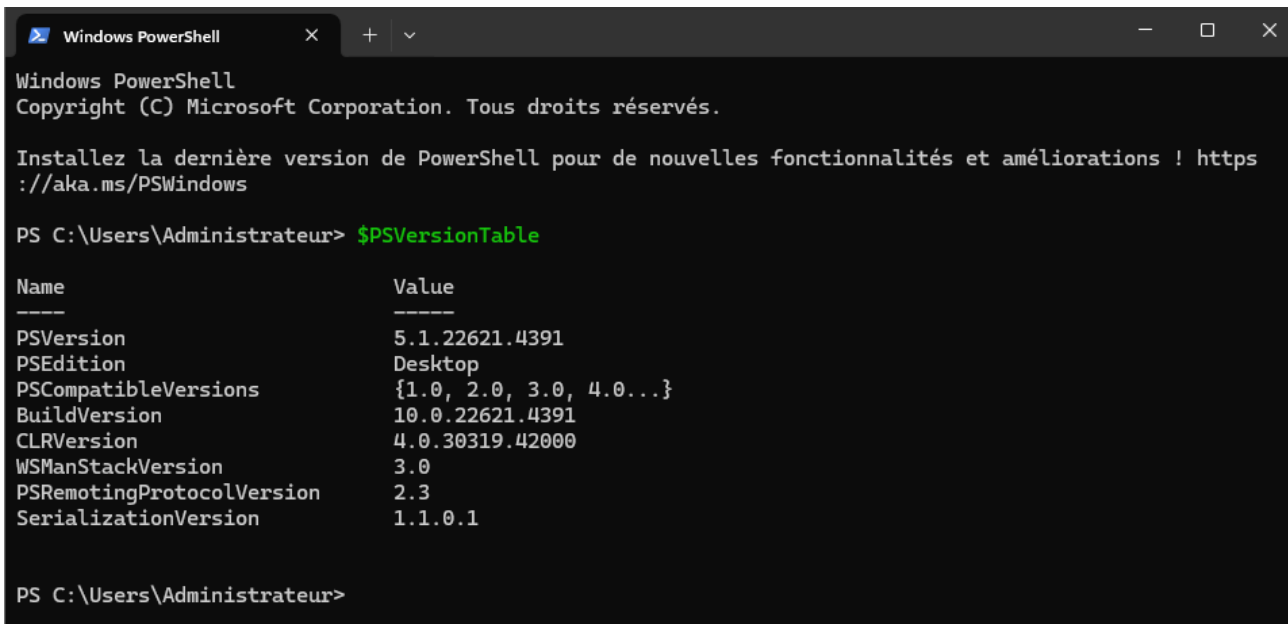


Chapitre 6 - Module Active Directory

2. Prise en main

> Affichage de la version de Powershell :



```
Windows PowerShell
Copyright (C) Microsoft Corporation. Tous droits réservés.

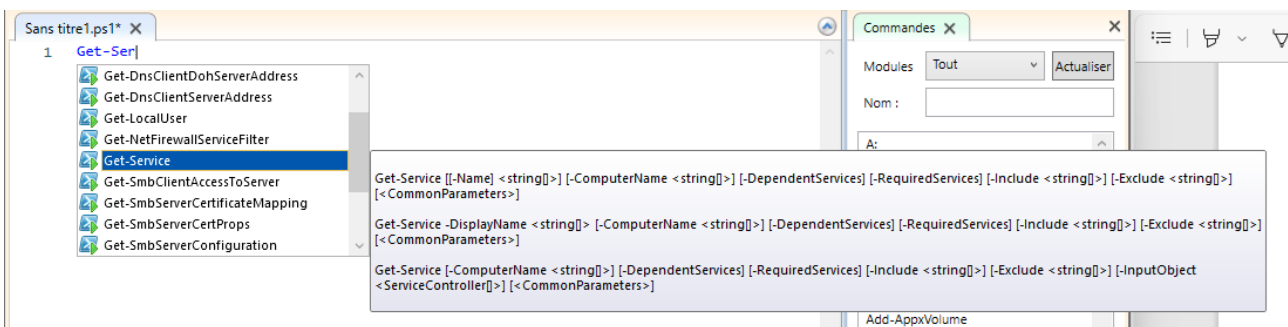
Installez la dernière version de PowerShell pour de nouvelles fonctionnalités et améliorations ! https://aka.ms/PSWindows

PS C:\Users\Administrateur> $PSVersionTable

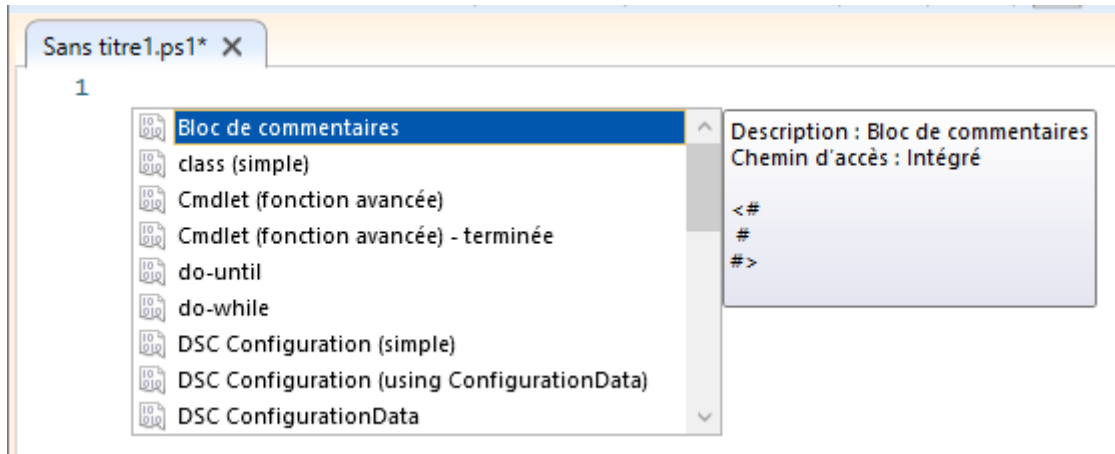
Name                           Value
----                           -
PSVersion                       5.1.22621.4391
PSEdition                       Desktop
PSCompatibleVersions             {1.0, 2.0, 3.0, 4.0...}
BuildVersion                    10.0.22621.4391
CLRVersion                      4.0.30319.42000
WSManStackVersion               3.0
PSRemotingProtocolVersion       2.3
SerializationVersion            1.1.0.1

PS C:\Users\Administrateur>
```

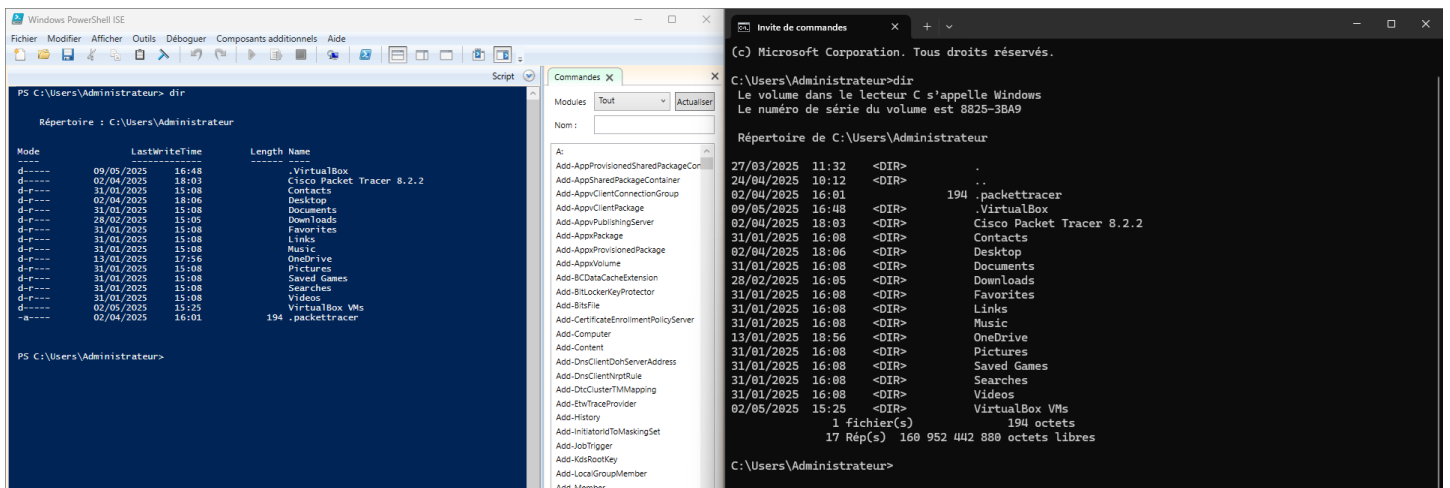
> Affichage de la fonctionnalité « IntelliSense » :



> Exemples de snippets :



> Utilisation de la commande dir sur Powershell ainsi que sur l'invite de commande :



