X11R6 Sample Implementation Frame Work

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X11R6 Sample Implementation Frame Work

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Table of Contents

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Chapter 1. Framework

Preface

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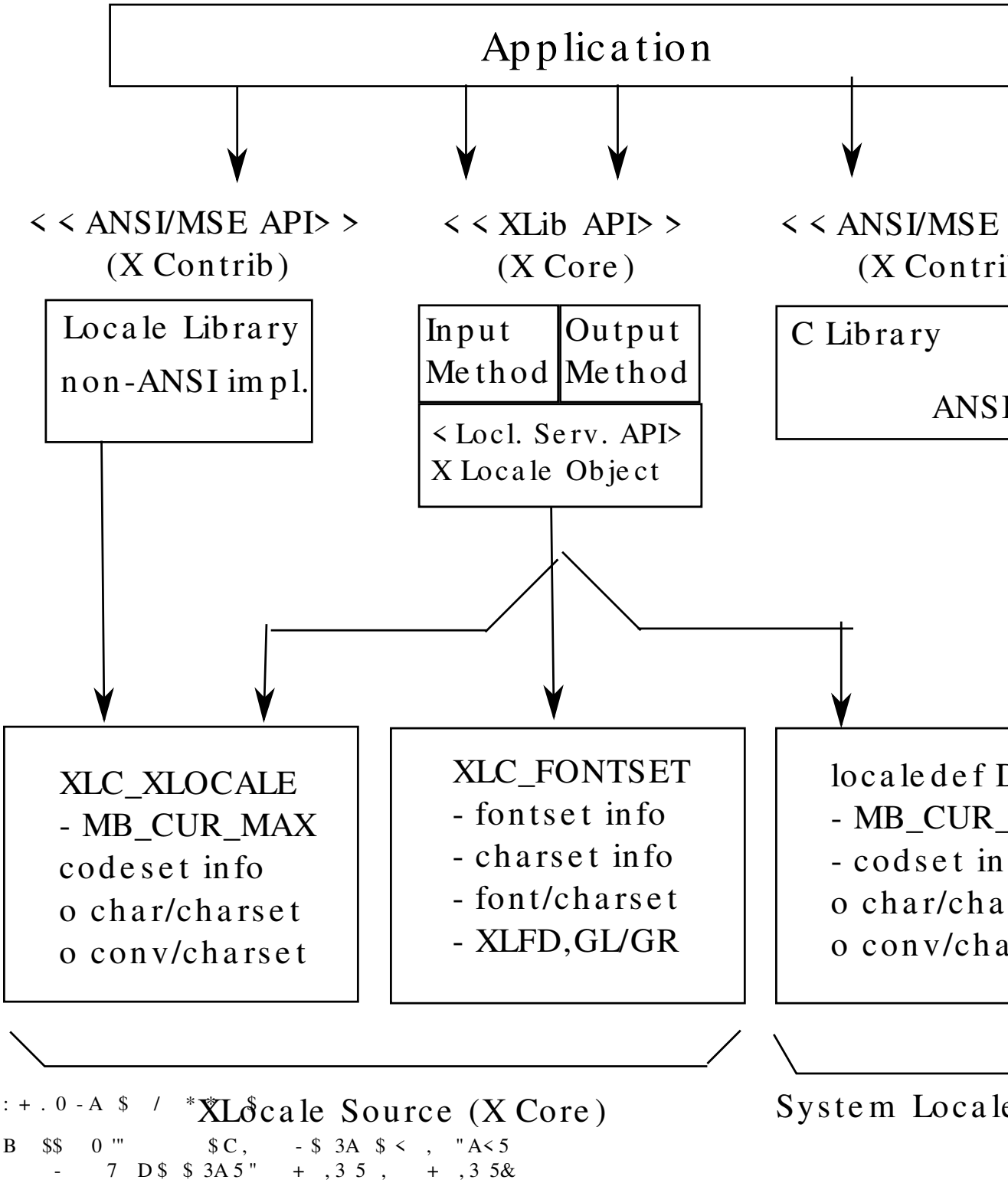

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Objective

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Locale Object Binding Functions

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$, $ $, _XOpenLC, $ $ - _XOpenLC , ,
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A , - , " $ + , - A , , $, , $ $, '&

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_XlcInitLoader - $ C $ $ $, $. / , -
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K, - $ $

```
Bool  _XlcAddLoader( proc,  position);
```

_XlcAddLoader - ' - , $ $ $, 4 4
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- $, $ 3 $, 5 $ 3 $ $5&

