

Transliteration Map
DEVNAC font
(Hindi, Marathi, Sanskrit)

itrans
©1991–1998 Avinash Chopde

1 Fonts Available

1.1 T_EX Interface

The devanagari font is called *devnac*, and its PostScript description resides in the file *devnac.ps*. It is a user-defined type III PostScript font. Four fonts, variations on the basic devnac font, are bundled with the itrans package. Their names (in the T_EX interface) are *dnh*, *dnho*, *dnhrc*, and *dnhre*.

dnh This is the basic devanagari font. There are some other fonts available, derived by transforming this font.

dnho This is the slanted version of *dnh*.

dnhrc Both *dnho* and *dnh* look extremely heavy. A scaled down, compressed version (along the x-axis) of the basic font is available as *dnhrc*.

dnhre This is heavier than *dnh*, to be used as a bold version.

Since these are PostScript fonts, you can use them at any font size in your document. In fact, the font size must be specified when loading in the font. In this document (and in *idoc.itx*), the following line was used for loading the font:

```
\newfont{\devnfn}{dnh at 15pt}.
```

Even though this document has been typeset using a 11 point size, the devanagari font is loaded in at 15 point size. This is just to emphasize the devanagari characters. Normally, I would suggest loading in the font at 15-20% greater size than the other text in the document. So, if your document is being typeset at 11 point, load in the devanagari fonts using a 13 point size. Of course, this relation of size is important only if you wish to mix english and devanagari in the same document. In any case, go wild, experiment with various font sizes. Since the characters are described as outlines in bezier curve form, smaller point sizes do not look too good on a 300dpi output device, the larger the font size, the better the shapes look.

1.2 L^AT_EX Interface

In ITRANS version 5.2, apart from the addition of a new style file named *itrans.sty*, a font definition file for Devnac was also added. The file is named *Udvnc.fd*, and it can be used to load this font using L^AT_EX2e commands where the font encoding is U (unknown) and the font family is *dvnc*. Thus, the following can be used to load the medium series with normal shape:

```
\usefont{U}{dvnc}{m}{n} and then to select a size and baselineskip: \fontsize{18pt}{24pt}\selectfont
```

The above will load the **dnh** version of this font.

⁰Last modification: December 3, 2009

`\usefont{U}{dvnc}{b}{sl}` will load the `dnho` version, and
`\usefont{U}{dvnc}{c}{n}` will load the `dnhrc` version, and
`\usefont{U}{dvnc}{bx}{n}` will load the `dnhre` version.

1.3 Textual Interface - PostScript

A direct PostScript interface is supported. HTML and Unicode (UTF-8) are not supported for this font.

This interface does not offer any wordprocessing capabilities other than that of checking when a page is complete, and then resetting the current point to the top of the next page. Thus, all spaces, lines, etc from the input text appear in the output too.

For the PostScript mode, the user may also directly invoke PostScript commands to create various versions of the font, as required. Refer to PostScript language manuals for specific help regarding the PostScript font manipulation commands. If you decide to go this route, take a look at the file *itrans.pro*, it is the prologue that gets sent to the printer. It contains definitions of various commands such as *normalfont*, *slantfont*, *compressedfont*, etc, which may be used to change the font being used. These PostScript functions take a single argument: the font size to use. All this and more information can be obtained from the prologue file, *itrans.pro*, and PostScript users should take a look at it. For example usage, look through the sample input files provided. Files ending in *.ips* are the direct PostScript input files, *itrans* (with the `-P` option) directly produces PostScript output for these files.

The file *devnac.ps* contains the PostScript language program for this devanagari font.

1.4 Sanskrit, Hindi and Marathi

The single IFM file *dvnc.ifm* can be used for Sanskrit, Hindi or Marathi output.

The marathi form of ra-half is available through the `R` character, the second LA is at `L` (or `ld`), etc. The table displays the complete mapping from English to Devanagari for all the three Indic Scripts.

1.5 Text Interface - Unicode (UTF-8) for Sanskrit, Hindi, and Marathi

IFM file to use is named *udvng.ifm*.

Unicode (UTF-8) output is supported for this the Devanagari script, but no Unicode fonts are included with the ITRANS package. There are many Unicode fonts available on the Web, and more are being developed so it should be easy to locate a Unicode font when needed. Not all Unicode fonts fully support Indian Languages yet.

2 Known Problems

In the \TeX interface, characters with any non-zero Y offset are not correctly printed in some cases, when the PostScript font Devnac is used. I have only seen this happen for the **द** consonant, in cases such as the da-u consonant-vowel, or the da-ra ligature, words such as *draaviiDa* (द्रावीड) or *dukaanaat* दुकानात. Note that it is only in certain cases that the word is printed incorrectly, in most cases it is handled correctly. Usually, when the word appears near the end of the line, \TeX (or dvips, I'm inclined to think it is dvips) inserts a negative kern just before the character with a non-zero Y offset, and the word appears squashed up at that point. Have no remedy for this, only workaround is to force a line break before the problem word, it usually sets everything right.

