Los Angeles Unidata Meetings

The Unidata staff and most of the working volunteers and consultants were present at the Los Angeles meeting of the AMS, and attended Unidata discussions held at the same time. The most heavily attended session was the combined meeting for the Communications and the Local Hardware/Software Systems working groups, chaired by Ernie Agee (Purdue). The discussion was lively and the general tone was enthusiastic as the Unidata concepts appeared to be taking specific form.

The Management Advisory Committee also met in LA, chaired by John Dutton (Penn State). The committee heard status reports from the chair of each working group: Communications by Chris Cooper (UCAR; Rutherford Appleton Lab), Local Hardware/Software Systems by Agee, Data Sources by Cliff Mass (U of Washington), and Data Management by Rollie Hauser (California State - Chico). Rollie accepted the Data Management chair just days before the meeting, so his report primarily covered anticipated approaches rather than actual progress.

Data Sources

The Data Sources working group expects to complete its report, characterizing and quantifying real-time and archived data that may be of interest in Unidata, by the next Management Committee meeting in mid-March. Cliff is also gathering information on optical storage media and their potential use in Unidata.

Communications

Chris Cooper described the emerging communications architecture, one that is based on local area network (LAN) technology for intrasite communications, and that has segmented the long haul communications into two principal components, one for data delivery and one for general purpose, two way communications. The former can be accomplished via commercial broadcast systems, and the latter is expected to mesh perfectly with NCAR/SCD plans for high speed, computer-to-computer communications. Chris distributed several technical assessment documents that will undoubtedly set the tone for future design and evaluation papers. He also prepared a draft document on user communications, which was intended to stimulate discussion and further refinement of those requirements prior to completing the communications design; this is available through the Unidata office for general review and comment.

Issued by the Unidata Project Office
David Fulkner, Manager (303) 497 8696
University Corporation for Atmospheric Research
Boulder, Colorado  80307

(continued)
Workstations

The report by Ernie Agee on Local Hardware/Software Systems ranged from possible development of a specialized data ingest/management system to evaluation of candidate workstations and user interface software. Several experimental efforts were considered, including combining NCAR's new GKS-oriented graphics developments with NASA's TAE and GEMPAK applications environments, and transporting the U of Miami's DSP applications environment to various computing systems. Specification of user requirements and software evaluation efforts are also proceeding in this group.

In all, the Los Angeles meetings left one with a sense that Unidata is starting to take shape in a practical way, solutions to problems are emerging, and the participants are gaining enthusiasm.

Unidata Philosophy

The emerging character of the Unidata system concept is one which should be highly configurable to participating sites and indeed individual user's needs. In sharp contrast to the "turnkey system" approach, the Unidata goal is to define a general system architecture and to provide a set of key building blocks which can be combined to provide a variety of levels of service. This approach is being applied to all areas of Unidata system development, data access, communications, data management, and local workstation hardware and software.

A strong emphasis in the project is that of community involvement and effort. A crucial aspect is the identification of ways in which to make the most effective use of existing community systems and expertise, as well as the identification of developments required by the project which could with advantage be undertaken within the community. While the present focus of the project has been largely on technical aspects, it is hoped that a similar, distributed, community based approach can be taken to the issues of system management and maintenance.

Information Gathering

Much of the present Unidata effort is oriented toward gathering information, with members of the working groups visiting Unidata-like sites and contacting vendors of related hardware, software, and services. As well, surveys are planned to characterize the systems that are already in place, thus maximizing the potential for Unidata compatibility and utilization of existing software and hardware. These surveys are likely to be based on the list of participants in the Madison Workshop of summer, 1983. Potential Unidata participants, who have systems presently in use, but who did not attend the Madison workshop, should contact the Unidata office to assure inclusion in the surveys.