

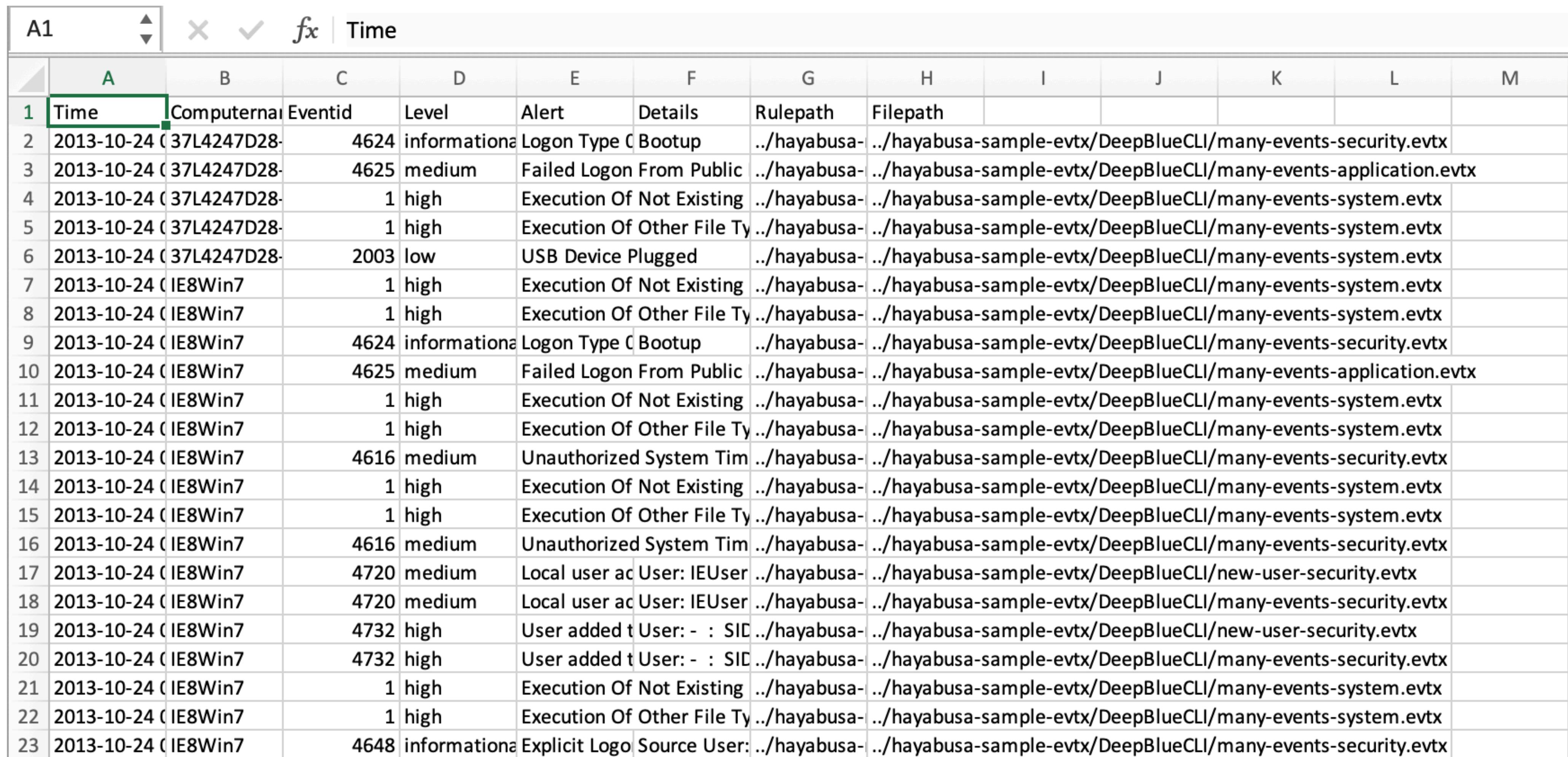


# CSV結果をExcelと Timeline Explorerで 解析する方法

田中ザック (2021/12/25)

# Excel

CSVを開くと、このように表示される：



1	A	B	C	D	E	F	G	H	I	J	K	L	M
	Time	Computername	Eventid	Level	Alert	Details	Rulepath	Filepath					
2	2013-10-24 03:37:42	47D28-0000000000000000	4624	informational	Logon Type 0	Bootup	./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
3	2013-10-24 03:37:42	47D28-0000000000000000	4625	medium	Failed Logon From Public		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-application.evtx					
4	2013-10-24 03:37:42	47D28-0000000000000000	1	high	Execution Of Not Existing		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
5	2013-10-24 03:37:42	47D28-0000000000000000	1	high	Execution Of Other File Ty		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
6	2013-10-24 03:37:42	47D28-0000000000000000	2003	low	USB Device Plugged		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
7	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Not Existing		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
8	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Other File Ty		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
9	2013-10-24 03:37:42	IE8Win7	4624	informational	Logon Type 0	Bootup	./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
10	2013-10-24 03:37:42	IE8Win7	4625	medium	Failed Logon From Public		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-application.evtx					
11	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Not Existing		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
12	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Other File Ty		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
13	2013-10-24 03:37:42	IE8Win7	4616	medium	Unauthorized System Tim		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
14	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Not Existing		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
15	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Other File Ty		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
16	2013-10-24 03:37:42	IE8Win7	4616	medium	Unauthorized System Tim		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
17	2013-10-24 03:37:42	IE8Win7	4720	medium	Local user ac	User: IEUser	./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/new-user-security.evtx					
18	2013-10-24 03:37:42	IE8Win7	4720	medium	Local user ac	User: IEUser	./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
19	2013-10-24 03:37:42	IE8Win7	4732	high	User added t	User: - : SID	./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/new-user-security.evtx					
20	2013-10-24 03:37:42	IE8Win7	4732	high	User added t	User: - : SID	./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
21	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Not Existing		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
22	2013-10-24 03:37:42	IE8Win7	1	high	Execution Of Other File Ty		./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
23	2013-10-24 03:37:42	IE8Win7	4648	informational	Explicit Logon	Source User: ..	./hayabusa-	./hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					

見にくいで左上をクリックして、  
まず全セルを選択します：

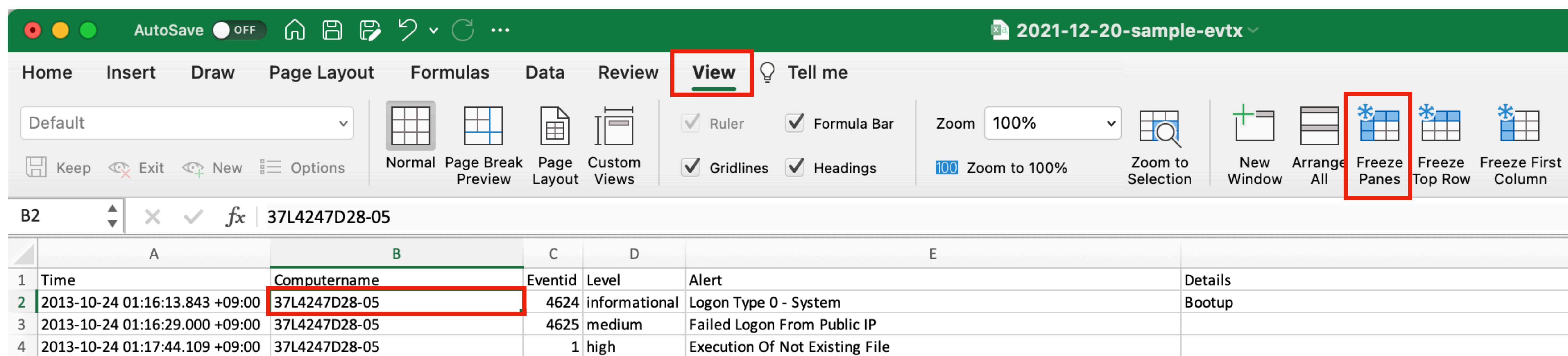
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Time	ComputerName	EventId	Level	Alert	Details	Rulepath	Filepath					
2	2013-10-24 03:37:42	47D28-0000000000000000	4624	informational	Logon Type 0	Bootup	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
3	2013-10-24 03:37:42	47D28-0000000000000000	4625	medium	Failed Logon From Public		../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-application.evtx					
4	2013-10-24 03:37:42	47D28-0000000000000000	1	high	Execution Of Not Existing		../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
5	2013-10-24 03:37:42	47D28-0000000000000000	1	high	Execution Of Other File Type		../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
6	2013-10-24 03:37:42	47D28-0000000000000000	2003	low	USB Device Plugged		../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
7	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Not Existing	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
8	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Other File Type	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
9	2013-10-24 03:37:42	IE8Win7		4624	informational	Logon Type 0	Bootup	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx				
10	2013-10-24 03:37:42	IE8Win7		4625	medium	Failed Logon From Public		../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-application.evtx				
11	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Not Existing	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
12	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Other File Type	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
13	2013-10-24 03:37:42	IE8Win7		4616	medium	Unauthorized System Time	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
14	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Not Existing	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
15	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Other File Type	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
16	2013-10-24 03:37:42	IE8Win7		4616	medium	Unauthorized System Time	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
17	2013-10-24 03:37:42	IE8Win7		4720	medium	Local user account: IEUser	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/new-user-security.evtx					
18	2013-10-24 03:37:42	IE8Win7		4720	medium	Local user account: IEUser	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
19	2013-10-24 03:37:42	IE8Win7		4732	high	User added to User: - : SID	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/new-user-security.evtx					
20	2013-10-24 03:37:42	IE8Win7		4732	high	User added to User: - : SID	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-security.evtx					
21	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Not Existing	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					
22	2013-10-24 03:37:42	IE8Win7		1	high	Execution Of Other File Type	../hayabusa-	../hayabusa-sample-evtx/DeepBlueCLI/many-events-system.evtx					

