

CYSE 280 Windows System Management and Security

Lab 7-1: Managing Local Storage and Virtual Hard Disks

1. Screenshot

Actioned

Item completed: 04/08/2025 04:50 AM
Value: 0

The screenshot displays the Windows Computer Management console, specifically the Disk Management section. It shows three disks with their respective partitions and configurations:

| Volume | Layout | Type | File System | Status |
|---------------------------|----------|-------|-------------|---------------------------------------|
| (C:) | Mirror | Dy... | NTFS | Healthy (Boot, Page File, Crash Dump) |
| (Disk 0 partition 2) | Simple | Basic | | Healthy (EFI System Partition) |
| PLABS-TEST (F:) | Simple | Basic | ReFS | Healthy (Primary Partition) |
| RAID-0 (H:) | Strip... | Dy... | NTFS | Healthy |
| RAID-5 (S:) | RAID... | Dy... | NTFS | Healthy |
| SSS_X64REV_EN-US_DV9 (Z:) | Simple | Basic | UDF | Healthy (Primary Partition) |
| VHD (D:) | Simple | Basic | NTFS | Healthy (Primary Partition) |

Disk 1 (Basic, 99.98 GB, Online) contains VHD (D:) (99.98 GB NTFS, Healthy Primary Partition).

Disk 2 (Dynamic, 49.98 GB, Online) contains (C:) (39.40 GB NTFS, Healthy), RAID-5 (S:) (2.93 GB NTFS, Healthy), and RAID-0 (H:) (7.65 GB NTFS, Healthy).

Disk 3 (Basic, 49.98 GB, Online) contains PLABS-TEST (F:) (49.98 GB ReFS, Healthy Primary Partition).

Legend: ■ Unallocated ■ Primary partition ■ Striped volume ■ Mirrored volume ■ RAID-5 volume

System tray: 4c9dcbe0a2cbcf77: -5ea0d3df: 18cefac740d: -77ca
04/08/2025 17:50:52

1.

2. Screenshot

Actioned

Item completed: 04/08/2025 05:02 AM

Value: 0

The screenshot displays the Windows PowerShell ISE interface. The main console window shows the following output:

```
Get-VHD : D:\engineering.vhdx is not an existing virtual hard disk file.
At line:1 char:1
+ Get-VHD D:\engineering.vhdx
+ ~~~~~
+ CategoryInfo          : InvalidArgument: (:) [Get-VHD], VirtualizationException
+ FullyQualifiedErrorId : InvalidParameter,Microsoft.Vhd.PowerShell.Cmdlets.GetVHD

PS C:\Users\Administrator.PRACTICELABS> Get-VHD D:\engineering.vhdx

ComputerName      : PLABDM01
Path              : d:\engineering.vhdx
VhdFormat         : VHDX
VhdType           : Dynamic
FileSize          : 104857600
Size              : 5368709120
MinimumSize       : 5367677440
LogicalSectorSize : 512
PhysicalSectorSize : 512
BlockSize         : 33554432
ParentPath        :
DiskIdentifier    : 6138E214-B7F6-4054-900C-17837D570A7E
FragmentationPercentage : 0
Alignment         : 1
Attached          : False
DiskNumber        :
IsPmemCompatible  : False
AddressAbstractionType : None
Number            :

PS C:\Users\Administrator.PRACTICELABS> Optimize-VHD -Path D:\engineering.vhdx -Mode Full
PS C:\Users\Administrator.PRACTICELABS> Mount-VHD D:\engineering.vhdx
PS C:\Users\Administrator.PRACTICELABS>
```

The right-hand pane shows a list of Windows features under the 'A' category, including:

- Add-AppxClientConnectionGroup
- Add-AppxClientPackage
- Add-AppxPublishingServer
- Add-AppxPackage
- Add-AppxProvisionedPackage
- Add-AppxVolume
- Add-BCDataCacheExtension
- Add-BitsFile
- Add-CertificateEnrollmentPolicyServer
- Add-ClusterSCSITargetServerRole
- Add-Computer
- Add-Content
- Add-DnsClientNrpptRule
- Add-DtcClusterTMMapping
- Add-EtwTraceProvider
- Add-History
- Add-InitiatorIdToMaskingSet
- Add-IscsiVirtualDiskTargetMapping
- Add-JobTrigger
- Add-KdsRootKey
- Add-LocalGroupMember
- Add-Member
- Add-MpPreference
- Add-MpPreference
- Add-NetEventNetworkAdapter

The taskbar at the bottom shows the system tray with the date and time: 04/08/2025 18:02:06.

2.