

Advanced Weather Interactive Processing System II (AWIPS II)

AWIPS Development Environment (ADE)
and the
Common AWIPS Visualization
Environment
(CAVE)

TO10 Developer Briefing / Agenda

February 18, 2009

AWP.PSN.SWCTR/TO10.ADE/CAVE-01.00

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Purpose of Course

- Early developer-level introduction to facilitate cooperative development
 - Trying to evolve project toward an Open Source core
 - Everything a part of the baseline and open to improvement
- Early focus on architecture and design patterns
 - Get the big picture right, before moving into specific capabilities
 - Widen exposure to get more creative input
- Workstations with full installation of ADE 1.0
 - Source with Eclipse IDE
 - Server Side Run environment
 - CAVE visualization
 - Javadocs and other documentation



Training Prerequisites

- Reading materials
 - *Software Product Improvement Plan*
- Software
 - Pure Java
 - <http://java.sun.com/docs/books/tutorial>
 - CAVE: ECLIPSE IDE Framework & Plug-Ins
 - <http://www.eclipse.org>
 - Eclipse RCP
 - EDEX: Introductory level of ActiveMQ, Spring, and Camel Integration Framework
 - <http://camel.apache.org>
 - <http://activemq.apache.org>
 - <http://www.springsource.org>
 - All: Introductory level of ANT
 - All: Introductory level of XML



Course Content

■ Six segments

- A look back to Task Order 9 training (recap of TO-T1 delivered documents)
- Problem resolution Metrics
- Three new modules detailing important modifications made in Task Order 10 (separate slide packages)
 - EDEX modifications
 - CAVE modifications
 - ADE modifications
- A look ahead to modifications planned for Task Order 11



Course Objectives

Module 16: TO10 EDEX Updates

- Describe EDEX platform updates
- Describe EDEX code reorganization
- Describe move to Camel as the Integration Framework
- Describe database improvements
- Describe data serialization improvements
- Describe new Command Line Interface tools package
- Describe improvements to data decoder plug-ins
- Describe improvements to EDEX service endpoints



Course Objectives (cont'd)

Module 17: TO10 CAVE Updates

- Describe CAVE platform updates
- Summarize additional capabilities added to CAVE
- Describe CAVE baseline reorganization
- Describe CAVE serialization improvements
- Describe modified error handling capability



Course Objectives (cont'd)

Module 18: TO10 AWIPS II ADE Updates

- Describe ADE platform updates
- Describe AWIPS II installer updates
- Describe AWIPS II flow tag updates
- Describe Code baseline updates
- Describe ADE Build issues
- Describe Test Driver issues



TO10 Problem Resolution



AWIPS II Problem Fixes

- TO10 release includes a number of DR fixes
- 20 DRs written to implement fixes for TTRs: 116, 118, 266, 270, 271, 294, 298, 302, 303, 304, 305, 307, 308, 309, 310, 314, 316, 317, 319, 320, 325, 327, 329, 341, and 385
- Includes both CAVE and EDEX fixes



Questions?



TO9 Look Back



TO 9 Training Material Additions/Corrections

- Updated training materials
 - *Materials on Mule are OBE*
 - *Materials on JiBX are OBE*
- Supplementary materials (delivered under TO T1)
 - AWIPS II EDEX logging
 - Configuring Mule file age (OBE with TO 10)
 - Extending Cave menus
 - uEngine Scripting – Python version
 - End-to-end programming example (including sample code)



Questions?



Module 16: TO10 EDEX Updates



TO10 EDEX Updates

- Covered in a separate slide package



Module 17: TO10 CAVE Updates



TO10 CAVE Updates

- Covered in a separate slide package



Module 18: TO10 ADE Updates



TO10 ADE Updates

- Covered in a separate slide package



T011 Look Ahead



TO11 Platform Updates

- We anticipate no platform updates at this time; however ...
 - Most of our COTS/FOSS products are updated from time to time
 - Notably, Eclipse 3.4.2 (Ganymede SR2) is expected to be released in the near future
- We plan to continue evaluating new releases of the AWIPS II platform components and incorporating them as appropriate



EDEX Enhancements

- Implementation of additional functionality to support rehosted AWIPS I functionality
- Some general clean-up of the AWIPS II code baseline
- Improvements in data retrieval performance
- Creation of an integrated pattern for building and deploying JNI code libraries



CAVE Enhancements

- Implementation of additional AWIPS I features
- Some general clean-up of the AWIPS II code baseline
- Improvements in data retrieval performance
- Elimination of JiBX from CAVE
 - Data bundle structure likely to be modified as a result
- Some refactoring of the CAVE menu system
 - Simplification of menu specifications
 - Simplified pattern for hooking non-CAVE/local applications into the CAVE menu system



Database Enhancements

- Nothing specific in view here, but ...
 - We continue to explore ways to make database access usable and efficient



ADE Enhancements

- We anticipate no major changes in the ADE; however ...
 - We do expect the installers to continue to be polished
 - We do expect the installation flow tags to continue to be polished



Questions?



Wrap-Up



Resources

- On the ADE TO10 DVD
 - Current code available for examination in the EDEX baseline
 - JavaDoc documentation available
- Also available
 - TO10 Training Updates
 - TO-T1 Training Materials

