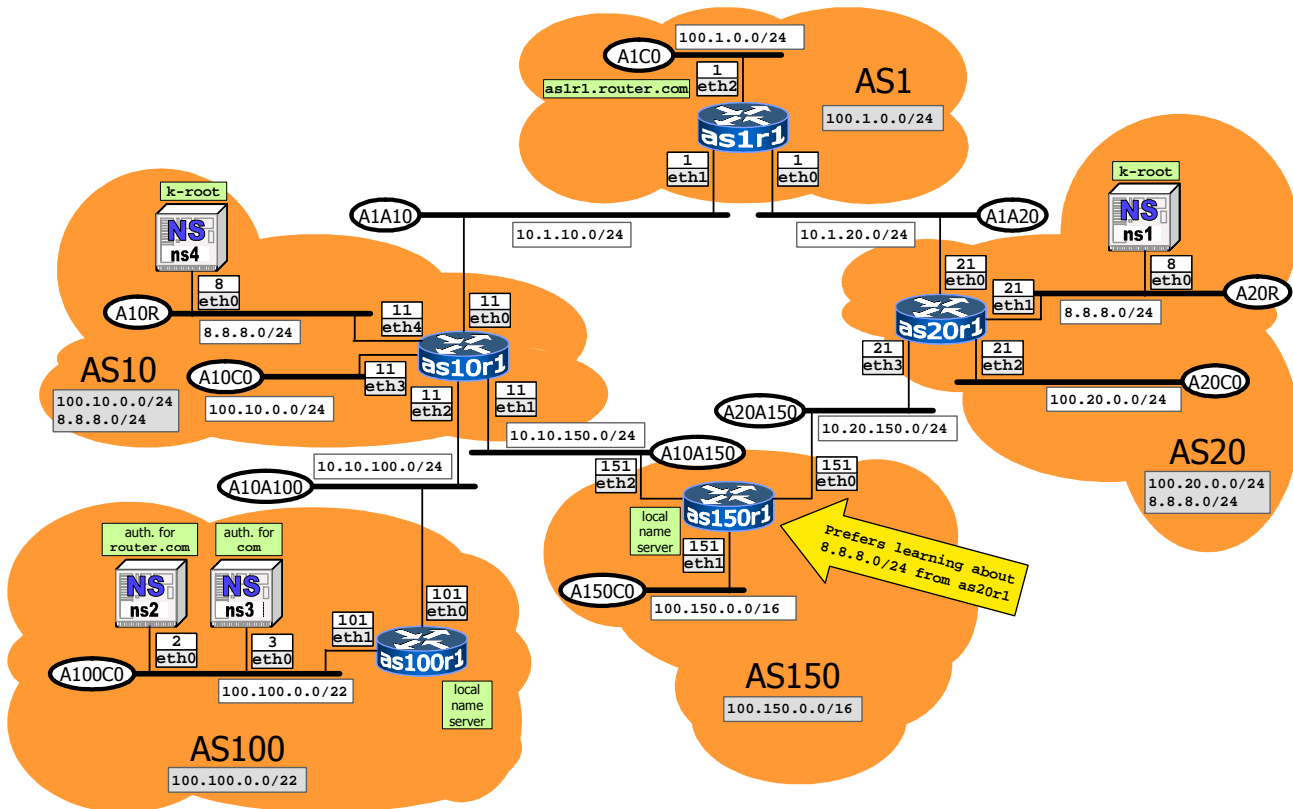




## ICN – Examination date: 25-01-2012 – “Sepia”

Available time: 80 minutes

Using Netkit, implement the network shown in the following picture. Interconnection networks between border routers must be announced in BGP. All the networks that are internal to the autonomous systems must be reachable from any other internal network. Name `as1r1.router.com` must be resolvable from `as100r1` and `as150r1` and the corresponding router be reachable from the same points.



