

Automating IIS

This Article presents some examples of automating IIS using PowerShell and the appcmd.exe tool

References I used

URL IIS AppCmd Quick Reference	https://blogs.msdn.com/ajakez/archive/2012/04/23/iis-appcmd-quick-reference.aspx	https://github.com/jabrozki/OrchardBootstrap/blob/master/OrchardBootstrap.ps1	http://www.iis.net/learn/manage/powershell/powershell-commands-in-creating-web-sites-web-applications-virtual-directories-and-application-pools
Title	...	PowerShell Snap-in	

PowerShell Commands

This applies to my environment: Before you can utilize PowerShell commands for IIS automation, you'll need to ensure two things:

- PowerShell Script Execution is allowed for your session

```
[code language="powershell"]Set-Executionpolicy Bypass -Scope Process[/code]
```

- IIS Web Administration PowerShell module is properly loaded

```
[code language="powershell"]Import-Module WebAdministration[/code]
```

In the following end-to-end scenario we will execute the following steps:

1. Create new Application Pool
2. Create a new site
3. Create a new application
4. Assign the newly created Application to the Newly Created AppPool
5. Create two virtual directories
6. Assign permissions to these virtual directories

No.	Action	Command Create an IIS AppPool named MyAppPool	New-Item AppPools\MyAppPool Create an IIS Site named MySite with a physical path of C:\MySite	New-Item IIS:\Sites\MySite -bindings @({protocol="http";bindingInformation="80:MySite"}) -physicalPath C:\MySite Create an IIS Application named MyApplication with a physical path of C:\MySite\MyApplication	New-Item IIS:\Sites\MySite\MyApplication -physicalPath C:\MySite\MyApplication -type Application Modify Application - Set AppPool for MyApplication to MyAppPool	Set-ItemProperty "IIS:\Sites\MySite\MyApplication" -name ApplicationPool -value MyAppPool Create a Virtual Directory MyVirtualDirectory under MySite\MyApplication pointing to C:\MySite\MyApplication\MyVirtualDirectory	New-Item 'IIS:\Sites\MySite\MyApplication\MyVirtualDirectory' -type VirtualDirectory -physicalPath "C:\MySite\MyApplication\MyVirtualDirectory" Assign permissions for MyApplication\MyVirtualDirectory	\$file = \$(get-item "IIS:\Sites\MySite\MyApplication\MyVirtualDirectory") \$sdcl = \$file.GetAccessControl() \$newRule = New-Object Security.AccessControl.FileSystemAccessRule("BUILTIN\IIS_IUSRS", "Write", Allow) \$sdcl.ModifyAccessRule("Add", \$newRule, [ref]\$sdcl) \$file.SetAccessControl(\$sdcl) \$file.GetAccessControl().GetAccessRules(\$true, \$true, [System.Security.Principal.NTAccount])
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Additional Commands

Action	Command Copy IIS AppPool to MyNewAppPool forcing overwrite	Copy IIS:\AppPools\MyAppPool -force Remove the site IIS:\AppPools\MyNewAppPool	Remove-Item IIS:\Sites\MySite Copy IIS Application MyApplication to MyNewApplication forcing overwrite	Copy "IIS:\Sites\MySite\MyApplication" -force Start IIS MySite	Start-WebItem 'IIS:\Sites\MySite' Stop IIS MySite	Stop-WebItem 'IIS:\Sites\MySite' Start IIS Application Pool	Start-WebAppPool -Name "MyAppPool" Stop IIS Application Pool	Stop-WebAppPool -Name "MyAppPool" Get Application Pool Status	Get-WebAppPoolState SappPoolName
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Note:For the sake of example: Application Pool Name is MyAppPool and Site Name is MySite

IIS AppCmd Quick Reference

Action	Command	Notes
add new site (name, path, physical path, http port)	<code>appcmd add site /name:"MySite" /bindings:"*" /path:"C:\MySite" /physicalPath:"C:\MySite\MyApplication" /scriptMappings:""</code>	add new apppool (name, path)
add new apppool (name, path)	<code>appcmd add apppool /name:"MyAppPool" /path:"C:\MyAppPool"</code>	add new app (name, path, physical path, http port)
add new app (name, path, physical path, http port)	<code>appcmd add app /name:"MyApp" /path:"C:\MyApp" /physicalPath:"C:\MyApp" /scriptMappings:""</code>	add new virtual directory (name, path, physical path, http port)
add new virtual directory (name, path, physical path, http port)	<code>appcmd add vdir /name:"MyVirtualDirectory" /path:"C:\MyVirtualDirectory" /physicalPath:"C:\MyVirtualDirectory"</code>	delete site (name, path)
delete site (name, path)	<code>appcmd delete site /name:"MySite" /path:"C:\MySite"</code>	delete apppool (name, path)
delete apppool (name, path)	<code>appcmd delete apppool /name:"MyAppPool" /path:"C:\MyAppPool"</code>	delete app (name, path, physical path, http port)
delete app (name, path, physical path, http port)	<code>appcmd delete app /name:"MyApp" /path:"C:\MyApp" /physicalPath:"C:\MyApp" /scriptMappings:""</code>	delete virtual directory (name, path, physical path, http port)
delete virtual directory (name, path, physical path, http port)	<code>appcmd delete vdir /name:"MyVirtualDirectory" /path:"C:\MyVirtualDirectory" /physicalPath:"C:\MyVirtualDirectory"</code>	start site (name, path)
start site (name, path)	<code>appcmd start site /name:"MySite" /path:"C:\MySite"</code>	start apppool (name, path)
start apppool (name, path)	<code>appcmd start apppool /name:"MyAppPool" /path:"C:\MyAppPool"</code>	start app (name, path, physical path, http port)
start app (name, path, physical path, http port)	<code>appcmd start app /name:"MyApp" /path:"C:\MyApp" /physicalPath:"C:\MyApp" /scriptMappings:""</code>	stop site (name, path)
stop site (name, path)	<code>appcmd stop site /name:"MySite" /path:"C:\MySite"</code>	stop apppool (name, path)
stop apppool (name, path)	<code>appcmd stop apppool /name:"MyAppPool" /path:"C:\MyAppPool"</code>	stop app (name, path, physical path, http port)
stop app (name, path, physical path, http port)	<code>appcmd stop app /name:"MyApp" /path:"C:\MyApp" /physicalPath:"C:\MyApp" /scriptMappings:""</code>	stop virtual directory (name, path, physical path, http port)
stop virtual directory (name, path, physical path, http port)	<code>appcmd stop vdir /name:"MyVirtualDirectory" /path:"C:\MyVirtualDirectory" /physicalPath:"C:\MyVirtualDirectory"</code>	get site (name, path)
get site (name, path)	<code>appcmd get site /name:"MySite" /path:"C:\MySite"</code>	get apppool (name, path)
get apppool (name, path)	<code>appcmd get apppool /name:"MyAppPool" /path:"C:\MyAppPool"</code>	get app (name, path, physical path, http port)
get app (name, path, physical path, http port)	<code>appcmd get app /name:"MyApp" /path:"C:\MyApp" /physicalPath:"C:\MyApp" /scriptMappings:""</code>	get virtual directory (name, path, physical path, http port)
get virtual directory (name, path, physical path, http port)	<code>appcmd get vdir /name:"MyVirtualDirectory" /path:"C:\MyVirtualDirectory" /physicalPath:"C:\MyVirtualDirectory"</code>	