> Commande Get-Alias permettant de recenser tout les alias :

```
PS C:\Users\Administrateur> Get-Alias

CommandType      Name                                     Version      Source
-----
Alias            % -> ForEach-Object
Alias            ? -> Where-Object
Alias            ac -> Add-Content
Alias            asnp -> Add-PSSnapin
Alias            cat -> Get-Content
Alias            cd -> Set-Location
Alias            CFS -> ConvertFrom-String              3.1.0.0     Microsoft...
Alias            chdir -> Set-Location
Alias            clc -> Clear-Content
Alias            clear -> Clear-Host
Alias            clhy -> Clear-History
Alias            cli -> Clear-Item
Alias            clp -> Clear-ItemProperty
Alias            cls -> Clear-Host
Alias            clv -> Clear-Variable
Alias            cnsn -> Connect-PSSession
Alias            compare -> Compare-Object
Alias            copy -> Copy-Item
Alias            cp -> Copy-Item
Alias            cpi -> Copy-Item
Alias            cpp -> Copy-ItemProperty
Alias            curl -> Invoke-WebRequest
Alias            cvpa -> Convert-Path
Alias            dbp -> Disable-PSBreakpoint
Alias            del -> Remove-Item
Alias            diff -> Compare-Object
Alias            dir -> Get-ChildItem
Alias            dsn -> Disconnect-PSSession
Alias            ebp -> Enable-PSBreakpoint
Alias            echo -> Write-Output
Alias            epal -> Export-Alias
Alias            epsv -> Export-Csv
Alias            epsn -> Export-PSSession
Alias            erase -> Remove-Item
Alias            etsn -> Enter-PSSession
Alias            exsn -> Exit-PSSession
Alias            fc -> Format-Custom
Alias            fhx -> Format-Hex                          3.1.0.0     Microsoft...
Alias            fl -> Format-List
Alias            foreach -> ForEach-Object
Alias            ft -> Format-Table
Alias            fw -> Format-Wide
Alias            gal -> Get-Alias
Alias            gbp -> Get-PSBreakpoint
Alias            gc -> Get-Content
Alias            gcb -> Get-Clipboard                       3.1.0.0     Microsoft...
Alias            gci -> Get-ChildItem
Alias            gcm -> Get-Command
Alias            gcs -> Get-PSCallStack
Alias            gdr -> Get-PSDrive
Alias            ghy -> Get-History
Alias            gi -> Get-Item
Alias            gin -> Get-ComputerInfo                   3.1.0.0     Microsoft...
Alias            gjb -> Get-Job
Alias            gl -> Get-Location
Alias            gm -> Get-Member
Alias            gmo -> Get-Module
Alias            gp -> Get-ItemProperty
Alias            gps -> Get-Process
Alias            gpv -> Get-ItemPropertyValue
Alias            group -> Group-Object
Alias            gsn -> Get-PSSession
Alias            gsnp -> Get-PSSnapin
```

> Commande Get-Command qui recense toutes les commandes :

```
PS C:\Users\Administrateur> Get-Command
```

| CommandType | Name | Version | Source |
|-------------|---|---------|---------------|
| Alias | Add-AppPackage | 2.0.1.0 | Appx |
| Alias | Add-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | Add-AppProvisionedPackage | 3.0 | Dism |
| Alias | Add-ProvisionedAppPackage | 3.0 | Dism |
| Alias | Add-ProvisionedAppSharedPackageContainer | 3.0 | Dism |
| Alias | Add-ProvisionedAppxPackage | 3.0 | Dism |
| Alias | Add-ProvisioningPackage | 3.0 | Provisioning |
| Alias | Add-TrustedProvisioningCertificate | 3.0 | Provisioning |
| Alias | Apply-WindowsUnattend | 3.0 | Dism |
| Alias | Disable-PhysicalDiskIndication | 2.0.0.0 | Storage |
| Alias | Disable-PhysicalDiskIndication | 1.0.0.0 | VMDirectSt... |
| Alias | Disable-StorageDiagnosticLog | 2.0.0.0 | Storage |
| Alias | Disable-StorageDiagnosticLog | 1.0.0.0 | VMDirectSt... |
| Alias | Dismount-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | Enable-PhysicalDiskIndication | 2.0.0.0 | Storage |
| Alias | Enable-PhysicalDiskIndication | 1.0.0.0 | VMDirectSt... |
| Alias | Enable-StorageDiagnosticLog | 2.0.0.0 | Storage |
| Alias | Enable-StorageDiagnosticLog | 1.0.0.0 | VMDirectSt... |
| Alias | Flush-Volume | 2.0.0.0 | Storage |
| Alias | Flush-Volume | 1.0.0.0 | VMDirectSt... |
| Alias | Get-AppPackage | 2.0.1.0 | Appx |
| Alias | Get-AppPackageAutoUpdateSettings | 2.0.1.0 | Appx |
| Alias | Get-AppPackageDefaultVolume | 2.0.1.0 | Appx |
| Alias | Get-AppPackageLastError | 2.0.1.0 | Appx |
| Alias | Get-AppPackageLog | 2.0.1.0 | Appx |
| Alias | Get-AppPackageManifest | 2.0.1.0 | Appx |
| Alias | Get-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | Get-AppProvisionedPackage | 3.0 | Dism |
| Alias | Get-DiskSNV | 2.0.0.0 | Storage |
| Alias | Get-DiskSNV | 1.0.0.0 | VMDirectSt... |
| Alias | Get-Language | 1.0 | LanguagePa... |
| Alias | Get-PhysicalDiskSNV | 2.0.0.0 | Storage |
| Alias | Get-PhysicalDiskSNV | 1.0.0.0 | VMDirectSt... |
| Alias | Get-PreferredLanguage | 1.0 | LanguagePa... |
| Alias | Get-ProvisionedAppPackage | 3.0 | Dism |
| Alias | Get-ProvisionedAppSharedPackageContainer | 3.0 | Dism |
| Alias | Get-ProvisionedAppxPackage | 3.0 | Dism |
| Alias | Get-StorageEnclosureSNV | 2.0.0.0 | Storage |
| Alias | Get-StorageEnclosureSNV | 1.0.0.0 | VMDirectSt... |
| Alias | Get-SystemLanguage | 1.0 | LanguagePa... |
| Alias | Initialize-Volume | 2.0.0.0 | Storage |
| Alias | Initialize-Volume | 1.0.0.0 | VMDirectSt... |
| Alias | Mount-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | Move-AppPackage | 2.0.1.0 | Appx |
| Alias | Move-SmbClient | 2.0.0.0 | SmbWitness |
| Alias | Optimize-AppProvisionedPackages | 3.0 | Dism |
| Alias | Optimize-ProvisionedAppPackages | 3.0 | Dism |
| Alias | Optimize-ProvisionedAppxPackages | 3.0 | Dism |
| Alias | Remove-AppPackage | 2.0.1.0 | Appx |
| Alias | Remove-AppPackageAutoUpdateSettings | 2.0.1.0 | Appx |
| Alias | Remove-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | Remove-AppProvisionedPackage | 3.0 | Dism |
| Alias | Remove-EtwTraceSession | 1.0.0.0 | EventTraci... |
| Alias | Remove-ProvisionedAppPackage | 3.0 | Dism |
| Alias | Remove-ProvisionedAppSharedPackageContainer | 3.0 | Dism |
| Alias | Remove-ProvisionedAppxPackage | 3.0 | Dism |
| Alias | Remove-ProvisioningPackage | 3.0 | Provisioning |
| Alias | Remove-TrustedProvisioningCertificate | 3.0 | Provisioning |
| Alias | Reset-AppPackage | 2.0.1.0 | Appx |
| Alias | Set-AppPackageAutoUpdateSettings | 2.0.1.0 | Appx |
| Alias | Set-AppPackageDefaultVolume | 2.0.1.0 | Appx |
| Alias | Set-AppPackageProvisionedDataFile | 3.0 | Dism |

> Comptage des commandes de type cmdlet :

```
PS C:\Users\Administrateur> (Get-Command -CommandType Cmdlet).count
682
PS C:\Users\Administrateur>
```

> Affichage de toutes les commandes contenant « write » dans leurs partie « verbe » :

```
PS C:\Users\Administrateur> Get-Command -Verb write
```

| CommandType | Name | Version | Source |
|-------------|-----------------------------------|---------|---------------|
| Alias | Write-FileSystemCache | 2.0.0.0 | Storage |
| Alias | Write-FileSystemCache | 1.0.0.0 | VMDirectSt... |
| Function | Write-DtcTransactionsTraceSession | 1.0.0.0 | MsDtc |
| Function | Write-PrinterNfcTag | 1.1 | PrintManag... |
| Function | Write-VolumeCache | 2.0.0.0 | Storage |
| Cmdlet | Write-Debug | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-Error | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-EventLog | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-Host | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-Information | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-Output | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-Progress | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-Verbose | 3.1.0.0 | Microsoft... |
| Cmdlet | Write-Warning | 3.1.0.0 | Microsoft... |

```
PS C:\Users\Administrateur>
```

> Commandes « object » dans leurs partie « nom » :

```
PS C:\Users\Administrateur> Get-Command -Noun object
```

| CommandType | Name | Version | Source |
|-------------|----------------|---------|--------------|
| Cmdlet | Compare-Object | 3.1.0.0 | Microsoft... |
| Cmdlet | ForEach-Object | 3.0.0.0 | Microsoft... |
| Cmdlet | Group-Object | 3.1.0.0 | Microsoft... |
| Cmdlet | Measure-Object | 3.1.0.0 | Microsoft... |
| Cmdlet | New-Object | 3.1.0.0 | Microsoft... |
| Cmdlet | Select-Object | 3.1.0.0 | Microsoft... |
| Cmdlet | Sort-Object | 3.1.0.0 | Microsoft... |
| Cmdlet | Tee-Object | 3.1.0.0 | Microsoft... |
| Cmdlet | Where-Object | 3.0.0.0 | Microsoft... |

```
PS C:\Users\Administrateur>
```

