



## ASCII Character Set and Hex Values

Some commands described in the Cisco IOS documentation set, such as the **escape-character** line configuration command, require that you enter the decimal representation of an ASCII character. Other commands, such as the **snmp-server group** command, make use of hexadecimal representations.

[Table 138](#) provides code translations from the decimal numbers to their hexadecimal and ASCII equivalents. It also provides the keyword entry for each ASCII character. For example, the ASCII carriage return (CR) is decimal 13. Entering Ctrl-M at your terminal generates decimal 13, which is interpreted as a CR.

**Table 138** ASCII Translation Table

Numeric Values		ASCII Character	Meaning	Keyboard Entry
Decimal	Hex			
0	00	NUL	Null	Ctrl-@
1	01	SOH	Start of heading	Ctrl-A
2	02	STX	Start of text	Ctrl-B
3	03	ETX	Break/end of text	Ctrl-C
4	04	EOT	End of transmission	Ctrl-D
5	05	ENQ	Enquiry	Ctrl-E
6	06	ACK	Positive acknowledgment	Ctrl-F
7	07	BEL	Bell	Ctrl-G
8	08	BS	Backspace	Ctrl-H
9	09	HT	Horizontal tab	Ctrl-I
10	0A	LF	Line feed	Ctrl-J
11	0B	VT	Vertical tab	Ctrl-K
12	0C	FF	Form feed	Ctrl-L
13	0D	CR	Carriage return (Equivalent to the Enter or Return key)	Ctrl-M
14	0E	SO	Shift out	Ctrl-N
15	0F	SI	Shift in/XON (resume output)	Ctrl-O
16	10	DLE	Data link escape	Ctrl-P

Table 138 ASCII Translation Table (continued)

Numeric Values		ASCII Character	Meaning	Keyboard Entry
Decimal	Hex			
17	11	DC1	Device control character 1	Ctrl-Q
18	12	DC2	Device control character 2	Ctrl-R
19	13	DC3	Device control character 3	Ctrl-S
20	14	DC4	Device control character 4	Ctrl-T
21	15	NAK	Negative acknowledgment	Ctrl-U
22	16	SYN	Synchronous idle	Ctrl-V
23	17	ETB	End of transmission block	Ctrl-W
24	18	CAN	Cancel	Ctrl-X
25	19	EM	End of medium	Ctrl-Y
26	1A	SUB	Substitute/end of file	Ctrl-Z
27	1B	ESC	Escape	Ctrl-[
28	1C	FS	File separator	Ctrl-\
29	1D	GS	Group separator	Ctrl-]
30	1E	RS	Record separator	Ctrl-^
31	1F	US	Unit separator	Ctrl-_
32	20	SP	Space	Space
33	21	!	!	!
34	22	"	"	"
35	23	#	#	#
36	24	\$	\$	\$
37	25	%	%	%
38	26	&	&	&
39	27	,	,	,
40	28	(	(	(
41	29	)	)	)
42	2A	*	*	*
43	2B	+	+	+
44	2C	,	,	,
45	2D	-	-	-
46	2E	.	.	.
47	2F	/	/	/
48	30	0	Zero	0
49	31	1	One	1
50	32	2	Two	2
51	33	3	Three	3

Table 138 ASCII Translation Table (continued)

Numeric Values		ASCII Character	Meaning	Keyboard Entry
Decimal	Hex			
52	34	4	Four	4
53	35	5	Five	5
54	36	6	Six	6
55	37	7	Seven	7
56	38	8	Eight	8
57	39	9	Nine	9
58	3A	:	:	:
59	3B	;	;	;
60	3C	<	<	<
61	3D	=	=	=
62	3E	>	>	>
63	3F	?	?	?
64	40	@	@	@
65	41	A	A	A
66	42	B	B	B
67	43	C	C	C
68	44	D	D	D
69	45	E	E	E
70	46	F	F	F
71	47	G	G	G
72	48	H	H	H
73	49	I	I	I
74	4A	J	J	J
75	4B	K	K	K
76	4C	L	L	L
77	4D	M	M	M
78	4E	N	N	N
79	4F	O	O	O
80	50	P	P	P
81	51	Q	Q	Q
82	52	R	R	R
83	53	S	S	S
84	54	T	T	T
85	55	U	U	U
86	56	V	V	V

Table 138 ASCII Translation Table (continued)

Numeric Values		ASCII Character	Meaning	Keyboard Entry
Decimal	Hex			
87	57	W	W	W
88	58	X	X	X
89	59	Y	Y	Y
90	5A	Z	Z	Z
91	5B	[	[	[
92	5C	\	\	\
93	5D	]	]	]
94	5E	^	^	^
95	5F	_	_	_
96	60	`	`	`
97	61	a	a	a
98	62	b	b	b
99	63	c	c	c
100	64	d	d	d
101	65	e	e	e
102	66	f	f	f
103	67	g	g	g
104	68	h	h	h
105	69	i	i	i
106	6A	j	j	j
107	6B	k	k	k
108	6C	l	l	l
109	6D	m	m	m
110	6E	n	n	n
111	6F	o	o	o
112	70	p	p	p
113	71	q	q	q
114	72	r	r	r
115	73	s	s	s
116	74	t	t	t
117	75	u	u	u
118	76	v	v	v
119	77	w	w	w
120	78	x	x	x
121	79	y	y	y

**Table 138** ASCII Translation Table (continued)

Numeric Values		ASCII Character	Meaning	Keyboard Entry
Decimal	Hex			
122	7A	z	z	z
123	7B	{	{	{
124	7C			
125	7D	}	}	}
126	7E	~	Tilde	~
127	7F	DEL	Delete	Del

