Q Search on Super User... Stack Exchange Log in superuser superuser Starting scheduled task by detecting connection of USB device Home **Ask Question** Questions Asked 8 years, 7 months ago Active 5 months ago Viewed 52k times Tags I know it has been discussed that it is not possible to start an application from an usb drive upon Users Blog connection due to limitations of autorun (or autoplay??) in Win 7. But it is possible to create a scheduled task having an event type trigger. Surely there must be an event occurring when the drive -Unanswered Find Help Online Mindfully — and - or any USB device, for that matter -- is connected. Effectively! Does anybody have the slightest idea which Event ID should I use? Or at least what type of event? **Featured on Meta** Where can I find the event in event viewer? 18 Custom Filters release announcement windows scheduled-tasks usb-storage event-log windows-task-scheduler Employee profiles are now marked with a share improve this question edited Nov 27 '14 at 14:49 asked Dec 7 '10 at 14:49 "Staff" indicator gemisigo 168 • 1 • 1 • 7 Linked add a comment 4 Run program when USB device is plugged 6 Answers active oldest votes 1 Run a program when USB mass storage device connected The thread <u>Task Scheduler: How to automatically synchronize my USB flash drive?</u> has this answer How to shutdown the computer when a by a user called monotone, which uses PowerShell together with the Task Scheduler: USB is attached? 15 I had the same question as you, and worked out something with powershell (windows built-in 1 Start a action when a USB device is added scripting) using techniques from the Scripting Guy Blog <a href="here">here</a> and <a href="here">here</a>. The script runs Is it possible to make a (Windows 7) continuously as a background process, which you can start at system logon with task scheduler. executable automatically run when I put in The script will be notified whenever a new drive is plugged and then do something (here you my thumb drive? configure the script rather than the task). Since it is basically paused while waiting for the next 0 Automatically launch a program on a plugged drive, you should not find it takes up much resources. Here I go: freshly connected USB flash drive 1) Start Powershell ISE, which can be found in your start menu under Accessories/Windows 1 Launch a .exe when a specific USB device Powershell. 2) Copy paste the following into Powershell: is connected O Task scheduler: How to detect that a usb #Requires -version 2.0 device is unplugged? Register-WmiEvent -Class win32\_VolumeChangeEvent -SourceIdentifier volumeChange write-host (get-date -format s) " Beginning script...' 0 How To Trigger A Windows Task When By using our site, you acknowledge that you have read and understand our Cookie Policy, Privacy Policy, and our Terms of Service. 1 {"Configuration changed"} see more linked questions... 2 {"Device arrival"} 3 {"Device removal"} Related 4 {"docking"} Is it possible to do safe USB autorun with write-host (get-date -format s) " Event detected = " \$eventTypeName Task Scheduler on Windows 7? if (\$eventType -eq 2) Using a USB HDD being connected to \$driveLetter = \$newEvent.SourceEventArgs.NewEvent.DriveName trigger a scheduled task \$driveLabel = ([wmi]"Win32\_LogicalDisk='\$driveLetter'").VolumeName write-host (get-date -format s) " Drive name = " \$driveLetter O Detecting USB connection automatically in write-host (get-date -format s) " Drive label = " \$driveLabel a network # Execute process if drive matches specified condition(s) if (\$driveLetter -eq 'Z:' -and \$driveLabel -eq 'Mirror') 4 Run program when USB device is plugged write-host (get-date -format s) " Starting task in 3 seconds..." start-sleep -seconds 3 0 Detect USB device connection (any device, start-process "Z:\sync.bat" not only storage) 0 Multi (Dual) Boot planning - Linux and Remove-Event -SourceIdentifier volumeChange Windows 7,8,10 - BIOS (not UEFI) } while (1-eq1) #Loop until next event Unregister-Event -SourceIdentifier volumeChange Hot Network Questions 3) You need to modify the script above to tell the script what drive to look for, and what to execute. why there is no "error" term in survival analysis? The two lines to change are: Exploiting the delay when a festival ticket is if (\$driveLetter -eq 'Z:' -and \$driveLabel -eq 'Mirror') How do I make my photos have more impact? Prepare a user to perform an action before My usb hard drive named 'Mirror' is set as the Z: drive. You could just use if (\$driveLabel -eq proceeding to the next step 'MyDiskLabel') if you didn't care about the letter. Rampant sharing of authorship among colleagues in the name of "collaboration". Is not taking part in start-process "Z:\sync.bat" it a death knell for a future in academia? Scam? Checks via Email Path of whatever task you want to do. In my example, I have created a batch file on my USB drive What is a good example for artistic ND filter which starts 3-4 backup tasks command lines. applications? 