



# Murasu Anjal 10

User Guide for Mac OS X

Murasu Systems Sdn Bhd

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## Introduction

Murasu Anjal is a suite of software tools that help create, edit, convert and publish Tamil content on Windows and Mac OS X operating environments.

Muthu Nedumaran first developed the software in 1985, on a personal computer running MS DOS 3.1 operating system as a hobby. The early versions of the software had both software and hardware components. The graphics card hardware was modified to render Tamil characters along with Roman letters.

Features of the software were regularly updated year after year. Murasu Anjal 5.0, the first version to run on Microsoft Windows operating environment (Windows 3.0) was released in 1991. Mac OS X version of Murasu Anjal was included as part of the operating system in Tiger (10.4).

Murasu Anjal changed the Tamil publishing landscape in the region from the day it was first introduced. Daily, weekly and monthly publications and printed books were produced with Murasu Anjal.

Version 9 of the software, which was introduced in late 1999 included support for Unicode. It is widely believed that Murasu Anjal was the first Tamil input software to support Unicode at that time. Much of the technical design of the software remained the same from versions 5.0 till 9.7. Modern operating systems such as Windows 7 and Mac OS X provide much better support for Indian languages. As such the old design required a review.

Murasu Anjal 10, introduces a completely redesigned set of components. Each of the components takes advantage of the operating system services to bring out the best utilities for Tamil while staying conformant to the standards for better co-existence with other languages, specifically Chinese.

This release includes companion tools that will help users create Tamil content with improved ease of use and compatibility with all the common software, specifically Office and Web applications.

A highly sophisticated input method editor, look-up word dictionary, visual keyboard are just to name a few. Legacy documents composed with older encoding formats like TSCII, TAB, TAM and Murasu-6 can be converted to Unicode with Anjal's embedded conversion tools. High quality Tamil Unicode fonts, some with regular and bold variants are included for better presentation

The “Nigandu” feature introduced in Anjal 9.5 has been redesigned in the new version. It now includes a complete Tamil-English dictionary from Lifco.

## Overview of Key Features

### Input Method

Murasu Anjal 10 leverages the Input Method that is already included in Mac OS X, namely Anjal and Tamil99.

### Keyboard Viewer and Character Palette

To assist new users, the Tamil99 Keyboard Viewer is provided so that users can click through the keys to input text or use it as an on-screen reference while typing on the physical keyboard. The Character Palette allows users to select Tamil symbols and numerals that are not mapped to the keyboard layout. (In Mac OS, users can pick the characters from the system Character Palette).

### Lookup Word with Lifco Tamil-English Dictionary

The complete Tamil-English Dictionary is bundled into Anjal. This will allow users to lookup the words and check their meanings.

### Anjal Unicode Fonts

Fifteen professionally designed Tamil Unicode fonts are included. Some of them are provided with regular and bold variants for better contrast between body text and headings. In addition, Anjal InaiMathi Schoolbook font is specifically adapted to comply with the written form of Tamil alphabets as approved by MOE.

### Document converter Add-In for MS Office

Old documents created in legacy encoding such as TSCII, TAB or TAM can be converted to Unicode with the converter embedded into Office applications. For the first time, users will be able to convert even PowerPoint and Excel documents. This add-in is available only in the Microsoft Windows version. However, documents converted from the Windows version can be used with compatible Mac OS software like OpenOffice.org or iWork suite.

### File Converter for HTML and Text Documents

Legacy documents in TXT or HTML files can be converted using the file converter. Users just drag-and-drop these files and the converter creates Unicode versions of the files. Many files can be selected and dropped into the converter for a batch conversion. This too is only available on Windows. However, the converted documents can be brought into Mac OS for further editing.

### PDF Creation

Windows version of Anjal includes a PDF writer. In Mac OS X, this is a built in feature. Users can create PDF documents by just printing to a file.

### Anjal.Net Community Portal

This online portal is created for users to exchange views, participate in forums, create blogs and read regularly posted articles and guides on Murasu Anjal software. Membership is open to all Anjal users.



## Installation

### Pre-requisites

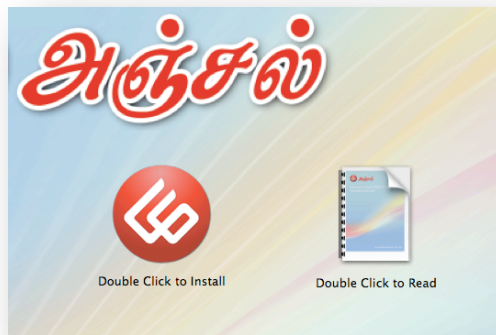
Before installing Anjal into your computer, please ensure that you have the following minimum requirements:

1. A Macintosh computer running Mac OS X 10.5 (Leopard) or later.
  - a. Mac machines with Intel architecture may run 10.5 or 10.6 (Snow Leopard)
  - b. Mac machines with the older PowerPC architecture will run 10.5 by not 10.6 or later.
2. An active Internet Connection
  - a. Internet connection is required at the time of installation. This is to verify your Anjal 10 serial number.

