

Registration of a Cyrillic Character Set

Status of this Memo

This memo provides information for the Internet community. It does not specify an Internet standard. Distribution of this memo is unlimited.

Introduction

Though the proposed character set "koi8-r" is not currently an international standard, there is very large user community (including Relcom Net) supporting it. Factually, "koi8-r" is de-facto standard for Unix and global network applications in the former Soviet Union. This is the reason the Society of Unix User Groups (SUUG) believes "koi8-r" should be registered.

MIME character set name: koi8-r

Published specification: This standard is unpublished, but based on several published standards: GOST 19768-74 (old-koi8), ISO 6937/8 (not registered) and variations: INIS-cyrillic, ISO 5427.

C language coding table from koi8-r to Unicode (ISO 10646) for the upper half of the code table (the lower half of the table is fully coinciding with ASCII character set)

```
unsigned short koi82unicode[128] = {
    0x2500,0x2502,0x250c,0x2510,0x2514,0x2518,0x251c,0x2524,
    0x252c,0x2534,0x253c,0x2580,0x2584,0x2588,0x258c,0x2590,
    0x2591,0x2592,0x2593,0x2320,0x25a0,0x2219,0x221a,0x2248,
    0x2264,0x2265,0x00a0,0x2321,0x00b0,0x00b2,0x00b7,0x00f7,
    0x2550,0x2551,0x2552,0x0451,0x2553,0x2554,0x2555,0x2556,
    0x2557,0x2558,0x2559,0x255a,0x255b,0x255c,0x255d,0x255e,
    0x255f,0x2560,0x2561,0x0401,0x2562,0x2563,0x2564,0x2565,
    0x2566,0x2567,0x2568,0x2569,0x256a,0x256b,0x256c,0x00a9,
    0x044e,0x0430,0x0431,0x0446,0x0434,0x0435,0x0444,0x0433,
    0x0445,0x0438,0x0439,0x043a,0x043b,0x043c,0x043d,0x043e,
    0x043f,0x044f,0x0440,0x0441,0x0442,0x0443,0x0436,0x0432,
    0x044c,0x044b,0x0437,0x0448,0x044d,0x0449,0x0447,0x044a,
    0x042e,0x0410,0x0411,0x0426,0x0414,0x0415,0x0424,0x0413,
    0x0425,0x0418,0x0419,0x041a,0x041b,0x041c,0x041d,0x041e,
    0x041f,0x042f,0x0420,0x0421,0x0422,0x0423,0x0416,0x0412,
```

```
    0x042c,0x042b,0x0417,0x0428,0x042d,0x0429,0x0427,0x042a  
};
```

The description of all characters from the upper half of the table
in compliance with ISO 10646 (Unicode)

<hex-code> <description>

```
80 FORMS LIGHT HORIZONTAL  
81 FORMS LIGHT VERTICAL  
82 FORMS LIGHT DOWN AND RIGHT  
83 FORMS LIGHT DOWN AND LEFT  
84 FORMS LIGHT UP AND RIGHT  
85 FORMS LIGHT UP AND LEFT  
86 FORMS LIGHT VERTICAL AND RIGHT  
87 FORMS LIGHT VERTICAL AND LEFT  
88 FORMS LIGHT DOWN AND HORIZONTAL  
89 FORMS LIGHT UP AND HORIZONTAL  
8A FORMS LIGHT VERTICAL AND HORIZONTAL  
8B UPPER HALF BLOCK  
8C LOWER HALF BLOCK  
8D FULL BLOCK  
8E LEFT HALF BLOCK  
8F RIGHT HALF BLOCK  
90 LIGHT SHADE  
91 MEDIUM SHADE  
92 DARK SHADE  
93 TOP HALF INTEGRAL  
94 BLACK SMALL SQUARE  
95 BULLET OPERATOR  
96 SQUARE ROOT  
97 ALMOST EQUAL TO  
98 LESS THAN OR EQUAL TO  
99 GREATER THAN OR EQUAL TO  
9A NON-BREAKING SPACE  
9B BOTTOM HALF INTEGRAL  
9C DEGREE SIGN  
9D SUPERSCRIPIT DIGIT TWO  
9E MIDDLE DOT  
9F DIVISION SIGN  
A0 FORMS DOUBLE HORIZONTAL  
A1 FORMS DOUBLE VERTICAL  
A2 FORMS DOWN SINGLE AND RIGHT DOUBLE  
A3 CYRILLIC SMALL LETTER IO  
A4 FORMS DOWN DOUBLE AND RIGHT SINGLE  
A5 FORMS DOUBLE DOWN AND RIGHT
```

