WEB PROPHETS®

DEDICATED HOSTING & SUPPORT

Web Prophets

Sydney Data Centre Facility Overview

Building Overview

- Five storey 17,650m2 building.
- Total technical space approximately 5,800m2.
- 2,800 rack capacity.
- Average 1,450m2 per data hall.
- Office and common areas approximately 1,450m2.
- 1m raised floors in data halls and service corridors.
- Floor is reinforced concrete with 14.4kPa floor load capacity.
- Built to the Australian Earthquake Loading Standard AS1170. Importance Level 4 (IL4).

Power

- Initial available power of 12MVA, increasing up to 20MVA.
- IT load capacity of approximately 14MW.
- 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.
- Full N+1 main electrical infrastructure extending to N+N at power rail level.
- Ultimate 12+1, 1670kVA Diesel Rotary UPS [DRUPS] units on an Isolated Parallel bus for 100% no break IT and mechanical power.
- Diverse main feeders delivered at 11kV.
- Minimum 24 hours' onsite fuel supply.

Cooling

- N+1 high efficiency water cooled chillers, cooling towers and pumps.
- Dual primary pipework header and distribution system.
- Secondary pipework distribution serving data hall equipment valved and looped providing dual path.
- Multiple redundant water pump and compressor configuration.
- Water storage for cooling towers.
- 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.
- All CRAC units are fitted with dual power supplies.
- CRAC units fitted with high efficiency electronically commutated fans.
- All CRAC units are located in secured plant corridors outside the data halls.
- Average cold aisle temperature of 22 +/-2 degrees.
- Average cold aisle relative humidity of 50% +/- 15%.
- All mechanical plant is fully backed up by DRUPS.
- Building Management System (BMS) for monitoring of major mechanical systems.

Telecommunications

- Diverse connectivity and underground cable pathways to the building.
- Dedicated interconnect rooms for cable connections.
- 100% carrier and vendor neutral.

Security

- Individual credential checks prior to authorisation.
- 24/7 onsite security personnel.
- Biometric fingerprint security for data centre access.
- Anti-cloning access card encryption.
- Secure lifts between floors.
- Intruder-resistant glass, steel mesh and solid concrete walls.
- Secure loading dock for deliveries.
- Extensive coverage of motion sensitive CCTV cameras.
- Remote monitoring and control of rack access via ONEDC®.
- Monitoring of news and weather for external security risks.

Sustainability

- Water cooled chiller technology with variable speed
- compressors.
- Indirect water-side free cooling.
- Rain water for cooling towers.
- Dedicated area for potential future installation of onsite generation plant (such as tri-gen or other technologies) to significantly reduce CO2 emissions.
- Energy efficient lighting (fluro or LED) meeting AS1680.2.2 standard.
- External walls insulated to reduce heat transmission.
- Variable speed compressors, pumps and fans.
- Direct free air cooling for data halls on the upper level.
- Low volatile organic compound (VOC) materials and paint.
- Target PUE is 1.3 at peak load.

Fire Suppression and Monitoring

- 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 compromising Fire Indicator Panel (FIP), mimic panels, heat detection and MASDs systems.

Certifications and Standards

- Uptime Institute Tier III certification of design documents.
- Uptime Institute Tier III certification of constructed facility.
- Designed by ASIO T4 accredited consultants with ASIO T4 security and future requirements of the Protective Security Policy framework (PSPF) in mind.
- Designed in accordance with the Telecommunications Industry Association's (TIA) 942 standard (Tier III).

Customer Services

- Meeting rooms and offices for shared customer hot-desking, private suites, purpose-built NOCs or SMCs, or temporary offices for the project management of larger installations.
- Sound-resistant boardroom, featuring floor-to-ceiling blackboards for workshops and planning sessions; and staging rooms for testing equipment installations.
- Chill-out room featuring fully functioning kitchen, flat screen 75-inch TV, lounge, gaming console, two fully reclining massage chairs, Foxtel® and free Wi-Fi.