
String Table

String table sections hold null-terminated character sequences, commonly called strings. The object file uses these strings to represent symbol and section names. One references a string as an index into the string table section. The first byte, which is index zero, is defined to hold a null character. Likewise, a string table's last byte is defined to hold a null character, ensuring null termination for all strings. A string whose index is zero specifies either no name or a null name, depending on the context. An empty string table section is permitted; its section header's `sh_size` member would contain zero. Non-zero indexes are invalid for an empty string table.

A section header's `sh_name` member holds an index into the section header string table section, as designated by the `e_shstrndx` member of the ELF header. The following figures show a string table with 25 bytes and the strings associated with various indexes.

Index	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
0	\0	n	a	m	e	.	\0	v	a	r
10	i	a	b	l	e	\0	a	b	l	e
20	\0	\0	x	x	\0					

Figure 1-15: String Table Indexes

Index	String
0	<i>none</i>
1	<i>name.</i>
7	<i>Variable</i>
11	<i>able</i>
16	<i>able</i>
24	<i>null string</i>

As the example shows, a string table index may refer to any byte in the section. A string may appear more than once; references to substrings may exist; and a single string may be referenced multiple times. Unreferenced strings also are allowed.