



## **GStreamer & WebM**

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A large, light gray watermark of the GStreamer logo and the word "gstreamer" is positioned across the lower half of the slide.

# Outline

- Basics about WebM
- Support for WebM in GStreamer
- Support in other software and by the industry
- How to use WebM in your product

*gstreamer*

## Basics – WebM

- WebM is an open container format
  - Based on Matroska
  - Supports VP8 video and Vorbis audio
  - Streamable & fast random access
  - Many implementations available
- Released by Google earlier this year
  - Should become the standard for HTML5 video

## Basics – Codecs

- VP8 is an open, royalty-free video codec
  - Successor of On2's VP3 (i.e. Theora)
  - Modern codec technology
  - Free patent licence by Google
  - BSD licensed encoder/decoder library
- Not much to say about Vorbis, you all know it

# Support in GStreamer

- Supported in GStreamer since day one
  - WebM muxer/demuxer elements  
(webmmux, matroskademux)
  - VP8 encoder/decoder elements  
(vp8enc, vp8dec)
  - Support for VP8 in Matroska, Ogg, AVI and MP4
  - RTP support coming soon

## Support in other software

- All GStreamer based software
  - PiTiVi, Flumotion, Songbird, Banshee, Miro, Moovida, Transmageddon, ...
- Browsers: Opera\*, WebKit/GTK\*, Chrome/Chromium, Mozilla, IE9
- FFmpeg, VLC, Winamp, Google Talk, ...
- Major Linux distributions & Windows via DShow
- YouTube

## Support by the industry

- Supported by many hard/software companies
  - Collabora, Adobe, Oracle, Opera, Skype, Fluendo, Sorensen, Freescale, Qualcomm, Mozilla, Xiph.org, AMD, ARM, Broadcom, Texas Instruments, Logitech, MIPS, Nvidia, ... and many more



Suchen

[Kategorien](#)

[Video hochladen](#)

## Big Buck Bunny

[BlenderFoundation](#)

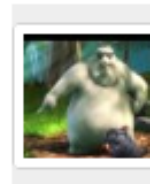
102 Videos 

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▶ 🔊 02:36 / 09:56 HTML5 WEBM Normal 360p  

### Vorschläge





# How to use it in your application

- Get libvpx for VP8 encoding/decoding
  - Optimizations for x86 (SSE/MMX), ARM (NEON), PowerPC (AltiVec) included
  - Or use hardware that support VP8 (e.g. TI OMAP4)
- Use GStreamer
  - Needed: `gst-plugins-good >= 0.10.23`,  
`gst-plugins-bad >= 0.10.19`
- Use it like any other container/codec



**Thanks**

**Questions?**

