Document Library Folder Collaboration User Guide

From: Veera Bharat Bhushan Kaveri

Audience: All the Developers and Admins

Environment: SharePoint Online

Entities: Document Libraries, Folders, Files etc.

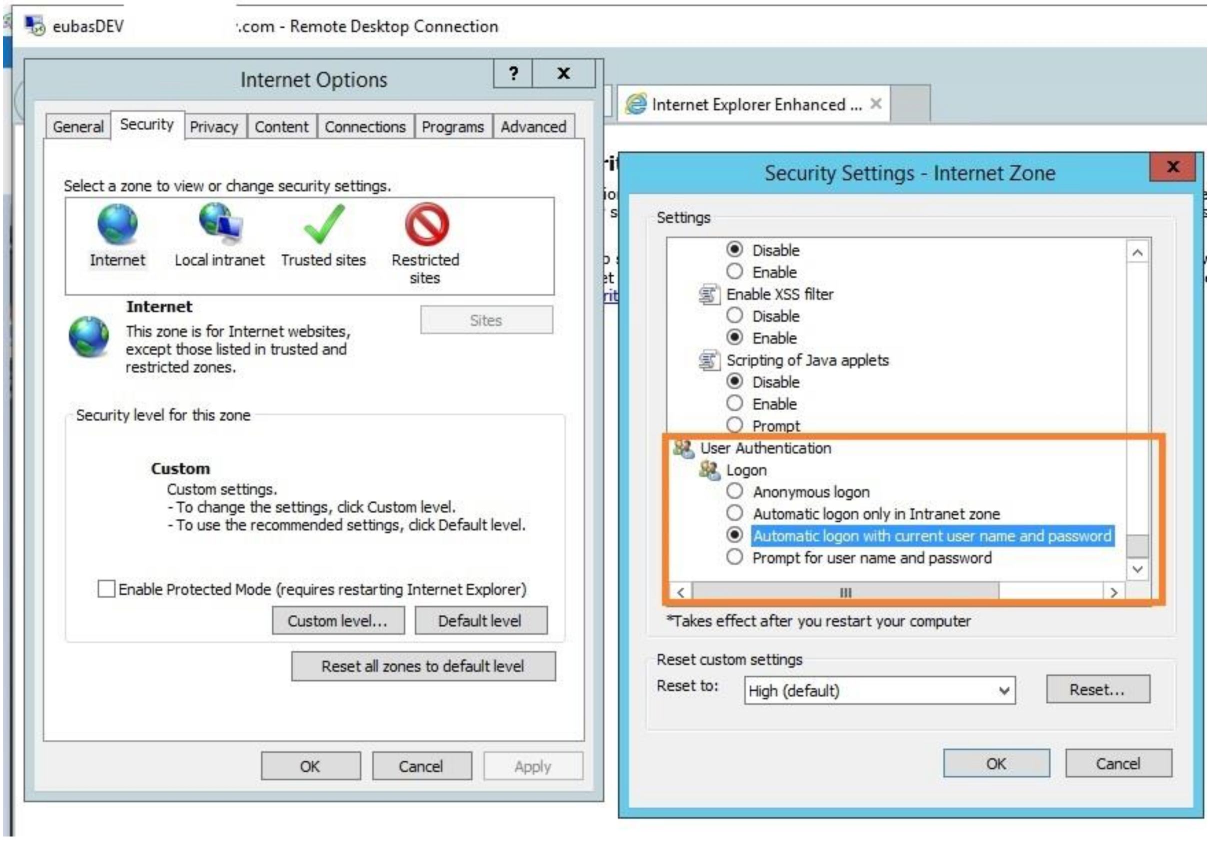
Document Library Folder Collaboration User Guide

Introduction:

Through this User Guide we are trying to cover most of the major areas of Folder collaboration with related Files management of the given SPO Libraries.

Initial Browser Settings:

Please open the Primary/Parent Browser in your machine >> Click the Top Right corner Cog >> Go To Internet Options >> Security Tab >> Custom Level >> Enable the below options as highlighted >> Click Ok >> Restart the Machine for all Settings to get reflected.



Select a zone to view or change security settings.

Internet

This zone is for Internet websites, except those listed in trusted and restricted zones.

Security level for this zone

Custom

Custom settings.
- To change the settings, click Custom level.
- To use the recommended settings, click Default level.

□ Enable Protected Mode (requires restarting Internet Explorer)

Custom level... | Default level

Reset all zones to default level

Security Settings - Internet Zone

Settings

- ● Disable
- ○ Enable

Enable XSS filter
- ○ Disable
- ● Enable

Scripting of Java applets
- ● Disable
- ○ Enable
- ○ Prompt

User Authentication

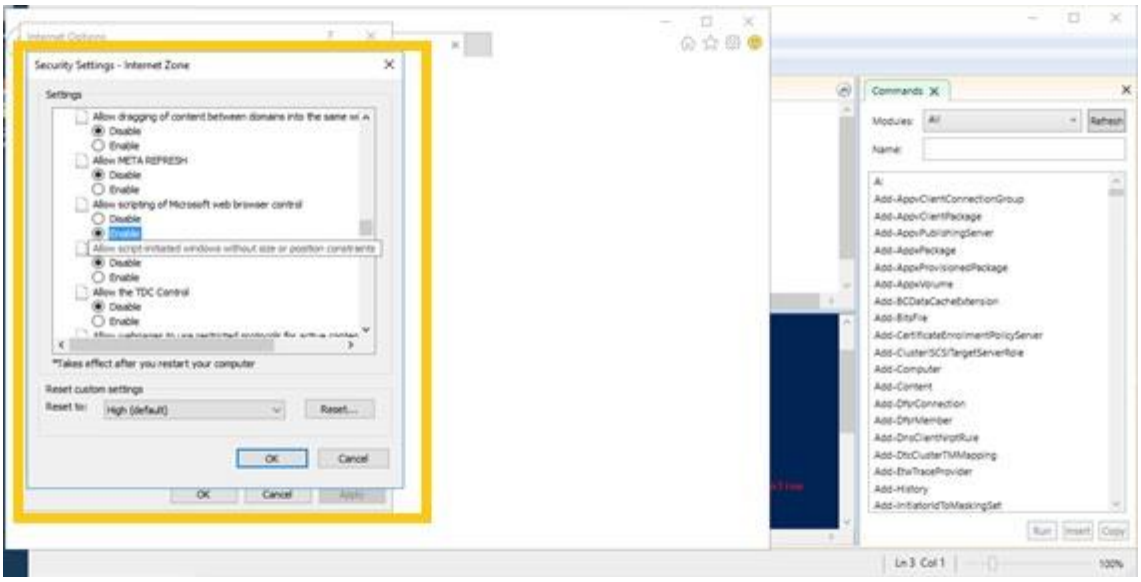
Logon
- ○ Anonymous logon
- ○ Automatic logon only in Intranet zone
- ● Automatic logon with current user name and password
- ○ Prompt for user name and password

*Takes effect after you restart your computer

Reset custom settings

Reset to: High (default) | Reset...

OK | Cancel



Security Settings - Internet Zone

Settings

Allow dragging of content between domains into the same wi
- ● Disable
- ○ Enable

Allow META REFRESH
- ● Disable
- ○ Enable

Allow scripting of Microsoft web browser control
- ○ Disable
- ● Enable

Allow script-initiated windows without size or position constraints
- ● Disable
- ○ Enable

Allow the TDC Control
- ● Disable
- ○ Enable

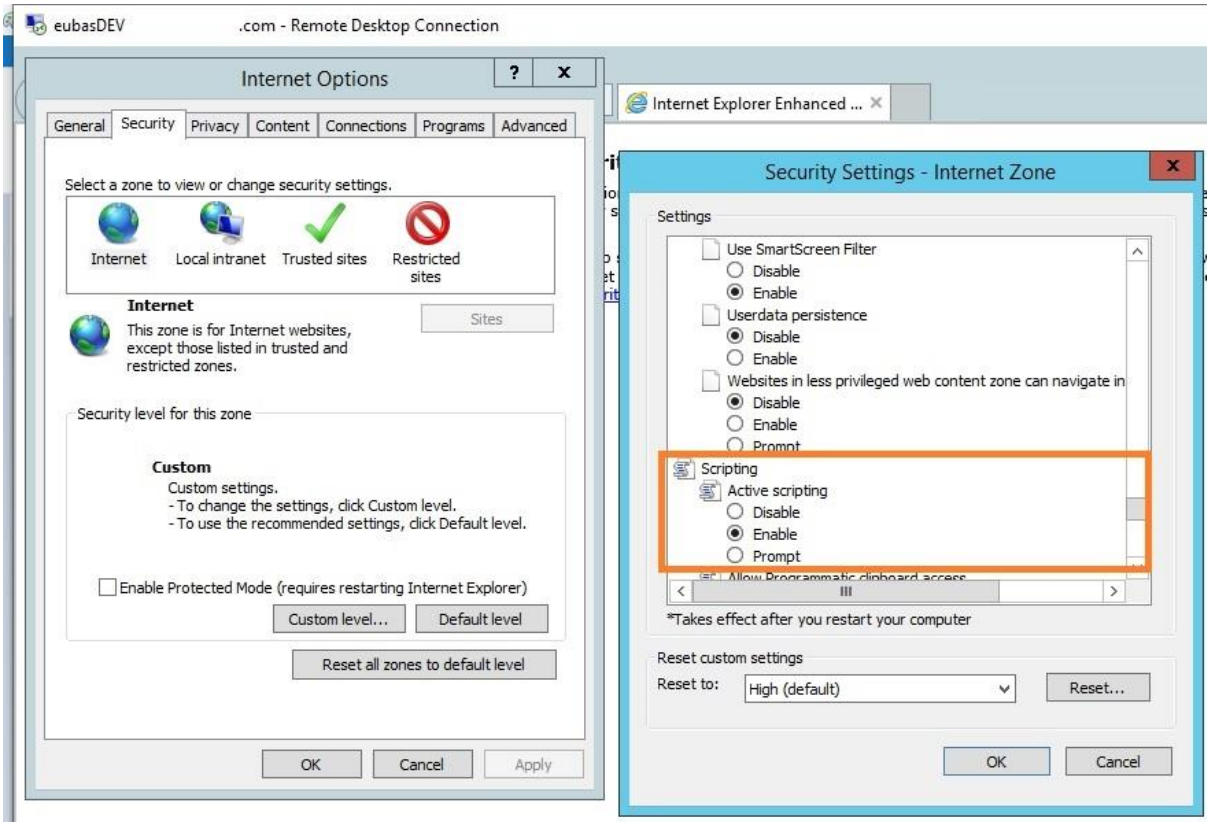
*Takes effect after you restart your computer

Reset custom settings

Reset to: High (default) | Reset...

OK | Cancel

A:
Add-AppvClientConnectionGroup
Add-AppvClientPackage
Add-AppvPublishingServer
Add-AppxPackage
Add-AppxProvisionedPackage
Add-AppxVolume
Add-BCDataCacheExtension
Add-BitsFile
Add-CertificateEnrollmentPolicyServer
Add-ClusteriSCSITargetServerRole
Add-Computer
Add-Content
Add-DfsrConnection
Add-DfsrMember
Add-DnsClientNrptRule
Add-DtcClusterTMMapping
Add-EtwTraceProvider
Add-History
Add-InitiatorIdToMaskingSet


eubasDEV .com - Remote Desktop Connection

Internet Options

General | Security | Privacy | Content | Connections | Programs | Advanced

Select a zone to view or change security settings.

Internet | Local intranet | Trusted sites | Restricted sites

Internet
This zone is for Internet websites, except those listed in trusted and restricted zones.

Security level for this zone

Custom
Custom settings.
- To change the settings, click Custom level.
- To use the recommended settings, click Default level.

□ Enable Protected Mode (requires restarting Internet Explorer)

Security Settings - Internet Zone

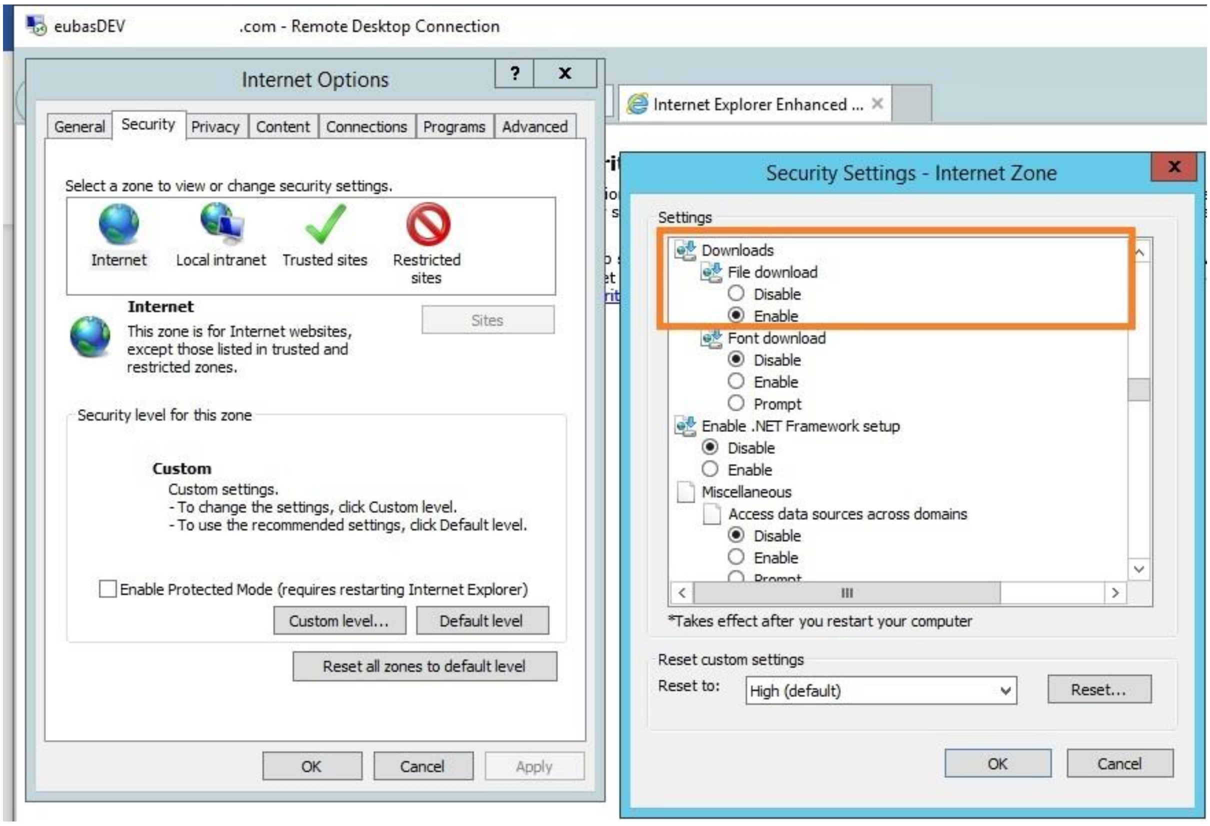
Settings

- Use SmartScreen Filter
  - ○ Disable
  - ● Enable
- Userdata persistence
  - ● Disable
  - ○ Enable
- Websites in less privileged web content zone can navigate in
  - ● Disable
  - ○ Enable
  - ○ Prompt
- Scripting
  - Active scripting
    - ○ Disable
    - ● Enable
    - ○ Prompt
  - Allow Programmatic clipboard access

*Takes effect after you restart your computer

Reset custom settings
Reset to: High (default)

Sites
Custom level...
Default level
Reset all zones to default level
OK
Cancel
Apply
Internet Explorer Enhanced ...
Reset...


eubasDEV .com - Remote Desktop Connection

Internet Options

General | Security | Privacy | Content | Connections | Programs | Advanced

Select a zone to view or change security settings.

Internet | Local intranet | Trusted sites | Restricted sites

Internet
This zone is for Internet websites, except those listed in trusted and restricted zones.

Security level for this zone

Custom
Custom settings.
- To change the settings, click Custom level.
- To use the recommended settings, click Default level.

□ Enable Protected Mode (requires restarting Internet Explorer)

Security Settings - Internet Zone

Settings

- Downloads
  - File download
    - ○ Disable
    - ● Enable
  - Font download
    - ● Disable
    - ○ Enable
    - ○ Prompt
- Enable .NET Framework setup
  - ● Disable
  - ○ Enable
- Miscellaneous
  - Access data sources across domains
    - ● Disable
    - ○ Enable
    - ○ Prompt

*Takes effect after you restart your computer

Reset custom settings
Reset to: High (default)

Sites
Custom level...
Default level
Reset all zones to default level
OK
Cancel
Apply
Internet Explorer Enhanced ...
Reset...

Document Library Folder Collaboration User Guide

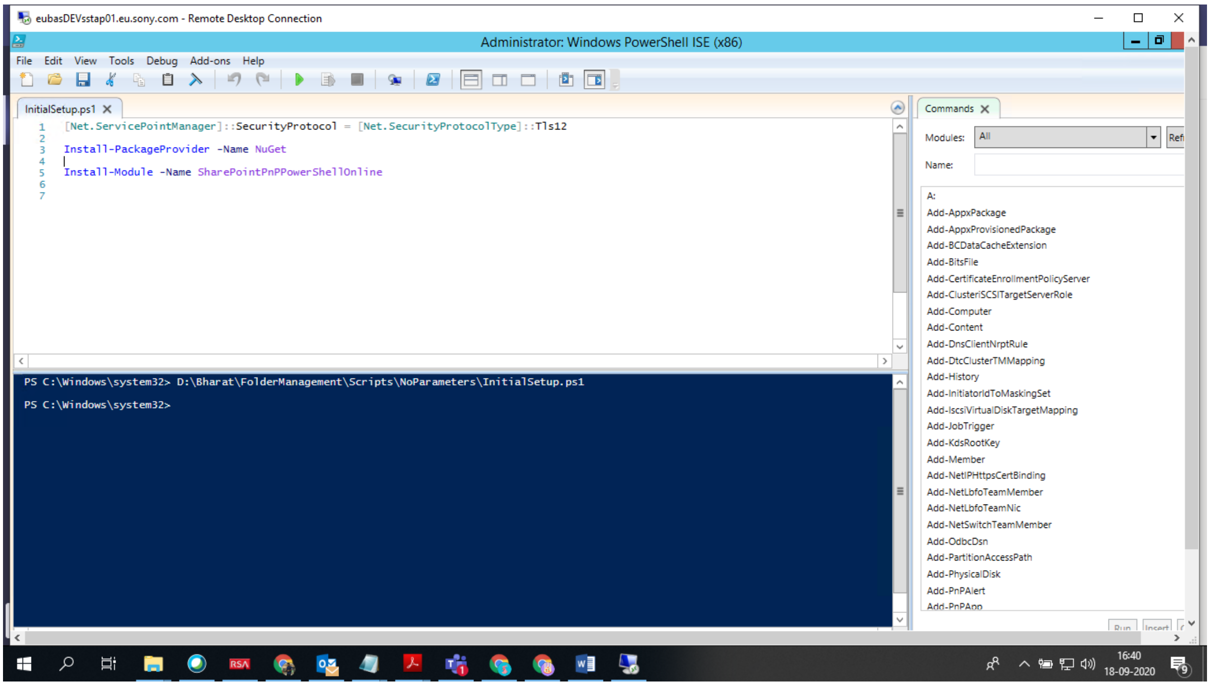
Initial Set Up:

Please run the below set of PS code lines before working with all our PnP scripts.

[Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12

Install-PackageProvider -Name NuGet

Install-Module -Name SharePointPnPPowerShellOnline



```
[Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12

Install-PackageProvider -Name NuGet

Install-Module -Name SharePointPnPPowerShellOnline
```

```
PS C:\Windows\system32> D:\Bharat\FolderManagement\Scripts\NoParameters\InitialSetup.ps1

PS C:\Windows\system32>
```

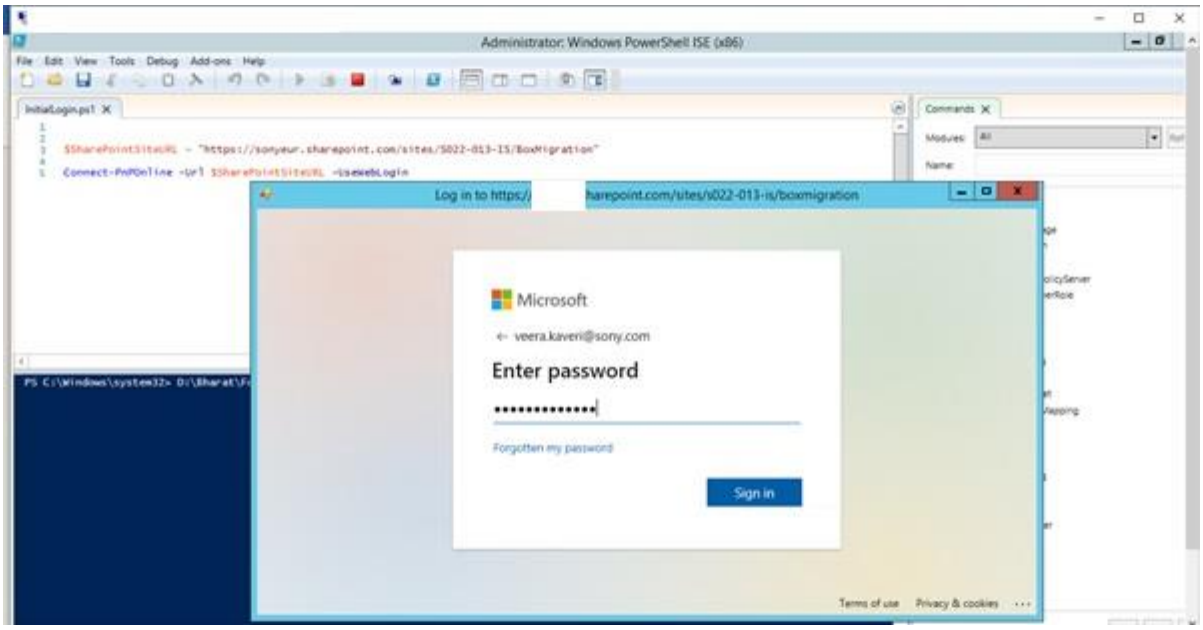
Initial Login:

Please run the below set of PS code lines by replacing the highlighted details before working with all our PnP scripts that covers the Login process and stores the credentials and re-uses it whenever you run next set of PnP PowerShell scripts.

