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1  #Remove-OldHomeDirectory.ps1
2  #Written by: Jeff Brusoe
3  #Last Updated: April 15, 2020
4
5  [CmdletBinding()]
6  param (
7      [string]$FileSystemPath = "\\hs.wvu-ad.wvu.edu\Public\Path", #Chosen for test
        purposes,
8      [string]$ADOrgUnitCN = "OU=path,OU=SOM,OU=HSC,DC=hs,DC=wvu-ad,DC=wvu,DC=edu"
9  )
10
11  $Error.Clear()
12  Set-StrictMode -Version Latest
13  Clear-Host
14
15  Function Exit-Command([string]$ExitMessage)
16  {
17      Write-Warning "$ExitMessage`nProgram is exiting."
18      Stop-Transcript
19      return
20  }
21
22  $SessionTranscript = "$PSScriptRoot\Logs\" + (Get-Date -format yyyy-MM-dd-HH-mm) +
    "-SessionTranscript.txt"
23  Start-Transcript $SessionTranscript
24
25  #Verify file system path exists
26  if ([string]::IsNullOrEmpty($FileSystemPath))
27  {
28      Exit-Command "Path not specified."
29  }
30
31  if (Test-Path $FileSystemPath)
32  {
33      Write-Output "File system path exists."
34  }
35  else
36  {
37      Exit-Command "File system path does not exist."
38  }
39
40  #Create directory not found file
41  $OUnName = $FileSystemPath.SubString($FileSystemPath.LastIndexOf("\")+1)
42  Write-Output "OU Name: $OUnName"
43
44  $NotFoundFile = "$PSScriptRoot\Logs\" + (Get-Date -format yyyy-MM-dd-HH-mm) +
    "-$OUnName-NotFoundFile.txt"
45  New-Item -type file -Path $NotFoundFile -Force
46
47  Add-Content -Path $NotFoundFile -Value "Search Path: $ADOrgUnitCN"
48  Add-Content -Path $NotFoundFile -Value "Home directories with no corresponding users:"
49
50  try
51  {
52      Write-Output "Generating list of AD users"
53      Write-Output "Search Base: $ADOrgUnitCN"
54      $users = Get-ADUser -Filter * -SearchBase $ADOrgUnitCN -Properties
        extensionAttribute1 -ErrorAction Stop
55  }
56  catch
57  {
58      Exit-Command "Error getting AD users."
59  }
60
61  if (($users | Measure).Count -gt 0)
62  {
63      $usernames = $users.SAMAccountName

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64 }
65 else
66 {
67     Exit-Command "No users were found."
68 }
69
70 Write-Output "Username Array:"
71 Write-Output $usernames
72
73 Write-Output "`nAD User Information:"
74
75 foreach ($user in $users)
76 {
77     #This is here for logging output purposes
78     $SAMAccountName = $user.SAMAccountName
79
80     Write-Output "Current User: $SAMAccountName"
81     Write-Output $("End Access Date: " + $user.extensionAttribute1)
82     Write-Output $("Enabled: " + $user.Enabled)
83     Write-Output "Distinguished Name:"
84     Write-Output $user.DistinguishedName
85
86     Write-Output "*****"
87 }
88
89 $ExcludedDirectories = "shared","ACGME"
90
91 $Directories = Get-ChildItem $FileSystemPath -Directory
92 $DirectoryNames = $Directories.Name
93
94 Write-Output $DirectoryNames #Test output
95
96 foreach ($Directory in $Directories)
97 {
98     #This is used simply as a output for the transcript
99     Write-Output $("Current Directory: " + $Directory.Name)
100     Write-Output $("Full path:" + $Directory.FullName)
101
102     #Directory permissions
103     #See this link:
104     https://www.petri.com/how-to-get-ntfs-file-permissions-using-powershell
105     Write-Output "Directory Permissions:"
106
107     try
108     {
109         Get-Acl -Path $Directory.FullName -ErrorAction Stop | Format-Table -Wrap
110     }
111     catch
112     {
113         Write-Warning "Error retrieving directory permissions."
114     }
115
116     if ($usernames -contains $Directory.Name)
117     {
118         Write-Output "Valid Home Directory"
119     }
120     else
121     {
122         Write-Output "Old Home Directory"
123         Add-Content -Path $NotFoundFile -Value $Directory.Name
124     }
125
126     Write-Output "*****"
127 }
128 Stop-Transcript

```