High Availability Media Delivery

Dave Adams - September 15, 2004
Overview

- Past and Current situation on campus
- What others are doing
- Why we’re doing this
- What we’re doing
- How we’re doing it
Media Streaming Projects across Campus

- Eccles Library / School of Medicine / Telehealth
- Media Solutions / KUED
- Marriott Library Multimedia Center
- College of Fine Arts
- Sports / Gymnastics
- Center for High Performance Computing
- Technology Assisted Curriculum Center
TACC - Technology Assisted Curriculum Center

- Primary Support Department for Online Learning
- Software Training / Instructional Design
- Funding for development of fully online, for-credit courses
- WebCT
- UOnline
- Everything Else
Instructor Needs

- Digitization and streaming of media clips normally displayed in class via VHS or DVD
- Light editing and consolidation of multiple media sources
- Repurposing of obsolete formats and deteriorating media sources
- Archiving and distribution of guest lectures, instructional demonstrations, student projects
Diverse Media
Diverse Audiences

- Currently hosting over 400 hours of content
- 30, 100 and 250 kbps (kilobits per second)
- QuickTime, RealMedia, Windows Media
- MP3, Ogg Vorbis, Mpeg 4, SMIL, etc
Diverse Media
Diverse Audiences

- Public Health Education CEU videos to Native American Reservations
- 3 hour 15-way video conference class archives for College of Nursing
- Narrated slide show presentations with embedded media
- On location live streaming and archiving of lectures, instructional demonstrations, etc
Making it Happen on a Shoestring
The Details

- Acquisition
  - Analogue sources via Sony, Canopus DV converters, microphones, audio interfaces
  - Digital sources via various extraction, conversion utilities

- Capture, Editing and Production with Final Cut Pro, iMovie, Microsoft Producer, Emagic Logic Audio, others

- Conversion and Exportation with Discreet Cleaner 6/XL, Apple iDVD, Producer, others
The Details

• Acquisition, Production, Conversion
  • Macintosh: Dual 2GHz G5, 733 MHz G4s, 450MHz G4s
  • Windows: Dell Optiplex 2.4Ghz Desktops (Approximately 90% performance and 35% cost of 2X2GHz G5)

• Storing and Serving
  • QuickTime: Open Darwin streaming server on Linux
  • RealMedia: RealServer Basic on Windows Server 2003
  • Windows Media: Windows Media Services on Windows Server 2003
The Details

• Asset management and delivery system (TACC’s Home Grown solution)
  • Catalogue and organize media clips
  • Provide instructors/course builders with tools for integrating their media into existing course content
  • Powers the content delivery mechanisms (browser/plugin detection, copyright notification, client restrictions, etc)
  • Provides interactive help to end users (players and plugins, connection speeds, etc)

• Adaptable, customizable, integrated.... and FREE!!
Questions?

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