

How to manipulate Excel files with PowerShell

🏠 How to manipulate Excel files with PowerShell

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No one can deny that Excel is a daily use application even for IT guys, it’s one skill that you cannot avoid or skip without having and using.

To generating reports as an excel file or you can say presenting PowerShell object properties as excel file -Not .CSV- is very helpful specially with AD and Exchange, for example creating bulk users or getting specific property out of huge users list.

for that “ImportExcel” Module is one of the powerful modules you can use in PowerShell, you can get download that manually from PowerShell Gallery [here](#).. or you can use the below command to install directly:

```
1 Install-Module -Name ImportExcel
```

using this module is fairly simple, most of the commands which will be used are :

```
1 Import-Excel -path "Excel file Path"
2 Export-Excel -path "Excel file path"
```

will show some examples below to clear things and show how simple and powerful this module is:

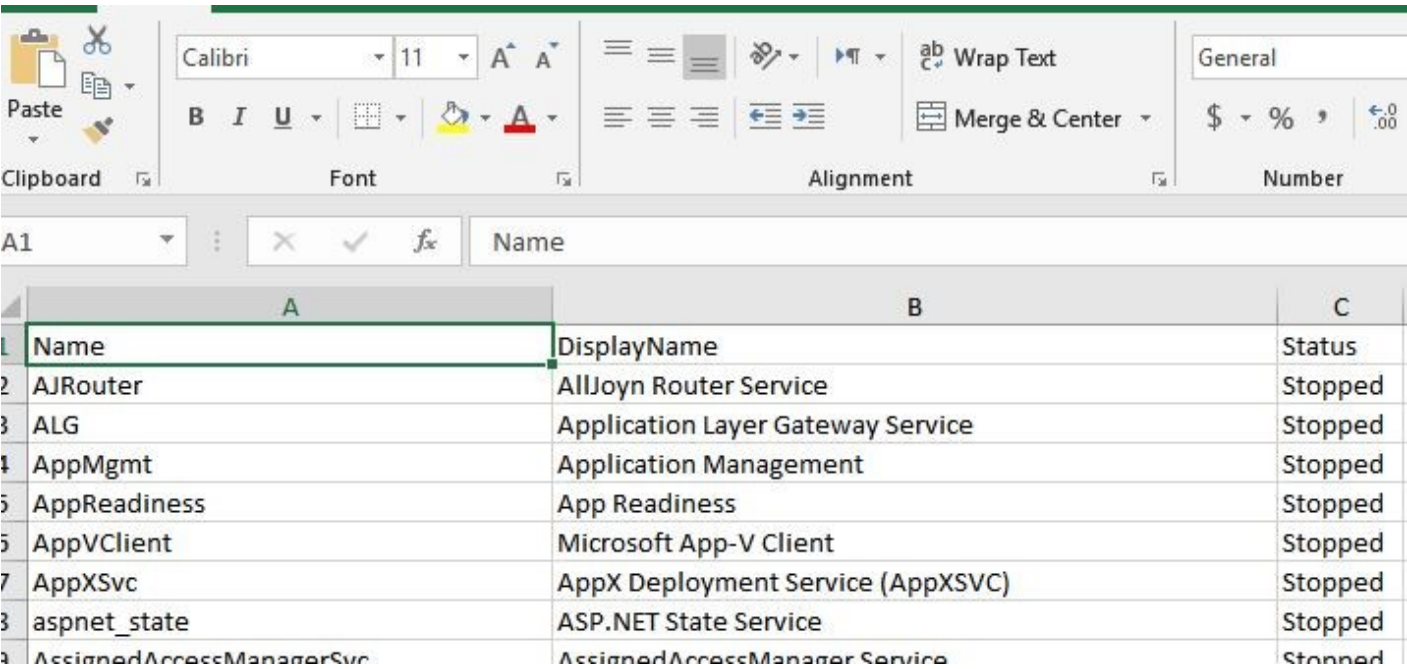
First lets see how to open Excel sheet with PowerShell and insert of edit data (without using ImportExcel module) :

```
1 # Opening Excel application:
2 $XL = New-Object -comobject Excel.Application
3
4 # Opening excel workbook:
5 $book = $XL.Workbooks.Open("Excel Sheet path")
6
7 # Opening sheet if having multiple sheet:
8 $Sheet=$book.worksheets.item("Name of the Sheet")
9
10 # Accessing cells :
11 $Var = $Sheet.Rows.item("Row number").cells.item("Column Number").Value2
12
13 # for example if I want to access cell D5 :
14 $Var = $Sheet.Rows.item(5).cells.item(4).Value2
15
16 # save the changes and close the sheet.
17 $book.Save()
18 $book.close($true)
```

as the above example we can manipulate one by one cell, which time consuming to generate a report to an excel file however, in some cases it’s really helpful and the only way to do it.

lets see how to output to excel file with ImportExcel module:

```
1 # Installing module
2 Install-Module ImportExcel
3
4 # getting stopped services from local computer
5 $Services = Get-Service | Where-Object {$_.Status -eq "Stopped"}
6
7 # Selecting Name, DisplayName and Status then exporting stopped services to excel sheet using the module:
8 $Services | select-object Name,DisplayName,Status | Export-Excel -path D:\StoppedServices.xlsx
```



exported excel sheet

as you can see above, all the properties are exported correctly with Property name being the *head* and each item or (service) in our example is the *row*.

lets import the same excel sheet using the module and see how data will be populated.

```
1      # Importing the sheet
2      $StoppedService = Import-Excel -Path D:\StoppedServices.xlsx
3
4      # Checking data type of the created variable which is an ( Array )
5      $StoppedService.GetType()
6
7      # Accessing the first item from the array:
8      $StoppedService[0]
9
10     # Accessing property "DisplayName" from the first item in the array.
11     $StoppedService[0].DisplayName
```

the output of the above example will be as below, where the type is an “Array” and we can access one item only ”*row* “ or can access one property only “*column*”

Console
output

Now it seems obvious how to access and edit excel sheets with PowerShell, by accessing one cell at a time or use ImportExcel module to export and import data

