

installation d'un "wec server" en images.

Résultats attendus

Recevoir les "events sysmon" d'une machine distant "windows (>=10)" sur un serveur WEC" dédié ici win-1 le DC) dans le canal "forwarded events".

The screenshot shows the Windows Event Viewer interface. The left pane displays a tree view of logs: Event Viewer (Local), Custom Views, ServerRoles, Administrative Events, Windows Logs (Application, Security, Setup, System, Forwarded Events selected), Applications and Services Logs, and Subscriptions. The main pane is titled "Forwarded Events" with the subtitle "Number of events: 458". It contains a table with columns: Level, Date a..., Source, Event..., Task Category, and Log. The table lists 15 rows of forwarded events from a Sysmon source on 7/25/2023, categorized by Task Category (e.g., Registry value ..., Process access..., Dns query (rul...)). The right pane is titled "Actions" and includes buttons for Forward, Open Log, Create Rule, Import, Export, Filter, Properties, Find, Search, Attach, View, and Refresh.

| Level | Date a... | Source | Event... | Task Category | Log |
|--------|-----------|--------|----------|--------------------|-------------------------|
| Inf... | 7/25/2023 | Sysmon | 13 | Registry value ... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 10 | Process access... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 10 | Process access... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 10 | Process access... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 10 | Process access... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 22 | Dns query (rul... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 22 | Dns query (rul... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 22 | Dns query (rul... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 22 | Dns query (rul... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 3 | Network conn... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 3 | Network conn... | Microsoft-Windows-Sy... |
| Inf... | 7/25/2023 | Sysmon | 3 | Network conn... | Microsoft-Windows-Sy... |

Résultats attendus: recevoir aussi les "security events"

The screenshot shows the Windows Event Viewer interface. The left pane displays a tree view of logs: Event Viewer (Local), Custom Views, ServerRoles, Administrative Events, Windows Logs (Application, Security, Setup, System, Forwarded Events selected), Applications and Services Logs, and Subscriptions. The main pane shows a table titled "Forwarded Events" with 94 entries. The columns are Level, Date a..., Source, Event..., Task Category, and Log. Most entries are for Microsoft Windows Security at level Inf... (Information) on 7/25/2013, with Event IDs 4672, 4624, or 4634, Task Category "Special Logon" or "Logon", and Log "Security". A detailed view of an event (Event 4672) is shown in the bottom pane, with tabs for General and Details. The General tab shows the subject as "Special privileges assigned to new logon." The Details tab is empty. The Actions pane on the right lists various options: Open Saved Log..., Create Custom Vie..., Import Custom Vie..., Clear Log..., Filter Current Log..., Properties, Find..., Save All Events As..., Attach a Task To thi..., View, Refresh, Help, Event Properties, Attach Task To This ..., Copy, Save Selected Event..., Refresh, and Help.

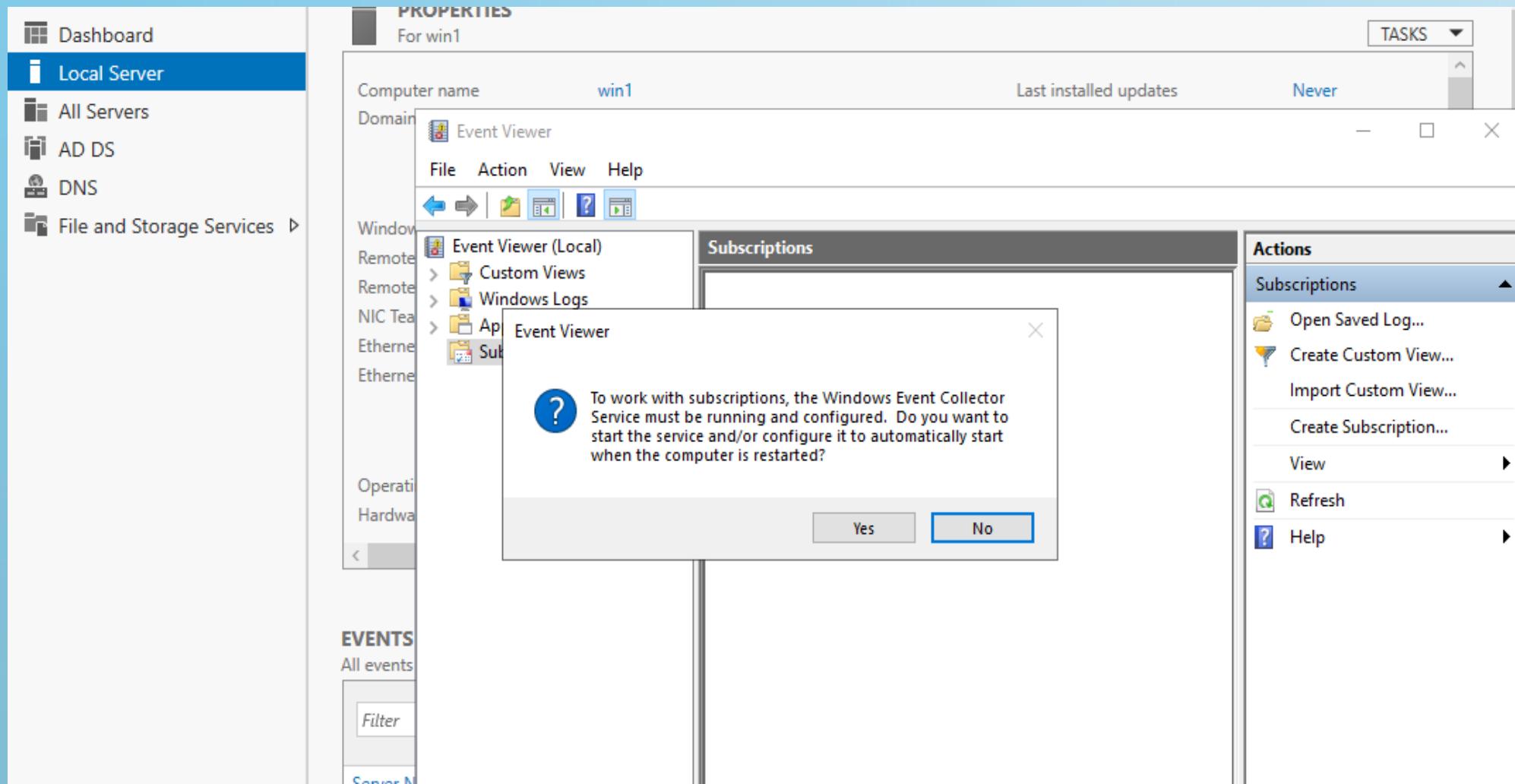
| Level | Date a... | Source | Event... | Task Category | Log |
|--------|-----------|-----------------|----------|---------------|----------|
| Inf... | 7/25/2013 | Microsoft Wi... | 4672 | Special Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4624 | Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4634 | Logoff | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4624 | Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4672 | Special Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4634 | Logoff | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4624 | Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4672 | Special Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4634 | Logoff | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4624 | Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4672 | Special Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4648 | Logon | Security |
| Inf... | 7/25/2013 | Microsoft Wi... | 4672 | Special Logon | Security |

Pré-requis: le service WinRM qui assure le transport des évènements doit être démarré sur toutes les machines.

```
jmp\ vagrant@WIN1 C:\Users\vagrant>sc query winrm

SERVICE_NAME: winrm
    TYPE               : 30  WIN32
    STATE              : 4   RUNNING
                           (STOPPABLE, NOT_PAUSABLE, ACCEPTS_SHUTDOWN)
    WIN32_EXIT_CODE    : 0   (0x0)
    SERVICE_EXIT_CODE  : 0   (0x0)
    CHECKPOINT         : 0x0
    WAIT_HINT          : 0x0
```

Dans "eventviewer" de win-1 (DC) clicker sur "subscription" va démarrer le service "WEC"