4) When you're done, save your script somewhere (extension .ps1 ), then go create a task in How do discovery writers hibernate? Task Scheduler to have your script run in background. Mine looks like this: [S] Was Donald Trump at ground zero helping out on Trigger: At log on Efficiently finding furthest two nodes in a graph Action: Start a program What are the closest international airports in Program/script: powershell different countries? Add arguments: -ExecutionPolicy Unrestricted -File "D:\Stuff\Backup script.ps1" Why don't short runways use ramps for takeoff? Three Dots in Center Page 5) Voilà! Antonym of "Megalomania" 6) Extra stuff: What are the cons of stateless password If you want your script window to be hidden, use these arguments: generators? Patio gate not at right angle to the house Add arguments: How can Paypal know my card is being used in -WindowStyle Hidden -ExecutionPolicy Unrestricted -File "D:\Stuff\Backup script.ps1" another account? If you want to output the script messages into a log file (that gets overwritten everytime the script If the Moon were impacted by a suitably sized starts, i.e. at log on), use the following task action: meteor, how long would it take to impact the Program/script: cmd Typesetting numbers above, below, left, and right Add arguments: /c powershell -WindowStyle Hidden -ExecutionPolicy Unrestricted -File Should students have access to past exams or an "D:\Stuff\Backup script.ps1" > "D:\Stuff\script <mark>log.txt"</mark> Raindrops in Python Anytime you want to end the running hidden script, you can end the "Powershell" process in Task Should I intervene when a colleague in a different Manager. department makes students run laps as part of The only downside is that nothing will run when you boot your computer with the drive already plugged in. (The script could be changed to perform a first check initially though, but I've had Solve equation using Mathematica enough for today!) What is my clock telling me to do? share improve this answer answered Nov 26 '14 at 18:41 Question feed **278k** • 14 • 292 • 605 I think this'll work great. Let me tinker with it and I'll get back to you – GiantDuck Nov 26 '14 at 23:47 1 It's working for drives. How can I modify this to detect **any** USB device inserted, and not only drives? – GiantDuck Nov 27 '14 at 0:20 EventType 2 will detect any device arrival. Getting the details will require some more digging into the event. Simplest might be to print the members of \$newEvent.SourceEventArgs.NewEvent for the events you are interested in. – harrymc Nov 27 '14 at 8:14 🧪 Nice to see a promising answer after almost 4 years :) Thank you very much, GiantDuck & harrymc. – gemisigo Nov 27 '14 at 8:35 @harrymc Can you provide some context for that? I've never used powershell before. Thanks! – GiantDuck Nov 27 '14 at 13:32 show 3 more comments As I already explained on this discussion (but it was about running a program when a USB drive is removed), **USB Safely Remove**, although not free, can run a program when some events about USB devices are triggered: Another USB Safely Remove feature that distinguishes it from similar software is starting any applications not only after connecting a device, but also before removing it. The autorun feature allows you to set up data backup before disconnecting a removable hard drive, to run Total Commander with the contents of the pen-drive, automatically unmount an encrypted TrueCrypt drive before disconnecting the USB media, etc. X Edit USB Device Properties Common | Auto Run | Drive Properties | Technical information Igor Flash Drive1 (G:) Here you can setup launching programs on device connection or disconnection 29,9 GB Process To Launch After device plugging Mount TrueCrypt Volume Yes No 📏 "\Programs\Lapiz\Lapiz.exe" Yes No 🌬 🦬 Before device stopping Dismount TrueCrypt Volume Yes No 🎍 🐫 After device stopping No programs to launch 🎍 📹 After device removing - No programs to launch Run "After device plugging" processes on Windows startup Change Global Autorun settings OK Help Cancel Of course, this does not fully answer the question, as it is not about using scheduled tasks, but the goal is the same, I think, which is to run a specific program when a USB stick is plugged in. share improve this answer edited Mar 20 '17 at 10:17 answered May 25 '11 at 12:09 Snark
