



Windows PowerShell Get-Help on Cmdlet 'New-AzSynapseSparkPool'

PS:\>Get-HELP New-AzSynapseSparkPool -Full

NAME

New-AzSynapseSparkPool

SYNOPSIS

Creates a Synapse Analytics Spark pool.

SYNTAX

```
New-AzSynapseSparkPool [-AsJob] [-AutoPauseDelayInMinute <System.Int32>] -AutoScaleMaxNodeCount
<System.Int32> -AutoScaleMinNodeCount <System.Int32> [-DefaultProfile
<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-EnableAutoPause]
[-EnableDynamicExecutorAllocation]
[-EnableIsolatedCompute] [-MaxExecutorCount <System.Int32>] [-MinExecutorCount <System.Int32>] -Name
<System.String> -NodeSize {Small | Medium | Large | XLarge |
XXLarge | XXXLarge} [-ResourceGroupName <System.String>] [-SparkConfiguration
<Microsoft.Azure.Commands.Synapse.Models.PSSparkConfigurationResource>] -SparkVersion
<System.String> [-Tag <System.Collections.Hashtable>] -WorkspaceName <System.String> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

New-AzSynapseSparkPool [-AsJob] [-AutoPauseDelayInMinute <System.Int32>] -AutoScaleMaxNodeCount

```

<System.Int32> -AutoScaleMinNodeCount <System.Int32> [-DefaultProfile
    <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-EnableAutoPause]
[-EnableDynamicExecutorAllocation]
    [-EnableIsolatedCompute] [-MaxExecutorCount <System.Int32>] [-MinExecutorCount <System.Int32>] -Name
<System.String> -NodeSize {Small | Medium | Large | XLarge |
                                XXXLarge} [-SparkConfiguration
<Microsoft.Azure.Commands.Synapse.Models.PSSparkConfigurationResource>] -SparkVersion <System.String> [-Tag
                                <System.Collections.Hashtable>] -WorkspaceObject
<Microsoft.Azure.Commands.Synapse.Models.PSSynapseWorkspace> [-Confirm] [-WhatIf] [<CommonParameters>]

```

```

New-AzSynapseSparkPool [-AsJob] [-AutoPauseDelayInMinute <System.Int32>] [-DefaultProfile
    <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-EnableAutoPause]
[-EnableDynamicExecutorAllocation]
    [-EnableIsolatedCompute] [-MaxExecutorCount <System.Int32>] [-MinExecutorCount <System.Int32>] -Name
<System.String> -NodeCount <System.Int32> -NodeSize {Small |
    Medium | Large | XLarge | XXXLarge} [-ResourceGroupName <System.String>] [-SparkConfiguration
    <Microsoft.Azure.Commands.Synapse.Models.PSSparkConfigurationResource>] -SparkVersion <System.String> [-Tag
<System.Collections.Hashtable>] -WorkspaceName
    <System.String> [-Confirm] [-WhatIf] [<CommonParameters>]

```

