Perth
Data Centres

Technical Specifications
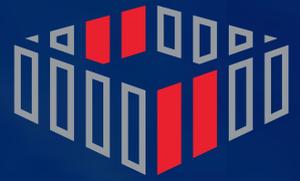
NEXTDC

where the cloud lives™

Perth's innovation epicentre for cloud and digital transformation

NEXTDC's Perth data centre network is centrally located yet geodiverse and seamlessly interconnected to WA's largest community of cloud platforms, digital services providers and enterprises.

Connect to the critical communities that underpin the acceleration of your digital transformation objectives, and amplify business value, including content and digital media providers, global networks and cloud services.

Housing WA's only locally available cloud onramps, connect securely and natively to Perth's only Microsoft and AWS cloud access points. Additionally, interconnect seamlessly and securely to the country's largest cloud-network with private, low latency access to Microsoft Azure, Amazon Web Services (AWS), Google Cloud, IBM Cloud, Oracle Cloud and OVHcloud so you optimise speed to value for your cloud and transformation objectives.

Take advantage of close proximity to local submarine cable infrastructure, and benefit from the fastest access path to Asia.

A1 Adelaide
125 Frome Street, Adelaide SA 5000

B1 Brisbane
20 Wharf Street, Brisbane City QLD 4000

B2 Brisbane
454 St Pauls Terrace, Fortitude Valley QLD 4006

C1 Canberra
19 Battye Street, Bruce ACT 2617

D1 Darwin
2 Harvey Street, Darwin NT 0800

M1 Melbourne
826 Lorimer Street, Port Melbourne VIC 3207

M2 Melbourne
75 Sharps Road, Tullamarine VIC 3043

M3 Melbourne
25 Indwe Street, West Footscray VIC 3012

NE1 Newman
96 Woodstock Street, Newman WA 6753

P1 Perth
4 Millrose Drive, Malaga WA 6090

P2 Perth
11 Newcastle Street, Perth WA 6000

PH1 Port Hedland
17 Loreto Circuit, Port Hedland WA 6721

S1 Sydney
4 Eden Park Drive, Macquarie Park NSW 2113

S2 Sydney
6-8 Giffnock Avenue, Macquarie Park NSW 2113

S3 Sydney
2 Broadcast Way, Artarmon NSW 2064

S6 Sydney
3 Broadcast Way, Artarmon NSW 2064

SC1 Sunshine Coast
44 Maud Street, Maroochydore QLD 4558

Scale your IT securely, with speed and precision at Perth's major technology hub

NEXTDC's digital infrastructure platform enables secure, seamless and frictionless access to the cloud platforms, carriers and digital services providers that your business needs to succeed.

There is nothing more critical than your brand, reputation, and your ability to faultlessly serve your customers. We understand the always-on nature of your businesses, and the critical need for immediacy 100% of the time. As Perth's premier data centre provider, we're the best in the business when it comes to protecting yours.

Confidently managing risk and improving the resilience of your business is critical to compete and thrive in the digital era. Supporting the dynamic and rapidly evolving requirements of digital businesses requires the backing of completely fault tolerant digital infrastructure. Our Perth data centres set the benchmark for premium colocation facilities in the state. As the only Tier IV certified and completely fault tolerant infrastructure platform in WA, your business benefits from the highest levels of resilience, reliability and performance, all backed by NEXTDC's industry leading 100% uptime guarantee.

Proximity and performance

NEXTDC's Perth data centres offer superior interconnectivity capability, enabling you to bridge the distance and latency between your hybrid IT environment to your cloud platforms, locations and digital services partners.

Geo-redundancy

Enables you to run active sites across our national footprint. Should disaster strike, simply failover to your specified location via secure, high-performance dynamic connections.