29.6k ● 6 ● 78 ● 91 Community • Thank you very much, a good workaround, it is. I've tried it but in spite of it working properly, I'm still trying to achieve my original goal (that is, using a natively available and free solution). So far I've figured out that using Event ID 2006 events from DriverFrameworks-UserMode I can trigger the action. It's still not perfect though. The necessary info is available in the event details but I cannot filter it for a specific USB drive, so plugging in any USB drive will cause the trigger to fire. – gemisigo May 26 '11 at 10:37 add a comment It should be quite easy using EventVwr. 1. Find the event you want - When I plugged an USB mass storage device it triggered the following events (under application category): 20001, 20003, 7036 and a few other less relevant. Make sure you test those events against other USB devices events to avoid false positives. 2. right click on the event and click "Attach task to this event" (relevant only in Windows Vista or higher - for XP there's CLI EventTrigger), choose "Start a Program" and point it to the script you want to run. 3. To pass to the script the event parameters you need have a look in this article. Under the events 20001 and 20003 you can find the UNC path to the new storage. Using Sysinternals Junction utility you can create a links to the UNC paths. share improve this answer answered Oct 14 '13 at 13:46 EliadTech **2,076** • 8 • 10 I like the idea of this, but it isn't detailed enough; I can't get it to work. – GiantDuck Nov 26 '14 at 18:29 @GiantDuck For me it looks pretty straight-forward, on what would you like me to elaborate? – EliadTech Nov 26 '14 at 18:44 🧪 I can't find said events in Event Viewer. (On Win8 at the moment) What is the exact path? Thank you! – GiantDuck Nov 26 '14 at 23:40 I wrote, it's under 'application' log with the event numbers mentioned above. But I've tested this on Win7, so maybe on Win8 the event numbers are different. As I said you'll need to do some testing anyway to ensure it would work with any device you're plugging. – EliadTech Nov 27 '14 at 6:40 1 In Win10 nothing appeared in Application category. I had to go to System and attach to Event ID 98. It's fine for me cause I will only ever have that one device, but others may not work – dbinott May 25 '16 at 19:20 add a comment I was able to get this to work: I found event 1003 in applications and services logs, Microsoft-Windows-DriverFrameworks-UserMode for a phone plugged in to usb Full xml of the event: - <Event xmlns="http://schemas.microsoft.com/win/2004/08/events/event"> <Provider Name="Microsoft-Windows-DriverFrameworks-UserMode" Guid="{2E35AAEB-857F-4BEB-A418-</pre> <EventID>1003</EventID> <Version>1</Version> <Level>4</Level> <Task>17</Task> <Opcode>1</Opcode> <Keywords>0x80000000000000000000/Keywords> <TimeCreated SystemTime="2016-08-19T01:42:06.292278900Z" /> <EventRecordID>17516</EventRecordID> <Correlation /> <Execution ProcessID="456" ThreadID="2932" /> <Channel>Microsoft-Windows-DriverFrameworks-UserMode/Operational</Channel> <Computer>5CG6070VFK-W7.nikonprecision.com <Security UserID="S-1-5-18" /> </System> - <UserData> - <UMDFDriverManagerHostCreateStart lifetime="{AFEC92AD-6015-4AB4-86AE-F34CEE06A977}" xmlns:au <HostGuid>{193a1820-d9ac-4997-8c55-be817523f6aa}/HostGuid> <DeviceInstanceId>USB.VID\_04E8&PID\_6860&MS\_COMP\_MTP&SAMSUNG\_ANDROID.6&3400EB54&1&0000/DeviceInstanceId>USB.VID\_04E8&PID\_6860&MS\_COMP\_MTP&SAMSUNG\_ANDROID.6&3400EB54&1&00000 </UMDFDriverManagerHostCreateStart> </UserData> </Event> And the custom event filter for my task: <QueryList> <Query Id="0" Path="Microsoft-Windows-DriverFrameworks-UserMode/Operational"> <Select Path="Microsoft-Windows-DriverFrameworks-UserMode/Operational">\*[System[Provider[@ </Query> </QueryList> Similarly for