

# AWIPS OB7.1: Final Release Notes

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## 1.0 D2D/TEXT/OTHER APPLICATIONS

The following Discrepancy Reports (DR) have been fixed in AWIPS OB7.1.

### 1.1 Color Curve/Blinking/Image Combination

#### **Problem. 'Initializing D2D' window has a font problem.**

The 'Initializing D2D' launch window had blurry font for 'Display Two Dimensional'. (DR 17060)

#### **Problem. Test Mode Control GUIs or banners covered by D-2D or other AWIPS applications.**

Previously, in OB7, the Test Mode Control GUIs, banners (3 on lx and 1 on xt machines) pop down behind AWIPS applications (e.g., D-2D). The users will not be able to see the banner, which will indicate test/practice/operation mode is in-effect. (DR 17528)

### 1.2 Looping/Sampling/Swapping Panes/Zooming

#### **Problem. Text Window from the D2D Tools menu launches with font and sizing problems.**

Previously, text Window from the D2D Tools menu launched with font problems. Also, the text entry area did not match up with the window. (DR 17061)

#### **Problem. Problems with cities map on D2D.**

When the cities.lpi file was created after a localization, the D2D would display all the cities at once; there was no density restriction. Again, the cities.lpi was observed with localizing with the default file /awips/fxa/data/CitiesInfo.txt. This was observed at the WFO. State and Regional scales were similar, but the cities would not appear until zooming occurred.

When the CCC-LocalCitiesInfo.txt was in place in customFiles, the density issue did not occur. However, the area of the cities map was much smaller. Both these issues were observed on lx5-tbw3 with EAX localizations. (DR 17759)

#### **Problem. Hurricane strike probability menus display old data.**

Under the D2D Menu - NCEP/Hydro - Hurricane - 12hr and 24hr strike should be looking for PWSAT(1-5), not the old discontinued products or removed from the menu. (DR 17560)

#### **Problem. Spell checker error in text window**

Previously, in the D-2D/TextWS text window, the spell checker does not work on TBW3 and TBDW. It popped up the following error message:

Error: error writing "file31": broken pipe

This is not occurring on TBW4 or TBDR. The file name could change (i.e., file25). (DR 17570)

**Problem. Data Ingest Restart GUI need to be updated.**

Data Ingest GUI was updated for all options shown on GUI and comments. Every option was updated because of process movements in OB7.1. (DR 17336)

**Problem. Focus returned to main application: apps launched within D2D open up behind D2D.**

Previously, when opening up a new window, such as the Volume Browser or procedures, it will open up on a layer beneath D2D over the desktop. Basically, it frequently opens up behind D2D and it appears at first that it never opened. (DR 17133)

**Problem. Put Home Cursor tool not working properly (Ref DR 17045)**

Previously, when you changed the location of the home cursor, the cursor no longer moved to the new home location. In RHE4 you need to close the tool and reopen it for the change to take effect. (DR 16981)

Toggling OFF the Sample Cloud Heights SKEW-T tool cause[d] the large pane to crash and restart. To re-create the crash:

Load the IR Window Sat product.

From the Large Pane pop-up menu (press and hold the right mouse button).

Turn on Sampling.

Select Sample Cloud Heights/ETA.

Toggle ON Sample Cloud Heights/SKEW-T.

Now Toggle OFF Sample Cloud Heights/SKEW-T.

This problem was only found when logged on using KDE. There is no such problem when using GNOME. A workaround was implemented with DR16329 to ignore the exceptions fired by closing the skew-t window. This DR will track the problem for a future fix. (DR 16843)

**Problem. DMD: replace variable names 2d\_lat/2d\_lon with lat\_d2 and lon\_2d**

In the new version of the DMD product, there are two fields, 2d\_lat and 2d\_lon. NetCDF does not allow variable names that start with a digit. A capability was built in to replace the variable names 2d\_lat/2d\_lon with lat\_2d and lon\_2d. When a major modification to the storage of the DMD product (DR 16856 - Improve the performance of the DMD product display when the volume scan changes) was made, the developer undid this transformation. So an error message resulted. This only occurred with the version 1 data. (DR 17754)

**Problem. DMD data missing for lower scans until about the third scan**

To view these issues, load an all-tilts and both DMDs. Examine both DMD displays when the all-tilts indicates a new volume scan. The SCAN DMD would exhibit the following behavior:

- The data in the DMD table would disappear.
- All tilt indicators would show an elevation of -999.9.

- All DMD icons disappeared.

The Dig DMD would not do anything. It would continue to display the latest information from the previous volume scan (usually tilt 14). Screen capture 1.jpg shows this.

Once the 0.5 tilt was loaded in all-tilts, the DMD's would show the following:

- Scan DMD icons would reappear.
- Dig DMD icons would reappear.
- Both had much of the table data missing.
- The SCAN DMD table would show many white squares with N/A and 999 values.
- The Dig DMD would show ---.

Screen capture 2.jpg shows this.

Once the DMDs reached the 2.4 tilt, all data would reappear and everything appeared to be back to normal. Screen capture 3.jpg shows this. (DR 17169)

**Problem. Improve the performance of the DMD product display when the volume scan changes.**

Previously, the 0.5 degree elevation takes so long to be updated that it does not appear to display. (DR 16856)

**Problem. Auto load can result in a blank frame - file not found, or cannot be read (Ref DRs 17169 & 17188).**

Previously, when a decoder, running on one machine, finished writing out a data file to the NAS, it sent a notification to the notificationServer. The notificationServer then sent a notification to any IGC\_Processes that were displaying the product. Sometimes, the IGC\_Process, running on a different machine than the decoder, could not find the file, resulting in a blank frame and a logProblem message saying that file could not be found.

This was due to an NFS delay. The workstation the IGC is running on has not had its NFS cache updated by the time the IGC tries to read the file. (DR 17416)

**Problem. Menu post titles incorrect.**

The menu names in the right click menu post were different than what they were in OB6 and was fixed. This involved the editing the kde template file. (DR 17378)

### 1.3 Climate

**Problem. Initialize Climate Database missing data.**

Previously, Initialize Climate Database is not storing data for any station on TBW3. Only local data was stored on TBW4 and TBDW. (DR 17437)

**Problem. Climate does not process multiple METARs in a nominal hour.**

The file build\_daily\_obs\_temp.ec in create\_climate has its own function[s] get\_pd\_metar\_max[min] which supposedly duplicates the same functionality of adapt/foundation/lib/src/utls/get\_pd\_metar\_max[min].ecpp previously used by AWIPS verification. The climate version ignores the possibility of more than one METAR valid time in a nominal hour, unlike the more complete logic of the foundation utilities. As such, climate only looks at the one METAR with the earliest valid time in the nominal hour, while most AWOS observing sites report three METARs in a nominal hour, and so climate is likely to miss the absolute max or min temperature in the 24 hour period at such stations. Not to mention the obvious code duplication between the two trees. (DR 16836)

**Problem. Average wind speed is wrong.**

Previously, if the climate program runs entirely on its own, meaning a cron initiates the process, and then after 25 minutes the climate product is stored automatically in AWIPS, the average wind speed was wrong. (DR 15946)

**Problem. Incorrect match count returned from Climate Trend GUI.**

Previously, changing search parameters did not always update results. (DR 17309)

**Problem. Max temperature, min temperature, & max precipitation times missing.**

The magnitudes of the max temperature, min temperature, and max precipitation are stated, but the data and time of those values were missing in the monthly climate report.

Matt Kensey 7/26/06: Actioned to SWIT, was originally built without being related to the SPR/DR. (DR 17171)

**Problem. Toggling OFF the Sample Cloud Heights SKEW-T tool causes the large pane to crash.**

Toggling OFF the Sample Cloud Heights SKEW-T tool cause the large pane to crash and restart.

To re-create the crash:

- Load the IR Window Sat product.

- From the Large Pane pop-up menu (press and hold the right mouse button):

  - Turn on Sampling

  - Select Sample Cloud Heights/ETA

  - Toggle ON Sample Cloud Heights/SKEW-T

  - Now Toggle OFF Sample Cloud Heights/SKEW-T

This problem is only found when logged on using KDE. There is no such problem when using GNOME. A workaround is implemented with DR16329 to ignore the exceptions fired by closing the skew-t window. This DR will keep track of the problem for a future fix. (DR 16483)

## 1.4 Radar

### **Problem. Radar Cell Display Displaced From Actual Cell Location (Ref OB6.1.2 DR 17840, OB7.2 DR 17839).**

Site DMX reported a discrepancy in its radar display during an event in early June 2006. The warning forecasters reported that the cells were displaced 3 to 5 miles to the "west" when the same echo was loaded from two different WSR-88D's. This condition can be recreated by loading a cell, which is equidistant between two different WSR-88D's. When the data is loaded, there will be a noticeable counter-clockwise displacement of about 1.5 degrees. This problem was introduced in OB6. This is fixed. **(DR 17718)**

### **Problem. Radar SCAN QPF was not updated.**

Previously, the SCAN:pghg -> QPF from pahg -> QPF .10" was not updated on TBW4. **(DR 17704)**

### **Problem. Auto load can result in a blank frame - redundant radar requests (Ref DRs 17169 & 17188).**

If two or more RPS list requests specify tilts that are too close together will cause the RPG to send the same product twice, because it will resolve them to the same product. Because of this, if the list contains products that are separated by 0.2 degrees or less, the second one will be filtered out and not sent to the RPG. When products are a little more than 0.2 degrees apart, both of them will be sent to the RPG. When the product comes in the first time it gets autoloading correctly. But, when it comes in the second time it will cause a display frame to become blank.

**Workaround:** is for sites to avoid putting multiple products in the RPS list that resolve to the same product on the RPG. **(DR 17415)**

### **Problem. CP\_Reconfigure need to update due to radar\* move from ds1 to dx2.**

The CP\_Reconfigure menu option 3 and 7 was modified due to radar function move from ds1 to dx2. The syteSwapCp.3 file also was modified. **(DR 17366)**

### **Problem. RadarStorage cannot store class 2 TDWR radar data (Ref OB6.1 DR 16915, OB7.2 DR 17290).**

If a site does not have a class 1 tdwr radar, then RadarStorage will not store any of the tdwr radar for that site. RadarStorage NEEDS to see a class1 tdwr in the radarsInUse.txt before it will store any data, otherwise, it will fail to bring in the radarDataKey.

If the data key is not found in the list of data keys generated by RadarStorage, the log file will have the following message:

"Unable to read DataAccessKey xxx from dictionary"

This appears below the line which shows the product being received, such as:

"Product /data/fxa/radar/raw/SDUS33KJKL.23000008.537 was received via the SBN"

If it worked, then you would see a line such as:

"Product was stored as /data/fxa/radar/tjua/SRM/elev1\_5/res1/level16/20060122\_2359".  
(DR 17289)

**Problem. Radar menu item labeled "radar" and not "Radar"; Volume Browser; capitalization.**

Previously, under the sources section of the Volume Browser in the Other menu, the Radar menu item was labeled "radar" and not "Radar." The other entries in the menu were all caps or at least had the first character capitalized. Also, this entry is not in alphabetical order to go with the rest of the entries in this menu. (DR 17159)

**Problem. /awips/fxa/data/orpgOTRs.txt missing.**

/awips/fxa/data/orpgOTRs.txt is missing from DX2 - it was placed in on DX1 previously. (DR 17114)

**Problem. TDWR: Internal record keeping error with TDWR All cuts request.**

Previously, within the RadarServer code, for a TDWR All cuts request, the record keeping method uses the maximum number of elevation angles instead of the actual number of cuts of the requested angle. Using an incorrect value internally will not result in products being missed or processes not getting terminated.

