

## Minutes from CHPS Meeting Thursday September 2, 2010

### Attendees:

ABRFC – Billy Olsen, Eric Jones, Mike Boehmke  
CNRFC – Pete Fickenscher [Rob Hartman unavailable]  
NERFC – Rob Shedd, Alison MacNeil  
NWRFC – Joe Intermill [Harold Opitz unavailable]  
NOHRSC – John Halquist  
Deltares – Peter Gijssbers  
OCWWS HSD – [absent]  
OHD – Pedro Restrepo, Jon Roe, Lee Cajina, Chris Dietz

### Pre-reading:

- Support Log distributed via chps\_ops on Sept 1, 2010

### 1. Health check on Support Log (major issues, show stoppers)

NWRFC: So far so good. When issues occur more than once and/or are repeatable they are submitted to chps\_ops and FogBugz. Experiencing some stability issues, especially graphical – the GUI keeps locking up. Removing data in the local data store and restarting seems to resolve the problem. “Permgen” isn’t currently a major issue because there’s no rain; but will be a big problem if there’s high water. The “flash” issue is strange because it isn’t repeatable on demand. Interestingly Xuning (HSEB) also encountered the problem when investigating a chps\_ops issue on the SA. Peter will see if Rick can reproduce the problem while he’s here in Silver Spring.

- The memory leak problem seems to be back. We have had several reports of delays in graphics refresh. It increases with time during a session. Performance improves if you logout/login. Peter said NW users should look at the “About” box to see how much memory is being used and then track it.

### ABRFC:

- The QPF thing is STILL not working. This is completely unacceptable to both Chris and Jon. Why is it taking so long? It’s been on the books for 2 weeks. If ABRFC had no NWSRFS as backup they would be completely dead in the water! Chris will be meeting with MarkG tomorrow to discuss lessons learned for HSD. Eric and Willem have been exchanging emails but to no avail; Deltares can’t reproduce the problem in Delft. The solution to ABRFC’s QPF/0-QPF requirement was originally implemented by Deltares and may never have worked correctly. The 12Z run works fine (consistently); no other operational runs have ever worked properly, except when there’s no QPF.... SA works fine. When running in debug mode on the FSS and the SA the log files look identical. None of the other CATs are doing more than one run, so it’s unique to ABRFC. Peter will try to understand the issue while he’s in Silver Spring this week; when he goes to Delft next week he will convey whatever he knows to Willem.
- The other main issue for ABRFC is the pi\_service keeps dying. The workaround is to restart it every 5 minutes. Deltares suggests it’s a problem within the application; but how can it be an application problem if bouncing the pi\_service solves the issue? Frederik took a look at the problem this week but it remains unresolved.
- A third issue seems to be that we can’t do mods on the UnitHG. When we delete the local data store it works fine. NW suggests trying to make a TS Change mod directly on the graphics to see if that works.

### NERFC:

- Similar issue with the pi\_service. Certain data gets sync'd when we first start the pi\_service but doesn't get sync'd again. It works reliably on the OC. It's an annoyance but the workaround is okay.
- We're also experiencing the same "clickability" issue as NW, reported on chps\_ops. It seems to occur right after logging in but subsequently doesn't seem to occur once you've been logged in for a while. After the initial logout/login the problem doesn't seem to show up again for the rest of the day. This is acceptable during no flooding, but it is not an acceptable workaround when there's flooding.
- We are beginning a new parallel operations phase with staff using CHPS more routinely.
- The Sac model is implemented – transition for some headwater guidance points which were still using API should be completed by today.
- NERFC chose to NOT install FEWS patch #27147. We have a few configuration issues we're working through and decided the cost associated with installing the new patch outweighed the benefits – the September release is imminent.
- We're still seeing the occasional "memory" issue, which has been occurring for some time. Approximately once every 2-3 days we encounter a popup box which indicates a memory problem and asks if you want to Quit? If you select No, you can carry on. If you say Yes, you have to restart.

CNRFC: We are still in parallel operations, everything looks fine. Staff is using CHPS on a routine basis to get practice. We mainly continue to debug the retrospective analysis. We expect to go to full operations this October but haven't made a decision yet. Lee asked if it's okay for the recent esp fix to go out with the [September release] Beta; this is fine, as CN should receive it the week of Sept 20 according to the schedule.

FogBugz: is currently down. HSD will get an account for NOHRSC. Some issues in chps\_ops don't seem to be in FogBugz. Automated mail messages don't seem to be working. The latter is probably a configuration item. Should RFCs be entering issues in both places? HSD should be able to set it up so that whenever a new issue is entered into FogBugz the system automatically sends an email to chps\_ops. When FogBugz comes back online Chris will ask HSD to make that happen.

There's been some talk recently about updating the priority categories. High (2-10 days) seems a bit too vague. There's been some suggestion that we implement a "Target-Fix date" category. Should non-operational CATs use the system as if RFC is operational? **Conclusion = yes.** Otherwise we can't assess the support infrastructure. However if the support team does get multiple Emergency or Critical items, they will rank non-operational RFCs lower. Support also needs to be aware that an RFC using NWSRFS in operations might not have the capacity to support investigation into an Emergency CHPS issue during an event – either downgrade the issue to non-Emergency and/or build in some latitude with the required response times. HSD will continue to assess the priority categories.

