

Subnetting Cheat Sheet

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	Classful Ranges	Network/Host	Private IP Address Ranges
A	0.0.0.0 - 127.255.255.255	N.H.H.H	10.0.0.0 – 10.255.255.255
B	128.0.0.0 - 191.255.255.255	N.N.H.H	172.16.0.0 – 172.31.255.255
C	192.0.0.0 - 223.255.255.255	N.N.N.H	192.168.0.0 – 192.168.255.255
D	224.0.0.0 - 239.255.255.255	Multicast	-
E	240.0.0.0 - 255.255.255.255	Experimental	-

CIDR	Subnet Mask	Addresses	Wildcard Mask	Binary Mask
/32	255.255.255.255	1	0.0.0.0	11111111.11111111.11111111.11111111
/31	255.255.255.254	2	0.0.0.1	11111111.11111111.11111111.11111110
/30	255.255.255.252	4	0.0.0.3	11111111.11111111.11111111.11111100
/29	255.255.255.248	8	0.0.0.7	11111111.11111111.11111111.11111000
/28	255.255.255.240	16	0.0.0.15	11111111.11111111.11111111.11110000
/27	255.255.255.224	32	0.0.0.31	11111111.11111111.11111111.11100000
/26	255.255.255.192	64	0.0.0.63	11111111.11111111.11111111.11000000
/25	255.255.255.128	128	0.0.0.127	11111111.11111111.11111111.10000000
/24	255.255.255.0	256	0.0.0.255	11111111.11111111.11111111.00000000
/23	255.255.254.0	512	0.0.1.255	11111111.11111111.11111110.00000000
/22	255.255.252.0	1,024	0.0.3.255	11111111.11111111.11111100.00000000
/21	255.255.248.0	2,048	0.0.7.255	11111111.11111111.11111000.00000000
/20	255.255.240.0	4,096	0.0.15.255	11111111.11111111.11110000.00000000
/19	255.255.224.0	8,192	0.0.31.255	11111111.11111111.11100000.00000000
/18	255.255.192.0	16,387	0.0.63.255	11111111.11111111.11000000.00000000
/17	255.255.128.0	32,768	0.0.127.255	11111111.11111111.10000000.00000000
/16	255.255.0.0	65,536	0.0.255.255	11111111.11111111.00000000.00000000
/15	255.254.0.0	131,072	0.1.255.255	11111111.11111110.00000000.00000000
/14	255.252.0.0	262,144	0.3.255.255	11111111.11111100.00000000.00000000
/13	255.248.0.0	524,288	0.7.255.255	11111111.11111000.00000000.00000000
/12	255.240.0.0	1,048,576	0.15.255.255	11111111.11110000.00000000.00000000
/11	255.224.0.0	2,097,152	0.31.255.255	11111111.11100000.00000000.00000000
/10	255.192.0.0	4,194,304	0.63.255.255	11111111.11000000.00000000.00000000
/9	255.128.0.0	8,388,608	0.127.255.255	11111111.10000000.00000000.00000000
/8	255.0.0.0	16,777,216	0.255.255.255	11111111.00000000.00000000.00000000
/7	254.0.0.0	33,554,432	1.255.255.255	11111110.00000000.00000000.00000000
/6	252.0.0.0	67,108,864	3.255.255.255	11111100.00000000.00000000.00000000
/5	248.0.0.0	134,217,728	7.255.255.255	11111000.00000000.00000000.00000000
/4	240.0.0.0	268,435,456	15.255.255.255	11110000.00000000.00000000.00000000
/3	224.0.0.0	536,870,912	31.255.255.255	11100000.00000000.00000000.00000000
/2	192.0.0.0	1,073,741,824	63.255.255.255	11000000.00000000.00000000.00000000
/1	128.0.0.0	2,147,483,648	127.255.255.255	10000000.00000000.00000000.00000000
/0	0.0.0.0	4,294,967,296	255.255.255.255	00000000.00000000.00000000.00000000