



## ***Windows PowerShell Get-Help on Cmdlet 'New-NetEventSession'***

***PS:\>Get-HELP New-NetEventSession -Full***

### **NAME**

New-NetEventSession

### **SYNOPSIS**

Creates a network event session.

### **SYNTAX**

```
New-NetEventSession [-Name] <String> [-AsJob] [-CaptureMode {RealtimeRPC | SaveToFile | RealtimeLocal}]  
[-CimSession <CimSession[]>] [-Confirm] [-LocalFilePath  
<String>] [-MaxFileSize <UInt32>] [-MaxNumberOfBuffers <Byte>] [-ThrottleLimit <Int32>] [-TraceBufferSize <UInt32>]  
[-WhatIf] [<CommonParameters>]
```

### **DESCRIPTION**

The New-NetEventSession cmdlet creates a network event session. A session controls how the computer logs events and, optionally, network traffic, or packets. Later, add network event providers to a session. A network event provider logs events and network traffic as Event Tracing for Windows (ETW) events. The session stores these events in an .etl file or provides them to an application that displays them.

Assign a name for the session. Only one session can exist at a time. Remove an existing session by using the Remove-NetEventSession cmdlet. You can specify the maximum number of buffers in a session and the size of the trace buffer.

You can also specify whether to use an .etl file. If you use an .etl file, you can specify its location and maximum size. Instead of an .etl file, you can select a type of live display.

After you create a session, you can use the Set-NetEventSession cmdlet to modify the session settings. After you create a session, add one or more providers to it by using the Add-NetEventProvider cmdlet. Use the Start-NetEventSession and Stop-NetEventSession cmdlets to start and stop logging.

## PARAMETERS

-AsJob [<SwitchParameter>]

Runs the cmdlet as a background job. Use this parameter to run commands that take a long time to complete.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-CaptureMode <CaptureModes>

Specifies a capture mode. The acceptable values for this parameter are:

- SaveToFile. Saves the capture to an .etl file.
- RealtimeRPC. Connects remotely for a live event and packet capture.
- RealtimeLocal. Connects locally for a live event and packet capture.

If you specify a value of SaveToFile, you can specify a location for the file by using the LocalFilePath parameter and

specify a maximum file size by using the  
MaxFileSize parameter.

If you specify a value of RealtimeRPC or RealtimeLocal, the capture requires additional software, such as Microsoft Message Analyzer.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-CimSession <CimSession[]>

Runs the cmdlet in a remote session or on a remote computer. Enter a computer name or a session object, such as the output of a New-CimSession

(<https://go.microsoft.com/fwlink/p/?LinkId=227967>) or

[Get-CimSession](<https://go.microsoft.com/fwlink/p/?LinkId=227966>)cmdlet. The default is the current session on the local computer.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-Confirm [<SwitchParameter>]

Prompts you for confirmation before running the cmdlet.

Required?	false
Position?	named
Default value	False
Accept pipeline input?	False
Accept wildcard characters?	false

**-LocalFilePath <String>**

Specifies a file path. If you specify a value of `SaveToFile` for the `CaptureMode` parameter, the cmdlet saves the file to this location. Be sure that you can write

to this location. If you do not specify this parameter, the cmdlet uses the default value of `%LocalAppData%\Temp\NetTrace.etl`.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

**-MaxFileSize <UInt32>**

Specifies a maximum file size, in megabytes. If you specify a value of `SaveToFile` for the `CaptureMode` parameter, this value is the maximum size for the .etl file.

Once the file reaches the maximum, the session continues to save events, and discards the oldest events to create space. A value of 0 means that there is no

maximum. If you do not specify this parameter, the cmdlet uses a default value of 250.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

**-MaxNumberOfBuffers <Byte>**

Specifies the maximum number of buffers used in a session. If the computer determines that the value restricts performance or the value is 0, the computer

overrides the configuration to optimize trace performance. For more information, see `EVENT_TRACE_PROPERTIES` structure

([https://msdn.microsoft.com/en-us/library/windows/desktop/aa363784\(v=vs.85\)](https://msdn.microsoft.com/en-us/library/windows/desktop/aa363784(v=vs.85))) in the Microsoft Developer Network library.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

**-Name <String>**

Specifies a name to assign to the session for event and packet capture.

Required?	true
Position?	0
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

**-ThrottleLimit <Int32>**

Specifies the maximum number of concurrent operations that can be established to run the cmdlet. If this parameter is omitted or a value of `0` is entered, then

Windows PowerShell calculates an optimum throttle limit for the cmdlet based on the number of CIM cmdlets that are running on the computer. The throttle limit applies only to the current cmdlet, not to the session or to the computer.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

**-TraceBufferSize <UInt32>**

Specifies the amount of memory, in kilobytes, for a buffer for event tracing. The maximum value is 1024. If the computer determines that the value restricts

performance or the value is 0, the computer overrides the configuration to optimize trace performance. The ETW

logger uses the size of physical memory to  
calculate the default value.

Required?	false
Position?	named
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

#### -WhatIf [<SwitchParameter>]

Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required?	false
Position?	named
Default value	False
Accept pipeline input?	False
Accept wildcard characters?	false

#### <CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug, ErrorAction, ErrorVariable, WarningAction, WarningVariable, OutBuffer, PipelineVariable, and OutVariable. For more information, see [about\\_CommonParameters \(https://go.microsoft.com/fwlink/?LinkID=113216\)](https://go.microsoft.com/fwlink/?LinkID=113216).

## INPUTS

## OUTPUTS

## NOTES

----- Example 1: Create a session -----

```
PS C:\>New-NetEventSession -Name "Session38"
```

This command creates session named Session38. Use the Add-NetEventProvider cmdlet to add a provider for the session.

## RELATED LINKS

Online

Version:

[https://learn.microsoft.com/powershell/module/neteventpacketcapture/new-neteventsession?view=windowsserver2022-ps&wt.mc\\_id=ps-gethelp](https://learn.microsoft.com/powershell/module/neteventpacketcapture/new-neteventsession?view=windowsserver2022-ps&wt.mc_id=ps-gethelp)

Get-NetEventSession

Remove-NetEventSession

Set-NetEventSession

Start-NetEventSession

Stop-NetEventSession

Add-NetEventProvider