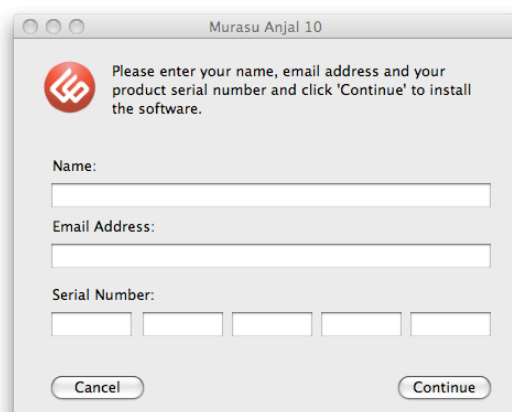
## Installing Murasu Anjal

Start the Murasu Anjal installer either by double clicking the downloaded file or from the appropriate link on the CD-ROM main screen.

You will now be able to see the mounted folder in Finder as shown below:



There are only two icons. Double clicking the book will open this manual in Preview. Double clicking on the Anjal icon will start the installer:



Enter your name, email address, Murasu Anjal 10 product serial number and click 'Continue'. You will be prompted for the Administrator password. Enter that to complete the installation.

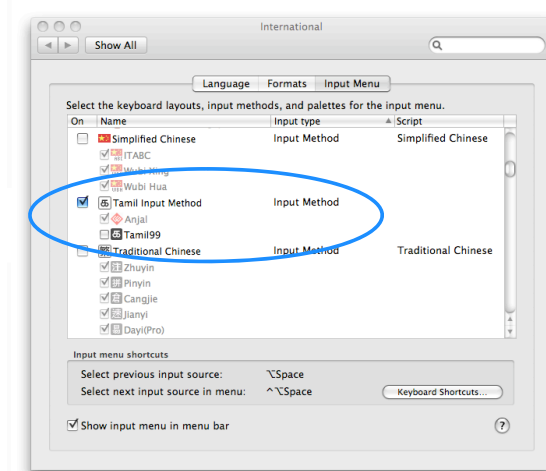
Once the installation is complete, the installer will prompt you to initiate a logout. Answer yes to logout of the system and log in back again.

All the required application files are now installed in your system. The next step is to enable the Input Method and Keyboard Viewer. If you are running Snow Leopard, you may need to enable the Lookup Word feature as well.

We'll do all of these in the next section.

## Enabling the Input Method and Keyboard Viewer

1. Open System Preferences from the doc.
2. Select 'International' from the top most row
3. Search and enable Anjal or Tamil99 from Tamil Input Methods

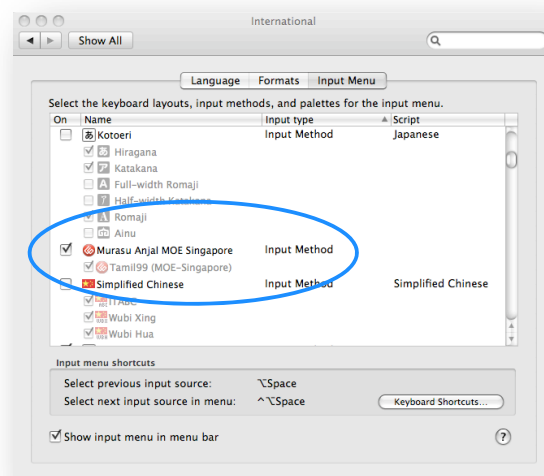


4. Search and enable Murasu Anjal MOE Singapore (Input Method)

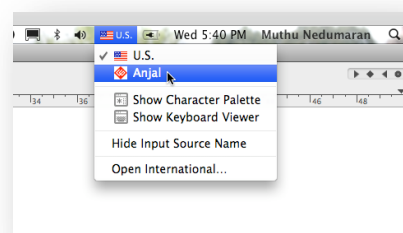
This is optional for users who want to use this input method

5. Also search and enable Tamil99 MOE Singapore (Keyboard)

This is optional for uses who want to use this keyboard.



Once enabled, you can activate them from the input menu:



## Using Tamil Input Methods

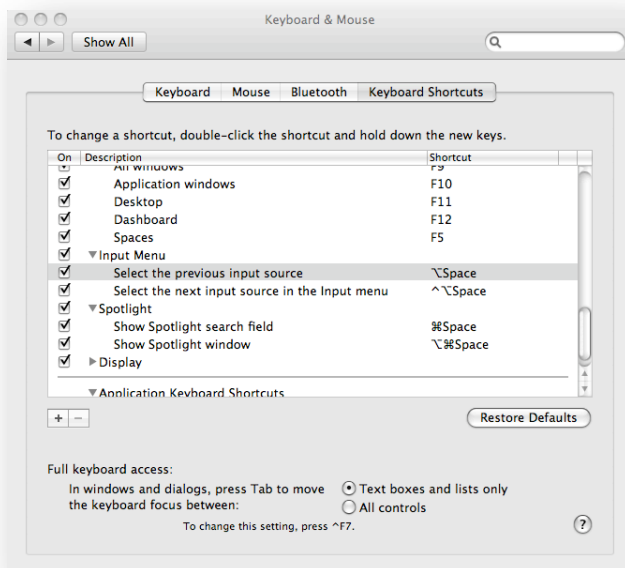
### Activating the Input Method

To activate the input method, select Anjal, Tamil99 or the other input method from the input menu (see ‘Enabling the input method and keyboard viewer’ in the Installation section. To switch back to English, you can select the U.S. Flag again from the input menu.

