

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Published specification: This standard is unpublished, but based on several published standards: GOST 19768-74 (old-koi8), ISO 6937/8 (not registered) and variations: INIS-cyrillic, ISO 5427.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

Author's Address

Andrew A. Chernov
RELCOM Development Team
Moscow, Russia

EMail: ache@astral.msk.su
FIDOnet: 2:5020/23.34