This fix was required for the DialServer in OB7 If the All cuts option is implemented. The DialServer code uses this value to determine when the request is satisfied. Once the request is satisfied, the ORPGReqMgr process is killed. If the incorrect value is used, the number of cuts received will almost never be more than the number of elevations and the signal to kill the ORPGReqMgr will not be triggered. (DR 16744)

**Problem. TDWR: multiple 0.6 elevation cuts are incorrectly assumed to be 0.6 long range.**

Previously, if a site had a TDWR radar that had 0.6 short range elevation cuts, it was assumed to be the 0.6 long range elevation. If you tried to display 0.6 short range elevation cuts, you would get a red banner saying no data inventory is available. Currently, PHX is the only TDWR radar that will have this problem. (DR 16743)

**Problem. Some radar status messages are too long for red banner.**

Previously, two products had text that was slightly too long for the red banner popup:

Fcst Grp MDA Strength Rank Alert Area and

Vol Grp MDA Strength Rank Alert Area. (DR 17118)

**Problem. Radar Upper Air plan view displays of the VWP not auto-updating.**

The Radar Upper Air plan view displays of the VWP did not auto-update even though the new data had arrived. The display had to be reloaded for it to update. (DR 17058)

**Problem. Nexrad Unit Status on D2D not displaying some text.**

Previously, on the Nexrad Unit Status graphic, the RPG/RDA version/build numbers did not display, nor did the list of elevation angles displaying. (DR 17057)

**Problem. Cannot do an OTR on a non-dedicated TDWR radar.**

This change was made in OB6, but was accidentally reverted out of D-2D/src/applications/radar/common/rpg-select.tcl during the transition of PVCS from NGIT to Raytheon. There was a problem with requesting TDWR radars via the One-Time Request in OB6. Whenever a request is made for TDWR products, the data comes in but the ORPGReqMgr hangs. This happened because the information needed to determine how many products to wait for had not been implemented for the TDWR radar products. The DialServer keeps track of how many products to wait for based on the request. When that number of products is received it sends an exit message to ORPGReqMgr, which causes it to die. The problem is that that number is not initialized and can be in the millions. Hence, ORPGReqMgr will not get an exit message from DialServer and thus will hang. This is a problem because no more requests can be sent out due to the hung ORPGReqMgr. Only one ORPGReqMgr can run at a time. (DR 16955)

**Problem. Radar general status message uses byte swapped numbers instead of product ID for WAN OTR products.**

The radar general status message reported a 5-digit number instead of the radar product ID for products received via the WAN OTR. (DR 17116)

**Problem. RMR problem on D2D.**

A number of problems had occurred with the OB7.1 COTS upgrade. Previously, changes to a Radar Multi-Request (RMR) request no longer automatically updates the request. You need to close the RMR application and re-open it for the change to take place. (DR 16979)

## 1.5 Text Alarms/Warnings

**Problem. Announcements do not get displayed at all.**

Previously, Announcement display failed for all the workstations at a site if the .fac.RADAR\_Announcer and .fac.SYSTEM\_Announcer files became empty. These files are found in /data/fxa/workFiles. All data entries are removed from these files when all the workstations are brought down normally – a standard situation for an upgrade. The files will then be of zero length and the announcement display will fail when the workstations are restarted. This problem was introduced when the problem of RadarMsgHandler or RadarServer crashing with a Segmentation violation was fixed for OB7.1. The fix was checked into OB7.1 under DCS 3270. The crashing problem has also been seen in OB6 - DR 17024. (DR 17045)

## 1.6 Text Workstation

**Problem. The "Set Time" tool on D2D does not change the time.**

Previously, if you pop the dialog box for Set Time, you can set the time you want, but the time displayed in the lower right corner does not turn yellow, nor does the time change to what you

were setting it to. If you close the application and exit d2d and then restart d2d, the time displayed in the lower right corner displays as yellow and reflects the time you set originally. **(DR 17074)**

## 1.7 GFE

### **Problem. Wx tool crashes GFE (Ref OB7.2 DR 17963).**

Previously, SLC and GJT are experiencing GFE "lockups" with "weather from pop" type tools. GFE also locks up with the RemoveWX tool. Site had to shut down the computer or log in remotely and kill the GFE process to restart GFE. Sometimes these problems seem to be related to using an edit area when running the Wx\_from\_Pop tools, but not always and not so much with the removewx tool. Forecasters have reported that, "If I run the tool without an edit area on a new grid first, then I can use edit areas with the tool." IForecaster at GJT report many tools are "slow" with 7.1 but SLC is fine except for the weather tools.

SLC started seeing a new type of error pop up the last few days as I have been experimenting. SLC called GJT and they were able to repeat a slight variation of this error. If "coverage" and "stratiform" is chosen a python error window pops up with messages like:

```
Bad Weather Key in storeNumericGrid: Areas:S:-::
```

If you use the Wx "Set Pickup Value" GUI - Areas is not associated at all with precipitation weather. Areas is for non-precipitation weather like F or BS.

SLC has also seen these errors pop up in the python window:

```
Bad Weather Key in storeNumericGrid: Iso:R:-::
```

Additionally, remove obsolete files from IFPS-OB7.1 so they are not delivered in the release tar.

```
gfe/OB7.1b_RHE3_GFESuite_CORE.tgz
```

```
gfeTopo/OB7.1b_GFESuite_TOPO.tgz
```

```
gfeClimo/OB7.1b_GFESuite_CLIMO.tgz
```

```
gfeMaps/OB7.1b_GFESuite_MAPS.tgz
```

```
*/*_OB7.1ab.html (DR 17955)
```

### **Problem. Live data unavailable for all data model on TBW3, TBW4 and TBDW for GFE testing.**

Previously, live data unavailable to use for all data model on TBW3, TBW4 and TBDW for GFE testing. All the raw data pile up on the queue, and decoder unable to process it on the normal time. **(DR 17691)**

**Problem. FormatterLauncher: text product tab color error using Local processor.**

Previously, when running text formatters with the "Local" Processor setting in the latest build, the text product tab color bug occurred. (DR 16906)

**Problem. EditAreaUtils: createLatLonArea fix.**

EditAreaUtils: createLatLonArea was fixed to make sure we have at least one grid point and to handle a lat/lon where we want only one grid point. (DR 16897)

**Problem. Baseline test cases failed during the failover from dx4 to dx3 at TBW3.**

Previously, unable to copy all the grids from the populate menu in the GFE gui during and after the failover from dx3 to dx4 at TBW3 platform. No lives data available to use (ex: GFS40 and NAM12). The data did not get transfer or copy to the GFE archives directory during and after the failover. (DR 17577)

**Problem. ScalarPhrases: "no snow accumulation" when blowing snow reported.**

A mechanism was implemented for getting the subkeys that are actually reported from weather\_words. (DR 16896)

**Problem. VTECTable: wrong phens for FA.W, FA.Y.**

VTECTable: The 'phens' listed for FA.W and FA.Y were incorrect; they should be "FA" and not "FW." Although this has no adverse effect in the field because GFE/GHG do not use those VTEC codes, the baseline was corrected to make the change. (DR 16895)

**Problem. ifpServer crashes with HUGE text string from formatter.**

Analysis showed that ifpServer crashed when attempting to read a huge text file. The text file was from the ZFP formatter where trace was turned on. Trace is only used for special debugging and should not be used for the entire product due to megabytes of output from the formatter. Site made a mistake which caused this issue. (DR 16887)

**Problem. Infra: Eliminate redundant wording in heavyPrecip phrase (RegReq).**

combineHeavy, a method to take phrases generated by the heavyPrecip\_phrase and combine them to avoid needless redundancy, actually combined too much given certain specific and unusual occurring situations. Given the following in Wx:

6am-12pm: Ocnl T+RW+ [LgA]

12pm-3pm: Ocnl T+RWm [LgA]

3pm-6pm: Chc TRWm

The phrase generated is:

OCCASIONAL SHOWERS AND THUNDERSTORMS IN THE MORNING  
AND EARLY AFTERNOON...THEN CHANCE OF SHOWERS AND  
THUNDERSTORMS LATE IN THE AFTERNOON. STORMS MAY BE  
SEVERE WITH LARGE HAIL IN THE MORNING AND EARLY

AFTERNOON. LOCALLY HEAVY RAINFALL POSSIBLE IN THE MORNING AND EARLY AFTERNOON.

Note that the timer sub-phrase for the heavy rain phrase was wrong...it should have simply read "IN THE MORNING" (when RW+ ended). **(DR 16886)**

**Problem. Hazard\_HWO: variable name error.**

Hazard\_HWO.py line 83: refers to defaultEditAreas, which is not defined in the module. It should be self.\_defaultEditAreas. This also occurred on line 109. **(DR 16885)**

**Problem. AFD: makeHazardBlock can end up with a hazard and no zones.**

AFD's makeHazardBlock had a bug. **(DR 16884)**

**Problem. GLF: Lake zone and expire time missing**

Previously, Lake zone and expire time was missing in the baseline formatter. **(DR 16883)**

**Problem. MWS: CAN segment can't be edited.**

There were no lines of data between the segment header and the \$\$ when there is a CAN condition. The template was changed to have a dummy line like the |\* STATEMENT TEXT GOES HERE \*|. **(DR 16882)**

**Problem. "Replace all" does not work with "nocase."**

Previously, there was a very obscure bug in the 'search and replace' dialog of the GFE product editor (accessed from the edit-->replace... menu option). **(DR 16881)**

**Problem. Infra: infinite loop with checkResolution.**

Previously, Infra: infinite loop occurred with checkResolution() in the Text Formatters. **(DR 16880)**

**Problem. CFW: Overview options do not work.**

Previously, the preProcessProduct from GenericHazards had been overridden in the baseline Hazard\_NPW, Hazard\_WSW, and others to include the overview section. This override does not appear in Hazard\_CFW and so the includeOverview and includeOverviewHeadline flags were not working. **(DR 16879)**

**Problem. TCV/PlotTCVEvents - deletes existing non-tropical events.**

PlotTCVEvents correctly plotted the TCV situation, but as it does it deleted some of the existing non-tropical events in the grids. **(DR 16878)**

**Problem. StatusBar: extra line feeds appear in output.**

StatusBar was changed (in IFPS17.5) to use line feeds to allow for better output. Unfortunately, any simple messages containing a trailing line feed would cause blank lines in the output. **(DR 16877)**

**Problem. ViewWCL fails if old Utility file around.**

The architecture of ViewWCL was changed to support multiple WCLs from SPC. At some sites, the old format of the file still existed, which caused the new ViewWCL procedure to crash. **(DR 16876)**

**Problem. Duplicate Procedures in Menu.**

Previously, when a new procedure was created, it showed up twice in the menu until you the GFE was restarted. **(DR 16875)**

**Problem. Spell Checker problem (two errors in one line).**

Previously, if you had two misspellings on the same line you would get in trouble **(DR: 16874)**

**Problem. SAF\_Overrides: Double phrases: need assemblePhrases fix.**

SAF\_Overrides: Double phrases: need assemblePhrases fix. **(DR 16873)**

**Problem. HWO: currentHour bug.**

Previously, when the local time was between 12:00 a.m. and 3:00 a.m., the HWO was inadvertently advancing the day forward for the "DAYS TWO THROUGH SEVEN..." phrase. **(DR 16872)**

**Problem. FWS: Fails if a weather element is named in the Remarks section of the STQ.**

Previously, FWS failed if a weather element was named in the Remarks section of the STQ. **(DR:16871)**

**Problem. PFM: generates timezone based on office, not point location.**

Previously, the current PFM formatter output forecasts for Burns and Baker Oregon in MST/MDT, even though the time zone in effect at Burns is PST/PDT. **(DR 16870)**

**Problem. Headlines: dual time zones with same output (EST4EDT, EST) have repeated text.**

DiscretePhrase logic was changed to ensure that they don't have the same "time zone" output. **(DR 16868)**

**Problem. VTECPartners: MHX accessing ABQ.**

Previously, MHX had ABQ listed for VTEC table sharing, and it should have been AKQ. The VTECPartners file had an incorrect entry for MHX, which caused the default VTEC active table sharing requests from MHX to flow to ABQ. **(DR:16867)**

**Problem. SmartScript: getSite4Id bug.**

Previously, when running the HazardsRecovery procedure, it crashed on line 91 of the SmartScript module. Line 91 was in the getSite4ID method. **(DR 16866)**

**Problem. VTECDecoder didn't replace old record in split, CAN, NEW operation.**

The VTECDecoder previously left an old record in the VTEC active table under some conditions. This in turn, caused an incorrect action and ETN code to be formatted. The situation occurred only rarely, and required the creation of one long event, then split the event in the middle by inserting another hazard, deleting the first hazard, putting the hazard back in, deleting the first hazard, putting the hazard back in but not taking up the entire time. (DR: 16865)

**1.8 Volume Browser/Grid Products****Problem. Profiler data locks up main pane in D2D.**

Some frames of 850 and/or 925 profiler data locked up main pane. When loaded, it sometimes locks up the main pane; at other times it loads fine, but when looped, it locks up the main pane. It was common to observe it locking up on the same frame.. Once it locks the main frame (defunct IGC process), the user can simply restart dead panes to clear and unlock the main pane. (DR 17140)

**Workaround:** Once it locks the main frame (defunct IGC process), the user can simply restart dead panes to clear and unlock the main pane.

