NAME

pacat – Play back or record raw or encoded audio streams on a PulseAudio sound server

SYNOPSIS

paplay [*options*] [*FILE*]

parecord [*options*] [*FILE*]

pacat [*options*] [*FILE*]

parec [*options*] [*FILE*]

pamon [*options*] [*FILE*]

pacat --help

pacat --version

DESCRIPTION

pacat is a simple tool for playing back or capturing raw or encoded audio files on a PulseAudio sound server. It understands all audio file formats supported by *libsndfile*.

OPTIONS

-h | --help

Show help.

--version

Show version information.

-r | --record

Capture audio data and write it to the specified file or to STDOUT if none is specified. If the tool is called under the name *parec* this is the default.

-p | --playback

Read audio data from the specified file or STDIN if none is specified, and play it back. If the tool is called under the name *pacat* this is the default.

-v | --verbose

Enable verbose operation. Dumps the current playback time to STDERR during playback/capturing.

-s | --server=*SERVER*

Choose the server to connect to.

-d | --device=*SINKORSOURCE*

Specify the symbolic name of the sink/source to play/record this stream on/from.

--monitor-stream=*INDEX*

Record from the sink input with index INDEX.

-n | --client-name=*NAME*

Specify the client name *paplay* shall pass to the server when connecting.

--stream-name=*NAME*

Specify the stream name *paplay* shall pass to the server when creating the stream.

--volume=*VOLUME*

Specify the initial playback volume to use. Choose a value between 0 (silent) and 65536 (100% volume).

--rate=*SAMPLERATE*

Capture or play back audio with the specified sample rate. Defaults to 44100 Hz.

--format=*FORMAT*

Capture or play back audio with the specified sample format. Specify one of **u8**, **s16le**, **s16be**, **s32le**, **s32be**, **float32le**, **float32be**, **ulaw**, **alaw**, **s32le**, **s32be**, **s24le**, **s24be**, **s24-32le**, **s24-32be**. Depending on the endianness of the CPU the formats **s16ne**, **s16re**, **s32ne**, **s32re**, **float32ne**, **float32re**, **s32ne**, **s32re**, **s24ne**, **s24re**, **s24-32ne**, **s24-32re** (for native, resp. reverse endian) are available as aliases. Defaults to s16ne.

--channels=*CHANNELS*

Capture or play back audio with the specified number of channels. If more than two channels are used it is recommended to use the **--channel-map** option below. Defaults to 2.

--channel-map=*CHANNELMAP*

Explicitly choose a channel map when playing back this stream. The argument should be a comma separated list of channel names: **front-left**, **front-right**, **mono**, **front-center**, **rear-left**, **rear-right**, **rear-center**, **lfe**, **front-left-of-center**, **front-right-of-center**, **side-left**, **side-right**, **top-center**, **top-front-center**, **top-front-left**, **top-front-right**, **top-rear-left**, **top-rear-right**, **top-rear-center**, or any of the 32 auxiliary channel names **aux0** to **aux31**.

--fix-format

If passed, the sample format of the stream is changed to the native format of the sink the stream is connected to.

--fix-rate

If passed, the sampling rate of the stream is changed to the native rate of the sink the stream is connected to.

--fix-channels

If passed, the number of channels and the channel map of the stream is changed to the native number of channels and the native channel map of the sink the stream is connected to.

--no-remix

Never upmix or downmix channels.

--no-remap

Never remap channels. Instead of mapping channels by their name this will match them solely by their index/order.

--latency=*BYTES*

Explicitly configure the latency, with a time specified in bytes in the selected sample format. If left out the server will pick the latency, usually relatively high for power saving reasons. Use either this option or **--latency-msec**, but not both.

--latency-msec=*MSEC*

Explicitly configure the latency, with a time specified in milliseconds. If left out the server will pick the latency, usually relatively high for power saving reasons. Use either this option or **--latency**, but not both.

--process-time=*BYTES*

Explicitly configure the process time, with a time specified in bytes in the selected sample format. If left out the server will pick the process time. Use either this option or **--process-time-msec**, but not both.

--process-time-msec=*MSEC*

Explicitly configure the process time, with a time specified in miliseconds. If left out the server will pick the process time. Use either this option or **--process-time**, but not both.

--property=*PROPERTY=VALUE*

Attach a property to the client and stream. May be used multiple times

--raw   Play/record raw audio data. This is the default if this program is invoked as *pacat*, *parec* or *pamon*.

--file-format[*=FFORMAT*]

> Play/record encoded audio data in the file format specified. This is the default if this program is invoked as *paplay* and *parecord*.

--list-file-formats

> List supported file formats.

LIMITATIONS

Due to a limitation in *libsndfile paplay* currently does not always set the correct channel mapping for playback of multichannel (i.e. surround) audio files, even if the channel mapping information is available in the audio file.

AUTHORS

The PulseAudio Developers <pulseaudio-discuss (at) lists (dot) freedesktop (dot) org>; PulseAudio is available from **http://pulseaudio.org/**

SEE ALSO

pulseaudio(1), **pactl(1)**