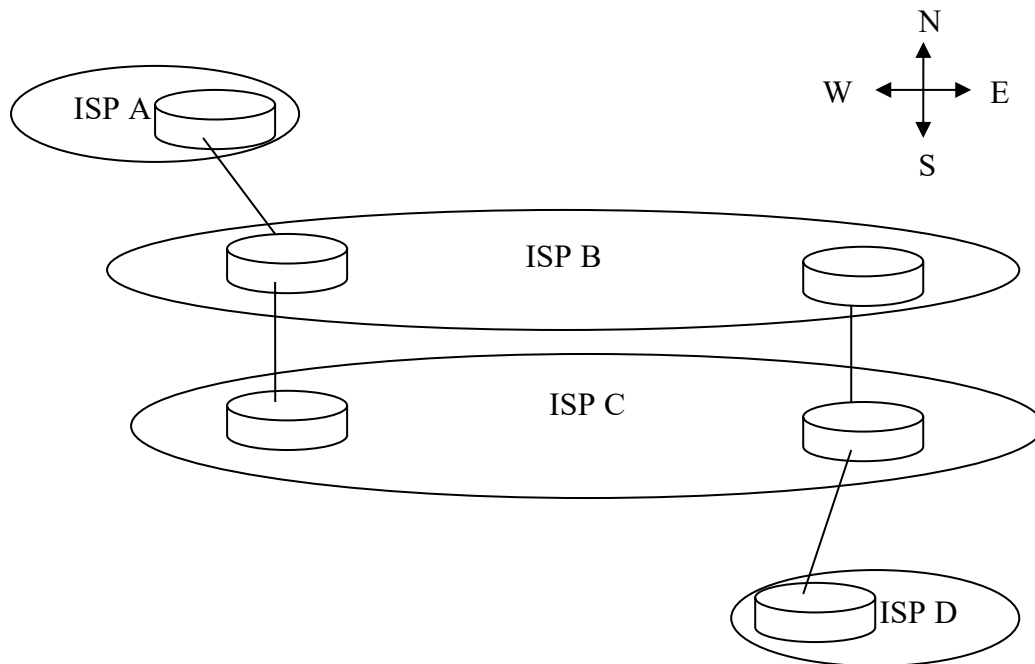


CSCI4211 Spring 2019
Assignment #4
Due date: April 17th

1. [10pt.] Consider the network shown below. ISP B provides national backbone service to regional ISP A. ISP C provides national backbone service to regional ISP D. B and C are peering with each other in two places using BGP. Consider the traffic going from A to D. B would prefer to hand that traffic over to C on the West Coast (so that C would have to absorb the cost of carrying the traffic cross-country), while C would prefer to get the traffic via its East coast peering point with B (so that B would have carried the traffic across-country). What BGP mechanism might C use, so that B would hand over A-to-D traffic at their East Coast peering point?



2. [10pt.] What are the advanced features in OSPF? Please describe them in details.
3. [10pt.] Please describe Software-Defined Networks and what are the major differences between SDN and the existing IP networks. Please write this a typed page.
4. [10pt.] Why are different inter-AS and intra-AS routing protocols used in Internet?
5. [10pt.] Describe a way that policy-based routing is implemented in inter-AS routing.

