D'ni: U+E830 - E88F

Draft 2013-10-27

The D'ni script was created by programmer Richard A. Watson for the Myst series of videogames and novels by Cyan Worlds, Inc. (now Cyan, Inc.) and is used to write the artificial language D'ni.

D'ni should be treated as a Category D (Attested Extinct) alphabet: there is a relatively limited corpus, and a relatively small (but existent) scholarly body studying it. In order to provide a standard D'ni character coding for such scholars and enthusiasts, it has been suggested that this character set be included into the ConScript Unicode Registry. 6 columns should be reserved to encode D'ni. Character names derive from the most commonly used romanization (OTS, Old Transliteration Standard).

General Principles of the D'ni script

The D'ni alphabet is comprised of 24 consonants and 11 vowels, plus numerals for a base-25 numeral system, punctuation and 6 symbols for colors. There are 25 basic signs (included DNI APOSTROPHE, which is actually a glottal stop), 11 of which are modified by the addition of a DNI APOSTROPHE.

D'ni is written from left-to-right. D'ni numerals are written from right-to-left (the least significant digit is on the left).

No positional variants of the letters exist and no composition is required. The script is based on calligraphic handwriting, however every letter begins and end at the same height, therefore no ligatures are needed, although no kerning should be applied between glyphs.

Two alternative letters are included in the script for completedness, as these are generally considered improper shapes, but nontheless occasionally used.

Numeral system

D'ni language uses a base-25 system, subdivided in two sets of 5 glyphs each. There are unique glyphs for numerals ZERO, ONE, TWO, THREE and FOUR; glyphs for FIVE, TEN, FIFTEEN and TWENTY are respectively ONE, TWO, THREE and FOUR rotated 90 degrees anticlockwise. The remaining glyphs – all of which to be encoded separately, up to TWENTYFOUR – are superpositions of these sets, e.g. seventeen is the combination of FIFTEEN + TWO. There are also stand-alone glyphs for TWENTYFIVE, ZERO, and CYCLIC ZERO (a numeral used in cyclic countings, it is both zero and the maximum value, e.g. the equivalent of 0/24 in clocks or 0/360 in degrees).

Punctuation

D'ni punctuation characters are considered to be unique to the script and are coded in the D'ni block: DNI APOSTROPHE, DNI FULL STOP and DNI HYPHEN; no other punctuation is known. D'ni fonts provide an appropriately-sized space character.

In D'ni usage, DNI FULL STOP is placed at the beginning of the sentence instead of the end.

Fonts availability

Mainly two fonts are in use: *Dnifont,* from Cyan itself, and *D'ni Script,* made by Colin Arenz and Sebastian Ochs; these two fonts have a slightly different encoding for numerals and symbols. *D'ni Script* is also available in the *LM* version, which is mapped to the equivalent characters in the NTS romanization (New Transliteration Standard) and therefore has a radically different encoding from the other two fonts.

A dingbat font with about 93 symbols is available, but these are Category E (Minor): the utility of encoding them is open to question.

Sources

Summaries of the alphabet

http://www.omniglot.com/conscripts/dni.htm

http://dni.wikia.com/wiki/D%27ni_Alphabet

Fonts sets

http://www.mystcommunity.com/storage/Dnifont/Dn_____.TTF

http://linguists.riedl.org/old/sebastian/index.htm

http://www.mediafire.com/?

sharekey=99e6cc74f9b647ecab1eab3e9fa335caf64de741b23b30a4

Dictionary of the language

http://www.eldalamberon.com/dni_dict.htm

Encoding Structure

The D'ni block is divided into the following ranges:

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U+E830 -> E852 Letters
U+E857 -> E859 Punctuation
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U+E860 -> E879 Numerals

U+E87C -> E87D Additional numerals U+E880 -> E885 Symbols for colors U+E888 -> E889 Additional letters

