

xinput

Version 5.0

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INPUT METHOD SOLUTION FOR INDIAN LANGUAGES

➤ **What is Xinput ?**

Xinput is a standards- based software tool that facilitates inputting content in Indian languages. While enabled, Xinput automatically transliterates the English characters you type to a target Indian Language in the application of focus. Xinput works as a conduit between the keyboard and the target application. It is very flexible in that you can change the target language, the input scheme from GUI provided. It supports the popular ITRANS transliteration scheme and several keyboard layouts such as Inscript , Phonetic , Typewriter and Remington (Typewriter and. Remington are Underdevelopment)

➤ **Features :**

- All Input is based on Unicode Which is natively supported by all latest Unix based Operating Systems
- On- the- fly conversion of ASCII text written in ITRANS (or any supported input scheme) to target encoding.
- Support for multiple keyboard layouts (PHONETIC, INSCRIPT etc.)
- Multi- lingual support.
- Not Application Specific i.e Xinput works at System Level uses X protocol to communicate with windows.

➤ **System Requirements**

- 1) KDE >=3.2.1 or GNOME >=2.8 is recommended
- 2) Qt 3.3.1 or greater is must.
- 3) 2.3 MB Disk Space

if the above conditions are not satisfied by your system then rpm will not get installed on your machine.

➤ **How to Install Xinput on your machine**

- ➔ Login as root
- ➔ run the command
linux# rpm -ivh xinput- 5.0.i386.rpm
that's it. Now you can run xinput by just typing xinput on terminal.

➤ **How to uninstall Xinput from your machine**

- ➔ login as root
- ➔ run the command : linux# rpm -e xinput
it will successfully get uninstalled from your machine.

➤ **Comparisons with existing solutions**

Presently All Linux distribution natively supports inscript keyboard layout for Indian language input . And phonetic support is added by IndLinux group for devanagari known as **Bolnagari**.

Compared to these existing solution xinput is highly flexible and customizable which presently supports INSCRIPT, PHONETIC, and ITRANS input schemes.

There is no support for itrans input today. But xinput is the only solution for itrans. xinput also can support TYPEWRITER and REMINGTON input schemes which is the most popular schemes in Government offices but this work is underdevelopment. These will added in future versions of Xinput.

Complete Table of input method solution

	INSCRIPT	PHONETIC	ITRANS	TYPEWRITER	REMINGTON
Bengali	Y		Y		
Devanagari	Y	Y	Y		
Gujarati	Y		Y		
Gurumukhi	Y		Y		
Kannada	Y		Y		
Malayalam	Y		Y		
Oriya	Y		Y		
Telugu	Y		Y		
Tamil	Y	Y			
Urdu	Y				
Arabic			Y		

Blanks will be added as per demand from the people in future versions.

➤ **Sample Uses of Xinput**

General Usage

Email, both web-based and email applications such as Kmail, Evolution, Hotmail, Yahoo! Mail, rediffmail, gmail Content creation using OpenOffice, KOffice
Development of Unicode applications that take input in Indian languages
Storage of information in Indian languages using pgadmin database software and
For localization Purpose.

Publishing

- Develop content in Indian languages using applications of your choice
- Use Xinput for an economic means to create, edit and distribute content in Indian languages.

Educational Institution

- Develop applications in Indian languages for teaching language courses
- Deploy Xinput to facilitate communication using Indian languages via email, instant messaging among your personnel
- Create content in Indian languages for students to use and communicate

Portal

- Reach a wider audience by presenting your content in Indian languages
- Create news reports, online advertisements, other content in multiple Indian languages to cater to specific language groups

➤ **Strengths**

- Easy to use
- Free Software under GPL License
- First Solution which supports ITANS input method for all Indian languages.
- Non- intrusive.
- Use the popular applications that you are already familiar with (OpenOffice,KOffice)
- Supports several popular transliteration schemes and keyboard layouts
- Support for Unicode.
- Runs on all Distros of Linux that supports X protocol

➤ **Our Competition**

- Most DO NOT support Unicode
- Most of them use proprietary fonts/input schemes
- Some even come with proprietary font rendering engines
- Some are server- based solutions which are slow and non- standard

➤ **Advantages**

On top of being most convenient and intuitive way to type in Indian languages using an English keyboard our solution has the following advantages as well:

- **Uses Unicode** : This allows data interchange between applications using cut and paste and other Windows standard mechanisms. Other non- Unicode solutions do not give this portability as the character- mapping for each font is vendor- dependent and can change without notice.
- **Consistent** : Our input method supports many popular Input schemes. We support ITRANS across all supported Indian languages. ITRANS is consistent across all Indian languages. That is, a user familiar with typing using this method (in any language) can do the same in any other language without re- learning the character sequence.

- **Comprehensive** : Our solution is not application specific. Our software directly speaks with OS in a standard manner and so can be used across all applications on SuSe,RedHat,Debian.
- **Standard** : Xinput is similar to other international input schemes that use the same standards for example Japanese, Chinese etc.,
- **Compact** : This software has a small footprint as it uses Xlib Library for fast and efficient transformation from English character sequence to the respective Indian language.

➤ **What is expected in Future Versions**

- 1) Support for adding additional languages or input schemes (as they become available) without updating the software. (This is Advance Mode Presently it will show message not yet implemented)
- 2) Support for conversion of font coded Indian language text to Unicode text.
- 3) All free fonts are expected to distribute with this Xinput.
- 4) Addition of **TYPEWRITER** and **REMINGTON** input schemes.
- 5) Phonetic keyboard for all remaining scripts

Sample Inscript Keyboard Layout

	ँ	ँ	्र	र्	ञ	त्र	क्ष	श्र	()	ः	ऋ	BS
	1	2	3	4	5	6	7	8	9	0	-	ृ	
Tab	q औ	w ऐ	e आ	r ई	t ऊ	y भ	u ड	i घ	o ध	p झ	[ढ] ञ	\ ओ
	ौ	ै	ा	ी	ू	व	ह	ग	द	ज	ड	ञ	ॉ
Caps	a ओ	s ए	d अ	f इ	g उ	h फ	j र	k ख	l थ	; छ	' ठ	CR	
	ो	े	र्	ि	ु	प	र	क	त	च	ट		
Shift	Z	X ँ	c ण	v न	b व	n ळ	m श	, ष	।	/ य		Shift	
			ं	ं			स	,	.	/	य		

Sample Phonetic Keyboard Layout

,	1	2	3	4	ॐ	ऋ	ॠ	ॡ	ॢ	ॣ	-	=	BS
Tab	q ँ ँ	W ै ऐ	e े ए	r ॄ ॅ	t ॆ े	Y य	u ॊ ो	i ौ ्	o ॎ ॏ	p ॐ ॑	[॒ ॓]	॒ ॑	॒ ॑
Caps	a ॒ अ	s ॑ ष	d ॒ ड	F ॑ ऐ	g ॒ घ	h ॑ ॒	j ॑ झ	K ॑ ख	l ॑ ळ	; ॑ ः	' ॑	CR	
Shift	Z ॒ ऑ	x ॑ ओ	c ॑ छ	v ॑ ॒	b ॑ भ	n ॑ ण	m ॑ ं	' ॑ ॒	. ॑ ॒	/ ॑	Shift		

Sample Transliteration Text

- 1) bhaarata meraa desha hai भारत मेरा देश है
- 2) yeha bhaaratiiyo.nko ke liye banaaya gayaa mukta sophTaveara hai

येह भारतीयोंके
लिये बनाया
गया मुक्त
सॉफ्टवेयर
है

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Version 2, June 1991

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