



DRAFT

Murasu Anjal2000 A Beginners Guide

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Introduction

Murasu Anjal2000 is the latest version of the software that was first introduced in Malaysia in 1986. It adds Tamil language capabilities to other applications that run on your computer desktop. It includes professionally designed, high quality Tamil fonts and well designed Tamil input methods, or Tamil keyboards. In addition Anjal2000 includes many more utilities that can help you with your most common Tamil computing needs.

This document is written to get you started with this software, used by hundreds of thousands of users around the world today. You will learn about all the standards that are supported and all the features that are available.

You will learn to download this software from the Internet, install it into your computer, set it up so that you can use it with other software, use the Tamil99 keyboard or the Anjal keyboard to type Tamil and briefly look at all other features that are available.

Murasu Anjal2000 is also known as Murasu Anjal, Anjal2000 or just simply as Anjal. It is a merger of two products that were called "Murasu" and "Anjal" individually. All the features in both these products were integrated and many more new features were added into a single product in the year 2000.

What is Murasu Anjal?

Murasu Anjal is a software tool that gives you the ability to read and write Tamil in your computer applications. With Anjal, you can compose Tamil text in text editors, mail readers, Web browsers, publishing tools and other software to create documents, emails, Web pages, magazines, newsletters and all other form of publications in Tamil.

Murasu Anjal2000 version 9.5 is the latest edition since it was first introduced in 1986. This version provides support for seven different keyboard layouts and ten different character sets. Murasu Tamil fonts are known for their quality and variety. They are used by individuals, publications, organisations and businesses around the world today.

Anjal2000-Lite, which you download and install for free, provides these facilities in a limited number of (but most frequently used) software - they include: Internet Explorer, Netscape Navigator, Netscape Messenger, Netscape Composer, Outlook Express, Eudora, Pegasus, Notepad, Murasu Mailer and Anjal Editor.

To use the features on all your desktop software, including Microsoft Word, PowerPoint, Excel, Access, FrontPage, StarOffice, PageMaker, WordPad and others, you will need Murasu Anjal2000-Pro. This is a commercial product and all you need is a license key to upgrade your Lite installation to a Pro installation.

Murasu Anjal has reached hundreds of thousands of users world-wide and is the most commonly used tool to create Tamil Websites and run Tamil mailing lists on the Internet today.

Downloading Murasu Anjal2000

The entire Murasu Anjal2000 package can be downloaded from the Internet. The official download site is <http://www.murasu.com/downloads>. Use your browser to visit this site and click on the appropriate link(s) to download the file(s) into your computer.

There are a number of options you can choose from. If you have a good connection to the Internet that gives you faster download speeds, you may download the "Anjal 2000 with Plug-Ins package". This package will have all the files required to install and use Murasu Anjal2000 and the additional software like Murasu Editor. As this package is rather large, it may take some time before it is completely transferred into your computer.

The "Anjal2000 Core Package" is much smaller in size. If you do not have a good connection, it is best that you download this file. You can then download the Plug-Ins separately from the same site.

Here is a list of files you can download (the exact names may vary with newer versions):

No.	Package Name	Size	Remarks
1.	Anjal2000 With Plug-Ins	Over 2MB	Download this file if you have a fast Internet connection. It contains both the core package and the plug-ins.
2.	Anjal2000 Core Package	About 1.4MB	This package does not contain the plug-ins. If you do not have a stable Internet connection, it may be better to download this file. You may copy the file into a floppy disk to transfer into another computer or user.
3.	Plug-Ins for Murasu Anjal2000	About 1.2MB	This file contains the plug-ins that were taken out of the core package. This will also fit into a floppy disk.

Table DL1: Packages that can be downloaded from <http://www.murasu.com/downloads>

You may have a friend who has a faster connection or you may use an Internet Cafe. In this case, you may download the second and third files and copy them over to two floppy disks. You can then install Anjal2000 in your home computer or pass it on to your friends so that they can install them too.

These files will have a Murasu icon with a box (shown below). This icon indicates that they are installable packages. All you have to do is to run them in order to install them.

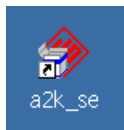


Figure DL1:

Icon that has a box in front of the Murasu Logo. Indicates that this is an installable package.

Murasu Anjal CD-ROM

You may also get Murasu Anjal2000 in a CD-ROM. The Anjal2000 CD-ROM is released periodically to include the latest release of the software and documentation. The CD also contains other Internet tools like browsers, email readers, e-books and others. A copy of this CD-ROM will be sent to you with any product that you buy at Murasu.Com (<http://www.murasu.com/buy>).

If you have the Anjal CD-ROM, just insert the CD into your CD-Drive to start the Main Menu screen in the CD. If the menu does not start, open "My Computer" from your desktop and double click on the CD-Drive that shows the Murasu icon. The main menu will present you all the software, tools and documentation that are in the CD-ROM. You may just click on the links or buttons to install them. The Anjal package in the CD-ROM contains all the Plug-Ins as well.

Installing Murasu Anjal2000

Once you have downloaded Anjal, you need to install Anjal into your computer. To start the installation, double click on the package you just downloaded (see figure DL1). You will see the package information shown as below:

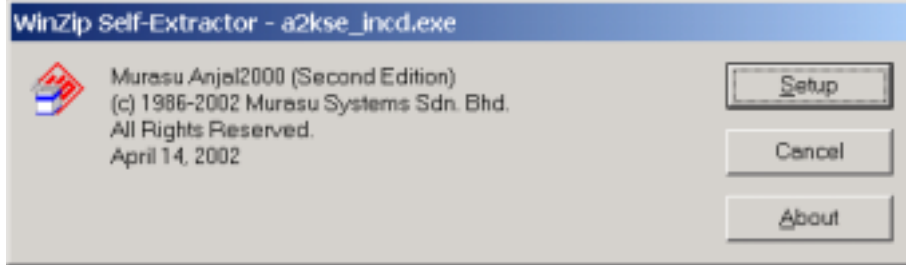
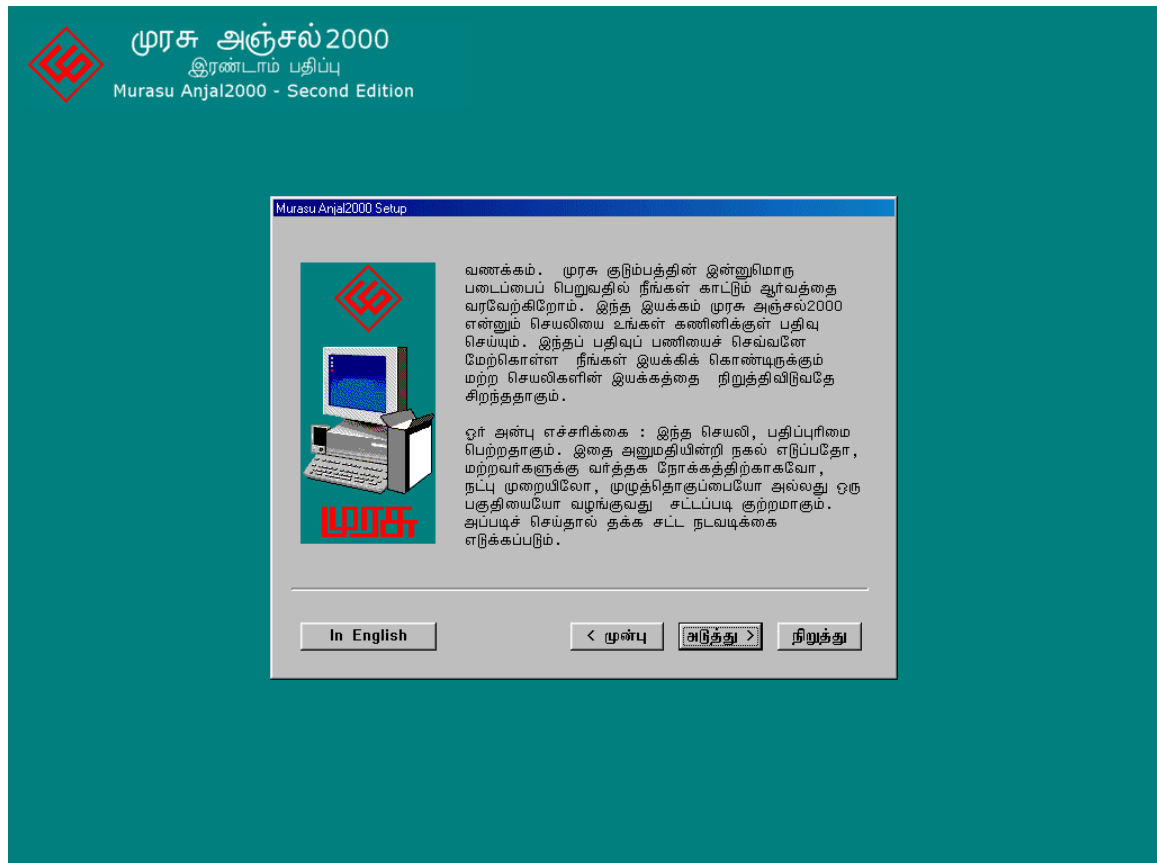


