

Instructions for Switching from MSD to HID (Windows, Mac & Linux)

John Poulson, Wibu-Systems USA, 2013 April 22

MSD = Mass Storage Device, like any detachable memory drive attached to a USB port.

HID = Human Interface Device, like a keyboard or mouse attached through a USB port.

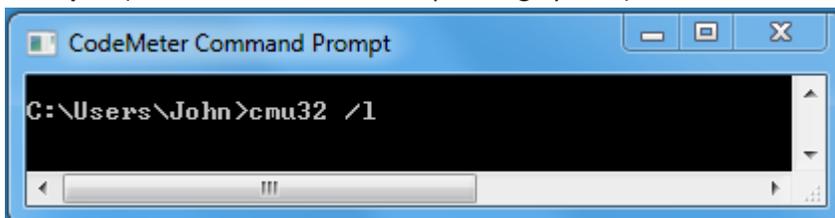
The biggest advantage of the HID interface vs. the MSD interface is that CmSticks no longer appear as memory sticks or thumb drives. In some network environments detachable memory devices are forbidden. Now that a CmDongle can appear as a simple HID device, this concern has been eliminated.

NOTE: The HID option is only available for CmStick, CmStick/T, CmStick/C and CmStick/C Basic. It is *not* an option for CmDongles with flash memory (CmStick/M or CmCard).

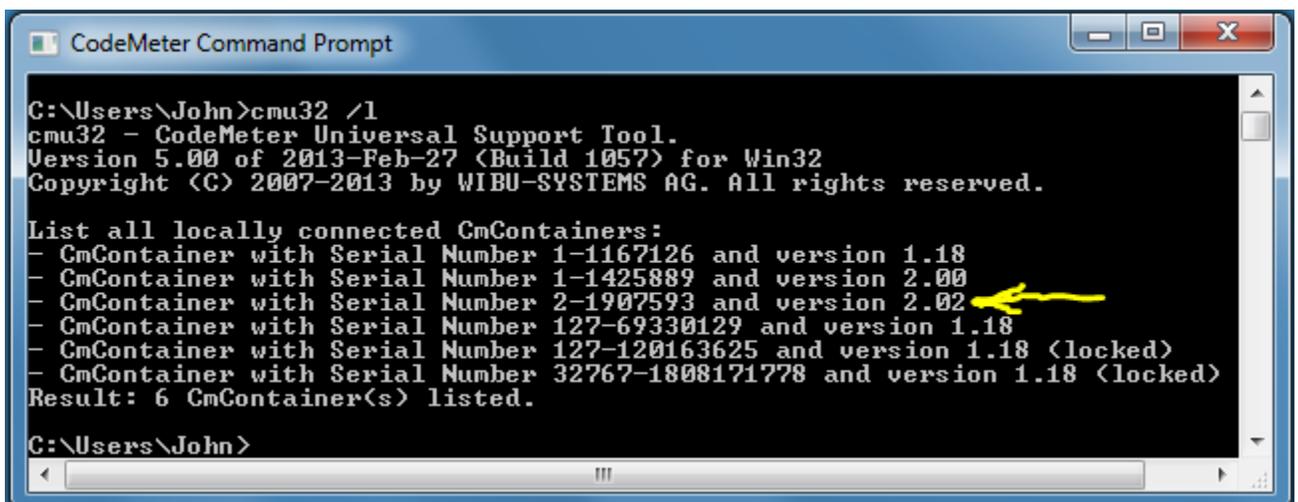
Both the ISV and the end user can choose between MSD and HID (and switch back and forth as desired) by following these simple instructions.

