```
1
    ### Configure Guest OS Module
2
3
    ### ECI.EMI.Automation.OS.Prod.psm1
4
    5
7
    function Import-ECI.EMI.Modules
8
9
       $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
       "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
10
       foreach($Module in (Get-Module -ListAvailable ECI.*)){Import-Module -Name
11
       $Module.Path -DisableNameChecking}
12
13
14
       Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
15
    }
16
17
    function Configure-ECI.EMI.Configure.OS.NetworkInterface
18
19
       $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
       "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
20
21
       22
       ### DESIRED STATE PARAMETERS
23
       24
       $PropertyName
                      = "NetworkInterfaceName"
25
                      = $NetworkInterfaceName
       $DesiredState
       $ConfigurationMode = "Configure" ### Report - Configure
26
27
                      = $False ### $True - $False
       $AbortTrigger
28
29
       30
       ### GET CURRENT CONFIGURATION STATE:
       31
32
       [scriptblock]$script:GetCurrentState =
33
       {
          $global:CurrentState = (Get-NetAdapter -Physical | Where-Object Status -eq
34
          'Up').Name
35
       }
36
37
       38
       ### SET DESIRED-STATE:
39
       40
       [scriptblock] $script: SetDesiredState =
41
       {
42
          Rename-NetAdapter (Get-NetAdapter -Name $CurrentState).Name -NewName
          $DesiredState
43
       }
44
45
       46
       ### CALL CONFIGURE DESIRED STATE:
47
       48
       ###-----
49
50
       $Params = @{
51
          ServerID
                           = $ServerID
52
          HostName
                          = $HostName
53
          FunctionName
                          = $FunctionName
54
          PropertyName
                          = $PropertyName
55
          DesiredState
                           = $DesiredState
56
                          = $GetCurrentState
          GetCurrentState
57
          SetDesiredState
                           = $SetDesiredState
58
          ConfigurationMode
                           = $ConfigurationMode
59
          AbortTrigger
                           = $AbortTrigger
60
61
       Configure-DesiredState @Params
62
63
       Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
64
    }
```

```
66
 67
     function Configure-ECI.EMI.Configure.OS.WSMan
 68
 69
 71
     }
 72
 73
     function Configure-ECI.EMI.Configure.OS.SMBv1
 74
 75
        $FunctionName = $((Get-PSCallStack)[0].Command);Write-Host `r`n('-' * 50)`r`n
        "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
 76
 77
        78
        ### DESIRED STATE PARAMETERS
 79
        80
                       = "SMBv1"
        $PropertyName
 81
                       = $SMBv1
        $DesiredState
 82
        $ConfigurationMode = "Configure" ### Report - Configure
 83
        $AbortTrigger
                     = $False ### $True - $False
 84
 85
        86
        ### GET CURRENT CONFIGURATION STATE:
 87
        88
        [scriptblock] $script: GetCurrentState =
 89
 90
           $KeyPath = "HKLM:\SYSTEM\CurrentControlSet\Services\LanmanServer\Parameters"
 91
           $KeyName = "SMB1"
 92
 93
           try
 94
           {
 95
               $KeyValue = Get-ItemProperty -Path $KeyPath -Name $KeyName
 96
           }
 97
           catch
 98
           {
99
               $global:CurrentState = $null
100
              Write-ECI.ErrorStack
101
           }
102
103
           if ($KeyValue)
104
           {
105
               $global:CurrentState = $KeyValue
106
           }
107
           else
108
           {
109
               $global:CurrentState = $null
110
           }
111
        }
112
113
        114
        ### SET DESIRED-STATE:
        115
        [scriptblock] $script: SetDesiredState =
116
117
118
           $KeyValue = $DesiredState
119
           $KeyPath = "SYSTEM\CurrentControlSet\Services\LanmanServer\Parameters"
120
           $KeyName = "SMB1"
121
           Set-ItemProperty -Path $KeyPath -Name $Keyname -Value $KeyValue
122
        }
123
124
        125
        ### CALL CONFIGURE DESIRED STATE:
        126
        ###-----
127
128
        $Params = @ {
129
                           = $ServerID
           ServerID
130
           HostName
                           = $HostName
131
                           = $FunctionName
           FunctionName
132
           PropertyName
                           = $PropertyName
```

```
133
           DesiredState
                             = $DesiredState
134
                            = $GetCurrentState
           GetCurrentState
135
            SetDesiredState
                           = $SetDesiredState
136
            ConfigurationMode = $ConfigurationMode
137
            AbortTrigger
                             = $AbortTrigger
138
        }
139
        Configure-DesiredState @Params
        Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
140
141
     }
142
     function Configure-ECI.EMI.Configure.OS.IPv6
143
144
145
        $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
        "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
146
147
        ### DESIRED STATE PARAMETERS
148
149
        = "IPv6Preference"
150
        $PropertyName
151
        $DesiredState
                        = $IPv6Preference
152
        $ConfigurationMode = "Configure" ### Report - Configure
153
                        = $False ### $True - $False
        $AbortTrigger
154
155
        156
        ### GET CURRENT CONFIGURATION STATE:
157
        158
        [scriptblock] $script: GetCurrentState =
159
        {
160
            ### Get Current Interface
161
            $CurrentInterface = (Get-NetAdapter -Physical | Where-Object {$ .Status -eq
            'Up'}).Name
162
            $IPv6State = Get-NetAdapterBinding -InterfaceAlias $CurrentInterface
            -DisplayName "Internet Protocol Version 6 (TCP/IPv6)"
163
            $qlobal: CurrentState = $IPv6State. Enabled ### Return True/False
164
        }
165
166
        167
        ### SET DESIRED-STATE:
168
        169
170
        [scriptblock]$script:SetDesiredState =
171
172
            if ($DesiredState -eq $True)
173
            {
174
               ### Enable IPv6
175
               Enable-NetAdapterBinding -InterfaceAlias $CurrentInterfaceName -ComponentID
               MS TCPIP6
176
177
            elseif ($DesiredState -eq $False)
178
179
               ### Disable IPv6
180
               Disable-NetAdapterBinding -InterfaceAlias $CurrentInterfaceName
               -ComponentID MS TCPIP6
181
            }
182
        }
183
184
