different content types. The system comes with a number of screen layouts that contain multiple zones for adding media. Users can manipulate zones however they want, and put them wherever they want, put zones on top of zones, and more.

The system was also chosen for its stability. The digital signage players are Linux® based and, therefore, more stable than Windows® based systems. With the system, Swanmore College of Technology publishes content to 10 different channels.

Nine player units each subscribe to the appropriate channel and are located in the nine feeder schools within a 10-mile radius. The school also installed an additional player in its college library.

Each screen displays a basic layout designed by the college. The layout contains two zones that the feeder schools can update locally, depending on what message they want to communicate to their particular students "ad hoc." In all, the layouts consist of a media zone, a text zone for school notices, an RSS feed containing BBC Newsround bulletins, the weather, the time and date, and school name and logo.

The Result

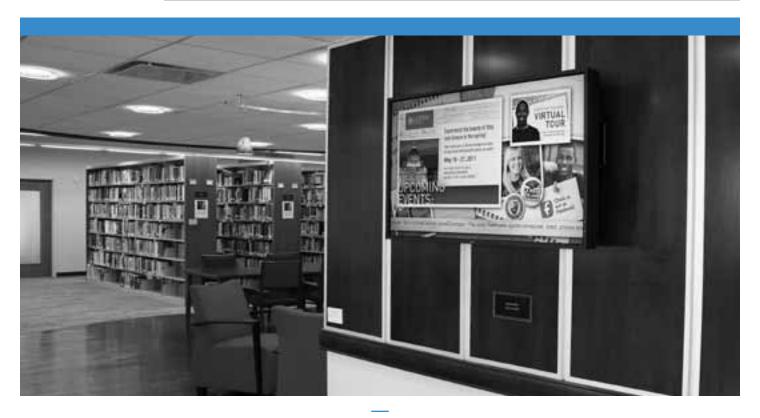
This solution not only met the school's expectations, but exceeded them. The flexible display and simple-to-use integrated software means content can be updated regularly without an excessive investment in time.

"We have found (it to be) a flexible and comprehensive system which allows ad-hoc users to quickly and easily update the screen whilst allowing us to make more complex changes where necessary."

Helen Woodland,

Community IT Techinican Swanmore College of Technology

Read more at www.blackbox.co.uk





Case Study: Cambridgeshire County Schools.

The Background

Black Box Network Services was chosen to be part of a project introduce regional broadband capabilities to the Cambridgeshire County Schools. This networking and cabling project, part of the "Connected Learning" Project, ensures students and teachers have reliable, fast access to on-line information, resources and services.

Black Box was involved in Phase One of the project, which included installing "business-quality" integrated data networks in more than 50 schools. The networks were designed to provide the infrastructure for effective access to a new, regional broadband network.

The Planning

Black Box worked closely with the county council's project team in network design, installation scheduling and post-installation site reviews. The planning was critical to allow for future growth, while setting the standard for future phases of the project.

Black Box consultant Graeme Woolly said "In projects of this type, careful planning is required, as a large part of the work took place whilst the pupils and teachers were at school, so safety is a first priority."

The Networks

Black Box installed Local Area Networks (LANs) in 50 schools. The LANs consisted of fibre backbones with CAT5e horizontal cable. A number of wireless access points were also installed in some schools. These provided pupils and teachers with a flexible networking solution rather than being physically connected into the wired network infrastructure.

The Future

Future phases of the project include broadband connectivity and school networks in the remaining 200 Cambridgeshire schools. This will enable on-line learning, enhanced curriculum-based activities, and improved administrative/teaching processes.

Patrick George, the school's Networking and Cabling Project Manager, explains the project further. "Connected Learning is about ensuring pupils and teachers have reliable and fast access to on-line information, resources, and services for the benefit of learners of all ages within the local community. The school LANs will also be able to link into other regional and national networks, including JANET, the private, government-funded network for education and research."

"Black Box has competitively and effectively met our needs throughout the first phase of the project, and we've been very satisfied with the quality of the work."

Patrick Grange,

Networking and Cabling Project Manager Cambridgeshire County Schools

Read more at www.blackbox.co.uk



Standardise on Black Box Network Services...

When you standardise on Black Box products for your network solutions, you can go from the data centre to the desktop using up to 12,000 products. Add our 24-hour FREE Tech Support, and you have dependable end-to-end solutions that solve your real-life network problems.

Cabling

- Deploy CAT5/5e, CAT6, CAT6a and CAT7 channel cable solutions
- Install structured cabling systems from the server room to the desktop
- Design entire networks with data communications cable and hardware including:
 - Copper/fibre optic/USB/SCSI/coax
 - Audio/video/keyboard/mouse
 - Cisco compatible
 - Token Ring/twinax/transceiver
- Serial and parallel
- Harsh environment/security
- Distribution/patch panels
- Jacks and wallplates
- · Connectors/adapters/terminators
- · Custom-made cables

Testers & Tools

- · Diagnose and certify networks
- Verify fibre and copper runs
- Troubleshoot cable and equipment
- Copper and fibre optic tools and testers
- · General-use tools and tool sets

Security

- Configure remote surveillance systems
- · Construct building access systems
- Secure your networks
- CCTV cameras/mounts/enclosures
- · Building access control solutions
- · KVM and network security hardware

