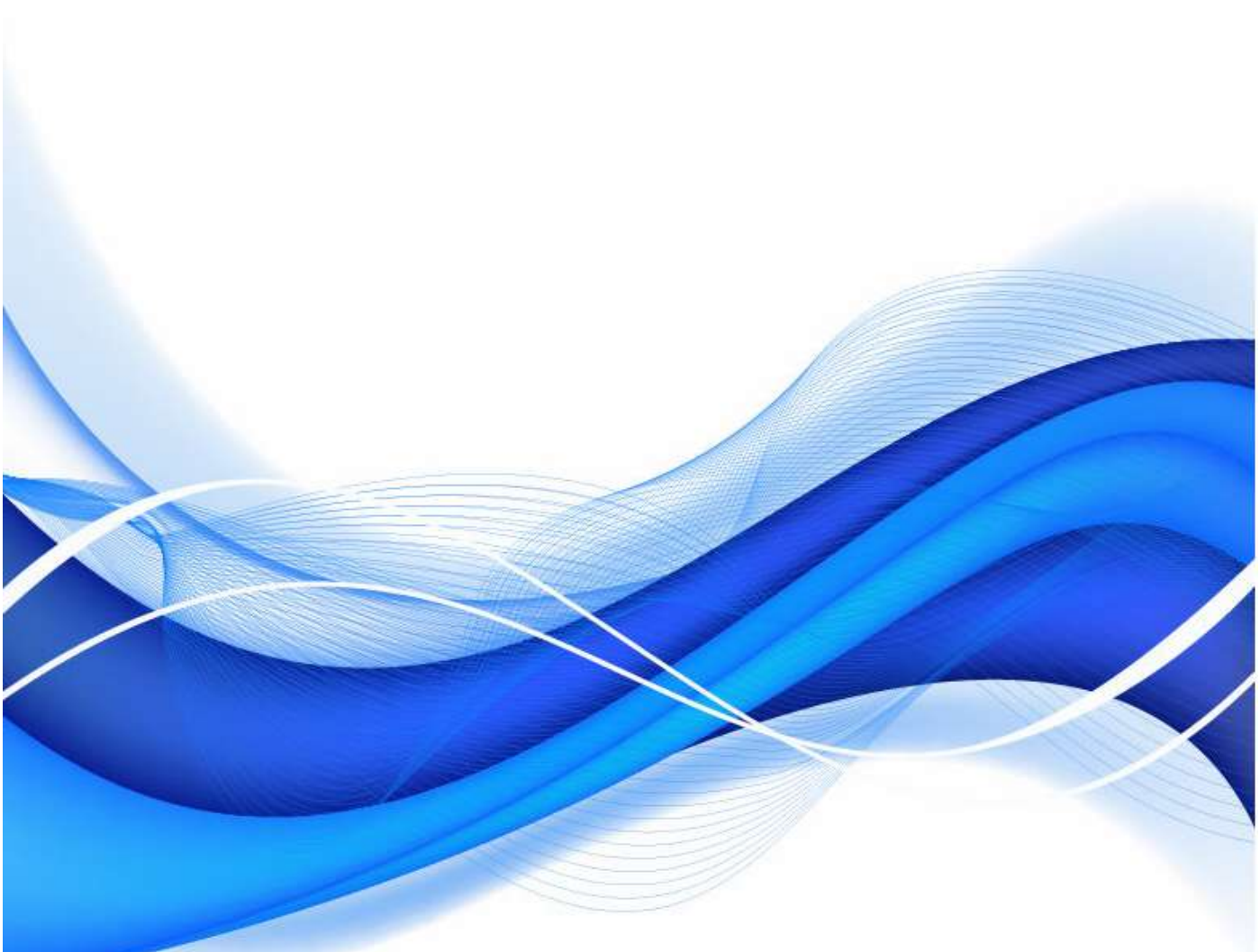


BMS Controls
Energy Management
Integration
Remote Monitoring

TRI

Control Systems Ltd



HIGH END RESIDENTIAL PROJECT

Our client wanted to create a luxurious escape from the big city that is London and decided to turn a nice house in one of the capitals favourite suburbs into an expansive retreat with many features to ensure he could make the most of his precious time off.

The different facilities that have been installed in the property all require different types of environmental control, which meant a very flexible system was required, but also one that was easy for the occupants of the house to adjust as necessary.

The building incorporates Fan Coil Units for fast response heating and cooling demands and underfloor heating for background heating. These elements had to be carefully controlled to ensure they weren't fighting with each other, both for energy efficiency purposes, but also to ensure that some of the delicate floor coverings weren't damaged by excessive heating.

The heating and cooling sources for the building were both fed by a highly efficient ground source heat pump system that could feed both the heating and cooling buffers at the same time. This of course needed careful monitoring from the BMS due to the highly technical nature of the system, particularly as it is installed in a domestic situation.

TRI Control Systems also needed to deliver high level integration between the environmental conditioning systems and the room controls, which were provided by the audio visual system.



Working close with the Main contractor, the Mechanical Services installer and the home automation contractor delivered a highly versatile system.

This was achieved with a high level interface from Synapsys Solutions, which provides seamless communications between the custom coded Crestron home automation system and the Trend BMS system.

This allows the users of the house to alter setpoints, fanspeeds and holiday modes from the Crestron room controllers and iPads from anywhere in the house or even from another part of the world via their phone.

TRI also installed a remote monitoring router on to the clients network, enabling us to maintain their system 24 hours a day, 7 days a week and react quickly to any faults that are sent directly to our engineers from the onsite Trend 963 supervisor software.



SYNAPSYS SOLUTIONS



Synapsys Solutions provide integration controllers for BMS systems and an innovative range of energy monitoring systems.

TRI Control Systems can provide the full range of integration and energy monitoring systems that Synapsys offer.



Home automation and Air conditioning central controllers are interfaced using a Trend XNC integration controller, with Synapsys's custom integration software loaded into it. This allows the seamless communication and control of the separate systems.

The SIP unit from Synapsys provides easy integration with industry standard protocols, including Modbus, M-Bus and BACNet. The unit becomes part of the Trend network via a Trend approved software node.

The SIPE software that is available for use with the SIP units provides you with live data about your energy consumption and allows you to target different parts of your network for improvement.

TREND CONTROLS

Trend is a major international supplier of building energy management systems (BEMS) with a worldwide distribution and support network covering over 50 countries.

As a Trend Technology Centre TRI Control Systems have access to the full range of Trend Controls, including the 963 supervisor and IQ4 controllers.

We also have 'Trend Expert' accredited engineers, ensuring the very best implementation of the BMS control system.

TREND



963 is a graphical, real-time, user interface for the building control system. It enables the user to monitor plant or building services, and make changes to the way the building is controlled from a graphical display.

The security system ensures that the user is only presented with information and functions that are relevant to their authority or task.

It is also compatible with the Trend Open Protocol Server (TOPS) which allows values from supported 3rd party systems (such as BACnet) to be included in schematic pages, adjustments to be made, and alarms received.

Please contact us on 01895 257500 for information on Trend BMS control systems



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