AとBの間の線をダブルクリックすると、  
列の幅が自動的に調整されます：

	A	B	C	D	E	
1	Time	Computername	Eventid	Level	Alert	Details
2	2013-10-24 01:16:13.843 +09:00	37L4247D28-05	4624	informational	Logon Type 0 - System	Bootup
3	2013-10-24 01:16:29.000 +09:00	37L4247D28-05	4625	medium	Failed Logon From Public IP	
4	2013-10-24 01:17:44.109 +09:00	37L4247D28-05	1	high	Execution Of Not Existing File	
5	2013-10-24 01:17:44.109 +09:00	37L4247D28-05	1	high	Execution Of Other File Type Than .exe	
6	2013-10-24 01:18:09.203 +09:00	37L4247D28-05	2003	low	USB Device Plugged	
7	2013-10-24 01:18:33.828 +09:00	IE8Win7	1	high	Execution Of Not Existing File	
8	2013-10-24 01:18:33.828 +09:00	IE8Win7	1	high	Execution Of Other File Type Than .exe	
9	2013-10-24 01:18:50.500 +09:00	IE8Win7	4624	informational	Logon Type 0 - System	Bootup
10	2013-10-24 01:21:30.000 +09:00	IE8Win7	4625	medium	Failed Logon From Public IP	
11	2013-10-24 01:21:33.630 +09:00	IE8Win7	1	high	Execution Of Not Existing File	
12	2013-10-24 01:21:33.630 +09:00	IE8Win7	1	high	Execution Of Other File Type Than .exe	
13	2013-10-24 01:21:33.630 +09:00	IE8Win7	4616	medium	Unauthorized System Time Modification	
14	2013-10-24 01:22:39.911 +09:00	IE8Win7	1	high	Execution Of Not Existing File	
15	2013-10-24 01:22:39.911 +09:00	IE8Win7	1	high	Execution Of Other File Type Than .exe	
16	2013-10-24 01:22:39.911 +09:00	IE8Win7	4616	medium	Unauthorized System Time Modification	
17	2013-10-24 01:22:39.973 +09:00	IE8Win7	4720	medium	Local user account created	User: IEUser : SID:S-1-5-21-3463664321-2923530833-3546627382-1000
18	2013-10-24 01:22:39.973 +09:00	IE8Win7	4720	medium	Local user account created	User: IEUser : SID:S-1-5-21-3463664321-2923530833-3546627382-1000
19	2013-10-24 01:22:40.004 +09:00	IE8Win7	4732	high	User added to local Administrators group	User: - : SID: S-1-5-21-3463664321-2923530833-3546627382-1000 : Group: Administrators
20	2013-10-24 01:22:40.004 +09:00	IE8Win7	4732	high	User added to local Administrators group	User: - : SID: S-1-5-21-3463664321-2923530833-3546627382-1000 : Group: Administrators
21	2013-10-24 01:22:40.005 +09:00	IE8Win7	1	high	Execution Of Not Existing File	

幅が広いので、なるべくワイドな  
モニターをおすすめします！

B2セルを選択してから、View→Freeze Panesをクリックすると、タイムスタンプと見出しが固定されるのでおすすめします：

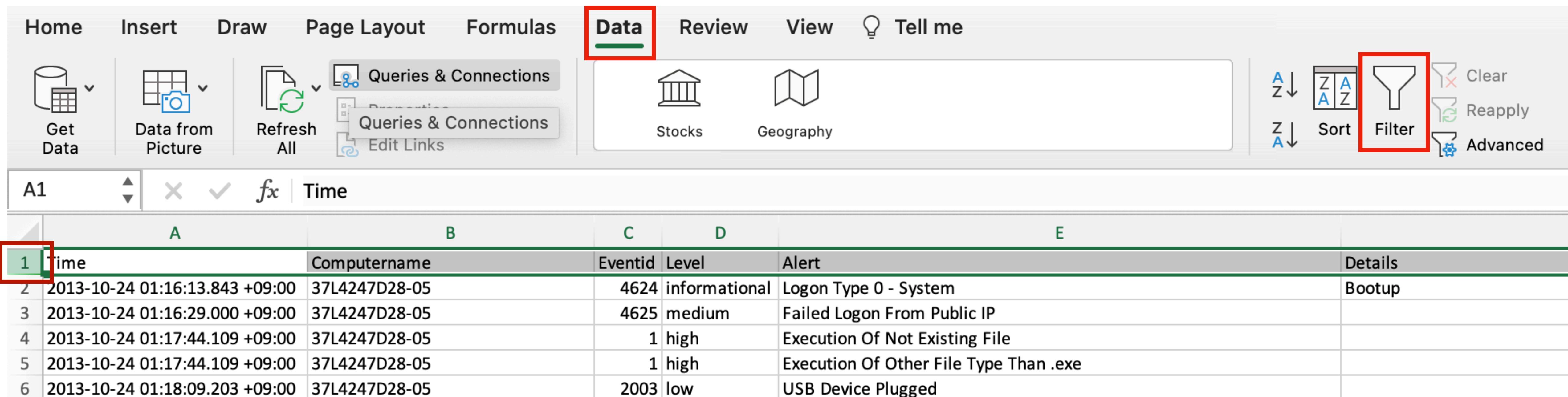


The screenshot shows the Microsoft Excel ribbon with the 'View' tab selected (indicated by a red box). The 'Freeze Panes' button in the 'Window' group is also highlighted with a red box. The Excel window displays a table with data in columns A, B, C, D, and E. The second row of the table is highlighted with a red box, and the cell containing '37L4247D28-05' in column B is also highlighted with a red box, demonstrating that the header row is being frozen.

	A	B	C	D	E	Details
1	Time	Computername	Eventid	Level	Alert	
2	2013-10-24 01:16:13.843 +09:00	37L4247D28-05	4624	informational	Logon Type 0 - System	Bootup
3	2013-10-24 01:16:29.000 +09:00	37L4247D28-05	4625	medium	Failed Logon From Public IP	
4	2013-10-24 01:17:44.109 +09:00	37L4247D28-05	1	high	Execution Of Not Existing File	

1. 1番目の行を全部選択します

2. Data→Filterをクリックします



The screenshot shows the Microsoft Excel ribbon with the 'Data' tab selected, indicated by a red box. Below the ribbon, a table of log data is displayed. The first row (header) is highlighted with a green background, and the 'Time' column is selected, indicated by a red box. The 'Data' tab contains several icons: 'Get Data', 'Data from Picture', 'Refresh All', 'Queries & Connections' (with sub-options 'Stocks' and 'Geography'), and 'Filter' (which is also highlighted with a red box). To the right of the 'Filter' icon are buttons for 'Sort' (with 'A to Z' and 'Z to A' options) and 'Advanced'.