```

New-AzSynapseSparkPool [-AsJob] [-AutoPauseDelayInMinute <System.Int32>] [-DefaultProfile
    <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-EnableAutoPause]
[-EnableDynamicExecutorAllocation]
    [-EnableIsolatedCompute] [-MaxExecutorCount <System.Int32>] [-MinExecutorCount <System.Int32>] -Name
<System.String> -NodeCount <System.Int32> -NodeSize {Small |
    Medium | Large | XLarge | XXXLarge} [-SparkConfiguration
<Microsoft.Azure.Commands.Synapse.Models.PSSparkConfigurationResource>] -SparkVersion
    <System.String> [-Tag <System.Collections.Hashtable>] -WorkspaceObject
<Microsoft.Azure.Commands.Synapse.Models.PSSynapseWorkspace> [-Confirm] [-WhatIf]
    [<CommonParameters>]

```

The New-AzSynapseSparkPool cmdlet creates an Azure Synapse Analytics Spark pool.

PARAMETERS

-AsJob <System.Management.Automation.SwitchParameter>

Run cmdlet in the background

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-AutoPauseDelayInMinute <System.Int32>

Number of minutes idle. This parameter can be specified when Auto-pause is enabled. The default value will be [15] if it is not specified manually.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-AutoScaleMaxNodeCount <System.Int32>

Maximum number of nodes to be allocated in the specified Spark pool. This parameter must be specified when Auto-scale is enabled.

Required? true

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-AutoScaleMinNodeCount <System.Int32>

Minimum number of nodes to be allocated in the specified Spark pool. This parameter must be specified when Auto-scale is enabled.

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

-DefaultProfile <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>

The credentials, account, tenant, and subscription used for communication with Azure.

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

-EnableAutoPause <System.Management.Automation.SwitchParameter>

Indicates whether Auto-pause should be enabled.

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

-EnableDynamicExecutorAllocation <System.Management.Automation.SwitchParameter>

Indicates whether dynamic executor allocation should be enabled.

Required?	false
Position?	named

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

-EnableIsolatedCompute <System.Management.Automation.SwitchParameter>

The Isolate Compute option is only available with the XXXLarge (80 vCPU / 504 GB) node size. Enabling this option offers isolation for Apache Spark compute for

untrusted services. Isolated compute costs the same as the non-isolated VM of the same size. If you expect to enable Isolated Compute for spark pool, ensure that

your Synapse workspace is created in an isolated compute supported region, please refer to this document for more details:

<https://learn.microsoft.com/en-us/azure/synapse-analytics/spark/apache-spark-pool-configurations#isolated-compute>.

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

-MaxExecutorCount <System.Int32>

Maximum number of executors to be allocated in the specified Spark pool. This parameter can be specified when DynamicExecutorAllocation is enabled. The value

should lie between 1 (inclusive) and maximumNodeCount (exclusive). If it is not specified manually, the default value will be 2.

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

-MinExecutorCount <System.Int32>

Minimum number of executors to be allocated in the specified Spark pool. This parameter can be specified when

DynamicExecutorAllocation is enabled. The value

should lie between 1 (inclusive) and maxExecutors (exclusive). If it is not specified manually, the default value will be 1.

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

-Name <System.String>

Name of Synapse Spark pool.

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

-NodeCount <System.Int32>

Number of nodes to be allocated in the specified Spark pool.

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

-NodeSize <System.String>

Number of core and memory to be used for nodes allocated in the specified Spark pool. This parameter must be specified when Auto-scale is disabled

Required?	true
Position?	named

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

-ResourceGroupName <System.String>

Resource group name.

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

-SparkConfiguration <Microsoft.Azure.Commands.Synapse.Models.PSSparkConfigurationResource>

Apache Spark configuration. When a job is submitted to the pool, the properties specified in the selected configuration will be referenced.

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

-SparkVersion <System.String>

Apache Spark version. Allowed values: 2.4

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

-Tag <System.Collections.Hashtable>

A string,string dictionary of tags associated with the resource.

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

-WorkspaceName <System.String>

Name of Synapse workspace.

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

-WorkspaceObject <Microsoft.Azure.Commands.Synapse.Models.PSSynapseWorkspace>

workspace input object, usually passed through the pipeline.

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

-Confirm <System.Management.Automation.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 <System.Management.Automation.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.Azure.Commands.Synapse.Models.PSSynapseWorkspace

OUTPUTS

Microsoft.Azure.Commands.Synapse.Models.PSSynapseSparkPool

NOTES

```
New-AzSynapseSparkPool -WorkspaceName ContosoWorkspace -Name ContosoSparkPool -NodeCount 3  
-SparkVersion 2.4 -NodeSize Small
```

This command creates an Azure Synapse Analytics Spark pool.

----- Example 2 -----

```
New-AzSynapseSparkPool -WorkspaceName ContosoWorkspace -Name ContosoSparkPool -AutoScaleMinNodeCount 3  
-AutoScaleMaxNodeCount 10 -SparkVersion 2.4 -NodeSize Small
```

This command creates an Azure Synapse Analytics Spark pool with auto-scale enabled.

----- Example 3 -----

```
New-AzSynapseSparkPool -WorkspaceName ContosoWorkspace -Name ContosoSparkPool  
-EnableDynamicExecutorAllocation -MinExecutorCount 1 -MaxExecutorCount 4 -NodeCount 10  
-SparkVersion 2.4 -NodeSize Small
```

This command creates an Azure Synapse Analytics Spark pool with dynamic executor allocation enabled and specify min executor count and max executor count.

----- Example 4 -----

```
$config = Get-AzSynapseSparkConfiguration -WorkspaceName ContosoWorkspace -Name ContosoSparkConfig1  
New-AzSynapseSparkPool -WorkspaceName ContosoWorkspace -Name ContosoSparkPool -NodeCount 3  
-SparkVersion 2.4 -NodeSize Small -SparkConfiguration $config
```

This command creates an Azure Synapse Analytics Spark pool and specify a Spark configuration for Spark pool.

----- Example 5 -----

```
$ws = Get-AzSynapseWorkspace -Name ContosoWorkspace
```

```
$ws | New-AzSynapseSparkPool -Name ContosoSparkPool -NodeCount 3 -SparkVersion 2.4 -NodeSize Small
```

This command creates an Azure Synapse Analytics Spark pool through pipeline.

----- Example 6 -----

```
$ws = Get-AzSynapseWorkspace -Name ContosoWorkspace
```

```
$ws | New-AzSynapseSparkPool -Name ContosoSparkPool -AutoScaleMinNodeCount 3 -AutoScaleMaxNodeCount 10  
-SparkVersion 2.4 -NodeSize Small
```

This command creates an Azure Synapse Analytics Spark pool with auto-scale enabled through pipeline.

----- Example 7 -----

```
$ws = Get-AzSynapseWorkspace -Name ContosoWorkspace
```

```
$ws | New-AzSynapseSparkPool -Name ContosoSparkPool -EnableIsolatedCompute -NodeSize XXXLarge -NodeCount  
3 -SparkVersion 2.4
```

This command creates an Azure Synapse Analytics Spark pool with isolated compute enabled through pipeline.

RELATED LINKS

Online Version: <https://learn.microsoft.com/powershell/module/az.synapse/new-azsynapsesparkpool>