

Army Foundation College

Tridium provides the British Army with an efficient foundation for the future!



Charged with training the British soldiers of the 21st century, the new Army Foundation College (AFC) in Harrogate is also employing an open building controls solution of the future from open framework specialist, Tridium.

“The Tridium solution is perfect for this type of open systems project.”

Built on the Army's existing site under the PFI scheme at a development cost of over £80 million, the new AFC is a flagship training centre for the Army Training and Recruitment Agency. This hi-tech, high quality residential environment represents the new way forward for troop training, housing around 1500 students and 420 staff in an 18 building campus that consists of accommodation in 132 new or refurbished quarter sites together with full academic and military training facilities. A key feature of the development is the new LONWORKS® building control system designed, installed and commissioned by 2Serve Ltd – the systems integrator for the project. 2Serve has unlocked the potential of this open control system through its use of Tridium's market leading NIAGARA Framework™, enabling delivery of the inter-operability, efficiency, flexibility and life-cycle cost-savings promised by the network.

“Thanks to Tridium, the LONWORKS® control system is easily accessible through a Web browser and brings real added value for the end-user.”

“The Tridium solution is perfect for this type of open systems project” says Mark Davenport of 2Serve. “It saves on capital cost and allows us to create a fully functioning open LONWORKS® control system, easily accessible through a Web browser and bringing real added value for the end-user.”

Continued overleaf

The Tridium Solution

The project

- Hi-tech, high quality, campus environment for troop training.
- Houses around 1500 students and 420 staff in an 18 building site with varied accommodation, academic and military training facilities.
- An open LONWORKS® building control system covers all building services, including HVAC, lighting, access control, alarm and security systems.

The requirement

- Cost-effective integration of the various multi-vendor devices on this open network to deliver the promised benefits of inter-operability, efficiency, flexibility and life-cycle cost-savings.

Tridium provides

- Market-leading NIAGARA Framework™ as the system architecture.
- NIAGARA Framework™ embedded within 9 JACE 5 series controllers.
- Tridium Web Supervisor software.

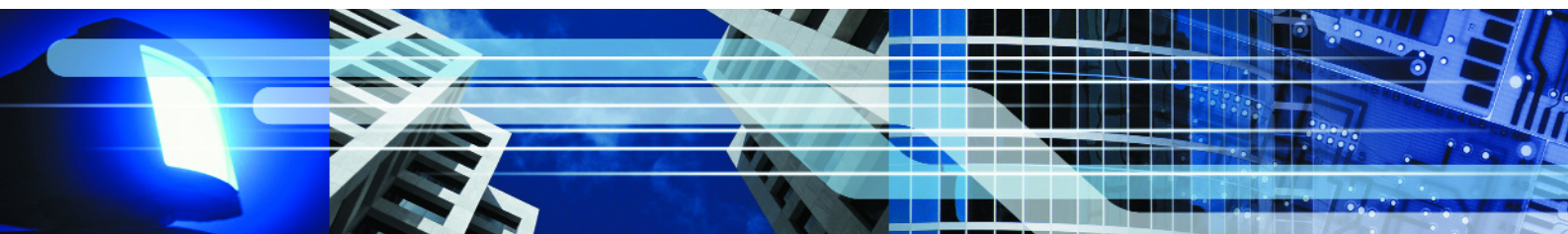
The results

- Different LONWORKS® compatible control devices from manufacturers, including TAC, Honeywell and Calon all bound and integrated efficiently and seamlessly into one network.
- Real-time control, data logging, alarm handling and scheduling functionality.
- Complete and easy access, supervision and adjustment of over 2500 data points on the system via a standard Web browser from any PC.

Conclusion

- Project integrator delivers a future-proof and fully functioning open control system, with products selected purely on “best of breed” criteria.
- NIAGARA Framework™ also achieves significant savings on engineering and capital costs plus the added advantage of reduced maintenance and training costs.

