Vanier College

Computer Science & Technology

Networks 420-421-VA section 00002

Task 1: Create the Network topology in the Logical Workspace

Networking addressing scheme Report

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# Network addressing scheme Report

## Network ID 192.168.1.0/24 :

There are 28 host bits – 2 = 254 hosts for this network.

The network is a Class C network because it takes 3 octets for the network ID.

The range of host addresses available on the network (192.168.1.0/24) is from 192.168.1.1 to 192.168.1.254 because we remove one address at the beginning for the network ID, and we remove the last address for the broadcast address. Because this is a Class C network, there are 8 bits for host information.

## Network ID 200.168.20.0/30:

There are 22 host bits – 2 = 2 hosts for this network.

The range of host addresses available for the network (200.168.20.0/30) is between 200.168.20.1 and 200.168.20.2 because we take 200.168.20.0 for the network ID and we take 200.168.20.3 for the broadcast address.

## Network ID 177.44.35.0/30:

There are 22 host bits – 2 = 2 hosts for this network.

The range of host addresses for the network (177.44.35.0/30) is between 177.44.35.1 and 177.44.35.2. We take 177.44.35.0 for the network ID, and we take 177.44.35.3 for the broadcast address.

## Network ID 192.20.20.0/28:

There are 24 host bits – 2 = 14 hosts for the network.

The range of host addresses for the network (192.20.20.0/28) is between 192.20.20.1 to 192.20.20.14.

We use the first 4 bits of the last octet for the network ID. This means that 192.20.20.0 is the network ID and 192.20.20.15 is the broadcast address.