1	Time	Computername	Eventid	Level	Alert	Details
2	2013-10-24 01:16:13.843 +09:00	37L4247D28-05	4624	informational	Logon Type 0 - System	Bootup
3	2013-10-24 01:16:29.000 +09:00	37L4247D28-05	4625	medium	Failed Logon From Public IP	
4	2013-10-24 01:17:44.109 +09:00	37L4247D28-05	1	high	Execution Of Not Existing File	
5	2013-10-24 01:17:44.109 +09:00	37L4247D28-05	1	high	Execution Of Other File Type Than .exe	
6	2013-10-24 01:18:09.203 +09:00	37L4247D28-05	2003	low	USB Device Plugged	

そうすると、深刻度のレベル等でファイルタすることができます。

The screenshot shows a log viewer application with a table of log entries and a filter dialog.

**Table Headers:** B (Timestamp), C (Event ID), D (Level).

**Table Data:**

B	C	D
7/28/05	4624	informational
7/28/05	4625	medium
7/28/05	1	high
7/28/05	1	high
7/28/05	2003	low
7	1	high
7	1	high
7	4624	informational
7	4625	medium
7	1	high
7	1	high
7	4616	medium
7	1	high
7	1	high
7	4616	medium
7	4720	medium
7	4720	medium
7	4732	high
7	4732	high
7	1	high
7	1	high
7	4648	informational
7	4624	informational
7	4624	informational
7	4672	informational
7	1	high

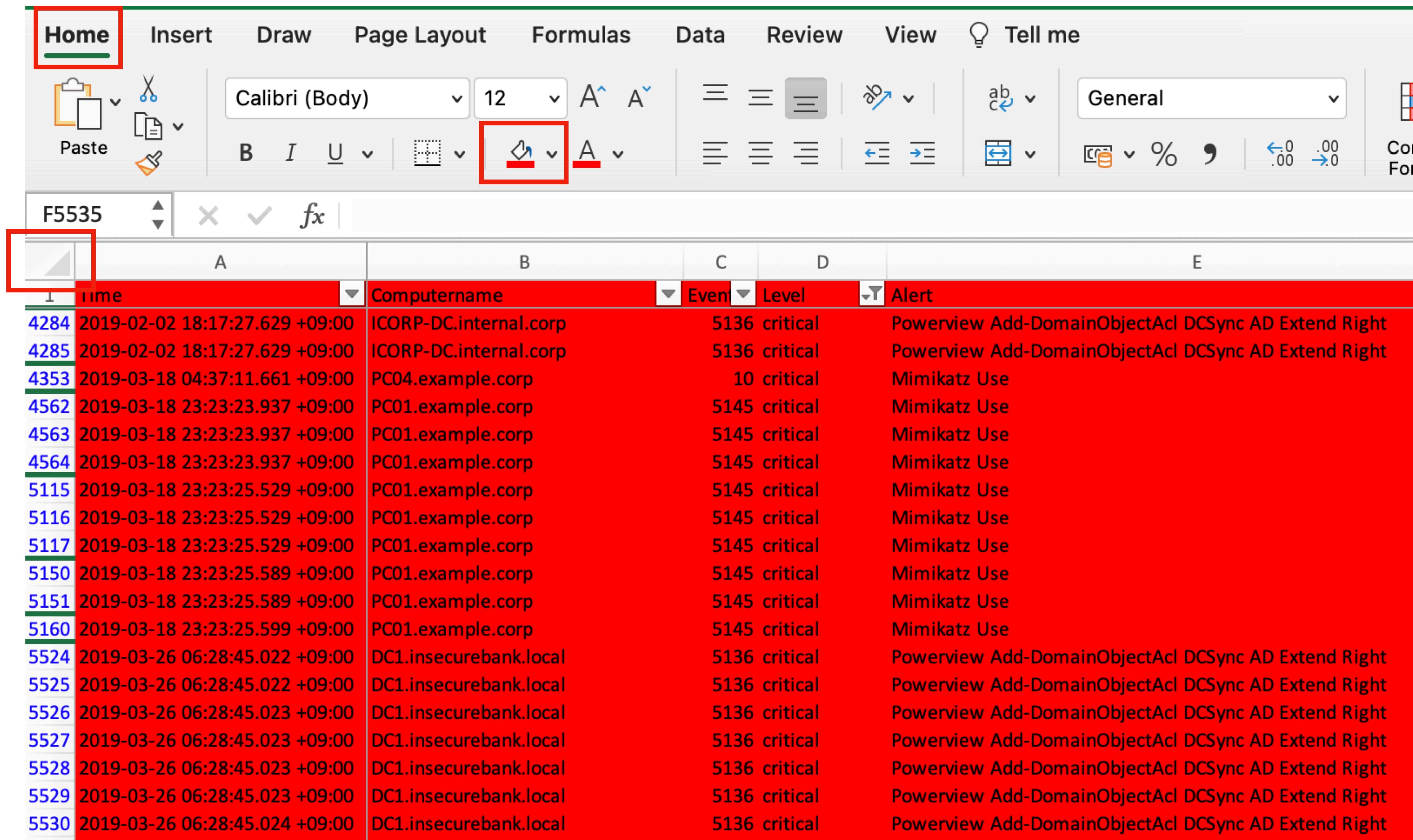
**Filter Dialog:**

- Alert Level:** A red box highlights the "Details" dropdown menu.
- Sort:** Z↓ Ascending, A↓ Descending.
- Filter:**
  - By color: None
  - Choose One: (dropdown menu)
- Search:** Search bar.
- Filter Options:** A red box highlights the list of levels:
  - (Select All)
  - critical
  - high
  - informational
  - low
  - medium
- Buttons:** Auto Apply, Apply Filter, Clear Filter.

Execution of NOT EXISTING file

誤検知もありますが、criticalから順番にアラートを調べることをおすすめします。

各レベルに色を付けるとより分かりやすくなります：



The screenshot shows a Microsoft Excel spreadsheet with a table of log entries. The table has columns for ID, Time, Computername, Event, Level, and Alert. The rows are color-coded by the 'Level' column: red for critical, green for warning, and blue for info. The 'Home' tab is selected in the ribbon, and the 'Conditional Formatting' button in the 'Styles' group is highlighted with a red box. The 'Level' column header is also highlighted with a red box.

ID	Time	Computername	Event	Level	Alert
4284	2019-02-02 18:17:27.629 +09:00	ICORP-DC.internal.corp		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
4285	2019-02-02 18:17:27.629 +09:00	ICORP-DC.internal.corp		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
4353	2019-03-18 04:37:11.661 +09:00	PC04.example.corp		10 critical	Mimikatz Use
4562	2019-03-18 23:23:23.937 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
4563	2019-03-18 23:23:23.937 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
4564	2019-03-18 23:23:23.937 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
5115	2019-03-18 23:23:25.529 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
5116	2019-03-18 23:23:25.529 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
5117	2019-03-18 23:23:25.529 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
5150	2019-03-18 23:23:25.589 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
5151	2019-03-18 23:23:25.589 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
5160	2019-03-18 23:23:25.599 +09:00	PC01.example.corp		5145 critical	Mimikatz Use
5524	2019-03-26 06:28:45.022 +09:00	DC1.insecurebank.local		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
5525	2019-03-26 06:28:45.022 +09:00	DC1.insecurebank.local		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
5526	2019-03-26 06:28:45.023 +09:00	DC1.insecurebank.local		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
5527	2019-03-26 06:28:45.023 +09:00	DC1.insecurebank.local		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
5528	2019-03-26 06:28:45.023 +09:00	DC1.insecurebank.local		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
5529	2019-03-26 06:28:45.023 +09:00	DC1.insecurebank.local		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
5530	2019-03-26 06:28:45.024 +09:00	DC1.insecurebank.local		5136 critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right

