

In New Zealand when entering words in **Māori** there are a number of words that use a **macron** over certain characters. A macron is a horizontal bar over the character. This is used to emphasise the pronunciation of the word. In most cases it lengthens the sound. You can get more advice on their use from website for [Te Taura Whiri i te Reo Māori](#) (the Māori Language Commission).

Here are some examples of words that use **macrons**:

**Māori**

**Tēnā koe**

**Ngā mihi**

### What's the problem?

The Māori macron is part of an extended Character Set that requires the implementation of what is called [Unicode](#) , or more specifically [UTF-8](#) . Originally text characters were encoded ( ie given numbers that computers deal with) in the range of 0 to 255, in what was called [ASCII](#) . This did include some latin characters used in French and German. These were based on a computer using just one [byte](#) ( giving the 256 character range) per text character.

With other languages needing to use computers, ie Chinese, Japanese, and Middle Eastern, extended character sets were created that used 2 or more bytes per character - some even vary the number of bytes per character of text to optimise file sizes. UTF-8 uses one [byte](#) for any [ASCII](#) characters, which have the same code values in both UTF-8 and ASCII encoding, and up to four bytes for other characters

### Your Options

There are a number of options to assist in the keyboard entry of words with macrons.

1. The Māori Language Commission website has a free keyboard macroniser. This is a plugin to MS Windows that allows you to use keyboard sequences to enter the macrons. eg.

## Typing Macrons

Written by Administrator

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[ + a = ā  
[ + e = ē  
[ + i = ī  
[ + o = ō  
[ + u = ū

To get this free tool go to

[http://www.tetaurawhiri.govt.nz/english/resources\\_e/download/keyboard.shtml](http://www.tetaurawhiri.govt.nz/english/resources_e/download/keyboard.shtml)

2. There are a number of websites with instructions on how to modify the system settings for your computer. As this varies you will need to check out how it affects your current operating system.

### Kupu Māori

<http://kupu.maori.nz/Show.aspx?page=12>

### Massey University

<http://masseyblogs.ac.nz/weboffice/2012/06/11/how-to-type-macrons/>

### Auckland University

<http://www.stat.auckland.ac.nz/~kimihia/maori-keyboard>

3. You can use a downloadable program that does it for you.

Check out:

### [FastFox Text and Word Expander](#)

This has a HotKey feature as well as an automatic word replacement facility that can be configured so when you type in **Maori** it automatically get's changed to **Māori**. This is a pay for product that costs around \$US30.00

*NOTE: I use FastFox*

### [Phrase Express for Windows](#)

Like FastFox but free for personal use, and concentrates more on phrases.

Both provide the added benefit of being able to store phrases for later recall at the touch of a button.

4. Some versions of Windows allow you to enter ASCII numbers using the ALT key and the numeric keypad. You hold down the ALT key, then enter 0257, then release the ALT key. And lo and behold you have the ā character appear. Well sometimes.

You can see the [ASCII Chart](#) for more details of what is possible.

### Summary

Every situation is different. On a corporate network you may need to get permission to load external programs, or to get the default Keyboard language changed. If you are only using macrons occasionally, then the hotkey approach may be all that is required. When using these words extensively, then the automatic phrase replacement will be a very welcome extension to your productivity.

Ngā mihi