

## STEP-BY-STEP GUIDE: HOW TO RUN THE apache\_monitor.sh SCRIPT ON UBUNTU

### 1. OPEN A TERMINAL

- Press Ctrl + Alt + T.

### 2. SAVE THE SCRIPT

- Ensure the apache\_monitor.sh file is saved in your home folder (e.g., ~/apache\_monitor.sh).
- To create manually: run 'nano ~/apache\_monitor.sh' and paste contents.

### 3. MAKE THE SCRIPT EXECUTABLE

```
chmod +x ~/apache_monitor.sh
```

### 4. RUN THE SCRIPT (REQUIRES SUDO)

```
sudo ~/apache_monitor.sh
```

### 5. VIEW THE LOG OUTPUT

```
sudo less /var/log/apache_monitor.log
```

or:

```
sudo tail -n 50 /var/log/apache_monitor.log
```

### 6. CHECK APACHE STATUS

```
sudo systemctl status apache2
```

```
sudo systemctl restart apache2
```

### 7. OPTIONAL: RUN AUTOMATICALLY WITH CRON

```
sudo crontab -e
```

Add:

```
*5 * * * * /root/apache_monitor.sh >> /var/log/apache_monitor_cron.log 2>&1
```

### 8. SECURITY NOTE ABOUT chmod 777

Avoid setting /var/www to world-writable.

Use safer permissions:

```
sudo chown -R www-data:www-data /var/www  
sudo find /var/www -type d -exec chmod 755 {} \\;  
sudo find /var/www -type f -exec chmod 644 {} \\;
```

## 9. FIX FOR TRUNCATED SCRIPT ENDING

Append this block to check and restart Apache only if needed:

```
if systemctl is-active --quiet apache2; then  
    echo "[OK] Apache is running." >> $LOGFILE  
else  
    echo "[WARN] Apache is NOT running. Attempting restart..." >> $LOGFILE  
    sudo systemctl restart apache2 >> $LOGFILE 2>&1  
    if systemctl is-active --quiet apache2; then  
        echo "[OK] Apache restarted successfully." >> $LOGFILE  
    else  
        echo "[ERROR] Apache failed to start." >> $LOGFILE  
    fi  
fi
```

## 10. TROUBLESHOOTING

- Permission denied → run chmod +x again.
- Script errors → check for incomplete lines in nano.
- Apache fails to install → sudo apt update then sudo apt install apache2 -y.