EMEA

# Frankfurt 1
# Data Center

Plan for every second

Site brochure

## Home to the cloud

Frankfurt is the largest city in the German state Hessen, and the fifth-largest city in Germany, in terms of population. The city is regarded as an alpha world city and is Germany's financial capital, as well as the major financial center of continental Europe. Major banks headquartered in the city include European Central Bank, Deutsche Bundesbank, Frankfurt Stock Exchange, Deutsche Bank, DZ Bank, KfW and Commerzbank. By market capitalization, the Frankfurt stock exchange is one of the world's largest stock exchanges.

Frankfurt is also a major tech hub, as the city is rich in fiber and is home to the DE-CIX, one of the world's largest internet exchange points. The city is also a vibrant start-up hub with a natural disposition for FinTech companies. Frankfurt is the leading data center market in Germany and is one of the largest data center markets in Europe. The city's geographic location allows connections to Eastern and Western Europe, along with the Nordics and the Middle East (via Turkey), making it a very well-connected hub.

The Frankfurt 1 Data Center is the main site of NTT, which has a total of more than 47,900+m² of data center and technical space once fully built out. This makes our campus Germany's largest individual data center site. Our campus offers space for eight free-standing buildings which have been constructed and equipped especially for use as data centers. The campus is currently being expanded by a further building, building I, with an additional IT space of 4,300+m². The campus also houses an office building and an event center. Particularly noteworthy is the direct fiber optic connection to the Frankfurt 3 Data Center in Ruesselsheim and Frankfurt 4 Data Center in Hatters-heim, whereby a dual hall concept is possible.

## A solution for every requirement

With a total of 47,900+m² of IT space and a maximum of 120MVA with an own substation 110/20kV, Frankfurt 1 offers complete solutions for housing your IT and network systems in a secure, high availability environment. We provide you with the best possible physical and techni-cal infrastructure supported by 2N UPS systems, N+1 generator backup, as well as highly redundant cooling systems for each data center building. Frankfurt 1 holds multiple certifications and is connected to major carrier hubs and cloud networks, as well as to the DE-CIX.

## 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

- 47,900+m² of IT space (additional 4,300+m² currently under construction)
- 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
- Separated and independent technical areas per data center building

### Cooling

- High efficient chiller systems with free-cooling integrated or separated recoolers and own-programmed, weather-dependent energy management systems
- Peripheral ventilation and deventilation systems with energy-optimized operating points (rotation speed control, humidity-dependent control etc.)
- CRAH units in the suites and technical rooms
- Peripheral humidifying and dehumidifying systems with low energy expenditure managing the humidity of IT areas

- Cooling and cold water loops with redundant pumps, FU controlled
- Heat recovery with heating pumps for pre-heating the emergency standby power systems and offices

### Power

- On-site substation delivering 120MVA of power
- Maximum client IT load of 8–12MW per data center building
- Average power density of 1–3kW/m²
- Power supply at 110kV level from two substations with two feeds
- Own substation with three 110/20kV transformers N+1
- Separate, dual UPS systems (A- and B-supply) with 2N redundancy per data center building
- Redundantly designed emergency power system with diesel generators for each building

### Fire protection

- Automatic digital fire alarm system on all levels with point and air aspiration detectors

- Very Early Smoke Detection Alarm Systems (VESDA) in the return air path
- Firefighting system based on an argon or nitrogen extinguishing gas system
- Fire protection walls to a minimum of 90 minutes separation

### Security

- 24/7 Security Operations Center and Operation Control Center
- Redundant monitoring of all critical functions underpinned by standardized security processes and the multilevel security zone principle, secures the rental area and the technical operation
- Palisade fencing supported by a security perimeter fence to protect the campus
- Video surveillance systems for the external perimeter, plant areas, and data halls
- Ram-raid bollard protection in accordance to BS PAS 68:2013
- Card swipe entry/exit to all doors
- Preventive risk assessment as well as continuous testing and training of operating personnel

**Connectivity**

- Carrier- and cloud-neutral
- Redundant Carrier-Access-Rooms per building
- Redundant Carrier-Meet-Me-Rooms
- Carrier mix from global Tier 1 supplier to regional supplier (350+ carriers)
- Connectivity to the major carrier hubs, as well as to the DE-CIX
- Via our partner IX Reach direct connection to international internet exchanges
- Pre-spliced dark fiber available on demand
- Redundant, structural 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 Cloud Platform

**Additional services**

- Consulting, general and implementation planning for development projects
- Client implementation
- Installation services

