

# Creating a PowerShell Backup Script for VPS Syncing Folders

I'm using Robocopy to sync folders with logic to skip unchanged files.

```
# Define source and destination paths
$source1 = "C:\Users\aronat\BookStack-VPS-Backups"
$source2 = "C:\Users\aronat\Default Folder"
$destination = "E:\VPS-Backups"

# Ensure destination exists
if (!(Test-Path -Path $destination)) {
    New-Item -Path $destination -ItemType Directory
}

# Mirror BookStack-VPS-Backups
Robocopy $source1 "$destination\BookStack-VPS-Backups" /MIR /Z /FFT /XA:H /W:5 /R:3 /XO

# Mirror Default Folder
Robocopy $source2 "$destination\Default Folder" /MIR /Z /FFT /XA:H /W:5 /R:3 /XO
```

The only thing that is confusing in the script is all the logic trailing the Robocopy commands. Here is the breakdown of that:

- `/MIR` - Mirrors folder (adds new, removes deleted files)
- `/XO` - Excludes older files (does not overwrite newer destination files)
- `/Z` - Enables restartable mode (safe for external drives)
- `/FFT` - Treats file times as FAT-style (2-second tolerance; good for cross-OS syncing)
- `/XA:H` - Skips hidden files
- `/W:5 /R:3` - Waits 5 seconds and retries 3 times on errors

I tested and made sure the script worked as intended:

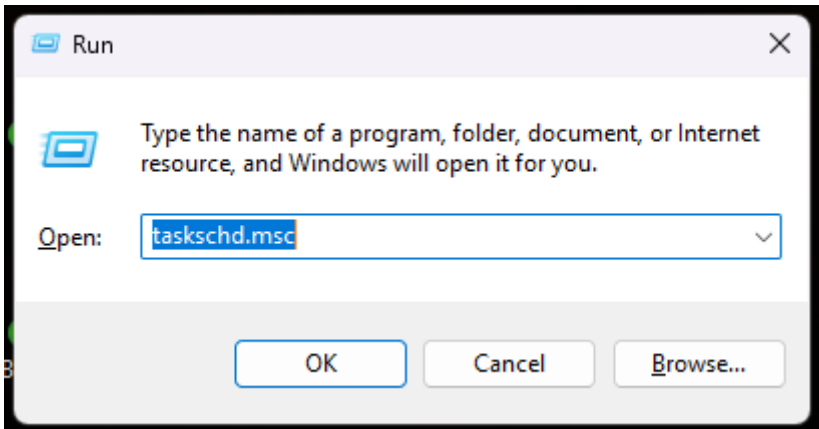
```
New Dir          1      C:\Users\anonat\Default Folder\.stfolder\  
New File        118     syncthing-folder-37a8ee.txt  
100%  
-----  
      Total      Copied      Skipped      Mismatch      FAILED      Extras  
 Dirs  :         2         2           0           0           0           0  
Files  :         9         9           0           0           0           0  
Bytes  :    1.89 m    1.89 m           0           0           0           0  
Times  :    0:00:00    0:00:00           0           0           0           0  
  
Speed  :          181,084,909 Bytes/sec.  
Speed  :          10,361.762 MegaBytes/min.  
Ended  : Saturday, May 17, 2025 5:57:57 PM  
  
PS C:\WINDOWS\system32>
```

It indeed copied the folders and files I needed:

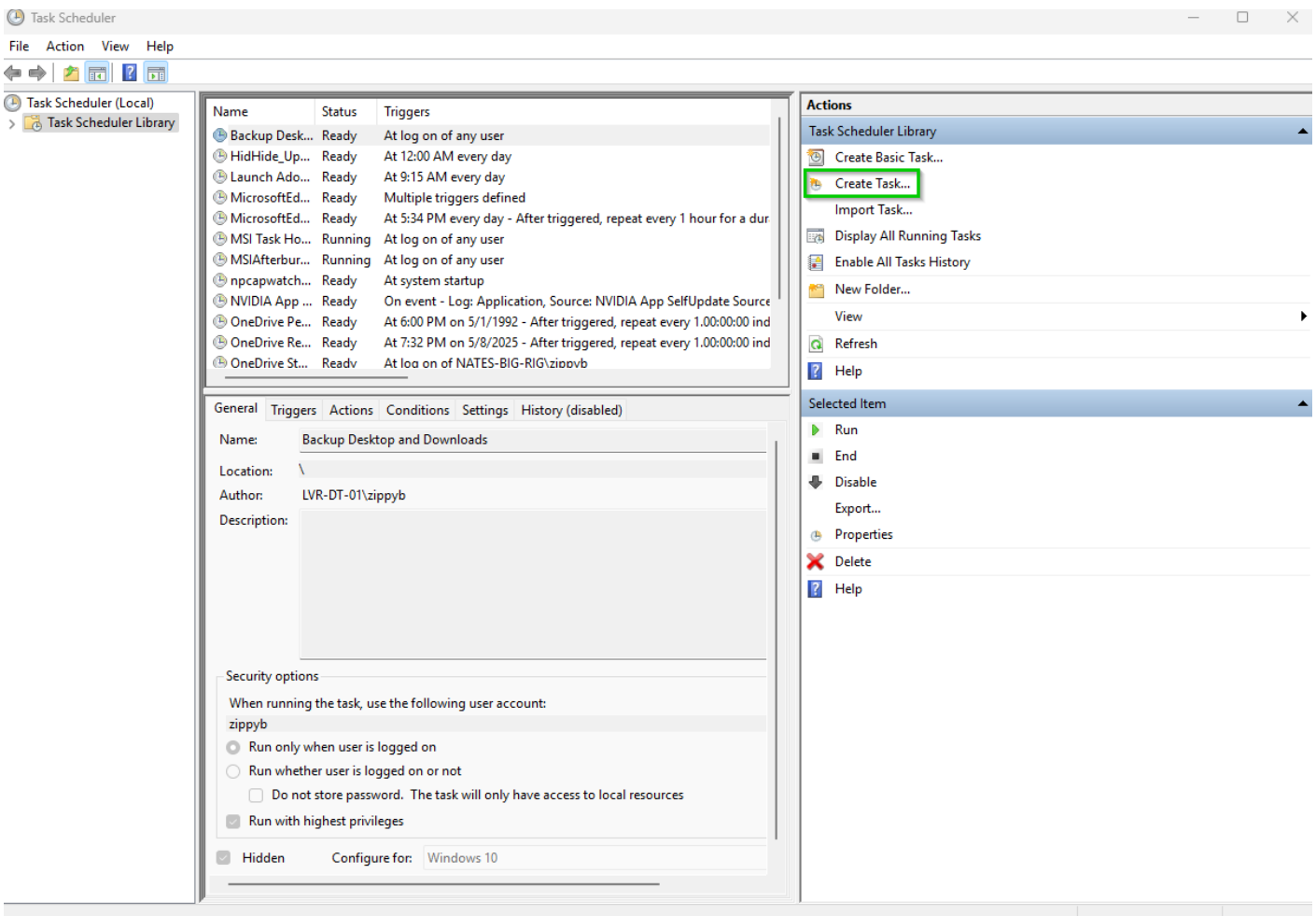
Name	Date modified	Type	Size
Backup-5-20-24	5/20/2024 9:45 PM	File folder	
BookStack_Backups	5/17/2025 5:49 PM	File folder	
Desktop and Downloads Backup	5/10/2025 3:09 PM	File folder	
Obsidian-Backups	7/4/2024 10:24 AM	File folder	
Pi-Cam-Backups	6/20/2024 9:32 AM	File folder	
Proxmox-Backups	7/4/2024 9:58 AM	File folder	
VPS-Backups	5/17/2025 5:57 PM	File folder	

Name	Date modified	Type
BookStack-VPS-Backups	5/16/2025 9:00 PM	File folder
Default Folder	5/14/2025 4:36 PM	File folder

I then created a task in the Task Scheduler by doing Win + R and entering taskschd.msc



## Create New Task:



Under General Tab create a Name and check the 2 boxes below:

Create Task

General Triggers Actions Conditions Settings

Name: VPS Backup Sync

Location: \

Author: NATES-BIG-RIG\zippyb

Description:

Security options

When running the task, use the following user account:  
NATES-BIG-RIG\zippyb Change User or Group...

