



Windows PowerShell Get-Help on Cmdlet 'Join-SqlAvailabilityGroup'

PS:\>Get-HELP Join-SqlAvailabilityGroup -Full

NAME

Join-SqlAvailabilityGroup

SYNOPSIS

Joins the local secondary replica to an availability group.

SYNTAX

```
Join-SqlAvailabilityGroup [-Name] <String> [-InputObject] <Server> [-AccessToken <PSObject>] [-ClusterType {Wsfc | None | External}] [-Encrypt {Mandatory | Optional | Strict}] [-HostNameInCertificate <String>] [-ProgressAction <ActionPreference>] [-Script] [-TrustServerCertificate] [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Join-SqlAvailabilityGroup [-Name] <String> [[-Path] <String>] [-AccessToken <PSObject>] [-ClusterType {Wsfc | None | External}] [-Encrypt {Mandatory | Optional | Strict}] [-HostNameInCertificate <String>] [-ProgressAction <ActionPreference>] [-Script] [-TrustServerCertificate] [-Confirm] [-WhatIf] [<CommonParameters>]
```

DESCRIPTION

The Join-SqlAvailabilityGroup cmdlet joins the local secondary replica to an availability group.

Run this cmdlet on an instance of SQL Server that hosts a secondary replica that is not joined to the availability group.

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

`-ClusterType <AvailabilityGroupClusterType>`

The type of cluster backing the AG. Possible values are:

- Wsfc. The AG will be integrated in Windows Server Failover Cluster. This is how AGs in SQL Server 2016 and below are created. This is the default.
- None. The AG will be cluster-independent.

- External. The AG will be managed by a cluster manager that is not a Windows Server Failover Cluster, like Pacemaker on Linux.

This is supported in SQL Server 2017 and above. When targeting SQL Server on Linux, you must specify this value or an error will occur.

Required?	false
Position?	named
Default value	Wsfc
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 that hosts the instance of SQL Server that hosts the secondary replica that this cmdlet joins to the availability group.

Required?	true
Position?	2
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

-Name <String>

Specifies the name of the availability group to which this cmdlet joins a secondary replica.

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

-Path <String>

Specifies the path of the instance of SQL Server that hosts the secondary replica that this cmdlet joins to the availability group. If you do not specify this

parameter, this cmdlet uses current working location.

Required? false
Position? 2
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

-Script [<SwitchParameter>]

Indicates that this cmdlet returns a Transact-SQL script that performs the task that this cmdlet performs.

Required? false
Position? named
Default value False
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

-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

-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>).

INPUTS

Microsoft.SqlServer.Management.Smo.Server

You can pass a server instance to this cmdlet.

OUTPUTS

NOTES

The high availability data recovery service must be enabled on the server instance. The availability replica specified by the Path parameter must exist.

- Example 1: Join a secondary replica to an availability group -

```
PS C:\> Join-SqlAvailabilityGroup -Path "SQLSERVER:\SQL\SecondaryServer\InstanceName" -Name "MainAG"
```

This command joins a secondary replica to the availability group named 'MainAG'. This server instance must host a secondary replica in this availability group.

Example 2: Create a script that joins a secondary replica to an availability group

```
PS C:\> Join-SqlAvailabilityGroup -Path "SQLSERVER:\SQL\SecondaryServer\InstanceName" -Name "MainAG" -Script
```

This command creates a Transact-SQL script that joins a secondary replica to the availability group named 'MainAG'.

RELATED LINKS

Online Version: <https://learn.microsoft.com/powershell/module/sqlserver/join-sqlavailabilitygroup>

New-SqlAvailabilityGroup

Remove-SqlAvailabilityGroup

Set-SqlAvailabilityGroup

Switch-SqlAvailabilityGroup

Test-SqlAvailabilityGroup

