Compound Text Encoding

X Consortium Standard

Robert W. Scheifler, X Consortium

X Version 11, Release 7.7

Version 1.1

Copyright © 1989 X Consortium

!

" #

$

"%& '(")*+& , +'-,.&. /* , 0),"%'1")*++*2"3 '(*23
4,2. &5 +& '+ ,6 7,&. ,2871.,29 :1" 2'" 7,6,"&. "' "%&
)*++*2",& '(6&+8%*2"*:,7,"3 (,"2& ('+ * *+",817*+
1+ ' & *2. 2'2,2(+,29&6&2'$,2 2' &-&2" %*77 "%& 5
8'2 '+",16 :& 7,*:7& ('+ *23 87*,6 .*6*9& '+ '"%&+ 7,*:,7,
"3)%&"%&+ ,2 *2 *8",'2 '(8'2"+*8" '"+" '+ '"%&+), &
+, ,29 (+'6 '1" '('+ ,2 8'22&8",'2),"% "%& '(")+& '+
"%& 1 & '+ '"%&+ .&*7,29 ,2 "%& '(")*+&$

&; 5 8

#

< 5 8 $

5) = " ' 9 $

Table of Contents

'# # $$$$

Overview

8 ";
; $ " , '
$ 8 "; ; !

,8886 @ $ $
,8886 @ $ $ 5 5 , $

8 "; ;
$, ; A
8 ";
8 ";
; $

Values

" 8'6 '12.B"&5" $) ; #
,8886
8'6 '12.B"&5" $

' #
$ " # C >D E $ (; F? F> #
GG$

(# !

8F	FF FF	F> >H
97	F? FF	FI >H
8>	FJ FF	FK >H
9+	>F FF	>H >H

8F 8> 97 9+
$ ' 8F 8>
97 9+ 97 9+
@ $ * FF FF >H >H
; ; $

L(, ' ?F?? J #
9F 97 9> 9+$M

Control Characters

, 8F # !

FF FK	%"	%'+,N'2"*7 "*:17*",'2
FF >F	27	2&) 7,2&
F> >>	& 8	& 8* &

, 8> # !

FK >>	8 ,	8'2"+'7 &O1&28& ,2"+'.18&+

L" I 8 , F> >> FH >> 8 "; $M

2 A 8 "; 8F 8>
$

* < FF FK$
8 "; ;
$

L, < "+,29
,8886$M

* FF >F$

L2 FF >F 7,2&(&&. 2&)7,2&$ "
2&) 7,2& &$>$G , ' DP?K$
1 # FJ FH 2&7 2&5" 7,2&
"+,29 ,8886$M

" 8F 8> # F> >> FK >>
A $

Standard Character Set Encodings

" 97 9+ 8 "; #
, ' JJHK > 7 > $ * "+,29
,8886 8'6 '12.B"&5"$

L" , ' ?F?? A ! F> >> F? FF
FP FG 9' 9> J # $. # = $ F> >> F? FF
FP FI , J # 8> J $ F> >> F? FF FP FK 9
KP KD$ F> >> F? FF FP >> J $ F> >> F? FJ
FP F? . * 8,, 9F$ F> >> F? >G FP F> . , '
7 > 9>$ M

" # 97
A !

F> >> F? FJ Q,R (KP
F> >> F? FP F? FJQ,R (KP^2

" # 9+
A !

F> >> F? FK Q,R (KP
F> >> F? >G Q,R (KD
F> >> F? FP F? FK Q,R (KP^2

" (A # (
FP FF FI >P$ " Q,R <
F? FF F? >H
F? F> F? FG$ "
Q,R (A $

L(# FG FF FG >H
8 "; $M

(97 F? FF *8& FI >H .&7&"&
$ (KP 9+ >F FF >H >H
$

L" , ' ?F??$M

* KP [2] 2 2 S > $ " # 2
# # (!