Run only when user is logged on

Run whether user is logged on or not

Do not store password. The task will only have access to local computer resources.

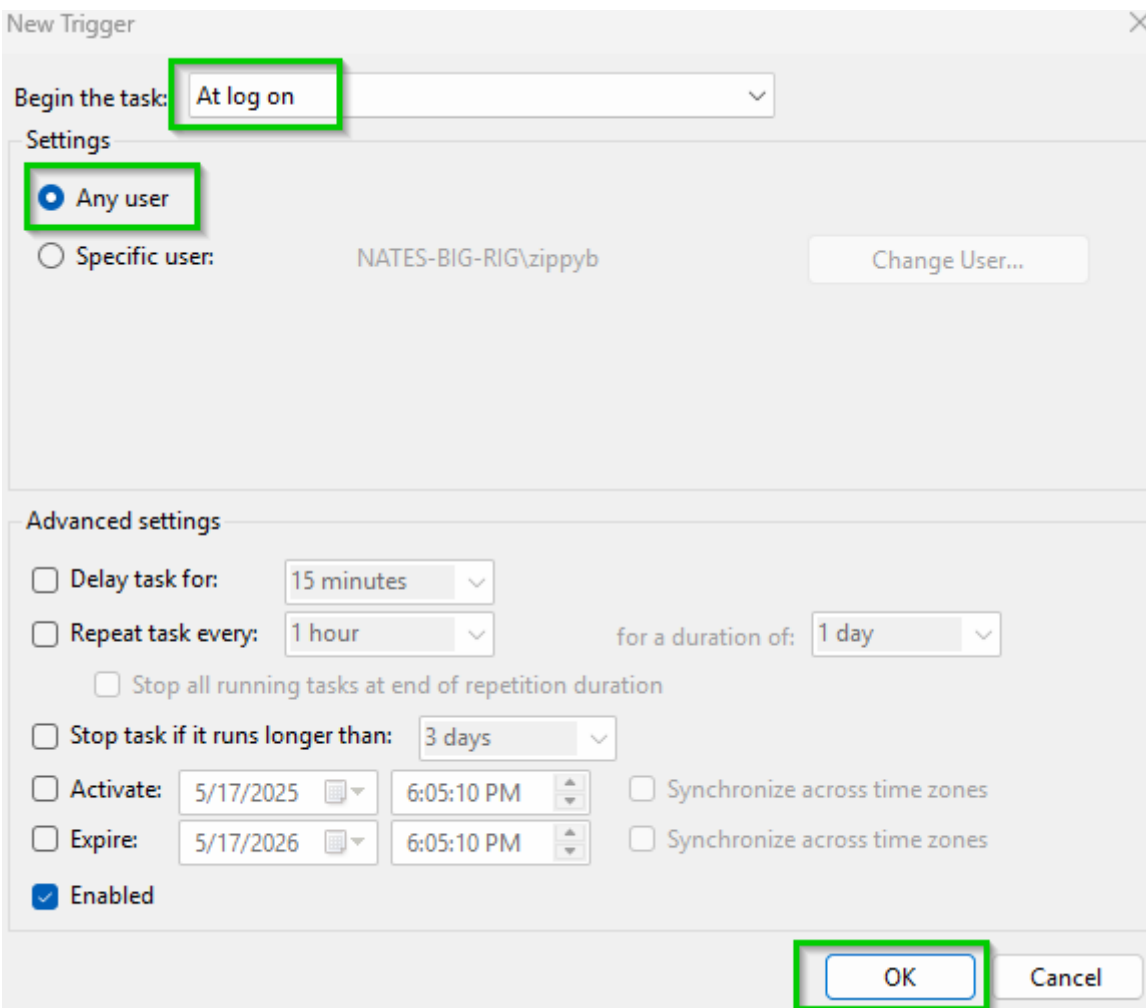
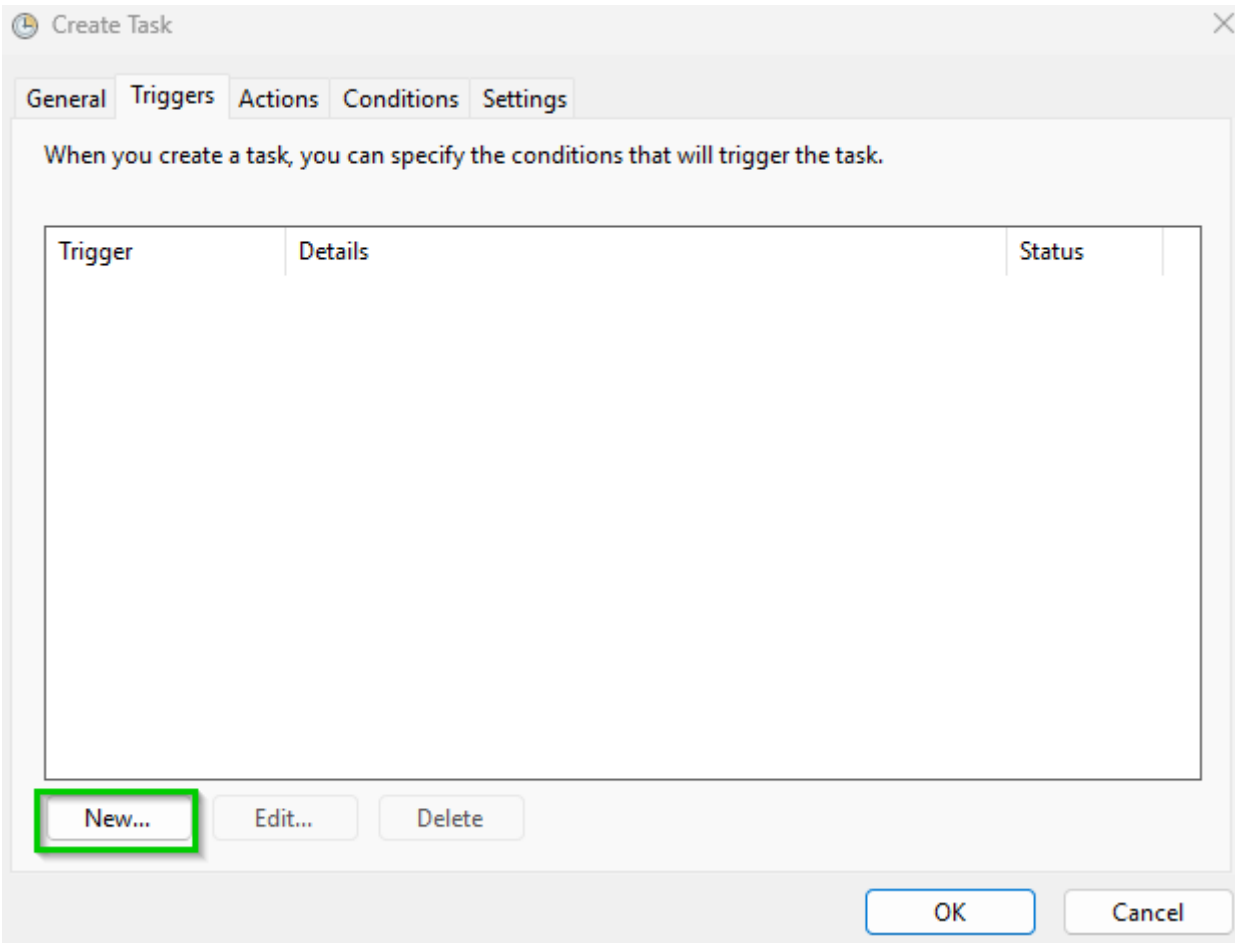
Run with highest privileges