Figure IN1: Murasu Anjal2000 Package Information

Click on the "Setup" button to start the Murasu Installer which is part of the package. You should see a screen similar to figure IN1. The actual look of the screen may be a little different if you have a newer version of the Anjal package.



<Figure IN1: First screen of the Anjal2000 Installer>

The message in this screen is in Tamil. The installer will walk you through some options and each option will have a different screen. If you want these messages to appear in English instead, you may just click on the "In English" button at the bottom. To go back to Tamil, click the "தமிழில்" button. Mostly, you just need to

click the "Next" (or "அடுத்து" in Tamil) to accept the pre-assigned (or default) values.

One of the options you can set during the installation is to place Anjal2000 in the start-up folder. The default setting is "yes", that is, Anjal2000 will be placed in the start-up folder. It is highly recommended that you leave this as it is. This will ensure that Anjal2000 gets started automatically every time you start Windows (or your computer). Anjal must be running in your computer all the time in order for you to see Anjal fonts and compose Tamil text with these fonts.

Once the installation is complete, you may click the "Finish" (or "முற்றும்") to close the installer. You will now see an icon to start Murasu Anjal2000 on your desktop (see figure IN2).



Figure IN2:

Murasu Anjal2000 icon placed on the desktop. Note that there isn't a box attached to the Murasu logo. Double click on this to start Anjal2000 for the first time.

Installing Murasu Anjal Plug-Ins

If you had downloaded only the core Anjal package, you may install the plug-ins separately. Run the plug-ins package you downloaded (a2kplug.exe). This will invoke the Murasu Installer programme that will install all the files required, including Murasu Editor and Murasu Insert Text Editor.

If you have installed the "Anjal with plug-ins" package, you need not install the plug-ins separately. You also need not install the plug-ins if you are installing Anjal from the CD-ROM.

Setting-up Murasu Anjal2000

If you have placed Anjal in the Windows start-up folder (see section on Installing Anjal2000), you do not have to start Anjal all the time. Windows will start it for you when it starts up. However, since you have just installed the software and your Windows system is still running, you will have to double click on the Anjal2000 icon (see figure IN2) to start Anjal manually. You will see Anjal's setup screen as in figure SU1.

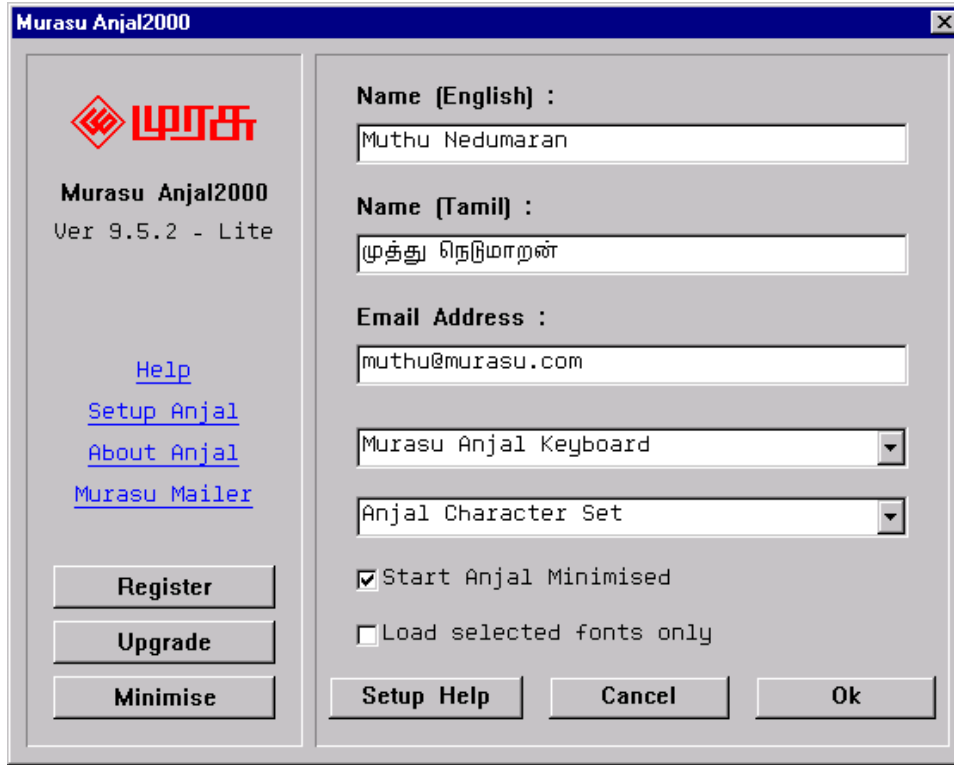


Figure SU1: Anjal2000 Setup

On the left column of the setup screen, you will find the version number of the software just below the Murasu logo. Next to the version number is the operating mode of Anjal. You should see "Lite" which denotes that you are running Anjal2000 in Lite mode. If you have previously used Anjal2000, you may see different modes; we will discuss this in a later section.

In the middle of the column, there are four text links: "Help", "Setup Anjal", "About Anjal" and "Murasu Mailer".

Help: Click on this link to invoke the Quick Start Guide that is bundled into the package that you downloaded. This will start your Web browser and load the page.

Setup Anjal: Click this link to see the full setup screen. If you are already seeing the full setup screen, this will have no effect.

About Anjal: This link will show you the "About Box" when clicked. The About Box contains information like detailed version number and System ID number (see figure SU2).

Murasu Mailer: Murasu Mailer is a simple tool that you can use to compose and send emails in Tamil. Click on this like to start the Mailer. We will discuss the mailer in a later section.

In the second column of the setup screen, you enter your personal information and select some settings. In the space provided, type your name in English and Tamil and your email address. If you are not familiar with Tamil typing, you may just leave the Tamil name blank or type it in English.

The next two settings are the most important ones. Here is where you tell Anjal the keyboard and the character set you want to use. Let's look at the various options that are available in Anjal.

Selecting your keyboard layout

Anjal2000 provides support for 7 keyboard layouts. They are:

Anjal Keyboard: This is the most popular keyboard among Anjal users. With this keyboard, you type Tamil text as you would write Tamil with Roman text. Check the section on "Using the Anjal Keyboard" for a details on how to use the keyboard.

