# Project Showcase: Automated Database Backup & Recovery

I recently worked on a Database Backup & Recovery Automation project that ensures business continuity in case of system failures. The goal was to automate backups, enable quick recovery, and verify data integrity for both MySQL and PostgreSQL databases.

## Key Highlights

✅ Automated full & incremental backups

✅ Point-in-time recovery using binary logs

✅ Cross-platform support for MySQL & PostgreSQL

✅ Data integrity checks with row count & checksum verification

✅ Cron jobs for zero manual intervention

## Tech Stack

- Databases: MySQL, PostgreSQL

- Tools: mysqldump, mysqlbinlog, pg\_dump, pg\_restore

- Automation: Bash scripts, cron jobs

- Validation: Custom verification scripts

## Process Overview

1️⃣ Backup – Full & incremental/binlog backups stored securely

2️⃣ Recovery – Restore from the latest valid backup and apply incremental logs

3️⃣ Verification – Compare restored data with original for accuracy

4️⃣ Automation – Scheduled jobs to ensure regular backups without downtime

## Why It Matters

Database failures can be costly. This solution minimizes downtime, protects against data loss, and supports quick, reliable recovery — a must-have for any organization managing critical data.

## Conclusion

This project not only enhanced my skills in database administration & scripting but also strengthened my understanding of disaster recovery planning. Reliable backups = peace of mind for any business.

💬 Would love to hear how you manage your backups & recovery strategy. Drop your thoughts below!

#Database #Backup #Recovery #MySQL #PostgreSQL #DataIntegrity #Automation #DevOps #DatabaseAdministration