

Express Manual for WinVNKey

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A. ABOUT WINVNKEY

WinVNKey is a free software to type Vietnamese and other languages for Windows NT/2K/XP/2003/2008/Vista.

WinVNKey supports most of the Vietnamese character set (encoding), such as: Unicode, VISCII, VNI, VPS, ABC, ... also the obsolete charsets. Besides for typing Vietnamese, we can use WinVNKey to type languages of many other countries such as: French, German, Polish, Czech,

Russian, Pali, Pinyin, Japanese, etc.. In particular, we can entry of Hán (chinese) or Nôm characters by typing their pronunciations in Vietnamese or Pinyin.

The outstanding advantage of WinVNKey is provided the means for users to input their own designs of typing method and macros. And the available typing methods or macros in WinVNKey are just some common types for helping users can use the keyboard driver immediately.

View [screenshots](#) of WinVNKey.

WinVNKey supports:

- ❖ Vietnamese character set and 45 other countries' charset. [details](#)
- ❖ Many Vietnamese typing methods: VNI, Telex, VIQR, Microsoft, etc. [details](#)
- ❖ Type the mark anywhere and WinVNKey will put it in place.
- ❖ Correcting spelling for single words or compound words.
- ❖ Type language of more than 30 countries with macros. [details](#)
- ❖ Type Hán Nôm by Vietnamese and Pinyin pronunciations, or by the four corner index method or Canjie. [details](#)
- ❖ Convert character case for selected text in an application. [details](#)
- ❖ Correcting the deformation or the square-box in email. [details](#)
- ❖ Look up Hỏi/Ngã (the Falling and Rising accent mark) in Vietnamese words. [details](#)
- ❖ The Characters Map and Unicode typepad. [details](#)
- ❖ Automatical re-typing the documents. [details](#)
- ❖ Convert between Vietnamese charset (encoding) for plain text. [details](#)
- ❖ Convert charset for RTF documents (only need knowing source font and destination font). [details](#)
- ❖ Many types of macros to be used in any situation of shorthand typing. [details](#)
- ❖ Type Vietnamese in Audition game and other games. [details](#)
- ❖ Shortcut typing method Tubinhtran. [details](#)

There are also many other diverse functions. To find out these functions, when running WinVNKey, just click the blue text (hyperlinks) related to see the detailed explanation, or see the articles about WinVNKey in [Manual of WinVNKey](#) .

B. BASIC STEPS

This article "*Express Manual for WinVNKey*" only shows the very basic steps, the parts which are commonly used in WinVNKey.

B1. Download WinVNKey

How to download?

WinVNKey is free. The official versions are contained in: <http://winvnkey.sf.net> . On this page, click "Download" will open a page containing the official versions of WinVNKey. There are six different packages:

- 3 packages support Hán / Nôm (with Han / Nom) in format: EXE, RAR, ZIP.
- 3 packages do not support Hán / Nôm (without Han / Nom) in format: EXE, RAR, ZIP.

If you do not type the Han / Nom, then you can reduce the download time by selecting the package without Hán / Nôm (without Han/Nom).

You just download one package only. Normally you just download the package with the tail ending in **.EXE** as it supports automatic installation. However, the automatic installation may fail on some XP or Vista. In that case, you must download the package ending in zip or 7z. Package ending in 7z is in a compressed format like zip, but in smallest size.

When deciding which package to download, right-click it in that package, then select the menu "Save Target As ...", will display a box "Save As". In this box, we select the folder that we want WinVNKey is stored, then click the "Save" button, then WinVNKey will be download to the selected folder.

Where it can be stored?

It can be stored in: computers, USB, floppy disk (1.44MB).

1) *In computer*: Download WinVNKey.EXE then WinVNKey automatically installed on your machine. However, if you can not install any reason, then we should download WinVNKey.ZIP package so. Zip format is a compressed format. If using Windows XP, we can extract by right click on the zip file and then select "Extract."

2) *In USB*: Download, extract (unzip) or install on USB. Both are ok. Then, when running, click on the file "winvnkey.exe" then runs . All files are in the WinVNKey folder installed. Just bring USB to any computer that runs Windows (of course must be Windows 2000, NT, XP).

3) *In floppy disk*: Can only download RAR format because it only has 1.2MB. Zip format is also ok but depending on what version, the version that has more than 1.44 MB would not fit floppy disk. Rar format is a compression format like zip. Windows XP also can extract by right click on the rar file and then select menu "Extract."

B2. Install WinVNKey

Download finished, unzip and install in your computer.

(If you are familiar with computer, you should not read this step. The experience is always as Next, Yes, Finish, etc ... Otherwise, you should read this step to avoid mistakes).

Open the WinVNKey folder just downloaded, double click on the file WinVNKey, a frame will appear as follows:

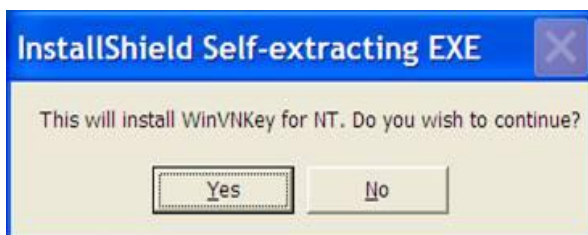


Figure 1

Select "Yes", a Setup frame will appear and automatically jump to 100% as follows:

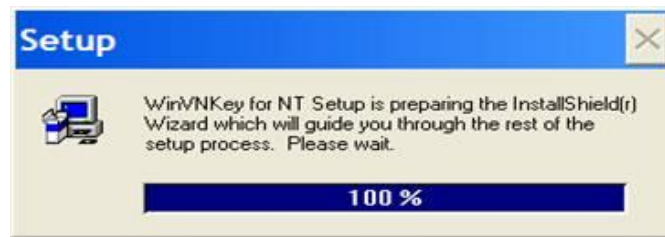


Figure 2

After few seconds, Setup frame disappears and another frame will appear as follows:



Figure 3

Select "Next" to continue.

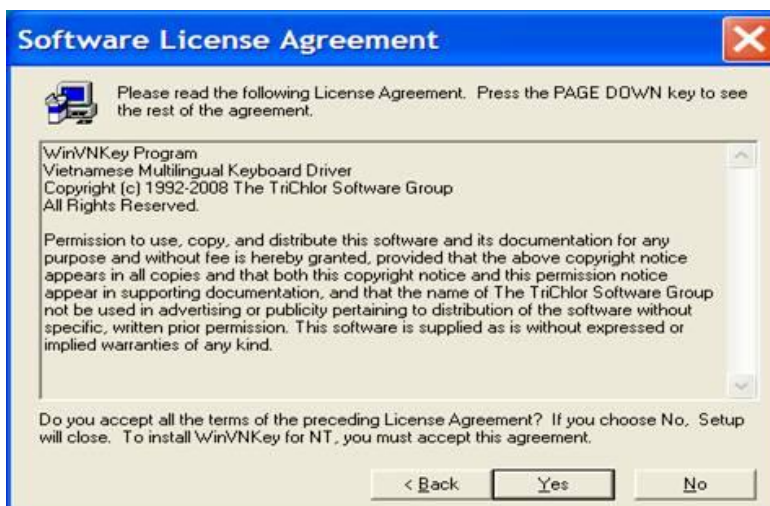


Figure 4

Select "Yes" to continue.



Figure 5

If we want to install WinVNKey in the directory selected as listed in the image above (C:\Program Files \ TriChor \ WinVNKey for NT), we select "Next" to continue. If we want to install WinVNKey in another folder, click "Browse". If we select "Next", a frame will appear as follows:



Figure 6

Select "Next" to continue.



Figure 7

Select "Next" to continue.