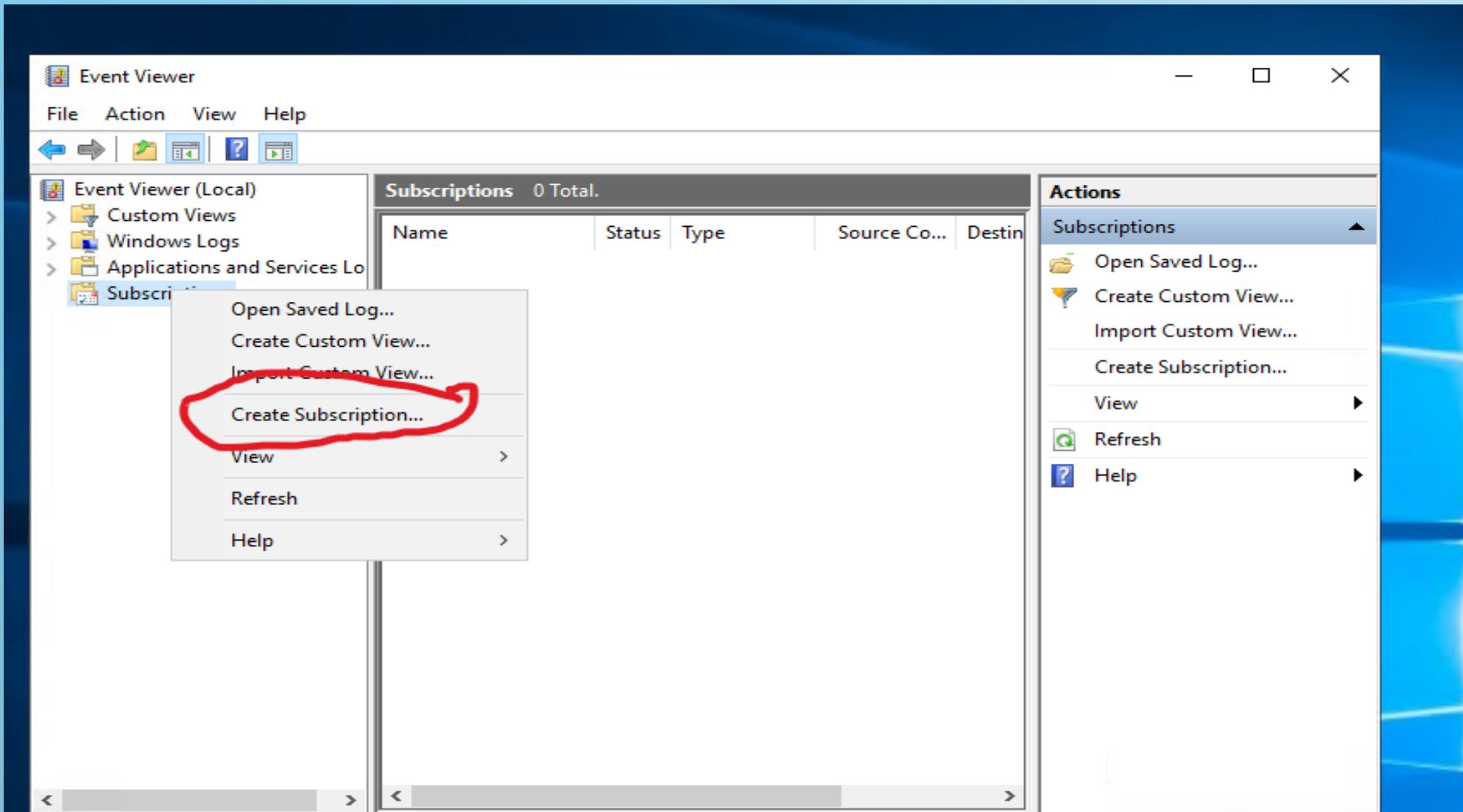


Visualisez le démarrage du service "SEC" sur le serveur "win-1" (DC)

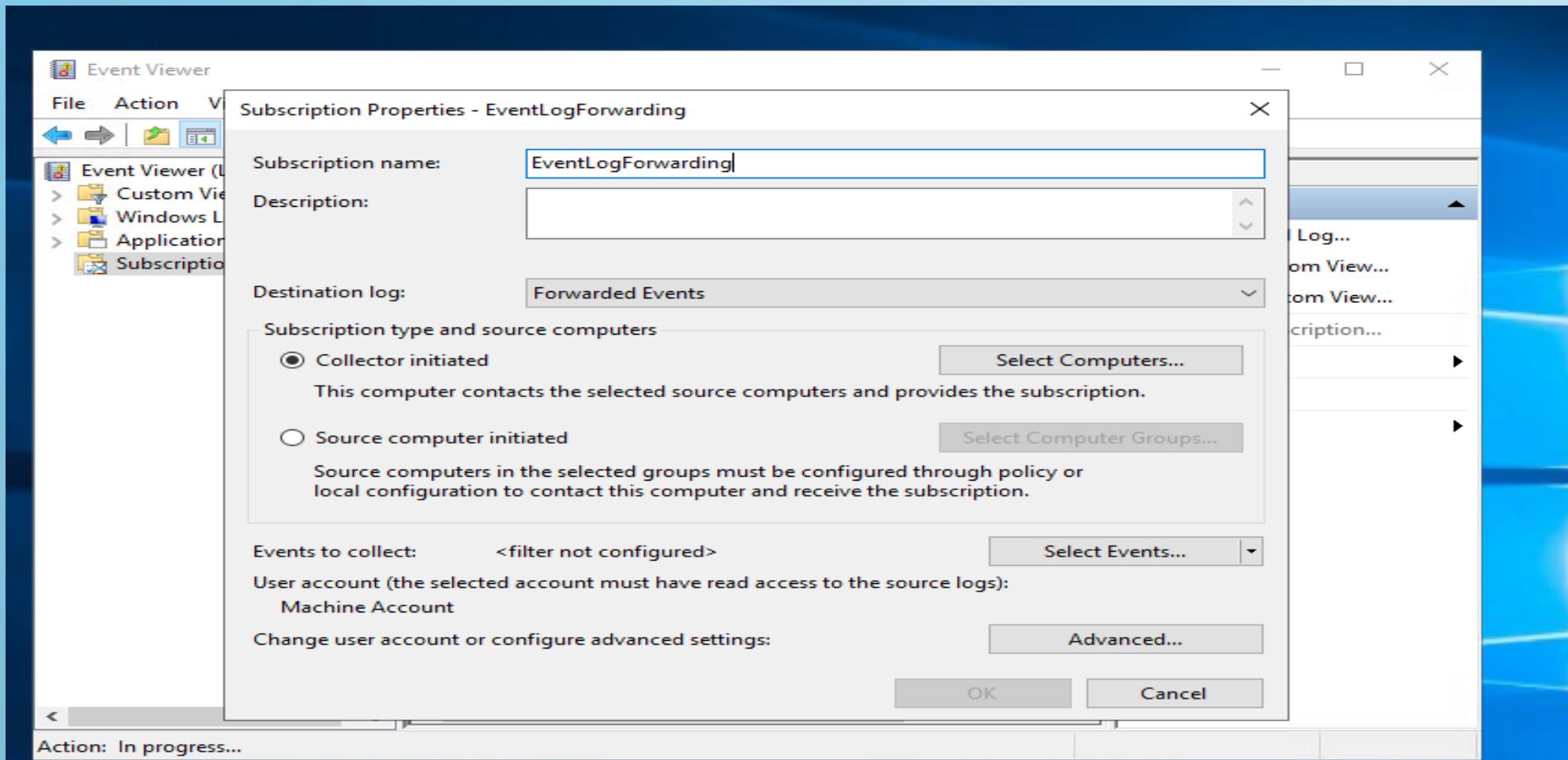
```
jmp\ vagrant@WIN1 C:\Users\vagrant>sc query wecsvc

SERVICE_NAME: wecsvc
    TYPE               : 30  WIN32
    STATE              : 4   RUNNING
                          (STOPPABLE, NOT_PAUSABLE, ACCEPTS_SHUTDOWN)
    WIN32_EXIT_CODE    : 0   (0x0)
    SERVICE_EXIT_CODE  : 0   (0x0)
    CHECKPOINT         : 0x0
    WAIT_HINT          : 0x0
```

Créez une nouvelle "subscription"