Hidden

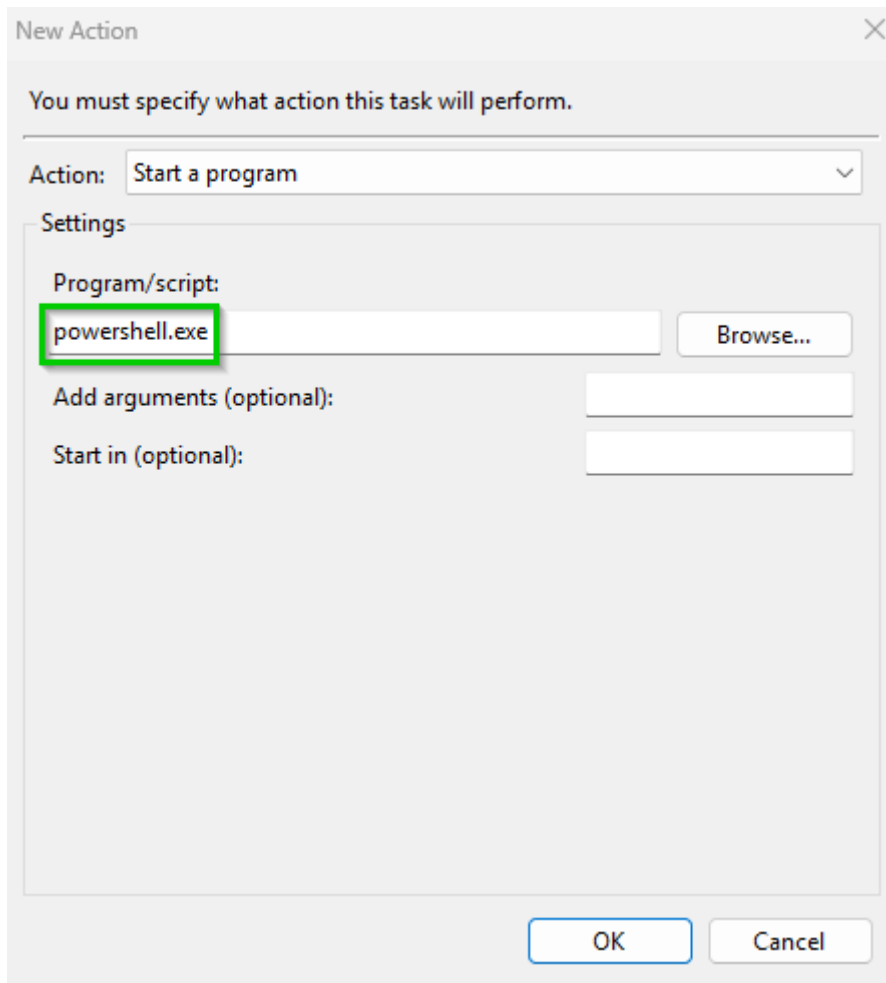
Configure for: Windows Vista™, Windows Server™ 2008

OK Cancel

Under the Triggers tab click New, Begin Task at Logon, and for Any User:



Under the Actions Tab, Click New > Start a Program > powershell.exe



New Action

You must specify what action this task will perform.

Action: Start a program

Settings

Program/script:  
powershell.exe Browse...

