TRIDIUM™

Case Study

iceSheffield Arena

HVAC systems opened to web-based control

Sheffield's new, world class sports venue, iceSheffield, is benefiting from a web-accessible HVAC control system, thanks to the project's open framework architecture provided by Tridium for M&E services contractor, N G Bailey & Co.

Built at a cost of £15.7 million, iceSheffield features two Olympic size ice rinks and seating for more than 1500 people in a state-of-the-art sports facility, located next to the English Institute of Sport at Attercliffe Common. All chillers, boilers and domestic hot water services at iceSheffield together with air handling units, featuring humidification and dehumidification plant, and lighting are controlled and monitored by a Cylon Building Management System. The HVAC controls architecture for the installation is provided by Tridium's established NIAGARA Framework™ which successfully fulfils the client's requirement for easily achievable, user-friendly, remote web access to the whole system.

> *"The flexibility to access the system remotely from any PC on the client's intranet or over the web, simply by inputting the relevant IP address, was a top priority"*

"The client, Sheffield International Venues (SIV), had specific demands concerning HVAC controls operation and monitoring for this project" explains Richard Wade, Controls Technical Manager at N G Bailey & Co. "The flexibility to access the system remotely from any PC on the SIV intranet or over the web, simply by

Continued overleaf

The Tridium Solution

The project

- A world-class sports arena for Sheffield International Venues (SIV).
- iceSheffield features two Olympic size ice rinks and seating for more than 1500 people in a state-of-the-art sports facility.
- Chillers, boilers and domestic hot water services together with air handling units, featuring humidification and dehumidification plant, plus lighting are controlled and monitored by a Cylon Building Management System.

The requirement

- To provide the client with easily achievable, user-friendly, remote web access to the whole system.

Tridium provides

- Market-leading NIAGARA Framework™ as the system architecture.
- NIAGARA Framework™ embedded within a single JACE 5 series controller.
- Web-based access to the control system over the SIV intranet.

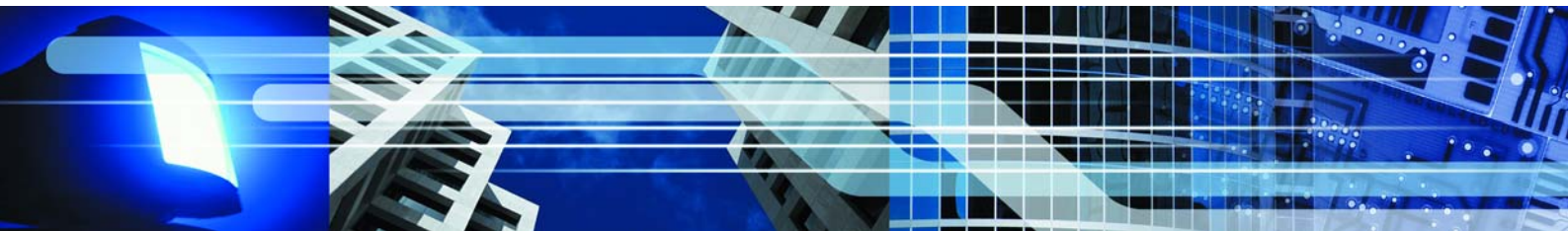
The results

- The NIAGARA Framework™ allows web access to the Cylon control system by automatically serving up its graphical information as web pages, ensuring that all supervisory actions, such as monitoring, adjustment, data archiving and equipment maintenance can take place from any PC on the SIV intranet or internet.
- This capability avoids the need for expensive BMS supervisory software and associated training costs.
- Fully open, web-based system architecture allows straightforward future integration of any new or replacement building services equipment, whether the equipment's controller uses MODBUS or any other controller protocol, such as, BACNET, EIB or LonWorks®.

Conclusion

- Thanks to Tridium's NIAGARA Framework™, all building services are easily accessible through a web-based control system architecture.
- If the client wants to extend or change the control system in any way, then he is not restricted to using any one brand, but can select the best equipment for the job, without affecting the integrity of the installation.

Powered by niagara FRAMEWORK™



Case Study

“Tridium’s solution brings us an added ‘future-proofing’ bonus”

inputting the relevant IP address, was a top priority. The Tridium solution allows us to do just that, and brings an added ‘future-proofing’ bonus as well – if the client wants to extend or change the control system in any way, then he isn’t tied to using any one brand, but can select the best equipment for the job, without affecting the integrity of the installation.”

Embedded within a single Tridium JACE control unit in the iceSheffield installation, the NIAGARA Framework™ allows web access to the Cylon control system by automatically serving up its graphical information as web pages. This ensures that all supervisory actions, such as monitoring, adjustment, data archiving and equipment maintenance can take place from any PC on the SIV intranet or internet, so avoiding the need for expensive BMS supervisory software and associated training costs. As well as proving easy to access and control, this fully open, web-based system architecture allows straightforward future integration of any new or replacement building services equipment, whether the equipment’s controller is using MODBUS or any other controller protocol, such as, BACNET, EIB or LonWorks®.

The iceSheffield venue officially opened in May 2003. It is part of Sheffield City Trust whose operating arm, Sheffield International Venues, has grown rapidly in the last six years to become one of the largest sport, entertainment and leisure groups in the North of England.

“There’s no need for the client to spend money on expensive BMS supervisory software and the associated training costs”

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