



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

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

NAME

New-AzBatchPool

SYNOPSIS

Creates a pool in the Batch service.

SYNTAX

```
New-AzBatchPool [-Id] <System.String> [-ApplicationLicenses <System.Collections.Generic.List`1[System.String]>]
[-ApplicationPackageReferences
    <Microsoft.Azure.Commands.Batch.Models.PSApplicationPackageReference[]>] [-AutoScaleEvaluationInterval
<System.Nullable`1[System.TimeSpan]>] [-AutoScaleFormula
    <System.String>] -BatchContext <Microsoft.Azure.Commands.Batch.BatchAccountContext> [-CertificateReferences
    <Microsoft.Azure.Commands.Batch.Models.PSCertificateReference[]>] [-CloudServiceConfiguration
<Microsoft.Azure.Commands.Batch.Models.PSCloudServiceConfiguration>]
[-CurrentNodeCommunicationMode {Default | Classic | Simplified}] [-DefaultProfile
    <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-DisplayName
<System.String>] [-InterComputeNodeCommunicationEnabled]
    [-Metadata <System.Collections.IDictionary>] [-MountConfiguration
<Microsoft.Azure.Commands.Batch.Models.PSMountConfiguration[]>] [-NetworkConfiguration
```


[-ApplicationPackageReferences

<Microsoft.Azure.Commands.Batch.Models.PSApplicationPackageReference[]>] [-BatchContext

<Microsoft.Azure.Commands.Batch.BatchAccountContext> [-CertificateReferences

<Microsoft.Azure.Commands.Batch.Models.PSCertificateReference[]>] [-CloudServiceConfiguration

<Microsoft.Azure.Commands.Batch.Models.PSCloudServiceConfiguration>]

[-CurrentNodeCommunicationMode {Default | Classic | Simplified}] [-DefaultProfile

<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-DisplayName

<System.String>] [-InterComputeNodeCommunicationEnabled]

[-Metadata <System.Collections.IDictionary>] [-MountConfiguration

<Microsoft.Azure.Commands.Batch.Models.PSMountConfiguration[]>] [-NetworkConfiguration

<Microsoft.Azure.Commands.Batch.Models.PSNetworkConfiguration>] [-ResizeTimeout

<System.Nullable`1[System.TimeSpan]>] [-ResourceTag <System.Collections.IDictionary>]

[-StartTask <Microsoft.Azure.Commands.Batch.Models.PSStartTask>] [-TargetDedicatedComputeNodes

<System.Nullable`1[System.Int32]>] [-TargetLowPriorityComputeNodes

<System.Nullable`1[System.Int32]>] [-TargetNodeCommunicationMode {Default | Classic | Simplified}]

[-TaskSchedulingPolicy

<Microsoft.Azure.Commands.Batch.Models.PSTaskSchedulingPolicy>] [-TaskSlotsPerNode

<System.Nullable`1[System.Int32]>] [-UpgradePolicy

<Microsoft.Azure.Commands.Batch.Models.PSUpgradePolicy>] [-UserAccount

<Microsoft.Azure.Commands.Batch.Models.PSUserAccount[]>] [-VirtualMachineSize <System.String>

[-Confirm] [-WhatIf] [<CommonParameters>]

New-AzBatchPool [-Id] <System.String> [-ApplicationLicenses <System.Collections.Generic.List`1[System.String]>]

[-ApplicationPackageReferences

<Microsoft.Azure.Commands.Batch.Models.PSApplicationPackageReference[]>] [-BatchContext

<Microsoft.Azure.Commands.Batch.BatchAccountContext> [-CertificateReferences

<Microsoft.Azure.Commands.Batch.Models.PSCertificateReference[]>] [-CurrentNodeCommunicationMode {Default |

Classic | Simplified}] [-DefaultProfile

<Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-DisplayName

<System.String>] [-InterComputeNodeCommunicationEnabled]

[-Metadata <System.Collections.IDictionary>] [-MountConfiguration

<Microsoft.Azure.Commands.Batch.Models.PSMountConfiguration[]>] [-NetworkConfiguration

<Microsoft.Azure.Commands.Batch.Models.PSNetworkConfiguration>] [-ResizeTimeout

```

<System.Nullable`1[System.TimeSpan]>] [-ResourceTag <System.Collections.IDictionary>]
    [-StartTask <Microsoft.Azure.Commands.Batch.Models.PSStartTask>] [-TargetDedicatedComputeNodes
<System.Nullable`1[System.Int32]>] [-TargetLowPriorityComputeNodes
    <System.Nullable`1[System.Int32]>] [-TargetNodeCommunicationMode {Default | Classic | Simplified}]
[-TaskSchedulingPolicy
    <Microsoft.Azure.Commands.Batch.Models.PSTaskSchedulingPolicy>] [-TaskSlotsPerNode
<System.Nullable`1[System.Int32]>] [-UpgradePolicy
    <Microsoft.Azure.Commands.Batch.Models.PSUpgradePolicy>] [-UserAccount
<Microsoft.Azure.Commands.Batch.Models.PSUserAccount[]>] [-VirtualMachineConfiguration
    <Microsoft.Azure.Commands.Batch.Models.PSVirtualMachineConfiguration>] -VirtualMachineSize <System.String>
[-Confirm] [-WhatIf] [<CommonParameters>]

```

DESCRIPTION

The New-AzBatchPool cmdlet creates a pool in the Azure Batch service under the account specified by the BatchContext parameter.

