

# Bug Report: Database Connection Error

**Reported By:** Piyush Vaishnav

**Environment:**

- **CMS:** WordPress 6.8.3
- **Theme:** Astra Pro
- **Plugins:** WP Rocket Pro Cache, Elementor, Gravity Forms, Ultimate Addons for Elementor, Malcare, UpdraftPlus Pro and 9 other plugins
- **Server Environment:** Apache, PHP 8.2
- **Browser Tested:** Chrome (v.141), Edge, Firefox
- **Hosting:** Bluehost (Production)

## 1. Issue Summary

After a scheduled plugin update and server reboot, the website started displaying the **“Error establishing a database connection”** message.

The issue was intermittent during the first hour, then persistent across all pages including /wp-admin indicating that WordPress was unable to communicate with the MySQL server.

This prevented both visitors and administrators from accessing the site.

## 2. Steps to Reproduce

1. Visit <https://clientdomain.com> or /wp-admin.
2. Observe the error: Error establishing a database connection
3. Attempt to access phpMyAdmin -> confirm the MySQL server is running.
4. Check wp-config.php for DB credentials.
5. Restart MySQL service -> reload site.
6. Observe that the error persists intermittently.

## 3. Expected Behavior

WordPress should connect successfully to the database using the credentials defined in wp-config.php, load site content, and allow admin login without interruption.

## 4. Actual Behavior

- Site shows the default WordPress database connection error page.
- /wp-admin sometimes shows a fatal error related to mysqli\_connect().
- MySQL logs show “Too many connections” and “Access denied for user” messages.

- Intermittent downtime across multiple site requests.

## 5. Technical Findings

- Database credentials in wp-config.php were correct.
- MySQL service was running but reached its **connection limit (max\_connections=150)** during heavy traffic after the plugin update.
- Error logs revealed delayed queries from a backup plugin consuming connections.
- The DB\_HOST value pointed to another IP; the hosting provider later confirmed it required 127.0.0.1 for socket-based access.
- Temporary MySQL restart resolved the issue but recurrence confirmed an underlying configuration issue.

## 6. Steps Taken to Fix

- Verified credentials and permissions using phpMyAdmin.
- Replaced DB\_HOST in wp-config.php from another IP to 127.0.0.1.
- Increased max\_connections to 250 and adjusted wait\_timeout and interactive\_timeout to 60 seconds.
- Disabled backup plugin's automatic hourly cron job to reduce load.
- Repaired and optimized database tables using wp db repair and phpMyAdmin.
- Cleared cache and confirmed normal load across all pages.
- Monitored uptime for 48 hours and no further disconnections detected.

## 7. Resolution Status

 **Resolved.**

Database connection restored after correcting DB\_HOST and optimizing MySQL configuration. All services stable and verified through UptimeRobot and hosting logs.

## 8. Recommendations

- Always verify host-specific DB\_HOST values after migration or server changes.
- Limit automated backup frequency during high-traffic hours.
- Implement MySQL slow query logging to identify heavy queries.
- Use a monitoring tool to alert on DB response time or connection errors.
- Test plugin updates in a **staging environment** before deployment.