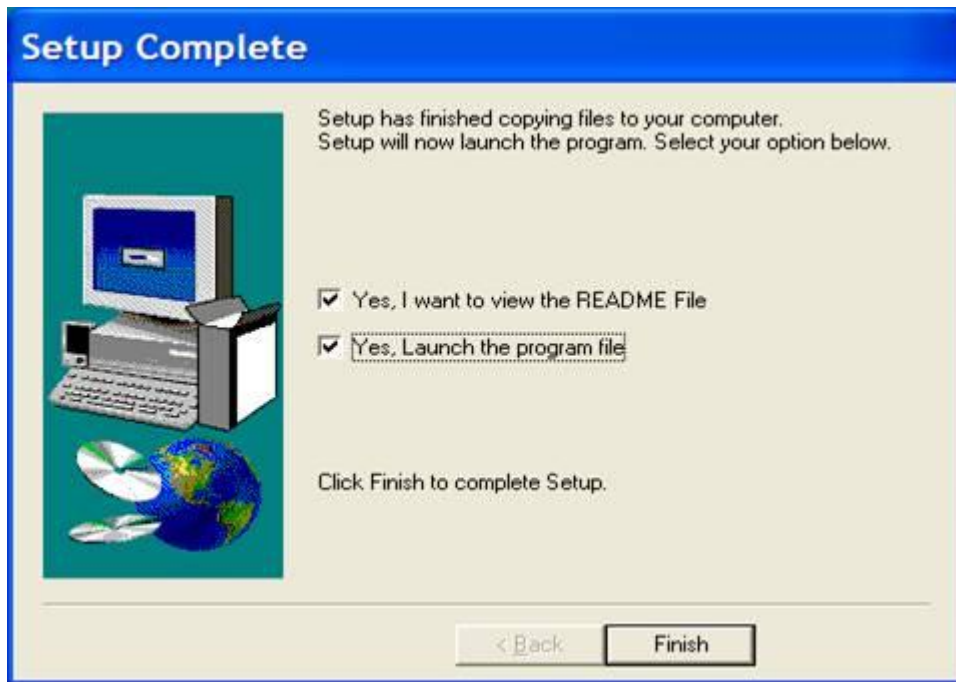


Figure 8

Tick in 2 "Yes" boxes and click "Finish" to complete the installation.

B3. Run and Exit WinVNKey

How to run ?

Start WinVNKey by click the words: | Start > All Programs > Vietnam > WinVNKey Multilingual for NT | as the following:

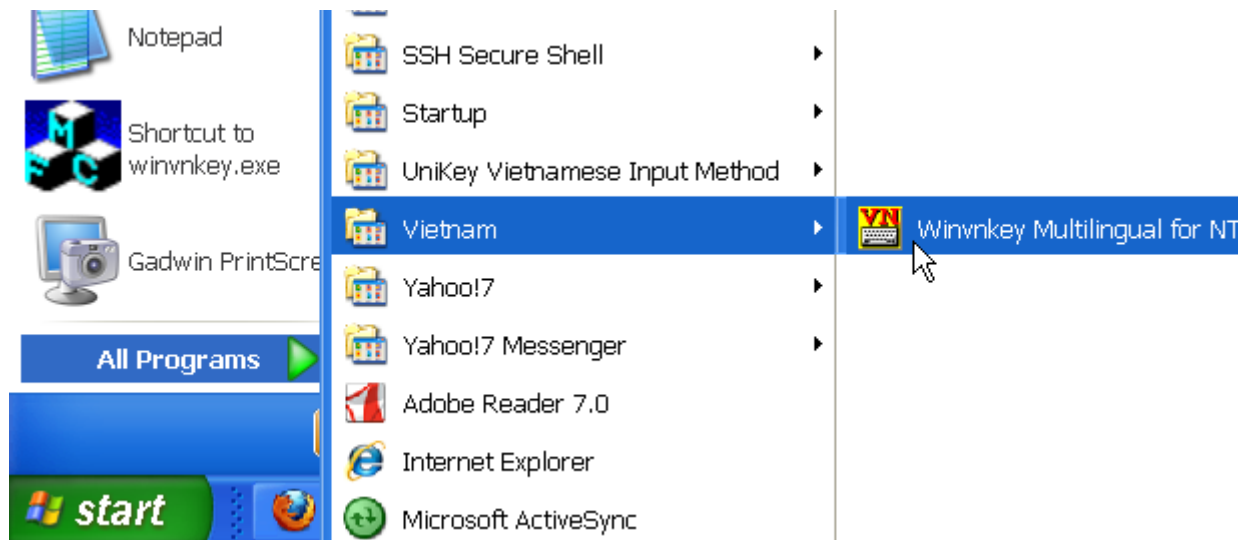


Figure 9

Or:

Start WinVNKey by click the words: | Start > C: > Program Files > TriChlor > WinVNKey for NT > WinNT > winvnkey.exe |.

You will see the icon  at the taskbar as this:



Figure 10

Double click that icon to display the Main page of WinVNKey in default form as shown below. If you want to change the interface to Vietnamese or English then we press the button "Run" and select.





Figure 11: Main page WinVNKey in default.



From here, you can adjust WinVNKey to type text in Vietnamese and languages of other countries.

How to exit ?


Can be exit by one of three ways:

◇ *Turn off temporarily:*

Left click once on image  at the bottom right corner of computer screen, image will change to , WinVNKey will turn off temporarily.

If you want to run WinVNKey again, click once on image , the image will be changed back to .

◇ *Exit:*

- Right click on image  at the bottom right corner of the screen and select menu "Exit".
- Or click the "Exit" button at the bottom of the WinVNKey frame.

B4. Seeing the features of WinVNKey

The blue text in WinVNKey frame are the links to view the related informations. When you hover the mouse over the hypelinks, it appears the words showing that if clicked, we will know what.

Example: In Figure 11, we hover the "Typing method" word, it appears the words "Click here to setup Vietnamese typing method". If you click the "Typing method" word, it will open frame "Setup forVietnamese only" for "2. VIQR - flexible" typing method. And in the frame "Setup

for Vietnamese only" also has other hypelinks, we want to see more information then click on that hypelink.

B5. Answering the questions about WinVNKey

We can participate in WinVNKey or UniKey forums to have the answering of questions:

- WinVNKey: <http://vietunicode.sourceforge.net/forum/viewforum.php?f=2>

- UniKey: Please send any questions in the topic "Vietnamese in the computer (Tiếng Việt trong máy tính)" at the following link:

<http://www.unikey.org/forum/viewforum.php?f=4&sid=717c7f27de79280c648352e6688f6cf0>

Or we can use WinVNKey, by click the buttons: | Run > Browse > Forum at VietUnicode |

B6. How to report bugs

We can report bugs by pressing the buttons: | Run > Report bugs > Prepare bug report |, then the screen will display a letter in drafted form, and we report bugs as the guides in that letter.

C. THE VIETNAMESE TYPING METHODS IN WINVNKEY

C1. General principle

WinVNKey support the principle of typing letter first, then the diacritic marks after. The marks can be typed immediately after the letter or typing after the word and WinVNKey will automatically put the mark in the correct order.

WinVNKey has up to 16 typing methods, we can choose any method. Following is how to use 6 popular typing methods: VIQR, VNI, Telex, Microsoft, Tubinhtran-MS, Tubinhtran.

Diacritics	Typing Method					
	VIQR	VNI	Telex	Microsoft	Tubinhtran-MS	Tubinhtran
´ acute mark (high tone)	´	1	s	8	1	1
` grave mark (low tone)	`	2	f	5	2	2
? hook above (falling accent)	?	3	r	6	3	3
˜ tilde (rising accent)	˜	4	x	7	4	4
· dot under (drop tone)	·	5	j	9	5	5
â	a^	a6	aa	2	6	or a6 aq *
ê	e^	e6	ee	3	7	ee
ô	o^	o6	oo	4	8	or o6 oq *
ă	a(	a8	aw	1	9	aa
ư	u+	u7	uw	[	[	uu
ơ	o+	o7	ow	]	]	oo
đ	dd	d9	dd	0	d	d
d					z	z

Figure 12: Six typing method: VIQR, VNI, Telex, Microsoft, Tubinhtran-MS, Tubinhtran.
 (*) only suitable with French keyboard.

C2. Typing method VIQR

First, you start WinVNKey by click: | Start > All Programs > Vietnam > WinVNKey Multilingual for NT |, it will open the Main page of WinVNKey in default as shown below (like Figure 11 above):

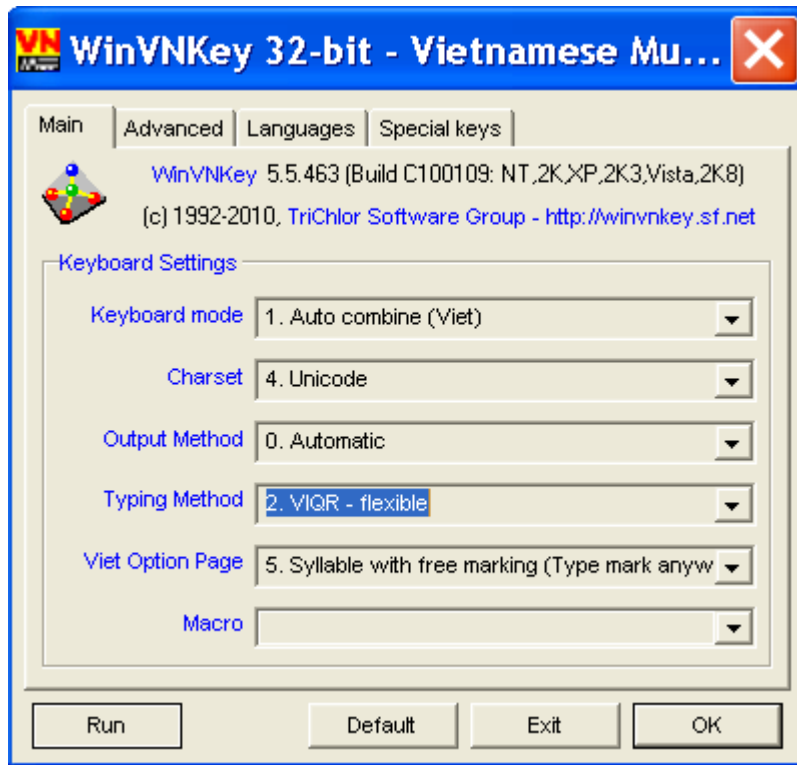


Figure 13: Main page WinVNKey for VIQR typing method.

