



Home to the cloud

e-marketplace for growth and innovation

Johannesburg is the largest and most populous city in South Africa. It's also the provincial capital and largest city of Gauteng, the wealthiest province in South Africa. Johannesburg, classed as an alpha level city, is an economic and financial hub in South Africa, home to Africa's largest stock exchange, the JSE, which ranks among the top 20 in the world. The city hosts the South African headquarters of more than half of the world's top 20 global brands, including Barclays, Huawei, LG, L'Oréal, Song Ericsson and Tata Group.

South Africa has one of the largest IT industries in Africa and the sector is an important contributor to South Africa's GDP. Johannesburg stands among the leading cities in South Africa for this sector. Global technology players including the likes of Google, SAP, HP, IBM, Oracle all have a base in the city. The JINX (Johannesburg Internet Exchange) resides in the city, which was the first internet exchange point in Africa. Johannesburg has citywide fiber-optic networks and three of the four mobile network operators in South Africa (Cell C, MTN and Vodacom) have their base in Johannesburg. Johannesburg has a vibrant start-up scene, with initiatives in place such as JoziHub, which cultivates young entrepreneurship and innovation. In terms of the data center industry, Johannesburg is the data center capital of South Africa, representing a massive majority of capacity in the country. Furthermore,

South Africa is the data center market leader in Africa as a whole. The African markets are expected to accelerate in the coming years, as mobile and fixed connections are growing fast in the continent.

The Johannesburg 1 Data Center will be located in the >Central Point Innovation District, in close distance to highway N1 and a 30-minute drive from the Johannesburg Airport as well as the city center. JOH1 is planned as a dedicated data center new build and is being developed in two stages. The campus will offer an IT space of about 3,000 sqm and a client IT load of 6 MW after completion of phase 1. The grand opening is scheduled for Q1 2022.

A solution for every requirement

With a total of 6,000 sqm IT space and a maximum of 12 MW once fully built out, Johannesburg 1 will offer complete solutions for housing your IT and network systems in a secure, high availability environment. We provide you with the best possible physical and technical infrastructure supported by N+1 UPS systems, N+1 generator backup, as well as highly redundant cooling systems. Our data center will hold multiple certifications and will be connected to the major Internet Service Providers NAP Africa and JINX.

To validate hybrid cloud services and innovations faster and at lower cost, our **Technology Experience Labs** provide the perfect hosted ecosystem in a live data center environment.



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Secure and flexible space built to your specifications

Your requirements are the most important aspect of our service offering. You choose, we deliver. Whether you select a building shell which you configure yourself, or we construct it according to your specifications, or even if you want to rent a single rack in our shared environment, we can accommodate your needs. We will also ensure the space is highly available through our years of engineering critical data centers while maintaining high levels of security to keep your infrastructure and data safe.

| Overview of our main product offerings: | |
|---|--|
| Fully-fitted | Colocation Rack Carrier Rack |
| | Dedicated Cage |
| | Dedicated Suite |
| Shell and core | Area |
| Supporting products and services | Multi Service Interconnection Platform |
| | Cross Connect |
| | Remote Hands |

Infrastructure



Data center space

- · 6,000 sqm of IT space
- flexible colocation deployments: single rack colocation, cages, suites, turnkey build to suites, shell and core solutions
- ancillary spaces (offices, storages, and pre-installation rooms) available
- common areas such as meeting rooms and catering area

Cooling

- chilled water data suite cooling with aircooled free-cooling chiller systems with a minimum of N+1 redundancy and supplemental adiabatic system for efficiency
- concurrently maintainable AHUs providing fresh air pressurization and humidity control to data suites
- chilled water cooling to MMR and to electrical plant rooms (N+1)
- pressure relief and cold smoke extract system to all suppressed areas

Power

- on-site substation delivering 20 MVA of power
- maximum client IT load of 12 MW