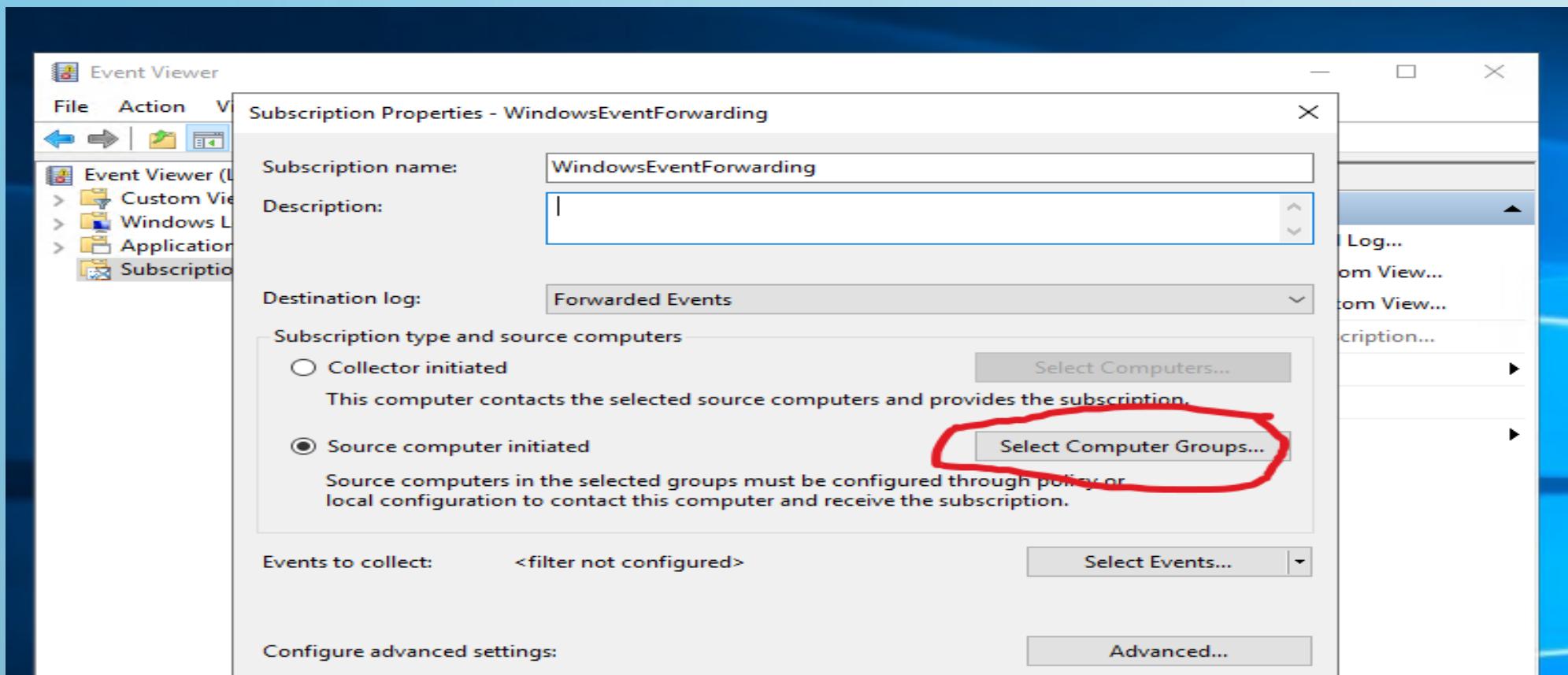


Créez une nouvelle "subscription" nommée EventLogforwarding

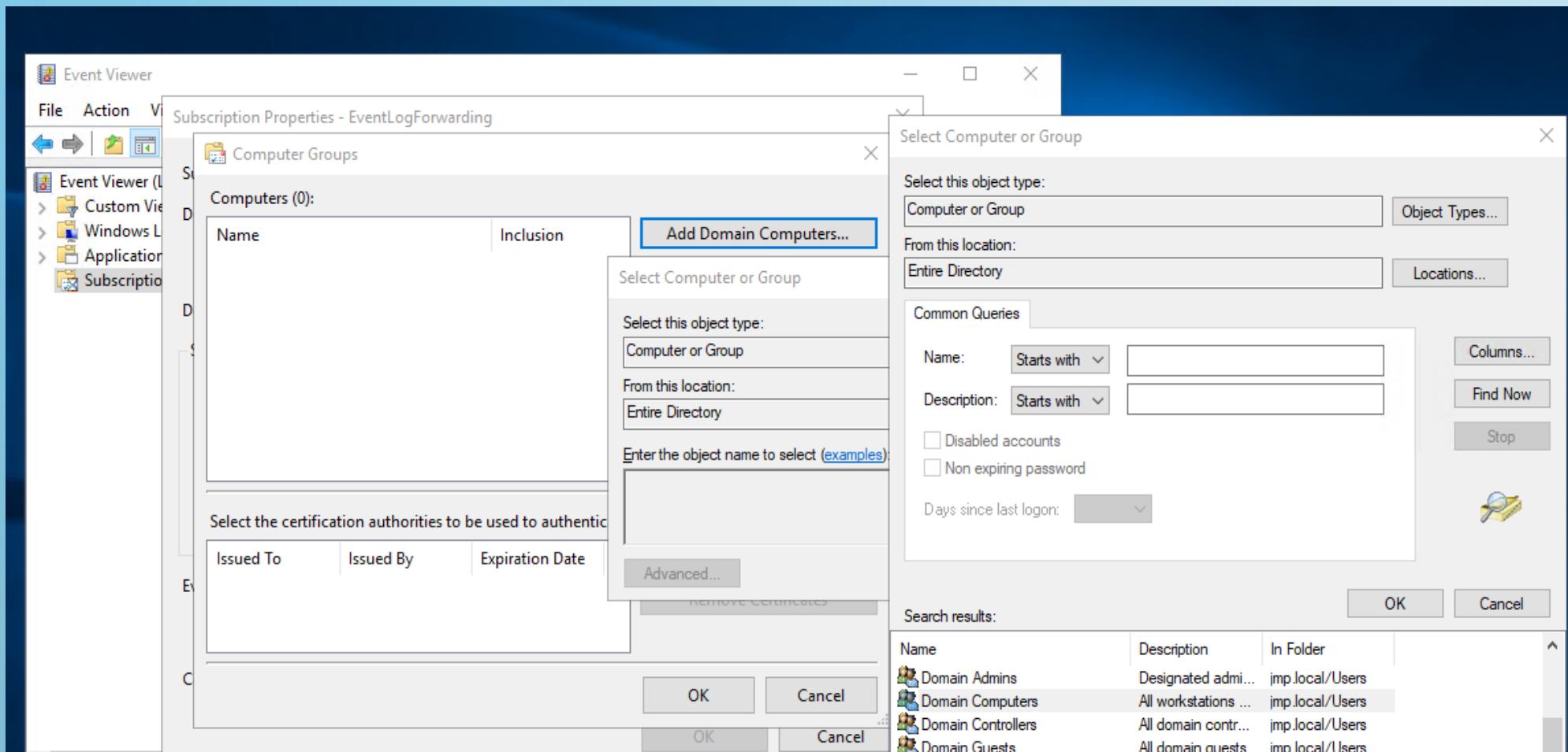


La subscription est pilotée par le client WEC

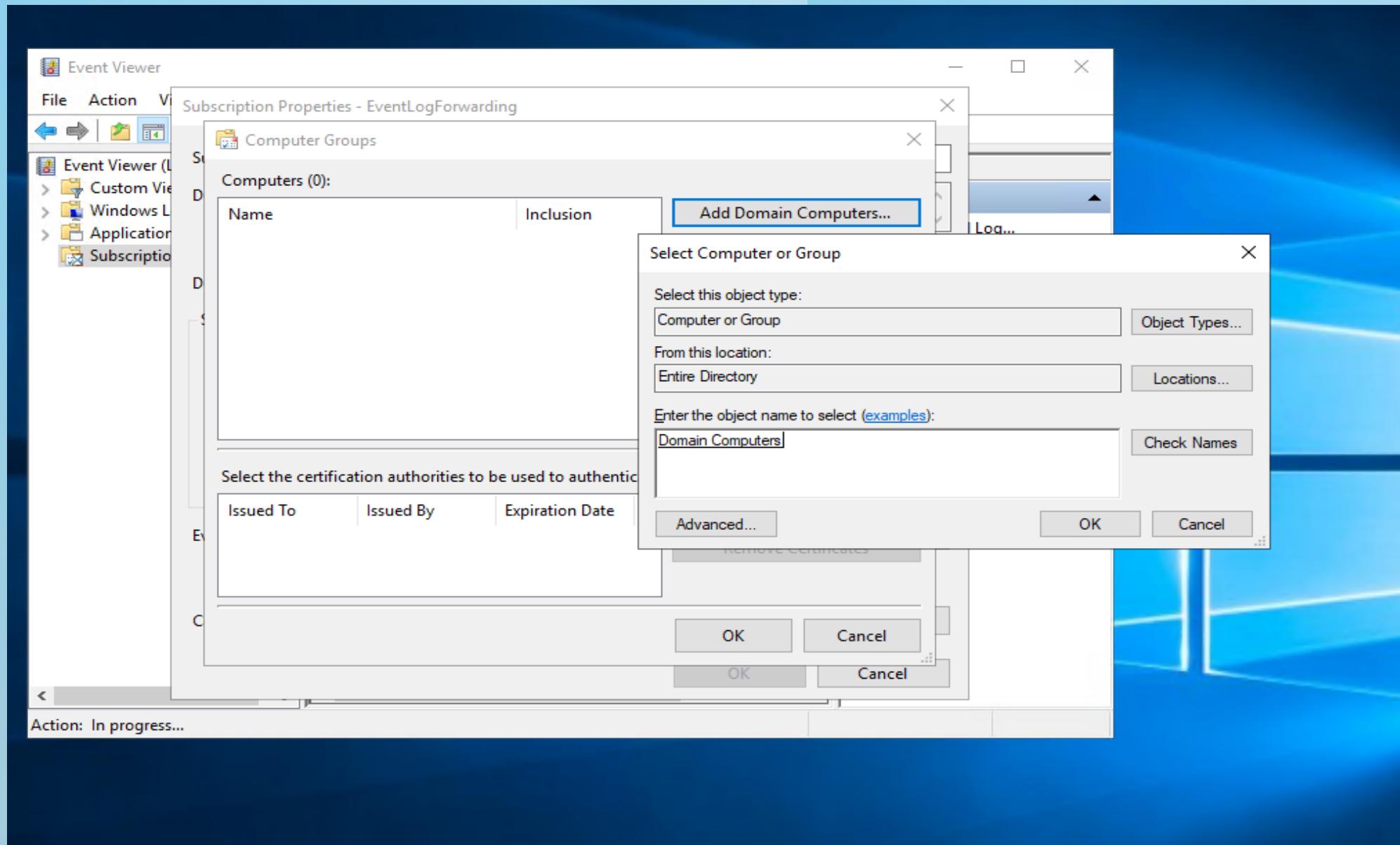
Choisissez "source computer initiated" et cliquez sur "Select Computer Groups"