If not change anything in the WinVNKey, you can type Vietnamese in typing method VIQR. This is the default typing method of WinVNKey.

VIQR (Vietnamese Quoted Readable) typing method uses the available signs on keyboard to type Vietnamese diacritics.

Diacritics	VIQR typing method	Example
' acute mark (high tone)	'	a' → á
` grave mark (low tone)	`	a` → à
? hook above (falling accent)	?	a? → ả
~ tilde (rising accent)	~	a~ → ã
. dot under (drop tone)	.	a. → ạ
â	a^	a^m → âm
ê	e^	e^m → êm
ô	o^	o^m → ôm
ă	a(	a(n → ăn
ư	u+	tu+ → tư
ơ	o+	o+n → ơn
đ	dd	ddi → đi
Erase mark (Xóa dấu)	0	á0 → a
Stop mark (Tắt dấu)	Repeating \	a . . → a. a \ . → a.

Figure 14: VIQR typing method.

Example: *Phấn sơn tô điểm sơn hà*
Làm cho rõ mặt đàn bà nước Nam
 Typing: *Pha^'n son to^ ddie^?m so+n ha`*
La`m cho ro+~ ma(.t dda`n ba` nu+o+'c Nam

C3. Typing method VNI

Press the arrow in the box "Typing Method" on Main page of WinVNKey to select **6. VNI** as shown below:

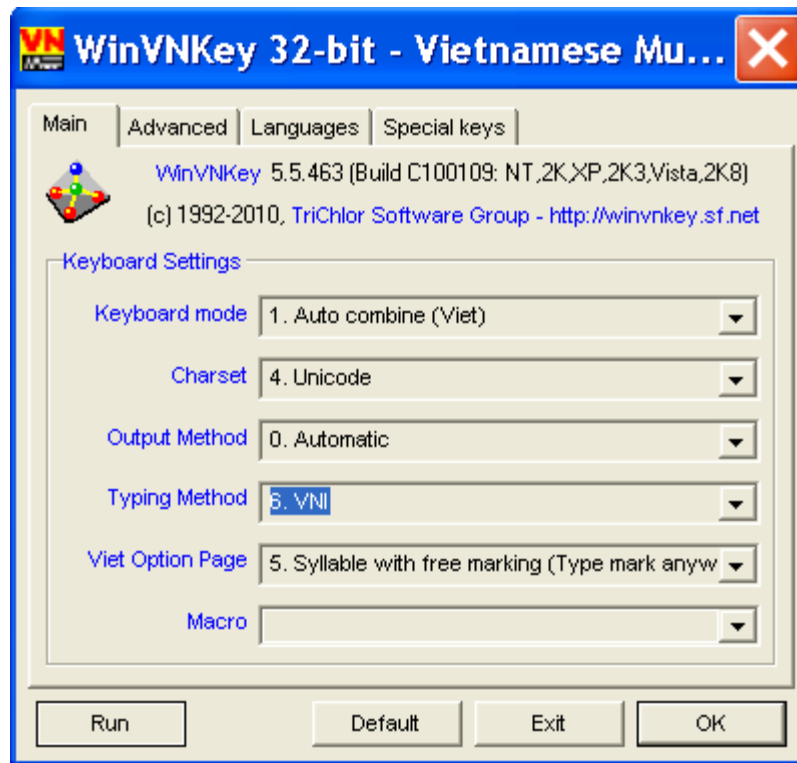


Figure 15: Main page WinVNKey for VNI typing method.

VNI typing method using the number keys for typing the Vietnamese diacritics.

Diacritics	VNI typing method	Example
´ acute mark (high tone)	1	a1 → á
` grave mark (low tone)	2	a2 → à
? hook above (falling accent)	3	a3 → ả
~ tilde (rising accent)	4	a4 → ã
. dot under (drop tone)	5	a5 → ạ
â	a6	a6m → âm
ê	e6	e6m → êm
ô	o6	o6m → ôm
ã	a8	a8n → ãn
ư	u7	tu7 → tư
ơ	o7	o7n → ơn
đ	d9	d9i → đi
Erase mark (Xóa dấu)	0	á0 → a
Stop mark (Tắt dấu)	Repeating \ \	a11 → a1 a\1 → a1

Figure 16: VNI typing method.

Example: *Phấn sơn tô điểm sơn hà
Làm cho rõ mặt đàn bà nước Nam*
 Typing: *Pha61n sơn to6 d9ie63m so7n ha2
La2m cho ro74 ma85t d9a2n ba2 nu7o71c Nam*

C4. Typing method Telex

Press the arrow in the box "Typing Method" on Main page of WinVNKey to select **Telex 3 (free style)** as shown below:

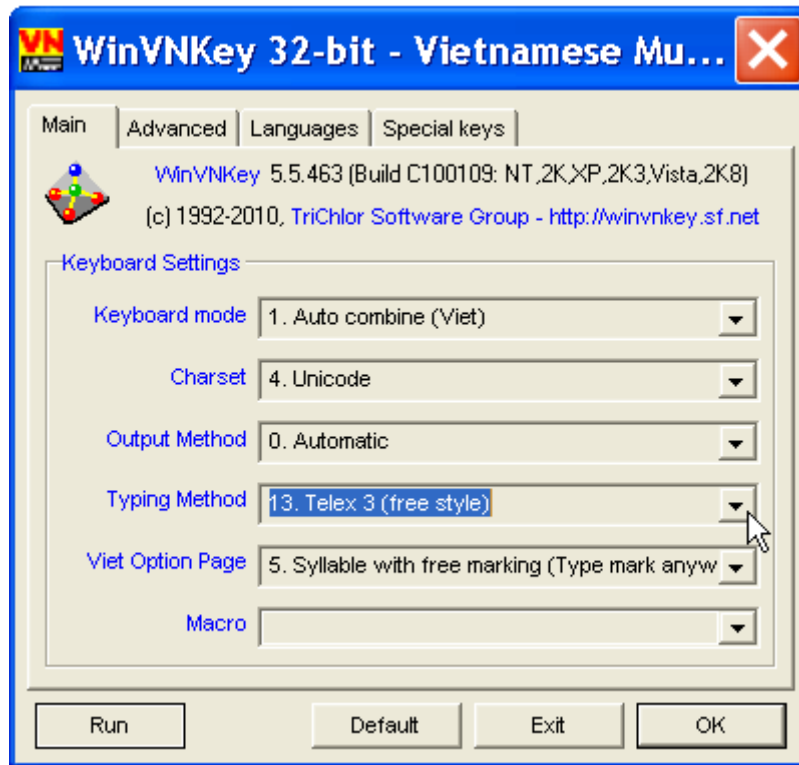


Figure 17: Main page WinVNKey for Telex typing method.

Telex typing method using: the repeat keys, the letters not in the Vietnamese alphabet, or the location of the letters not in the Vietnamese alphabet for entering the Vietnamese diacritics.

Diacritics	Telex typing method	Example
´ acute mark (high tone)	s	as → á
` grave mark (low tone)	f	af → à
? hook above (falling accent)	r	ar → ả
~ tilde (rising accent)	x	ax → ã
. dot under (drop tone)	j	aj → ạ
â	aa	aam → âm
ê	ee	eem → êm
ô	oo	oom → ôm
ã	aw	awn → ãn
ư	uw	tuw → tư
ơ	ow	own → ơn
đ	dd	ddi → đi
Erase mark (Xóa dấu)	0	á0 → a
Stop mark (Tắt dấu)	Repeating \ /	ass → as a\s → as

Figure 18: Telex typing method.