- average power density of 2.0 kW/sqm
- power supply at 20 kV level
- all IT racks supplied with two separate UPS systems (A- and B-supply) with N+1 redundancy
- redundantly designed emergency power system with diesel generators N+1

Fire protection

- smoke detection early warning system (VESDA) in the return air path
- pre-action dry-pipe multi-range nitrogen gas extinguishing system
- fire protection walls to a minimum of 60 minutes separation
- monitoring with automatic digital fire alarm system

Security

- 24/7 Security Operations Center and remote Service Control Center
- redundant monitoring of all critical functions underpinned by standardized security processes and the multi level security zone principle, secures the rental area and the technical operation
- site perimeter fence to be 2,700 mm high ClearVu or similar fence,



- with extended post to 3,000 mm accommodating an electric fence
- · card swipe entry/exit to all doors
- preventive risk assessment as well as continuous testing and training of operating personnel

Connectivity

- · carrier-neutral
- carrier mix from global tier 1 supplier to regional supplier
- connectivity to the major carrier hubs in South Africa
- pre-spliced dark fiber available on demand
- · redundant Carrier-Meet-Me-Rooms
- redundant cabling infrastructure with diverse paths
- Pre-Cabling to support fast Cross Connect deployments
- · high-performance internet access
- inter data center connectivity between NTT data centers for geo-redundant solutions
- Multi Service Interconnection Platform to connect our clients to major cloud service providers such as Amazon Web Services, Microsoft Azure, and Google

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Cloud Platform

Additional services

- consulting, general and implementation planning for development projects
- · client implementation
- · installation services
- · Remote Hands services
- · facility services
- · audit support

Global data center network

- part of the NTT family of over 160 data centers around the world
- connectivity options to the global NTT network
- access and use of Technology Experience Labs with a worldwide partner network

Service Level Agreement

- 99.999% power uptime availability
- climate control conditions in line with ASHRAE guidelines
- · connectivity availability

Technology Experience Lab

- **Technology spaces:** Globally available facilities in productive data centers of NTT that bring together more than 140 technology partners to enable prospects and clients to test and validate, but also innovate on the latest technologies.
- **Industry communities:** Today, information technologies are a key enabler to many organizations. Our industry communities help these organizations to identify relevant technology providers and connect with helpful contacts.
- Start-ups and venture capital: Many times, start-ups are major drivers when it comes to disrupting various industries. Our start-up unit brings together start-ups, corporates and venture capitalists to enable and accelerate innovation.

About the Global Data Centers division of NTT Ltd.

Global Data Centers is a division of NTT Ltd. and incorporates DPA, e-shelter, Gyron, NetMagic, NTT Indonesia Nexcenter, RagingWire and other NTT Communications group Data Center divisions. Our combined global platform is one of the largest in the world, with over 160 data centers spanning more than 20 countries and regions including North America, Europe, Africa and APAC. As a neutral operator, we offer access to multiple cloud providers, a large variety of Internet Exchanges and telecommunication network providers including our own IPv6 compliant, tier 1 global IP network. Our clients benefit from tailored infrastructure and experience consistent best practices in design and operations across all of our highly reliable, scalable, and customizable data centers.

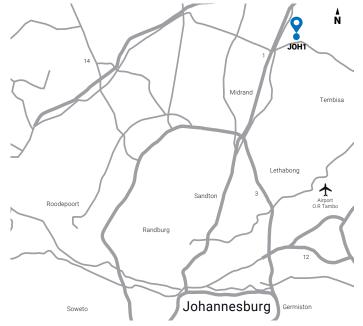


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Flexible connection to data centers and clouds: 20+ countries and 500,000 sqm server space



Location



Contact

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NTT in numbers and facts **Expertise** We help you to do great things. Over **40,000** people are working for NTT Ltd. worldwide. **Delivering services** in more than 200 countries.

300,000
people are part of the NTT Group.





Technology solution

We have a full suite of technology solutions to help you create value.

