

Summary of the ESMF Change Review Board Meeting on October 30, 2007.

Attendance:

Robert Ferraro/JPL, Cecelia Deluce/NCAR, Tom Clune/NASA GSFC, Alan Walcraft/NRL SSC, Tom Black/NOAA, Atanas Trayanov/NASA GSFC, Mariana Verstenstein/NCAR

Agenda

The CRB covered the following topics during its meeting:

- Development status review (v 3.1.0 scheduled for Oct)
- Review of bug list and feature requests being tracked by the Core Team
- Review and amend current schedule

A synopsis of the discussion and decisions from the meeting is presented below. It is organized by agenda item. These notes attempt to capture the high points of the discussions, and any decisions that resulted.

Development Status Review (Cecelia Deluca)

The internal release ESMF v3.1.0 is on schedule for release in the next couple of weeks. All required functionality planned for this release will be delivered. The 2 optional items (error reporting and Sun platform port) are not ready and will be deferred to a future release. As a side effect of the development on the new array and grid functionality, two additional features related to Array Gather/Scatter which were not scheduled for v3.1.0 have been completed and will be included in the delivery. See the 'as built' description on the new schedule.

Development will incur some impact due to imminent paternity leave by two of the core team members. This may delay the v3.1.0 release, and will certainly impact the ability to deliver the v3.1.0r public release in Dec and the v3.1.1 internal release scheduled for Jan. It was agreed that the schedule would be modified to show that both releases are now expected in Feb 2008.

Cecelia announced that the Core Team has received additional funding specifically for the development of C language interfaces for the ESMF API. A developer has been identified for the task. It is expected to take about 6 months to complete. An interim delivery of a subset of these interfaces has been placed on the schedule for v3.1.1.

ESMF support/feature/bug requests update

[The ESMF SourceForge site now tracks all support requests, bugs, new feature requests, and all development tasks. Links to the various tracking lists can be reached by clicking on Developers on the navigation bar at the top of the ESMF home page.]

The CRB reviewed the bugs tracking list and the feature request list in order to develop the content for a v3.1.2 release for May 2008. Board members were polled for their highest priorities. Locations Streams remains the highest priority from NASA for

new development, along with Cube Sphere support. Structured grids support is the highest priority from DoD. Structured grids will be addressed by the current grid development schedule. An outside contribution for the location streams functionality has been deposited in the Contrib site on SourceForge, but does not compile properly with any of the recent ESMF releases. NASA agreed to work with the contributor to sort out the problem so that the Core Team could begin integration and testing with release v3.1.1. If the implementation is as mature as advertised, the integration and testing should be completed in time for the Feb release. This is dependent on NASA sorting out the compile problems.

Of the items on the support request list, Cecelia recommended proceeding with array halo, bundles, MAPL support, and continued focus on regrid/unstructured grids. She also wanted to proceed with implementation of exchange grids, which have been requested by GFDL and NASA. The board agreed with these recommendations.

Review and amend current schedule

Locations Streams was added to the v3.1.1 release. Additional tasks related to array haloing were also added to v3.1.1. A separate task to review the bug and feature request lists was added, which is intended to sort through both lists and close out tickets that have either been satisfied or superseded by new development.

The remaining new tasks were added to the schedule for a tentative May delivery.

Based on the CRB prioritization and developer loading, the following tasks currently scheduled for v3.1.1 have also been rescheduled to May (v3.1.2):

- ArrayBundle Create and sparse MM

- Perf profiling of bundles with sparse MM

The following tasks have been deferred to a future release:

- Interlanguage consistency

- System tests for OpenMP

- Consistent treatment of logicals and characters

Other Topics

None

Next Meeting

The next meeting will take place in late Jan or early Feb. The specific date is TBD, with interest expressed in having a face-to-face meeting in Boulder.