4.27 'Saral' The Universal IME

Introduction

Jaydeep Bhatt, proprietor of Vision Consultants is the developer of this software and has many years of experience in the field of regional language computing.

Saral was developed by keeping in mind the needs of an average user and not a professional user and therefore both whether a professional or just an sparingly exploring user can easily use this Input Method Editor within minutes of getting introduced to the same.

It is not that people in general do not want to compute/type in regional languages but they find it difficult to do so. Saral makes it a child's play for anybody who wants to work with not only one but multiple languages.

He also has experience in developing several multilingual applications and has provided consultancy and services to many organisations for the same.

Product

1. 'Saral' – The Universal IME – An Introduction

'Saral' – The Universal IME is a unique software, which enables the user to type into the Computer in

any Language,

any Script,

any Font,

any 32 bit Windows Operating System or

any Application.

Also, the user can select any Keyboard layout of his choice.

Currently, a large variety of options are available to accommodate various keyboard layouts and any other such requirements. Versions are also available with value-added features such as font converter, text-to-speech for English language. Speech to text module is also under development.

Salient Features of 'Saral' – The Universal IME

Saral is only-one-of-its-kind because,

- 'Saral' is Unicode Compliant.

- 'Saral' is an "Augmentation utility", meaning it adds value to the Application, Tool or Software that you are using. You retain all the benefits of your favourite Application, Tool or Software and also gain the benefits of 'Saral'. Not only that, if Application, Tool or Software that you are using, comes out with newer version with more features, utility of usability, you will automatically gain all of them. (Now, you can "have the apple and eat it too") The idea is Not to re-invent the wheel.

- Saral is Multilingual. In one sentence you can mix English, हिन्दी or any other language under the Sun, including Urdu (بس ص ص خ).

- You can use any language (script, to be more precise), any Font or any Coding System (ASCII, ISCII, Unicode) of the world.

- Saral is Backward Font Compatible, hence you can continue using your favourite font. Plus, you can start using some font that you wanted-to-use, but could-not-use because of lack of proper s/w. 'Saral' frees you from having to maintain a pile of Keyboard-entry-softwares (now termed, IMEs i.e. Input Method Editors) with varying complexity and many a times conflicting keys.

- What is more, even with non-unicode fonts, you can select the standard keyboard layouts like Phonetic, InScript, Typist or your own.

- 'Saral' is 100% Customizable. The User can configure the settings as per his taste, need or ability. Also there is no limitation of Number of Characters that can be sent in response to a single KeyStroke. You can configure 'Saral'⁻ to type pre-defined words (or even paragraphs) on press of key.

- 'Saral' can also enforce language specific rules.viz.

  ◗ In Indian languages Swar cannot have any trailing Swar Sign. In such case 'Saral' intelligently replaces the Swar with most logical new Swar.

    viz. Swar uu ऊ + Swar Sign i ि = Swar i इ

  ◗ Similarly, there is a mutually exclusive set of Swar Signs; there 'Saral' intelligently replaces the Swar Sign with most logical new Swar Sign.

    viz. Ja ज + Swar Sign uu ू + Swar Sign i ि = Ja ज + Swar Sign i ि

  ◗ Further, if the first letter of the word is Swar Sign; 'Saral' inserts, an apt Swar in place of the Swar Sign.

    viz. Swar Sign i ि (as First Letter) = Swar i इ (as First Letter)

  ◗ Moreover, if the language has 'nukta' character, 'Saral'⁻ fetches the 'nukta' character, whenever the character is followed by the 'nukta'.

    viz. Ja ज + Nukta Sign ़ = Nukta Ja ज़

    Nukta is also used for Extending the Character Set. Please see the list of Extended Characters.

◗ Also, a special add-on utility of 'Saral' restructures the document for proper sorting and spell checking in multilingual environments.

    viz. Ja ज + Anuswar ं + Swar Sign i ि = Ja ? + Swar Sign i ि + Anuswar ं

'Saral' is a completely future ready software. Being "unicode compliant" itself is a great advantage. For example all the Language Tools & Utilities, are now designed keeping "unicode" in consideration. And keeping that in mind newer and newer features just get added to 'Saral' frequently. For example, since 'Saral' uses Unicode, all the advantages of Unicode are automatically available, viz. Spelling & Grammar Check will be possible.

'Saral' runs under any 32 bit Operating System. However, in order to obtain full advantage of 'Saral', it is preferred that the entire system, from keyboard to screen, is Unicode Compliant. Hence, 'Saral' suggests Windows 2000 or Windows XP to demonstrate all its features.

