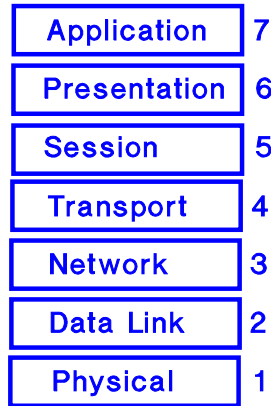
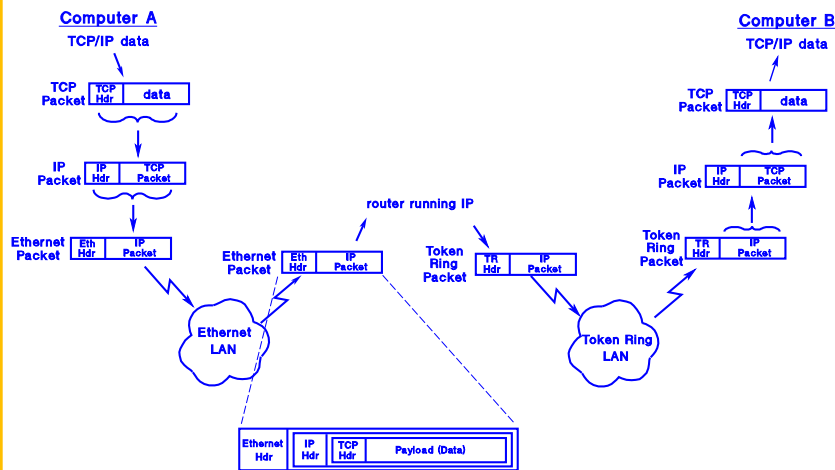


OSI Network Model

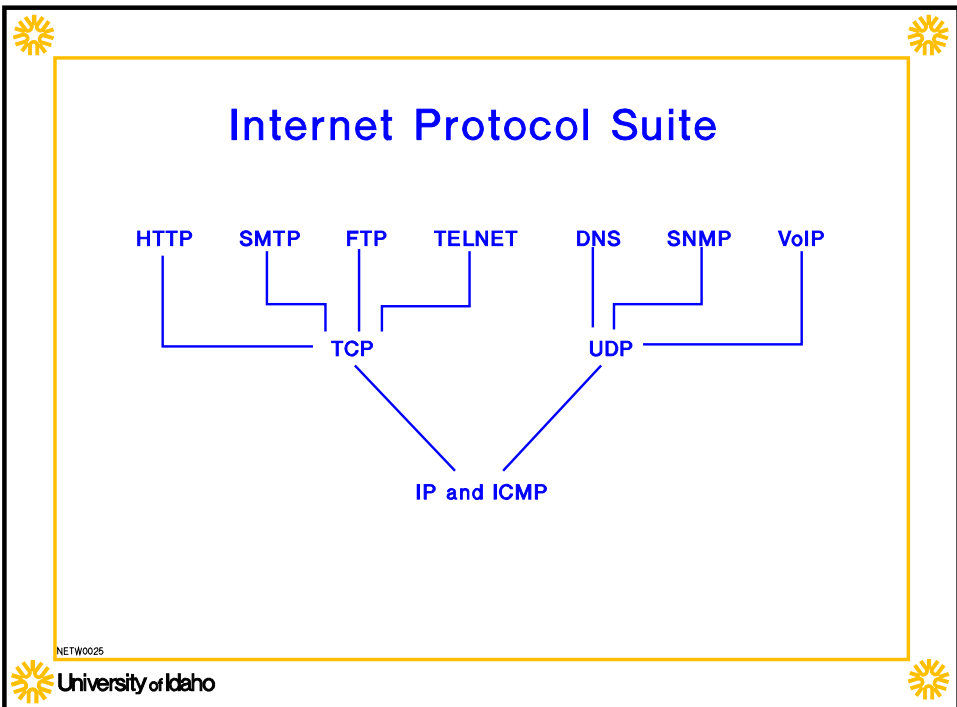
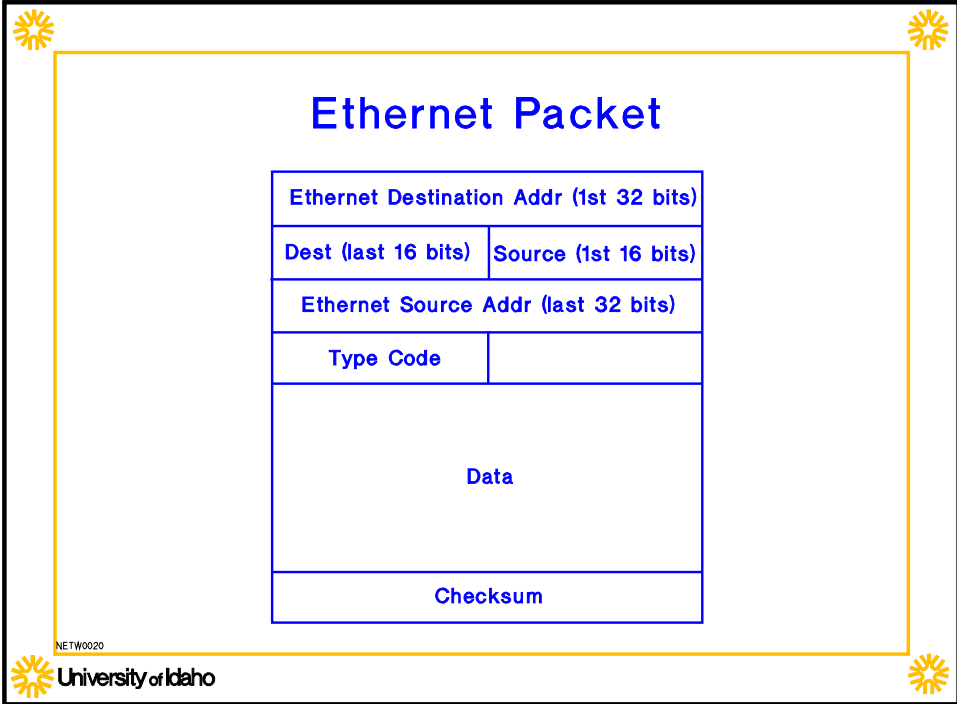