Availability

NEXTDC delivers the highest levels of availability and reliability of the critical infrastructure your business needs to succeed. Our national digital infrastructure footprint is backed by an industry leading service level guarantee of 100% uptime.
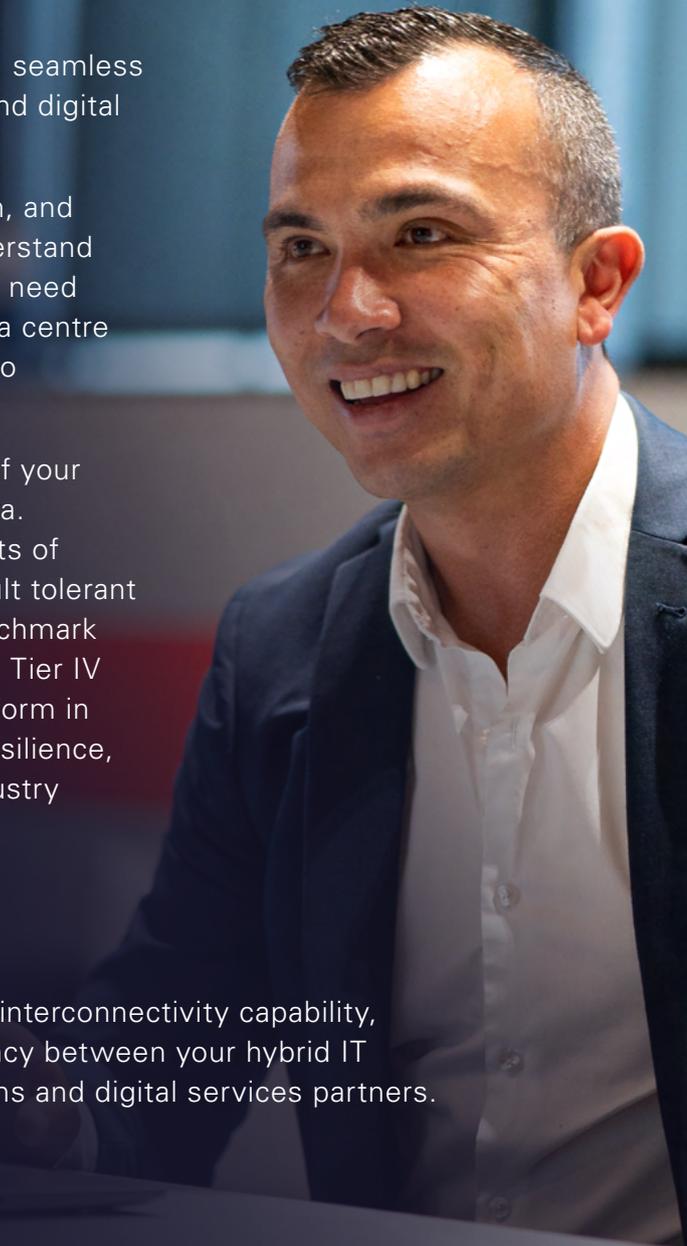
Data centre specifications

	P1	P2
Location	4 Millrose Drive Malaga WA 6090	11 Newcastle Street Perth WA 6000
Target IT capacity	6MW	20MW
Technical space	3,000m^2	12,000m^2
Target PUE	1.3[1]	~1.15[2]/1.29[1]
Data halls	5	10
Rack capacity	1,500	6,300
Interconnect rooms	2	3

Facility features

On-site parking	Undercover loading dock	Wifi	Customer breakout area
Office space	Bookable meeting rooms	Spare parts	Crash carts
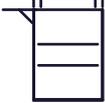
1. Value refers to best instantaneous power consumption ratio within a calendar year, dependent on load and optimal environmental conditions.
2. Value relates to total energy consumption ratio during a full calendar year, dependent on load.

Globally recognised and certified data centres

In order for organisations to run a business that is 'Always On' and available to service consumer demand, ensuring you have the most reliable infrastructure supporting your business is critical to ensuring future growth and continued expansion.

NEXTDC's focus and continued investment into building the most reliable infrastructure platform in the country is demonstrated in our Uptime Institute certifications for operational sustainability (Gold Operations) and completely fault tolerant data centre design and construction (Tier IV).

A globally recognised endorsement of our facilities' ability to withstand individual equipment failures or distribution path interruptions and maintain IT operations 24/7.

