

# IPv4 CIDR Chart

IP2LOCATION

| Bits | CIDR | Subnet Mask     | IP Addresses  |
|------|------|-----------------|---------------|
| 0    | /32  | 255.255.255.255 | 1             |
| 1    | /31  | 255.255.255.254 | 2             |
| 2    | /30  | 255.255.255.252 | 4             |
| 3    | /29  | 255.255.255.248 | 8             |
| 4    | /28  | 255.255.255.240 | 16            |
| 5    | /27  | 255.255.255.224 | 32            |
| 6    | /26  | 255.255.255.192 | 64            |
| 7    | /25  | 255.255.255.128 | 128           |
| 8    | /24  | 255.255.255.0   | 256           |
| 9    | /23  | 255.255.254.0   | 512           |
| 10   | /22  | 255.255.252.0   | 1,024         |
| 11   | /21  | 255.255.248.0   | 2,048         |
| 12   | /20  | 255.255.240.0   | 4,096         |
| 13   | /19  | 255.255.224.0   | 8,192         |
| 14   | /18  | 255.255.192.0   | 16,384        |
| 15   | /17  | 255.255.128.0   | 32,768        |
| 16   | /16  | 255.255.0.0     | 65,536        |
| 17   | /15  | 255.254.0.0     | 131,072       |
| 18   | /14  | 255.252.0.0     | 262,144       |
| 19   | /13  | 255.248.0.0     | 524,288       |
| 20   | /12  | 255.240.0.0     | 1,048,576     |
| 21   | /11  | 255.224.0.0     | 2,097,152     |
| 22   | /10  | 255.192.0.0     | 4,194,304     |
| 23   | /9   | 255.128.0.0     | 8,388,608     |
| 24   | /8   | 255.0.0.0       | 16,777,216    |
| 25   | /7   | 254.0.0.0       | 33,554,432    |
| 26   | /6   | 252.0.0.0       | 67,108,864    |
| 27   | /5   | 248.0.0.0       | 134,217,728   |
| 28   | /4   | 240.0.0.0       | 268,435,456   |
| 29   | /3   | 224.0.0.0       | 536,870,912   |
| 30   | /2   | 192.0.0.0       | 1,073,741,824 |
| 31   | /1   | 128.0.0.0       | 2,147,483,648 |
| 32   | /0   | 0.0.0.0         | 4,294,967,296 |

# IPv6 CIDR Chart

IP2LOCATION

| Bits | CIDR | IP Addresses  |
|------|------|---------------|
| 0    | /128 | 1             |
| 1    | /127 | 2             |
| 2    | /126 | 4             |
| 3    | /125 | 8             |
| 4    | /124 | 16            |
| 5    | /123 | 32            |
| 6    | /122 | 64            |
| 7    | /121 | 128           |
| 8    | /120 | 256           |
| 9    | /119 | 512           |
| 10   | /118 | 1,024         |
| 11   | /117 | 2,048         |
| 12   | /116 | 4,096         |
| 13   | /115 | 8,192         |
| 14   | /114 | 16,384        |
| 15   | /113 | 32,768        |
| 16   | /112 | 65,536        |
| 17   | /111 | 131,072       |
| 18   | /110 | 262,144       |
| 19   | /109 | 524,288       |
| 20   | /108 | 1,048,576     |
| 21   | /107 | 2,097,152     |
| 22   | /106 | 4,194,304     |
| 23   | /105 | 8,388,608     |
| 24   | /104 | 16,777,216    |
| 25   | /103 | 33,554,432    |
| 26   | /102 | 67,108,864    |
| 27   | /101 | 134,217,728   |
| 28   | /100 | 268,435,456   |
| 29   | /99  | 536,870,912   |
| 30   | /98  | 1,073,741,824 |
| 31   | /97  | 2,147,483,648 |
| 32   | /96  | 4,294,967,296 |

# IPv6 CIDR Chart

# IP2LOCATION

|    |     |                            |
|----|-----|----------------------------|
| 33 | /95 | 8,589,934,592              |
| 34 | /94 | 17,179,869,184             |
| 35 | /93 | 34,359,738,368             |
| 36 | /92 | 68,719,476,736             |
| 37 | /91 | 137,438,953,472            |
| 38 | /90 | 274,877,906,944            |
| 39 | /89 | 549,755,813,888            |
| 40 | /88 | 1,099,511,627,776          |
| 41 | /87 | 2,199,023,255,552          |
| 42 | /86 | 4,398,046,511,104          |
| 43 | /85 | 8,796,093,022,208          |
| 44 | /84 | 17,592,186,044,416         |
| 45 | /83 | 35,184,372,088,832         |
| 46 | /82 | 70,368,744,177,664         |
| 47 | /81 | 140,737,488,355,328        |
| 48 | /80 | 281,474,976,710,656        |
| 49 | /79 | 562,949,953,421,312        |
| 50 | /78 | 1,125,899,906,842,620      |
| 51 | /77 | 2,251,799,813,685,248      |
| 52 | /76 | 4,503,599,627,370,496      |
| 53 | /75 | 9,007,199,254,740,992      |
| 54 | /74 | 18,014,398,509,481,984     |
| 55 | /73 | 36,028,797,018,963,968     |
| 56 | /72 | 72,057,594,037,927,936     |
| 57 | /71 | 144,115,188,075,855,872    |
| 58 | /70 | 288,230,376,151,711,744    |
| 59 | /69 | 576,460,752,303,423,488    |
| 60 | /68 | 1,152,921,504,606,846,976  |
| 61 | /67 | 2,305,843,009,213,693,952  |
| 62 | /66 | 4,611,686,018,427,387,904  |
| 63 | /65 | 9,223,372,036,854,775,808  |
| 64 | /64 | 18,446,744,073,709,551,616 |
| 65 | /63 | 36,893,488,147,419,103,232 |
| 66 | /62 | 73,786,976,294,838,206,464 |

