

## OSI LAYERS OUTLINE

OSI LAYER	TOPICS	METHODS	NOTES:
PHYSICAL  <u>NOTES:</u> 1:BITS 2:PACKETS 3:DEFINES MEDIA 4:PHYS. NETWORK STRUCTURES. 5:VOLTAGE 6:RING VS. BUS 7:COST VS. PERF. 8:BIT TRANSM. 9:ENCODING AND TIMING RULES.	CONNECTION TYPES	POINT TO POINT  MULTIPOINT	<b>Devices</b> <b>NIC</b> <b>Transceivers</b> <b>Repeaters</b> <b>Hubs</b> <b>MAUs</b>
	PHYSICAL TOPOLOGY	BUS  RING  STAR  MESH  CELLULAR	
	DIGITAL SIGNALING	CURRENT STATE  STATE TRANSITION	
	ANALOG SIGNALING	CURRENT STATE  STATE TRANSITION	
	BIT SYNCHRONIZATION	ASYNCHRONOUS  SYNCHRONOUS	
	BANDWIDTH USE	BROADBAND  BASEBAND	
	MULTIPLEXING	FREQ. DIVISION (FDM)  TIME DIVISION (TDM)  STATISTICAL TIME DIV.	

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DATA LINK-MAC NOTES: 1:FRAMES 2:PACKETS 3:MLID 4:LSL(LLC) 5:PUTS ON PHYS. MEDIUM & TAKES OFF. 6:NODE ADDRESS 7:BRIDGES, NICS, INTELL. HUBS. 8: ID COMP. ON NET.	LOGICAL TOPOLOGY	BUS  RING	
	MEDIA ACCESS	CONTENTION  TOKEN PASSING  POLLING	<b>Devices</b> <b>Bridges</b> <b>Switches</b> <b>Wireless Access Points</b>
	ADDRESSING	PHYSICAL DEVICE	
DATA LINK-LLC	TRANSMISSION SYNCHRONIZATION	ASYNCHRONOUS  SYNCHRONOUS  ISOCHRONOUS	
	CONNECTION SERVICES	LLC-LEVEL FLOW CONTROL  ERROR CONTROL	

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<p>NETWORK</p>  <p><i>NOTES:</i>            1:DATAGRAMS            2:PACKETS            3:ROUTING            4:MOVE TO NETWORK LOCS.            5:SWITCHING            6:NLSP            7:RIP            8:IPX</p>	ADDRESSING	LOGICAL NETWORK  SERVICE	   <b>Devices</b>
	SWITCHING	PACKET  MESSAGE  CIRCUIT	<b>Routers</b>
			<b>Layer 3 Switches</b>
	ROUTE DISCOVERY	DISTANCE VECTOR  LINK-STATE	
	ROUTE SELECTION	STATIC  DYNAMIC	
	CONNECTION SERVICES	NETWORK LAYER FLOW CONTROL  ERROR CONTROL  PACKET SEQUENCE CONTROL	
GATEWAY SERVICES	NETWORK LAYER TRANSLATION		

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<b>TRANSPORT</b>  <i>NOTES:</i> 1:SEGMENTS 2:PACKETS 3:HIDES INTRICACIES OF NETWORK STRUCTURES FROM UPPER LAYERS 4:RELIABILITY 5:ACKN. AND SEQUENCED 6:SENDER AND RECEIVER WORK TOGETHER 7:ASSEM. SEGS FOR UPPER LAYERS	ADDRESS/NAME RESOLUTION	SERVICE REQUESTOR INITIATED  SERVICE PROVIDER INITIATED		
	ADDRESSING	CONNECTION IDENTIFIER  TRANSACTION IDENTIFIER		
	SEGMENT DEVELOPMENT	DIVISION AND COMBINATION		
	CONNECTION SERVICES	SEGMENT SEQUENCING  ERROR CONTROL  END TO END FLOW CONTROL		

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SESSION  <i>NOTES:</i> 1:SAP 2:NCP 3:PACKETS 4:FILE TRANSFER 5:DS OPERATOR 6:RPC	DIALOG CONTROL	SIMPLEX	
		FULL-DUPLEX	
		HALF-DUPLEX	
	SESSION ADMINISTRATION	CONN. ESTABLISHMENT	
		DATA TRANSFER	
		CONN. RELEASE	

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<u><b>OSI LAYER</b></u>	<u><b>TOPICS</b></u>	<u><b>METHODS</b></u>	<u><b>NOTES:</b></u>
<b>PRESENTATION</b>  <i>NOTES:</i> 1:PACKETS 2:NCP 3:R/W SECURITY 4:TRANSLATES DATA INTO AGREED UPON FORMAT 5:CAN ENCRYPT AND COMPRESS DATA.	TRANSLATION	BIT ORDER  BYTE ORDER  CHARACTER ORDER  FILE SYNTAX	
	ENCRYPTION	PUBLIC KEYS  PRIVATE KEY	

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OSI LAYER	TOPICS	METHODS	NOTES:
APPLICATION  <i>NOTES:</i> 1:MESSAGES 2:PACKETS 3:RPC'S 4:SAP 5:NCP 6:GETS PROGS. FOR USERS 7:BINDERY FUNC. 8:PRINTING 9:MOVING INFO NW TO NW. (MAIL GATEWAYS)	NETWORK SERVICES	(SECTION 2)	
			<i>Devices</i>
			Gateways
	SERVICE ADVERTISEMENT	ACTIVE	
		PASSIVE	
	SERVICE USE	OS CALL INTERCEPTION	
		REMOTE OPERATION	
		COLLAORATIVE	