

This repository contains a PowerShell script designed to query and analyze specific Windows system event logs and databases to determine detailed usage statistics for a local desktop computer. The gathered data, including system uptime, idle time, and last logon times, is formatted and exported to a .csv file for easy analysis and reporting.

Key Features

Usage Calculation: Computes the total uptime duration by analyzing Windows System Event IDs.

Idle Time Analysis: Calculates daily, weekly, and monthly idle time based on system logs and processes.

Last Logon Retrieval: Queries the `$Win32\LogonSession$` database to retrieve details on the last physical login time (`$LogonType=2$`).

Process Analysis: Determines the earliest process start times to confirm system operation periods.

CSV Export: Utilizes the built-in `$Export-CSV$` cmdlet for clean, structured data output.

Technical Focus: Demonstrates proficiency in using PowerShell's .NET Framework integration and WMI (Windows Management Instrumentation).

Technologies Used

PowerShell

.NET Framework (specifically `$System.Management$` and `$System.Diagnostics$`)

WMI (for system query)

CSV Export

How to Use the Script

Prerequisites

A local machine running Windows 7 or newer.

PowerShell 5.1 or newer.

The user must have Administrator privileges to access certain system logs and WMI databases.