## NAME

cpyfld -- locate a specified field within a specified line of ASCII data and copy to a specified character buffer

## SYNOPSIS

```
cpyfld(line,field,skip,length,from,to)
int line, field, skip, length;
struct GMBUF *from;
char *to;
```

## DESCRIPTION

Cpyfld extracts a specified field or subfield from a data buffer, copies the contents of this field to a specified character buffer, and appends a null byte to the end of the character buffer. If an error is detected, cpyfld returns a value that is less than zero, as discussed below; otherwise, it returns the number of characters that have been copied to the character buffer, but not including the null byte. Calling programs should always check the number of characters copied to the character buffer to insure that a valid field or subfield has been extracted.

Cpyfld calls the library subroutine getfld(3L) to locate the specified field. Getfld breaks the specified line of input data into its respective fields, starting with field 0. Once the specified field has been located, the field, or a subfield within the field, is copied to the character buffer. Field separation characters are one or more tabs and/or blanks, a newline, an octal 212, or a null byte.

The ASCII data buffer, which is a structure of type GMBUF, is declared and allocated by the calling routine. Before calling this subroutine, the calling routine must fill the ASCII data buffer via the subroutine gtmsg(3L) or some other routine which performs a similar function.

For the argument descriptions that follow, the value nchar represents the total number of characters contained in the specified field in the data buffer.

The argument line is the number of the line in which the requested field is located. The range of values for line are:

    0 <= line < GM_MAX_LNS

where GM_MAX_LNS is defined in the header file, gtmhdr.h.

The argument field is the number of the field that is to be located. The range of values for field are:

    0 <= field < max. fields for specified line

The argument skip is the number of characters at the beginning of the field that are to be skipped before the specified subfield is copied to the specified character buffer.  If the value of  skip is  0, then no characters are skipped and copying begins with the first character in the field.  The range of values for skip are:

     0 <= skip < nchar

The argument length is the number of characters that  are  to  be copied  from  the field to the character buffer.  If the value of length is less than 0,  then  an  error  value  is  returned,  as described  below.   If the value of length is 0, then all characters from skip to the end of the field are copied to the  character buffer.   If the value of length is greater than 0, then the number of characters copied to the character buffer is length  or ( nchar - skip ), whichever is smaller.

The argument from is the address of a data buffer  in  which  the requested line and field can be found.  The data buffer must have a format that is identical to  that  required  by  the  gtmsg(3L) subroutine.

The argument to is the address of the character buffer  to  which the  specified  field  or subfield is to be copied.  This address must be nonzero.

## FILES
/usr/include/gtmhdr.h which contains the definitions  for  GMBUF, GM_MAX_LNS, CFR_LEN, CFR_SKIP, CFR_TO, CFR_FLD, CFR_LN.

## LIBRARY
/lib/lib1.a

## SEE ALSO
getfld(3L), gtmsg(3L)

## DIAGNOSTICS
The error codes returned by this subroutine are:

CFR_LEN   The argument length is less than zero.

CFR_SKIP  The argument skip is less than zero or greater than the number of characters in the field.

CFR_TO    The argument to contains an  invalid  address  for  the character buffer.

CFR_FLD   The argument field is out of range.

CFR_LN    The argument line is out of range.