Windows OS: To Switch from MSD to HID

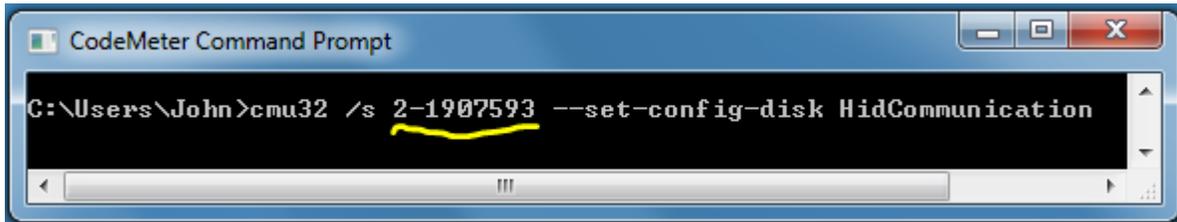
- Make sure the target CmStick has been flashed with Firmware version 2.02 or higher.
- Make sure the target PC is running CodeMeter Runtime version 5.0 or higher.
- Plug the target CmStick into the target PC.
- Open a *CodeMeter Command Prompt*.
 - In Windows go to: Start | All Programs | CodeMeter | Tools | CodeMeter Command Prompt".
- Once the *CodeMeter Command Prompt* window opens; you can use the **CMU32** command to discover the CmStick's Serial Number. Run the *CMU32 List* command:
 - /l = the correct parameter. So enter *CMU32 /l*
 - **Example:** (From a Windows 32 bit Operating System)



Example showing the results of a successful *CMU32 /l* command. (The CmStick Serial Number must start with the numeral "2-" and have Firmware version 2.02 or higher.) Here Serial Number = 2-1907593

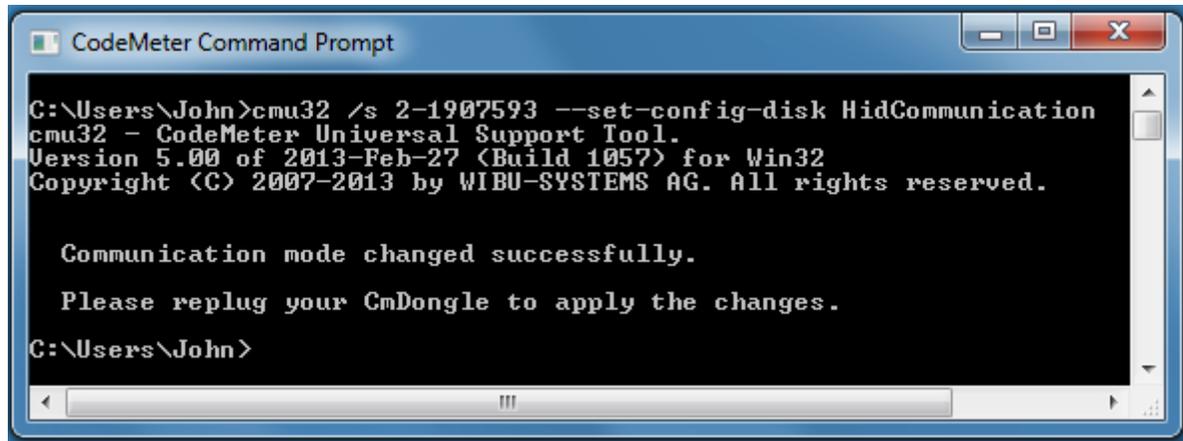


- Once you know the Serial Number; run the **CMU32** command with the following parameters:
 - `cmu32 /s [CmDongle-Serial Number] --set-config-disk HidCommunication`
 - Example:**



```
C:\Users\John>cmu32 /s 2-1907593 --set-config-disk HidCommunication
```

Example of successful CMU command:



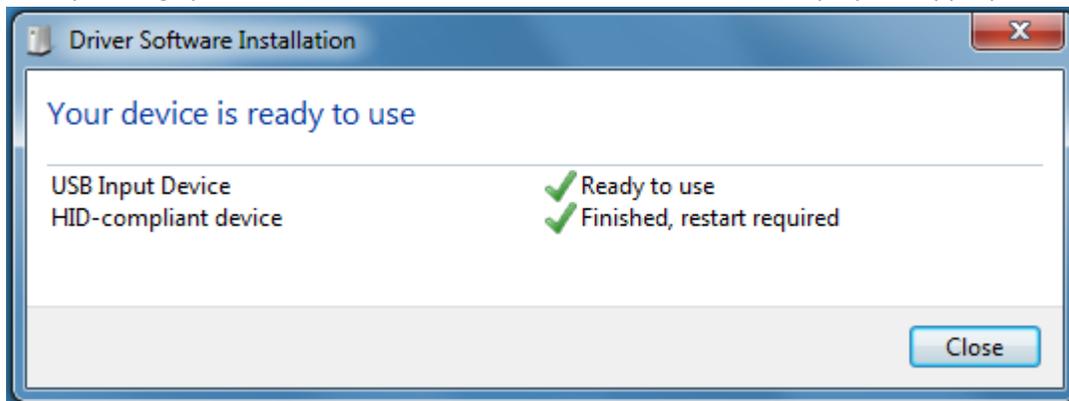
```
C:\Users\John>cmu32 /s 2-1907593 --set-config-disk HidCommunication
cmu32 - CodeMeter Universal Support Tool.
Version 5.00 of 2013-Feb-27 (Build 1057) for Win32
Copyright (C) 2007-2013 by WIBU-SYSTEMS AG. All rights reserved.

Communication mode changed successfully.

Please replug your CmDongle to apply the changes.

C:\Users\John>
```

- Unplug (and then re-plug in) the target CmDongle
- The operating system should now detect the new HID device and display the appropriate message.



To Switch from HID to MSD (Windows)

To switch from HID to MSD follow the above instruction; except use these parameters in the **CMU32** command
`cmu32 /s [Box mask-Serial Number] --set-config-disk MsdCommunication`

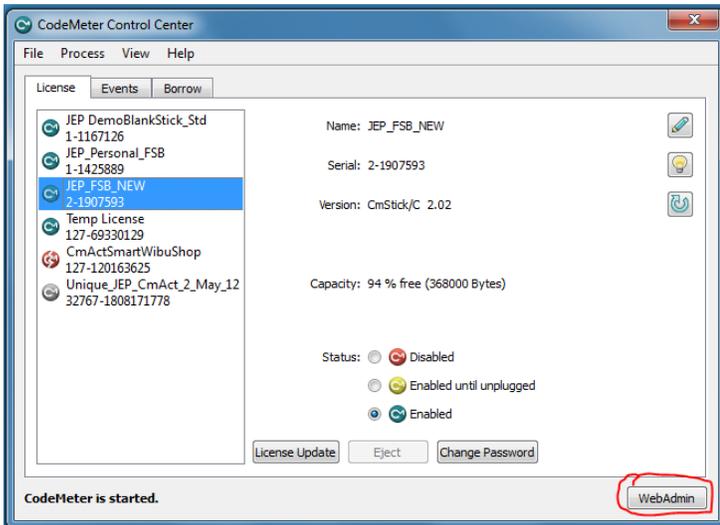


```
C:\Users\John>cmu32 /s 2-1907593 --set-config-disk MsdCommunication
```

