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Project: Programming Language C++  
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Proposed Changes to Clause 22 (locales)

\*\*\* lib-locales Tue Nov 12 10:59:49 1996  
--- lib-loc Tue Nov 12 23:48:00 1996

=====  
Add Allocator parameter to basic\_string

```
*****  
*** 151,158 ****  
    .Ce  
    .Cb  
        template <class charT,Traits>  
    !     bool operator()(const basic_string<charT,Traits>& s1,  
    !                               const basic_string<charT,Traits>& s2) const;  
    .Ce  
    .Cb  
    \&\f6// global locale objects:\fP&  
--- 151,158 ----  
    .Ce  
    .Cb  
        template <class charT,Traits>  
    !     bool operator()(const basic_string<charT,Traits,Allocator>& s1,  
    !                               const basic_string<charT,Traits,Allocator>& s2)  
const;  
    .Ce  
    .Cb  
    \&\f6// global locale objects:\fP&
```

=====  
add all of execution set to characters known to widen and narrow  
=====

```
*****  
*** 1151,1162 ****  
    .CW char  
    values to the corresponding  
    .CW charT  
    ! value or values.  
    The only characters for which unique transformations are required  
    ! are the digits, alphabetic characters,  
    ! .CW '-' ,  
    ! .CW '+' ,  
    ! newline, and space.  
    .br  
    For any named  
    .CW ctype  
--- 1151,1165 ----  
    .CW char  
    values to the corresponding  
    .CW charT  
    ! value or values.\f*  
    ! .Fs  
    ! The char argument of  
    ! .CW do_widen  
    ! is intended to accept values derived from character literals for  
conversion
```

```

! the locale's encoding.
! .Fe
  The only characters for which unique transformations are required
! are those in the basic source character set (_lex.charset_).
.br
  For any named
  .CW ctype
*****
*** 1197,1207 ****
  values to the corresponding
  .CW char
  value or values.
! The only characters for which unique transformations are required
! are the digits, alphabetic characters,
! .CW '-' ,
! .CW '+' ,
! newline, and space.
.br
  For any named
  .CW ctype
--- 1200,1211 ----
  values to the corresponding
  .CW char
  value or values.
! .br
! For any character \f6c\fP in the basic source character
set(_lex.charset_)
! the transformation is such that
! .Cb
! do_widen(do_narrow(c),d) == c
! .Ce
.br
  For any named
  .CW ctype

===== Add unshift to codecvt =====

*****
*** 1541,1546 ****
--- 1545,1552 ----
    result out(stateT& \f6state\fP,
      const internT* \f6from\fP, const internT* \f6from_end\fP, const
internT*& \f6from_next\fP,
      externT* \f6to\fP,          externT* \f6to_limit\fP,
externT*& \f6to_next\fP) const;
+   result unshift(stateT& \f6state\fP,
+     externT* \f6to\fP,          externT* \f6to_limit\fP,
externT*& \f6to_next\fP) const;
    result in(stateT& \f6state\fP,
      const externT* \f6from\fP, const externT* \f6from_end\fP, const
externT*& \f6from_next\fP,
      internT* \f6to\fP,          internT* \f6to_limit\fP,
internT*& \f6to_next\fP) const;
*****
*** 1559,1564 ****
--- 1565,1572 ----
    virtual result do_out(stateT& \f6state\fP,
      const internT* \f6from\fP, const internT* \f6from_end\fP, const
internT*& \f6from_next\fP,
      externT* \f6to\fP,          externT* \f6to_limit\fP,
externT*& \f6to_next\fP) const;
+   virtual result unshift(stateT& \f6state\fP,
+     externT* \f6to\fP,          externT* \f6to_limit\fP,
externT*& \f6to_next\fP) const;

```

```

        virtual result do_in(stateT& \f6state\fP,
            const externT* \f6from\fP, const externT* \f6from_end\fP, const
externT*& \f6from_next\fP,
                internT* \f6to\fP,          internT* \f6to_limit\fP,
internT*& \f6to_next\fP) const;
*****
*** 1620,1625 ****
--- 1628,1641 ----
    .La Returns:
    .CW "do_out(\f6state\fP, \f6from\fP,\f6from_end\fP,\f6from_next\fP,
\f6to\fP,\f6to_limit\fP,\f6to_next\fP)"
    .\"
+ .ix "[codecvt] [unshift]"
+ .Pb
+ result unshift(stateT& \f6state\fP,
+     externT* \f6to\fP, externT* \f6to_limit\fP, externT*&
\f6to_next\fP) const;
+ .Pe
+ .La Returns:
+ .CW "do_unshift(\f6state\fP, \f6to\fP,\f6to_limit\fP,\f6to_next\fP)"
+ .\"
    .ix "[codecvt] [in]"
    .Pb
    result in(stateT& \f6state\fP,
*****
*** 1732,1737 ****
--- 1748,1783 ----
    indicates that either the destination sequence has not absorbed all the
    available destination elements, or that additional source elements are
    needed before another destination element can be produced.
+ .\"---
+ .ix "[codecvt] [do__unshift]"
+ .Pb
+ result do_unshift(stateT& \f6state\fP,
+     externT* \f6to\fP, externT* \f6to_limit\fP, externT*& \f6to_next\fP)
const;
+ .Pe
+ .La "Effects"
+ Places characters starting at \f6to\fP that should be appended
+ to terminate a sequence when the current
+ .CW stateT
+ is given by \f6state\fP.*f
+ .Fs
+ Typically these will be characters to return the state to
+ .CW stateT()
+ .Fe
+ .La "Returns"
+ An enumeration value, as summarized in Table \n+(Tn:
+ .Ts "\f7convert result\fP values"
+ .TS
+ box center;
+ Cf3 Cf3.
+ Value      Meaning
+ =
+ .T&
+ Lf5 Lf1.
+ ok completed the sequence
+ partial more characters need to be supplied to complete termination
+ noconv no termination is needed for this \&\f5state_type\fP\&
+ .TE
+ .Te
+ .\"---
+ .\"
    .ix "[codecvt] [do__encoding]"

```