

Project Plan

User Generated Content for Cable Systems

Team 6: Motorola
CSE 498, Collaborative Design

Matt Beer
Randy Lyczynski
Maitland Marsh
Bethany Wenzel

Department of Computer Science and Engineering
Michigan State University

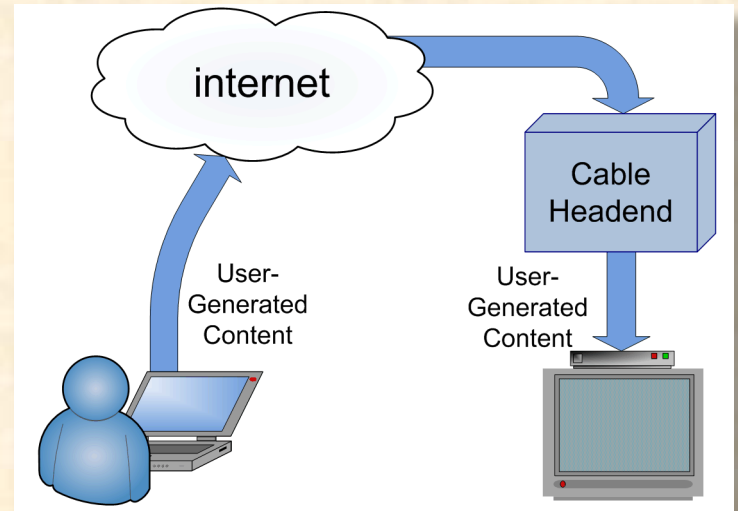
Spring 2009



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Functional Specifications

- Problem?
- Solution: Create a set of services to allow users to upload content to cable networks.
- Service must allow:
 - Upload user videos via Web
 - Associate metadata and user rights with videos
 - Browse list of associated videos
 - View videos on Set-Top Box (STB)





Design Specifications

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- User Interface
 - Upload Service
 - User Generated Content Portal
- Cable Headend
 - Identity Management Service (IMS)
 - Video Storage Service (VSS)
 - Transcoding Service
 - Streaming Service



Screen Mockups



Upload UI

User Generated Content Upload	
<u>Add</u>	<u>Update</u>
New Video:	
Name:	<input type="text" value="Video 1"/>
Desc:	<input type="text" value="Awesome Video"/>
File:	<input type="text" value="C:\video1.mpg"/>
	Buddies
	<input checked="" type="checkbox"/> Jon
	<input type="checkbox"/> Jan
	<input checked="" type="checkbox"/> Joe

UGC Portal

Name: Video 1 Description: Awesome Video Date Added: 02/01/09	
Video 1	
Video 2	
Video 3	
Video 4	
Video 5	

