

COVE DATA PROTECTION

MICROSOFT 365 REPORTING

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INTRODUCTION

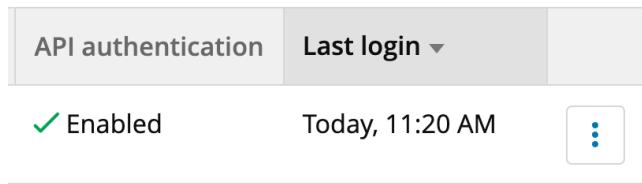
With use of the following guide, you'll be able to generate a highly detailed consolidated report of all M365 tenants and users into 2 separate CSV's and it will convert those CSV's to XLSX automatically.

REQUIREMENTS

- A Windows workstation or server with PowerShell installed. No further Cove Data Protection software is required.
- User login credentials to <https://backup.management> with API authentication enabled. See step 1 for further details.
- Microsoft Excel installed on the computer that will execute the script.

STEP 1: CHECK COVE DATA PROTECTION USER ACCESS

Login to <https://backup.management> and select the Users option in the left menu. Make sure the user that is going to execute the PowerShell script has the option API authentication Enabled.



If the option is not Enabled yet, you can click on the three dots and select Edit. Select the option API authentication and click Save.

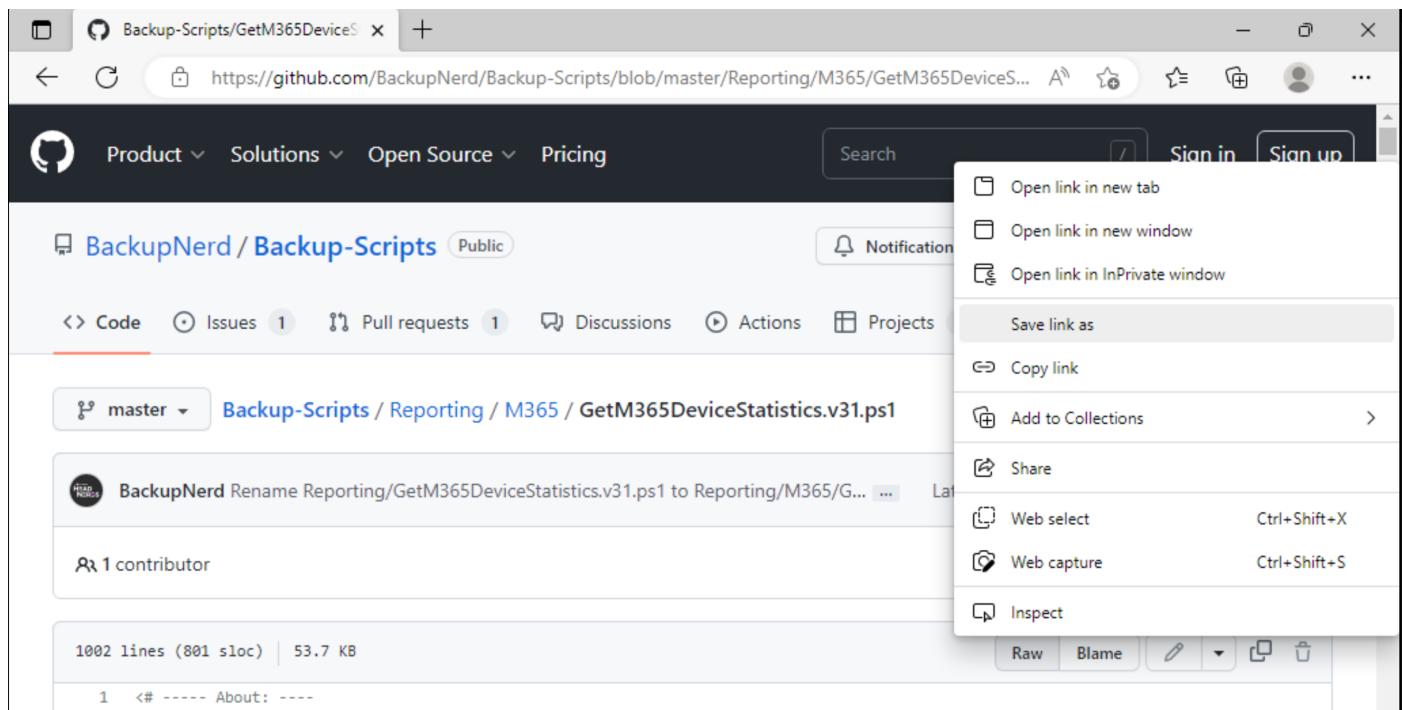
API authentication
API authentication allows users to authenticate with the API. [See more »](#)

STEP 2: DOWNLOAD POWERSHELL SCRIPT

If you don't already have the GetM365DeviceStatistics.vXX.ps1 on your computer, you can download it from the Cove Backup Nerd Github:

<https://github.com/BackupNerd/Backup-Scripts/tree/master/Reporting/M365>

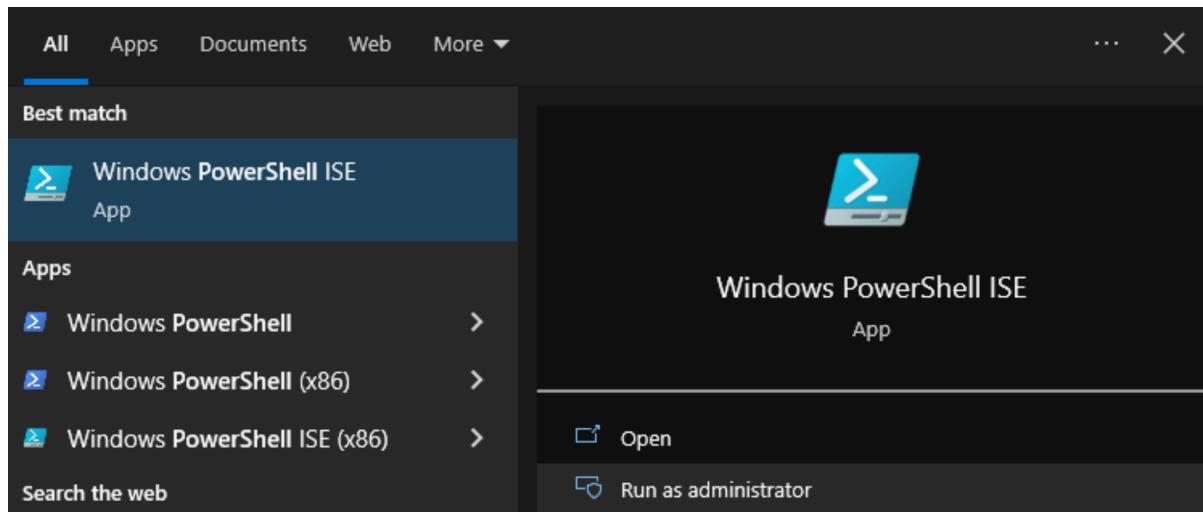
Click on the GetM365DeviceStatistics.vXX.ps1 file. In the next screen, you'll see a Raw button on the right side above the source code. Right click on the Raw button and select Save link as.



STEP 2: EXECUTE POWERSHELL SCRIPT AS ADMINISTRATOR

The first time you will run this script, it will require administrator rights to install additional modules.

There are multiple ways to run the script as administrator, depending on your personal preference. When you search in Windows for PowerShell, it will present both Windows PowerShell and Windows PowerShell ISE. Both options are supported, the ISE option will give you a GUI that is bit more user friendly. Make sure you select the **Run as administrator** option.

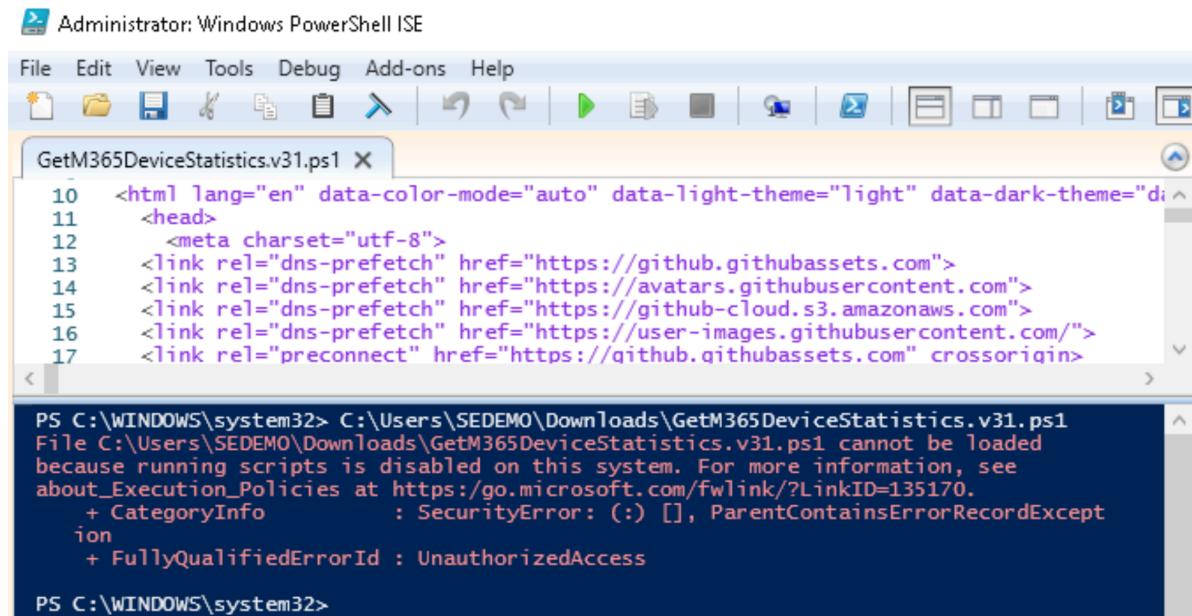


The next steps will be executed in PowerShell ISE.