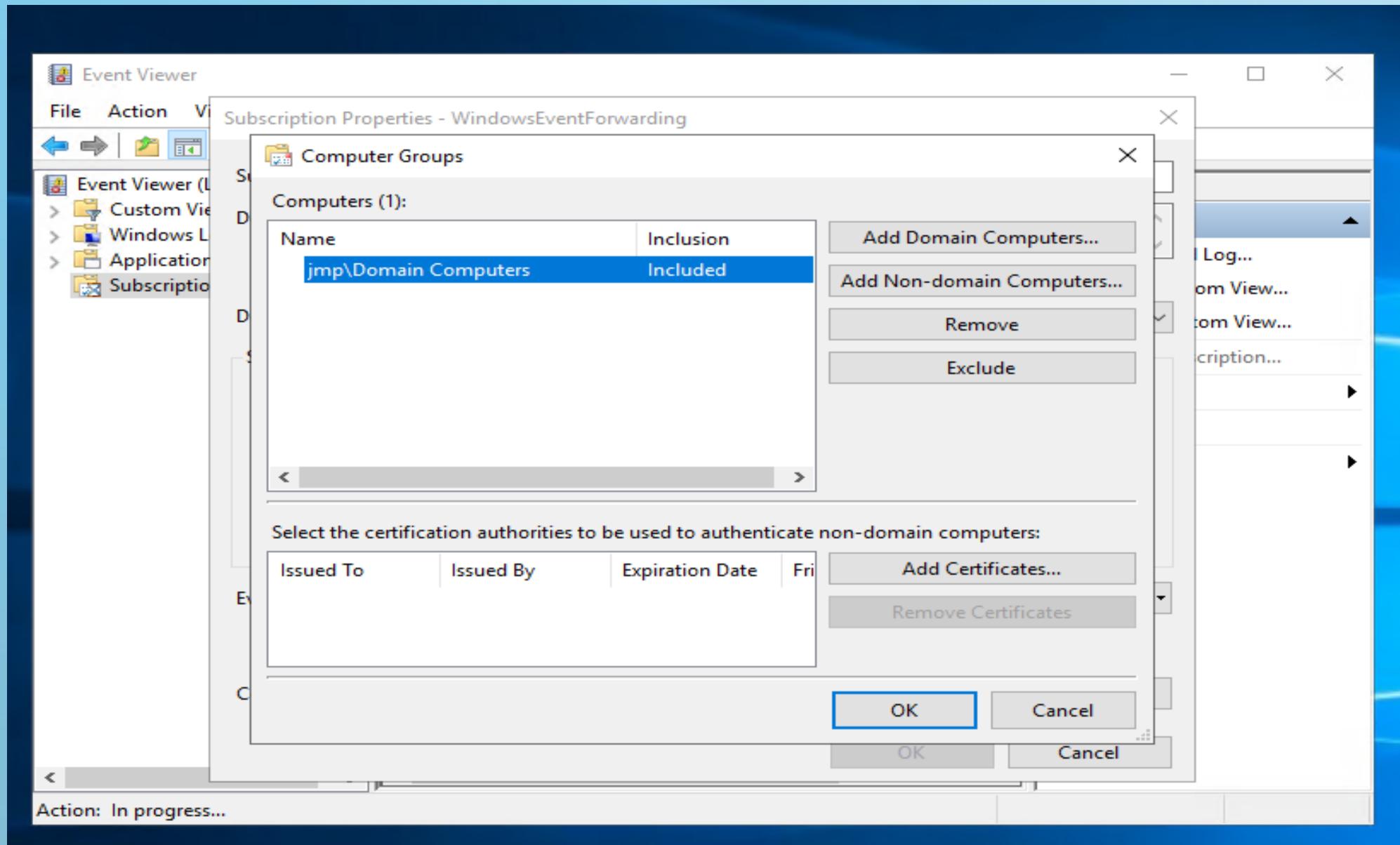


On ajoute le groupe "domain computers" pour que tous les ordinateurs du domaine envoient leurs logs vers le serveur WEC (win-1).

