

# 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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