

Developing a Synchronous Web Seminar Application for Online Learning

Michael Ciocco, Neil Toporski, Michael Dorris

SIGUCCS Fall 2005 Conference
Monterey, CA – Nov 6-9, 2005



Rowan Virtual Meeting (RVM) Project

- More and more educational institutions want an Online, Synchronous web collaboration system for use with
 - Training
 - Online Courses & Seminars
 - Meetings
 - And More ...
- Commercial Software Products are Just too Expensive
 - Companies like WebEx, Centra, Horizon Live, and Microsoft Live Meeting charge anywhere from \$20,000 to \$60,000 and beyond for 20 to 25 users
 - Commercial software is often difficult to use and support
- Rowan University IT Department began an initiative to design its own Web Conferencing software
 - Rowan Virtual Meeting Project is born



The Need for a Tool

- Rowan intends to complement asynchronous tools, like Web CT, with a synchronous component
- Key Goals
 - Center learning around the student
 - Focus on the needs and strengths of students
 - Provide just-in-time and anywhere-in-time instruction
 - Foster collaborative learning environments
 - Emphasize authentic learning experiences



Buy vs. Build

- Why Buy a commercial web collaboration product?
 - PROS
 - It's fast and convenient to buy a ready-made product
 - Most products have features like PowerPoint integration, audio, video, interactive whiteboard, etc.
 - CONS
 - However, the expense is much greater than most universities can afford
 - Most products do not support Macintosh Environment (35% of Rowan Computer Users)
 - Typically, commercial products are not user friendly
- If Not, Then Why Build?
 - PROS
 - The up-front savings are very significant
 - Tools & features can be tailored to Rowan's needs
 - CONS
 - The price to pay is in development time and human resources



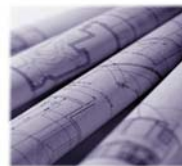
RMV Application Requirements

- Truly Operating System independent
- No proprietary software download or installation
- Firewall "friendly" with no need to open (or close) ports on your network
- Avoids the need for additional network technical support



The Solution

- The RVM System is built on top of Macromedia Flash Communications Server (FCS) Technology
- Flash is Standard across computing platforms and works with most web browsers
- Flash Player software eliminates the need to download and install software
- Only a single port needs to be opened on the FCS hosting server, and not at either the sending or the receiving client organization



Research & Development

- Goal: provide a web conferencing product that encompasses the core features of most commercial products while keeping the interface simple and intuitive.
- Survey of Commercial Products revealed common problems
 - Most software runs on MS Windows OS only
 - Most software required a download and installation of greater than 1MB
 - Most products required institutions to open ports on their network firewall



Suggested RVM Core Features

- Real-time audio and video
- Text Chat Room
- PowerPoint Presentation slide show
- Virtual Whiteboard with extensible drawing tools
- Desktop application sharing
- User feedback and polling



Beta Testing

- Phase 1: Tech Support Team Testing
 - Internal to Rowan Support Staff
- Phase 2: Faculty & Staff Testing (Spring 2005)
 - Launched RVM Beta Testing Program
 - Construction of Beta Testing Web Site
 - Beta Testers have individual accounts for the site
 - Site Logs usage for beta testers
 - Support & Feedback forums provide useful information for the users in need of support and the RVM Development Team alike
- Information collected during Phase 2 Beta Testing will be compiled and reviewed for use in fixing RVM System bugs and enhancing features based on user comments

Future Implementation

- What is the next step for the RVM System?
 - Slow incorporation with other technologies on campus
 - Correspondence courses
 - Training and Seminars
 - More...