



## Appendix



### Adding Support for Indian Languages

Ubuntu comes with support for several Indian languages, including Gujarati and Hindi. The installation CD, however, contains support only for English. To add support for Gujarati, you need to take the following steps (You should be connected to the Internet).

Select the menu item System → Administration → Language Support.

Select “Install Languages”, Choose Gujarati from the list of languages, and select the “Input methods” and “Extra Fonts” checkboxes.

Click on “Apply Changes”.

After you get the message “Successfully applied all the changes...”, select “ibus” for the keyboard input method system.

Close the window.

Select the menu item System → Preferences → iBus Preferences.

You will get a dialog with the message “iBus daemon not started. Start it now?”. Select “Yes”.

In the notification area in the top panel, you will see an additional icon for iBus.

A dialog box will open for setting iBus preferences (it can also be opened by clicking on the iBus icon and selecting “Preferences”).

Switch to the input method tab, select Gujarati → itrans (m17n) from the list and click “Add”.

Now you can type Gujarati text in any program. Support for Hindi can be added in a similar way.

To change the language while typing in any program, click on the iBus icon and select appropriate language (there are keyboard shortcuts as well). You can mix languages also.

Typing Gujarati using the itrans m17n input method is very intuitive for new users because it is phonetic, i.e. the keystrokes to be pressed follow the usual transliteration schemes between the Gujarati and Roman (English) scripts. In general, typing a simple Gujarati letter involves typing the letter for the consonant followed by the letter for the vowel as per the examples below :

**k** → ક  
**ka** → કા  
**kaa or kA** → કા  
**ki** → કિ  
**kee or kI** → કે  
**ku** → કુ  
**kuu or kU** → કુ  
**ke** → કે  
**kai** → કૈ  
**ko** → કૌ  
**kau** → કૌ  
**kM** → કઃ  
**kH** → કઃ

Table A.1 shows the full key map :

Keyboard Sequence	Character	Keyboard Sequence	Character	Keyboard Sequence	Character	Keyboard Sequence	Character
k	ક	p	પ	a	અ	.h	ઠ
kh	કઃ	ph	કપ	aa	આ	AUM	ઠઠ
g	ગ	b	બ	A	આ	OM	ઠઠ
gh	ગઃ	bh	બઃ	i	ઇ	0	૦
~N	ક	m	મ	i	ઈ	1	૧
N^	ક	y	ય	I	ઈ	2	૨
ch	ચ	r	ર	u	ઉ	3	૩
Ch	ચઃ	l	લ	uu	ઉ	4	૪
chh	ચઃ	ld	લઃ	U	ઉ	5	૫
j	જ	L	લ	RRi	ઝ	6	૬
jh	જઃ	v	વ	R^i	ઝ	7	૭
~n	જ	w	વ	.c	ઝ	8	૮
JN	જ	sh	શ	e.c	ઝ	9	૯
T	ટ	Sh	શઃ	e	ઝ	#	૨
Th	ટઃ	shh	શઃ	ai	ઝ	\$	૨
D	ડ	s	સ	o.c	ઝ	^	૨
Dh	ડઃ	h	હ	o	ઝ	*	૨
N	ઢ	j~n	જ	au	ઝ		
t	ત	GY	જ	RRI	ઝ		
th	તઃ	dny	જ	R^I	ઝ		
d	દ	x	જ	.N	.		
dh	દઃ			.n	.		
n	ન			M	.		
				H	:		
				.a	:		

Table A.1 : Key Map for the itrans (m17n) Keyboard

