Doc No: X3J16/95-0011

WG21/N0611

Date: January 24, 1995

Project: Programming Language C++

Reply to: Beman Dawes

beman@dawes.win.net

Reintroduction of basic_string getline function

Introduction

The string and wstring library classes included a getline function as recently as the 27 May 1994 working paper. When string and wstring were templatized into basic_string, the getline function was inadvertently dropped. This proposal reintroduces getline for basic_string.

Proposal

Add the following function to the working paper (presumably after 21.1.1.4.4 Inserters and extractors):

```
template<class charT>
basic_istream<charT>& getline(basic_istream<charT>& is,
     basic_string<charT>& str,
     charT delim = ios_traits<charT>::newline());
```

An unformatted input function, extracts characters with

string_char_traits<charT>::char_in and appends them to the string controlled by str. The string is initially made empty by calling str.remove(0). Each extracted character c is appended as if by calling str.append(c). Characters are extracted and appended until any of the following occurs:

- NPOS 1 characters are appended (in which case the function calls setstate(failbit));
- end-of-file occurs on the input sequence (in which case the function calls ${\tt setstate(eofbit))};$
- -c = delim for the next available input character c (in which case the input character is extracted but not appended).

If the function appends no characters, it calls setstate(failbit). The function returns is.