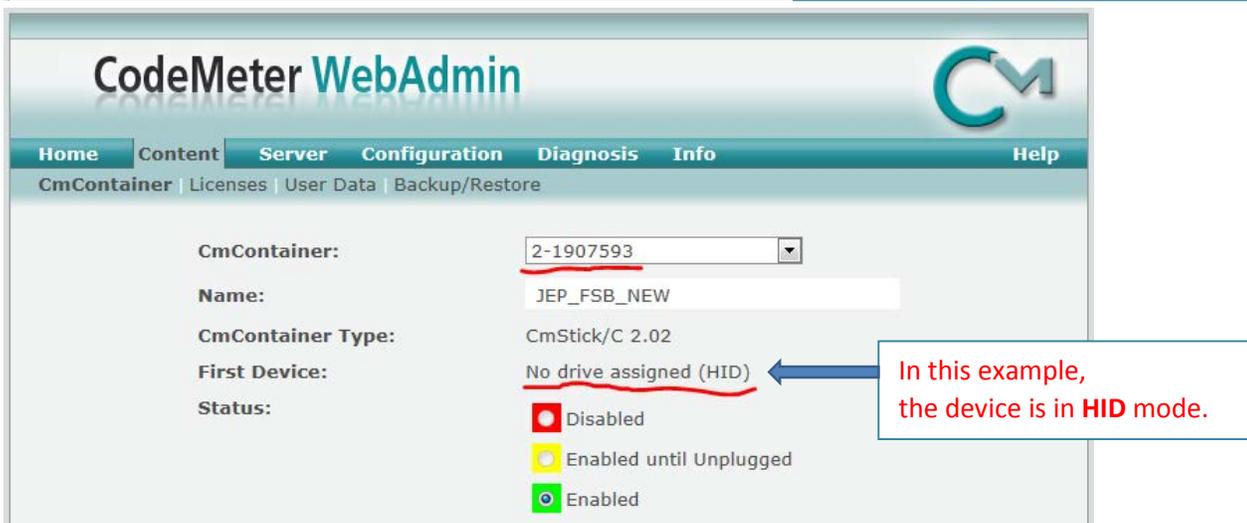
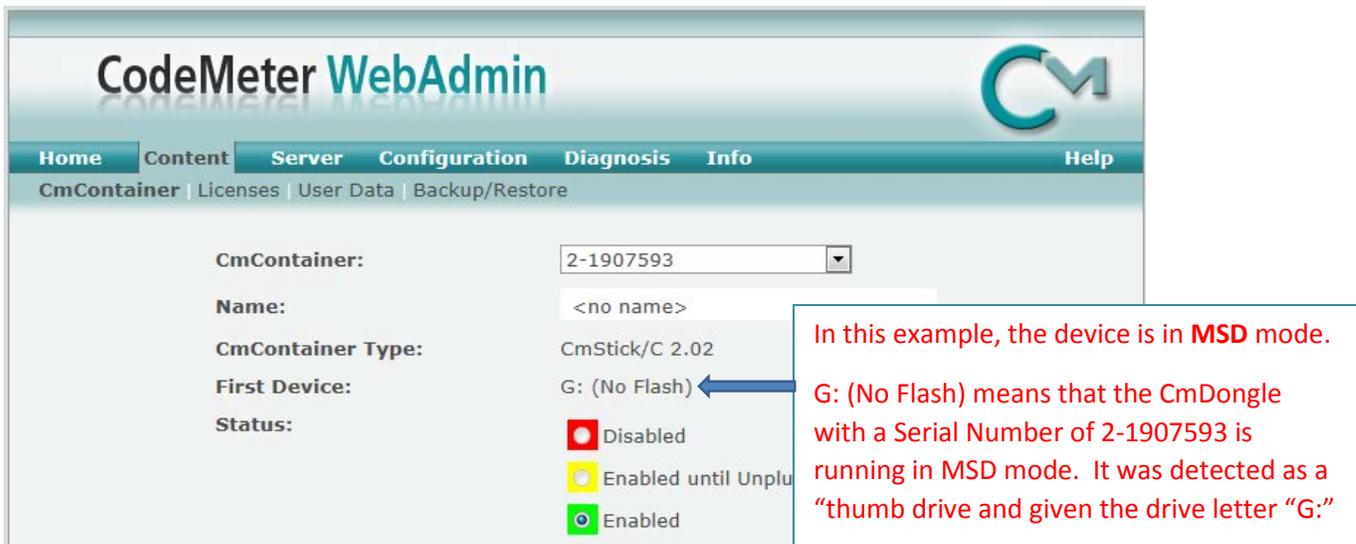
Using CodeMeter WebAdmin to Detect CmStick Mode (Windows)

It is also possible to detect if the CmStick is running with a MSD interface or an HID interface using the CodeMeter WebAdmin tool.