# 色付け完了

A	B	C	D	E	Details
Time	Computername	EventID	Level	Alert	
2021-05-03 17:58:38.774 +09:00	webiis01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : Port: 65534
2021-05-03 17:58:38.775 +09:00	webiis01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : Port: 65534
2021-05-03 17:58:38.775 +09:00	webiis01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : Port: 65534
2021-05-03 21:06:57.954 +09:00	win10-02.offsec.lan	1	high	Process Creation Sysmon Rule Alert	Rule: technique_id=T1059,technique_name=Command-Line Interfa
2021-05-03 21:06:57.954 +09:00	win10-02.offsec.lan	1	critical	Sticky Key Like Backdoor Usage	
2021-05-15 05:39:33.214 +09:00	fs01.offsec.lan	1102	high	Security log was cleared	User: admmig
2021-05-19 06:18:40.607 +09:00	rootdc1.offsec.lan	150	critical	DNS Server Error Failed Loading the ServerLevelPluginDLL	
2021-05-19 06:18:40.607 +09:00	rootdc1.offsec.lan	150	high	Possible CVE-2021-1675 Print Spooler Exploitation	
2021-05-19 06:18:40.607 +09:00	rootdc1.offsec.lan	150	critical	Mimikatz Use	
2021-05-19 06:23:27.038 +09:00	rootdc1.offsec.lan	150	critical	DNS Server Error Failed Loading the ServerLevelPluginDLL	
2021-05-19 06:23:27.038 +09:00	rootdc1.offsec.lan	150	high	Possible CVE-2021-1675 Print Spooler Exploitation	
2021-05-19 06:23:27.038 +09:00	rootdc1.offsec.lan	150	critical	Mimikatz Use	
2021-05-19 06:30:17.318 +09:00	rootdc1.offsec.lan	4688	high	Possible CVE-2021-1675 Print Spooler Exploitation	
2021-05-19 06:30:17.318 +09:00	rootdc1.offsec.lan	4688	critical	Mimikatz Use	
2021-05-19 06:30:17.318 +09:00	rootdc1.offsec.lan	4688	high	Relevant Anti-Virus Event	
2021-05-19 06:33:49.548 +09:00	rootdc1.offsec.lan	770	critical	DNS Server Error Failed Loading the ServerLevelPluginDLL	
2021-05-19 06:33:49.548 +09:00	rootdc1.offsec.lan	770	high	Possible CVE-2021-1675 Print Spooler Exploitation	
2021-05-19 06:33:49.548 +09:00	rootdc1.offsec.lan	770	high	Relevant Anti-Virus Event	
2021-05-19 06:33:49.548 +09:00	rootdc1.offsec.lan	770	critical	Mimikatz Use	
2021-05-20 21:49:31.863 +09:00	fs01.offsec.lan	1102	high	Security log was cleared	User: admmig
2021-05-20 21:49:46.875 +09:00	fs01.offsec.lan	4648	informational	Explicit Logon	Source User: FS01\$ : Target User: sshd_5848 : IP Address: - : Pr
2021-05-20 21:49:46.876 +09:00	fs01.offsec.lan	4624	low	Logon Type 5 - Service	User: sshd_5848 : Workstation: - : IP Address: - : Port: - : Logo
2021-05-20 21:49:46.876 +09:00	fs01.offsec.lan	4672	informational	Admin Logon	User: sshd_5848 : LogonID: 0x3c569ed
2021-05-20 21:49:52.315 +09:00	fs01.offsec.lan	4776	informational	NTLM Logon to Local Account	User: NOUSER : Workstation FS01 : Status: 0xc0000064
2021-05-20 21:49:52.315 +09:00	fs01.offsec.lan	4625	informational	Logon Failure - Username does not exist	User: NOUSER : Type: 8 : Workstation: FS01 : IP Address: - : S

