



Windows PowerShell Get-Help on Cmdlet 'Get-SqlErrorLog'

PS:\>Get-HELP Get-SqlErrorLog -Full

NAME

Get-SqlErrorLog

SYNOPSIS

Gets the SQL Server error logs.

SYNTAX

Get-SqlErrorLog [[-ServerInstance] <String[]>] [-AccessToken <PSObject>] [-After <DateTime>] [-Ascending] [-Before <DateTime>] [-ConnectionTimeout <Int32>]

[-Credential <PSCredential>] [-Encrypt {Mandatory | Optional | Strict}] [-HostNameInCertificate <String>] [-ProgressAction <ActionPreference>] [-Since {Midnight |

Yesterday | LastWeek | LastMonth}] [-Timespan <TimeSpan>] [-TrustServerCertificate] [<CommonParameters>]

Get-SqlErrorLog [-InputObject] <Server[]> [-AccessToken <PSObject>] [-After <DateTime>] [-Ascending] [-Before <DateTime>] [-Encrypt {Mandatory | Optional | Strict}]

[-HostNameInCertificate <String>] [-ProgressAction <ActionPreference>] [-Since {Midnight | Yesterday | LastWeek | LastMonth}] [-Timespan <TimeSpan>]

[-TrustServerCertificate] [<CommonParameters>]

```
Get-SqlErrorLog [[-Path] <String[]>] [-AccessToken <PSObject>] [-After <DateTime>] [-Ascending] [-Before <DateTime>]
[-Encrypt {Mandatory | Optional | Strict}]
[-HostNameInCertificate <String>] [-ProgressAction <ActionPreference>] [-Since {Midnight | Yesterday | LastWeek |
LastMonth}] [-Timespan <TimeSpan>]
[-TrustServerCertificate] [<CommonParameters>]
```

DESCRIPTION

The Get-SqlErrorLog cmdlet gets the SQL Server errors logs.

This cmdlet supports the following modes of operation to get an error log:

- Pass the instance of the SQL Server.
- Specify the Path parameter of the SQL Server instance.
- Invoke the cmdlet in a valid context.

PARAMETERS

-AccessToken <PSObject>

The access token used to authenticate to SQL Server, as an alternative to user/password or Windows Authentication.

This can be used, for example, to connect to `SQL Azure DB` and `SQL Azure Managed Instance` using a `Service Principal` or a `Managed Identity`.

The parameter to use can be either a string representing the token or a `PSAccessToken` object as returned by running `Get-AzAccessToken -ResourceUri https://database.windows.net`.

> This parameter is new in v22 of the module.

Required? false

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

-After <DateTime>

Specifies that this cmdlet only gets error logs generated after the given time.

If you specify the Before parameter, then this cmdlet gets all the error logs generated before the specified.

Do not specify this parameter if you intend to use the Since or Timespan parameters.

The format is defined according to the rules of .Net System.DateTime.Parse().

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

-Ascending [<SwitchParameter>]

Indicates that the cmdlet sorts the collection of error logs by the log date in ascending order. If you do not specify this parameter, the cmdlet sorts the error logs in descending order.

When this cmdlet gets error logs multiple sources, the sorting is applied to all the error logs from the same source. The logs this cmdlet get are grouped by source first and then sorted by log date.

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

Accept wildcard characters? false

-Before <DateTime>

Specifies that this cmdlet only gets error logs generated before the given time.

If the After parameter is specified, the cmdlet defaults to now, meaning that the cmdlet gets all the error logs generated after what you specified for this parameter until the present time.

Do not specify a value for this parameter if you intend to use the Since or Timespan parameters. The format is defined according to the rules of .Net

System.DateTime.Parse().

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ConnectionTimeout <Int32>

Specifies the number of seconds to wait for a server connection before a time-out failure. The time-out value must be an integer between 0 and 65534. If 0 is specified, connection attempts do not time out.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Credential <PSCredential>

Specifies a PSCredential object used to specify the credentials for a SQL Server login that has permission to perform this operation.

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

`-Encrypt <String>`

The encryption type to use when connecting to SQL Server.

This value maps to the `Encrypt`` property `SqlConnectionEncryptOption`` on the `SqlConnection` object of the `Microsoft.Data.SqlClient` driver.

In v22 of the module, the default is `Optional`` (for compatibility with v21). In v23+ of the module, the default value will be `Mandatory``, which may create a breaking change for existing scripts.

> This parameter is new in v22 of the module.