Open the downloaded PowerShell script and select the green play-button to start the execution. 

Depending on your local security settings, access to the script can be blocked. In the below example, the error is

CategoryInfo : SecurityError: () [], ParentContainsErrorRecordException
FullyQualifiedErrorId: UnauthorizedAccess.



```
GetM365DeviceStatistics.v31.ps1
10  <html lang="en" data-color-mode="auto" data-light-theme="light" data-dark-theme="di
11  <head>
12  <meta charset="utf-8">
13  <link rel="dns-prefetch" href="https://github.githubassets.com">
14  <link rel="dns-prefetch" href="https://avatars.githubusercontent.com">
15  <link rel="dns-prefetch" href="https://github-cloud.s3.amazonaws.com">
16  <link rel="dns-prefetch" href="https://user-images.githubusercontent.com/>
17  <link rel="preconnect" href="https://github.githubassets.com" crossorigin>

PS C:\WINDOWS\system32> C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1
File C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1 cannot be loaded
because running scripts is disabled on this system. For more information, see
about_Execution_Policies at https://go.microsoft.com/fwlink/?LinkId=135170.
+ CategoryInfo          : SecurityError: () [], ParentContainsErrorRecordExcept
ion
+ FullyQualifiedErrorId : UnauthorizedAccess

PS C:\WINDOWS\system32>
```

You can change the access level with the Set-ExecutionPolicy command. Type **Set-ExecutionPolicy Unrestricted** if you want to change the execution policy on your computer to the level that will execute the script. PowerShell ISE will ask for confirmation in a pop-up, please select **Yes** or **Yes to All**.

Administrator: Windows PowerShell ISE

```
File Edit View Tools Debug Add-ons Help
GetM365DeviceStatistics.v31.ps1 X
10  <html lang="en" data-color-mode="auto" data-light-theme="light" data-dark-theme="di
11  <head>
12    <meta charset="utf-8">
13  <link rel="dns-prefetch" href="https://github.githubassets.com">
14  <link rel="dns-prefetch" href="https://avatars.githubusercontent.com">
15  <link rel="dns-prefetch" href="https://github-cloud.s3.amazonaws.com">
16  <link rel="dns-prefetch" href="https://user-images.githubusercontent.com/">
17  <link rel="preconnect" href="https://github.githubassets.com" crossorigin>

PS C:\WINDOWS\system32> C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1
File C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1 cannot be loaded
because running scripts is disabled on this system. For more information, see
about_Execution_Policies at https://go.microsoft.com/fwlink/?LinkID=135170.
+ CategoryInfo          : SecurityError: () [], ParentContainsErrorRecordExcept
ion
+ FullyQualifiedErrorId : UnauthorizedAccess

PS C:\WINDOWS\system32> Set-ExecutionPolicy Unrestricted
```

After selecting Yes or Yes to All, the system should return to the prompt without errors.