- 24/7 Remote Hands services
- Facility services
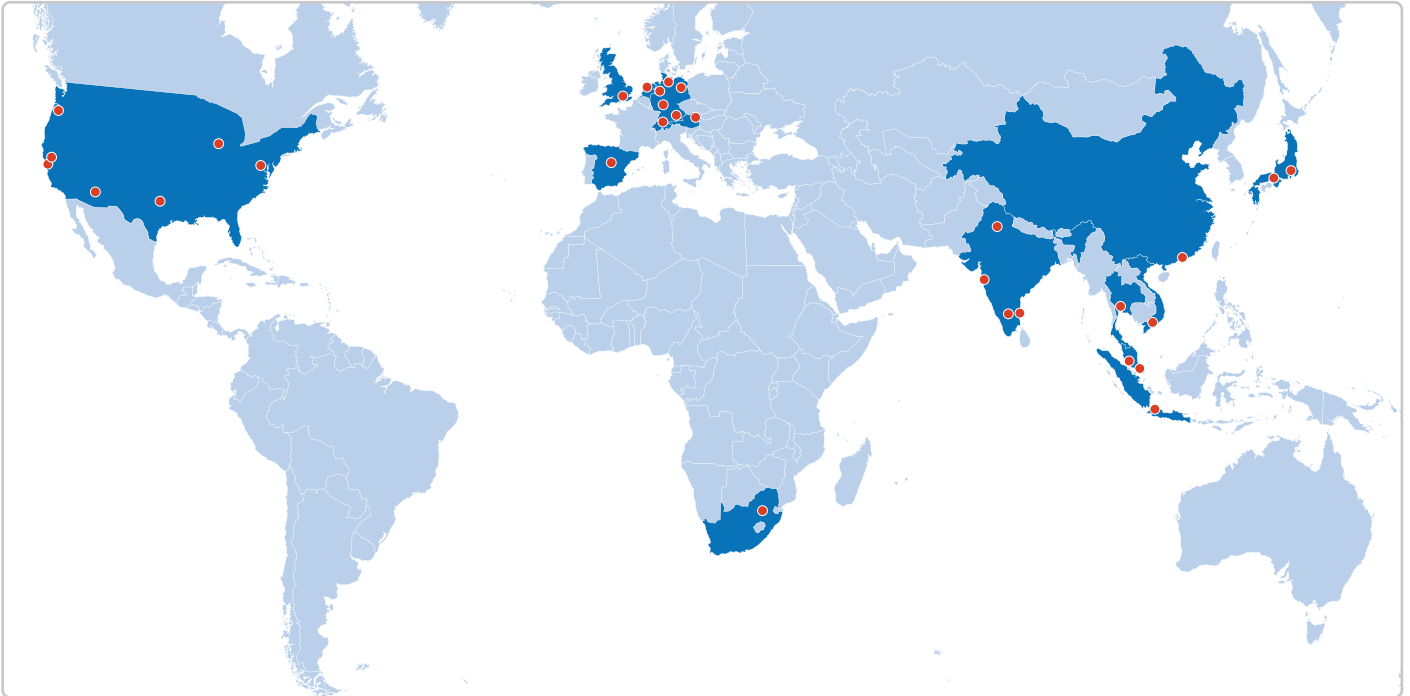- Additional security services

**Global data center network**

- Part of the NTT family
- Connectivity options to the global NTT network

**Service level agreement**

- 99.999% power uptime availability
- Climate control conditions in line with ASHRAE guidelines
- Connectivity availability

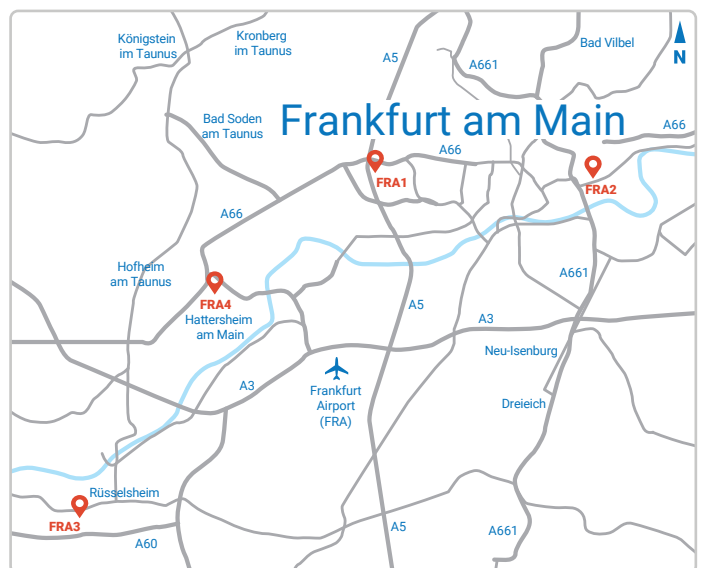## Flexible connection to data centers and clouds: 20+ countries and 1,500+MW IT load



## Why NTT's Global Data Centers?

Global Data Centers is a division of NTT Ltd. Our global platform is one of the largest in the world. NTT is routinely recognized as a leader by leading analysts in the networking and data center space, spanning more than 20 countries and regions, including North America, Europe, Africa, India 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. You benefit from tailored infrastructure and experience consistent best practices in design and operations across all of our reliable, scalable and customizable data centers. We're ready to facilitate client adoption of next-generation technologies for computing at scale, virtualization, data migration and cloud and B2B private connectivity both regionally and across the globe.

Visit us at our website **services.global.ntt**.



## Locations



## Contact and address

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