Tamil99: This keyboard was introduced after the TamilNet99 conference in Chennai. It was subsequently announced as a standard keyboard for Tamil input by the Tamil Nadu state government in India.

TamilNet97: This layout was introduced after the TamilNet97 conference in Singapore. There are not many implementations of this keyboard. It is included in Anjal2000 to support users who have been using this layout since Anjal 2.0.2.

Mylai: Created by Dr. K. Kalyanasundaram of Switzerland, this layout is based on the Mylai font created by the same author. It was popularly used before any standardisation efforts were initiated to produce a common keyboard layout or even an encoding scheme for Tamil. Many Anjal users still use this layout as they find it to be closer to how they write Tamil script on paper.

New Typewriter: Announced as a standard by the Tamil Nadu government after the TamilNet99 conference, this keyboard is based on the classical typewriter scheme with one difference: The modifiers (like "pulli" and "kokki") are typed after the base consonant.

Old Typewriter: This is the classical typewriter layout.

Anjal-Indic: New in Anjal2000-Second Edition. This layout is based on the popular Anjal keyboard. Some changes were made to realise a common scheme for Indic languages. Currently this keyboard has been tested for Devanagari, Telugu, Malayalam and Tamil.

Pull down the option box (called the combo box) and pick the keyboard you would like to use.

If you type mostly in Tamil, select Tamil99 keyboard. This layout has been designed for fast Tamil typing on a standard keyboard. There are also specially designed "Tamil keyboards" that are based on the Tamil99 layout.

If you are comfortable typing English or Malay with a common PC keyboard, we recommend that you use the Anjal layout. With this layout, you may compose Tamil text using a simple romanised scheme. This keyboard layout is the most common among Anjal users world-wide.

We have provided sufficient documentation for both these layouts in later sections.

However, if you are likely to work on Tamil text a lot more than English (or non-Tamil) text, you may want to give the Tamil99 keyboard a try. Details on this keyboard can be found at <http://www.tamilnet99.org>

Selecting your character set

Choosing a character set is extremely important. Every Tamil font is designed for a particular character set. A character set (also known as encoding) determines how each character is stored in a font.

If you are new and do not want to be troubled by these, we recommend that you select the TSCII 1.7 character set. If you have selected this, you should only use fonts that begin with "TSC". Examples of Murasu fonts that uses the TSCII character set are TSCu_InaiMathi and TSCu_InaiKathir. All Murasu fonts are available in TSCII as well as others.

To make this document complete, we provide the details of each character set below.

Murasu Anjal2000 supports 10 different character sets – 7 for Tamil and one each for Devanagari, Telugu and Malayalam. A brief description of each is given below:

Anjal: This was popularly used for email communications and Tamil Web page construction prior to any standardisation effort on 8bit encoding for Tamil. It is still supported in Anjal to enable users to revisit their old documents. Anjal fonts that are based on this encoding start their names with "An_" (like An_Amuthu). The popular fonts like "InaiMathi", "InaiKathir" and "ArulMathi" (without any pre or postfix in their names) are all based on Anjal encoding. If you are new to Anjal, you may want to start with TSCII 1.7 or Unicode (see below).

TSCII 1.7: This is the latest version of the TSCII (short for Tamil Script Code for Information Interchange) format. TSCII is format that was developed by programmers, webmasters and users around the world to realise a common format to represent Tamil in computers. Since then, many fonts, software and websites adopted this format. If you already use TSCII, or if you are new, you may want to use this format. There is another white paper on "Moving to TSCII 1.7" that you can download from <http://www.murasu.com/help/tscii17>. The names of fonts based on TSCII 1.7 encoding start with "TSC" (such as TSCu_InaiMathi).

TAB: Short for Tamil Bilingual, this is another 8bit standard. It differs from TSCII in the way it renders mey-ezutthukkal (மெய் எழுத்துக்கள்). The dot (புள்ளி) is encoded as a separate character. This format was announced after the TamilNet99 conference and has been adopted as a standard by the Tamil Nadu state government. The names of Anjal fonts based on TAB start with TAB_ (like TAB_InaiMathi etc).

- TAM: Based on TAB, TAM (Tamil Monolingual) is a monolingual encoding. Fonts that are based on TAM do not contain Roman alphabets. This format is used mainly for print publishing in Tamil Nadu. While Anjal2000 provides support for typing Tamil text based in TAM, there are no Anjal fonts in this format. You may use any TAM font downloaded from the Internet with Anjal's keyboards.
- Unicode: Unicode is a standard that encompasses all the characters in all the scripts in the world. It is the encoding used by modern operating systems like Windows2000, WindowsXp, MacOS X and others. Anjal provides both keyboard and font support (this support has been in Anjal since Jan 2000). However, you will need to run Anjal on a Windows2000 or WindowsXp machine in order to compose Tamil text on Unicode. You may use the fonts to read Unicode text on other versions of Windows. The same Anjal fonts that were encoded for TSCII 1.7 will also render Unicode text in Tamil. Thus, these fonts also begin their names with "TSCu" (like TSCu_InaiMathi).
- Murasu-6: This is an old Murasu encoding that was used in the 80's by Murasu users in Malaysia. It is included in Anjal to allow these users to work on their old documents without having to change their settings.
- Devanagari: Unicode encoding for Devanagari. No fonts are included in Anjal. You may use the "Mangal" font that is bundled into Windows2000 and WindowsXp. When this encoding is picked, the keyboard will automatically be switched to Anjal-Indic.
- Telugu: Same as Devanagari. No fonts included.
- Malayalam: Same as Devanagari. No fonts included.
- TSCII 1.6 (old): The older TSCII encoding. This encoding is supported in the second edition only for backward compatibility. It is highly recommended that you use TSCII 1.7. Only 3 TSCII 1.6 fonts are bundled into the second edition: InaiMathiTSC, ArulMathiTSC and InaiKathirTSC.

Pull down the combo box and select the character set you want to use. (Note: the words "character set" and "encoding" have been used interchangeably. Although there is a difference in meaning, we can take it to mean the same for the purpose of this document.

Default and Run-Time Settings

The settings you have done above will be the default ones. This will be the settings Anjal will use every time it starts up.

There may be times when you have to change something (especially the encoding) while you are working on a specific document. For example, you may be using TSCII as your default encoding and you get a document from your friend

that is in TAB encoding. You are to edit some text in the same document for your friend.

To change the encoding for just this document, you may pick TAB from the Murasu menu. You may find this menu in some applications (like Murasu Editor, WordPad, Word, Outlook Express and others). Anjal attaches this menu to some known applications. Pull down this menu, select "Encoding" and pick TAB (or whatever you need to pick). This will set the encoding for that document alone without changing the default.

You may do the same for keyboard setting as well. Your friend may want to work on your computer to edit a document that you were writing. She may be familiar with a different keyboard than the one you are using. She could change the keyboard setting for just this document the same way you did for the encoding above.

If your application does not have a +Murasu menu, you may invoke it from the minimised Murasu icon in your system tray. See the section on +Murasu Menu for more information on each entry and their use in this menu.

Other Setup Options

There are three other setup options:

Start Anjal Minimised

This option, when checked (or selected) will automatically minimise Anjal into the system tray of your desktop. As you will not have to modify the settings in Anjal all the time, it is best that you leave this option checked. Figure SU2 shows the Anjal icon minimised into the system tray.



Figure SU2:

Anjal minimised into the system tray. You may point your mouse at the icon and click on the right button to invoke the menu.

Hide Splash Screen at Start Up

This option is enabled only if you are running Anjal in "Pro" mode. Checking this option will hide the "About Box" when Anjal starts up. If you are running Anjal-Lite, you will not be able to use this option. In this case, the About Box will show every time Anjal starts.