A6 FORMS DOWN SINGLE AND LEFT DOUBLE
A7 FORMS DOWN DOUBLE AND LEFT SINGLE
A8 FORMS DOUBLE DOWN AND LEFT
A9 FORMS UP SINGLE AND RIGHT DOUBLE
AA FORMS UP DOUBLE AND RIGHT SINGLE
AB FORMS DOUBLE UP AND RIGHT
AC FORMS UP SINGLE AND LEFT DOUBLE
AD FORMS UP DOUBLE AND LEFT SINGLE
AE FORMS DOUBLE UP AND LEFT
AF FORMS VERTICAL SINGLE AND RIGHT DOUBLE
B0 FORMS VERTICAL DOUBLE AND RIGHT SINGLE
B1 FORMS DOUBLE VERTICAL AND RIGHT
B2 FORMS VERTICAL SINGLE AND LEFT DOUBLE
B3 CYRILLIC CAPITAL LETTER IO
B4 FORMS VERTICAL DOUBLE AND LEFT SINGLE
B5 FORMS DOUBLE VERTICAL AND LEFT
B6 FORMS DOWN SINGLE AND HORIZONTAL DOUBLE
B7 FORMS DOWN DOUBLE AND HORIZONTAL SINGLE
B8 FORMS DOUBLE DOWN AND HORIZONTAL
B9 FORMS UP SINGLE AND HORIZONTAL DOUBLE
BA FORMS UP DOUBLE AND HORIZONTAL SINGLE
BB FORMS DOUBLE UP AND HORIZONTAL
BC FORMS VERTICAL SINGLE AND HORIZONTAL DOUBLE
BD FORMS VERTICAL DOUBLE AND HORIZONTAL SINGLE
BE FORMS DOUBLE VERTICAL AND HORIZONTAL
BF COPYRIGHT SIGN
C0 CYRILLIC SMALL LETTER IU
C1 CYRILLIC SMALL LETTER A
C2 CYRILLIC SMALL LETTER BE
C3 CYRILLIC SMALL LETTER TSE
C4 CYRILLIC SMALL LETTER DE
C5 CYRILLIC SMALL LETTER IE
C6 CYRILLIC SMALL LETTER EF
C7 CYRILLIC SMALL LETTER GE
C8 CYRILLIC SMALL LETTER KHA
C9 CYRILLIC SMALL LETTER II
CA CYRILLIC SMALL LETTER SHORT II
CB CYRILLIC SMALL LETTER KA
CC CYRILLIC SMALL LETTER EL
CD CYRILLIC SMALL LETTER EM
CE CYRILLIC SMALL LETTER EN
CF CYRILLIC SMALL LETTER O
D0 CYRILLIC SMALL LETTER PE
D1 CYRILLIC SMALL LETTER IA
D2 CYRILLIC SMALL LETTER ER
D3 CYRILLIC SMALL LETTER ES
D4 CYRILLIC SMALL LETTER TE
D5 CYRILLIC SMALL LETTER U

D6 CYRILLIC SMALL LETTER ZHE
D7 CYRILLIC SMALL LETTER VE
D8 CYRILLIC SMALL LETTER SOFT SIGN
D9 CYRILLIC SMALL LETTER YERI
DA CYRILLIC SMALL LETTER ZE
DB CYRILLIC SMALL LETTER SHA
DC CYRILLIC SMALL LETTER REVERSED E
DD CYRILLIC SMALL LETTER SHCHA
DE CYRILLIC SMALL LETTER CHE
DF CYRILLIC SMALL LETTER HARD SIGN
E0 CYRILLIC CAPITAL LETTER IU
E1 CYRILLIC CAPITAL LETTER A
E2 CYRILLIC CAPITAL LETTER BE
E3 CYRILLIC CAPITAL LETTER TSE
E4 CYRILLIC CAPITAL LETTER DE
E5 CYRILLIC CAPITAL LETTER IE
E6 CYRILLIC CAPITAL LETTER EF
E7 CYRILLIC CAPITAL LETTER GE
E8 CYRILLIC CAPITAL LETTER KHA
E9 CYRILLIC CAPITAL LETTER II
EA CYRILLIC CAPITAL LETTER SHORT II
EB CYRILLIC CAPITAL LETTER KA
EC CYRILLIC CAPITAL LETTER EL
ED CYRILLIC CAPITAL LETTER EM
EE CYRILLIC CAPITAL LETTER EN
EF CYRILLIC CAPITAL LETTER O
F0 CYRILLIC CAPITAL LETTER PE
F1 CYRILLIC CAPITAL LETTER IA
F2 CYRILLIC CAPITAL LETTER ER
F3 CYRILLIC CAPITAL LETTER ES
F4 CYRILLIC CAPITAL LETTER TE
F5 CYRILLIC CAPITAL LETTER U
F6 CYRILLIC CAPITAL LETTER ZHE
F7 CYRILLIC CAPITAL LETTER VE
F8 CYRILLIC CAPITAL LETTER SOFT SIGN
F9 CYRILLIC CAPITAL LETTER YERI
FA CYRILLIC CAPITAL LETTER ZE
FB CYRILLIC CAPITAL LETTER SHA
FC CYRILLIC CAPITAL LETTER REVERSED E
FD CYRILLIC CAPITAL LETTER SHCHA
FE CYRILLIC CAPITAL LETTER CHE
FF CYRILLIC CAPITAL LETTER HARD SIGN

Security Considerations

Security issues are not discussed in this memo.

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