

National Weather Service Product Description Document (PDD) NOAA Weather Radio Podcasts

Part I – Mission Connection

a. Product Description:

The NWS is responsible to make its weather, water and climate information widely available to taxpayers using commonly accepted standards and technologies. Currently the NWS provides audio broadcasts of their NOAA Weather Radio via the Internet only in a limited fashion.

The VIP(voice improvement processor) on the NWR(NOAA Weather Radio) is able to convert these audio files into mp3 files. Southern and Western Region NWS offices are now testing the transfer of NWR files to the internet. In addition to making the mp3 file more accessible, we are placing links to the mp3 files in Really Simple Syndication (RSS) files, making them accessible through podcasting.

Anyone with an mp3 player and podcasting or RSS reader software can receive a suite of weather products from Southern and Western Region NWS offices participating in this test.

b. Product Type - Experimental

c. Purpose/Intended Use:

The purpose of the podcasts is to provide NWR products and weather information to those people who either don't have a weather radio or don't live close enough to an NWR transmission tower. In addition, podcasting allows people listen to the broadcast on their own time. Someone could have the podcast software automatically download the latest forecast. Then as he or she leaves home they grab their mp3 player and are able to listen to the forecast on their way to work. Or they can subscribe to the Watch/Warning suite and when a Watch or Warning product is issued for their subscribed area, it would be downloaded and played immediately.

d. Audience:

This service is intended for anyone who would want audio access to the current conditions, forecasts or climate statements. The podcasts are available to anyone with a computer connected to the Internet and have the ability to play mp3 files either directly on their computer or download the mp3 files to a portable mp3 player.

e. Presentation Format:

The actual podcasts are in the commonly accepted audio format of mp3. Most desktop computers can play mp3 files. In addition some stand alone mp3 players are on the market and just recently cell phones and car radios are being sold that can play mp3 files.

To subscribe to a podcast a person would access the RSS (really just a simple XML file) file via some podcasting software. There are several podcast client and/or RSS feed reader software that is freely available via the Internet. Once the person has subscribed to the RSS feed, the podcasting or RSS reader software will periodically check for new podcasts and downloads them to the computer and/or mp3 player. For example someone could subscribe to the Phoenix zone forecast product. The podcasting software could be set up to check for a new forecast and when one is found it is immediately downloaded to the person's computer or mp3 player and is ready to be listened to the next time the person uses their computer or mp3 player.

f. Feedback Method:

We always are looking for positive or negative feedback on this product. Comments regarding the podcast will be emailed to the National Weather Service Phoenix webmaster at:

w-psr.Webmaster@noaa.gov

g. Example – <http://www.wrh.noaa.gov/psr/broadcast/podcast.php>

h. PDD Approved by Vickie Nadolski, Director, Western Region

Part II – Technical

a. Format and Science Basis:

The mp3 files for the podcasts will be generated with the VIP program on the NWR CRS and then transferred to LDAD (Local Data Acquisition and Dissemination). These mp3 files are products that are already broadcast and available over the NOAA Weather Radio for each station or local area. Once on LDAD a perl script will take the mp3 file, give it a unique file name based on the product and time the mp3 was created. The script then writes the XML file for that product and adds the file information to a master file (bsuite.file). The bsuite.file is then used to generate a broadcast suite and a watchwarn suite XML file along with all the other files that are included in the suite files. These XML files along with the mp3 file are then sent up to the web server.

A set of php scripts on the web server builds the podcast/mp3 tables for each transmitter (site) on the fly from the suite files and serves out the RSS and MP3 files to the public.

The php scripts create the broadcast and watchwarn suite and also each of the products available as a RSS feed file by parsing through each suite file. The design was to allow the users to subscribe to either the broadcast suite or the watchwarn suite. It also allows the users to subscribe to any single product within each suite. It creates a RSS link for all products that the NWS office chooses to provide and the mp3 file if it is current.

b. Availability:

This service will be available 24 hours a day, seven days a week at test sites. Selection of forecasts, daily climate statements, hourly weather roundups, synopsis and watch/warning products might differ from site to site during this test. Each site can configure which products they process by adapting their configuration file to suite their needs.