Load Selected Fonts Only

This option will only be seen if you are running Anjal on a Windows95, Windows98 or WindowsMe system. It allows you to select the fonts you want to load in Anjal in order to minimise the use of system resources. In Windows2000 and WindowsXp, Anjal uses resource sharing techniques so that the use of

system memory and disk are minimised. Therefore there all Anjal fonts are loaded when Anjal runs in these later operating environments.

Registering Anjal2000

You may use Anjal2000 in Lite mode for free, as long as it is for your personal use. However, you are required to register your usage with Murasu.Com. This will help Murasu.Com keep you informed about new updates and other usage tips. You will also enjoy a free electronic newsletter that is sent out to Murasu users once a month.

To register Anjal2000, click on the "Register" button in the setup screen. You will have the option of sending the registration directly or through the email tool that you use regularly. If you are dialling to the Internet from home, you may just choose to send your registration directly. If you have problems with this, or if you are in an office environment, you may just cut the registration message, paste it into a new email composition and send it to register@murasu.com.

You may also signup for the Anjal mailing list in Yahoo! groups. Membership to this list is also free. To signup, visit <http://groups.yahoo.com/group/anjal>, the groups home page.

We will look at the function of the "Upgrade" button in the "Anjal2000-Pro" section later.

Once you are done with your setup, you may click on the "Minimise" button to put Anjal into the system tray.

Typing Tamil Text

Murasu Anjal2000 incorporates seven keyboard layouts. These layouts offer different approaches to composing Tamil text. In this guide we will look at two layouts: Tamil99 and Anjal's own layout. Which ever keyboard layout you chose, there is a key called the "toggle" key that lets you switch your computer's keyboard in and out of Tamil mode. For example; while you are typing in English, pressing F12 will switch your keyboard to Tamil mode. Pressing F12 again will switch it back to English mode.





The F12 key is used as the toggle key in Murasu Anjal. Pressing this key will switch your keyboard between English and Tamil modes.

If you are running Anjal-Lite, the switching will only work on applications that are supported by Anjal-Lite (see section on "What is Murasu Anjal"). If you are running Anjal-Pro, F12 will switch keyboards in any application.

If there is a +Murasu menu in your application, you may also switch keyboard with the "Tamil Keyboard" menu item – this is the first item in the +Murasu menu. When you are in Tamil mode, this item will read as "English Keyboard". The effect is the same as pressing the F12 key.

Another way of switching keyboard modes is to use the Ctrl+Grave key as shown below:

 +  Pressing the "Ctrl" key and the "Grave" key together has the same effect as the F12 key.

Checking the Keyboard Mode

At anytime during an editing session, you can check your keyboard mode by pressing the "Ctrl", "Shift" and "Grave" keys simultaneously (figure KB3). If Anjal is running in Pro mode, you will be able to do this in any application. In Lite mode, you will only be able to do this in Lite supported applications.

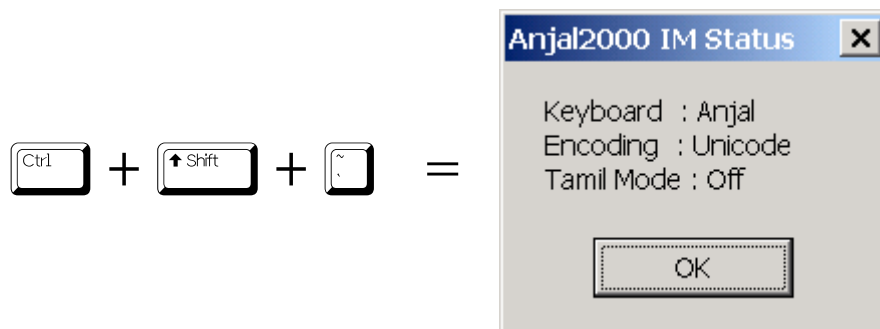


Figure KB1:
Checking the
keyboard
status in
Anjal.

The Tamil99 Keyboard

Tamil99 keyboard layout is based on consonant-vowel combination. This keyboard has been announced as a standard by the Tamil Nadu state government in India. The keyboard has been optimised for fast Tamil text typing. Users who type mostly Tamil text prefer this keyboard layout.



Figure TK1: The Tamil99 Keyboard Layout











































The vowels are placed over the lower case keys on the left side of the keyboard. The akaram-consonants (அகரம் ஏறிய உயிர்மெய்) are placed over the lower case keys on the left. The 'pulli' is over lower case 'f' and ayutham is on the upper case 'F'. The grantha characters and other symbols are over the upper case keys on the left.























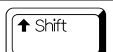




Also note that there are some shuffling of punctuation marks.

When the keyboard is in English mode (or the default system mode), you will not be seeing Tamil characters when you depress the keys. What you will see are the bold characters on the left of each keycap in figure TK1.

When you switch keyboard mode to Tamil with the F12 key, you will get the characters on the right of the keycaps when you press these keys.


























To get the other Tamil letters that are not on the keyboard, you use the consonant-vowel combination. Some examples are given below:

To get...	You type...
க்	 
மா	 
தமிழ் மொழி	         
நடைமுறை	      
வேகமாக வா	       
துணிவான செயல்	            

உண்மை பேசு	         
கிருஷ்ணன்	     +     
விஜயன்	   +    

























Automatic 'pulli'

The Tamil99 keyboard has a feature called “automatic pulli”. When a akaram consonant is typed one after the other, the first consonant will automatically get a pulli. For example; when one types க twice, the first க will become க். The same feature is also applied to the following pairs of characters: ஙக, ஞச, நத, ணட, மப, னற. Therefore, when the word மன்றம் is typed, there is no need to type a pulli after the ன. The pulli will be automatically added. Here are some examples:

To get...	You type...
பக்கம்	    
மங்கை	   
கன்று	   
அஞ்சல்	    
வேண்டும்	      

Vowel Modifiers

There are times you may have to type the vowel modifiers (sdf) alone – without the base consonant. You can get these characters by typing the caret key followed by the respective vowel key. This is shown in the table below:

To get...	You type...
π	 +  
୩	 +  
୧	 +  
୮	 +  
୨	 +  
୬	 +  
୭	 +  
୫	 +  

The Anjal Keyboard

Murasu Anjal2000 incorporates seven keyboard layouts. These layouts offer different approaches to composing Tamil text. In this section we will look at the Anjal keyboard and some of the advanced features that are available to make Tamil text composition as easy as possible.

Keyboard Mapping

Figure AK1 shows the key mapping for the Anjal layout.

Figure AK1: Anjal Keyboard Key Assignments					
உயிர் எழுத்துக்கள் (Vowels)		மெய் எழுத்துக்கள் (Consonants)		மெய் எழுத்துக்கள் (Consonants)	
அ	a	க்	K	ங்	ng
ஆ	aa or A	ச்	ch or s	ஞ்	nj
இ	i	ட்	d or t	ந்	n-
ஈ	ii or I	த்	th	ண்	N
உ	u	ப்	p	ம்	m
ஊ	uu or U	ற்	R	ன்	n
எ	e				
ஏ	ee or E	ய்	y	ஹ்	h
ஐ	ai	ர்	r	ஸ்	S
ஓ	o	ல்	l	க்ஷ்	x
ஔ	oo or O	வ்	v	ஜ்	j
ஔ	au	ழ்	z	ஷ்	sh
ஃ	q	ள்	L	ஸ்ரீ	sri

Use F12 to switch between Tamil and English modes

The Murasu Anjal keyboard layout is based on the phonetic mapping which most people are used to. The assignment is simple. The table above shows the keys that are mapped to vowels and consonants.