$SharePointSiteURL = "<Site URL>"

Connect-PnPOnline -Url $SharePointSiteURL -UseWebLogin

Document Library Folder Collaboration User Guide



```
$SharePointSiteURL = "https://sonyeur.sharepoint.com/sites/S022-013-IS/BoxMigration"

Connect-PnPOnline -Url $SharePointSiteURL -UseWebLogin
```

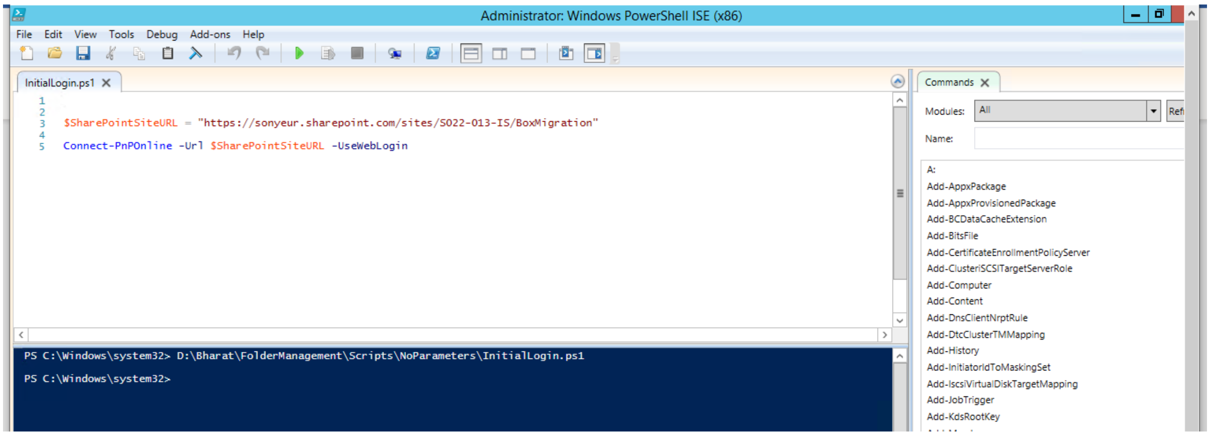
```
PS C:\Windows\system32> D:\Bharat\F
```

Log in to https:/[redacted]harepoint.com/sites/s022-013-is/boxmigration

← veera.kaveri@sony.com

Enter password

•••••••••••••


Administrator: Windows PowerShell ISE (x86)
File Edit View Tools Debug Add-ons Help
InitialLogin.ps1
Commands
Modules: All
Refi
Name:
A:
Add-AppxPackage
Add-AppxProvisionedPackage
Add-BCDataCacheExtension
Add-BitsFile
Add-CertificateEnrollmentPolicyServer
Add-ClusteriSCSITargetServerRole
Add-Computer
Add-Content
Add-DnsClientNrptRule
Add-DtcClusterTMMapping
Add-History
Add-InitiatorIdToMaskingSet
Add-IscsiVirtualDiskTargetMapping
Add-JobTrigger
Add-KdsRootKey

```

$SharePointSiteURL = "https://sonyeur.sharepoint.com/sites/S022-013-IS/BoxMigration"

Connect-PnPOnline -Url $SharePointSiteURL -UseWebLogin
```

```
PS C:\Windows\system32> D:\Bharat\FolderManagement\Scripts\NoParameters\InitialLogin.ps1

PS C:\Windows\system32>
```

Create Dummy Files:

Please run the below set of CMD script lines for creating all kinds of dummy files with required extensions by making and changing it to the directory.

md <FilePath>

cd <FilePath>

Fsutil file createnew dummyfile1.pdf 2000000

Fsutil file createnew dummyfile2.doc 2000000

Fsutil file createnew dummyfile3.ppt 2000000

Fsutil file createnew dummyfile4.dat 2000000

Note: Only run in the CMD prompt

Above CMD lines create dummy files with above titles and mentioned extensions each with 20 MB sizes.

Document Library Folder Collaboration User Guide

We can use the above concept for all kinds of testing, validation, uploading, downloading of dummy files via PnP PS scripting on a given SPO Library’s Folders or Sub-Folders etc.

Running Environments:

Suggested Environment to run all the below PnP PowerShell scripts are **using Windows PowerShell ISE** only **Right Click as Admin**

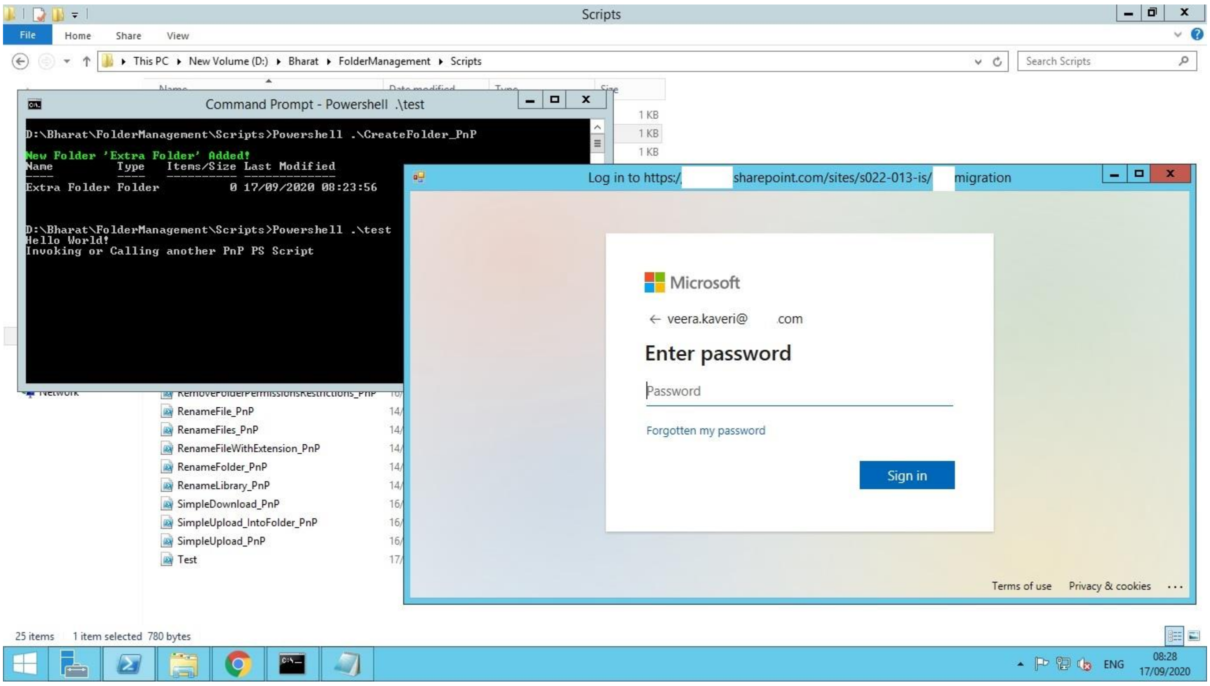
Invoking/Calling another PS Script:

We can also use Command Line Prompt Tool to run below PnP scripts as an alternative as shown in the below illustrated example:

Write-Host "Hello World!";

Write-Host "Invoking or Calling another PnP PS Script";

Powershell .\CreateFolder_PnP



Command Prompt - Powershell .\test

```
D:\Bharat\FolderManagement\Scripts>Powershell .\CreateFolder_PnP

New Folder 'Extra Folder' Added!
Name         Type   Items/Size Last Modified
----         ----   ---------- -------------
Extra Folder Folder          0 17/09/2020 08:23:56


D:\Bharat\FolderManagement\Scripts>Powershell .\test
Hello World!
Invoking or Calling another PnP PS Script
```

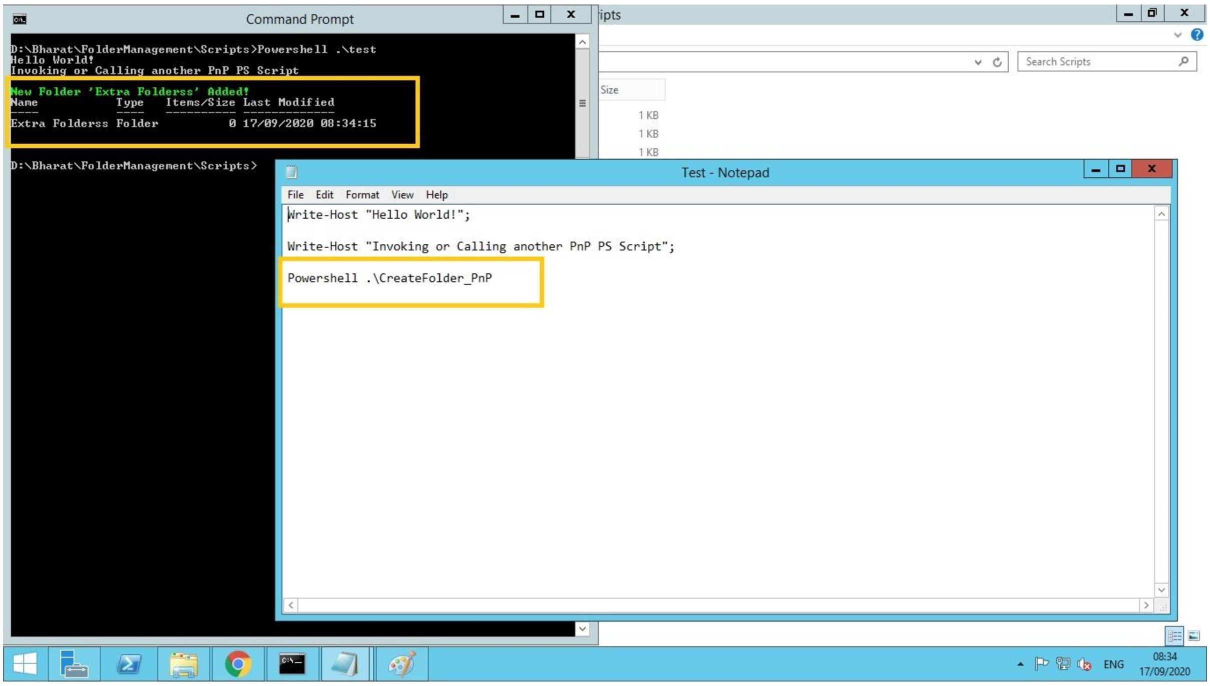
Log in to https:/[redacted]sharepoint.com/sites/s022-013-is/[redacted]migration

Microsoft

veera.kaveri@[redacted]com

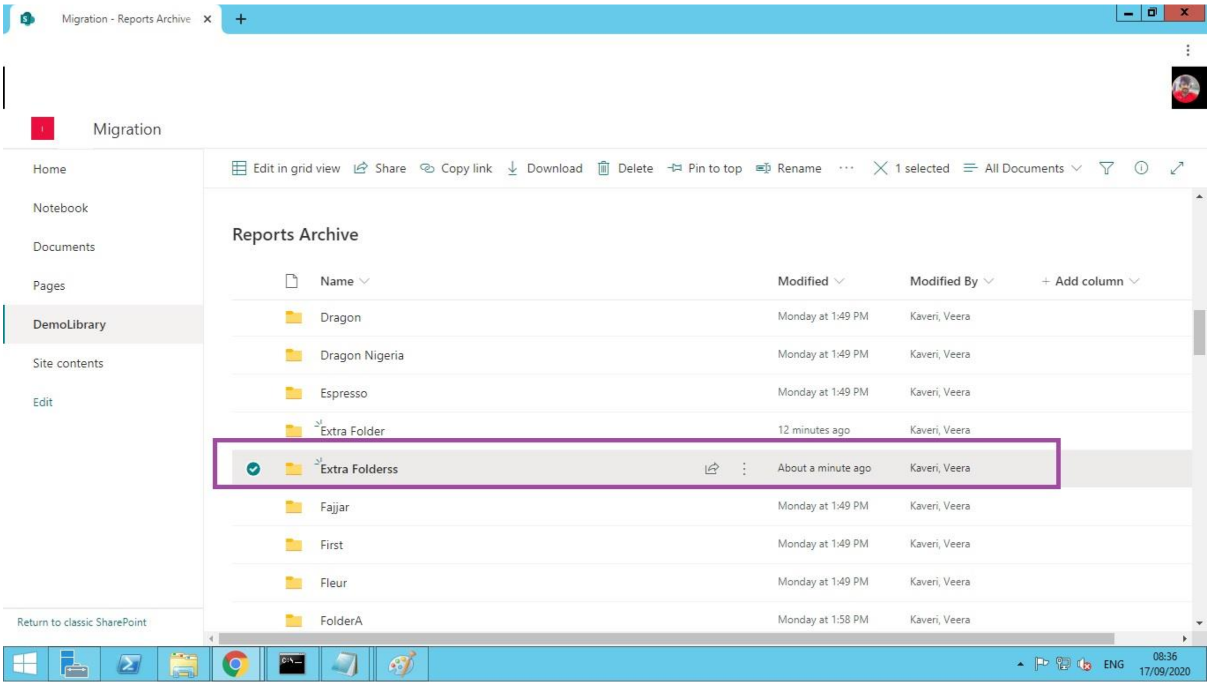
Enter password

Document Library Folder Collaboration User Guide



```
D:\Bharat\FolderManagement\Scripts>Powershell .\test
Hello World!
Invoking or Calling another PnP PS Script
New Folder 'Extra Folderss' Added!
Name           Type   Items/Size Last Modified
----           ----   ---------- -------------
Extra Folderss Folder          0 17/09/2020 08:34:15

D:\Bharat\FolderManagement\Scripts>
```

```
Write-Host "Hello World!";

Write-Host "Invoking or Calling another PnP PS Script";

Powershell .\CreateFolder_PnP
```



Reports Archive

Name	Modified	Modified By	+ Add column
Dragon	Monday at 1:49 PM	Kaveri, Veera	
Dragon Nigeria	Monday at 1:49 PM	Kaveri, Veera	
Espresso	Monday at 1:49 PM	Kaveri, Veera	
Extra Folder	12 minutes ago	Kaveri, Veera	
Extra Folderss	About a minute ago	Kaveri, Veera	
Fajjar	Monday at 1:49 PM	Kaveri, Veera	
First	Monday at 1:49 PM	Kaveri, Veera	
Fleur	Monday at 1:49 PM	Kaveri, Veera	
FolderA	Monday at 1:58 PM	Kaveri, Veera	

Note

All the below PnP Scripts support **MFA [multi factor authentication]** which will be very helpful for the end user to enter his password at the run time only for once and rest of the times will login automatically with the same login details if he has permissions on the site collections which are referred in the PnP PowerShell scripts.

Below Scripts can be used across a Modern as well as Classic SPO Libraries.

Document Library Folder Collaboration User Guide

Create Folder:

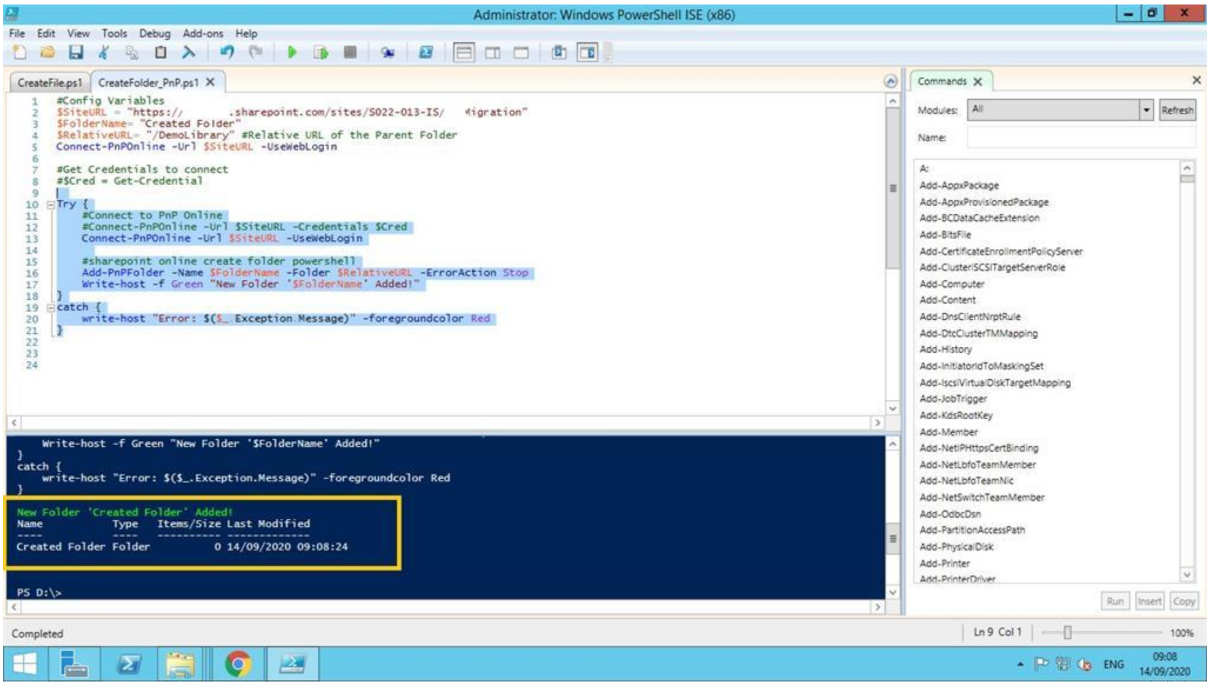
Here is a simple way to create a folder on a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell ISE.

```
#Config Variables
$SharePointSiteURL = "########################"

$FolderName= "Extra Folder"

$RelativeURL= "/Reports Archive"


Try {
    #Connect to PnP Online
    Connect-PnPOnline -Url $SharePointSiteURL -UseWebLogin

    #sharepoint online create folder powershell
    Add-PnPFolder -Name $FolderName -Folder $RelativeURL -ErrorAction Stop
    Write-host -f Green "New Folder '$FolderName' Added!"
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

Please configure above highlighted points to have your own folder created via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script,



```
#Config Variables
$SiteURL = "https://          .sharepoint.com/sites/S022-013-IS/    4igration"
$FolderName= "Created Folder"
$RelativeURL= "/DemoLibrary" #Relative URL of the Parent Folder
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get Credentials to connect
#$Cred = Get-Credential

Try {
    #Connect to PnP Online
    #Connect-PnPOnline -Url $SiteURL -Credentials $Cred
    Connect-PnPOnline -Url $SiteURL -UseWebLogin

    #sharepoint online create folder powershell
    Add-PnPFolder -Name $FolderName -Folder $RelativeURL -ErrorAction Stop
    Write-host -f Green "New Folder '$FolderName' Added!"
}
catch {
    write-host "Error: $($_ Exception Message)" -foregroundcolor Red
}
```

```
    Write-host -f Green "New Folder '$FolderName' Added!"
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
New Folder 'Created Folder' Added!
Name           Type   Items/Size Last Modified
----           ----   ---------- -------------
Created Folder Folder          0 14/09/2020 09:08:24

PS D:\>
```

Create Multiple Folders:

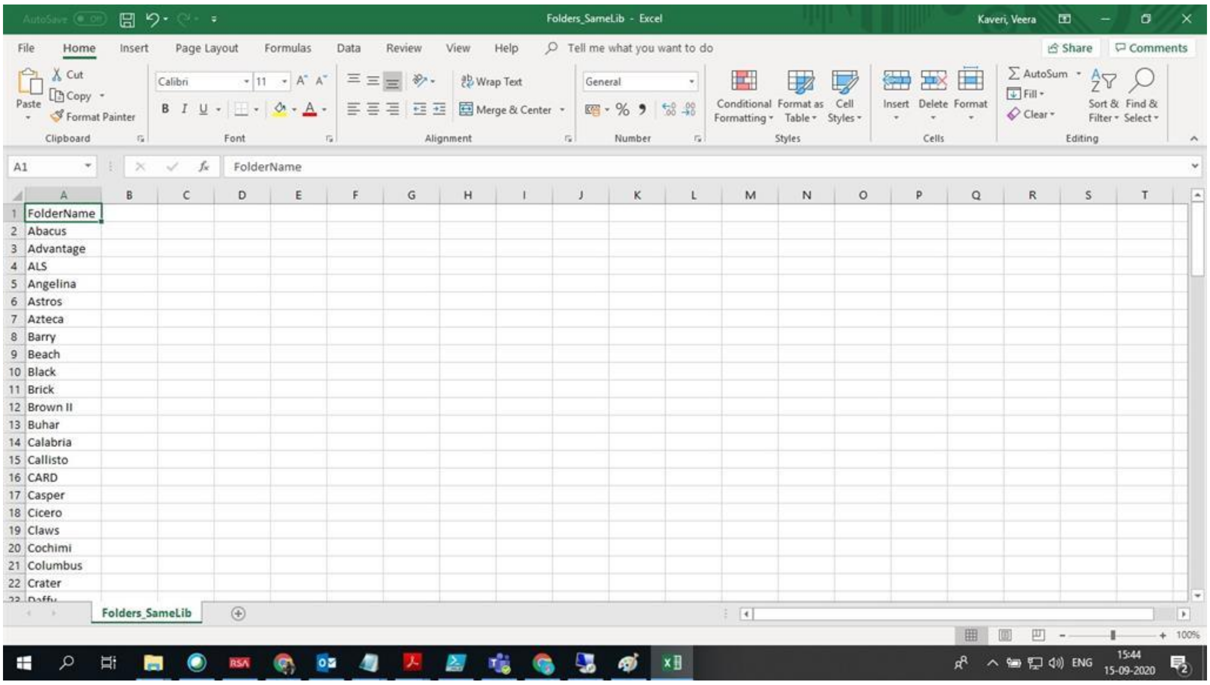
Here is a simple way to create multiple folders on a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "########################"
$CSVFilePath = "D:\Bharat\Folders_SameLib.csv"

Try {
    #Connect to PnP Online
    Connect-PnPOnline -Url $SiteURL -UseWebLogin

    #Get the CSV file
    $CSVFile = Import-Csv $CSVFilePath

    #Read CSV file and create document document library
    ForEach($Row in $CSVFile)
    {
        #Create Folder if it doesn't exist
        Resolve-PnPFolder -SiteRelativePath $Row.FolderSiteRelativeURL | Out-Null
        Write-host "Ensured Folder:"$Row.FolderSiteRelativeURL -f Green
    }
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

Please configure above highlighted points to have your own folder created via PnP PowerShell programmatically.

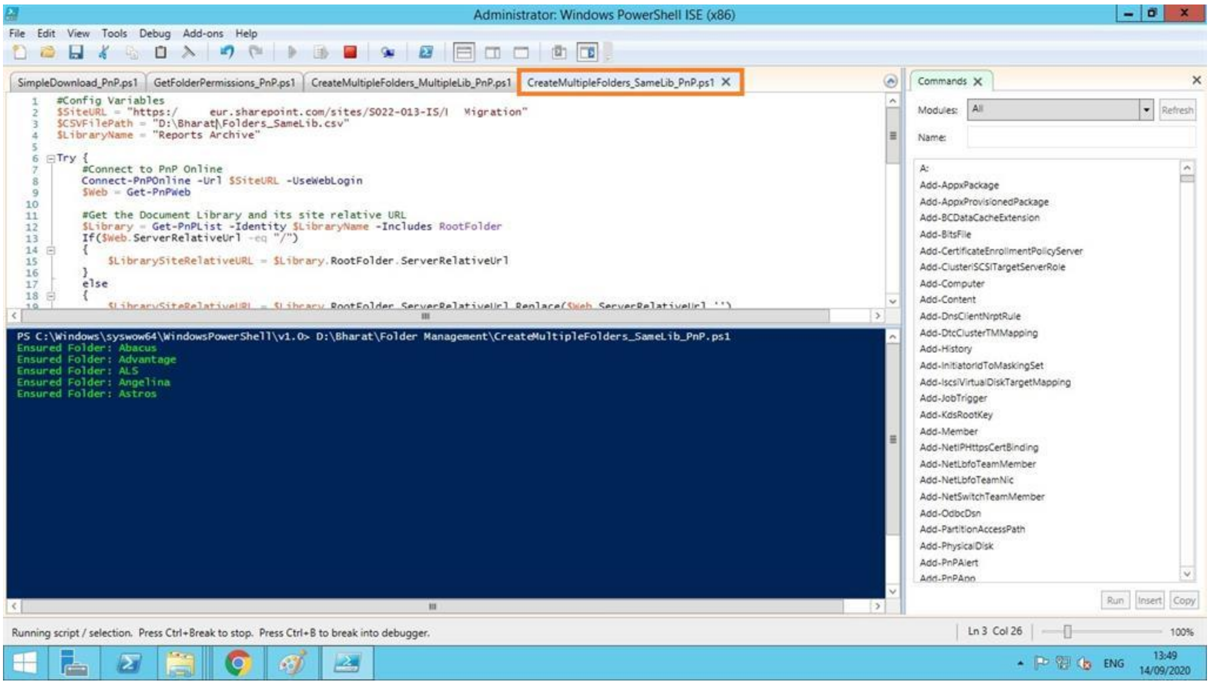
Above csv file mentioned in the script should look like this with column, values, sheet name same as file name saved etc. as shown below:



	A
1	FolderName
2	Abacus
3	Advantage
4	ALS
5	Angelina
6	Astros
7	Azteca
8	Barry
9	Beach
10	Black
11	Brick
12	Brown II
13	Buhar
14	Calabria
15	Callisto
16	CARD
17	Casper
18	Cicero
19	Claws
20	Cochimi
21	Columbus
22	Crater

Here is the snapshot after a successful running of the script,

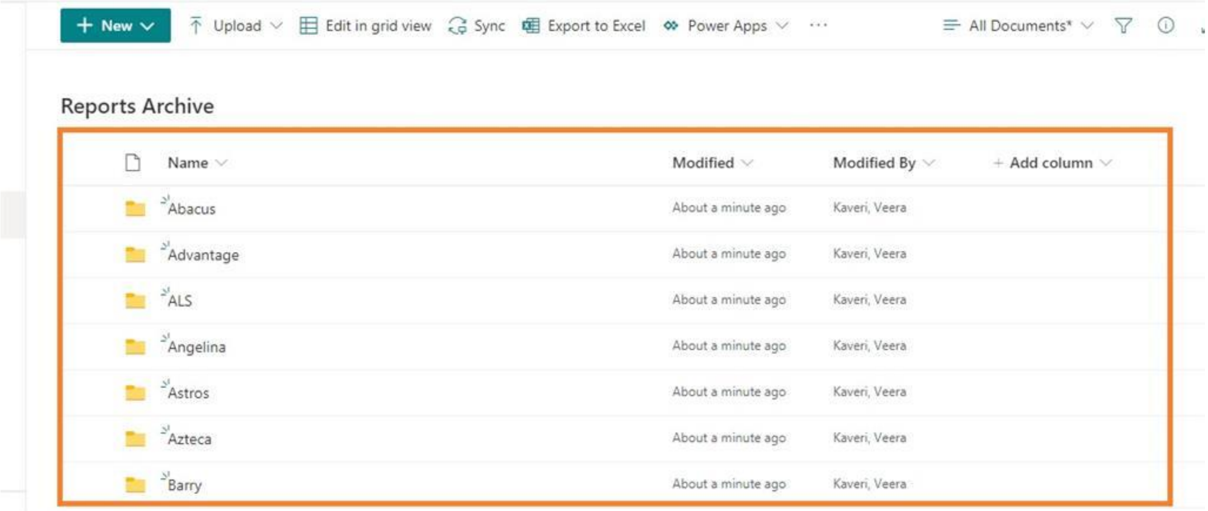
Document Library Folder Collaboration User Guide