Example: *Phấn sơn tô điểm sơn hà*
Làm cho rõ mặt đàn bà nước Nam
 Typing: *Phaasn son too ddieerm sown haf*
Lafm cho rowx mawjt ddafn baf nuwowsc Nam

C5. Typing method Microsoft (or TCVN6064).

Press the arrow in the box "Typing Method" on Main page of WinVNKey to select **Microsoft** as shown below:

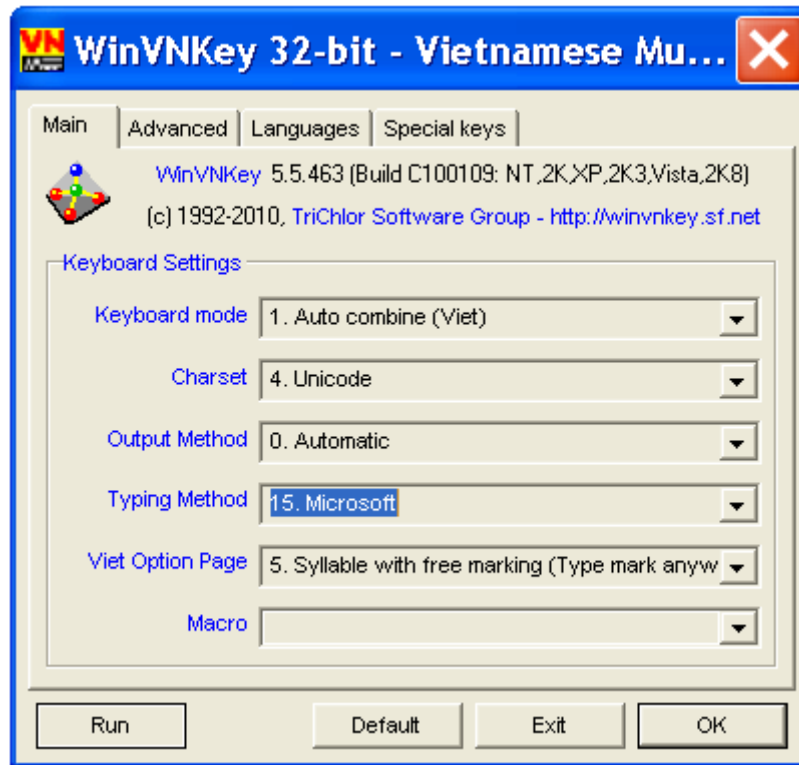


Figure 19: Main page WinVNKey for Microsoft typing method.

Microsoft typing method helps us to type faster the characters *â ê ô ã ư ơ đ* because using only 1 keystroke.

Diacritics	Microsoft typing method	Example
´ acute mark (high tone)	8	a8 → á
` grave mark (low tone)	5	a5 → à
? hook above (falling accent)	6	a6 → ả
~ tilde (rising accent)	7	a7 → ã
. dot under (drop tone)	9	a9 → ạ
â	2	2m → âm
ê	3	3m → êm
ô	4	4m → ôm
ã	1	1n → ãn
ư	[	t[→ tư
ơ	]	]n → ơn
đ	0	0i → đi
Erase mark (Xóa dấu)	0	á0 → a
Stop mark (Tắt dấu)	Repeating \]	a88 → a8 a\8 → a8

Figure 20: Microsoft typing method.

Example: *Phấn sơn tô điểm sơn hà*
Làm cho rõ mặt đàn bà nước Nam
 Typing: *Ph28n sơn t4 0i36m s]n ha5*
La5m cho r]7 m19t 0a5n ba5 n[]8c Nam

C6. Typing method Tubinhtran-MS

Diacritics	Tubinhtran-MS typing method	Example
´ acute mark (high tone)	1	a1 → á
` grave mark (low tone)	2	a2 → à
? hook above (falling accent)	3	a3 → ả
~ tilde (rising accent)	4	a4 → ã
. dot under (drop tone)	5	a5 → ạ
â	6	6m → âm
ê	7	7m → êm
ô	8	8m → ôm
ã	9	9n → ăn
ư	[	t[→ tư
ơ	]	]n → ơn
đ	d	di → đi
d	z	za → da
Erase mark (Xóa dấu)	0	á0 → a
Stop mark (Tắt dấu)	Repeating \]	a88 → a8 a\8 → a8

Figure 21: Kiểu gõ dấu Tubinhtran-MS.

Example: *Phấn son tô điểm sơn hà
Làm cho rõ mặt đàn bà nước Nam*

Typing: *Ph61n son t8 di73m s]n ha2
La2m cho r]4 m95t da2n ba2 n[]1c Nam*

Tubinhtran-MS typing method helps us to type faster the characters *â ê ô ã ư ơ đ* because using only 1 keystroke. Basically, Tubinhtran-MS typing method is similar with Microsoft typing method, only different in selecting the key to define.

How to use Tubinhtran-MS typing method?

Press the arrow in the box "Typing Method" on Main page of WinVNKey to select **Tubinhtran-MS** as shown below:

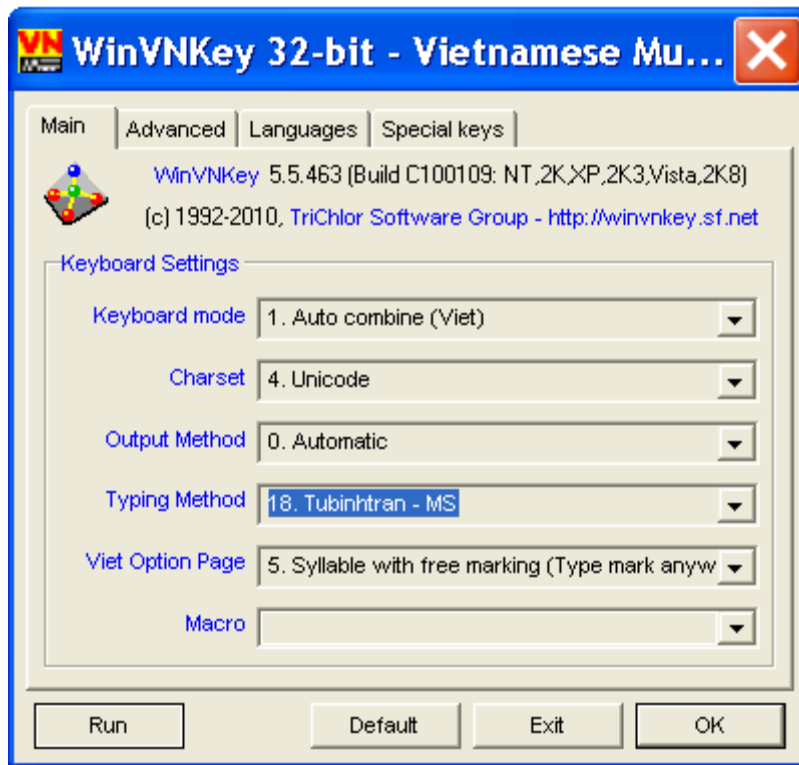


Figure 22: Main page WinVNKey for Tubinhtran-MS typing method.

Note: Adjusted as above, we not only can type in Tubinhtran typing method, but also can type fast some pre-consonants:

- Typing **f** appears *ph* (eg: type *fi* → *phi*).
- Typing **q** appears *qu* (eg type *qa* → *qua*).
- Typing **j** appears *gi* (eg: type *ja* → *gia*).
- Typing **k** appears *kh* (if we just want *k* then quickly type 2 times the key *k*. The reason for choosing this way is because consonant *kh* preceding all vowels while *k* is only in the front of: *i*, *ê*, *e*).

C7. Typing method Tubinhtran

Diacritics	Tubinhtran typing method	Example
sắc	1	a1 → á
huyền	2	a2 → à
hỏi	3	a3 → ả
ngã	4	a4 → ã
nặng	5	a5 → ạ
â	or a6 aq *	a6m → âm aqm → âm
ê	ee	eem → êm
ô	or o6 oq *	o6m → ôm oqm → ôm
ã	aa	aan → ăn
ư	uu	tuu → tư
ơ	oo	oon → ơn
đ	d	di → đi
d	z	za → da
Erase mark (Xóa dấu)	0	á0 → a
Stop mark (Tắt dấu)	Repeating \ /	a88 → a8 a\8 → a8

Figure 23: Typing method Tubinhtran.
 (*) only suitable with French keyboard.

