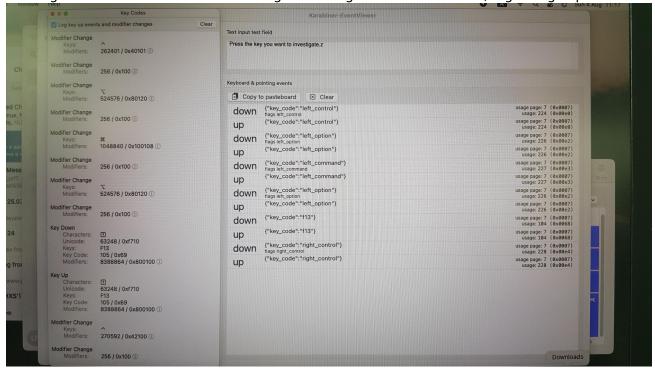
## modifier keys: Right Alt Gr button acts the same as (duplicates) the Windows button (has the same key code)

Beitrag von "elnprk" vom 4. August 2024, 09:58

So I used the latest efi from here (<a href="https://github.com/KawaiiGirl2001/ThinkPadT470-OpenCore/">https://github.com/KawaiiGirl2001/ThinkPadT470-OpenCore/</a>) to hackintosh my t470 (i only edited config.plist with unique serial number (didn't bother with apecid) and replaced airportitlwm kext with the latest because the laptop restarted at the apple logo progress)

What bothers me is that I cannot map the modifier buttons as I wish: I want to have the t470 buttons to act in the same way as those of a mac keyboard located in the same positions do. So if i do not look at the keyboard i don't notice a difference with the real mac keyboard button positions.

I tested the bottom row with modifier buttons by pressing each button from left to right starting from fn button and ending with right control button, ignoring space bar:



By default (with default system settings keyboard shortcuts modifier keys):

## Code

- 1. fn button doesn't produce any event (btw is that correct?)
- 2. Control buttons act as intended
- 3. Windows button -> Left Option key
- 4. Left Alt button -> Left Command key
- 5. Right Alt Gr button -> Left Option key (!) same as the Windows key
- 6. PrtSc button -> f13 key

So, the left modifier buttons are working as I prefer. But the Right Alt Gr button has the same key codes as the Windows button as seen on the photo and thus produce the same effect. For this reason changing keyboard system settings or using 3rd party tools like <u>Karabiner</u> do not solve my problem with the Right Alt Gr button. I want the Windows button and Right Alt Gr button to produce different results but Right Alt Gr button is essentially a duplicate of a Windows button.

Prior to using that efi i tried installing ventura from <a href="https://github.com/MultimediaLucario/Lenovo-ThinkPad-T470">https://github.com/MultimediaLucario/Lenovo-ThinkPad-T470</a> and I remember that the default key mapping was different from that produced by latest efi: Windows button acted as a Command key, Left Alt button acted as an Option key, and Right Alt Gr button acted as an Option key (don't remember if PrtSc did something). And after I switched command and option keys in system settings I got the result i wanted.

Does anybody know why is this happening that both buttons have same key codes? For comparison, left and right control buttons have different key codes as seen on the photo. My suspect is that the <a href="hardware">hardware</a> key mappings (Windows button and Right Alt Gr) might depend on the efi. I know nothing about hackintosh, im just a user that follows manuals. If you know and can tell me how to change keyboard key codes through efi or find alternative solution that solves my problem it would be nice

p.s. some little bugs I found on my hackintosh is inability to connect my bluetooth mouse and that my bluetooth headphones couldn't connect after sleep yesterday (a reboot helped). Also, when connecting hdmi to tv the picture on tv was with a pink filter. Maybe you know how to solve these as well?