Application Programming in AWIPS II

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Since its inception almost 8 years ago, NASA's Short-term Prediction Research and Transition (SPoRT) Center has integrated NASA data into the National Weather Service's decision support system (DSS) – the Advanced Weather Interactive Processing System (AWIPS). SPoRT has, in some instances, had to shape and transform data sets into various formats and manipulate configurations to visualize them in AWIPS. With the advent of the next generation of DSS, AWIPS II, developers will be able to develop their own plugins – to handle any type of data. Raytheon is developing AWIPS II to be a more extensible package written mainly in Java, and built around a Service Oriented Architecture. A *plugin* architecture will allow users to install their own code modules, and (if all the rules have been properly followed) they will work hand-in-hand with AWIPS II as if it were originally built in. Users can bring in new datasets with existing plugins, tweak plugins to handle a nuance or desired new functionality, or create an entirely new visualization layout for a new dataset. SPoRT is developing plugins to ensure its existing NASA data will be ready for AWIPS II when it is delivered, and to prepare for the future of new instruments on upcoming satellites.