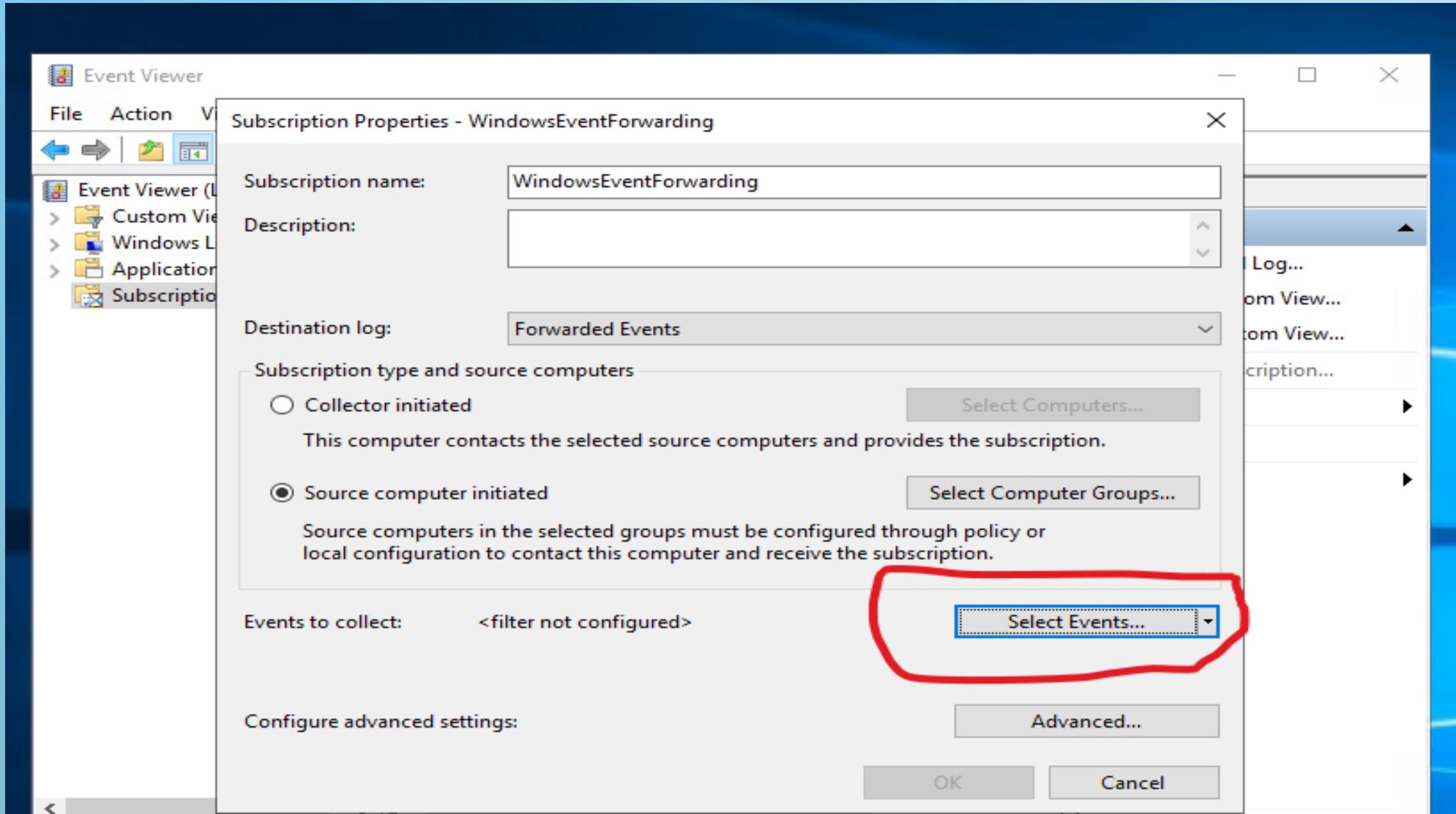


R5.cyber.11 Supervision de la sécurité

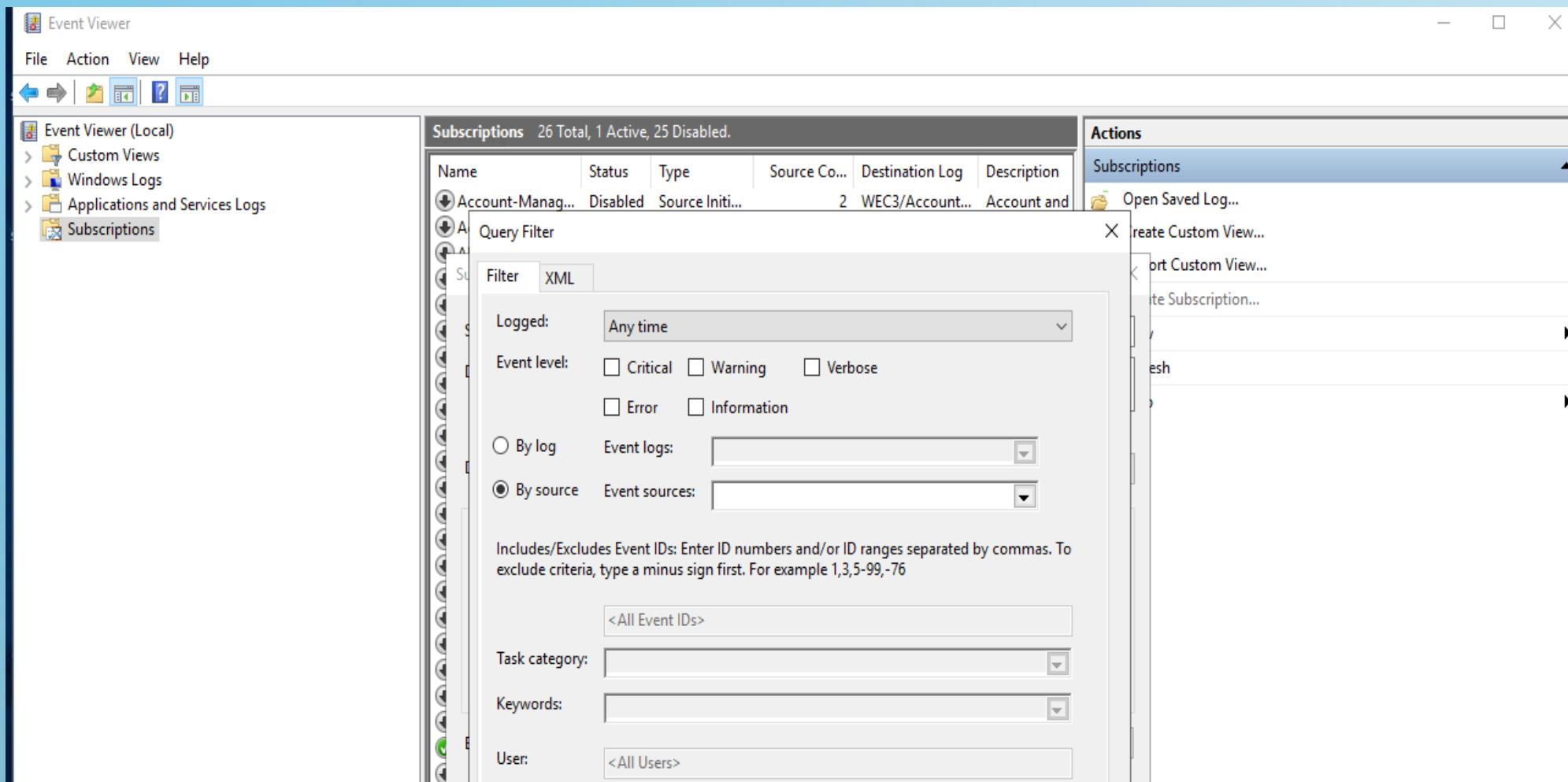




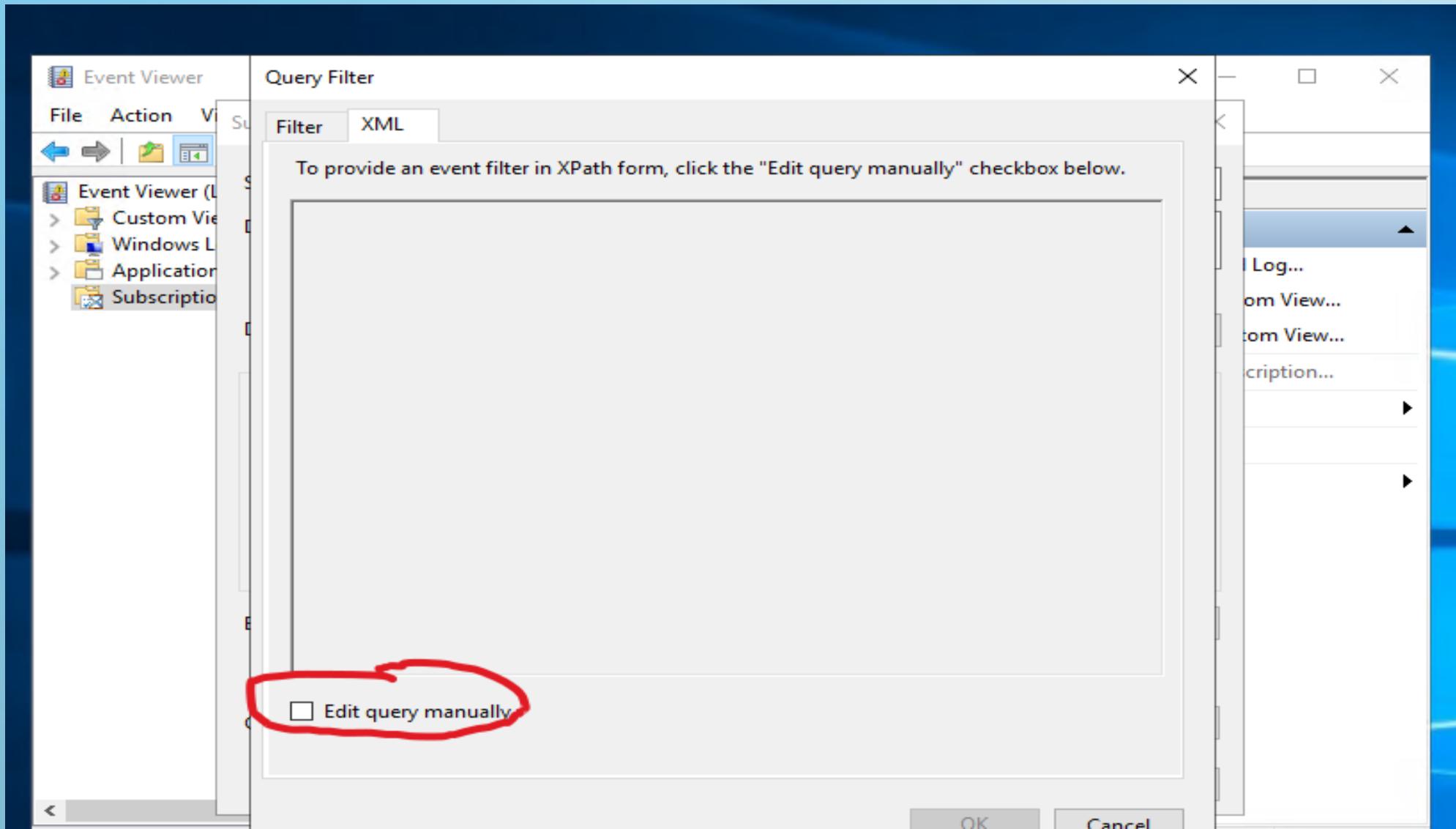
On va sélectionner les évènements à transférer



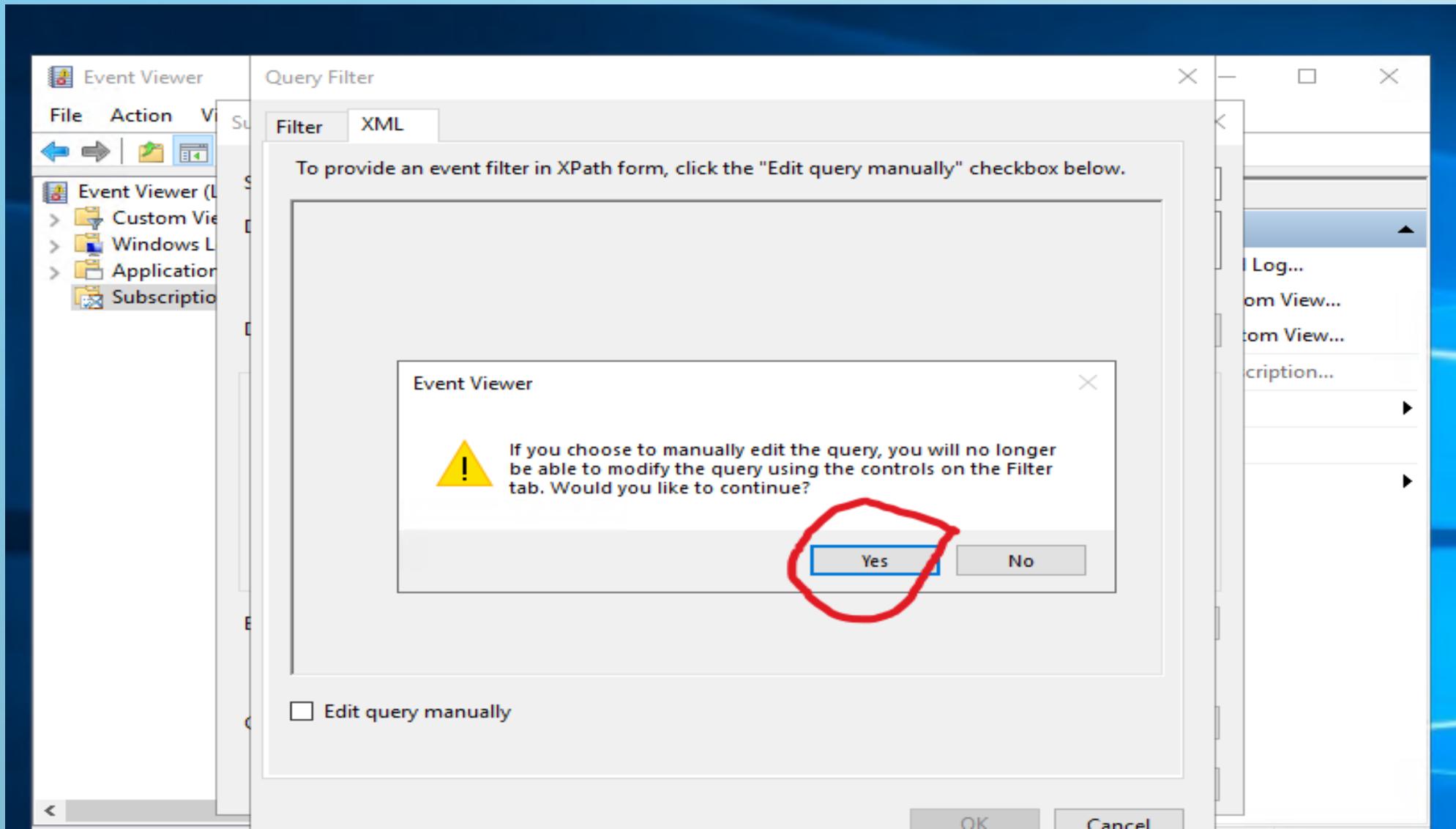
On sélectionne les sources d'évènements à transférer



On configure manuellement la requête XPATH

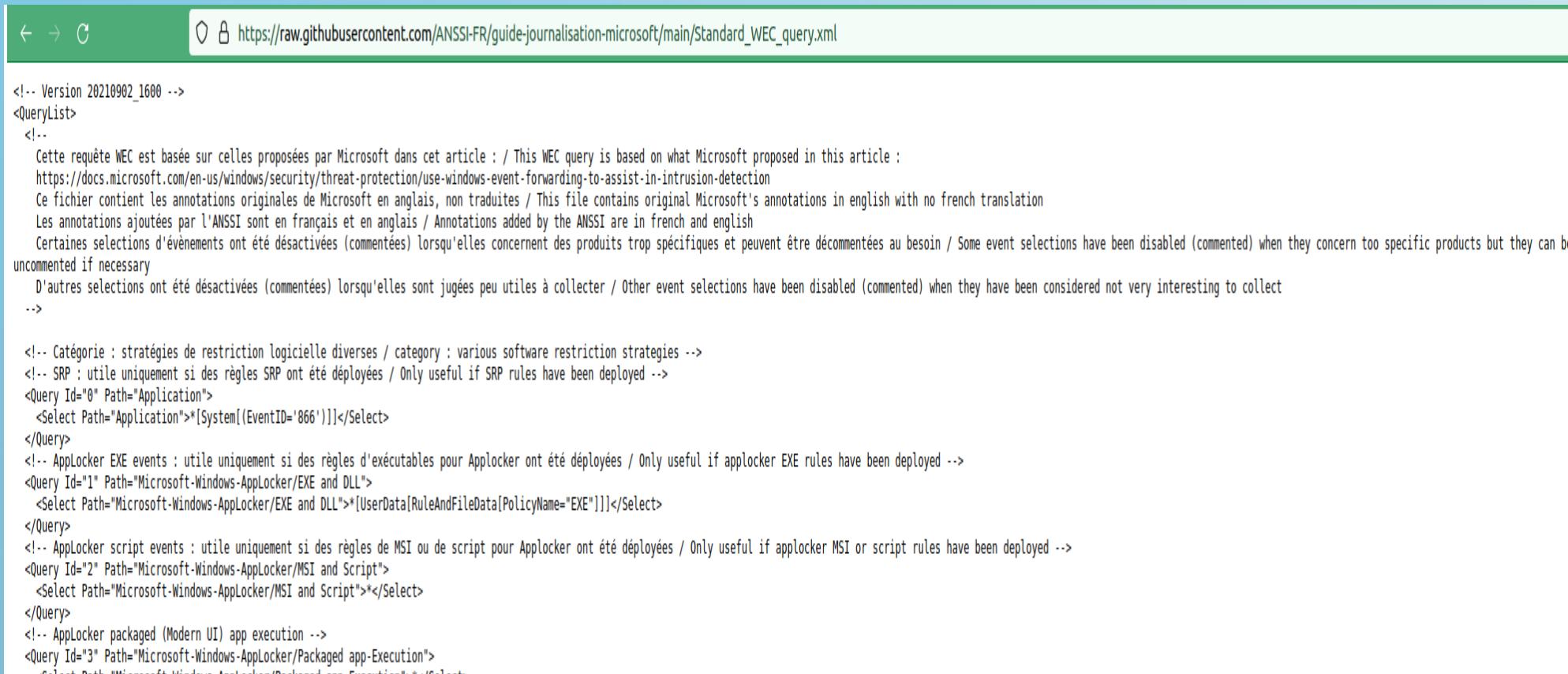


On configure manuellement la requête XPATH



L'ANSSI recommande cette configuration

https://raw.githubusercontent.com/ANSSI-FR/guide-journalisation-microsoft/main/Standard_WEC_query.xml

