

INTRODUCTION

New functionality which helps migrating to Microsoft Azure was added to 7.0 version. This functionality is provided in full version only (valid license required) in the form of PowerShell cmdlets. Two cmdlets were added to deal with migration to Microsoft Azure Classic and Microsoft Azure Resource Manager type deployments.

REQUIREMENTS

1. V2V needs to be installed on the Hyper-V server to access guest virtual harddisks
2. Azure-powershell 1.7.0 or later needs to be installed
<https://github.com/Azure/azure-powershell/releases/download/v1.7.0-August2016/azure-powershell.1.7.0.msi>
3. Net Framework 4.5 needs to be installed

SYNTAX

```
Import-VMDisks -OS <string> -Container <uri> -StorageKey  
<string> -Source <string> [-VM <IPersistentVM>]  
Import-VMDisksRM -OS <OperatingSystemTypes> {Windows | Linux} -Container  
<uri> -StorageKey <string> -Source <string> [-VM <PSVirtualMachine>]
```

PARAMETERS

OS – Operating System Type (Windows on Linux) of the Hyper-V guest Container - Full Uri of container used to store imported virtual harddisk of the Azure Storage Account, e.g.

```
https://<storage_account>.blob.core.windows.net/vhds/
```

StorageKey - Key used to Access Storage Account

Source - Hyper-V host name

While exporting disk drives first IDE drive will be assigned as OS disk, while remaining as data disks.

USING WITH MICROSOFT AZURE CLASSIC

1. Preparation – you need to be registered on Azure, with an active subscription. You should have created Azure Storage Account (classic) using azure portal (portal.azure.com)
2. Start powershell and load snap-in `Add-PSSnapin 59v2v`
 - 2.1. To login to Azure type `Add-AzureAccount`
 - 2.2. If you have multiple subscriptions - choose correct one with
`Select-AzureSubscription -SubscriptionId <Subscription-Id>`
 - 2.3. Export storage account keys
`$StorageKey = Get-AzureStorageKey -StorageAccountName <storage_account>`
 - 2.4. Creating Azure VM using local Hyper-V guest disks (please shutdown guest prior to conversion!). In the example below “CentOS 7” guest is uploaded to Azure (Northern Europe) (storage container is created if it does not exists), new VM (<new_azure_vm_name>) and corresponding service (<azure_service_name>) are created, also public access to SSH and HTTP ports are allowed:
`New-AzureVMConfig -Name <new_azure_vm_name> -InstanceSize
Small -AvailabilitySetName ‘RDGW’ -DiskName ‘CentOS7’ |
Import-VMDisks -Container
“https://<storage_account>.blob.core.windows.net/centos7/” -StorageKey
$StorageKey.Primary -Source “CentOS 7” -OS Linux |
Add-AzureEndpoint -Protocol tcp -LocalPort 22 -PublicPort 22 -Name ‘SSH’ |
Add-AzureEndpoint -Protocol tcp -LocalPort 80 -PublicPort 80 -Name ‘HTTP’ |
New-AzureVM -Location ‘Northern Europe’ -ServiceName
<azure_service_name> -Verbose`
Once this command succeeds, you will be able to establish ssh connection and navigate to
`http://<azure_service_name>.cloudapp.net/`
3. All done!

USING WITH MICROSOFT AZURE RESOURCES MANAGER

1. Preparation – you need to be registered on Azure, with an active subscription.
 - 1.1. You should have created Azure Storage Account (Resource Manager) using Azure portal (portal.azure.com). Be sure to select “General purpose” as a Storage Account type (vs Blob storage), the later does not work with page blobs.
 - 1.2. At least one virtual network and subnet should be configured with Azure portal. In the sample below those are called `RMVNET/RMVSUBNET`
2. Start powershell and load snap-in
 - `Add-PSSnapin 59v2v`
 - 2.1. To login to Azure type
 - `Login-AzureRmAccount`
 - or
 - `Login-AzureRmAccount -SubscriptionId <Subscription-Id>`to select subscription
 - 2.2. Create network interface for the new VM (skip this step if you have it already)

```
$Subnet = Get-AzureRmVirtualNetwork -Name 'RMVNET' -ResourceGroupName <rm_resource_group> | Get-AzureRmVirtualNetworkSubnetConfig -Name RMSUBNET
New-AzureRmNetworkInterface -Name RMNIC_1 -ResourceGroupName <rm_resource_group> -Location 'North Europe' -SubnetId $SubnetID.Id
```
 - 2.3. Export storage account keys and NIC ids

```
$StorageKey = Get-AzureRmStorageAccountKey -Name <rm_storage_account> -ResourceGroupName <rm_resource_group>
$NIC = Get-AzureRmNetworkInterface -Name RMNIC_1 -ResourceGroupName <rm_resource_group>
```
 - 2.4. Creating Azure VM using local Hyper-V guest disks (please shutdown guest prior to conversion!). In the example below “testing” guest is uploaded to Azure (Northern Europe) (storage container is created if it does not exists), new VM (<new_azure_vm_name>) is created:

```
New-AzureRmVMConfig -VMName <new_azure_vm_name> -VMSize "Standard_A1" |
Import-VMDisksRM -Container
"https://<rm_storage_account>.blob.core.windows.net/testing/" -StorageKey
$StorageKey.Key1 -Source testing -OS Linux -Verbose |
Add-AzureRmVMNetworkInterface -Id $NIC.Id |
New-AzureRmVM -Location "Northern Europe" -ResourceGroupName
<rm_resource_group>
```

TROUBLE-SHOOTING

1. If you receive error during installation, please check if requirements are met
2. If you receive “**Forbidden**” error message from Azure during upload, then check if you selected storage keys correctly
3. If you receive “**Bad request**” error message from Azure during upload, then check storage account kind to be “general purpose”
4. If you receive “**Not found**” error message from Azure during upload, then check if you specified storage account url correctly

CONTACT US

Sales:

Phone US: + 1 561 898 1100
Phone EU: + 44 20 7048 2021
Email: sales@5nine.com
Fax: + 1 732 203 1665

Technical Support:

Phone US/Canada Toll Free: + 1 877 275 5232
Phone: + 1 561 898 1100 Ext.3
Email: techsupport@5nine.com
Fax: + 1 732 203 1665