# IPv6 CIDR Chart

# IP2LOCATION

|     |     |   |
|-----|-----|---|
| 67  | /61 | 147,573,952,589,676,412,928               |
| 68  | /60 | 295,147,905,179,352,825,856               |
| 69  | /59 | 590,295,810,358,705,651,712               |
| 70  | /58 | 1,180,591,620,717,411,303,424             |
| 71  | /57 | 2,361,183,241,434,822,606,848             |
| 72  | /56 | 4,722,366,482,869,645,213,696             |
| 73  | /55 | 9,444,732,965,739,290,427,392             |
| 74  | /54 | 18,889,465,931,478,580,854,784            |
| 75  | /53 | 37,778,931,862,957,161,709,568            |
| 76  | /52 | 75,557,863,725,914,323,419,136            |
| 77  | /51 | 151,115,727,451,828,646,838,772           |
| 78  | /50 | 302,231,454,903,657,293,676,544           |
| 79  | /49 | 604,462,909,807,314,587,353,088           |
| 80  | /48 | 1,208,925,819,614,629,174,706,176         |
| 81  | /47 | 2,417,851,639,229,258,349,412,352         |
| 82  | /46 | 4,835,703,278,458,516,698,824,704         |
| 83  | /45 | 9,671,406,556,917,033,397,649,408         |
| 84  | /44 | 19,342,813,113,834,066,795,298,816        |
| 85  | /43 | 38,685,626,227,668,133,590,597,632        |
| 86  | /42 | 77,371,252,455,336,267,181,195,264        |
| 87  | /41 | 154,742,504,910,672,534,362,390,528       |
| 88  | /40 | 309,485,009,821,345,068,724,781,056       |
| 89  | /39 | 618,970,019,642,690,137,449,562,112       |
| 90  | /38 | 1,237,940,039,285,380,274,899,124,224     |
| 91  | /37 | 2,475,880,078,570,760,549,798,248,448     |
| 92  | /36 | 4,951,760,157,141,521,099,596,496,896     |
| 93  | /35 | 9,903,520,314,283,042,199,192,993,792     |
| 94  | /34 | 19,807,040,628,566,084,398,385,987,584    |
| 95  | /33 | 39,614,081,257,132,168,796,771,975,168    |
| 96  | /32 | 79,228,162,514,264,337,593,543,950,336    |
| 97  | /31 | 158,456,325,028,528,675,187,087,900,672   |
| 98  | /30 | 316,912,650,057,057,350,374,175,801,344   |
| 99  | /29 | 633,825,300,114,114,700,748,351,602,688   |
| 100 | /28 | 1,267,650,600,228,229,401,496,703,205,376 |

# IPv6 CIDR Chart

IP2LOCATION

|     |     |   |
|-----|-----|---|
| 101 | /27 | 2,535,301,200,456,458,802,993,406,410,752           |
| 102 | /26 | 5,070,602,400,912,917,605,986,812,821,504           |
| 103 | /25 | 10,141,204,801,825,835,211,973,625,643,008          |
| 104 | /24 | 20,282,409,603,651,670,423,947,251,286,016          |
| 105 | /23 | 40,564,819,207,303,340,847,894,502,572,032          |
| 106 | /22 | 81,129,638,414,606,681,695,789,005,144,064          |
| 107 | /21 | 162,259,276,829,213,363,391,578,010,288,128         |
| 108 | /20 | 324,518,553,658,426,726,783,156,020,576,256         |
| 109 | /19 | 649,037,107,316,853,453,566,312,041,152,512         |
| 110 | /18 | 1,298,074,214,633,706,907,132,624,082,305,024       |
| 111 | /17 | 2,596,148,429,267,413,814,265,248,164,610,048       |
| 112 | /16 | 5,192,296,858,534,827,628,530,496,329,220,096       |
| 113 | /15 | 10,384,593,717,069,655,257,060,992,658,440,192      |
| 114 | /14 | 20,769,187,434,139,310,514,121,985,316,880,384      |
| 115 | /13 | 41,538,374,868,278,621,028,243,970,633,760,768      |
| 116 | /12 | 83,076,749,736,557,242,056,487,941,267,521,536      |
| 117 | /11 | 166,153,499,473,114,484,112,975,882,535,043,072     |
| 118 | /10 | 332,306,998,946,228,968,225,951,765,070,086,144     |
| 119 | /9  | 664,613,997,892,457,936,451,903,530,140,172,288     |
| 120 | /8  | 1,329,227,995,784,915,872,903,807,060,280,344,576   |
| 121 | /7  | 2,658,455,991,569,831,745,807,614,120,560,689,152   |
| 122 | /6  | 5,316,911,983,139,663,491,615,228,241,121,378,304   |
| 123 | /5  | 10,633,823,966,279,326,983,230,456,482,242,756,608  |
| 124 | /4  | 21,267,647,932,558,653,966,460,912,964,485,513,216  |
| 125 | /3  | 42,535,295,865,117,307,932,921,825,928,971,026,432  |
| 126 | /2  | 85,070,591,730,234,615,865,843,651,857,942,052,864  |
| 127 | /1  | 170,141,183,460,469,231,731,687,303,715,884,105,728 |
| 128 | /0  | 340,282,366,920,938,463,463,374,607,431,768,211,456 |