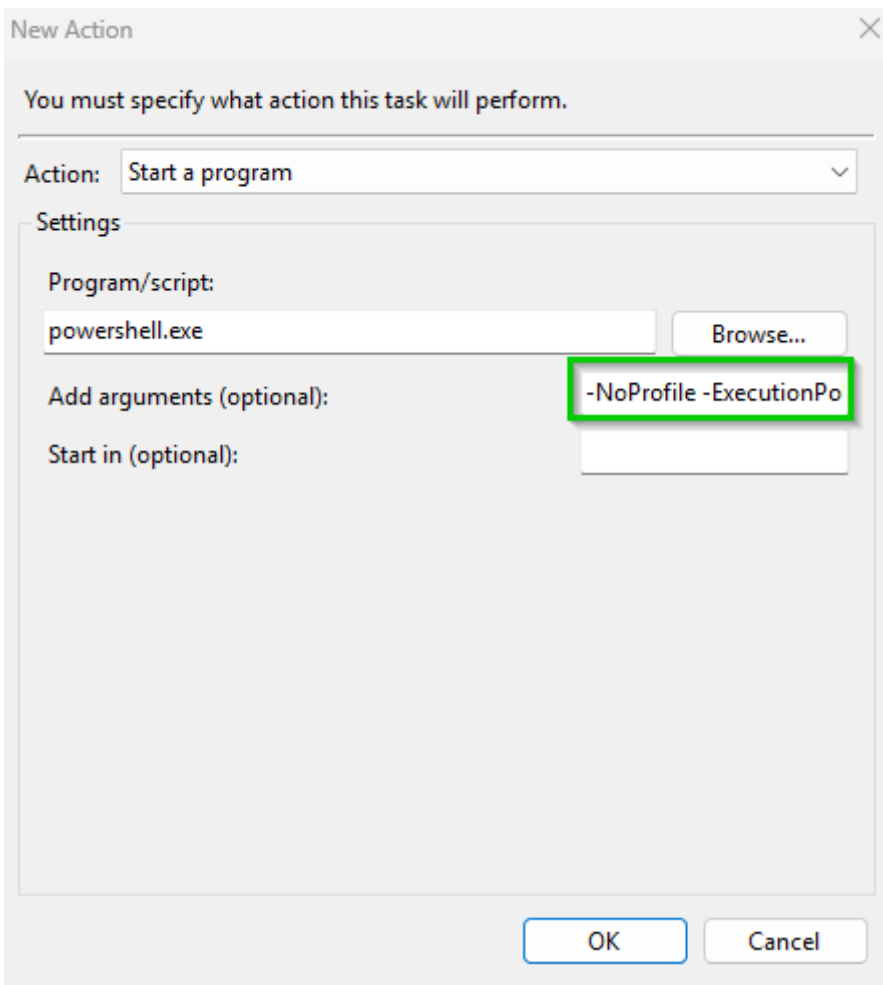
Add arguments (optional):

Start in (optional):