While you are typing in English mode press the F12 key to switch to Tamil mode. Use the same (F12) key again to switch back to English.

To get the compound characters (உயிர்மெய் எழுத்துக்கள்) you just need to type the conso + vowel combination.

For example:

To get:	You type:	More examples
பெ	p e	அறம் செய விரும்பு
து	thu	aRam seya virumbu
தமிழ்	thamiz	தீதும் நன்றும் பிறர்தர வாரா thiithum nanRum piRarthara vaaraa
அமுது	amuthu	or thIthum nanRum piRarthara vArA

Figure AK2: Anjal keyboard examples

Short-cuts

Short-cut mechanisms are provided to speed up your typing. More will be added as and when new findings are encountered.

Double "kuril" for "nedil" characters

Examine the following line:

யாகாவாராயினும் நாகாக்க

yAkAvArAyinum nAkAkkA

It is tedious to alternatively press the shift key to type nedil characters (like A in the above example). You could type the following (simplified) sequence to produce the same text in Tamil:

yaakaavaaraayinum naakaakkaa

Although there are more keystrokes, it is a lot faster to type the second line. You may want to try typing both in Murasu Mailer or the Notepad editor. They should produce identical results when typed in Tamil mode. (Note if you are using Notepad, set the font to TSCu_ArulMathi, your character set should be TSCII 1.7).

The consonant 'ற' (R)

Examine the following words:

மன்றம், நன்றி, கன்று

manRam, nanRi, kanRu

The character 'r' (ற) never appear after 'n' (ன்). So if a 'r' character appears after 'n', it must be a 'R' (ற்). This 'intelligence' has been fed into the keyboard driver. So, the above words can also be typed in the following sequence:

mandram, nandri, kandru *etc.*

(The 'd' must appear - to emphasize the 'n' sound. You cannot type manram - you'll get மன்ரம்)

The same applies for 'tr'. Small 'r' (ற) never follow a big 'R' (ற்) And small 'r' never gets repeated (றற - not common). So if two 'r's are appearing next to each other, it must be RR (றற). Try the following:

போற்றி, நாற்றம், தோற்றம்

pootri, naatram, thootram, etc.
(here 't' is user to emphasize the 'r')

Try the key sequences and the short cuts above. If you have any other ideas on implementing short cuts you may send a note to muthu@murasu.com.

Now try this:

paRRuka paRRaRRAn paRRinai, appaRRai
paRRuka paRRu vitaRku

Versus this:

patruka patratraan patrinai, appatrai
patruka patru vitaRku

The second one is not only easier type - it's also easier to read!

ந (n-) as the first character and 'nth'

When 'n' is typed immediately after a space, carriage return or tab, you will automatically get 'n-' (ந்). Also if a 'th' follows 'n', the 'n' will be switched to 'n-'. The following line will render the 'n's correctly when typed in Tamil mode (remember F12).

ivan nadanthu vanthaan

ந in the middle of a word (மாநிலம், மாநகர்)

You type as:

maan-ilam
maan-agar

Use 'n-' for force a 'ந்'.

ண (dan-nakaram)

'd' after an 'n' will switch the preceding 'n' to 'N'. eg :

கண்டேன், மண்டபம், நண்டு
kandeen, mandapam, nandu *etc.*

ஞ்ச (njc = njj)

அஞ்சல், மஞ்சல், தஞ்சம்
anjchal, manjchal, thanjcham *etc*

can also be typed as:

anjjal, manjja, thanjjam *etc.*

த்த (thth = tth)

முத்து, பத்தி, சத்தம்
muththu, paththi, saththam *etc*

can also be typed as

mutthu, patthi, sattham *etc*

English words in Tamil

To type English words like 'petrol' or 'control' using Tamil script, you need to employ some tricks. Otherwise Anjal will render them as பெற்றொல் and கன்றொல் (kandrol) or கந்த்ரொல் (kantrol).

To avoid this, type as follows:

pet<space><delete>rool (பெட்ரோல்)
kant<space><delete>rool (கண்ட்ரோல்)

The <space><delete> sequence removes the 't' from Anjal's memory. The 'r' that follows is treated as a fresh sequence.

Murasu Editor

Murasu Editor is a simple text editing tool that is bundled as a plug-in to Anjal2000. If you had downloaded and installed Anjal2000 with Plug-Ins (see section on "Downloading Murasu Anjal"), you already have Murasu Editor in your system. Otherwise, you may just download the Plug-Ins and install them in order to get the editor (see Installing Murasu Anjal Plug-Ins section).

To start Murasu Editor, right click on the minimised Murasu Anjal icon in your system tray (figure SU2) and select "Murasu Editor".

The figure below (ME1) shows the Murasu Editor window:

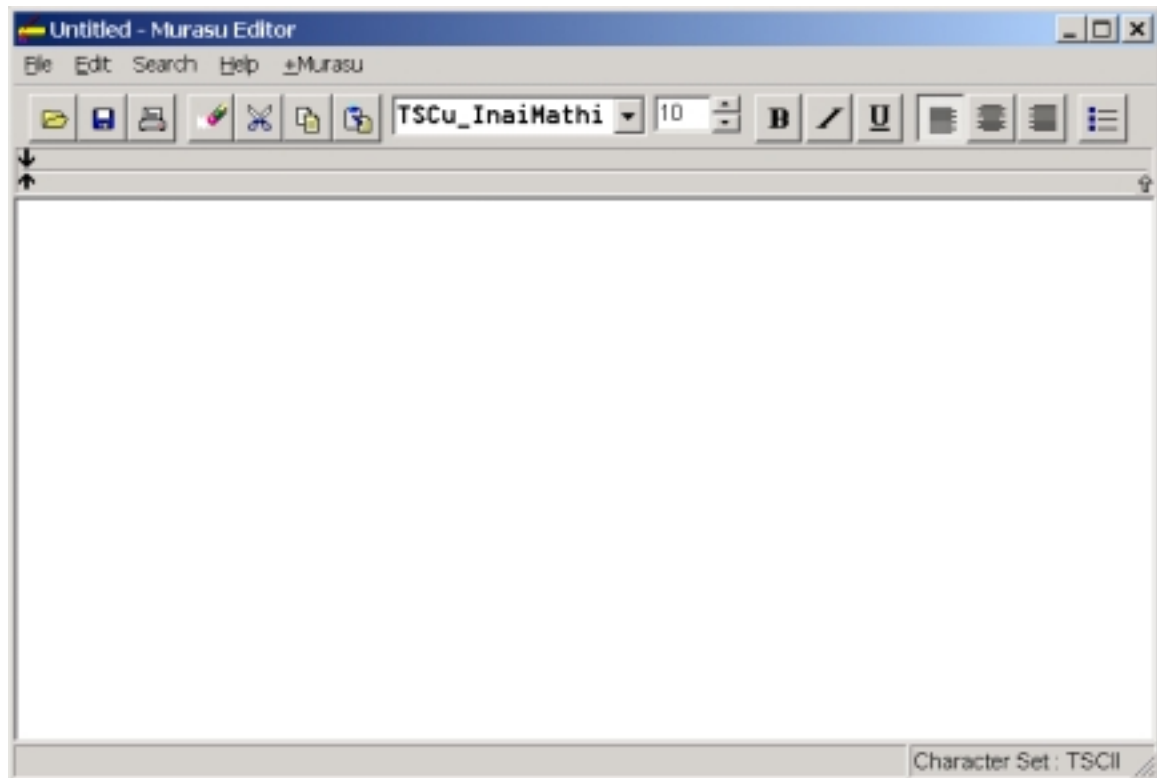


Figure ME1: The Murasu Editor

The editor has the basic features that will help you with your text editing. They include file operations, printing, cut and paste, find and replace font variations, text justifications and formatting. It does not provide you advanced word processing features like pagination, headers and footers, tabulation, indents etc. For these features, it is best that you use a tool such as Microsoft Word or StarOffice.