Tier III
Concurrently maintainable data centre infrastructure

A Tier III certified data centre means there is no requirement for the complete shutdown of operational equipment during maintenance and repairs. A redundant delivery path for power and cooling is added to the redundant critical components of Tier II so that every component that is needed to support the operational environment can be shut down and maintained without impacting the overall operation of the facility.

Tier IV
Completely fault tolerant data centre infrastructure

Uptime Tier IV for constructed facility is the pinnacle of data centre certifications worldwide. Tier IV infrastructure is a building block on top of the requirements for Tier III, adding in complete fault tolerance to the infrastructure deployed onsite. Completely fault tolerant infrastructure means that any individual equipment failures or distribution path interruptions that occur, will have no impact to the overall operations of the facility.

ISO 27001:2013

Information Security Management System (ISMS) certification.

ISO 14001:2015

Environmental Management System certification.

ISO 9001:2015

Quality Management System certification.

ISO 45001:2018

Occupational health and safety management systems.

SOC 1/SOC 2

SOC is a suite of reports from the AICPA that CPA firms can issue in connection with system-level controls at a service organisation.

PCI-DSS

The Payment Card Industry Data Security Standard is an information security standard for organisations that handle branded credit cards from the major card schemes.

FTSE4Good

Certified ethical company.

Digital Transformation Agency (DTA)

Commonwealth Government's Hosting Certification Framework.

P1 Perth

Situated 13km northeast of Perth's CBD, P1 is Uptime Institute Tier III certified for design and construction and the only Perth data centre with Uptime Institute Tier III Gold Certification of Operational Sustainability.

Completely carrier neutral, P1 offers excellent access to major public and telecommunications infrastructure as well as unprecedented connectivity options to the world's largest cloud platforms including AWS, Microsoft Azure, IBM Cloud and Oracle Cloud, as well as Australia's national carrier networks and service providers either directly, or via AXON.

Home to Perth's only direct connections for AWS Direct Connect and Microsoft Azure ExpressRoute, P1 is the only data centre to offer Western Australian customers private, local access to AWS and Microsoft Azure cloud, enabling the delivery of applications and digital services at scale in a highly secure environment without any unnecessary backhaul costs.
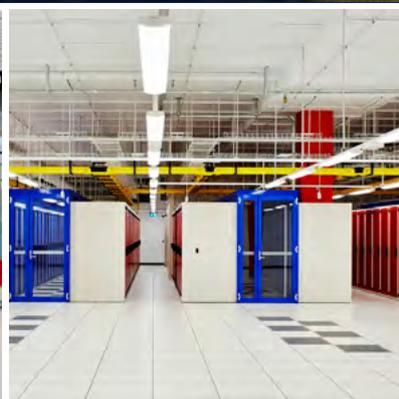
P2 Perth

Strategically positioned in Perth's CBD, P2 is a critical technology and interconnection hub delivering local organisations enhanced connectivity capability to connect directly to the only locally available cloud on-ramps for Microsoft and AWS.

To support the dynamic and ever-changing needs of business, requires the need for a completely fault tolerant digital infrastructure. NEXTDC's Perth digital infrastructure platform is engineered, built and operated at the highest global standards, delivering the assurance and reliability digital businesses rely on.

P2 brings together Perth's new high capacity, high-speed submarine cable networks that connect Perth to South-east Asia and Sydney, P2 enables seamless access and the most direct route to Asia Enabling secure and direct access to the countries' leading communications networks, cloud and IT providers, P2 delivers the flexibility and interconnected capability that digital business needs to succeed.
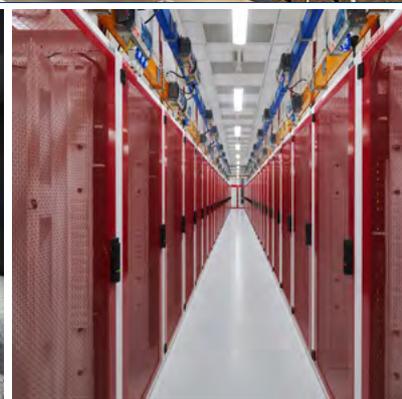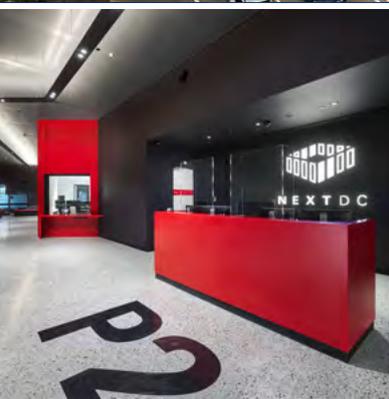
Why choose NEXTDC

