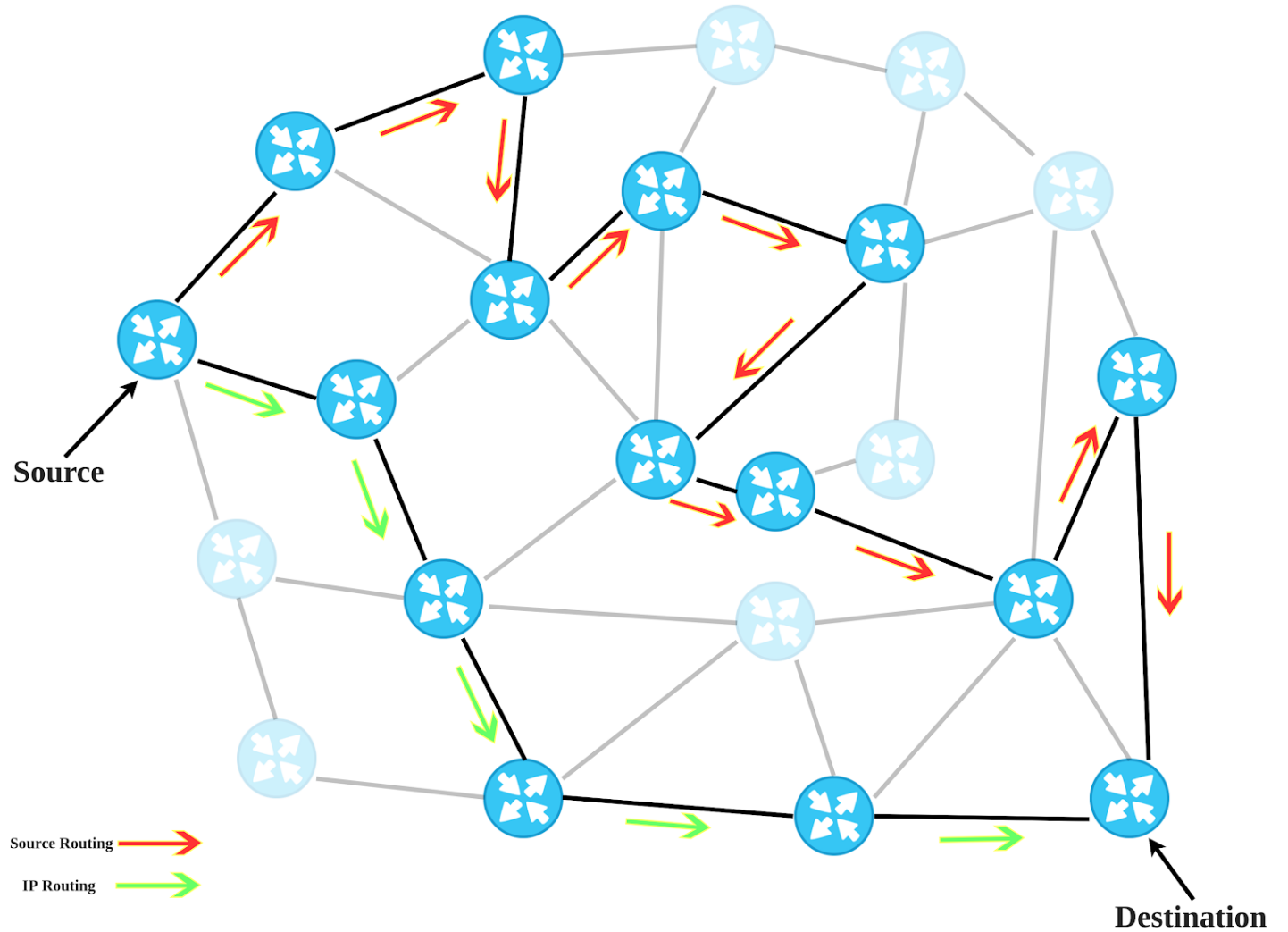


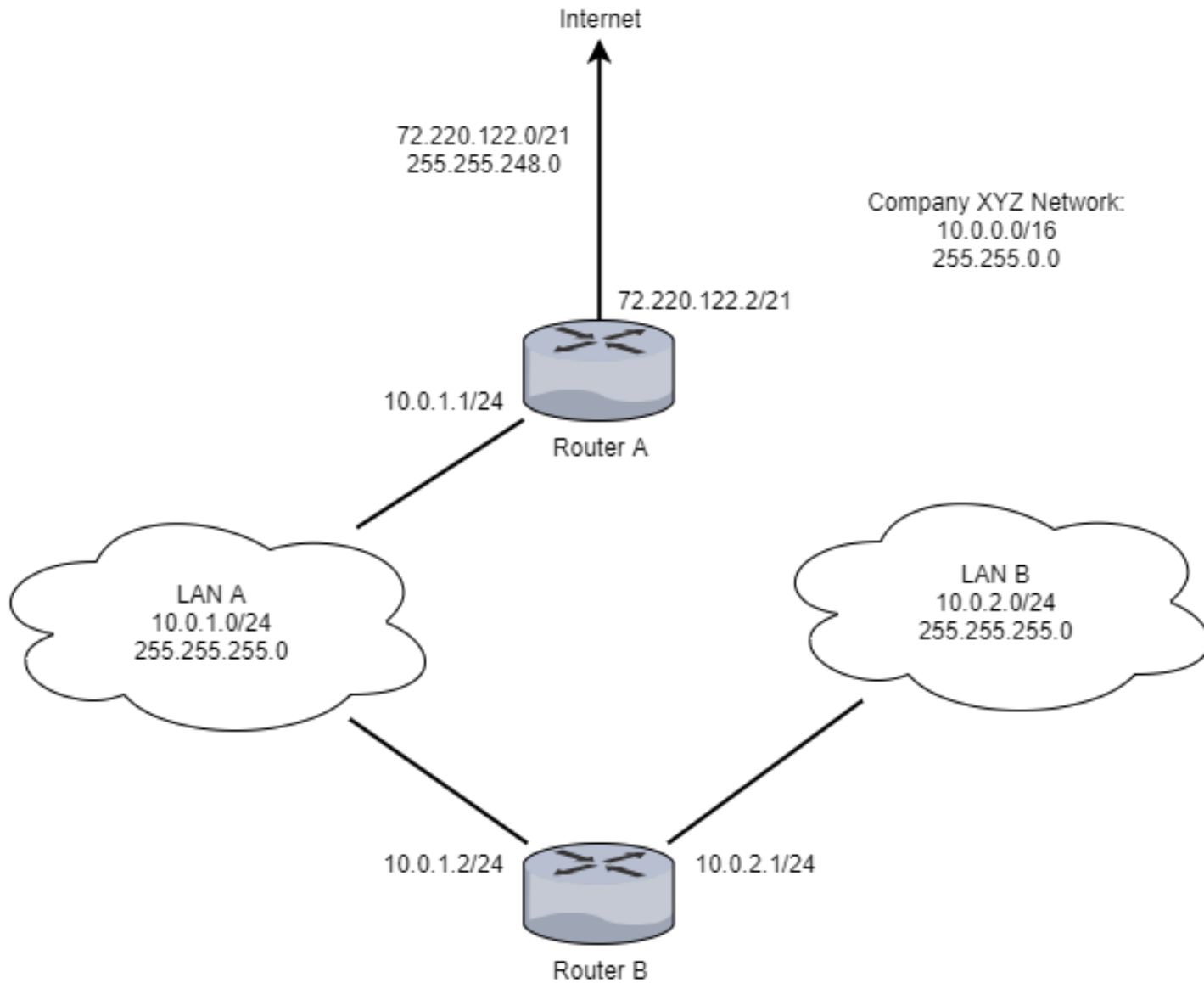
HANDS-ON #7: ROUTER TABLES

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IT 315: Basic Network & Security

01218081





NEW NETWORK DIAGRAM FOR COMPANY XYZ

ROUTING TABLES FOR ROUTERS A & B

Router A's Routing Table

Row ID#	Destination Network	Subnet Mask	Gateway/Next Hop	Interface
1	10.0.1.0	255.255.255.0	Local	LAN
2	72.220.122.0	255.255.248.0	Local	WAN
3	10.0.2.0	255.255.255.0	10.0.1.2	LAN
4	0.0.0.0	0.0.0.0	72.220.122.1	WAN

Router B's Routing Table

Row ID#	Destination Network	Subnet Mask	Gateway	Interface
1	10.0.2.0	255.255.255.0	Local	LAN
2	10.0.1.0	255.255.255.0	Local*	WAN
3	0.0.0.0	0.0.0.0	10.0.1.1	WAN

*Router B is connected to LAN A; therefore, it can forward traffic destined to LAN A directly.