When Anjal is operating in Lite (i.e. Free) mode, you may only use a single typeface (InaiMathi). However, you may use any of the three popular 8bit encoding: Anjal, TSCII or TAB. You must take note of the font names for these formats. If you are using Anjal encoding, use InaiMathi. TSCII fonts will start with

TSC, as such use TSCu_InaiMathi if your selected encoding is TSCII. Similarly use TAB_InaiMathi if you are using TAB encoding. If you are new, we recommend that you use TSCII 1.7 character set and the TSCu_InaiMathi font.

In Pro mode operation, you may choose any font in your computer to compose text in Murasu Editor. Again, take note that you should pick the appropriate fonts for your encoding (see section on Murasu Fonts).

Murasu Editor saves the files with an extension “.MRT”. The file is in Rich Text Format. You may also choose to save the files with an “.RTF” extension instead. When you do this, you may open the same file in WordPad, Word, StarOffice or any other sophisticated word processor for more advanced editing and page make-up.

Like all Anjal supported applications, Murasu Editor also has the “+Murasu” menu. You will be able to use all the features in this menu within Murasu Editor. This applies to both Lite and Pro mode operation of Anjal.

Murasu Mailer

Like the Murasu Editor, Murasu Mailer is another plug-in tool. However, Murasu Mailer is included in the core Anjal package, thus you will be able to use this tool even without installing the plug-ins package.

You may start Murasu Mailer in one of two ways. You can either click on the “Murasu Mailer” text link in the Anjal Setup screen (figure SU1); or start it the same way as the Editor by right clicking on the minimised icon and selecting the mailer item.

Before using the mailer to send email messages, you need to first set it up. To do this, click on the “Setup” menu item or the “அமைப்பு” button. The setup screen will appear as figure MM1.

Fill in your name (in English and Tamil) and your email address. The SMTP server is a tricky one. If you are directly connected to the Internet from home, you can leave this blank (do not even type a space). Otherwise, you need to check with your Network Administrator or your Service Provider for this information. If you are connected to an ISP, this information will be given to you in your signup package.

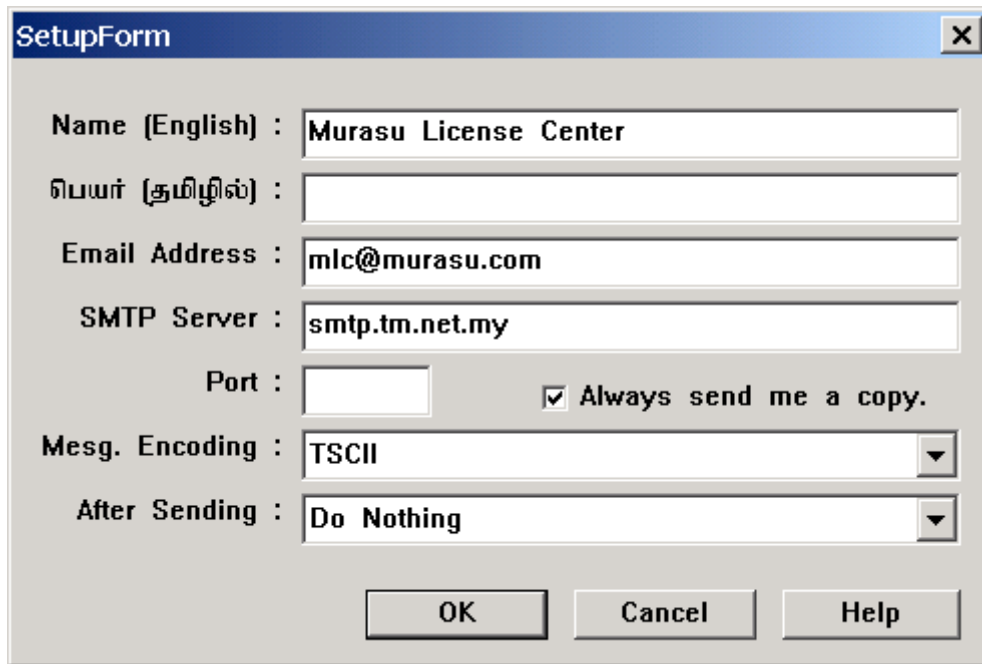
You can leave the “Port” entry as blank. This entry is only useful if the SMTP service you are using is configured in a non-standard (abnormal!) way.

The other two entries are “Message Encoding” and what you want the mailer to do after sending your message.

Note that the options for Message Encoding in the mailer are limited. The message composition window (figure MM2) uses a font called “Anjal-Text”. This is a system font created in a bitmap format for sharp rendering on the screen. This font is based on Anjal encoding. The mailer will convert the text message you composed to the format you set in the Message Encoding before it sends it out to your recipients.

For example, if you have set your Message Encoding to TSCII, the mailer will convert your message to TSCII encoded text before it sends out the mail. Also, note that you are able to type Tamil text in the subject line (figure MM2). This is not recommended as some mail servers may not handle 8bit text (which is the format Tamil text is in) properly. To avoid these problems, Murasu Mailer will convert the Tamil subject line to Romanised Tamil text prior to sending the message.

The After Sending parameter can be set to "Do nothing", "Close Mailer" or "Pop up a message". The last option displays a message box once the email is sent.



The image shows a Windows-style dialog box titled "SetupForm". It contains several input fields and a checkbox. The fields are: "Name (English)" with the value "Murasu License Center"; "பெயர் (தமிழில்)" which is empty; "Email Address" with the value "mlc@urasu.com"; "SMTP Server" with the value "smtp.tm.net.my"; "Port" which is empty; "Mesg. Encoding" with a dropdown menu set to "TSCII"; and "After Sending" with a dropdown menu set to "Do Nothing". There is a checked checkbox labeled "Always send me a copy.". At the bottom, there are three buttons: "OK", "Cancel", and "Help".

