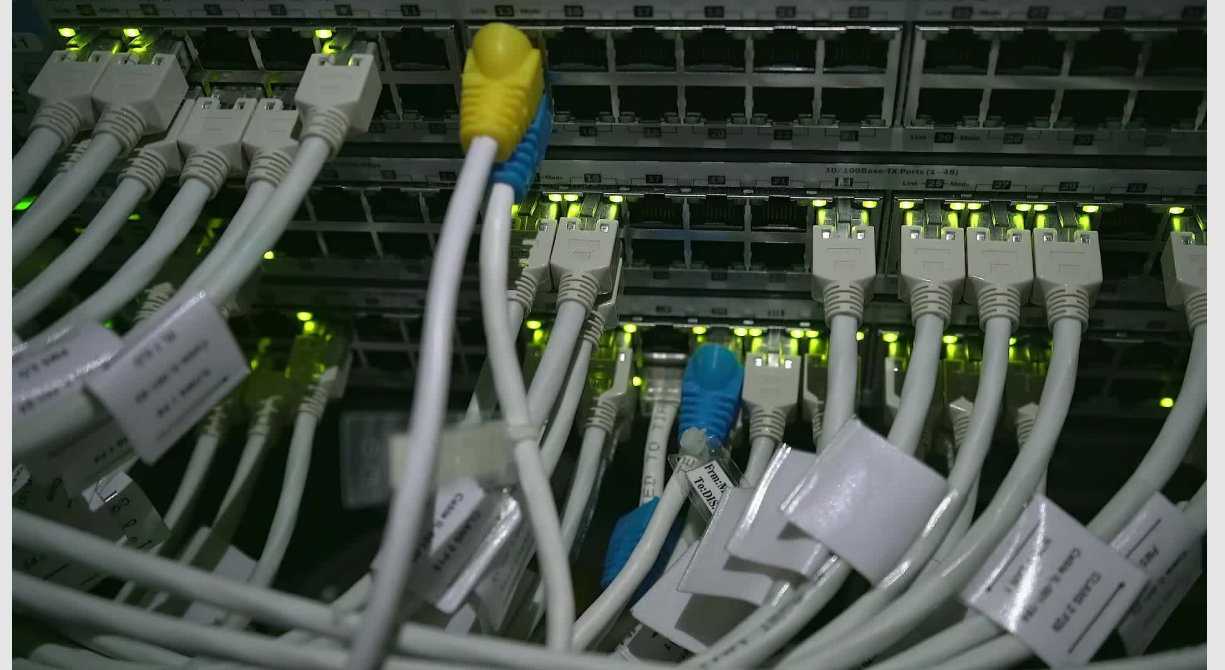
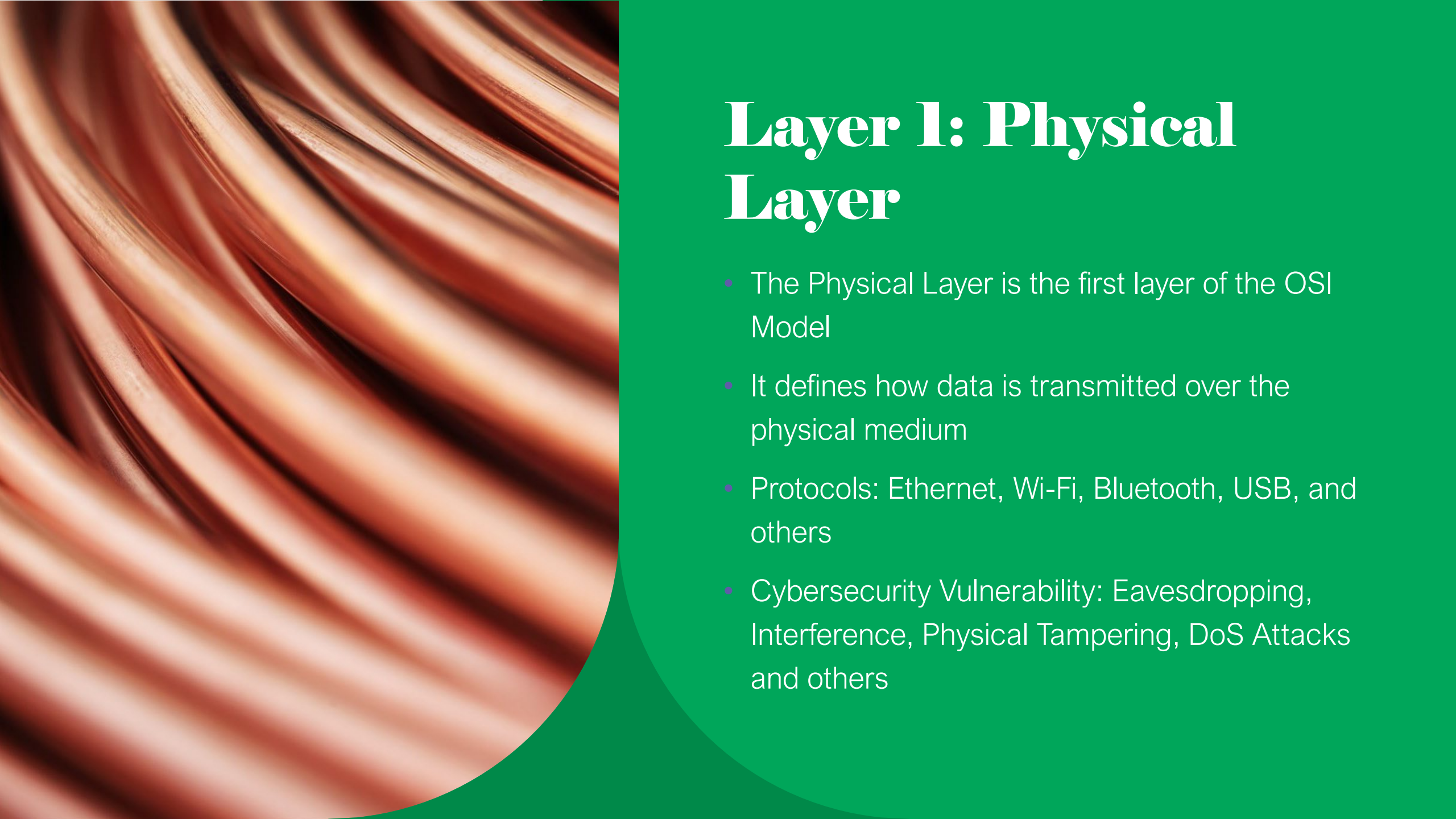