From the *CodeMeter Control Center*, click the *WebAdmin* button.

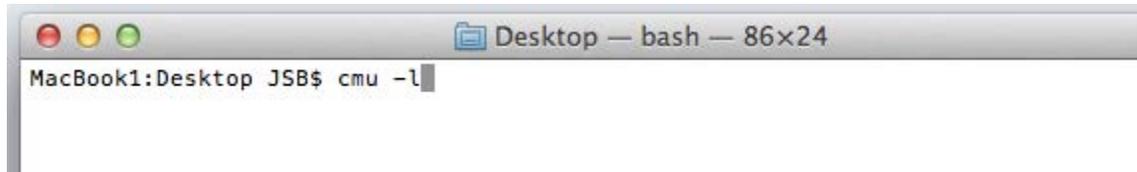


From the *Content / CmContainer* Menu Selection, examine the First Device entry:



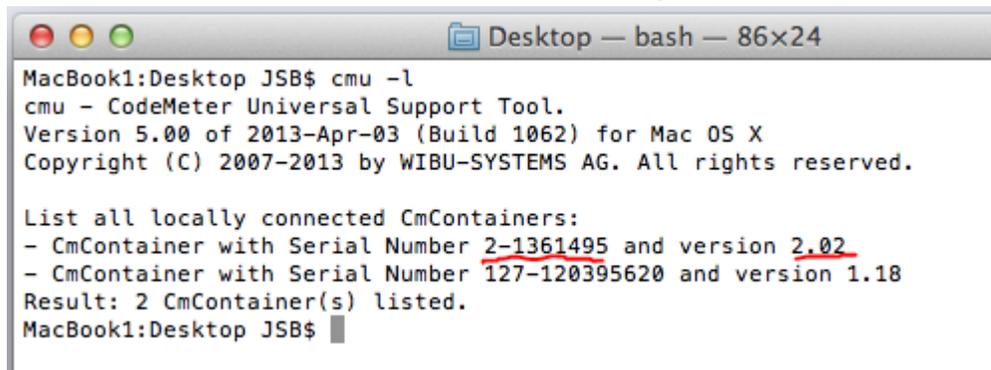
Mac OS: To Switch from MSD to HID – and back again

- Make sure the target CmStick has been flashed with Firmware version 2.02 or higher.
- Make sure the target Mac is running CodeMeter Runtime version 5.0 or higher.
- Plug the target CmStick into the target Mac.
- Open a Terminal or Command Prompt window
- Once the Command Prompt window opens; you can use the *CMU List* command to discover the CmStick's Serial Number:
 - -l = the correct parameter. So enter *CMU -l*
 - **Example:** (From a Mac 64 bit Operating System)



```
Desktop — bash — 86x24
MacBook1:Desktop JSB$ cmu -l
```

Example showing the results of a successful *CMU -l* command. (The CmStick Serial Number must start with the numeral “2-” and have Firmware version 2.02 or higher.) Here Serial Number = 2-1361495

