

Esperanto Characters on Mint 19.3

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Since the advent of Unicode, it is much easier to add Esperanto keyboard layouts in the major Linux desktop environments.¹ The era of legacy Latin-3 encodings and special TrueType fonts has fallen by the wayside as application support for Unicode improved.²

This tutorial explains how to properly type Esperanto’s diacritical letters via Unicode with minimal fuss in Mint 19.3 Cinnamon – without needing to change your system locale. (In my case, the locale remains set as English (US) [en_US.UTF-8]).³ I did *not* test these instructions in the MATE or Xfce desktop environment.

1 Cinnamon

1.1 Without Separate Keyboard Layout

Cinnamon 4.4.8 allows you to type Esperanto’s supersigns right out of the box, without having to install a separate keyboard layout. To configure this, follow

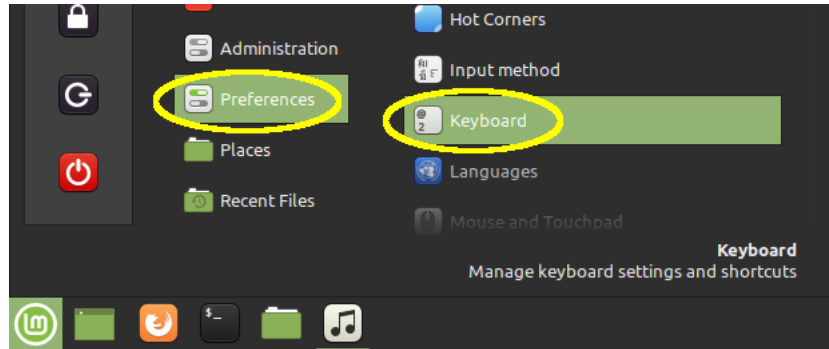
¹Unicode is a character encoding standard with the capacity to support over one million characters. It is being developed with the goal of having a single character set that supports all characters from all scripts, that are in common use around the world today.

²The Latin-3 (ISO-8859-3) encoding standard, which supported Esperanto, Turkish and Maltese, was popular from the late 1990s until the early 2000s.

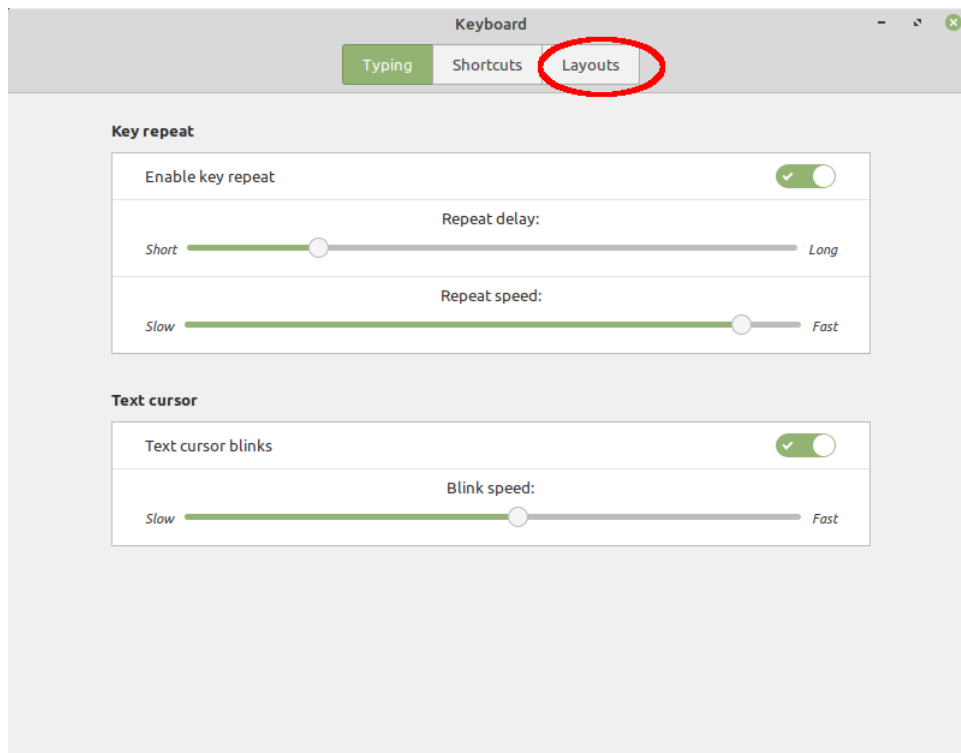
³If you need to view your system locale information, see subsection 1.3 of this guide.

