



#### REQUIREMENTS

1. Configure according to the diagram shown above.
2. Configure OSPF area 0 on A, B and C including the A-C link, but excluding the ISP-links.
3. Configure OSPF area 42 on routers and A and C including the lo0 – Lo3
4. Unsolved challenge: Is it possible to share the A-C link on the areas?  
 Fallback: is it possible to have the loopback-interfaces in the same area without an extra link?  
 (fallback 2: use an extra ethernet-cable for area 42)
5. Use BGP on A, B and ISP; but not on C
6. Unsolved challenge: Is it possible to peer A and B (i. e. multihop ??)  
 Fallback: use an extra serial-cable
7. Use MED and LocalPref to select the other serial-cable to, and from, ISP

#### DEFAULT ROUTE

8. Create a static quad-zero on ISP pointing towards Lo0.
9. Advertise 0.0.0.0 from ISP to A and B with the network command;  
 use Route-maps so it will not propagate to any other peers!  
 Fallback: skip route-map, we don't peer with anybody else.
10. Make sure quad-zero is on A and B
11. Unsolved challenge: Try to resend the default route without using redistribution, use only "default information originate" in ospf  
 Fallback: Redistribute with Route-map only 0.0.0.0
12. Now C will receive two default route; one from A and one from B.  
 Use OSPF link-cost to select the A-C link or the A-B link (try both links, one at a time, regardless of which route BGP uses to leave the AS.
13. Summarize Lo0-Lo4 on C and A (A is ASBR 42<->0 too !!)
14. Create IPv6 addressing and routing within the box area 0, use OSPF and another process-ID.

Make sure you have full connectivity in your network (C# ping Lo0 source Lo3)