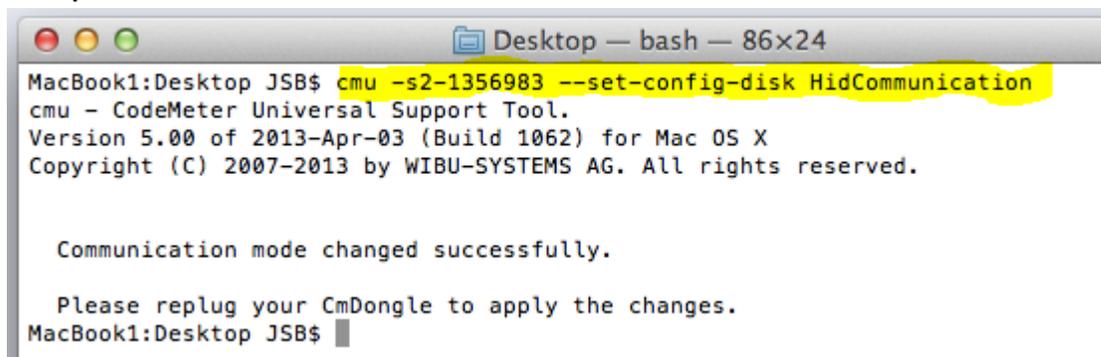


```
Desktop — bash — 86x24
MacBook1:Desktop JSB$ cmu -l
cmu - CodeMeter Universal Support Tool.
Version 5.00 of 2013-Apr-03 (Build 1062) for Mac OS X
Copyright (C) 2007-2013 by WIBU-SYSTEMS AG. All rights reserved.

List all locally connected CmContainers:
- CmContainer with Serial Number 2-1361495 and version 2.02
- CmContainer with Serial Number 127-120395620 and version 1.18
Result: 2 CmContainer(s) listed.
MacBook1:Desktop JSB$
```

Once you know the Serial Number, run the **CMU** command with the following parameters:
cmu -s [CmDongle-Serial Number] --set-config-disk HidCommunication

Example:



```
Desktop — bash — 86x24
MacBook1:Desktop JSB$ cmu -s 2-1356983 --set-config-disk HidCommunication
cmu - CodeMeter Universal Support Tool.
Version 5.00 of 2013-Apr-03 (Build 1062) for Mac OS X
Copyright (C) 2007-2013 by WIBU-SYSTEMS AG. All rights reserved.

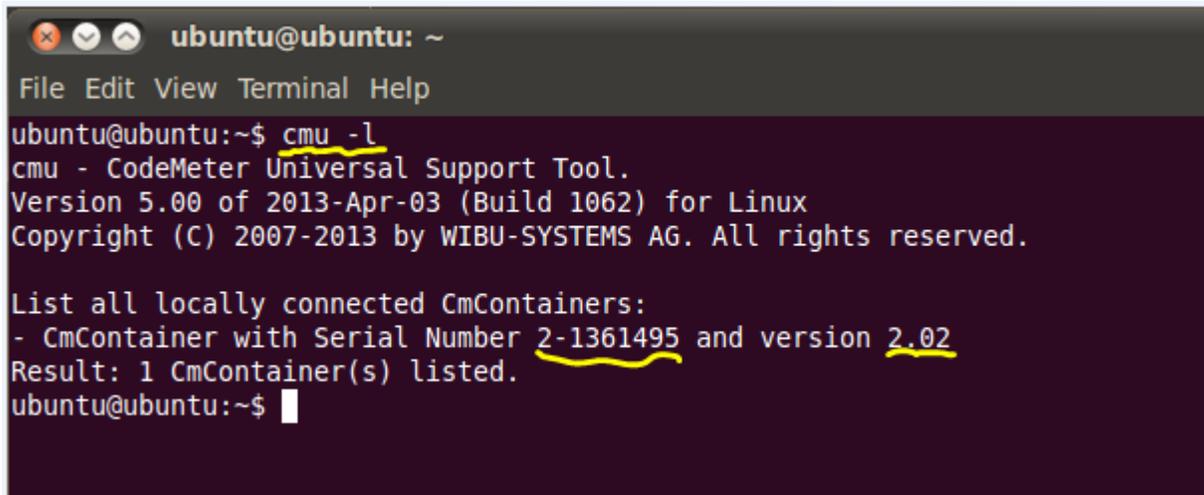
Communication mode changed successfully.

Please replug your CmDongle to apply the changes.
MacBook1:Desktop JSB$
```

- You can switch from HID to MSD using the following command parameters:
cmu -s [CmDongle-Serial Number] --set-config-disk MsdCommunication