> Affichage de toutes les alias :

```
PS C:\Users\Administrateur> Get-Command -CommandType alias
```

| CommandType | Name | Version | Source |
|-------------|--|---------|---------------|
| Alias | % -> ForEach-Object | | |
| Alias | ? -> Where-Object | | |
| Alias | ac -> Add-Content | | |
| Alias | Add-AppPackage | 2.0.1.0 | Appx |
| Alias | Add-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | Add-AppProvisionedPackage | 3.0 | Dism |
| Alias | Add-ProvisionedAppPackage | 3.0 | Dism |
| Alias | Add-ProvisionedAppSharedPackageContainer | 3.0 | Dism |
| Alias | Add-ProvisionedAppxPackage | 3.0 | Dism |
| Alias | Add-ProvisioningPackage | 3.0 | Provisioning |
| Alias | Add-TrustedProvisioningCertificate | 3.0 | Provisioning |
| Alias | algm -> | 1.0.0.0 | Microsoft.... |
| Alias | Apply-WindowsUnattend | 3.0 | Dism |
| Alias | asnp -> Add-PSSnapin | | |
| Alias | blsmba -> | 2.0.0.0 | SmbShare |
| Alias | blsmbclas -> | 2.0.0.0 | SmbShare |
| Alias | cat -> Get-Content | | |
| Alias | cd -> Set-Location | | |
| Alias | CFS -> ConvertFrom-String | 3.1.0.0 | Microsoft.... |
| Alias | chdir -> Set-Location | | |
| Alias | clc -> Clear-Content | | |
| Alias | clear -> Clear-Host | | |
| Alias | clhy -> Clear-History | | |
| Alias | cli -> Clear-Item | | |
| Alias | clp -> Clear-ItemProperty | | |
| Alias | cls -> Clear-Host | | |
| Alias | clv -> Clear-Variable | | |
| Alias | cmpcfg -> | 1.1 | PSDesiredS... |
| Alias | cnsn -> Connect-PSSession | | |
| Alias | compare -> Compare-Object | | |
| Alias | copy -> Copy-Item | | |
| Alias | cp -> Copy-Item | | |
| Alias | cpi -> Copy-Item | | |
| Alias | cpp -> Copy-ItemProperty | | |
| Alias | cssmbo -> | 2.0.0.0 | SmbShare |
| Alias | cssmbse -> | 2.0.0.0 | SmbShare |
| Alias | curl -> Invoke-WebRequest | | |
| Alias | cvpa -> Convert-Path | | |
| Alias | dbp -> Disable-PSBreakpoint | | |
| Alias | del -> Remove-Item | | |
| Alias | diff -> Compare-Object | | |
| Alias | dir -> Get-ChildItem | | |
| Alias | Disable-PhysicalDiskIndication | 2.0.0.0 | Storage |
| Alias | Disable-PhysicalDiskIndication | 1.0.0.0 | VMDirectSt... |
| Alias | Disable-StorageDiagnosticLog | 2.0.0.0 | Storage |
| Alias | Disable-StorageDiagnosticLog | 1.0.0.0 | VMDirectSt... |
| Alias | Dismount-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | dlnu -> | 1.0.0.0 | Microsoft.... |
| Alias | dnsn -> Disconnect-PSSession | | |
| Alias | dsmbd -> | 2.0.0.0 | SmbShare |
| Alias | ebp -> Enable-PSBreakpoint | | |
| Alias | echo -> Write-Output | | |
| Alias | elu -> | 1.0.0.0 | Microsoft.... |
| Alias | Enable-PhysicalDiskIndication | 2.0.0.0 | Storage |
| Alias | Enable-PhysicalDiskIndication | 1.0.0.0 | VMDirectSt... |
| Alias | Enable-StorageDiagnosticLog | 2.0.0.0 | Storage |
| Alias | Enable-StorageDiagnosticLog | 1.0.0.0 | VMDirectSt... |
| Alias | epal -> Export-Alias | | |
| Alias | epcsv -> Export-Csv | | |
| Alias | epsn -> Export-PSSession | | |
| Alias | erase -> Remove-Item | | |
| Alias | esmbd -> | 2.0.0.0 | SmbShare |
| Alias | etsn -> Enter-PSSession | | |

> Affichage de toutes les commandes en « Get- » :

```
PS C:\Users\Administrateur> Get-Command Get-*
```

| CommandType | Name | Version | Source |
|-------------|---|---------|---------------|
| Alias | Get-AppPackage | 2.0.1.0 | Appx |
| Alias | Get-AppPackageAutoUpdateSettings | 2.0.1.0 | Appx |
| Alias | Get-AppPackageDefaultVolume | 2.0.1.0 | Appx |
| Alias | Get-AppPackageLastError | 2.0.1.0 | Appx |
| Alias | Get-AppPackageLog | 2.0.1.0 | Appx |
| Alias | Get-AppPackageManifest | 2.0.1.0 | Appx |
| Alias | Get-AppPackageVolume | 2.0.1.0 | Appx |
| Alias | Get-AppProvisionedPackage | 3.0 | Dism |
| Alias | Get-DiskSNV | 2.0.0.0 | Storage |
| Alias | Get-DiskSNV | 1.0.0.0 | VMDirectSt... |
| Alias | Get-Language | 1.0 | LanguagePa... |
| Alias | Get-PhysicalDiskSNV | 2.0.0.0 | Storage |
| Alias | Get-PhysicalDiskSNV | 1.0.0.0 | VMDirectSt... |
| Alias | Get-PreferredLanguage | 1.0 | LanguagePa... |
| Alias | Get-ProvisionedAppPackage | 3.0 | Dism |
| Alias | Get-ProvisionedAppSharedPackageContainer | 3.0 | Dism |
| Alias | Get-ProvisionedAppxPackage | 3.0 | Dism |
| Alias | Get-StorageEnclosureSNV | 2.0.0.0 | Storage |
| Alias | Get-StorageEnclosureSNV | 1.0.0.0 | VMDirectSt... |
| Alias | Get-SystemLanguage | 1.0 | LanguagePa... |
| Function | Get-AppBackgroundTask | 1.0.0.0 | AppBackgro... |
| Function | Get-AppVirtualProcess | 1.0.0.0 | AppvClient |
| Function | Get-AppxLastError | 2.0.1.0 | Appx |
| Function | Get-AppxLog | 2.0.1.0 | Appx |
| Function | Get-AssignedAccess | 1.0.0.0 | AssignedAc... |
| Function | Get-AutoLoggerConfig | 1.0.0.0 | EventTraci... |
| Function | Get-BCClientConfiguration | 1.0.0.0 | BranchCache |
| Function | Get-BCContentServerConfiguration | 1.0.0.0 | BranchCache |
| Function | Get-BCDataCache | 1.0.0.0 | BranchCache |
| Function | Get-BCDataCacheExtension | 1.0.0.0 | BranchCache |
| Function | Get-BCHashCache | 1.0.0.0 | BranchCache |
| Function | Get-BCHostedCacheServerConfiguration | 1.0.0.0 | BranchCache |
| Function | Get-BCNetworkConfiguration | 1.0.0.0 | BranchCache |
| Function | Get-BCStatus | 1.0.0.0 | BranchCache |
| Function | Get-BitLockerVolume | 1.0.0.0 | BitLocker |
| Function | Get-ClusteredScheduledTask | 1.0.0.0 | ScheduledT... |
| Function | Get-DAClientExperienceConfiguration | 1.0.0.0 | DirectAcce... |
| Function | Get-DACConnectionStatus | 1.0.0.0 | NetworkCon... |
| Function | Get-DAEntryPointTableItem | 1.0.0.0 | DirectAcce... |
| Function | Get-DedupProperties | 2.0.0.0 | Storage |
| Function | Get-DeliveryOptimizationPerfSnap | 1.0.3.0 | DeliveryOp... |
| Function | Get-DeliveryOptimizationPerfSnapThisMonth | 1.0.3.0 | DeliveryOp... |
| Function | Get-DeliveryOptimizationStatus | 1.0.3.0 | DeliveryOp... |
| Function | Get-Disk | 2.0.0.0 | Storage |
| Function | Get-DiskImage | 2.0.0.0 | Storage |
| Function | Get-DiskStorageNodeView | 2.0.0.0 | Storage |
| Function | Get-DnsClient | 1.0.0.0 | DnsClient |
| Function | Get-DnsClientCache | 1.0.0.0 | DnsClient |
| Function | Get-DnsClientDohServerAddress | 1.0.0.0 | DnsClient |
| Function | Get-DnsClientGlobalSetting | 1.0.0.0 | DnsClient |
| Function | Get-DnsClientNrptGlobal | 1.0.0.0 | DnsClient |
| Function | Get-DnsClientNrptPolicy | 1.0.0.0 | DnsClient |
| Function | Get-DnsClientNrptRule | 1.0.0.0 | DnsClient |
| Function | Get-DnsClientServerAddress | 1.0.0.0 | DnsClient |
| Function | Get-DOSConfig | 1.0.3.0 | DeliveryOp... |
| Function | Get-DOSDownloadMode | 1.0.3.0 | DeliveryOp... |
| Function | Get-DOSPercentageMaxBackgroundBandwidth | 1.0.3.0 | DeliveryOp... |
| Function | Get-DOSPercentageMaxForegroundBandwidth | 1.0.3.0 | DeliveryOp... |
| Function | Get-DscConfiguration | 1.1 | PSDesiredS... |
| Function | Get-DscConfigurationStatus | 1.1 | PSDesiredS... |
| Function | Get-DscLocalConfigurationManager | 1.1 | PSDesiredS... |
| Function | Get-DscResource | 1.1 | PSDesiredS... |
| Function | Get-Dtc | 1.0.0.0 | MsDtc |

> Création de la variable « mvariable » :

```
PS C:\Users\Administrateur> $maVariable = 'Bonjour tout le monde!'
PS C:\Users\Administrateur>
```

