Runbook: Restarting a Database Server

📄 Title: Safe Restart Procedure for Database Server

Applies To: MySQL / PostgreSQL / MSSQL (Adjust steps as per your DB engine)
Priority: High
Owner: DevOps / DBA Team
Last Updated: July 2025

✅ Objective

To safely restart the database server without data loss or prolonged downtime.

🔐 Pre-checks Before Restart

1. **Inform Stakeholders**
   - Notify impacted teams (backend, frontend, analytics).
   - Schedule during a maintenance window (preferably off-peak).
2. **Check Active Sessions**
   - MySQL: SHOW PROCESSLIST;
- PostgreSQL:
  sql
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  SELECT * FROM pg_stat_activity WHERE state = 'active';
     -
- MSSQL:
  sql
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  SELECT session_id, login_name, status FROM sys.dm_exec_sessions;
     -
3. **Check for Ongoing Backups or Jobs**
   - Ensure no backups, migrations, or batch jobs are running.

4. **Take a Snapshot / Backup** (If not automated)
    ○ MySQL: mysqldump -u root -p --all-databases > backup.sql
    ○ PostgreSQL: pg_dumpall > full_backup.sql
    ○ MSSQL: Use SQL Server Management Studio (SSMS) or sqlcmd.

💻 Restart Instructions

🔷 Linux (Ubuntu/CentOS)

✅ MySQL / MariaDB

bash

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- sudo systemctl status mysql
- sudo systemctl stop mysql
- sleep 10
- sudo systemctl start mysql
- sudo systemctl status mysql

✅ PostgreSQL

bash

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- sudo systemctl status postgresql
- sudo systemctl stop postgresql
- sleep 10
- sudo systemctl start postgresql
- sudo systemctl status postgresql

🔶 Windows Server

1. Open **Services (services.msc)**
2. Find your DB engine (e.g., *MySQL*, *PostgreSQL*, or *SQL Server (MSSQLSERVER)*)
3. Right-click → **Restart**
4. Wait until the status changes to Running

Alternatively (CMD or PowerShell):

powershell

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- Restart-Service -Name "MSSQLSERVER" -Force

🔎 Post-Restart Verification

1. **Check Logs**
   - Linux: /var/log/mysql/error.log or /var/log/postgresql/postgresql-*.log
   - Windows: Event Viewer → Application Logs
2. **Verify DB Connectivity**
   - Use a client (e.g., DBeaver, MySQL Workbench) to connect.
- Run a simple query:
  sql
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  SELECT NOW(); -- PostgreSQL/MySQL
- SELECT GETDATE(); -- MSSQL
    -
3. **Application Health Check**
   - Verify the app is connecting to the DB and running correctly.
4. **Monitor for 10–15 mins**
   - Keep an eye on CPU, memory, and disk I/O
   - Linux: htop, iostat, vmstat
   - Windows: Task Manager or Resource Monitor

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