these steps:

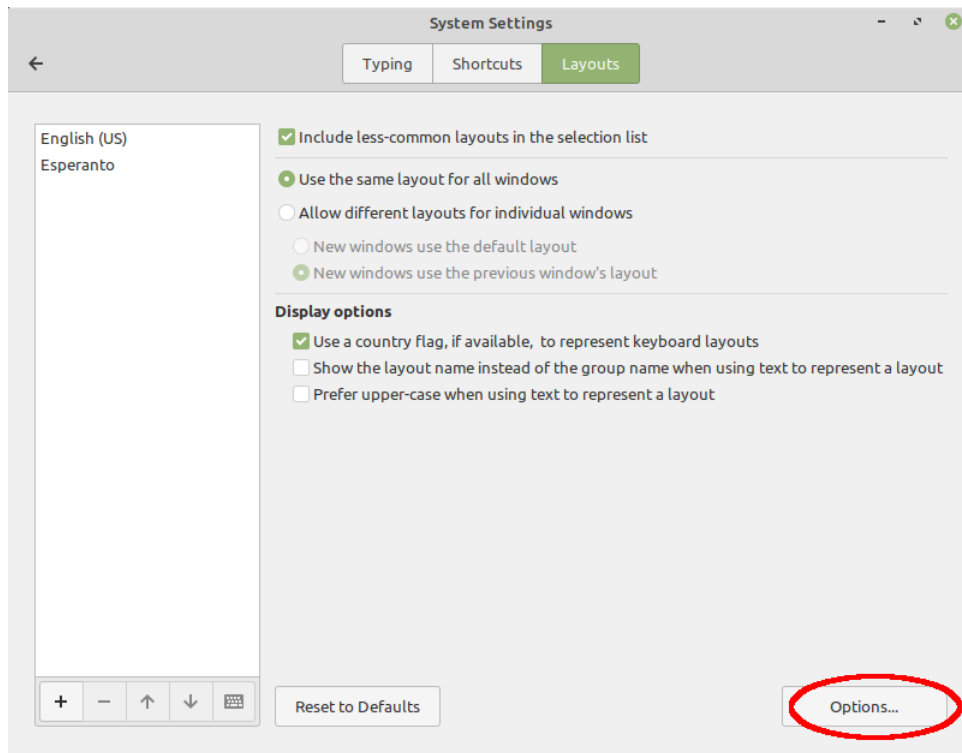
Go to Preferences > Keyboard:



Click on the **Layouts** tab to bring it forward:

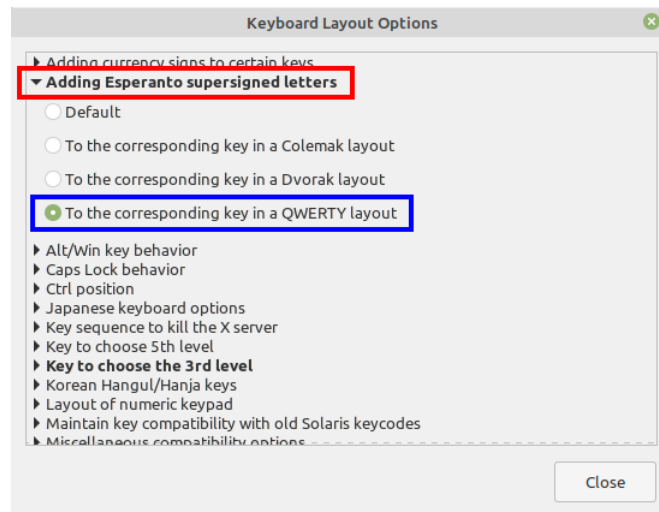


Next, click on the **Options** button in the lower right corner of the dialog box:



