

Appendix 2 of the Data Protection Agreement: Technical and Organizational Measures in accordance with Article 32 of the GDPR

The Technical and Organizational Measures (TOMs) are in place to make sure that there is an appropriate level of protection for personal data, and more specifically, to protect the rights and freedoms for data subjects. Below, you will find detailed information about Hetzner’s TOMs.

You can also find more information at <https://docs.hetzner.com/general/others/technical-and-organizational-measures>.

1 Physical access control

Physical access control defines who has physical access to a site, building, or room.

Measure	Data centers	Admin buildings
Electronic access control system with logging	✓	✓
Documented distribution of access media	✓	✓
Comprehensive video monitoring	✓	✓
Policy about how to handle visitors	✓	✓
High security perimeter fencing (with anti-climbing and anti-tunnelling protection) around the entire data center park	✓	NA
Separate colocation area with lock-able racks	✓	NA

For the next few sections of this appendix, the following is true:

Dedicated servers/Cloud servers: You/the Client are completely responsible for the management, maintenance and security of the server.

Managed products: For these products, we at Hetzner take responsibility for the maintenance, administration, and security of your systems.

2 Electronic access control

The electronic access control defines who is allowed to log on to a system so that only authorized people have access to it.

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
Individual customer ac- counts with numerous management options and access to the administra- tion interface	✓	✓	✓	✓	✓	✓	✓	✓
Traceable access logs and change logs for cus- tomer accounts	✓	✓	✓	✓	✓	✓	✓	✓
Required passwords for customer accounts with defined minimum require- ments	✓	✓	✓	✓	✓	✓	✓	✓

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
Option for two-factor authentication (2FA) for customer accounts	✓	✓	✓	✓	✓	✓	✓	✓
Client has exclusive access to server	✓	✓	✓	NA (see next line)	NA (see next line)	NA (see next line)	NA (see next line)	NA (see next line)
Only authorized Hetzner employees have administrative access, within the scope of the agreed service; via multi-level authentication and cryptographic protection Access done for tasks ranging from infrastructure maintenance to complete server management depending on product	NA (see last line)	NA (see last line)	NA (see last line)	✓	✓	✓	✓	✓
Additional measures are the responsibility of the Client	✓	✓	✓	✓	✓	✓	✓	✓

3 Internal access control

Internal access control defines which authorizations people have within a system. It defines what a user may see, change, or execute after accessing a system.

Measure	Colo-cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
Regular updates	Client's responsibility	Client's responsibility	✓ for the underlying cloud infrastructure	✓ for the underlying infrastructure	✓	✓	✓	✓
Audit-proof, binding authorization procedure based on a role and authorization policy	Client's responsibility	Client's responsibility	✓ the cloud infrastructure is accessed Client's responsibility for virtual machine	✓ Client's responsibility for file access	✓ Client's responsibility for file access	✓ Client's responsibility for file access	✓ Client's responsibility for file access	✓ Client's responsibility for file access
Maintaining, securing, and updating transferred data/software	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility
Additional measures are the responsibility of the Client	✓	✓	✓ regarding access to cloud servers	✓	✓	✓	✓	✓

4 Transfer control

Transfer control includes measures and procedures that make sure that the use, access, and transport of physical data storage media are monitored and protected against unauthorized access.

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
Defined process for deleting data from storage drives after contract is complete Implemented differently depending on product type	Client's responsibility	✓	✓	✓	✓	✓	✓	✓
Storage drives are physically destroyed if data cannot be successfully erased	Client's responsibility	✓	✓	✓	✓	✓	✓	✓
Physical access to storage devices only in defined areas; transport across locations exclusively in locked transport boxes	Client's responsibility	✓	✓	✓	✓	✓	✓	✓

5 Isolation control

Measures for isolation control make sure that data for each different customer or application within a system is separated from each other when they are processed and stored.

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
Physical or logical separation of data	Client's responsibility	Client's responsibility	✓	✓	✓	✓	✓	✓
Physical and logical separation of back-up data	Client's responsibility	Client's responsibility	✓	✓	✓	✓	NA	Client's responsibility
Additional measures are the responsibility of the Client	✓	✓	✓	✓	✓	✓	NA	NA

6 Pseudonymization

Using pseudonymization methods, personal data is modified in such a way that it cannot be tied to specific people without additional information being provided.

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
Pseudonymization of data stored within the systems	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility

7 Confidentiality

Confidentiality measures make sure that personal data is protected from unauthorized access or disclosure while it is being processed and stored.