NETW0010

IP Over Different Networks



NETW0015



IP Packet Format

Version	Header Length	Type of Service	Packet Length	
Identification			Flags	
Time to Live	Protocol	Checksum		
Source Address				
Destination Address				
Data				

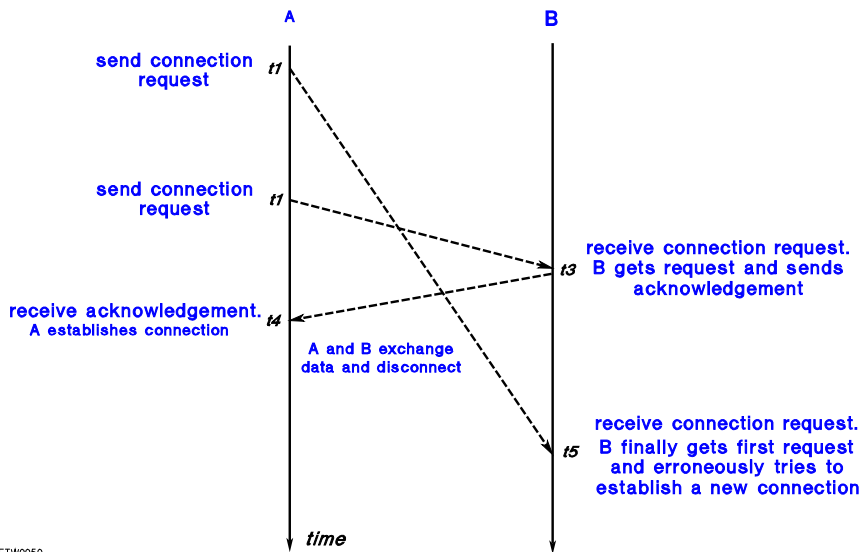
NETW0030

TCP Packet Format

Source Port		Destination Port	
Sequence Number			
Acknowledgement Number			
Header Length	Flags		
Checksum			
Data			