> Utilisation de la commande « Get-Member » pour pouvoir trouver la méthode ToUpper (permettant de mettre en majuscule) et Length (pour la longueur) :

```
PS C:\Users\Administrateur> $maVariable | gm

TypeName : System.String

Name      MemberType      Definition
-----
Clone     Method          System.Object Clone(), System.Object ICloneable.C...
CompareTo Method          int CompareTo(System.Object value), int CompareTo...
Contains  Method          bool Contains(string value)
CopyTo    Method          void CopyTo(int sourceIndex, char[] destination, ...
EndsWith  Method          bool EndsWith(string value), bool EndsWith(string...
Equals    Method          bool Equals(System.Object obj), bool Equals(strin...
GetEnumera Method         System.CharEnumerator GetEnumerator(), System.Co...
GetHashCode Method         int GetHashCode()
GetType   Method          type GetType()
GetTypeCode Method         System.TypeCode GetTypeCode(), System.TypeCode IC...
IndexOf   Method          int IndexOf(char value), int IndexOf(char value, ...
IndexOfAny Method         int IndexOfAny(char[] anyOf), int IndexOfAny(char...
Insert    Method          string Insert(int startIndex, string value)
IsNormalized Method        bool IsNormalized(), bool IsNormalized(System.Tex...
LastIndexOf Method        int LastIndexOf(char value), int LastIndexOf(char...
LastIndexOfAny Method        int LastIndexOfAny(char[] anyOf), int LastIndexO...
Normalize Method          string Normalize(), string Normalize(System.Text...
PadLeft   Method          string PadLeft(int totalWidth, string PadLeft(in...
PadRight  Method          string PadRight(int totalWidth), string PadRight(...
Remove    Method          string Remove(int startIndex, int count), string ...
Replace   Method          string Replace(char oldChar, char newChar), strin...
Split     Method          string[] Split(Params char[] separator), string[]...
StartsWith Method        bool StartsWith(string value), bool StartsWith(st...
Substring Method          string Substring(int startIndex), string Substrin...
ToBoolean Method          bool IConvertible.ToBoolean(System.IFormatProvid...
ToByte    Method          byte IConvertible.ToByte(System.IFormatProvider p...
ToChar    Method          char IConvertible.ToChar(System.IFormatProvider p...
ToCharArray Method        char[] ToCharArray(), char[] ToCharArray(int star...
ToDateTime Method        datetime IConvertible.ToDateTime(System.IFormatPr...
ToDecimal Method          decimal IConvertible.ToDecimal(System.IFormatProv...
ToDouble  Method          double IConvertible.ToDouble(System.IFormatProvid...
ToInt16   Method          int16 IConvertible.ToInt16(System.IFormatProvider...
ToInt32   Method          int IConvertible.ToInt32(System.IFormatProvider p...
ToInt64   Method          long IConvertible.ToInt64(System.IFormatProvider ...
ToLower   Method          string ToLower(), string ToLower(cultureinfo cult...
ToLowerInvariant Method        string ToLowerInvariant()
ToSByte   Method          sbyte IConvertible.ToSByte(System.IFormatProvider...
ToSingle  Method          float IConvertible.ToSingle(System.IFormatProvide...
ToString  Method          string ToString(), string ToString(System.IFormat...
ToType    Method          System.Object IConvertible.ToType(type conversion...
ToUInt16  Method          uint16 IConvertible.ToUInt16(System.IFormatProvid...
ToUInt32  Method          uint32 IConvertible.ToUInt32(System.IFormatProvid...
ToUInt64  Method          uint64 IConvertible.ToUInt64(System.IFormatProvid...
ToUpper   Method          string ToUpper(), string ToUpper(cultureinfo cult...
ToUpperInvariant Method        string ToUpperInvariant()
Trim      Method          string Trim(Params char[] trimChars), string Trim()
TrimEnd   Method          string TrimEnd(Params char[] trimChars)
TrimStart Method          string TrimStart(Params char[] trimChars)
Chars     ParameterizedProperty char Chars(int index) {get;}
Length    Property        int Length {get;}

PS C:\Users\Administrateur>
```

> Utilisation de la méthode Length sur mavariable (retournant 22 caractères au lieu des 23 de l'énoncé car ici, l'espace du « ! » est manquant) :

```
PS C:\Users\Administrateur> $maVariable.Length
22
PS C:\Users\Administrateur>
```

> Utilisation de la méthode ToUpper sur mavariable :

```
PS C:\Users\Administrateur> $maVariable.ToUpper()
BONJOUR TOUT LE MONDE!
PS C:\Users\Administrateur>
```

> L'alias « dir » exécute la commande « Get-ChildItem » :

```
PS C:\Users\Administrateur> Get-Alias dir
```

| CommandType | Name | Version | Source |
|-------------|----------------------|---------|--------|
| Alias | dir -> Get-ChildItem | | |

```
PS C:\Users\Administrateur>
```

> Exemples des différents alias :

```
PS C:\Users\Administrateur> Get-Alias dir
CommandType      Name                Version            Source
-----
Alias            dir -> Get-ChildItem

PS C:\Users\Administrateur> Get-Alias cd
CommandType      Name                Version            Source
-----
Alias            cd -> Set-Location

PS C:\Users\Administrateur> Get-Alias md
CommandType      Name                Version            Source
-----
Alias            md -> mkdir

PS C:\Users\Administrateur> Get-Alias rd
CommandType      Name                Version            Source
-----
Alias            rd -> Remove-Item

PS C:\Users\Administrateur> Get-Alias move
CommandType      Name                Version            Source
-----
Alias            move -> Move-Item

PS C:\Users\Administrateur> Get-Alias ren
CommandType      Name                Version            Source
-----
Alias            ren -> Rename-Item

PS C:\Users\Administrateur> Get-Alias copy
CommandType      Name                Version            Source
-----
Alias            copy -> Copy-Item

PS C:\Users\Administrateur>
```

> Affichage des dossiers dans le système de fichiers avec l'alias « gci » :

```
PS C:\Users\Administrateur> gci c:\

Répertoire : C:\

Mode                LastWriteTime         Length Name
----                -
d-----            07/05/2022    07:24         PerfLogs
d-r-----          31/01/2025    15:18       Program Files
d-r-----          01/04/2025    10:57       Program Files (x86)
d-r-----          24/04/2025    10:12         Users
d-----            03/04/2025    16:54         Windows
-a-----            18/03/2025    14:43       12288 DumpStack.log

PS C:\Users\Administrateur>
```

> Ajout du paramètre « -Force » pour afficher les fichiers cachés :

```
PS C:\Users\Administrateur> gci c:\ -Force

Répertoire : C:\

Mode                LastWriteTime         Length Name
----                -
d--hs-             24/04/2025    10:13         $Recycle.Bin
d--h--             24/04/2025    10:50         $WINDOWS.BT
d--hs-             25/04/2025    09:05         Config.Msi
d--hs|             13/01/2025    17:50       Documents and Settings
d-----            07/05/2022    07:24         PerfLogs
d-r-----          31/01/2025    15:18       Program Files
d-r-----          01/04/2025    10:57       Program Files (x86)
d--h--             18/03/2025    14:43         ProgramData
d--hs-             28/02/2025    14:05         Recovery
d--hs-             15/05/2025    10:06       System Volume Information
d-r-----          24/04/2025    10:12         Users
d-----            03/04/2025    16:54         Windows
-a-----            18/03/2025    14:43       12288 DumpStack.log
-a-hs-             15/05/2025    09:42       12288 DumpStack.log.tmp
-a-hs-             15/05/2025    09:42     27451232256 hiberfil.sys
-a-hs-             15/05/2025    09:42     10200547328 pagefile.sys
-a-hs-             15/05/2025    09:42     16777216 swapfile.sys

PS C:\Users\Administrateur>
```

> Affichage de tout les fichiers .log dans le répertoire « Users » :

```
PS C:\Users\Administrateur> Get-ChildItem C:\Users\* -Include *.log -Recurse

Répertoire : C:\Users\Administrateur\VirtualBox

Mode                LastWriteTime         Length Name
----                -
-a----            09/05/2025    16:48           140 selectorwindow.log
-a----            09/05/2025    16:49          77981 VBoxSVC.log

Répertoire : C:\Users\Administrateur\Cisco Packet Tracer 8.2.2\logs

Mode                LastWriteTime         Length Name
----                -
-a----            27/03/2025    10:23          31510 pt_03.27.2025_10.20.04.181.log
-a----            27/03/2025    10:23           5406 pt_03.27.2025_10.20.05.509.log
-a----            02/04/2025    13:59          38128 pt_04.02.2025_13.56.54.583.log
-a----            02/04/2025    13:59           5366 pt_04.02.2025_13.56.55.912.log
-a----            02/04/2025    16:01         129866 pt_04.02.2025_13.59.59.695.log
-a----            02/04/2025    18:04           5778 pt_04.02.2025_14.00.01.013.log
-a----            02/04/2025    18:04         143998 pt_04.02.2025_16.01.56.454.log

Répertoire : C:\Users\Administrateur\VirtualBox VMs\desktop\Logs

Mode                LastWriteTime         Length Name
----                -
-a----            27/03/2025    10:49         257826 VBox.log
-a----            27/03/2025    10:49         479741 VBoxHardening.log
```

> Affichage des objets de plus de 32KB avec la méthode Length :

```
PS C:\Users\Administrateur\Desktop> Get-ChildItem | Where-Object {$_.Length -gt 32KB}

Répertoire : C:\Users\Administrateur\Desktop

Mode                LastWriteTime         Length Name
----                -
-a----            02/04/2025    18:05        1084331 evaluation ENZO FAUDON.7z
-a----            15/05/2025    10:31         115621 Nouveau Document texte.txt
-a----            20/03/2025    11:12          61300 packet.pkt

PS C:\Users\Administrateur\Desktop>
```

> Affichage des objets postérieure a la date 01/31/2018 avec la méthode « LastWriteTime » :

```
PS C:\Users\Administrateur\Desktop> Get-ChildItem | Where-Object {$_.LastWriteTime -gt '01/31/2018'}

Répertoire : C:\Users\Administrateur\Desktop

Mode                LastWriteTime         Length Name
----                -
d-----            02/04/2025   18:03          eval
-a-----            02/04/2025   18:05    1084331 evaluation ENZO FAUDON.7z
-a-----            15/05/2025   10:31    115621 Nouveau Document texte.txt
-a-----            20/03/2025   11:12     61300 packet.pkt
-a-----            23/01/2025   11:38     1706 Tftpd64.lnk

PS C:\Users\Administrateur\Desktop>
```