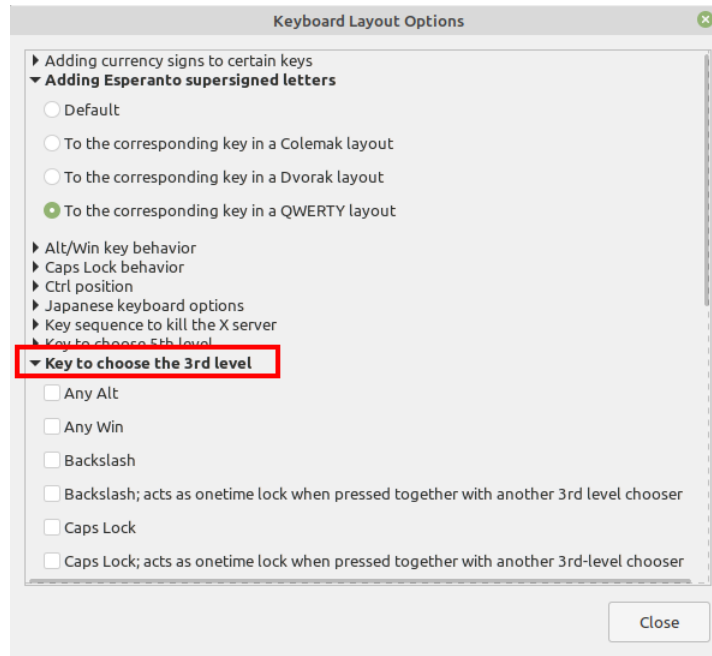
1.1.1 Adding Esperanto Supersigned Letters

You will see a “Keyboard Layout Options” pop-up window. Locate the section Adding Esperanto supersigned letters. Under it, select / tick the option To the corresponding key in a QWERTY layout:



1.1.2 Key to Choose 3rd Level

Next, scroll down to the section labeled **Key to choose the 3rd level**. This is where you will choose your **AltGr** key (also known as the **Alt Graph** key or the **Alternate Graphic** key) as a “Compose key.” It is located where the **Right Alt** key is normally found (to the right of the spacebar). When pressed along with a keyboard key, it enables the entry of special characters.



You will notice a variety of options available; you can choose whichever key you wish. I selected the Right Alt key. (Another good choice is the AltGr key).

I was puzzled by what “3rd level” means until I found a blog post by Timothy Boronczyk which provides a clear explanation of the term:

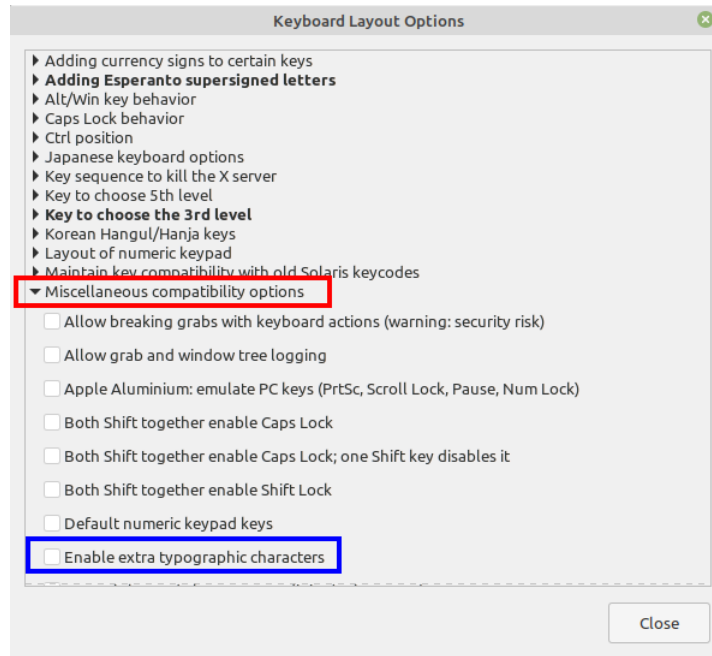
Each key can be thought of having multiple levels. For example, the first level of the C key would be a lower-case “c”. The second level would be an upper-case “C” (the second level is accessible [via] the Shift key as a modifier). The supersigno option maps the accented characters to the third and fourth levels of the keys of their respective base glyphs. That is, the third level of the C key is now “ĉ” and the fourth is “Ĉ”.

