

Advanced Weather Interactive Processing System II (AWIPS II)

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

TO10 Developer Briefing: Follow-On Q&A

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ADE Build Problems

Question: *I am having ADE Build Problems.*

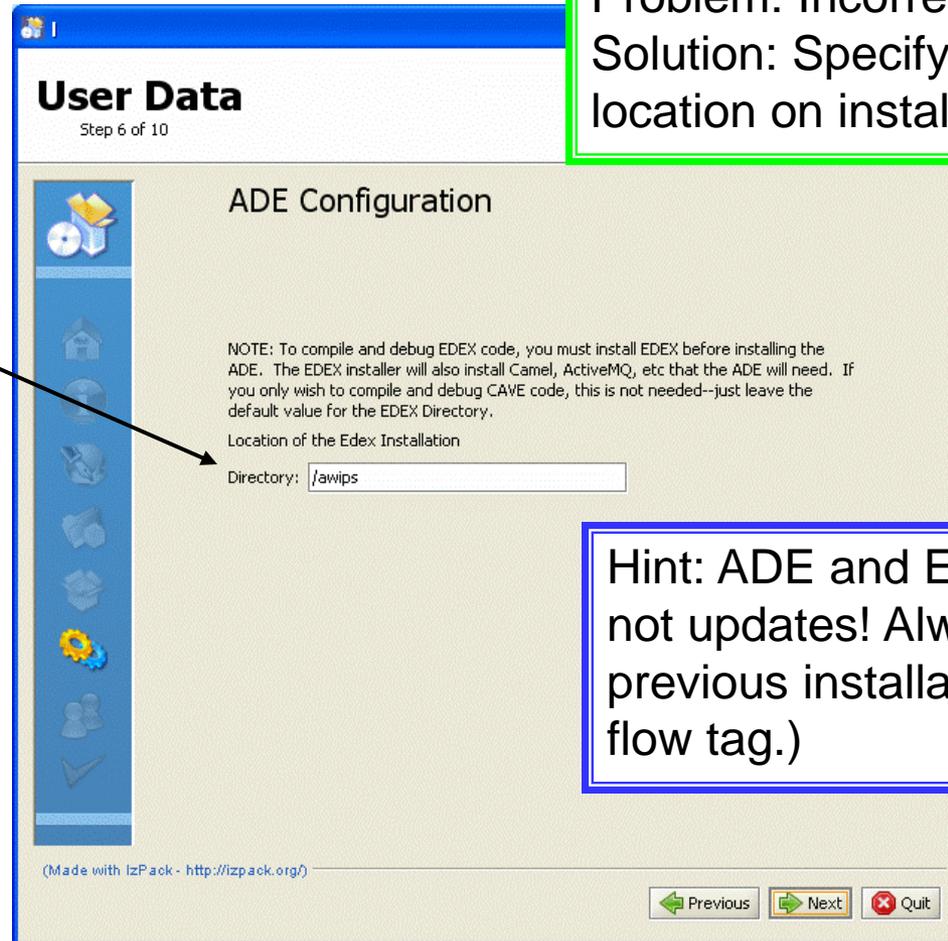
- *Building and installing ADE (TO10) on RHE 4.x*

Status:

- We are awaiting additional information from the NWS on the exact problem(s).
- Possible solutions for ADE build problems that we have noticed appear on the next two slides.



ADE Build Problems (cont'd)



Problem: Incorrect EDEX location
Solution: Specify correct EDEX location on install

EDEX location

Hint: ADE and EDEX installs are not updates! Always uninstall previous installation. (Follow ADE flow tag.)



ADE Build Problems (cont'd)

Problem: Invalid environment
Solution: Edit environment settings,
usually in .bashrc, to eliminate
settings provided by start.sh

```
#!/bin/bash

path_to_script=`readlink -f $0`
dir=$(dirname $path_to_script)

if [ "$EDEX_HOME" == "" ]; then
    export EDEX_HOME="$dir"/..
fi

if [ "$LD_LIBRARY_PATH" == "" ]; then
    export LD_LIBRARY_PATH="$EDEX_HOME/../../lib"
fi

if [ "$LD_PRELOAD" == "" ]; then
    export LD_PRELOAD="$EDEX_HOME/../../lib/libpython2.5.so"
fi
```

setup of running environment



uFrame – What Is It?