> Affichage des dossiers ET fichiers cachés à la racine du disque C :

```
PS C:\Users\Administrateur\Desktop> Get-ChildItem c:\ -Attributes Hidden

Répertoire : C:\

Mode                LastWriteTime         Length Name
----                -
d--hs-             24/04/2025   10:13          $Recycle.Bin
d--h--             24/04/2025   10:50          $WINDOWS.~BT
d--hs-             25/04/2025    9:05          Config.Msi
d--hsl             13/01/2025   17:50          Documents and Settings
d--h--             18/03/2025   14:43          ProgramData
d--hs-             28/02/2025   14:05          Recovery
d--hs-             15/05/2025   10:06          System Volume Information
-a-hs-             15/05/2025    9:42          12288 DumpStack.log.tmp
-a-hs-             15/05/2025   9:42    27451232256 hiberfil.sys
-a-hs-             15/05/2025   9:42    10200547328 pagefile.sys
-a-hs-             15/05/2025   9:42    16777216 swapfile.sys

PS C:\Users\Administrateur\Desktop>
```

> Affichage UNIQUEMENT des fichiers cachés à la racine du disque C :

```
PS C:\Users\Administrateur\Desktop> Get-ChildItem c:\ -Attributes Hidden+!Directory

Répertoire : C:\

Mode                LastWriteTime         Length Name
----                -
-a-hs-             15/05/2025    9:42          12288 DumpStack.log.tmp
-a-hs-             15/05/2025   9:42    27451232256 hiberfil.sys
-a-hs-             15/05/2025   9:42    10200547328 pagefile.sys
-a-hs-             15/05/2025   9:42    16777216 swapfile.sys

PS C:\Users\Administrateur\Desktop>
```

> Déplacement dans le disque D :

```
PS C:\Users\Administrateur\Desktop> Set-Location D:\
PS D:\>
```

> Commande « Get-Location » permettant d'afficher le chemin du répertoire courant :

```
PS C:\users> Get-Location
Path
----
C:\users
PS C:\users>
```

> Commande « Get-Member » permettant de découvrir la méthode « Path » :

```
PS C:\users> Get-Location | gm

    TypeName : System.Management.Automation.PathInfo
Name          MemberType Definition
-----
Equals        Method      bool Equals(System.Object obj)
GetHashCode   Method      int GetHashCode()
GetType       Method      type GetType()
ToString      Method      string ToString()
Drive         Property    System.Management.Automation.PSDriveInfo Drive {get;}
Path          Property    string Path {get;}
Provider      Property    System.Management.Automation.ProviderInfo Provider {get;}
ProviderPath Property    string ProviderPath {get;}

PS C:\users>
```

> Création de la variable « CheminCourant » donnant le chemin courant avec la méthode Path :

```
PS C:\users> $CheminCourant = (Get-Location).Path
PS C:\users> $CheminCourant
C:\users
PS C:\users>
```

> Création du répertoire Temp a la racine du disque C :

```
PS C:\> New-Item -ItemType directory -Name Temp

Répertoire : C:\

Mode                LastWriteTime         Length Name
----                -
d-----            15/05/2025   10:47         Temp

PS C:\>
```

> Création d'un fichier texte dans la racine du disque C :

```
PS C:\> ni -Name EFaudon.txt -ItemType file -Value 'ENZO FAUDON FOREVER!!!'

Répertoire : C:\

Mode                LastWriteTime         Length Name
----                -
-a-----            15/05/2025   10:50         22 EFaudon.txt

PS C:\>
```

> Suppression de tout les fichier en .log dans le répertoire Temp :

```
PS C:\> Remove-Item C:\Temp\*.log
PS C:\>
```

> Suppression de tout les fichiers en .txt dans le répertoire Temp :

```
PS C:\> Get-ChildItem C:\Temp\* -Include *.txt -Recurse | Remove-Item
PS C:\>
```

> Suppression du fichier EFaudon.txt de force :

```
PS C:\> ri EFaudon.txt -Force
PS C:\>
```

> Déplacement de tout les fichiers en .jpg dans le répertoire « Mes Photos » :

```
PS C:\> Move-Item -Path *.jpg -destination 'Mes photos'  
PS C:\>
```

> Nouvelle création du fichier Efaudon.txt tout en le renommant Test.txt :

```
PS C:\> ni -Name Efaudon.txt -ItemType file -Value 'ENZO FAUDON FOREVER!!!'  
  
Répertoire : C:\  
  
Mode                LastWriteTime         Length Name  
----                -  
-a----             15/05/2025      10:59           22 Efaudon.txt  
  
PS C:\> Rename-Item -Path C:\Efaudon.txt -NewName Test.txt  
PS C:\> ls  
  
Répertoire : C:\  
  
Mode                LastWriteTime         Length Name  
----                -  
d-----             07/05/2022      07:24     PerfLogs  
d-r---             31/01/2025     15:18     Program Files  
d-r---             01/04/2025     10:57     Program Files (x86)  
d-----             15/05/2025     10:47     Temp  
d-r---             24/04/2025     10:12     Users  
d-----             03/04/2025     16:54     Windows  
-a----             18/03/2025    14:43    12288 DumpStack.log  
-a----             15/05/2025     10:59           22 Test.txt  
  
PS C:\>
```

> Création du dossier ENZOF en le renommant Test :

```
PS C:\> ni -Name ENZOF -ItemType directory  
  
Répertoire : C:\  
  
Mode                LastWriteTime         Length Name  
----                -  
d-----             15/05/2025     11:00           ENZOF  
  
PS C:\> Rename-Item C:\ENZOF Test  
PS C:\>
```

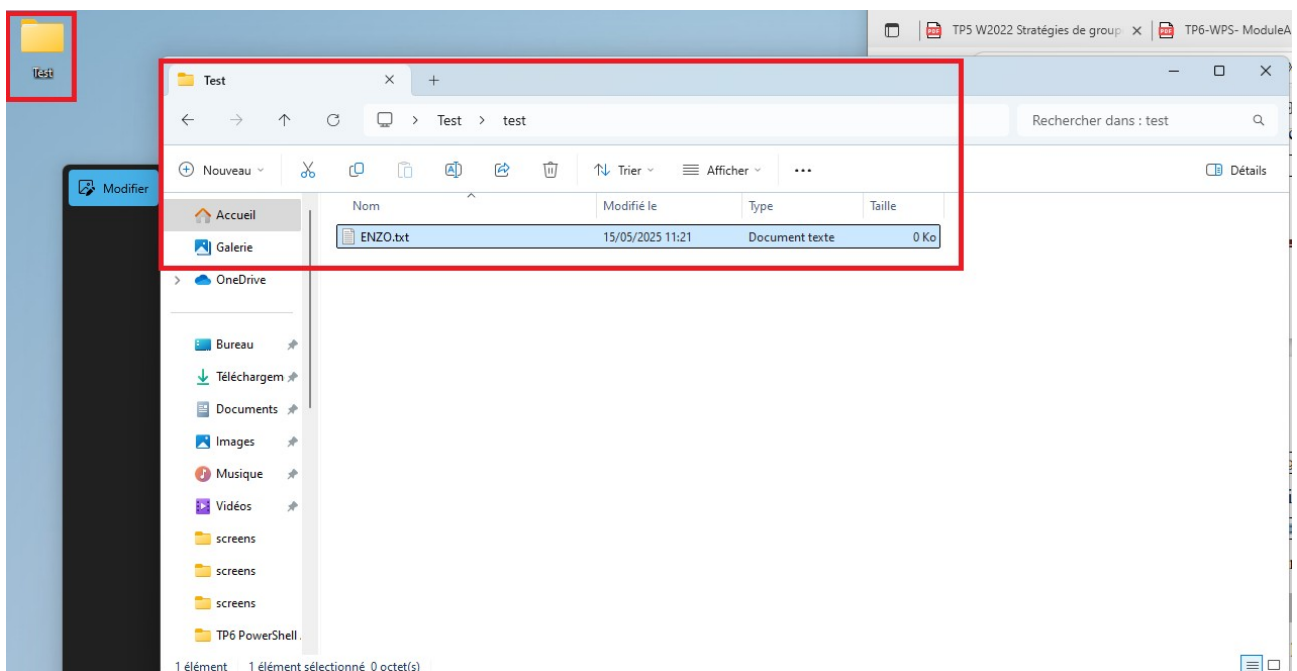
> Copie du fichier Test.txt sur le bureau :

```
PS C:\> Copy-Item C:\Test.txt -destination C:\Users\Administrateur\Desktop  
PS C:\>
```

> Copie d'une arborescence de fichiers de la racine C au bureau :

```
PS C:\WINDOWS\system32> Copy-Item -Path C:\Test -Destination C:\Users\Administrateur\Desktop -Recurse  
PS C:\WINDOWS\system32>
```

> Vérification sur le bureau :



