

Java Media Framework

Dave Price
Computer Science
University of Wales, Aberystwyth

Essential Web References

- Course notes for CS25610
- <http://www.java.sun.com/products/java-media/jmf>
- <http://www.java.sun.com/products/java-media/jmf/2.0/jmf20-fcs-guide/JMFTOC.html>
- <http://www.java.sun.com/products/java-media/jmf/2.0/jmf20-fcs-apidocs/index.html>
- <http://www.java.sun.com/products/java-media/jmf/2.0/supported.html>

Time Based Media

- “Any data that meaningfully changes with respect to time” - JMF Guide
- Audio and Video are two examples
- has stringent requirements for successfully transmission, reception and delivery
- provides heavy demands on the resources of networks and units processing the material

The Java™ Media Framework (JMF)

“The Java™ Media Framework (JMF) is an application programming interface (API) for incorporating time-based media into Java applications and applets.”
- JMF Guide

JMF Development

- The JMF 1.0 API was jointly developed by Sun Microsystems Inc., Intel Corporation, and Silicon Graphics, Inc.
- The JMF 2.0 API is being jointly designed by Sun Microsystems, Inc. and IBM Corporation.

JMF Evolution

- JMF 1.0 - provided facilities for programmers to develop applications and applets that presented time-based media
- JMF 2.0 - extends the framework to provide
 - capturing and storing of media data
 - control of processing during playback
 - custom processing on media streams
 - a Plug-In API to permit customization and extension of JMF functionality

JMF Usage

- the construction of simple players for time based media is very straightforward and simple, providing you are willing to accept the default look and feel etc
- you can produce your own, completely new look and feel by interacting more intimately with the JMF's components
- depends heavily on “event handling” for many operations