Tubinhtran typing method actually is a combination Telex and VNI. This typing method helps us entering the Vietnamese language faster because:

- Use 4 keys to repeat: ee, uu, oo, aa (to type: ê, ư, ơ, ã) so we do not need to move a finger.
- In English keyboard, the key positions: 1, 2, 3, 4, 5 (for typing the accents) and 6, q, a, e, u, o (for typing â, ô, ê, ã, ư) are next to each other so we do not move finger far away when typing accented marks and the diacritics.
- Form letter "e" key was just typing a "d".

How to use Tubinhtran typing method?

We click the arrow in the box "Typing Method" in the Main page to select "Tubinhtran (co dau)" like the following:

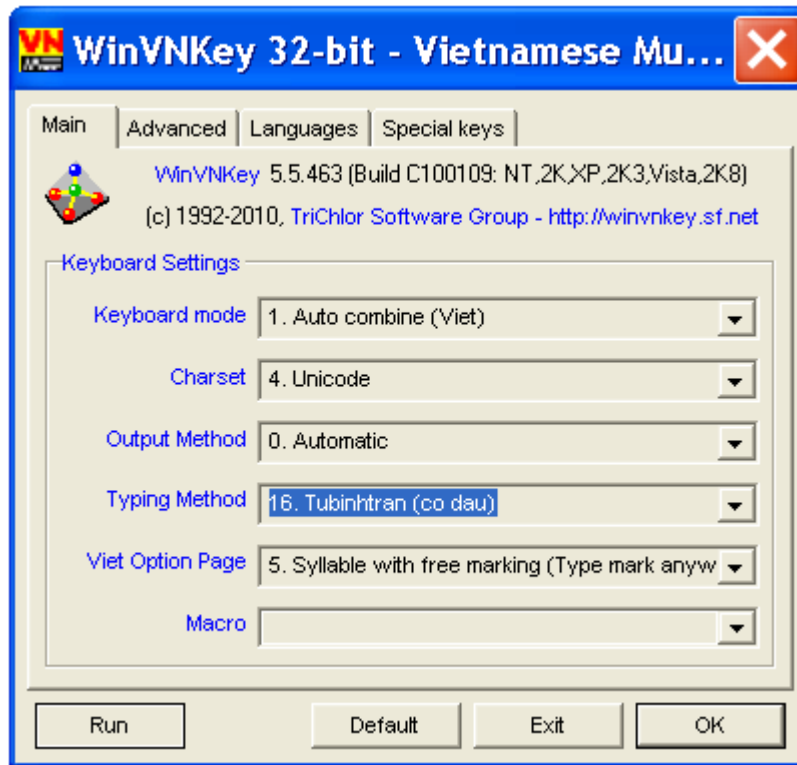


Figure 24: Main page WinVNKey for Tubinhtran typing method.

Note: Adjusted as above, we not only can type in Tubinhtran typing method, but also can type fast some pre-consonants:

- Typing **f** appears *ph* (eg: type *fi* → *phi*).
- Typing **q** appears *qu* (eg type *qa* → *qua*).
- Typing **j** appears *gi* (eg: type *ja* → *gia*).
- Typing **k** appears *kh* (if we just want *k* then quickly type 2 times the key *k*. The reason for choosing this way is because consonant *kh* preceding all vowels while *k* is only in the front of: *i*, *ê*, *e*).

C8. How to use other typing method ?

Press the black arrow in the box "Typing Method", it will appear a page listing 18 typing methods. We can choose any typing method.

C9. How to integrate your own typing method ?

WinVNKey allow to change the typing method according to your own design.

How: Click the blue "Typing Method" in the Main page of WinVNKey, it will display a frame "Setup For Vietnamese Only" as Figure 25 below:



Figure 25: Frame "Setup For Vietnamese Only".

Ta có thể thay đổi xếp các dấu chữ Việt theo bất cứ nút dấu nào. Xong, ta nhấn mũi tên đen kế nút "Kiểu gõ" ở góc trên và chọn menu "Lưu trữ dưới tên khác" (Save As). Lúc ấy sẽ hiện ra khung "Đặt Tên Phương Pháp Gõ Chữ" như Hình 24 dưới đây và sau khi chọn tên mới, ta nhấn nút "OK".

We can change the Vietnamese diacritics by any keys, any signs. Finished, we press the black arrow button next to menu "Typing" at the top and select "Save As". A frame "Naming Typing Method" will appear as Figure 26 below, and after typing a new name, we press "OK" button.

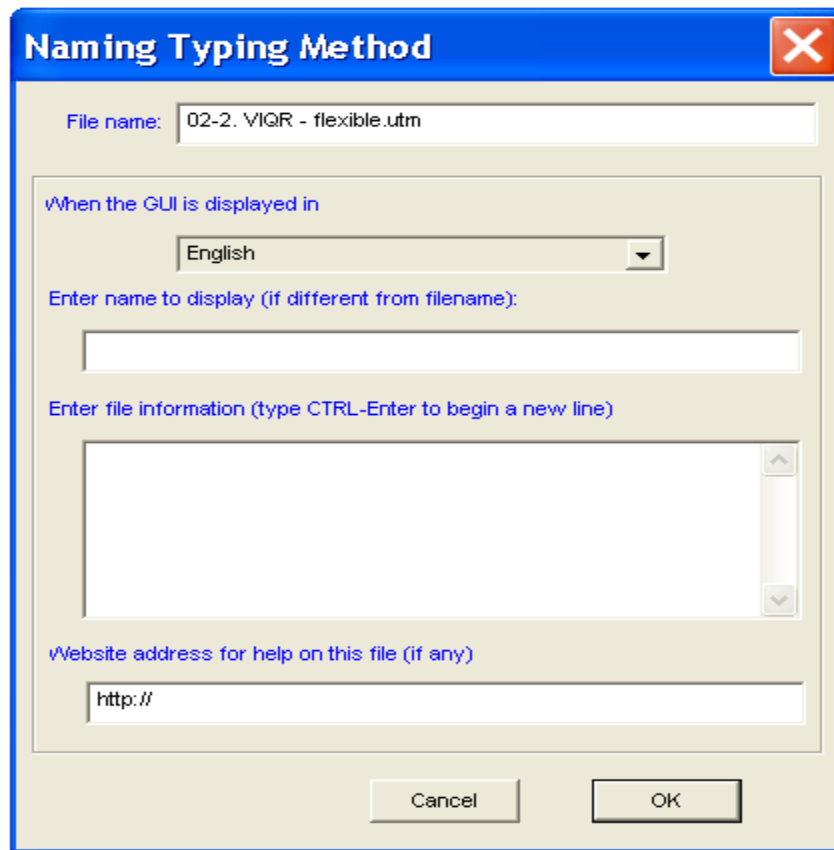


Figure 26: Khung “Đặt Tên Phương Pháp Gõ Chữ”.

D. THE CHARSETS IN WINVNKEY

Charset, also known as encoding, is a collection of letters arranged in a certain order. Same collection but each has different arrangement will form a different charset. Example: Unicode charset is a collection of Vietnamese characters which are arranged in order by the regulations of Unicode Consortium corporate, the VISCII charset is arranged by regulations of the Vietnam offshore team (Viet-Std), and VNI charset is from the VNI-Soft company, VPS is from VPS organization, etc.

When the letters in a charset are displayed as text in a specified style then the collection of those styles are called fonts. Example: Times font, Courier font. Because the order of letters in a font have to be identical to the order of letters in the charset, so sometimes causing confusion between the font and charset (encoding).

WinVNKey support most of the Vietnamese charset available on the market, from the popular charset such as Unicode, VISCII, VNI, VPS, ABC, ... until the obsolete charset such as VNU, U.S. LABS, ... In total, WinVNKey supports 46 Vietnamese charsets and 45 charsets of other countries.

The most popular charset now is Unicode, designed and released by Unicode Consortium corporation. In default of WinVNKey, we will use Unicode charset. The popular fonts of Unicode are: Arial, Tahoma, Verdana, Times New Roman, Courier New, etc..

We can select the charset as follows. For example:

- 1) If using Unicode fonts, then must choose Unicode charset (the 4th charset in the box "Charset" in the Main page of WinVNKey).
- 2) If using VPS fonts, then must choose VPS charset (11th charset in the box "Charset" of WinVNKey).
- 3) If using VNI fonts, then must choose VNI charset (10th charset in the box "Charset" of WinVNKey).
- 4) etc ...

E. SMART METHODS OF DIACRITICAL TYPING

WinVNKey support 17 smart combining methods in Viet Option Page to type the Vietnamese diacritics more accurate and faster. Users interested in any methods, they can choose it.