Administrator: Windows PowerShell ISE

```
File Edit View Tools Debug Add-ons Help
GetM365DeviceStatistics.v31.ps1 X
10  <html lang="en" data-color-mode="auto" data-light-theme="light" data-dark-theme="di
11  <head>
12    <meta charset="utf-8">
13  <link rel="dns-prefetch" href="https://github.githubassets.com">
14  <link rel="dns-prefetch" href="https://avatars.githubusercontent.com">
15  <link rel="dns-prefetch" href="https://github-cloud.s3.amazonaws.com">
16  <link rel="dns-prefetch" href="https://user-images.githubusercontent.com/">
17  <link rel="preconnect" href="https://github.githubassets.com" crossorigin>

PS C:\WINDOWS\system32> C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1
File C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1 cannot be loaded
because running scripts is disabled on this system. For more information, see
about_Execution_Policies at https://go.microsoft.com/fwlink/?LinkID=135170.
+ CategoryInfo          : SecurityError: () [], ParentContainsErrorRecordExcept
ion
+ FullyQualifiedErrorId : UnauthorizedAccess

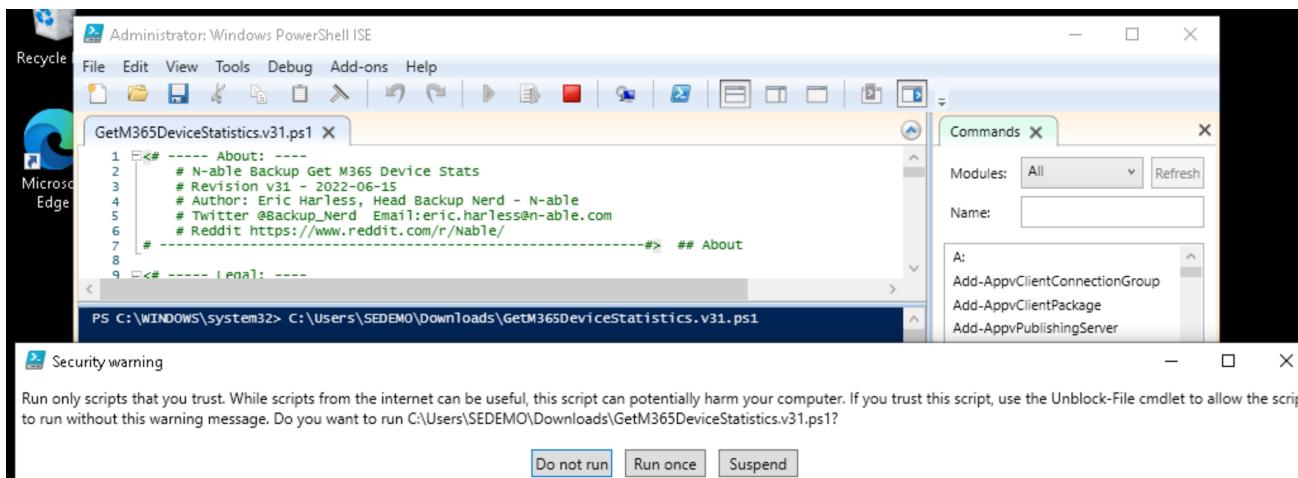
PS C:\WINDOWS\system32> Set-ExecutionPolicy Unrestricted

PS C:\WINDOWS\system32>
```

More info on this can be found on: <https://learn.microsoft.com/en-us/powershell/module/microsoft.powershell.security/set-executionpolicy?view=powershell-7.3>

When these steps are executed, you can start the script again by clicking on the green play-button .

You can be presented with a security warning; in that case you can choose the **Run once** option to start the execution of the script.



If you don't want to process this warning every time you execute the script, enter **unblock-file .\GetM365DeviceStatistics.vXX.ps1** to unlock the script.

Get M365 Device Statistics

File Edit View Tools Debug Add-ons Help

GetM365DeviceStatistics.v31.ps1 X

```

76
77
78     <meta name="request-id" content="BD65:F8F6:6C85999:70D3514:639705E1" data-pjax-tracker="true"/>
79
80
81     <meta name="hovercard-subject-tag" content="repository:284954793" data-turbo-track="true"/>
82
83

```

```

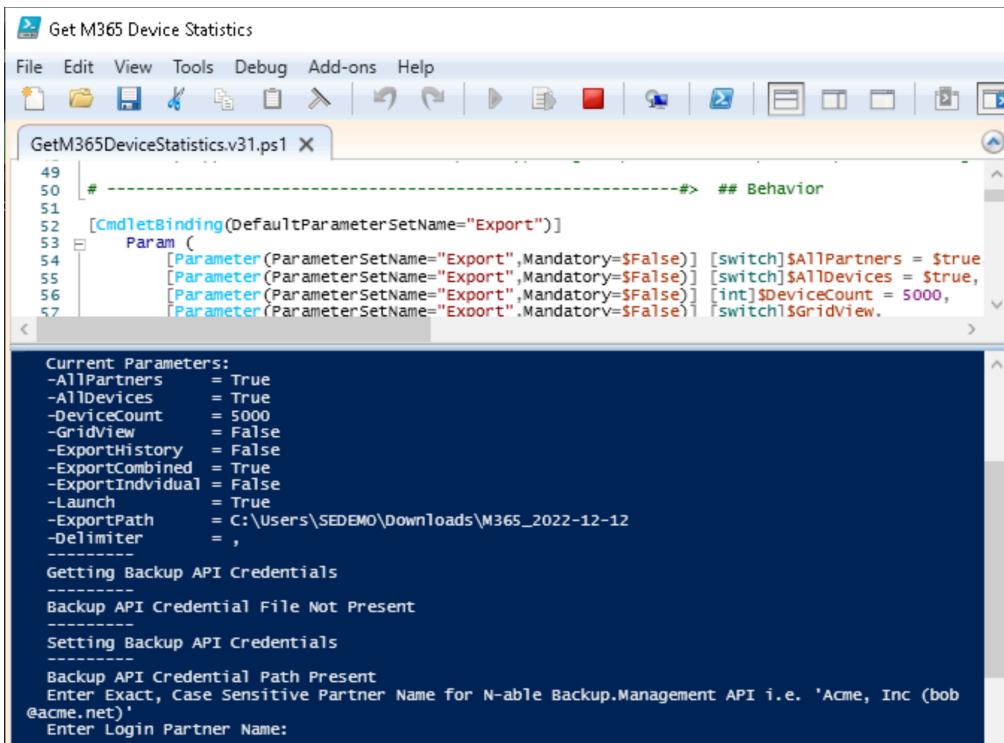
-GridView      = False
-ExportHistory = False
-ExportCombined = True
-ExportIndividual = False
-Launch        = True
-ExportPath     = C:\Users\SEDEMO\Downloads\M365_2022-12-12
-Delimiter      = ,
-----
Getting Backup API Credentials
-----
Backup API Credential File Not Present
-----
Setting Backup API Credentials
-----
Backup API Credential Path Present
Enter Exact, Case Sensitive Partner Name for N-able Backup.Management API i.e. 'Acme
, Inc (bob@acme.net)'
Enter Login Partner Name:
PS C:\Users\SEDEMO\Downloads> C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1
File C:\Users\SEDEMO\Downloads\GetM365DeviceStatistics.v31.ps1 cannot be loaded
because you opted not to run this software now.
+ CategoryInfo          : SecurityError: (:) [], ParentContainsErrorRecordException
+ FullyQualifiedErrorId : UnauthorizedAccess