        185
        ### CALL CONFIGURE DESIRED STATE:
186
        187
        $Params = @ {
                             = $ServerID
188
            ServerID
189
            HostName
                             = $HostName
190
           FunctionName
                             = $FunctionName
191
           PropertyName
                             = $PropertyName
192
           DesiredState
                             = $DesiredState
193
           GetCurrentState
                             = $GetCurrentState
194
           SetDesiredState
                             = $SetDesiredState
195
            ConfigurationMode
                             = $ConfigurationMode
196
                             = $AbortTrigger
            AbortTrigger
```

```
197
198
        Configure-DesiredState @Params
199
        Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
200
201
202
     function Configure-ECI.EMI.Configure.OS.CDROM
203
        $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
204
        "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
205
        ### Modify Parameter Values
206
207
208
        ### Drive Letter Must End with Colon ":"
209
        $CDROMLetter = $CDROMLetter.Trim()
210
        $LastChar = $CDROMLetter.substring($CDROMLetter.length-1)
211
        if ($LastChar -ne ":") {$CDROMLetter = $CDROMLetter + ":"}
212
213
        ### DESIRED STATE PARAMETERS
214
215
        = "CDROMLetter"
216
        $PropertyName
217
        $DesiredState
                       = $CDROMLetter
218
        $ConfigurationMode = "Configure" ### Report - Configure
219
        $AbortTrigger
                        = $False ### $True - $False
220
        221
222
        ### GET CURRENT CONFIGURATION STATE:
        223
224
        [scriptblock] $script: GetCurrentState =
225
226
            $script:ComputerName = (Get-WmiObject Win32 ComputerSystem).Name
227
            $global:CurrentState = (Get-WMIObject -Class Win32 CDROMDrive -ComputerName
            $ComputerName).Drive
228
        1
229
230
        ### SET DESIRED-STATE:
231
232
        233
        [scriptblock] $script: SetDesiredState =
234
        {
235
            $CDVolume = Get-WmiObject -Class Win32 Volume -ComputerName $ComputerName
            -Filter "DriveLetter='$CurrentState'"
236
            Set-WmiInstance -InputObject $CDVolume -Arguments @{DriveLetter =
            $DesiredState} | Out-Null
237
        }
238
239
        ### CALL CONFIGURE DESIRED STATE:
240
241
        242
        $Params = @ {
243
           ServerID
                             = $ServerID
244
           HostName
                            = $HostName
245
                            = $FunctionName
           FunctionName
246
           PropertyName
                            = $PropertyName
247
           DesiredState
                            = $DesiredState
248
           GetCurrentState
                            = $GetCurrentState
249
            SetDesiredState
                           = $SetDesiredState
250
            ConfigurationMode = $ConfigurationMode
251
            AbortTrigger
                             = $AbortTrigger
252
        }
253
        Configure-DesiredState @Params
254
        Write-Host `r`n('-' * 50)`r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
255
    }
256
257
     function Configure-ECI.EMI.Configure.OS.Folders
258
     -{
259
        $FunctionName = $((Get-PSCallStack)[0].Command);Write-Host `r`n('-' * 50)`r`n
        "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
260
```

```
261
262
       ### DESIRED STATE PARAMETERS
263
       = "ECIFolders"
264
       $PropertyName
265
       ### Create ECI Folders
266
267
       ###------
268
       $ECIFolders = @()
269
       $ECIFolders += "C:\Scripts"
       $ECIFolders += "D:\Kits"
270
271
272
       $DesiredState = $ECIFolders
273
       $ConfigurationMode = "Configure" ### Report - Configure
274
       $AbortTrigger = $False ### $True - $False
275
276
       foreach($State in $DesiredState)
277
278
           $DesiredState = $State
279
           280
281
           ### GET CURRENT CONFIGURATION STATE:
282
           283
           [scriptblock] $script: GetCurrentState =
284
           -{
285
              if(Test-Path -Path $DesiredState) {$global:CurrentState = $DesiredState}
286
              else{$global:CurrentState = $False}
287
          }
288
           289
           ### SET DESTRED-STATE:
290
           291
292
           [scriptblock] $script: SetDesiredState =
293
              New-Item - ItemType Directory - Path $State - Force | Out-Null
294
295
           }
296
297
           298
           ### CALL CONFIGURE DESIRED STATE:
299
           300
301
           $Params = @ {
302
             ServerID
                            = $ServerID
303
             HostName
                            = $HostName
304
                            = $FunctionName
             FunctionName
305
             PropertyName
                            = $PropertyName
                            = $DesiredState
306
             DesiredState
307
                            = $GetCurrentState
             GetCurrentState
308
                             = $SetDesiredState
             SetDesiredState
309
              ConfigurationMode = $ConfigurationMode
310
             AbortTrigger
                             = $AbortTrigger
311
           1
312
          Configure-DesiredState @Params
313
314
       Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
315
    }
316
317
    function Configure-ECI.EMI.Configure.OS.RemoteDesktop
318
319
       $FunctionName = $((Get-PSCallStack)[0].Command);Write-Host `r`n('-' * 50)`r`n
       "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
320
321
       ### Modify Parameter Values
       ### -----
322
323
       if($RemoteDesktopPreference -eq "False") {$RemoteDesktopPreferenceValue = "1"}
324
       elseif($RemoteDesktopPreference -eq "True") {$RemoteDesktopPreferenceValue = "0"}
325
       326
327
       ### DESIRED STATE PARAMETERS
328
```

```
= "RemoteDesktopPreference"
329
        $PropertyName
330
                       = $RemoteDesktopPreferenceValue
        $DesiredState
331
        $ConfigurationMode = "Configure" ### Report - Configure
332
                       = $False ### $True - $False
        $AbortTrigger
333
334
        335
        ### GET CURRENT CONFIGURATION STATE:
336
        337
        [scriptblock] $script: GetCurrentState =
338
        {
339
           $global:CurrentState = (Get-ItemProperty -Path
           'HKLM:\System\CurrentControlSet\Control\Terminal Server' -name
           "fDenyTSConnections").fDenyTSConnections
340