Action: Edwin to add (or confirm existence of) ABRFC's ensemble mod request on the FEWS development registry for early implementation.

Action: NWRFC users to track memory usage shown in the "About" box across multiple users over time; report back to Deltares if the numbers show an increase (i.e., confirm a memory leak).

Action: When FogBugz comes back online HSD to configure system so it sends copy of all new/updated issues in an email to chps\_ops.

## 2. Transformations document review

Edwin sent an email recently – the document is on the Deltares wiki. The idea is to give RFCs an opportunity to review transformations in FEWS before the end of the contract. ABRFC said the instructions were bad – we followed the instructions, couldn't find the document, did a search, found the document. Peter remarked that the latest wiki software doesn't seem as structure-friendly as the old. Chris said the problem with the wiki is there's no overall management of the FEWSUSA area and it's too easy for people to add things ad-hoc. Perhaps that's an HSD function; but HSD is focused on web/html not wiki. Peter pointed out it's possible to house originals on the wiki and generate PDFs for publication on a web site. Peter and/or Edwin will send better instructions regarding location of the Transformations document.

**Action: Deltares to issue improved/corrected instructions for FEWS Transformations document.**

### 3. FFG/FFH for BOC

HSEB sent NERFC the beta version of the FFG/FFH software a couple of weeks ago. ABRFC also received it last week. Expectation is that RFCs will test. NE did install and conducted a preliminary run but got some blank output files and haven't been able to pick it up since. They're not sure they've got the correct executables. Jeane and Alison have been out of the office. Lee said the gFFG scripts are in progress. CNRFC and NWRFC confirmed there's no point asking them to test FFG/FFH. However Lee pointed out that the beta version does contain all of OHD fixes since June (including ssarreg) so they should install it.

Lee also said there are very few canned data test cases included with the OHD code, the exception being FFG/FFH. RFCs confirmed they don't need canned data for the other bug fixes and will know how to reproduce the original scenario.

**Action: None.**

### 4. Managing development/enhancement requests

There's an existing request from ABRFC to be able to make a mod on a specific ensemble member ID; will this be in the September release? Peter says the work is significant – why is it required? We can't change time series in the future without wanting to change both the QPF and the 0-QPF but the mods only change one not the other. The answer is no, that request did not make it on the list for September. ABRFC wonders can they raise the priority to get it into one of the next releases?

Edwin is the current owner of the “development registry” (a spreadsheet used to note and track software enhancement requests). Peter says it makes sense for the NWS to ultimately keep their own “registry”. FogBugz could be used to capture requests – i.e., Low priority – however, a to-be-determined CHPS requirements process will be needed to manage a further prioritization exercise on all requests entered into FogBugz in the Low category.

**Action: Chris to determine and assign responsibility for/management of the future CHPS enhancements (requirements) process, with a well-defined path to any associated FEWS enhancements.**

### 5. Any other items?

- JoeI mentioned a discussion between NWRFC, OHD/Pedro, Deltares/Edwin, and Portland State University (PSU) concerning some research the university is interested in conducting with NWRFC under a CSTAR grant. Deltares can provide the license to use FEWS for research purposes. NWS will need to provide a copy of CHPS. Hamid(?) is the contact at PSU. We assigned Pedro an action to hold an internal OHD informational meeting on this.

This kind of request is coming up more frequently. What happened to the agreement between Edwin and CUAHSI that CUAHSI would be a distributor of “CHPS research packages”? It seems to need funding. Chris did put some \$ in the FY11 budget to build a “community portal” precisely for this kind of thing, except that Chris had professional web development in mind. HSEB is actively working with BPA to pilot such a thing. Such CHPS-based exchanges aren’t straightforward – we need to think about how to distribute software updates to 3<sup>rd</sup> parties. Will 3<sup>rd</sup> parties get data from the RFC directly? We need to convey to 3<sup>rd</sup> parties which version of FEWS is guaranteed to work with CHPS. We need to initiate a self-supporting community forum. We will need to define and formalize the procedures, not throw something together in a knee-jerk fashion; however we do need to get this activity moving.

- Lee wanted to confirm that testing for September release begins next week; also that we plan to hold daily conference calls. Monday 6<sup>th</sup> is a holiday. Tuesday 7<sup>th</sup> Deltares will distribute the release. Weds 8<sup>th</sup> RFCs will install (NE, NW). Time of conference call should be no later than 16:00 CEST = 10:00am EDT = 7:00am PDT. Conclusion: first conference call (or at least “a contact moment”) will occur on **Thurs September 8<sup>th</sup> at 16:00 CEST/ 10:00am EDT/ 7:00am PDT**. Note that this will be the first test of an installation at an operational site (NW); HSD needs to be available and prepared to support.

**Action: Pedro to provide more information to HSEB on the PSU CSTAR grant proposal.**

**Next meeting:** Thursday Sept 9, 2010