

GUIDE Monitoring Windows Processes with Procmon

v1.0.0

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This guide is based on my independent practice and understanding of Windows process monitoring using Procmon, intended for portfolio demonstration.



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REVISION HISTORY

Version	Date	≗ Author	Description of Changes
v1.0.0	08/29/2025	Eldon G.	Initial draft.



1.0 SECURING FOLDERS WITH ACCESS PERMISSIONS

1.1 Project Description

This guide provides a step-by-step walkthrough for using Process Monitor (Procmon) on Windows to capture and analyze process activity.

1.2 Capture Procmon Events

- Launch Procmon as Administrator.
- Allow Procmon to capture activity for a few minutes.
- Stop capture with Ctrl+E.

1.3 Apply Filters for Specific Processes

- Go to Filter > Filter...
- Add:

Process Name is [Target Process] → Include

Process Name is [Another Target Process] → Include



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Generate visible activity in monitored processes:

For any command-line tool, script, or application:

- Perform basic system or application actions.
- Open programs or tools.
- Run simple commands or scripts.
- Interact with applications or services using normal workflows.
- Stop capture with Ctrl+E.

1.4 Review Registry Activity for a Selected Process

- Clear filters (Ctrl+Shift+C).
- Add filter: Process Name is [Target Process] → Include.
- Open a File Explorer window (e.g., C:) and monitor registry-related events such as keys being opened or values being checked.

1.5 Filter Out File Read Events

- Add filter: Operation is [Unnecessary Operation] → Exclude.
- This reduces noise in the log and keeps the view focused.

1.6 Save Events to CSV

- Go to File > Save...
- Choose CSV format.
- Save all or displayed events as [Filename].csv.



2.0 TESTING AND VERIFICATION

2.1 Key Takeaways

- Procmon shows live details of what processes are doing on the system.
- Filters allow you to focus on the activity of specific processes.
- Excluding heavy, repetitive operations such as file reads makes the data easier to analyze.
- Exporting logs to CSV keeps a permanent copy of the events for later review.

2.2 Security Implications and Recommendations

- Watching how processes interact with files and the registry can reveal unusual or unwanted behavior.
- Investigators and defenders can rely on Procmon during incident response to trace suspicious activity across a Windows endpoint.