        }
341
342
        343
        ### SET DESIRED-STATE:
344
        345
        [scriptblock] $script: SetDesiredState =
346
        {
347
           Set-ItemProperty -Path 'HKLM:\System\CurrentControlSet\Control\Terminal Server'
           -name "fDenyTSConnections" -Value $RemoteDesktopPreferenceValue
348
349
           if($RemoteDesktopPreferenceValue -eq "0")
350
351
               Enable-NetFirewallRule -DisplayGroup "Remote Desktop"
352
               Netsh advfirewall firewall set rule group="remote desktop" new enable=yes
353
           }
354
           elseif($RemoteDesktopPreferenceValue -eq "1")
355
356
               Disable-NetFirewallRule -DisplayGroup "Remote Desktop"
357
           }
358
        }
359
360
        361
        ### CALL CONFIGURE DESIRED STATE:
362
        363
        $Params = @{
364
           ServerID
                            = $ServerID
365
           HostName
                           = $HostName
366
           FunctionName
                          = $FunctionName
367
          PropertyName
                           = $PropertyName
368
          DesiredState
                          = $DesiredState
369
           GetCurrentState
                          = $GetCurrentState
                          = $SetDesiredState
370
           SetDesiredState
371
           ConfigurationMode = $ConfigurationMode
372
                           = $AbortTrigger
           AbortTrigger
373
374
        Configure-DesiredState @Params
375
        Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
376
     }
377
378
     function Configure-ECI.EMI.Configure.OS.WindowsFirewallProfile
379
        $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
380
        "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
381
382
        383
        ### DESIRED STATE PARAMETERS
384
        385
                       = "WindowsFirewallPreference"
        $PropertyName
386
                       = $WindowsFirewallPreference
        $DesiredState
387
        $ConfigurationMode = "Configure" ### Report - Configure
388
        $AbortTrigger = $False ### $True - $False
389
390
        391
        ### GET CURRENT CONFIGURATION STATE:
        392
393
        [scriptblock] $script: GetCurrentState =
```

```
{
395
           $qlobal:CurrentState = (Get-NetFirewallProfile -Name Domain).Enabled
396
397
398
        399
        ### SET DESIRED-STATE:
400
        401
        [scriptblock] $script: SetDesiredState =
402
403
           Set-NetFirewallProfile -Profile Domain -Enabled $WindowsFirewallPreference
404
        1
405
        406
        ### CALL CONFIGURE DESIRED STATE:
407
        408
409
        $Params = @ {
410
           ServerID
                           = $ServerID
411
                           = $HostName
          HostName
412
          FunctionName
                          = $FunctionName
413
          PropertyName
                          = $PropertyName
414
          DesiredState
                          = $DesiredState
415
          GetCurrentState
                          = $GetCurrentState
416
          SetDesiredState
                          = $SetDesiredState
           ConfigurationMode = $ConfigurationMode
417
418
           AbortTrigger
                           = $AbortTrigger
419
420
        Configure-DesiredState @Params
        Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
421
422
423
   function Configure-ECI.EMI.Configure.OS.InternetExplorerESC
424
425
    {
426
        $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
        "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
427
428
        ### Modify Parameter Values
429
        ### -----
430
        if ($InternetExplorerESCPreference -eq "False")
                                              {$InternetExplorerESCValue = "0"}
431
        elseif($InternetExplorerESCPreference -eq "True"){$InternetExplorerESCValue = "1"}
432
433
       434
       ### DESIRED STATE PARAMETERS
435
       436
                     = "InternetExplorerESCPreference"
        $PropertyName
        $script: DesiredState
437
                            = $InternetExplorerESCPreference
        $ConfigurationMode = "Configure" ### Report - Configure
438
439
                     = $False ### $True - $False
        $AbortTrigger
440
441
        x = 0 ()
442
        $Keys += "HKLM:\SOFTWARE\Microsoft\Active Setup\Installed
        Components\{A509B1A7-37EF-4b3f-8CFC-4F3A74704073}"
        $Keys += "HKLM:\SOFTWARE\Microsoft\Active Setup\Installed
443
        Components\{A509B1A8-37EF-4b3f-8CFC-4F3A74704073}"
444
445
        foreach($Key in $Keys)
446
        {
447
           448
           ### GET CURRENT CONFIGURATION STATE:
449
           450
           [scriptblock]$script:GetCurrentState =
451
           {
452
               $global:CurrentState = (Get-ItemProperty -Path $Key -Name
               "IsInstalled"). IsInstalled
453
           }
454
455
           456
           ### SET DESIRED-STATE:
457
           458
          [scriptblock] $script: SetDesiredState =
```

```
459
             {
460
                Set-ItemProperty -Path $Key -Name "IsInstalled" -Value $DesiredState -Force
461
             }
462
463
             464
             ### CALL CONFIGURE DESIRED STATE:
465
             466
             $Params = @{
467
                                   = $ServerID
                ServerID
468
                HostName
                                   = $HostName
469
                                  = $FunctionName
                FunctionName
470
                PropertyName
                                  = $PropertyName
                                  = $DesiredState
471
                DesiredState
                                  = $GetCurrentState
472
                GetCurrentState
473
                                  = $SetDesiredState
                SetDesiredState
474
                ConfigurationMode
                                  = $ConfigurationMode
475
                AbortTrigger
                                   = $AbortTrigger
476
             1
477
             Configure-DesiredState @Params
478
479
         Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
480
     }
481
482
     function Initialize-ECI.EMI.Configure.OS.HardDisks
483
484
         $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
485
         ### Initalzie Disk
486
487
         ### -----
488
         Write-Host "Initialize Disk: "
489
         Get-Disk | Where-Object partitionstyle -eq 'raw' | Initialize-Disk -PartitionStyle
         MBR -PassThru | New-Partition -AssignDriveLetter -UseMaximumSize | Format-Volume