The OSI Model





Layer 1: Physical Layer

- The Physical Layer is the first layer of the OSI Model
- It defines how data is transmitted over the physical medium
- Protocols: Ethernet, Wi-Fi, Bluetooth, USB, and others
- Cybersecurity Vulnerability: Eavesdropping, Interference, Physical Tampering, DoS Attacks and others

Layer 2: Data Link Layer

- The Data Link Layer is responsible for data delivery between two devices
- It separates data into frames and performs error checking
- Protocols: Ethernet, Wi-Fi, PPP, HDLC, and others
- Cybersecurity Vulnerability: MAC Spoofing, ARP Spoofing, VLAN Hopping, and others



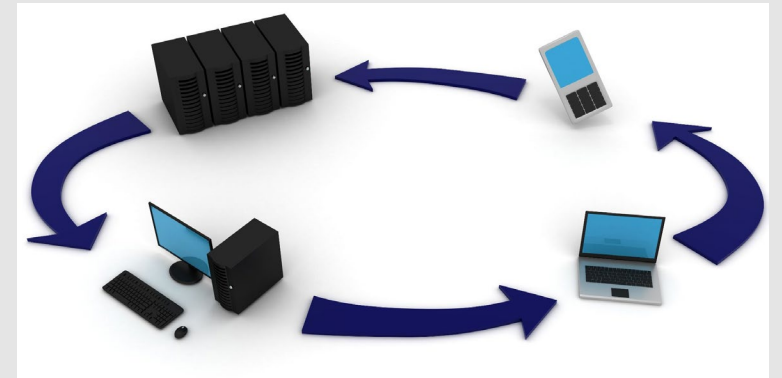
Layer 3: Network Layer



- The Network Layer is responsible for routing data between networks
- It adds logical addresses to data packets
- Protocols: IP, ICMP, ARP, RARP, and others
- Cybersecurity Vulnerability: IP Spoofing, Routing Attacks, Fragmentation Attacks, and others