7 $, $ $, - + - $, $, " . $ $ ' + &

Remove a loader

void **_XlcRemoveLoader**(*proc*);

_XlcRemoveLoader- +/ $ $ $, - , 4 4- + $, $ &

+ $ + /, -$$. '$ $ $, D

_XlcDefaultLoader
_XlcGenericLoader
_XlcEucLoader
_XlcSjisLoader
_XlcUtfLoader
_XaixOsDynamicLoad

Locale Method Interface

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$ - ' * , - '/ , / 1 - $ $ 7 ". 0 $ $ " , , , $ &

Locale Method Functions

Open a Locale Method

XLCd **_XOpenLC**(**name*);

_XOpenLC- $ $ + ,. , - , $ $ +& _XOpenLC $$ $ $ 7 $, ". ' , / _XlcAddLoader into the internal loader list. If the called loader /$, , -$$ $ $ " _XOpenLC A ,& - $, /$, - $, $ $ " _XOpenLC $$ 1 $, & - $$ ' , $, $ $ " _XOpenLC @?AA&

A , I $ A

_XlcCurrentLC- A , , $ $ &

void **_XCloseLC**(*lcd*);

_XCloseLC- $ $ $ + , - , $,&

char ***_XGetLCValues**(*lcd*);

_XGetLCValues- @?AA - ,D . " + - - '+ $, ,& -$$. '/ $,- , , , '+ & /$ + $ + , , &

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$ @	J -$ $ +

Charset functions

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5 $ $ 7 &

```
typedef enum {
      XlcUnknown, XlcC0, XlcGL, XlcC1, XlcGR, XlcGLGR, XlcOther
} XlcSide;

typedef struct _XlcCharSetRec *XlcCharSet;

typedef struct {
      char *name;
      XPointer value;
} XlcArg, *XlcArgList;

typedef char* (*XlcGetCSValuesProc)(charset, args, num_args);
      XlcCharSet charset;
      XlcArgList args;
      int num_args;

typedef struct _XlcCharSetRec {
      char *name;
      XrmQuark xrm_name;
      char *encoding_name;
      XrmQuark xrm_encoding_name;
      XlcSide side;
      int char_size;
      int set_size;
      char *ct_sequence;
      XlcGetCSValuesProc get_values;
} XlcCharSetRec;
```

" # $

```
XlcCharSet  _XlcGetCharSet( *name);
```

_XlcGetCharSet - ' $. ,
+ - , 4 4& _XlcGetCharSet @?AA" - $,
- , 4 4&

- $$. ' ' ,&

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NON!&!(%H N8BA	A - $- - NON! !(%H 3 -- + , !(L)5"
U	L $ + 0 ,
LLF(!8B#	# ' $- - LLF(!" A $ @ & !
LLF(O8B#	# ' $- - LLF(O" A $ @ & O
LLF(M8B#	# ' $- - LLF(M" A $ @ & M
LLF( )8B#	# ' $- - LLF( )" A $ @ &)
LLF(%8B#	# ' $- - LLF(%" A 6B 0 $
LLF(H8B#	# ' $- - LLF(H" A 6 $
LLF(L8B#	# ' $- - LLF(L" A 6 . $
LLF(F8B#	# ' $- - LLF(F" A 6 $$ $
LLF((8B#	# ' $- - LLF((" A $ @ & F
NON!&!(%H N8B#	# ' $- - NON! !(%H 3 -- + , !(L)5"
U	L $ + 0 ,
B OM!O&!(LN N8BA	B OM!O !(LN" 3*# 5 C , - , BA
B OM!O&!(LN N8B#	B OM!O !(LN" 3*# 5 C , - , B#
NONL&!(LM N8BA	NONL !(LM" B
U	, - , BA
NONL&!(LM N8B#	NONL !(LM" B
U	, - , B#
FHN!&!(L% N8BA	FHN! !(L%" B
U	, - , BA
FHN!&!(L% N8B#	FHN! !(L%" B
U	, - , B#
NO!O&!((N N8BA	NO!O !((N" B
U	, - , BA
NO!O&!((N N8B#	NO!O !((N" B
U	, - , B#

 # $

```
Bool  _XlcAddCharSet( charset);
```

_XlcAddCharSet - ' $ - , 4 4&

Obtain Character Set values

```
char *  _XlcGetCSValues( charset,  ...);
```

_XlcGetCSValues - @?AA - ,D . "
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/ $, - , , , '+ & / $ + $ + ,
, &

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$ @ C		+ -
$ @ $ P	J	$ P - + , 1