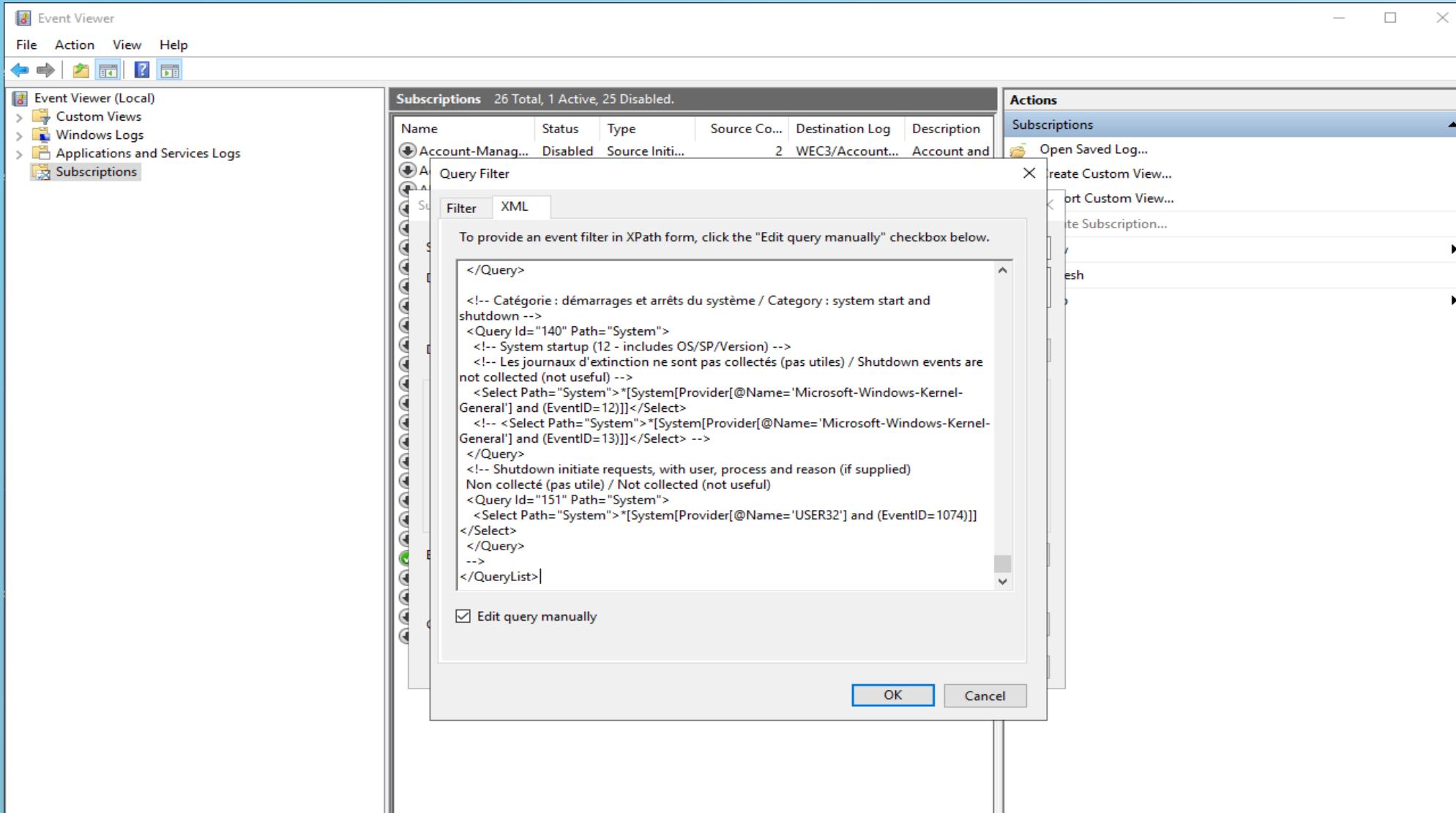


The screenshot shows a browser window with the URL https://raw.githubusercontent.com/ANSSI-FR/guide-journalisation-microsoft/main/Standard_WEC_query.xml. The page content is an XML document for WEC queries. It includes a header with version information and annotations from Microsoft and ANSSI. The XML code defines several event queries, primarily for AppLocker, including rules for executables, DLLs, MSI packages, and scripts.

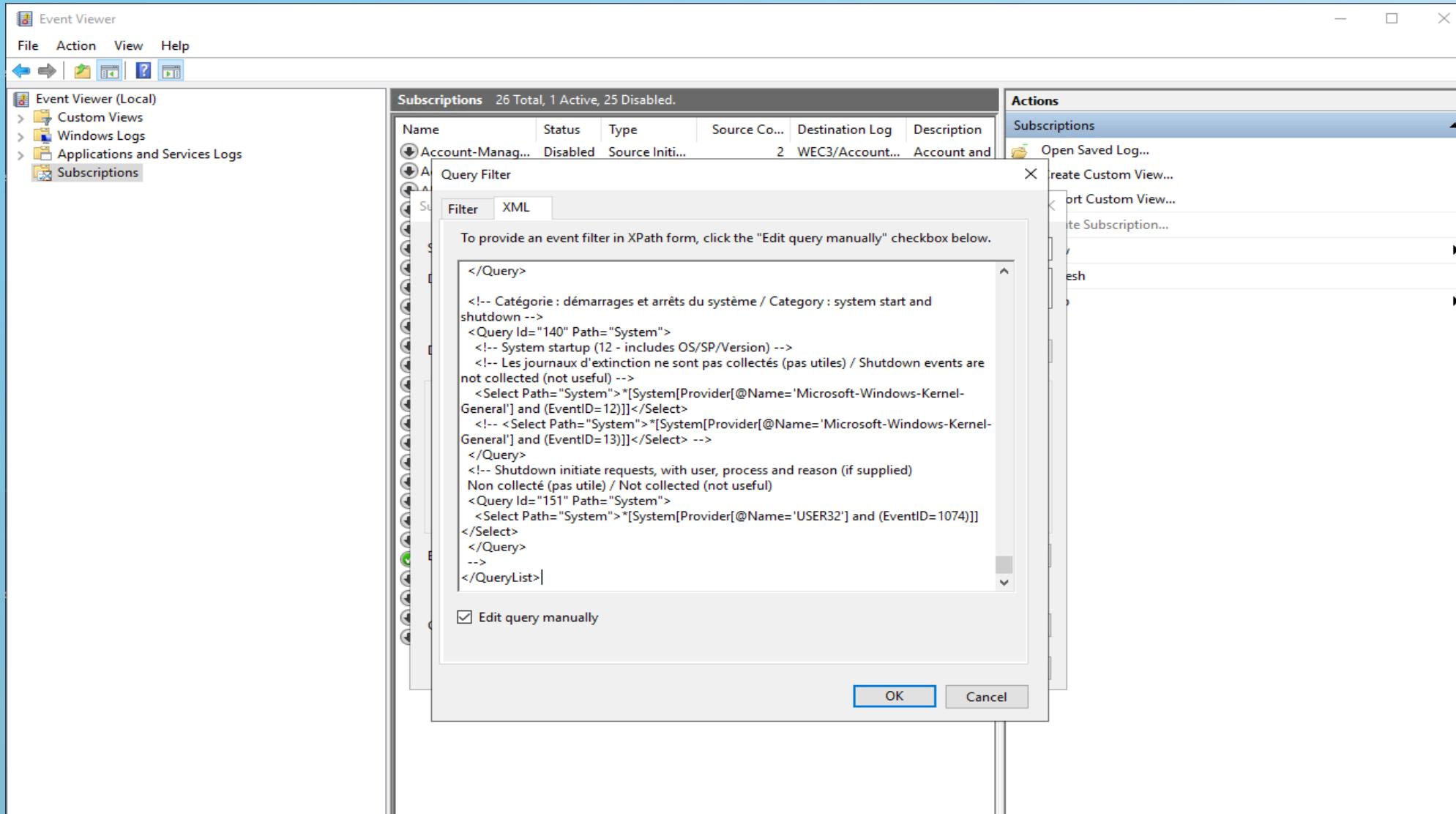
```
<!-- Version 20210902_1600 -->
<QueryList>
<!--
Cette requête WEC est basée sur celles proposées par Microsoft dans cet article : / This WEC query is based on what Microsoft proposed in this article :
https://docs.microsoft.com/en-us/windows/security/threat-protection/use-windows-event-forwarding-to-assist-in-intrusion-detection
Ce fichier contient les annotations originales de Microsoft en anglais, non traduites / This file contains original Microsoft's annotations in english with no french translation
Les annotations ajoutées par l'ANSSI sont en français et en anglais / Annotations added by the ANSSI are in french and english
Certaines selections d'événements ont été désactivées (commentées) lorsqu'elles concernent des produits trop spécifiques et peuvent être décommentées au besoin / Some event selections have been disabled (commented) when they concern too specific products but they can be uncommented if necessary
D'autres selections ont été désactivées (commentées) lorsqu'elles sont jugées peu utiles à collecter / Other event selections have been disabled (commented) when they have been considered not very interesting to collect
-->

<!-- Catégorie : stratégies de restriction logicielle diverses / category : various software restriction strategies -->
<!-- SRP : utile uniquement si des règles SRP ont été déployées / Only useful if SRP rules have been deployed -->
<Query Id="0" Path="Application">
  <Select Path="Application">*[System[(EventID='866')]]</Select>
</Query>
<!-- AppLocker EXE events : utile uniquement si des règles d'exécutables pour Applocker ont été déployées / Only useful if applocker EXE rules have been deployed -->
<Query Id="1" Path="Microsoft-Windows-AppLocker/EXE and DLL">
  <Select Path="Microsoft-Windows-AppLocker/EXE and DLL">*[UserData[RuleAndFileData[PolicyName="EXE"]]]</Select>
</Query>
<!-- AppLocker script events : utile uniquement si des règles de MSI ou de script pour Applocker ont été déployées / Only useful if applocker MSI or script rules have been deployed -->
<Query Id="2" Path="Microsoft-Windows-AppLocker/MSI and Script">
  <Select Path="Microsoft-Windows-AppLocker/MSI and Script"></Select>
</Query>
<!-- AppLocker packaged (Modern UI) app execution -->
<Query Id="3" Path="Microsoft-Windows-AppLocker/Packaged app-Execution">
  <Select Path="Microsoft-Windows-AppLocker/Packaged app-Execution"></Select>
</Query>
```

