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Unidata Meteorological Applications Task Force (MetApps)

Status Report: January - May 2002

Planning for an Integrated Application: The major objective for the MetApps project during the first half of 2002 is the development and testing of an integrated application. The first step for the Task Force was providing feedback to the developers on the desired features for an integrated application. At the end of January a UMADA discussion of feature ranking was held which considered the following areas: data types, analysis capabilities, display capabilities, data access mechanisms, other needs. As expected the Task Force indicated a desire for a broad and inclusive set of capabilities, however the discussion did establish some prioritization as required by the developers.

Prototype Testing: Two iterations of testing on the Integrated Data Viewer (IDV) have been carried out; the first beginning on February 12th for IDV Release 1 and the second on March 22nd for Release 2. New features tested in Release 2 included color table editor, projection control, user defined preferences, enhanced SkewT control, combined data source selection widget, HTML display, and color filled contours.

Conference Call: The testing of Release 2 of the IDV from March 22nd through April 5th served as the impetus for a conference call among the MetApps developers and Task Force members held on April 3rd. The conference call had fourteen participants (nine task force members and five developers. The discussion was focused on the user interface of the IDV, data access and selection, user derived quantities, and future development priorities.

 Some Task Force members reported problems with application installation and using WebStart on Solaris. One solution offered for general problems was to use UMADA that would enlist the entire Task Force as a support mechanism.

There was extensive discussion of the current IDV interface with a wide range of needs and opinions. The developers pointed out that the interface is not locked in place but can be easily modified because of the underling Java framework. Further it is most likely that the interface will ultimately be configurable by the user. However, the point was made that the Task Force must provide adequate and detailed feedback to the developers on the interface design.

The performance of the applications was raised during the conference call as it had been in the past. Some members expressed a desire for the applications to operate in a smaller memory space. It was noted that the 3D features of the IDV are primarily responsible for heavy memory demand and performance on memory limited systems can be improved by limiting use to 2D features.

Generally, Task Force members were satisfied with data access through remote servers although there were a few complaints of slow data transfers. Better explanations of remote data access are necessary as some participants were not aware of the possibility of running data servers at their own site with presumably good connectivity.

The discussion of user-derived quantities was limited, as most task force members had not explore this feature of the IDV at the time of the conference call. Standard derived quantities for future releases of the IDV were suggested including potential temperature, compositing and averaging of fields, and standard statistical quantities (mean, standard deviation, etc.)

Task Force members expressed the need for a summary of the discussions that take place during each testing period to provide a quick look at the process and its major results.

Future development priorities that resulted from the conference call discussion were: reduce memory footprint for applications, applications should provide feedback to the user, a web-based user's guide, and support for collaboration.

A summary of the conference call is available at
http://www.unidata.ucar.edu/projects/umada/d0022

Task Force Participation: The level of participation by Task Force members remains an ongoing issue for the MetApps project. However, during the first half of 2002 participation was much improved. The UMADA discussion on IDV Release 1 consisted of seventy-four responses and there were seventy-nine for the Release 2 discussion. Further, the April 3rd conference call has excellent participation. Although the UMADA online discussion format has served the project fairly well, as the prototype applications mature additional methods such as intensive small in-person user/developer groups may by more productive.

Membership: Alex DeCaria from Millersville University was appointed to the Task Force as a replacement for Robert Ross who retired.

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