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sqlps Utility

Article • 04/03/2023 • 10 contributors

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The **sqlps** utility starts a Windows PowerShell session with the SQL Server PowerShell provider and cmdlets loaded and registered. You can enter PowerShell commands or scripts that use the SQL Server PowerShell components to work with instances of SQL Server and their objects.

> ⓘ **Important**
>
> This feature will be removed in a future version of SQL Server. Avoid using this feature in new development work, and plan to modify applications that currently use this feature. Use the **sqlps** PowerShell module instead. For more information about the **sqlps** module, see **Import the SQLPS Module**.

Syntax

Copy

```
sqlps
[ [ [ -NoLogo ][ -NoExit ][ -NoProfile ] ]
    [ -OutPutFormat { Text | XML } ] [ -InPutFormat { Text | XML } ] ]
    ]
    [ -Command { -
                | script_block [ -args argument_array ]
                | string [ command_parameters ]
                }
    ]
]
[ -? | -Help ]
```

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Arguments

-NoLogo
Specifies that the **sqlps** utility hide the copyright banner when it starts.

-NoExit
Specifies that the **sqlps** utility continue running after the startup commands have completed.

-NoProfile
Specifies that the **sqlps** utility not load a user profile. User profiles record commonly used aliases, functions, and variables for use across PowerShell sessions.

-OutPutFormat { Text | XML }
Specifies that the **sqlps** utility output be formatted as either text strings (**Text**) or in a serialized CLIXML format (**XML**).

-InPutFormat { Text | XML }
Specifies that input to the **sqlps** utility is formatted as either text strings (**Text**) or in a serialized CLIXML format (**XML**).

-Command
Specifies the command for the **sqlps** utility to run. The **sqlps** utility runs the command and then exits, unless **-NoExit** is also specified. Do not specify any other switches after **-Command**, they will be read as command parameters.

-
-Command- specifies that the **sqlps** utility read the input from the standard input.

script_block [**-args** *argument_array*]
Specifies a block of PowerShell commands to run, the block must be enclosed in braces: {}. *Script_block* can only be specified when the **sqlps** utility is called from either **PowerShell** or another **sqlps** utility session. The *argument_array* is an array of PowerShell variables containing the arguments for the PowerShell commands in the *script_block*.

string [*command_parameters*]
Specifies a string that contains the PowerShell commands to be run. Use the format **"&** {*command*}**"**. The quotation marks indicate a string, and the invoke operator (&) causes the **sqlps** utility to run the command.

[**-?** | **-Help**]
Shows the syntax summary of the **sqlps** utility options.

Remarks

The **sqlps** utility starts the PowerShell environment (PowerShell.exe) and loads the SQL Server PowerShell module. The module, also named **sqlps**, loads and registers these SQL Server PowerShell snap-ins:

- Microsoft.SqlServer.Management.PSProvider.dll

  Implements the SQL Server PowerShell provider and associated cmdlets such as **Encode-SqlName** and **Decode-SqlName**.

- Microsoft.SqlServer.Management.PSSnapin.dll

  Implements the **Invoke-Sqlcmd** and **Invoke-PolicyEvaluation** cmdlets.

You can use the **sqlps** utility to do the following:

- Interactively run PowerShell commands.
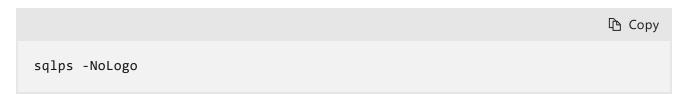
- Run PowerShell script files.

- Run SQL Server cmdlets.

- Use the SQL Server provider paths to navigate through the hierarchy of SQL Server objects.

By default, the **sqlps** utility runs with the scripting execution policy set to **Restricted**. This prevents running any PowerShell scripts. You can use the **Set-ExecutionPolicy** cmdlet to enable running signed scripts, or any scripts. Only run scripts from trusted sources, and secure all input and output files by using the appropriate NTFS permissions. For more information about enabling PowerShell scripts, see [Running Windows PowerShell Scripts](#).

The version of the **sqlps** utility in SQL Server 2008 (10.0.x) and SQL Server 2008 R2 (10.50.x) was implemented as a Windows PowerShell 1.0 mini-shell. Mini-shells have certain restrictions, such as not allowing users to load snap-ins other than those loaded by the mini-shell. These restrictions do not apply to the SQL Server 2012 (11.x) and higher versions of the utility, which have been changed to use the **sqlps** module.

Examples

A. Run the sqlps utility in default, interactive mode without the copyright banner

```
sqlps -NoLogo
```

B. Run a SQL Server PowerShell script from the command prompt

```
sqlps -Command "&{.\MyFolder.MyScript.ps1}"
```

C. Run a SQL Server PowerShell script from the command prompt, and keep running after the script completes

```
sqlps -NoExit -Command "&{.\MyFolder.MyScript.ps1}"
```

See Also

[Enable or Disable a Server Network Protocol](#)
[SQL Server PowerShell](#)

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Learning path

[Get started with Windows PowerShell - Training](#)

This learning path introduces you to Windows PowerShell and provides an overview of the product's functionality. It explains how to open and configure Windows PowerShell, run commands, and use its built-in Help system.

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