Press the black arrow in the box "Viet Option Page", it will display a list of 17 smart combining methods, are numbered from 0 to 17 as shown below.

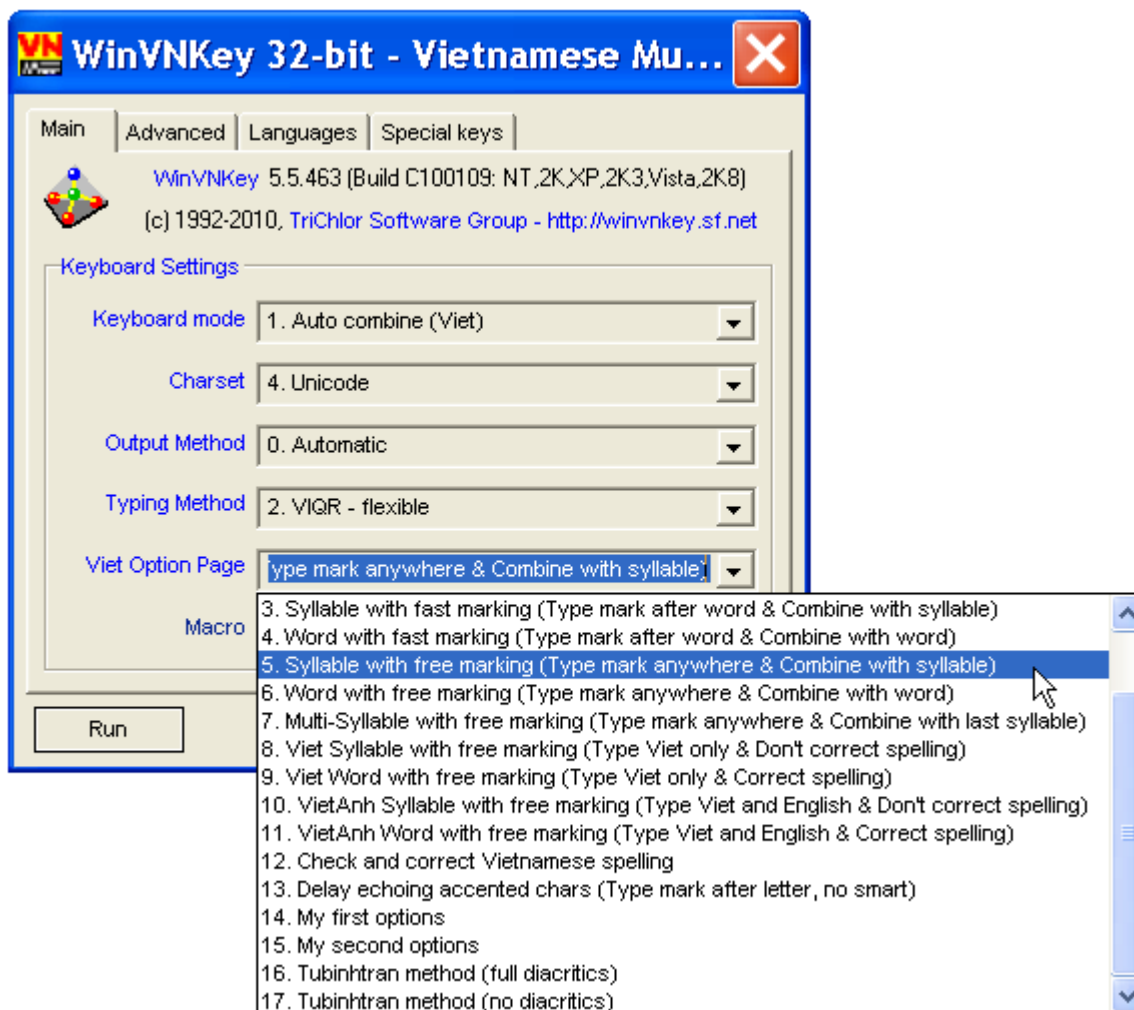


Figure 27

Ví dụ, ta chọn cách số 5. “Vần kiểu tự do (Gõ dấu tự do, kết hợp nếu là vần Việt)”. Muốn hiểu nội dung cách này, ta nhấn chuột ở chữ màu xanh “**Cách kết hợp dấu**” sẽ hiện ra khung “Chọn Lựa Cho Chữ Việt” như hình dưới đây. Ở khung này, ta nhấn các nút hình vuông sẽ hiện ra các chi tiết được hỗ trợ trong cách này.

For example, we choose the method "5. Syllable with free marking (Type mark anywhere & Combine with syllable)". To understand this method, we click on the blue words "Viet Option Page", it will display a frame "Viet Options" as shown below. In this frame, pressing the square button will display the details of this method.

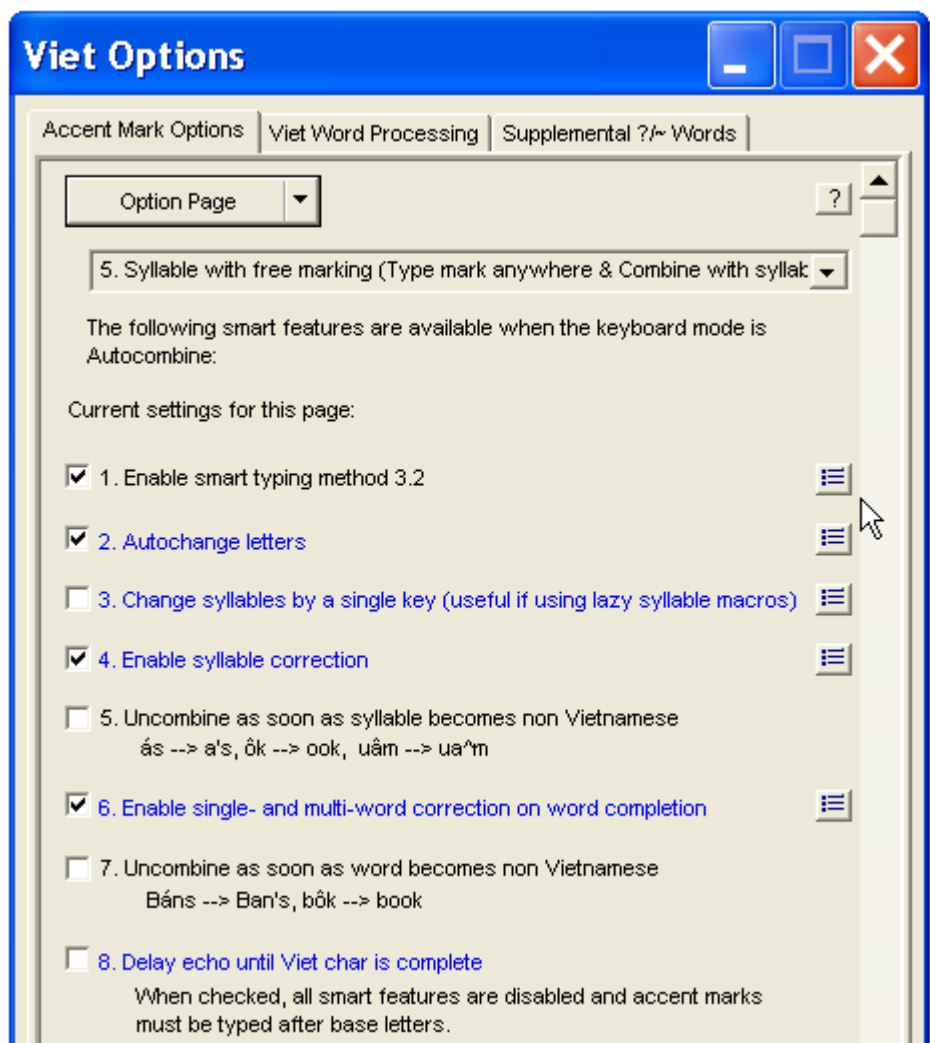


Figure 28

F. TYPING FAST BY MACROS

The word "Macro" in WinVNKey can be understood as a shortcut, speed up. Compared with other type of software, the outstanding advantage of WinVNKey is integrated the fast built-in method for typing by using macros.

F1. How to use the available macros ?

WinVNKey is provided with a number of macros so users can immediately use, or used as examples from which to develop more.

