OSI 7 Layer Model Flow Chart

User Computer
Assigned IP: 192.168.0.2
MAC: 4C-BB-2B-87-8C-D6

Google.com Web Server
Assigned IP: 10.54.251.94
MAC: 78-29-23-92-0B-BC

Layer 7 - Application
Format: Data
User Interface Program: Firefox
Human Interface to Webpage

Layer 7 - Application
Format: Data
Interface Software: Apcahe
Sever Interface to Webpage

Layer 6 - Presentation
Format: Data
Protocol: HTTPS GET
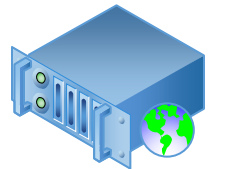Formats Data to be usable to user
Data Compression

Layer 6 - Presentation
Format: Data
Protocol: HTTPS Listen
Formats Data to be usable to Server
Data Decompression

Layer 5 - Session
Format: Data
Ephemeral Port: 50000
TLS Encryption
Maintains Connection between devices

Layer 5 - Session
Format: Data
Logical Port: 443
TLS Encryption
Maintains Connection between devices

Layer 4 - Transport
Format: Segments
Protocol: TCP
TLS Encryption
Transmit Data / Responsible for Reliability/Data Check Point

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Format: Segments
Protocol: TCP
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User Internet Router
Assigned IP: 68.2.200.10
DHCP IP: 192.168.100.1/24
MAC: 56-8A-45-93-51-4C

Google Internet Router
Assigned IP: 172.217.11.174
DHCP IP: 172.16.0.1/16
MAC: 55-36-BE-EF-37-C6

Layer 3 - Network
Format: Packets
Protocol: IP Address v4
Decides which physical path data will take

User Network Switch Gateway
Assigned IP: 192.168.100.2
DHCP IP: 192.168.0.1/24
MAC: DA-71-8D-39-C3-2A

Layer 3 - Network
Format: Packets
Protocol: IP Address v4
Decides which physical path data will take

Layer 3 - Network
Format: Packets
Protocol: IP Address v4
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Internet Backbone

Layer 3 - Network
Format: Packets
Protocol: IP Address v4
Decides which physical path data will take

Google Network Switch Gateway
Assigned IP: 172.16.10.5
DHCP IP: 10.0.0.1/8
MAC: 32-26-B0-DC-5C-7C

Layer 3 - Network
Format: Packets
Protocol: IP Address v4
Decides which physical path data will take

Layer 2 - Data Link
Format: Frames
Interface: NIC Card
MAC Address
Ethernet II framing
Defines Format/ Error Check

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Layer 1 - Physical
Format: Bits
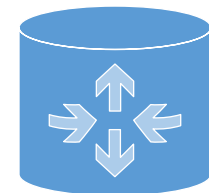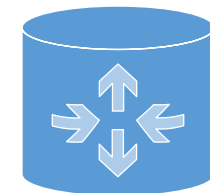Cat5e Cable
Transmits raw bit stream over cable

Layer 1 - Physical
Format: Bits
Cat5e Cable

Layer 1 - Physical
Format: Bits
Cat6a Cable

Layer 1 - Physical
Format: Bits
Cat6e Cable

Layer 1 - Physical
Format: Bits
Coaxial cable

Layer 1 - Physical
Format: Bits
Fiber Optic Cable

Layer 1 - Physical
Format: Bits
Cat7a Cable

Layer 1 - Physical
Format: Bits
Cat7a Cable

Layer 1 - Physical
Format: Bits
Cat7a Cable

Layer 1 - Physical
Format: Bits
Cat7a Cable
Transmits raw bit stream over cable