Figure MM1: Murasu Mailer Setup Screen

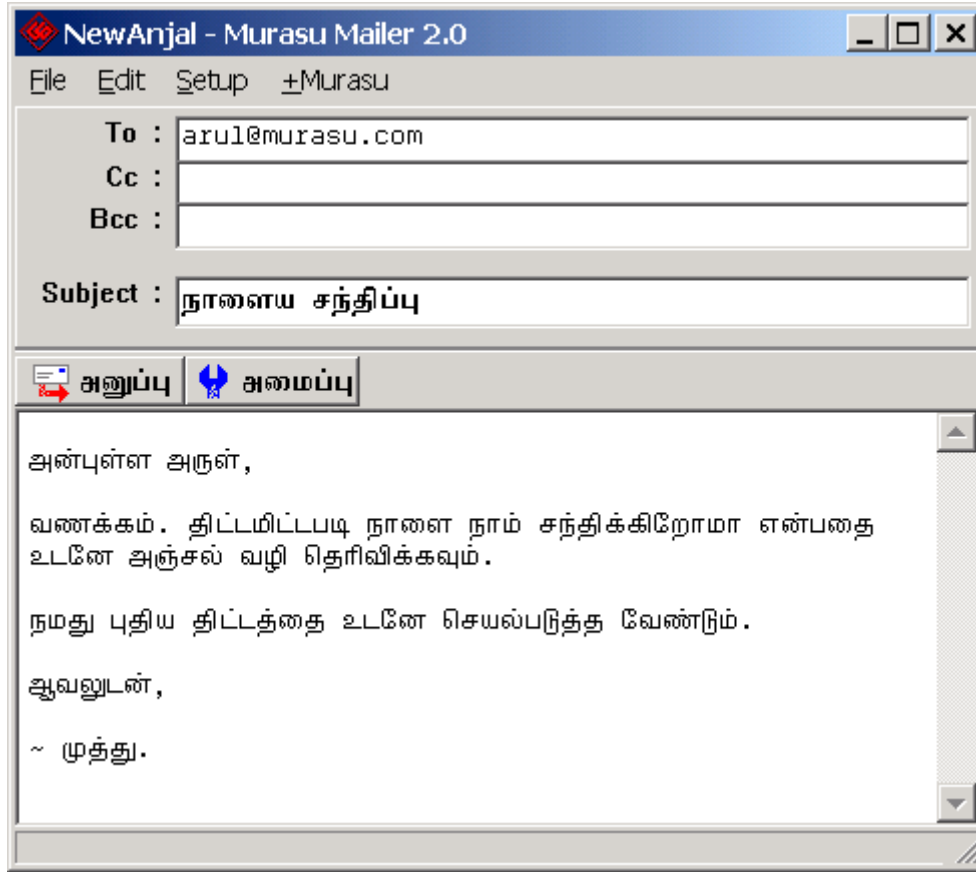


Figure MM2: Message composed in Murasu Mailer

Note that Murasu Mailer is just a simple tool for you to send quick messages in Tamil. It does not receive message, does not support attachments and it does not support HTML formatted messages. For these purposes, it is best that you use full blown email software like Outlook Express, Netscape Messenger or Eudora. There is a detailed document on how you can use TSCII fonts with these tools, called "Moving to TSCII 1.7". It is available in both Tamil and English. You may download this document in PDF format from <http://www.murasu.com/help>.

The +Murasu Menu

One of the features that differentiates Murasu Anjal from other Tamil input method software is the inclusion of the "+Murasu" menu in some of the most popular applications. This provides the ability access all the major features of Anjal without getting out of the application. The menu includes simple utilities like switching the keyboard mode to sophisticated functions like checking the encoding of selected text and converting them on the fly.

The menu can be accessed from the menu bar (figure ME1) or from the system menu of the application (figure ME2).

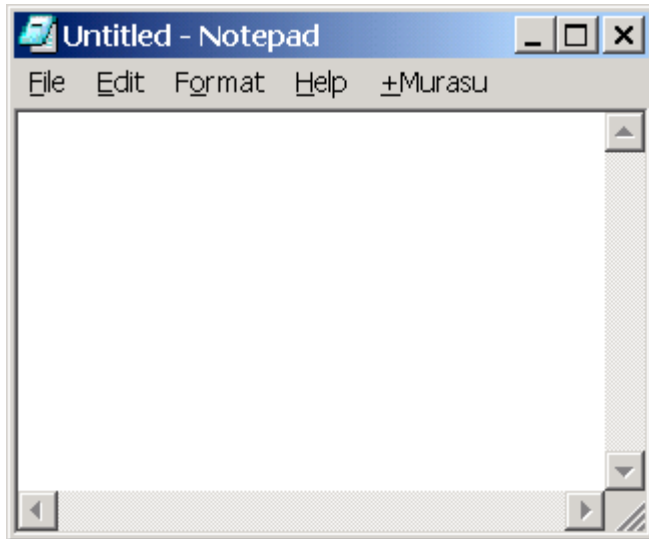


Figure ME1: The +Murasu menu in the application's menu bar. In this case the application is Notepad.

Applications that support the +Murasu menu include Notepad, Murasu Editor, Murasu Mailer, Eudora, Netscape Navigator, Netscape Composer, Netscape Messenger and Acrobat Reader. Anjal-Pro mode applications include WordPad, Yahoo! and MSN messengers and Adobe Acrobat.

Applications that support +Murasu menu in their system menu include Outlook Express and Netscape-6 in Anjal-Lite mode and Word, Excel, PowerPoint, FrontPage in Anjal-Pro mode. To see the menu in these applications, click on the icon at the top left corner. "Murasu" will be the last item in the system menu.

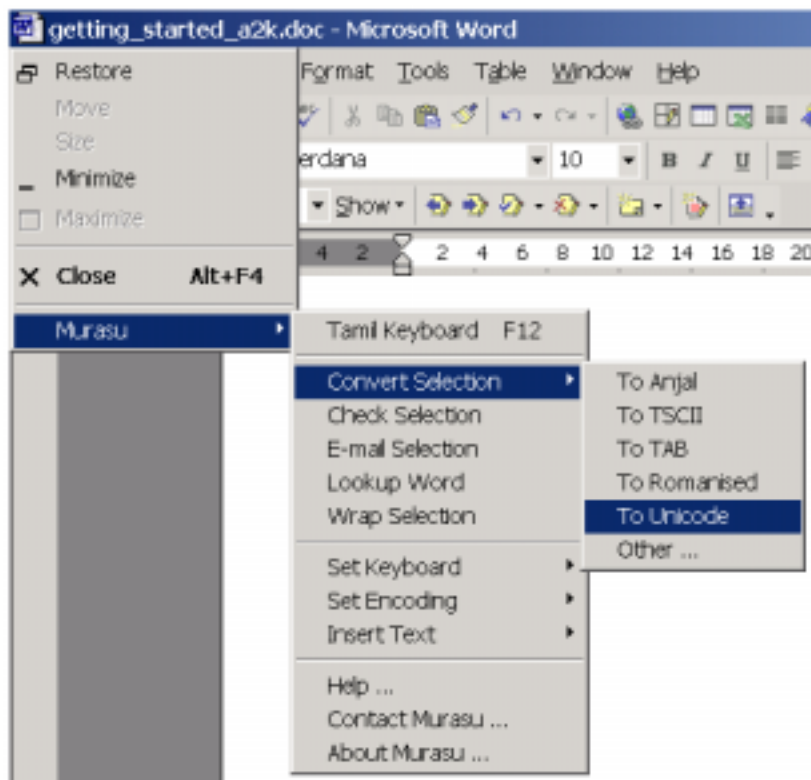


Figure ME2: Murasu menu seen in the system menu of Microsoft Word in an Anjal-Pro operation.

Now let's take a look at each of the menu items.

Tamil Keyboard (F12)

This is the first item and it toggles the keyboard mode between Tamil and Roman. Picking this menu is the same as pressing the F12 key.

Convert Selection

This is a very useful and powerful utility. While working on any of the applications listed above, you can select a section (or the entire) text and ask Anjal to convert that text into a particular format.

For example, if you receive an email in Outlook Express or a document in Microsoft Word in Anjal format; you can select the entire text and pick on "+Murasu→Convert Selection→To TSCII" item to convert the entire text to TSCII. Similarly you can convert to TAB, Unicode or Romanised Tamil directly.

You may also use indirect conversion to convert to other formats. To do this, pick the "Other" item. ("+Murasu→Convert Selection→Other..."). This will bring up the converter dialog box (figure ME3).