> Importation automatique du module AD et affichage des commandes AD :

```

PS C:\Users\Administrateur> Import-Module ActiveDirectory
PS C:\Users\Administrateur> Get-Command -Module ActiveDirectory

CommandType      Name                                     Version      Source
-----
Cmdlet           Add-ADCentralAccessPolicyMember        1.0.1.0     ActiveDirectory
Cmdlet           Add-ADComputerServiceAccount           1.0.1.0     ActiveDirectory
Cmdlet           Add-ADDomainControllerPasswordReplica 1.0.1.0     ActiveDirectory
Cmdlet           Add-ADFineGrainedPasswordPolicySubje 1.0.1.0     ActiveDirectory
Cmdlet           Add-ADGroupMember                      1.0.1.0     ActiveDirectory
Cmdlet           Add-ADPrincipalGroupMembership         1.0.1.0     ActiveDirectory
Cmdlet           Add-ADResourcePropertyListMember       1.0.1.0     ActiveDirectory
Cmdlet           Clear-ADAccountExpiration               1.0.1.0     ActiveDirectory
Cmdlet           Clear-ADClaimTransformLink              1.0.1.0     ActiveDirectory
Cmdlet           Disable-ADAccount                      1.0.1.0     ActiveDirectory
Cmdlet           Disable-ADOptionalFeature              1.0.1.0     ActiveDirectory
Cmdlet           Enable-ADAccount                       1.0.1.0     ActiveDirectory
Cmdlet           Enable-ADOptionalFeature                1.0.1.0     ActiveDirectory
Cmdlet           Get-ADAccountAuthorizationGroup         1.0.1.0     ActiveDirectory
Cmdlet           Get-ADAccountResultantPasswordReplica 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADAuthenticationPolicy             1.0.1.0     ActiveDirectory
Cmdlet           Get-ADAuthenticationPolicySilo         1.0.1.0     ActiveDirectory
Cmdlet           Get-ADCentralAccessPolicy              1.0.1.0     ActiveDirectory
Cmdlet           Get-ADCentralAccessRule                1.0.1.0     ActiveDirectory
Cmdlet           Get-ADClaimTransformPolicy              1.0.1.0     ActiveDirectory
Cmdlet           Get-ADClaimType                        1.0.1.0     ActiveDirectory
Cmdlet           Get-ADComputer                         1.0.1.0     ActiveDirectory
Cmdlet           Get-ADComputerServiceAccount           1.0.1.0     ActiveDirectory
Cmdlet           Get-ADDCCloningExcludedApplicationList 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADDefaultDomainPasswordPolicy      1.0.1.0     ActiveDirectory
Cmdlet           Get-ADDomain                           1.0.1.0     ActiveDirectory
Cmdlet           Get-ADDomainController                 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADDomainControllerPasswordReplica 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADDomainControllerPasswordReplica 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADFineGrainedPasswordPolicy        1.0.1.0     ActiveDirectory
Cmdlet           Get-ADFineGrainedPasswordPolicySubje 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADForest                           1.0.1.0     ActiveDirectory
Cmdlet           Get-ADGroup                             1.0.1.0     ActiveDirectory
Cmdlet           Get-ADGroupMember                     1.0.1.0     ActiveDirectory
Cmdlet           Get-ADObject                           1.0.1.0     ActiveDirectory
Cmdlet           Get-ADOptionalFeature                  1.0.1.0     ActiveDirectory
Cmdlet           Get-ADOrganizationalUnit                1.0.1.0     ActiveDirectory
Cmdlet           Get-ADPrincipalGroupMembership         1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationAttributeMetadata     1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationConnection            1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationFailure                1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationPartnerMetadata       1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationQueueOperation        1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationSite                  1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationSiteLink              1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationSiteLinkBridge        1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationSubnet                1.0.1.0     ActiveDirectory
Cmdlet           Get-ADReplicationUpToDatenessVectorTa 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADResourceProperty                 1.0.1.0     ActiveDirectory
Cmdlet           Get-ADResourcePropertyList             1.0.1.0     ActiveDirectory
Cmdlet           Get-ADResourcePropertyValueTypes       1.0.1.0     ActiveDirectory
Cmdlet           Get-ADRootDSE                          1.0.1.0     ActiveDirectory

```

> Commandes User du module AD :

```
PS C:\Users\Administrateur> Get-Command -Module ActiveDirectory -Name *user*
```

| CommandType | Name | Version | Source |
|-------------|-----------------------------------|---------|-----------------|
| Cmdlet | Get-ADUser | 1.0.1.0 | ActiveDirectory |
| Cmdlet | Get-ADUserResultantPasswordPolicy | 1.0.1.0 | ActiveDirectory |
| Cmdlet | New-ADUser | 1.0.1.0 | ActiveDirectory |
| Cmdlet | Remove-ADUser | 1.0.1.0 | ActiveDirectory |
| Cmdlet | Set-ADUser | 1.0.1.0 | ActiveDirectory |

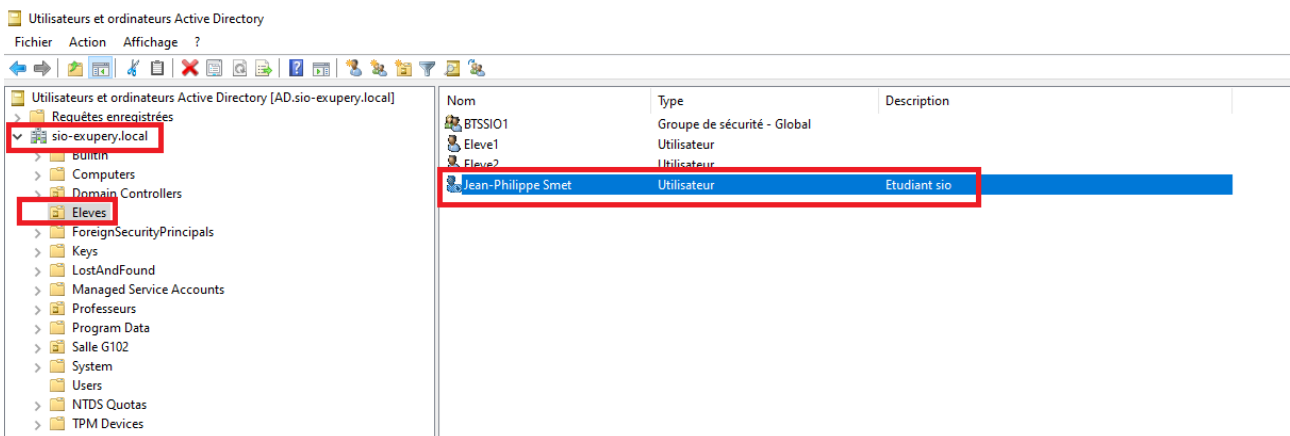
```
PS C:\Users\Administrateur> |
```

> Création de l'utilisateur Johnny :

```
PS C:\Users\Administrateur> New-ADUser -SamAccountName johnny -Name 'Jean-Philippe Smet' -GivenName Jean-Philippe -Surname Smet -DisplayName 'Jean-Philippe Smet' -description 'Etudiant sio' -HomeDrive 'C:' -HomeDirectory '\\AD\Home' -Path 'OU=Eleves,DC=sio-exu...
New-ADUser : Le compte spécifié existe déjà
Au caractère ligne:1 : 2
+ New-ADUser -SamAccountName johnny -Name 'Jean-Philippe Smet' -GivenN ...
+ ~~~~~
+ CategoryInfo          : ResourceExists: (CN=Jean-Phillip...xupery,DC=local:String) [New-ADUser], ADIdentityAlreadyExi
stsException
+ FullyQualifiedErrorId : ActiveDirectoryServer:1316,Microsoft.ActiveDirectory.Management.Commands.NewADUser

