



## Remote access

Ing. Ondřej Ševeček | GOPAS a.s. |

MCSM:Directory2012 | MCM:Directory2008 | MVP:Enterprise Security | CEH |  
CHFI | CISA |

ondrej@sevecek.com | www.sevecek.com |

GOPAS: info@gopas.cz | www.gopas.cz | www.facebook.com/P.S.GOPAS

1

### Admin accounts to use (all passwords are Pa\$\$w0rd)

- gps\domain-admin
  - Domain Admins
- gps\db-admin
  - Administrators on DATA server
- gps\iis-admin
  - Administrators on SRV, WFE
- gps\rdp-admin
  - Administrators on RDP
- gps\wks-admin
  - Administrators on WKS



2

## User input and passwords

```
$login = Read-Host 'Type your login'
$login.GetType().FullName

# password only [SecureString]
$password = Read-Host 'Type password' -AsSecureString
$password.GetType().FullName

# password only [SecureString]
$securePwd = ConvertTo-SecureString 'Pa$$w0rd' -AsPlainText -Force

# whole credentials [PSCredential]
$credentials = Get-Credential $login -Message 'Login for WMI'
$credentials.GetType().FullName

# plaintext password from the [PSCredential]
$credentials.GetNetworkCredential().Password

# plaintext password from the [SecureString]
(New-Object Management.Automation.PSCredential 'NoLgn', $securePwd).GetNetworkCredential().Password
```



3

## Remote access over SMB (TCP 445)

```
# only SSO aka default credentials
Get-Service -Computer data

# only SSO aka default credentials
Get-Process -Computer data

# runs either under SSO aka default credentials
T:\SysInternals\psexec -noBanner -acceptEula \\wfe
c:\windows\system32\inetsrv\appcmd list apppool /text:*

# or you can also supply credentials in plaintext
# you may have to convert them from [SecureString] or [PSCredential]
$password = 'Pa$$w0rd'
$login = 'gps\domain-admin'
T:\SysInternals\psexec -u $login -p $password -noBanner -acceptEula \\wfe
c:\windows\system32\inetsrv\appcmd list apppool /text:*
```



4

## Remote access over the Active Directory Web Services (TCP 9389)

```
$newPassword = ConvertTo-SecureString 'Pa$$w0rdPa$$w0rd' -AsPlainText -Force  
  
Get-ADUser stanislav -Credential (Get-Credential gps\domain-admin) |  
    Set-ADAccountPassword -Reset -NewPassword $newPassword
```



5

## Remote access over Windows Management Instrumentation (WMI) (TCP 135 + TCP DCOM)

```
$cred = Get-Credential gps\domain-admin  
  
Get-WmiObject Win32_LogicalDisk $cred -Computer data  
  
(gwmi -List Win32_Process -Computer wfe -Cred $cred).Create('mspaint')
```



6

## Remote access over Windows Remote Management (WinRM) (TCP 5985)

```
$cred = Get-Credential gps\domain-admin
$session = New-CimSession -Credential $cred -Computer data

Get-CimInstance Win32_LogicalDisk -CimSession $session

Invoke-CimMethod -CimSession $session `
  -Class Win32_Process `
  -Method Create `
  -Arguments @{ CommandLine = 'mspaint' }

$session.Close()
```



7

## PowerShell Remoting over WinRM (TCP 5985)

```
# you may need to Enable-PSRemoting on workstation operating
# systems and Windows 2008 R2 and older
# Enable-PSRemoting -SkipNetworkProfileCheck -Force

$cred = Get-Credential gps\domain-admin

Enter-PSSession -Computer data -Credential $cred

Invoke-Command -Computer data `
  -Credential $cred `
  -ScriptBlock { ipconfig; klist }
```



8