



London 1 Data Center



Home to the cloud

Marketplace for growth and innovation

London, the capital and most populous city in the UK, features one of the largest economies in Europe. It is a leading business and financial services district, with more than half of the FTSE 100 headquartered in the city. London is a global connectivity hub, home to the London Internet Exchange (LINX), which is one of the world's largest internet exchange points, with more than 850 members. The city boasts thousands of technology businesses and is a leading location for technological innovations such as FinTech.

Our London 1 Data Center is located in Dagenham, approximately 20 km east of London city center and 15 km from the Docklands. The Docklands has been established as the UK's internet hub and the backbone for the global internet network, which facilitates the majority of the London Internet Exchange's (LINX) infrastructure. Dagenham is also situated close to Shoreditch, which has recently

become known as 'East London Tech City' or the 'Silicon Roundabout,' as many technology companies and start-ups have decided to reside in the area.

In addition, London 1 will join the five existing data centers we currently operate in Hemel Hempstead and Slough. The campus will offer highly available, scalable data center space, with high power density, carrier neutrality, flexible colocation spaces, cloud network access, connectivity, and on-site support.

The London data center market is one of the most active colocation ecosystems in the world with a strong networking, internet and cloud infrastructure presence. London is a strategic hub for data center services for both UK organizations as well as multinational companies, who from both a physical and digital perspective, require reliable services to reach local customers even faster. As one of the leading data center providers, we continue to build on our sturdy foundation to successfully serve this vibrant data center market today and in the future.

Clients can choose flexible colocation deployments from single racks to cages and suites, or select larger shell and core building space with custom fit-outs if needed.

A solution for every requirement

With up to 12,800 sqm of IT space, and a maximum IT load of 32 MW (64 MW once fully built out), the first phase of London 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.

London 1 holds multiple certifications and is connected to major carrier hubs and cloud networks, as well as to the LINX. To validate hybrid cloud services and innovations faster and at lower cost, our Technology Experience Lab provides 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:

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

Infrastructure



Data center space

- 10 data halls with 12,800 sqm of IT space in first building
- 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, kitchen, and showers

Cooling

- redundant water-cooled system supported by free-cooling (n+1)
- data halls utilize a compressorless cooling system, designed for superior energy efficiency and performance
- cold air flooded room cooling design with Suite Cooling Units (SCUs), rejecting the heat from the servers in the data suites into the cooling water loop
- hot aisle containment to support high densities and maximize efficiencies

Power

- on-site substation delivering 80 MVA of power
- maximum customer IT load of 32 MW/ 64 MW once completely built out
- average power density of 2.5 kW/sqm
- power supply on 132 kV level from two grid connections
- own substation with two 132/11 kV transformers 2n
- 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
- water mist fire suppression system activated by double-knock fire detection
- fire protection walls to a minimum of 60 minutes separation
- monitoring with automatic digital fire alarm system

Security

- 24/7 Security Operations Center (SOC) and Service Control Center (SCC)
- 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 an additional 2.4-m-high anti-climb 358 'weldmesh' fence to protect the perimeter
- CCTV covering the external perimeter, plant areas, and data halls
- ram-raid bollard protection 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-neutral
- carrier mix from global tier 1 supplier to regional supplier
- connectivity and dark fiber infrastructure in place connecting LON1 to Hemel Hempstead, Slough and the major carrier hubs in the Docklands
- pre-spliced dark fibre available on demand
- redundant Carrier-Meet-Me-Rooms (CMMR)
- redundant cabling infrastructure with diverse paths
- pre-cabling to support fast cross connect deployments
- high-performance internet access
- inter DC 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 (AWS), Microsoft Azure, and Google Cloud Platform

Additional services

- consulting, general and implementation planning for development projects
- customer implementation
- installation services
- 24/7 remote-hands services
- facility services
- audit support

Global data center network

- part of the NTT family of over 140 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