         -FileSystem NTFS -NewFileSystemLabel "SwapFile" -Confirm: $false
490
         Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
491
     }
492
493
     function Configure-ECI.EMI.Configure.OS.WindowsFeatures
494
495
         $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
496
497
         498
         ### DESIRED STATE PARAMETERS
499
         500
         $PropertyName
                        = "WindowsFeatures"
         $ConfigurationMode = "Configure" ### Report - Configure
501
502
                           = $False ### $True - $False
         $AbortTrigger
503
504
         switch ( $ServerRole )
505
             "2016Server"
506
507
             { $WindowsFeatures =
508
509
                    "NET-Framework-Features",
510
                    "NET-Framework-Core",
511
                    "GPMC",
512
                    "Telnet-Client"
513
                )
514
515
             "2016FS"
516
             { $WindowsFeatures =
517
                @ (
518
                    "NET-Framework-Features",
519
                    "NET-Framework-Core",
520
                    "GPMC",
521
                    "Telnet-Client",
522
                    "RSAT"
523
                )
```

```
524
             }
525
             "2016DC"
526
             { $WindowsFeatures =
527
528
                 "NET-Framework-Features",
529
                 "NET-Framework-Core",
530
                 "GPMC",
531
                 "Telnet-Client",
                 "RSAT"
532
533
534
             "2016DCFS"
535
536
             { $WindowsFeatures =
537
             @ (
538
                 "NET-Framework-Features",
539
                 "NET-Framework-Core",
                 "GPMC",
540
541
                 "Telnet-Client",
542
                 "RSAT"
543
544
545
              "2016VDA"
              { $WindowsFeatures =
546
              @ (
547
                 "NET-Framework-Features",
548
                 "NET-Framework-Core",
549
550
                 "GPMC",
                 "Telnet-Client",
551
                 "RSAT"
552
                 "AS-Net-Framework",
553
554
                 "RDS-RD-Server"
555
556
             "2016SOL"
557
558
             { $WindowsFeatures =
559
             @ (
                 "NET-Framework-Features",
560
561
                 "NET-Framework-Core",
562
                 "GPMC",
563
                 "Telnet-Client",
564
                 "RSAT"
565
                 )
566
567
             "2016SQLOMS"
568
             { $WindowsFeatures =
569
             @ (
                 "NET-Framework-Features",
570
                 "NET-Framework-Core",
571
572
                 "GPMC",
573
                 "Telnet-Client",
574
                 "RSAT"
575
                 )
576
             }
577
578
         foreach ($Feature in $WindowsFeatures)
579
         {
580
             $script:DesiredState = $Feature
581
             write-host "DesiredState: " $DesiredState
582
583
             584
             ### GET CURRENT CONFIGURATION STATE:
             585
586
             [scriptblock]$script:GetCurrentState =
587
588
                 $global:CurrentState = ((Get-WindowsFeature -Name $Feature) | Where-Object
                 {$_.Installed -eq $True}).Name
589
             }
590
591
```

```
### SET DESIRED-STATE:
592
593
           594
           [scriptblock]$script:SetDesiredState =
595
596
               Write-Host "Installing Feature: " $Feature
597
598
               #$WindowsMediaSource =
               "R:\sources\sxs\microsoft-windows-netfx3-ondemand-package.cab"
599
               $WindowsMediaSource = "R:\sources\sxs"
600
               Install-WindowsFeature -Name $Feature -Source $WindowsMediaSource
601
           }
602
           603
           ### CALL CONFIGURE DESIRED STATE:
604
           605
606
           $Params = @ {
607
                               = $ServerID
              ServerID
              HostName
                               = $HostName
608
609
              FunctionName
                              = $FunctionName
610
              PropertyName
                              = $PropertyName
611
              DesiredState
                              = $DesiredState
612
              GetCurrentState
                              = $GetCurrentState
613
              SetDesiredState
                              = $SetDesiredState
614
              ConfigurationMode = $ConfigurationMode
615
              AbortTrigger
                              = $AbortTrigger
616
617
           Configure-DesiredState @Params
618
619
        Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
620
   }
621
622
    function Configure-ECI.EMI.Configure.OS.WindowsFirewallRules
623
624
        $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
        "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
625
626
        627
        ### DESIRED STATE PARAMETERS
628
        629
        $PropertyName
                    = "WindowsFirewallRules"
630
        $ConfigurationMode = "Configure" ### Report - Configure
631
        $AbortTrigger
                    = $False ### $True - $False
632
633
       ### Set Firewall Rules
634
       ###-----
635
        $FireWallRules = @()
636
        $FireWallRules += "File and Printer Sharing (SMB-In)"
        $FireWallRules += "Windows Management Instrumentation (ASync-In)"
637
        $FireWallRules += "Windows Management Instrumentation (DCOM-In)"
638
        $FireWallRules += "Windows Management Instrumentation (WMI-In)"
639
640
641
        foreach($Rule in $FireWallRules)
642
643
           ### Set Desired State Value
           ###-----
644
645
           $script:DesiredState = $Rule
646
647
           648
           ### GET CURRENT CONFIGURATION STATE:
649
           650
           [scriptblock] $script: GetCurrentState =
651
           {
652
               $global:CurrentState = (Get-NetFirewallProfile -Name Domain |
               Get-NetFirewallRule | Where {$ .DisplayName -eq $Rule}).DisplayName
653
           }
654
655
           656
           ### SET DESIRED-STATE:
657
```

```
658
             [scriptblock] $script: SetDesiredState =
659
660
                Write-Host "Installing Feature: " $Feature
661
                Enable-NetFirewallRule -DisplayName $Rule
662
663
664
            665
            ### CALL CONFIGURE DESIRED STATE:
            666
667
            $Params = @ {
668
                                 = $ServerID
                ServerID
669
                HostName
                                 = $HostName
                                 = $FunctionName
670
                FunctionName
                                 = $PropertyName
671
                PropertyName