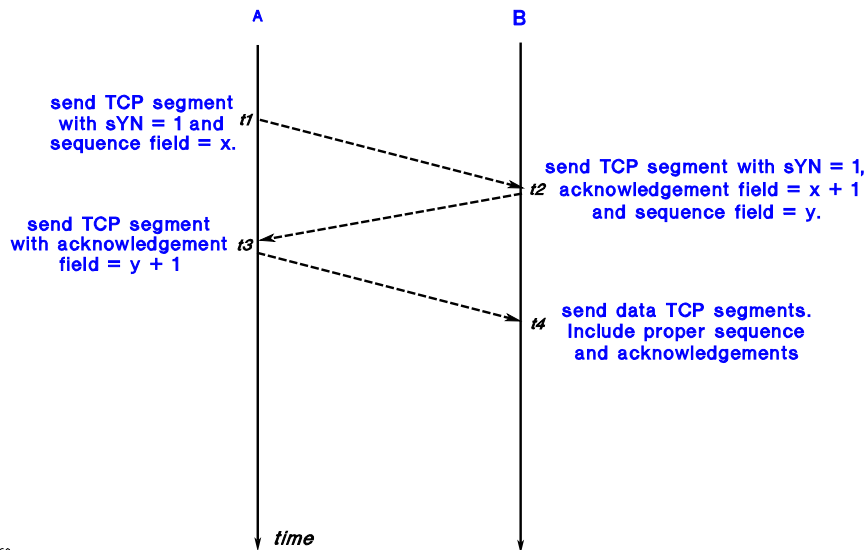
NETW0040

Two Way Handshake Protocol



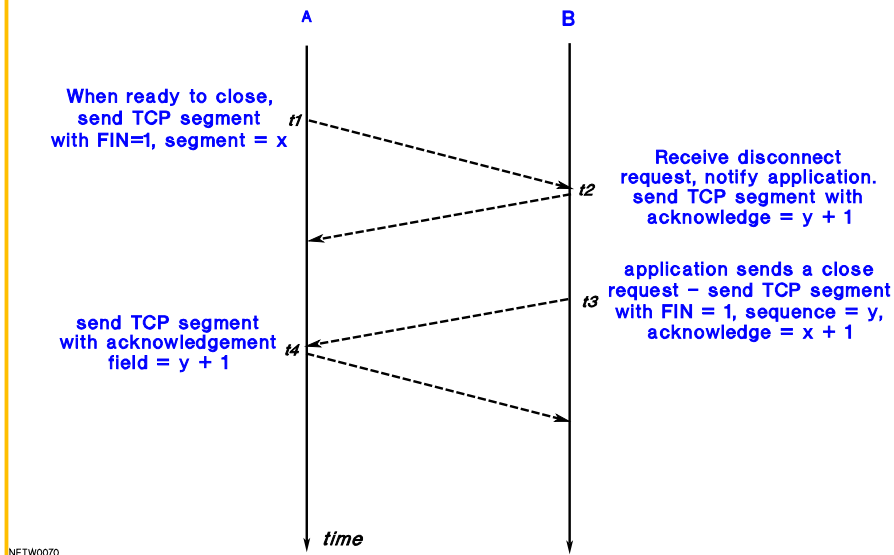
University of Idaho

Three Way Handshake Protocol



University of Idaho

TCP Disconnect Protocol



IP Addresses

32 bit value, usually expressed in "Dotted-Quad" format

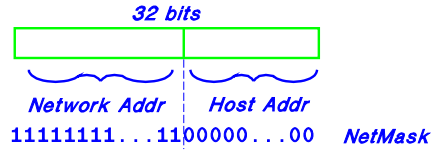
129 . 101 . 153 . 33

One byte

URL is converted to IP address by DNS

IP is assigned to a system either statically, or dynamically by DHCP

Network Addresses



Ex.

Host Address 192.168.110.23
Network Mask 255.255.255.0
Network Portion 192.168.110.
Host Portion .23

<i>Net Class</i>	<i>Network Mask</i>	<i>Network Address Range</i>
<i>Class A</i>	255.0.0.0	0.0.0.0 - 127.255.255.255
<i>Class B</i>	255.255.0.0	128.0.0.0 - 191.255.255.255
<i>Class C</i>	255.255.255.0	192.0.0.0 - 223.255.255.255

NETW0090

Another Example

UI Subnet

Ex.

<i>Host Address</i>	129.101.153.33	<i>Last Digit (binary)</i>
<i>Network Mask</i>	255.255.255.192	.1100 0000
<i>Network Portion</i>	129.101.153.	.0000 0000
<i>Host Portion</i>	.33	.xx10 0001

NETW0000

Private Networks

<i>Net Class</i>	<i>Network Mask</i>	<i>Network Address Range</i>
<i>Class A</i>	255.0.0.0	10.0.0.0 - 10.255.255.255
<i>Class B</i>	255.255.0.0	172.31.0.0 - 172.31.255.255
<i>Class C</i>	255.255.255.0	192.168.0.0 - 192.168.255.255

NETW010