# Timeline Explorer

イチオシ！！！

Eric Zimmermanが作ったCSV解析ツール  
C#で開発され、Excelより速くて、便利！！

<https://ericzimmerman.github.io/#/index.md>

からダウンロードできます。

※残念ながら、Windowsのみ・・

# Timeline Explorer

Timeline Explorer v1.3.0.0

File Tools Tabs View Help

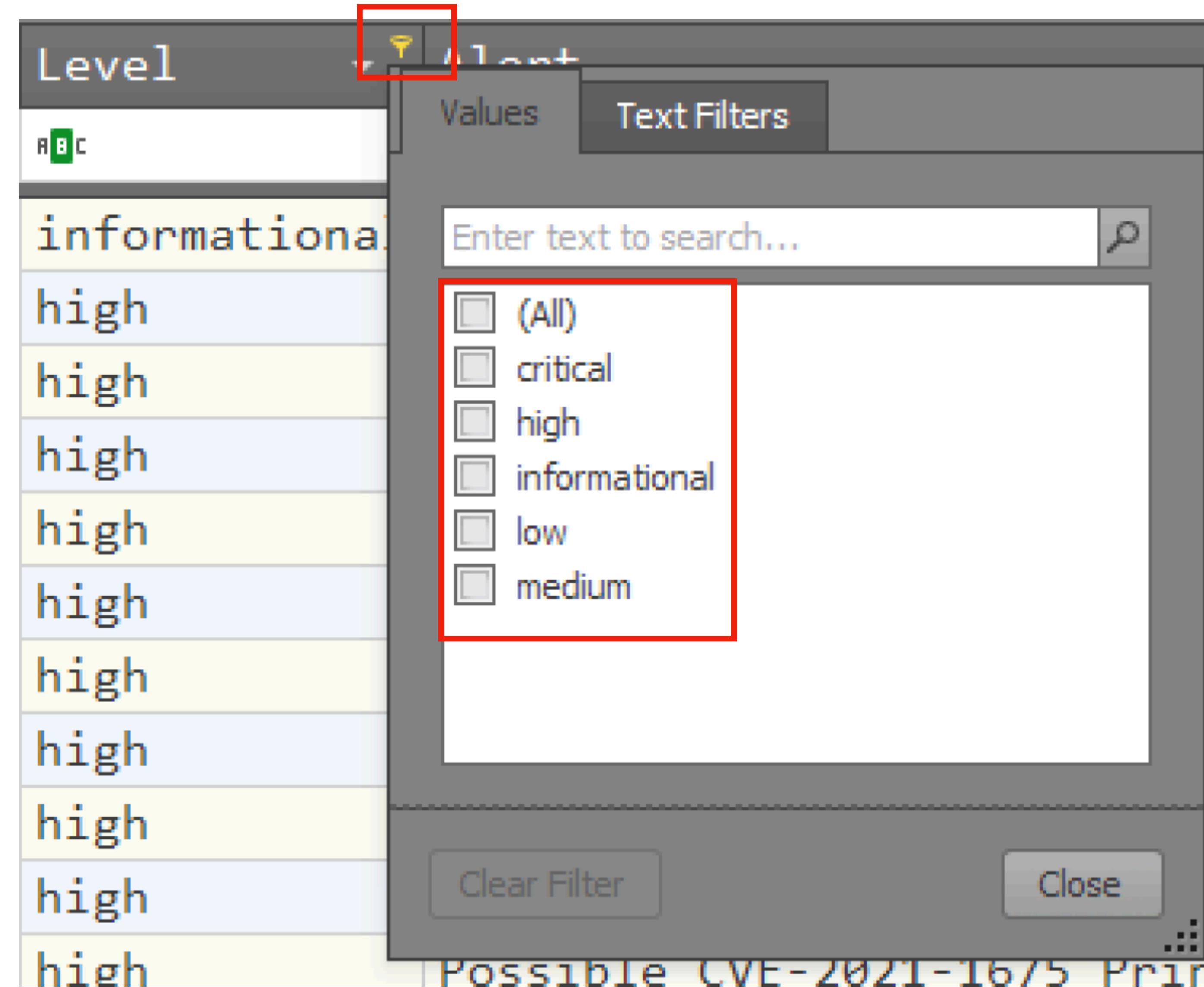
2021-12-20-sample-evtx-results.csv

Drag a column header here to group by that column

Enter text to search... Find

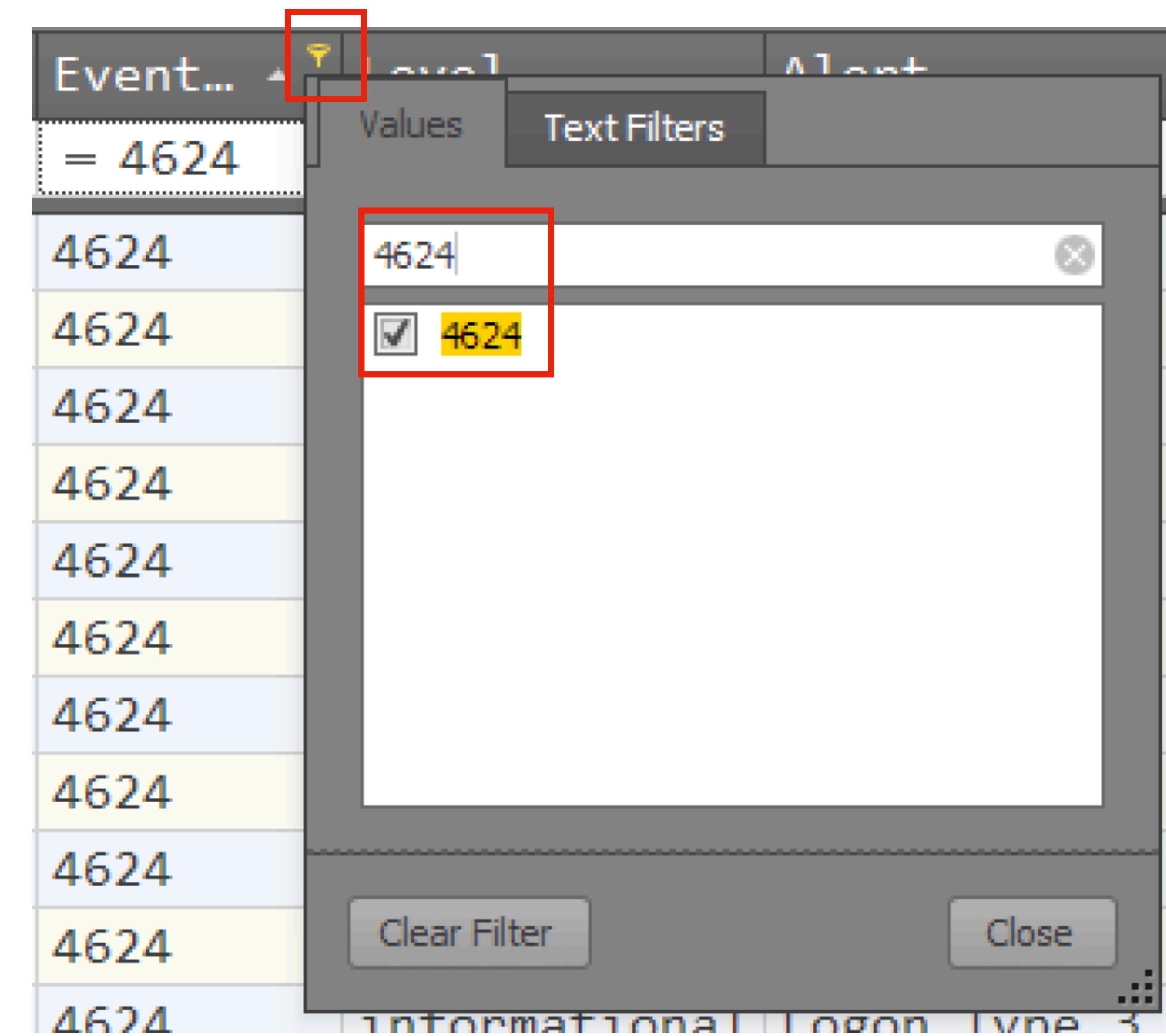
Time	Computername	Eventid	Level	Alert
2013-10-24 01:16:13.843 +09:00	37L4247D28-05	4624	informational	Logon Type 0 - System
2013-10-24 01:16:29.000 +09:00	37L4247D28-05	4625	medium	Failed Logon From Public IP
2013-10-24 01:17:44.109 +09:00	37L4247D28-05	1	high	Execution Of Not Existing File
2013-10-24 01:17:44.109 +09:00	37L4247D28-05	1	high	Execution Of Other File Type Than .exe
2013-10-24 01:18:09.203 +09:00	37L4247D28-05	2003	low	USB Device Plugged
2013-10-24 01:18:33.828 +09:00	IE8Win7	1	high	Execution Of Not Existing File
2013-10-24 01:18:33.828 +09:00	IE8Win7	1	high	Execution Of Other File Type Than .exe
2013-10-24 01:18:50.500 +09:00	IE8Win7	4624	informational	Logon Type 0 - System
2013-10-24 01:21:30.000 +09:00	IE8Win7	4625	medium	Failed Logon From Public IP
2013-10-24 01:21:33.630 +09:00	IE8Win7	1	high	Execution Of Not Existing File
2013-10-24 01:21:33.630 +09:00	IE8Win7	1	high	Execution Of Other File Type Than .exe
2013-10-24 01:21:33.630 +09:00	IE8Win7	4616	medium	Unauthorized System Time Modification
2013-10-24 01:22:39.911 +09:00	IE8Win7	1	high	Execution Of Not Existing File
2013-10-24 01:22:39.911 +09:00	IE8Win7	1	high	Execution Of Other File Type Than .exe
2013-10-24 01:22:39.911 +09:00	IE8Win7	4616	medium	Unauthorized System Time Modification
2013-10-24 01:22:39.973 +09:00	IE8Win7	4720	medium	Local user account created
2013-10-24 01:22:39.973 +09:00	IE8Win7	4720	medium	Local user account created
2013-10-24 01:22:40.004 +09:00	IE8Win7	4732	high	User added to local Administrators group

