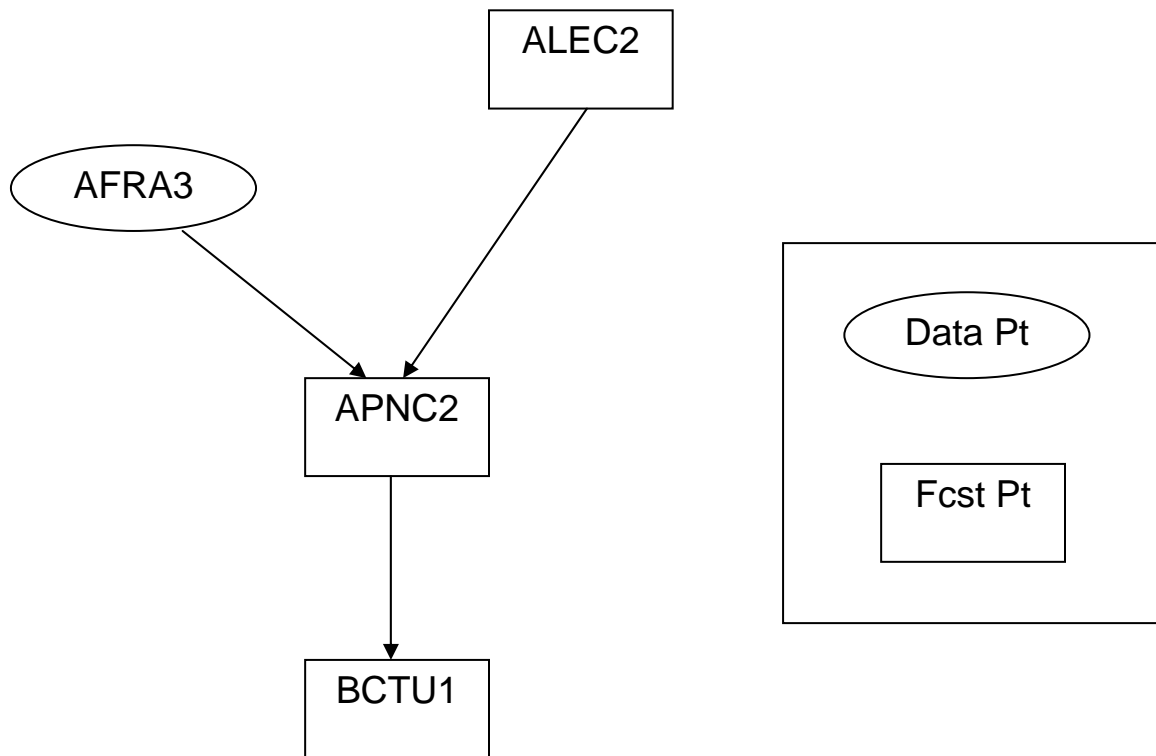


WS1  
Logistical Verification: Forecast Services in IHFS Lab  
RFC Verification Workshop  
August 14-16, 2007

**Lab Exercise**



In the above schematic of a river basin the following services are provided:

- AFRA3 is a data point, the observed data is provided on the AHPS pages
- ALEC2 is a forecast point where forecasts are only issued when the forecast exceeds the action stage, it is a headwater basin
- APNC2 is a mandatory daily forecast point, it is downstream of AFRA3 and ALEC2
- BCTU1 is a daily mandatory forecast point, it is downstream of APNC2. Additionally, water supply forecasts are made at this point with both an ESP computational method and the SWS-Principle Components (Regression) method. Recently, the RFC has been experimenting with short-term ensembles at this location.

For the above forecast points, enter the forecast services information and related service attributes into the IHFS-DB. **An initial set of attributes have been provided as batch file inputs.**

Task1: Input pre-populated batch files into the IHFS DB

Step 1: login to system using your ws1 id

Step 2: cd /home/ws1/fcstservice

Step 3: Look at the files in this directory. The Bulk\_Input is the bulk input script and the \*.unl files are the initial data for your data and forecast points.

Step 4: On the command line enter 'Bulk\_Input hd\_ob72str'

Step 5: If an error occurred, this would be identified in the error log (path for this file can be found in the Bulk\_Input script). Verify that an error log was not created.

Task 2: Open GUI and verify your forecast services points are in the appropriate tables

Step1: /awips/hydroapps/whfs/bin/start\_fcstservice

Step 2: Open each table (Data Services, Deterministic Services, Water Supply Services and Ensemble Services) to verify your lids were input correctly. The Forecast Services main window will only show a summary of services.

Task 3: Recently, to satisfy a request from customers, the RFC changed the service at ALEC2 to daily mandatory. Using the GUI, update the deterministic services table for this point. (As appropriate, change the normal, drought and flood update frequency for this change.) Be sure to delete the old service.

Task 4: You update SAC-SMA soil moisture states for AFRA3, for the WFO to run the Site Specific Hydrologic Predictor. Include this service in the deterministic services table. (HINT: Select a similar lid and change the lid and any other appropriate fields to create a new record.)

Task 5: Since forecasts are provided at AFRA3, in the data services table update AFRA3 to 'forecast point' for point type.

Task 6: To satisfy customer requests, the RFC recently changed their water supply forecasts for BCTU1, from updating monthly to updating weekly. Make the appropriate change in the Water Supply Services Table. (Be sure to delete the old monthly service.) In addition to the current volume water supply product, the customers are also concerned about high flows. Include this information in the services table.

Task 7: In the ESP services table be sure to update the long-range ESP service for BCTU1 from monthly to weekly.

Task 8: The COE operates the reservoir associated with BCTU1, since they have their own reservoir models they have requested the RFC provide long-term ensemble forecasts of local flow only. Indicate in the ESP services table that this is a service the RFC provides.