5 Case: IP addressing

One of the most common tasks related to routing that a young engineer faces in the industry is the planning the use of the IP addresses for the company. In this exercise you plan the use of an IP network with four routers as shown in Figure 6. The edge gateways have four Ethernet interfaces which are connected to networks containing up to 10 hosts. Use the address space indicated in Figure 6. You do not have to reserve any additional space so keep the masks as long as possible. Note that you may (and should) use different mask lengths in the core and edges of the network. Mask length defines the important bits to the routing process (subnets) and the bits outside the mask indicate the hosts (in the indicated subnet).

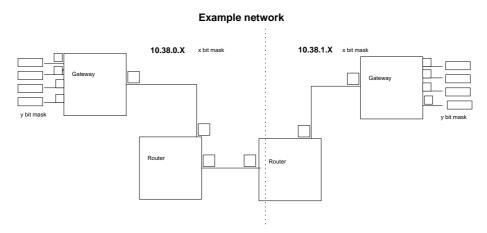


Figure 6: Example IP network