Just as a modifier key is needed to access the second level (Shift), a modifier is also used to access the higher levels. In my case I set this as the Right Alt key, a key traditionally used for this purpose.⁴

One last item to verify is under the section labeled Miscellaneous compatibility options. Make sure that the option “Enable extra typographic characters” is *not*

⁴Timothy Boronczyk, “Esperanto Accented Characters in Ubuntu,” *Zaemis* (blog), Jan. 30, 2012. <https://zaemis.blogspot.com/2012/01/esperanto-accented-characters-in-ubuntu.html>

selected / ticked:

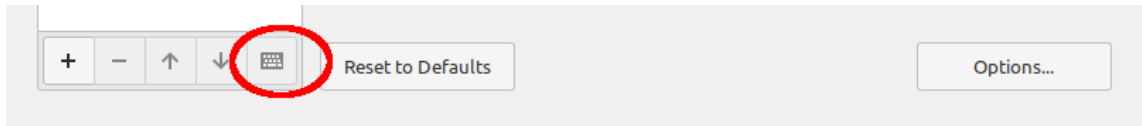


Finally, click the **Close** button and you're ready to type the supersigned letters. This method works well, providing that you do not mind typing the two-key combinations listed below. (You must press both keys simultaneously to produce the supersigns):

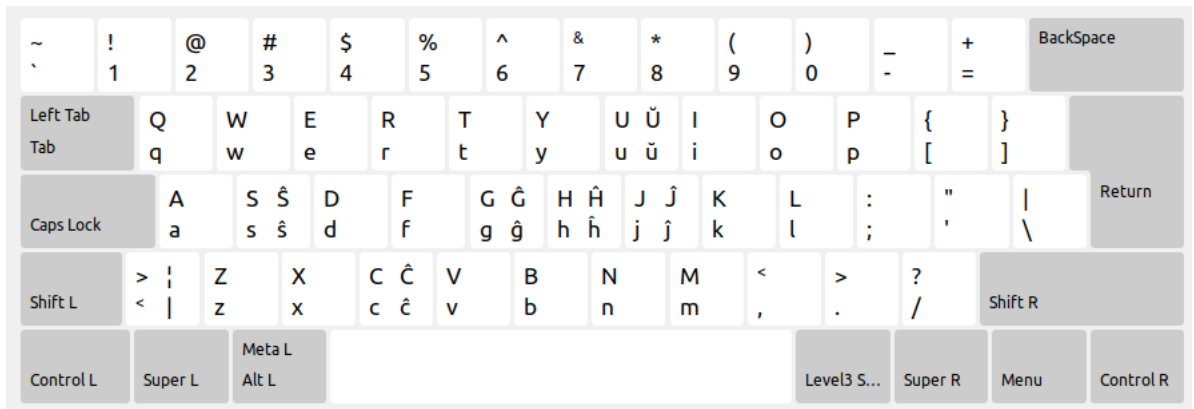
3rd Level Key (Prefix)	Key	Result	3rd Level Key (Prefix)	Key	Result
<i>(Your choice here)</i>			<i>(Your choice here)</i>		
Right Alt +	c	ĉ	Right Alt +	C	Ĉ
Right Alt +	s	ŝ	Right Alt +	S	Ŝ
Right Alt +	g	ĝ	Right Alt +	G	Ĝ
Right Alt +	h	ĥ	Right Alt +	H	Ĥ
Right Alt +	j	ĵ	Right Alt +	J	Ĵ
Right Alt +	u	ŭ	Right Alt +	U	Ŭ

Cinnamon has a handy feature which generates a preview of the keyboard layout. If you return to the Preferences > Keyboard > **Layouts** tab, there is a

small keyboard icon towards the bottom of the dialog box:



Click on this icon to show a preview of your modified keyboard. If you wish, you can use the Screenshot utility to save a screenshot for future reference.