Flexible infrastructure

With over 15,000m^2 of technical space, NEXTDC's Perth data centres provide the capability needed to support high-density hybrid IT environments. Our digital infrastructure platform supports the long-term requirements of organisations, delivering solutions that meet your needs now, with the ability to scale easily to support your future needs.

Interconnected advantage

Select from flexible connectivity services ranging from Structured Cabling and Cross Connects to cloud connections, we will help build a solution that best suits your business or project requirements.

Cloud enabled

When you house your IT infrastructure in NEXTDC's data centres, your critical IT assets are interconnected directly and natively to AWS, Microsoft, Google, Oracle, IBM and OVHcloud.

Operational excellence

Our team of highly specialised operations experts are the leaders in the Australian industry. As a customer-first organisation, we pride ourselves on ensuring we deliver the highest levels of customer service and support in the country. Our expertise and passionate team are the reason we are recognised as the leading data centre services provider in the country.

Scalable networks

Establish low-latency network connections with access over 70 global carriers, networks of your choice, including global carriers, subsea cables, metro networks, SDNs and more.

Elite security

Every NEXTDC facility is monitored and secured via our elite security operations centres 24/7/365. Governed by the highest security standards globally, our facilities are purpose built to ensure a frictionless experience, governed by a comprehensive framework comprising five layers of security.

Interconnect to the digital platforms and services that fuel your growth

With over 750 cloud, network and IT service providers available within our data centres and continued facility expansions, our customers' growth and technology needs are supported now and into the future. NEXTDC offer organisations greater choice and guaranteed reliability when interconnecting their business to the clouds, networks and platforms that drive their business, and quality assurance when it comes to building high-performance, highly reliable and scalable Hybrid IT architectures.

Strategic partners

The fastest most direct access to your public cloud on-ramp

Partnering with NEXTDC, means positioning your critical infrastructure in the epicentre of your digital services supply chain. Our digital infrastructure platform enables direct, secure and native access to your clouds, with the advantage of proximity. The power of proximity and speed delivers you the agility, performance, and customer experience advantages needed to increase your competitive edge.