Converter Functions

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```
typedef struct _XlcConvRec *XlcConv;

typedef void (*XlcCloseConverterProc)(conv);
      XlcConv conv;

typedef int (*XlcConvertProc)(conv, from, from_left, to, to_left, args, num_args);
      XlcConv conv;
      XPointer *from;
      int *from_left;
      XPointer *to;
      int *to_left;
      XPointer *args;
      int num_args;

typedef void (*XlcResetConverterProc)(conv);
      XlcConv conv;

typedef struct _XlcConvMethodsRec {
      XlcCloseConverterProc close;
      XlcConvertProc convert;
      XlcResetConverterProc reset;
} XlcConvMethodsRec, *XlcConvMethods;

typedef struct _XlcConvRec {
    XlcConvMethods methods;
    XPointer state;
} XlcConvRec;
```

Open a converter

```
XlcConv _XlcOpenConverter( from_lcd, *from_type, to_lcd, *to_type);
```

_XlcOpenConverter- / . / 1 - +
- , 4 4 - , 4 4 , '& - - - ,

/ , ' / " @?AA& . "
/ , &

- $$. ' , - ,& + $ + , , &

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$ @ + , 1	J	* ?@<I 9
$ @ '	J	# @B
$ @	J	$
$ @	J	$

void **_XlcCloseConverter**(*conv*);

_XlcCloseConverter - $ - , / 4 4&

int **_XlcConvert**(*conv*, **from*, **from_left*, **to*, **to_left*, **args*, *num_args*);

_XlcConvert - / P - - + "
- , 4 4" P - , '
" - , 4 4& - , _XlcOpen-
Converter() $$, / , "4 4& '+
4 4" 4 4" 4 4 , 4 4 / + - - *B) /
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/ "- + $ @ $ 6 $ @; , $ @ " 1 '
+ . + , ' & '+
/ , $$&

&

void **_XlcResetConverter**(*conv*);

_XlcResetConverter - - , / 4 4&

&

```
typedef XlcConv (*XlcOpenConverterProc)(from_lcd, from_type, to_lcd, to_type);
      XLCd from_lcd;
      char *from_type;
      XLCd to_lcd;
      char *to_type;

Bool  _XlcSetConverter( from_lcd,  *from,  to_lcd,  *to,  converter);

     XlcSetConverter -     '       /    .    /   - +
4         4  4        4      /   $  3      - , A ,5&
```

X Locale Database functions

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$  $   $ / -$ &

: +  ,  $     A  $ <    " $    -   A  $ <     <-
, +  &

"       '

void  _XlcGetResource( lcd,  *category,  *class,  ***value,  *count);

     _XlcGetResource-        $  $ ,  ,  ,  .        ,
.    $  $  -    - , 4              4&    $  $ ,      /,,      + $  $
   A  $ <     -$ "  , .  0 , - ,     / $ $    + $ +
,  ,  &

    - , 4              4  , 4       4     , -  - , '      7  / $  $
, &

     , / $       ,  / $   '+       ' $   - +"  ,
  ,     .    +   -   '     / $ &

     , / $    . ,  $  $ +  ," ,   $,     + , - ,  - ,
  $$ &

"          '

char *_XlcFileName( lcd,  *category);

    _XlcFileName -          - $   + .      ,        - ,
4   4  , 4           4"     $$   +   ,   '& -   - $   +      - ,"
       , $ - $ -    -  , - $   + "                    _XlcFileName     @?AA&
   , - $   +    $,   -  ,    $$ &

   $ -      ' - $   +    + $ +     ,  ,  &       + $
+    "      _XlcFileName    4S   '  T&, 4 - $    +   '   $ " .
   -   '"  - $$ $  $   +   ,       , ' - $   + &
```

Utility Functions

(

int **_XlcCompareISOLatin1**(**str2*);

int **_XlcNCompareISOLatin1**(**str2*, *len*);

_XlcCompareIsoLatin1 - + . LLF(! '&
' $. $ / , - +0 '
+ & /$, ' $ " P $ " '
C ", , ' . 4 4 $1 ' $ $ " P $ " '
4 4&

_XlcNCompareIsoLatin1 - , $ _XlcCompareISOLatin1, 1
+ 4 4 + ,&

&)

int **XlcNumber**(*array*);

+$ @ + &

void **_XlcCopyFromArg**(**src*, **dst*, *size*);

void **_XlcCopyToArg**(**src*, ***dst*, *size*);

+$ _XtCopyFromArg , _XtCopyToArg.

void **_XlcCountVaList**(*var*, **count_ret*);

