



Unidata Policy Committee
14–15 May 2012
AWIPS II Progress at UPC

Linda Miller & Michael James



Unidata and AWIPS II

- AMS demos in Unidata booth, great interest!
- Field trip to Boulder WFO (Brian Motta coordinated the visit)
 - Side-by-side comparison of AWIPS and AWIPS II (D2D, NSHARP and GFE)
 - Good opportunity to talk with forecasters using the system
- Release to two beta testing sites Univ of Albany and Texas A&M
- 64 bit EDEX servers available 2012–2013
- LDM reconfigured for non-operational data flow

Unidata and AWIPS II Documentation Efforts

- General system overview
- Software components
- Data ingest and decoding
- Server management
- CAVE client visualization perspectives
- Software Development Add on Apps (extending AWIPS II)

Chapter 1 AWIPS II System Overview

1.3 AWIPS II Communication Architecture

AWIPS II takes a unified approach to data ingest; most data types follow a standard path through the system. Though operational forecast offices have variations of this basic data flow, including local radar and LDAD (Local Data Acquisition and Dissemination) delivered products, Universities that use the Unidata IDD and LDM have the data delivery components already in place for AWIPS II.

At a high level, data flow describes the path taken by a piece of data from its source to its display by a client. This path starts with data requested and written to disk by an LDM client and includes the decoding of the data and storing of decoded data in a form readable and displayable by the end user.

The AWIPS II ingest and request processes are a highly distributed system; messaging is used for inter-process communication. Figure 1.3-1 shows the basic process communication architecture for AWIPS II. There are four primary communication channels:

1. AMQP messages routed between the various AWIPS II processes by the Qpid message broker.
2. Data flow, either written to disk or obtained in a request.
3. Data requests sent upstream.
4. Product notification messages posted to connected clients.

Figure 1.3-1. AWIPS II Inter-Process Communication

1.4 Basic AWIPS II Software Deployment

UCAR Unidata Program Center 4

AWIPS II Staff Involvement

- Michael James, 75%
- Steve Emmerson, 10%
- Linda Miller, 10%
- Mike Schmidt, 5%
- Jeff Weber, 25%
- Tom Yoksas, 5%

Future

- SysAdmin training at NWS/ Kansas City Training Center (Michael James, Mike Schmidt and Jeff Weber)
- Continued coordination with NWS and NCEP
 - Continued weekly meetings with NCEP developers and centers
 - Monthly Progress reports to NCEP Directors
- Release AWIPS II to community – Spring 2013 (barring unforeseen circumstances)

Hi from Unidata Staff