Linux OS: To Switch from MSD to HID and back again

- Make sure the target CmStick has been flashed with Firmware version 2.02 or higher.
- Make sure the target Linux System is running CodeMeter Runtime version 5.0 or higher.
- Plug the target CmStick into the target system.
- Open a Terminal or Command Prompt window
- Once the Command Prompt window opens; you can use the *CMU List* command to discover the CmStick's Serial Number:
 - l = the correct parameter. So enter *CMU -l*
 - Example:** (From an Ubuntu operating system) showing the results of a successful *CMU -l* command. (The CmStick Serial Number must start with the numeral "2-" and have Firmware version 2.02 or higher.) Here Serial Number = 2-1361495

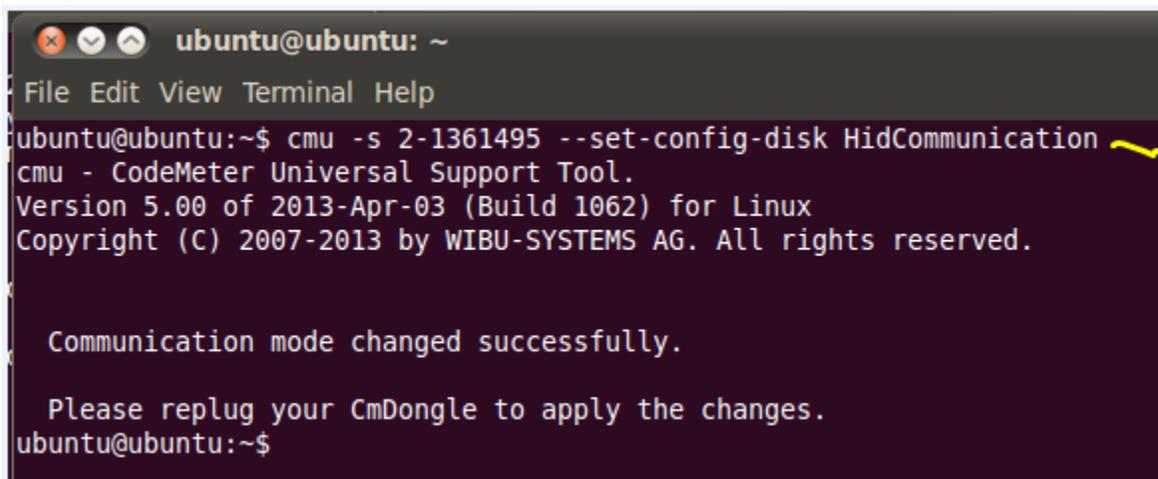


```
ubuntu@ubuntu: ~  
File Edit View Terminal Help  
ubuntu@ubuntu:~$ cmu -l  
cmu - CodeMeter Universal Support Tool.  
Version 5.00 of 2013-Apr-03 (Build 1062) for Linux  
Copyright (C) 2007-2013 by WIBU-SYSTEMS AG. All rights reserved.  
  
List all locally connected CmContainers:  
- CmContainer with Serial Number 2-1361495 and version 2.02  
Result: 1 CmContainer(s) listed.  
ubuntu@ubuntu:~$
```

Once you know the Serial Number; run the **CMU** command with the following parameters:

```
cmu -s [CmDongle-Serial Number] --set-config-disk HidCommunication
```

Example:



```
ubuntu@ubuntu: ~  
File Edit View Terminal Help  
ubuntu@ubuntu:~$ cmu -s 2-1361495 --set-config-disk HidCommunication  
cmu - CodeMeter Universal Support Tool.  
Version 5.00 of 2013-Apr-03 (Build 1062) for Linux  
Copyright (C) 2007-2013 by WIBU-SYSTEMS AG. All rights reserved.  
  
Communication mode changed successfully.  
  
Please replug your CmDongle to apply the changes.  
ubuntu@ubuntu:~$
```

- You can switch from HID to MSD using the following command parameters:
cmu -s [CmDongle-Serial Number] --set-config-disk MsdCommunication