



## SegmentAnt (Windows)

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Help file version: 001.



## Introduction

*SegmentAnt* is a freeware Japanese and Chinese segmenting tool based on various tagging tools including the Jieba<sup>1</sup> and PyNLPIR (NLPIR/ICTLICAS)<sup>2</sup> engines for Chinese segmenting and POS tagging, the TinySegmenter<sup>3</sup> engine for Japanese segmenting, and the smallseg<sup>4</sup> engine for Chinese segmenting. *SegmentAnt* takes either an input text or an input list of text files (**UTF-8 encoded**) and splits the texts into "tokens" separated by either half-width or full-width spaces. Depending on the embedded tool, *SegmentAnt* can also tag the texts with Parts-Of-Speech. *SegmentAnt* runs on any computer running Microsoft Windows (tested on Win 7), Macintosh OS X (tested on OS X 10.9 Mavericks), and Linux (tested on Linux Mint 17) computers. It is developed in Python and Qt using the *PyInstaller* compiler to generate executables for the different operating systems.

<sup>1</sup> Available at: <https://github.com/fxsjy/jieba>

<sup>2</sup> Available at <http://pynlpir.readthedocs.org/en/latest/index.html>.

The segmentation accuracy is reported to be 98.23% (<http://ictclas.nlpir.org/nlpir/html/fenci-1.html>)

<sup>3</sup> Developed by Taku Kudo <taku@chasen.org> and implemented in Python by Masato Hagiwara at <http://lilyx.net/pages/tinysegmenter.py.html>

<sup>4</sup> Available at: <https://code.google.com/p/smallseg/>

## Getting Started (No installation necessary)

### Windows

On Windows systems, simply double click the *SegmentAnt* icon to launch the program.

### Macintosh OS X

On Macintosh systems, simply double click the *SegmentAnt* zip file. The zip file will unzip the *SegmentAnt* application. Then, you can drag the *SegmentAnt* application to your application folder, your desktop, or anywhere else you like. Throw away the zip file when you are finished.

### Linux

On Linux systems, set the permissions to run the executable, then double click the *SegmentAnt* icon to launch the program.

### Segmenting Input Text

**Step 1:** Select the "Input Text" radiobox on the left of the main window.

**Step 2:** Select the language of the files using the combobox next to the "Language" label.

**Step 3:** Load a custom (user) dictionary if available for improved accuracy of segmenting/tagging. (See <https://github.com/fxsjy/jieba> for an explanation of how to use this feature with the Jieba engine).

**Step 4:** Choose either the "Half space" or "Full space" radiobox for the segment character of the output results.

**Step 5:** Click "Start" to begin the segmenting process.

Note 1: The segmenting process can be stopped at any time by clicking the "Stop" button.

### Segmenting Input Files

**Step 1:** Select the "Input Files" radiobox on the left of the main window.

**Step 2:** Select the files you want to segment. You can do this in four ways:

- a) Click on the File->Open File(s) menu option and select the files you want to segment;
- b) Click on the File->Open Dir menu option and select a directory of files you want to segment;
- c) Click on the "Load" button next to the "Input Files" label and select the files you want to segment;
- d) Drag and drop files directly onto the *SegmentAnt* application.

Note 1: The number of selected files is shown next to the "Input Files" label.

Note 2: If you click on the File->Close Files menu option or click the "Close" button next to the "Input Files" label, the input files will be removed from the list.

**Step 3:** Select the language of the files using the combobox next to the "Language" label.

**Step 4:** Load a custom (user) dictionary if available for improved accuracy of segmenting/tagging. (See <https://github.com/fxsjy/jieba> for an explanation of how to use this feature with the Jieba engine).

**Step 5:** Choose either the "Half space" or "Full space" radiobox for the segment character of the output results.

**Step 6:** Click "Start" to begin the segmenting process.

Note 1: Segmented versions of the original files will be saved in a new folder named "segmented" in the same folder as the original file.

Note 2: The segmenting process can be stopped at any time by clicking the "Stop" button.

### Additional Features

The output display can be selected, copied, and pasted as is standard on the operating system:

Windows/Linux:	CTRL-A ⇔ Select All	CTRL-C ⇔ Copy	CTRL-V ⇔ Paste
Macintosh:	CMD-A ⇔ Select All	CMD -C ⇔ Copy	CMD -V ⇔ Paste

## NOTES

### Comments/Suggestions/Bug Fixes

All new editions and bug fixes are listed in the revision history below. However, if you find a bug in the program, or have any suggestions for improving the program, please let me know and I will try to address the issues in a future version.

This software is available as 'freeware' according to the license below. It is important for my funding to hear about any successes that people have with the software. Therefore, if you find the software useful, please send me an e-mail briefly describing how it is being used.

## CITING/REFERENCING *SegmentAnt*

Use the following method to cite/reference *SegmentAnt* according to the APA style guide:

Anthony, L. (YEAR OF RELEASE). *SegmentAnt* (Version VERSION NUMBER) [Computer Software]. Tokyo, Japan: Waseda University. Available from <http://www.laurenceanthony.net/>

For example if you download *SegmentAnt 1.1.0*, which was released in 2014, you would cite/reference it as follows:

Anthony, L. (2015). *SegmentAnt* (Version 1.1.0) [Computer Software]. Tokyo, Japan: Waseda University. Available from <http://www.laurenceanthony.net/>

Note that the APA instructions are not entirely clear about citing software, and it is debatable whether or not the "Available from ..." statement is needed. See here for more details:

<http://owl.english.purdue.edu/owl/resource/560/10/>

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These terms will be governed by Japanese law and the Japanese courts shall have jurisdiction.

## KNOWN ISSUES

If a very large file is copied to the "Input Text" box and segmented, once the results are generated, copying the results might use up all the available system memory and cause the program to crash. To avoid this problem, large files should always be segmented using the "Input File" option.

## REVISION HISTORY

### 1.1.3

This is a minor upgrade with the following bug fix

Bug fixes

1. An expiry of the license to the NLP/ITCLCAS engine caused it to break inside SegmentAnt. This has now been fixed.

### 1.1.2

This is a minor upgrade with the following bug fix

Bug fixes

2. An update to the NLP/ITCLCAS engine (again) caused it to break inside SegmentAnt. This has now been fixed..

### 1.1.1

This is a minor upgrade with the following bug fix

Bug fixes

3. An update to the NLP/ITCLCAS engine caused it to break inside SegmentAnt. This has now been fixed by using version 0.4.6 of the engine.

### 1.1.0

This is a minor upgrade with new features and various bug fixes

New features

- Revised this help file and added a more formal license for the software

- Added the Jieba and PyNLPIR (NLPIR/ICTLCAS) Chinese segmentation/tagging engines allowing for more accurate tagging of files as well as the ability to Part-of-Speech (POS) tag the files.
- Adapted the interface to allow for custom dictionaries to be added that replace or append the main dictionary used for segmenting/tagging.
- Changed the output so that segmented/tagged files are saved to a new "segmented" sub-folder in the same folder as the original files
- Cleaned up the code to allow further improvements to be added more easily

1.0.0

This is the first version of the program

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