a USB drive it was event 2100, 2101, 2105, 2106 For a specific USB Drive: - <Event xmlns="http://schemas.microsoft.com/win/2004/08/events/event"> <Provider Name="Microsoft-Windows-DriverFrameworks-UserMode" Guid="{2E35AAEB-857F-4BEB-A418-</pre> <EventID>2101</EventID> <Version>1</Version> <Level>4</Level> <Task>37</Task> <Opcode>2</Opcode> <Keywords>0x80000000000000000000/Keywords> <TimeCreated SystemTime="2016-08-19T01:52:37.922289600Z" /> <EventRecordID>17662</EventRecordID> <Correlation /> <Execution ProcessID="10956" ThreadID="11892" /> <Channel>Microsoft-Windows-DriverFrameworks-UserMode/Operational</Channel> <Computer>5CG6070VFK-W7.nikonprecision.com <Security UserID="S-1-5-19" /> </System> - <UserData> - <UMDFHostDeviceRequest instance="WPDBUSENUMROOT\UMB\2&37C186B&0&STORAGE#VOLUME#\_??\_USBSTOR#L</p> - <Request major="27" minor="20"> <Argument>0x0</Argument> <Argument>0x141b</Argument> <Argument>0x0</Argument> <Argument>0x0</Argument> </Request> <Status>0</Status> </UMDFHostDeviceRequest> </UserData> </Event> It looks like event 2101 happens 3 times with slightly different "<request>" tags when I plug in my usb drive: <Request major="27" minor="20"> <Request major="27" minor="9"> <Request major="27" minor="0"> I have no idea what this means but here is a filter for only one of them to avoid multiple triggers: (this will only trigger for this specific USB drive) <QueryList> <Query Id="0" Path="Microsoft-Windows-DriverFrameworks-UserMode/Operational"> <Select Path="Microsoft-Windows-DriverFrameworks-UserMode/Operational">\*[System[Provider[@ </Query> </QueryList> Note that the ampersands must be escaped as & amp; share improve this answer edited Aug 19 '16 at 16:03 answered Aug 19 '16 at 2:05 add a comment As others have mentioned, it seems that System log Event 7036 from the Service Control Manager is the only event which correlates reliably with a USB drive being inserted. I checked this by inserting a USB drive and running the following powershell command to list all event log entries from all sources in the last hour: get-winevent | where {\$\_.timecreated -ge (get-date) - (new-timespan -hour 1)} Unfortunately that Event 7036 is generated every time the Service Control Manager successfully starts or stops any service, so additional filtering is required. The filtering available in the GUI of Event Viewer / Task Scheduler is quite basic and doesn't allow for any filtering on the event data - it only lets you filter on the metadata which in this case doesn't tell you anything about which service has changed state and what state it has changed to. That is held in "param1" and "param2" of the EventData. The following XPath filter can therefore be used to capture only the relevant service starting up: <QueryList> <Query Id="0" Path="System"> <Select Path="System">\*[System[Provider[@Name='Service Control Manager'] and (Level=4 or and \*[EventData[ Data[@Name="param1"]="Portable Device Enumerator Service" and Data[@Name="param2"]="running" </Select> </Query> </QueryList> From there you can run your script, ideally with some additional logic in place to check that the USB drive which has been inserted is the one you are interested in. share improve this answer answered Nov 2 '13 at 14:00 sahmeepee **1,559** • 9 • 11 add a comment I found a better (IMO) event from the event log located under Applications and Service Logs-Microsoft-Windows-Ntfs\_Operational. Eventid 4. It looks like this: 0 Event ID 4 The NTFS volume has been successfully mounted. Volume GUID: {55bf0ee3-d507-4031-a60a-22e5892ebf37} Volume Name: E: Volume Label: AirGapDrive A Device Name: \Device\HarddiskVolume51 From that you can create a scheduled task trigger and filter by volume name and or label. This event was found on a Windows Server 2019 box, however for some reason I'm not seeing it on my Windows 10 (1809) desktop. May be a server only event.... share improve this answer edited Feb 27 at 18:56 answered Feb 27 at 18:45 RyanG 1 • 1 add a comment Your Answer Ø 66 {} <u>≅</u> ≡ <u>≡</u> Sign up or log in Post as a guest Name G Sign up using Google f Sign up using Facebook **Email** Required, but never shown Sign up using Email and Password Post Your Answer By clicking "Post Your Answer", you agree to our terms of service, privacy policy and cookie policy Not the answer you're looking for? 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