

Data Loss Risks and Mitigation Strategies

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Introduction

Data loss can have severe operational and financial impacts on a company. Understanding the risks and implementing mitigation strategies is essential for business continuity.

1. Risks of Data Loss

- Human Error: Accidental deletion or modification of critical files.
- Hardware Failures: Disk crashes, server failures, or faulty storage devices.
- Malware or Cyberattacks: Ransomware, viruses, or hacking incidents that delete or encrypt data.
- Natural Disasters: Fire, floods, earthquakes, or power surges.

2. Mitigation Strategies

- Regular Backups: Schedule frequent backups of all critical data and store them in secure locations.
- Access Control: Limit write/edit permissions in the database to authorized personnel only.
- Database Replication: Create replicas of the master database to ensure data availability in case of failure.
- Monitoring and Alerts: Implement monitoring tools to detect unusual activity or hardware issues early.
- Disaster Recovery Plan: Maintain a tested plan for recovering data in case of system failure or disaster.

Conclusion

By implementing these strategies, companies can protect their data, minimize downtime, and safeguard both operational efficiency and financial stability.