

Case Study //

Brisbane Club Tower

Building Management System Infrastructure Upgrade

The Brisbane Club Tower in the heart of Brisbane's CBD is home to one of Australia's premier private clubs – The Brisbane Club – as well as key commercial tenants.

Over its 30 year life, the building has seen several Building Management Systems (BMS) implemented. To ensure the ongoing satisfaction and comfort of occupants and visitors, a decision was made by owner, Australian Unity, to upgrade the BMS to the latest, non-proprietary Tridium Niagara 4 platform.

Business Needs //

Completed in 1988, the commercial office tower at 241 Adelaide Street in Brisbane – commonly known as the Brisbane Club Tower – features 20 levels of contemporary B Grade commercial office space as well as foyers on the ground and first levels, retail tenancies and basement car parking over four levels. Owned by Australian Unity, the building is home to one of Australia's premier private clubs - The Brisbane Club – which occupies four levels within the building. The Club frequently hosts some of Brisbane's most influential leaders, as well as offering a range of function spaces.

Over the building's 30 year history, a number of Building Management Systems (BMS) had been deployed. In recent times, frequent hardware failures had contributed to unstable indoor conditions, leading to tenant complaints and placing undue stress on tenants, building managers and the owner alike.

These failures had also impacted on the energy efficiency of the building's mechanical services systems.

To ensure the ongoing satisfaction and comfort of tenants, occupants and visitors to the building and Club, Australian Unity partnered with CBRE, GWA Consultants and Airmaster Australia's automation team to upgrade the building's existing BMS infrastructure to a non-proprietary system.

The aim of the project was to install a stable, reliable and flexible system (with improved controls strategies) that would provide a marked improvement in indoor comfort conditions across the building, as well as improve the energy performance of the building's mechanical services systems.

Solution Overview //

The latest non-proprietary, truly open framework Tridium Niagara 4 platform was selected for deployment at the Brisbane Club Tower.

The Tridium Niagara 4 platform is a proven, reliable solution with open protocol standards, no lock-in licensing or software agreements, and allowed for BACnet and Modbus protocols to be integrated into all facets of the platform, throughout the building.

With decades of experience in the retrofit of controls systems and strategies in existing buildings, Airmaster's Queensland automation team worked seamlessly with the support of the Airmaster projects team to deliver the solution while the building remained fully operational.

As well as installing the new BMS, Airmaster also installed new AHU (air handling unit) motors, VSDs (variable speed drives) and outside airflow control station and valves throughout the building's system. This upgraded equipment allowed GWA as the project consultant to design strategies that would allow the HVAC system to not only deliver stable, comfortable indoor conditions, but also operate efficiently to deliver enviable energy savings.

Verified Results //

Since the completion of the BMS upgrade, the 30-year old Brisbane Club Tower now operates using 20% less energy month-to-month compared to previous years. Fewer tenant complaints have been recorded than ever before, with stable and reliable indoor comfort conditions delivered throughout.

Additionally, the building's management team are now in control of a stable and reliable BMS that offers greater flexibility. The project offers a Return on Investment (ROI) of less than four years.

Customer Benefits //

- Improved indoor comfort conditions
- Significant energy savings
- Improved reliability, stability and flexibility
- Reduction in tenant complaints
- Full plant control and automation
- Non-proprietary, open protocol standards

About Us //

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