Technical Specifications

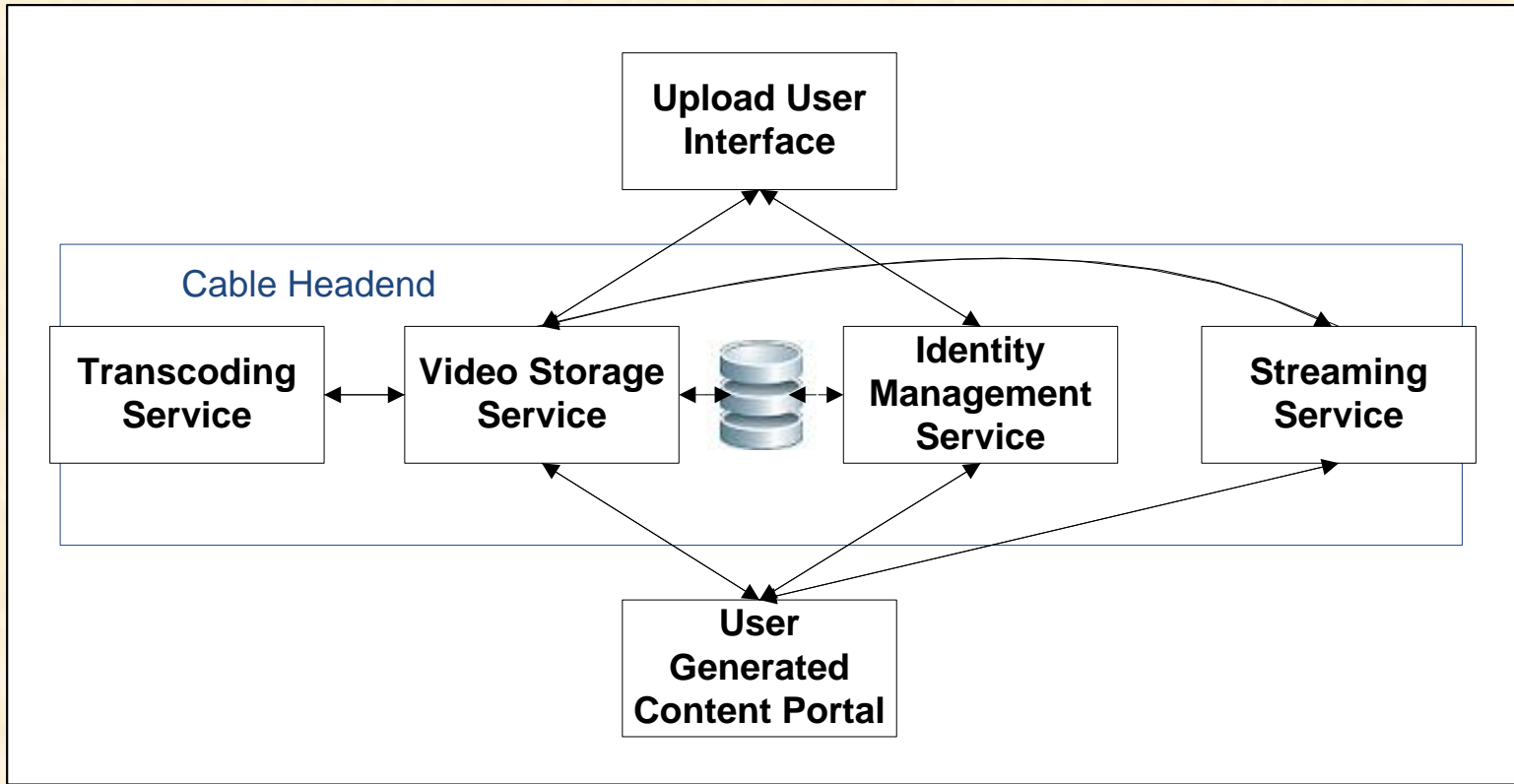
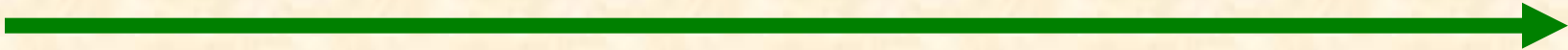


- RESTful Web Service
 - GET, PUT, POST, DELETE
- VSS
 - /vss/videos/{videoid} (GET, POST, DELETE)
 - /vss/videos/{videoid}/metadata (GET, PUT)
 - /vss/users/{username}
- Transcode
 - /transcode (POST)
- IMS
 - /ims/authenticate (POST)
 - /ims/buddylist/{username} (POST, GET)
 - /ims/buddylist/{username}/{buddyid} (PUT, DELETE)
 - /ims/stb/{stbid} (GET)
- Streaming Service
 - /stream/{movie id} (GET)
 - /stream/trick/{tricktype} (POST)





Architecture Illustrated





System Components

- Hardware Platforms
 - Server(s)
 - Set-Top Box
- Software Platforms / Technologies
 - Java / JRE
 - Glassfish
 - TIBCO (Ajax)
 - RESTlet
 - VLC



Risks

- Uploading using TIBCO
- Logging in
- Learn API for STB Portal
- Trick Mode
- Transcode Bottleneck