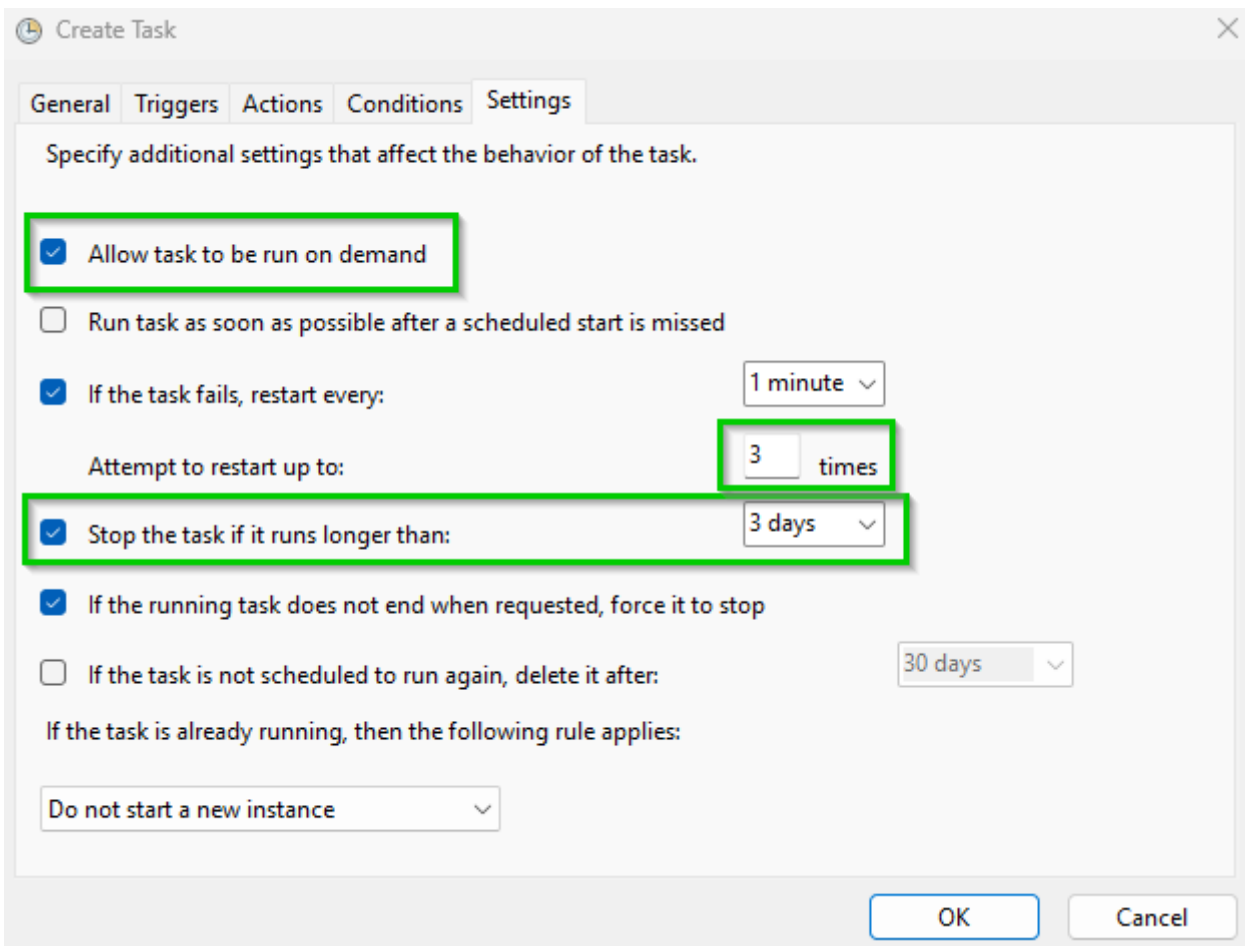
OK Cancel

Add this argument script in the Add arguments section replacing the path to the script:

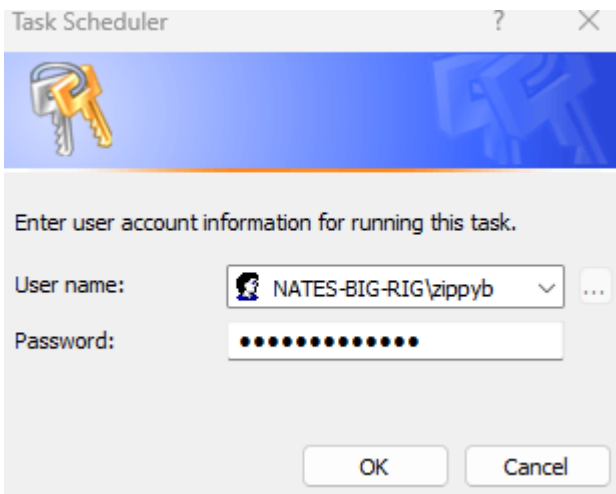
```
-NoProfile -ExecutionPolicy Bypass -File "C:\Path\To\backup-vps-folders.ps1"
```



Under Settings do the following:



Click OK and then it will prompt you for your logon password:



Once you enter that correctly this will run on logon and make sure you have another offsite backup out of Syncthing.

Revision #1

Created 17 May 2025 23:00:47 by Nate Nash

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