Apache Troubleshooting Quick Guide

✅ Common Issues & Fixes

- **Apache won't start**

  - Check if another service is using port 80/443:
    sudo lsof -i :80
    Stop conflicting service or change Apache port in httpd.conf / ports.conf.

- **Permission denied errors**

  - Ensure correct ownership:
    sudo chown -R www-data:www-data /var/www/html
    Adjust file permissions:
    sudo chmod -R 755 /var/www/html.

- **Configuration errors**

  - Test config before restart:
    apachectl configtest
    Look for syntax errors in /etc/apache2/apache2.conf or
    /etc/httpd/conf/httpd.conf.

- **Website not loading**

  - Check logs:
    tail -f /var/log/apache2/error.log
    Verify DNS and firewall rules.

- **SSL/TLS issues**

- Confirm certificate paths in default-ssl.conf.

- Reload Apache after renewal:
  sudo systemctl reload apache2.

🛠 Useful Commands

- Restart Apache:
  sudo systemctl restart apache2 (Debian/Ubuntu)
  sudo systemctl restart httpd (CentOS/RHEL)

- Check status:
  systemctl status apache2

- Enable modules:
  sudo a2enmod rewrite
  sudo systemctl restart apache2

📁 Key Log Locations

- Error log: /var/log/apache2/error.log

- Access log: /var/log/apache2/access.log

- Config files: /etc/apache2/ (Debian/Ubuntu), /etc/httpd/ (CentOS/RHEL)

🚀 Quick Tips

- Always run apachectl configtest before restarting.

- Use journalctl -xe for system-level errors.

- Keep backups of config files before editing.

- Monitor with htop or top for resource usage.