



GTM GERMANY | GLOBAL DATA CENTERS EMEA

# Rhine-Ruhr 1 Data Center

Ecosystem in a live data center environment

Site brochure



## Home to the cloud

Rhine-Ruhr, located in the federal state of North Rhine-Westphalia, is the largest metropolitan region in Germany, with a population of over 10 million. Rhine-Ruhr is located at the center of the ›European Blue Banana‹, making it very well-connected to other major European cities and important German metropolitan areas. Rhine-Ruhr accounts for a large amount of the German economy GDP, and is home to some important economic regions, such as Dusseldorf, Essen, Cologne and Bonn. Twelve Fortune Global 500 companies reside in the region, among them two are located in Bonn, Deutsche Post AG and Deutsche Telekom AG. Rhine-Ruhr is a highly industrialized region, and in recent years has developed important financial services and technology industries.

Rhine-Ruhr 1 Data Center is NTT's tenth data center and located within a 11,400 sqm facility situated in Bonn, about a 25 minutes drive from Cologne-Bonn Airport. After completion of both construction phases, our location will offer a total of about 5,400 sqm of high availability colocation space and total power capacity of 8 MW.

## A solution for every requirement

With a total of 2,700 sqm IT space and a maximum of 4 MW in building A, Rhine-Ruhr 1 offers a secure and highly available data center infrastructure for our clients in the public sector. We provide you with the best possible physical and technical infrastructure supported by 2n UPS systems, n+1 generator backup, as well as

highly redundant cooling systems. Rhine-Ruhr 1 holds multiple certifications and is connected to major carrier hubs and cloud networks. 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.



## 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:

<b>Fully-fitted</b>	Colocation rack
	Carrier rack
	Cage
<b>Shell and core</b>	Suite
	Area
<b>Supporting products and services</b>	Multi service interconnection platform
	Cross connects
	Remote-hands

## Infrastructure



### Data center space

- 2,700 sqm of IT space in building A (5,400 sqm once fully built out)
- 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

- high efficient chiller systems with free-cooling integrated or separated coolers and own-programmed, weather-dependent energy management systems
- CRAH units in the suites and technical rooms
- additional ground water cooling for building A
- concurrently maintainable AHUs providing fresh air pressurization and humidity control to data suites
- cold aisle containment to support high densities and maximize efficiencies
- heat recovery with heating pumps for pre-heating the emergency standby power systems and offices

### Power

- off-site substations delivering 15 MVA of power
- maximum client IT load of 8 MW (once fully built out)
- average power density of 1.5 kW/sqm
- power supply at medium level 10 kV from two separate feeds
- two separate UPS systems per building section (A- and B-supply) with 2n redundancy
- redundantly designed emergency power system with diesel generators n+1 per 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 a nitrogen extinguishing gas system
- fire protection walls to a minimum of 90 minutes separation

### Security

- Service Control Center for security and operation with 24/7 fallback to Frankfurt 1
- 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 data center area
- 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 and persons separation locks per data center building
- 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
- pre-spliced dark fiber available on demand
- 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 cloud interconnection platform to connect our clients to major cloud service providers such as Amazon Web Services, Microsoft Azure, and Google Cloud Platform

### 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.

### Additional services

- client implementation
- installation services
- remote-hands service provided by the technical infrastructure on-call service
- facility services

- connectivity options to the global NTT network
- access and use of Technology Experience Labs with a worldwide partner network

### Service Level Agreement

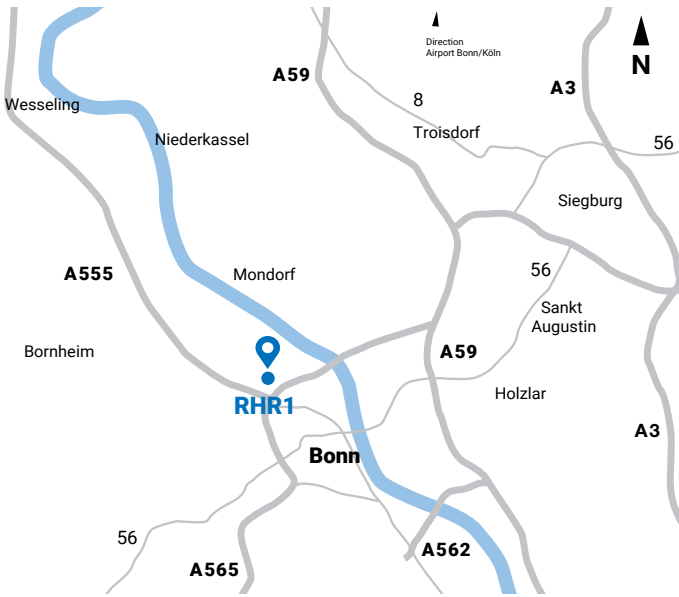
- 99.999% power uptime availability
- climate control conditions in line with ASHRAE guidelines

