

# Case Study //

## Tuggeranong Office Park, Canberra

With the emergence of smart buildings based on connected devices and the Internet of Things (IoT), buildings must be network-ready in order to support the transmission of complex data throughout it. This means having all connected devices on a single network communicating over Ethernet IP.

A Building Services Network (BSN) facilitates this and future-proofs the building. It ensures that, regardless of developments in technologies or future requirements of the building, there is a resilient backbone and network environment that will be able to support current and future connected devices.

Although IT services are not a traditional HVAC contractor service, and are not usually installed in a building until construction is complete, the BSN was one of the first services completed and formed the primary communications platform for the building.

### The Solution //

The BSN provides commonality for data transfer between all engineering systems onsite and to reduce the amount of cabled infrastructure and hardware across the building. The BSN's design allows for either a reduction or elimination of the need for multiple cabling distribution systems, parallel networks and additional head end equipment.

A BSN makes a building IoT ready and new systems and devices can be easily added to the BSN and communicate via the BSN's network infrastructure.

For example, if a new technology or system was to be installed onsite, traditionally a new network would need to be run to connect all the devices back to a central server. The BSN negates the requirement for any major backbone networking, any new devices can simply be patched into the exiting network – saving significant time and money in the future.

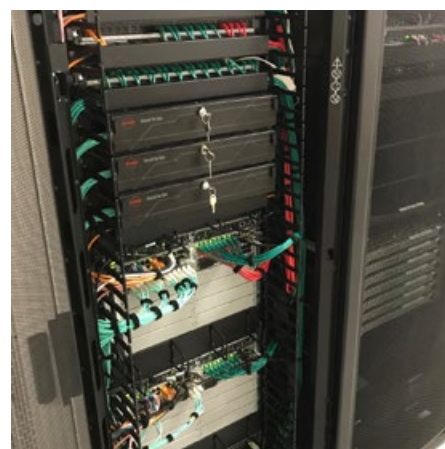
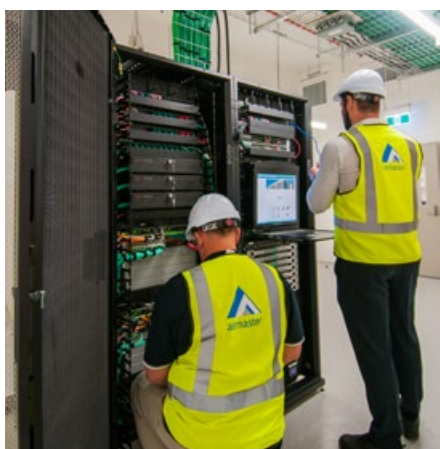
## Tuggeranong Office Park //

Tuggeranong Office Park in Canberra, completed in mid-2017, is a 30,400sqm building comprising five floors of office space and two levels of support facilities, storage and parking. It features floor plates of more than 5000sqm and a central atrium allowing natural light to flow through the building. It can accommodate up to 2,500 staff.

Designed and installed by Airmaster, the Building Services Network (BSN) uses an Ethernet platform to bring together services such as BMS, security, lighting control, energy metering and more, streamlining operations and minimising overhead duplications. This approach provides commonality for data transfer between all engineering systems onsite, and reduces the amount of cabled infrastructure and hardware throughout the building.

The engineered design of the BSN infrastructure is a combination of passive structured cabling and active networking, supporting the large amount of information transmitted throughout the building.

The result is a stable, failsafe and resilient infrastructure for the day-to-day running of the building that provides a cost effective solution for the roll out of site wide services, now and into the future.



## About Us //

Optimum Air is a technical solutions company, delivering end-to-end management of heating, ventilation, air conditioning, industrial and process cooling and building automation across New Zealand. Founded by Airmaster Australia, one of Australia's leading HVAC service solutions companies, Optimum Air draws upon the vast industry experience to deliver Airmaster's range of award-winning services and solutions to the New Zealand market.

**optimumair.co.nz**  
**0800 678 247**