### Switching Input Modes

Using the input menu is an easy way to switch input methods. Mac OS X also allows you to configure keyboard short cuts to activate and deactivate input methods. With short cuts, we can toggle as we are typing without leaving the keyboard.

To configure keyboard short cuts, open System Preferences from the doc and select “Keyboard and Mouse” (Leopard) or “Keyboard” (Snow Leopard). Choose any keyboard short cut you prefer.



Note: the default short cut for input source is Command-Space. However, since this short cut is used for spotlight, Option-Space (as shown above) can be a close equivalent.

### Input Method versus Keyboard selection

Note that the Input Method and Keyboard are two different input sources in Mac OS X. The icon differentiates them.

## Anjal Input Method

Murasu The Murasu Anjal keyboard layout was introduced in the first version of Murasu Anjal released in early 1994. It is based on the phonetic mapping of Tamil letters to those of English. The table below shows the mapping:

உயிர் எழுத்துகள் (Vowels)		மெய் எழுத்துகள் (Consonants)	
அ	a	க்	k
ஆ	A <u>or</u> aa	ச்	ch <u>or</u> s
இ	i	ட்	d <u>or</u> t
ஈ	I <u>or</u> ii	த்	th
உ	u	ப்	p <u>or</u> b
ஊ	U <u>or</u> uu	ற்	R
எ	e		
ஏ	E <u>or</u> ee	ய்	y
ஐ	ai	ர்	r
ஒ	o	ல்	l
ஓ	O <u>or</u> oo	வ்	v
ஒள	au	ழ்	z
ஃ	q	ள்	L
கிரந்த எழுத்துகள் - Grantha			
ஹ்	h	ங்	ng
ஸ்	S	ஞ்	nj
க்ஷ்	x	ண்	N
ஜ்	j	ந்	n- <u>or</u> w
ஷ்	sh	ம்	m
ஸ்ரீ	sri	ன்	n <u>or</u> n=

## Anjal Key sequences:

1. To get compound letters (உயிர்மெய்), type the base consonant followed by the respective vowel. Examples:

**mozi** => மொழி

**anbu** => அன்பு

2. To get elongated vowels (நெடில்) type the same vowel twice or upper case letter. Examples:

**yaakaavaaraayinum** => யாகாவாராயினும்

**yAkAvArAyinum** => யாகாவாராயினும்

3. Words with ன்ற். Type **ndr** to get ன்ற். Examples:

**mandram** => மன்றம்

**kandru** => கன்று

**toondri** => தொன்றி

4. Words with ற்ற். Type **tr** to get ற்ற். Examples:

**patru** => பற்று

**pootri** => பொற்றி

**petraal** => பெற்றால்

5. Words with ண்ட். Type **nd** to get ண்ட். Examples:

**mandapam** => மண்டபம்

**kandu** => கண்டு

**veendaam** => வேண்டாம்

6. Words with ந்த். Type **nt** to get ந்த். Examples:

**sontam** => சொந்தம்

**anti** => அந்தி

**vantu** => வந்து

7. Words with ஞ்ச். Type **njj** to get ஞ்ச். Examples:

**ManjjaL** => மஞ்சள்

**Tanjjam** => தஞ்சம்

**Konjji** => கொஞ்சி

8. Words beginning with the letter ந. When **n** is typed after a space, tab or Return key, it will automatically produce 'ந'.

## The Tamil99 Layout

You can also type in Tamil with the Tamil99 layout. This layout automatically becomes active when you select the Input Method or the keyboard.

The key arrangements in Tamil99 is shown in the figure below:



1. The vowels are arranged on the left and consonants on the right.
2. Some punctuation keys are reassigned: example single-quote, double-quote, semi-colon, colon, forward-slash and square brackets. You may also type these characters from their original location while in "English mode".
3. The Grantha letters are mapped to upper case letters Q, W, E, R, T and Y. Therefore, you need to press the shift key to input Grantha letters.
4. Independent vowels (அ to ஐ) are typed by pressing the respective keys in the layout. These keys will become dependant vowels (உயிர்க் குறியீடு) when typed immediately after a base consonant.
5. To get base consonants, type the respective keys on the right.
6. To get compound letters (உயிர்மெய்), type the base consonant followed by the respective vowel.

## The Pulli ( ` )

Pulli is mapped to the lower case ' f ' key. Since a pulli can only follow a base consonant, this key will generate AYTHAM (ஃ) when typed without a preceding base consonant.

