

Simple Example for Extending CAVE

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This simple plugin is for showing how to extend the AWIPS II CAVE under TO8 ADE, including creating a resource for display and a menu/button for launching the application. The example in Raythoen's TO8 training documentation doesn't match with TO8, not works. Anyway you can refer to p224~256 and p282~297 to understand the code and creating procedure of this example, install, build, run and modify it, then start creating your CAVE plugin. I hope this is helpful for developer who want to write a CAVE application.

FILES

SimpleDrawAction.java -- The action class for launch the application;
SimpleDrawResource.java -- A resource to draw lines and text in the current panel;
plugin.xml -- Configure the menu and link with the action;
MANIFEST.MF -- Add the used packages at here for package building;
readme.txt -- Text version of this document;
gov.noaa.gsd.simple_draw.tar -- The package of this plugin.

INSTALLATION and CONFIG

- 1) Copy the [gov.noaa.gsd.simple_draw.tar](#) file under ../projects of the ADE;
- 2) Unzip gov.noaa.gsd.simple_draw.tar to have the unzip gov.noaa.gsd.simple_draw tree;
- 3) Launch eclipse from the ADE(be sure the JAVA and AT with right version);
- 4) Import the gov.noaa.gsd.simple_draw plugin as an existing project under eclipse, File->Import->General->Existing Projecting into Workspace->next ->Select Root Directory:../gov.noaa.gsd.simple_draw(select with browser) ->Finish
If you need to repeat step 4, then when you select Import, "General" would already be selected;
- 5) On the Package window, select on the gov.noaa.gsd.simple_draw and Right click "Refresh" files;
- 6) Include the gov.noaa.gsd.simple_draw plugin in the feature.xml under com.raytheon.viz.feature.awips, by
 - a. double clicking feature.xml;
 - b. selecting the "Plugins" link on right side of GUI that pops up;
 - c. clicking on "Add.." to add plugin;
 - d. selecting gov.gsd.viz.simple_draw -> OK ->save the feature.xml; If you need to repeat step 6, you won't need to do 6b.
- 7) In ../projects/build/customTargets.xml, add copy for gov.noaa.gsd.simple_draw,

...

```
<copy todir="${buildDirectory}/plugins">
    <fileset dir="${buildDirectory}/../.." includes="org.*/**"/>
</copy>
<copy todir="${buildDirectory}/plugins">
```

```
<fileset dir='${buildDirectory}/../..' includes='gov.*/**'/>
```

```
</copy>
```

...

BUILD and RUN with Command Line

```
-cd ../projects/build
```

```
sh build.sh
```

The package file CAVE-linux.gtk.x86.zip will be created ../projects/build/tmp/I.CAVE/

-You can copy it to where do you want to and unpack it to create the cave client tree ../cave;

```
cd ../projects/build/tmp/I.CAVE/
```

```
unzip CAVE-linux.gtk.x86.zip
```

-Launch CAVE by cd ../cave and ./cave&;

-Configure the preference and re-launch if you want to connect to EDEX server.

-You will see the "SimpleDraw" button on the menu bar, double click on it, something will be in the current D2D panel.

BUILD and RUN under Eclipse

-The eclipse will automatically build the ADE tree;

-Launch CAVE application under awips.xml of the com.raytheon.viz.product.awips by clicking on "Launch an eclipse application" or "Launch an eclipse application debug mode"

-Configure the preference and re-launch if you want to connect to EDEX server.

-You will see the "SimpleDraw" button on the menu bar, double click on it, something will be in the current D2D panel. It may take long time or with problem.

REAL CAVE Application

For writing a real CAVE application, you should understand some CAVE APIs and plugins. I feel more comfortable with the code than the training documents, although there aren't enough inline comments yet.