```

PS C:\Users\SEDEMO\Downloads> Unblock-file .\GetM365DeviceStatistics.v31.ps1

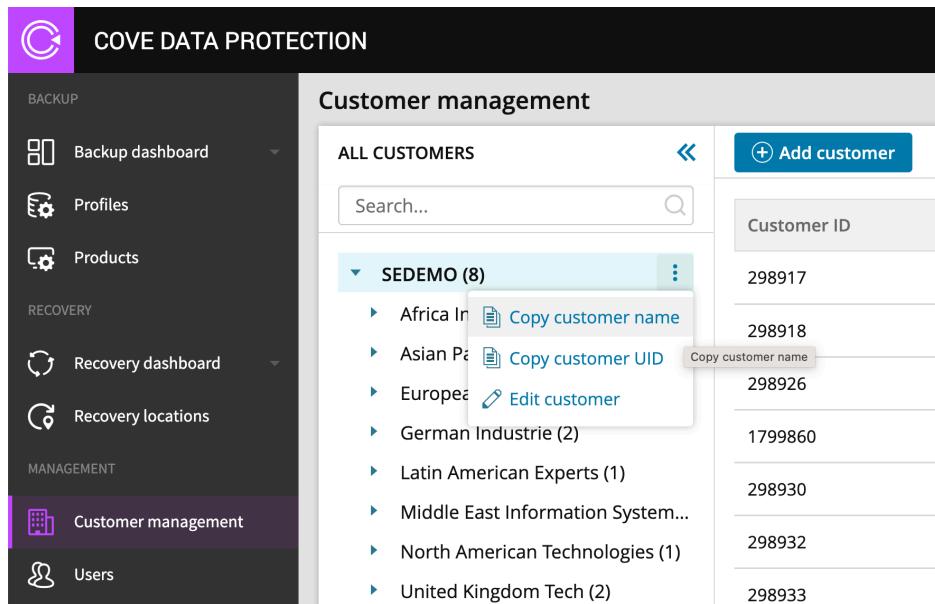
STEP 3: ENTER CREDENTIALS

After executing the script, it will ask for the **exact, case sensitive partner name**.



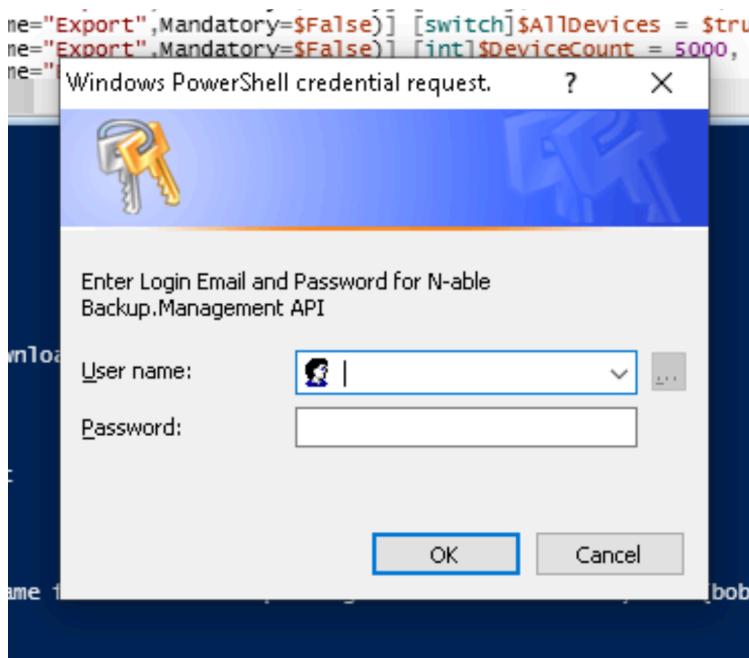
```
Get M365 Device Statistics
File Edit View Tools Debug Add-ons Help
GetM365DeviceStatistics.v31.ps1
49
50
51
52 [CmdletBinding(DefaultParameterSetName="Export")]
53 Param (
54     [Parameter(ParameterSetName="Export",Mandatory=$False)] [switch]$AllPartners = $true,
55     [Parameter(ParameterSetName="Export",Mandatory=$False)] [switch]$AllDevices = $true,
56     [Parameter(ParameterSetName="Export",Mandatory=$False)] [int]$DeviceCount = 5000,
57     [Parameter(ParameterSetName="Export",Mandatory=$False)] [switch]$GridView.
)
Current Parameters:
-AllPartners      = True
-AllDevices       = True
-DeviceCount      = 5000
-GridView          = False
-ExportHistory    = False
-ExportCombined   = True
-ExportIndividual = False
-Launch            = True
-ExportPath        = C:\Users\SEDEMO\Downloads\M365_2022-12-12
-Delimiter         =
-----
Getting Backup API Credentials
-----
Backup API Credential File Not Present
-----
Setting Backup API Credentials
-----
Backup API Credential Path Present
Enter Exact, Case Sensitive Partner Name for N-able Backup.Management API i.e. 'Acme, Inc (bob@acme.net)'
Enter Login Partner Name:
```