                                 = $DesiredState
672
                DesiredState
                                 = $GetCurrentState
                               = $GetCurredState
= $SetDesiredState
673
                GetCurrentState
674
                SetDesiredState
                ConfigurationMode = $ConfigurationMode
675
676
                AbortTrigger = $AbortTrigger
677
678
            Configure-DesiredState @Params
679
         }
680
681
         Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
682
683
684
     function Configure-ECI.EMI.Configure.OS.WindowsFirewallRules-orig-deleteme
685
686
         $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
687
688
         $FireWallRules = @()
689
         $FireWallRules += "File and Printer Sharing (SMB-In)"
         $FireWallRules += "Windows Management Instrumentation (ASync-In)"
690
691
         $FireWallRules += "Windows Management Instrumentation (DCOM-In)"
692
         $FireWallRules += "Windows Management Instrumentation (WMI-In)"
693
694
         foreach($Rule in $FireWallRules)
695
696
             #Write-Host "Getting FireWall Rule: " $Rule
697
            Get-NetFirewallRule | Where {$ .DisplayName -eq $Rule}
698
            Enable-NetFirewallRule -DisplayName $Rule
699
700
701
         Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
702
703
704
     function Configure-ECI.EMI.Configure.OS.PageFileLocation
705
706
         $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
707
708
         709
         ### DESIRED STATE PARAMETERS
710
         711
         $PropertyName
                        = "PageFileLocation"
                       = $PageFileLocation
712
         $DesiredState
713
         $ConfigurationMode = "Configure" ### Report - Configure
714
         $AbortTrigger
                      = $False ### $True - $False
715
716
        ### Modify Parameter Values
717
         ### ------
         ### Drive Letter Must NOT End with Colon ":"
718
719
         $PageFileLocation = $PageFileLocation.Trim()
720
         $LastChar = $PageFileLocation.substring($PageFileLocation.length-1)
721
         if ($LastChar -eq ":"){$PageFileLocation = $PageFileLocation.Split(":")[0]}
722
723
         724
         ### GET CURRENT CONFIGURATION STATE:
```

```
725
         726
         [scriptblock] $script: GetCurrentState =
727
728
            try
729
            {
730
                if((Get-CimInstance -ClassName
                Win32 ComputerSystem).AutomaticManagedPagefile) -eq $True)
731
732
                    $global:CurrentState = $Null
733
                    Write-Host "PageFile is set to AutomaticManagedPagefile"
734
                }
735
                else
736
                {
737
                    $global:CurrentState = ((Get-CimInstance -ClassName
                    Win32 PageFileSetting).Name).Split(":")[0]
738
                }
739
            }
740
            catch
741
            {
742
                Write-ECI.ErrorStack
743
            }
744
         }
745
746
         747
         ### SET DESIRED-STATE:
748
         749
         [scriptblock] $script: SetDesiredState =
750
         -{
751
            $script:DesiredState = $PageFileLocation
752
753
            # Disable Automatically Managed PageFile Setting
754
            ### -----
755
            $ComputerSystem = Get-CimInstance -ClassName Win32 ComputerSystem
756
            if ($ComputerSystem.AutomaticManagedPagefile -eg "True")
757
758
                Set-CimInstance -InputObject $ComputerSystem -Property
                @{AutomaticManagedPageFile = $False }
759
            }
760
            Write-Host "AutomaticManagedPagefile: " $ (Get-CimInstance -ClassName
            Win32 ComputerSystem).AutomaticManagedPagefile
761
            ### Delete Existing PageFile
762
            ### -----
763
764
            $PageFile = Get-CimInstance -ClassName Win32 PageFileSetting
765
            $PageFile | Remove-CimInstance
766
767
            ### Calculate Page File Size
768
            ### -----
769
            $Memory = (Get-CimInstance -ClassName Win32 PhysicalMemory | Measure-Object
            -Property Capacity -Sum | % {[Math]::Round(($_.sum / 1MB),2)})
            $NewPageFileSize = [Math]::Round(($Memory * $PageFileMultiplier)) # Memory Size
770
            Plus 20% - Round Up
771
772
            ### PageFile Minumin Size = 4GB
773
            ###-----
774
            if ($NewPageFileSize -1t "4096") {$NewPageFileSize = "4096"}
775
776
            ### Min/Max Multiplier - Currently 1/1
777
            ###-----
778
            [int]$script:InitialSize = ($NewPageFileSize * 1)
779
            [int]$script:MaximumSize = ($NewPageFileSize * 1)
780
781
            Write-Host "PageFile Location : " $PageFileLocation
            Write-Host "PageFile InitialSize : " $InitialSize
782
            Write-Host "PageFile MaximumSize : " $MaximumSize
783
784
785
            ###
786
            ### Create New Page File
```

```
787
788
             [scriptblock] $CreatePageFile =
789
790
                 if(-NOT(Get-CimInstance -ClassName Win32 PageFileSetting))
791
792
                     try
793
                     {
                         $PageFileName = $PageFileLocation + ":\pagefile.sys"
794
795
                         New-CimInstance -ClassName Win32 PageFileSetting -Property 0{
                         Name= $PageFileName } | Out-Null
                         Get-CimInstance -ClassName Win32 PageFileSetting | Set-CimInstance
796
                         -Property @{InitialSize = $InitialSize; MaximumSize =
                         $MaximumSize;} | Out-Null
797
                     }
798
                     catch
799
                     {
800
                         Write-ECI.ErrorStack
801
                     }
802
                 }
803
                 else
804
                 {
805
                     Write-Host "A Page File Already Exists!"
806
                     $Abort = $True
807
                 }
808
             }
809
             ### Check Avilable Disk Space
810
811
812
             [int]$FreeSpace = [Math]::Round(((Get-PSDrive $PageFileLocation).Free/1MB),2)
813
814
             if($FreeSpace -gt $NewPageFileSize)
815
816
                 Write-Host "Free Space is Available. Drive: $PageFileLocation FreeSpace:
                 $FreeSpace NewPageFileSize: $NewPageFileSize"
817
                 Invoke-Command -ScriptBlock $CreatePageFile
818
819
             elseif($FreeSpace -le $NewPageFileSize)
820
821
                 Write-Host "Not Enough Avialable Space. Drive: $Drive FreeSpace: $FreeSpace
                 NewPageFileSize: $NewPageFileSize `r`nNot Configuring!"
