

## Data Format

Start offset (in bytes)	Size (in bytes)	Data
0	4	Header: Version Information
4	4	Header: Flags
8	4	Header: Number of Mappings
12	4	Individual Mapping
...	...	...
Last 4 bytes	4	Null Terminator (0x00000000)

## Path

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\Keyboard Layout\ScanCode Map

(Type: REG\_BINARY)

## Example 1

*Swapping left control key with caps lock key*

00000000 00000000 03000000 3A001D00 1D003A00 00000000

**Value:** Interpretation

**0x00000000:** Header: Version. Set to all zeroes.

**0x00000000:** Header: Flags. Set to all zeroes.

**0x00000003:** Three entries in the map (including null entry).

**0x001D003A:** Left CTRL key --> CAPS LOCK (0x1D --> 0x3A).

**0x003A001D:** CAPS LOCK --> Left CTRL key (0x3A --> 0x1D).

**0x00000000:** Null terminator.

## Example 2

*Removes right control key's function and changes right alt key to mute key*

00000000 00000000 03000000 00001DE0 20E038E0 00000000

**Value:** Interpretation

**0x00000000:** Header: Version. Set to all zeroes.

**0x00000000:** Header: Flags. Set to all zeroes.

**0x00000003:** Three entries in the map (including null entry).

**0xE01D0000:** Remove the right CTRL key (0xE01D --> 0x00).

**0xE038E020:** Right ALT key --> Mute key (0xE038 --> 0xE020).

**0x00000000:** Null terminator.

## Authentic Looks

### Legend

Header: Version

Header: Flags

Number of Entries

Entry

Null

### Example (1)

*Swapped the 'f' key with the 'j' key*

00000000 00 00 00 00 00 00 00 00 .....

00000008	03 00 00 00	21 00 24 00	....!.\$.
00000010	24 00 21 00	00 00 00 00	\$.!.....
00000018			

## Example (2)

*Swapped the 's' key with the 'w' key*

00000000	00 00 00 00	00 00 00 00	.....
00000008	02 00 00 00	1F 00 11 00	.....
00000010	02 00 00 00	11 00 1F 00	.....
00000018	00 00 00 00		....