## Composition Examples

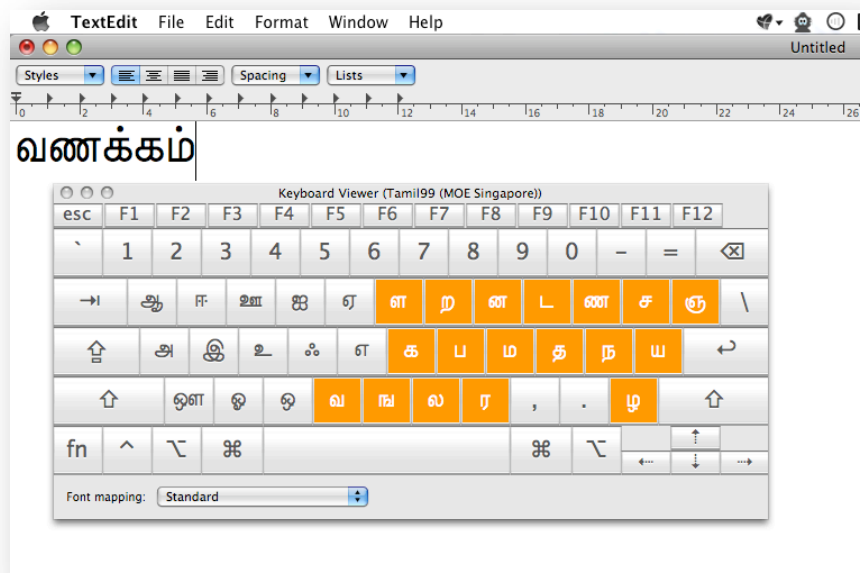
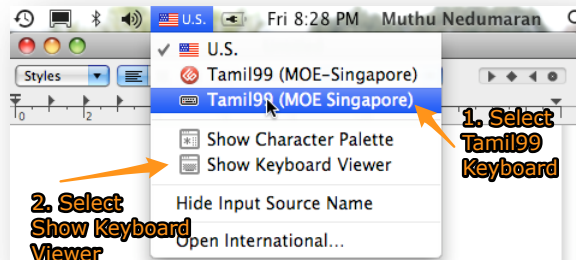
Below are some examples of simple Tamil words and their respective keystroke sequence:

வணக்கம்	V வ	P ண	H க	F .	H க	K ம	F .				
தமிழ்	L த	K ம	S இ	? ழ	F .						
ஜீவன்	Shift	E ஐ உள	W ஷ ஈ	V வ	I ன	F .					
தூய்மை	L த	E ஐ உள	" ய	F .	K ம	R ஐ ஐ					
திருக்குறள்	L த	S இ	M ர	D உ	H க	F .	H க	D உ	U ற	Y ள	F .
புஷ்பா	J ப	D உ	Shift	W ஷ ஈ	F .	J ப	Q ஸ ஆ				



## Keyboard Viewer and Character Palette

To assist users who are new to the Tamil text input or the Tamil99 keyboard layout, Anjal provides a Keyboard Viewer tool. The Keyboard Viewer is a tool-window that will be always on top of all other application windows.

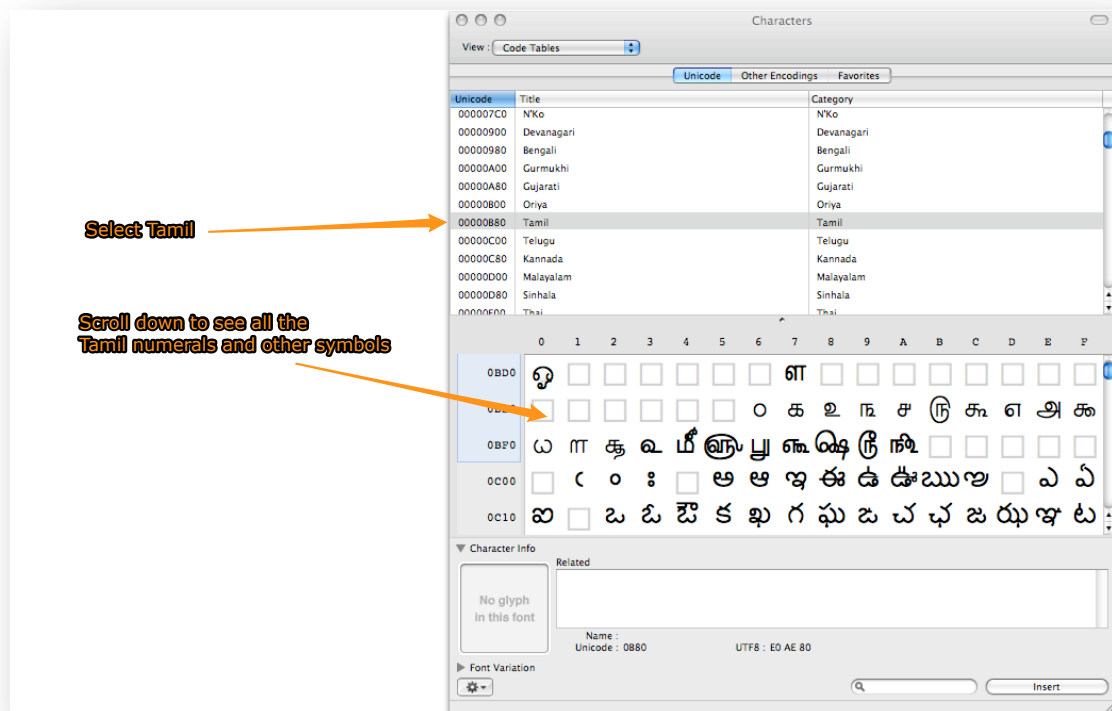
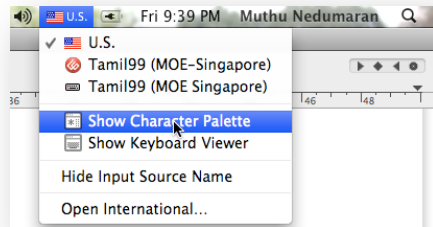


