

# Mathes Online Utilities - Shutdown & Restart Checklist

## SHUTDOWN PROCEDURE

### Step 1: Stop All Services (PowerShell as Admin)

```
powershell

# Stop the tasks
Stop-ScheduledTask -TaskName "Cloudflared Tunnel"
Stop-ScheduledTask -TaskName "Flask Excel Backend"
Stop-ScheduledTask -TaskName "Flask Full Edit Backend"

# Disable auto-restart on reboot
Disable-ScheduledTask -TaskName "Cloudflared Tunnel"
Disable-ScheduledTask -TaskName "Flask Excel Backend"
Disable-ScheduledTask -TaskName "Flask Full Edit Backend"
```

### Step 2: Update Landing Page to Show Offline Status

Edit `D:\excel-web-interface\index.html` in the CONFIG section:

Find the Movies & Shows card and change:

```
javascript

{
  icon: "🎬",
  title: "Movies & Shows",
  description: "Full CRUD editor... (Currently offline)", // Add this
  buttons: [
    {
      text: "Full Editor",
      url: "...",
      style: "disabled" // Change from "primary" to "disabled"
    },
    {
      text: "Quick Add",
      url: "...",
      style: "disabled" // Change from "secondary" to "disabled"
    }
  ]
}
```

Then push the update:

```
powershell
```

```
cd D:\excel-web-interface  
git add index.html  
git commit -m "Mark Movies & Shows as offline"  
git push origin main
```

Wait 1-2 minutes for GitHub Pages to deploy.

### Step 3: Verify Everything is Stopped

```
powershell
```

```
# Check ports are no longer listening  
netstat -ano | findstr :5000  
netstat -ano | findstr :5001  
# Should return nothing  
  
# Check cloudflared isn't running  
Get-Process -Name cloudflared -ErrorAction SilentlyContinue  
# Should return nothing  
  
# Check Flask apps aren't running  
Get-Process -Name python -ErrorAction SilentlyContinue | Where-Object {$_.Path -like "*Python313*"}  
# Should return nothing related to your backends
```

### Step 4: Test Shutdown Complete

Open browser and test:

- ✗ <https://api.ldmathes.cc/api/health> → Should timeout/fail
- ✗ <https://api-edit.ldmathes.cc/api/health> → Should timeout/fail
- ✓ <https://dennyrgood.github.io/> → Still loads (static, safe)

**Status: All backend services are now offline. Your machine is no longer exposing anything to the internet.**

### Optional: Disable Cloudflare Tunnel Routes (Web Dashboard)

If you want to prevent any access attempts through Cloudflare:

1. Go to **Cloudflare Zero Trust Dashboard**: <https://one.dash.cloudflare.com/>

2. Navigate to **Networks → Tunnels**

3. Click on **excel-backend** tunnel

4. Go to **Public Hostname** tab

5. You'll see two routes:

- `api.ldmathes.cc` → `http://localhost:5000`

- `api-edit.ldmathes.cc` → `http://localhost:5001`

6. Click the **3 dots (:)** next to each route → **Delete**

7. Confirm deletion

**Note:** Deleting routes is optional. If the local services are stopped, the routes won't work anyway. Delete them if you want to be extra cautious or if you're shutting down for an extended period.

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## RESTART PROCEDURE

### Step 1: Re-enable Task Scheduler Tasks (PowerShell as Admin)

```
powershell

# Re-enable the tasks
Enable-ScheduledTask -TaskName "Cloudflared Tunnel"
Enable-ScheduledTask -TaskName "Flask Excel Backend"
Enable-ScheduledTask -TaskName "Flask Full Edit Backend"
```

### Step 2: Start Services

#### Option A: Reboot (Recommended)

```
powershell

Restart-Computer
```

All services will auto-start on boot.