PS C:\Users\Administrateur>
```

> Vérification de la bonne création de l'utilisateur :

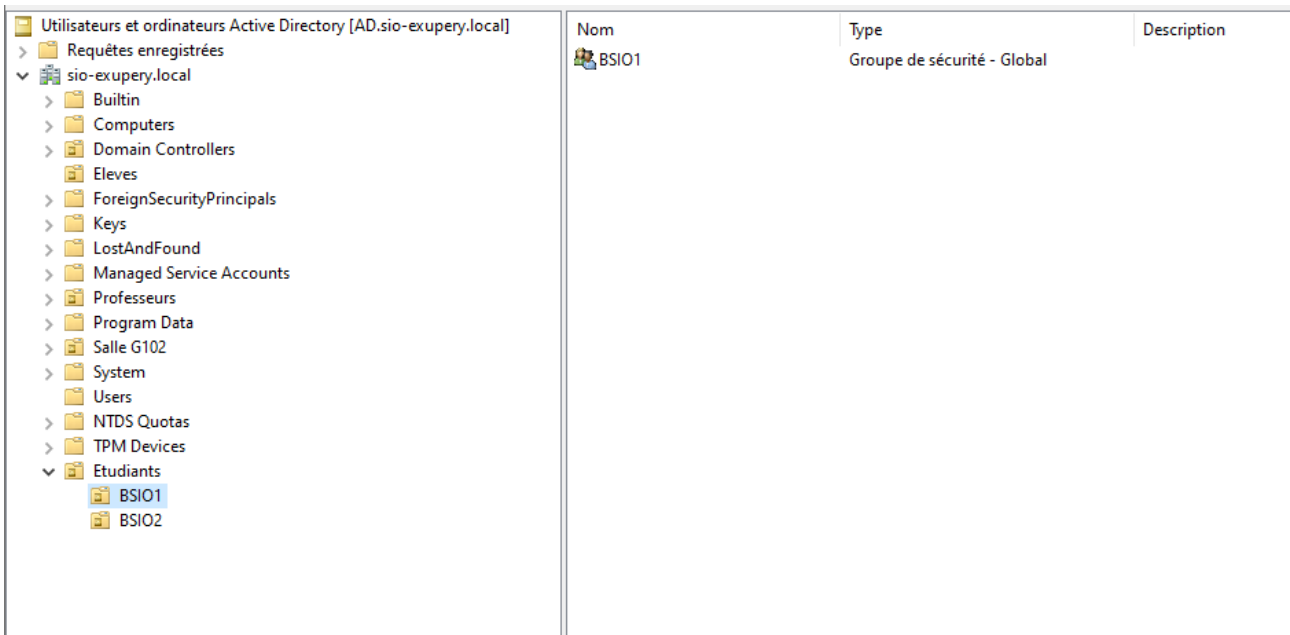


> Création d'un mot de passe sécurisé :

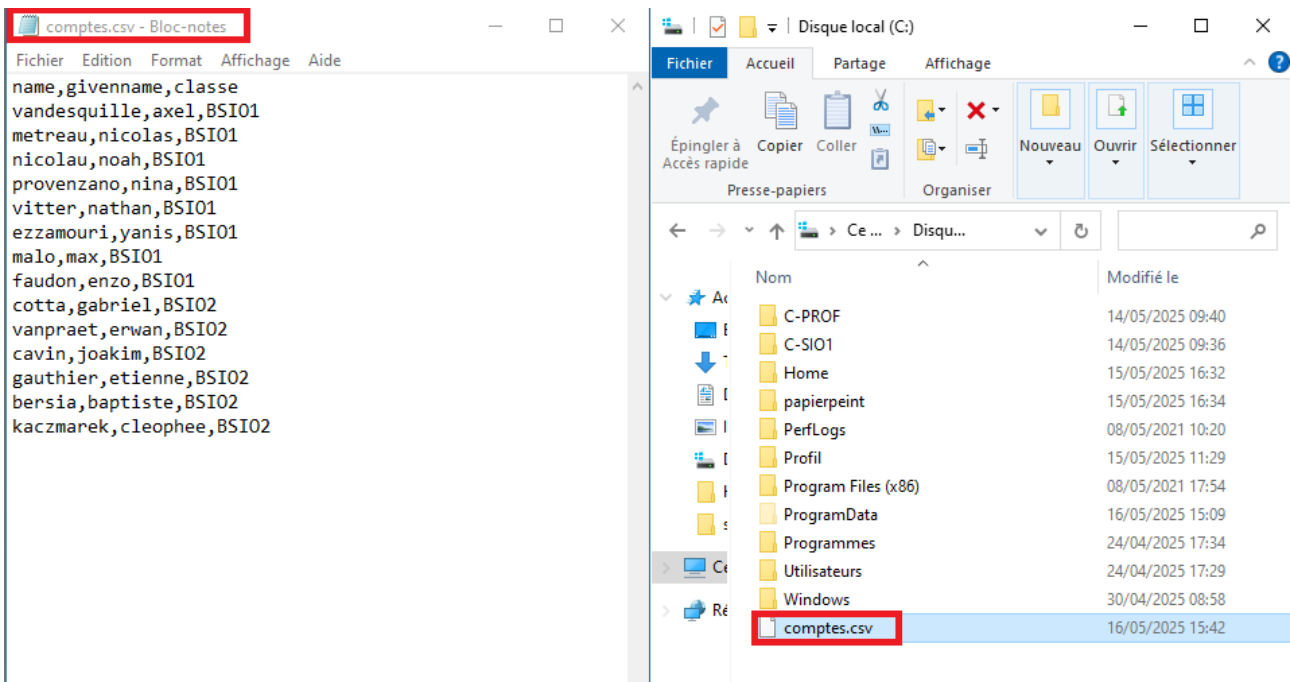
```
PS C:\Users\Administrateur> $secure_passwd = read-host "Entrer un mot de passe :" -assecurestring
```

The screenshot shows a dialog box titled 'Windows PowerShell ISE - Entrée'. It contains the text 'Entrer un mot de passe :'. Below the text is a text input field filled with 12 dots, representing a secure password. At the bottom right of the dialog are 'OK' and 'Annuler' buttons.

> Création de l'UO Étudiants avec les sous-UOs BSIO1 et BSIO2 ainsi que leurs groupes respectifs :



> Création du fichier comptes.csv et enregistrement dans le disque local :



> Affichage des commandes NTFS :

```
PS C:\Users\Administrateur> Get-Command *NTFS*

CommandType      Name                               Version      Source
-----
Cmdlet            Add-NTFSAccess                    4.2.6        NTFSSecurity
Cmdlet            Add-NTFSAudit                    4.2.6        NTFSSecurity
Cmdlet            Clear-NTFSAccess                  4.2.6        NTFSSecurity
Cmdlet            Clear-NTFSAudit                  4.2.6        NTFSSecurity
Cmdlet            Disable-NTFSAccessInheritance    4.2.6        NTFSSecurity
Cmdlet            Disable-NTFSAuditInheritance    4.2.6        NTFSSecurity
Cmdlet            Enable-NTFSAccessInheritance     4.2.6        NTFSSecurity
Cmdlet            Enable-NTFSAuditInheritance     4.2.6        NTFSSecurity
Cmdlet            Get-NTFSAccess                   4.2.6        NTFSSecurity
Cmdlet            Get-NTFSAudit                   4.2.6        NTFSSecurity
Cmdlet            Get-NTFSEffectiveAccess         4.2.6        NTFSSecurity
Cmdlet            Get-NTFSHardLink                4.2.6        NTFSSecurity
Cmdlet            Get-NTFSInheritance             4.2.6        NTFSSecurity
Cmdlet            Get-NTFSOrphanedAccess          4.2.6        NTFSSecurity
Cmdlet            Get-NTFSOrphanedAudit           4.2.6        NTFSSecurity
Cmdlet            Get-NTFSOwner                   4.2.6        NTFSSecurity
Cmdlet            Get-NTFSSecurityDescriptor      4.2.6        NTFSSecurity
Cmdlet            Get-NTFSSimpleAccess            4.2.6        NTFSSecurity
Cmdlet            New-NTFSHardLink                4.2.6        NTFSSecurity
Cmdlet            New-NTFSSymbolicLink            4.2.6        NTFSSecurity
Cmdlet            Remove-NTFSAccess               4.2.6        NTFSSecurity
Cmdlet            Remove-NTFSAudit                4.2.6        NTFSSecurity
Cmdlet            Set-NTFSInheritance             4.2.6        NTFSSecurity
Cmdlet            Set-NTFSOwner                   4.2.6        NTFSSecurity
Cmdlet            Set-NTFSSecurityDescriptor      4.2.6        NTFSSecurity
Cmdlet            Show-NTFSSimpleAccess           4.2.6        NTFSSecurity
Application       chkntfs.exe                      10.0.20...  C:\Windows\system32\chkntfs.exe

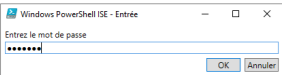
PS C:\Users\Administrateur>
```

> Création du script :

```
Sans titre1.ps1 X
1 $impfile = "C:\comptes.csv"
2 $password = Read-Host "Entrez le mot de passe" -AsSecureString
3 $users = Import-Csv $impfile -Delimiter ";"
4 Foreach ($user in $users)
5 {
6     $name = $user.name
7     $givenname = $user.givenname
8     $samname = $givenname.substring(0,1) + $name
9     $surname = $user.surname
10    $section = $user.classe
11    $domaine = "sio-exupery"
12    $ext = "local"
13    $hdrive = "H:"
14    $hdirectory = "\\AD\Homes"
15    $dossier = "$hdirectory\$samname"
16    $profil = "\\AD\Profils\$samname"
17    New-ADUser -Name "$name $givenname" -UserPrincipalName "$name@$domaine.$ext" -SamAccountName $samname -GivenName $givenname -Surname $surname -Path "ou=$section,ou=Etudiants,dc=sio-exupery,dc=local" -HomeDrive $hdrive -HomeDirectory $dossier -ProfilePath $profil
18    Set-Location $hdirectory
19    New-Item -Name $samname -ItemType directory
20    Get-Item "$dossier" | Disable-NTFSAccessInheritance
21    Set-NTFSOwner -Path "$dossier" -Account "sio-exupery.local\$samname"
22    Add-NTFSAccess -Path "$dossier" -Account "sio-exupery.local\$samname" -AccessRights FullControl
23    Get-NTFSAccess -Path "$dossier" -Account "Utilisateurs" -ExcludeInherited | Remove-NTFSAccess
24    Add-ADGroupMember -Identity "$section" -Members $samname
25 }
```

> Exécution du script :

```
19 New-Item -Name $samname -ItemType directory
20 Get-Item "$dossier" | Disable-NTFSAccessInheritance
21 Set-NTFSOwner -Path "$dossier" -Account "sio-exupery.local\$samname"
22 Add-NTFSAccess -Path "$dossier" -Account "sio-exupery.local\$samname" -AccessRights FullControl
23 Get-NTFSAccess -Path "$dossier" -Account "Utilisateurs" -ExcludeInherited | Remove-NTFSAccess
24 Add-ADGroupMember -Identity "$section" -Members $samname
25 }
```



```
Application      chkntfs.exe                      10.0.20...  C:\Windows\system32\chkntfs.exe

PS C:\Users\Administrateur> $impfile = "C:\comptes.csv"
$password = Read-Host "Entrez le mot de passe" -AsSecureString
$users = Import-Csv $impfile -Delimiter ";"
Foreach ($user in $users)
{
    $name = $user.name
    $givenname = $user.givenname
    $samname = $givenname.substring(0,1) + $name
    $surname = $user.surname
    $section = $user.classe
    $domaine = "sio-exupery"
    $ext = "local"
    $hdrive = "H:"
    $hdirectory = "\\AD\Homes"
    $dossier = "$hdirectory\$samname"
    $profil = "\\AD\Profils\$samname"
    New-ADUser -Name "$name $givenname" -UserPrincipalName "$name@$domaine.$ext" -SamAccountName $samname -GivenName $givenname -Surname $surname -Path "ou=$section,ou=Etudiants,dc=sio-exupery,dc=local" -HomeDrive $hdrive -HomeDirectory $dossier -ProfilePath $profil
    Set-Location $hdirectory
    New-Item -Name $samname -ItemType directory
    Get-Item "$dossier" | Disable-NTFSAccessInheritance
    Set-NTFSOwner -Path "$dossier" -Account "sio-exupery.local\$samname"
    Add-NTFSAccess -Path "$dossier" -Account "sio-exupery.local\$samname" -AccessRights FullControl
    Get-NTFSAccess -Path "$dossier" -Account "Utilisateurs" -ExcludeInherited | Remove-NTFSAccess
    Add-ADGroupMember -Identity "$section" -Members $samname
}
```

> Création des dossiers :