1.2 With Esperanto Keyboard Layout

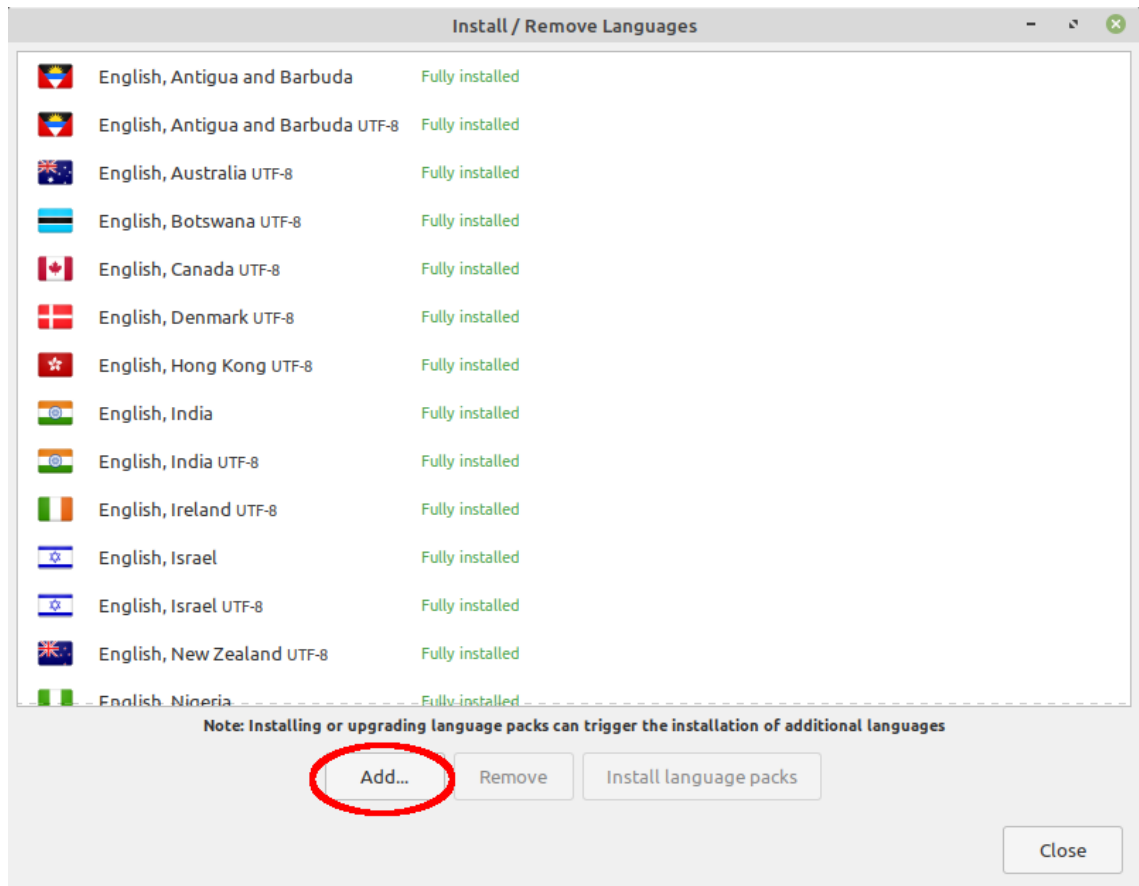
Mint 19.3 Cinnamon also offers the option of using a dedicated Esperanto keyboard layout; this is my preference.

From the main menu, go to Preferences > Languages. This will open the “Language Settings” dialog box:



Click on the the **Install / Remove Languages** button. Prior to executing this next step, you must authenticate with your sudo password.