The basic technology used in development of 'Saral' is OS-independent. With little modification 'Saral' will be available on Linux and Unix OS too, provided such requests are received by us

Why 'Saral' should be a Universal Choice for everyone ?

There are many softwares, that let you type in Indian Languages. Why should you use 'Saral', instead of them ?

- Beats Resistance to Change

People are resistant to change. They will not like to change their deep-rooted habits and learn any thing new, even if it is better. Also, upgrading to higher versions of sofrwares or OS, makes you bleed through your nose.

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Using 'Saral' you don't have to change your preferred Keyboard Layout, Font, Coding System or Operating System).

• No Resource Upgradation

Every new version of software, comes with better features, but unfortunately, it invariably requires higher resources in terms of memory, CPU or OS.

Worst !!! it costs a hell lot of money.

'Saral' lets you use all the new features, without upgrading your Computer and there by offers a huge cost benefit.

• Support for All Fonts & Software

First of all you need to understand, the Font is different than Software. Creation of Font is an artistic and creative job, often best done by Graphic Artist. Designing the user friendly software, so that the user can use the fonts easily; is another type of artistic and creative job, best done only by veteran Software Developer.

If you purchase Software from Font Maker, you don't get the full software strength. (same as purchasing Font from Software Developer) Also, you are tied up with the Font, if you buy s/w from a specific vendor, you can use only Fonts of that vendor only. Besides, for editing/entering multiple fonts in a document, you will have to purchase more than one s/w; not to talk about inconveniency of keeping all them open at a same time on your desktop.

'Saral' lets you use any font of the world, multiple fonts in a same document

• Input Method

Basically, there are two accepted methods of inputting Indian language Characters,

Inscript & Itrans. Inscript is suitable for trained Indian Computer Typist. It uses shift Characters. Itrans is based on English Alphabets.

However, both of them have their own pros & cons. Inscript forces you to learn a completely different Keyboard Layout; while with Itrans, you are forced to enter trailing swar always (Indian Consonants have intrinsic Swar), which make the typing slower and confusing.

'Saral' offers best of both the worlds, you can choose online English-to-Vernacular transcription or any of the Keyboard Layouts

• KeyBoard Layouts

It is known that Govt. Depts., Autonomous Bodies and Institutions, Private Enterprises give a huge amount of Data Entry work, outside; at an enormous cost.

The Reasons, why they do so are

• The Traditional Typist are trained and comfortable with 'Type Writer'⁻ KeyBoard Layout.

• The officer or the user, don't know, how to type or even atleast edit the document prepared on computer

• The Computer Typist, specifically trained to type vernacular languages on Computer, finds different Keyboard Layout for different vendor software.

Using 'Saral' one can operate upon the document in any language, with KeyBoard Layout, he is comfortable with, that too consistently over any font.

• Currently, any one who needs to operate upon computer in vernacular language, has to remember atleast Two Keyboard Layouts.

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Also, for the Computer Typist, the s/w vendor creates an artificial barrier viz. "English Typist" & "Vernacular Typist". The point to ponder here, is, all the Computer Keyboards are having English alpha-bets printed on them, very few of them are having Vernacular alpha-bets.

Using 'Saral', one has to remember only one Keyboard Layout for all the languages of the world. 'Saral' eliminates the barrier between "User" & "Typist" or "English Typist" & "Vernacular Typist".

Here is an example of multilingual text written with the use of Saral – The Universal IME.

Multilingual Example

Devnagari	:	यह वाक्य देवनागरी में है ।
Gujarati	:	આ વાક્ય ગુજરાતીમાં છે.
Bangla	:	আ বাংলা বাক্য
Gurumukhi	:	ਗੁਰਮੁਖੀ ਗਲ
Oriya	:	ଆ ହଡ଼ିଆ ବାକ୍ୟ
Tamil	:	தமிழ
Telugu	:	తెలుగు
Kannada	:	ಕನ್ನಡ
Malayalam	:	മലയാലമ
Urdu	:	اردو : جيدي ﮪ

2. USP (Unique Selling Propositions) of 'Saral' – The Universal IME

• Coding System

'Saral' is compliant to any coding system, Unicode, ISCII, TSCII, Proprietary or some new system that will come in future

• Language

'Saral' support all the languages of the world, including the ones which uses right-to-left script and complex conjunctures

• Input Method

'Saral' implements INSCRIPT, Phonetic, Type Writer, pseudo ITRANS or Custom Input methods. This Input Methods are implemented, even if the original font does not support this methods

• Non-Unicode Font

'Saral' also generates the font-codes for currently available Vernacular fonts like ShreeLipi, iLeap, Indica, Akruti, Sulekh etc.