```

set-NTFSOwner -Path $dossier -Account sio-exupery.local\${samname}
Add-NTFSAccess -Path "$dossier" -Account "sio-exupery.local\${samname}" -AccessRights FullControl
Get-NTFSAccess -Path "$dossier" -Account "Utilisateurs" -ExcludeInherited | Remove-NTFSAccess
Add-ADGroupMember -Identity "$section" -Members $samname
}

Répertoire : \\AD\Home$

Mode                LastWriteTime         Length Name
----                -
d-----         16/05/2025   16:27         avandesquille
d-----         16/05/2025   16:27         nmetreau
d-----         16/05/2025   16:27         nnicolau
d-----         16/05/2025   16:27         nprovenzano
d-----         16/05/2025   16:27         nvitter
d-----         16/05/2025   16:27         yezzamouri
d-----         16/05/2025   16:27         mmalo
d-----         16/05/2025   16:27         efaudon
d-----         16/05/2025   16:27         gcotta
d-----         16/05/2025   16:27         evanpraet
d-----         16/05/2025   16:27         jcavin
d-----         16/05/2025   16:27         egauthier
d-----         16/05/2025   16:27         bbersia
d-----         16/05/2025   16:27         ckaczmarek

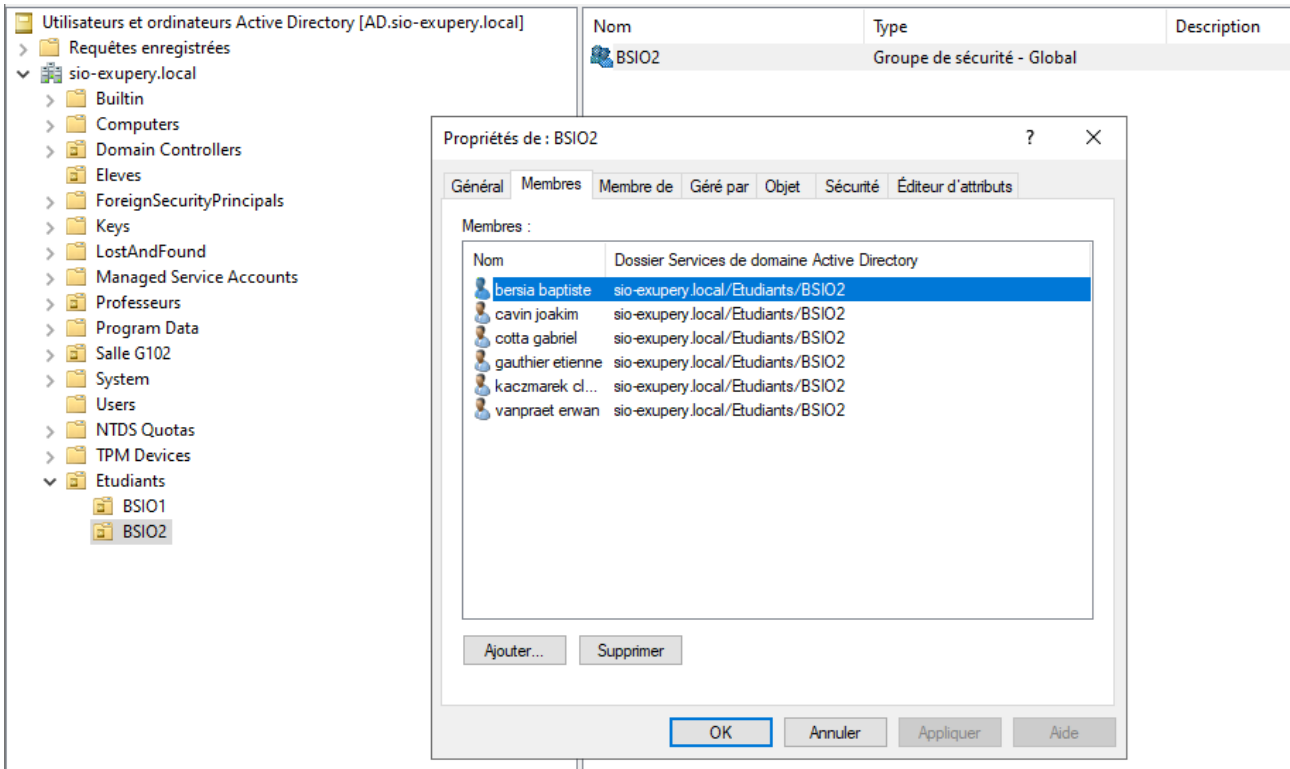
PS Microsoft.PowerShell.Core\FileSystem: \\AD\Home$ |
    
```

> Affectation des utilisateurs à leurs groupes respectifs :

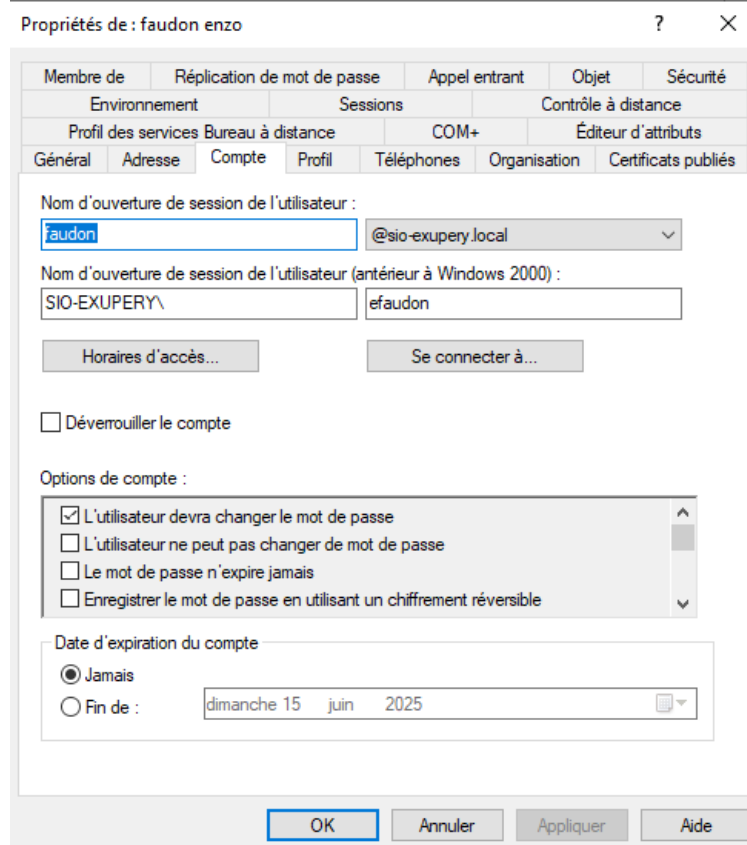
The screenshot shows the Active Directory console with the 'Etudiants' group expanded, showing sub-groups 'BSIO1' and 'BSIO2'. A 'Propriétés de : BSI01' dialog box is open, showing the 'Membres' tab. The members list includes several users from the 'Etudiants/BSIO1' group.

| Nom | Type | Descript |
|-------|-----------------------------|----------|
| BSIO1 | Groupe de sécurité - Global | |

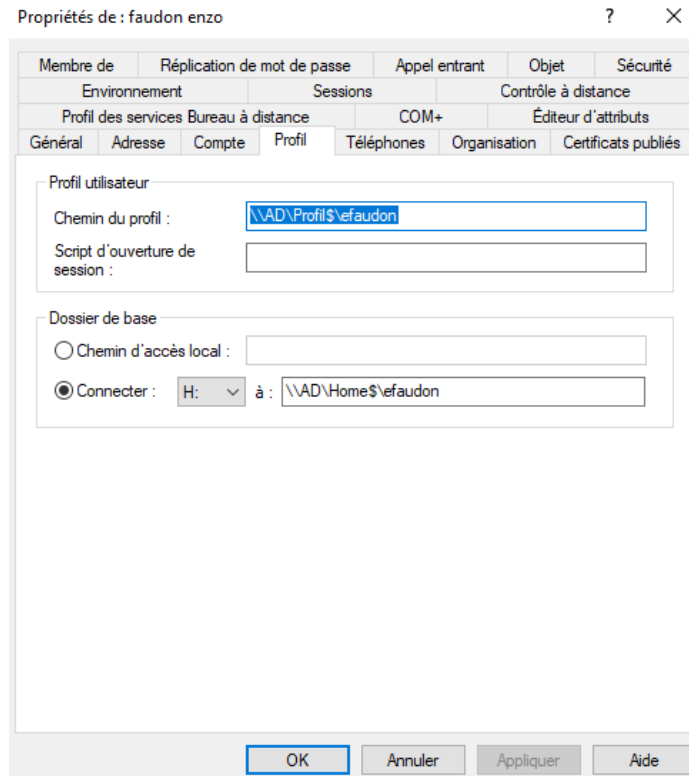
| Propriétés de : BSI01 - Membres | |
|---------------------------------|--|
| Nom | Dossier Services de domaine Active Directory |
| ezzamoui yanis | sio-exupery.local/Etudiants/BSIO1 |
| faudon enzo | sio-exupery.local/Etudiants/BSIO1 |
| malo max | sio-exupery.local/Etudiants/BSIO1 |
| metreau nicolas | sio-exupery.local/Etudiants/BSIO1 |
| nicolau noah | sio-exupery.local/Etudiants/BSIO1 |
| provenzano ni... | sio-exupery.local/Etudiants/BSIO1 |
| vandesquille ... | sio-exupery.local/Etudiants/BSIO1 |
| vitter nathan | sio-exupery.local/Etudiants/BSIO1 |



> Affichage de la propriété Compte d'un utilisateur :



> Affichage de la propriété Profil d'un utilisateur :



> Vérification des droits admis sur les dossiers :