```
#Config Variables
$SiteURL = "https:/      eur.sharepoint.com/sites/S022-013-IS/I   Migration"
$CSVFilePath = "D:\Bharat\Folders_SameLib.csv"
$LibraryName = "Reports Archive"

Try {
    #Connect to PnP Online
    Connect-PnPOnline -Url $SiteURL -UseWebLogin
    $Web = Get-PnPWeb

    #Get the Document Library and its site relative URL
    $Library = Get-PnPList -Identity $LibraryName -Includes RootFolder
    If($Web.ServerRelativeUrl -eq "/")
    {
        $LibrarySiteRelativeURL = $Library.RootFolder.ServerRelativeUrl
    }
    else
    {
        $LibrarySiteRelativeURL = $Library.RootFolder.ServerRelativeUrl.Replace($Web.ServerRelativeUrl,'')
```

```
PS C:\Windows\syswow64\WindowsPowerShell\v1.0> D:\Bharat\Folder Management\CreateMultipleFolders_SameLib_PnP.ps1
Ensured Folder: Abacus
Ensured Folder: Advantage
Ensured Folder: ALS
Ensured Folder: Angelina
Ensured Folder: Astros
```

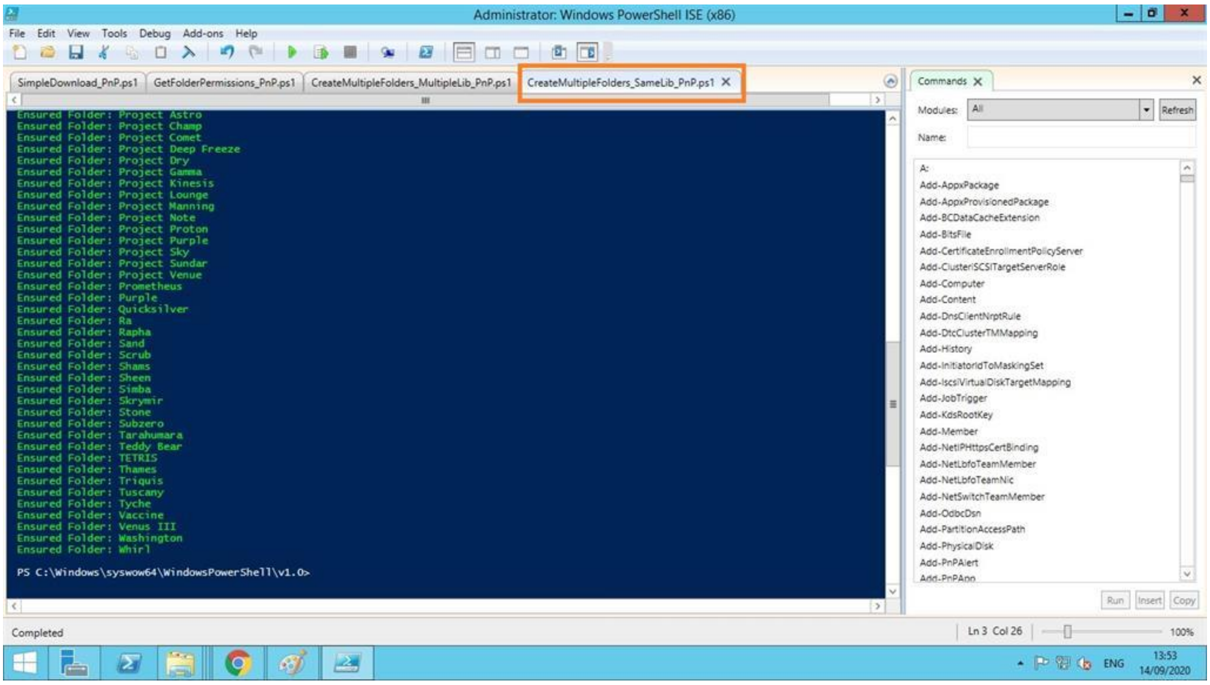
Running script / selection. Press Ctrl+Break to stop. Press Ctrl+B to break into debugger.



Reports Archive

Name	Modified	Modified By	+ Add column
Abacus	About a minute ago	Kaveri, Veera	
Advantage	About a minute ago	Kaveri, Veera	
ALS	About a minute ago	Kaveri, Veera	
Angelina	About a minute ago	Kaveri, Veera	
Astros	About a minute ago	Kaveri, Veera	
Azteca	About a minute ago	Kaveri, Veera	
Barry	About a minute ago	Kaveri, Veera	

Document Library Folder Collaboration User Guide


Administrator: Windows PowerShell ISE (x86)
File Edit View Tools Debug Add-ons Help
SimpleDownload_PnP.ps1
GetFolderPermissions_PnP.ps1
CreateMultipleFolders_MultipleLib_PnP.ps1
CreateMultipleFolders_SameLib_PnP.ps1
Commands
Modules: All
Refresh
Name:
Run
Insert
Copy
Ln 3 Col 26
100%
ENG
13:53
14/09/2020

```
Ensured Folder: Project Astro
Ensured Folder: Project Champ
Ensured Folder: Project Comet
Ensured Folder: Project Deep Freeze
Ensured Folder: Project Dry
Ensured Folder: Project Gamma
Ensured Folder: Project Kinesis
Ensured Folder: Project Lounge
Ensured Folder: Project Manning
Ensured Folder: Project Note
Ensured Folder: Project Proton
Ensured Folder: Project Purple
Ensured Folder: Project Sky
Ensured Folder: Project Sundar
Ensured Folder: Project Venue
Ensured Folder: Prometheus
Ensured Folder: Purple
Ensured Folder: Quicksilver
Ensured Folder: Ra
Ensured Folder: Rapha
Ensured Folder: Sand
Ensured Folder: Scrub
Ensured Folder: Shams
Ensured Folder: Sheen
Ensured Folder: Simba
Ensured Folder: Skrymir
Ensured Folder: Stone
Ensured Folder: Subzero
Ensured Folder: Tarahumara
Ensured Folder: Teddy Bear
Ensured Folder: TETRIS
Ensured Folder: Thames
Ensured Folder: Triquis
Ensured Folder: Tuscany
Ensured Folder: Tyche
Ensured Folder: Vaccine
Ensured Folder: Venus III
Ensured Folder: Washington
Ensured Folder: Whirl

PS C:\Windows\syswow64\WindowsPowerShell\v1.0>
```

Completed

Create Multiple Folders on Multiple Libraries:

Here is a simple way to create multiple folders on a given multiple SPO libraries using PnP PowerShell.

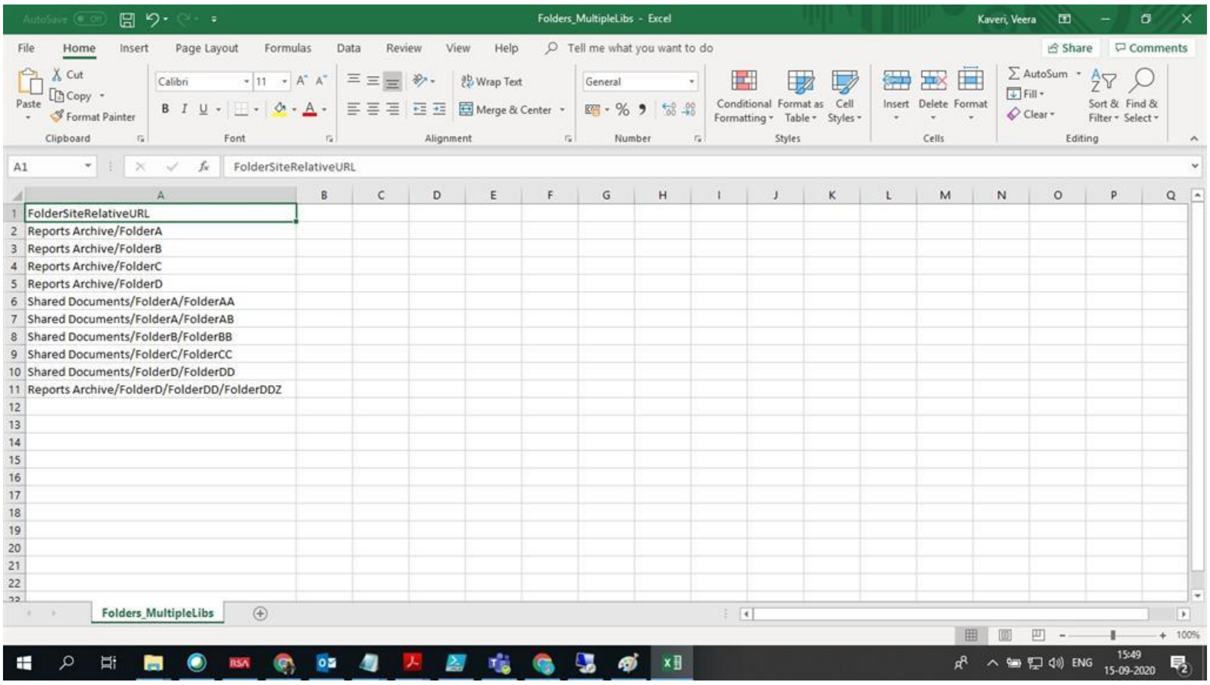
Here's the PnP PowerShell code to execute on a windows PowerShell.

```
#Config Variables
$SiteURL = "#########################”
$CSVFilePath = "D:\Bharat\Folders_MultipleLibs.csv"

Try {
    #Connect to PnP Online
    Connect-PnPOnline -Url $SiteURL -UseWebLogin

    #Get the CSV file
    $CSVFile = Import-Csv $CSVFilePath

    #Read CSV file and create document document library
    ForEach($Row in $CSVFile)
    {
        #Create Folder if it doesn't exist
        Resolve-PnPFolder -SiteRelativePath $Row.FolderSiteRelativeURL | Out-Null
        Write-host "Ensured Folder:"$Row.FolderSiteRelativeURL -f Green
    }
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

Document Library Folder Collaboration User Guide

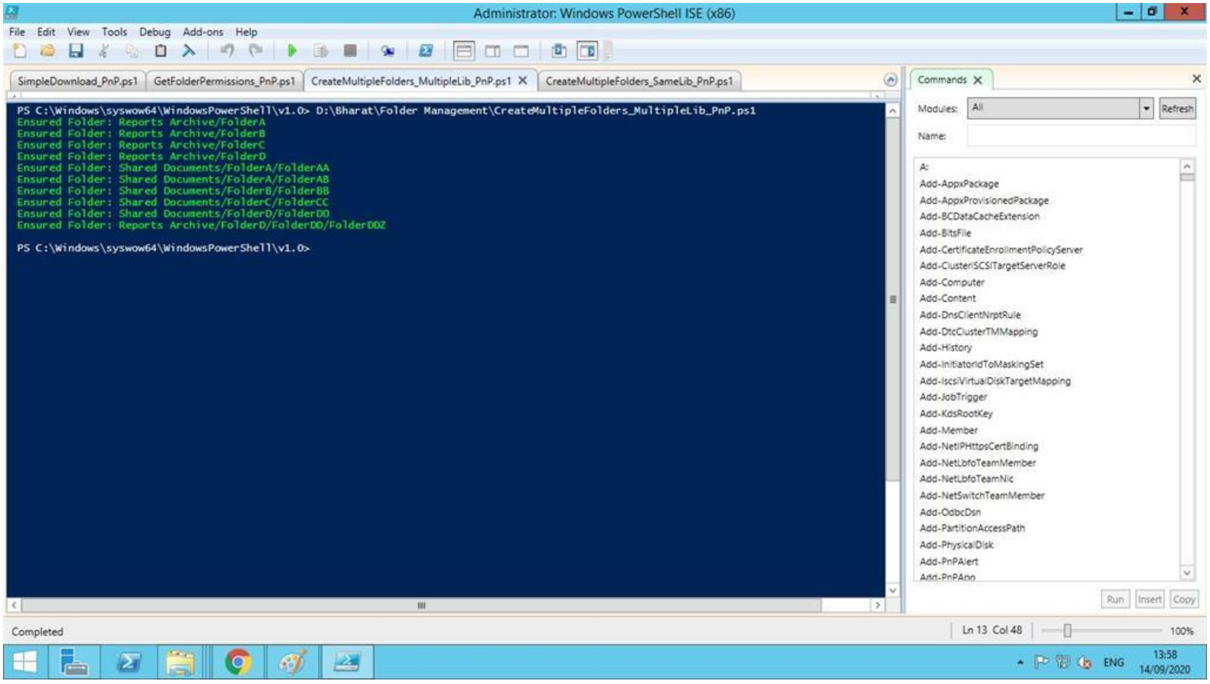
Please configure above highlighted points to have your own folder created via PnP PowerShell programmatically.

Above csv file should look like this with column, values, sheet name same as file name saved etc. as shown below:



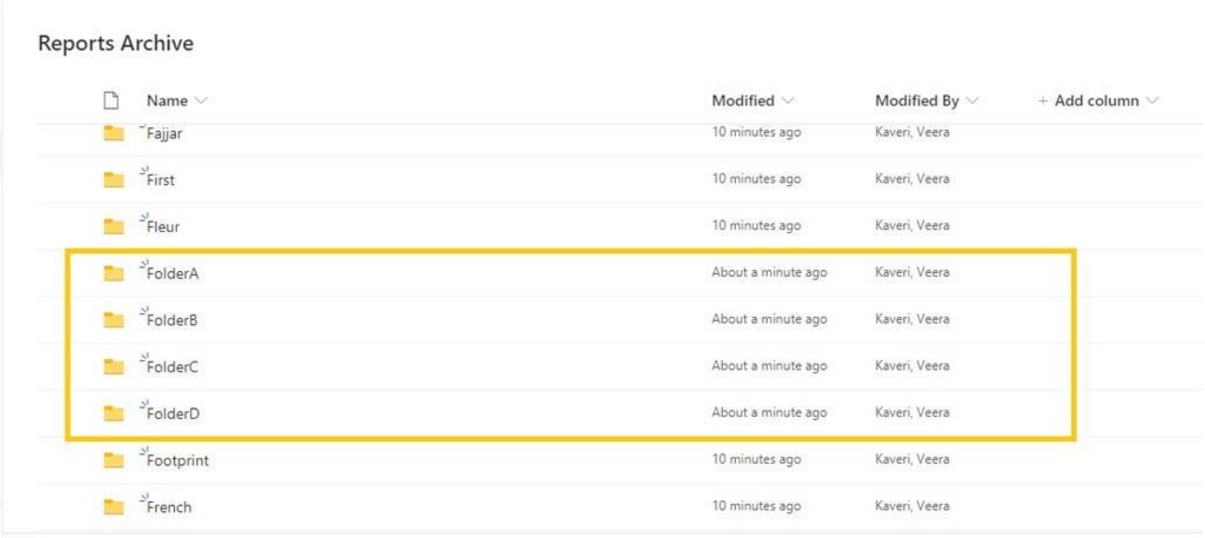
	A
1	FolderSiteRelativeURL
2	Reports Archive/FolderA
3	Reports Archive/FolderB
4	Reports Archive/FolderC
5	Reports Archive/FolderD
6	Shared Documents/FolderA/FolderAA
7	Shared Documents/FolderA/FolderAB
8	Shared Documents/FolderB/FolderBB
9	Shared Documents/FolderC/FolderCC
10	Shared Documents/FolderD/FolderDD
11	Reports Archive/FolderD/FolderDD/FolderDDZ

Here is the snapshot after a successful running of the script:


Administrator: Windows PowerShell ISE (x86)
SimpleDownload_PnP.ps1
GetFolderPermissions_PnP.ps1
CreateMultipleFolders_MultipleLib_PnP.ps1
CreateMultipleFolders_SameLib_PnP.ps1
Completed
Ln 13 Col 48

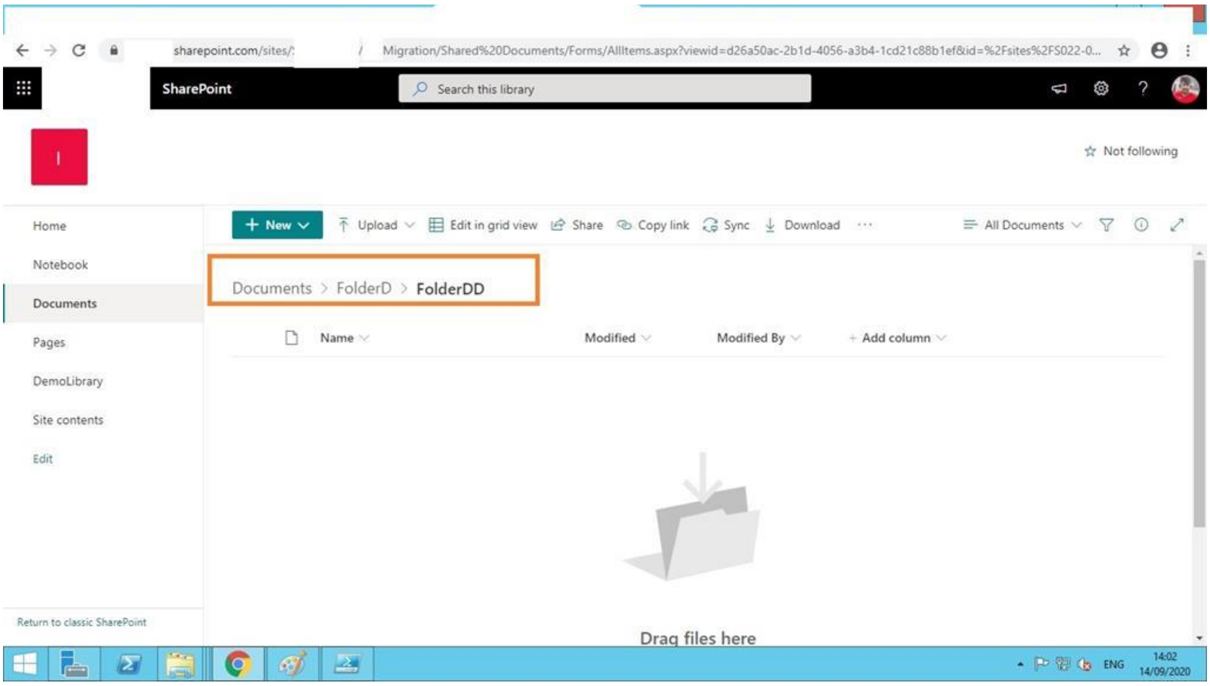
```
PS C:\Windows\syswow64\WindowsPowerShell\v1.0> D:\Bharat\Folder Management\CreateMultipleFolders_MultipleLib_PnP.ps1
Ensured Folder: Reports Archive/FolderA
Ensured Folder: Reports Archive/FolderB
Ensured Folder: Reports Archive/FolderC
Ensured Folder: Reports Archive/FolderD
Ensured Folder: Shared Documents/FolderA/FolderAA
Ensured Folder: Shared Documents/FolderA/FolderAB
Ensured Folder: Shared Documents/FolderB/FolderBB
Ensured Folder: Shared Documents/FolderC/FolderCC
Ensured Folder: Shared Documents/FolderD/FolderDD
Ensured Folder: Reports Archive/FolderD/FolderDD/FolderDDZ

PS C:\Windows\syswow64\WindowsPowerShell\v1.0>
```

Document Library Folder Collaboration User Guide



Reports Archive

Name	Modified	Modified By	+ Add column
Fajjar	10 minutes ago	Kaveri, Veera	
First	10 minutes ago	Kaveri, Veera	
Fleur	10 minutes ago	Kaveri, Veera	
FolderA	About a minute ago	Kaveri, Veera	
FolderB	About a minute ago	Kaveri, Veera	
FolderC	About a minute ago	Kaveri, Veera	
FolderD	About a minute ago	Kaveri, Veera	
Footprint	10 minutes ago	Kaveri, Veera	
French	10 minutes ago	Kaveri, Veera	



Documents > FolderD > FolderDD

Name	Modified	Modified By	+ Add column

Above concept can be used across a Modern as well as Classic SPO Libraries.