822
                 $Abort = $True
823
             }
824
         }
825
826
         827
         ### CALL CONFIGURE DESIRED STATE:
         828
829
         ###-----
830
         $Params = @ {
831
             ServerID
                                = $ServerID
832
             HostName
                                = $HostName
833
                                = $FunctionName
             FunctionName
834
             PropertyName
                               = $PropertyName
835
             DesiredState
                               = $DesiredState
836
             GetCurrentState
                               = $GetCurrentState
837
             SetDesiredState
                                = $SetDesiredState
838
             ConfigurationMode
                                = $ConfigurationMode
839
             AbortTrigger
                                 = $AbortTrigger
840
         }
         Configure-DesiredState @Params
841
842
         Write-Host `r`n('-' * 50)`r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
843
     }
844
845
     function Configure-ECI.EMI.Configure.OS.PageFileSize
846
     -{
847
         $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
```

```
850
        ### DESIRED STATE PARAMETERS
851
        $PropertyName = "PageFileSize"
852
        $ConfigurationMode = "Configure" ### Report - Configure
853
854
        $AbortTrigger
                       = $True ### $True - $False
855
        ### Modify Parameter Values
856
857
        ### -----
858
        ### Drive Letter Must NOT End with Colon ":"
859
        $PageFileLocation = $PageFileLocation.Trim()
860
        $LastChar = $PageFileLocation.substring($PageFileLocation.length-1)
861
        if ($LastChar -eq ":"){$PageFileLocation = $PageFileLocation.Split(":")[0]}
862
        $Memory = (Get-CimInstance -ClassName Win32 PhysicalMemory | Measure-Object
863
         -Property Capacity -Sum | % {[Math]::Round(($ .sum / 1MB),2)})
864
        $DesiredState = [Math]::Round(($Memory * $PageFileMultiplier)) # Memory Size Plus
        20% - Round Up
865
866
867
        868
        ### GET CURRENT CONFIGURATION STATE:
869
        870
        [scriptblock] $script: GetCurrentState =
871
872
            try
873
            {
874
                if((Get-CimInstance -ClassName
                Win32 ComputerSystem).AutomaticManagedPagefile) -eq $True)
875
876
                   $global:CurrentState = $Null
877
                   Write-Host "PageFile is set to AutomaticManagedPagefile"
878
                }
879
                else
880
                {
881
                   $global:CurrentState = (Get-CimInstance -ClassName
                   Win32 PageFileUsage).AllocatedBaseSize
882
                }
883
            }
884
            catch
885
            {
886
                Write-ECI.ErrorStack
887
            }
888
        }
889
        890
891
        ### SET DESIRED-STATE:
        892
893
        [scriptblock] $script: SetDesiredState =
894
895
            $script:DesiredState = $PageFileLocation
896
897
            # Disable Automatically Managed PageFile Setting
898
899
            $ComputerSystem = Get-CimInstance -ClassName Win32 ComputerSystem
900
            if ($ComputerSystem.AutomaticManagedPagefile -eg "True")
901
            {
902
                Set-CimInstance -InputObject $ComputerSystem -Property
                @{AutomaticManagedPageFile = $False }
903
            Write-Host "AutomaticManagedPagefile: " $(Get-CimInstance -ClassName
904
            Win32 ComputerSystem).AutomaticManagedPagefile
905
906
            ### Delete Existing PageFile
907
            ### -----
908
            $PageFile = Get-CimInstance -ClassName Win32 PageFileSetting
909
            $PageFile | Remove-CimInstance
910
911
            ### Calculate Page File Size
```

```
912
913
              $Memory = (Get-CimInstance -ClassName Win32 PhysicalMemory | Measure-Object
              -Property Capacity -Sum | % {[Math]::Round(($ .sum / 1MB),2)})
914
              $NewPageFileSize = [Math]::Round(($Memory * $PageFileMultiplier)) # Memory Size
              Plus 20% - Round Up
915
916
              ### PageFile Minumin Size = 4GB
917
              ###-----
             if ($NewPageFileSize -lt "4096") {$NewPageFileSize = "4096"}
918
919
920
              ### Min/Max Multiplier - Currently 1/1
921
922
              [int]$script:InitialSize = ($NewPageFileSize * 1)
923
              [int]$script:MaximumSize = ($NewPageFileSize * 1)
924
                                             : " $PageFileLocation
925
              Write-Host "PageFile Location
             Write-Host "PageFile InitialSize : " $InitialSize
926
             Write-Host "PageFile MaximumSize : " $MaximumSize
927
928
929
930
              ### Create New Page File
931
932
              [scriptblock] $CreatePageFile =
933
934
                  if(-NOT(Get-CimInstance -ClassName Win32 PageFileSetting))
935
                  {
936
                      try
937
                      {
                          $PageFileName = $PageFileLocation + ":\pagefile.sys"
938
939
                          New-CimInstance -ClassName Win32 PageFileSetting -Property @{
                          Name= $PageFileName } | Out-Null
940
                          Get-CimInstance -ClassName Win32 PageFileSetting | Set-CimInstance
                          -Property @{InitialSize = $InitialSize; MaximumSize =
                          $MaximumSize;} | Out-Null
941
                      }
942
                      catch
943
                      {
944
                          Write-ECI.ErrorStack
945
                      }
946
                  }
947
                  else
948
                  {
949
                      Write-Host "A Page File Already Exists!"
950
                      $Abort = $True
951
                  }
952
              }
953
954
              ### Check Avilable Disk Space
955
956
              [int] $FreeSpace = [Math]::Round(((Get-PSDrive $PageFileLocation).Free/1MB),2)
957
958
              if($FreeSpace -gt $NewPageFileSize)
959
              {
960
                  Write-Host "Free Space is Available. Drive: $PageFileLocation FreeSpace:
                  $FreeSpace NewPageFileSize: $NewPageFileSize"
961
                  Invoke-Command -ScriptBlock $CreatePageFile
962
963
              elseif($FreeSpace -le $NewPageFileSize)
964
965
                  Write-Host "Not Enough Avialable Space. Drive: $Drive FreeSpace: $FreeSpace
                  NewPageFileSize: $NewPageFileSize `r`nNot Configuring!"
966
                  $Abort = $True
967
              }
968
          }
969
970
          971
          ### CALL CONFIGURE DESIRED STATE:
```

```
972
          973
          ###-----
 974
         $Params = @ {
975
         ServerID
HostName
                               = $ServerID
                               = $HostName
 976
            FunctionName = $FunctionName
PropertyName = $PropertyName
DesiredState = $DesiredState
GetCurrentState = $GetCurrentState
SetDesiredState = $SetDesiredState
 977
978
979
980
981
982
             ConfigurationMode = $ConfigurationMode
983
             AbortTrigger = $AbortTrigger
984
985
          Configure-DesiredState @Params
986
          Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
