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# Windows PowerShell Get-Help on Cmdlet 'New-AzNetworkCloudVirtualMachine'

#### PS:\>Get-HELP New-AzNetworkCloudVirtualMachine -Full

WARNING: The names of some imported commands from the module 'Az.NetworkCloud.private' include unapproved verbs that might make them less discoverable. To find the

commands with unapproved verbs, run the Import-Module command again with the Verbose parameter. For a list of approved verbs, type Get-Verb.

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#### NAME

New-AzNetworkCloudVirtualMachine

#### **SYNOPSIS**

Create a new virtual machine or update the properties of the existing virtual machine.

SYNTAX Page 1/19

New-AzNetworkCloudVirtualMachine -Name <String> -ResourceGroupName <String> [-SubscriptionId <String>] -AdminUsername <String>

-CloudServiceNetworkAttachmentAttachedNetworkId <String> -CloudServiceNetworkAttachmentIPAllocationMethod <VirtualMachineIPAllocationMethod> -CpuCore <Int64>

-ExtendedLocationName <String> -ExtendedLocationType <String> -Location <String> -MemorySizeGb <Int64> -OSDiskSizeGb <Int64> -VMImage <String> [-BootMethod

<VirtualMachineBootMethod>] [-CloudServiceNetworkAttachmentDefaultGateway < DefaultGateway>]
[-CloudServiceNetworkAttachmentIpv4Address < String>]

[-CloudServiceNetworkAttachmentIpv6Address <String>] [-CloudServiceNetworkAttachmentName <String>] [-IsolateEmulatorThread <VirtualMachineIsolateEmulatorThread>]

[-NetworkAttachment <INetworkAttachment[]>] [-NetworkData <String>] [-OSDiskCreateOption <OSDiskCreateOption>] [-OSDiskDeleteOption <OSDiskDeleteOption>]

[-PlacementHint <IVirtualMachinePlacementHint[]>] [-SshPublicKey <ISshPublicKey[]>] [-StorageProfileVolumeAttachment <String[]>] [-Tag <Hashtable>] [-UserData

<String>] [-VMDeviceModel <VirtualMachineDeviceModelType>] [-VMImageRepositoryCredentialsPassword
<SecureString>] [-VMImageRepositoryCredentialsRegistryUrl <String>]

[-VMImageRepositoryCredentialsUsername <String>] [-VirtioInterface <VirtualMachineVirtioInterfaceType>] [-DefaultProfile <PSObject>] [-AsJob] [-Break]

[-HttpPipelineAppend <SendAsyncStep[]>] [-HttpPipelinePrepend <SendAsyncStep[]>] [-NoWait] [-Proxy <Uri>] [-ProxyCredential <PSCredential>]

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

#### **DESCRIPTION**

Create a new virtual machine or update the properties of the existing virtual machine.

#### **PARAMETERS**

-Name <String>

The name of the virtual machine.

Required? true

Position? named Page 2/19

Default value

Accept pipeline input? false

Accept wildcard characters? false

## -ResourceGroupName <String>

The name of the resource group.

The name is case insensitive.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -SubscriptionId <String>

The ID of the target subscription.

The value must be an UUID.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -AdminUsername <String>

The name of the administrator to which the ssh public keys will be added into the authorized keys.

Required? true

Position? named

Default value

Accept pipeline input? false

-CloudServiceNetworkAttachmentAttachedNetworkId <String>

The resource ID of the associated network attached to the virtual machine. It can be one of cloudServicesNetwork, I3Network, I2Network or trunkedNetwork resources.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-CloudServiceNetworkAttachmentIPAllocationMethod <VirtualMachineIPAllocationMethod>

The IP allocation mechanism for the virtual machine. Dynamic and Static are only valid for I3Network which may also specify Disabled. Otherwise, Disabled is the

only permitted value.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -CpuCore <Int64>

The number of CPU cores in the virtual machine.

Required? true

Position? named

Default value 0

Accept pipeline input? false

Accept wildcard characters? false

### -ExtendedLocationName <String>

The resource ID of the extended location on which the resource will be created.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

# -ExtendedLocationType <String>

The extended location type, for example, CustomLocation.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

# -Location <String>

The geo-location where the resource lives

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

# -MemorySizeGb <Int64>

The memory size of the virtual machine in GB.

Required? true

Position? named

Default value 0

Accept pipeline input? false

-OSDiskSizeGb <Int64>

The size of the disk in gigabytes.

Required if the createOption is Ephemeral.

Required? true

Position? named

Default value 0

Accept pipeline input? false

Accept wildcard characters? false

### -VMImage <String>

The virtual machine image that is currently provisioned to the OS disk, using the full url and tag notation used to pull the image.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

#### -BootMethod <VirtualMachineBootMethod>

Selects the boot method for the virtual machine.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -CloudServiceNetworkAttachmentDefaultGateway < DefaultGateway >

The indicator of whether this is the default gateway. Only one of the attached networks (including the CloudServicesNetwork attachment) for a single machine may be

specified as True. Page 6/19

Required?