Create Sub Folder:

Here is a simple way to create a sub-folder on a given SPO library using PnP PowerShell.

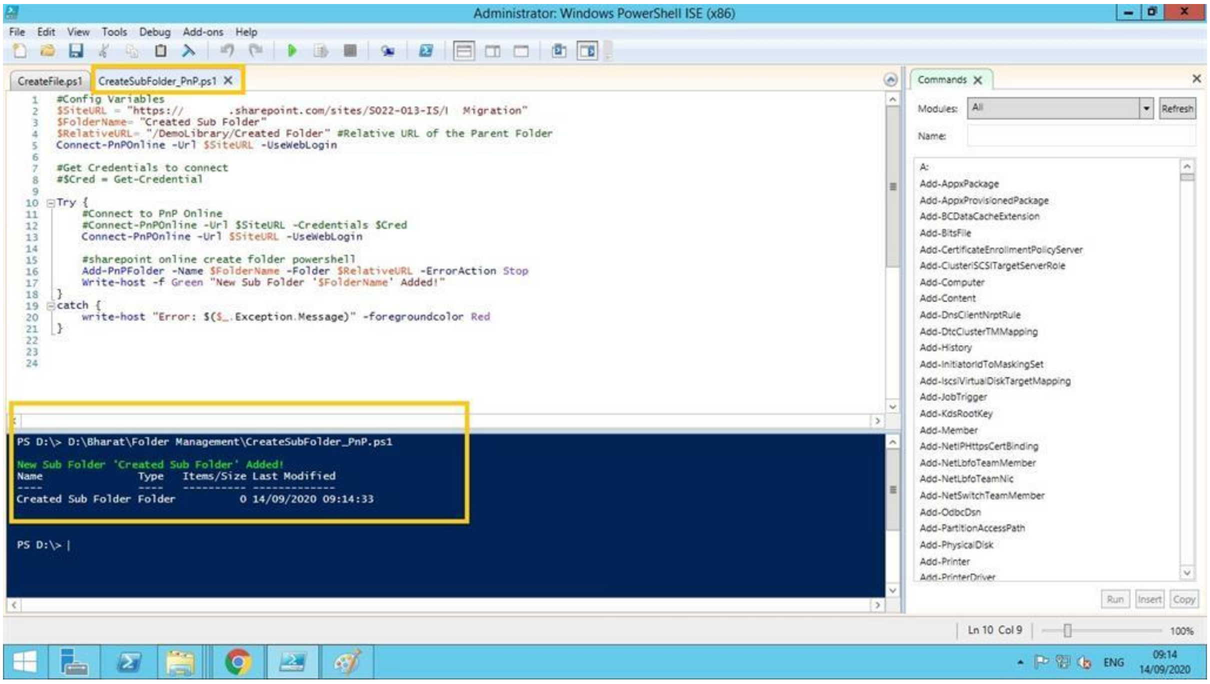
Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "##############################"
$FolderName= "Created Sub Folder"
$RelativeURL= "/DemoLibrary/Created Folder"
Connect-PnPOnline -Url $SiteURL -UseWebLogin
```

```
Try {
    #Connect to PnP Online
    Connect-PnPOnline -Url $SiteURL -UseWebLogin

    #sharepoint online create folder powershell
    Add-PnPFolder -Name $FolderName -Folder $RelativeURL -ErrorAction Stop
    Write-host -f Green "New Sub Folder '$FolderName' Added!"
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

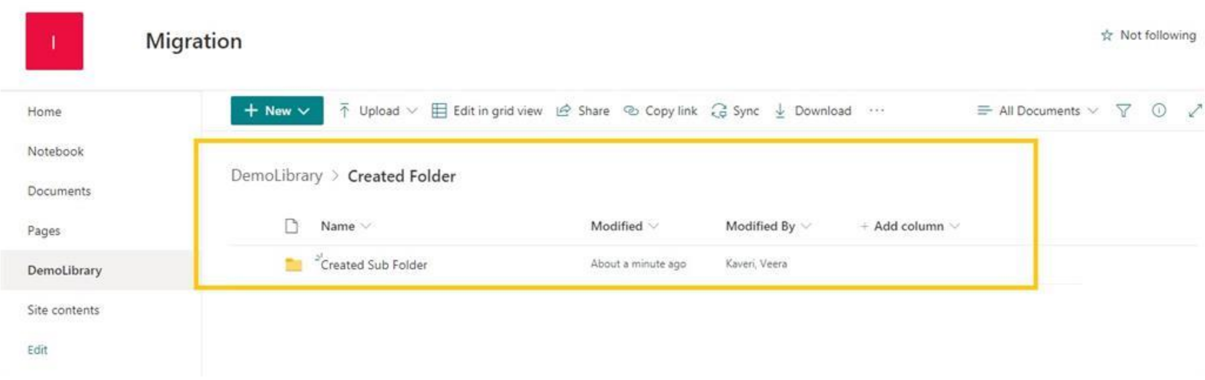
Please configure above highlighted points to have your own folder created via PnP PowerShell programmatically.

Here is the snapshot(s) after a successful running of the script:



```
#Config Variables
$SiteURL = "https://        .sharepoint.com/sites/S022-013-IS/I  Migration"
$FolderName= "Created Sub Folder"
$RelativeURL= "/DemoLibrary/Created Folder" #Relative URL of the Parent Folder
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get Credentials to connect
#$Cred = Get-Credential

Try {
    #Connect to PnP Online
    #Connect-PnPOnline -Url $SiteURL -Credentials $Cred
    Connect-PnPOnline -Url $SiteURL -UseWebLogin

    #sharepoint online create folder powershell
    Add-PnPFolder -Name $FolderName -Folder $RelativeURL -ErrorAction Stop
    Write-host -f Green "New Sub Folder '$FolderName' Added!"
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

```
PS D:\> D:\Bharat\Folder Management\CreateSubFolder_PnP.ps1

New Sub Folder 'Created Sub Folder' Added!
Name               Type   Items/Size Last Modified
----               ----   ---------- -------------
Created Sub Folder Folder          0 14/09/2020 09:14:33


PS D:\> |
```



DemoLibrary > Created Folder

Name	Modified	Modified By	+ Add column
Created Sub Folder	About a minute ago	Kaveri, Veera	

Rename Folder:

Here is a simple way to Rename a Folder on a given SPO library using PnP PowerShell.

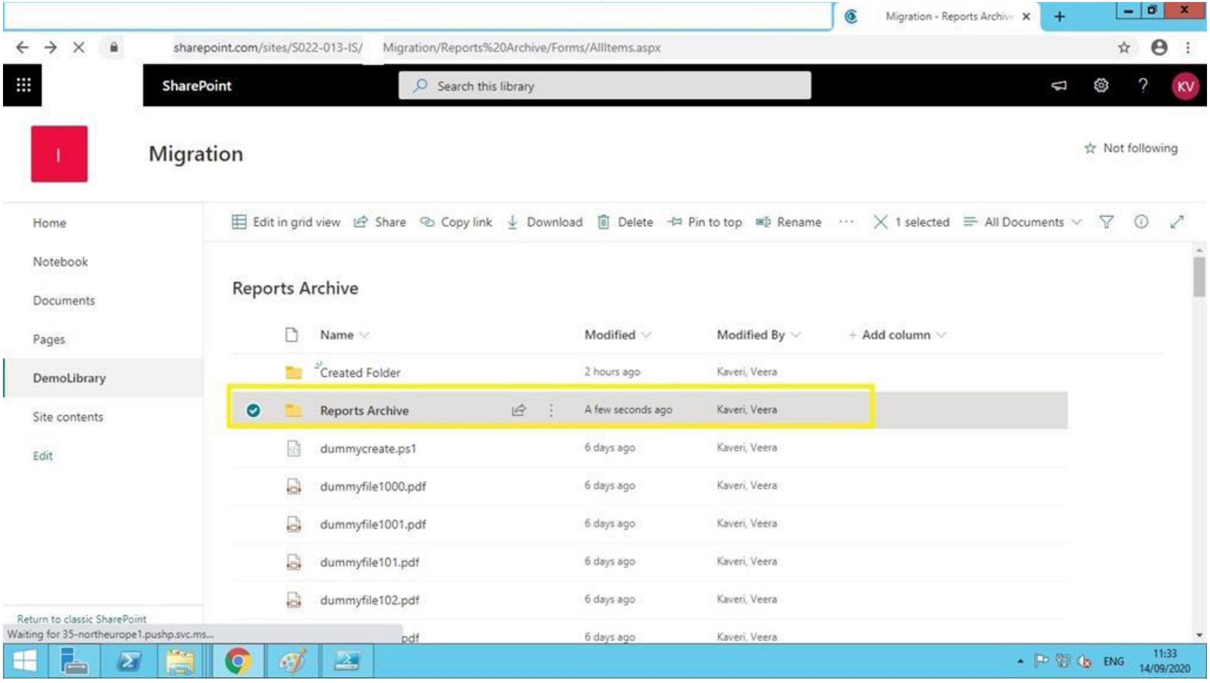
Here's the PnP PowerShell code to execute on a Windows PowerShell.

Document Library Folder Collaboration User Guide

```
#Config Variables
$SiteURL = "###############"
$FolderURL= "Reports Archive/TestABC"

#Site Relative URL
$FolderNewName ="Reports Archive"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Rename the Folder
Rename-PnPFolder -Folder $FolderURL -TargetFolderName $FolderNewName
```

Please configure above highlighted points to have your own folder created via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script:



Reports Archive

Name	Modified	Modified By	Add column
Created Folder	2 hours ago	Kaveri, Veera	
Reports Archive	A few seconds ago	Kaveri, Veera	
dummycreate.ps1	6 days ago	Kaveri, Veera	
dummyfile1000.pdf	6 days ago	Kaveri, Veera	
dummyfile1001.pdf	6 days ago	Kaveri, Veera	
dummyfile101.pdf	6 days ago	Kaveri, Veera	
dummyfile102.pdf	6 days ago	Kaveri, Veera	
pdf	6 days ago	Kaveri, Veera	

Above concept can be used across a Modern as well as Classic SPO Libraries.

Rename Library:

Here is a simple way to Rename a given SPO library using PnP PowerShell.

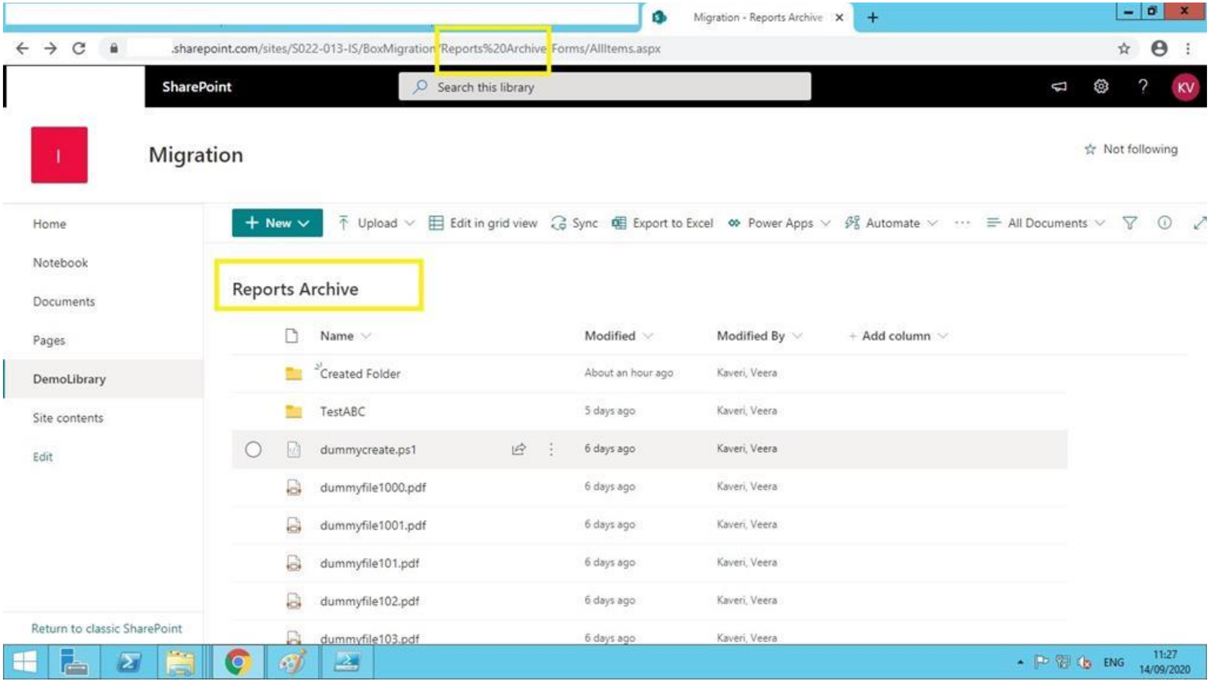
Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "#################"
$LibURL= "Reports Archive/"


#Site Relative URL
$FolderNewName ="Reports Updated"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Rename the Folder
Rename-PnPFolder -Folder $LibURL -TargetFolderName $FolderNewName
```

Document Library Folder Collaboration User Guide

Please configure above highlighted points to have your own folder created via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script:



Reports Archive

Name	Modified	Modified By	+ Add column
Created Folder	About an hour ago	Kaveri, Veera	
TestABC	5 days ago	Kaveri, Veera	
dummycreate.ps1	6 days ago	Kaveri, Veera	
dummyfile1000.pdf	6 days ago	Kaveri, Veera	
dummyfile1001.pdf	6 days ago	Kaveri, Veera	
dummyfile101.pdf	6 days ago	Kaveri, Veera	
dummyfile102.pdf	6 days ago	Kaveri, Veera	
dummyfile103.pdf	6 days ago	Kaveri, Veera	

Above concept can be used across a Modern as well as Classic SPO Libraries.

Rename File:

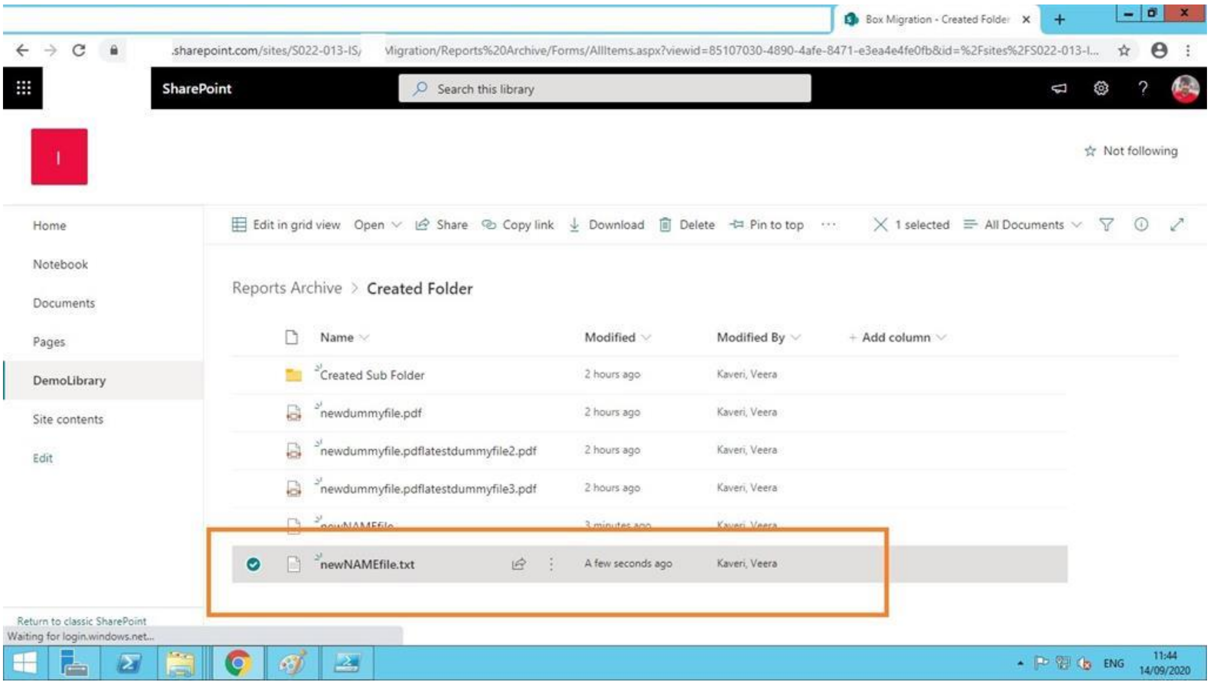
Here is simple way to rename file in a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "######################"
$FileURL= "Reports Archive/Created Folder/test2.txt"
$NewFileName ="UpdatedNAMEfile.txt"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Rename the File
Rename-PnPFile -SiteRelativeUrl $FileURL -TargetFileName $NewFileName -Force
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script:


Box Migration - Created Folder
.sharepoint.com/sites/S022-013-IS/ Migration/Reports%20Archive/Forms/AllItems.aspx?viewid=85107030-4890-4afe-8471-e3ea4e4fe0fb&id=%2Fsites%2FS022-013-I...
SharePoint
Search this library
Not following
Home
Notebook
Documents
Pages
DemoLibrary
Site contents
Edit
Edit in grid view
Open
Share
Copy link
Download
Delete
Pin to top
1 selected
All Documents
Return to classic SharePoint
Waiting for login.windows.net...
ENG
11:44
14/09/2020

Reports Archive > Created Folder

Name	Modified	Modified By	+ Add column
Created Sub Folder	2 hours ago	Kaveri, Veera	
newdummyfile.pdf	2 hours ago	Kaveri, Veera	
newdummyfile.pdflatestdummyfile2.pdf	2 hours ago	Kaveri, Veera	
newdummyfile.pdflatestdummyfile3.pdf	2 hours ago	Kaveri, Veera	
newNAMEfile	3 minutes ago	Kaveri, Veera	
newNAMEfile.txt	A few seconds ago	Kaveri, Veera	

Above concept can be used across a Modern as well as Classic SPO Libraries.

Rename File with Extension:

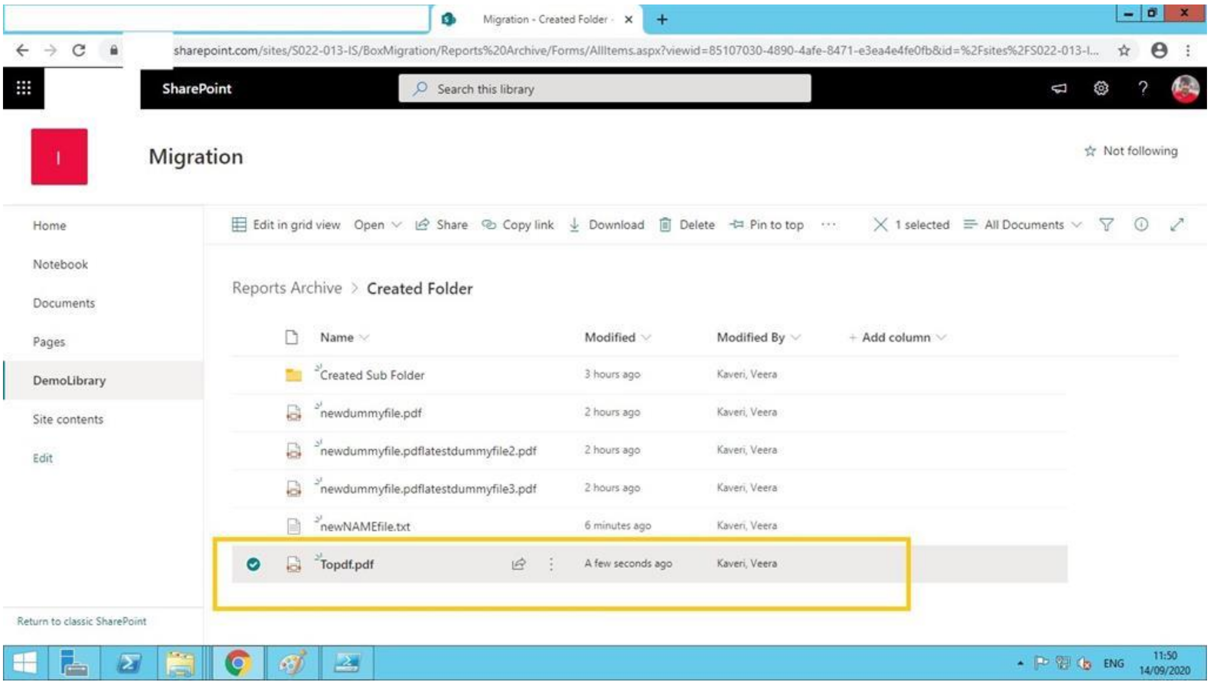
Here is simple way to Rename file along with Extension in a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "###############"
$FileURL= "Reports Archive/Created Folder/newNAMEfile.txt"
#Always include file extension
$NewFileName ="Topdf.pdf"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Rename the File
Rename-PnPFile -SiteRelativeUrl $FileURL -TargetFileName $NewFileName -Force
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script:


Migration - Created Folder -
sharepoint.com/sites/S022-013-IS/BoxMigration/Reports%20Archive/Forms/AllItems.aspx?viewid=85107030-4890-4afe-8471-e3ea4e4fe0fb&id=%2Fsites%2FS022-013-I...
SharePoint
Search this library
Migration
Not following
Home
Notebook
Documents
Pages
DemoLibrary
Site contents
Edit
Return to classic SharePoint
Edit in grid view
Open
Share
Copy link
Download
Delete
Pin to top
1 selected
All Documents
ENG
11:50
14/09/2020

Reports Archive > Created Folder

Name	Modified	Modified By	+ Add column
Created Sub Folder	3 hours ago	Kaveri, Veera	
newdummyfile.pdf	2 hours ago	Kaveri, Veera	
newdummyfile.pdflatestdummyfile2.pdf	2 hours ago	Kaveri, Veera	
newdummyfile.pdflatestdummyfile3.pdf	2 hours ago	Kaveri, Veera	
newNAMEfile.txt	6 minutes ago	Kaveri, Veera	
Topdf.pdf	A few seconds ago	Kaveri, Veera	

Above concept can be used across a Modern as well as Classic SPO Libraries.