# Levelでのフィルタリング



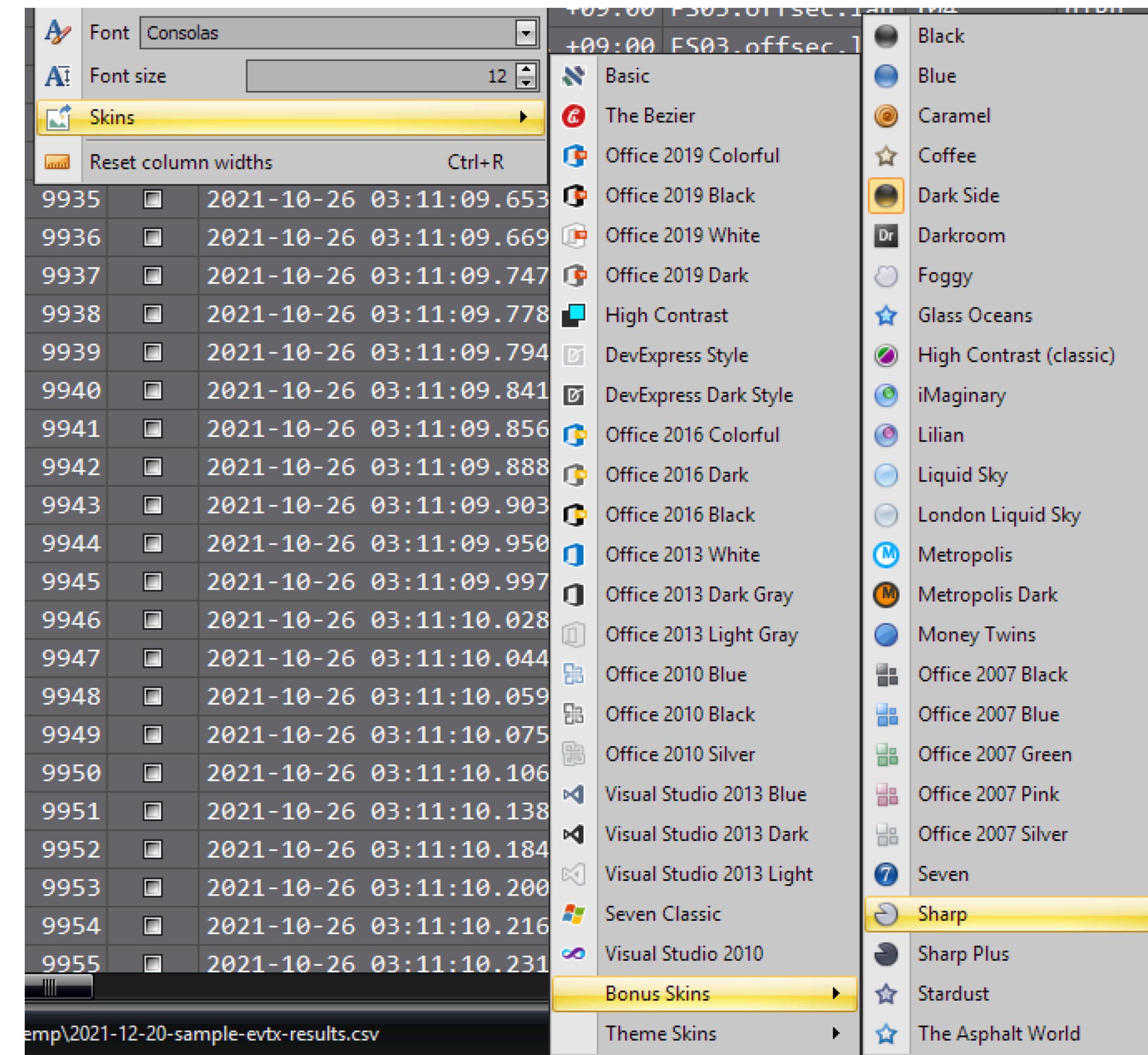
Time	Computername	Eventid	Level	Alert
2019-03-26 06:28:45.025 +09:00	DC1.insecurebank.local	5136	critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
2019-03-26 06:28:45.025 +09:00	DC1.insecurebank.local	5136	critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
2019-03-26 06:28:45.026 +09:00	DC1.insecurebank.local	5136	critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
2019-03-26 06:28:45.026 +09:00	DC1.insecurebank.local	5136	critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
2019-03-26 06:28:45.026 +09:00	DC1.insecurebank.local	5136	critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
2019-03-26 06:28:45.026 +09:00	DC1.insecurebank.local	5136	critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
2019-03-26 06:28:45.026 +09:00	DC1.insecurebank.local	5136	critical	Powerview Add-DomainObjectAcl DCSync AD Extend Right
2019-04-29 01:29:42.988 +09:00	IEWIN7	10	critical	Mimikatz Use
2019-04-30 05:59:14.447 +09:00	IEWIN7	18	critical	Malicious Named Pipe
2019-05-01 03:08:29.138 +09:00	Sec504Student	4673	critical	Mimikatz Use
2019-05-01 03:08:29.138 +09:00	Sec504Student	4673	critical	Mimikatz Use
2019-05-01 03:08:29.138 +09:00	Sec504Student	4673	critical	Mimikatz Use
2019-05-01 03:08:29.138 +09:00	Sec504Student	4673	critical	Mimikatz Use
2019-05-01 05:26:51.981 +09:00	IEWIN7	13	critical	CobaltStrike Service Installations in Registry
2019-05-09 10:59:29.090 +09:00	IEWIN7	1	critical	UAC Bypass via Event Viewer
2019-05-26 13:01:43.567 +09:00	IEWIN7	1	critical	Suspect Svchost Activity
2019-06-20 02:22:41.709 +09:00	IEWIN7	13	critical	Registry Persistence Mechanisms
2019-06-20 02:22:43.944 +09:00	IEWIN7	13	critical	Registry Persistence Mechanisms
2019-06-20 02:22:45.694 +09:00	IEWIN7	13	critical	Registry Persistence Mechanisms
2019-06-21 16:35:37.329 +09:00	alice.insecurebank.local	11	critical	Dumpert Process Dumper
2019-06-21 16:35:50.259 +09:00	alice.insecurebank.local	11	critical	Dumpert Process Dumper
2019-06-21 16:35:50.729 +09:00	alice.insecurebank.local	11	critical	Dumpert Process Dumper
2019-07-19 23:47:40.706 +09:00	MSEdgeWIN10	1	critical	Shadow Copies Deletion Using Operating Systems Utilities
2019-07-19 23:47:45.585 +09:00	MSEdgeWIN10	1	critical	WannaCry Ransomware
2019-07-19 23:47:45.624 +09:00	MSEdgeWIN10	1	critical	Shadow Copies Deletion Using Operating Systems Utilities
2019-07-19 23:47:45.624 +09:00	MSEdgeWIN10	1	critical	WannaCry Ransomware

# イベントIDでのフィルタリング



Time	Computername	Event ID	Level	Alert	Details
2021-05-03 17:58:38.752 +09:00	prtg-mon.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.753 +09:00	prtg-mon.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.753 +09:00	prtg-mon.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.762 +09:00	adfs01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.762 +09:00	fs01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.771 +09:00	adfs01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.771 +09:00	fs01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.772 +09:00	fs01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.773 +09:00	fs01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.773 +09:00	adfs01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.773 +09:00	adfs01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.774 +09:00	webiis01.offse...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.775 +09:00	webiis01.offse...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-03 17:58:38.775 +09:00	webiis01.offse...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-20 21:49:46.876 +09:00	fs01.offsec.lan	4624	low	Logon Type 5 - Service	User: sshd_5848 : Workstation: - : IP Address: - : Port: -
2021-05-22 05:43:07.153 +09:00	fs01.offsec.lan	4624	low	Logon Type 5 - Service	User: sshd_4332 : Workstation: - : IP Address: - : Port: -
2021-05-26 22:02:27.149 +09:00	mssql01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F
2021-05-26 22:02:29.726 +09:00	mssql01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F
2021-05-26 22:02:34.373 +09:00	mssql01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-26 22:02:34.379 +09:00	mssql01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-26 22:02:34.379 +09:00	mssql01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-05-26 22:02:34.380 +09:00	mssql01.offsec...	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-06-03 21:18:12.942 +09:00	fs01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-06-11 06:21:20.636 +09:00	fs01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.23.9 : F
2021-06-11 06:21:26.357 +09:00	fs01.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F
2021-10-20 22:39:17.315 +09:00	FS03.offsec.lan	4624	informational	Logon Type 9 - NewCredentials	User: admmig : Workstation: - : IP Address: ::1 : Port: 0
2021-10-20 22:39:17.315 +09:00	FS03.offsec.lan	4624	medium	Pass the Hash Activity 2	
2021-10-20 22:39:17.315 +09:00	FS03.offsec.lan	4624	high	Successful Overpass the Hash Attempt	
2021-10-20 23:29:09.758 +09:00	FS03.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F
2021-10-20 23:29:09.773 +09:00	FS03.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F
2021-10-20 23:29:09.836 +09:00	FS03.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F
2021-10-20 23:29:09.898 +09:00	FS03.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F
2021-10-20 23:29:09.961 +09:00	FS03.offsec.lan	4624	informational	Logon Type 3 - Network	User: admmig : Workstation: - : IP Address: 10.23.123.11 : F

# Skin が沢山 !!



# コンピュータ名でのグルーピング

Drag a column header here to group by that column

Line	Tag	Computername	Time	Eventid	Level	Alert
		ドラッグ＆ドロップ			=	=
10062	■	fs03vuln.offse...	2021-11-09 00:01:27.604	+09:00 1	high	WMI Spawning Windows PowerShell
10061	■	fs03vuln.offse...	2021-11-09 00:01:27.604	+09:00 1	low	Non Interactive PowerShell
10060	■	fs03vuln.offse...	2021-11-09 00:01:27.604	+09:00 1	high	Process Creation Sysmon Rule Alert
10059	■	fs03vuln.offse...	2021-11-02 23:15:23.676	+09:00 1102	high	Security log was cleared
10058	■	FS03.offsec.lan	2021-10-28 22:41:21.325	+09:00 1	high	Abused Debug Privilege by Arbitrary ...
10057	■	FS03.offsec.lan	2021-10-28 22:41:21.325	+09:00 1	high	Process Creation Sysmon Rule Alert
10056	■	FS03.offsec.lan	2021-10-27 19:34:50.024	+09:00 4674	critical	Mimikatz Use
10055	■	FS03.offsec.lan	2021-10-27 19:34:49.837	+09:00 6416	critical	Mimikatz Use
10054	■	FS03.offsec.lan	2021-10-27 19:28:26.307	+09:00 823	critical	Mimikatz Use
10053	■	FS03.offsec.lan	2021-10-27 19:28:26.260	+09:00 354	critical	Mimikatz Use
10052	■	FS03.offsec.lan	2021-10-27 19:28:26.260	+09:00 354	high	Possible CVE-2021-1675 Print Spooler...
10051	■	fs03vuln.offse...	2021-10-27 19:14:27.559	+09:00 300	critical	Mimikatz Use
10050	■	fs03vuln.offse...	2021-10-27 19:14:27.559	+09:00 823	critical	Mimikatz Use
10049	■	fs03vuln.offse...	2021-10-27 19:14:27.466	+09:00 5142	critical	Mimikatz Use
10048	■	fs03vuln.offse...	2021-10-27 19:14:27.466	+09:00 848	critical	Mimikatz Use
10047	■	fs03vuln.offse...	2021-10-27 19:14:27.403	+09:00 4674	critical	Mimikatz Use
10046	■	fs03vuln.offse...	2021-10-27 19:14:27.403	+09:00 823	critical	Mimikatz Use

