Hydrology Database on AWIPS-2

This is a brief overview of the hydrologic database on AWIPS-2 and methods for interacting with it.

Database Names

Documentation uses several names to refer to the to the hd_ob92xxx database within PostgreSQL:

- Hydro DB
- WHFS DB
- IHFSDB
- hd ob92xxx (xxx= office ID in lowercase)

List Databases

- 1. Open a terminal window on AWIPS-2
- 2. Type **psql -l**
- The databases of interest are hd_ob92xxx and dc_ob7xxx (used by DamCREST)

Check for PostgreSQL Processes

- 1. Log into dx1
- 2. Type ps -ef | grep -i postgres
 - If the command returns nothing, no PostgreSQL processes are running on dx1.

Ensure PostgreSQL failed over correctly to dx2:

- 3. Log into dx2
- 4. Type ps -ef | grep -i postgres
 - If no processes are running, check with the ITO/ESA/AWIPS Focal Point to see if other
 tasks require the database to be stopped. If the local staff did not stop the database,
 notify NCF.
 - **Note:** A large number of **inactive** processes are returned by the command. A large number of **waiting** processes indicates a problem.

Methods to Access the Hydro DB

Access the database using one of three methods. The first two provide tools to complete common tasks. The third option uses **psql** commands to query and update tables directly (**only** for experienced PostgreSQL users).

Hydro Database Manager (HydroBase)

- 1. From the Hydro perspective, navigate to the **HydroApps** menu
- 2. Select Hydro Database Manager
- 3. Add new locations and make edits as needed

Snoopy Application

- 1. Log into the Software Collaboration Portal https://collaborate.nws.noaa.gov/trac/nwsscp/wiki
- 2. Scroll down to **Quick Links** and click the **ScpIndex** link
- 3. Scroll toward the bottom of the first section, AppsAwips, and click AppsAwips/Snoopy
- 4. At the bottom of the page, click the arrow to expand the **Attachments** section
- 5. Download the **Installing Instructions**, **User Instructions**, and **tar** file
- 6. Work with the ITO to install the application on AWIPS-2

psql Utility

Only use this utility for command-line interaction with PostgreSQL **if** you completed training. The psql commands query and/or update database tables directly. **Note**: Running a **SELECT** command to view data is safe.

References

PostgreSQL training on the NWS Learn Center - Navigate to AWIPS-2 Training. From the AWIPS-2 Transition Training page, scroll to the System Administration Training, and locate the **Postgres Overview for ESAs, ITOs, and AWIPS Focal Points** section.

In-depth information from the PostgreSQL software page http://www.postgresql.org/ **Note:** AWIPS-2 uses a specific version, which is **not** the most recent version available. This PostgreSQL site is just for general knowledge and is not AWIPS-specific.

The **Software Version Description** defines the current version of PostgreSQL in AWIPS. The document is available on the AWIPS One Stop page under **AWIPS-II Documents** https://onestop.noaa3a.awips.noaa.gov/awips 2 Document2.html