

SERVICE DISCOVERY, WIRELESS ENTERPRISE, AND VIRTUAL AND CLOUD NETWORKS

Lesson 03

Virtual Network

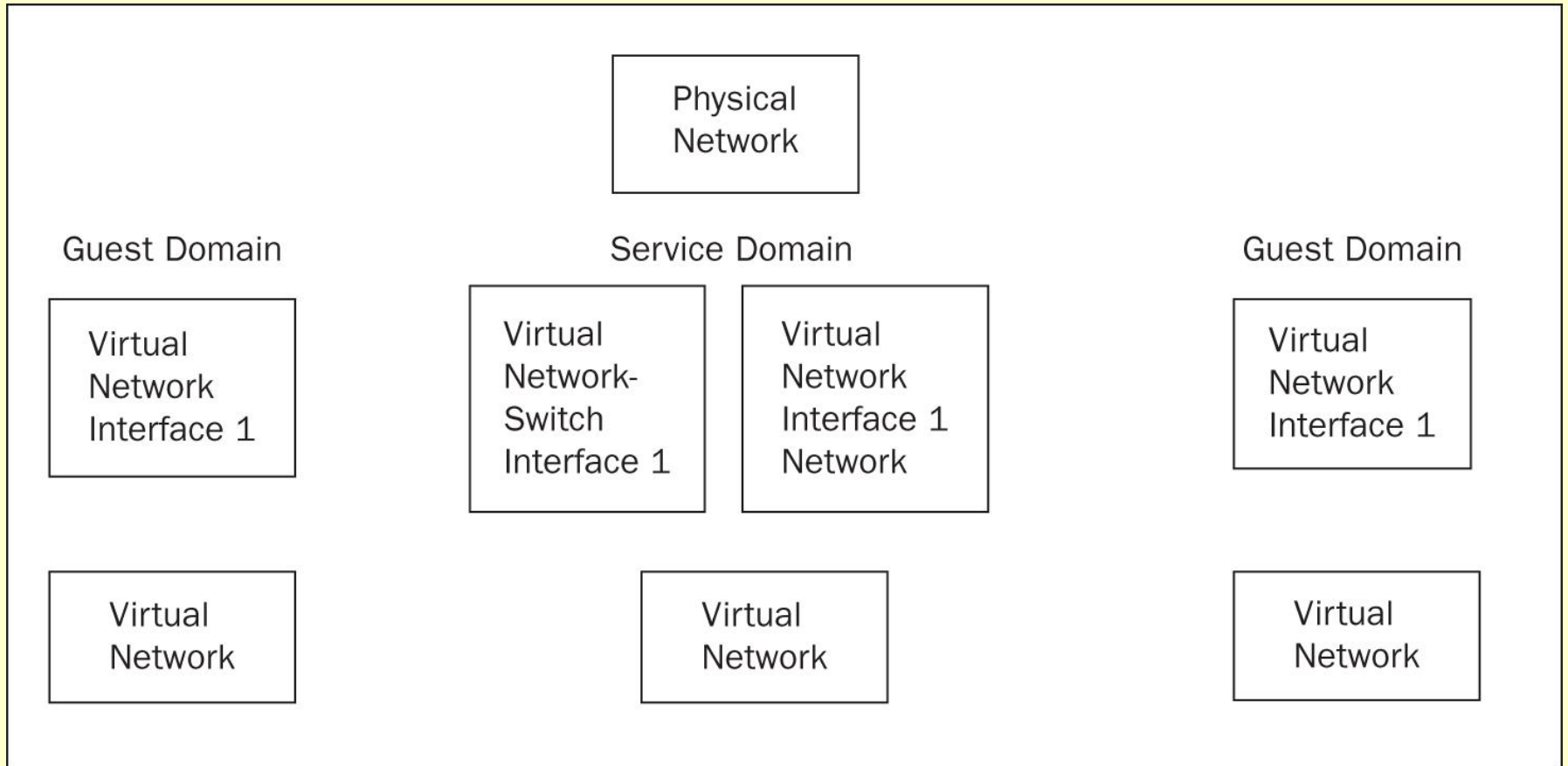
VIRTUAL NETWORK (VN)

- Virtual network means that two domains communicate with each other without using any external physical network (PN)
- Consider two VNs, VN1 and VN2.
- VN1, can also allow two domains, D1 and D2, which can use the same PN interface.

VIRTUAL NETWORK

- D1 and D2 access the interfaced PN.
- D1 and D2 communicate with remote systems through the shared PN
- Refer Figure

TWO VIRTUAL NETWORKS



INTERCONNECTIONS OF TWO OR MORE VIRTUAL NETWORKS

- A virtual switch at service domain interconnects through virtual network devices (VNDs)
- The virtual switch connects to a PN and to one or more virtual networks, each on distinct guest domains.

VIRTUAL SWITCH

- Two virtual switches on two physical networks connect to two physical network interfaces (PNICs), which connect to an intranet.

GUEST DOMAIN VIRTUAL NETWORK

- A guest domain virtual network configuration enables flexibility in configuration of the network, performance, and security to the guests running on the virtual machine (VM) host.

VIRTUAL NETWORK COMPUTING (VNC)

- VNC does not depend on the platform, (hardware and OS Windows or Mac or UNIX).
- Clients and servers in many GUI-based Oss connect to a VNC server at the same time.

VNC

- Java multiple clients may connect to a VNC server at the same time
- VNC provides remote access to the files by virtual networked computing systems through a virtual switch in the service domain or vice versa

VNC

- Provisions technical support remotely to a home computing system

VIRTUAL NETWORK

- Assume four computing systems at four nearby or remote places (domains)
- All four working on a design project.
- Virtual network between four, enables them connectivity and work as if design is being developed on same computing system with identical interface to each.

EXAMPLE OF VNC

- Remote PC or server connect to a computer using TeamViewer– a popular software
- VN software enables remote technical support and remote installation at the other end using VN concept.

EXAMPLE OF VNC

- A technical expert can directly access the desktop of the other system using the TeamViewer application to execute the desired work.

SUMMARY

- Virtual network enables two domains communicate with each other without using any external physical network (PN) just the virtual switches

End of Lesson 03

Virtual Network