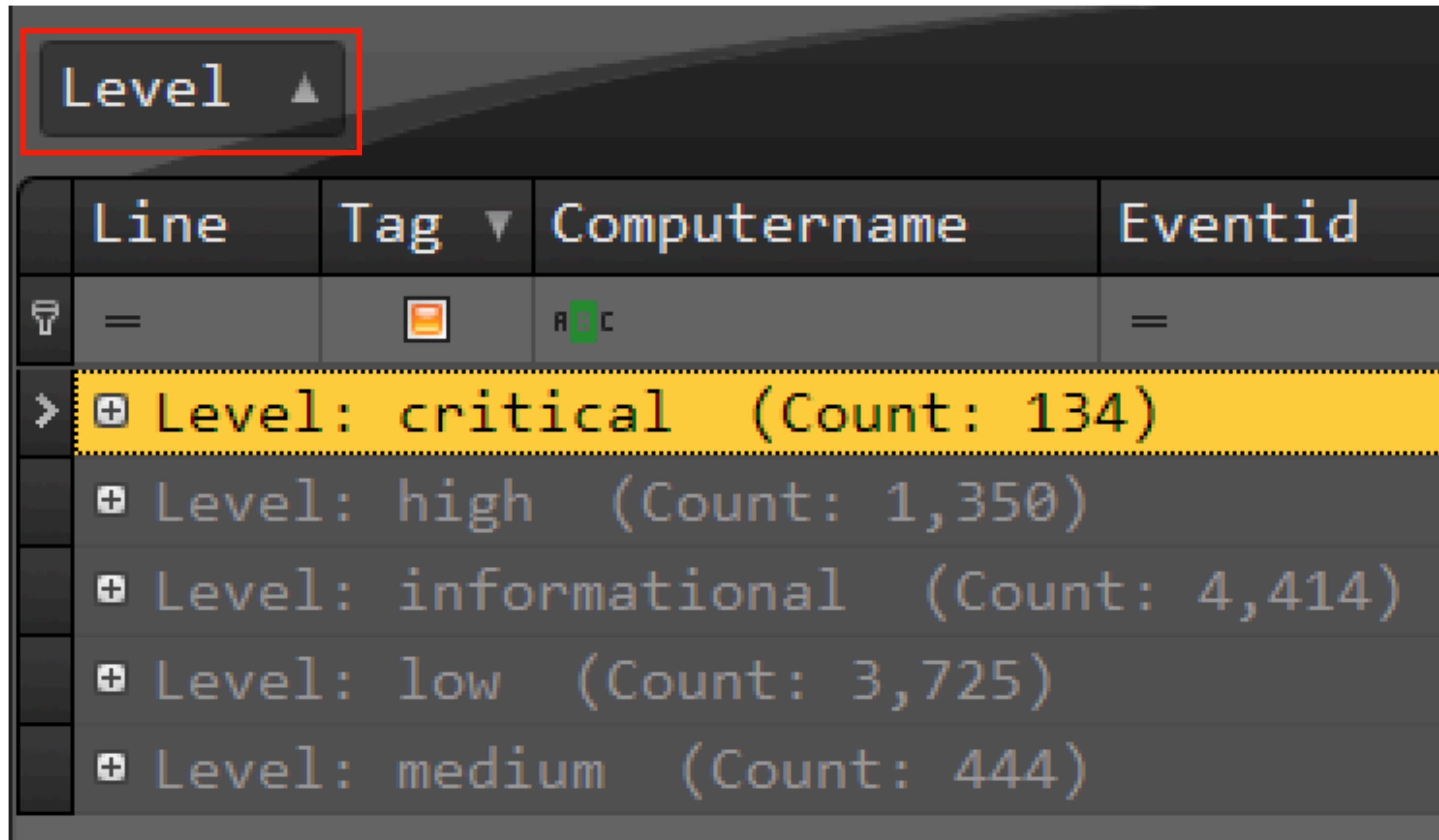
# コンピュータ名でのグレーピング

Computername						
Line	Tag	Time	Eventid	Level	Alert	Details
7	=	2013-10-24 01:18:09.203 +09:00	2003	low	USB Device Plugged	
6	+	Computername: 2012r2srv.maincorp.local (Count: 1)				
5	+	Computername: 2016dc.hqcorp.local (Count: 1)				
4	+	Computername: 37L4247D28-05 (Count: 5)				
5	□	2013-10-24 01:18:09.203 +09:00	2003	low	USB Device Plugged	
4	□	2013-10-24 01:17:44.109 +09:00	1	high	Execution Of Other File Type Than .e...	
3	□	2013-10-24 01:17:44.109 +09:00	1	high	Execution Of Not Existing File	
2	□	2013-10-24 01:16:29.000 +09:00	4625	medium	Failed Logon From Public IP	
1	□	2013-10-24 01:16:13.843 +09:00	4624	informational	Logon Type 0 - System	Bootup
6	+	Computername: adfs01.offsec.lan (Count: 6)				
5	+	Computername: alice.insecurebank.local (Count: 18)				
4	+	Computername: atacore01.offsec.lan (Count: 6)				
3	+	Computername: atanids01.offsec.lan (Count: 6)				
2	+	Computername: DC1.insecurebank.local (Count: 35)				
1	+	Computername: DC-Server-1.labcorp.local (Count: 24)				

# イベントIDでのグルーピング

Eventid	Line	Tag	Computername	Time	Level	Alert
+	=	■	REC	REC	=	REC
+	Eventid: 1 (Count: 2,370)					
+	Eventid: 10 (Count: 118)					
+	Eventid: 104 (Count: 97)					
+	Eventid: 11 (Count: 20)					
+	Eventid: 1102 (Count: 55)					
+	Eventid: 1116 (Count: 35)					
+	Eventid: 1117 (Count: 9)					
+	Eventid: 12 (Count: 34)					
+	Eventid: 13 (Count: 60)					
+	Eventid: 150 (Count: 6)					
+	Eventid: 17 (Count: 4)					
+	Eventid: 18 (Count: 6)					
>	Eventid: 20 (Count: 1)	5542	PC04.example.c...	2019-04-04 03:11:54.178 +09:00	high	Suspicious Scripting in a WMI Consumer
+	Eventid: 2003 (Count: 4)					

# レベルでのグルーピング



The screenshot shows a log viewer application with a table of log entries. The table has columns: Line, Tag, Computername, and Eventid. The 'Line' column contains log messages, the 'Tag' column contains icons, the 'Computername' column contains 'RBC', and the 'Eventid' column contains '='. The log messages are grouped by level:

Line	Tag	Computername	Eventid
=	■	RBC	=
➤ + Level: critical (Count: 134)			
➤ + Level: high (Count: 1,350)			
➤ + Level: informational (Count: 4,414)			
➤ + Level: low (Count: 3,725)			
➤ + Level: medium (Count: 444)			

# アラートでのグルーピング

Alert					
	Line	Tag	Computername	Level	Eventid
					Time
▼	=	■	ABC	=	=
▶	+	Alert: Abused Debug Privilege by Arbitrary Parent Processes	(Count: 11)		
▶	+	Alert: Accessing WinAPI in PowerShell	(Count: 2)		
▶	+	Alert: Accessing WinAPI in PowerShell for Credentials Dumping	(Count: 4)		
▶	+	Alert: Accessing WinAPI in PowerShell. Code Injection.	(Count: 93)		
▶	+	Alert: Active Directory User Backdoors	(Count: 16)		
▶	+	Alert: AD Privileged Users or Groups Reconnaissance	(Count: 11)		
▶	+	Alert: AD User Enumeration	(Count: 18)		
▶	+	Alert: Addition of SID History to Active Directory Object	(Count: 1)		
▶	+	Alert: Admin Logon	(Count: 76)		
▶	+	Alert: Admin User Remote Logon	(Count: 1)		
▶	+	Alert: Always Install Elevated MSI Spawns Cmd And Powershell	(Count: 1)		