For example, if we want to use the available macros in the file "Common words", with the VNI typing method, we adjust the Main page as below:

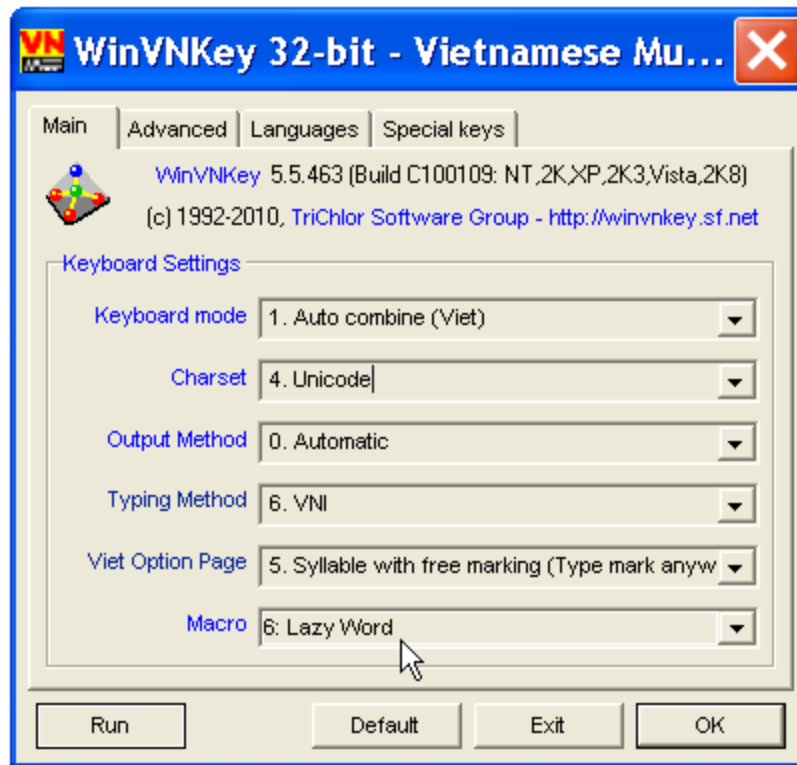


Figure 29

Then press the blue "Macro" word, a box "Select Macro" will appear as below. We check the box "Common words", the next box will show the macros will turn into what words.

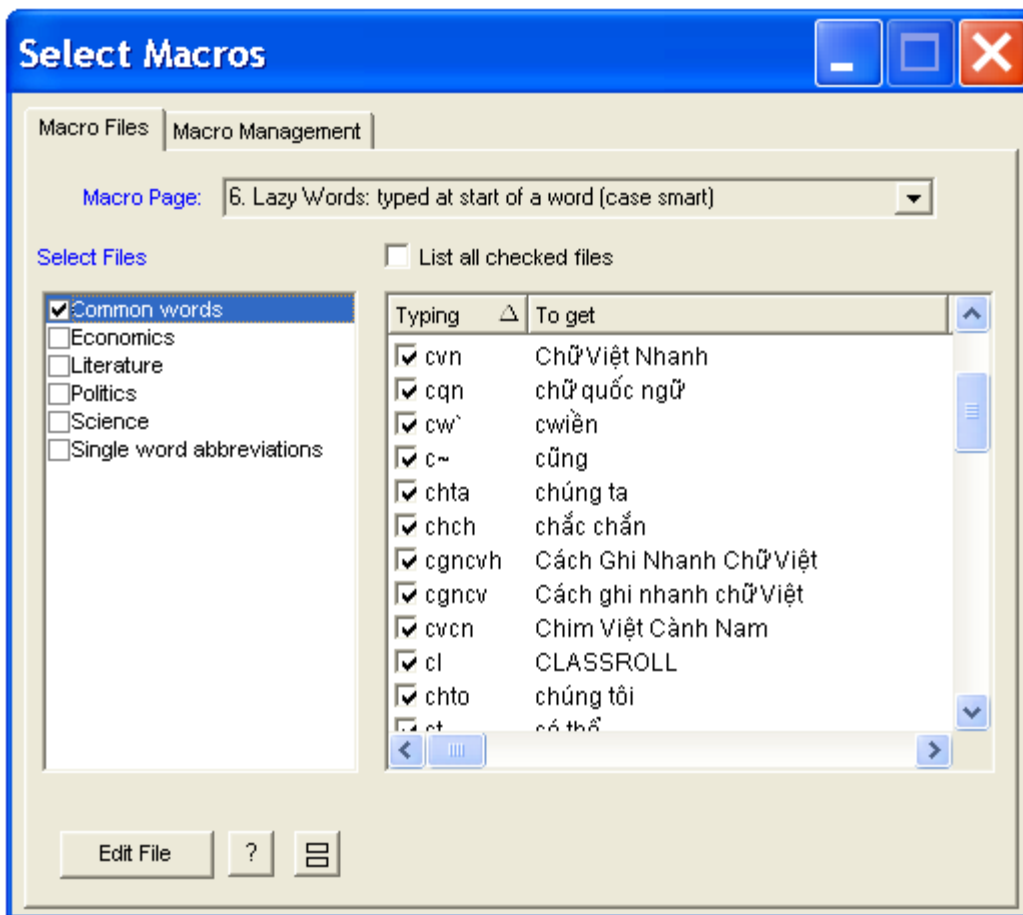



Figure 30

After selecting, for example, type *chta* and then press a space bar, it will turn into *chúng ta*.

F2. How to define more macros ?

For example, if we want to define another macro *dc* turn into *được* in the file "Common words", we click the "Edit File" button at the bottom, it will display the frame "Edit Lazy Word Macros" as shown below. In this frame, perform the following steps:

- Click "Add" button.
- Type the macro *dc* and word *được* in the boxes at the bottom as in the picture.
- Press "Enter". The new macro *dc* turn into *được* will be added.
- Finally, press the  button at the top to close and macro *dc* → *được* will be stored in WinVNKey.

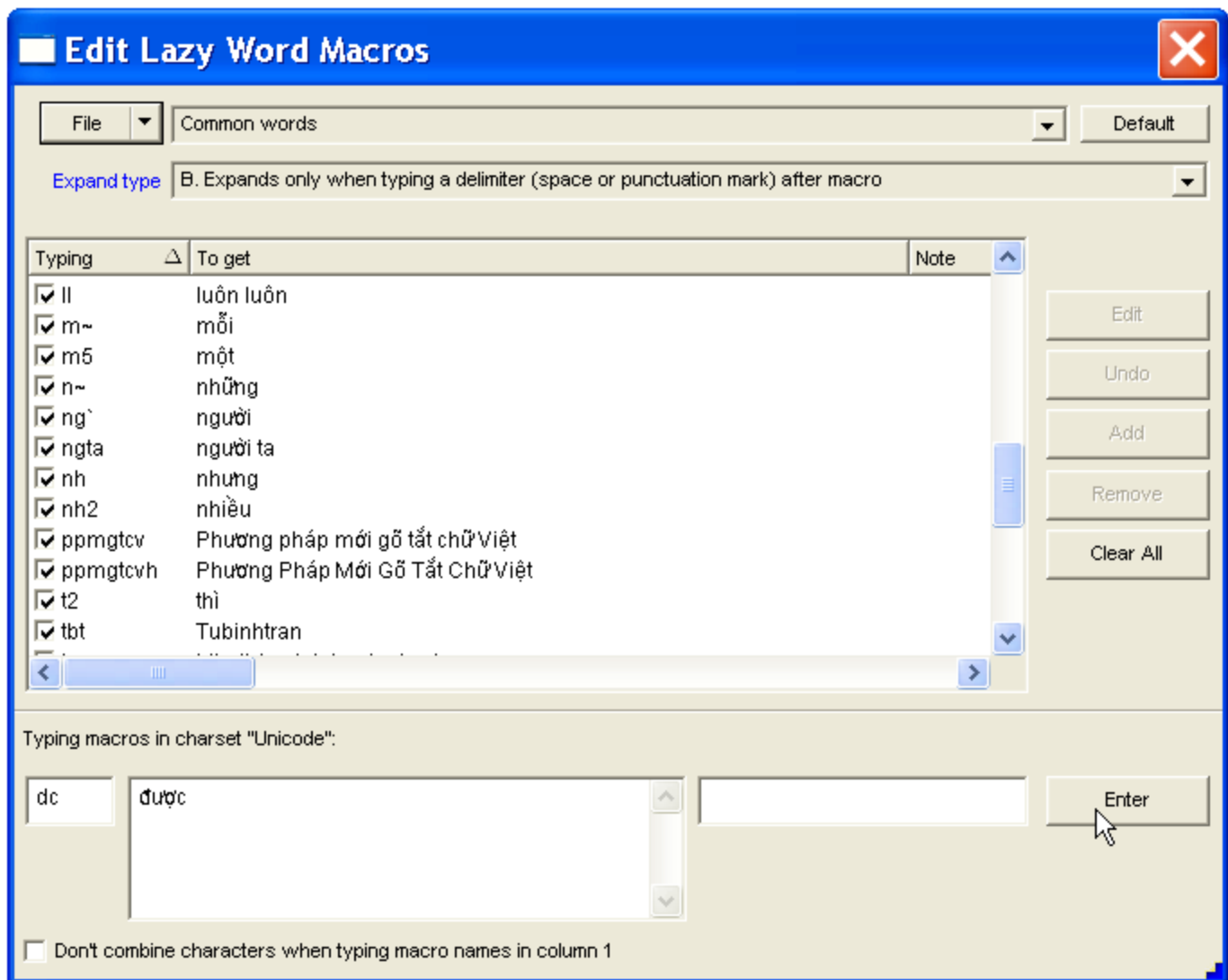


Figure 31

G. NEW SHORTCUT METHOD FOR VIETNAMESE ENTRY

This is a very fast shortcut method of typing Vietnamese language on the computer. Users need only typing the shortcuts on keyboard, but with the conversion of software so the computer will display the complete Vietnamese words. This shortcut method has been successfully implemented in WinVNKey since version 5.4.444 onwards.

