CERES Systems Engineering Committee

Members: Tammy Ayers, SSAI (DM)
Denise Cooper, SSAI (DM)
Tonya Davenport, SSAI (ASDC)
Vertley Hopson, SSAI (ASDC)
Lisa Link, chair, SSAI (ASDC)
Walt Miller, SSAI (DM)
Sue Sorlie, SSAI (ASDC)
Scott Zentz, SSAI (SA)

Charter: Serve as a forum for resolving issues which affect more than one working group. Report to the CERES Data Management Team.

August 11, 2008 10:00 a.m.
The following members were present for this meeting: Tammy Ayers, Tonya Davenport, Vertley Hopson, Lisa Link, Walt Miller, and Scott Zentz. Lisa Coleman was invited to talk about the toolkit meeting held late Friday afternoon at the ASDC.

Topics discussed (comments added later from members who did not attend):

What is CERES policy when code on various production machines is forced to differ in order to execute properly? *warlock* and *magneto* currently have different file systems. Will they be the same once the new file system is in place or separate? Currently, separate scripts are made and placed on *magneto* and *warlock*. With the new file system, maybe a script will need to decide if it should run on PowerPC or X86.

The discussion of the different codes on different platforms was raised initially by the SIT group. Apparently this has occurred for MISR, at least that is what had been discussed. We DO NOT want separate code unless it cannot be done any other way. I know that for instance Instrument has to have separate code for SGI and the Mac cluster, as the link name for the HDF routines on the Macs have an "_" in front of the name. On the SGIs there is no "_", and it doesn't exist on the PowerPC chips on *magneto*. I don't have any knowledge of the x86 chips so I don't know if we have to have "_" or not. But if that should occur, there would be no other way to handle it than to have different sets of code for the two platforms. This HOPEFULLY will not occur, but it is thought to be out of the "NORM", but we want to know what we do in those cases, because none of us knows what is going on with all of the new platforms coming down the line.

/QA - There hasn't been a /QA for awhile. Why do we even have /QA rules anymore? Scott Zentz reported that the SAs mounted the /QA back on *warlock* last week for ANGe parallel testing?? Web files are not archived and they are not going to be handled by ANGe. Web files are created by ERBE-like and TISA Averaging. They get overwritten with each new processing. Lisa C. will poll the subsystem folks to determine who currently is concerned with “a /QA area”.

Denise comments on /QA: I thought the /QA stuff had been decided. Dale and Cathy need something like /QA, because their files are not archived, but instead are overwritten. Everyone else can live without /QA now. Phil was working with Sue Sorlie and the ANGe folks on how to get our QC reports delivered to him, so he can move them into the directory that he uses for the Instrument Web reports. There was some e-mail that they had changed how they were going to handle that type of subscription, but other than that, I thought this was resolved. As for the rules for /QA, to the best of my recollection, Henry had a set of rules to clean up /QA as necessary, something along the lines of how long files would remain on the /QA based on data product. I believe it was something along the lines of QC reports for the web would stay "forever", BDSs would stay for a maximum of 7 days, etc. This was something we came up with years ago for the sweeper program, which has not been kept up since Henry's time and I'm not certain that it even exists any longer. It was a cron job at some point in history.

Sue's comments on /QA:

This is the deal on /QA:

It has been mostly not mounted for quite awhile; when it isn't mounted no one complained. It appears that Beth pulls the gif files from *warlock* where they reside. With our new equipment installed, Mike has plans that would include disk space for data access by the SCF (this would include archived data). As a result of these plans and the fact that Beth/Phil is able to acquire the data from *warlock* and/or the archive, we chose not to create/test subscriptions for these files. Recently I asked that /QA be mounted again, but there were no files/directories on it.

Toolkit meeting held last Friday afternoon: the next CERESlib delivery, currently scheduled for 8/22, will include the new toolkit version 5.2.15 on *magneto*. ERBE-like has issues with this version. There are several solutions being tried now by ERBE-like using this version. If all else fails, more than one version of the toolkit will be made available on *magneto*. FLASHFlux needs to be included in toolkit upgrades.

CERES ops manual format – will remain as is until CERES automation comes up again.

Topics for next meeting:

Should Sun Grid Engine (SGE or GRD) be included in Tammy Ayers' testing?

On *magneto*, is data written to /gpsf or to hardware? The software doesn't know where it's writing data to. This was noted from the last DMT meeting and I forgot to bring it up today. I believe this topic came up when talking about running Subsystem 8.0. Scott asked if the data is being written to /gpsf or the hardware? We didn't know. I spoke with Chris Harris about this and he said he would touch base with Scott. This will be brought up again at the next DMT meeting.

Denise: I know that you are asking Chris Harris about the different types of blades on *magneto*. My understanding is that subsystems would be designated to run on certain types of blades and that there would not be two executables, one for one type of blade and one for another type of blade, because you would always run on only one type of blade based on subsystem. However, if we get to the point where we want to have two different executables, then CERES CM would have to create one executable for one platform with the platform name in the executable name and then would clean up to create the other executable with that blade/platform type in the name. There would be no reason to keep .o, files once the executable had been created. This might mean that you would have two sets of Makefiles, but I'm not certain that we would want to have to keep track of executables for each type of blade. Especially if for some reason the code had to be changed to run on the different blades, we would chose one set of blades to execute.

The meeting was adjourned at 10:40 a.m.