



Linux Ubuntu 26.04 Manual Pages on command 'alsaucm.1'

\$ man alsaucm.1

alsaucm(1) General Commands Manual alsaucm(1)

Name

alsaucm - ALSA Use Case Manager

SYNOPSIS

alsaucm <options> [command]

DESCRIPTION

alsaucm (ALSA Use Case Manager) is a program to use the ALSA Use Case Interface <http://www.alsa-project.org/alsa-doc/alsa-lib/group__ucm.html> from the command line.

On complex sound cards, setting up audio routes is not trivial and mixer settings can conflict one another preventing the audio card to work at all.

The ALSA Use Case Manager is a mechanism for controlling complex audio hardware establishing a relationship between hardware configurations and meaningful use cases that the end-user can relate with.

The use case manager can also be used to switch between use cases when necessary, in a consistent way.

At a lower level, the use case manager works by configuring the sound card ALSA kcontrols to change the hardware digital and analog audio routing to match the requested device use case.

The use case manager kcontrol configurations are stored in easy to modify text files. An audio use case can be defined by a verb and device parameter.

The verb describes the use case action i.e. a phone call, listening to music, recording a conversation etc. The device describes the physical audio capture and playback hardware i.e. headphones, phone handset, bluetooth headset, etc.

OPTIONS

Available options:

-h, --help

this help

-c, --card NAME

open card NAME

-i, --interactive

interactive mode

-b, --batch FILE

batch mode (use '-' for the stdin input)

-n, --no-open

do not open first card found

Available commands:

open NAME

open card NAME.

valid names are sound card names as listed in /usr/share/alsa/ucm.

reset reset sound card to default state.

reload reload configuration.

listcards

list available cards.

list IDENTIFIER

list command, for items returning two entries (value+comment).

the value of the IDENTIFIER argument can be:

? _verbs - get verb list (in pair verb+comment)

? _devices[/verb] - get list of supported devices (in pair device+comment)

? _modifiers[/verb] - get list of supported modifiers (in pair modifier+comment)

The forms without the trailing /verb are valid only after a specific verb has

been set.

list1 IDENTIFIER

list command, for lists returning one item per entry.

the value of the IDENTIFIER argument can vary depending on the context, it can be:

? TQ[/verb] - get list of Tone Quality identifiers

? _enadevs - get list of enabled devices

? _enamods - get list of enabled modifiers

? _supporteddevs/{modifier}/{device}/{verb} - list of supported devices

? _conflictingdevs/{modifier}/{device}/{verb} - list of conflicting devices

get IDENTIFIER

get string value.

the value of the IDENTIFIER argument can be:

? _verb - return current verb

? [=]{NAME}/{[{modifier}]{/device}]{/{verb}}] (For valid NAMES look at the ALSA

Use Case Interface <http://www.alsa-project.org/alsa-doc/alsa-lib/group__ucm.html>)

geti IDENTIFIER

get integer value.

the value of the IDENTIFIER argument can be:

? _devstatus/{device}

? _modstatus/{device}

set IDENTIFIER VALUE

set string value

The value of the IDENTIFIER argument can be:

? _verb - set the verb to VALUE

? _enadev - enable the device specified by VALUE

? _disdev - disable the device specified by VALUE

? _swdev/{old_device} - switch device:

? disable old_device and then enable the device specified by VALUE

? if no device was enabled just return

? _enamod - enable the modifier specified by VALUE

? _dismod - disable the modifier specified by VALUE

? _swmod/{old_modifier} - switch modifier:

? disable old_modifier and then enable the modifier specified by VALUE

? if no modifier was enabled just return

Note that the identifiers referring to devices and modifiers are valid only after setting a verb.

h, help

help

q, quit

quit

FILES

The master use case files for each supported sound card are in `/usr/share/alsa/ucm`.

For example, the master use case file for the Pandaboard card is in `/usr/share/alsa/ucm/PandaBoard/PandaBoard.conf`, this file lists all the supported use cases, e.g.

```
SectionUseCase."HiFi" {  
    File "hifi"  
    Comment "Play HiFi quality Music."  
}  
...
```

Each use case defines a `_verb`, which is described in the file specified in the File directive, like above.

The HiFi verb above is described in `/usr/share/alsa/ucm/PandaBoard/hifi`.

For more details on the syntax of UCM files, see the `alsa-lib` source code: <http://git.alsa-project.org/?p=alsa-lib.git;a=blob;f=src/ucm/parser.c>

EXAMPLES OF USE

Some commands, like for instance `list _devices`, can only work after setting a `_verb` in the same execution, for instance this sequence doesn't work:

```
# alsaucm -c bytcr-rt5640 set _verb HiFi  
# alsaucm -c bytcr-rt5640 list _devices
```

However this command does:

```
# alsaucm -n -b - <<EOM  
open bytcr-rt5640  
set _verb HiFi  
list _devices  
EOM
```

An example of setting the Speaker device for the HiFi verb of the bytcr-rt5640 card:

```
# alsaucm -n -b - <<EOM  
open bytcr-rt5640  
reset  
set _verb HiFi  
set _enadev Speaker
```

EOM

SEE ALSO

? Use Case Interface: <http://www.alsa-project.org/alsa-doc/alsa-lib/group__ucm.html>

BUGS

None known.

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