Practical Lab 003 – In-Class Assignment

Welcome to your final practical in-class assignment. This assignment is based on your knowledge and understanding of concepts. No hits are allowed, and the usage of external resources is strictly prohibited.

Rules/Restrictions and Allowed Resources

For the purposes of this lab, **external resources are strictly prohibited.** You may **not** use a cell phone, laptop or ask for advice from your non-group members. You may bring **one** handwritten list of commands with you, which contains notes and/or commands that are relevant to what you have covered so far. Discussing with other students will result in a zero grade for both students.

This assignment can be completed in pairs.

Instructions

Please complete the following scenario, meeting all learning objectives. Unlike previous labs, there is only one topology to complete. Please ensure that you fully read the requirements in the Topology Design portion of this assignment to ensure you are on track.
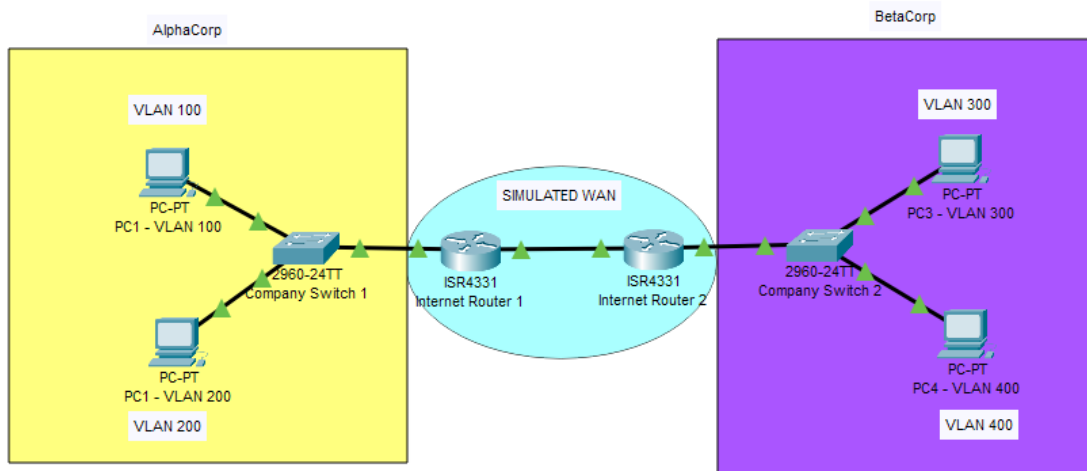
Topology Design

You will be building a small infrastructure for two companies that can ping across a 'simulated WAN network'. Each company (AlphaCorp and BetaCorp) has a two end user devices on separate VLANs that is connected to a switch. The switch is connected to a router. The Router in AlphaCorp is connected to the Router in BetaCorp, and EIGRP is running between the two routers.

All devices must be able to pint all other devices, including cross-organization.

Student Planning Worksheet

To simplify planning, you may use the following worksheet to jot down IP Addresses and any other reference material you may need to keep track of.

End User Device	VLAN	IP	Interface
PC1 – AlphaCorp			
PC2 – AlphaCorp			
PC3 – BetaCorp			
PC4 – Betacorp			

Switch	VLAN	Details / Other Info	Interface
AlphaCorp Switch			
BetaCorp Switch			

Router	Interface	IP	Details / Other Info
AlphaCorp Router			
BetaCorp Router			

Evaluation Requirements:

Your professor will grade you based on the following criteria. Please ensure you read it and understand the full list of deliverables. The deliverables are complete on a pass-fail basis, there are no partial marks.

Done	Criteria	Description	Points
	Network Connectivity	**All** devices can ping all other devices **and** EIGRP is set up and correctly configured. **Professor will verify that devices can ping and EIGRP is correctly set up.**	10
	VLAN Setup	**VLAN** and **routing** between VLANs is correctly set up	5
	Security	Pick **any 3 security principles** – Demonstrate to the professor. These should enhance the network device security (Router or Switch)	3
	IP Address Usage	**Appropriate IP Addresses** are used, including appropriate subnet masks	2
	Demonstration – 1	Show the professor the **EIGRP Topology** through the router	1
	Demonstration – 2	Show the professor the **EIGRP Neighbours** through the router	1
		TOTAL	**/22**

Finishing up:

After you have completed this, please erase the startup config (erase startup-config) to clear the switches and router for the next group of students. **Failure to do this will result in in a 50% on this lab.**