

# **Ogg Theora**

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### **Ogg Theora: Activity**

- theora-exp implementation
  - From scratch, not API compatible
  - Heavy decoder optimization, both algorithmic (myself) and low-level (Rudolf Marek)
    - Real-time SD decoding on a PII-333
  - Encoder not currently usable
    - Produces valid, but very low quality output
- Google Summer of Code project
  - Goal: Produce a usable encoder for theora-exp
  - Result: No commitable code



## **Ogg Theora: Challenges**

- Getting active developers
  - Require highly specialized technical background
  - Corporate interests focused on MPEG
- Good tool integration
  - Seeking support usually poor or broken
  - Virtually no chaining support
    - Needed for hybrid streams that are a mix of 24fps and 30fps content, since Theora is fixed-framerate
- Adoption



## Ogg Theora: Dependencies

- Libraries in use: libogg
- Projects dependent upon
  - Players (totem, vlc, xine, mplayer, etc.)
  - Content creation (ffmpeg2theora, Cinelerra, LiVES)



### **Ogg Theora: Next Steps**

- Before beta, want a complete implementation of the spec
- There are two routes for this:
  - Enhancing the mainline encoder
    - Still original VP3 codebase, few people familiar with it
    - Lack of volunteers
  - Improving the theora-exp encoder
    - Already has more features than the mainline
    - Now needs better functionality (quality)