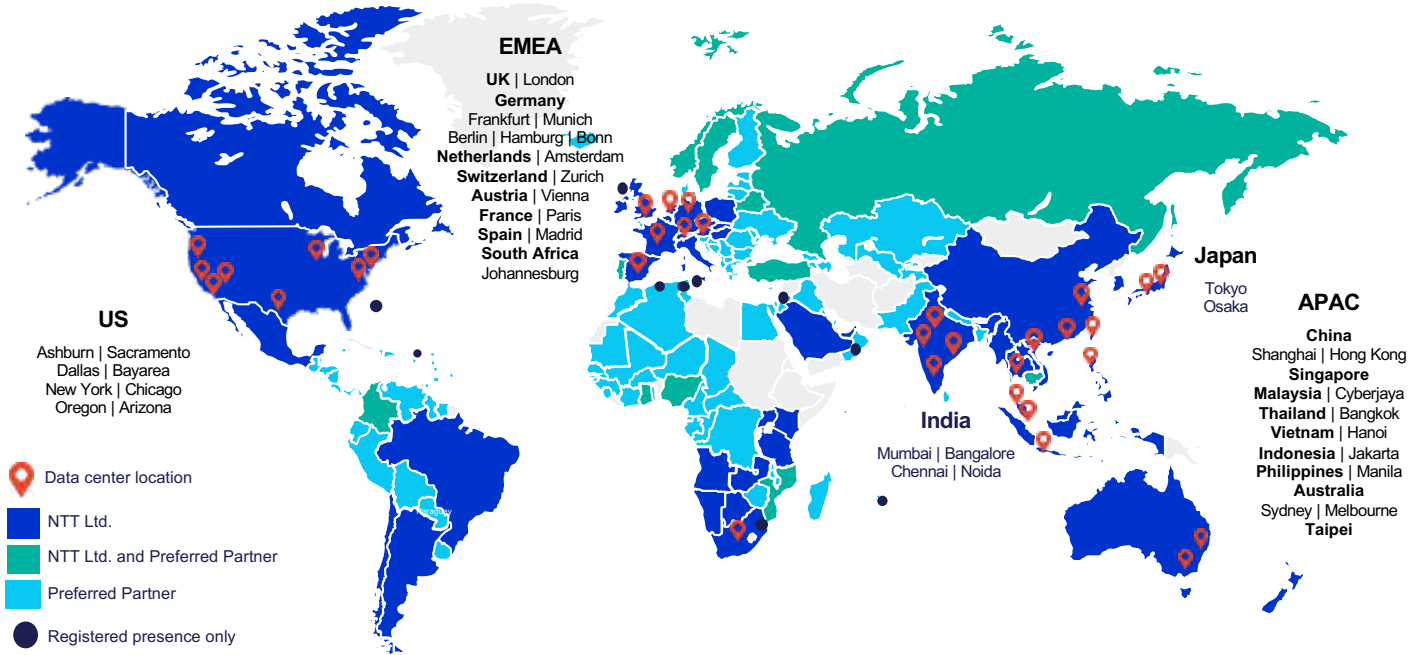
- 99.999% power uptime availability
- climate control conditions in line with ASHRAE guidelines
- connectivity availability

Our Technology Experience Lab

- **Rich ecosystem:** Drive private and hybrid cloud use-cases jointly with partners and clients of all sizes
- **Room for innovation:** Test and validate distributed architectures in a real-world production environment
- **Knowledge community:** Share information via a series of regular webcasts, meetups, and hackathons, in addition to hosting and joining bootcamps
- **FinTech, hybrid cloud, local technology partners**



Flexible connection to data centers and clouds: 20+ countries and 450,000 sqm server space



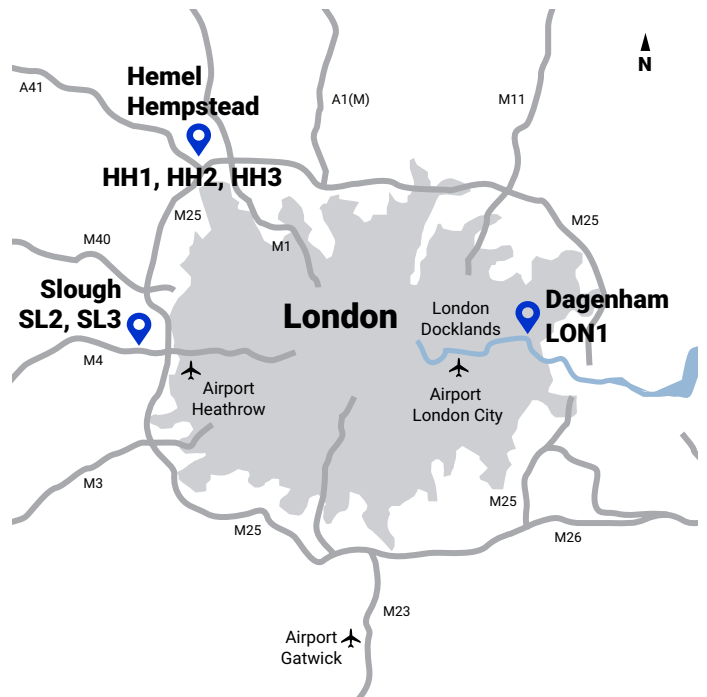
About the Global Data Centers division of NTT

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 140 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.



Locations in London





72%

**of British venture
capital was given
to London firms**

#1

**data center market
in Europe**

38%

**of European unicorn
companies are based
in London**



#1

**in funding tech start-ups
in Europe**

37%

**of global foreign
exchange trading
happens in London**

47%

**of the best start-ups
in Europe are located
in London**

