Hamburg 1 Data Center
Fulfilled requirements for high availability
Home to the cloud
Hamburg is the second-largest city in Germany. The city has one of Germany’s most significant economic centers, home to Europe’s third-largest port and a highly important financial sector. Germany’s oldest stock exchange and merchant bank, Berenberg Bank, both reside in the city. Hamburg has a very well-established media industry, with major regional broadcaster NDR, publishing firms Gruner + Jahr and Axel Springer AG, and newspapers ‘Der Spiegel’ and ‘Die Zeit’ based in the city. A budding technology industry is emerging in Hamburg, with many start-ups forming. There is also a large amount of established technology companies who have a base in Hamburg such as Adobe Systems, Facebook, Google, Microsoft and Twitter.

In Hamburg, we operate a colocation center with a total of 1,230 sqm of high availability data center space. Together with Frankfurt 2 and Munich 1, it’s one of our three smaller data centers, which fulfils all the requirements of high availability.

A solution for every requirement
With up to 1,230 sqm of IT space, and about an IT load of 0.8 MW Hamburg 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 technical infrastructure supported by N+1 UPS systems, generator backup, as well as highly redundant cooling systems. Hamburg 1 holds multiple certifications such as DIN EN ISO 9001 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.

Infrastructure
Data center space
- 1,230 sqm of IT space
- flexible colocation deployments: single rack colocation, cages, suites
- ancillary spaces (offices, storages, and pre-installation rooms) available
- common areas such as meeting rooms, catering area, and showers

Cooling
- redundant water-cooled system supported by free-cooling (N+1)
- cold air supply from »bottom to top« via raised floor
- star-shaped chilled water pipes to CRAC units with redundant pumps

Power
- on-site substation delivering 1.6 MVA of power
- maximum client IT load of 0.8 MW
- average power density of 1.0 kW/sqm
- own medium-voltage feed from the European grid via local power supplier (2 x 800 kVA transformer station)
- UPS N+1 redundant with bridging time minimum 15 minutes battery at full load
- emergency generators (1 x 1,400 kVA) fuel storage for 48 hours
Fire protection
• monitoring with automatic digital fire alarm system
• smoke detection early warning system (VESDA) in the return air path
• mobile gas extinguishing systems and hand-held fire extinguishers for first firefighting actions
• fire protection walls with fire resistance 90 minutes

Security
• Service Operation Center for security and operation with 24/7 fallback to Berlin 1
• redundant monitoring of all critical functions underpinned by standardized security
• video surveillance systems for the external building facade and internal areas
• 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
• 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
• Remote Hands services provided by the technical infrastructure on-call service

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
• 99.95% power uptime availability
• connectivity availability

Overview of our main product offerings:

<table>
<thead>
<tr>
<th>Fully-fitted</th>
<th>Supporting products and services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colocation Rack</td>
<td>Multi Service Interconnection Platform</td>
</tr>
<tr>
<td>Carrier Rack</td>
<td>Cross Connect</td>
</tr>
<tr>
<td>Dedicated Cage</td>
<td>Remote Hands</td>
</tr>
<tr>
<td>Dedicated Suite</td>
<td></td>
</tr>
</tbody>
</table>

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.

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

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

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

120
years of heritage in the NTT Group.

Outcomes
We shape the outcomes you’re looking for.