

connectors

Fiber connections

ST -> connects with push and twist off action

SC - a snap-on connection

LC - a snap-on connection

MT-RJ - ||

copper connection

twisted pair

RJ-11	- used with finished pair cable for telephone
110 block	- termination point of twisted pair
RJ-95 -	Twisted pair cable on network

BNC - a push and twist with coaxial cable

connectors - with RJ-6 coaxial

COAXIAL

DB-9 - pin and shaped for serial connected  
such as RJ-232

(T568A)

white/green  
green  
white/orange  
orange  
blue  
white/blue  
orange  
white/brown  
brown

T568B

white/orange  
orange  
white/green  
green  
blue  
white/blue  
green  
white/brown  
brown

defused

curly

curly

curly

curly

curly

wifi analyzed } determine the wireless network's signal strength, the frequency in use, possible radio frequency interference.

cable tested } is it created as patch or crossover, provides detailed information on physical and electrical condition, crosstalk, attenuation, noise, resistance, and other cable run characteristics.

Multimeter } measure voltage, amperage and resistance of circuit.

Protocol	port	
SMTP	25	served to serve
SNMP	161	
POP3	110	receive and hold

Logic bomb } is a piece of often malicious code that is infrastructurally inserted into software that is activated upon the host network only when certain conditions are met.

## Penetration

port scanning - used to determine which ports and services are open and available for communication on a target system.

Protocol analysis - used to capture, monitor and analyze data transmitted over a communication channel.

## Antenna

A patch antenna is a type of radio antenna with a flat profile, which can be mounted on a flat surface. It is typically mounted to a wall or a mast and provides coverage in a limited angle pattern. Patch antenna could be directional or omnidirectional. Yagi for longer footprint.

Whip antenna is a vertical omnidirectional antenna that is usually used in indoor environments. whip antenna is omni directional and cannot be used for directional use case.

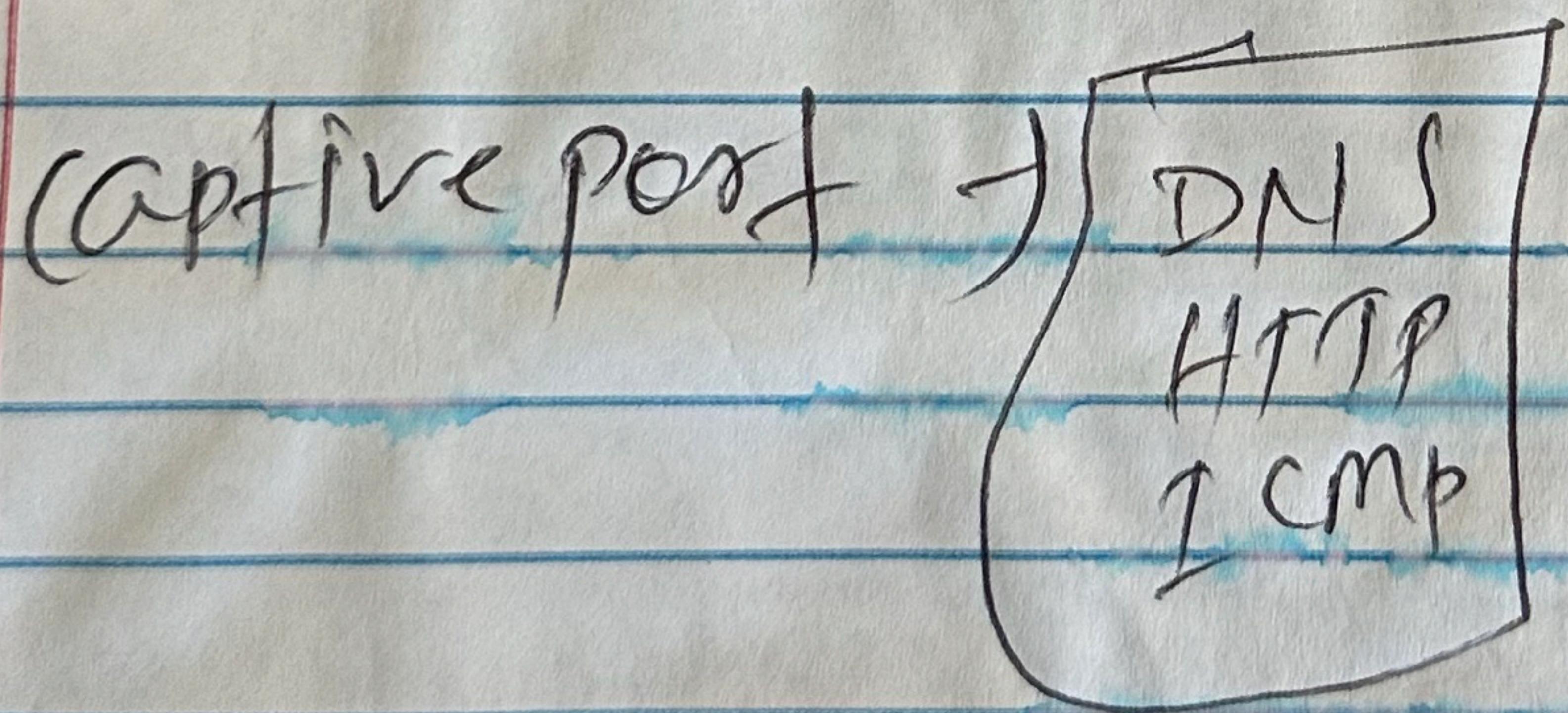
IP scanner - used to monitor a network's IP address space in real time and identify any devices connected to the network. This tool sends ping to every IP on the network and then creates a report of which IP address sent a response.

Netflow Analyzer - used to perform monitoring, troubleshooting, inspection, interpretation, and synthesis of network traffic flow data.

Application-aware firewall → would detect both the accessing of random ports and SSL encryption and identify it as suspicious. can make decisions about applications are allowed or blocked by a firewall.

stateless packet inspection → allows or denies packets into the network based on the source or destination IP address or the traffic type (TCP, UDP, ICMP)

stateful packet inspection → monitors the active sessions and connections on the network



Captive portals usually rely on 802.1X and 802.1X uses RADIUS for authentication

SSL works at layer 5  
↑  
application independent

## DNS Records

SRV -> specifies a host and port for specific services such as voice over IP

PTR -> used for the reverse DNS lookup

SOA -> indicates which domain name server is the best source of information for the specified domain.

TXT -> lets a domain administrator enter info into the DNS.