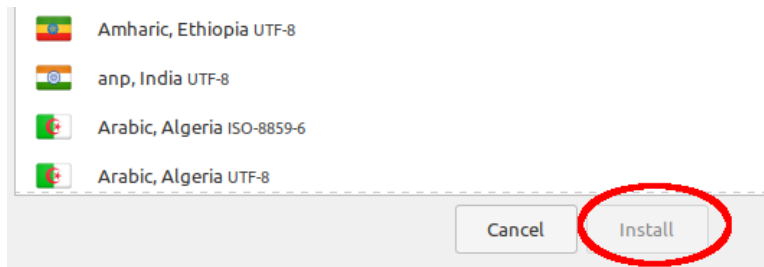
A pop-up window listing available languages will appear. Click on the **Add** button:



The “Add a New Language” pop-up window will appear. Scroll down and select the following language packs:

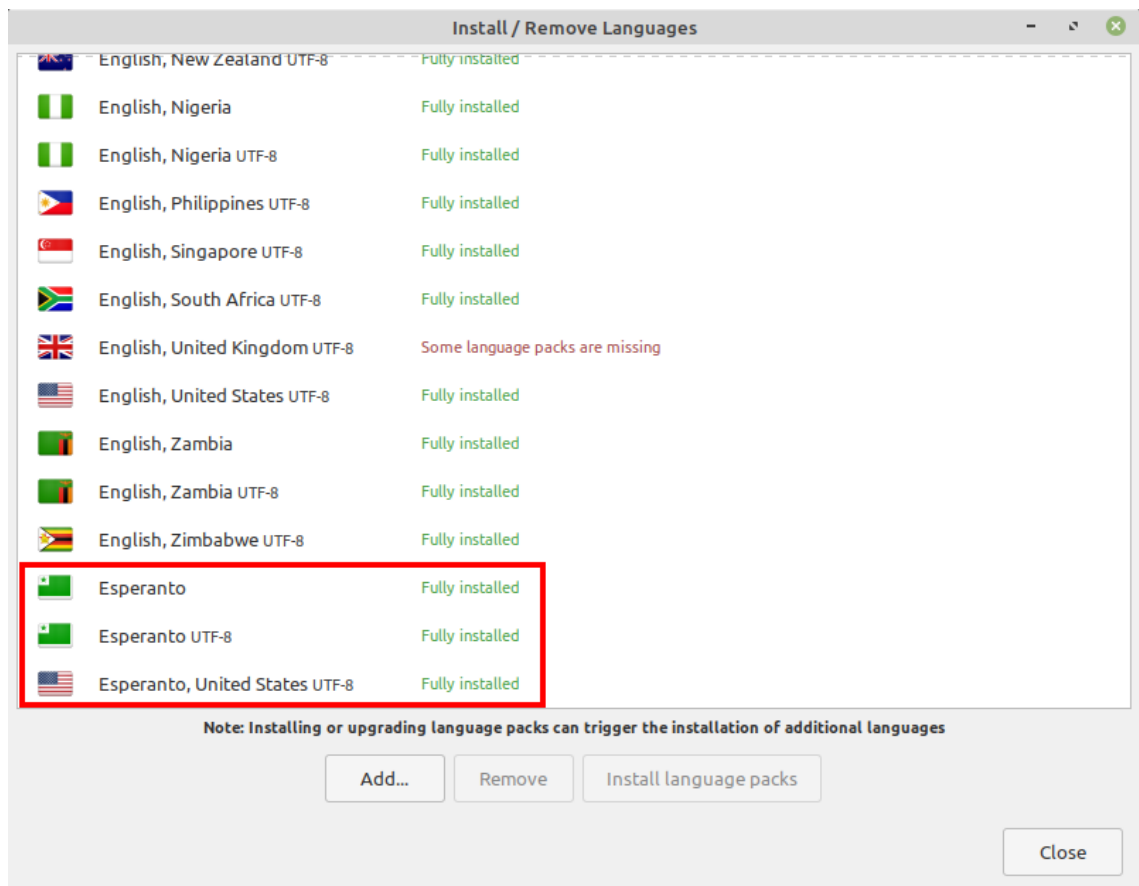
- Esperanto
- Esperanto UTF-8
- Esperanto, US UTF-8

