Minutes from CHPS Meeting Thursday July 30, 2009

Attendees:

ABRFC – Billy Olsen, Mike Pierce
CNRFC – Rob Hartman
NERFC – Ron Horwood, Ed Capone, Alison Gillis
NWRFC – Harold Opitz, Joe Intermill
NOHRSC – John Halquist
Deltares – Edwin Welles
OCWWS –
OHD – Pedro Restrepo, Jon Roe, Joe Gofus, Chris Dietz

Pre-reading:

- Deltares proposal for data retention times in operational database, distributed via email to attendees on 7/29/09

1. Discuss attached proposal from Deltares

Micha and Onno are the originators of the proposal referenced above. The numbers are based on their experience with operational FEWS databases. Some testing has been conducted on the systems at Deltares, but not on any CHPS configurations.

Data retention times ("expiry times") will be related to the archive system and associated information retrievals, which has yet to be further developed and which was presented and discussed at the last CAT workshop. The CHPS archive solution will be a combination of the existing RFC archive software (AWIPS baseline applications and local applications) and a new FEWS export file; the latter file will be generated as part of a workflow to be run at all RFCs (it can be automated).

Storage of, and access to each type of information has a different impact on performance; hence the different suggested expiry times. Expiration times are configurable but re-configuration of expiry times in the operational database is a non-trivial exercise; Edwin will find out exactly what that means.

Note too that software performance is always highly dependent on the system configuration; so any RFC configuring a different environment should expect to see changed performance in the software. For this reason OHD and Deltares recommends that the CATs stay consistent with each other.

The CATs concluded that they'd like 30 days of forecast runs (run on server) instead of 15. If performance is too sluggish we can try reducing to 15 days. Initially NWRFC requested 365 days but subsequently concurred that it would impact performance too much and therefore isn't realistic. Furthermore 365 days of data is not a BOC requirement (i.e. not

currently provided by NWSRFS). RFCs currently retrieve recent/past TS information from the IHFS_DB.

One of the goals of this sizing exercise is to provide AWIPS with information regarding RFC requirements (under OSIP 07-059), and also provide input for the CAT-II configurations. JohnH pointed out that we may not need the (large) amount of disk space originally specified for the CHPS prototype hardware if we're reducing the amount of data we store; a change in specs won't impact the imminent hardware purchase (already in the system), but could impact the final purchase in FY10. Deltares and OS&T will work on a way to gather and communicate the information so AWIPS can work out how to meet the RFC/CHPS requirements. While OS&T and Deltares can define the metrics to gather, the RFCs and OCWWS still need to define the appropriate scenarios used to gather data.

The CAT rolling barrel database will be configured with these settings during the Sept/Oct installation, immediately before parallel operations begins.

Action: Edwin will find out how complicated a re-configuration of database expiry times is.

2. Data flow from RFCs to central location

Each CAT RFC is currently sending a copy of their CHPS data feed to Deltares. A script developed by HSEB is not being used by the CAT RFCs – they are each using their own mechanism to deliver data. Now other organizations (OHD HSMB, OCWWS HSD) have requested a copy of the same data. Proposal is that NOHRSC be a central gathering location for the CAT (and the CAT-II), distributing it to Deltares and others as requested.

The RFCs agreed that they would redirect their current methods of sending data to Deltares to point it to NOHRSC instead.

NOHRSC may require extra disk space to accommodate the CAT-II data. JohnH will find out from RandyR and/or Deltares what the directory structures are. John will also provide details of the NOHRSC system to the CAT RFCs. HSMB and HSD will tell JohnH where they want the data stored on their systems.

Action: JohnH to coordinate with Deltares, CAT RFCs, OCWWS HSD, and OHD HSMB to get the new data flows in place.
Action: CAT RFCs to redirect their data flows to NOHRSC instead of directly to Deltares.

3. Xinerama for 3-screen use on AWIPS-II

There is a problem with CAVE displays on multiple screens. GUI windows are appearing in the wrong locations. Jon is about to attend a meeting to explain to AWIPS that any solution should be sensitive to RFC needs (CHPS). Specifically, we do not want to preclude RFCs from using all 3 screens for CHPS.

Action: none.

4. Other topics

- From the CAT-II minutes: flood inundation mapping using HEC-RAS output was always a known requirement for NCRFC (and others) but the need was delayed until HEC-RAS become operational. We're now nearing that point. The driver for getting a replacement process in place will be the desire to move off FldWav. A replacement will be needed in the BOC-II timeline but is not a BOC-II requirement. The solution will involve a significant effort and should not be implemented hastily. It isn't clear who will implement the final solution; funding will likely come through an AHPS Core Goal team.
- Ron Horwood raised the alarm concerning operational support for NERFC's outstanding technical problem with the configuration manager. NERFC can't use their live system because of this. The problem has been outstanding since June and is now **impacting the CHPS schedule for NERFC**. JohnH noted that the same (NERFC) configuration was loaded at NOHRSC but does not exhibit any problematic symptoms. This problem is urgent enough that Deltares should consider flying someone over from NL to Taunton. Edwin said he would contact Frederik, who is currently conducting System Management training at CNRFC this week; Edwin will then provide Chris with a plan and a progress update by COB today 7/30/09.

Action: Edwin to get NERFC's operational problem (configuration manager not working) addressed ASAP.

Next meeting: Thursday August 6, 2009 at 11:00 am EDT.