The Picture above shows the Keyboard Viewer floating over the TextEdit application. Consonants are marked orange and vowels are unmarked. You can either click on the keys on the Keyboard Viewer or type them directly on the physical keyboard.

## Mac OS X Character Palette

The character palette utility in Mac OS X allows you to input characters that are not mapped to the Tamil99 keyboard. In addition it also includes non-Tamil characters that are not available in the standard keyboard.

As with the Keyboard Viewer, the Character Palette can be invoked from the input menu as shown below:

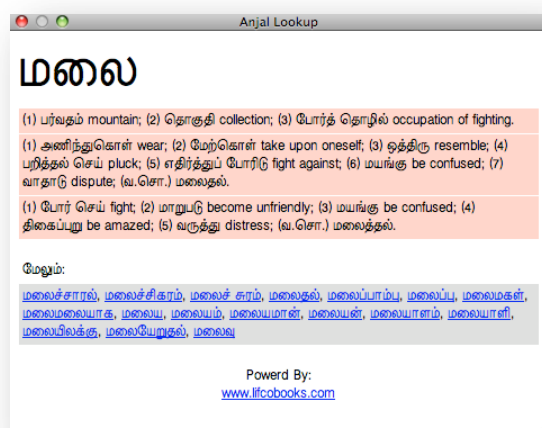
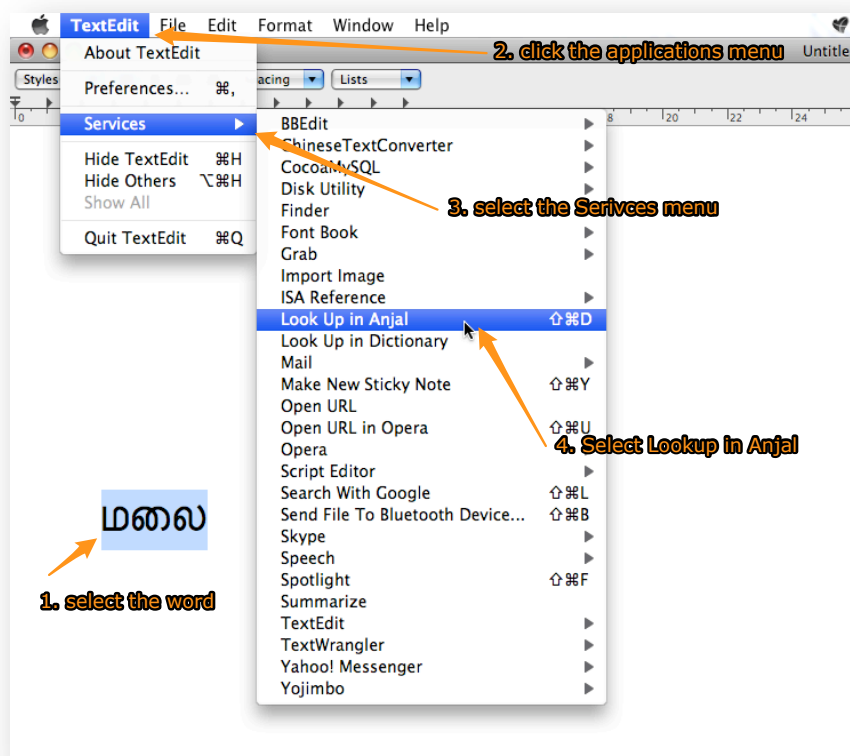


## Lookup Word with LIFCO Tamil Dictionary

Murasu Anjal 10 includes the complete Tamil-English Dictionary from LIFCO. Details of the print version of this dictionary can be found at <http://lifcobooks.com>