Locally available hosted cloud access points

Technical specifications

	P1 Perth	P2 Perth
Cooling	• N+1 high efficiency chillers and pumps. • Dual chilled water risers servicing the building. • 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. • Leak detection system. • Server heat load approximately 2000W/m². • N+2 Computer Room Air Conditioning (CRAC) units per data hall. • CRAC units fitted with high efficiency electronically commutated fans and dual power supply. • CRAC units supply temperature control and floor pressure control. • CRAC units fitted with high efficiency electronically commutated fans and dual power supply. • All CRAC units are located in secured plant corridors outside the data halls.	• Hot aisle contained, cold flooded Room for improved efficiency. Stulz in-direct, free cooling CRACS paired with modular cooling tower infrastructure. • Stulz DX CRAC units with Indirect free cooling. • Fully modular cooling systems for ultimate redundancy. • N+1 cooling Circuits to the facility. • N+2 Computer Room Air Conditioning (CRAC) units per data hall. • 24 hours peak design water storage. • Peak design 4000w/m² heat load capacity. • CRAC units fitted with high efficiency electronically commutated fans and dual power supply.
Electrical	• Isolated Parallel Bus, supporting N+N delivery to the rack. • Ultimate 6+1, 1670kVA Diesel Rotary UPS [DRUPS]. • IT load capacity of approximately 6MW. • Minimum N+1 redundancy on power supply. • Multiple power distribution units providing N+N final circuit distribution to IT racks. • 24 hours of fuel stored on-site (minimum), per Generator.	• Isolated Parallel Bus, supporting N+N delivery to the rack. • 1.5MW Pillar rotary UPS supported by Penske engines, supporting the entire site load. • 24 hours of fuel stored on-site (minimum), per Generator. • Fault tolerant distribution and isolation throughout the facility.
Fire	• VESDA fire detection. • Leak detection systems. • High pressure water misting system supply to DRUPS units. • Inert gas fire suppression for all data halls.	• VESDA fire detection. • Leak detection systems. • High pressure water misting system for all Generators. • Inert gas fire suppression for all data halls. • 2-hour fire rating isolation between all critical systems.
Security	• Individual credential checks prior to authorisation. 24/7 onsite security operations. • Two factor 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 by motion sensitive CCTV cameras. • Remote monitoring and control of rack access via ONEDC®. • Monitoring of news and weather for external security risks.	• Individual credential checks prior to authorisation. 24/7 onsite security operations. • Two factor 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 by motion sensitive CCTV cameras. • Remote monitoring and control of rack access via ONEDC®. • Monitoring of news and weather for external security risks. • Anti-pass back on the single person turnstile entries. • Designed with advice from ASIO T4 accredited consultants and in consideration of ASIO levels of security and the requirements of the Protective Security Policy Framework (PSPF). • Data Hall perimeters designed and built to meet the intent of SCEC Zone 3.
Loading dock	• Secure, undercover loading dock facilities. • Supporting large scale delivery of IT equipment. • Unpacking space, with trash removal Staging rooms, pre-test before move to data hall. • Purpose built paths from delivery to data hall for rapid install and activation.	• Secure, undercover loading dock facilities. • Supporting large scale delivery of IT equipment. • Unpacking space, with trash removal Staging rooms, pre-test before move to data hall. • Customer storage facilities available. • Purpose built paths from delivery to data hall for rapid install and activation.
Front of house	• Support for escorted access and tours. • Assistance with car parking and meeting rooms. • Package receipt and dispatch. • 24/7 365 support on-site (if required).	• Support for escorted access and tours. • Assistance with car parking and meeting rooms. • Package receipt and dispatch. • 24/7 365 support on-site (if required).
Customer services	• Bookable meeting room and AV equipment. • Dedicated office space for long-term private use. • Chill-out and break-out suites equipped with kitchen facilities, coffee and refreshments, TV, lounge, massage chairs and Foxtel. • Equipment staging room. • 2 x lifts (max 3.5 tonne). • Customer car parking. • Spare parts vending machine. • Crash carts. • Guest Wi-Fi.	
Carrier and vendor neutral	• Multiple street fibre connection pits and dual diverse Interconnect rooms. • Direct access to INDIGO submarine cable. • Access to Vocus ASC submarine cable. • Open access for all fibre operators, Carriers, ISPs, MSPs.	
Interconnectivity solutions	• Gateway to NEXTDC's entire national ecosystem of public and private cloud providers, carrier networks and MSP services. Managed and unmanaged Data Centre Interconnects between P1 and P2 (1Gbps, 10Gbps and customer managed). • Dynamic scalable on-demand connections to Microsoft Azure, Amazon Web Services (AWS), Google Cloud, IBM Cloud, Oracle Cloud and OVHcloud. • High performance, lowest possible latency secure connections. • Dedicated, cost effective and low latency point-to-point Cross Connects.	

NEXTDC's infrastructure platform delivers the security, sovereignty and interconnectivity capability your businesses requires. Our premium solutions empower the underlying capability you need to grow and scale without friction or limitation and accelerate the momentum of data traction.

Find out how NEXTDC can help you enhance the reliability and efficiency of your digital infrastructure, so you stay focussed on driving growth and creating value for your customers.

N E X T D C

where the cloud lives™

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