+$ _XtCountVaList.

void **_XlcVaToArgList**(*var*, *count*, **args_ret*);

+$ _XtVaToArgList.

```
typedef struct _XlcResource {
      char *name;
      XrmQuark xrm_name;
      int size;
      int offset;
      unsigned long mask;
} XlcResource, *XlcResourceList;


#define    XlcCreateMask   (1L<<0)
#define    XlcDefaultMask  (1L<<1)
#define    XlcGetMask      (1L<<2)
#define    XlcSetMask      (1L<<3)
#define    XlcIgnoreMask   (1L<<4)
```

void **_XlcCompileResourceList**(*resources*, *num_resources*);

+$ _XtCompileResourceList.

char * **_XlcGetValues**(*base*, *resources*, *num_resources*, *args*, *num_args*, *mask*);

+$ B /$ &

char * **_XlcSetValues**(*base*, *resources*, *num_resources*, *args*, *num_args*, *mask*);

+ $ /$ &

$ %

-$$.' @ 6 9 + $: - @ / + &

int **_Xmblen**(*str, len*);

_Xmblen - + - , 4 4& $
4 4 4 4 , , + ' ,& 4 4 +
- + /$, , $ $ &

$$ _Xmblen P /$ I + . 3I + . 33 5@?AA" " 55

int **_Xmbtowc**(*wstr, str, len*);

_Xmbtowc - / 3 5 , 4 4 .,
3 5 , 4 4& 4 4 + -
4 4 / ,& /$ + - / ,&

$$ _Xmbtowc P /$ I $ + . 33 A ,5@?AA" " " 5

int **_Xlcmbtowc**(*lcd, wstr, str, len*);

_Xlcmbtowc - , $ _Xmbtowc, 1 P
4 4 '+ & - 4 4 3 A ,5 @?AA" _Xlcmbtowc, $$ _XlcCurrentLC
, + $ $ &

int **_Xwctomb**(*str, wc*);

_Xwctomb - / '$., , 4 4
+ $, 4 4& " /$!&

$$ _Xwctomb P /$ I $. + 33 A ,5@?AA" " 5

int **_Xlcwctomb**(*lcd, str, wc*);

_Xlcwctomb - , $ I . + " 1 P 4 4
'+ & - 4 4 3 A ,5 @?AA" _Xlcwctomb, $$ _XlcCurrentLC ,
+ $ $ &

int **_Xmbstowcs**(*wstr, str, len*);

_Xmbstowcs - / @?AA + , ' , 4 4
., ' , 4 4& 4 4 +
- 4 4 / ,&

$$ _Xmbstowcs P /$ I $ + . 33 A ,5@?AA" " " 5

int **_Xlcmbstowcs**(*lcd, wstr, str, len*);

_Xlcmbstowcs - , $ I + . " 1 P
4 4 '+ & - 4 4 3 A ,5 @?AA" _Xlcmbstowcs, $$ _XlcCurrentLC
, + $ $ &

```
int  _Xwcstombs( *str,  *wstr,  len);
```

_Xwcstombs - / 3. I 5 @?AA + ,. , ' , 4 4 @?AA + , + $ ' , 4 4&

$$ _Xwcstombs P / $ I $. + 33 A ,5@?AA" " " 5

```
int  _Xlcwcstombs( lcd,  *str,  *wstr,  len);
```

_Xlcwcstombs - , $ I . + " 1 P 4 4 '+ & - 4 4 3 A ,5 @?AA" _Xlcwcstombs, $$ _XlcCurrentLC , + $ $ &

```
int  _Xwcslen( *wstr);
```

_Xwcslen - -. , 3. I 5 @?AA + ,. , ' , 4 4&

```
wchar_t * _Xwcscpy( *wstr1,  *wstr2);

wchar_t *  _Xwcsncpy( *wstr1,  *wstr2,  len);
```

_Xwcscpy - 3. I 5 @?AA + , . , ' , 4 4 7 , 4 4& 4 4 3. I 5 @?AA + ,& / $ 4 4&

_Xwcsncpy - , $ _Xwcscpy, 1 4 4 . , - + 7 , 4 4 7 , 4 4&

```
int  _Xwcscmp( *wstr2);

int  _Xwcsncmp( *wstr2,  len);
```

_Xwcscmp - + . 3. I 5 @?AA + , . , '& / $, ' $ " P $ " ' C " , , ' . 4 4 $ 1 ' $ $ " P $ " ' 4 4&

_Xwcsncmp - , $ _XlcCompareISOLatin1, 1 + 4 4 . , + ,&