

Equipment

OSI Model

Protocol Data Unit

Firewall: NGFW, WAF

Proxy

Load Balancer

Application layer

Web, DNS, Email, IRC, Zip, SSH, SSL/TLS, RTP, H.323, PGP/GPG

L7PDU: “Payload” or “Data”

Formatting, Encoding, Compression, Encryption/Decryption

Presentation layer

Zip, SSH, SSL/TLS

L6PDU

End-to-end connections (applications)

Session layer

H.225, H.245

L5PDU

Firewall

Proxy

Load Balancer

M/L Switch

Segmentation/Reassembly, Sequencing, Logical Ports

Transport layer

TCP→

UDP→

Port Numbers

L4PDU:

Segment

Datagram

Firewall

Proxy

Load Balancer

Router or M/L Switch

Logical Address

Network layer

I.P., ICMP, IGMP

L3PDU: Packet

MPLS: “Label” or “Shim” Layer 2.5

Switch

Bridge

Data Link layer

MAC sublayer	LLC sublayer						
Physical Address	802.3	802.5	802.11	802.16	Relay	Frame	ATM
MAC Address, STP, L2TP, PPTP, ARP							

L2PDU: Frame

Hub

Repeater

Patch Panel

Punch Down Block

NIC

Physical layer

Coax, Twisted Pair,

Fiber, Radio Frequency

10BASE2	10BASE-T	10BASE-ER	ATM	BROADBAND	SONET	SATELLITE
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L1PDU: Bit (100110...)