

ATTACHMENT F - Installing CAVE on the same computer with the EDEX server

- F.1 **NOTE: The EDEX subsystem should be installed on the same computer as the CAVE install before moving forward with this procedure. The CAVE installation procedure assumes that the installer is experienced with software installation on Linux, and the workstation is not running AWIPS I (Non-AWIPS system). Requires at least 500 MB disk space for cave. Install and run CAVE as non-root user.**
- F.2 This procedure describes installing CAVE on the same system as the EDEX server, so the HDF5 data access is on the same computer. This configuration does not require network file access. The Topological data files will be copied from the install DVD to the data directory for the EDEX subsystem. So the EDEX subsystem needs to be installed before proceeding with the CAVE installation. The topo file should be shared by all the CAVE clients since the topo file is close to 2 GB in size. Install CAVE as non-root user.
- F.3 Ensure that the OpenGL libraries are not corrupt on the workstation (CAVE requires OpenGL 2.x support and 256MB memory on the graphics card). The following steps may have to be performed as the root user.
- F.3.1 Log into the workstation at the console (*do not perform this remotely*)
 - F.3.2 Open a terminal window and execute "glxinfo | more"
 - F.3.3 Look for the line that says "Direct Rendering". It must say "Yes". If it says "No", then CAVE will not display most images. To fix the problem, you must either reinstall the graphics driver or ensure that the GL libs in /usr/lib point to the optimized graphics libraries.
- F.4 Verify that the mouse option in xorg.conf permits scrollable zoom if mouse has a scroll wheel (*set "Protocol" to "IMPS/2"*)
- F.5 Install CAVE into {install path}/cave. (Where the {install path} is the path to the user's home directory) The following steps should be performed as a non-root user.
- F.5.1 Place TO8 installer DVD in the DVD drive and mount it
 - F.5.2 Copy Topological files from the DVD to the EDEX server data directory
 - F.5.2.1 Create a "topo" directory in the edex data directory {*edex install path*}/edex/opt/data
 - F.5.2.2 Copy the *Topo/srtm-topo.hdf* file to {*edex install path*}/edex/opt/data/topo/directory
 - F.5.3 Change directory to the DVD mount point and run the installer as non-root user

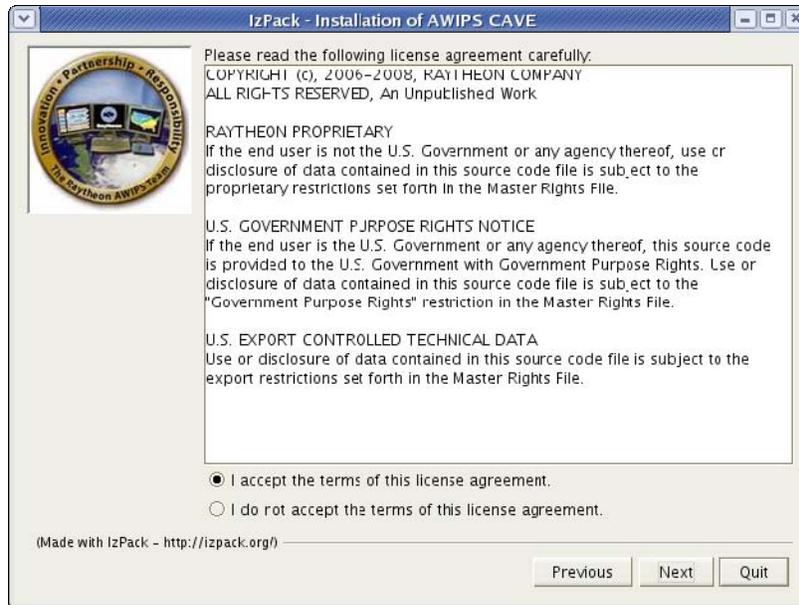
F.5.4 `./setup_cave.sh`

F.5.4.1 In the first and second screens verify that version 2.0 is being installed

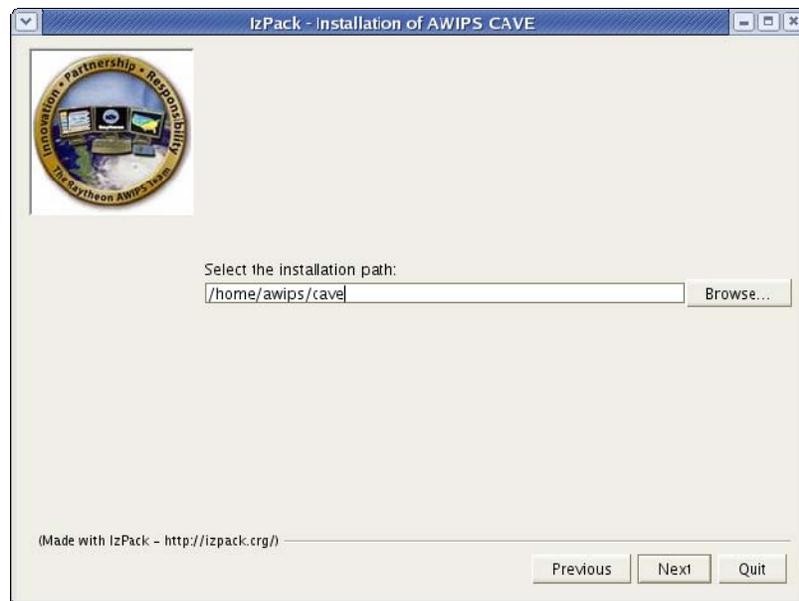
F.5.4.1.1 In the Welcome page, **Select “Next”**