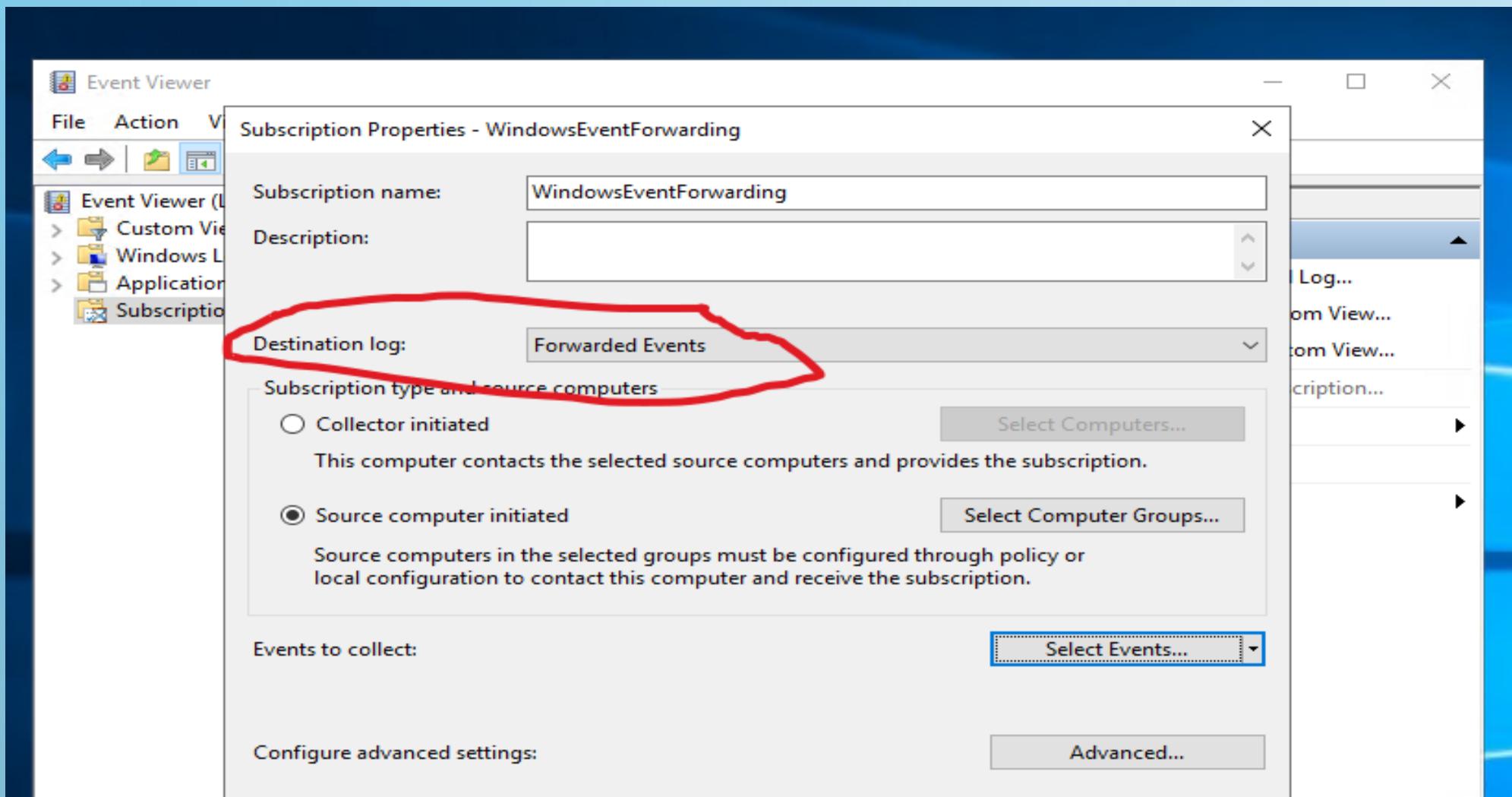
Copiez la configuration recommandée par l'ANSSI



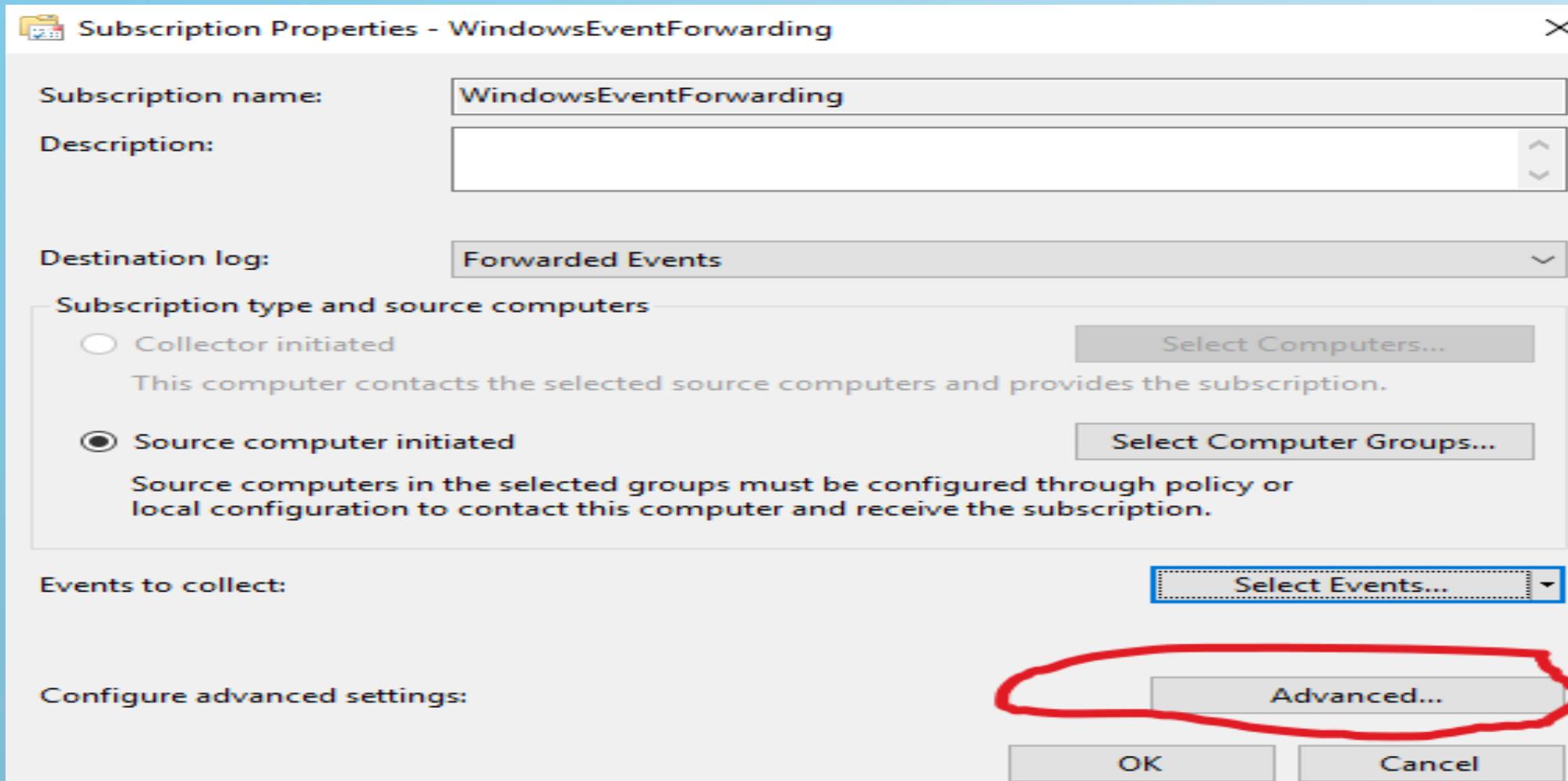
Copiez la configuration recommandée par l'ANSSI



