NAWIPS 7.0.0 Release Notes

Product Release Information

- **Product:** NAWIPS
- **Release Number:** 7.0.0
- **Release Date:** 12 Nov 2013

Introduction

This document contains the release notes for NAWIPS, version 7.0.0. The following sections describe the release in detail and provide late-breaking or other information that supplements the main documentation.

This is a major release with bug fixes, table updates and a few modifications, which are outlined below.

What's New

1. Added new DA library that requests data from AWIPS II EDEX using python scripts. The DA library packages information into a form required by the DM library and makes the database information look like a standard GEMPAK data file.
   a. Programs that list or display data from GDFILE, SFFILE, and SNFILE can now retrieve data from AWIPS II.
   b. Currently supported values for parameters GDFILE, SFFILE, and SNFILE can be found in datatype.tbl in the "AWIPS Database" section.
2. Modified the missing data check in the neighborhood min/max functions. This work provided by Chris Melick, SPC
3. Allowed the Synoptic data decoder to optionally produce 1-hour data intervals.
4. Removed the check that filtered out eastern and central pacific storms when decoding tropical cyclone advisory bulletins issued by JTWC.
5. Updates and fixes were made to the XML-to-VGF and VGF-to-XML converters
6. Added check to correctly encode small data values in GRIB2 format.
7. Added more GRIB center ids to the time check for the analysis time or the zero-hour forecast.
8. Fixed improperly clipped hash marks and wind barbs from jets. This work was done by L. Hinson, AWC.
9. Moved the error, help, parm, and pdf files from AWC contributed source to the proper common locations.
10. Fixed bug that prevented saving ATCF data settings to an SPF file.
11. Added default values for the SKIP, FILTER, and IJSKIP parameters to baseline NMAP restore files.
12. Fixed problem with gptcww's smoothed track and cone for storms that dissipate before day 3.
13. Changed AWC's program to create G-AIRMET BUFR messages using BUFR table version 13.

14. Modified the convective sigmet decoder to correctly decode isolated thunderstorm convective SIGMETs containing 'VCNTY' followed by the VOR station. This work provided by L. Hinson, AWC
15. Fixed a problem where long tropical cyclone breakpoint names were being incorrectly truncated.
16. Fixed the interpolation of climatological sounding data when it is used in the Cloud Height algorithm.

17. Maps and Tables
    a. Added missing color lut files to enhance.tbl for NMAP.
    b. Updated tables used in AIRMET creation with changes provided by AWC including changing JAN to MHZ.
    c. Added Ice Growth Rate (ICEG) to the gempak GRIB2 parameter tables.
    d. Updated tables used in convective watches with changes provided by SPC.
    e. Defined ARINC as center 56 in the version 5 table for the melBUFR library.
    f. Updated information about 8 upper air stations in the Caribbean.

List of Modified Tables

- $GEMTBL/luts/enhance.tbl
- $GEMTBL/melbufr/B3M-000-005-0
- $GEMTBL/grid/grdnav.tbl
- $GEMTBL/config/datatype.tbl
- $GEMTBL/grid/g2varswmo2.tbl, g2varswmo3.tbl
- $GEMTBL/data-access/*.xml
- $GEMTBL/stns/snstns.tbl
- $GEMTBL/stns/snap.tbl
- $GEMTBL/stns/vors.tbl
- $GEMTBL/stns/permclust.tbl
- $GEMTBL/stns/spcwatch.tbl
- $GEMTBL/stns/tcabkpt.tbl

List of Modified Maps

- none

Installation Notes

Download Site

The distribution may be found at http://www.nco.ncep.noaa.gov/sib/nawips. This Release Notes document is also available at this web site. The link to the download page is located at the bottom of the page. A user id and password are required to access the download area. This will be provided to site administrators via a phone call.

Installation

After getting the necessary compressed tar file from the distribution page, unpack the tar file in your NAWIPS user directory. Please note that the "dot files" have been moved to subdirectories. The sample .cshrc and .profile files are in the sample_files/ subdirectory and show the proper use and locations for these files. Update all users' .cshrc or .profile as needed.

Build the entire system as follows:

- cd $GEMPAK/build
- external_libs_compile >&! EXTERNAL_BUILD_$NA_OS
- cd $NAWIPS
- make all >&! MAKE_ALL_$NA_OS
- make link >&! MAKE_LINK_$NA_OS
- cd $GEMPAK/utilities/a2conv
- make >&! A2CONV_MAKE_$NA_OS

Repeat this process for each operating system.

System Requirements

The software has been built and tested on the following operating systems:

- Red Hat Enterprise Linux 5 (32 bit)
- Red Hat Enterprise Linux 5 (64 bit)
- Red Hat Enterprise Linux 6 (32 bit)
- Red Hat Enterprise Linux 6 (64 bit)

Suggested Installation for the AWIPS Environment

The following configuration is used on NTBN, OPCN and HPCN. It allows for easy updating, but does require a separate user account to store the NAWIPS/GEMPAK tables, libraries and binaries.

1. If it does not exist, create a user account named "gempak". Log into the "gempak" account.
2. Get the source tar file from the download web site above and transfer it to the AWIPS system.
3. Sample .cshrc and .profile files may also be found on the download site.
4. Make a directory for the current release (i.e., mkdir v7.0.0) in $HOME.
5. Go to the release directory and unpack the source tar file.
6. Follow the build instructions above.

The current data flow paradigm for the AWIPS does not provide for creating or transferring GEMPAK files to the AWIPS system. Therefore, all of the data-related environment variables will not be used. Any data access, while on an AWIPS system, will be through the database. Sample entries for the data types are in $GEMTBL/config/datatype.tbl and the XML control files are in $GEMTBL/data-access/*.xml.