**1.9 Archiver****Problem. Archiver GUI prompts for archiver user password.**

Previously, launching any of the archiver GUI options from the system menu generated the open SSH pop-up instead of the selected GUI: "archiver @ ax's password". There is no password normally required. and the popup should not appear. (DR 17263)

**1.10 FFG****Problem. SSHP failure to acknowledge missing data; OH (Ref: OB7.2 DR 17667)**

Previously, when clicking on the missing value box in the Forecast Stage Editor & Mean Areal Potential Evaporation GUIs the information should be treated as missing and not used in the graph. In this case, both times the graph took the value of -9999. (DR 17667)

**Problem. Mosaic of FFG data in WHFS failing.**

Previously, the generate areal flash flood (GAFF) routine failed to generate areal, mosaicked headwater flash flood guidance values from the gridded flash flood guidance provided by the RFCs. As a result, flash flood guidance values were not available as input into the Site Specific application. This problem occurred in OB6, but not in OB7.1. It was related to the build environment/configuration used in OB6. (DR 17385)

**Problem. Problem in NERFC FFG Image Display**

The FFG image display for the NERFC is skewed to the south and east. The problem arose because the dimensions of the FFG array were changed from (175,227) to (180,235). This was done to accommodate an increase in the aerial coverage of their FFG display; namely, the grid

was extended to the west to incorporate all of New York state (they had been chopping off a few counties) and extended to the north to incorporate all of the St. John basin in Maine and Canada.

Accordingly, the following entry in dx1:/awips/fxa/data/localization/scripts/makeDataSups.csh has to be changed from:

```
$maksuparg 1 90 -105 0 HrapNERFCffg.sup \  
g 60 -105 41.975 -79.771 4.762 4.762 175 227
```

to:

```
$maksuparg 1 90 -105 0 HrapNERFCffg.sup \  
g 60 -105 42.057 -80.005 4.762 4.762 180 235
```

After the above change, running a "-dataSups" localization on dx1, then restarting ingest will correct the problem. (DR 16321)

### 1.11 Forecast Applications

#### **Problem. SAFESEAS does not launch from applauncher.**

The SAFESEAS applications did not launch from the system menu (applauncher). (DR 17084)

### 1.12 AVNFPS

#### **Problem. TAF Decoder fails on corrected TAFs recieved from NWSTG.**

NWS Telecommunications Gateway strips correction headers from the TAF issued by AvnFPS software. Thus when these TAF arrive back to the WFO, AvnFPS wrongly faults timestamps in the product since it cannot determine it was a corrected product. (DR 17090)

#### **Problem. Configuration GUI fails to launch.**

The Configuration GUI immediately terminated upon selection from the applauncher. (DR 17090)

#### **Problem. AvnWatch TAF GUI crashes AVNWatch.**

Selecting the TAF button in the AVN Watch GUI crashed the program. (DR 17089)

#### **Problem. When guidance indicates 'dry' thunderstorms, code to create guidance TAF text, crashes.**

During AvnFPS 3.2 testing at HQ dry thunderstorms indicated by guidance caused AvnFPS TAF Generator to crash. (DR 17047)

#### **Problem. Unable to save TWEBs under work PIL.**

During alpha testing of AvnFPS3.2, forecasters were unable to use the 'Save' feature in the TWEB editor. This feature will save the TWEB in the text database under a work 'PIL', similar

to saving TAFs (which does work). **(DR 17046)**

**Problem. Data Ingest Server (avndis) does not decode NIL convection in CCFP product.**

If CCFP product was issued with NIL convection, avndis did not put into the AvnFPS 'database'. As a result, the CCFP monitor was grayed out on AvnWatch GUI, which indicated that CCFP forecasts were missing, when in fact they were not. **(DR 17015)**

**Problem. Erroneous error message when winds are absent from TEMPO group.**

When checking a TAF with TEMPO group that has no wind group, AvnFPS syntax check would flag this as an error, when in fact it is not illegal to do this. **(DR 17014)**

**Problem. Pmw code does not forward python exceptions to \_Logger class.**

If a Python Mega Widget (PMW) encounters an error, a Pmw class provides traceback information and displays it to the forecaster, and then dispatches the error. The problem occurred because the Pmw errors were not recorded in any AvnFPS log files for diagnosis. **(DR 17013)**

### **1.13 FOG Monitor**

**Problem. Configure Monitor Area window includes very blurry font.**

From the Root menu, select Fog Monitor Apps/ Configure Monitor Area. The Fog Monitor: Monitoring Area Configuration window launches. At this point, previously, the blurry font was visible under the Monitor Area Zones and Additional Zones boxes. **(DR 17106)**

### **1.14 NWWS**

**Problem. Problems sending messages to NWWS.**

Various applications were unable to send their messages to the NWWS Scheduler and therefore the associated NWWS Simulator PC. **(DR 17361)**

### **1.15 NWRWAVES**

**Problem. NWRWAVES Warning and Error text dialog boxes look blurry.**

Previously, the NWRWAVES pop-ups included blurry warnings and error text messages. **(DR 17062)**

### **1.16 LAPS**

**Problem. Error while loading shared libraries: libpgc.so.**

LAPS images were not available in D2D; found that LAPS was not working properly. It was looking for a shared library that does not exist on the system. **(DR 17126)**

## 1.17 WarnGen

### Problem. WarnGen could create the 4th bullet twice.

For new EWW product the DR16815 was done incorrectly for the TOR template in OB6. In the logic that created the fourth bullet, in two places, a change was made as follows:

```
|item_format=[99,`][1702,county_type][2702,counties_type][599,~AND~] >
```

was changed to this:

```
|item_format=[99,`][1702,county_type][2702,counties_type][599,~AND~]|var=fourthBullet >
```

This change was made in national Data/wwa\_tor.preWWA and the -wwa task was rerun. (DR 17324)

### Problem. WarnGen: Duplicate County Names in Follow-up Headlines (Ref OB6.1 DR 17129, OB7.2 DR 17283). (DR 17282)

In the case where two counties of the same name are included in a WarnGen warning, the baseline template produces a headline with all county and state names:

```
THE NATIONAL WEATHER SERVICE IN ST LOUIS HAS ISSUED A
* SEVERE THUNDERSTORM WARNING FOR...
NORTHERN PIKE COUNTY IN NORTHEAST MISSOURI
EASTERN RALLS COUNTY IN NORTHEAST MISSOURI
SOUTHERN PIKE COUNTY IN WEST CENTRAL ILLINOIS
```

The baseline SVS template however, produces a headline with only the county names:

```
...A SEVERE THUNDERSTORM WARNING REMAINS IN EFFECT UNTIL 230 PM
CST FOR EASTERN RALLS...NORTHERN PIKE AND SOUTHERN PIKE
COUNTIES...
```

The baseline SVS headline is quite confusing concerning the duplicate county names. There are 6 pairs of such counties that are adjacent. There are an additional 22 sets of duplicate counties that are within 50 miles of each other.

Jim Ramer said that a WarnGen template solution is possible, that is, no baseline AWIPS software logic changes are needed. The template change would affect most WarnGen land based follow-up templates. Richard May confirmed that this issue does not affect marine products. 5 templates in OB6 are affected:

- \* wwa\_svrwx\_sta\_county.preWWA (Severe Weather Statement)
- \* wwa\_flflood\_sta\_county.preWWA (Convective Flash Flood Follow-up)
- \* wwa\_flflood\_sta.preWWA (Non convective Flash Flood Follow-up)
- \* wwa\_flood\_sta.preWWA (Areal Flood Warning Follow-up)
- \* wwa\_flood\_adv\_sta.preWWA (Areal Flood Advisory Follow-up)

**Workaround:** Additional manual steps are needed to complete DR 17282 (OB7.1 WarnGen: Duplicate County Names in Followup Headlines).

**Problem. In the case where two counties of the same name are included in a WarnGen warning, the baseline template produces a headline with all county and state names:**

**THE NATIONAL WEATHER SERVICE IN ST LOUIS HAS ISSUED A  
\* SEVERE THUNDERSTORM WARNING FOR...  
NORTHERN PIKE COUNTY IN NORTHEAST MISSOURI  
EASTERN RALLS COUNTY IN NORTHEAST MISSOURI  
SOUTHERN PIKE COUNTY IN WEST CENTRAL ILLINOIS**

**The baseline SVS template however, produces a headline with only the county names:**

**...A SEVERE THUNDERSTORM WARNING REMAINS IN EFFECT UNTIL 230  
PM CST  
FOR EASTERN RALLS...NORTHERN PIKE AND SOUTHERN PIKE  
COUNTIES...**

The baseline SVS headline is quite confusing concerning the duplicate county names. There are 6 pairs of such counties that are adjacent. There are an additional 22 sets of duplicate counties that are within 50 miles of each other.

To correct this problem, sites will need to make an additional manual change adding a /data/fxa/nationalData/dupCounties.txt file.

Using LSX as an example, place the following information in the file, /data/fxa/nationalData/dupCounties.txt where the include\_text fields are the FIPS county code of the duplicate counties.

```
|file=wwa_counties |output_field=3 |include_field=3 |include_text=MOC163  
|file=wwa_counties |output_field=3 |include_field=3 |include_text=ILC149
```

As user fxa, run a WS localization on each workstation:

```
from /awips/fxa/data/localization/scripts run:  
./mainScript.csh -wwa
```

Try this on one workstation and test the change. If everything looks ok, localize the rest of the workstations. To test, use practice mode and create an SVR using WarnGen that crosses the two counties with the same name in different states. Issue a follow-up (SVS). Observed the created text on the text workstation and check that it properly and clearly lists the two counties with the same name and what state they are in.

**Problem. bowtie warning created and viewed on D2D.**

A simple polygon with six vertices was created ahead of a storm cell with WarnGen. The polygon was used to create a local warning with WarnGen. When the local warning boundary was viewed on D2D, it looked like a skewed bowtie. Images of this event are available, as well as the warning. **(DR 17134)**

## 1.18 Other

### Problem. makeGridKeyTables could seg fault.

If one issues these commands on an default AWIPS OB7.1 system:

```
cd $FXA_HOME/data/localizationDataSets/$FXA_LOCAL_SITE grep 3028613968
gridDepictKeys.txt
```

you will discover that some of the text in that key entry is junk.

```
3028613968|0||||CPCOutlook Precip Probabilities
Img\ufffd\ufffd0\ufffd(\ufffd\ufffd\ufffdb\ufffd:9105874| || |
```

the stuff after the product title and before the :9105874 is the junk, your actual junk may vary.

