



TECHNICAL SPECIFICATIONS

C1CANBERRA

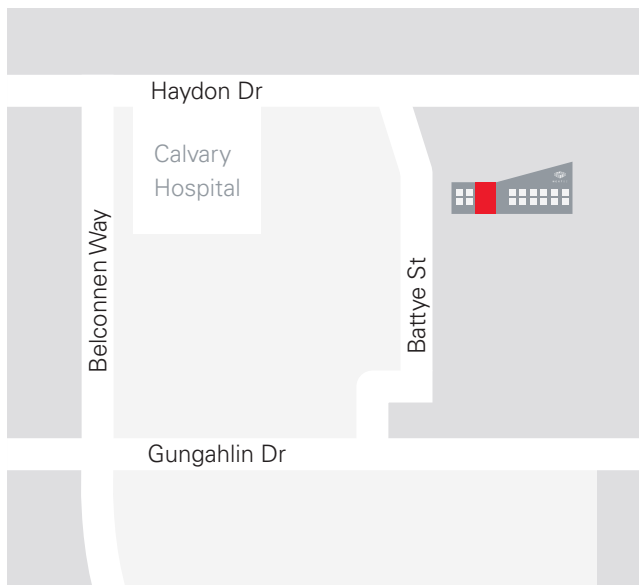
About **C1**CANBERRA

C1 is strategically located in Bruce, 6km from Canberra's CBD, with excellent access to major public and telecommunications infrastructure. Built to the highest levels of security for the Australian Government in 1994 as the primary data centre for the Australian Taxation Office, C1 has undergone extensive transformation to provide enterprise-class data centre services and to comply with UTI Tier III requirements.

C1 now offers 2,260m² of high-density technical space and on-demand connectivity to a myriad of local cloud services and major cloud platforms such as AWS, IBM SoftLayer, Microsoft Azure and Office 365 through AXONVX.

BUILDING OVERVIEW

- Two storey, approximately 6,000m² building.
- Total technical space approximately 2,260m².
- 1,000 rack capacity.
- Office and common areas approximately 1,740m².
- 600mm raised floor in data halls and service corridors.
- Main data hall floor is reinforced concrete.



POWER

- Available power of up to 8MVA.
- IT load capacity of approximately 4.8MW.
- Minimum N+1 redundancy on power supply.
- Multiple power distribution units providing N+N final circuit distribution to IT racks.
- Harmonic distortion controlled and monitored by UPS systems.
- N+1 RUPS units.
- Full N+1 main electrical infrastructure extending to N+N at power rail level.
- Minimum 24 hours' onsite fuel supply.
- Two substations at C1.

COOLING

- N+1 water-cooled chillers, cooling towers and pumps.
- Secondary valved pipework distribution, serving data hall equipment.
- Chilled water buffer tank to maintain cooling during power failures.
- Leak detection system.
- Server heat load approximately 2000W/m².
- N+2 Computer Room Air Conditioning (CRAC) units per data hall.
- CRAC units supply temperature control and floor pressure control.
- Average cold aisle temperature of 22 +/-2 degrees.
- Average cold aisle relative humidity of 50% +/- 15%.

FIRE SUPPRESSION AND MONITORING

- Inert gas fire suppression system.
- Leak detection systems.
- Emergency warning systems throughout the building.
- Water mist suppression system in DRUPS enclosures.
- Distributed fire alarm controls equipment to avoid single point of failure.
- Fully addressable analogue fire alarm system comprising Fire Indicator Panel (FIP), mimic panels, heat detection and MASDs systems.

SECURITY

- Individual credential checks prior to authorisation.
- 24/7 onsite security personnel.
- Biometric fingerprint security for data centre access.
- Anti-cloning access card encryption.
- Intruder-resistant glass, steel mesh and solid concrete walls.
- Secure loading dock for deliveries.
- Extensive coverage by motion sensitive CCTV cameras.
- Remote monitoring and control of rack access via ONEDC®.
- Monitoring of news and weather for external security risks.
- C1's physical security includes ramraid barrier and blast-resistant doors at loading dock.
- Designed with advice from ASIO T4 accredited consultants and in consideration of ASIO levels of security and the future requirements of the Protective Security Policy framework (PSPF).

SUSTAINABILITY

- Water cooled chiller technology with variable speed compressors.
- Energy efficient lighting (fluoro or LED) meeting AS1680.2.2 standard.
- Low volatile organic compound (VOC) materials and paint.
- Direct free air-cooling for upper level.
- Self-contained atrium fed by air conditioning condensation.
- Target PUE is 1.4 at peak load.

TELECOMMUNICATIONS

- Diverse connectivity and underground cable pathways to the building.
- Ready access to ICON Fibre.
- Dedicated interconnect rooms for cable connections.
- Access to choice of 50+ carrier networks.

CUSTOMER SERVICES

- Dedicated office space for long-term private use.
- Quiet zone customer meeting room.
- Sound-proof boardroom.
- Chill-out room equipped with kitchen facilities and Nespresso machine, TV, lounge and Foxtel.
- Equipment staging room.
- Customer carpark.
- Spare parts vending machine.
- Guest Wi-Fi.

CERTIFICATIONS



ISO 9001:2015
Quality
Management
System.



ISO 27001:2013
Information Security
Management
System (ISMS).