Minutes from CHPS Meeting Thursday September 11, 2008

Attendees:

ABRFC -

CNRFC - Rob Hartman

NERFC - Rob Shedd

NWRFC - Harold Opitz, Joe Intermill, Don Laurine

NOHRSC – John Halquist

Deltares - Karel Heynert

OCWWS - Mary Mullusky

OHD – Pedro Restrepo, Chris Dietz, Joe Gofus, Larry Cedrone (Gary Carter, Kathy O'Leary also attended briefly)

Pre-reading:

None

1. Hardware

1.1 All agreed that the HP-based quote is unacceptable: information is missing or ambiguous (for example there's no information about operating system), and the vendor hasn't been responsive enough to our queries. Discussions therefore focused on quote for Dell systems.

2 system configurations were considered:

- o "ideal system" = one Dell 7310 for each of MC, DB, and FSS servers
- o "compromise system" = one Dell 5400 for the MC server + one Dell 7310 for each of DB and FSS servers

Cost

1 "Compromise" system = ~\$31.8K

1 "Ideal" system = \sim \$37.7K

Compromise system at 4 RFCs = \$128 K

Compromise system at 4 RFCs + one extra for CNRFC = ~\$159K

Ideal system at 4 RFCs = ~\$152 K

Ideal system at 4 RFCs + one extra for CNRFC = ~\$190K

Larry did not believe there was room for any further negotiation on price – contract has been pre-negotiated with discounts built in.

Budget

Funds approved by Gary from the Hydro budget were \$78K (with possibility of extra, depending on last-minute FY08 funds availability)

CNRFC to contribute \$36K

Total available budget = \$114K

Note: there was some confusion concerning Hydro funds availability. Kathy O'Leary briefly joined the meeting to explain what funds had been received from CNRFC – it was only about half the amount RobH had authorized; Kathy will tell NOAA Procurement to increase the amount.

Discussion

It seems we can't even quite afford to buy the "compromise system" for 12 units, let alone anything better.

NWRFC argued that we should aim for an "ideal system" configuration now, based on a history of AWIPS providing sub-optimal system configurations at RFCs; better to set the bar high at the beginning. Group was reminded that OHD stated several months ago the cost for the "ideal" configuration is too high for our budget. Would Chris ask Gary for more funds? Chris was reluctant to return to Gary again, as Jon has already been through the process with both PPC and Gary. Perhaps the request should come from the field?

Deltares pointed out that this purchase is for the Offline system, which can afford to be a slightly less than an "ideal" configuration.

Deltares also stated that the recent additional requirement for synchronization of the FSS with 2 or more MCs does not impact the spec for the MC.

CNRFC is contributing \$36K to the cause, but is reluctant to contribute if it doesn't benefit the whole group and/or CNRFC in some way.

Pedro had Gary come into the meeting to hear NWRFC's request for extra funds. The discussion resulted in Gary approving a total of \$120K from the Hydro budget. CNRFC confirmed their contribution of \$36K, bringing the total funds to \$156K. This will allow us to purchase a "compromise" system for 4 RFCs plus one extra for CNRFC.

Conclusion:

OHD/Larry will put together details for the final configuration ("compromise system" for 4 RFCs, plus an extra Standby "compromise system" for CNRFC; 300GB disks on all systems – see Other Notes below) so that NOAA Procurement can proceed with the purchase. A summary will also be distributed to the CAT.

Other Notes:

The CAT members expressed concern that the NWS may ultimately limit the RFC configuration to two systems (Online duty, Online standby; no Offline). Deltares advised that such a solution is high-risk, as it may be possible to damage an operationally critical system with untested software. An Offline system is every bit as important as a Standby system.

There was a misunderstanding wrt disk capacity – the Deltares hardware document says 500GB disk space (Raid 10), but the Dell quotes came back as ~270GB. Difference in cost between 146GB disks and 300GB disks is minimal – based on BPA quotes via the Internet the difference is only ~\$273 per disk. Group agreed to opt for 4x300GB disks on each unit, without any significant increase to the final cost.

IWRSS can potentially contribute some money in the future, but it can't provide any immediate relief.

Action: Larry to submit final requirements to NOAA Procurement for purchase

Action: Chris to distribute summary of Larry's request to the CAT

Action: Kathy to ask NOAA Procurement to increase the amount that can be drawn from

CNRFC's account to \$36K.

2. Data Ingest Script

NWRFC is sending (new) ofsde output to Deltares. Does Deltares need to receive data from all 4 RFCs? Yes. The data are needed to set up the "pilot" configurations – live data is for testing purposes. Could be a permanent requirement if NWS chooses. Definitely will not be a requirement for follow-on RFCs.

Need to develop a new data export application that takes ofsde output and stores it in 3 places (directory for local FEWS ingest; local archive; offsite shipping area). Suggestion that OHD could pull data into our system (NHDR? NHOR?) for delivery to other locations as needed. That way it's centrally distributed rather than individually by each RFC.

Deltares requested that OHD provide some sort of mechanism (e.g., script) to move data into correct location(s) in time for the demo/workshop in Taunton. The script should be running at all 4 CAT sites. Highest priority is delivery to FEWS ingest directory, and delivery to Deltares. The solution doesn't have to be 100% robust/available, as it's only for testing.

Action: OHD to complete a data transfer script for use at all 4 CAT RFCs.

3. Agenda for Preparation Workshop #2 w/c Sept 29

Some specific agenda items:

Interactive Forecasting process. Some simple non-functional "prototypes" will be demonstrated. These will just show screen sequences, with enough information to permit evaluation.

Migration and configuration tools; Deltares reports that the amount of manual work required by RFCs after running the scripts is less than expected.

Ensembles/XEFS into CHPS - Albrecht was at OHD this week, discussing some details in order to put a plan together.

HEC-RAS: request that we specifically address this project because of the CHPS schedule dependency. Deltares will need some structures to test for Northwest. The adapter has no issues.

Additional training for NERFC – need to leave some room for this, perhaps on Thursday and Friday. Karel and Peter plan to be at NOHRSC on Friday 10/3; Micha will stay in Taunton and can continue with NERFC training there on Friday. Karel might be able to spend some time on Monday going over the NERFC configuration with RobS.

Action: Karel to put together an agenda and distribute

4. Other items

What is the status of the signed license agreement for CNRFC? It is supposed to have been signed, but Karel has not seen a copy. Pedro will check.

Some email traffic concerning NWSEO representative to the CAT – nothing definitive yet; waiting for final approval from Mickey Brown.

Action: Pedro to check in status of software license agreement between NOAA and Deltares for CNRFC (ResSim).

Note: Action items from this and all previous meetings are contained in the "ActionItems" document maintained and distributed by Chris Dietz, OHD.

Next meeting: Thursday 9/18/08.