### CASE STUDY

# **Pulse Data Centre adopts** state-of-the-art fire management system

## **Outcomes**

Preventative fire protection and safety systems are now in place with a 24/7 on-call response for all fire components.

Extensive procedures have been implemented to achieve high-level operational and compliance standards in accordance with Uptime and ITIL change-management principles.

Increased visibility across all assets has reduced equipment /component failure and operational costs.



Management systems targeted at data centre use have been implemented.

## The Client

Established in 2018, the \$40 million Pulse Data Centre (Pulse DC) is a cutting edge, highly resilient, Tier III Uptime Institute-certified large-scale data centre. It is designed as a secure primary site to support corporate and enterprise customers; local, state and federal government; through to global tech giants.

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The facility also holds ISO9001/14001/27001 and 50001 certifications. Its capacity is over 750 racks across six fire separated data rooms as well as a fire isolated power train and support areas with separate fire compartments. Located in Queensland's largest inland city, Toowoomba is a hub for diverse fibre routes from multiple carriers along multiple highways, providing a very high level of communications resilience.

At an elevation of over 500 metres above sea level, Pulse DC enjoys a safe, mild climate. All components of the Pulse DC design are optimised for the local climatic conditions which are ideal for utilising extended free cooling capability, thereby providing excellent operating efficiency and power usage effectiveness. Pulse DC is located in the Toowoomba Energy Precinct, a planned future project that will have access to large capacity renewable energy.

Pulse DC is a wholly owned subsidiary of FKG Group, which is a privately owned and operated Australian company employing over 800 staff.

# CLIENT

**Pulse Data Centre** 

#### PROJECT

Pulse Data Centre fire management and essential services maintenance

#### **KEY CHALLENGES**

- Improve visibility and control of fire assets
- Reduce risk levels for critical systems by capturing innovative data
- Reduce whole-of-life operating costs
- Working in a secure state-of-the-art technology environment



## What We Did

Our extensive experience working in large scale data centre environments has enabled Pulse DC to implement the critical processes required and improve visibility across fire assets.

Several services are being provided including preventative maintenance to all fire services to protect Pulse DC's people, equipment, assets and infrastructure. Australian Standard AS1851–2012 is being used to maintain all fire systems. Integral parts of the regular testing include fire detection, gaseous fire suppression systems, fire hydrants, portable fire equipment, passive fire barriers, fire rated doors and air handling equipment.

Recommendations have been made on how changes to the operation of systems could reduce the notification time with emergencies, enabling extra time to respond before problems arise. Grosvenor's cycle of service innovation process has been adopted, enabling Pulse DC to have clear visibility of the condition of assets in 24/7 real-time. A whole-of-life asset approach is also resulting in operational cost reductions.

Grosvenor also follows Uptime operational processes with method of procedure utilised by field technicians on tablet technology, enabling real-time delivery of important data collected from the facility. Multiple facts drove our decision to appoint Grosvenor including response times that aligned with our Service Level Agreement with clients, ensuring 100 per cent uptime could be met. The company's online portal (ARMS) is a great tool for tracking preventative maintenance and the management team has worked with Grosvenor in the past. They were confident a professional level of service could be delivered that would enhance overall management of fire assets.

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