 987
      }
 988
 989
 990
      function Configure-PageFile-old #<---- need to complete function!!!!!!!!!!!!!!!!!</pre>
 991
992
          $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
          "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
993
994
          ### Modify Parameter Values
          ### -----
995
          ### Drive Letter Must NOT End with Colon ":"
996
997
          $LastChar = $PageFileLocation.substring($PageFileLocation.length-1)
998
          if ($LastChar -eq ":"){$PageFileLocation = $PageFileLocation.Split(":")[0]}
999
1000
          ### DESIRED STATE PARAMETERS
1001
1002
          = "PageFileSize"
1003
          $PropertyName
1004
1005
          $ConfigurationMode = "Configure" ### Report - Configure
1006
          $AbortTrigger = $False ### $True - $False
1007
1008
          $DesiredState = @()
1009
          $DesiredState += $PageFileSize
1010
          $DesiredState += $PageFileLocation
1011
          1012
1013
          ### GET CURRENT CONFIGURATION STATE:
1014
          1015
          [scriptblock]$script:GetCurrentState =
1016
          -{
1017
              ### Calculate Desired Page File Size
1018
              $Memory = (Get-WMIObject -class Win32 PhysicalMemory | Measure-Object -Property
              Capacity -Sum | % {[Math]::Round(($ .sum / 1GB),2)})
1019
              $DesiredPageFileSize = [Math]::Round(($Memory * $PageFileMultiplier)) # Memory
              Size Plus 20% - Round Up
1020
              if($Memory -lt "4") {$NewPageFileSize = "4"} ### Set a Minimun 4GB PageFile Size
1021
1022
1023
              $DesiredState = ($DesiredPageFileSize * 1000)
1024
              $PageFile = Get-WmiObject -Class Win32 PageFileUsage -Computer "LocalHost"
1025
              $CurrentState = $PageFile.MaximumSize
1026
              $Size = ($CurrentState -eq $DesiredState)
1027
1028
              ### PageFile Location
1029
              $script:DesiredState = $PageFileLocation
1030
              $PageFile = Get-CimInstance -ClassName Win32 PageFileSetting
1031
              $CurrentState = ($PageFile.Name).Split(":")[0]
1032
              $Location = ($CurrentState -eq $DesiredState)
1033
1034
              ### Set $CurrentState
1035
              $script:CurrentState = $True
1036
              $script:DesiredState = $True
1037
              if (($Size -eq $False) -OR ($Location -eq $False))
```

```
1038
              {
1039
                  $script:CurrentState = $False
1040
              }
1041
          }
1042
1043
          ### SET DESIRED-STATE:
1044
1045
          1046
          [scriptblock] $script: SetDesiredState =
1047
1048
              $script:DesiredState = $PageFileSize
1049
1050
              # Disable Automatically Managed PageFile Setting
1051
              $ComputerSystem = Get-CimInstance -ClassName Win32 ComputerSystem
1052
              if ($ComputerSystem.AutomaticManagedPagefile -eq "True")
1053
1054
                  Set-CimInstance -Property @{ AutomaticManagedPageFile = $False }
1055
              }
              Write-Host "AutomaticManagedPagefile : " $(Get-CimInstance -ClassName
1056
              Win32 ComputerSystem).AutomaticManagedPagefile
1057
1058
              ### Delete Existing PageFile
1059
              ### -----
1060
              $PageFile = Get-CimInstance -ClassName Win32 PageFileSetting
1061
              $PageFile | Remove-CimInstance
1062
1063
              ### Calculate Page File Size
1064
1065
              ### -----
1066
              $Memory = (Get-WMIObject -class Win32 PhysicalMemory | Measure-Object -Property
              Capacity -Sum | % {[Math]::Round(($ .sum / 1GB),2)})
1067
              $NewPageFileSize = [Math]::Round(($Memory * $PageFileSize)) # Memory Size Plus
              20% - Round Up
              if ($Memory -lt "4") {$NewPageFileSize = "4"}
1068
1069
              [int]$NewPageFileSize = ($NewPageFileSize * 1000)
              [int]$InitialSize = ($NewPageFileSize * 1)
1070
                                  = ($NewPageFileSize * 1)
1071
              [int] $MaximumSize
1072
1073
              ### Create New Page File
1074
              ###
1075
              [scriptblock] $CreatePageFile =
1076
              {
1077
                  if(-NOT(Get-CimInstance -ClassName Win32 PageFileSetting))
1078
1079
                      $PageFileName = $PageFileLocation + ":\pagefile.sys"
1080
                      Write-Host "Creating New Page File: PageFileLocation: $PageFileName
                      InitialSize: $InitialSize MaximumSize: $MaximumSize "
1081
                      New-CimInstance -ClassName Win32_PageFileSetting -Property 0{ Name=
                      $PageFileName } | Out-Null
1082
                      Get-CimInstance -ClassName Win32 PageFileSetting | Set-CimInstance
                      -Property @{InitialSize = $InitialSize; MaximumSize = $MaximumSize;} |
                      Out-Null
1083
                  }
1084
              }
1085
1086
              ### Check Avilable Disk Space
1087
1088
              $FreeSpace = (Get-PSDrive $PageFileLocation).Free
1089
1090
              #[int]$FreeSpace = $FreeSpace
1091
1092
              if($FreeSpace -gt $NewPageFileSize)
1093
1094
                  Write-Host "Free Space Available. Drive: $Drive FreeSpace: $FreeSpace
                  NewPageFileSize: $NewPageFileSize"
1095
                  Invoke-Command -ScriptBlock $CreatePageFile
1096
              elseif($FreeSpace -le $NewPageFileSize)
1097
```

```
1098
            {
1099
               Write-Host "Not Enough Avialable Space. Drive: $Drive FreeSpace: $FreeSpace
               NewPageFileSize: $NewPageFileSize `r`nNot Configuring!"
1100
            }
1101
1102
1103
         }
1104
1105
         Configure-DesiredState -GetCurrentState $GetCurrentState -SetDesiredState
         1106
         Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
1107
1108
1109
     function Rename-ECI.EMI.Configure.OS.GuestComputer
1110
1111
1112
         $FunctionName = $((Get-PSCallStack)[0].Command);Write-Host `r`n('-' * 50)`r`n
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
1113
1114
         1115
         ### DESIRED STATE PARAMETERS
1116
         $PropertyName
1117
                       = "HostName"
                       = $HostName
1118
         $DesiredState
         $ConfigurationMode = "Configure" ### Report - Configure
1119
1120
         $AbortTrigger
                       = $True ### $True - $False
1121
         1122
1123
         ### GET CURRENT CONFIGURATION STATE:
         1124
         [scriptblock]$script:GetCurrentState =
1125
1126
         {
1127
            $global:CurrentState = (Get-ItemProperty -Path
            HKLM:\SYSTEM\CurrentControlSet\Control\ComputerName\ComputerName).ComputerName
1128
1129
            #$ActiveComputerName = (Get-ItemProperty -Path
            HKLM:\SYSTEM\CurrentControlSet\Control\ComputerName\ActiveComputerName).ComputerN
1130
            #$ComputerName = (Get-ItemProperty -Path
            HKLM:\SYSTEM\CurrentControlSet\Control\ComputerName\ComputerName).ComputerName
1131
1132
         }
1133
1134
         1135
         ### SET DESIRED-STATE:
1136
         1137
         [scriptblock]$script:SetDesiredState =
1138
1139
            #Rename-Computer -ComputerName $ (Get-CIMInstance CIM ComputerSystem).Name