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

`-HostNameInCertificate <String>`

The host name to be used in validating the SQL Server TLS/SSL certificate. You must pass this parameter if your SQL Server instance is enabled for Force

Encryption and you want to connect to an instance using hostname/shortname. If this parameter is omitted then passing the Fully Qualified Domain Name (FQDN) to

`-ServerInstance` is necessary to connect to a SQL Server instance enabled for Force Encryption.

> This parameter is new in v22 of the module.

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

-InputObject <Server[]>

Specifies the server object, as an array, of the target instance that this cmdlet get the logs from.

Required?	true
Position?	1
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

-Path <String[]>

Specifies the path, as an array, to the instance of SQL Server on which this cmdlet runs the operation. If you do not specify a value for this parameter, the cmdlet uses the current working location.

Required?	false
Position?	1
Default value	None
Accept pipeline input?	False
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

-ServerInstance <String[]>

Specifies the name of an instance of SQL Server, as an array. For default instances, only specify the computer name: MyComputer. For named instances, use the format ComputerName\InstanceName.

Required? false
Position? 1
Default value None
Accept pipeline input? True (ByValue)
Accept wildcard characters? false

-Since <SinceType>

Specifies an abbreviation for the Timespan parameter.

Do not specify this parameter if you intend to use the After or Before parameter.

The acceptable values for this parameter are:

- Midnight (gets all the logs generated after midnight)
- Yesterday (gets all the logs generated in the last 24 hours).
- LastWeek (gets all the logs generated in the last week)
- LastMonth (gets all the logs generated in the last month)

Required? false
Position? named

Default value None
Accept pipeline input? False
Accept wildcard characters? false

-Timespan <TimeSpan>

Specifies a TimeSpan object that this cmdlet filters out of the error logs that do are outside of the time span.

The format of this parameter is d.HH:mm:ss.

This parameter is ignored if you use the Since, After, or Before parameters.

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

-TrustServerCertificate [<SwitchParameter>]

Indicates whether the channel will be encrypted while bypassing walking the certificate chain to validate trust.

In v22 of the module, the default is `$true`` (for compatibility with v21). In v23+ of the module, the default value will be `$false`, which may create a breaking change for existing scripts.

> This parameter is new in v22 of the module.

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

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[]

Microsoft.SqlServer.Management.Smo.Server[]

OUTPUTS

NOTES

Example 1: Get all logs generated in a specific time frame that have a search word

```
PS C:\> CD SQLSERVER:\SQL\MyServer\MyInstance
```

```
PS SQLSERVER:\SQL\MyServer\MyInstance> Get-SqlErrorLog -Since Yesterday | Where-Object { $_.Text -match 'Error' } | Format-Table
```

Date	Source Text	ArchiveNo	ServerInstance
6/16/2016 6:04:20 PM	Logon Error: 17828, Severity: 20, State: 4.	0	MyServer\MyInstance

The first command changes the directory to the SQL Server instance.

-- Example 2: Get all logs generated in a specific time frame --

```
PS C:\> CD SQLSERVER:\SQL\MyServer\MyInstance
```

```
PS SQLSERVER:\SQL\MyServer\MyInstance> Get-SqlErrorLog -Timespan '05:30:00' | Format-Table
```

Date	Source	Text
------	--------	------

----	-----	----
------	-------	------

6/17/2016 12:00:00 AM	spid26s	This instance of SQL Server has been using a process ID of 21520 since 6/10/2016 3:56:...
-----------------------	---------	---

6/16/2016 6:04:20 PM	Logon	The prelogin packet used to open the connection is structurally invalid; the connectio...
----------------------	-------	---

6/16/2016 6:04:20 PM	Logon	Error: 17828, Severity: 20, State: 4.
----------------------	-------	---------------------------------------

The first command changes the directory to the SQL Server instance.

Example 3: Get all logs generated in a specific time frame sorted ascending and grouped

```
PS C:\> CD SQLSERVER:\SQL\MyServer
```

```
PS SQLSERVER:\SQL\MyServer> ls | Get-SqlErrorLog -After '2016-05-10' -Before '2016-06-18' -Ascending | ? { $_.Text  
-match 'Login failed' } | Group-Object -Property  
ServerInstance
```

Count	Name	Group
-------	------	-------

-----	-----	-----
-------	-------	-------

1	MyServer	{{ Date = 6/17/2016 2:00:04 AM, Source = Logon, Text = Login failed for user ...
---	----------	--

2	MyServer\INST1	{{ Date = 6/10/2016 3:58:46 PM, Source = Logon, Text = Login failed for user
---	----------------	--

The first command changes the directory to the SQL Server instance.

RELATED LINKS

Online Version: <https://learn.microsoft.com/powershell/module/sqlserver/get-sqlerrorlog>

Set-SqlErrorLog