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -CloudServiceNetworkAttachmentIpv4Address <String>

false

The IPv4 address of the virtual machine. This field is used only if the attached network has IPAllocationType of IPV4 or DualStack. If IPAllocationMethod is: Static

- this field must contain a user specified IPv4 address from within the subnet specified in the attached network. Dynamic

- this field is read-only, but will be

populated with an address from within the subnet specified in the attached network. Disabled - this field will be empty.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

#### -CloudServiceNetworkAttachmentlpv6Address <String>

The IPv6 address of the virtual machine. This field is used only if the attached network has IPAllocation Type of IPv6 or Dual Stack. If IPAllocation Method is: Static

- this field must contain an IPv6 address range from within the range specified in the attached network. Dynamic - this field is read-only, but will be populated

with an range from within the subnet specified in the attached network. Disabled - this field will be empty.

Required? false

Position? named

Default value

Accept pipeline input? false

-CloudServiceNetworkAttachmentName <String>

The associated network's interface name. If specified, the network attachment name has a maximum length of 15 characters and must be unique to this virtual

machine. If the user doesn?? Tt specify this value, the default interface name of the network resource will be used. For a Cloud Services Network resource, this name

will be ignored.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-IsolateEmulatorThread <VirtualMachineIsolateEmulatorThread>

Field Deprecated, the value will be ignored if provided.

The indicator of whether one of the specified CPU cores is isolated to run the emulator thread for this virtual machine.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-NetworkAttachment <INetworkAttachment[]>

The list of network attachments to the virtual machine.

To construct, see NOTES section for NETWORKATTACHMENT properties and create a hash table.

Required? false

Position? named

Default value

Accept pipeline input? false

-NetworkData <String> The Base64 encoded cloud-init network data. Required?

false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -OSDiskCreateOption <OSDiskCreateOption>

The strategy for creating the OS disk.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

# -OSDiskDeleteOption <OSDiskDeleteOption>

The strategy for deleting the OS disk.

Required? false

Position? named

Default value

Accept pipeline input?

Accept wildcard characters? false

### -PlacementHint <IVirtualMachinePlacementHint[]>

The scheduling hints for the virtual machine.

To construct, see NOTES section for PLACEMENTHINT properties and create a hash table.

Required? false

Page 9/19 Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-SshPublicKey <ISshPublicKey[]>

The list of ssh public keys.

Each key will be added to the virtual machine using the cloud-init ssh\_authorized\_keys mechanism for the adminUsername.

To construct, see NOTES section for SSHPUBLICKEY properties and create a hash table.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-StorageProfileVolumeAttachment <String[]>

The resource IDs of volumes that are requested to be attached to the virtual machine.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-Tag <Hashtable>

Resource tags.

Required? false

Position? named

Default value

Accept pipeline input? false

The Base64 encoded cloud-init user data.
Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false
-VMDeviceModel <virtualmachinedevicemodeltype></virtualmachinedevicemodeltype>
The type of the device model to use.
Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false
-VMImageRepositoryCredentialsPassword <securestring>  The password or token used to access an image in the target repository.</securestring>
Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false
-VMImageRepositoryCredentialsRegistryUrl <string></string>
The URL of the authentication server used to validate the repository credentials.

-UserData <String>

Required?

Position?

false

named

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Default value

Accept pipeline input? false

Accept wildcard characters? false

-VMImageRepositoryCredentialsUsername <String>

The username used to access an image in the target repository.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-VirtioInterface <VirtualMachineVirtioInterfaceType>

Field Deprecated, use virtualizationModel instead.

The type of the virtio interface.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-DefaultProfile <PSObject>

The DefaultProfile parameter is not functional.

Use the SubscriptionId parameter when available if executing the cmdlet against a different subscription.

Required? false

Position? named

Default value

Accept pipeline input? false

-AsJob [<SwitchParameter>] Run the command as a job Required? false Position? named Default value False Accept pipeline input? false Accept wildcard characters? false -Break [<SwitchParameter>] Wait for .NET debugger to attach Required? false Position? named Default value False Accept pipeline input? false Accept wildcard characters? false -HttpPipelineAppend <SendAsyncStep[]> SendAsync Pipeline Steps to be appended to the front of the pipeline

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -HttpPipelinePrepend <SendAsyncStep[]>

SendAsync Pipeline Steps to be prepended to the front of the pipeline

Required? false

Position? named

Default value Page 13/19

Accept pipeline input? false

Accept wildcard characters? false

### -NoWait [<SwitchParameter>]

Run the command asynchronously

Required? false

Position? named

Default value False

Accept pipeline input? false

Accept wildcard characters? false

### -Proxy <Uri>

The URI for the proxy server to use

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -ProxyCredential < PSCredential >

Credentials for a proxy server to use for the remote call

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

# -ProxyUseDefaultCredentials [<SwitchParameter>]

Use the default credentials for the proxy

Required? false

Position? named

Default value False

Accept pipeline input? false

Accept wildcard characters? false

### -WhatIf [<SwitchParameter>]

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

### -Confirm [<SwitchParameter>]

Required? false

Position? named

Default value

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**

### **OUTPUTS**

#### COMPLEX PARAMETER PROPERTIES

To create the parameters described below, construct a hash table containing the appropriate properties. For information on hash tables, run Get-Help

about\_Hash\_Tables.

