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)