About Vlad Catrinescu

SHAREPOINT EXPERT
Independent SharePoint Consultant, SharePoint MVP and Top 25 SharePoint Influencer Worldwide.

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absolute-sharepoint.com
Agenda

- PowerShell for Office 365
- PowerShell Tips & Tricks
- Exchange Online
- Advanced Scripting
- Users and Licensing
- SharePoint Online
- Questions
Tips and Tricks
Let's learn the basics!
Getting Help

- **Get-Command**: Gets All the commandlets installed on your computer.
- **Get-Help**: Displays Additional information about a commandlet.
- **Get-Member**: View all the properties.

.CHM
Keyboard Shortcuts

- Ctrl+Left arrow / Ctrl+Right arrow
  - Move to the next word

- F7
  - Displays a pop-up window with your command history

- F9
  - Runs a specific number command

- Tab
  - Autocomplete command
Including Other Files

- TXT
- CSV

1, 2, 3
$servers = get-Content C:\Scripts\input.txt

foreach ($line in $servers) {
    Write-Host $line
}
CSV File

```powershell
$users = Import-Csv C:\Scripts\Users.csv
foreach ($user in $users) {
    $UserName = $user.Name
    $UserDept = $user.Department
    $UserTitle = $user.Title
    Write-Host "$UserName is a $UserTitle in the $UserDept department."
}
```
Users and Licensing
Let’s learn how to manage our users, grant and remove their licenses.
Connecting to Office 365

Requirements

- Office 365 Administrator rights
- 64-bit Machine
- Windows 7 SP1 +
- Windows Server 2008R2 +
Connecting to Office 365

Software:

- Microsoft Online Services Sign-in Assistant
  - http://spvlad.com/MSOL-SignIn
- Azure Active Directory (AD) Module
  - http://spvlad.com/Azure-PSModule
Connecting to Office 365

1. Import Module
2. Get Credential
3. Establish Connection
Connecting to Office 365

#Import Module into PowerShell Session
Import-Module MSOnline

#Get Connection Credential
$cred = get-credential

#Establish Connection
Connect-MsolService -Credential $cred
PowerShell Commandlets

**Users**
- Get-MsolUser
- New-MsolUser
- Set-MsolUser

**Licenses**
- Get-MsolSubscription
- New-MsolLicenseOptions
- Set-MsolUserLicense

**Groups and Roles**
- Get-MsolGroup
- New-MsolGroup
- Set-MsolGroup
PowerShell Commandlets

Get-MsolUser
New-MsolUser
Set-MsolUser
Get-MsolSubscription
New-MsolLicenseOptions
Set-MsolUserLicense
Get-MsolGroup
New-MsolGroup
Set-MsolGroup

<Verb> - Msol<noun>

Microsoft Online Services
SharePoint Online
Let's learn how to manage Site Collections, Tenants and Users
Connecting to SharePoint Online

Requirements:

- Install the SharePoint Online Management Shell
- [http://spvlad.com/SPOShell](http://spvlad.com/SPOShell)
- SharePoint Online Admin
Connecting to SharePoint Online

1. Open SharePoint Management Shell
2. Get Credential
3. Establish Connection
Connecting to SharePoint Online

#Get connection credential
$cred = get-credential

#Establish connection
Connect-SPOSService
    -Url https://<SP Admin Center>.sharepoint.com
    -Credential $cred
PowerShell Commandlets

SharePoint On Premises

- Install
- Configure
- Update
- Web Application
- Site Collection
- SPWeb
- SPList
- SPItem

SharePoint Online

- Tenant
- Site Collection
- SPWeb *(very limited)*
## PowerShell Commandlets

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</table>
Exchange Online
Let’s Learn how to manage Exchange Online
Mailboxes & Distribution lists
Connecting to SharePoint Online

Requirements:
- Exchange Online Admin
Connecting to Exchange Online

1. Get Credential
2. Establish connection
3. Import remote session
#Get Connection Credential
$cred = get-credential

#Establish Connection
$Session = New-PSSession
-ConfigurationName Microsoft.Exchange
-ConnectionUri https://outlook.office365.com/powershell-liveid/
-Credential $cred
-Authentication Basic
-AllowRedirection

#Add Remote Session into current session
Import-PSSession $Session
# PowerShell Commandlets

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<td>Get-RecipientPermission</td>
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</tr>
<tr>
<td>Disable-Mailbox</td>
<td>Get-Contact</td>
<td>Add-UnifiedGroupLinks</td>
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</table>
Advanced Scripting
Let's take it to the next level!
Advanced Scripting
Connecting to all Services

Steps:
1. Get Connection Credential
2. Import Modules
3. Create Sessions
4. Connect to Services
5. Import Sessions
Connecting to all the services

#Get Connection Credential
$cred = get-credential

#Import Modules
Import-Module MsOnline, Microsoft.Online.SharePoint.PowerShell

#Create Sessions

#Connect to Services
Connect-MsolService -Credential $cred
Connect-SPOSService -Url https://tenant.sharepoint.com -credential $cred

#Import Sessions
Import-PSSession $exchange
CSOM For SharePoint Online

- **Client Side Object Model**
- Used to develop code that runs outside of the SharePoint server
CSOM For SharePoint Online

1. Get Client Context
   • Class that manages the interaction between our script and the SharePoint server.
2. Do the required action
function Get-ClientContext($UserPrincipalName,$SecurePassword,$Url)
{
    $credentials = New-Object Microsoft.SharePoint.Client.SharePointOnlineCredentials($UserPrincipalName, $SecurePassword)
    $clientContext.Credentials = $credentials
    return $clientContext }

#Initial Variables
$User = "vlad@globomantics.org"
$File = "C:\Scripts\Password.txt"
$Site = "https://globomanticsorg.sharepoint.com"
$Password = Get-Content $File | ConvertTo-SecureString

#Get Context
$Context = Get-ClientContext $User $Password $Site
$lists = $Context.Web.Lists
$context.Load($lists)
$context.ExecuteQuery()

#Loop through lists
foreach ($list in $lists) {
    Write-Host $list.Title}
Community Extensions

**OfficeDev PnP-PowerShell**
- Program ran mostly by Microsoft
- 134 Cmdlets

Download
https://github.com/OfficeDev/PnP-PowerShell

Documentation
https://github.com/OfficeDev/PnP-PowerShell/blob/master/Documentation/readme.md
Get All Lists in a Website

$User = "vlad@globomantics.org"
$File = "C:\Scripts\Password.txt"
$cred = New-Object -TypeName System.Management.Automation.PSCredential -ArgumentList $User, (Get-Content $File | ConvertTo-SecureString)

Connect-SPOnline
-Url https://globomanticsorg.sharepoint.com
-Credentials $cred

Get-SPOList
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<td>02</td>
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<tr>
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<td><a href="http://powershell.office.com/">http://powershell.office.com/</a></td>
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<td>03</td>
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<td><a href="http://blogs.technet.com/b/heyscriptingguy/">http://blogs.technet.com/b/heyscriptingguy/</a></td>
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<td>04</td>
<td>PnP-PowerShell</td>
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Thank you!

Q&A

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