MULTICS SYSTEM-PROGRAMMERS ' MANUAL

SECTION BY.2.01A PAGE 1

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Identification

Appendix to BY.2.01 K. J. Martin

Purpose

This appendix documents a discrepancy between the BY.2.01 document and current implementation of the file system interface procedures and corrects mistakes in the current document.

<u>Discussion</u>

When BY.2.01 was published, it was optimistically thought that the command system error handling mechanism (BY.11) would be installed shortly. Therefore, BY.2.01 was written to conform with the final implementation of the procedures. The procedures, however, were written to be usable now; each has an undocumented fixed bin(17) error code as its last argument and merely passes back to the caller whatever code the file system returned to it.

When these procedures are changed to use the command system standard error handling, these last arguments will disappear. This will <u>not</u> be fatal to any calling procedures which either ignore the error code returned or are clever enough to set it to zero before calling the file system interface procedures. If all goes well in the file system's handling of a call, the calling procedure will see no difference in the interface procedure's activity.

If all is not well, the interface procedure will signal a condition (append_branch_err, for example). Since the calling program is not prepared for this signal, a handler established elsewhere will deal with the signal.

In most cases unclaimed_signal (by.11.05) will handle it. Unclaimed_signal places the user at a secondary command level where he has many options. If he chooses to continue, the procedure which called the file system interface procedure will see no sign of irregularity and will proceed as though all had gone well. (Note that the user -personally at a console- was informed of the nature of the problem and presumably made an intelligent decision.)

The calling procedure may be changed at the author's convenience to conform with the command system standard error handling.

References

The reader is referred to BY.2.02 where file system errors are documented and to BY.11 for an explanation of command system standard error handling.

Interim Calling Sequences

The final argument is declared:

dcl code fixed bin(17):

The other arguments are described in BY.2.01.

call change_name (dir, entry, oldname, newname, code);

call delete_entry (dir, entry, courtesy_flag, code);

- call append_branch (dir, name, type, mode, optsw, max1, code);
- call append_link (dir, name, pathname, code);
- call set_max_length (dir, entry, max1, code);
- call set_copy (dirname, entry, copysw, code);
- call set_relate (dirname, entry, relatesw, code);

call set_retention_date (dirname, entry, retdate, code);

call set_consistency (dirname, entry, constsw, code);

call truncate_seg (addr_ptr, code);

mode = check_access (segptr, ringno, code);

Errata

page 2, courtesy_flag setting:

the three values 0,1,2 should be "00"b, "01"b, "10"b.

page 3, third paragraph from the bottom should read:

If type is off (i.e., <u>name</u> is a nondirectory branch), the <u>optsw</u> argument is meaningful. If <u>type</u> is on, it is ignored.