EAS SUPPORT

NVerzion's CloudNine and NFinity Video Servers support transmissions from the Emergency Alert System, decoding and playing them out according to federal regulations. Established in 1997, the EAS was designed to allow government agencies to quickly broadcast an urgent message throughout a specific region.

Two radio stations in each market are required to retransmit EAS signals, providing redundancy in the event of a disaster. Through an interface with an external DASDEC (Digital Alert Systems Decoder/Encoder), NVerzion video servers support three message types: EASTest, EASAmber, and EASEmergency.

These messages are transmitted across radio waves as audio. The DASDEC monitors the audio channels for a SAME (Specific Area Message Encoding) header. Since there are no data levels in the radio waves, the SAM E header generates a distinct tone that most Americans will recognize from tests of the Emergency Broadcast System. The header is followed by an attention signal, an audio announcement, and a stop code. When DASDEC hears the signal, it deciphers the message and sends an IP message to the server's Coder application.

DASDEC initiates communication with the Coder application over a known port. The Coder determines what type of message has been sent, interprets it, then sends the message information with the rest of the audio to a designated shared subdirectory. The Coder application then sends an IP message to the video server telling it to play out the new message.

When a message is received, the server plays a text crawl from the decoded header with the full radio signal, including the header and alert tone. The server will play one of three different effects, changing the crawl's background color to indicate severity.

Putting it all together, when the server receives a message from the Coder, it builds a crawl with the specified text, and olays the crawl. It reads the audio wave file and plays it out over channels 1 and 2. The server will always send the entire message as soon as it gets a signal.