

## CASE STUDY: UNIVERSITY OF MAINE

*University of Maine uses Wowza Streaming Engine™ software to revamp custom LCMS*



### INDUSTRY:

Education

### USE CASE:

Lecture capture,  
distance learning, LCMS

### PRODUCTS/SERVICES:



Wowza Streaming  
Engine software

Aiming to make course content for its largest biology lecture classes more accessible to students, the University of Maine's School of Biology and Ecology struggled to find an off-the-shelf learning content management system (LCMS) to suit their needs. So they built their own, called Synapse. And when they outgrew the technology they'd used originally, they turned to **Wowza Streaming Engine™** software to future-proof the solution.

### THE CHALLENGE

At first Synapse incorporated QuickTime Streaming Server and Flash Media Server, but those came with stream-quality challenges for remote viewers, player plug-in requirements, and security concerns, and ultimately didn't support the growing population of iOS devices. In a new solution, UMaine sought to address these and other challenges:

**SCALE FOR PEAK VIEWERSHIP:** During peak demand spikes, QuickTime Streaming Server became overwhelmed, restricting the number of viewers who could access material.

**AVOID PROPRIETARY FORMATS:** "Our Flash-based video platform meant that not everyone could access all of the content. Plus, with all the plug-ins required and the questionable security, we felt it was time to begin moving away from Flash," notes Ron Kozlowski, director of the UMaine BioMediaLab.

**IMPLEMENT SELF-SERVICE FEATURES:** Professors needed the ability to upload video course materials themselves, with a self-service portal that doesn't require advanced technical knowledge.

## THE SOLUTION

By switching to Wowza Streaming Engine, UMaine arrived at a reliable, future-proof, any-screen streaming solution.

**DELIVERY TO ANY DEVICE, ANYWHERE:** Wowza Streaming Engine software's automatic file conversion (transmuxing) allows UMaine to stream assets in its existing video library to any device, regardless of the original file format.

### FLEXIBLE AND ADAPTABLE INFRASTRUCTURE:

Wowza™ software's seamless compatibility with virtually any storage platform means the processing and delivery of video between the server farm and the streaming server is very fast, eliminating the cumbersome, multistep process required with the former Flash-based environment.

## THE BENEFITS

Synapse is now delivering 3TB of video content to 2,000 students per semester, and the team is working with other UMaine departments to live-stream presentations by guest lecturers to share with satellite campuses across the state. Here's a look at some of the other benefits of building the custom Synapse LCMS on Wowza technology.

**MINIMAL ADMINISTRATION:** "Before, [professors would] have to bring content to us, and we'd have to work with them to get it ready, which made it time-consuming. With Wowza, our professors are able to efficiently use the latest technology to create a more exciting learning environment," says Kozlowski.

**TIME SAVINGS AND FINANCIAL SAVINGS:** Kozlowski explains, "Now we can deliver video in a web stream, to iOS, or any other viewer, and we didn't have to reformat any of the video we already have. That was a huge time-, work-, and money-saver."

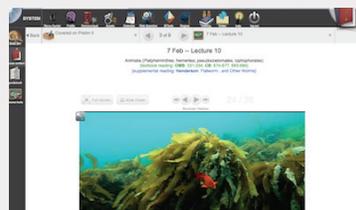
**QUICK ROLLOUT OF NEW FEATURES:** One new Synapse course requires students to give oral presentations in a live class, which are recorded and uploaded to Synapse. With Wowza technology, the video can go straight from an H.264 camera to the Wowza server for immediate streaming to the mobile Synapse app—cutting the workflow complexity in half.

---

*"I love it when a technology just works, and Wowza does that. That reliability is very valuable, freeing us up to work on innovative solutions instead of troubleshooting problems."*

— Ron Kozlowski, director, UMaine BioMediaLab

## SYNAPSE: ENHANCING BIOLOGY EDUCATION THROUGH TECHNOLOGY



To make course content easily available for its largest biology lecture classes, the School of Biology and Ecology built their own Learning Management System, Synapse, which incorporates Wowza Streaming Engine streaming software.

To learn more about how others are using Wowza streaming technology, visit [wowza.com](http://wowza.com)