From version WinVNKey 5.4.444 onwards, there are two built-in shortcut files (Macro files):

- *Tubinhtran method (full diacritics)*: For fast typing Vietnamese words with diacritics.
- *Tubinhtran method (no diacritics)*: For fast typing Vietnamese words without diacritics.

Choose the file that you want to use. When no longer use the shortcut method, we then can turn off and type the Vietnamese words in the normal way.

This new method saves more than 40% of the keystrokes. We save a lot more when use this approach together with another shorthand file of our own.

To understand this method, please read the article "[New shortcut method for Vietnamese entry](#)" in website *Quick Vietnamese*: <http://chuvietnhanh.sf.net> , or at the following link: <http://chuvietnhanh.sf.net/PhuongPhapMoiGoTatChuViet.htm>

H. THE UTILIZATION IN DIFFERENT TYPES OF MACRO

(Extract from the reply of Dr. Hoc Dinh Ngo in WinVNKey forum and private correspondences when we asked about the different uses in different types of macros)

This section is for users who wants to dig deeper into other functions of macros in WinVNKey.

From version 5.4.x , WinVNKey support 6 types of macro. When you click the blue hyperlink "Macro" at the Main page, you will see two types of self-extracting, two types of macro representing syllable, and two types for words or phrases.

Note:

1. For WinVNKey, word is a sequence of characters standing close together and are surrounded by punctuation marks as: space or punctuation, commas, semicolons, parentheses, brackets, etc. Example: "abc def123, xyz2t" is a chain composed of three words, "abc", "def123" and "xyz2t." Many times, a word could be understood in broad sense including all the characters except white marks or TAB. In the example just mentioned, "def123," can also be understood as the second word together with the comma.

2. WinVNKey have a online manual in English (Online Manual): <http://winvnkey.sf.net> . This manual describes in great detail all the functions of WinVNKey 5.0.355. While this guide may be not updated, but the explanation of the functions or how to use basic steps still valuable for later versions.

Each type of macro is supported by a tag or page in WinVNKey. Language tag are also a form of self-extracting macro. The reason for having many types of macro is because WinVNKey are designed for multi-lingual environment, that is needed to support typing many different languages simultaneously.

Each macro tag may have many files that you can enable or disable each file. Each file has multiple options so that we can change the features of all the macros in that file. This way, we can assign a number of features of this macro to another type of macro.

When we finished typing a word key, WinVNKey will handle all the text typed in the following order:

- Firstly, combining the Vietnamese diacritics based on the options of "Typing Method" page and "Viet Option Page" page.
- Next, processing the macros switched on at the Languages tab.
- Finally, processing six types of macro in the following order if they are selected at Main page: Level 1 Self-extracting, level 2 Self extracting, Tail macro, Lazy Syllable, Shorthand, Lazy Word.
- However, we can change this process by using the "Macro Processing" tag in control WinVNKey to stop the macro processing if clusters of words that have been modified already by a macro.

Below is the summary of 6 types of macro.

Self-extracting levels 1 and 2:

- Usage: usually used to represent a letter, or part of the word.
- Same: macro can be typed anywhere in the word clusters and macro automatically inflate when finished typing the last character.
- Difference: Level 1 Self extracting processed before Level 2 Self-extracting.

Examples: "Earth" is written as *земля* (Russian) and *地球* (Traditional Hán). Russians used a U.S. keyboard to type Chinese character (traditional Hán) can define macros as the following:

Self-extracting level 1: *3em => зем* and *lr => ля*

Self-extracting level 2: *земля => 地球*

So when typing *3emlr* will inflate into *地球*. The reason for this result is because WinVNKey process Self-extracting level 1 before Self-extracting level 2. Although having the same ability to inflate immediately, but with different treatment order so we would see the followings appear in screen:

1) Type *3em* will see *зем*

2) Next, type 2 letters *lr*: *земlr*

3) Just finished typing the letters *r*, the Self-extracting level 1 processing makes it inflate to *земля*, then next Self-extracting level 2 process *земля* and makes it inflating to *地球*.

The above example only illustrates one of the utilization of two types of self-extracting macro. If we want the same phrase to go through three times, then the first self-extracting should be put in the Language tab, second self-extracting put in Self-extracting level 1, and third self-extracting put in Self-extracting level 2. And the definition of each type is due to our decision.

For example, we can use two types of self-extracting to correct spelling for the word clusters after typing one Vietnamese character. Considering, for example, the word *thuở*. Assuming WinVNKey be run with all the smart features are turned off (select: typing method 4, and Viet Option Page 0). Because most of *ư* and *ơ* go together, except the word as *huơ*, *thuở*, so we can define as follows to the type quickly:

Self-extracting level 1: *uơ => uơ* and *uơ => uơ* (that automatically add the second bracket, saving an operation)

Self-extracting level 2: *huơ => huơ* and *quơ => quơ* (ie edit for using only one bracket)

With these macros, type *Chương dương* will inflate to *Chương dương*, but type *huơ* will only inflate to *huơ*. Thus, self-extracting level 2 can be used to correct spelling (autocorrection).

Tail macro and Lazy Syllable

- Usage: often used to symbolize the word clusters in the tail of a word, such as suffix or syllable.

- Same: must type macros after the other letters (with the option allowed to type in beginning of word)

- Difference: Lazy syllable is processed after the Tail macro. In addition, the main differences of this two kinds is how to handle uppercase/lowercase.

1. Tail macro: case sensitive, must type the correct uppercase / lowercase, as defined.

2. Lazy syllable: case smart and only inflating when can forming a Vietnamese word (but not necessary in the correct spelling, as "băng").

Case smart means a word cluster will inflate intelligently by self-change uppercase or lowercase depending when typing each character of macro. When defining the macro, only define one form, but when typing, you can change the form of uppercase/lowercase. For example: Suppose Lazy syllable *bb* represents *ong*. Type *cbb* inflate type to *cong*, and type *CBB* inflate to *CONG* (though not defining *BB* is *ONG*).

Shorthand and Lazy Word:

- Usage: usually used to represent an entire group of characters such as a word or phrase.

- Same: must type macro at the beginning of word, means immediately after the space or the splitting-word marks

- Difference: Lazy Word is treated after processing the Shorthand. In addition, the main differences of this two kinds is how to handle uppercase/lowercase.

1. Shorthand: case sensitive, must type the correct uppercase / lowercase, as defined

2. Lazy Word: case smart as explained in Lazy Syllable.

Why must support Shorthand?

The main characteristics of the Shorthand is case sensitive. We must type exactly the text, then it will inflate. This is essential for many people (especially for programmers or usage of TeX / LaTeX). They may want more macros differ only in uppercase / lowercase, but inflate to the phrases completely different.

Example: gtc => go to church

gtC => go to Canada

In summary, WinVNKey provide the facilities, and to use or not is up to each person's needs. In general, we should take advantage of Lazy macros because we do not have to define many uppercase / lowercase forms. If we use Tail macros or Shorthand, they can not automatically change uppercase / lowercase and therefore we must define all shape of the macro, for example:

il => iên

IL => IÊN

iL => iên

Il => iên

The reason WinVNKey not support the lazy form for the self-extracting macros is simple as follow. Self-extracting macros are used for the abbreviation of a language. Every language usually has very limited number of letters. Therefore, we can list all of them in uppercase / lowercas easily. See all definitions of upper / lower case of French, German, etc. in the Language tag.

oOo

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