Rename Multiple Files:

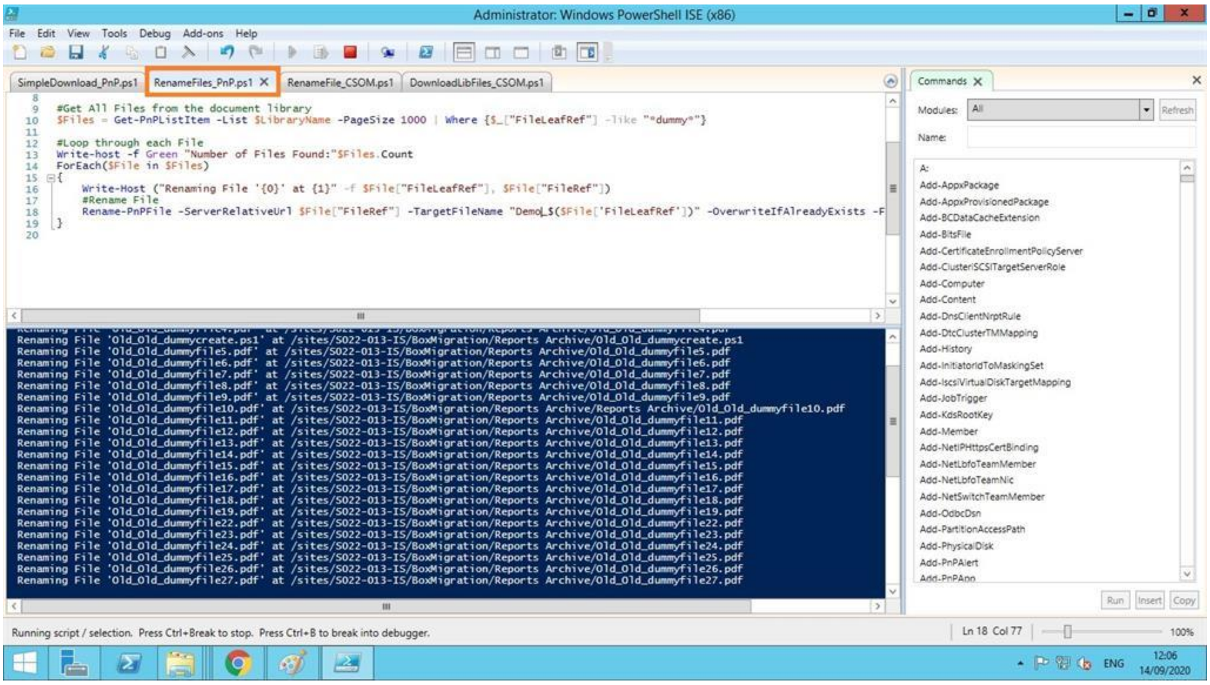
Here is a simple way to rename multiple files in a given SPO library using PnP powershell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "#####################"
$LibraryName = "Reports Archive"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get All Files from the document library
$Files = Get-PnPListItem -List $LibraryName -PageSize 1000 | where
{$_["FileLeafRef"] -like "*dummy*"}

#Loop through each File
Write-host -f Green "Number of Files Found:"$Files.Count
ForEach($File in $Files)
{
    Write-Host ("Renaming File '{0}' at {1}" -f $File["FileLeafRef"],
$File["FileRef"])
    #Rename File
    Rename-PnPFile -ServerRelativeUrl $File["FileRef"] -TargetFileName
"SpecialDemo_$($File['FileLeafRef'])" -OverwriteIfAlreadyExists -Force
}
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

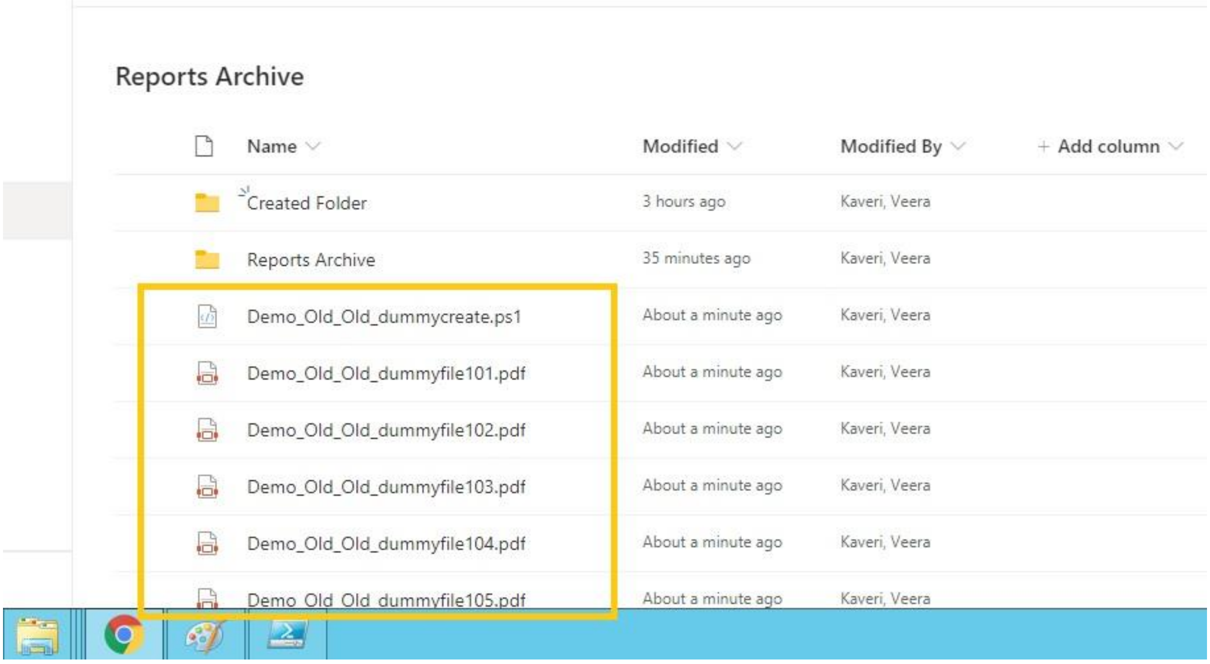
Here is the snapshot after a successful running of the script:



```
#Get All Files from the document library
$Files = Get-PnPListItem -List $LibraryName -PageSize 1000 | Where {$_["FileLeafRef"] -like "*dummy*"}

#Loop through each File
Write-host -f Green "Number of Files Found:"$Files.Count
ForEach($File in $Files)
{
    Write-Host ("Renaming File '{0}' at {1}" -f $File["FileLeafRef"], $File["FileRef"])
    #Rename File
    Rename-PnPFile -ServerRelativeUrl $File["FileRef"] -TargetFileName "Demo_$($File['FileLeafRef'])" -OverwriteIfAlreadyExists -F
}
```

```
Renaming File 'Old_Old_dummycreate.ps1' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummycreate.ps1
Renaming File 'Old_Old_dummyfile5.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile5.pdf
Renaming File 'Old_Old_dummyfile6.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile6.pdf
Renaming File 'Old_Old_dummyfile7.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile7.pdf
Renaming File 'Old_Old_dummyfile8.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile8.pdf
Renaming File 'Old_Old_dummyfile9.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile9.pdf
Renaming File 'Old_Old_dummyfile10.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Reports Archive/Old_Old_dummyfile10.pdf
Renaming File 'Old_Old_dummyfile11.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile11.pdf
Renaming File 'Old_Old_dummyfile12.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile12.pdf
Renaming File 'Old_Old_dummyfile13.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile13.pdf
Renaming File 'Old_Old_dummyfile14.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile14.pdf
Renaming File 'Old_Old_dummyfile15.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile15.pdf
Renaming File 'Old_Old_dummyfile16.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile16.pdf
Renaming File 'Old_Old_dummyfile17.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile17.pdf
Renaming File 'Old_Old_dummyfile18.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile18.pdf
Renaming File 'Old_Old_dummyfile19.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile19.pdf
Renaming File 'Old_Old_dummyfile22.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile22.pdf
Renaming File 'Old_Old_dummyfile23.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile23.pdf
Renaming File 'Old_Old_dummyfile24.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile24.pdf
Renaming File 'Old_Old_dummyfile25.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile25.pdf
Renaming File 'Old_Old_dummyfile26.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile26.pdf
Renaming File 'Old_Old_dummyfile27.pdf' at /sites/S022-013-IS/BoxMigration/Reports Archive/Old_Old_dummyfile27.pdf
```

Running script / selection. Press Ctrl+Break to stop. Press Ctrl+B to break into debugger.



Reports Archive

Name	Modified	Modified By	+ Add column
Created Folder	3 hours ago	Kaveri, Veera	
Reports Archive	35 minutes ago	Kaveri, Veera	
Demo_Old_Old_dummycreate.ps1	About a minute ago	Kaveri, Veera	
Demo_Old_Old_dummyfile101.pdf	About a minute ago	Kaveri, Veera	
Demo_Old_Old_dummyfile102.pdf	About a minute ago	Kaveri, Veera	
Demo_Old_Old_dummyfile103.pdf	About a minute ago	Kaveri, Veera	
Demo_Old_Old_dummyfile104.pdf	About a minute ago	Kaveri, Veera	
Demo_Old_Old_dummyfile105.pdf	About a minute ago	Kaveri, Veera	

Above concept can be used across a Modern as well as Classic SPO Libraries.

Download a File by a Specific Path:

Here is a simple way to download a file by path specification in a given SPO library using PnP PowerShell.

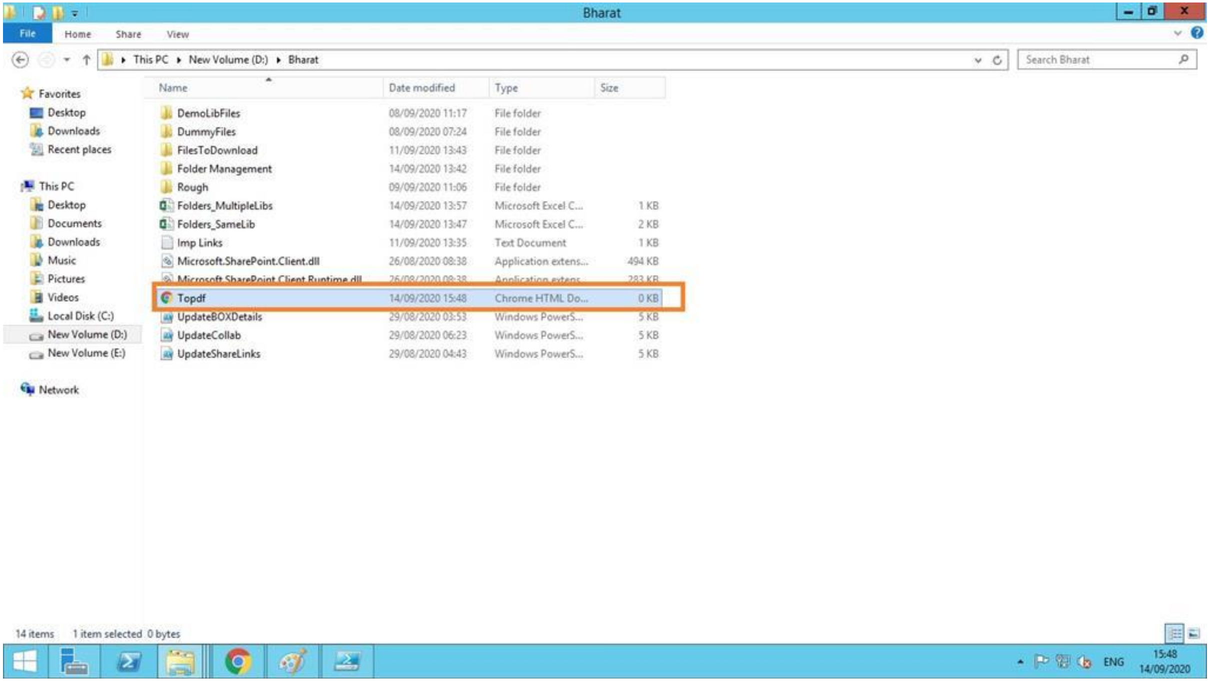
Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "#########################"
```

```
$ListName="Reports Archive"
$FileRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Created
Folder/Topdf.pdf"

$DownloadPath ="D:\Bharat"

Try {
    #Connect to PNP Online
    Connect-PnPOnline -Url $SiteURL -Useweblogin

    #powershell download file from sharepoint online
    Get-PnPFile -Url $FileRelativeURL -Path $DownloadPath -AsFile
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script:



Name	Date modified	Type	Size
DemoLibFiles	08/09/2020 11:17	File folder	
DummyFiles	08/09/2020 07:24	File folder	
FilesToDownload	11/09/2020 13:43	File folder	
Folder Management	14/09/2020 13:42	File folder	
Rough	09/09/2020 11:06	File folder	
Folders_MultipleLibs	14/09/2020 13:57	Microsoft Excel C...	1 KB
Folders_SameLib	14/09/2020 13:47	Microsoft Excel C...	2 KB
Imp Links	11/09/2020 13:35	Text Document	1 KB
Microsoft.SharePoint.Client.dll	26/08/2020 08:38	Application extens...	494 KB
Microsoft.SharePoint.Client.Runtime.dll	26/08/2020 08:38	Application extens...	283 KB
Topdf	14/09/2020 15:48	Chrome HTML Do...	0 KB
UpdateBOXDetails	29/08/2020 03:53	Windows PowerS...	5 KB
UpdateCollab	29/08/2020 06:23	Windows PowerS...	5 KB
UpdateShareLinks	29/08/2020 04:43	Windows PowerS...	5 KB

Download Multiple Files by a Specific Folder:

Here is a simple way to download all files by a specified path folder in a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "########################"
$ListName="Reports Archive"
$FileRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Created
Folder/"

$DownloadPath ="D:\Bharat"

Try {
    #Connect to PNP Online
    Connect-PnPOnline -Url $SiteURL -Useweblogin
    #powershell download file from sharepoint online
    Get-PnPFile -Url $FileRelativeURL -Path $DownloadPath -AsFile
}
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Above concept can be used across a Modern as well as Classic SPO Libraries.

Get Folder Permissions Report:

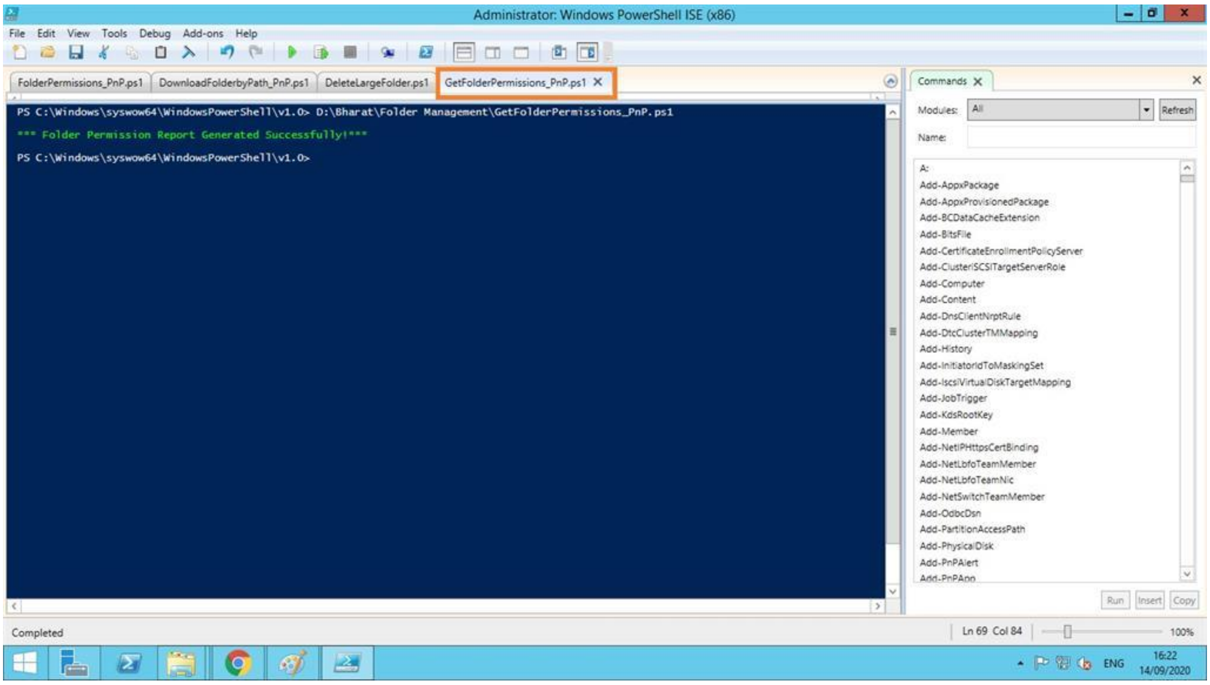
Here is a simple way to get the total Permissions report for a given Folder on a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

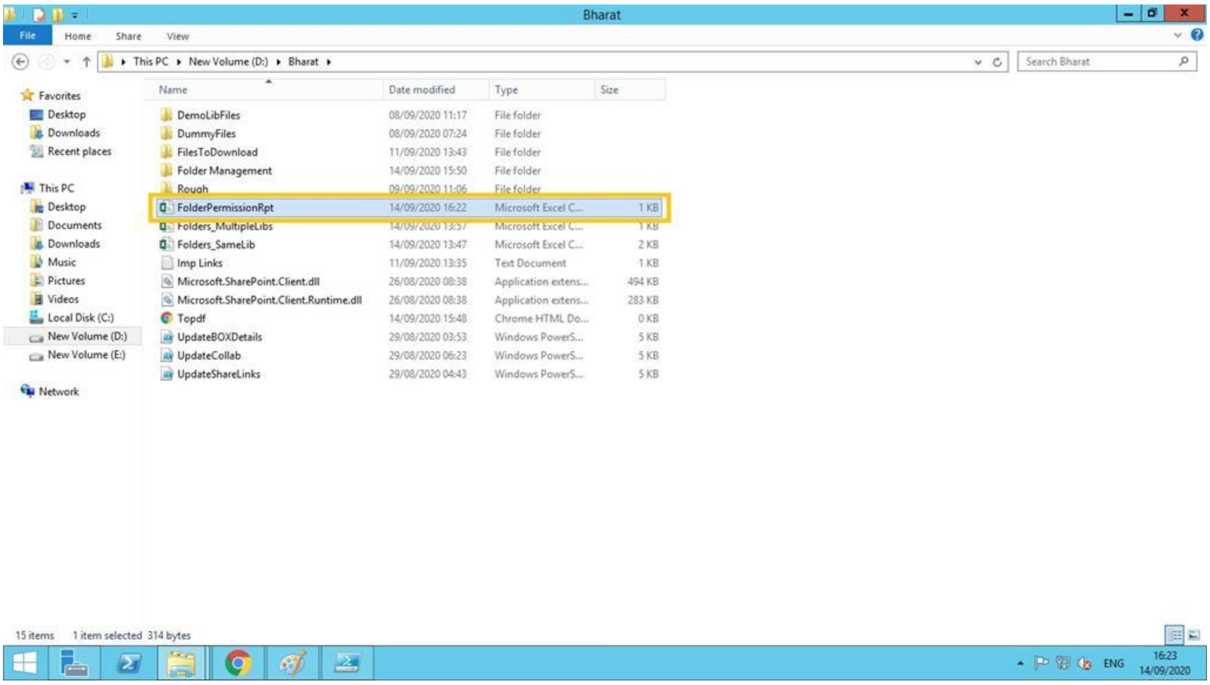
```
Function Get-PnPPermissions([Microsoft.SharePoint.Client.SecurableObject]$Object)
{
    Try {
        #Get permissions assigned to the Folder
        Get-PnPProperty -ClientObject $Object -Property HasUniqueRoleAssignments,
RoleAssignments

        #Check if Object has unique permissions
        $HasUniquePermissions = $Object.HasUniqueRoleAssignments

        #Loop through each permission assigned and extract details
        $PermissionCollection = @()
        Foreach($RoleAssignment in $Object.RoleAssignments)
        {
            #Get the Permission Levels assigned and Member
            Get-PnPProperty -ClientObject $RoleAssignment -Property
RoleDefinitionBindings, Member

            #Get the Principal Type: User, SP Group, AD Group
            $PermissionType = $RoleAssignment.Member.PrincipalType
            $PermissionLevels = $RoleAssignment.RoleDefinitionBindings | Select -
ExpandProperty Name

            #Remove Limited Access
            $PermissionLevels = ($PermissionLevels | Where { $_ -ne "Limited
Access"}) -join ","
            If($PermissionLevels.Length -eq 0) {Continue}

            #Get SharePoint group members
            If($PermissionType -eq "SharePointGroup")
            {
                #Get Group Members
                $GroupMembers = Get-PnPGroupMembers -Identity
$RoleAssignment.Member.LoginName

                #Leave Empty Groups
                If($GroupMembers.count -eq 0){Continue}

                ForEach($User in $GroupMembers)
                {
                    #Add the Data to Object
                    $Permissions = New-Object PSObject
                    $Permissions | Add-Member NoteProperty User($User.Title)
                    $Permissions | Add-Member NoteProperty Type($PermissionType)
                    $Permissions | Add-Member NoteProperty
Permissions($PermissionLevels)
                    $Permissions | Add-Member NoteProperty
GrantedThrough("SharePoint Group: $($RoleAssignment.Member.LoginName)")
                    $PermissionCollection += $Permissions
                }
            }
            Else
            {
                #Add the Data to Object
                $Permissions = New-Object PSObject
                $Permissions | Add-Member NoteProperty
User($RoleAssignment.Member.Title)
                $Permissions | Add-Member NoteProperty Type($PermissionType)
                $Permissions | Add-Member NoteProperty
Permissions($PermissionLevels)
                $Permissions | Add-Member NoteProperty GrantedThrough("Direct
Permissions")
                $PermissionCollection += $Permissions
            }
        }
        #Export Permissions to CSV File
        $PermissionCollection | Export-CSV $ReportFile -NoTypeInformation
        Write-host -f Green "`n*** Folder Permission Report Generated
Successfully!***"
    }
    Catch {
    write-host -f Red "Error Generating Folder Permission Report!"
$_.Exception.Message
    }
}

#region ***Parameters***
$SiteURL="#########################"
$ReportFile="D:\Bharat\FolderPermissionRpt.csv"
$FolderRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Project
Champ"
#endregion

#Connect to the Site collection
Connect-PnPOnline -URL $SiteURL -UseWebLogin

#Get the Folder from URL
$Folder = Get-PnPFolder -Url $FolderRelativeURL

#Call the function to generate permission report
Get-PnPPermissions $Folder.ListItemAllFields
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Here are the snapshots after a successful running of the script:

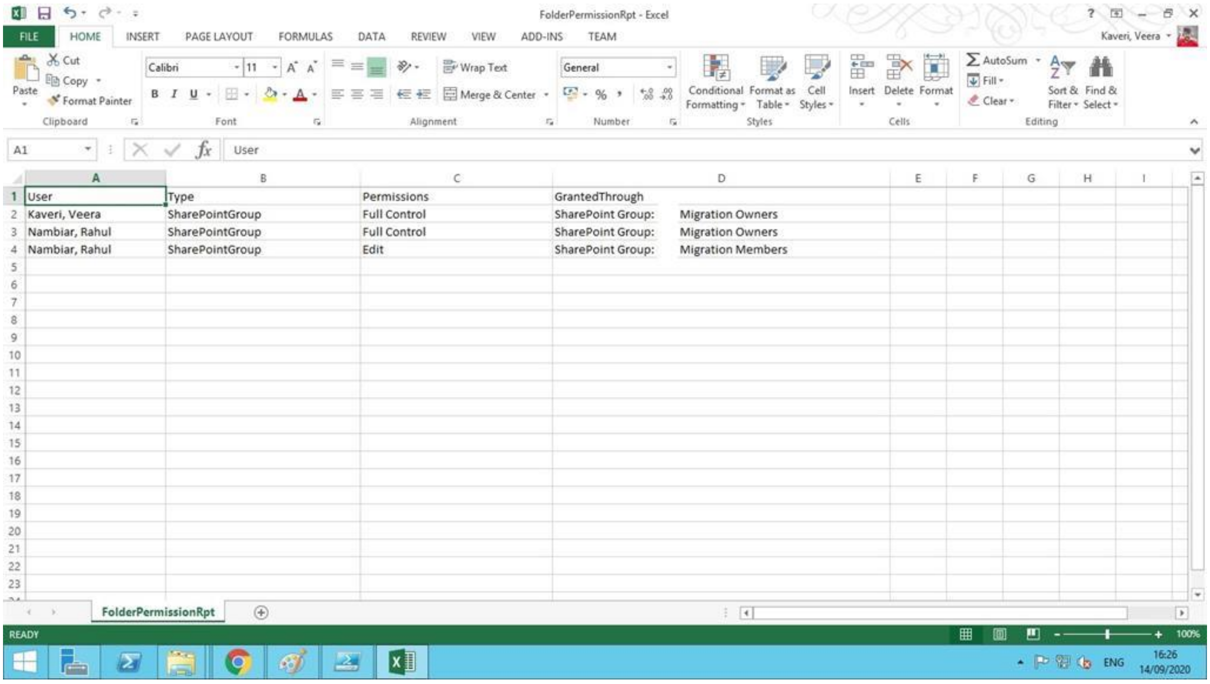

Administrator: Windows PowerShell ISE (x86)
File Edit View Tools Debug Add-ons Help
FolderPermissions_PnP.ps1
DownloadFolderbyPath_PnP.ps1
DeleteLargeFolder.ps1
GetFolderPermissions_PnP.ps1
Commands
Modules: All
Refresh
Name:
Run Insert Copy
Completed
Ln 69 Col 84
100%
ENG
16:22
14/09/2020