In your Cove Data Protection portal, you can find the exact partner name by selecting the Customer management option in the left menu. The highest partner in the tree is the reseller. Click on the 3 dots and select Copy customer name. Paste the result in the output of the PowerShell script.



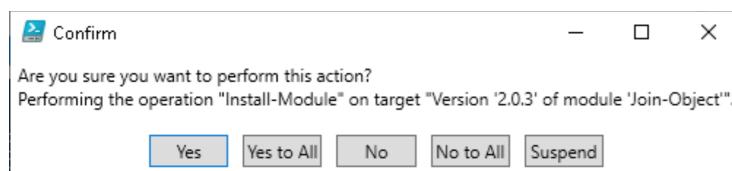
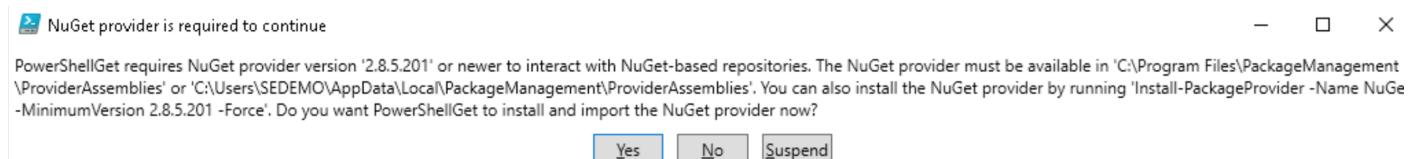
When you entered the right partner name, a pop up for User name and Password will appear. Enter the credentials that are used in the <https://backup.management> portal.

The credentials only work when the API authentication is enabled (see step 1)



When running the script for the first time on a computer, it will ask to install specific components used in the script. *If these pop ups don't appear and it runs in an error, the script probably wasn't executed with administrator rights. Please restart PowerShell (ISE) as administrator and execute it again.*

Click on Yes or Yes to All to continue for the next 3 pop ups.



After finishing the complete run through the tenants, the system has generated a new folder in the location you started the script. For instance, in the Downloads folder there is now a new folder named M365_2022-12-31. In that folder, 2 CSV's and 2 XLSX files will be generated. The Excel spreadsheets will be automatically opened, an option you can adjust in the PowerShell script at line 62.

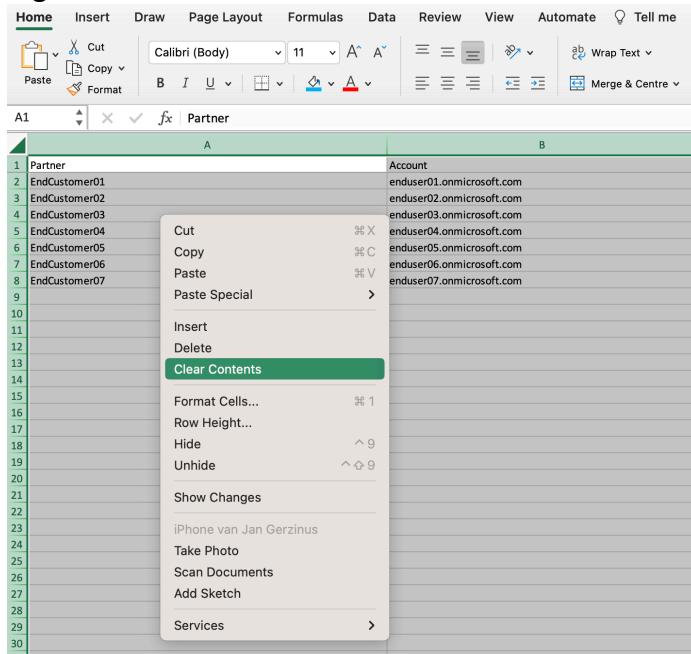
The 2 spreadsheets that are opened have different datasets:

- **Devices** shows the overview of all devices with the user totals, similar to the portal view.
- **User** shows a high level of detail for all users that are present in the tenants.

