

The way TellNext use the Hardware keyboard info is the following:

As we mention previously, none of an ACTION\_UP is valid without an ACTION\_DOWN.  
So, the “stand-alone” ACTION\_UP are ignored by the system.

Here you have some examples with a multi tap hardware keyboard:



With the numeric mode active, we press 2 key:

- For keyboard 8 (deviceId), we have a binomial DOWN-UP action.  
Corresponding to the key 2 (DisplayLab), with Scancode 3 and Keycode 9

```
Keyboard test

---
DeviceID : 8
Action   : ACTION_DOWN
Flags    : 1000b
DisplayLab: 2
MetaState :
Unicode  : 50 (0x32)
Scancode : 3 (0x3)
Keycode  : 9 (0x9)
Key      :

---
DeviceID : 8
Action   : ACTION_UP
Flags    : 1000b
DisplayLab: 2
MetaState :
Unicode  : 50 (0x32)
Scancode : 3 (0x3)
Keycode  : 9 (0x9)
Key      :
```

With the alpha mode active, we press A key:

- For keyboard 5 (deviceId), we have a binomial DOWN-UP action and a “stand-alone” ACTION\_UP that will be ignored by TellNext.  
Corresponding to the key A (DisplayLab), with Keycode 29

```
Keyboard test

---
DeviceID : 5
Action   : ACTION_DOWN
Flags    : 0b
DisplayLab: A
MetaState :
Unicode  : 97 (0x61)
Scancode : 0 (0x0)
Keycode   : 29 (0x1d)
Key       :

---
DeviceID : 5
Action   : ACTION_UP
Flags    : 0b
DisplayLab: A
MetaState :
Unicode  : 97 (0x61)
Scancode : 0 (0x0)
Keycode   : 29 (0x1d)
Key       :

---
DeviceID : 8
Action   : ACTION_UP
Flags    : 1000b
DisplayLab: 2
MetaState :
Unicode  : 50 (0x32)
Scancode : 3 (0x3)
Keycode   : 9 (0x9)
Key       :
```

With the alpha mode active, we press B key:

1. For keyboard 5 (deviceId), we have a binomial DOWN-UP action and a “stand-alone” ACTION\_UP that will be ignored by TellNext.  
Corresponding to the key A (DisplayLab), with Keycode 29
2. We have another binomial DOWN-UP corresponding to a delete action performed by the system
3. For keyboard 5 (deviceId), we have a binomial DOWN-UP action and a “stand-alone” ACTION\_UP that will be ignored by TellNext.  
Corresponding to the key B (DisplayLab), with Keycode 30

```

Keyboard test

---
DeviceID : 5
Action   : ACTION_DOWN
Flags    : 0b
DisplayLab: A
MetaState :
Unicode  : 97 (0x61)
Scancode : 0 (0x0)
Keycode  : 29 (0x1d)
Key      :
---
DeviceID : 5
Action   : ACTION_UP
Flags    : 0b
DisplayLab: A
MetaState :
Unicode  : 97 (0x61)
Scancode : 0 (0x0)
Keycode  : 29 (0x1d)
Key      :
---
DeviceID : 8
Action   : ACTION_UP
Flags    : 1000b
DisplayLab: 2
MetaState :
Unicode  : 50 (0x32)
Scancode : 3 (0x3)
Keycode  : 9 (0x9)
Key      :
---
DeviceID : -1
Action   : ACTION_DOWN
Flags    : 0b
DisplayLab:
MetaState :
Unicode  : 0 (0x0)
Scancode : 0 (0x0)
Keycode  : 67 (0x43)
Key      : KEYCODE_DEL
---
DeviceID : -1
Action   : ACTION_UP
Flags    : 0b
DisplayLab:
MetaState :
Unicode  : 0 (0x0)
Scancode : 0 (0x0)
Keycode  : 67 (0x43)
Key      : KEYCODE_DEL
---
DeviceID : 5
Action   : ACTION_DOWN
Flags    : 0b
DisplayLab: B
MetaState :
Unicode  : 98 (0x62)
Scancode : 0 (0x0)
Keycode  : 30 (0x1e)
Key      :
---
DeviceID : 5
Action   : ACTION_UP
Flags    : 0b
DisplayLab: B
MetaState :
Unicode  : 98 (0x62)
Scancode : 0 (0x0)
Keycode  : 30 (0x1e)
Key      :
---
DeviceID : 8
Action   : ACTION_UP
Flags    : 1000b
DisplayLab: 2
MetaState :
Unicode  : 50 (0x32)
Scancode : 3 (0x3)
Keycode  : 9 (0x9)
Key      :

```

1

2

3

HardwareKeyboardTrace.txt file

This file is added to /sdcard/TellNext folder. In this file, all keys pressed are recorded.

It is never deleted nor cleared. Entering/exiting TellNext will not change the file content.