
CreeKeysDesktop3 - Cree Syllabics Keyboarding for Windows

Background

Since 1988 I have been working with the Naskapi language at Kawawachikamach with the primary purpose of Bible translation, sponsored by Wycliffe Bible Translators and the Summer Institute of Linguistics. Related work includes training in translation and literature and curriculum development.

Since those early days I have been working on methods of production of Naskapi language materials in syllabics by means of the computer. With the advent of high quality publishing capabilities in today's computers, I continually upgraded the procedure to keep pace with the improving technology. With resources available from the Summer Institute of Linguistics computer services department, I have developed a very satisfactory system of keyboarding syllabic texts in Naskapi.

At the urging of my colleagues, I have adapted the system to include the wider inventory of standard Eastern and Western Cree syllabics. While this has pushed the limit of what is possible with the current technology, Unicode makes this practical. Note that the system I first developed to keyboard Naskapi syllabics is similar to but slightly different from the Cree system, because of the unique local orthography in use at Kawawachikamach. The Cree system described in this document is intended to be useful for most Cree communities.

An important feature of this system is the method of keyboarding. There are currently *two* basic philosophies with regard to keyboarding syllabics. The first has its roots in the early Cree typewriters, where each symbol had its own key on the keyboard. A special keyboard layout had to be learned, but once learned the typist could keyboard syllabics rather quickly. Also, the keyboard layout could be arranged mnemonically, so that one horizontal row corresponds to the /e/ syllabic series, and another row corresponds to the /i/ series, and so on. This system also requires holding down a control key (like Shift or Alt or Both) while pressing the key to get vowel length or the various orientations of the characters.

The other system described below, and that we use at Kawawachikamach, follows a different philosophy of keyboarding.

Taking into account that a most First Nations people have had some education in one of the majority languages, and more and more First Nations people are increasingly computer literate, the standard QWERTY keyboard is familiar. This is also the generation of First Nations people who have a desire to be able to read and write in their own mother-tongue and use the syllabic orthography. Syllabic writing has a high traditional value, but sometimes seems out of reach. We have found, for the people we have trained, that a system that combines what they already *know* (the English alphabet and the computer keyboard) with what they *want to know* (how to read their own language in syllabics) has a very high success rate and an easy learning curve.

The system is essentially this: the user type in **roman letters** on a standard keyboard the way the word "sounds" in their own language. What he sees on the screen as soon as he types is the word written in syllabics. With the advent of scaleable TrueType fonts and sophisticated word processors, anyone can now produce clear, publication quality syllabics with a minimum of training.

We have dozens of Cree and Naskapi speakers, a few of them elders and children but mostly people in their 20's and 30's who thought that they would never read syllabics, now producing their own syllabic literature in their own language in a quality that is accepted and read by others in the community. Even though we have had the best success training people who have never written in syllabics before, we have also helped several people who could read and write but never "typed": and they caught on quickly as well. A benefit to this system is that the hardware, that is, the keyboard, does not need to be modified in any way with special key-caps or stickers, a new keyboard layout does not have to be learned and memorized, and that syllabics and non-syllabics (roman) words can be mixed in at any time in any place in the document.

In any case, Users are able to choose which method they prefer to type in whenever they like.

Unicode

Unicode font encoding was developed in the 1990s in order to address the many requirements for multilingual and multi-platform computing. As of this writing, Windows operating system software after from Windows 2000 on (including Windows XP and Windows Vista), and Office suites beginning with Office 97 or 2000 fully support Unicode word processing. More and more applications are being produced that have this capability. OpenOffice is a good (free) word processing program that supports Unicode.

This system includes not only the Unicode TrueType font(s) but also the keyboard drivers for typing syllabics in roman.

Installation instructions

The keyboard mapping program used is **Tavultesoft Keyman Desktop Version 7**. You will need to choose whether to install **Keyman Desktop Professional** or **Keyman Desktop Light**.

The main difference between the two versions is that **Keyman Desktop Professional** allows an unlimited number of keyboards to be installed and used concurrently, while **Keyman Desktop Light** only permits two keyboards to be installed and used. Since the Cree keyboard/font package includes two keyboards (see below), if you install **Keyman Desktop Light**, you will not be able to install or use the Cree keyboard package concurrently with any other Keyman keyboards.

The keyboard installer is available (from the Tavultesoft download site) in three versions:

- (a) keyboards, fonts and documentation packaged with **Keyman Desktop Professional**;
- (b) keyboards, fonts and documentation packaged with **Keyman Desktop Light**;
- (c) keyboards, fonts and documentation only, for installation on computers which already have **Keyman Desktop Version 7** installed.

To install any version simply double click the downloaded installation file. This will install the **Tavultesoft Keyman Version 7** program (if included in the package), the keyboards, fonts and supporting documents. You will need to be logged on as a computer administrator (on Windows XP), or be able to enter a user name and password with administrative privileges (on Windows Vista) to install the package. The suggested (default) installation folder and settings will usually be most appropriate.

