

How Cloud Storage Works

Storing data online instead of local devices

Master control server with multiple storage servers

Access data anywhere via Internet

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Why Cloud Storage Matters



Space Limitations

Local devices can fill up or break



Convenience

Access data from any device online



Collaboration

Share access with others easily

Key Security Practices

Authorization

Set different access levels for users

Encryption

Data encoded to prevent unauthorized reading

Authentication

Username and password required for access

Physical Security

Protect storage machines in secured data centers



Risks and Concerns

Data Theft

Hackers may try to break encryption

Insider Threats

Employees might misuse access rights

Physical Theft

Stealing data servers is a risk



How Cloud Storage Systems Work

1

Client Uploads Files

Data sent over Internet to servers

2

Data Stored on Servers

Saved on multiple machines for safety

3

Client Accesses Data

Files retrieved or edited via web

Redundancy and Backup

Data Replication
Copies stored on several servers



Power Supply Failover
Servers on different power sources

Backup Storage
Off-site copies prevent data loss



Popular Cloud Storage Providers



Large Capacity

Providers offer increasing storage limits



Security Focus

Strong encryption and access controls



Reliable Access

Data available 24/7 worldwide

Benefits of Cloud Storage

Convenience

Access files anywhere, any device

Collaboration

Easy sharing and teamwork

Data Safety

Protected by backups and encryption

Scalability

Expand storage as needs grow