I have never encountered this problem when using Frans Velthuis's Devnag font with the itrans package, therefore this problem is probably related to the use of PostScript fonts in T_EX.

3 Author and Font Developer

The Devnac font has been developed by Avinash Chopde.

E-mail: avinash@aczoom.com.

Home page: <http://www.aczoom.com/>

Vowels		Consonants		Specials/Accents	
अ	a	क	ka	क्र	qa
आ	aa or A	ख	kha	ख़	Ka
इ	i	ग	ga	ग़	Ga
ई	ii or I	घ	gha	ज़	Ja or za
उ	u	ङ	~Na or N^a	फ़	fa
ऊ	uu or U	च	cha	ड़	.Da
ऋ	RRi or R^i	छ	chha	ढ़	.Dha
ए	e	ज	ja	ऊँ	AUM or OM
ऐ	ai	झ	jha	ऋ	Rga
ओ	o	ञ	~na or JNa	र्ग	rga or ga^r
औ	au	ट	Ta	गं	ga.n
अं	aM	ठ	Tha	ऑ	aa.c
अः	aH	ड	Da	डँ	Da.N
		ढ	Dha	ड्ह	D.h
		ण	Na	दुः	duH
		त	ta	ऽ	.a
		थ	tha		
		द	da		
		ध	dha		
		न	na		
		प	pa		
		फ	pha		
		ब	ba		
		भ	bha		
		म	ma		
		य	ya		
		र	ra		
		ल	la		
		व	va or wa		
		श	sha		
		ष	Sha or shha		
		स	sa		
		ह	ha		
		ळ	lda or La		
		क्ष	kSha or xa		
		ज्ञ	j~na or GYa		

Table 1: ITRANS: Devanagari to English Transliteration Table.

Sample Letters

क का कि की कु कू	ka kaa ki kii ku kuu
स् स सा सि सी सु सू	s.h sa saa si sii su suu
ख खे खै खं खः खँ खैं	khRRi khe khai khaM khaH kha.c kha.N
डे डै डं डः डँ डैं	De Dai DaM DaH Da.c Da.N

Sample Words

भाग्य	bhaagya	कस्तुरी	kasturii
राज्य	raajya	नास्तिक	naastik
विद्या	vidyaa	प्राप्त	praapt
शिष्य	shishhya	स्वतंत्र	swata.ntr
मुख्य	mukhya	स्वातंत्र्य	svaata.ntrya
गाढा	gaaDyaa	ध्वनी	dhvanii
त्याग	tyaag	गोष्ट	goshhT
ध्यान	dhyaan	युद्ध	yud.hdh
न्याय	nyaay	युद्ध	yuddh
श्याम	shyaam	पश्चिम	pashchim
ज्योत	jyot	फक्त	phakt
मनुष्य	manushhy	तर्हा	tarhaa
चांदण्या	chaa.ndaNyaa	अर्थ	arth
अभ्यास	abhyaas	कर्ता	kartaa
कल्याण	kalyaaN	गर्दी	gardii
घड्याळ	ghaDyaald	निर्णय	nirNay
कच्चा	kachchaa	पत्र	patr
खड्डा	khaD.hDaa	त्रिकोण	trikoN
गढ़ा	gaTh.hThaa	श्रावण	shraavaN
धक्का	dhakkaa	आश्रम	aashram
पत्ता	pattaa	शुश्रूषा	shushruushhaa
तिप्पत	tippat	ग्रंथ	gra.nth
पन्नास	pannaas	प्रजा	prajaa
सज्जन	sajjan	द्राक्षे	draakShe
पुस्तक	pustak	गृहस्थ	gRRihasth
		प्रकृती	prakR^itii

Table 2: Examples

नैर्ऋत्य	nairR`itya
शुभ्र	shubhr
सहस्र	sahastr
क्रीडा	kriiDaa
स्वच्छ	svachchh
स्वरूप	svaruup
ट्रक	Trak
आम्ही	aamhii
चतुर्थी	chaturthii
ऋतू	RRituu
ऑक्तोबर	aa.cktobar
नोव्हेंबर	novhe.nbar
ग्रॅम	gra.cm
ऊँचा	uu.Nchaa
बैलगाडी	bailagaaDii
गुरुद्वारा	gurud.hvaaraa
गुरुद्वारा	gurudvaaraa
निराळ्या	niraaldyaa
ज्ञान	GYaan
मेकॅनिक	meKa.cnik
म्हैस	mhaais
देणार्या	deNaaryaa
प्रतिष्ठा	pratishhThaa
इतिहास	itihaas
आस्थाबद्ध	aasthaabaddh
अंतर्राष्ट्रीय	a.ntarraashhTriiy

Table 3: More Examples