• ISCII

'Saral' also generates ISCII codes, directly (and also ISCII font-codes, if you have ISCII font); if you need the sorting, indexing features

• JSCII

We have a developed a new Storage Code System, which can store entire Unicode in just last 64 Characters of ASCII. It offers better features than ISCII since it is smaller by 32 Characters than ISCII. 'Saral' generates JSCII codes too; if you need the sorting, indexing features

• Operating System

'Saral' runs on any 32 bit Windows Operating System

• Applications

'Saral' integrates itself in your current Application, natively. i.e. you don't need to Import/Export from the custom editor

• Type & Replace

A special feature of 'Saral'. 'Saral' keeps track of last 10 Characters, typed by the user, and intelligently replaces appropriate Character whend typed.

• Conjunctures

Conjunctures are formed automatically in 'Saral'. The user does not have to remember, where the conjuctures are located.

Other Additional Features of Saral:

3. Font Converter Software

Font converter software is used for converting Non Unicode Fonts to ISCII / Unicode.

Options explanation

• Convert "." to "|" ⇨ The software will convert "Full stops" to "Viram Characters"

• iLeap Text ⇨ The software will open the iLeap editor and convert the text to selected scripts in iLeap

• Repair Dirgh | ⇨ In certain fonts, Dirgh | characters are not present. The software will convert the Hasva I followed by rrkar character to Dirgh I

• ISCII Button ⇨ The software will convert Non Unicode Data tits internal ISCII Codes

• Use
 Tag ⇨ The Software will use
 Tag instead of <p></p> tags. This will reduce the spacing between the lines

• Web Page ⇨ The Software will create Non Unicode Web Page from the text.

• You can select a different font in the drop down combobox, of the same font family

• Latin Numerals ⇨ The software will use Latin Numerals in place of vernacular numerals

• Remove Extra <p></p> tags ⇨ The software will remove extra paragraphs in the document.

• Devnagari ⇨ OM ⇨ Devnagari OM in place of Vernacular OM

• Devnagari ⇨ Viram ⇨ Devnagari Viram in place of Vernacular Viram

• iTrans ⇨ The software will convert the text to Roman scripts, using the scheme selected in the adjacent Spin Edit Box

• Script ⇨ The Software will convert to the selected Unicode Script codes

• External Browser ⇨ The software will use the External Browser of the System

4. Speech-to-Text (Dictation) Software (Under Development)

Speech to Text software is used for inputting the data in to the computer using Voice.

Following are the steps for Enabling the Dictation Software

• Please ensure that the Microphone is plugged in to the appropriate socket provided for it, on the back of the computer (The microphone can be tested by Sound Recorder Software, provided by the operating systems under All programs à Accessories à Entertainment)

• Click on Microphone (On Language Bar)

• Select '°Dictation'±

• Go to Microsoft Word and Start Speaking at a continuous and normal speed

- If you want to control the windows / application using voice commands click on voice command (on language bar)

5. Text-to-Speech Software

Text to speech software is used for enabling the computer to speak in English

Following are the steps to Enable Text to Speech

- Please ensure that "Saral' – The Universal IME" is ON

- Right click on 'Saral' ⇨ Assist ⇨ Voice

- Now select any English Text in any application viz. Microsoft Word, Outlook Express, Page maker etc. and copy it to clipboard (press Ctrl + C)

- The software will automatically start speaking

Menu Commands

To see the menu, right click any where on the speech note pad available in the software

Speak ⇨ Notes: The software will speak whatever you have return in the speech note pad

Speak ⇨ Clipboard: The software will speak whatever is available on the clipboard.

Speak ⇨ Abort: The software will stop speaking

Auto ⇨ Clipboard: If this option is checked than the software will automatically start speaking whenever you copy anything to clipboard (press Ctrl + C etc.)

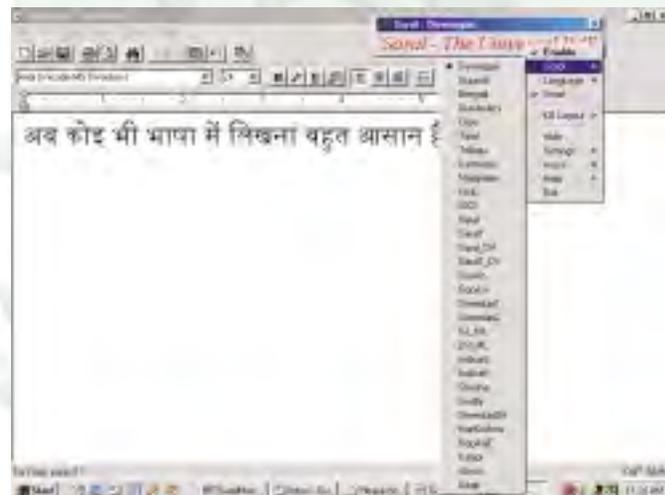Auto ⇨ Balloon: Whenever the character speaks, the word balloon will appear if this option is checked.