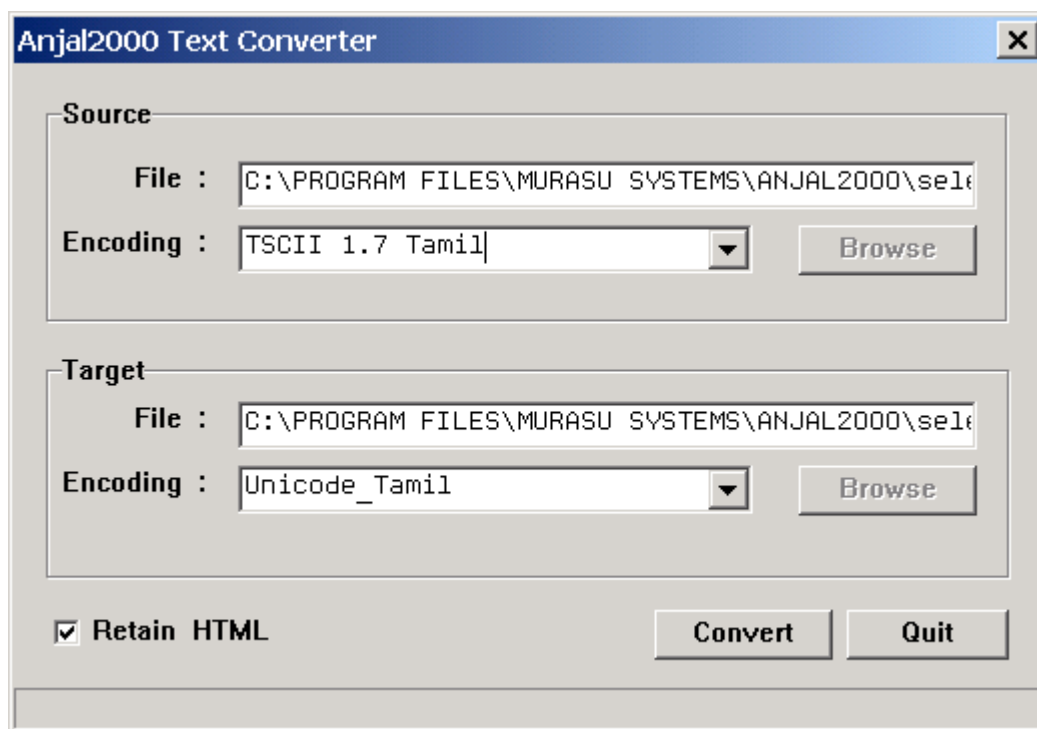


Figure ME3: Converter Dialog

In the converter dialog, you can set the source and target encodings and click the "Convert" button. The selected text will be converted to the target encoding.

Remember that you must have selected some text in the document to do this on the fly conversion. You can also use the same converter tool to convert text documents. We will look at this in the "Plug-Ins section.

The tables below show a list of all Murasu fonts and their availability in the various modes:

	Typeface	Sample Text
1	Arulmathi	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
2	InaiKathir	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்
3	InaiMathi	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
4	Amuthu	இணையம்வழி இதயங்களை இணைக்கும் துழ்ச் செயலி!
5	Mullai	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
6	Sudar	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
7	Arumbu	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
8	Kayal	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்
9	Malar	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
10	MullaiSlant	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
11	Munivar	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
12	Selvam	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
13	Thamarai	இணையம்வழி இதயங்களை இணைக்கும் தமிழ்ச் செயலி!
14	Kannigal	

	Typeface	Font Name			Available In*		
		Anjal Encoding	TSCII & Unicode Encoding	TAB Encoding	1	2	3
1	Arulmathi	ArulMathi	TSCu_ArulMathi	TAB_ArulMathi	✓	✓	✓
2	InaiKathir	InaiKathir	TSCu_InaiKathir	TAB_InaiKathir	✓	✓	✓
3	InaiMathi	InaiMathi	TSCu_InaiMathi	TAB_InaiMathi	✓	✓	✓
4	Amuthu	An_Amuthu	TSCu_Amuthu	TAB_Amuthu		✓	✓
5	Mullai	An_Mullai	TSCu_Mullai	TAB_Mullai		✓	✓
6	Sudar	An_Sudar	TSCu_Sudar	TAB_Sudar		✓	✓
7	Arumbu	An_Arumbu	TSCu_Arumbu	TAB_Arumbu			✓
8	Kayal	An_Kayal	TSCu_Kayal	TAB_Kayal			✓
9	Malar	An_Malar	TSCu_Malar	TAB_Malar			✓
10	MullaiSlant	An_MullaiSlant	TSCu_MullaiSlant	TAB_MullaiSlant			✓
11	Munivar	An_Munivar	TSCu_Munivar	TAB_Munivar			✓
12	Selvam	An_Selvam	TSCu_Selvam	TAB_Selvam			✓
13	Thamarai	An_Thamarai	TSCu_Thamarai	TAB_Thamarai			✓
14	Kannigal	AA_Kannigal	AA_Kannigal	AA_Kannigal		✓	✓

*1: Free Anjal Lite. 2: Eval Mode – 20 days free trial of Anjal-Pro. 3: Full Anjal-Pro mode.

Which encoding should I use?

This is probably the most frequently asked question in Tamil computing. Our answer to this is simple: If you have a computer that supports Unicode, use Unicode. Unicode is the only standard for Tamil encoding. Windows2000 and WindowsXp support Unicode and include a Tamil font called Latha.

Murasu Anjal2000 was the first Tamil software to provide fonts and all the commonly used keyboard layouts for Unicode – including the Tamil99 keyboard and the popular Anjal keyboard. If you use OfficeXp, you may create Tamil documents, publications, spreadsheets and databases in Tamil based on the Unicode standard.

This will ensure that your documents and other files will be completely usable in the future.

However, Windows2000 and WindowsXp require a fairly powerful computer. Some users may still be using their older computer with Windows98 and older version of Office. Some may be using other applications for desktop publishing and email. For these users, it may not be possible to use Unicode at this point. As an interim solution, we recommend the TSCII encoding. This is the most widely used encoding for email exchanges and web browsing around the world.

Murasu Fonts for Unicode and TSCII.

Which ever encoding (or character set) you use, you must select this in Anjal Setup. Murasu fonts that start with "TSCu_" (TSCu_InaiMathi for example) will work on both Unicode and TSCII encoding. This is a unique feature of Murasu fonts. Whether you choose to use Unicode or TSCII encoding, you may use any Murasu font that starts with TSCu_.

Fonts and Keyboard Layouts

The selection of a font will depend on the encoding you choose. As seen above, if you choose Unicode or TSCII, you will select fonts that begin with TSCu_. However, the choice of keyboard has nothing to do with your font or encoding selection. You may pick any keyboard you want and use that layout with the encoding you choose. This is another unique feature of Anjal.

Users who are comfortable with the Tamil99 keyboard or the Anjal keyboard may use the same layout when they compose text in any encoding.

TAB fonts in Murasu

We have seen that all of Murasu fonts are available in Anjal, TSCII, Unicode and TAB encoding. The TAB encoding was introduced in 1999 (after TamilNet99) to serve as a secure encoding for email and Web usage. If you select this encoding, you may use any font that starts with TAB_.

Note to Murasu-6, 7, 8 users

Murasu Anjal2000 no longer includes fonts for the Murasu-6 encoding. This encoding was used in versions 6, 7 and 8 of the old Murasu software. However, there is a pack of fonts called "Murasu Compatibility Pack" which has all the fonts that were included in Murasu 6, 7 and 8. These fonts begin their names with AA_ (like AA_Alli, AA_Mullai etc).

The package is provided only for previous users of Murasu software. We do not recommend that they continue with these fonts. They may not work properly in newer version of Windows. We highly recommend that they move to Unicode (or TSCII if they still use older machines).

There is a software tool called Murasu Rich Text Converter that will convert your old documents to the new format. As long as your software is able to save the document in RTF format, the converter will convert the Tamil text in the document and substitute the appropriate fonts automatically.

Note to users of other Tamil software and fonts

Users who have moved from other Tamil software to Anjal2000 may also make use of the Murasu Rich Text Converter to convert all their documents from previous fonts to Murasu fonts. Please refer to the Murasu Rich Text Converter documentation for more details.

Where to go for more help

We constantly update our user guides and introduce new ones to help our users work better with the software. These updates are available free of cost from the help section of our Website: <http://www.murasu.com/help>. You may also write to info@murasu.com if you do not find an answer in the help section.