For all versions, a **CreeKeysDesktop3** menu will be installed to the start menu, and all documentation will be accessible from that menu.

Activating Keyboards

The keyboards should work with any application that supports Unicode.

Start **Tavultesoft Keyman Desktop (Professional or Light)** from the **start - programs** menu. (If the **Start when Windows starts** option has been selected, **Keyman Desktop** may be already executing.)

Keyman Desktop shows that it is running by displaying a small icon ("Keyman button") in the taskbar "Tray", (normally on the lower right-hand side of the screen) like this:



Using CreeKeysDesktop3

Open any Windows word processor, or other application.

(I have tested it with Word, OpenOffice Writer, Windows Write, Photoshop, Excel and Paintbrush, etc.)

Change the active font to **BJCree Uni**.

To type in Roman and get Cree: 

Now click on the Keyman button  in the "Tray". Now click on the  **BJCreeUni (east)** button. The icon in the tray changes to let you know which keyboard is active.

Now type in Roman. You should get syllabics. Double the vowels to get the diacritic (that is, type "paa" to get the long vowel dot over "pa"). "Ch" is "c". or "ch" Back vowel is "u", or "o"

To change back to English, just click on the  button in the "Tray". Choose "Switch Keyman Desktop Off". You can then keep typing in roman in the BJCree Uni font (or any standard English language font) and will get normal roman characters.

A complete syllabic chart **Cree Unicode Keyboard Layout (Roman).pdf** may be opened from from the **start - programs** menu, under **CreeKeysDesktop3**, or from the link on the OnScreen Keyboard window.

To type using the Cree "typewriter style" keyboard layout: 

Now click on the Keyman button  in the "Tray" again. This time, click on the  **Creeboard** button. The icon in the tray changes to let you know which keyboard is active.

Now type following the Cree Keyboard layout. Press **Shift+Alt+L** to get ᓄᓄᓄ "suu". The Cree typewriter keyboard layout **Cree Unicode Keyboard Layout (Typewriter).pdf** may be opened from the **start - programs** menu, under **CreeKeysDesktop3**, or from the link on the OnScreen Keyboard window.

To change back to English, just click on the  button in the "Tray". Choose "Switch Keyman Desktop Off". You can then keep typing in roman in the **BJCree Uni** font (or any standard English language font) and will get normal roman characters.

To view Keyman Help, or open the Keyman Configuration window, just Right Click on the Keyman button  in the "Tray".

Windows Keyboard Settings to "Fix"

Windows XP (or later) has certain default settings that must be disabled if you type using the

It is also possible to convert Unicode syllabic documents to Roman and back again. Select **Unicode Cree Roman VBA Template 10.dot** file in the **start - programs** menu (under **CreeKeysDesktop3**) and follow the instructions indicated.

For either template, the conversion functions will then appear in a Word menu (under Add-Ins for Word 2007 or later).

Acknowledgments:

The syllabic fonts I designed myself: drew them from scratch, using a program called “Fontmonger”, and later “Fontographer” and “FontLab” to refine them. They are scaleable “TrueType” outline syllabic fonts.

Tavultesoft Keyboard Manager was written by Marc Durdin. See “About Keyman” in the Keyman configuration menu.

The keyboard files `bjcruni.kmx` (This is the file that changes your keystrokes to the syllabic character) were based on the roman spelling of Cree, and adapted from source keyboard files designed by SIL. The other keyboard file `CrBrdUni.kmx` I designed to match the original Macintosh keyboard layout that the Cree School Board has been using, which was modeled on the Cree typewriter.

I thank Rod Bartlett for showing me a pre-release version of Keyman in September 1994.

Special thanks to David Denton for his initial encouragement to produce the keyboard packages for distribution on the World Wide Web, and for generous support from the Cree Regional Authority and the Cree School Board.

The continuing development of these packages (2002-2008) was supported by the Cree School Board, the Social Science and Humanities Research Council (SSHRC) grants # 410-1998-0350 and # 856-2004-1028 to Marie-Odile Junker, # 410-2004-1836 to Julie Brittain, the eastcree.org Project, and SIL International.

The whole system may be shared with anyone who is interested provided there are no charges for it. (A license is required to use Tavultesoft Keyman Desktop.) Include these acknowledgments. If you received these keyboards and fonts for free and decide that they meet your needs, a donation may be made to the Naskapi Bible Translation Project. Please contact me for details.

The easiest way to share it is to give away a copy of the original installation file and these instructions.

These instructions are in a file named Cree Syllabics Keyboarding for Windows.pdf that are linked from the **start - programs** menu (under **CreeKeysDesktop3**) and can be opened and copied or saved from that location.

Bill Jancewicz,

Schefferville, Quebec 2001, updated 2009

418-585-2612

<bill_jancewicz@sil.org>