Letters

U+E830 DNI LETTER V U+E831 DNI LETTER B

U+E832	DNI	LETTER	Т
U+E833	DNI	LETTER	S
U+E834	DNI	LETTER	SH
U+E835	DNI	LETTER	J

U+E836 DNI LETTER G U+E837 DNI LETTER Y U+E838 DNI LETTER K U+E839 DNI LETTER KH

U+E83A DNI LETTER AH U+E83B DNI LETTER I

U+E83C DNI LETTER F U+E83D DNI LETTER P U+E83E DNI LETTER IH U+E83F DNI LETTER EE

U+E840 DNI LETTER EH U+E841 DNI LETTER AY U+E842 DNI LETTER R

U+E843 DNI LETTER M U+E844 DNI LETTER TH

U+E845 DNI LETTER DH U+E846 DNI LETTER D U+E847 DNI LETTER H

U+E848 DNI LETTER O U+E849 DNI LETTER OY

U+E84A DNI LETTER CH U+E84B DNI LETTER W U+E84C DNI LETTER U

U+E84D DNI LETTER OO U+E84E DNI LETTER TS

U+E84F DNI LETTER L U+E850 DNI LETTER A U+E851 DNI LETTER Z U+E852 DNI LETTER N

Punctuation

U+E857 DNI APOSTROPHE U+E858 DNI FULL STOP U+E859 DNI HYPHEN

Numerals

Numer ar.	•		
U+E860	DNI	NUMBER	ZERO
U+E861	DNI	NUMBER	ONE
U+E862	DNI	NUMBER	TWO
U+E863	DNI	NUMBER	THREE
U+E864	DNI	NUMBER	FOUR
U+E865	DNI	NUMBER	FIVE
U+E866	DNI	NUMBER	SIX
U+E867	DNI	NUMBER	SEVEN
U+E868	DNI	NUMBER	EIGHT
U+E869	DNI	NUMBER	NINE
U+E86A	DNI	NUMBER	TEN
U+E86B	DNI	NUMBER	ELEVEN
U+E86C	DNI	NUMBER	TWELVE
U+E86D	DNI	NUMBER	THIRTEEN
U+E86E	DNI	NUMBER	FOURTEEN
U+E86F	DNI	NUMBER	FIFTEEN
U+E870	DNI	NUMBER	SIXTEEN
U+E871	DNI	NUMBER	SEVENTEEN
U+E872	DNI	NUMBER	EIGHTEEN
U+E873	DNI	NUMBER	NINETEEN
U+E874	DNI	NUMBER	TWENTY
U+E875	DNI	NUMBER	TWENTYONE
U+E876	DNI	NUMBER	TWENTYTWO
U+E877	DNI	NUMBER	TWENTYTHREE
U+E878	DNI	NUMBER	TWENTYFOUR
U+E879	DNI	NUMBER	TWENTYFIVE

Additional numerals

U+E87C DNI NUMBER CYCLIC ZERO U+E87D DNI SYMBOL INFINITY

Symbols for colors

U+E880 DNI SYMBOL RED
U+E881 DNI SYMBOL ORANGE
U+E882 DNI SYMBOL YELLOW
U+E883 DNI SYMBOL GREEN
U+E884 DNI SYMBOL BLUE
U+E885 DNI SYMBOL VIOLET

Additional letters

U+E888 DNI LETTER ALTERNATIVE L U+E889 DNI LETTER ALTERNATIVE Z

	E83	E84	E85	E86	E87	E88
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4	Ų	z		П	旦	0
5	\mathcal{D}	K		日	田	Θ
6	\mathcal{D}	ĸ		田	田	
7	1)	١	Ш	H	
8	4	9	1	\square	匣	1
9	1	Ŋ	١	田	\boxtimes	B
Α	2	9		П		
В	2	υ		\exists		
С	3	6		\square	\square	
D	32	ß		M	罴	
Е	\mathcal{D}	٦		口		
F	\mathcal{E}	V		\square		