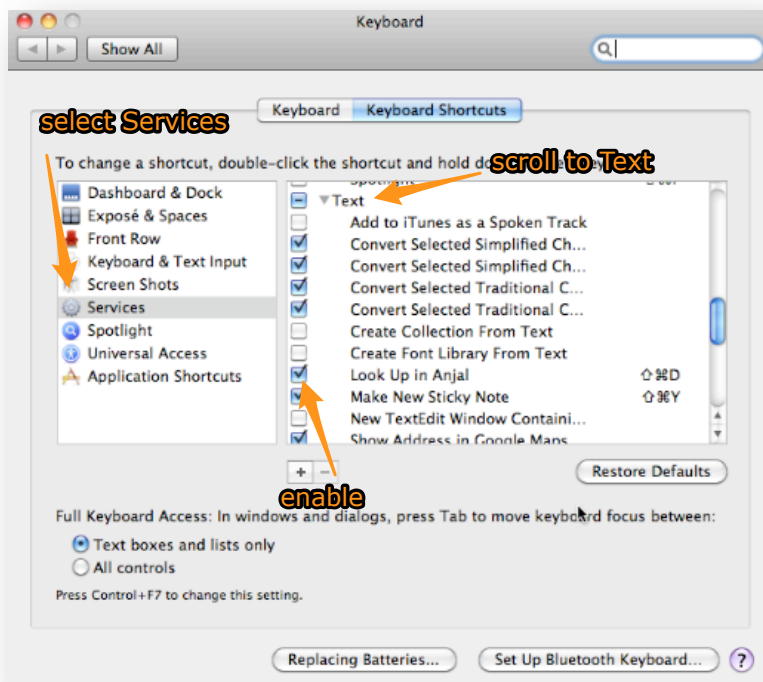
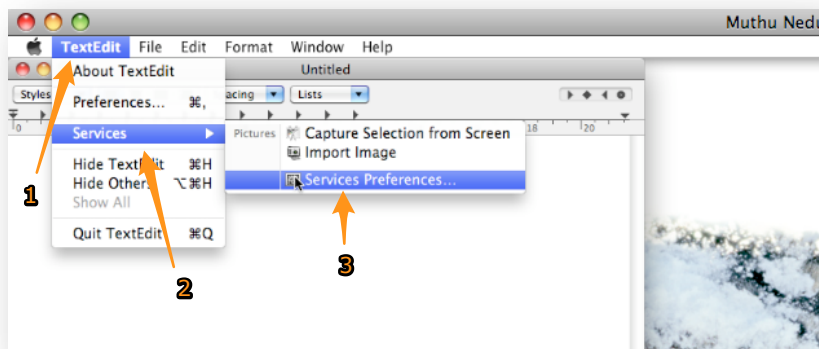
The dictionary can be used while composing Tamil text to lookup Tamil words and their meanings in Tamil and English.

Lookup word will only work on some applications, specifically the ones from Apple. The example below shows how a word can be looked up in TextEdit. The same can be done from other applications that support this feature.



## Lookup Word in Snow Leopard

Anjal's lookup feature may not be enabled by default in Snow Leopard. It can be easily done shown in the picture below:



## Murasu Anjal Fonts

Murasu Anjal 10 includes 25 Tamil typefaces that are completely Unicode compliant. These typefaces are available on both Windows and Mac OS X platforms. This enables users to easily take their documents and work across both these platforms.

Two of the typefaces include regular and bold variants. This feature allows a single typeface with two different weights for consistent type styles in documents.

The table below lists some font faces that are available in Anjal 10 and their recommended usage. This is just a sample set of fonts. There are more fonts in the package that what is shown in the samples below.

### Schoolbook Font : Recommended font for teaching and learning

Anjal InaiMathi has a variant that is specifically designed for primary school text usage. The glyphs in this font, called Anjal InaiMathi Schoolbook, are designed to meet the standard for letter shapes set by the Ministry of Education.

தூரம், கழுகு, முக்கு, இலை, பரிவு, பார், ஓடம்
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### Body Text Fonts

The screen capture below shows fonts that are specifically designed for body text. Two of these, Anjal InaiMathi and Anjal Chittu Slant, are available in two faces: regular and bold. The emboldening of the stem widths of these fonts in design, make the bold faces stand out from their regular counterparts. The effect will be much better than the default emboldening done by Windows.