Measure	Implementation
Hetzner employees sign a confidentiality agreement before they begin doing any work with personal data in compliance with data protection regulations	✓
Confidentiality agreement and implementation of TOMs by external persons before starting their activities for Hetzner (if necessary)	✓
Hetzner employees regularly get training to raise awareness for and knowledge about data protection and information security	✓
Encryption options for data transfers (Implemented differently depending on product type)	✓
Encryption of Data (at rest)	Client's responsibility
Encryption of Backups (at rest)	Client's responsibility Exception Managed Servers: ✓

8 Integrity

Data integrity measures make sure that data and systems remain complete, uncorrupted, and correct while they are being stored or transferred.

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
Data changes are logged in an audit-proof manner	Client's responsibility	Client's responsibility	Client's responsibility	✓	✓	✓	✓	✓
Responsibility for entering and processing data	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility	Client's responsibility
Virus scanner / Security tests	Client's responsibility	Client's responsibility	Client's responsibility	✓	✓	Rootkit tests	Rootkit tests	-
Additional measures the responsibility of the Client	✓	✓	✓	✓	✓	✓	✓	✓

9 Availability, resilience and network security

Availability measures focus on keeping the systems in continued working order. Resilience measures make sure that the data remains available even under exceptional circumstances. Network security includes measures to protect the network infrastructure from unauthorized access and attacks.

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
<u>Operation and support</u>								
24/7 technical support di- rectly in data center	NA Remote hands on request	✓	✓	✓	✓	✓	✓	✓
Escalation chain for dis- ruptions and emergencies	See product description							
Monitoring	Client's responsi- bility	Client's responsi- bility	✓ for Host Client's responsi- bility for virtual ma- chine	✓	✓	✓	✓	✓

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
<u>Power supply, climatization and facility management</u>								
Uninterruptible power supply using redundant UPSs and emergency power supply system	✓	✓	✓	✓	✓	✓	✓	✓
Redundant power supply from the substation	✓	✓	✓	✓	✓	✓	✓	✓
Redundant and energy-efficient cooling using direct free cooling and climate controls	✓	✓	✓	✓	✓	✓	✓	✓
Cold-aisle containment in above-average raised flooring	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring of process-relevant parameters via intelligent measurement, control, regulation, and monitoring system	✓	✓	✓	✓	✓	✓	✓	✓

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
<u>Fire protection</u>								
Site-wide early warning fire system; direct connection to the local fire and rescue coordination center	✓	✓	✓	✓	✓	✓	✓	✓
Dynamic fire protection measures	✓	✓	✓	✓	✓	✓	✓	✓
Regular training for emergencies and fire protection	✓	✓	✓	✓	✓	✓	✓	✓

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
<u>Network and attack protection</u>								
Redundant and highly available network infrastructure 99.9% network availability in accordance with GTC	✓	✓	✓	✓	✓	✓	✓	✓
Continuous active DDoS recognition	✓	✓	✓	✓	✓	✓	✓	✓
Use of firewall and port management	Client's responsibility	Client's responsibility	Client's responsibility	✓	✓	✓	✓	✓
Individually configured firewall	NA	✓	✓	NA (see next line)	NA (see next line)	NA (see next line)	NA (see next line)	✓
Hetzner-managed firewall with 24/7 monitoring	NA	NA (see last line)	NA (see last line)	✓	✓	✓	✓	NA (see last line)

Measure	Colo- cation	Dedicated servers	Cloud servers	Managed servers	Web hosting	Storage Shares	Storage Boxes	Object Storage
<u>Backup and system protection</u>								
Backup and recovery plan	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility Backups and snapshots can be added for a fee	✓ partially de- pends on pur- chased ser- vices	✓	✓ Own backup recommended	Client's responsi- bility Snapshots, depending on purchased services	Client's responsi- bility Redundant storage within the cluster system
Disk mirroring	Client's responsi- bility	Client's responsi- bility	Client's responsi- bility	✓	✓	✓	✓	✓

10 Procedures for regular testing, assessment, and evaluation

Regularly testing, assessing, and evaluating the data protection and security standards ensures that the measures stay in compliance with regulations and improve over time.

Measure	Implementation
Data protection and information security management system (DMS, ISMS)	✓
Employment of a data protection and information security officer who is integrated into the operational processes	✓
Data-protection-friendly default settings (privacy by default and privacy by design)	✓
Incident response management	✓
Certifications according to ISO 27001, § 8a BSI-KritisV and BSI C5 Type 2 certification	✓
Annual review of TOMs by external service provider	✓
Annual review of the proper calculation and billing of connection charges by expert opinion in accordance with § 63 TKG	✓
EMAS certification (ISO 14001) of the environmental management system at German locations	✓