The cause is this part of makeGridKeyTables.C:

```
// Get the scales valid for the source.
char scaleIndicies[100];
for (s=j=0; s<>
{
if (!depictSrc->scaleOK(s)) continue;
if (j==0)
sprintf(scaleIndicies,"%d",s);
else
sprintf(scaleIndicies+j,"%d",s);
j += strlen(scaleIndicies+j);
}
```

to account for the fact that some sources have no displayable scales associated with them, this line needs to be added after the declaration of scaleIndicies:

```
*scaleIndicies = '\0';
```

To complete the implementation, the makeGridKeyTables executable was rebuilt and reinstalled. **(DR 17295)**

### Problem. FFMP: VGBs retrieval failure when hydro-database ported into Postgres.

FFMP uses Virtual Gage Basins (VGB) as very important data source for user to compare the gage precip data with radar estimation. But when the hydrology database was ported into "Postgres" from "Informix" for OB6, the "postgres" hydro database was not created in any of the development system. So the testing of the VGBs inclusion in FFMP application could not be done. **(DR 16958)**

**Problem. The NWEM formatter does not correctly handle January product creation times in HazCollect messages.**

The NWEM formatter has a problem parsing the issue date/time from HazCollect messages for the month of January. In the issue time string, the month is preceded by a space (' JAN '), but the NWEM code is looking for 'JAN ', without the leading space. The result is that the date and the day (Monday, Tuesday, etc) are formatted incorrectly in the messages that are sent to the NWR. The problem only exists for the month of January, so this problem will not show up in the field until Jan. 2007. (DR 16945)

**Problem. HazCollect needs to handle duplicate products stored in the Text Database.**

The HazCollect software does not handle duplicate products stored in the Text Database correctly. The logic for handling products with the same PIL, but different WMO headers does not work if duplicate products are encountered. The HazCollect products are all warnings, and the Text Database software should filter out any duplicates. However, HazCollect should handle the products correctly, in case duplicates get into the database. (DR 16861)

**Problem. New text product acquisition into AWIPS**

Request acquisition and retention of text messages called Collaborative Convective Forecast Products (CCFP) issued as needed by Aviation Weather Center. These products are used as another new form of guidance to aviation forecaster using AvnFPS to monitor their TAFs and Twebs. More details can be found here:

<http://aviationweather.gov/products/ccfp> (DR 16934)

**Problem. HandleOUP.pl failed to block product transmission to NCF/WAN using WMO id.**

Previously, handleOUP.pl failed to block product transmission to NCF/WAN even though the product is listed in the WAN\_exclude\_LWX.txt file as WMO id. (DR 16977)

**Problem. FFMPprocessor crashes.**

Due to a recent change to the FFMPprocessor, when a DHR product is received, the process crashes, and eventually hits the max restart limit and quits. This is not observed at BCQ but that is a separate issue because they do not have the same version of FFMPprocessor. (DR 17674)

**Problem. Sluggish display performance.**

The fix for DR 16530 broke FFMP a bit, in that it yielded significantly reduced performance in the FFMP display. (WES folks noticed an approximate increase of 500%.) (DR 16921)

**Problem. Time-syncing CRS to AWIPS.**

Previously, CRS (NWR) used the unix rdate command to time-sync with the HP DS "time" service at each field site. CRS cannot use ntpdate since there is an ntp incompatibility between the CRS Unixware clients and the ntp servers running on the AWIPS servers at each AWIPS site. (DR 16912)

**Problem. WAN OTR Link Hung in Connect State.**

When a WAN OTR for a CFC product was made, a product response message of "Avail Next Scan" and the requested product was received. However, the link stayed connected until the RPG disconnected it one hour later. During this hour, OTRs could not be issued to any other radar and no other user could get product from the RPG on that port. (DR 16911)

**2.0 WARNING ADVISORY (WWA)**

The following Discrepancy Reports (DR) have been fixed in AWIPS OB7.1.

**Problem. NWS legal counsel advised that the flash flood CTA for vehicles caught in flood water change to focus on avoiding flood dangers.**

NWS legal counsel advised that the flash flood CTA for vehicles caught in flood water be changed to focus on avoiding flood dangers and not include instructions on escaping from the vehicle.

This affects three OB6 FFW templates:

wwa\_ffw.preWWA  
wwa\_ffw\_svr.preWWA  
wwa\_fflood\_sta\_county.preWWA

Here is the CTA in question.

Old format:

```
{=VEHICLES CAUGHT IN RISING WATER= Do not drive into water... |  
DO NOT DRIVE YOUR VEHICLE INTO AREAS WHERE THE WATER  
COVERS THE ROADWAY. THE WATER DEPTH MAY BE TOO GREAT TO  
ALLOW YOUR CAR TO CROSS SAFELY. VEHICLES CAUGHT IN RISING  
WATER SHOULD BE ABANDONED QUICKLY. MOVE TO HIGHER  
GROUND.
```

New format (deleting the following sentence - VEHICLES CAUGHT IN RISING WATER SHOULD BE ABANDONED QUICKLY.):

```
{=VEHICLES CAUGHT IN RISING WATER= Do not drive into water... |  
DO NOT DRIVE YOUR VEHICLE INTO AREAS WHERE THE WATER  
COVERS THE ROADWAY. THE WATER DEPTH MAY BE TOO  
GREAT TO ALLOW YOUR CAR TO CROSS SAFELY. MOVE TO  
HIGHER GROUND}. (DR 17280)
```

**3.0 HYDROLOGY**

The following Discrepancy Reports (DR) have been fixed in AWIPS OB7.1.

**Problem. RiverPro product data format precision error.**

Previously, user-specified formats such as F5.1 were converted improperly, resulting in numeric data in the output product having not enough precision. **(DR 17793)**

**Problem. VTEC OTE corrections.**

Previously, there have been discoveries of critical issues during the ongoing hydro\_VTEC OTE. The OTE is conducted using OB7.1 code configured to operate in an OB6 environment. This DR addresses the issues:

- a) service backup failing: In order to support service backup in the VTEC era, RiverPro transmits data packets to supporting offices so that they would have the necessary product info in the event that they had to provide service backup. The receipt of these WAN data sets is via the MHS, hosted on the DS. The posting of the data is into PostGres, which is not available from the DS. The existing receive script needs to be separated into two scripts - the original script for invocation from MHS, which is modified to call the new script on the PX1f, which has access to PostGres. .
- b) h-vtec rise-above and fall-below times not correct when flooding occurs over more than 2-3 days.
- c) the associated river monitoring capability may not monitor the current event (it can monitor an old event) if there are multiple events for the same forecast point. **(DR 17733)**

**Problem. /awips/ops/data/mc/postgres.dx1apps.cron vacuum entry needs changing for hydro databases.**

BCQ's /data/db/ihfs database disk partition was not being vacuumed as the crontab has hard-coded into it a vacuum command for the ob6 database.

```

15 # vacuum/analyze hd_ob6${FXA_INGEST_SITE}
16 #
17 00 00,04,08,12,16,20 * * * . ${FXA_HOME:=~fxa}/readenv.sh;
   /awips/ops/bin/vacuum_pgdb -d hd_ob6$(echo $FXA_INGEST_SITE | tr "[A-Z]" "[a-z]") -z

```

Numbers in the lefthand column are line numbers. The hd\_ob6 needs to be changed to hd\_ob7 to reflect the database name change done in OB7.1 install. Also, line 34 needs to be changed to reflect this change (vacuum/analyze all other databases). **(DR 17637)**

**Problem. P3 Triangles Utility Crashes.**

The create P3 triangles utility crashes when run at offices with MPE forecast areas containing more than 54000 HRAP grid bins. This is because of a hard-coded array index which can easily be exceeded at some of the larger RFCs. **(DR 17600)**

**Problem. HF 7.1 GagePP does not process 60 Minute Precip Reports.**

ShedDecoder was modified in DR17442 to send 60 minute precipitation reports to GagePP. However, GagePP does not recognize 60 minute precip reports and does not place them into the HourlyPP table. GagePP needs to be modified to recognize and process 60 minute precip reports. (DR 17599)

**Problem. RIverPro H-VTEC crest time tracking deficiency.**

In OB7.1, RiverPro was modified to track the type-source code used for the H-VTEC times. However, in order to track the times as the VTEC events are issued, the actual crest/max value was needed in order to know whether a new crest/max is higher than the prior event's crest. (DR 17389)

**Problem. RiverPro times invalid for discharge based locations. (Dup OB6.1 17152).**

An option exists in RiverPro to base all hydro data operations on discharge, rather than stage, data. This is used only at a limited number of stations around the country. RiverPro processing for the H-VTEC times and the P-VTEC event end time are not defined for these stations.

This has already been fixed. (DR 17387)

**Problem. RiverPro VTEC UGC expire time can be in past.**

For VTEC coding by RiverPro, the UGC expire time at the beginning of each segment can be in the past if the fall below flood time is in the past, or more typically, it can be less than an hour in the future, if the fall below time is less than an hour from the current time. The expire time should not be less than an hour or in the past, unless the product is a CANCEL or EXPIRE. (DR 17564)

**Problem. Point Data Control GUI, Type/Source button crashes Hydroview.**

Point Data Control GUI can be launched from the Hydroview application under the MapData menu options. In the Point Data Control GUI, below Filtering there is a button named Type/Source. Previously, once this button was clicked, both Point Data Control GUI and Hydroview GUI crashed. (DR 17486)

**Problem. VTEC UGC expire time can be in past.**

For VTEC coding by RiverPro, the UGC expire time at the beginning of each segment can be in the past if the fall below flood time is in the past, or more typically, it can be less than an hour in the future, if the fall below time is less than an hour from the current time. The expire time should not be less than an hour or in the past, unless the product is a CANCEL or EXPIRE. (DR 17564)

**Problem. Infinite loop started with HydroView; application hangs.**

When a user launches the Point Data Control GUI (HydroView: MapData > Point Data Control) and selects Data Source in the Filter section of the GUI, an infinite loop is started. Previously, when an infinite loop was started in HydroView, it caused the application to hang and was forced to be killed by user. (DR 17148)

**Problem. SSHP Site Specific does not launch.**

Previously, Site Specific did not launch from the system menu on the desktop or the Hydro submenu of NCEP/Hydro on D2D. **(DR 17077)**

**Problem. Hurricane position product button and depict keys do not match.**

D2D menu - NCEP/Hydro - Hurricane - Position Update shows --.---

and/or ????? for all 3 entries (Atlantic, E Pacific, and C Pacific).

Looking at the dataMenus.txt file it appears as if those are pointing to productKeys (6520, 6521, 6522) when in fact the DepictKeys indicate that the correct productKeys are 6515, 6520, and 6525. dataMenus.txt needs to be corrected so that it looks for the correct productKeys. The correct productKey for TCEAT1 (Atlantic) is 6515."

This was a site configuration issue. The baseline natlTextDepictKeys.template has the expected 6520, 6521, 6522 values. **(DR 17561)**

**Problem. Hydrology menu references OB6 applications.**

Previously, the Hydrology submenu under the NCEP/Hydro menu in D2D accessed OB6 programs instead of OB7.1. **(DR 17053)**

**Problem. HydroBase Shefdecode restart feature fails on ssh.**

Previously, the ssh connection to start the shef on the dx failed because the token was set to dx (not dx1f). **(DR 16763)**

**Problem. Can not get prints after selecting Print Image option.**

Previously, cannot receive the prints after selecting Print Image from the File submenu in the HydroView window on TBDW platform. **(DR 18008)**

**Problem. Add database stores for LowWater impacts and OfficeNotes info.**

This changes involves the addition of two new tables for storing LowWater and OfficeNotes info, requested by the Central Region and Eastern Region, respectively. No data for these tables will be provided. Also no interface will be provided in OB7.1 for this information. Their presence will allow local apps in OB7.1 and future OB7.2 national apps to populate this info. **(DR 16938)**

**Problem. Add ability to explicitly defined flow/stages for RiverPro impacts.**

Impact statements are phrases inserted into Riverpro products. They historically are based on a corresponding stage value. In a recent build, the ability to base impacts on a flow value was added, as per the Western Region request. However, the solution was awkward in that the method for associated impacts with a flow value was indirect. The change involves adding a field to the hydrologic database (Floodstmt) table to explicitly define the impact statement as being for a stage or flow value. The HydroBase application which manages this table, and the Riverpro application, which uses this table had minor changes to adapt to this new impact identification method. **(DR 16937)**

**Problem. Need ability to perform lower/limit alert/alarm checks.**

In order to support drought management needs, the Central Region requested that the ability to check whether ingested data is below a certain numerical threshold be added to the hydro data ingest processes. The shefdecode already does upper limit (exceedance) checks on data. This feature is similar, it just does lower limit checks. Lower limits are defined in the IHFS database managed by the HydroBase application,.

