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1 # Get-ADObjectCount.ps1
2 # Written by: Jeff Brusoe
3 # Last Updated: October 13, 2021
4 #
5 # This file counts all of the different types of
6 # objects in AD and is used to help monitor the
7 # AD migration project.
8
9 [CmdletBinding()]
10 param (
11     [ValidateNotNullOrEmpty()]
12     [string]$OutputFilePath = (Get-HSCGitHubRepoPath) +
13         "4ADMigrationProject\"
14 )
15
16 try {
17     Set-HSCEnvironment -ErrorAction Stop
18
19     $ADObjectCountLog = $OutputFilePath + "ObjectCount\ADObjectCount.csv"
20 }
21 catch {
22     Write-Warning "Unable to configure environment"
23     Invoke-HSCExitCommand -ErrorCount $Error.Count
24 }
25
26 try {
27     Write-Output "Getting list of all AD Objects"
28
29     $ADObjects = Get-ADObject -Filter * -ErrorAction Stop
30 }
31 catch {
32     Write-Warning "Unable to get list of AD objects"
33     Invoke-HSCExitCommand -ErrorCount $Error.Count
34 }
35
36 $SummaryInfo = [PSCustomObject]@{
37     Date = Get-Date
38     Total = $ADObjects.Count
39 }
40
41 try {
42     Write-Output "Generating list of AD object types"
43
44     $ADObjectTypes = $ADObjects |
45         Select-Object objectClass -Unique -ErrorAction Stop
46
47     Write-Output "Unique AD Object Types:"
48     Write-Output $ADObjectTypes
49     Write-Output "`n*****`n"
50 }
51 catch {
52     Write-Warning "Unable to determine unique AD object types"
53     Invoke-HSCExitCommand -ErrorCount $Error.Count
54 }
55
56 foreach ($ADObjectType in $ADObjectTypes)
57 {
58     Write-Output $("Current AD Object Type: " + $ADObjectType.objectClass)
59
60     $Count = ($ADObjects |

```

```
61         Where-Object {$_.objectClass -eq $ADObjectType.objectClass} |
62         Measure-Object).Count
63
64     $AddMemberParams = @{
65         MemberType = "NoteProperty"
66         Name = $ADObjectType.objectClass
67         Value = $Count
68         ErrorAction = "Stop"
69     }
70
71     try {
72         $SummaryInfo | Add-Member @AddMemberParams
73     }
74     catch {
75         Write-Warning "Unable to get count for AD object type"
76     }
77
78     Write-Output "Object Type Count: $Count"
79     Write-Output "*****"
80 }
81
82 $SummaryInfo
83
84 try {
85     $SummaryInfo |
86     Export-Csv $ADObjectCountLog -NoTypeInformation -Append -ErrorAction Stop
87
88     Write-Output "Finished writing to log file"
89 }
90 catch {
91     Write-Warning "Unable to write summary log file"
92 }
93
94 Invoke-HSCEExitCommand -ErrorCount $Error.Count
```