            -NewName $HostName
1140
            #Rename-Computer -ComputerName $(Get-WmiObject Win32 Computersystem).Name
            -NewName $HostName
1141
            Rename-Computer -ComputerName . -NewName $HostName
1142
1143
1144
         1145
         ### CALL CONFIGURE DESIRED STATE:
1146
         1147
         ###-----
1148
         $Params = @{
1149
            ServerID
                            = $ServerID
1150
            HostName
                            = $HostName
1151
           FunctionName
                           = $FunctionName
1152
           PropertyName
                           = $PropertyName
1153
           DesiredState
                           = $DesiredState
1154
                           = $GetCurrentState
           GetCurrentState
1155
           SetDesiredState
                           = $SetDesiredState
1156
            ConfigurationMode = $ConfigurationMode
1157
                            = $AbortTrigger
            AbortTrigger
```

```
1158
1159
         Configure-DesiredState @Params
1160
         Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
1161
1162
1163
     function Restart-ECI.EMI.Configure.OS.GuestComputer
1164
         $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
1165
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
1166
         $t = 10
1167
1168
1169
         Write-Host "Restarting Guest OS in $t seconds . . . "
1170
         Shutdown /r -t $t
1171
         Write-Host `r`n('-' * 50) `r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
1172
1173
      }
1174
1175
      function Configure-ECI.EMI.Configure.OS.JoinDomain
1176
         $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
1177
         "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
1178
1179
         1180
         ### DESIRED STATE PARAMETERS
1181
         = "ClientDomain"
= $ClientDomain
1182
         $PropertyName
1183
         $DesiredState
1184
         $ConfigurationMode = "Configure" ### Report - Configure
         $AbortTrigger = $False ### $True - $False
1185
1186
1187
        1188
         ### GET CURRENT CONFIGURATION STATE:
1189
         1190
         [scriptblock]$script:GetCurrentState =
1191
         {
1192
             $global:CurrentState = (Get-CimInstance -ClassName Win32 ComputerSystem).Domain
1193
         }
1194
1195
         1196
         ### SET DESIRED-STATE:
1197
         1198
         [scriptblock] $script: SetDesiredState =
1199
1200
             $AdministrativePassword = ConvertTo-SecureString $AdministrativePassword
             -AsPlainText -Force
1201
             $PSCredentials = New-Object System.Management.Automation.PSCredential
             ($AdministrativeUserName, $AdministrativePassword)
1202
1203
             #$OUPath = "OU=Servers,OU=London,DC=ercolanomgmt,DC=corp"
1204
             #Add-Computer -ComputerName $HostName -DomainName $ClientDomain -OUPath $OUPath
            -Credential $PSCredentials -Force -Verbose
1205
1206
            Add-Computer -ComputerName $HostName -DomainName $ClientDomain -Credential
             $PSCredentials -Force -Verbose
1207
         }
1208
1209
         1210
         ### CALL CONFIGURE DESIRED STATE:
1211
         1212
         ###-----
1213
         ### Test Variables passed from #$Variable# substitution
1214
         $Params = @ {
1215
            ServerID
                             = $ServerID
1216
            HostName
                             = $HostName
1217
                            = $FunctionName
           FunctionName
1218
           PropertyName
                            = $PropertyName
1219
                            = $DesiredState
           DesiredState
            GetCurrentState
1220
                            = $GetCurrentState
```

```
1221
               SetDesiredState
                                   = $SetDesiredState
1222
               ConfigurationMode = $ConfigurationMode
1223
              AbortTrigger
                                   = $AbortTrigger
1224
1225
           Configure-DesiredState @Params
1226
           Write-Host `r`n('-' * 50)`r`n "END FUNCTION:" $FunctionName -ForegroundColor DarkGray
1227
       }
1228
1229
       function Restart-ECI.GuestOS
1230
1231
           $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
           "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
1232
1233
           $t = 30
1234
           Write-Host "Restarting Guest OS on Server - $Hostname in $t seconds:"
           -ForegroundColor Magenta
1235
           Start-Sleep -Seconds $t
1236
          Restart-Computer -ComputerName . -Force #-Wait -For PowerShell -Timeout 300 -Delay
           $t -Verbose
1237
       }
1238
1239
       function
       Rename-Local Administrator-test
       <----- deleteme??????
1240
1241
           $FunctionName = $((Get-PSCallStack)[0].Command); Write-Host `r`n('-' * 50)`r`n
           "EXECUTING FUNCTION: " $FunctionName `r`n('-' * 50) -ForegroundColor Gray
1242
1243
               ### Use .NET to Find the Current Local Administrator Account
1244
               Add-Type -AssemblyName System.DirectoryServices.AccountManagement
1245
               $ComputerName = [System.Net.Dns]::GetHostName()
1246
               $PrincipalContext = New-Object
               System.DirectoryServices.AccountManagement.PrincipalContext([System.DirectoryServ
               ices.AccountManagement.ContextType]::Machine, $ComputerName)
1247
               $UserPrincipal = New-Object
               System.DirectoryServices.AccountManagement.UserPrincipal($PrincipalContext)
1248
               $Searcher = New-Object
               System.DirectoryServices.AccountManagement.PrincipalSearcher
1249
               $Searcher.QueryFilter = $UserPrincipal
1250
1251
               ### The Administrator account is the only account that has a SID that ends with
               "-500"
1252
               $Account = $Searcher.FindAll() | Where-Object {$ .Sid -Like "*-500"}
1253
               $script:CurrentAdminName = $Account.Name
1254
1255
              Write-Host "1CurrentAdminName
                                                        : " $CurrentAdminName
              Write-Host "1LocalAdministrator
                                                         : " $LocalAdministrator
1256
              Write-Host "1PreConfig_LocalAdminAccount : " $PreConfig_LocalAdminAccount
1257
              Write-Host "1PostConfig_LocalAdminAccount: " $PostConfig_LocalAdminAccount
1258
1259
1260
1261
               ### Check if Local Admin is already renamed
1262
               if ($CurrentAdminName -eq $LocalAdministrator)
1263
               {
1264
                   #Write-Host "Local Admin Names are the same - CurrentAdminName:
                   $CurrentAdminName NewAdminName: $LocalAdministrator"
                   #$RebootRequired = $False
1265
1266
1267
               elseif($CurrentAdminName -ne $NewLocalAdminName)
1268
1269
1270
                  # $RebootRequired = $True
                   #Write-Host "Renaming Local Admin Account: Current Admin: $CurrentAdminName
1271
                   New Admin: $LocalAdministrator"
1272
                   Rename-LocalUser -Name $CurrentAdminName -NewName $LocalAdministrator
                   -ErrorAction SilentlyContinue | Out-Null
1273
```