```
PS C:\Windows\syswow64\WindowsPowerShell\v1.0> D:\Bharat\Folder Management\GetFolderPermissions_PnP.ps1
*** Folder Permission Report Generated Successfully!***
PS C:\Windows\syswow64\WindowsPowerShell\v1.0>
```



Name	Date modified	Type	Size
DemoLibFiles	08/09/2020 11:17	File folder	
DummyFiles	08/09/2020 07:24	File folder	
FilesToDownload	11/09/2020 13:43	File folder	
Folder Management	14/09/2020 15:50	File folder	
Rough	09/09/2020 11:06	File folder	
FolderPermissionRpt	14/09/2020 16:22	Microsoft Excel C...	1 KB
Folders_MultipleLibs	14/09/2020 13:57	Microsoft Excel C...	1 KB
Folders_SameLib	14/09/2020 13:47	Microsoft Excel C...	2 KB
Imp Links	11/09/2020 13:35	Text Document	1 KB
Microsoft.SharePoint.Client.dll	26/08/2020 08:38	Application extens...	494 KB
Microsoft.SharePoint.Client.Runtime.dll	26/08/2020 08:38	Application extens...	283 KB
Topdf	14/09/2020 15:48	Chrome HTML Do...	0 KB
UpdateBOXDetails	29/08/2020 03:53	Windows PowerS...	5 KB
UpdateCollab	29/08/2020 06:23	Windows PowerS...	5 KB
UpdateShareLinks	29/08/2020 04:43	Windows PowerS...	5 KB

Document Library Folder Collaboration User Guide



User	Type	Permissions	GrantedThrough
Kaveri, Veera	SharePointGroup	Full Control	SharePoint Group: Migration Owners
Nambiar, Rahul	SharePointGroup	Full Control	SharePoint Group: Migration Owners
Nambiar, Rahul	SharePointGroup	Edit	SharePoint Group: Migration Members

Assign Folder Permissions:

Here is a simple way to assign a Folder permissions in a given SPO library using PnP PowerShell.

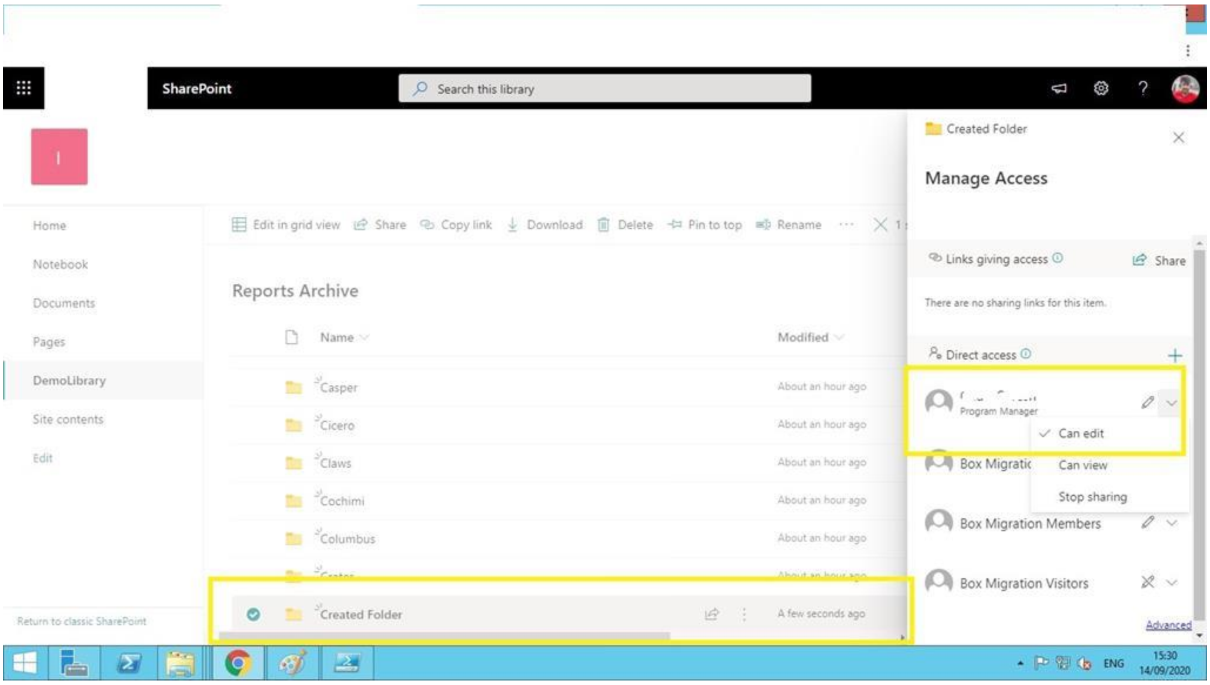
Here's the PnP PowerShell code to execute on a windows PowerShell.

```
#Config Variables
$SiteURL = "###################"
$ListName="Reports Archive"
$FolderServerRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Created
Folder"
$UserAccount = "suresh.gade@sony.com"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -Useweblogin

#Get the Folder from URL
$Folder = Get-PnPFolder -Url $FolderServerRelativeURL

#Set Permission to Folder
Set-PnPListItemPermission -List $ListName -Identity $Folder.ListItemAllFields -User
$UserAccount -AddRole 'Contribute'
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script:

Document Library Folder Collaboration User Guide



Assign Folder Permissions via Restrictions:

Here is a simple way to assign a Folder permissions via restrictions in a given SPO library using PnP PowerShell.

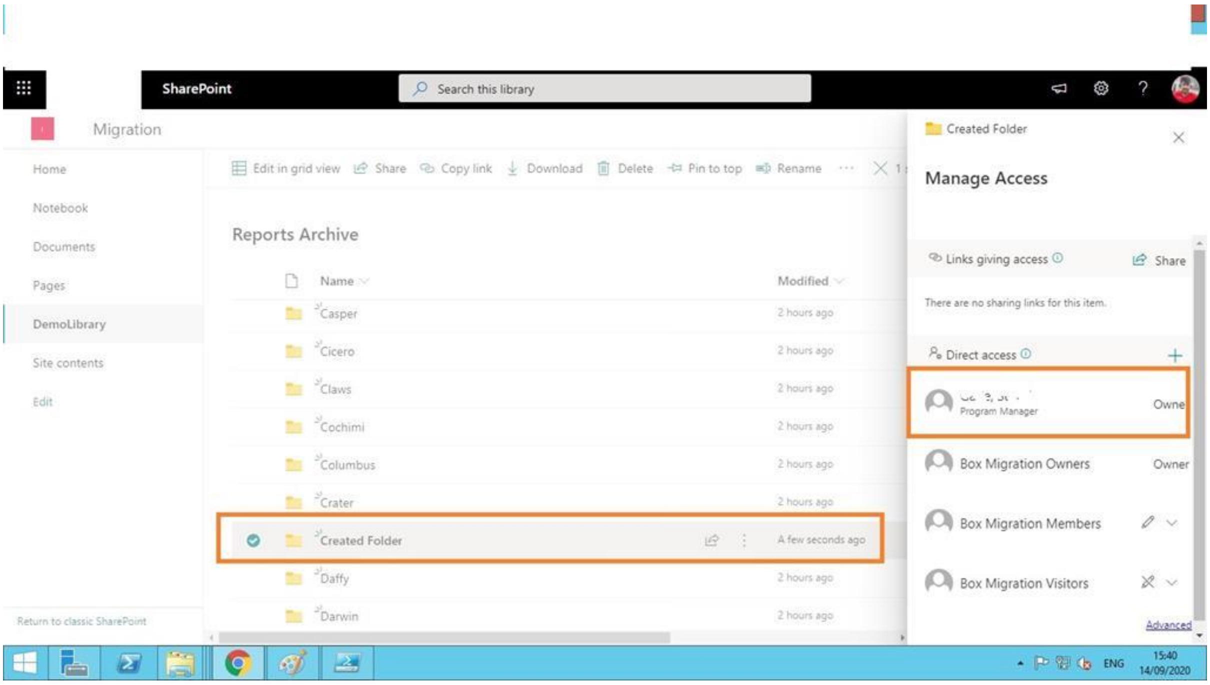
Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "##########################"
$ListName="Reports Archive"
$FolderServerRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Created Folder"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Set folder permissions - Add User
Set-PnPfolderPermission -List $ListName -identity $FolderServerRelativeURL -User "suresh.gade@sony.com" -AddRole "Full Control"
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Here is the snapshot after a successful running of the script:

Document Library Folder Collaboration User Guide



Un Assign Folder Permissions via Restrictions:

Here is a simple way to unassign/remove Folder permissions via restrictions in a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "#####################"
$ListName="Reports Archive"
$FolderServerRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Created
Folder"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#To remove user, use:- -RemoveRole
Set-PnPfolderPermission -List $ListName -identity $FolderServerRelativeURL -User
"suresh.gade@sony.com" -RemoveRole "Full Control"
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

You can check manually by going to that respective folder if the permissions have been removed or not.

Assign Folder Permissions via SP Group:

Here is a simple way to assign a Folder permissions via a SP group in a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "#################"
$ListName="Reports Archive"
$FolderServerRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Created
Folder"

#Connect to PnP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Grant folder permissions to SharePoint Group which should exist!
Set-PnPfolderPermission -List $ListName -identity $FolderServerRelativeURL -AddRole
"Read" -Group "Box Migration Members"
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Prerequisites:

Above mentioned SP group is expected to exist before either created by default or to be created separately in order to configure in the above script.

Above mentioned Folder is also expected to exist before or need to be created separately in order to configure in the above script.

Delete a Large Folder:

Here is a simple way to delete a Folder/Large Folder in a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables
$SiteURL = "################"
$ListName="Reports Archive"
$FolderServerRelativeURL = "/sites/S022-013-IS/BoxMigration/Reports Archive/Created
Folder"

Try {
    #Connect to PnP Online
    Connect-PnPOnline -Url $SiteURL -UseWebLogin

    #Get All Items from Folder in Batch
    $ListItems = Get-PnPListItem -List $ListName -FolderServerRelativeUrl
$FolderServerRelativeURL -PageSize 2000 | Sort-Object ID -Descending

    #Powershell to delete all files from folder
    ForEach ($Item in $ListItems)
    {
        Remove-PnPListItem -List $ListName -Identity $Item.Id -Recycle -Force
        Write-host "Removed File:"$Item.FieldValues.FileRef
    }
}
Catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

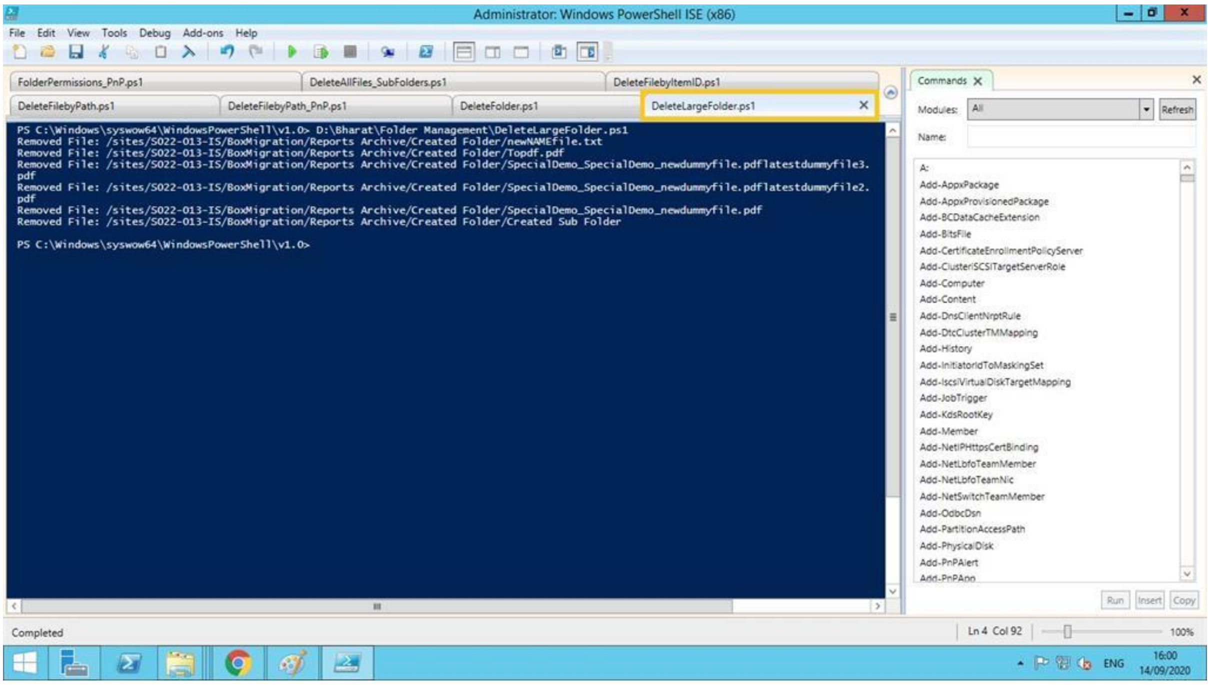
Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Document Library Folder Collaboration User Guide

Prerequisites:

Above mentioned Folder is also expected to exist before or need to be created separately in order to configure in the above script. Above value 2000 is mentioned for removing/deleting a large library & set it to 1000 for a normal library.

Here is the output after running the above script using your Windows PowerShell ISE tool.



```
PS C:\Windows\syswow64\WindowsPowerShell\v1.0> D:\Bharat\Folder Management\DeleteLargeFolder.ps1
Removed File: /sites/S022-013-IS/BoxMigration/Reports Archive/Created Folder/newNAMEfile.txt
Removed File: /sites/S022-013-IS/BoxMigration/Reports Archive/Created Folder/Topdf.pdf
Removed File: /sites/S022-013-IS/BoxMigration/Reports Archive/Created Folder/SpecialDemo_SpecialDemo_newdummyfile.pdflatestdummyfile3.
pdf
Removed File: /sites/S022-013-IS/BoxMigration/Reports Archive/Created Folder/SpecialDemo_SpecialDemo_newdummyfile.pdflatestdummyfile2.
pdf
Removed File: /sites/S022-013-IS/BoxMigration/Reports Archive/Created Folder/SpecialDemo_SpecialDemo_newdummyfile.pdf
Removed File: /sites/S022-013-IS/BoxMigration/Reports Archive/Created Folder/Created Sub Folder

PS C:\Windows\syswow64\WindowsPowerShell\v1.0>
```

Delete a File by it’s Path:

Here is a simple way to delete a File by it's path on a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Config Variables

$SiteURL = "###############"

$FileRelativeURL ="/sites/S022-013-IS/BoxMigration/Reports
Archive/SpecialDemo_SpecialDemo_Demo_dummyfile704.pdf"

Try {
    #Connect to PNP Online
    Connect-PnPOnline -Url $SiteURL -UseWebLogin

    #Try to Get File
    $File = Get-PnPFile -Url $FileRelativeURL -ErrorAction SilentlyContinue
    If($File)
    {
        #Delete the File
        Remove-PnPFile -ServerRelativeUrl $FileRelativeURL -Force
        Write-Host -f Green "File $FileRelativeURL deleted successfully!"
    }
    Else
    {
        Write-Host -f Yellow "Could not Find File at $FileRelativeURL"
    }
}
```

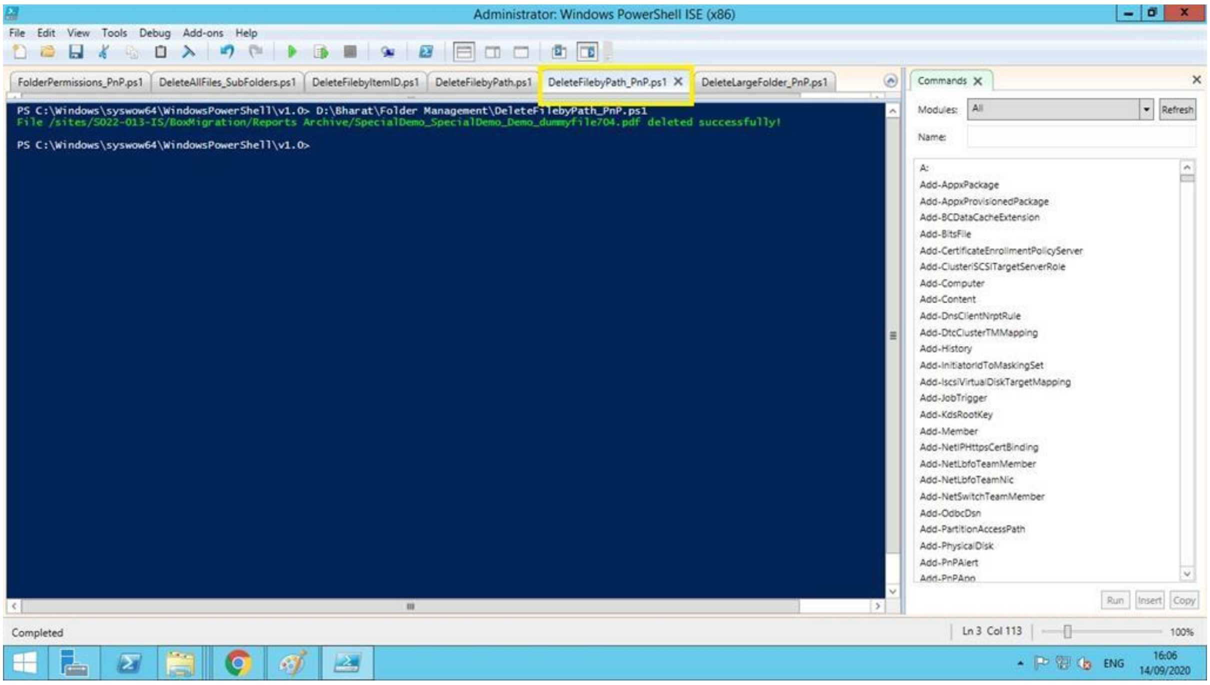
```
catch {
    write-host "Error: $($_.Exception.Message)" -foregroundcolor Red
}
```

Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Prerequisites:

Above mentioned Folder/File/File Path is also expected to exist before or need to be created separately in order to configure in the above script.

Output: Here is the output after running the above script using your Windows PowerShell ISE tool.


Administrator: Windows PowerShell ISE (x86)
File Edit View Tools Debug Add-ons Help
FolderPermissions_PnP.ps1
DeleteAllFiles_SubFolders.ps1
DeleteFilebyItemID.ps1
DeleteFilebyPath.ps1
DeleteFilebyPath_PnP.ps1
DeleteLargeFolder_PnP.ps1
Commands
Modules: All
Refresh
Name:
Run
Insert
Copy
Completed
Ln 3 Col 113
100%
ENG
16:06
14/09/2020

```
PS C:\Windows\syswow64\WindowsPowerShell\v1.0> D:\Bharat\Folder Management\DeleteFilebyPath_PnP.ps1
File /sites/SO22-013-IS/BoxMigration/Reports Archive/SpecialDemo_SpecialDemo_Demo_dummyfile704.pdf deleted successfully!

PS C:\Windows\syswow64\WindowsPowerShell\v1.0>
```

Assign Multi Folder Permissions via CSV:

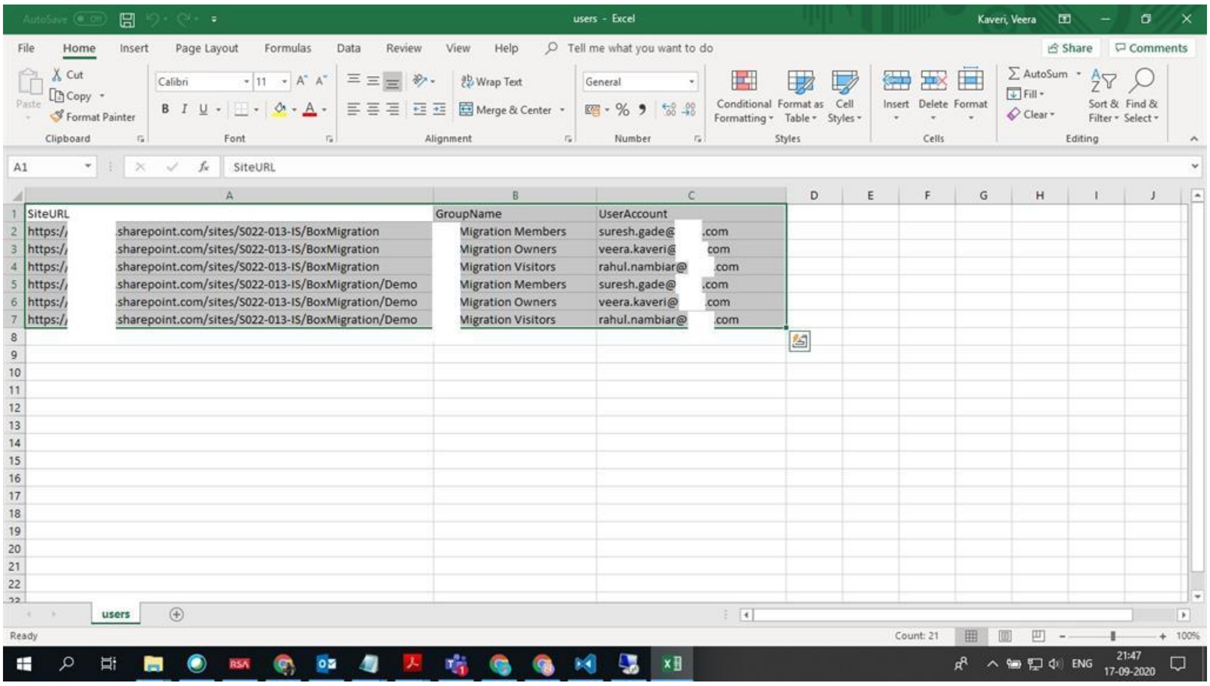
Here is a simple way to assign multiple Folder permissions via a CSV file in a given SPO library using PnP PowerShell.

Here's the PnP PowerShell code to execute on a Windows PowerShell.