Powered by
niagara
FRAMEWORK™



Case Study

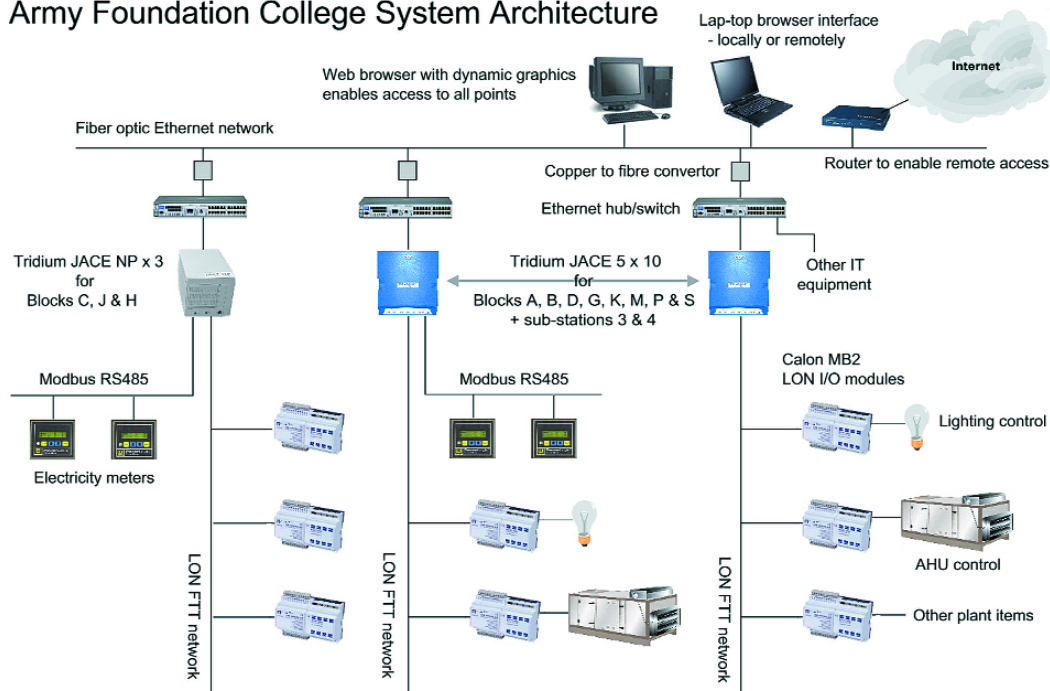
“ Using the NIAGARA Framework saves on capital cost and allows us to create a fully functioning open LONWORKS® control system. ”

All building services throughout the AFC, including HVAC, lighting, access control, alarm and security systems are connected through various LonWorks® compatible control devices from different manufacturers, including TAC, Honeywell and Calon and linked to Tridium's Niagara™ framework, incorporated within the company's JACE-5 controllers. The Tridium framework manages these multi-vendor devices in the most efficient and seamless way possible, providing real-time control, data logging, alarm handling and scheduling functions, as well as allowing complete and easy access to over 2500 data points on the system via a standard Web browser. Niagara's web serving graphics enable all supervisory actions, such as monitoring and adjusting the various sub-systems to be achieved from any PC without the need to load any special software, which reduces maintenance and training costs.

The campus buildings are linked with fibre-optics IP network for building-to-building connectivity. Each building contains one of Tridium's JACE-5 series controllers, which sits on the site-wide Ethernet network, providing integrated control, supervision, and network management for all the LonWorks® devices including the binding of the Lon devices. In the AFC's multi-building complex, the Tridium Web Supervisor™ software running on a standard PC, manages global control functions, and provides alarm handling and data archiving for the system.

The AFC was built as a PFI project by Jarvis plc, who will operate and maintain all buildings on the site for the next 30 years. M&E Contractor for the project was NG Bailey and building services consultants were WSP. One of the main attractions of the Tridium and Lon solution was the overall life-cycle cost savings of adopting an open rather than proprietary solution.

Army Foundation College System Architecture



About Tridium

Tridium is a US based company with their European headquarters in Buckinghamshire.

Tridium has established key strategic alliances with leading corporations in the energy services, building automation and data management industries.

Tridium markets its products to a wide range of controls manufacturers, HVAC equipment manufacturers, and a network of Tridium Systems Integrators.

Additional information about Tridium is available at www.tridium.com

TRIDIUM™

North America

3951 Westerre Parkway
Suite 350
Richmond, VA 23233, USA
Telephone: +1 804 747 4771
Fax: +1 804 747 5204

Europe

1 The Grainstore
Brooks Green Road
Coolham, West Sussex RH13 8GR, UK
Telephone: +44 (0) 1403 470290
Fax: +44 (0) 1403 741804

Asia Pacific

101 Cecil Street #10-11
Tong Eng Building
069533, Singapore
Telephone: +65 6 887 5154
Fax: +65 6 887 5342