<p><b>பூபுவின் தொப்பி</b>  பூபு ஒரு குட்டி யானை. பூபுவுக்கு அம்மா யானை ஒரு தொப்பி வாங்கி வந்தது. பூபு மகிழ்ச்சி அடைந்தது. அது தொப்பியை அணிந்து பார்த்தது.</p>	Anjal InaiMathi Regular & bold
<p><b>பூபுவின் தொப்பி</b>  பூபு ஒரு குட்டி யானை. பூபுவுக்கு அம்மா யானை ஒரு தொப்பி வாங்கி வந்தது. பூபு மகிழ்ச்சி அடைந்தது. அது தொப்பியை அணிந்து பார்த்தது.</p>	Anjal Chittu Slant Regular & Bold
<p>பூபுவின் தொப்பி  பூபு ஒரு குட்டி யானை. பூபுவுக்கு அம்மா யானை ஒரு தொப்பி வாங்கி வந்தது. பூபு மகிழ்ச்சி அடைந்தது. அது தொப்பியை அணிந்து பார்த்தது.</p>	Anjal Arulmathi
<p><b>பூபுவின் தொப்பி</b>  பூபு ஒரு குட்டி யானை. பூபுவுக்கு அம்மா யானை ஒரு தொப்பி வாங்கி வந்தது. பூபு மகிழ்ச்சி அடைந்தது. அது தொப்பியை அணிந்து பார்த்தது.</p>	Anjal Mullai
<p><b>பூபுவின் தொப்பி</b>  பூபு ஒரு குட்டி யானை. பூபுவுக்கு அம்மா யானை ஒரு தொப்பி வாங்கி வந்தது. பூபு மகிழ்ச்சி அடைந்தது. அது தொப்பியை அணிந்து பார்த்தது.</p>	Anjal Mallikai
<p><b>பூபுவின் தொப்பி</b>  பூபு ஒரு குட்டி யானை. பூபுவுக்கு அம்மா யானை ஒரு தொப்பி வாங்கி வந்தது. பூபு மகிழ்ச்சி அடைந்தது. அது தொப்பியை அணிந்து பார்த்தது.</p>	Anjal Munivar

### Stylish Text Fonts

The screen capture below shows stylish fonts that can be used for casual body text or sub headings:

தமிழ் மொழி விழா	Anjal Amma
தமிழ் மொழி விழா	Anjal Selvam
தமிழ் மொழி விழா	Anjal Sudar

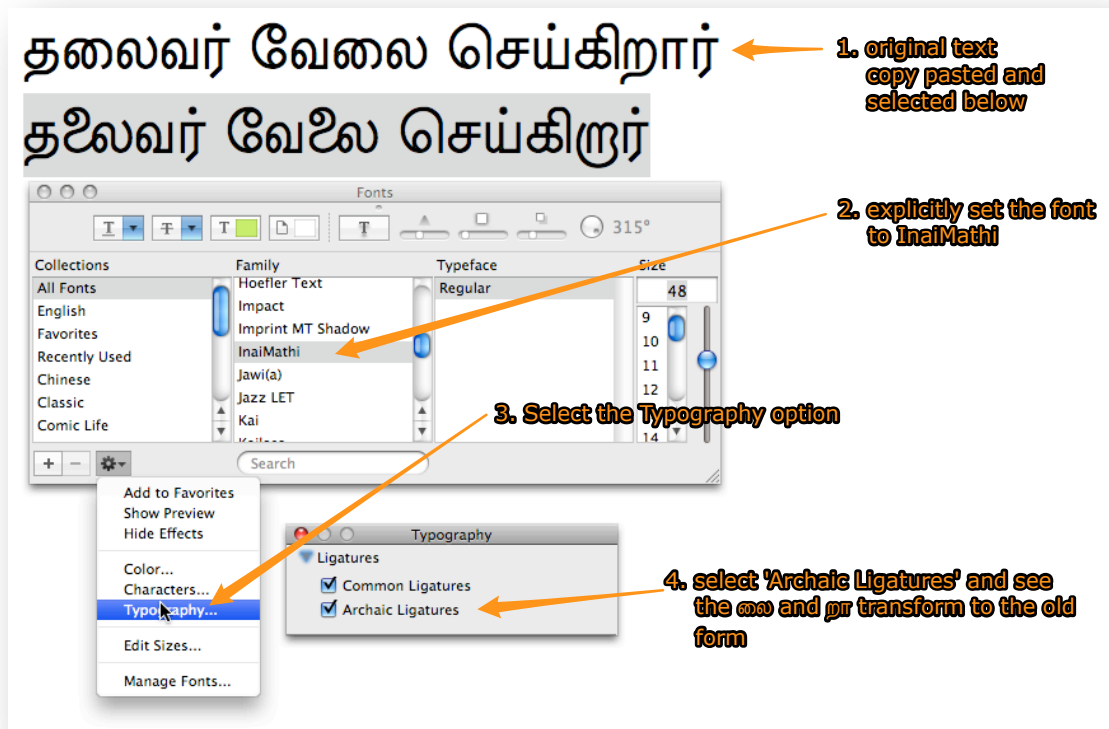
### Heading Fonts

The screen-capture below shows some heading fonts that can be used in formal and informal documents. The font Anjal Thoegai has another variant called Anjal Thoegai College (not shown in the capture).

தமிழ் மொழி விழா	Anjal Kayal
தமிழ் மொழி விழா	Anjal Mathavi
தமிழ் மொழி விழா	Anjal Sinthu
தமிழ் மொழி விழா	Anjal Thoegai

## Archaic Letter Forms

Mac OS X includes an Anjal font called InaiMathi. This font contains an optional feature that renders archaic latter forms (popularly known as ORNL letters or Old-stlye Ra Na La). The screen-capture below shows how they can be selected. Note that this form does not change the character encoding. In other words, when you change the font to another Unicode Tamil font, the archaic letters may not show, but their contemporary forms will appear.





