



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

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

NAME

Read-SqlTableData

SYNOPSIS

Reads data from a table of a SQL database.

SYNTAX

Read-SqlTableData [[-ServerInstance] <String[]>] [-AccessToken <PSObject>] [-ColumnName <String[]>] [-ColumnOrder <String[]>] [-ColumnOrderType {ASC | DESC}]

[-ConnectionTimeout <Int32>] [-Credential <PSCredential>] [-DatabaseName <String>] [-Encrypt {Mandatory | Optional | Strict}] [-HostNameInCertificate <String>]

[-IgnoreProviderContext] [-OutputAs {DataSet | DataTable | DataRows}] [-ProgressAction <ActionPreference>] [-SchemaName <String>] [-SuppressProviderContextWarning]

[-TableName <String>] [-TopN <Int64>] [-TrustServerCertificate] [<CommonParameters>]

Read-SqlTableData [-InputObject] <ScriptSchemaObjectBase[]> [-AccessToken <PSObject>] [-ColumnName <String[]>] [-ColumnOrder <String[]>] [-ColumnOrderType {ASC |

DESC}] [-Encrypt {Mandatory | Optional | Strict}] [-HostNameInCertificate <String>] [-OutputAs {DataSet | DataTable | DataRows}] [-ProgressAction <ActionPreference>]

[-TopN <Int64>] [-TrustServerCertificate] [<CommonParameters>]

Read-SqlTableData [[-Path] <String[]>] [-AccessToken <PSObject>] [-ColumnName <String[]>] [-ColumnOrder <String[]>]
[-ColumnOrderType {ASC | DESC}] [-Encrypt
{Mandatory | Optional | Strict}] [-HostNameInCertificate <String>] [-OutputAs {DataSet | DataTable | DataRows}]
[-ProgressAction <ActionPreference>] [-TopN <Int64>]
[-TrustServerCertificate] [<CommonParameters>]

DESCRIPTION

The Read-SqlTableData cmdlet reads data stored in a table of a SQL database. You can select which columns to read, limit the number of rows, and sort and order columns.

You can use this cmdlet with the Windows PowerShell SQL provider. This cmdlet can infer information such as server, database, schema, and table from its current path.

This cmdlet supports the follow output formats:

- DataSet. An object of type System.Data.DataSet that contains one table.

- DataTable. An object of type System.Data.DataTable. The TableName property of this object

is the same as the table that this cmdlet queries. - DataRows. A collection of System.Data.DataRow objects.

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 -ResourceUrl`

`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

`-ColumnName <String[]>`

Specifies an array of names of columns that this cmdlet returns.

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

`-ColumnOrder <String[]>`

Specifies an array of names of columns by which this cmdlet sorts the columns that it returns.

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

`-ColumnOrderType <OrderType[]>`

Specifies an array of order types for columns that this cmdlet returns. The acceptable values for this parameter are:

- ASC. Ascending.

- DESC. Descending.

The values that you specify for this parameter match the columns that you specify in the ColumnOrder parameter. This cmdlet ignores any extra values.

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 for the connection to SQL Server. To obtain a credential object, use the Get-Credential cmdlet. For more information, type `Get-Help Get-Credential`.

Required?	false
Position?	named

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

-DatabaseName <String>

Specifies the name of the database that contains the table.

If you run this cmdlet in the context of a database or a child item of a database, the cmdlet ignores this parameter value. Specify the IgnoreProviderContext

parameter for the cmdlet to use the value of the DatabaseName parameter anyway.

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

-IgnoreProviderContext [<SwitchParameter>]

Indicates that this cmdlet does not use the current context to override the values of the ServerInstance , DatabaseName , SchemaName , and TableName parameters.

If you do not specify this parameter, the cmdlet ignores the values of these parameters, if possible, in favor of the context in which you run the cmdlet.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-InputObject <ScriptSchemaObjectBase[]>

Specifies an array of SQL Server Management Objects (SMO) objects that represent the table that this cmdlet reads.

Required? true

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

-OutputAs <OutputTypeSingleTable>

Specifies the type of output.

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

-Path <String[]>

Specifies the path to the table that this cmdlet reads.

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

-SchemaName <String>

Specifies the name of the schema for the table.

If you run this cmdlet in the context of a database or a child item of a database, the cmdlet ignores this parameter value. Specify the IgnoreProviderContext

parameter for the cmdlet to use the value of the SchemaName parameter anyway.

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. For the default instance, specify the computer name. For named instances, use the format

`ComputerName\InstanceName`.

If you run this cmdlet in the context of a database or a child item of a database, the cmdlet ignores this parameter value. Specify the IgnoreProviderContext

parameter for the cmdlet to use the value of the ServerInstance parameter anyway.

Required? false

Position? 1

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-SuppressProviderContextWarning [<SwitchParameter>]

Indicates that this cmdlet suppresses the warning message that states that the cmdlet uses the provider context.

Required? false

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

-TableName <String>

Specifies the name of the table from which this cmdlet reads.

If you run this cmdlet in the context of a database or a child item of a database, the cmdlet ignores this parameter value. Specify the IgnoreProviderContext parameter for the cmdlet to use the value of the TableName parameter anyway.

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

-TopN <Int64>

Specifies the number of rows of data that this cmdlet returns. If you do not specify this parameter, the cmdlet returns all the rows.

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

<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

NOTES

----- Example 1: Get three rows from a table -----

```
PS C:\> Read-SqlTableData -ServerInstance "MyServer\MyInstance" -DatabaseName "MyDatabase" -SchemaName "dbo" -TableName "MyTable" -TopN 3
```

Id	Name	Amount
10	AAAAA	-1.2
11	BBBBB	1.2
12	CCCCC	-1.0

This command gets the first three rows from table `MyDatabase.dbo.MyTable` on the `MyServer\MyInstance` instance.

The TopN parameter specifies the number of rows (3

in this case).

----- Example 2: Display a whole table -----

```
PS C:\> cd SQLSERVER:\sql\MyServer\MyInstance\Databases\MyDatabase\Tables\dbo.CSVTable
```

```
PS SQLSERVER:\sql\MyServer\MyInstance\Databases\MyDatabase\Tables\dbo.CSVTable> Read-SqlTableData
```

Id	Name	Amount
10	AAAA	-1.2
11	BBBB	1.2
12	CCCC	-1.0
13	DDDD	-2.0

The first command changes the location to be a table in the SQLSERVER provider. The command prompt reflects the new location.

----- Example 3: Display selected sorted columns -----

```
PS C:\> cd SQLSERVER:\sql\MyServer\MyInstance\Databases\MyDatabase\Tables\dbo.CSVTable
```

```
PS SQLSERVER:\sql\MyServer\MyInstance\Databases\MyDatabase\Tables\dbo.CSVTable> Read-SqlTableData -TopN
```

```
3 -ColumnName "Id","Name" -ColumnOrder "Id","Name"
```

```
-ColumnOrderType DESC,ASC
```

Id	Name
12	CCCC

11 BBBB

10 AAAA

RELATED LINKS

Online Version: <https://learn.microsoft.com/powershell/module/sqlserver/read-sqltabledata>

Read-SqlViewData

Write-SqlTableData