BONUS SLIDES

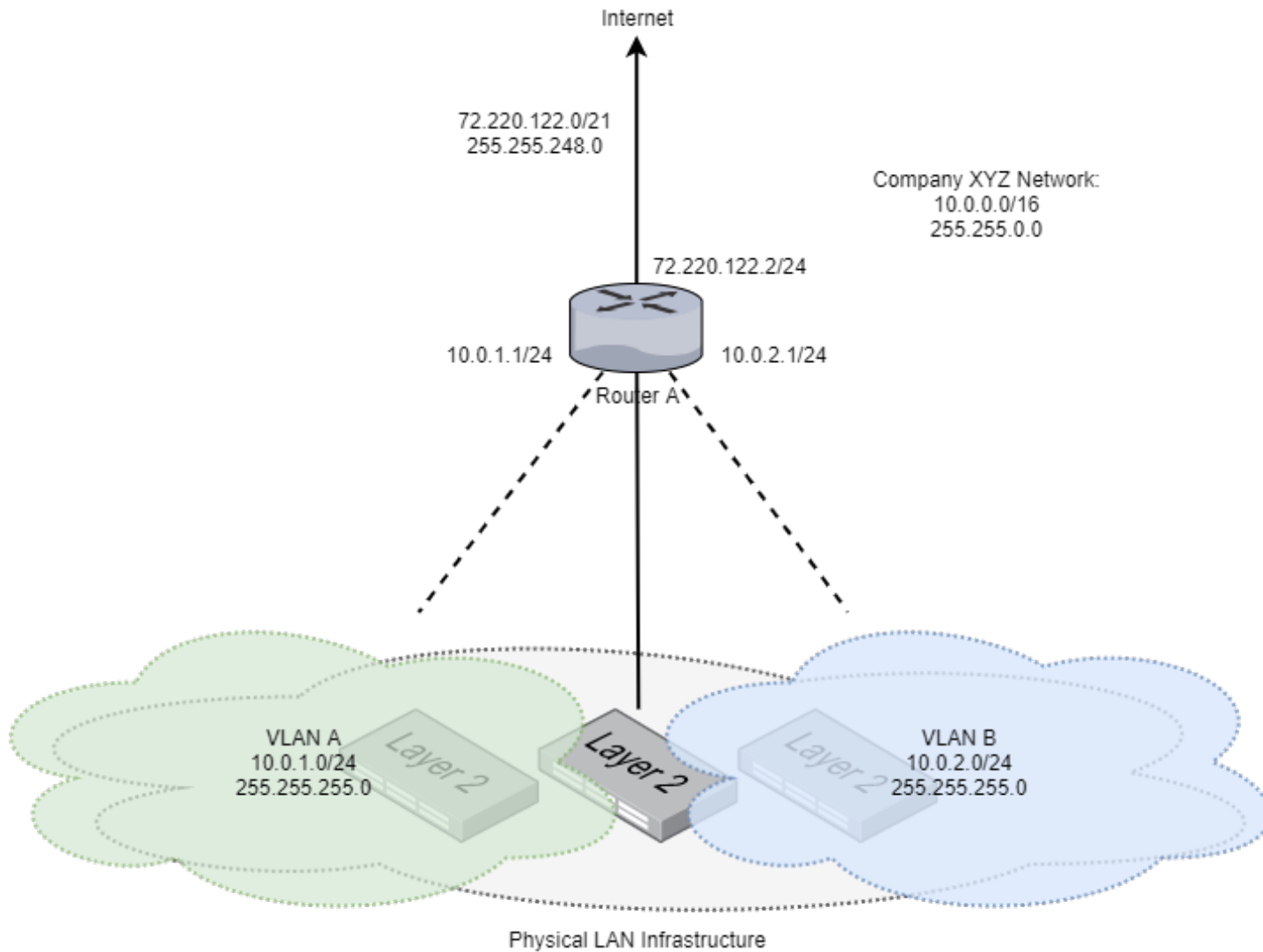
Alternative Network Design Proposals





ALTERNATIVE PROPOSALS: IMPROVE NETWORK REDESIGN

- #1: Connect LAN B to Router A on a different interface:
 - Avoid routing through an active subnet (LAN A)
 - Reduce costs by not buying a 2nd router (Router B)
 - Easier to manage routing table (only one)
- #2: Divide original physical LAN A into two VLANs:
 - Advantages of Proposal #1
 - Further reduce costs by not buying/building a separate physical network



NEW NETWORK DIAGRAM BASED ON PROPOSAL #2

ROUTING TABLE FOR ROUTER A

Router A's Routing Table

Row ID#	Destination Network	Subnet Mask	Gateway/Next Hop	Interface/Sub-Interface
1	10.0.1.0	255.255.255.0	Local	VLAN A
2	72.220.122.0	255.255.248.0	Local	WAN
3	10.0.2.0	255.255.255.0	Local	VLAN B
4	0.0.0.0	0.0.0.0	72.220.122.1	WAN