F.5.4.1.2 In the second screen, **Select “Next”**

F.5.4.2 In the License screen, **Check “Accept” and Select “Next”**

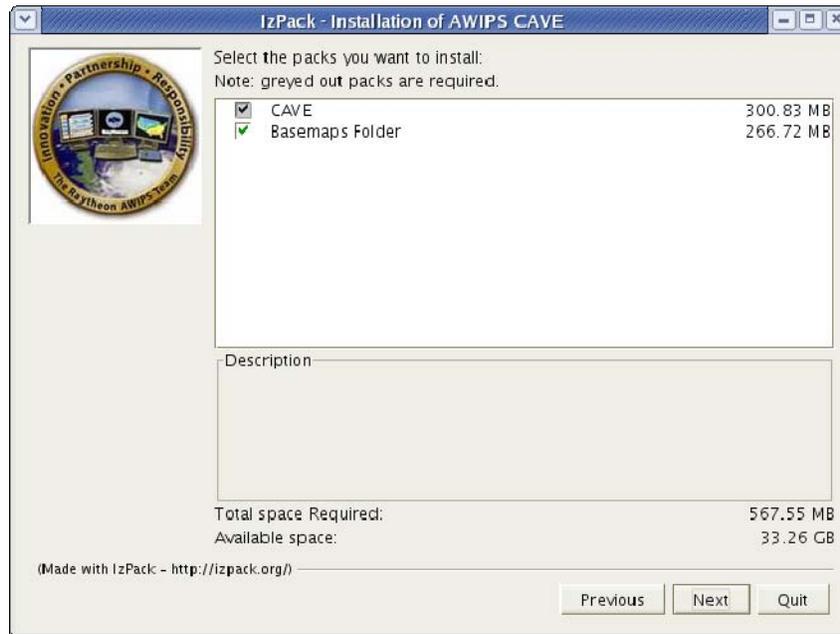


F.5.5 In the path screen, **Set Path to “{install path}/cave” and Select “Next”**



F.5.6 If prompted, **Choose “OK”** to create the directory for above install path.
Note: When the directory is already present, a prompt to overwrite the directory is displayed.

F.5.7 Packs screen, Ensure “Basemaps Folder” is Checked, and **Select “Next”**



F.5.8 Config Screen, Ensure that the *hdf5* path is correct and the *basemaps* and *topo* paths point to the *basemaps* and *topo* files, **Select “Next”**



F.5.9 In the Shortcuts wizard screen, **Select “Next”**



F.5.10 When the install is finished; **Select “Next”**



F.5.11 In the last screen, *Note the location of the Uninstaller*, and **Select “Done”**

F.5.12 `chmod -R 775 {install path}/cave` (may require root access)

F.5.13 Log out of the workstation and log back in as non-root user.

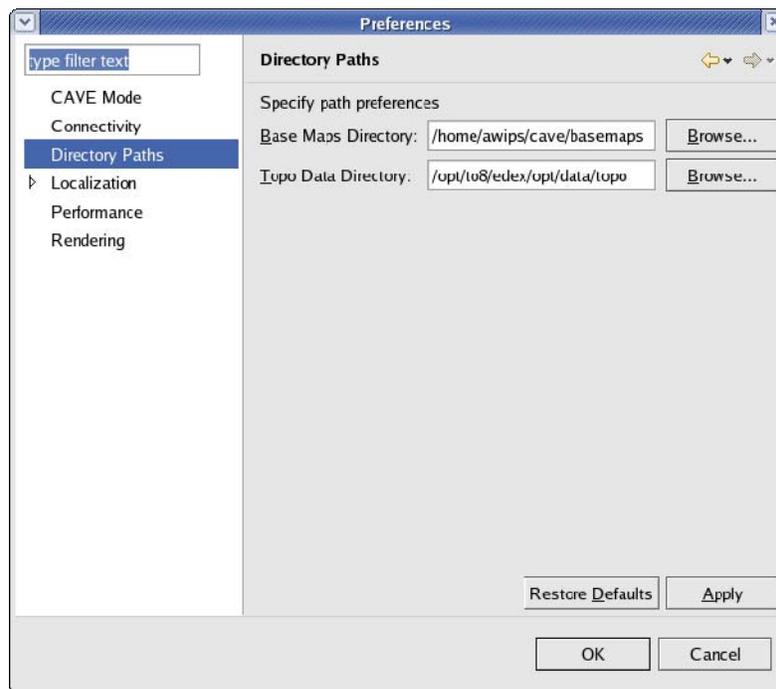
F.6 CAVE Configuration

F.6.1 `cd {install path}/cave`

F.6.2 `./cave.sh` (to launch cave)

