

TO9 CAVE Client Installation Instructions

Note:

- Intellectual Property concerns have become an issue for TO9. In short, do not give the AWIPS II software to anyone. For details see the "AWIPS-II Software Distribution Guidance and Procedures" document.

Caveats:

- Your graphics card must support OpenGL. To see if it does run the command:

```
glxinfo | grep rendering
```


You should see

```
irect rendering: Yes
```


OK, so it really does not have to support OpenGL. You could install and bring up CAVE without it, but images will not display, only contours and plots, etc.
- Zooming will not work so well without a scroll wheel mouse, and most of us don't have one. But, the problem is zooming back out - do this with the button 3 menu option. To zoom in click on button 2.
- Developers will probably end up with two CAVE installations, one as a client for the EDEX on dx1-a2dp (described here), and another as a client for your locally-installed EDEX, since you will probably want a local one for ADE build testing. I have two now, and since they are both configured differently, I have not had a problem.
- You must have dx1-a2dp's hdf5 directory remote mounted to your machine. The mount point is /data/hdf5. Test this with "cd /data/hdf5" to get the automounter to put it in place. If you can get there, it's available.

Installation

1. Decide on an installation directory. Mine is in /scratch2/socrates/fluke/TO9/caveClient on Socrates.

2. Run the wizard under your own account:

```
cd /misc/linux/awips2-TO9/AWIPS_TO9_Installers  
./setup_cave.sh
```

If you wish, refer to the installation screens illustrated in the Raytheon Training materials. TO6 versions start on page 295, with TO8 updates starting on page 377.

Regretably, there are no detailed updates to this installation procedure for TO9. You could also refer to OS&T's "TO9 Standalone Installation Guide," but this is for installing CAVE with EDEX on the same node, not for connecting to a separate server as we are. Install CAVE in your install directory when prompted by the install wizard. Enter the full path, letting the install wizard create the basename directory (caveClient in my case) by answering "OK" when it asks.

On the "Packs" screen select both CAVE and Basemaps.

Change the server to "dx1-a2dp" (from localhost).

Change the hdf5 data directory to "/data/hdf5".

We have a BOU localization available for TO9. To use it, you'll need to copy lx1- or lx2-

a2dp:/awips/cave/etc/bundles/BOU* (3 XML files) to your own etc/bundles directory. On the shortcuts screen, unselect all shortcuts and then select "Next". Step through the wizard and complete the install. Quit the wizard when the install is done.

3. In <install directory> create a startCave script that looks like this:
4. `#!/bin/sh`
5. `export JAVA_HOME=/misc/linux/awips2-`
`TO9/AWIPS_TO9_Installers/install_files/jre-linux`
6. `export PATH="$JAVA_HOME/bin:$PATH"`
7. `./cave.sh > cave.out 2>&1`

Make this file executable.

8. **Launch CAVE:**
9. `cd <install directory>`
10. `./startCave`

In the top-menu bar, select CAVE > Preferences...

- o Click on Localization and ensure that it's set to "OAX" and uses "http://dx1-a2dp:9581/services" as the server.
- o Click on Connectivity and
 - Ensure that JMS Server and HTTP Server refer to "dx1-a2dp" (not localhost) in the URL.
 - Ensure that Server Data Directory is "/data/hdf5".
- o Click Apply if you made changes, Cancel otherwise.

Exit and relaunch CAVE. Green times should show up within 30 seconds.