Data failing the lower limit check is copied to the AlertAlarmVal table, from which a separate application, report\_alarm, can prepare reports of these entries. **(DR 16936)**4.0 LOCAL DATA ACQUISITION AND DISSEMINATION (LDAD)

The following Discrepancy Reports (DR) have been fixed in AWIPS OB7.1.

**Problem. LDAD logs directory incorrectly linked.**

The /awips/ldad/logs directory on px1 and px2 (and dx1-4) was incorrectly linked to /data/logs/fxa/ldad. They should be linked to /data/logs/ldad. This was preventing many LDAD applications from being able to create log files, making it difficult to troubleshoot ldad issues. **(DR 17842)**

**Problem. ldad script change needed in px2apps.**

The location of the ldad script in px2apps was moved from /awips/fxa/bin/startLdadIngest.px2 to /awips/ldad/startLDAD.csh. **(DR 17110)**

**Problem. LDAD gauge data collection fails.**

The tell\_co process can lock up while processing a valid configuration file. This makes it impossible to use the LDAD Scheduler to collect data. **(DR 17298)**

**Problem. px2apps stop section needs ldad stop script change.**

The px2apps stop section uses the incorrect stop script for the ldad processes. It should be using /awips/ldad/bin/stopLDAD.csh. **(DR 17450)**

**Problem. LDAD data not processing.**

Previously, three problems have been identified at EHU, which are preventing ingest of LDAD data.

- 1) ls1 /ldad/.environs needs to be updated. Change LDAD\_INTERNAL\_HOST from ds to px2f.
- 2) ls1 /etc/hosts needs px2f's DMZ IP added.
- 3) gw firewall rules need to be added to allow communication through the firewall between ls1 and px1, 2 and 2f. (DR 17624)

**Problem. LDAD Internal process monitor now shows some processes down.**

Previously, the LDAD monitor used to show all 12 internal processes up for OB7.1, and with the s3 build wa showing 6 up and 6 down but the processes were running in the expected location. (DR 17264)

## 5.0 SYSTEM

### 5.1 12Planet

The following Discrepancy Reports (DR) have been fixed in AWIPS OB7.1.

**Problem. Chat client on AWIPS menu starts in Netscape.**

Previously, when starting the 12Planet client from the AWIPS pop-up menu, it started in Netscape. It was corrected to start in Mozilla in 7.1 and later builds. (DR 17751)

**Problem. Remove obsolete files from workset.**

startNotifyTextProd.dx2, startNotifyTextProd.dx4, and startNotifyTextProd.px3 scripts were removed from OB7.1 baseline. Also, the startNotifyTextProd script was brought up to date and was called in the startIngest.dx4 script. The Makefile was also changed to eliminate the removed scripts. (DR 17137)

**Problem. 12Planet: Extra window pops up indicating that user has logged off**

When 12Planet is logged out, a new window pops up indicating that the user is leaving the chat server. The user is successfully logged out, but the window is not closed. The previous functionality is that the message would pop-up in the same window. The previous functionality should be restored. (DR 17167)

**Problem. New Chat Server Client.**

New enhancements added to the existing chat server:

- 1) The ability to change font size.

- 2) The ability to change font background and foreground colors
- 3) The ability to save font size and colors as a "theme", to be remembered and restored at will.
- 4) Full time stamps.
- 5) The ability to cut, copy, and paste text.
- 6) The ability to print the chat text. **(DR 16964)**

## **5.2 GFE**

### **Problem. Hazard formatters will fail when an OB7.1 site provides service backup to an OB7.2 site.**

For DCS 3359 a new format for the Call To Actions file is provided to support the Tropical call to action. Because the format is changing, this will cause problems for OB7.1 sites that perform service backup for OB7.2 sites. This will occur for a four-month period, which is what it takes for OB7.2 to be fully deployed. This was corrected in OB7.1. **(DR 17252)**

### **Problem. GFE Gridded MOS test case fails due to no data availability**

Previously, test cases for GFE Gridded MOS requirement OB7.1-200-3 fails because the data is not available on the SBN. **(DR 17655)**

### **Problem. Live data unavailable for all data model on TBW3, TBW4 and TBDW for GFE testing.**

Earlier, live data was unavailable to use for all data model on TBW3, TBW4 and TBDW for GFE testing. All the raw data pile up on the queue, and decoder unable to process it on the normal time. **(DR 17691)**

## **5.3 Product/Process/System Monitoring**

### **Problem. pollForData.pl and routerShefEncoder were not up on px2.**

Previously, pollForData.pl and routerShefEncoder were not up on px2 in the TBW3 and TBW4. **(DR 17689)**

### **Problem. processSummary.pl was not stopped after failover.**

Previously, the processSummary.pl process was not stopped on PX2 after failing over back from px1 to px2 **(DR 17582)**

### **Problem. VIR switches were not on B after failover.**

Previously, the 8 switches were not on B from A after failover from PX1 to PX2 on (TBDW) **(DR 17581)**

**Problem. Update dsswap run commands for new architecture**

The dsswap run commands was updated to remove startup commands for LDAD, radar, and the IFPS cron, all of which moved off of the DS in OB7.1

(DR 17257)

**Problem. dx3 and dx4 should be added in the CPU monitor.**

The CPU monitor for dx3 and dx4 was added to monitor/awips.config file (DR 17230)

**Problem. dx2/dx3/dx4 disk space not being monitored.**

The same call to diskUsage.pl that is in ingest.crontab.dx1/px1/etc. needs to be added to ingest.crontab.dx2, ingest.crontab.dx3, and ingest.crontab.dx4. The latter two were overlooked in the dx3/dx4 activation for OB7.1, while the former was missed in earlier builds. (DR 17320)

**Problem. digi mux rpms need to be rebuilt for new kernel.**

With a new kernel for OB7.1, the digi mux drivers was rebuilt with this kernel's devel rpms to ensure proper function in the new kernel. (DR 17319)

**Problem. kernel 2.6.9-34.16 can lead to slab cache corruption; recalled by Red Hat.**

Red Hat notified about the potential for slab cache corruption of the hotfix kernel (2.6.9-34.16). Although the problem was discovered on x86\_64 architectures, other architectures may be affected. Typically, slab cache corruptions are serious, resulting in intermittent kernel crashes and memory leaks. Thus, Red Hat recalled the hotfix kernel and supplied an updated kernel (2.6.9-34.24). (DR 17318)

**Problem. ingProcMon.pl -DX3 not starting on failover to DX4.**

Previously, when running dx3apps on DX4, the inprocMon.pl script for the DX3 processes failed to start, so the Process Monitor reports those processes as down and running on DX3 instead of DX4. (DR 17287)

**Problem. Mozilla - unable to connect to LS1 to query External processes.**

Previously, the scripts that attempt to connect to LS1 to get the status of the external LDAD processes were not working and got a consistent red X. (DR 17262)

**Problem. System times drifting causing problems with applications.**

Previously, the system times in OB7.1 were drifting significantly between devices (10 minutes + ), causing application problems. (DR 17261)

**Problem. dx3 and dx4 disks need to be added in dataMon/disk.cfg.**

Previously, the disks on dx3 and dx4 were not in dataMon/disk.cfg file and were added for dx3/dx4 activation. (DR 17229)

**Problem. The extra startNotifyTextProd scripts should be removed from OB7.1 baseline.**

startNotifyTextProd.dx2, startNotifyTextProd.dx4, and startNotifyTextProd.px3 scripts were removed from OB7.1 baseline. Also, the startNotifyTextProd script was brought up to date and was called in the startIngest.dx4 script. The Makefile was also changed to eliminate the removed scripts. (DR 17227)

**Problem. dx2apps need to modify for \$SITE\_TYPE option (WFO/RFC)****Problem. Red Hat security patches from June 2006 scans (Ref: OB7.2 DR 17750)**

The following 5 high-risk security vulnerabilities were addressed for the quarterly security scans (quarter ending 6/06):

- STAT L1058 Isec-Tools - IKE Message Handling
- STAT L1086 Mozilla and Firefox multiple vulnerabilities
- STAT L1114 Sendmail - Address parsing
- STAT L1129 Firefox - Javascript processing
- STAT L1130 Mozilla - Javascript processing (DR 17749)

**Problem. New files created for DCS\_3328 not populated in Makefile.**

Previously, the following new files created for DCS\_3328 were not populated in Makefile: ingest.crontab.dx3, ingest.crontab.dx4, startIngest.dx3, startIngest.dx4, stopIngest.dx3, stopIngest.dx4. (DR 17226)

**Problem. RH7.2: RAX High Risk Security Vulnerabilities.**

The quarterly Harris security scans for 3/06 revealed the following high risk vulnerabilities: This has been fixed.

- L0812 CVE-2005-0750 Kernel - Multiple vulnerabilities - RHE, RH progeny
- L0935 CVE-2005-2665 Elm - 'Expires' header - RHE, RH 7.2 progeny High Risk

(DR 17359)

**Problem. Problems sending messages.**

In DR 17361 a link /var/spool/mail was rec recreated which was erased by RHEL 4u2 installation. It turned out, that there are two other links that needed to be recreated, /var/spool/mqueue and /var/spool/clientmqueue. This was accomplished. (DR 17748)

**Problem. Products Handled by routerShefEncoder are Not Being Sent on AWIPS WAN.**

Products received from AWIPS that are stored in the database via the routerShefEncoder process running on px2 are not being sent on the AWIPS WAN (e.g. LARC's). (DR 16702)

**Problem: Red Hat security patches based on March 2006 scans.**

The following 6 security vulnerabilities were addressed (based on the Harris Scans) as a result of the RHEL 4u2 upgrade:

- 1) L0975 Lynx - NNTP header handling
- 2) L0983 Wget and cURL ntlm output function error
- 3) L0985 Ethereal multiple dissector vulnerabilities
- 4) L0989 LmSensors pwnconfig symlink
- 5) L1004 Lynx - lynxcgi: URI handler
- 6) L1084 KDE JavaScript interpreter flaw. **(DR 17223)**

**Problem. ORPGCommsMgr was not killed after failover.**

Previously, ORPGCommsMgr was not killed on DX1 after failover back to DX2. **(DR 17610)**

**Problem. /awips/fxa/data/ORPGRequest missing from DX1 and DX2.**

Previously, /awips/fxa/data/ORPGRequest was missing from DX1 and DX2, so WAN OTR radar requests failed. **(DR 17115)**

**Problem. DX2:/awips/fxa/data/orpgDedicated.txt missing.**

Previously, ORPGCommsMgr would not start. As user fxa on DX2 when the startORPGCommsMgr was issued, it would fail and state that /awips/fxa/data/orpgDedicated.txt was missing. **(DR 17088)**

**Problem. Mozilla: process\_dpafiles should be monitored on DX1 not DX2.**

The hdpdecoder (process\_dpafiles) on the mozilla process monitor is listed under DX2, so it reported the process as down, when in fact it was running on DX1 **(DR 17082)**

