

FINAL REPORT FOR UNIDATA COMMUNITY EQUIPMENT AWARD

TITLE: INSTALLATION OF AWIPS II EDEX SERVERS FOR SHARING OF PRESENT DATA AND FUTURE DISTRIBUTION OF ARCHIVED DATA WITH COMMUNITY

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For our Unidata Equipment Award, we purchased two Dell servers. The first was a dual-Xeon R510, and the second was a quad-Xeon R820. The two servers have 64 and 192 GB of memory, respectively, and a few terabytes of storage attached to them. These servers were purchased to run the EDEX software, which is a part of AWIPS II. We worked closely with Unidata in trying to identify appropriate machines to be able to handle the needed components for AWIPS II, which was a challenging task as the development of AWIPS II continued throughout the term of our project, and many unanswered questions remained throughout the time period of the project. Fortunately, initial testing has been promising, suggesting that these servers will be able to handle whatever amount of real-time data are thrown at them. Figure 1 shows the two systems.

We are currently awaiting updated versions of EDEX and AWIPS II for further testing and for support of functionality we wish to support. This includes having an EDEX for real time data and another EDEX for archived cases to be used in academic study. As of a few months ago, we had been told that there were no immediate plans to create needed software that would allow archived gempak data to be put through the EDEX and used in AWIPS II, but it sounds like the situation is very fluid and could change. We are hopeful that the ability to access the archived data for use in AWIPS II will be achieved sooner rather than later, and would anticipate that we can quickly make it available to the community once such software is developed.

We found this particular equipment request to be especially challenging due to the fact that AWIPS II was still under development, and there were many unanswered questions regarding what it would and would not be able to do upon completion. Nonetheless, we believe the educational and research benefits of the project will eventually be large. Not only do we hope to begin using AWIPS II in our synoptic and mesoscale forecasting lab courses in the next year or two, but we also hope to be positioned so that we can quickly make our extensive gempak archive of weather data available to the community if/when AWIPS II has the capability to handle archived datasets in gempak format. Our servers were purchased with the goal that one might be able to run EDEX for the archived cases while the other handled real time data.



Figure 1: The dual-Xeon R510 and quad-Xeon R820 servers.