Minutes from CHPS Meeting Thursday September 3, 2009

Attendees:

ABRFC – Billy Olsen
CNRFC – Rob Hartman
NERFC – Rob Shedd, Ron Horwood (NWSEO)
NWRFC – Joe Intermill
NOHRSC – John Halquist
Deltares – Edwin Welles
OCWWS – Randy Rieman
OHD – Jon Roe, Chris Dietz

Pre-reading:

• Support log distributed on 9/3/09 via email to the chps_migration infolist.

1. Review Support Log

There are no major blocking issues.

#37: Should be Closed. ABRFC has been successful in developing a Java front-end to gxsets which reads standard time series data from the FEWS database. ABRFC is targeting 1 October to get a preliminary working version of gxsets distributed to all CAT RFCs for use as they choose, and also as a working example of code to extract and work with forecast time series – in this case gxsets is used to compose RVFs. Some features of gxsets, such as display of past forecasts, will not be ready by October 1. Once CAT-II offices get CHPS they'll also be able to use it as an example for their own local apps. Deltares has published documentation on the public FEWSDOC wiki site.

#45: What's causing the error messages to keep being generated? RandyR will take the lead to find out the cause and contact Frederik if needed. Randy already has a copy of the logs.

Other: During a brief meeting with OHD this morning, HSD requested that we find a better solution for an issue reported via the chps_ops with the subject line: "fromCHPS DumpFiles". The recommendation from Deltares was that the RFCs delete the offending dumpfiles. A better solution would be for Deltares to provide a cleanup script (since these files are generated by FEWS). Mark Pattee at NWRFC is already writing something and can provide a copy to Deltares.

Is there a way for RFCs to look into their own database? Ref. email exchange between NWRFC/Rick and Peter concerning data which appear to be garbled. Problem is the use of blobs, which aren't viewable using normal SQL commands. Edwin said he would find out what Deltares recommends as a viewing tool, if any.

Action: Edwin to see of Deltares has any information on a tool to view the blobs within the

FEWS database.

Action: RandyR to investigate issue #45.

2. FY10 AHPS budget for CHPS

Preparations for FY10 have now begun. PPC will use the same process as last year to develop the budget; next year FY11 should see some changes following discussions at the HIC meeting.

Chris (team lead for Core Goal 13/Software Refresh) has been asked by PPC to provide estimated CHPS costs by October 5. Again the CAT is the Core Goal 13 team for FY10. We suggested several items to be included in the budget, such as: completion of OHD's BOC/BOC-II software; workshops & training for the CAT and CAT-II; year 2 of the Deltares contract; remaining hardware purchases; and a placeholder for potential gridded forcings improvements needed for the CAT-II. Calibration is technically non-BOC but is an essential component of a functioning forecasting system. We do have to try to represent the CAT-IIs who won't want to get stuck with a system that's missing essential functionality. At the same time we have to be careful not to extend the CHPS project indefinitely or too broadly; it might be better to accept a "plug" solution for now, then look for a better longterm solution under a different project outside of this basic CHPS implementation examples might include gridded FFG, or the WR temperature problem. Our goal should be to deploy CHPS without serious deficiencies but not try to solve all problems; we should not attempt to incorporate distributed modeling, whose science-to-operations path still remains undefined. Note that some non-BOC capabilities might be covered by different Core Goals.

There was some discussion about the purpose of our workshops as we begin activities with the CAT-II. We will continue to need these for information exchange and progress reporting for the CATs. The CAT-II will need an outlet for expressing their operational needs, and we will all need an avenue to request changes. In the CAT-II era we won't be able to couple workshops with site support visits as we did for the CAT (because there are too many RFCs).

Chris will compile a list of suggested FY10 Core Goal 13 items for the CAT to review, including Rough Order of Magnitude (ROM) Level of Effort (LOE) estimates. Chris will then organize a conference call to review feedback. Unfortunately this needs to be completed before the upcoming CAT workshop.

Action: Chris to compile and distribute to the CAT a list of FY10 Core Goal 13 items and schedule a conference call to discuss.

3. Preparations for IFD training

3.1 Deltares wants to train forecasters using configurations that work correctly; so Deltares want to take the RFCs configurations, verify them, update them to match the IFD, and

return them before training. Deltares suggested that RFCs "freeze" their configurations as of 18th September. This implies no changes until after training is complete, i.e. the week of 19th October.

