Director’s Report

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May 19, 2003

Unidata Policy Committee Meeting
National Science Foundation
Arlington, VA
Jeff Glidden, a student assistant on the Plaza project, left in March to begin employment with Accenture.

A new Software Engineer III position announced for Russ’s NASA-AIST Project

Two new students assistants will come on board this summer to work on NLDM and netCDF

A part-time administrative assistant may be hired this summer to alleviate pressures on the admin group

22 May 2003
Expanding Horizons: Using Environmental Data for Education, Research, and Decision Making
- June 22-27, 2003

Planning well underway

Registration numbers are lower than corresponding figures for previous workshops
- Main Reasons: tight budgets and scheduling conflicts

Workshop program and other details will be provided this afternoon
Total pool, including UCAR overhead: $203K
Deadline was May 05th
16 proposals were received, one was international.
More later...
Avg last year: 76.5 responses/week
Avg. last 4 months: 85.9
Support load is increasing
Support required for LDM, IDD, DODS, and IDV continues to grow
Support for IDV is now comparable to that for GEMPAK and McIDAS.
The UPC hosted the OpenDAP/DODS Developer’s Workshop during 19-21 March 2003 (in the midst of the 100-year snowstorm).

The UPC staff are continuing to work with NWS on distribution of Level II data from the NEXRAD network.

Linda Miller is coordinating a joint USWRP CONDUIT-CRAFT meeting, which is scheduled for 29 May, 03.
LDM-5 Vs. LDM-6 (released 9 April)
IDD/LDM uses more of the Internet2 than any other advanced application.

Approximately 5 Terabytes of data and 6 billion packets transmitted last week!

Amount varies with weather.

By far, Unidata is the largest user of bandwidth within UCAR.

- almost 50% of outbound traffic, and 15% of inbound traffic is Unidata related.
GEMPAK, McIDAS and IDV

- GEMPAK: 5.6.j released on March 31\textsuperscript{st}
  - Supports FreeBSD
  - Release ported to Mac OS X
  - Version 5.6.k being release engineered
- McIDAS: Version 2002b released in January
  - As of April 30\textsuperscript{th} 89 sites have downloaded version 2002.
- IDV: The first non-beta released planned for mid-June
  - A steering committee is being formed to guide development; it will report to the Users Committee
  - The UPC staff has had meetings with WRF developers to improve netCDF I/O so that the IDV can visualize WRF output

22 May 2003
Panel met at NSF on March 26-27
Ad-hoc mail reviews: 6 out of 7 rated the proposal as Excellent; 1 rated it Good
The UPC was asked to respond to five questions that came out of the ad-hoc mail reviews; an additional question was added when the panel began deliberations.
No written response was required, but one was prepared

Recommendation: “The unanimous finding of the panel is that the Unidata Program Center program be supported as fully as possible by NSF for the years 2003-2008

22 May 2003
Submitted since February meeting:

- NSF/DUE: “THREDDS Second Generation”
  - Focus: Connecting People, Documents and Data
  - NSDL Collections track; Two-year project
  - Involves many collaborators
  - More in Ben’s presentation

- NSF/ITR: “Linked Environment for Atmospheric Discovery (LEAD)"
LEAD: A Large ITR Effort

- Lead PI: Kelvin Droegemeir, OU
- On-demand, real-time, mesoscale modeling using a Grid and Web services environment.
- Many new services will be developed, including data assimilation, data mining, on-the-fly cataloging and publishing of data, GIS integration, advanced visualizations, etc.
- Unidata’s role: Extend Unidata tools and technologies (LDM, netCDF, IDV, and THREDDS) to Grid and Web services environment.
Other Proposal News

- **Successful proposals:**
  - NASA/AIST: "Merging the NetCDF and HDF5 Libraries to Achieve Gains in Performance and Interoperability"
    - One of 21 selected from a field of 200 proposals submitted
    - One of 6 from universities
  - NSF/GEO: DLESE Data Services (in partnership with TERC) (Not official yet, however)

- **Still awaiting decision on:**
  - NASA/REASON: DODS/OpenDAP related (with NOAA/PMEL)
  - NASA/REASON: DODS/OpenDAP related (with U Rhode Island)
Current Implementation

Application

netCDF

POSIX I/O

File

Proposed Implementation

Application

netCDF

HDF5 (serial and/or parallel)

POSIX I/O

Split files

Custom

Stream

MPI-I/O

Parallel file system

User-defined device

Network or to/from another application

Raw data

Metadata

File

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NetCDF-HDF Integration

Unidata
State of the Program: A Snapshot

- Community relations: Green
- Data sources: Green
- IDD: Green
- Software Development: Green
- Collaborations: Green
- Staffing: Green
- Space: Yellow (Staff split on two floors)
- Finances (Core): Green (More in budget report)
- Non-core funding: Red (More in budget report)
- Case Studies: Red (Funding under the THREDDS endeavor a possibility)

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