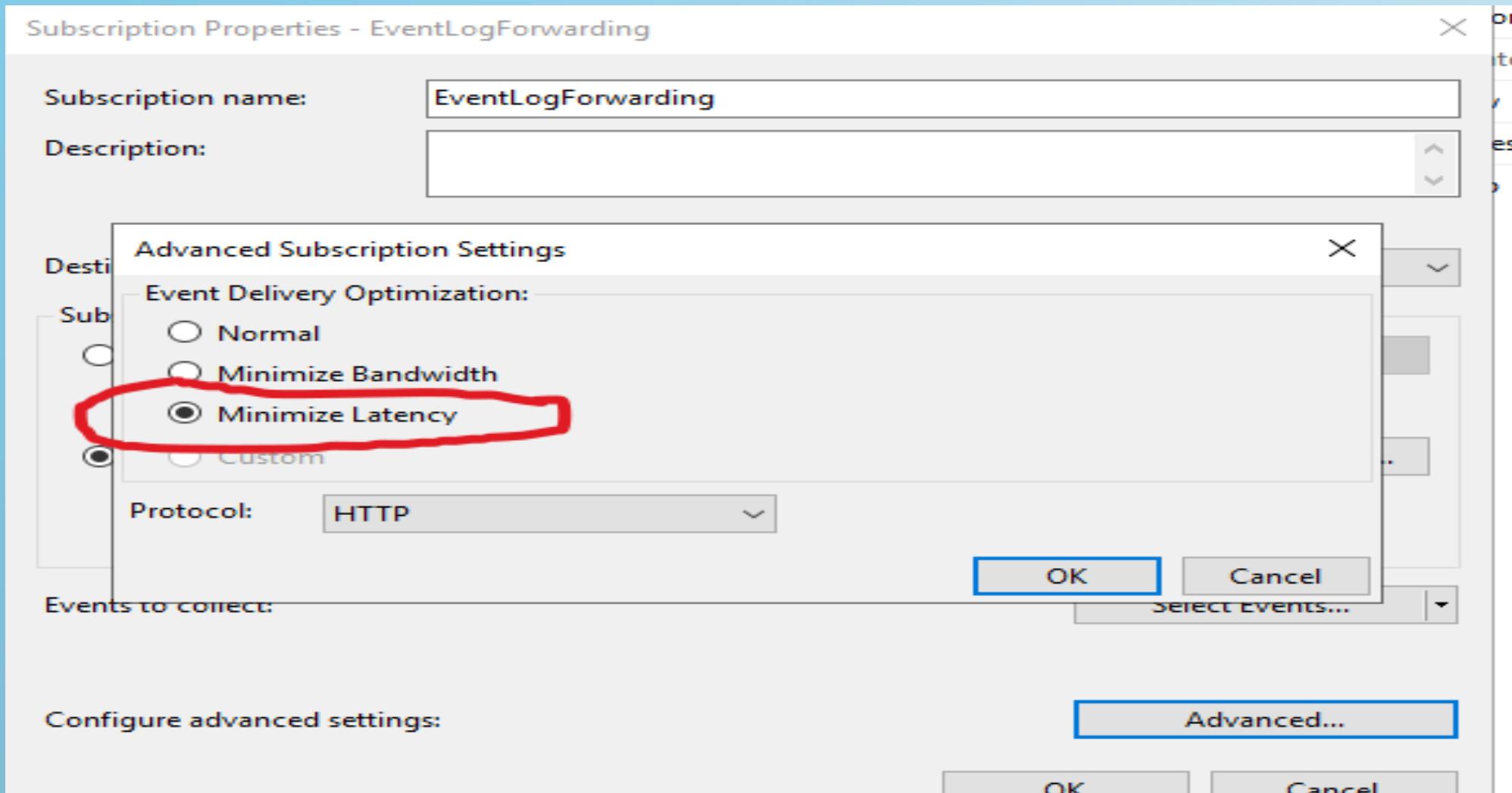
Sélectionnez le canal de destination "ForwardedEvents" (visible dans "eventviewer")



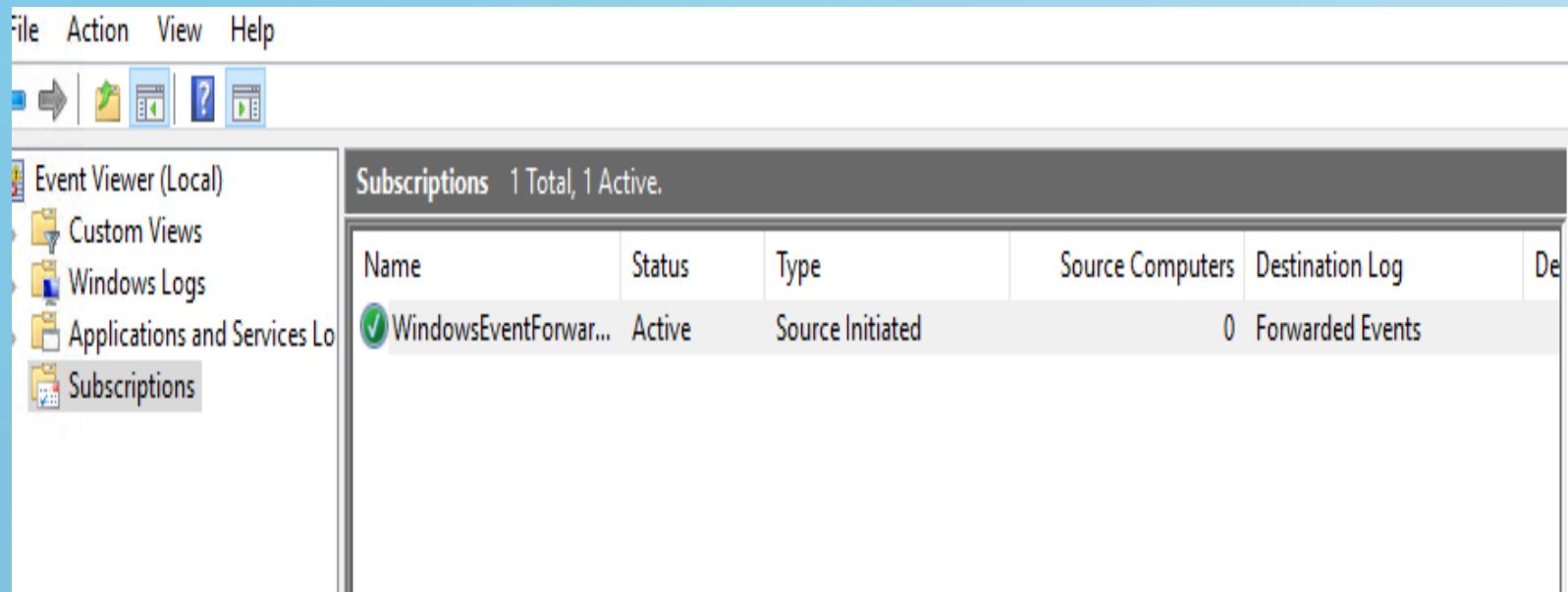
Configuration avancée pour le TP afin de recevoir les évènements au plus vite)



Configuration avancée pour le TP afin de recevoir les évènements au plus vite)



Subscription créée !



Avec windows 2016 et supérieur il faut corriger les permissions sur le protocole WS-Management avec les commandes suivantes sur le serveur WEC (win-1)

```
netsh http delete urlacl url=http://+:5985/wsman/  
netsh http add urlacl url=http://+:5985/wsman/ sddl=D:(A;;GX;;;S-1-5-80-569256582-2953403351-2909559716-1301513147-412116970)  
(A;;GX;;;S-1-5-80-4059739203-877974739-1245631912-527174227-2996563517)  
netsh http delete urlacl url=https://+:5986/wsman/  
netsh http add urlacl url=https://+:5986/wsman/ sddl=D:(A;;GX;;;S-1-5-80-569256582-2953403351-2909559716-1301513147-412116970)(A  
;;GX;;;S-1-5-80-4059739203-877974739-1245631912-527174227-2996563517)æ
```

<https://learn.microsoft.com/en-us/troubleshoot/windows-server/admin-development/events-not-forwarded-by-windows-server-collector>

The screenshot shows a Microsoft Learn troubleshooting page titled "Windows Server" under "Admin Development". The main content discusses how Windows Remote Management service (WinRM) uses specific URLs and how event forwarding works. It notes that in Windows Server 2016, both WinRM and WecSvc run in the same svchost process, while in Windows Server 2019, they run in separate processes, which can affect event forwarding if configuration changes are made.

Windows Server

- > Active Directory
- ▽ Admin Development
 - Admin Development
 - > Active Directory Services Interface (ADSI)
 - > Windows Management Instrumentation (WMI)
 - ▽ Windows Remote Management (WinRM)
 - Event collector doesn't forward events**
- > Application Management
- > Backup and Storage
- > Containers
- > Deployment
- > Group Policy
- > High Availability
- > Networking
- > Performance
- > Printing
- > Remote Desktop Services
- > Resources
- > Security and Malware

Windows Remote Management service (WinRM) use these URLs. However, the default access control lists (ACLs) for these URLs allow access for only the svchost process that runs WinRM. In the default configuration of Windows Server 2016, a single svchost process runs both WinRM and WecSvc. Because the process has access, both services function correctly. However, if you change the configuration so that the services run on separate host processes, WecSvc no longer has access and event forwarding no longer functions.

The services function differently in Windows Server 2019. If a Windows Server 2019 computer has more than 3.5 GB of RAM, separate svchost processes run WinRM and WecSvc. Because of this change, event forwarding may not function correctly in the default configuration. For more information about the service changes, see [Changes to Service Host grouping in Windows 10](#).

Resolution

To view the URL permissions, open an elevated Command Prompt window and run the command `netsh http show urlacl`.

To fix the URL permissions, use the elevated Command Prompt window and run the following commands:

```
Windows Command Prompt Copy
netsh http delete urlacl url=http://+:5985/wsman/
netsh http add urlacl url=http://+:5985/wsman/ sddl=D:(A;;GX;;;S-1-5-80-569256582-29
netsh http delete urlacl url=https://+:5986/wsman/
netsh http add urlacl url=https://+:5986/wsman/ sddl=D:(A;;GX;;;S-1-5-80-569256582-29
```