Chapter 4 Lab

WMI is a great management tool and one we think toolmakers often take advantage of. Using the new CIM cmdlets, write a function to query a computer and find all services by a combination of startup mode such as Auto or Manual and the current state, e.g. Running. The whole point of toolmaking is to remain flexible and re-usable without having to constantly edit the script . You should already have a start based on the examples in this chapter.

For your second lab, look at this script:

Function Get-DiskInfo {

Param ([string]$computername='localhost',[int]$MinimumFreePercent=10)

$disks=Get-WmiObject -Class Win32\_Logicaldisk -Filter "Drivetype=3"

foreach ($disk in $disks) {$perFree=($disk.FreeSpace/$disk.Size)\*100;

if ($perFree -ge $MinimumFreePercent) {$OK=$True}

else {$OK=$False};$disk|Select DeviceID,VolumeName,Size,FreeSpace,`

@{Name="OK";Expression={$OK}}

}}

Get-DiskInfo

Pretty hard to read and follow, isn’t it? Grab the file from the MoreLunches site, open it in the ISE and reformat it to make it easier to read. Don’t forget to verify it works.

Answers

### Part 1

Function Get-ServiceStartMode {

Param(

[string]$Computername='localhost',

[string]$StartMode='Auto',

[string]$State='Running'

)

$filter="Startmode='$Startmode' AND state='$State'"

Get-CimInstance -ClassName Win32\_Service -ComputerName $Computername -Filter $filter

}

#testing

Get-ServiceStartMode

Get-ServiceStartMode -Start 'Auto' -State 'Stopped'

Get-ServiceStartMode -StartMode 'Disabled' -Computername 'SERVER01'

### Part 2

Function Get-DiskInfo {

Param (

[string]$computername='localhost',

[int]$MinimumFreePercent=10

)

$disks=Get-WmiObject -Class Win32\_Logicaldisk -Filter "Drivetype=3"

foreach ($disk in $disks) {

$perFree=($disk.FreeSpace/$disk.Size)\*100

if ($perFree -ge $MinimumFreePercent) {

$OK=$True

}

else {

$OK=$False

}

$disk | Select DeviceID,VolumeName,Size,FreeSpace,@{Name="OK";Expression={$OK}}

} #close foreach

} #close function

Get-DiskInfo