**Best Powershell Scripts for Migrations**

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Description automatically generated

Email migrations can take weeks to complete but I try to save as much time as I can by making runbooks with Powershell scripts for both my source and destination environment. In this article, I’ve compiled a list of the my favorite and most used scripts during a migration. Feel free to comment with any that you like to use as well.

**Connecting to 365 Exchange Online Account**

$credential = Get-Credential  
  
Import-Module MsOnline  
Connect-MsolService -Credential $credential  
  
$exchangeSession = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri “https://outlook.office365.com/powershell-liveid/” -Credential $credential -Authentication “Basic” -AllowRedirection  
Import-PSSession $exchangeSession -DisableNameChecking

**Bulk Importing Users with Passwords to 365**

Create a CSV with the Following Headers:

* UserPrincipalName
* FirstName
* LastName
* DisplayName
* Password

Import-Csv -Path ‘FilePath.csv’ | foreach {New-MsolUser -UserPrincipalName $\_.UserPrincipalName -FirstName $\_.FirstName -LastName $\_.LastName -DisplayName $\_.DisplayName -Password $\_.Password -ForceChangePassword $False}

**Bulk Updating UPN in 365**

$UserCredential = Get-Credential  
Connect-MsolService -Credential $UserCredential  
$Session = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri https://outlook.office365.com/powershell-liveid/ -Credential $UserCredential -Authentication Basic -AllowRedirection  
Import-PSSession $Session -AllowClobber  
$testpath = test-path c:\temp; If ($testpath -eq $false) {new-item -type directory c:\temp}; $dataout = @();  
Get-MsolUser -All | ? {$\_.UserPrincipalName -match “domain.onmicrosoft.com” -and $\_.UserPrincipalName -notmatch “admin”} | % {Set-MsolUserPrincipalName -ObjectId $\_.objectId -NewUserPrincipalName ($\_.UserPrincipalName.Split(“@”)[0] + “@domain.com”); $dataout += “$($\_.UserPrincipalName)” ; $\_.UserPrincipalName };$dataout | out-file c:\temp\UPNChangeOutput.txt

**Adding an Alias’ to all Users 365**

$LiveCred = Get-Credential  
$Session = New-PSSession -ConfigurationName Microsoft.Exchange 砲onnecti  
dential $LiveCred -Authentication Basic -AllowRedirection  
Import-PSSession $Session  
$users = Get-Mailbox  
foreach ($a in $users) {$a.emailaddresses.Add(“$($a.alias)@domain.com”)  
$users | %{Set-Mailbox $\_.Identity -EmailAddresses $\_.EmailAddresses}

**Bulk Upload Distribution Lists with Members**

Create Two CSVs :

* One has the Distribution Group Name and Primary SMTP Address
* One has the Group name and the members apart of that group

Import-Csv -Path ‘FilePath.csv’ | foreach {New-Distributiongroup -Name $\_.Name -PrimarySmtpAddress $\_.Address }  
  
Import-Csv ‘FilePath.csv’ | foreach {Add-DistributionGroupMember  
-Identity $\_.DL -Member $\_.Alias}

**Bulk Upload Shared Mailboxes**

Create a CSV with the Headers of:

* DisplayName
* Userprincipalname

Import-Csv -Path ‘FilePath.csv’  | foreach-object { New-Mailbox -Name $\_.DisplayName -primarysmtpaddress $\_.Userprincipalname -Shared }

**Bulk Upload Mailbox Permissions**

Create a CSV with the headers of :

* Identity (This is the person you are giving the permissions to. Format: user@domain.com)
* User (This is the person whose mailbox is going to be able to be viewed by “Identity” user)

Import-Csv -Path ‘FilePath.csv’ | foreach {Add-MailboxPermission -Identity $\_.Identity -User $\_.User -AccessRights FullAccess -InheritanceType All}

**View Users Mailbox Size in 365/Exchange**

$UserCredential = Get-Credential  
  
$Session = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri https://outlook.office365.com/powershell-liveid/ -Credential $UserCredential -Authentication Basic -AllowRedirection  
  
Import-PSSession $Session  
  
  
get-mailbox | get-mailboxstatistics | ft displayname, totalitemsize

**Disable the throttling policy on Exchange**

New-ThrottlingPolicy MigrationPolicy

Set-ThrottlingPolicy MigrationPolicy -RCAMaxConcurrency $null -RCAPercentTimeInAD $null -RCAPercentTimeInCAS $null -RCAPercentTimeInMailboxRPC $null -EWSMaxConcurrency $null -EWSPercentTimeInAD $null -EWSPercentTimeInCAS $null -EWSPercentTimeInMailboxRPC $null -EWSMaxSubscriptions $null -EWSFastSearchTimeoutInSeconds $null -EWSFindCountLimit $null -CPAMaxConcurrency $null -CPAPercentTimeInCAS $null -CPAPercentTimeInMailboxRPC $null -CPUStartPercent $null

Set-Mailbox “<Admin User>” -ThrottlingPolicy MigrationPolicy

**Setting Impersonation on Exchange/365**

Set-ExecutionPolicy Unrestricted  
  
$LiveCred = Get-Credential  
  
$Session = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri https://ps.outlook.com/powershell/ -Credential $LiveCred -Authentication Basic -AllowRedirection  
  
Import-PSSession $Session  
  
Enable-OrganizationCustomization  
  
New-ManagementRoleAssignment -Role “ApplicationImpersonation” -User [admin@domain.com](mailto:admin@domain.com)

**Changing Mailbox Receive\_Send Size in 365**

$credential = Get-Credential  
  
Import-Module MsOnline  
Connect-MsolService -Credential $credential  
  
$exchangeSession = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri “https://outlook.office365.com/powershell-liveid/” -Credential $credential -Authentication “Basic” -AllowRedirection  
Import-PSSession $exchangeSession -DisableNameChecking

Get-Mailbox | Set-Mailbox -MaxReceiveSize 150MB -MaxSendSize 150MB

**Removing an Alias from Users**

$Records = Get-mailbox -ResultSize Unlimited| where {$\_.emailaddresses -like “smtp:\*@domain.com”} | Select-Object DisplayName,@{Name=“EmailAddresses”;Expression={$\_.EmailAddresses |Where-Object {$\_ -like “smtp:\*domain.com”}}}  
  
foreach ($record in $Records)  
{  
   write-host “Removing Alias” $record.EmailAddresses “for” $record.DisplayName  
   Set-Mailbox $record.DisplayName -EmailAddresses @{Remove=$record.EmailAddresses}  
}

**Removing Groups with a certain Domain from 365**