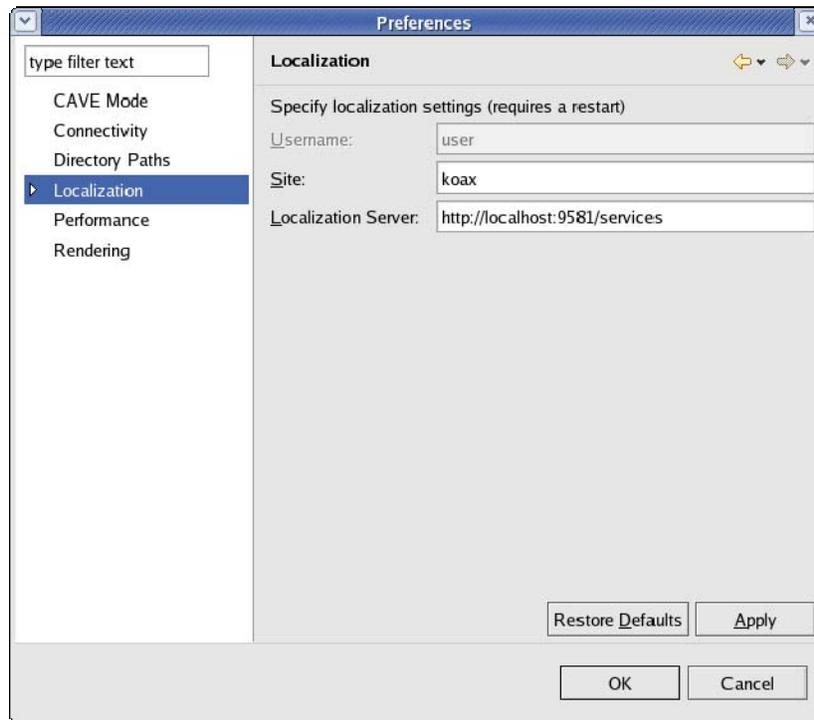
F.6.3 In the top-menu bar: **Select CAVE -> Preferences -> Directory Path**

F.6.4 *Ensure that Basemaps refers to {install path}/cave/basemaps" and Topo refers to {edex install path}/edex/opt/data/topo*



F.6.5 Select CAVE -> Preferences -> Localization

F.6.5.1 *Ensure localization is set to "koax" and uses http.*

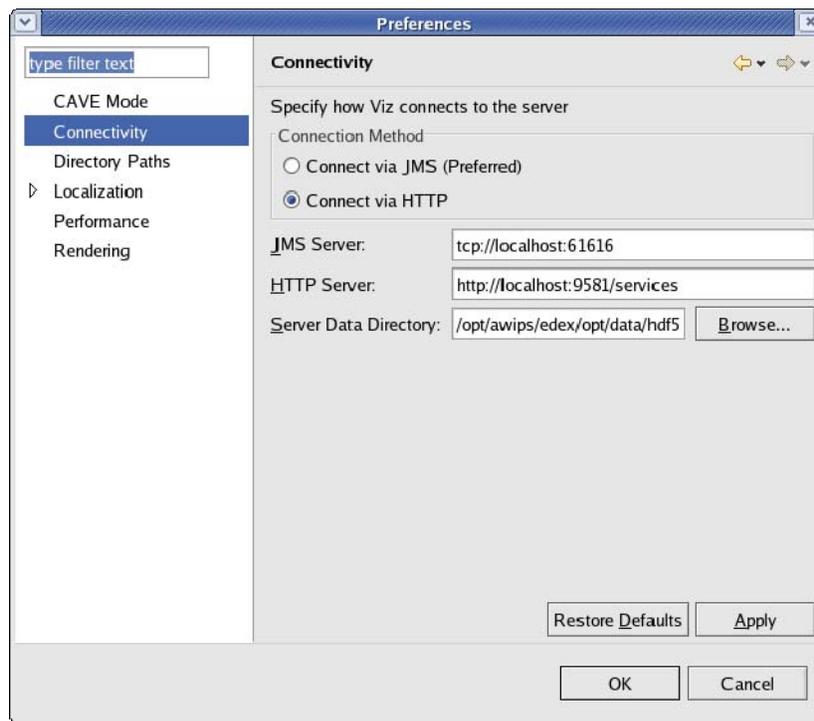


F.6.6 Select CAVE -> Preferences -> Connectivity

F.6.6.1.1 Ensure use of **HTTP** for services connectivity. (JMS should work too.)

F.6.6.1.2 Ensure that JMS Server and HTTP Server refer to "**localhost**" in the URL.

F.6.6.1.3 Ensure that Server Data Directory is "*{edex install path}/edex/opt/data/hdf5*". **Select "OK"**



F.6.7 Exit and restart CAVE

F.7 Green times should show up in cave within 30 seconds. *If data is available in the EDEX server.*

F.8 CAVE can be uninstalled by running the Uninstaller.jar application.

F.8.1.1.1 *Change to the cave/Uninstaller directory*

F.8.1.1.2 **java -jar Uninstaller.jar**