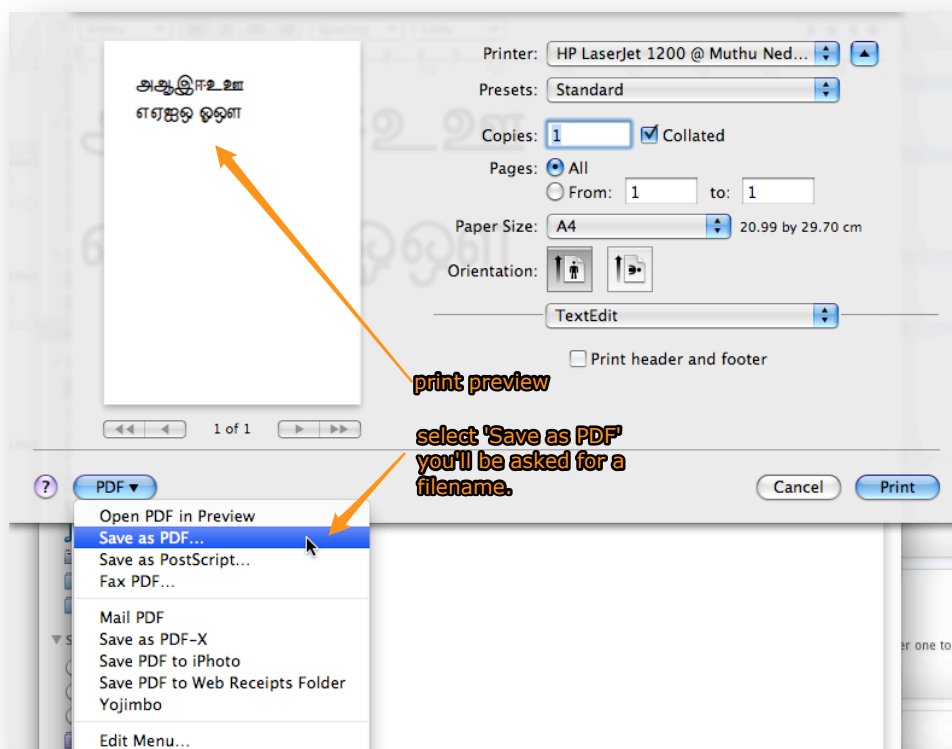
## PDF files

PDF, abbreviation for Portable Document Format, allows you to distribute your documents with the same formatting, as it would appear in print. This allows your recipients to view your documents without having to install the application you used to create the document. PDF also makes it possible to distribute your document as “read-only”.

Mac OS X has a built-in feature that allows you to create PDF documents.

### Creating PDF files

Creating PDF files in Mac OS X is as easy as printing to a printer. The picture below shows the print options you can choose to convert your documents into PDF:



## Application Considerations

In order to create Tamil documents, presentations and spreadsheets you will need an application that supports Indic Unicode.

At the time this document was created, the most common office application suite, Mac Office 2008 from Microsoft, does not fully support Tamil Unicode. However, the popular suites from Apple: iLife08, iLife09, iWork08 and iWork09 handle Tamil Unicode text very well. They can also be used to read and write Microsoft Office format documents.

The list below provides specific applications that can be used today as a replacement for Mac Office. These applications generally read or write Microsoft format documents. It is not an exhaustive list as there are many more Indic Unicode enabled applications available commercially or as free downloads. The number is certainly growing.

### Word Processing & Page Layout:

1. Pages: included in iWorks suite from Apple
2. OpenOffice.Org Writer: available as free download from [openoffice.org](http://openoffice.org)
3. TextEdit: included in Mac OS X
4. AbiWord: available as free download
5. Mallet: available as free download

### Presentation:

1. Keynote: most popular in Mac OS X, available as part of iWorks suite
2. OpenOffice.Org presenter: available as free download from [openoffice.org](http://openoffice.org)

### Spreadsheets:

1. Numbers: included in iWorks suite from Apple
2. OpenOffice.Org Calc: available as free download from [openoffice.org](http://openoffice.org)

## Anjal.Net : Murasu Anjal Community Portal

Anjal.Net (<http://anjal.net>) is a community Web portal for Murasu Anjal worldwide.

The Website hosts articles, discussion forums, blogs and other content that are published or updated from time to time.

This will be a great place for you to learn how to use the various features of Anjal and apply them in your work. You may exchange ideas with other users from around the world or even create your own forum to discuss ideas specific to the work you do.

The Website will also carry information on updates and upgrades to Murasu Anjal software.

Registration is required to access the forums and it's free. You may register at the portal and create your own login account.

The Website is optimized for the following browsers:

1. Internet Explorer 7.0 or later (Windows)
2. Firefox 3.0 or later (Windows and Mac OS X)
3. Opera browser (Windows and Mac OS X)
4. Safari 3.0 or later (Windows and Mac OS X)