

```

1  # Define ESXi host IP or hostname
2  $esxName = '192.168.204.2'
3
4  # Define time range for statistics collection
5  $start = (Get-Date).AddDays(-7)
6
7  # Define performance metrics to collect
8  $stat = 'cpu.usage.average','mem.usage.average','disk.usage.average'
9
10 # Get the ESXi host
11 $esx = Get-VMHost -Name $esxName
12
13 # Initialize an empty array to store VM metrics
14 $vmMetrics = @()
15
16 # Get all VMs registered on the ESXi host
17 $vms = Get-VMHost $esx | Get-VM
18
19 # Iterate through each VM on the host
20 foreach ($vm in $vms) {
21     # Get performance statistics for the VM
22     $vmStats = Get-Stat -Entity $vm -Start $start -Stat $stat -IntervalMins 120 |
23         Group-Object -Property Timestamp | ForEach-Object {
24             $cpuAvg = $_.Group | Where-Object { $_.MetricId -eq 'cpu.usage.average'
25             } | Select-Object -ExpandProperty Value -First 1
26             $memAvg = $_.Group | Where-Object { $_.MetricId -eq 'mem.usage.average'
27             } | Select-Object -ExpandProperty Value -First 1
28             $diskUsage = $_.Group | Where-Object { $_.MetricId -eq
29             'disk.usage.average' } | Select-Object -ExpandProperty Value -First 1
30
31             [PSCustomObject]@{
32                 VMName = $vm.Name
33                 Date = $_.Name
34                 CpuAvg = $cpuAvg
35                 MemAvg = $memAvg
36                 DiskUsage = $diskUsage
37             }
38         }
39
40     # Add VM metrics to the array
41     $vmMetrics += $vmStats
42 }
43
44 # Export VM metrics to CSV
45 $vmMetrics | Select-Object VMName,Date,CpuAvg,MemAvg,DiskUsage |
46     Export-Csv -Path 'C:\Users\santh\OneDrive\Desktop\workload
47     traces\host1_VMs\u21-03-2024.csv' -NoTypeInfo -UseCulture

```