

10 Archiving and Setting up a New Case

Background: WES uses archived AWIPS datasets for case playback and simulation. In AWIPS, cron jobs on the AWIPS archive machine, AX, copy AWIPS data from `/data/fixa` on DX1 to the AX. Each day is typically stored as a separate directory containing all the AWIPS data for that day (for the last five days). If you are missing something from your archive, check the AX first to see if the data is being copied. If it is not, then you will need to identify the appropriate cron job that copies the files, and you will need add the data types to the cron job.

Several utilities exist to archive data from the five day archive. One of the more common data archive programs that is available from the AWIPS Local Applications Development (LAD) is the HNX_Archive.tcl application. Another useful program for archiving text products is the Product Archiver, which is also available from the AWIPS LAD. The archive applications typically compress the data to fit on storage media such as DVD.

Special care needs to be taken on managing disk space with the archiver, particularly with the problems identified in the OB8.3 beta tests. Some often overlooked files that you should consider adding to your archive to support FFMP include:

- HRAP grid digital RFC flash flood guidance (stored in `/data/fixa/img/SBN/netCDF/HRAP/FFG/XXRFC/Yhr` (where `XXRFC` is the RFC for your area and `Yhr` is 1hr, 3hr, and 6hr)
- DHR files for each radar running FFMP stored in `/data/fixa/radar/xxxx/DHR/layer0/res1/level1256` (where `xxxx` is the radar name)
- `/data/fixa/Grid/LOCAL/netCDF/HPE`
- `/data/fixa/Grid/LOCAL/netCDF/BHPE`

Once archived, the data must be copied and uncompressed onto a WES machine. The data must be put into a case directory (e.g. 2004Jun09) in `/data/awips` where WES stores all cases. After copying the data, a few directories need to be created and an AWIPS localization needs to be created or copied into the case. Any archived text data will need to be added to the Postgres database (see Section 11), and FFMP data will need to be created if desired (see Section 12). After completing these steps, the case is ready for static review of all archived data and text. To run a simulation, the user must convert the data to “DRT format”, and then enter the simulation start time.

The following steps outline how to create the data case:

1. Obtain archive data (e.g. from the 5 day rollover or from a DVD).

2. As user fxa, prepare the archived dataset by making the critical base directory tree. First cd to the main WES case storage area:

e.g. `cd /data/awips`

3. Make the case name (typically named according to a yyyyymmdd convention), also create the `userPrefs`, `localizationDataSets`, `workFiles`, `customFiles` subdirectories:

e.g. `mkdir 2004Jun09`

e.g. `cd 2004Jun09`

e.g. `mkdir userPrefs localizationDataSets workFiles customFiles
tstorm`

Note: Pay special attention for typos.

Note: In general it is not a good idea to use an old case as a template for building a new one. If the “drt” directory is inherited from another case, this will confuse the WES inventories, and it will create significant problems.

Note: If you are going to work with FFMP and you don't have a version of tstorm from the CWA you are localizing for, then you will need to copy a `/<your_case>/tstorm/FFMPradartoCWA.txt` file from another case, and update the radar and CWA inside to be consistent with your radar data before localizing.

4. Uncompress the data into the case. If you don't have a case install program from your archiver, the follow the instructions below. For example, a 2004Jun09 case stored on DVD with tar files containing case-relative paths such as `2004Jun09/radar/kddc:`

e.g. `mount /media/cdrecorder`

e.g. `cd /data/awips`

e.g. `foreach fil (`ls /media/cdrecorder/*.gz`)` (note the back tick key is usually located above the Tab key)

e.g. `tar xvfz $fil`

e.g. `end`

5. Create a localization for the case using `mainScript.csh` (see Sections 6 - 9). If you already have created a localization with this version of AWIPS, you can copy or

link the localization into the `<data_case>/localizationDataSets` directory. If you don't have a localization already built, you have essentially three options for creating a localization (see Sections 6 - 9).

- Create a localization with the AWIPS defaults (no customization).
 - Create a localization with your customizations for your local CWA.
 - Create a localization for a non-local CWA.
6. Verify the data was loaded correctly and the localization was created correctly by checking all your data with `enhanced_case_review`. It is important to check the data before running a simulation to isolate any errors in setting up the case.

Note: If you would like to run a simulation, then you need to convert to DRT format before running a simulation.

- 7. If you need to add text products to the case, see Section 11.
- 8. If you are running SCAN or FFMP, see Sections 12 and 13.
- 9. If you are running AVNFPS, see Section 14.