**Problem. CPSBN needs updated file for OB7.1 Architecture.**

Since the acqservers moved from dx1f to dx3f in OB7.1, the variable DEFAULT\_HOST\_IDENTIFIER in the file /awips/data/acq\_send\_parms.sbn on both CPs was changed from dx1f to dx3f. **(DR 17052)**

**Problem. sendOtr and sendEnvData crons not activated in DX2.**

Previously, the following migrated crons from DX1 to DX2 were not activated in the current dx2 crontab:

- 1) sendOtr.sh
- 2) sendOtr.cfc.sh
- 3) sendEnvData.sh
- 4) waitUpTo.pl

This crons were inadvertently commented out by DCS\_3288 implementation. **(DR 17049)**

## 5.4 Radar System

### **Problem. ORPGReqMgr fails due to a byte ordering problem.**

For all incoming Nexrad products, ORPGReqMgr, the class2 WAN ORPG client, fails to correctly interpret the big-endian format of header's message length. All WAN-based class2 ORPG -> AWIPS transmissions fail. **(DR 17023)**

### **Problem. syncComms radar: pull in cs\_api.h when compiled on linux platforms.**

Previously, syncComms/csApi.h pulled in cs\_api\_stub.h when compiled on a linux machine. Since for OB7 and beyond, dialRadar and x25\_manager are run on dx1f, cs\_api.h was included. **(DR 17002)**

### **Problem. Freeway-related changes needed in Makefile.commonConfig.**

Previously, Protogate had delivered code that will enable the Simpact Freeway client programs dialRadar and x25\_manager to be run from a Linux system. The Freeway library path and the Freeway list of libraries were changed, so that these programs can build. **(DR 17000)**

## 5.5 System Process/Log

### **Problem. Wrong apache server running.**

The apache server running in OB7.1 is the one in /usr/local. **(DR 17344)**

### **Problem. dx2apps is attempting to launch ifpServer.**

dx2apps had logic in its stop and start sections to deal with ifps server and processes. This logic was moved to the dx4apps script since ifps/gfe had moved there. **(DR 17330)**

### **Problem. dx3apps script and cron errors.**

The dx3apps script had errors that prevented the heartbeat from registering a successful status. **(DR 17274)**

### **Problem. notificationServer went into zombie state (ref OB7.2 DR 17709).**

At OUN, the notificatonServer went into its zombie state when the notificationServer was attempting to update a textDepictKeys. When the notificationServer went into its zombie state, it will log accepting connections, but not disconnecting them. If you issue a netstat -inet you will see a lot of these connections in a CLOSE\_WAIT state, so the notificationServer should be disconnecting them at this point, but it doesn't. **(DR 17708)**

## 5.6 asyncScheduler

### **Problem. AsyncScheduler and NWS not working.**

Previously, this problem started when sending a product, in this case STLZFPEAX, from an external PC to the AWIPS system. Once the product is sent out it doesn't make it to awips server px1. **(DR 17951)**

**Problem. AsyncScheduler is not up due to textNotification server not being started earlier.**

Previously, AsyncScheduler was not up and running on PX1 due to textNotification Server (running on DX1) not being started earlier than AsyncScheduler. (DR 17430)

**Problem. Asynchronous scheduler and NWSWS Schedule unable to start.**

Previously, the asynchronous scheduler and NWSWS Scheduler crashed on start-up. So, the async digital mux software was changed from v1.1 to v1.3 for OB7.1. (DR 17063)

## 5.7 General

**Problem. Inaccurate OFSDE sort of forecasts by basistime.**

Previously, the OFSDE program is not consistently transferring the latest forecasted reservoir releases - as determined by basistime - from the PostgreSQL database to NWSRFS. This resulted in inaccurate forecasts being released to the public. (DR 17811)

**Problem. Can not archive to DVD using WFO AX.**

EHu reported that they can not archive to DVD using WFO archiver (AX) since the OB7.1 was installed. The error message is "ERROR: Burn failed!". This was fixed. (DR 17706)

**Problem. DS hosts have problem with SSH.**

Previously, the DS1 failed to ssh to DX1 and DX2. (DR 17426)

**Problem. rlogin to ls1 does not work from dx1 or dx2.**

With the implementation of dx3/4 switching the IP addresses of dx1 and dx2, the firewall rules for dx1 and dx2 no longer apply. They now apply to dx3/4, since they took over the old dx1/2 IPs. So new firewall rules were added for dx1 and dx2 IPs so that you can rlogin to ls1 from those servers. You can still ssh from dx1 and dx2 to ls1, as well as rlogin from any other device. (DR 17758)

**Problem. Import database script and import config file.**

The import\_dtbase script was updated because a type off on a database command and also on the proc\_imprt\_config\_data the path to the python executable was not right. (DR 17685)

**Problem. Xyplex terminal server and firewall configuration needed on TBDR, TBDW, and TBW4.**

Previously, this Xyplex and firewall was not functioning properly on TBW3 and allows river gauge data access from ldad scheduler via the ldad server. That setup on TBW3 was populated over to TBDW, TBDR, and TBW4, that includes adding this site's IP addresses to the xyplex configuration template located on px2f in the /ldad/bin directory and other firewall modifications.

(DR 17626)

**Problem. makeStationFiles.csh not creating cities.lpi**

BCQ could not display cities (Maps-->Cities) on any scale after installing OB7.1 alpha. We found that the makeStationFiles.csh was not creating the /awips/fxa/data/localizationDataSets/\${siteID}/cities.lpi file due to a specific coding condition. The cities.goodness file never gets created in the following code:

```

== CODE START ==
while ( $CITY_SCALE < $nScale )
if ( ! ( -e cities.goodness ) ) then
if ( -e LocalCitiesInfo.txt ) then
$bcdProc a LocalCitiesInfo.txt ${citySup} cities.temp
cat cities.temp >> cities.goodness
endif
else
mv cities.goodness cities.temp
$bcdProc a cities.temp ${citySup} cities.goodness
endif
rm -rf cities.temp >& /dev/null
set n = `cat cities.goodness | wc -l`
if ( ( $n < 15000 ) && ( $n > 0 ) ) break;
set citySup = ""
rm cities.goodness
@ CITY_SCALE++
set citySup = `scaleSup $CITY_SCALE`
end
== CODE END ==

```

If the variable n (number of lines in cities.goodness) is greater than 15000, or less than 0 it continues on in the script. Just after this, it removes the current cities.goodness file, and then resets the citySup variable. However, it never recreates a cities.goodness file. So, when the while loop recycles, the first 'if-then' clause returns true and the code looks for a LocalCitiesInfo.txt. If the site has no LocalCitiesInfo.txt it moves on to removing cities.temp and attempting to set the variable n once more. This will fail, as it will not have a cities.goodness file to cat in order to set the variable to a value. The code when then continue through without creating a cities.goodness, so a cities.lpi will not be created.

At some point in the loop, the cities.goodness must be recreated, perhaps just after the citySup is reset at the end of the while loop, or as an 'else' clause to the 'if ( -e LocalCitiesInfo.txt ) then' statement. **(DR 17566)**

**Problem. procedure for cutting over to SMTP from X.400.**

The nwwsup\_dlist.data file defines a site's nwws uplink sites. This file is not delivered as part of the baseline because sites do not want it to be overwritten with each install. When sites cut over to SMTP from X.400, they will need to copy the nwwsup\_dlist.data file from the DS1 to DX1 and DX2. This step should be included in the procedure that is developed for the cutover. (DR 17510)

**Problem. X.400 messages are not being received on ms1-tncf**

Previously, while executing X.400 to SMTP migration test cases on Friday, June 16th, it was discovered that the ms1-tncf server was not receiving messages. This was verified by using the msgrcv\_svr1.log file. The msg\_stats utility also has not showed any message sent or received since May 22, 2006. (DR 17605)

**Problem: Problems sending messages (Ref. DR 17361)**

In DR 17361 a link for /var/spool/mail, was created which is erased by RHEL 4u2 installation. It turns out there are two other links had to be recreated, /var/spool/mqueue and /var/spool/clientmqueue. (DR 17748)

**Problem: IT/OPS does not work with RHEL 4.**

A fix was made to RHEL4u2 postinstall script. (DR 17464)

**Problem. Base installation scripts.**

OS related installation and post installation scripts for RHEL4u2. (DR 17131)

**Problem. Apache server points to wrong directory; Mozilla; AWIPS System Monitor.**

Previously, Apache server pointed to wrong directory; Mozilla; AWIPS System Monitor (DR 17055)

**Problem. Sound problems.**

The following were ensured after RHEL3u4 is upgraded to RHEL4u2 (OB7.1) on the lx's and xt's only:

- 1) The OB6.1 changes made to /etc/security/console.perms for sound files are preserved after the lx's and xt's have been upgraded.
- 2) All sound files in /dev are writeable by the fxalpha group.

This DR was handled by the RTS Installation Team for OB7.1. (DR 17302)

**Problem. Graphics workstation title bar disappearing - screen is unusable.**

Ensure that the OB6.1 changes made to the gdm system file /etc/X11/gdm/PreSession/Default are preserved. These changes cleaned up a user's desktop prior to logging into the lx or xt console.

This DR was handled by the RTS Installation Team for OB7.1. **(DR 17301)**

**Problem. JRE mozilla plugin for chat (12Planet).**

The following were ensured after RHEL3u4 is upgraded to RHEL4u2 (OB7.1)

on the lx's and xt's only:

- 1) /usr/lib/mozilla -> /usr/lib/mozilla-1.7.12
- 2) rm -f /usr/lib/mozilla-1.7.12/plugins/libnullplugin.so
- 3) /usr/lib/mozilla-1.7.12/plugins/libjavaplugin\_oji.so ->  
/usr/local/java/plugin/i386/ns7/libjavaplugin\_oji.so  
(where /usr/local/java -> /usr/local/jre-1.5.0\_4)

This DR was handled by RTS AWIPS Installation Team for OB7.1. **(DR 17300)**

**Problem. Conflict between Red Hat and AWIPS Postgres executables.**

Previously, in some cases when a user ran a Postgres executable it found the Red Hat version and not the AWIPS version in /usr/local/pgsql/bin. **(DR 17383)**

**Problem. Remove the fix for DR 16664 from the OB7.1 workset.**

It has been decided that DR 16664 should not be fixed in OB7.1. However, a fix was developed in November 2005 and checked into OB7.1 on February 9, 2006. With this in mind, it has also been decided that it is worth the development time and effort to remove this fix from the workset. Hence, this DR. **(DR 17183)**

**Problem. NotifyTextProd should stay on DX4.**

The purpose of this DR was to back out the changes of DR 17101. NotifyTextProd is moving to DX4 and the DX2 and DX4 ingest scripts need to be updated. **(DR 17161)**

**Problem. Remove obsolete files from workset.**

Refer to DR17130. Due to changes required by DR17130, some files in the IFPS:OB7.1 workset were removed.

- gfe/OB7.1a\_RHE3\_GFESuite\_CORE.tgz
- gfeTopo/OB7.1a\_GFESuite\_TOPO.tgz
- gfeClimo/OB7.1a\_GFESuite\_CLIMO.tgz

gfeMaps/OB7.1a\_GFESuite\_MAPS.tgz.