#### Option B: Manual Start (No Reboot)

```
powershell
```

```
# Start each task manually
Start-ScheduledTask -TaskName "Cloudflared Tunnel"
Start-ScheduledTask -TaskName "Flask Excel Backend"
Start-ScheduledTask -TaskName "Flask Full Edit Backend"

# Wait 10 seconds for services to initialize
Start-Sleep -Seconds 10
```

## Step 2A: Re-add Cloudflare Tunnel Routes (If Deleted During Shutdown)

If you deleted the tunnel routes from the Cloudflare dashboard during shutdown, you need to re-add them:

### Method 1: Via Cloudflare Zero Trust Dashboard (Recommended)

1. Go to **Cloudflare Zero Trust Dashboard**: <https://one.dash.cloudflare.com/>
2. Navigate to **Networks → Tunnels**
3. Click on **excel-backend** tunnel
4. Go to **Public Hostname** tab
5. Click **Add a public hostname**

**For api.ldmathes.cc:**

- Subdomain: `api`
- Domain: `ldmathes.cc`
- Path: (leave blank)
- Type: `HTTP`
- URL: `localhost:5000`
- Click **Save hostname**

**For api-edit.ldmathes.cc:**

- Click **Add a public hostname** again
- Subdomain: **api-edit**
- Domain: **ldmathes.cc**
- Path: (leave blank)
- Type: **HTTP**
- URL: **localhost:5001**
- Click **Save hostname**

## Method 2: Via Command Line

```
powershell

# Add DNS routes
cloudflared tunnel route dns excel-backend api.ldmathes.cc
cloudflared tunnel route dns excel-backend api-edit.ldmathes.cc

# Restart tunnel to pick up changes
Stop-ScheduledTask -TaskName "Cloudflared Tunnel"
Start-Sleep -Seconds 5
Start-ScheduledTask -TaskName "Cloudflared Tunnel"
```

**Note:** Your local **(config.yml)** file should still have the ingress rules. If routes were only deleted from the dashboard, they'll automatically be recreated when the tunnel restarts.

## Step 3: Update Landing Page to Show Online Status

Edit **(D:\excel-web-interface\index.html)** in the CONFIG section:

Find the Movies & Shows card and change:

```
javascript
```

```
{  
  icon: "🎬",  
  title: "Movies & Shows",  
  description: "Full CRUD editor...", // Remove "(Currently offline)"  
  buttons: [  
    {  
      text: "Full Editor",  
      url: "...",  
      style: "primary" // Change from "disabled" to "primary"  
    },  
    {  
      text: "Quick Add",  
      url: "...",  
      style: "secondary" // Change from "disabled" to "secondary"  
    }  
  ]  
}
```

Then push the update:

```
powershell
```

```
cd D:\excel-web-interface  
git add index.html  
git commit -m "Mark Movies & Shows as online"  
git push origin main
```

Wait 1-2 minutes for GitHub Pages to deploy.

#### Step 4: Verify Services are Running

```
powershell
```

```
# Check Task Scheduler status
Get-ScheduledTask | Where-Object {$_.TaskName -like "*Flask*" -or $_.TaskName -like "*Cloudflared*"}
# All should show "Ready" or "Running"

# Check ports are listening
netstat -ano | findstr :5000
netstat -ano | findstr :5001
# Should show LISTENING for both ports

# Check cloudflared is running
Get-Process -Name cloudflared -ErrorAction SilentlyContinue
# Should show cloudflared.exe running

# Check Flask apps are running
Get-Process -Name python -ErrorAction SilentlyContinue | Where-Object {$_.Path -like "*Python313*"}
# Should show python.exe processes
```

## Step 5: Test Endpoints

### Backend Health Checks:

```
powershell
```

```
# Test port 5000 backend
Invoke-WebRequest -Uri https://api.ldmathes.cc/api/health
# Should return: {"status":"ok"}

# Test port 5001 backend
Invoke-WebRequest -Uri https://api-edit.ldmathes.cc/api/health
# Should return: {"status":"ok"}
```

