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## <u>Identification</u>

The merge\_edit Command - Implementation Edwin W. Meyer, Jr.

## Purpose

This section lists the merge\_edit package segments and their entry points along with a brief description of their functions. The segments are presented in binding order.

## Description

FILENAME

This procedure is used to associate the entry name of an arbitrary pathname with a guaranteed unique six character file name.

call filename\$fnam\_init;

call filename \$filename (seq\_name, file\_name);

call filename\$bits (seg\_name, file\_bits);

dcl seg\_name char (\*), /\*input pathname\*/

file\_name char(6), /\*returned filename\*/

file\_bits bit(36); /\*gebcd equiv. of file\_name\*/

filename\$fnam\_init must be called prior to any other filename calls in order to create the filename storage segment in the process directory.

MERGE\_EDIT

call merge\_edit (arg1, arg2, arg3, arg4, arg5);
dcl (arg1, arg2, arg3, arg4, arg5) char (\*);

This is the top level procedure in the command package, whose duties are:

- a. To interpret the arguments passed via the shell (see BE.18.00 for command format).
- b. Perform all initialization, file creation and moving.
- c. Call mg\_pass1 and mg\_pass2 to execute the merge\_edit.

MG COMP

call mq\_comp\comp\_pass1 (n);

call mg comp\$comp pass2;

dc1 n fixed bin(17);

/\*supplied argument indicating type of control line to be processed: 0-epl, 1-eplbsa, 2-bcpl. 3-tmql. 4-entry\*/

mg\_comp is the processor for all control lines dealing with compilation; comp\_pass1 stores the info in the list for the indicated type of line, and comp\_pass2 puts out productions for all the compilations.

MG\_DATA

This epibsa data segment is the main storage for long ascii strings, card image and array templates, etc. It is declared "slvprc, slvacc" so as to be bindable with the rest of the merge\_editor.

MG LDLB

call mq ldlb\$ldlb pass1 (n);

call mg\_ldlb\$putout (n, put\_top);

dcl (n, put\_top) fixed bin(17);

n	ldlb pass1	putout
0	tl line	load (tl or mk)
.1	mk line	load (other)
2	li line	1ibe
3	ld line	fetch
4	<b></b>	deck

mg\_ldlb is responsible for at least a portion of the processing of tl, mk, li, ld, fetch, and deck control lines.
mg\_ldlb\$ldlb\_pass1 processes a control line according to the supplied type code n, and stores the information away into the proper list. mg\_ldlb\$putout is used during pass2 to create and deliver productions from the supplied list "put\_top" according to the supplied type code.

MG\_PASS 1

call mg\_pass1 (f\_dir, f\_name, abort\_cd);

dcl (f\_dir,

/\*dir in which gecos file resides\*/

f\_name) char (\*),

/\*entry name of gecos file\*/

abort\_cd fixed bin(17);

/\*if non-zero upon return
from mg\_pass1, the merge\_edit
will be aborted\*/

mg\_pass1 scans the first token of each control line and calls the proper handler for each recognized token to scan and process the remainder of the line. Some control lines are totally processed within mg\_pass1 itself.

MG\_PASS2

call mg\_pass2 (w\_dir);

dcl w\_dir char(\*);

/\* working directory pathname\*/

The main duty of mg\_pass2 is to invoke in proper order the routines that create productions from list structure and other data created during pass1 and insert them into the ascii and binary output segments. Some of this production creation and insertion is done within mg\_pass2 itself.

MG\_TLMK

call mg\_tlmk\$tlmk\_pass2;

This routine creates and delivers productions for the tl and mk lists to the output segments.

MG\_UTIL

call mg\_util\$ascii\_line (char\_string);

call mg\_util\$move\_string (pntr, lth);

dcl char\_string (\*),

/\*supplied string\*/

pntr ptr.

/\*pointer to base of char string\*/

lth fixed bin(17); /\*lengt

/\*length of character string\*/

Char\_string (or the string defined by pntr and lth) plus a new-line character are inserted into the ascii control segment immediately following previously inserted strings.

call mg\_util\$bad\_line;

Write out on-line a "bad line" message and the entire current line of the gecos control segment.

call mg\_util\$fstate (pathname, fnd\_code);

dcl pathname char (\*),

fnd\_code fixed bin(17);

Look up the directory entry defined by pathname and return with fnd\_code = 0 if it exists as a non-directory branch. Otherwise fnd\_code = 1.

MG\_TABLES (not bound with merge\_editor)

mg\_tables is the data segment that contains the merge\_edit tables. This segment is used by the tape daemon, not the merge\_editor, but is associated with it because it is vital to the production of a proper merge\_edit tape.

mg\_tables contains several numbered merge\_edit tables starting at 1. Each table is an ascii string left adjusted in the first word of the table and with any unused character positions in the last word of the table filled with NUL characters. A lookup table at the head of mg\_tables has the property such that the right half of word j of mg\_tables contains the starting location of merge\_edit table j. If table j does not exist, word j=0. Word 0 contains the number of the highest numbered merge\_edit table within mg\_tables. (Figure 1 illustrates the format of mg\_tables.)

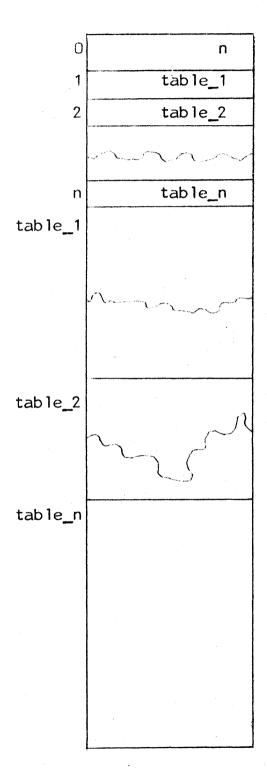


Figure 1. Format of mg\_tables