Office 365 PowerShell Cheatsheet

PowerShell Modules

To use the following PowerShell cmdlets with Microsoft Azure and Office 365, you need to at least install the first two items:

- Microsoft Online Services Sign-In Assistant for IT Professionals
- Azure Active Directory Module for Windows PowerShell
- SharePoint Online Management Shell (optional)
- Windows PowerShell Module for Lync Online (optional)

Then, any time you want to use the cmdlets you need to use the *Microsoft Azure Active Directory Module for Windows PowerShell* shortcut or use the following command:

```
Import-Module MSOnline
```

Connection and Credentials [more information]

To connect, you can do so interactively with your tenant credentials:

```
$cred = Get-Credential
Connect-MsolService -Credential $cred
```

This will prompt you for your Microsoft credentials. To make a script, you need to store those securely on the disk. First, store the password as an encrypted string:

```
Read-Host -AsSecureString | ConvertFrom-SecureString | Out-File C:\
    creds.txt
```

Once you enter your password, you can use that file to create the `$cred` variable:

```
$user = "john.doe@contoso.com"
$pass = Get-Content -Path C:\creds.txt | ConvertTo-SecureString
$cred = New-Object -TypeName System.Management.Automation.
    PSCredential -ArgumentList $user, $pass
Connect-MsolService -Credential $cred
```

Managing users [more information]

Creating a new Azure Active Directory (Office 365) user:

```
New-MsolUser -DisplayName "John Doe" -UserPrincipalName "john.
    doe@contoso.com" -FirstName "John" -LastName "Doe"
```

Note that the user's temporary password is displayed on the screen, but not emailed to the user. The domain you use in the UPN must also be assigned to your Office 365 tenant. You can get a list of users with:

```
Get-MsolUser
```

See all of the attributes of a particular user with this command:

```
Get-MsolUser -UserPrincipalName "john.doe@contoso.com" | Select *
```

Modify one of those attributes like this:

```
Set-MsolUser -UserPrincipalName "john.doe@contoso.com" -PhoneNumber
    "(555) 123-4567"
```

Finally, here's how to reset a password, and delete a user:

```
Set-MsolUserPassword -UserPrincipalName "john.doe@contoso.com"
Remove-MsolUser -UserPrincipalName "john.doe@contoso.com"
```

Assigning Licenses [more information]

Before you can assign a license to a user, you must make sure they have an assigned location. The needed parameter is the two-letter country code:

```
Set-MsolUser -UserPrincipalName "john.doe@contoso.com" -
    UsageLocation "US"
```

Then, find out the licenses you own and how many are still unassigned:

```
Get-MsolAccountSku
```

Finally, assign one of the licenses to your user:

```
Set-MsolUserLicense -UserPrincipalName "john.doe@contoso.com" -
    AddLicenses "contoso:O365_BUSINESS"
```

Groups and Roles [more information]

You can get a list of your existing groups with this command:

```
Get-MsolGroup
```

Create a new security group like this:

```
New-MsolGroup -DisplayName "Finance" -Description "People from the
    finance department"
```

To add people to the group, you need both the group's *ObjectID* which the previous commands told you and the user's *ObjectID* which can be gathered with the `Get-MsolUser` cmdlet.

```
Add-MsolGroupMember -GroupObjectId 2a72abbf-cd1b-4208-9499-
    e392eb74bea4 -GroupMemberObjectId 450e18c8-5d71-4472-b87f-
    d2c8053e9aa1
```

You can also assign pre-existing administrative roles to users. Get a list of available roles like this:

```
Get-MsolRole
```

Then add someone to an administration role like this:

```
Add-MsolRoleMember -RoleObjectId 729827e3-9c14-49f2-bb1b-9608
    f156bbb8 -RoleMemberObjectId 450e18c8-5d71-4472-b87f-
    d2c8053e9aa1
```

Exchange Online

[more information]

In order to use the Exchange Online cmdlets, you need to establish a remote session. This will connect you to the Office 365 server, and import the necessary modules. You can use the same credentials from previously to do this:

```
$ExchangeSession = New-PSSession -ConfigurationName Microsoft.
    Exchange -ConnectionUri https://outlook.office365.com/
    powershell-liveid/ -Credential $cred -Authentication Basic -
    AllowRedirection
Import-PSSession $ExchangeSession
```

Remember the use `Remove-PSSession $ExchangeSession` when you're done to close the connection. Otherwise it will remain active, and you can only have three active at once. To know if it works, you can try listing your mailboxes:

```
Get-Mailbox
```

This command creates a new mailbox for a user:

```
$pass = Read-Host -AsSecureString
New-Mailbox -Name "Jane Smith" -MicrosoftOnlineServicesID "jane.
    smith@contoso.com" -Password $pass
```

Note that the user needs a proper license activated. Here is how you would create a distribution list and add members to it:

```
New-DistributionGroup -Name Sales -PrimarySmtpAddress sales@contoso
    .com
Add-DistributionGroupMember -Identity Sales -Member "john.
    doe@contoso.com"
Add-DistributionGroupMember -Identity Sales -Member "jane.
    smith@contoso.com"
```

The most useful command is probably `Set-Mailbox` which allows you to configure user mailboxes. This command will enable mail forwarding:

```
Set-Mailbox -Identity "Jane Smith" -DeliverToMailboxAndForward
    $true -ForwardingSMTPAddress "test@example.com"
```

This will set a 5 MB maximum send size:

```
Set-Mailbox -Identity "Jane Smith" -MaxSendSize 5MB
```

Finally, this will set all users to receive quota warnings when they reach 30 GB:

```
Get-User | Set-Mailbox -IssueWarningQuota 30GB
```

SharePoint Online

[more information]

After you've started the *SharePoint Online Management Shell*, the first thing you need to do is connect to SharePoint Online:

```
Connect-SPOService -Url https://contoso-admin.sharepoint.com -
    Credential $cred
```

Then, to see if it worked, you can get information about your installation with this command:

```
Get-SPOTenant
```

You can also get a list of installed applications:

```
Get-SPOAppInfo
```

This will show you a list of sites under your organization, then more details about one particular site:

```
Get-SPOSite
Get-SPOSite -Identity https://contoso.sharepoint.com | Select *
```

If you have SharePoint groups, you can assign users to them:

```
Add-SPOUser -Site https://contoso.sharepoint.com -LoginName "john.
    doe@contoso.com" -Group "Finance"
```

Finally, another useful cmdlet allows you to run health checks to find any issue with your SharePoint site:

```
Test-SPOSite https://contoso.sharepoint.com
```

Lync Online

[more information]

Open the *Lync Server Management Shell* or use the command `Import-Module Lync` to access the Lync cmdlets. Then, you can get information about your installation with:

```
Get-CsTenant
```

This will list online users, and then extended information about one user:

```
Get-CsOnlineUser
Get-CsOnlineUser -Identity "sip:john.doe@contoso.com" | Select *
```

Finally, you can control resources like meeting rooms. This will disable all active meeting rooms:

```
Get-CsMeetingRoom | Set-CsMeetingRoom -Enabled $False
```

Comments? Mistakes?

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