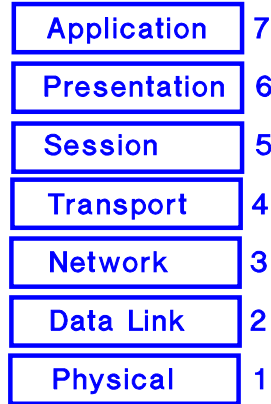
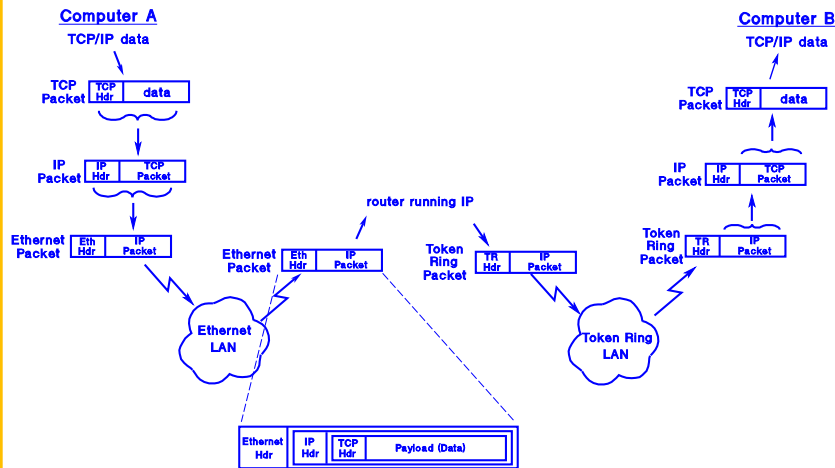


OSI Network Model



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				

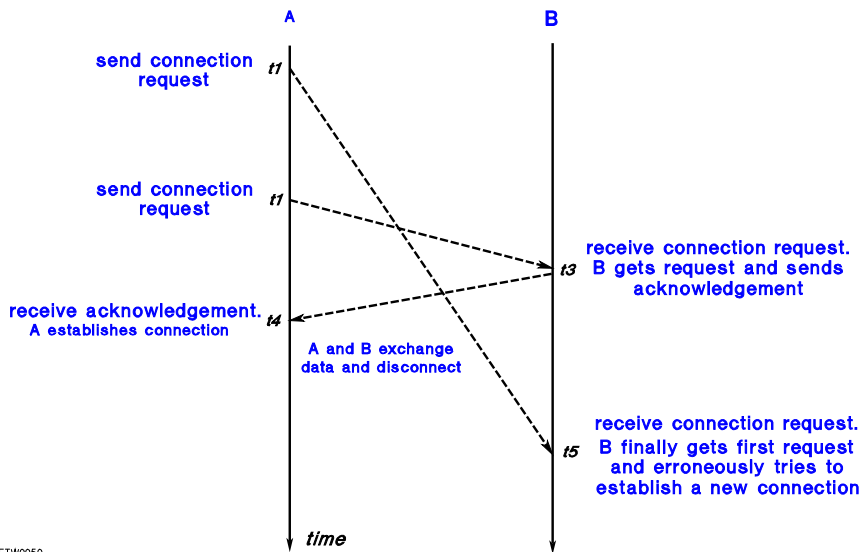
NETW0030

TCP Packet Format

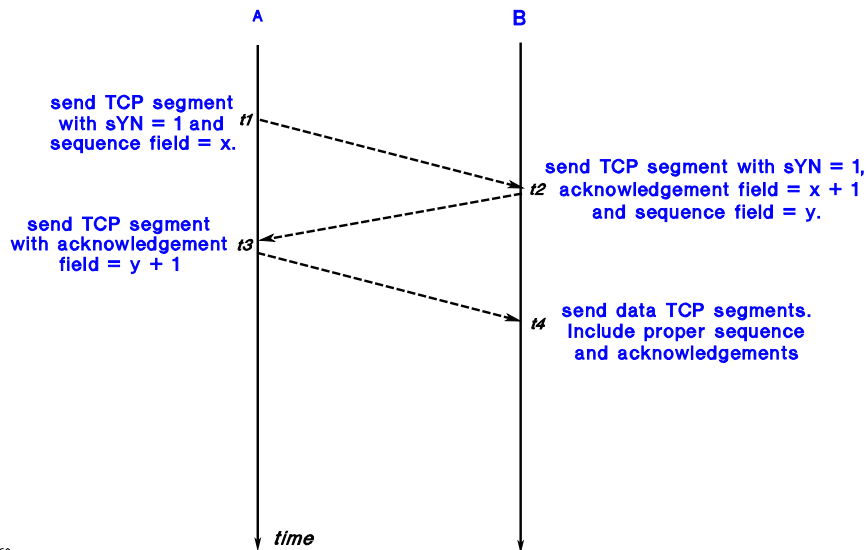
Source Port		Destination Port	
Sequence Number			
Acknowledgement Number			
Header Length	Flags		
Checksum			
Data			

NETW0040

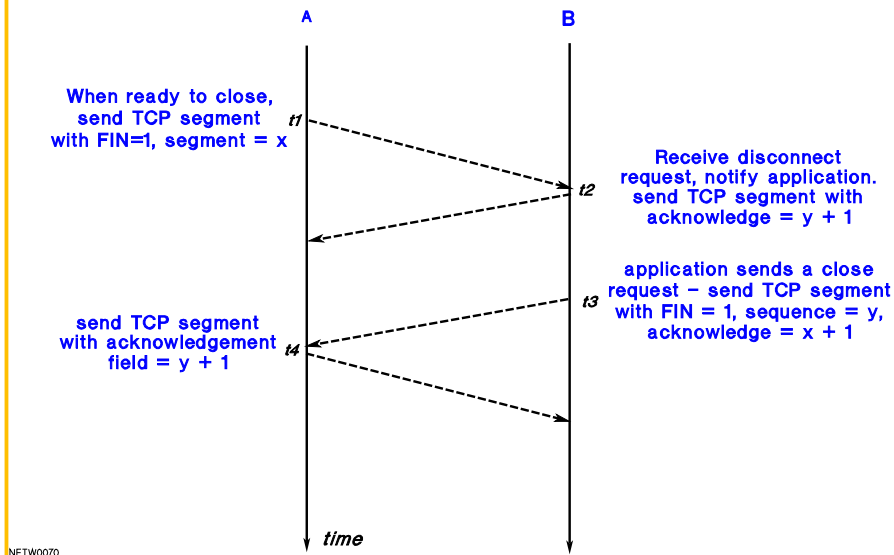
Two Way Handshake Protocol



Three Way Handshake Protocol



TCP Disconnect Protocol



University of Idaho

IP Addresses

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

129 . 101 . 153 . 33

One byte

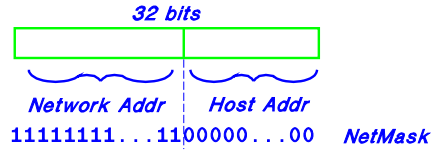
URL is converted to IP address by DNS

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

NETW0080

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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