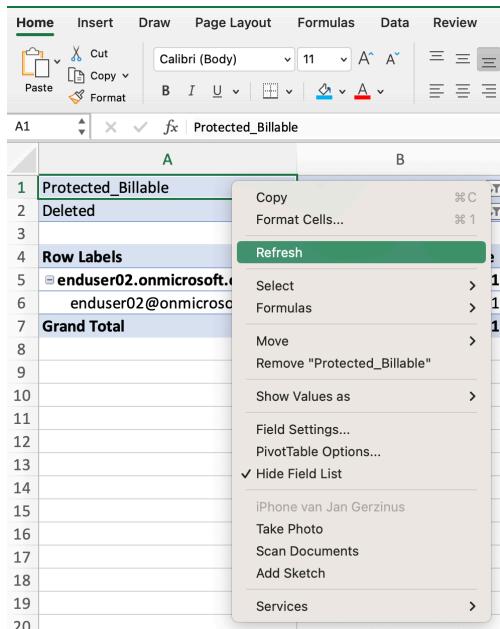
The pivot-template we'll use in this manual is working with the User spreadsheet.

STEP 4: UPDATING THE PIVOT TEMPLATE

1. Download the M365 with Pivots template:
2. Open the template and go to the Input tab.
3. Select everything
 - a. By clicking on the triangle above line 1, left from column header A
 - b. By entering CTRL+A
4. Right-click on the selection and choose **Clear Contents**



5. You now have an empty input tab
6. Go to the User spreadsheet that was generated in step 3
7. Select everything, similar to step 4.3
8. Paste the result in the Template in the tab Input. Make sure you select Cell A1 and paste it in.
9. Your generated details should appear in the template.
10. Go to the next tab (Deleted Users + Backup History) and right click on one of the blue pivot cells
11. Select Refresh



12. All your tabs are now refreshed and will be showing your data.

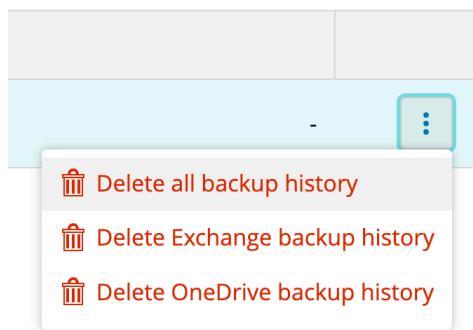
STEP 5: USING THE PIVOT TEMPLATE

5.1 DELETED USERS + BACKUP HISTORY

In the first tab you will see the users that were deleted in Microsoft 365, but not in Cove Data Protection.

	A	B
1	Protected_Billable	Billable
2	Deleted	Deleted
3		
4	Row Labels	Count of Protected_Billable
5	enduser02.onmicrosoft.com	1
6	enduser02@onmicrosoft.com	1
7	Grand Total	1

- If you want to keep the retention of the user, you can just ignore it here. The license will stay billable.
- If you want to remove the retention, you can go to the Cove Data Protection portal and click on the tenant. From there, select Exchange & OneDrive and find the user. At the end of the line there are 3 dots, this is where you can choose to delete all backup history.

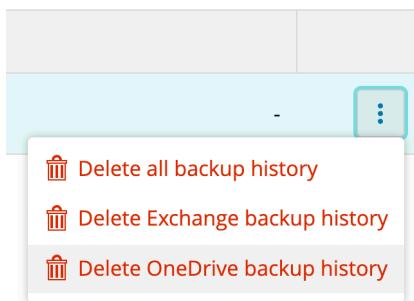


5.2 SHARED + ONEDRIVE PROTECTED

The tab Shared + OneDrive Protected will display all users that previously had a OneDrive selection, but the user has been converted to a shared mailbox. At that point Microsoft removes the OneDrive data, but Cove Data Protection doesn't. Because we detect the OneDrive plugin, we still count the license as a normal billable user.

Shared	Shared	▼
Protected_Billable	Billable	▼
Protected_OneDrive	protected	▼

- If you want to keep the OneDrive retention of the user, you can just ignore it here. The license will stay billable.
- If you want to remove the retention, you can go to the Cove Data Protection portal and click on the tenant. From there, select Exchange & OneDrive and find the user. At the end of the line there are 3 dots, this is where you can choose to delete OneDrive backup history.