USB

- Add Bluetooth® capabilities
- Connect USB equipment
- Share USB ports
- Extenders
- Switches
- KVM
- Networking
- Cables

Cabinets & Racks

- House servers and network-related equipment securely
- Create a safe and clean data centre
- Protect from environmental issues like dirt, weather, noise, heat, and power with:
 - Freestanding cabinets
 - Wallmount cabinets
 - Racks, drawers, and enclosures
 - Secure enclosures
 - Cable management accessories

Digital Signage & Multimedia

- Display digital signage in multiple locations
- Manage multiple display signals in real time
- Conduct wireless presentations
- · VGA, DVI, and HDMI products
- Extenders and switches
- Baluns
- · Video and audio equipment

Power & Surge Protection

- · Monitor power requirements
- · Back up critical equipment
- Protect data lines
- Power strips
- · Surge suppression
- · Environmental monitoring devices

Peripheral Switching & Sharing

- · Share peripherals
- Switch equipment electronically
- Statistical multiplexors
- Time-division multiplexors
- Copper/fibre solutions
- Data sharers/broadcast solutions
- · Manual/Electronic/Ethernet switches
- Fallback switches/KVM switches
- Power management switches
- · Console port managers
- · USB switches/ganged switches

Interface & Protocol Converters

- · Use DIN rail solutions
- · Connect incompatible hardware
- · Configure custom solutions
- · Interface converters
- Digital I/O and serial cards
- · SCSI®
- IBM® AS/400® and 3270 protocol converters

Networking

- · Design flexible Ethernet networks
- Drive data over fibre and copper
- Media converters
- Switches
- · Modems and routers
- Line drivers
- DSL extenders
- Bridges
- · Print servers
- · Serial, Ethernet, and laser solutions
- · Firewalls and network security
- · Legacy networking equipment
- · Share wireless peripherals
- · Create wireless networks
- · Network with PoE equipment
- · Antennas and access points
- · Cards and adapters
- CCTV cameras
- Device servers
- Laptop adapterUSB adapters
- Free space optics

KVM

- Share keyboards, monitors, and mice
- · Save on server room equipment
- Provide data room security and remote access monitoring
- KVM switches
- KVM extenders
- KVM trays
- · Specialty KVM products
- · Cables and accessories

...or choose from other well known industry names.

Combine our 12,000 products with a host of other products from other leading industry names. We are an approved supplier of thousands of branded products from a host of well known names. Call us for more details.



3Com	Brand Rex	ihse	Panasonic
Adder Technology	Cisco	Krone (ADC)	Patton Electronics
Allied Telesis	Cooper B-Line	Linksys	RAD
APC	D-Link	Marshall Trufflex	Raritan
ATEN	Excel	Minicom	Rose Electronics
Austin Hughes	Fluke Networks	NEC	Systimax
Avocent	Hellermann Tyton	NETGEAR	Transition Networks
Belden	HP Procurve	Nortel Networks	ZyXEL



Custom Cabling.

Create your own custom cables with Black Box.

Do we customise cable? Absolutely! In fact, Black Box designs and builds more than 450,000 custom cables every year. That's a lot of cable – and a lot of experience. So put that experience to work for you.

Need a custom-pinned cable? No problem. Have unusual connector combinations? We can assemble mixed-connector cables with no trouble at all. Does your installation call for specific lengths that aren't mentioned in the catalogue? Call us. We'll get you the cable you want in the length you need.

You can request cables with any or all of the following custom features: cable type, length, jacket type, connector type and gender, pinning, shielding and drain wire options. To help you determine the specifications for your custom cable, call our technical support on 0118 965 6000 or use our online custom cable and adapter wizard. This will take you through the design process step-by-step.

Convenient shopping.

It's easy to do business with Black Box.

We understand your business. You work hard every day taking care of your customers, that's why Black Box Network Services provides the right tools to make your job easier:

We provide fast quotes, aggressive pricing, same-day shipping, superior technical information, and much more.

How to order:

There are many ways to do business with Black Box Network Services. We provide you with maximum flexibility and many options so you can do business the way you want. We always recommend you first contact your Black Box Account Manager during normal business hours, but there are other ways to request quotes and place orders. Choose the way that is most appealing to you:

- · Contact your Black Box Account Manager during normal business hours.
- Fax orders: 0118 965 5001, 24 hours a day, 7 days a week.
- E-mail orders: sales@blackbox.co.uk.
- Mail orders: Black Box Network Services (UK) Ltd., 464 Basingstoke Road, Reading, Berkshire, RG2 0BG.
- Set up an account at www.blackbox.co.uk and shop using our Black Box On-line store.

Flexible returns.

Although we hope you never have to return a product that you have sold to a customer, returns are easy at Black Box, just talk to your Black Box Account Manager. If you need the unit repaired they will provide you with instructions and an RMA number for tracking purposes.

Packaging and shipping.

The shipping choice is yours. Black Box Network Services offers many shipping options. Need your products today? We can even arrange same-day delivery providing the goods are in stock. You can also elect to provide your own freight carrier or make arrangements to pay for shipping using your own shipping carrier account. Let your Black Box Account Manager know at the time you place your order which shipping method works best for you.