### Browser Tests:

- <https://dennyrgood.github.io/> → Landing page loads, health check shows "online", Movies & Shows card active
- <https://dennyrgood.github.io/excel-web-interface/> → Quick-add form works
- <https://dennyrgood.github.io/MoviesShowsFullEdit/> → Full editor loads rows

## Step 6: End-to-End Test

1. Go to <https://dennyrgood.github.io/excel-web-interface/>
2. Submit a test entry (Code: 999.1, Title: "Test Restart")
3. Verify entry appears in Excel file: D:\OneDrive\MS\MoviesShows.xlsx
4. Verify backup was created with timestamp

**Status: All services restored and operational.**

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## TROUBLESHOOTING

### Services Won't Start

#### Check Task Scheduler:

```
powershell

# View task details
Get-ScheduledTask -TaskName "Flask Excel Backend" | Select-Object *
Get-ScheduledTask -TaskName "Flask Full Edit Backend" | Select-Object *
Get-ScheduledTask -TaskName "Cloudflared Tunnel" | Select-Object *
```

#### Manually start to see errors:

```
powershell

# Test Flask backends
cd D:\OneDrive\MS\
python excel_backend.py
# Watch for errors

# In new PowerShell window:
python excel_backend_full_edit.py
# Watch for errors

# Test Cloudflare Tunnel
D:\OneDrive\MS\cloudflared.exe tunnel run excel-backend
# Watch for errors
```

### Ports Already in Use

```
powershell
```

```
# Find what's using the port  
netstat -ano | findstr :5000  
# Note the PID (last column)  
  
# Kill the process  
taskkill /PID [PID] /F  
  
# Restart the service  
Start-ScheduledTask -TaskName "Flask Excel Backend"
```

## Tunnel Not Connecting

```
powershell
```

```
# Check tunnel config  
Get-Content C:\Users\[YOUR-USERNAME]\.cloudflared\config.yml  
  
# Verify credentials exist  
Test-Path C:\Users\[YOUR-USERNAME]\.cloudflared\*.json  
  
# Restart tunnel  
Stop-ScheduledTask -TaskName "Cloudflared Tunnel"  
Start-Sleep -Seconds 5  
Start-ScheduledTask -TaskName "Cloudflared Tunnel"
```

## GitHub Pages Not Loading

- Check repo at: <https://github.com/dennyrgood/excel-web-interface>
- Verify GitHub Pages is enabled: Settings → Pages
- Wait 1-2 minutes for deployment
- Hard refresh browser: `(Ctrl + F5)`

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## 📋 QUICK REFERENCE

### Current Configuration

Service	Port	Tunnel URL	Task Name
Quick-Add Backend	5000	api.ldmathes.cc	Flask Excel Backend
Full Editor Backend	5001	api-edit.ldmathes.cc	Flask Full Edit Backend
Cloudflare Tunnel	N/A	N/A	Cloudflared Tunnel

## File Locations

Item	Location
Python	D:\Misc\Python313\python.exe
Backend Scripts	D:\OneDrive\MS\
Quick-Add	D:\OneDrive\MS\excel_backend.py
Full Editor	D:\OneDrive\MS\excel_backend_full_edit.py
Excel File	D:\OneDrive\MS\MoviesShows.xlsx
Cloudflared	D:\OneDrive\MS\cloudflared.exe
Tunnel Config	C:\Users\[USERNAME]\.cloudflared\config.yml
GitHub Repo	D:\excel-web-interface\

## Key URLs

Purpose	URL
Landing Page	<a href="https://dennyrsgood.github.io/">https://dennyrsgood.github.io/</a>
Quick-Add Form	<a href="https://dennyrsgood.github.io/excel-web-interface/">https://dennyrsgood.github.io/excel-web-interface/</a>
Full Editor	<a href="https://dennyrsgood.github.io/MoviesShowsFullEdit/">https://dennyrsgood.github.io/MoviesShowsFullEdit/</a>
Port 5000 Health	<a href="https://api.ldmathes.cc/api/health">https://api.ldmathes.cc/api/health</a>
Port 5001 Health	<a href="https://api-edit.ldmathes.cc/api/health">https://api-edit.ldmathes.cc/api/health</a>

