

IEEE Standards Interpretation for IEEE Std 1003.1™-2001 IEEE Standard Standard for Information Technology -- Portable Operating System Interface (POSIX®)

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Interpretation Request #51

Topic: fgetc, fgetwc, fgets, fgetws, gets **Relevant Sections:** XSH fgetc, fgetwc, fgets, fgetws, gets Page: 372 Line: 12048, Page: 378 Line: 12222, Page: 376 Line: 12166, Page: 380 Line: 12295, Page: 568 Line: 18675

The fgetc(), fgets() descriptions should not list the wide character functions in the text below.

The fgetwc() and fgetws() descriptions should be similar to their non-wide counterparts. gets() should have similar wording to fgetc().

fgetc() description states (p372 l12048):

"The fgetc() function may mark the st_atime field of the file associated with stream for update. The st_atime field shall be marked for update by the first successful execution of fgetc(), fgets(), fgetwc(), fgetws(), fread(), fscanf(), getc(), getchar(), gets(), or scanf() using stream that returns data not supplied by a prior call to ungetc() or ungetwc()."

fgetwc(): pg 378, line 12222 states:

"If the stream is at end-of-file, the end-of-file indicator for the stream shall be set and fgetwc() shall return WEOF."

fgets() description states (p376 l12166):

"The fgets() function may mark the st_atime field of the file associated with stream for update. The st_atime field shall be marked for update by the first successful execution of fgetc(), fgets(), fgetwc(), fgetws(), fread(), fscanf(), getc(), getchar(), gets(), or scanf() using stream that returns data not supplied by a prior call to ungetc() or ungetwc()."

fgetws(): pg 380, line 12295 states:

"If the stream is at end-of-file, the end-of-file indicator for the stream shall be set and fgetws() shall return a null pointer."

gets(): pg 568, line 18675 states:

"If the stream is at end-of-file, the end-of-file indicator for the stream shall be set and gets() shall return a null pointer."

Action:

The fgetc() description should not list the wide character functions, ie:

"The fgetc() function may mark the st_atime field of the file associated with stream for update. The st_atime field shall be marked for update by the first successful execution of fgetc(), fgets(), fread(), fscanf(), getc(), getchar(), gets(), or scanf() using stream that returns data not supplied by a prior call to ungetc()."

For fgetwc():

It should be similar to fgetc() behavior, ie: it should state:

"If the end-of-file indicator for the stream is set, or if the stream is at end-of-file, the end-of-file indicator for the stream shall be set and fgetwc() shall return WEOF."

The fgets() description should not list the wide character functions, ie:

It should be similar to fgetc() behavior, ie: it should state:

"If the end-of-file indicator for the stream is set, or if the stream is at end-of-file, the end-of-file indicator for the stream shall be set and fgets() shall return a null pointer."

gets():

It should be similar to fgetc() behavior, ie: it should state:

"If the end-of-file indicator for the stream is set, or if the stream is at end-of-file, the end-of-file indicator for the stream shall be set and gets() shall return a null pointer."

Interpretation Response #51

The standards states the requirements for fgetc(), fgetwc(), fgets(), fgetws(), and gets(), and conforming implementations must conform to this. However, concerns have been raised about this which are being referred to the sponsor.

Rationale for Interpretation

None.