PARAMETERS

-ApplicationLicenses <System.Collections.Generic.List`1[System.String]>

The list of application licenses the Batch service will make available on each compute node in the pool.

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

-ApplicationPackageReferences <Microsoft.Azure.Commands.Batch.Models.PSApplicationPackageReference[]>

Required?	false
Position?	named

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

-AutoScaleEvaluationInterval <System.Nullable`1[System.TimeSpan]>

Specifies the amount of time, in minutes, that elapses before the pool size is automatically adjusted according to the AutoScale formula. The default value is 15 minutes, and the minimum value is 5 minutes.

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

-AutoScaleFormula <System.String>

Specifies the formula for automatically scaling the pool.

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

-BatchContext <Microsoft.Azure.Commands.Batch.BatchAccountContext>

Specifies the BatchAccountContext instance that this cmdlet uses to interact with the Batch service. If you use the Get-AzBatchAccount cmdlet to get your

BatchAccountContext, then Microsoft Entra authentication will be used when interacting with the Batch service. To use shared key authentication instead, use the

Get-AzBatchAccountKey cmdlet to get a BatchAccountContext object with its access keys populated. When using shared key authentication, the primary access key is

used by default. To change the key to use, set the BatchAccountContext.KeyInUse property.

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

-CertificateReferences <Microsoft.Azure.Commands.Batch.Models.PSCertificateReference[]>

Specifies certificates associated with the pool. The Batch service installs the referenced certificates on each compute node of the pool.

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

-CloudServiceConfiguration <Microsoft.Azure.Commands.Batch.Models.PSCloudServiceConfiguration>

Specifies configuration settings for a pool based on the Azure cloud service platform.

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

-CurrentNodeCommunicationMode <Microsoft.Azure.Batch.Common.NodeCommunicationMode>

The current pool communication mode.

Required? false
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

-DisplayName <System.String>

Specifies the display name of the pool.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Id <System.String>

Specifies the ID of the pool to create.

Required? true

Position? 0

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-InterComputeNodeCommunicationEnabled <System.Management.Automation.SwitchParameter>

Indicates that this cmdlet sets up the pool for direct communication between dedicated compute nodes.

Required? false

Position? named

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

-Metadata <System.Collections.IDictionary>

Specifies the metadata, as key/value pairs, to add to the new pool. The key is the metadata name. The value is the metadata value.

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

-MountConfiguration <Microsoft.Azure.Commands.Batch.Models.PSMountConfiguration[]>

A list of file systems to mount on each node in the pool. This supports Azure Files, NFS, CIFS/SMB, and Blobfuse.

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

-NetworkConfiguration <Microsoft.Azure.Commands.Batch.Models.PSNetworkConfiguration>

The network configuration for the pool.

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

-ResizeTimeout <System.Nullable`1[System.TimeSpan]>

Specifies the time-out for allocating compute nodes to the pool.

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

-ResourceTag <System.Collections.IDictionary>

The user defined tags to be associated with the Azure Batch Pool. When specified, these tags are propagated to the backing Azure resources associated with the pool. This property can only be specified when the Batch account was created with the poolAllocationMode property set to 'UserSubscription'.

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

-StartTask <Microsoft.Azure.Commands.Batch.Models.PSStartTask>

Specifies the start task specification for the pool. The start task is run when a compute node joins the pool, or when the compute node is rebooted or reimaged.

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

-TargetDedicatedComputeNodes <System.Nullable`1[System.Int32]>

Specifies the target number of dedicated compute nodes to allocate to the pool.

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

-TargetLowPriorityComputeNodes <System.Nullable`1[System.Int32]>

Specifies the target number of low-priority compute nodes to allocate to the pool.

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

-TargetNodeCommunicationMode <Microsoft.Azure.Batch.Common.NodeCommunicationMode>

The desired node communication mode for the pool.

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

-TaskSchedulingPolicy <Microsoft.Azure.Commands.Batch.Models.PSTaskSchedulingPolicy>

Specifies the task scheduling policy, such as the ComputeNodeFillType.

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

-TaskSlotsPerNode <System.Nullable`1[System.Int32]>

The number of task slots that can be used to run concurrent tasks on a single compute node in the pool. The default value is 1. The maximum value is the smaller of 4 times the number of cores of the vmSize of the pool or 256.

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

-UpgradePolicy <Microsoft.Azure.Commands.Batch.Models.PSUpgradePolicy>

The upgrade policy for the pool in NewBatchPoolCommand.cs .

