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2012 Scripting Games Advanced Event 7: Search Windows Logs

[The Scripting Guys](#)

10 Apr 2012 1:01 AM

23

2012 Scripting Games



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Summary: In Advanced Event 7, you are required to search all Windows logs for the most recent event.

About this event

Division	Advanced
Date of Event	4/10/2012 12:01 AM
Due Date	4/17/2012 12:01 AM

Event scenario

You are troubleshooting a problem with your Windows 7 laptop, and you hope to find some clues to the recent performance issues by examining recent entries from various Windows logs. You have recently become aware that there are nearly 500 logs available in a standard Windows 7 installation, but you do not feel like manually searching through all of the logs by using the Event Viewer utility. You decide to use Windows PowerShell to come to the rescue. You want to write a command that will display the most recent one-event log entry from each event log and troubleshooting log that is enabled and has at least one entry in it. Crucial information for this process includes the log name, time of the event, the event ID, and the event message. An acceptable output is shown in the image that follows.

```

TimeCreated : 3/8/2012 3:42:59 PM
LogName     : Microsoft-Windows-UpdateClient/Operational
Id          : 42
Message     : There has been a change in the health of Windows Update.

TimeCreated : 3/8/2012 3:42:55 PM
LogName     : System
Id          : 7036
Message     : The WinHTTP Web Proxy Auto-Discovery Service service entered the running state.

TimeCreated : 3/8/2012 3:42:55 PM
LogName     : Application
Id          : 1001
Message     : Fault bucket, type 0
              Event Name: MpTelemetry
              Response: Not available
              Cab Id: 0

              Problem signature:
              P1: 8024402c
              P2: EndSearch
              P3: Search
              P4: 3.0.8402.0
              P5: MpSigDown.dll
              P6: 3.0.8402.0
              P7: Microsoft Security Essentials (EDB4FA23-53B8-4AFA-8C5D-99752CCA7094)
              P8:
              P9:
              P10:

              Attached files:

              These files may be available here:
              C:\ProgramData\Microsoft\Windows\WER\ReportQueue\NonCritical_8024402c_66c66075855619cc111e0dd9c4f3189cbbd9c6_0d2865d6

              Analysis symbol:
              Rechecking for solution: 0
              Report Id: 47b73e7d-695f-11e1-9f88-ccaf78e40660
  
```

Design points

- Your code should not display any errors.
- Your code should query hidden logs if they are enabled and they contain at least one entry.
- You should display only the most recent entry from each log.
- The event log entries should be sorted so that the most recent entry appears first.
- You must display the following required properties: time of the event, the name of the log, number of the event ID, and the event details.

2012 Scripting Games links

2012 Scripting Games: All Links on One Page

I invite you to follow me on [Twitter](#) and [Facebook](#). If you have any questions, send email to me at scripter@microsoft.com or post your questions on the [Official Scripting Guys Forum](#). Good luck as you compete in this year's Scripting Games. We wish you well.

Ed Wilson, Microsoft Scripting Guy

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Comments

IamMred

10 Apr 2012 2:47 PM

Please do NOT post answers to these questions here. The 2012 Scripting Games are still going on.

Roman Prosvetov

10 Apr 2012 2:54 PM

You are late Ed, I've read it! *evil laugh*

IamMred

10 Apr 2012 3:05 PM

@Roman Prosvetov Yes, but I deleted the answer because it was a bad script, and I did not want everyone copying it and getting a 1 :-)

Mikko K'

10 Apr 2012 3:08 PM

So hidden logs that are disabled, even if they contain entries, shouldn't be displayed, right?

IamMred

10 Apr 2012 3:17 PM

@Mikko K that is correct. If a hidden log is disabled it should not be displayed even it does have entries.

vNoob

10 Apr 2012 5:11 PM

What about logs that might need special access/rights to view?

IamMred

10 Apr 2012 5:15 PM

@VNoob you need to trap the error and display log name with "no access" in the output.

DamienCharbonnel

10 Apr 2012 5:48 PM

Hi,

When you ask for "a command that will display the most recent one-event log entry from each event log and troubleshooting log that is enabled and has at least one entry in it", in fact, you want the first information event of each log?

IamMred

10 Apr 2012 5:52 PM

@DamienCharbonnel I want the most recently written event log entry from each of the logs -- that is the one that is closest in time when the script runs.

DamienCharbonnel

10 Apr 2012 6:11 PM

Ok , thank you for your quick answer

Ryan Ries

10 Apr 2012 6:43 PM

I hope you have a fast computer for grading this one...

Bigteddy

10 Apr 2012 8:57 PM

Ed, can you confirm that you want errors trapped and reported, if a log is inaccessible? This is not what you stated in the original outline. You said "Do not display errors". This seems like an additional requirement.

IamMred

10 Apr 2012 9:03 PM

@Bigteddy, I do not want to display raw errors, but they should be trapped, and something friendly like logname not accessible should be displayed instead.

vNoob

10 Apr 2012 10:51 PM

What about logs that are enabled but don't have any log entries? Should those be included?

K Schulte

10 Apr 2012 11:58 PM

HI Ed,

I seem to be the only one here, who hadn't ever heard of "hidden" logs.

Even Google (or Bing) don't do much better :-)

If I once will get to know them ,, is it right, that we should display ONLY these logs?

The description of the event let me think, that we should query ALL logs.

Design point 2 ... is it: ONLY "Hidden?" logs ???

Klaus

1 2