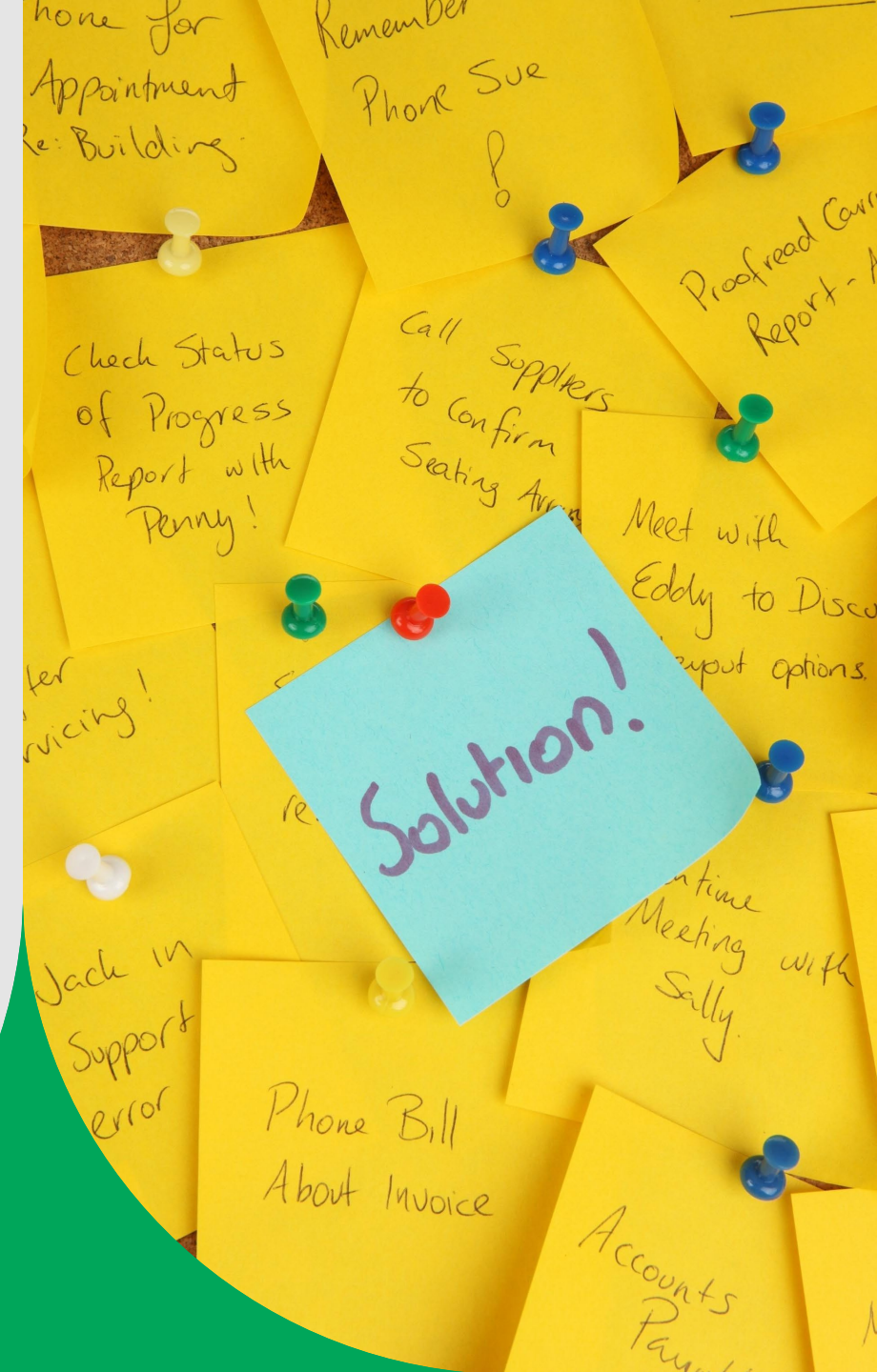
Layer 4: Transport Layer

- The Transport Layer is responsible for end-to-end communication
- It provides data segmentation and error recovery
- Protocols: TCP, UDP, SCTP, and others
- Cybersecurity Vulnerability: Syn Flood, Session Hijacking, and others



Layer 5: Session Layer

- The Session Layer is responsible for establishing and maintaining connections between applications
- It manages the session and provides synchronization between devices
- Protocols: NetBIOS, PPTP, RPC, and others
- Cybersecurity Vulnerability: Session Hijacking, Denial of Service (DoS) Attacks and others



Layer 6: Presentation Layer



- The Presentation Layer is responsible for presenting data to the application layer
- It performs data transformation and encryption
- Protocols: SSL, TLS, MIME, and others
- Cybersecurity Vulnerability: Data Injection, Malware, and others

Layer 7: Application Layer

- The Application Layer is the layer that interacts with the user
- It provides network services to applications
- Protocols: HTTP, FTP, SMTP, POP3, and others
- Cybersecurity Vulnerability: Malware, Phishing, DoS Attacks, and others





How to Remember the 7 Layers

- All People Seem To Need Data Processing
- Please Do Not Throw Sausage Pizza Away
- The Mnemonic: A silly phrase to remember the seven layers of the OSI Model