# タグ機能

## 調査に関係しているアラートとイベントに タグを付ける

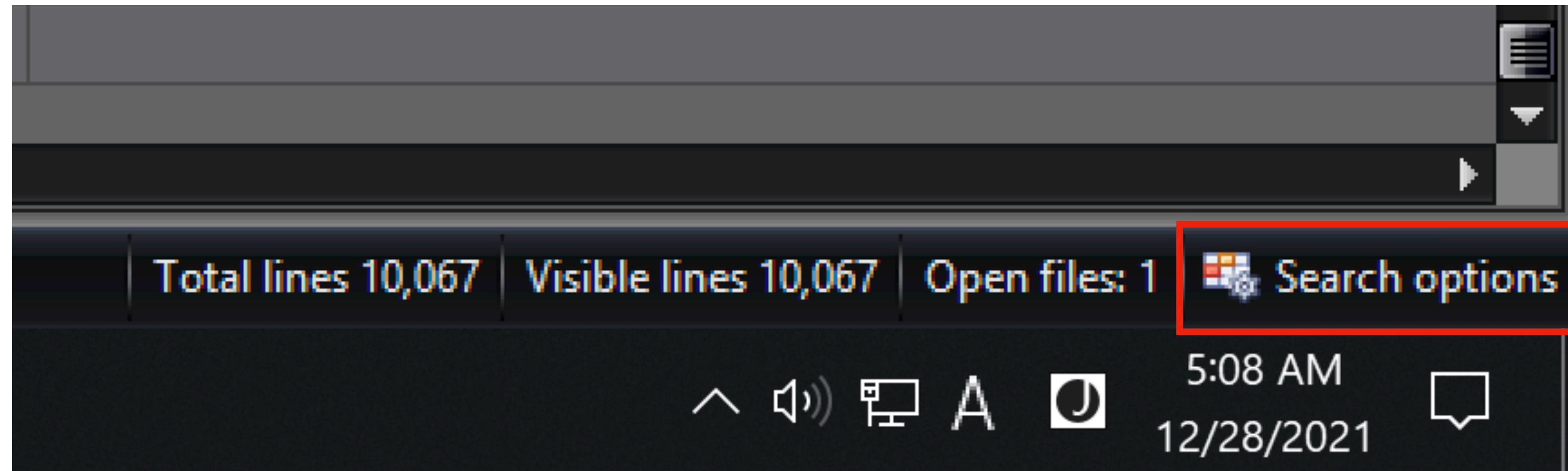
Drag a column header here to group by that column

Line	Tag	Computername	Time	Eventid	Level	Alert
10064	fs03vuln.offse...	2021-11-09 00:01:27.604 +09:00	1	high	WMI Spawning Windows PowerShell	
10063	fs03vuln.offse...	2021-11-09 00:01:27.604 +09:00	1	low	Non Interactive PowerShell	
10062	fs03vuln.offse...	2021-11-09 00:01:27.604 +09:00	1	high	Suspicious PowerShell Parent Process	
10061	fs03vuln.offse...	2021-11-09 00:01:27.604 +09:00	1	high	Wmiprvse Spawning Process	
10060	fs03vuln.offse...	2021-11-09 00:01:27.604 +09:00	1	high	Process Creation Sysmon Rule Alert	
10059	fs03vuln.offse...	2021-11-02 23:15:23.676 +09:00	1102	high	Security log was cleared	
10058	FS03.offsec.lan	2021-10-28 22:41:21.325 +09:00	1	high	Abused Debug Privilege by Arbitrary ...	
10057	FS03.offsec.lan	2021-10-28 22:41:21.325 +09:00	1	high	Process Creation Sysmon Rule Alert	
10056	FS03.offsec.lan	2021-10-27 19:34:50.024 +09:00	4674	critical	Mimikatz Use	
10055	FS03.offsec.lan	2021-10-27 19:34:49.837 +09:00	6416	critical	Mimikatz Use	
10054	FS03.offsec.lan	2021-10-27 19:28:26.307 +09:00	823	critical	Mimikatz Use	
10053	FS03.offsec.lan	2021-10-27 19:28:26.260 +09:00	354	critical	Mimikatz Use	
10052	FS03.offsec.lan	2021-10-27 19:28:26.260 +09:00	354	high	Possible CVE-2021-1675 Print Spooler...	
10051	fs03vuln.offse...	2021-10-27 19:14:27.559 +09:00	300	critical	Mimikatz Use	
10050	fs03vuln.offse...	2021-10-27 19:14:27.559 +09:00	823	critical	Mimikatz Use	
10049	fs03vuln.offse...	2021-10-27 19:14:27.466 +09:00	5142	critical	Mimikatz Use	
10048	fs03vuln.offse...	2021-10-27 19:14:27.466 +09:00	848	critical	Mimikatz Use	
10047	fs03vuln.offse...	2021-10-27 19:14:27.403 +09:00	4674	critical	Mimikatz Use	
10046	fs03vuln.offse...	2021-10-27 19:14:27.403 +09:00	823	critical	Mimikatz Use	

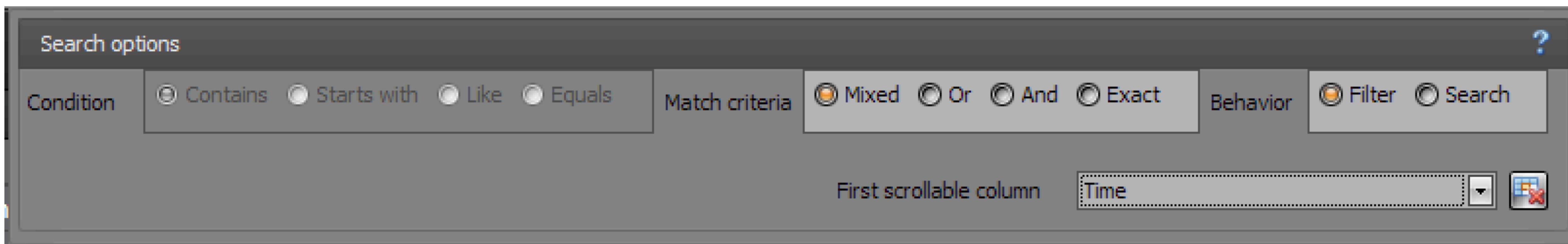
# タグでのタルーピング

# 列の固定

1. 右下の「Search options」をクリックします



2. 「First scrollable column」を「Time」に設定します：



# Time列が固定される

Time	Level	Eventid	Alert	Details
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Not Existing File	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Other File Type Than .exe	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Not Existing File	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Other File Type Than .exe	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Not Existing File	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Other File Type Than .exe	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Not Existing File	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Other File Type Than .exe	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Not Existing File	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Other File Type Than .exe	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Not Existing File	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Other File Type Than .exe	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Not Existing File	
2021-08-17 21:26:51.409 +09:00	high	1	Execution Of Other File Type Than .exe	
2021-08-17 21:26:51.409 +09:00	medium	9	Raw Disk Access Using Illegitimate Tools	
2021-08-23 04:33:38.725 +09:00	informational	1	Process Creation	Command: c:\temp\EfsPotato.exe whoami
2021-08-23 04:33:38.844 +09:00	critical	17	EfsPotato Named Pipe	
2021-08-23 04:33:38.884 +09:00	critical	18	EfsPotato Named Pipe	
2021-08-23 04:33:38.905 +09:00	informational	1	Process Creation	Command: whoami : Path: C:\Windows\Sys
2021-08-23 04:33:38.905 +09:00	high	1	Run Whoami as SYSTEM	
2021-08-23 04:33:38.905 +09:00	medium	1	Whoami Execution	
2021-08-23 04:33:38.905 +09:00	low	1	Local Accounts Discovery	

Timeline Explorerをもっと使いこなしたい方へ  
この記事をおすすめします：

<https://aboutdfir.com/toolsandartifacts/windows/timeline-explorer/2/>