Auto ⇨ Animation: The character on the screen will play animations if this option is checked

Character ⇨ You can change to your preferred speaking character through this option.

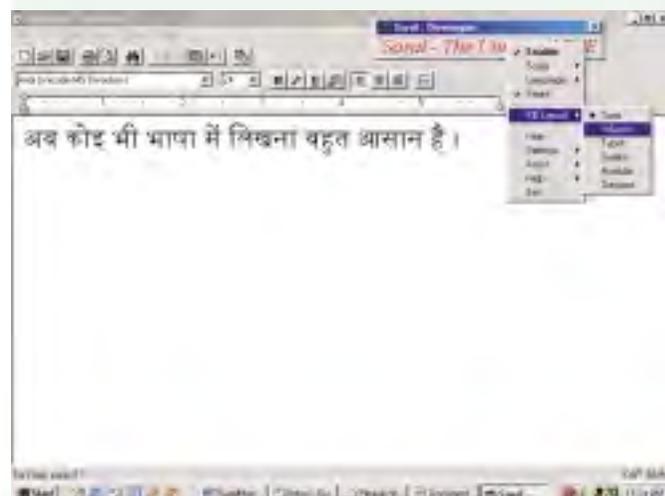**Screen Shots of the software in action**

1. Choice of Several Scripts to work with

This feature gives freedom to the typist to choose any fonts that he may like to use irrespective of the fact that he has installed the input method editor for the selected font or not and whether he is familiar with the keyboard layout specific to that font or not.

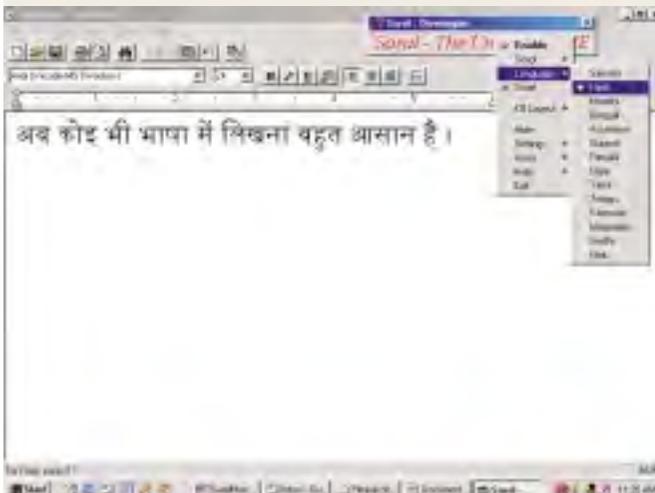### 2. Choice of Keyboard Layout

User can choose from the many keyboard

layouts that he is familiar with to work with any of the scripts/fonts chosen by him giving him or her complete freedom from memorising different keyboard layouts for different fonts/scripts. He can now just remember two keyboard layouts – one for English and another for regional language that he/she is comfortable with.

3. Using multiple languages simultaneously

Using Unicode fonts (such as Arial Unicode MS (Western)) one can write in various languages in a single sentence, paragraph or document without worrying about changing fonts everynow and then. All you need to do is change the language from the language selection available (keyboard shortcut available to toggle languages) and continue typing.
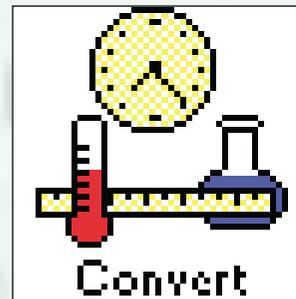

4. Unicode SDK

Image caption goes here.

We offer complete solution for making your Application Multi-Lingual. Using Unicode SDK, you will be able to offer your Application in all the languages of the World, with nil-to-very-little code change. Also, your existing code will not break, since Unicode is envelope to your Application and offers GUI in Unicode, but passes ASCII to the code.

Unicode SDK offers a great solution to the software developers. You can make your existing application multi-lingual by incorporaing this technology.

You have an option to use Unicode fullfledged or as the Interface only. In later case, you will be able to maintain data and code in non-unicode, hence existing installations will benefit without code-break.

(Source Website/Courtesy :
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