This won't work! It implies an entire month with no configuration work, which will significantly impact parallel operations. Also the CAT RFCs don't expect to have completed their IFD configurations before the 18th – perhaps one or two might be complete by then. Edwin had assumed some basins would be fairly complete by training. Deltares agreed that RFCs should continue to do their migration work; then later merge in their changes once training is complete.

The last IFD demo before SAT will be distributed by the end of the week; feedback will be incorporated in the version to be used for IFD training. Edwin pointed out that the displays are now reasonably stable and shouldn't impact migration activities too much. Some capabilities (e.g. precip and temperature on a single plot) won't appear until the November/December release – RFCs will need to re-run the migration scripts.

Continuing changes to the IFD have frustrated the CAT RFCs' ability to focus their efforts on configurations. RFCs are now in a time crunch because of the IFD delays, and also because the ESP configurations haven't been working properly either. [Edwin agreed to find out if the ESP changes are now in the migration scripts.] Because of this continuing flux, parallel operations can't begin for some until November.

Should we delay training? No. RonH says it's important the staff get some training on CHPS as soon as possible. Without training NERFC can't get to parallel operations. We have enough to move forward, but the IFD configurations may be changing throughout parallel operations.

Will IFD software changes in Nov/Dec release require additional training? No – changes are expected to be relatively minor.

What is the goal of training?

• Deltares: Goal is that staff will learn how to run the IFD, go through some "good" displays, discuss the forecasting process. Deltares assumed one segment would already be set up with a desired "standard" configuration. There may be some diversions by the end of the training – these can be merged back after training, possibly as part of site support. Another goal for Deltares is to begin the discussion regarding forecasting operations in a new CHPS environment. Deltares will suggest new kinds of operating procedures; for example forecasters may no longer need to use certain displays once they get away from the former way of thinking. Evolution would then continue to occur at the local office, with training (and re-training) occurring at some later point. It's likely the CATs will need to re-run migration scripts several times during parallel operations for some time as problems are found and fixed.

CAT: At least one RFC expected to have the "new way of forecasting"
conversations before training, because the mental model was to go into parallel
operations immediately following the training. During parallel operations the idea is
to conduct bottom line comparisons and gradually switch over to CHPS, not keep
changing their configurations or the way they do business.

Conclusion: Deltares will pick up a configuration from each RFC sometime close to the training; then RFCs will merge their additional changes into the live system later on.

There will be some training on the live system and some training on a standalone system. Presentations will be in the conference room. NERFC requests that activities on the ops floor be limited to the latter part of the day where possible, making it less intrusive on operations. Edwin will review the agenda to see what can be done.

- **3.2** Deltares wants to train using canned data, in order to run through scenarios with an expected outcome. Deltares needs 2 or 3 dates, with locations, of flood events during the past 9 months to year to use as simulated floods during exercises.
- **3.3** In order to set things up for training, Deltares requests access to NERFC and NWRFC buildings on Monday October 12 (a federal holiday). NERFC reported that Tom, Alison, and Jeff are all working on 10/12 so access will not be a problem. At NWRFC it depends on what expertise is needed; it requires access to postgres, access to DbVisualizer, possibly root access to the chps systems. RandyR and Edwin will tell NWRFC what the requirements are. RFCs will also need to clear foreign nationals who require access during training; Edwin will get the info to all CAT RFCs.

Action: Edwin to forward foreign national information to CATs for facility access during IFD training.

Action: CATs to provide Edwin with 2 or 3 flood events (dates, locations) during the past 9-12 months for use during IFD training.

Action: Edwin agreed to find out if the ESP changes are now in the migration scripts. Action: Edwin and RandyR to determine the nature of help needed at NWRFC on October 12.

4. Other

Edwin reported that Matthijs had recently given an IFD presentation and demo to the Rhine FEWS users. It generated a lot of excitement! These users are already beginning to think of new MODs that might be applied.

Does Deltares need access to ABRFC's live system for CAT-II workshop? No, demo will be done on a standalone. Deltares must also provide foreign national information to ABRFC in time for the visit; also submit a travel request to the COR.

Action: Edwin to provide foreign national information to ABRFC for facility access at the workshop; also submit a travel request to the COR if not already completed.

Next meeting: Thursday September 10, 2009 at 11:00 am EDT.