

NAME

ar – archive (library) file format

DESCRIPTION

The archive command *ar* is used to combine several files into one. Archives are used mainly as libraries to be searched by the link-editor *ld*.

A file produced by *ar* has a magic number at the start, followed by the constituent files, each preceded by a file header. The magic number is 177555(8) (it was chosen to be unlikely to occur anywhere else). The header of each file is 16 bytes long:

0-7	file name, null padded on the right
8-11	modification time of the file
12	user ID of file owner
13	file mode
14-15	file size

Each file begins on a word boundary; a null byte is inserted between files if necessary. Nevertheless the size given reflects the actual size of the file exclusive of padding.

Notice there is no provision for empty areas in an archive file.

SEE ALSO

ar (I), *ld* (I)

BUGS

Names are only 8 characters, not 14. More important, there isn't enough room to store the proper mode, so *ar* always extracts in mode 666.