Important notes:

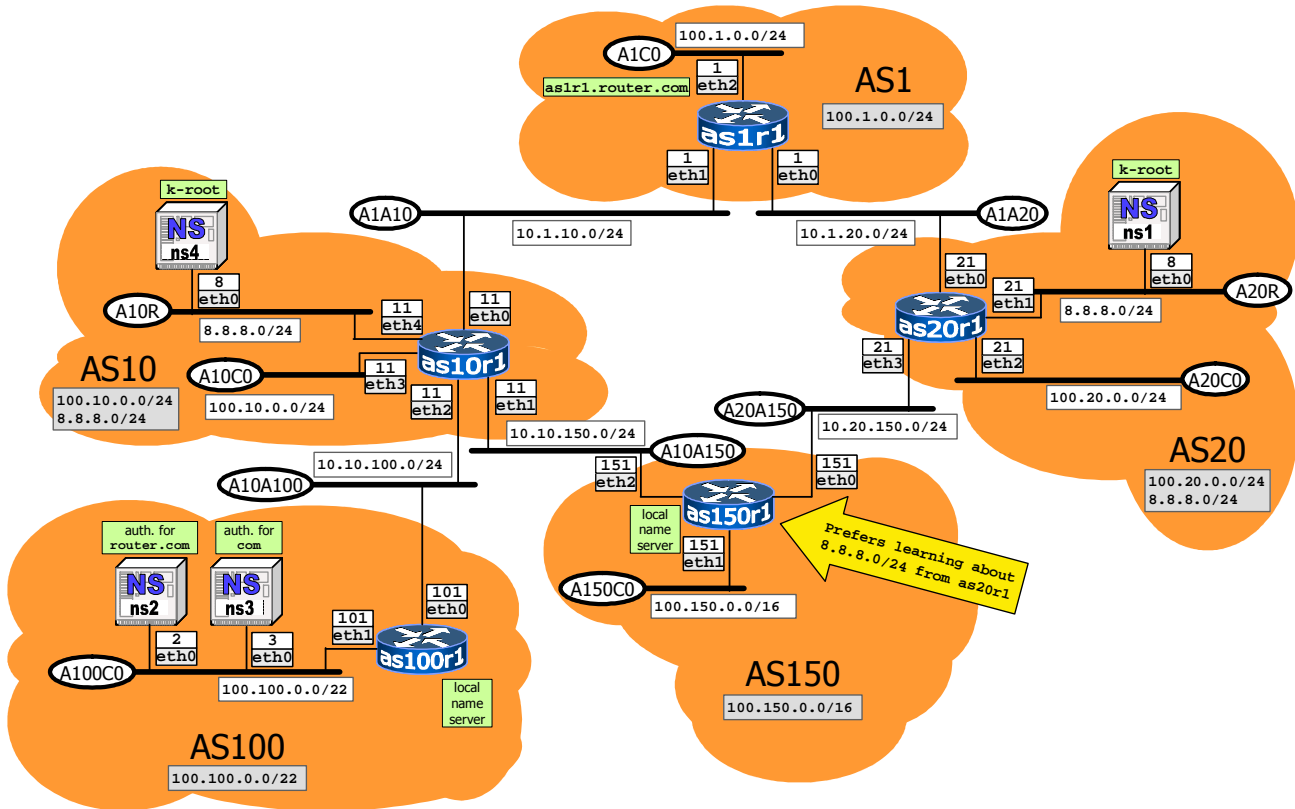
1. `ns1`, `ns2`, `ns3`, and `ns4` are name servers; `ns1` and `ns4` are two root name servers and their /24 network is announced in anycast via BGP (similarly to what happens in the real world for `k-root`); `ns2` is the authority for `router.com` and `ns3` is the authority for `com`; `100.1.0.1` is assigned the name `as1r1.router.com`; `as100r1` and `as150r1` are local name servers for themselves.
2. Router `as150r1` must obey the routine policy indicated in the arrow.
3. No routers announce the default route `0/0`.
4. Remember to specify the default gateway when configuring a host.

ICN – Examination date: 25-01-2012 – “Squid”  
 Available time: 80 minutes



Note: despite the different name, this lab is exactly the same as the “Sepia” one, therefore we provide only one solution

Using Netkit, implement the network shown in the following picture. Interconnection systems networks between border routers must be announced in BGP. All the networks that are internal to the autonomous systems must be reachable from any other internal network. Name **as1r1.router.com** must be resolvable from **as100r1** and **as150r1** and the corresponding router be reachable from the same points.



Important notes:

5. ns1, ns2, ns3, and ns4 are name servers; ns1 and ns4 are two root name servers and their /24 network is announced in anycast via BGP (similarly to what happens in the real world for k-root); ns2 is the authority for router.com and ns3 is the authority for com; 100.1.0.1 is assigned the name as1r1.router.com; as100r1 and as150r1 are local name servers for themselves.
6. Router as150r1 must obey the routine policy indicated in the arrow.
7. No routers announce the default route 0/0.
8. Remember to specify the default gateway when configuring a host.