### Global data center network

- part of the NTT family of over 160 data centers around the world



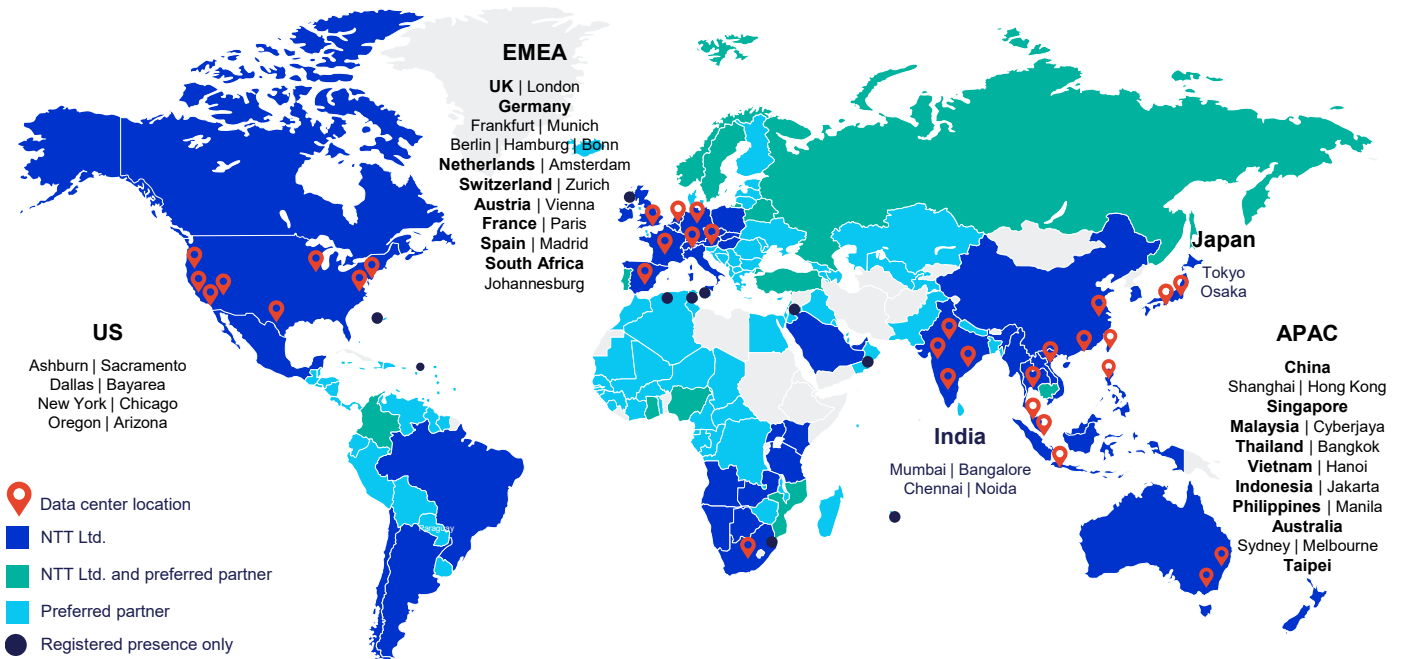
## Location in Rhine-Ruhr



## 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.

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



# 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.



## Partner

We work together with you.  
We're an extension for your business.



## Intelligent

For us, intelligent means helping you to be data driven, connected, digital, and secure.



5

regions



## Globally

We are wherever you are, making it easier for you to focus on your core business.



120

years of heritage in the NTT Group



## Outcomes

We shape the outcomes you're looking for.



**Contact**

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