**(DR 17137)**

**Problem. dx3/4apps scripts need to kill ctrlCpu and ingProcMon.pl.**

In the dx3apps and dx4apps scripts, the processes run by cron, ctrlCpu and ingProcMon.pl, need to be killed in the stop phase. **(DR 17123)**

**Problem. setupAwipsUser.sh desktop creation error.**

**Previously**, when creating a new user using the setupAwipsUser.sh script, an error occurred indicating that template.gnome.kde.rhel4.tar cannot be found. This file was delivered in /data/fxa/install\_root/scripts, but the /home/awipsadm/install/install-gnome-kde.sh is looking for the script in /home/awipsadm/install. It needed to be copied to this directory as part of the install. Ideally, install-gnome-kde.sh should not have been changed to untar this file, and the global template should have been modified to untar the entire desktop to the home directory. **(DR 17123).**

**Problem. setupAwipsUser customized AWIPS .KDE user settings.**

The /home/awipsadm/setupAwipsUser.sh script automatically loads AWIPS customized environment files (.KDE) in the user's home directory when a new user account is created. The files in the .KDE directory in each user's home directory have changed for OB7.1 (upgrade of Redhat from RHEL 3u4 to RHEL 4u2).

Users were not able to log in to D2D correctly. The setupAwipsUser.sh script needs to load the correct .KDE files when it builds a user's home directory (when it creates a new user account). **(DR 17449).**

**Problem. RFC Verify: ivpbatch VERTESTBATCH.txt results not as expected.**

IVP Batch Program Verification. This program is run on ax.

The following ivpbatch program runs successfully:

```
cd /rfc_arc/verify/scripts
ivpbatch VERTESTBATCH.txt
```

As expected, the last line contains "SUCCESSFULLY CALCULATED STATISTICS!" However, the output is not as expected. To verify this type the following:

```
cd /rfc_arc/verify/output/oper
diff ivp_test.pairs.txt ../awips it should return nothing however it returns a diff of (HG)
in a few lines.
```

Also type the following:

diff ivp\_test.output.txt ../awipstest returns one of the fields different i.e. 4.822368 and the expected result is 4.877632. (DR 17730)

**Problem. NotifyTextProd needs to be added back to startIngest.px3.**

NotifyTextProd was removed from the startIngest.px3 script in OB7.1 in response to DR 17227. NotifyTextProd needs to run on px3 at the Alaska sites where they have a multi-domain GFE server running. px3 (and px4) are only used at Alaska sites, and adding NotifyTextProd to the startIngest.px3 script will only start NotifyTextProd at those Alaska sites with the extra px3 and px4 devices. Problem. NotifyTextProd needs to be added back to startIngest.px3. (DR 17881)

**Problem. scp and sftp are not set up correctly.**

The OpenSSH package was removed in OB7.1. It was observed on BCQ and TBW3 that the links in /usr/local/bin to scp and sftp were still pointing to /usr/local/openssh. The other ssh\* links were correctly pointing to /usr/bin. This was corrected. (DR 17703)

**Problem. Products not successfully ingested by receiving site. (Ref OB7.2 DR 17439).**

It was found that text products were not able to be sent from system to system after the OB7.1 build. The variable CO\_HOST\_NAME in /etc/rc.config.d/AWIPS was changed from dx1f to dx3f. (DR 17438)

**Problem. NotifyTextProd should be moved back from dx4 to dx2.**

NotifyTextProd was removed from startIngest.dx4 and added back to startIngest.dx2. (DR 17101)

**Problem. Password sections of passwd file need to be edited for some basic AWIPS users.**

The LAMP was not working. The cron was kicking off the scripts, but there were no logs; the scripts were just dying. The passwd file was viewed (#ypcat passwd), and it was observed that the lamp user and a few other users had an 'x' in the password section. This acceptable with HP-UX and RedHat 7.2 and RHE 3.0, but not REL 4.0. When one tried to switch users to lamp from root, the error "No password found" was given. It was discovered that REL 4.0 required an '\*' where the 'x' was. The changes were made to the passwd file: 'x' to '\*' and now one can become the lamp user and the scripts work when called from cron. A few other general AWIPS users may also be affected, for example, awipsadm, informix, or archiver. Named also has an x. (DR 17087)

**Problem. postgres fails to start up.**

Several scripts were changed in order for postgres to start in OB7.1. The LVM script, postgresenv.sh, postgresenv.csh and postgresql init.d script. (DR 17069)

**Problem. OH database conversion script fails.**

Previously, the OB7.1 OH damcrest auto\_start script failed to rename the dc database from OB6 to OB7. (DR 17067)

**Problem. notificationServer running on DX1 and PX1**

Previously, although notificationServer moved from PX1 to DX1, it was still running on both servers on TBW3. (DR 17065)

**Problem. purgeProcess needs to move in OB7.1**

Previously, although purgeProcess moved from px1f to dx1f, it was still running on px1f. (DR 17056)

**Problem. Redbook graphics don't get purged by purgeProcess.**

**Previously**, when purgeProcess is started, all of the redbook entries are processed and files are purged. Thereafter, no purging occurs for these keys. There are a few 'scour' operations performed by purgeProcess on redbook products, but no 'purge' operations after the startup pass. (This is unrelated to DR16862 fix - the behavior is the same whether redbookPurgeInfo.txt is in nationalData or localizationDataSets.) (DR 17291)

**Problem. DX3/4 hb and apps scripts needed.**

DX3 and 4 hb scripts will be sent to the sites when they install dx3 and dx4 to verify correct operation. These scripts need to be checked into OB7.1 along with modifications so that they will start/stop crons and packages starting with the OB7.1 install. (DR 17054)

**Problem. Replacement of deprecated header file varargs.h.**

Linux Enterprise 4.0 deprecates the use of varargs.h. Instead stdargs.h is to be used. Also, signature of the function has been modified slightly to pacify the gcc 3.4.4 compiler. (DR 17037)

**Problem. Incorrect SMTP addresses in smtpaddr.txt.**

Previously, seven of the addresses listed in the smtp address file (smtpaddr.txt) contained the wrong region for the site specified. This caused MHS to fail for these sites. (DR 17035)

**Problem. start/stop scripts still refer to ds.**

The start/stopIngest scripts notify completion with an fxaAnnounce call. They were run using 'ssh ds', which did not work. (DR 16976)

**Problem. Build errors in the D-2D/src/nwwsScheduler directory.**

nwwsScheduler was upgraded to use gcc3.4.4. (DR: 16942)

**Problem. Makefile in D2D/src/dataIngest needs to be updated, causing build errors.**

Per DR 16872 files in D-2D/src/dataIngest startTextDB.ds1 and stopTextDB.ds1 were removed from the baseline. The makefile still referred to them, causing build errors. (DR: 16941)

**Problem. Add database stores for LowWater impacts and OfficeNotes info.**

This change involved the addition of two new tables for storing LowWater and OfficeNotes info, requested by the Central Region and Eastern Region, respectively. No data for these tables will

be provided. Also no interface will be provided in OB7.1 for this information. Their presence will allow local apps in OB7.1 and future OB7.2 national apps to populate this info. (DR:16932)

**Problem. The site was unable to transmit TAFs to their back-up site (CTP).**

Previously, the site was unable to transmit TAF products to their backup site, CTP. (DR 16804)

**Problem. AFOS ID required in message subject for NWS products sent to DEFAULTNCF.**

The NCF provides backup to the sites NWS uplink. All products received at the NCF with WMO headings beginning with 'W' are sent to the NCF NWS uplink interface. In order to create a valid NWS heading on the product, the NCF needs to receive the AFOS ID on the subject line of any of these messages. This should follow the same paradigm as the site NWS uplink. Previously, messages received with code '4' did contain the AFOS ID on the subject line, but messages received with code '134' did not. (DR: 16793)

## 5.8 Install

**Problem. /awips/ops/bin/Install hangs on dx4**

Previously, the Install script failed when attempting to shut down the heartbeat software on dx4. Specifically, the stopIngest.dx4 script hung. (DR 17535)

**Problem. RHEL4u2 OS upgrade hang**

Occasionally, the OS upgrade of RHEL4u2 will hang. A **workaround** is just to reboot. (DR 17482)

**Problem. The cleanup script (IFPS) is not working properly.**

Previously, the cleanup script was not working properly (unable to remove failed site database). The cleanup script failed after the execution of import configuration data. See the following errors message from the logs.

```
/data/logs/adapt/ifps/2006070706/SVCBU_import_config_1954
```

```
Import_dtbse Version: 34
```

```
Checking if database ifps_aly already exists. (DR 17739)
```

**Problem. Rebuild the digi drivers based on new -37 kernel.**

digi drivers were rebuild with the kernel headers of the new 37 kernel. No duplicate was needed. (DR 17729)

**Problem. Install NMAP 5.9.2 for AWIPS OB7.1, rhel4u2.**

This DR is to track installation of the new version of NMAP (5.9.2) for AWIPS OB7.1.

The compressed tar file (tarball) with the new NMAP version is:

dx1-nhda:/data/local/nmap/awips\_20060330.tar.gz

If you run cksum on that file you should get:

2699498974 179094332. (DR 17113)

**Problem. AX at BCQ failed to upgrade to RHEL4u2.**

Previously, the scriptSubs.pl in OB6 installation scripts can not deal with dual network interface correctly, therefore it was not able to generate correct ks.cfg for ax in BCQ. (DR 17481)

**Problem. RPMs built by make buildrpm are not installed with the correct ownership.**

Previously, when the awips rpms are installed, warning messages that "builder" is not a valid owner and group appear. The executables end up with root:root permissions. (DR 17556)

**Problem. Machines failed to start after new kernel 2.6.9-34.24 is installed.**

Occasionally, a machine fails to start after new kernel 2.6.9-34.24 is installed. It says "kernel panic" (DR 17484)

**Problem. /awips/ops/bin/Install hangs on dx4.**

Previously, the Install script failed when attempting to shut down the heartbeat software on dx4. Specifically, the stopIngest.dx4 script hangs. This is because it runs an ssh dx3f and dx3f is down since during the install, dx3 is brought down before dx4. Regardless, this ssh dx3f is a mistake, it should be dx4f, so that it will always work. (DR 17535)

**Problem. afa0 RAID file missing on CPSBNs.**

Previously, the afacli program (Dell PowerEdge RAID Command Line Interface) used to access the RAID will open. However, when selecting controller afa0, the following error would occur:

**Command Error:**

It turned out that the device file for afa0 was missing on cpsbn1 and needed to be recreated. The controller was then able to be accessed via afacli and the disk list showed all disks were available. This problem was recognized via an ITO alarm template..

(DR 17567)

**Problem. Rebuild the digi drivers based on new -37 kernel.**

The e digi drivers were rebuild with the kernel headers of the new 37 kernel. No duplicate is needed.. (DR 17729)

**Problem. OB7.1:dx2apps need to modify for \$SITE\_TYPE option (WFO/RFC).**

Previously, the startIngest.dx2 was not run on dx2-tbdr when bought up on dx2apps. This was because the \$SITE\_TYPE check "wfo" the tbdr is RFC. (DR 17511)

**Problem. PG\_INSTALL points to wrong directory.**

Previously, postgresenv.csh and postgresenv.sh PG\_INSTALL pointed to /usr/local/pgsql instead of /usr/bin. **(DR 16982)**

**Problem. Machines failed to start after new kernel 2.6.9-34.24 is installed.**

Occasionally, a machine failed to start after new kernel 2.6.9-34.24 was installed. It said "kernel panic." **(DR 17484)**

**Problem. IFPS install failed.**

Previously, the ifps installation script did not work. The init script was comparing 7.1 to OB7.1 and not finding a match and would not continue with the installation. **(DR 17086)**

**Problem. Export ALU configuration file and grids failed.**

Previously, Export ALU (SB multi domain) configuration file and grids to the central server failed. **(DR 17558)**

**Problem. IFPS install failed.**

The IFPS install failed in the a4 release. The error message was:

```
Backing up IFPS database...Mon Jun 19 14:10:17 GMT 2006
```

```
pg_dump: [archiver (db)] connection to database "ifps_" failed: FATAL: database "ifps_" does not exist
```

Upgrade was not able to backup ifps database.

Upgrade fails.

backup\_ifps failed...It was unable to backup the current IFPS.

Cannot continue without the backup.

Please contact NCF for assistance. **(DR 17579)**

**Problem. ADAPT installation failed.**

Previously, the adapt installation would not work. It was referencing directory lock files from OB6.