Click on the **Install** button to install these language packs:

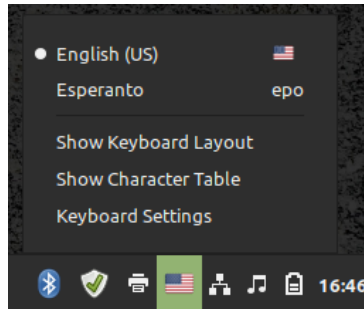


The system will prompt you to install some additional language packs (via the “Install language packs” button).

When this completes, you should see the three Esperanto language packs listed with a status of “Fully installed”:

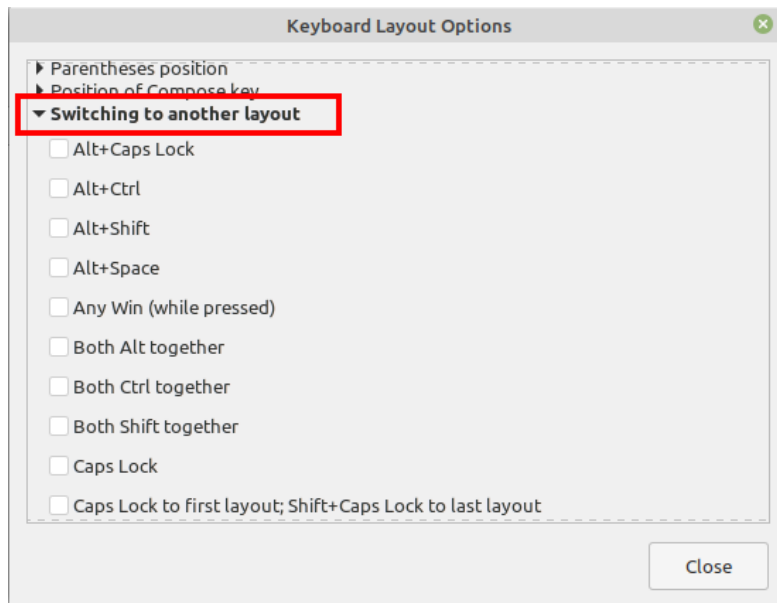


Click on the **Close** button to complete this procedure. At this point, the new Esperanto keyboard will be placed in your system tray:



Although not required, I recommend configuring one last item to provide some additional flexibility. Selecting a key shortcut for switching between the two keyboard layouts will give you a faster alternative to “point-and-clicking” the keyboard icons in the system tray.

To accomplish this, navigate to Preferences > Keyboard > **Layouts** tab > **Options**. Then scroll down to the section labeled Switching to another layout:



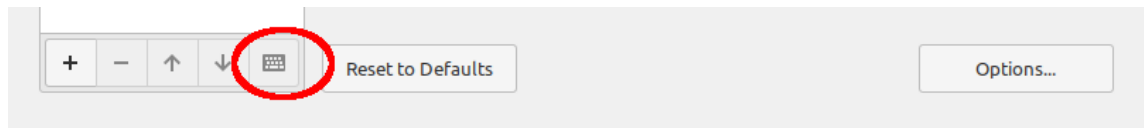
You will see a lengthy list of available keys and key combinations you can choose from. I opted for the Win+Space key combination (at the bottom of the list).

Click on the **Close** button to save this configuration change.