```
#Variables
$CSVPath   ="D:\Bharat\users.csv"

#Get data from CSV
$CSVData = Import-Csv $CSVPath

#Iterate through each row in CSV
ForEach($Row in $CSVData)
{
    Try {
        #Connect to SharePoint Online Site
        Write-host "Connecting to Site: "$Row.SiteURL
        Connect-PnPOnline -Url $Row.SiteURL -UseWebLogin

        #Get the group
        $Group = Get-PnPGroup -Identity $Row.GroupName

        #Add Each user to the Group
        Add-PnPUserToGroup -LoginName $Row.UserAccount -Identity $Group
        Write-host -f Green "`tAdded User $($Row.UserAccount) to $($Group.Title)"
        DisConnect-PnPOnline
    }
    Catch {
        write-host -f Red "Error Adding User to Group:" $_.Exception.Message
    }
}
```

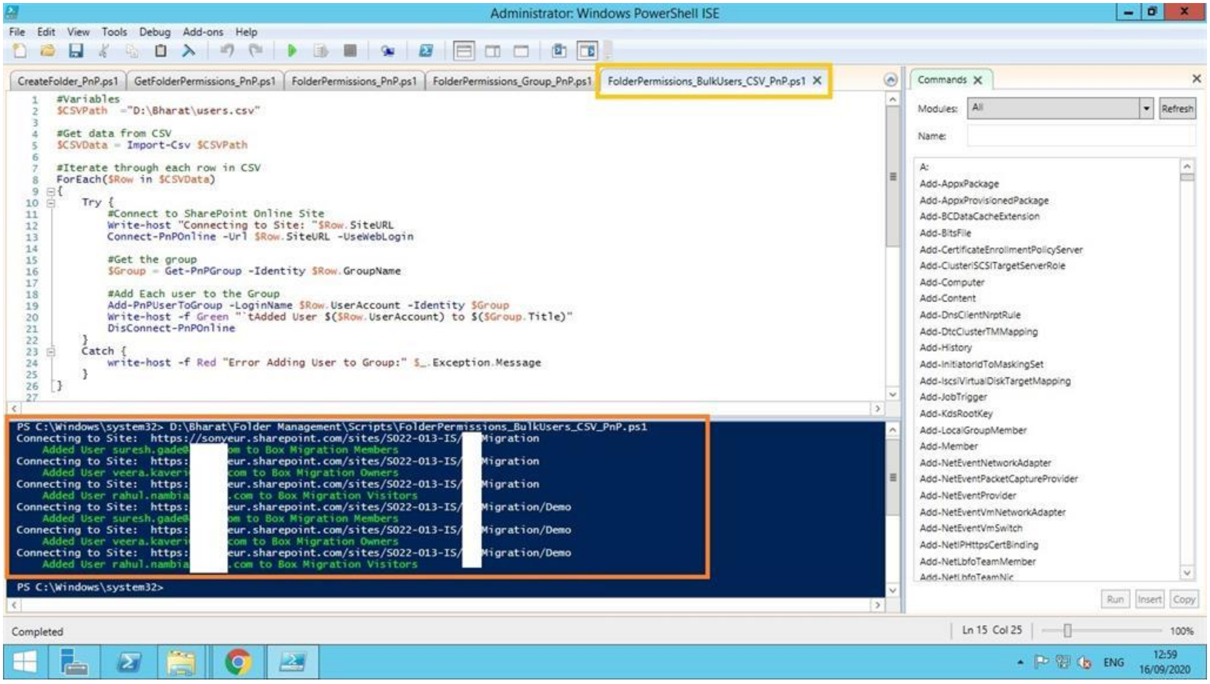
Please configure above highlighted points to have above requirement implemented via PnP PowerShell programmatically.

Users csv file should look like this:



SiteURL	GroupName	UserAccount
https:/[redacted].sharepoint.com/sites/S022-013-IS/BoxMigration	[redacted]Migration Members	suresh.gade@[redacted].com
https:/[redacted].sharepoint.com/sites/S022-013-IS/BoxMigration	[redacted]Migration Owners	veera.kaveri@[redacted]com
https:/[redacted].sharepoint.com/sites/S022-013-IS/BoxMigration	[redacted]Migration Visitors	rahul.nambiar@[redacted].com
https:/[redacted].sharepoint.com/sites/S022-013-IS/BoxMigration/Demo	[redacted]Migration Members	suresh.gade@[redacted].com
https:/[redacted].sharepoint.com/sites/S022-013-IS/BoxMigration/Demo	[redacted]Migration Owners	veera.kaveri@[redacted].com
https:/[redacted].sharepoint.com/sites/S022-013-IS/BoxMigration/Demo	[redacted]Migration Visitors	rahul.nambiar@[redacted].com

Here is the snapshot after a successful running of the script:


Administrator: Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
CreateFolder_PnP.ps1
GetFolderPermissions_PnP.ps1
FolderPermissions_PnP.ps1
FolderPermissions_Group_PnP.ps1
FolderPermissions_BulkUsers_CSV_PnP.ps1
Commands
Modules: All
Refresh
Name:
A:
Add-AppxPackage
Add-AppxProvisionedPackage
Add-BCDataCacheExtension
Add-BitsFile
Add-CertificateEnrollmentPolicyServer
Add-ClusteriSCSITargetServerRole
Add-Computer
Add-Content
Add-DnsClientNrptRule
Add-DtcClusterTMMapping
Add-History
Add-InitiatorIdToMaskingSet
Add-IscsiVirtualDiskTargetMapping
Add-JobTrigger
Add-KdsRootKey
Add-LocalGroupMember
Add-Member
Add-NetEventNetworkAdapter
Add-NetEventPacketCaptureProvider
Add-NetEventProvider
Add-NetEventVmNetworkAdapter
Add-NetEventVmSwitch
Add-NetIPHttpsCertBinding
Add-NetLbfoTeamMember
Add-NetLbfoTeamNic
Run Insert Copy
Completed
Ln 15 Col 25
100%
ENG
12:59
16/09/2020

```
#Variables
$CSVPath  ="D:\Bharat\users.csv"

#Get data from CSV
$CSVData = Import-Csv $CSVPath

#Iterate through each row in CSV
ForEach($Row in $CSVData)
{
    Try {
        #Connect to SharePoint Online Site
        Write-host "Connecting to Site: "$Row.SiteURL
        Connect-PnPOnline -Url $Row.SiteURL -UseWebLogin

        #Get the group
        $Group = Get-PnPGroup -Identity $Row.GroupName

        #Add Each user to the Group
        Add-PnPUserToGroup -LoginName $Row.UserAccount -Identity $Group
        Write-host -f Green "`tAdded User $($Row.UserAccount) to $($Group.Title)"
        DisConnect-PnPOnline
    }
    Catch {
        write-host -f Red "Error Adding User to Group:" $_.Exception.Message
    }
}
```

```
PS C:\Windows\system32> D:\Bharat\Folder Management\Scripts\FolderPermissions_BulkUsers_CSV_PnP.ps1
Connecting to Site:  https://sonyeur.sharepoint.com/sites/S022-013-IS/[redacted]Migration
    Added User suresh.gade@[redacted]om to Box Migration Members
Connecting to Site:  https:[redacted]eur.sharepoint.com/sites/S022-013-IS/[redacted]Migration
    Added User veera.kaveri[redacted]com to Box Migration Owners
Connecting to Site:  https:[redacted]eur.sharepoint.com/sites/S022-013-IS/[redacted]Migration
    Added User rahul.nambia[redacted].com to Box Migration Visitors
Connecting to Site:  https:[redacted]eur.sharepoint.com/sites/S022-013-IS/[redacted]Migration/Demo
    Added User suresh.gade@[redacted]om to Box Migration Members
Connecting to Site:  https:[redacted]eur.sharepoint.com/sites/S022-013-IS/[redacted]Migration/Demo
    Added User veera.kaveri[redacted]com to Box Migration Owners
Connecting to Site:  https:[redacted]eur.sharepoint.com/sites/S022-013-IS/[redacted]Migration/Demo
    Added User rahul.nambia[redacted].com to Box Migration Visitors
PS C:\Windows\system32>
```

Simple Upload:

Let's try to upload all the files present from your local desktop path to a SharePoint online library.

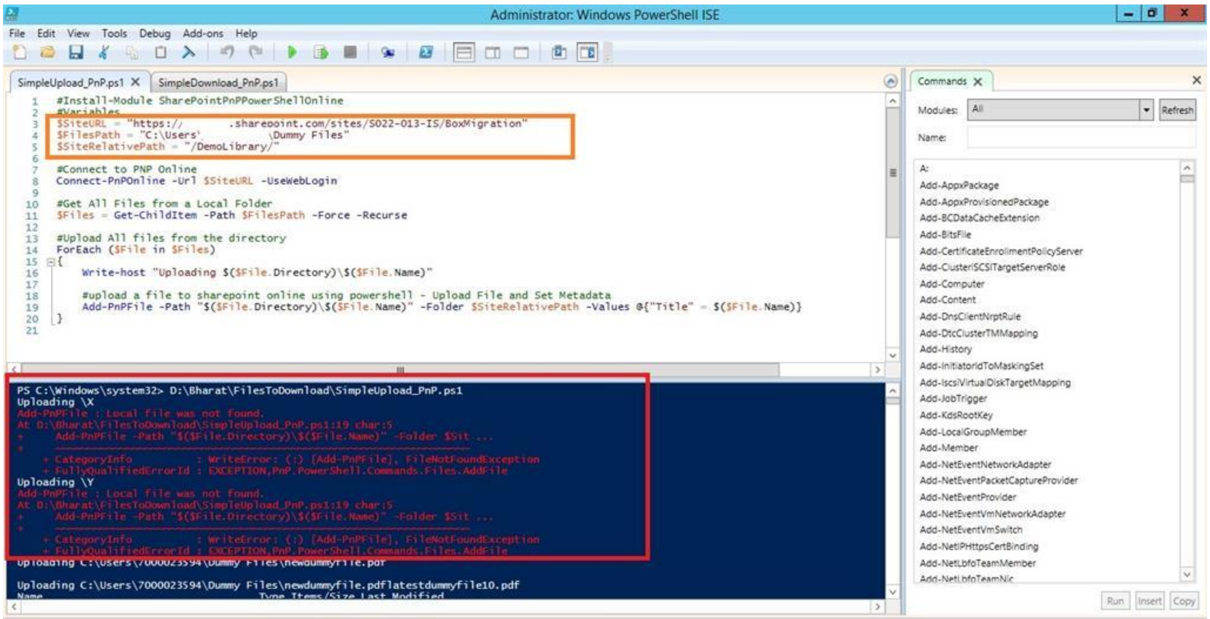
Here is uploading the PnP script to run. You need to do the configurations accordingly.

```
$SiteURL = "#############################"
$FilesPath = "C:\Users\7000023594\Dummy Files2"
$SiteRelativePath = "/Reports Archive"

#Connect to PNP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get All Files from a Local Folder
$Files = Get-ChildItem -Path $FilesPath -Force -Recurse

#Upload All files from the directory
ForEach ($File in $Files)
{
    Write-host "Uploading $($File.Directory)\$($File.Name)"

    #upload a file to sharepoint online using powershell - Upload File and Set
Metadata
    Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $SiteRelativePath
-Values @{"Title" = $($File.Name)}
}
```

Note

It can only upload files but not folders from the given folder path, as explained in the above script.

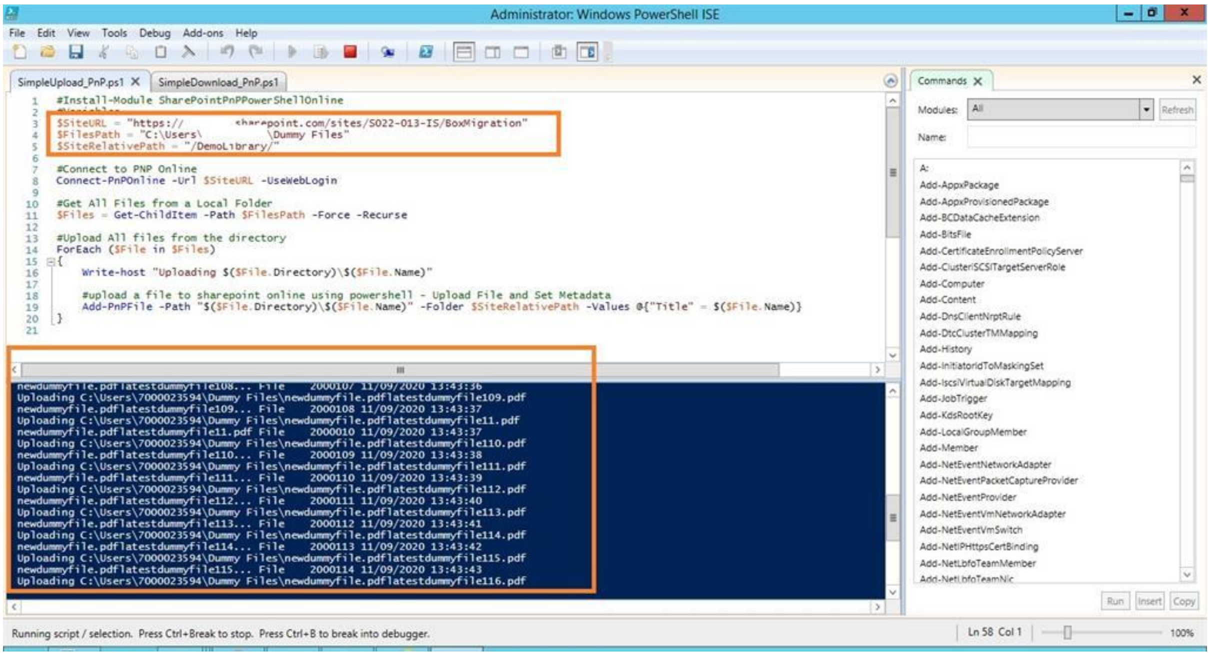
Document Library Folder Collaboration User Guide



```
#Install-Module SharePointPnPPowerShellOnline
#Variables
$SiteURL = "https://        .sharepoint.com/sites/S022-013-IS/BoxMigration"
$FilesPath = "C:\Users\          \Dummy Files"
$SiteRelativePath = "/DemoLibrary/"

#Connect to PNP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get All Files from a Local Folder
$Files = Get-ChildItem -Path $FilesPath -Force -Recurse

#Upload All files from the directory
ForEach ($File in $Files)
{
    Write-host "Uploading $($File.Directory)\$($File.Name)"

    #upload a file to sharepoint online using powershell - Upload File and Set Metadata
    Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $SiteRelativePath -Values @{"Title" = $($File.Name)}
}
```

```
PS C:\Windows\system32> D:\Bharat\FilesToDownload\SimpleUpload_PnP.ps1
Uploading \X
Add-PnPFile : Local file was not found.
At D:\Bharat\FilesToDownload\SimpleUpload_PnP.ps1:19 char:5
+     Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $Sit ...
+     ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
    + CategoryInfo          : WriteError: (:) [Add-PnPFile], FileNotFoundException
    + FullyQualifiedErrorId : EXCEPTION,PnP.PowerShell.Commands.Files.AddFile
Uploading \Y
Add-PnPFile : Local file was not found.
At D:\Bharat\FilesToDownload\SimpleUpload_PnP.ps1:19 char:5
+     Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $Sit ...
+     ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
    + CategoryInfo          : WriteError: (:) [Add-PnPFile], FileNotFoundException
    + FullyQualifiedErrorId : EXCEPTION,PnP.PowerShell.Commands.Files.AddFile
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdf

Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile10.pdf
Name                           Type Items/Size Last Modified
```

Here is the output, as shown below.

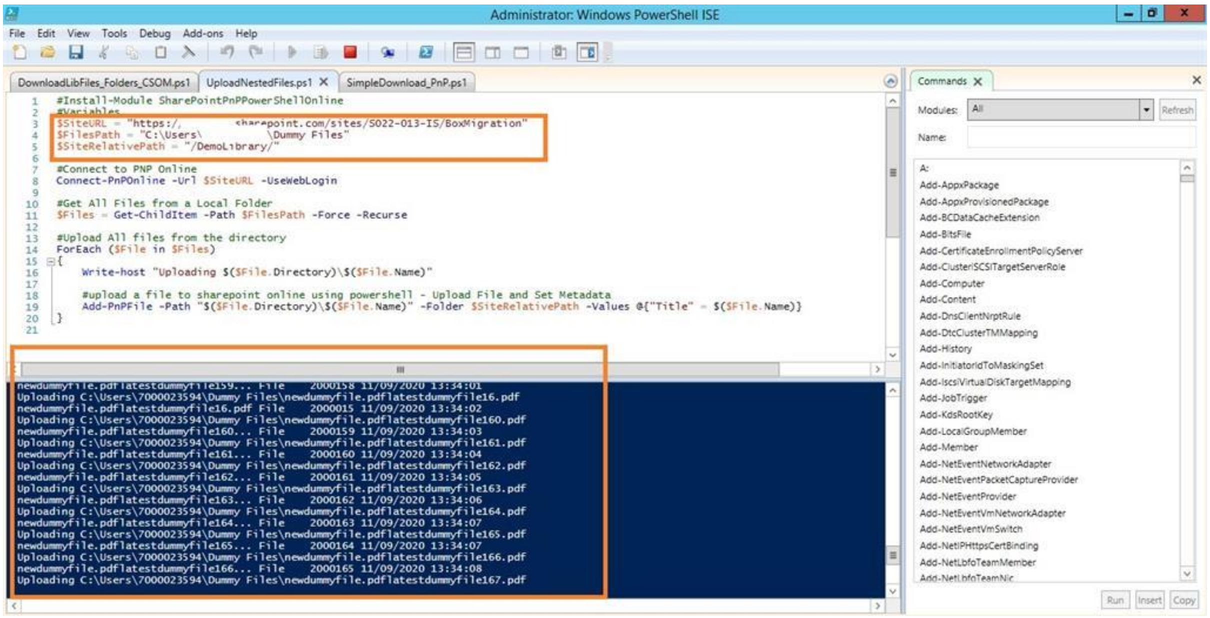


```
#Install-Module SharePointPnPPowerShellOnline
#Variables
$SiteURL = "https://        .sharepoint.com/sites/S022-013-IS/BoxMigration"
$FilesPath = "C:\Users\          \Dummy Files"
$SiteRelativePath = "/DemoLibrary/"

#Connect to PNP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get All Files from a Local Folder
$Files = Get-ChildItem -Path $FilesPath -Force -Recurse

#Upload All files from the directory
ForEach ($File in $Files)
{
    Write-host "Uploading $($File.Directory)\$($File.Name)"

    #upload a file to sharepoint online using powershell - Upload File and Set Metadata
    Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $SiteRelativePath -Values @{"Title" = $($File.Name)}
}
```

```
newdummyfile.pdflatestdummyfile108... File    2000107 11/09/2020 13:43:36
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile109.pdf
newdummyfile.pdflatestdummyfile109... File    2000108 11/09/2020 13:43:37
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile11.pdf
newdummyfile.pdflatestdummyfile11.pdf File    2000010 11/09/2020 13:43:37
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile110.pdf
newdummyfile.pdflatestdummyfile110... File    2000109 11/09/2020 13:43:38
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile111.pdf
newdummyfile.pdflatestdummyfile111... File    2000110 11/09/2020 13:43:39
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile112.pdf
newdummyfile.pdflatestdummyfile112... File    2000111 11/09/2020 13:43:40
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile113.pdf
newdummyfile.pdflatestdummyfile113... File    2000112 11/09/2020 13:43:41
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile114.pdf
newdummyfile.pdflatestdummyfile114... File    2000113 11/09/2020 13:43:42
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile115.pdf
newdummyfile.pdflatestdummyfile115... File    2000114 11/09/2020 13:43:43
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile116.pdf
```

Running script / selection. Press Ctrl+Break to stop. Press Ctrl+B to break into debugger.

Document Library Folder Collaboration User Guide


Administrator: Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
DownloadLibFiles_Folders_CSOM.ps1
UploadNestedFiles.ps1
SimpleDownload_PnP.ps1
Commands
Modules: All
Refresh
Name:
A:
Add-AppxPackage
Add-AppxProvisionedPackage
Add-BCDataCacheExtension
Add-BitsFile
Add-CertificateEnrollmentPolicyServer
Add-ClusterSCSITargetServerRole
Add-Computer
Add-Content
Add-DnsClientNrptRule
Add-DtcClusterTMMapping
Add-History
Add-InitiatorIdToMaskingSet
Add-IscsiVirtualDiskTargetMapping
Add-JobTrigger
Add-KdsRootKey
Add-LocalGroupMember
Add-Member
Add-NetEventNetworkAdapter
Add-NetEventPacketCaptureProvider
Add-NetEventProvider
Add-NetEventVmNetworkAdapter
Add-NetEventVmSwitch
Add-NetIPHttpsCertBinding
Add-NetLbfoTeamMember
Add-NetLbfoTeamNic
Run
Insert
Copy

```
#Install-Module SharePointPnPPowerShellOnline
#Variables
$SiteURL = "https:/,        sharepoint.com/sites/S022-013-IS/BoxMigration"
$FilesPath = "C:\Users\          \Dummy Files"
$SiteRelativePath = "/DemoLibrary/"

#Connect to PNP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get All Files from a Local Folder
$Files = Get-ChildItem -Path $FilesPath -Force -Recurse

#Upload All files from the directory
ForEach ($File in $Files)
{
    Write-host "Uploading $($File.Directory)\$($File.Name)"

    #upload a file to sharepoint online using powershell - Upload File and Set Metadata
    Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $SiteRelativePath -Values @{"Title" = $($File.Name)}
}
```

```
newdummyfile.pdflatestdummyfile159... File    2000158 11/09/2020 13:34:01
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile16.pdf
newdummyfile.pdflatestdummyfile16.pdf File    2000015 11/09/2020 13:34:02
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile160.pdf
newdummyfile.pdflatestdummyfile160... File    2000159 11/09/2020 13:34:03
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile161.pdf
newdummyfile.pdflatestdummyfile161... File    2000160 11/09/2020 13:34:04
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile162.pdf
newdummyfile.pdflatestdummyfile162... File    2000161 11/09/2020 13:34:05
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile163.pdf
newdummyfile.pdflatestdummyfile163... File    2000162 11/09/2020 13:34:06
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile164.pdf
newdummyfile.pdflatestdummyfile164... File    2000163 11/09/2020 13:34:07
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile165.pdf
newdummyfile.pdflatestdummyfile165... File    2000164 11/09/2020 13:34:07
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile166.pdf
newdummyfile.pdflatestdummyfile166... File    2000165 11/09/2020 13:34:08
Uploading C:\Users\7000023594\Dummy Files\newdummyfile.pdflatestdummyfile167.pdf
```

Upload Speed for 1k Dummy Files: 1.86 GB/19 Mins = 0.09 GB/Min

I would also suggest go for the direct drag and drop modern upload option on any Document Library, which completes faster + includes Folders/Subfolders too!!

Note

The above speeds can vary w.r.t to the LAN/Wi-Fi Connection too!!

We've come to know the above PnP script for our business requirements. It can be programmed to be automated by calling it into another program or via Azure Web Jobs/Azure Functions etc.

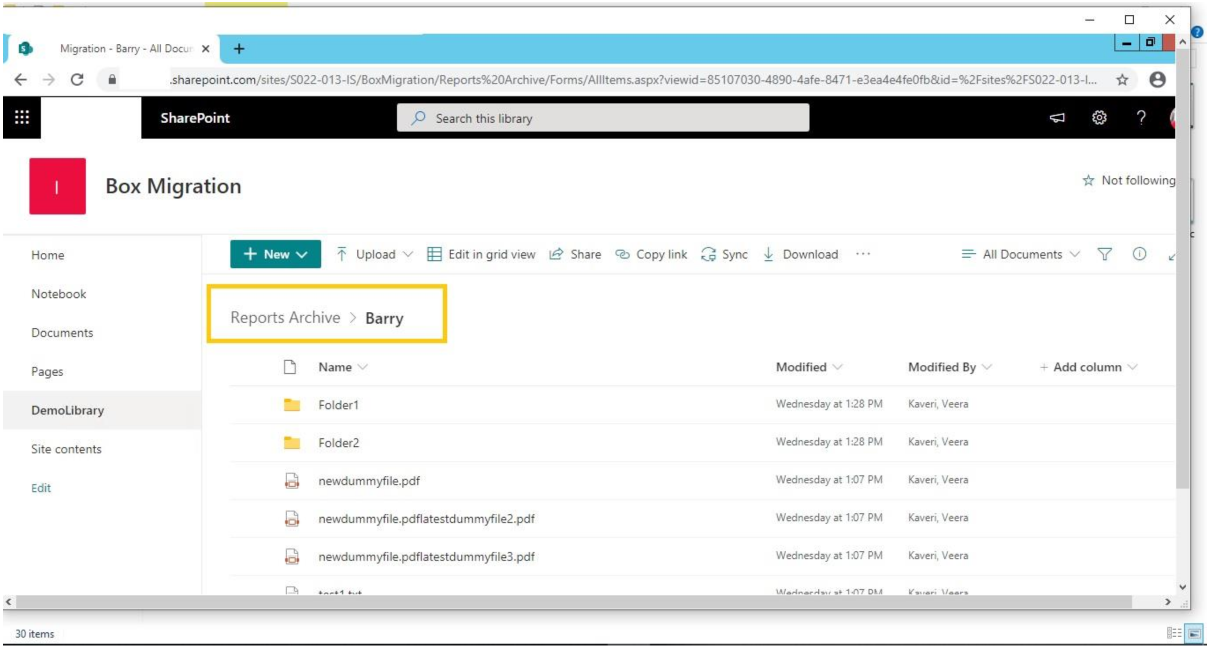
Simple Upload Files into a Folder:

Here is a simple way to upload all the files present in your local desktop path into a SharePoint online Library’s Folder.

It’s the same process as above but with a small change.

