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1 #Remove-ExchangeForwardingRuleRandom.ps1
2 #Written by: Jeff Brusoe
3 #Last Updated: October 7, 2020
4 #
5 #This file randomly pulls mailboxes to search them for forwarding rules.
6
7 [CmdletBinding()]
8 param (
9     [ValidateNotNullOrEmpty()]
10     [int]$MaximumSearches = 2000
11 )
12
13 $Error.Clear()
14
15 try {
16     Set-HSCEnvironment -ErrorAction Stop
17     Connect-HSCExchangeOnline -ErrorAction Stop
18 }
19 catch {
20     Write-Warning "Unable to configure HSC environment. Program is exiting."
21     Invoke-HSCExitCommand
22 }
23
24 $MailboxCount = 0
25 Write-Output "Reading exclusion lists"
26
27 try {
28     #Exclusion lists should be in same directory as ps1 file
29     $ExclusionList1 = Import-Csv ExclusionList1.csv
30     $ExclusionList2 = Import-Csv ExclusionList2.csv
31 }
32 catch {
33     Write-Warning "Unable to read HSC exclusion lists. Program is exiting"
34     Invoke-HSCExitCommand
35 }
36
37 #Forwarding rule log files
38 try {
39     $ForwardingRuleLogFile = (Get-Date -format yyyy-MM-dd-HH-mm) + "-
ExchangeForwardingFules.txt"
40     New-Item -Name $ForwardingRuleLogFile -Path "$PSScriptRoot\Logs\" -Force -type
file -ErrorAction Stop
41     Add-Content -Path "$PSScriptRoot\Logs\$ForwardingRuleLogFile" -Value
"PrimarySMTPAddress,RuleName,RuleForwardTo" -ErrorAction Stop
42 }
43 catch {
44     Write-Warning "Unable to generate forwarding rule log"
45 }
46
47 try {
48     Write-Output "Getting mailbox list"
49     $Mailboxes = Get-Mailbox -ResultSize Unlimited -ErrorAction Stop |
50     Where-Object {$_.PrimarySMTPAddress -notlike "*rni.*" -AND
$_.PrimarySMTPAddress -notlike "*wvurni*"}
51 }
52 catch {
53     Write-Warning "Unable to generate list of HSC mailboxes"
54     Invoke-HSCExitCommand
55 }
56
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57 Write-Output "Processing Mailboxes"
58 $RuleDeletes = 0
59 $SearchCount = 0
60 $MailboxTotal = $Mailboxes.Count
61 Write-Output "Mailbox Total: $MailboxTotal"
62
63 while ($SearchCount -lt $MaximumSearches)
64 {
65
66     $MailboxCount++
67     Write-Output "Mailbox Count: $MailboxCount"
68
69     Write-Output "Rule Deletes: $RuleDeletes"
70
71     $MailboxSelected = Get-Random -Minimum 0 -Maximum $MailboxTotal
72     Write-Output "Mailbox Selected: $MailboxSelected"
73
74     try {
75         $Mailbox = $Mailboxes[$MailboxSelected]
76
77         Write-Output $("Primary SMTP Address: " + $Mailbox.PrimarySMTPAddress)
78     }
79     catch {
80         Write-Warning "Unable to properly select mailbox"
81         $SearchCount++
82
83         Continue
84     }
85
86     try {
87         $Rules = Get-InboxRule -Mailbox $Mailbox.PrimarySMTPAddress -ErrorAction Stop
88     }
89     catch {
90         Write-Warning "Unable to get list of rules for this mailbox"
91     }
92
93     Write-Output $("Rule Count: " + $Rules.Count)
94
95     foreach ($Rule in $Rules)
96     {
97         Write-Output $("Rule Name: " + $Rule.Name)
98         Write-Output $("Rule Description: " + $Rule.Description)
99         Write-Output "Rule Deletes: $RuleDeletes"
100
101         if (($ExclusionList1.RuleName -contains $Rule.Name) -AND
($ExclusionList1.Mailbox -contains $Mailbox.PrimarySMTPAddress))
102         {
103             Write-Output "Rule is in ExclusionList1 and is being skipped"
104         }
105         elseif ($ExclusionList2.PrimarySMTPAddress -contains
($Mailbox.PrimarySMTPAddress) -AND (($ExclusionList2.ForwardingAddress -contains
$rule.ForwardTo) -OR ($ExclusionList2.ForwardingSmtptAddress -contains
$rule.ForwardTo)))
106         {
107             Write-Output "Rule is excluded based on exclusion list 2"
108         }
109         elseif (![string]::IsNullOrEmpty($rule.ForwardTo))
110         {
111             Write-Output $("Forward To: " + $rule.ForwardTo)
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112     Add-Content -Path "$PSScriptRoot\Logs\$ForwardingRuleLogFile" -Value
113     $($mailbox.PrimarySMTPAddress + "," + $rule.Name + "," + $rule.ForwardTo)
114     [string]$ForwardTo = ($rule.ForwardTo -split " ") -like "*smtp*"
115     Write-Output $("ForwardTo[1]: " + $ForwardTo)
116
117     if (($ForwardTo.IndexOf("@") -gt 0) -AND ($ForwardTo.IndexOf("hsc.wvu.edu") -
118     lt 0))
119     {
120         Write-Output "Rule will be deleted"
121
122         try {
123             Remove-InboxRule -Identity $Rule.Identity -Confirm:$false -ErrorAction
124             Stop
125             Write-Output "Successfully deleted rule."
126
127             $RuleDeletes++
128         }
129         catch {
130             Write-Output "Error removing forwarding rule"
131             #Invoke-HSCEExitCommand
132         }
133     }
134     else
135     {
136         Write-Output "Rule will not be deleted"
137     }
138 }
139 else {
140     Write-Output "Rule is not a forwarding rule"
141 }
142
143     Write-Output "-----"
144 }
145
146 $SearchCount++
147 Write-Output "*****"
148 }
149
150 Invoke-HSCEExitCommand -ErrorCount $Error.Count

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