## OPTIONAL: COMPLETE REMOVAL

If you want to permanently remove the project (not just pause):

### 1. Delete Task Scheduler Tasks

```
powershell
```

```
Unregister-ScheduledTask -TaskName "Cloudflared Tunnel" -Confirm:$false
Unregister-ScheduledTask -TaskName "Flask Excel Backend" -Confirm:$false
Unregister-ScheduledTask -TaskName "Flask Full Edit Backend" -Confirm:$false
```

### 2. Delete Cloudflare Tunnel

```
powershell

# List tunnels
D:\OneDrive\MS\cloudflared.exe tunnel list

# Delete tunnel
D:\OneDrive\MS\cloudflared.exe tunnel delete excel-backend
```

**Note:** This permanently deletes the tunnel. If you restart later, you'll need to create a new tunnel with a new ID.

### 3. Remove DNS Records

#### Option A: Via Cloudflare Dashboard (Recommended)

1. Go to **Cloudflare Zero Trust Dashboard**: <https://one.dash.cloudflare.com/>
2. Navigate to **Networks → Tunnels**
3. Click on **excel-backend** tunnel
4. Go to **Public Hostname** tab
5. Delete both routes:
  - `api.ldmathes.cc`
  - `api-edit.ldmathes.cc`
6. Click the 3 dots (:) next to the tunnel name → **Delete tunnel**

#### Option B: Via Cloudflare DNS Dashboard

1. Go to **Cloudflare Dashboard**: <https://dash.cloudflare.com/>
2. Select your domain: `ldmathes.cc`
3. Go to **DNS → Records**
4. Find and delete CNAME records:
  - `api` → `[tunnel-id].cfargotunnel.com`
  - `api-edit` → `[tunnel-id].cfargotunnel.com`

### 4. Delete GitHub Pages (Optional)

- Go to <https://github.com/dennyrgood/excel-web-interface/settings/pages>
- Select "None" under Source
- Or delete entire repository

### 5. Clean Up Local Files (Optional)

```
powershell
```

```
# Remove backend scripts  
Remove-Item D:\OneDrive\MS\excel_backend.py  
Remove-Item D:\OneDrive\MS\excel_backend_full_edit.py  
Remove-Item D:\OneDrive\MS\cloudflared.exe  
  
# Remove tunnel credentials  
Remove-Item -Recurse C:\Users\[USERNAME]\.cloudflared\  
  
# Remove GitHub repo clone  
Remove-Item -Recurse D:\excel-web-interface\
```

---

## NOTES

- **Pause vs. Remove:** Disabling tasks = pause (can restart easily). Deleting tasks/tunnel = permanent removal.
- **Excel File Safety:** Always remains local at `(D:\OneDrive\MS\MoviesShows.xlsx)`, never deleted in any scenario.
- **GitHub Pages:** Stays live even when backends are stopped (forms just won't work).
- **Domain:** `(ldmathes.cc)` remains active and registered—only the subdomains stop working.
- **Security:** When shutdown, nothing is exposed to the internet. Your machine is secure.

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## LESSONS LEARNED

Great things accomplished in this project:

- Set up Cloudflare Tunnel for secure external access
- Built Flask REST APIs with full CRUD operations
- Preserved Excel formulas and formatting programmatically
- Created responsive web forms with GitHub Pages
- Implemented multi-port backend architecture
- Automated services with Windows Task Scheduler
- Built configuration-driven, modular frontend

This was a successful experiment. You learned a ton about web architecture, Flask, Cloudflare, Excel automation, and system administration. Well done! 