FP FH ?
FD G
FI P

, KP [2] # F? FF FI >H 97 >F FF >H >H
9+ # $

L" , ' ?F??$M

' 97 9+ ;
A ;
97 9+ $ 97 9+
$

2 9+
FJ FF
>F FF >H >H$

L8 A # DG>G
, ' ?F?? 8 "; $ + #
; 8 "; $ "
$M

Approved Standard Encodings

" # 8 "; $
2 # , @ #
, #
$

P F? KP I * 8,, *2 , 5G$P >KDJ 7 , ' JJHK
FP FK KP + T, 5F?F> >KID >KJP J : *
4 = 8
FP >F KP 7 T, 5F?F> >KID >KJP J : *
4 = 8
FP F> KD + , ' JJHK > 7 2 $ >
FP F? KD + , ' JJHK ? 7 2 $?
FP FG KD + , ' JJHK G 7 2 $ G
FP FP KD + , ' JJHK P 7 2 $ P

FP FD	KD	+	, ' JJHK I 7 9 =
FP FI	KD	+	, ' JJHK D 7 *
FP FJ	KD	+	, ' JJHK J 7 %
FP >?	KD	+	, ' JJHK H 7 8
FP >G	KD	+	, ' JJHK K 7 2 $ H
FP F>	KP?	9:?G>? >KJF 8	+8 % <
FP F?	KP?	T, 5F?FJ >KJG T	9 8
FP FG	KP?	4 8HDF> >KJI 4	9 8

" 7 $$$ 97$ "
+ $$$ 9+$ '
97 9+$

Non-Standard Character Set Encodings

8 #
; $ * ;
A !

F> >> ? FH F? >H FG FF 6 #
7

F> >> ? FH F? >H FG F> 6 >
7

F> >> ? FH F? >H FG F? 6 ?
7

F> >> ? FH F? >H FG FG 6 G
7

F> >> ? FH F? >H FG FP 6 P
7

L" , ' ?F?? # ($M

" 6 7 >P # #
$ " 6
>?J C >?J E 7 >?J $ " 6 7 $
"

; $ "
; FF F? "5 "*+" '("&5" $ 2
6 7 $

L" # # < 8 ";
217 # 8
$ " < #
; ; # < $M

" 5 8 #
8 + &
5 7 (. $ "

, ' JJHK > 7 > A = FG >H =
F? >F F? >G 5 7 (
. $

&;
97 9+ # $ (;
; , ' JJHK $

, ; @ ;
8F 8> FF FF
$

L, ' 8 "; @ ;
?F?? $M

Directionality

, < ;
A !

FK >> FG F> FH >G ;
FK >> FG F? FH >G ;
FK >> FH >G

L" . "*+" .,+&8"&. "+,29 . :
* , ' DP?K$M

. $ 7 = $ &
A =
A # =$ " =
8 "; $) =
; $

. A ; 97 9+ ;
$, 97 9+ ;
A $

2 97 9+ @
97 9+
97 9+ $

@ ;
; $ % #
8 "; # ; #
$ " A
A 8 ";
=
$

Resources

" 8 ";
* 8,, 7 > U FH >? UU

FF >F U <
UFFF $, =
8 "; @
8 "; $

Font Names

" 8
5 7 (. !

, 'JJHK >	, 'JJHK >	7 2 $ >
, 'JJHK ?	, 'JJHK ?	7 2 $?
, 'JJHK G	, 'JJHK G	7 2 $ G
, 'JJHK P	, 'JJHK P	7 2 $ P
, 'JJHK H	, ' JJHK H	7 8
, 'JJHK D	, ' JJHK D	7 *
, 'JJHK I	, 'JJHK I	7 9 =
, 'JJHK J	, 'JJHK J	7 %
, 'JJHK K	, 'JJHK K	7 2 $ H
T, 5F?F>$>KID F	T, 5F?F> >KID >KJP	J * 4 = 8
9:?G>?$>KJF F	9:?G>? >KJF 97	8 +8 % <
T, 5F?FJ$>KJG F	T, 5F?FJ >KJG 97	T 9 8
4 8HDF>$>KJI F	4 8HDF> >KJI 97	4 9 8

Extensions

" A
; $ % # 8
"; ;
?F?? DP?K ; $

" # A ;
; !

F> >> Q,R (

(, F? FF F? >H (
FG FF FI >P$

FK >> Q R Q,R (

(FG FF FG >H ,
F? FF F? >H (FP FF FI >P$

, 8F 8>
$

(= ;
; !

F> >> F? FH F? >H (6 7

((FG FH G >H$ 6 7 ;
$
6 7$ " # #
; $

, ;
;
A !

F> >> F? FG - FG FF ; '4
F> >> F? FG - FG F> ; '4

, - F? FF F? >H #
$ " # A
# # $
" A ;
A @ $ "
A ;
A @ $,
8 "; A
$

Errors

, 8 "; $ $
A
; # ;
A $