```
$SiteURL = "#############################"
$FilesPath = "C:\Users\7000023594\Dummy Files2"
$SiteRelativePath = "/Reports Archive/Barry"

#Connect to PNP Online
Connect-PnPOnline -Url $SiteURL -UseWebLogin

#Get All Files from a Local Folder
$Files = Get-ChildItem -Path $FilesPath -Force -Recurse

#Upload All files from the directory
ForEach ($File in $Files)
{
    Write-host "Uploading $($File.Directory)\$($File.Name)"

    #upload a file to sharepoint online using powershell - Upload File and Set 
Metadata
    Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $SiteRelativePath 
-Values @{"Title" = $($File.Name)}
}
```

Here is the Output reflected after running above script:



Migration - Barry - All Docur ✕ +

.sharepoint.com/sites/S022-013-IS/BoxMigration/Reports%20Archive/Forms/AllItems.aspx?viewid=85107030-4890-4afe-8471-e3ea4e4fe0fb&id=%2Fsites%2FS022-013-I...

SharePoint | Search this library

Box Migration ☆ Not following

Home
Notebook
Documents
Pages
DemoLibrary
Site contents
Edit

+ New | Upload | Edit in grid view | Share | Copy link | Sync | Download | ··· | All Documents

Reports Archive > Barry

Name	Modified	Modified By	+ Add column
Folder1	Wednesday at 1:28 PM	Kaveri, Veera	
Folder2	Wednesday at 1:28 PM	Kaveri, Veera	
newdummyfile.pdf	Wednesday at 1:07 PM	Kaveri, Veera	
newdummyfile.pdflatestdummyfile2.pdf	Wednesday at 1:07 PM	Kaveri, Veera	
newdummyfile.pdflatestdummyfile3.pdf	Wednesday at 1:07 PM	Kaveri, Veera	
test1.txt	Wednesday at 1:07 PM	Kaveri, Veera	

30 items

Simple Download:

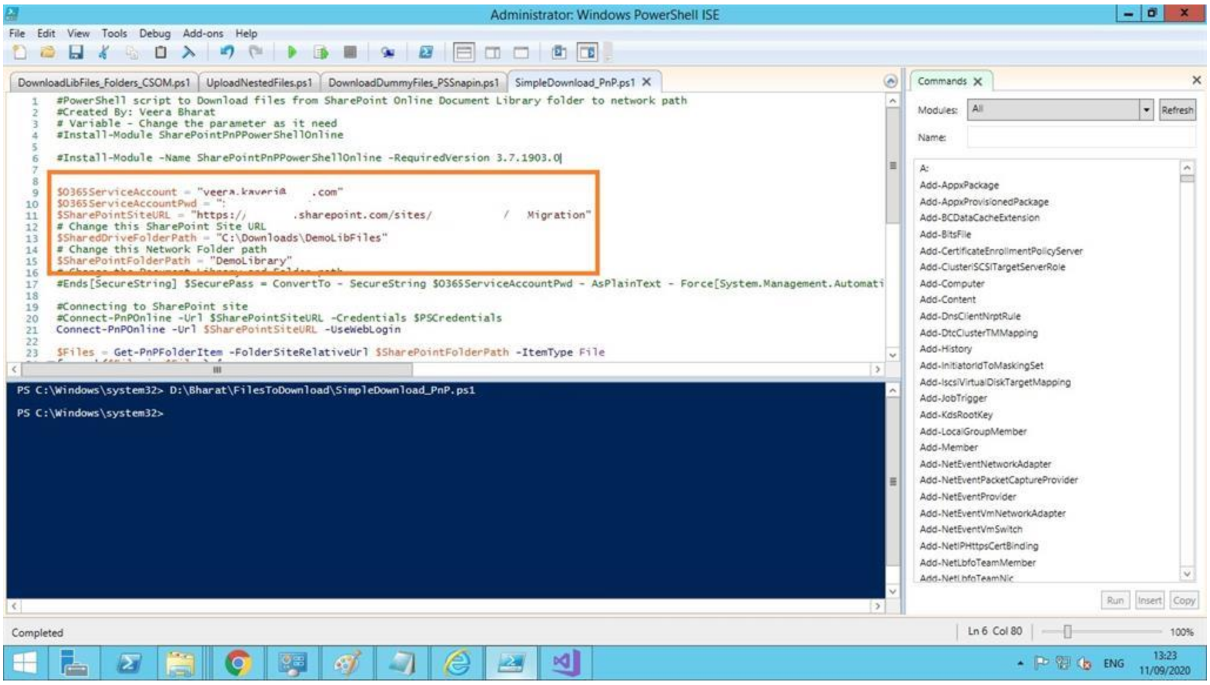
Here is a simple way to download all the files present into your local desktop path from a given SharePoint online library/folder.

Here is the downloading PnP script to run. You need to do the configurations accordingly.

```
$SharePointSiteURL = "######################"
# Change this SharePoint Site URL
$SharedDriveFolderPath = "D:\Bharat\DemoLibFiles4"
# Change this Network Folder path
$SharePointFolderPath = "/Reports Archive/Barry"
#$SiteRelativePath = "/Reports Archive/Barry"


#Connecting to SharePoint site
Connect-PnPOnline -Url $SharePointSiteURL -UseWebLogin

$Files = Get-PnPFolderItem -FolderSiteRelativeUrl $SharePointFolderPath -ItemType
File
foreach($File in $Files) {
    Get-PnPFile -Url $File.ServerRelativeUrl -Path $SharedDriveFolderPath -FileName
$File.Name -AsFile

}
```

Here is the output, as shown below.

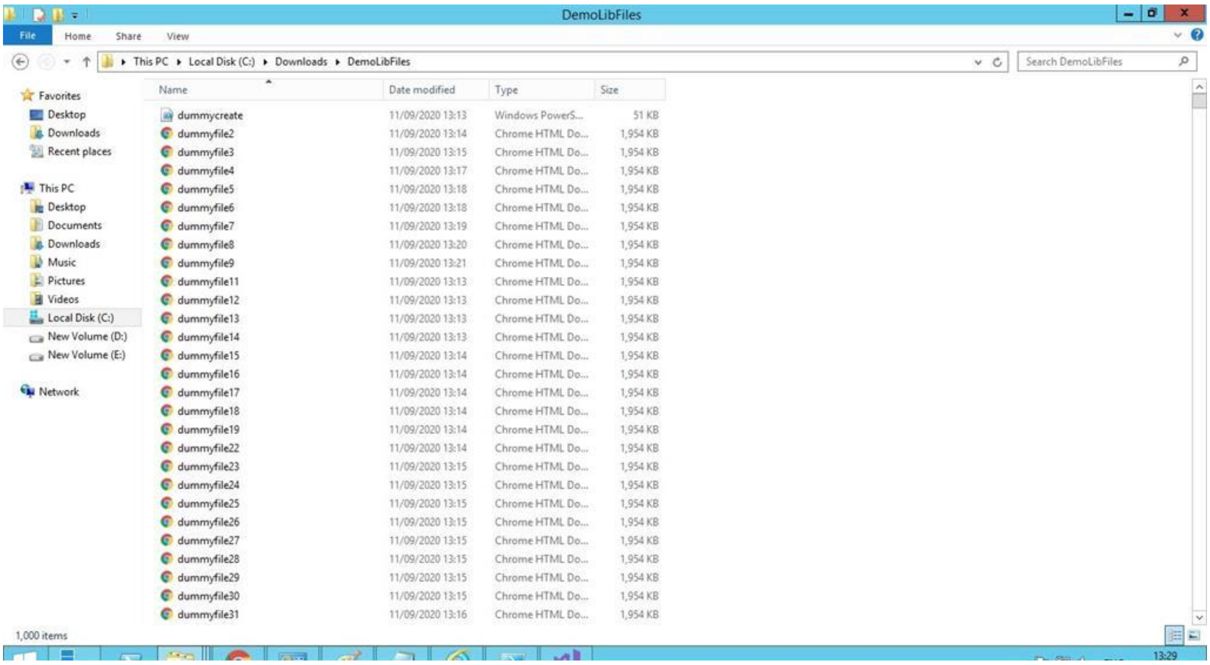
Document Library Folder Collaboration User Guide



```
#PowerShell script to Download files from SharePoint Online Document Library folder to network path
#Created By: Veera Bharat
# Variable - Change the parameter as it need
#Install-Module SharePointPnPPowerShellOnline

#Install-Module -Name SharePointPnPPowerShellOnline -RequiredVersion 3.7.1903.0


$O365ServiceAccount = "veera.kaveri@     .com"
$O365ServiceAccountPwd = ":
$SharePointSiteURL = "https://       .sharepoint.com/sites/          /   Migration"
# Change this SharePoint Site URL
$SharedDriveFolderPath = "C:\Downloads\DemoLibFiles"
# Change this Network Folder path
$SharePointFolderPath = "DemoLibrary"
# Change the Document Library and Folder path
#Ends[SecureString] $SecurePass = ConvertTo - SecureString $O365ServiceAccountPwd - AsPlainText - Force[System.Management.Automati

#Connecting to SharePoint site
#Connect-PnPOnline -Url $SharePointSiteURL -Credentials $PSCredentials
Connect-PnPOnline -Url $SharePointSiteURL -UseWebLogin

$Files = Get-PnPFolderItem -FolderSiteRelativeUrl $SharePointFolderPath -ItemType File
```

```
PS C:\Windows\system32> D:\Bharat\FilesToDownload\SimpleDownload_PnP.ps1

PS C:\Windows\system32>
```

Administrator: Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
DownloadLibFiles_Folders_CSOM.ps1
UploadNestedFiles.ps1
DownloadDummyFiles_PSSnapin.ps1
SimpleDownload_PnP.ps1
Commands
Modules: All
Refresh
Name:
A:
Add-AppxPackage
Add-AppxProvisionedPackage
Add-BCDataCacheExtension
Add-BitsFile
Add-CertificateEnrollmentPolicyServer
Add-ClusteriSCSITargetServerRole
Add-Computer
Add-Content
Add-DnsClientNrptRule
Add-DtcClusterTMMapping
Add-History
Add-InitiatorIdToMaskingSet
Add-IscsiVirtualDiskTargetMapping
Add-JobTrigger
Add-KdsRootKey
Add-LocalGroupMember
Add-Member
Add-NetEventNetworkAdapter
Add-NetEventPacketCaptureProvider
Add-NetEventProvider
Add-NetEventVmNetworkAdapter
Add-NetEventVmSwitch
Add-NetIPHttpsCertBinding
Add-NetLbfoTeamMember
Add-NetLbfoTeamNic
Run
Insert
Copy
Completed
Ln 6 Col 80
100%
ENG
13:23
11/09/2020



Name	Date modified	Type	Size
dummycreate	11/09/2020 13:13	Windows PowerS...	51 KB
dummyfile2	11/09/2020 13:14	Chrome HTML Do...	1,954 KB
dummyfile3	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile4	11/09/2020 13:17	Chrome HTML Do...	1,954 KB
dummyfile5	11/09/2020 13:18	Chrome HTML Do...	1,954 KB
dummyfile6	11/09/2020 13:18	Chrome HTML Do...	1,954 KB
dummyfile7	11/09/2020 13:19	Chrome HTML Do...	1,954 KB
dummyfile8	11/09/2020 13:20	Chrome HTML Do...	1,954 KB
dummyfile9	11/09/2020 13:21	Chrome HTML Do...	1,954 KB
dummyfile11	11/09/2020 13:13	Chrome HTML Do...	1,954 KB
dummyfile12	11/09/2020 13:13	Chrome HTML Do...	1,954 KB
dummyfile13	11/09/2020 13:13	Chrome HTML Do...	1,954 KB
dummyfile14	11/09/2020 13:13	Chrome HTML Do...	1,954 KB
dummyfile15	11/09/2020 13:14	Chrome HTML Do...	1,954 KB
dummyfile16	11/09/2020 13:14	Chrome HTML Do...	1,954 KB
dummyfile17	11/09/2020 13:14	Chrome HTML Do...	1,954 KB
dummyfile18	11/09/2020 13:14	Chrome HTML Do...	1,954 KB
dummyfile19	11/09/2020 13:14	Chrome HTML Do...	1,954 KB
dummyfile22	11/09/2020 13:14	Chrome HTML Do...	1,954 KB
dummyfile23	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile24	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile25	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile26	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile27	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile28	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile29	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile30	11/09/2020 13:15	Chrome HTML Do...	1,954 KB
dummyfile31	11/09/2020 13:16	Chrome HTML Do...	1,954 KB

1,000 items

Download Speed for 1k Dummy Files: 1.86 GB/9 Mins = 0.18 GB/Min

<u>Note</u>

The above speeds can vary with the LAN/Wi-Fi Connection too!!

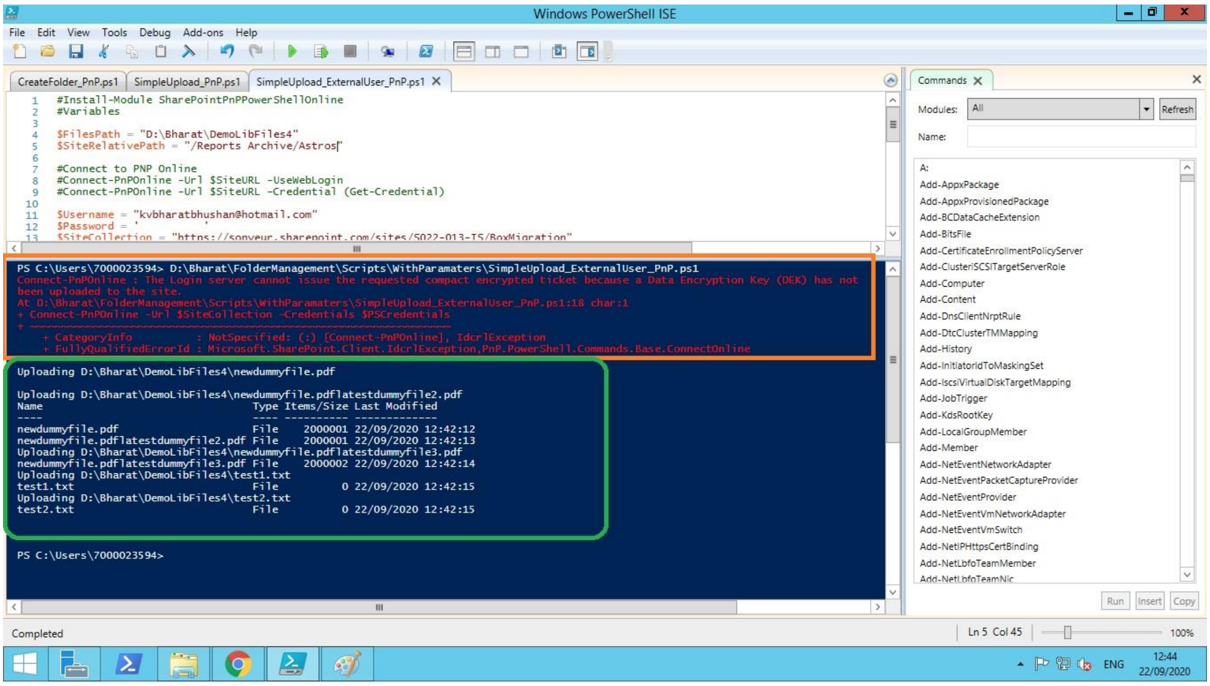
The above PnP script is useful for our business requirement and can be programmed to be automated by calling it into other programs, or via Azure web jobs/Azure functions, etc.

External User Authentication:

Here is a simple way to run your PnP Files Uploading script to a Library by hard coding the External User Credentials provided it has been already shared external to that specific SP Site collection.

```
$FilesPath = "D:\Bharat\DemoLibFiles4"
$SiteRelativePath = "/DemoLibrary/Astros"

$Username = "kvbharatbhushan@hotmail.com"
$Password = '##################'
$SiteCollection = "https://sonyeur.sharepoint.com/sites/S022-013-IS/BoxMigration"

[SecureString]$SecurePass = ConvertTo-SecureString $Password -AsPlainText -Force
[System.Management.Automation.PSCredential]$PSCredentials = New-Object
System.Management.Automation.PSCredential($Username, $SecurePass)
Connect-PnPOnline -Url $SiteCollection -Credentials $PSCredentials


#Get All Files from a Local Folder
$Files = Get-ChildItem -Path $FilesPath -Force -Recurse

#Upload All files from the directory
ForEach ($File in $Files)
{
    Write-host "Uploading $($File.Directory)\$($File.Name)"

    #upload a file to sharepoint online using powershell - Upload File and Set
Metadata
    Add-PnPFile -Path "$($File.Directory)\$($File.Name)" -Folder $SiteRelativePath
-Values @{"Title" = $($File.Name)}
}
```

Here is the Output after running the above script:



```
#Install-Module SharePointPnPPowerShellOnline
#Variables

$FilesPath = "D:\Bharat\DemoLibFiles4"
$SiteRelativePath = "/Reports Archive/Astros"

#Connect to PNP Online
#Connect-PnPOnline -Url $SiteURL -UseWebLogin
#Connect-PnPOnline -Url $SiteURL -Credential (Get-Credential)

$Username = "kvbharatbhushan@hotmail.com"
$Password = '          '
$SiteCollection = "https://sonyeur.sharepoint.com/sites/S022-013-IS/BoxMigration"
```

```
PS C:\Users\7000023594> D:\Bharat\FolderManagement\Scripts\WithParamaters\SimpleUpload_ExternalUser_PnP.ps1
Connect-PnPOnline : The Login server cannot issue the requested compact encrypted ticket because a Data Encryption Key (DEK) has not
been uploaded to the site.
At D:\Bharat\FolderManagement\Scripts\WithParamaters\SimpleUpload_ExternalUser_PnP.ps1:18 char:1
+ Connect-PnPOnline -Url $SiteCollection -Credentials $PSCredentials
+ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
    + CategoryInfo          : NotSpecified: (:) [Connect-PnPOnline], IdcrlException
    + FullyQualifiedErrorId : Microsoft.SharePoint.Client.IdcrlException,PnP.PowerShell.Commands.Base.ConnectOnline

Uploading D:\Bharat\DemoLibFiles4\newdummyfile.pdf

Uploading D:\Bharat\DemoLibFiles4\newdummyfile.pdflatestdummyfile2.pdf
Name                                 Type Items/Size Last Modified
----                                 ---- ---------- -------------
newdummyfile.pdf                     File    2000001 22/09/2020 12:42:12
newdummyfile.pdflatestdummyfile2.pdf File    2000001 22/09/2020 12:42:13
Uploading D:\Bharat\DemoLibFiles4\newdummyfile.pdflatestdummyfile3.pdf
newdummyfile.pdflatestdummyfile3.pdf File    2000002 22/09/2020 12:42:14
Uploading D:\Bharat\DemoLibFiles4\test1.txt
test1.txt                            File          0 22/09/2020 12:42:15
Uploading D:\Bharat\DemoLibFiles4\test2.txt
test2.txt                            File          0 22/09/2020 12:42:15


PS C:\Users\7000023594>
```

Important Note: Above External User Account Login details hard coding will help us to seamlessly run the scripts for External Users provided they are shared access permissions to that specific SP Site Collection. We can also leverage the same concept for Internal User Account that avoids entering the password during the scripts running.

Document Library Folder Collaboration User Guide

Use only application account details like some **Registered Service Accounts. Ex:** ***EUSSTSrvAcc@eu.sony.com***

Login Included:

There is a special folder named With **LoginIncluded** inside Scripts folder which has two sample scripts that can be easily run without manual entry of login details as explained in the above section.

Using CSV:

There is a special folder named **With CSV** inside Scripts folder which has all scripts that can easily run by passing the inputs for bulk items via a CSV file.

This approach can be used to run them on a CMD tool for bulk number of items.

Using Arguments:

There is a special folder named **Arguments** inside Scripts folder which has all scripts that can be easily run by passing the Arguments externally without configuring the scripts in detail.

This approach can be used to run them on a CMD tool for bulk number of items.

Please refer MasterArgumentsScripting.ps1 file for a quick template.

Total Scripts:

Here are the Zipped files of all the above scripts along with CSV files & screenshots for your quick reference and usage.

TotalScripts.zip

Also can be freely downloaded at my **GitHub Link**: https://github.com/KVBharatBhushan/FoldersFilesCollaborationScripting/blob/master/TotalScripts.zip

Summary:

All the above concepts can be completely utilised for an end Programmer to call/invoke the above PnP scripts accordingly as per their need and also automate them as scheduled jobs in their solutions by proper configuring and development with their respective Programming languages and it’s associated environment.