Lab 1: Install Windows Server 2019

The VMware Workstation, a hosted hypervisor was used during this lab. Windows server 2019 Datacenter, Desktop experience and core VMs were installed on the hypervisor. The desktop experience OS had *server manager* as the management tool. This offered GUI unlike the other one. The core OS had *SConfig*, a text-based utility, as the management tool.

Below are the screenshots from the virtual machines that were installed.

The Windows Server 2019 Datacenter (Desktop Experience)

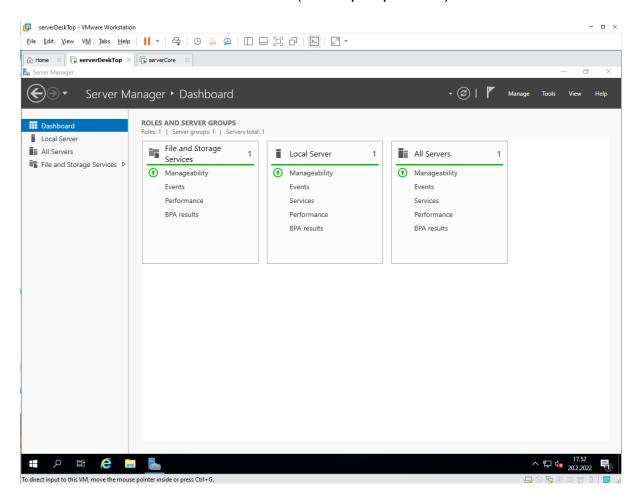


Figure1: Windows server 2019 Datacenter (Desktop Experience)

The update settings were set to manual and the computer names were changed. The VMware tools were installed for both VMs. The DHCP service was disabled for the

NAT adapter. A subnet was created for the VMs, and they were assigned static IP addresses. Default gateway and DNS server were configured too.

The Windows Server 2019 Datacenter (core)

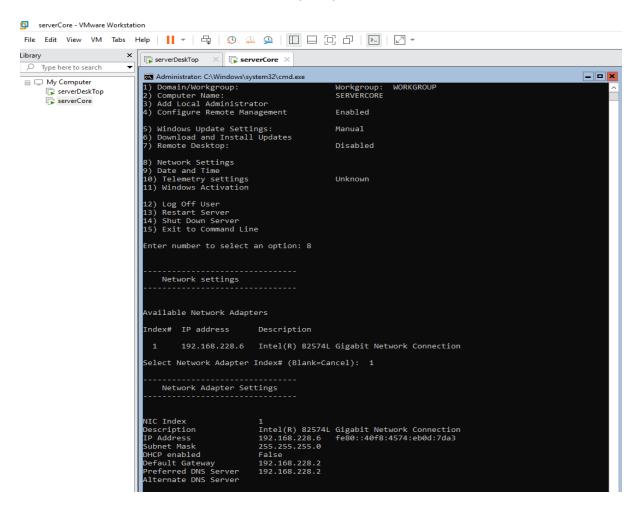


Figure 1: Windows server 2019 Datacenter (core)

The VMs can communicate with each other as depicted by the screenshot below:

```
C:\Users\Administrator>ping 192.168.228.5

Pinging 192.168.228.5 with 32 bytes of data:
Reply from 192.168.228.5: bytes=32 time<1ms TTL=128
Reply from 192.168.228.5: bytes=32 time=1ms TTL=128
Reply from 192.168.228.5: bytes=32 time=1ms TTL=128
Reply from 192.168.228.5: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.228.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\Administrator>The serverDesktop responded the ping requests
```

The configurations for the VMs are as below:

Computer Name	serverDesktop	serverCore
Memory	2GB	2GB
Processors	2	2
Hard Disk	60GB	60GB
IP address	192.168.228.5 / 24	192.168.228.6 / 24
Default Gateway	192.168.228.2	192.168.228.2
DNS Server	192.168.228.2	192.168.228.2

Conclusion

The Windows Server 2019 Datacenter can be installed in two different ways. One offered Graphical User Interface to manage server (*server manager*) while the other relied on the command line interface (*sconfig tool*). The *server manager* is run on the local machine. The new management tool, *Windows Admin Center*, is a web-based server management tool run on management station.

Both OS that we installed in this lab have their own pros and cons. Though the footprint of desktop experience was heavier and required comparatively much more resources than the server core, several apps was not installable in the core OS. Also, many roles and services were not configurable through sconfig. However, Server Core App Compability FOD includes some of the features of desktop experience.