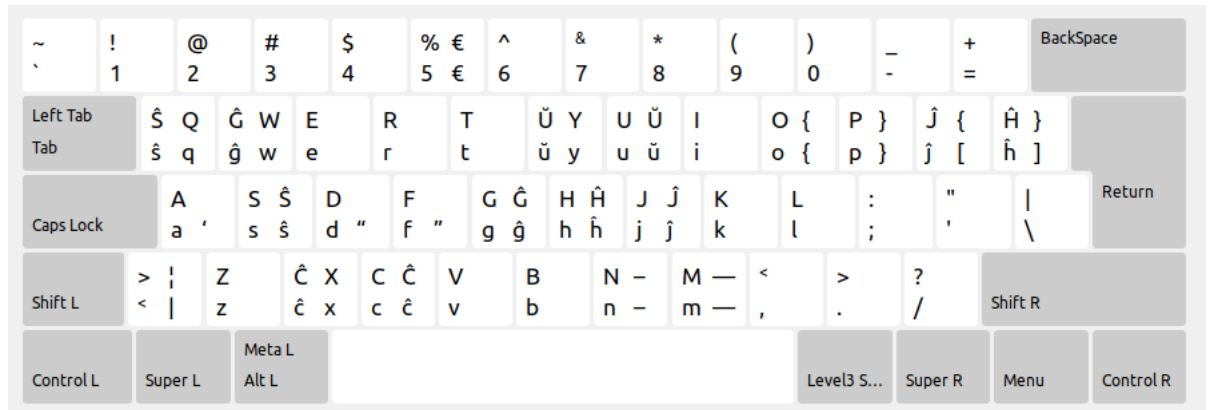
I find it straightforward and more convenient to type Esperanto's diacritical letters using this layout:

Key	Result	Key	Result
q	ŝ	Q	Ŝ
w	ĝ	W	Ĝ
y	ŭ	Y	Ŭ
[ĵ	Shift + [({)	Ĵ
]	ĥ	Shift +] (})	Ĥ
x	ĉ	X	Ĉ

Cinnamon has a user-friendly feature to preview the keyboard layout. If you return to the Preferences > Keyboard > **Layouts** tab, there is a small keyboard icon towards the bottom of the dialog box:



Click on this icon to show a preview of your Esperanto keyboard. If you wish, you can use the Screenshot utility to save a screenshot for future reference.



1.3 System Locale Information

If you need to view / check information about the currently installed locale, issue either of the commands below from a Terminal. (Sample output from my Mint 19.3 Cinnamon system is included).

```
kalwisti@kalwisti-ThinkCentre-M800:~$ locale
LANG=en_US.UTF-8
LANGUAGE=en_US
LC_CTYPE="en_US.UTF-8"
LC_NUMERIC="en_US.UTF-8"
LC_TIME="en_US.UTF-8"
LC_COLLATE="en_US.UTF-8"
LC_MONETARY="en_US.UTF-8"
LC_MESSAGES="en_US.UTF-8"
LC_PAPER="en_US.UTF-8"
LC_NAME="en_US.UTF-8"
LC_ADDRESS="en_US.UTF-8"
LC_TELEPHONE="en_US.UTF-8"
LC_MEASUREMENT="en_US.UTF-8"
LC_IDENTIFICATION="en_US.UTF-8"
LC_ALL=
```

```
kalwisti@kalwisti-ThinkCentre-M800:~$ localectl status
System Locale: LANG=en_US.UTF-8
VC Keymap: n/a
X11 Layout: us
X11 Model: pc105
```

I hope that you have found this guide useful, if you were needing to type more than just an isolated Esperanto word or phrase. As is typical under Linux, there are multiple ways to accomplish a given task. With Cinnamon 4.4.8, you may choose to type the supersigns without using a separate keyboard layout, or via a native Esperanto layout. Select whichever method works best for you and your use of the keyboard.

If you have family members or friends who are still stuck with Windows, I will mention two free utility programs that allow the typing of Esperanto's diacritical letters without modifying the OS in any way: EK! and Tajpi.⁵

⁵EK! is an open-source (GPL) program created by Jurij Finkel, a computer programmer and

Agrablan kaj komfortan tajpadon!

translator. Its most recent version (3.9) dates from 2010 and is available at: <http://www.esperanto.mv.ru/Ek/>

Tajpi ('to type') is also published under the GPL and was created by Thomas James. The program runs in the background and uses minimal system resources. It is a slightly better option than EK!, in my opinion, because its most recent release (2.98) is from 2016. Tajpi can be downloaded from: <http://www.zz9pza.net/tajpi/en/>