NETWORKATTACHMENT <INetworkAttachment[]>: The list of network attachments to the virtual machine.

AttachedNetworkId <String>: The resource ID of the associated network attached to the virtual machine. It can be one of cloudServicesNetwork, I3Network,

I2Network or trunkedNetwork resources.

IPAllocationMethod <VirtualMachineIPAllocationMethod>: The IP allocation mechanism for the virtual machine.

Dynamic and Static are only valid for

I3Network which may also specify Disabled. Otherwise, Disabled is the only permitted value.

[DefaultGateway < DefaultGateway?>]: The indicator of whether this is the default gateway. Only one of the attached networks (including the

CloudServicesNetwork attachment) for a single machine may be specified as True.

[Ipv4Address <String>]: The IPv4 address of the virtual machine. This field is used only if the attached network has IPAllocationType of IPV4 or

DualStack. If IPAllocationMethod is: Static - this field must contain a user specified IPv4 address from within the subnet specified in the

attached network. Dynamic - this field is read-only, but will be populated with an address from within the subnet specified in the attached network.

Disabled - this field will be empty.

[Ipv6Address <String>]: The IPv6 address of the virtual machine. This field is used only if the attached network has IPAllocationType of IPV6 or

DualStack. If IPAllocationMethod is: Static - this field must contain an IPv6 address range from within the range specified in the attached

network. Dynamic - this field is read-only, but will be populated with an range from within the subnet specified in the attached network. Disabled Page 16/19

- this field will be empty.

[Name <String>]: The associated network's interface name. If specified, the network attachment name has a maximum length of 15 characters and must be

unique to this virtual machine. If the user doesn??Tt specify this value, the default interface name of the network resource will be used. For a

CloudServicesNetwork resource, this name will be ignored.

PLACEMENTHINT <IVirtualMachinePlacementHint[]>: The scheduling hints for the virtual machine.

HintType <VirtualMachinePlacementHintType>: The specification of whether this hint supports affinity or anti-affinity with the referenced resources.

ResourceId <String>: The resource ID of the target object that the placement hints will be checked against, e.g., the bare metal node to host the virtual

machine.

SchedulingExecution <VirtualMachineSchedulingExecution>: The indicator of whether the hint is a hard or soft requirement during scheduling.

Scope <VirtualMachinePlacementHintPodAffinityScope>: The scope for the virtual machine affinity or anti-affinity placement hint. It should always be "Machine"

in the case of node affinity.

SSHPUBLICKEY <ISshPublicKey[]>: The list of ssh public keys. Each key will be added to the virtual machine using the cloud-init ssh\_authorized\_keys mechanism for

the adminUsername.

KeyData <String>: The SSH public key data.

```
----- EXAMPLE 1 -----

PS C:\>$networkAttachment = @{

AttachedNetworkId = "attachedNetworkID"

IpAllocationMethod = "Dynamic"
}
```

 $hint = @{$ 

```
SchedulingExecution = "schedulingExecution"

Scope = "scope"

ResourceId = "resourceId"

}

$sshPublicKey = @{

KeyData = "ssh-rsa aaaKyfsdx= fakekey@vm"
}
```

\$securePassword = ConvertTo-SecureString "password" -asplaintext -force

New-AzNetworkCloudVirtualMachine -Name vmName -ResourceGroupName resourceGroup -AdminUsername adminUsername -CloudServiceNetworkAttachmentAttachedNetworkId

csnAttachedNetworkId -CloudServiceNetworkAttachmentIPAllocationMethod ipAllocationMethod -CpuCore cpuCore -ExtendedLocationName extendedLocationName

-ExtendedLocationType "Custom" -Location location -SubscriptionId subscriptionId -MemorySizeGb memorySizeGb -OSDiskSizeGb osDiskSizeGb -VMImage vmImage -BootMethod

bootMethod -CloudServiceNetworkAttachmentDefaultGateway defaultGateway -CloudServiceNetworkAttachmentName csnAttachmentName -IsolateEmulatorThread

isolateEmulatorThread -NetworkAttachment \$networkAttachment -NetworkData networkData -OSDiskCreateOption osDiskCreationOption -OSDiskDeleteOption osDiskDeleteOption

-PlacementHint \$hint -SshPublicKey \$sshPublicKey -Tag @{tags = "tags"} -UserData userData -VirtioInterface virtioInterface -VMDeviceModel vmDeviceModel

-VMImageRepositoryCredentialsUsername registryUsername -VMImageRepositoryCredentialsPassword \$securePassword -VMImageRepositoryCredentialsRegistryUrl registryUrl

#### **RELATED LINKS**

https://learn.microsoft.com/powershell/module/az.networkcloud/new-aznetworkcloudvirtualmachine