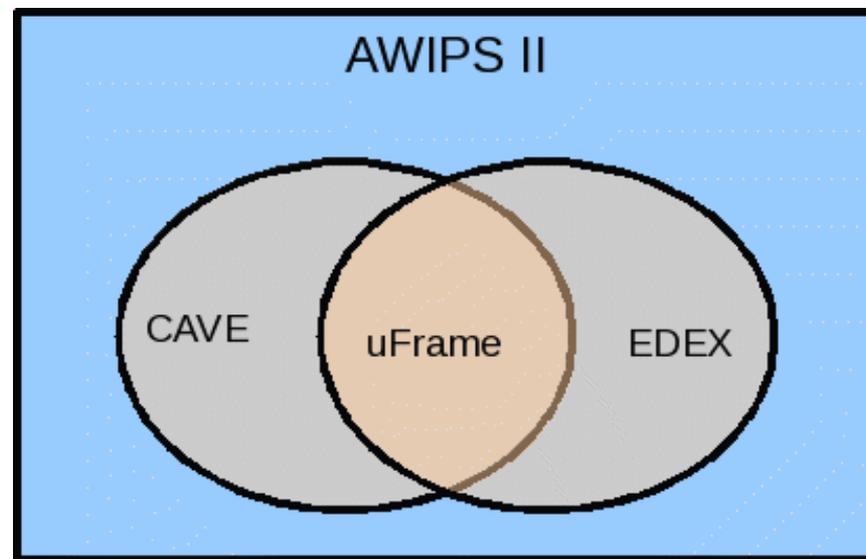
Question: u-frame was referred to several times in the briefing and is used in naming ADE software components. What does u-frame mean?

Answer: See details, next slide.



uFrame – What Is It? (cont'd)

- Short for “universal framework”
 - Baseline packages generally have “uf” or “uframe” in name.
- Common framework shared by CAVE and EDEX
 - Example: Data objects
- May see additional uFrame packages in TO 11 releases



jettyedex – What’s That?

Question: The examples on the slides relating to Camel wiring refer use “jettyedex” as a URI qualifier. What exactly is jettyedex?

Answer: jettyedex is a URI handler that was developed to allow EDEX endpoints to better handle http trigger events. See next slide for details.



jettyedex – What's That? (cont'd)

- jetty specifies a Camel endpoint to handle http: requests
 - An Apache project that provides a “light weight” HTTP capability
 - Few “bells and whistles”
 - Requires each endpoint to bind to a different port
 - This is an undesirable “feature” for uFrame
- edexjetty is a uFrame implementation of jetty
 - Allows multiple endpoints to bind to the same port
 - EDEX endpoints use port 9581

```
<from uri="jettyedex:http://0.0.0.0:9581/services/example" />
```



fileedex – What Is It?

- file specifies a Camel endpoint triggered by a file delivered to a directory
 - The Camel implementation (in V. 1.5) contains a memory leak
- uFrame edexfile is an implementation of a file that corrects the memory leak
 - Also delivers file pointer rather than contents

```
<endpoint id="satFileEndpoint"  
  uri="fileedex:${edex.home}/data/sbn/sat?noop=true" />
```



Test Driver Status

Question: What is the status of the ADE test driver interface?

Answer:

- In the TO 10 ADE release, the Web-based test drive has several problems
 - See module 18 for details
- On Test Driver Interface
 - Still includes JavaScript test scripts
 - Data purge button does not work
 - Archived data not working correctly
- On μ Engine Demonstration Page
 - Generally not working
 - Pages designed to work with JavaScript μ Engine



Test Driver Status (cont'd)

Future Intentions:

- Existing problems have been documented
 - Problem reports have been written.
- *Note:* The Test Driver was developed as an internal tool to assist the AWIPS II Raytheon development and test teams and was not meant for delivery. Therefore, problems will be resolved as time and schedule permit.



Turning Off Data Purge

Question: How do I turn off data purging for one or more data types?

Answer: Unfortunately, the quick way of stopping the purging a data type – by changing the retention time in the database to -1 – no longer works. The effect of a -1 retention time is to purge **all** data for the plug-in.



Turning Off Data Purge (cont'd)

Purging Suspension Alternatives:

1. Change the retention to “something large”
 - e.g., 8766 (the number of hours in a year)
2. Change the plugin to use the “No-Op” purger
 - This one requires a rebuild of the plug-in
 - See next slide for details



Turning Off Data Purge (cont'd)

Configuring No-Op Purger:

1. Locate the plug-in project in Eclipse
2. open res/conf/plugin.xml
3. change body of <Purger/> tag to
`com.raytheon.edex.db.purge.NoOpPurger`
4. Redeploy EDEX

This will turn off purging when EDEX is started

- The log will show a “No purger implemented” message for the plugin



OHD Lib

Question: Can you provide more details on building OHD and other JNI (native) libraries?

Answer: Some additional information is provided in Module 18, starting on slide 30 (ADE Build Issues: JNI). Generally, you will not need to build these libraries unless you are working on them. In TO11, building JNI libraries is being integrated into the AWIPS II build system.

