



# Disk & Folder Space Monitor

A lightweight **Bash-based monitoring toolkit** for tracking disk usage and folder sizes on Linux systems (including WSL). Includes automated logging, optional email alerts, and cron job support.



## What's Included

- `disk_space_monitor.sh` : Monitors overall disk/partition usage.
- `folder_size_monitor.sh` : Logs folder sizes and available space.



## Usage Guide

### 1. Make scripts executable

```
chmod +x disk_space_monitor.sh folder_size_monitor.sh
```

### 2. Run manually

```
./disk_space_monitor.sh  
./folder_size_monitor.sh
```

### 3. Configure via Environment Variables (Optional)

For `disk_space_monitor.sh`:

Variable	Description	Default
<code>PARTITIONS</code>	Space-separated list of partitions	<code>/</code>
<code>WARNING</code>	Warning threshold (%)	<code>80</code>
<code>CRITICAL</code>	Critical threshold (%)	<code>90</code>
<code>EMAIL</code>	Email to send alerts to	<code>(none)</code>
<code>LOG_FILE</code>	Path to disk usage log	<code>/var/log/disk_space_monitor.log</code>
<code>EXCLUDE_LIST</code>	Partitions to skip	<code>(none)</code>

Example:

```
PARTITIONS="/ /mnt/c /mnt/d" WARNING=80 CRITICAL=95 EMAIL="admin@example.com" ./disk_space_monitor.sh
```

For `folder_size_monitor.sh`:

No environment config currently. Edit the script to define:

```
FOLDERS_TO_MONITOR=("/mnt/c" "/mnt/d" "/mnt/e")  
OUTPUT_FILE=~/.folder_size_monitor.log
```

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## Output

**Disk Usage Log (e.g., `disk_space_monitor.log`):**

```
2025-07-21 09:00:00 - / - 68% - OK  
2025-07-21 09:00:00 - /mnt/c - 90% - WARNING
```

**Folder Size Log (e.g., `folder_size_monitor.log`):**

```
2025-07-21 09:30:00 - Folder sizes:  
Checking folder: /mnt/e  
3.3T    /mnt/e  
1.4T    /mnt/e/Movies  
...  
Free space on /mnt/e: 405G available of 3.7T
```

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## Setting up Cron Jobs

Edit crontab:

```
crontab -e
```

Example entries:

```
# Run disk monitor hourly  
0 * * * * /home/youruser/projects/disk-space-monitor/disk_space_monitor.sh >> ~/disk_cron.log 2>&1
```

```
# Run folder size monitor daily at 3:30 AM
30 3 * * * /home/youruser/projects/disk-space-monitor/folder_size_monitor.sh >>
~/folder_cron.log 2>&1
```

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## Email Alerts

If `EMAIL` is set and `mail` or `mailx` is installed and configured, alerts will be sent when thresholds are exceeded.

To install `mailutils` on Ubuntu:

```
sudo apt install mailutils
```

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## Author

Created and maintained by [ReachMillions](#).

Feel free to fork and contribute!

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