5.3 SHARED + SHAREPOINT PROTECTED

The tab Shared + SharePoint Protected will display all shared users that have a protected SharePoint status. In most cases, these users were converted to shared and the license at Microsoft was not yet removed. There can be situations where shared mailboxes require a SharePoint license. This overview will give you all users, you can decide if there is any action required on your side.

Shared	Shared	<input type="button" value="▼"/>
Protected_Billable	Billable	<input type="button" value="▼"/>
Protected_SharePoint	protected	<input type="button" value="▼"/>
<hr/>		
Row Labels	Count of Protected_Billable	
enduser03.onmicrosoft.com	1	
enduser03@onmicrosoft.com	1	
enduser04.onmicrosoft.com	1	
enduser04@onmicrosoft.com	1	
Grand Total	2	

5.4 TENANTS WITHOUT EXCHANGEAUTINC

The tab Tenants without ExchangeAutInc will display all tenants where the option **Add new users to backup** for Exchange is disabled. To streamline the onboarding process and minimize labour, we advise to enable this toggle. This will automatically add new users that are created in the Microsoft 365 tenant into the Exchange selection.

ExchangeAutoInclude	Off	▼
Row Labels ▼↑		
enduser05.onmicrosoft.com		
enduser06.onmicrosoft.com		
enduser07.onmicrosoft.com		
Grand Total		

Add new users to backup ?

- Exchange
- OneDrive

5.5 TENANTS WITHOUT ONEDRIVEAUTINC

The tab Tenants without OneDriveAutInc will display all tenants where the option **Add new users to backup** for OneDrive is disabled. To streamline the onboarding process and minimize labour, we advise to enable this toggle. This will automatically add new users that are created in the Microsoft 365 tenant into the OneDrive selection.

OneDriveAutoInclude	Off
Row Labels	
enduser05.onmicrosoft.com	
enduser06.onmicrosoft.com	
enduser07.onmicrosoft.com	
Grand Total	

Add new users to backup ?

Exchange

OneDrive

5.6 REGULAR EXCLUDED MAILBOXES

The tab Regular excluded mailboxes will display users who have a Regular (selectable) Exchange mailbox, but they are not part of the selection.

They're broken down in Billable (meaning they're already on the invoice for OneDrive or Sharepoint) and (blank), that are not on the invoice.

MailBoxSelection	Excluded	<input type="checkbox"/>	
MailBoxStatus	Regular	<input type="checkbox"/>	
Deleted	(blank)	<input type="checkbox"/>	
Count of MailBoxSelection		Column Labels <input type="button" value="▼"/>	
Row Labels		<input type="button" value="▼"/> Billable	(blank) Grand Total
		1	1
enduser05@onmicrosoft.com		1	1
		1	1
enduser06@onmicrosoft.com		1	1
		1	1
enduser07@onmicrosoft.com		1	1
Grand Total		2	1
			3

5.7 REGULAR EXCLUDED ONEDRIVES

The tab Regular excluded OneDrives will display users who have a Regular (selectable) OneDrive, but they are not part of the selection.

They're broken down in Billable (meaning they're already on the invoice for Exchange or Sharepoint) and (blank), that are not on the invoice.

OneDriveSelection	Excluded	<input type="button" value="▼"/>	
OneDriveStatus	Regular	<input type="button" value="▼"/>	
Deleted	(blank)	<input type="button" value="▼"/>	
<hr/>			
Count of MailBoxSelection	Column Labels	<input type="button" value="▼"/>	
Row Labels	<input type="button" value="▼"/> Billable	(blank)	Grand Total
<input checked="" type="checkbox"/> EndCustomer05	1	1	1
enduser05@onmicrosoft.com	1	1	1
<input checked="" type="checkbox"/> EndCustomer06	1	1	1
enduser06@onmicrosoft.com	1	1	1
<input checked="" type="checkbox"/> EndCustomer07	1	1	1
enduser07@onmicrosoft.com	1	1	1
Grand Total	2	1	3

5.8 PROTECTED SHAREPOINT ONLY

The tab Regular excluded OneDrives will show all users that are billable, only as part of the SharePoint. The listed users have or had access to a Sharepoint site in the selection. Only users with a Sharepoint license are counted.

Protected_SharePoint	protected	▼
Protected_Mailbox	(blank)	▼
Protected_OneDrive	(blank)	▼
Count of MailBoxSelection	Column Labels	▼
Row Labels	Billable	Grand Total
EndCustomer05	1	1
enduser05@onmicrosoft.com	1	1
EndCustomer06	1	1
enduser06@onmicrosoft.com	1	1
Grand Total	2	2

STEP 6: RERUN THE SCRIPT AT A LATER MOMENT

If you would like to run the script again on the same computer, the execution is a lot easier.

- Simply browse to the GetM365DeviceStatistics.vXX.ps1
- right-click on the file and select **Run with PowerShell**
- The script will execute with the saved credentials and will automatically generate the up to date output.
- After that, you can follow Step 4 from this manual and insert the new data in the pivot template.