Windows PowerShell Get-Help on Cmdlet 'Read-SqlXEvent'

PS:\>Get-HELP Read-SqlXEvent -Full

NAME

Read-SqlXEvent

SYNOPSIS

Reads SQL Server XEvents from XEL file or live SQL XEvent session.

SYNTAX

Read-SqlXEvent -ConnectionString <String> [-ProgressAction <ActionPreference>] -SessionName <String> [<CommonParameters>]

Read-SqlXEvent [-FileName] <String> [-ProgressAction <ActionPreference>] [<CommonParameters>]

DESCRIPTION

The Read-SqlXEvent reads SQL Server XEvents from a file or live SQL XEvent session. XEvent sessions are created by the CREATE EVENT SESSION Transact-SQL API. SQL

XEvent files usually have the .XEL or .sqlaudit extensions and contain a stream of XEvents. The structure of the XEvents is defined in the session configuration. SQL

live streams are available via the SQL TDS protocol and require authetication against the server that produced them.

> `New in v22: if you are using the -ConnectionString parameter, you may get an error like "The certificate chain was issued by an authority that is not trusted."

This is because the new SQL driver changed its default to something more secure. Either make sure you configure your server properly, or install/trust the

certificate; alternatively (not recommended), you can pass Encrypt=Optional or TrustServerCertificate=true in the connection string to go back to the behavior that

existed in v21 of the module.`

PARAMETERS

-ConnectionString <String>

SQL Server connection string.

Required? true

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-FileName <String>

File name of a XEvent file to read.

Required? true

Position? 0

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-ProgressAction <ActionPreference>

Determines how PowerShell responds to progress updates generated by a script, cmdlet, or provider, such as the progress bars generated by the Write-Progress

cmdlet. The Write-Progress cmdlet creates progress bars that show a command's status.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-SessionName <String>

The SQL Server XEvent session name as defined by the CREATE EVENT SESSION Transact-SQL.

Required? true

Position? named

Default value None

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).

INPUTS

System.String

OUTPUTS

Microsoft.SqlServer.XEvent.XELite.IXEvent

NOTES

Example 1: Read and parse the sqlaudit file. Each object returned will contain all the information from a single audit record.

```
Read-SqlXEvent -FileName C:\audits\Audit-20190529-132659.sqlaudit

# The output would look like this:
#
# Name      : audit_event
# UUID      : c6479a6f-f1bd-4759-9881-fcb493821aff
# Timestamp : 6/13/2019 7:49:42 AM +00:00
# Fields    : {[audit_schema_version, 1], [event_time, 6/13/2019 7:49:42 AM +00:00], [sequence_number, 1], [action_id,
#             1129534785]...}
# Actions   : {}
#
# Name      : audit_event
# UUID      : c6479a6f-f1bd-4759-9881-fcb493821aff
# Timestamp : 6/13/2019 12:42:28 PM +00:00
# Fields    : {[audit_schema_version, 1], [event_time, 6/13/2019 12:42:28 PM +00:00], [sequence_number, 1], [action_id,
#             1129534785]...}
# Actions   : {}
# ...
```

Example 2: Read and parse the live stream of XEvents from the SQL Server running on the same machine connected with Windows authentication. Each object returned will

contain all the information from a single XEvent record.

```
Read-SQLXEvent -ConnectionString "Server=.;Database=master;Trusted_Connection=True" -SessionName
telemetry_xevents
```

```
# The output would look like this:
#
# Name      : auto_stats
# UUID      : 9237e17a-a73d-4832-8936-f319e19e219b
# Timestamp : 11/14/2022 5:31:12 AM +00:00
# Fields    : {[database_id, 1], [object_id, 74], [index_id, 1], [job_id, 0].}
# Actions   : {}
#
# Name      : auto_stats
# UUID      : 9237e17a-a73d-4832-8936-f319e19e219b
# Timestamp : 11/14/2022 5:31:12 AM +00:00
# Fields    : {[database_id, 1], [object_id, 74], [index_id, 17], [job_id, 0].}
# Actions   : {}
# ...
```

RELATED LINKS

Online Version: https://learn.microsoft.com/powershell/module/sqlserver/read-sqlxevent

Extended events in Azure SQL Database

CREATE EVENT SESSION (Transact-SQL)

CREATE SERVER AUDIT (Transact-SQL)