

AMP Capital achieves sound HVAC health

CASE STUDY

CLIENT: AMP Capital

PROJECT: HVAC Asset Management

KEY CHALLENGES:

- To provide the client with improved visibility and control of its HVAC assets
- To improve occupant comfort
- To deliver significant whole-of-life operating cost reductions by using less electricity, minimising maintenance and extending asset life

OUTCOMES:

- ✓ **Faster and more accurate fault diagnostics**
- ✓ **A reduction in maintenance hours**
- ✓ **A reduction in major equipment/component failure**

The Client

With over \$AUD160 billion funds under management, AMP Capital is a leading real estate and infrastructure provider with specialist expertise in fixed income, equities and multi-asset solutions.

Their experience and leadership across asset classes not only provides insights into ever-changing markets, but also means they are at the forefront of developing contemporary investment solutions for clients.

AMP Capital engaged Grosvenor to improve the visibility and control of its HVAC assets.

What We Did

Traditionally, fault-finding and troubleshooting are completed on-site with physical inspections. AMP Capital wanted to improve the process with 24/7 real-time monitoring to optimise occupant comfort whilst better utilising existing assets. In this case both the existing Building Management System (BMS) and the Chiller Plant Manager did not provide the detailed data required to ensure that any alarms, faults or deviations from specified parameters are instantly flagged.

Our solution was to bypass the BMS and Chiller Plant Manager to create a high-level interface directly with the chiller compressors.

As a result, information from multiple compressors can now be easily accessed on-site with a single-point connection using HLI cards and Danfoss 3G SMT software. This also allowed remote access.

Our work included:

- Direct connection to the serial port of the compressor HLI
- Converting Modbus RTU to Modbus TCP
- System security with an in-house configured VPN router and gateway to encrypt communications and provide remote access to the compressors and data feed to a central server

The establishment of 24/7 real time remote monitoring resulted in faster and more accurate fault diagnostics, as well as a reduction in maintenance hours by eliminating the manual download of event log data from each compressor and a reduction in major equipment/component failure due to early detection.

Interested in knowing more? Call 1300 255 247