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

-UserAccount <Microsoft.Azure.Commands.Batch.Models.PSUserAccount[]>

The list of user accounts to be created on each node in the pool.

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

-VirtualMachineConfiguration <Microsoft.Azure.Commands.Batch.Models.PSVirtualMachineConfiguration>

Specifies configuration settings for a pool on the virtual machines infrastructure.

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

-VirtualMachineSize <System.String>

Specifies the size of the virtual machines in the pool. For more information about virtual machine sizes, see [Sizes for virtual machines](#)

(/azure/virtual-machines/sizes)in the Microsoft Azure site.

Required? true
Position? named
Default value None
Accept pipeline input? False
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 \(https://go.microsoft.com/fwlink/?LinkID=113216\)](https://go.microsoft.com/fwlink/?LinkID=113216).

INPUTS

Microsoft.Azure.Commands.Batch.BatchAccountContext

OUTPUTS

System.Void

NOTES

Example 1: Create a new pool using the TargetDedicated parameter set using CloudServiceConfiguration

```
$configuration = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSCloudServiceConfiguration"
-ArgumentList @(4, "")

New-AzBatchPool -Id "MyPool" -VirtualMachineSize "STANDARD_D1_V2" -CloudServiceConfiguration $configuration
-TargetDedicatedComputeNodes 3 -BatchContext $Context
```

The pool is configured to use STANDARD_D1_V2 virtual machines with operating system version of family four.

```

$ImageReference = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSImageReference"
-ArgumentList @("WindowsServer", "MicrosoftWindowsServer",
"2016-Datacenter", "")
$Configuration = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSVirtualMachineConfiguration"
-ArgumentList @($ImageReference, "batch.node.windows
amd64")
New-AzBatchPool -Id "MyPool" -VirtualMachineSize "STANDARD_D1_V2" -VirtualMachineConfiguration $Configuration
-TargetDedicatedComputeNodes 3 -BatchContext $Context

```

This command creates a new pool with ID MyPool using the TargetDedicated parameter set. The target allocation is three compute nodes. The pool is configured to use

STANDARD_D1_V2 virtual machines with the Windows-2016-Datacenter operating system image.

Example 3: Create a new pool using the AutoScale parameter set

```

$ImageReference = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSImageReference"
-ArgumentList @("WindowsServer", "MicrosoftWindowsServer",
"2016-Datacenter", "")
$Configuration = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSVirtualMachineConfiguration"
-ArgumentList @($ImageReference, "batch.node.windows
amd64")
New-AzBatchPool -Id "AutoScalePool" -VirtualMachineSize "STANDARD_D1_V2" -VirtualMachineConfiguration
$Configuration -AutoScaleFormula '$TargetDedicated=2;'
-BatchContext $Context

```

This command creates a new pool with ID AutoScalePool using the AutoScale parameter set. The pool is configured to use STANDARD_D1_V2 virtual machines with the

Windows-2016-Datacenter operating system image, and the target number of compute nodes are determined by the Autoscale formula.

----- Example 4: Create a pool with nodes in a subnet -----

```
$imageReference = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSImageReference"
-ArgumentList @("WindowsServer", "MicrosoftWindowsServer",
"2016-Datacenter", "*")

$configuration = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSVirtualMachineConfiguration"
-ArgumentList @($imageReference, "batch.node.windows
amd64")

$networkConfig = New-Object Microsoft.Azure.Commands.Batch.Models.PSNetworkConfiguration
$networkConfig.SubnetId =
"/subscriptions/{subscription}/resourceGroups/{group}/providers/{provider}/virtualNetworks/{network}/subnets/{subnet}"

New-AzBatchPool -Id "AutoScalePool" -VirtualMachineSize "STANDARD_D1_V2" -VirtualMachineConfiguration
$configuration -TargetDedicatedComputeNodes 3

-NetworkConfiguration $networkConfig -BatchContext $Context
```

----- Example 5: Create a pool with custom user accounts -----

```
$imageReference = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSImageReference"
-ArgumentList @("WindowsServer", "MicrosoftWindowsServer",
"2016-Datacenter", "*")

$configuration = New-Object -TypeName "Microsoft.Azure.Commands.Batch.Models.PSVirtualMachineConfiguration"
-ArgumentList @($imageReference, "batch.node.windows
amd64")

$userAccount = New-Object Microsoft.Azure.Commands.Batch.Models.PSUserAccount -ArgumentList @("myaccount",
"mypassword")

New-AzBatchPool -Id "AutoScalePool" -VirtualMachineSize "STANDARD_D1_V2" -VirtualMachineConfiguration
$configuration -TargetDedicatedComputeNodes 3 -UserAccount
$userAccount
```

RELATED LINKS

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

[Get-AzBatchAccountKey](#)

[Get-AzBatchPool](#)

[Remove-AzBatchPool](#)

[Azure Batch Cmdlets](#)