

## APPENDIX – SUGGESTED ADDRESSING SCHEME

While students are encouraged to generate their own addressing scheme for the workshop network, use the example in Figure 1 below as an aid.

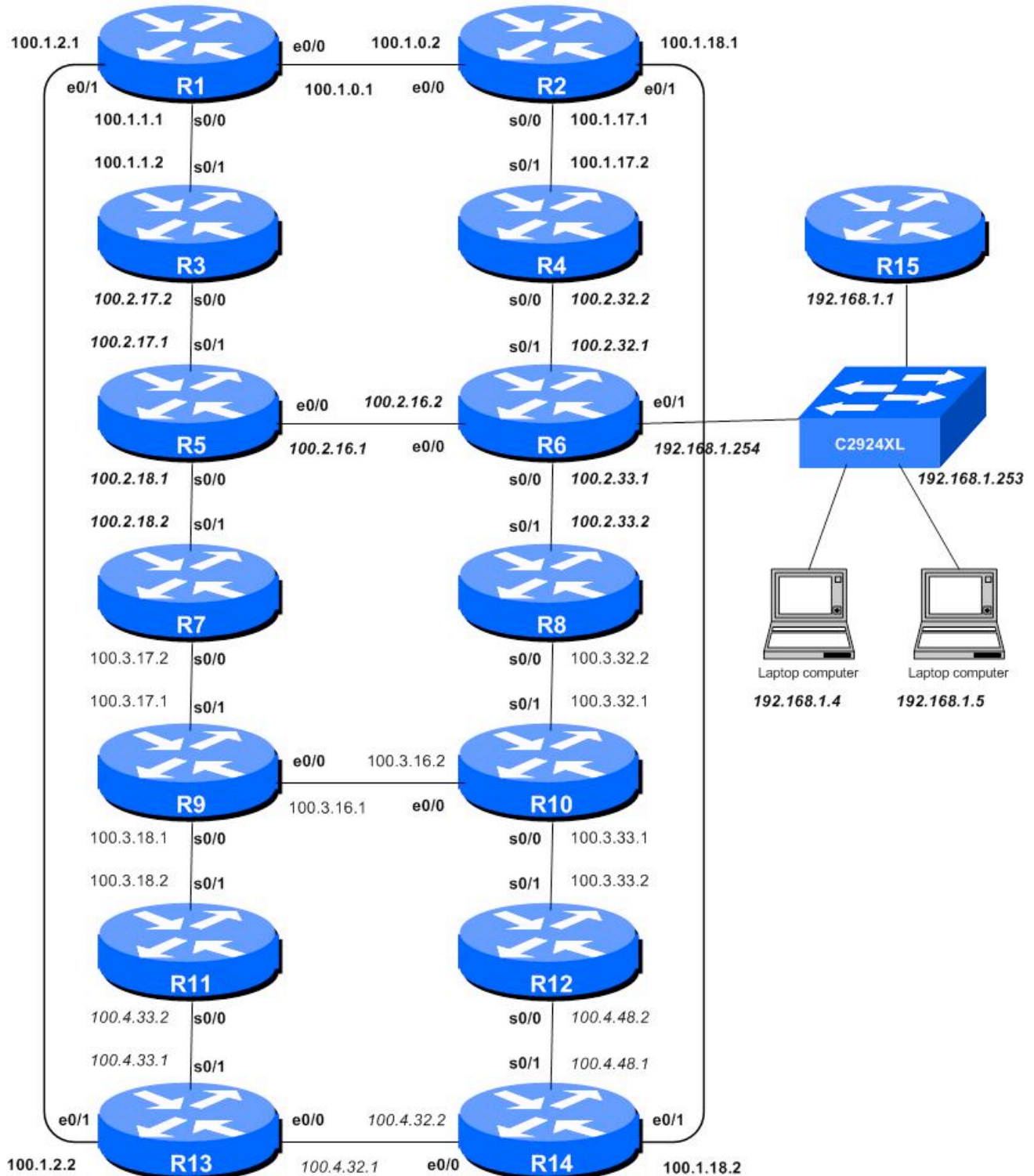


Figure 1 – Suggested addressing scheme

## APPENDIX – Netmask Table

Subnet Mask	Wild-Card Mask	Network Bits	Host Bits	Prefix
0.0.0.0	255.255.255.255	0	32	/0
128.0.0.0	127.255.255.255	1	31	/1
192.0.0.0	63.255.255.255	2	30	/2
224.0.0.0	31.255.255.255	3	29	/3
240.0.0.0	15.255.255.255	4	28	/4
248.0.0.0	7.255.255.255	5	27	/5
252.0.0.0	3.255.255.255	6	26	/6
254.0.0.0	1.255.255.255	7	25	/7
255.0.0.0	0.255.255.255	8	24	/8
255.128.0.0	0.127.255.255	9	23	/9
255.192.0.0	0.63.255.255	10	22	/10
255.224.0.0	0.31.255.255	11	21	/11
255.240.0.0	0.15.255.255	12	20	/12
255.248.0.0	0.7.255.255	13	19	/13
255.252.0.0	0.3.255.255	14	18	/14
255.254.0.0	0.1.255.255	15	17	/15
255.255.0.0	0.0.255.255	16	16	/16
255.255.128.0	0.0.127.255	17	15	/17
255.255.192.0	0.0.63.255	18	14	/18
255.255.224.0	0.0.31.255	19	13	/19
255.255.240.0	0.0.15.255	20	12	/20
255.255.248.0	0.0.7.255	21	11	/21
255.255.252.0	0.0.3.255	22	10	/22
255.255.254.0	0.0.1.255	23	9	/23
255.255.255.0	0.0.0.255	24	8	/24
255.255.255.128	0.0.0.127	25	7	/25
255.255.255.192	0.0.0.63	26	6	/26
255.255.255.224	0.0.0.31	27	5	/27
255.255.255.240	0.0.0.15	28	4	/28
255.255.255.248	0.0.0.7	29	3	/29
255.255.255.252	0.0.0.3	30	2	/30
255.255.255.254	0.0.0.1	31	1	/31
255.255.255.255	0.0.0.0	32	0	/32

Chart 1 – IPv4 Subnets

**Subnet Mask**

The subnet mask of the CIDR block.

**Wild-Card Mask**

Wild-Card Mask used in OSPF and packet filters

**Network Bits**

The number of bits in the network part of the mask

**Host Bits**

The number of bits in the host part of the mask

**Prefix**

Short hand syntax of the CIDR block.