Also, the create\_hmdb.sh script was still being launched, which creates the postgres database from informix. This was run in OB6 and cannot be run again in OB7. A climate HP tar file was being accessed, which does not currently exist in the OB7 release. Finally, if there are any db scripts that were checked in, they need to be added to this script so they are incorporated into the ADAPT install. **(DR 17085)**

**Problem. ADAPT install problems.**

The ADAPT install failed once we got an updated s6 ADAPT release. There is a logic problem

in the ADAPT\_install\_sh script with an empty if-then-else block in the hmdb section. I've fixed the script locally so alphas can continue, however this needs to be fixed in pvcs for any future releases. The lamp data dir is also getting installed with the wrong user/group ids (1001/101). This is because the lamp tar file originally has pcms/ident ownership and this ADAPT install script changes the permissions of the installed files. As of now, only prelamp/bin and lamp/bin are getting this treatment, but the lamp release also has the data directory in OB7.1. So the script needs to be updated to change the permissions on this directory. **(DR 17462)**

**Problem. OB7.1: RHEL4u2 OS upgrade hang.**

Occasionally, the OS upgrade of RHEL4u2 would hang. **(DR 17482)**

**Problem. AX at BCQ failed to upgrade to RHEL4u2.**

Previously, the scriptSubs.pl from OB6 installation scripts could not deal with dual network interface correctly; therefore, it was not able to generate correct ks.cfg for ax in BCQ. **(DR 17481)**

**Problem. DS need to modify for server moving.**

"hmMonitorServer" was removed from startIngest.ds1 and nwrTrans.pl was removed from ingest.crontab.ds. **(DR 17448)**

**Problem. dx4apps: hb\_stat reports dx4apps error when all servers are up successfully.**

dx4apps scripts were modified. **(DR 17447)**

**Problem. Test Mode Control Program cannot display the banner on XT workstation.**

Because the xhost access on the Xt workstation has been unset when user logs in the console, the Test Mode Control program was longer able to display the blinking banner on the Xt workstation to signal the Test/Practice mode is in progress. **(DR 17360)**

**Problem. Compilation Error with Linux Enterprise 4.0.**

Due to definition conflict, compilation error occurred with Linux Enterprise 4.0. **(DR 17173)**

**Problem. Problems with setupAwipsUser.sh.**

When the dsswap package was on DS2, setupAwipsuser caused users to not be able to login because of an NIS reference to ds1f instead of ds1. **(DR 17102)**

**Problem. verifysshkeys.sh does not work.**

The verifysshkeys.sh script needs was modified to reflect the change in ssh. **(DR 17093)**

**Problem. Native python does not work after installation of rhel3u4.**

Previously, If you start up python from an AWIPS user account by typing "python" at the command line, you get the error message: 'import site' failed; use -v for traceback. **(DR 16725)**

## 5.9 QPE/MPE

### **Problem. Creation of QPE MPE GRIB products failing.**

The MPE (Multi-sensor Precipitation Estimator) application generates hourly QPE (Quantitative Precipitation Estimate) grids. One alternative format it can create these grids in is the GRIB1 format. GRIB files can then be sent to the GRIBdecoder and displayed in D2D. For OB7.1, wrong files were provided with respect to this function. The MPE apps are in error in that they invoke the GRIB encoding program directly (gribit), rather than a grib processing script which better controls the encoding process. Also, the wrong processing script was provided; it had some lines improperly commented out. **(DR 17201)**

### **Problem. MPE files not being fully purged.**

In OB7.1, the MPE operations can produce new sets of MPE hourly grids, in addition to the existing grids. The purge\_mpe\_files script cleans out old files as they age. Previously, the script currently failed to clean out these files. **(DR 17388)**

## 5.10 X11

### **Problem. ssh X11 forward not turned on.**

Previously, the X11 forwarding for ssh was not turned on. **(DR 17379)**

## 5.11 IFPS

### **Problem: Map Configuration error occurs if site does not have correct backup site's shapefiles**

Before performing service backup for a site, check with the sites you back up to make sure your site has the backup site's shapefiles available in /awips/GFESuite/svcbu/data/maps. If their shapefiles are not available, when you begin service backup you will get an error message "WARNING: MAP-RELATED CONFIGURATION ERRORS". If you get this error, the ifpServer log for service backup (DX4:/awips/GFESuite/svcbu/data/logfiles/) will show an error message like the one below:

```
17:45:47.490 MapManager.C 338 PROBLEM: ***** MAP BACKGROUND  
GENERATION ERROR - Source Shapefile *****
```

```
Error in generating map #20 Name: ISC_all Basename: Code: Traceback (most recent call last):
```

```
File "./ifpServer/ShapeFile.py", line 371, in open
```

```
File "./ifpServer/ShapeFile.py", line 173, in __init__
```

```
File "./ifpServer/ShapeFile.py", line 49, in __init__
```

```
File "./ifpServer/ShapeFile.py", line 57, in open
```

```
File "./ifpServer/ShapeFile.py", line 32, in _open
```

```
exceptions.IOError: /awips/GFESuite/svcbu/data/maps/cm02se05.shp,
```

```
/awips/GFESuite/svcbu/data/maps/cm02se05.shp.gz, or
```

```
/awips/GFESuite/svcbu/data/maps/cm02se05.shp.Z does not exists
```

**Workaround.** Copy any missing shapefiles from your backup site to DX4:/awips/GFESuite/svcbu/data/maps and restart the backup ifpServer. ((DR 17863)

**Problem. Prepare\_Grib2 is not working on TBDW and TBW3.**

Previously, the Prepare\_Grib2 is not working on TBDW and TBW3 platforms. (DR 17948)

**Problem. The import configuration data function is not working on TBW4 (ALU and AER)**

The import configuration data function is not working on TBW4 platform (ALU and AER). See the following errors message.

```
" Import_svc_backup_data.bat okx localhost:0.0
omport_svcbackup_date so all scripts run as user ifps\n
D_DEV_STATUS=0
retrieve_svc_backup_data Version:14
Retrieving IFPS configration data from the central server\n
TBDW4-115051
x=1 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=2 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=3 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=4 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=5 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=6 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=7 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=8 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=9 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
x=10 ls: /awips/GFESuite/svcbu/data/databases/ifpServer.PID: No such file or directory
```

ERROR: Server did not start or lock file is not present (DR 17953)

**Problem. MOS guidance test cases failed due to unavailable data for MOS guidance to use.**

Previously, unable to execute all the test cases related to the MOS guidance data (mexmos, mavmos, fwcmos, gfsmos and hpcstn) due to unavailable MOS guidance data to use. (DR 17575)

**Problem. AER host need to be pointed to dx4f.**

The AER HOST variables in ifps-aer.env file needed to be changed from dx2f to dx4f and the HOST variables for ALU in ifps-alu.env file need to be changed from dx2f to px3f in TBW4 platform. This problem was related to the installation script issues ( ex: missing postgres file and incorrect parameters in the .env file).

The svcbu multi domain testing at TBW4 (SIT) was not executable due to incorrect host name set to the sites on the ifps-ccc.env files. See the following for more details.

ifps-alu.env

SVCHOST = dx2f need to be changed to SVCHOST = px3f

CDSHOST = dx2f need to be changed to CDSHOST = px3f

ifps-ear.env

SVCHOST = dx2f need to be changed to SCVHOST = dx4f

CDSHOST = dx2f need to be changed to CDSHOST = dx4f

ifps-main.env

IFPS\_DOMAIN = afc need to be changed to IFPS\_DOMAIN = "alu aer"

px3-tbw4: /awips/GFESUITE/primary/bin/run/site.sh

GFESUITE\_SITEID = AFC need to be changed to GFESUITE\_SITEID =ALU

#### **(DR 17514)**

##### **Problem. rsync SvcBu should use temporary location when creating file.**

The rsync version of export\_grid\_data writes the netCDF file to /awips/GFESuite/primary/exportgrids. The problem is that the rsync server on svc1-emix can catch that file in the middle of its creation -- meaning the source file will be changing while rsync is attempting to copy it. **(DR 16850)**

##### **Problem. Unable to create new postgres database at the backup site BOX.**

Unable to create new postgres database at the backup site during import configuration data of the failed site. **(DR 17686)**

##### **Problem. ifps alask multidomain databases not created in postgres.**

On TBW4, only the primary ifps database, ifps\_afc, has been completely ported to postgres. The other multi domain sites fail to port anything from informix to postgres (ifps\_alu and ifps\_aer). **(DR 17477)**

##### **Problem. IFPS/SNMultiDomains: Import configuration file hung.**

Previously, the import configuration data hung. No SVCBU\_import\_Config\_xxx log file was created. Also, the files times stamp were missing (e.g., Sep 16 2006 ipco.py) on both machines px3 and dx4 (TBDW). **(DR 17966)**

##### **Problem. IFPS-Review additional files for possible Postgres issues.**

Four Directories under /adapt/ifps...was checked for any possible issue for accessing Postgres related to IFPS service backup: **(DR 17816)**

**Problem. Error found on the export\_grid\_data script during SIT at tbw3, tbdw and tbw4.**

Previously, errors were found on the export\_grid\_data script during the SVCBU and SB multi domain tests at TBW3, TBDW and TBW4 after the last installation of IFPS codes on 6/26/06. See the following logs file.

```
dx4: vi /data/logs/adapt/ifps/20060628/svcbu_expGrd_1610
Starting rsync service backup grid export process (ONLY for AK SITES)
Please Do not use this software unless you know what you are doing.
Running from cron. NoGui=1
Cat: /awips/adapt/ifps/bin.boxsvcbuMode: No such file or directory
/awips/ifps/primay/bin/export_grid_data:line 327: [: s/: integer expression expected
Expr: non-numeric argument
/awips/ifps/primary/bin/export_grid_data:line 335: [: -le: unary operator expected
Error:Can't open display:
```

An exporting grid process is already running. Export exits. **(DR 17688)**

**Problem. Unable to create new postgres database at the backup site BOX.**

Unable to create new postgres database at the backup site during import configuration data of the failed site. See the following errors message on log and the wrong variable name (-U postres instead of -U postgres) in the import\_dtbse file.

```
Backup site = BOX
Failed site = OKX
vi /data/logs/adapt/ifps/20060628/createNewDatabase
LOG-STATUS: Can't process log preference file; skipping the rest.
EVENT: Establishing connection to server on dx4f: 98000000 ver=20050715
EVENT: Connect EVENT: Establishing connection to server on dx4f: 98000000
EVENT: Establishing connection to server on dx4f: 98000000 ver=20050715
EVENT: Connect EVENT: Establishing connection to server on dx4f: 98000000
vi /awips/ifps/primary/bin/import_dtbse
#create database for the failed site
Echo "Creating database $dbname in $db_bkup.."
Createdb $dbname -D PGDATA_IFPS -U postres
#
```

**(DR 17686)**

**Problem. The service backup is not working on all platforms (tbw3, tbw4 and tbdw). This will be tested at the field.**

Previously, after the last installation (a4) of IFPS codes at RTN site (TBW3, TBW4 and TBDW) the service backup was not working any more. See the following for the reported problems:

- Unable to execute the clean up script.
- Unable to export the config file to the central server.
- Unable to export the grids to the central server.
- Unable to import the config file and grids from the central server.

07/04/07- See below error message from the logs file.

```
/data/logs/adapt/ifps/20060706/SVCBU_import_config_1954
import_dtbse Version: 34
Checking if database ifps_aly already exists.
/awips/ifps/primary/bin/import_dtbse: line 223: [: missing ']'
Database already exists. Attempting to drop it.
Database was not drop. Please manually remove the database and try importing again.
cat: /data/logs/adapt/ifps/sqlerr.tmp: No such file or directory
ERROR: Importing database has failed. Duplicate database found. Please drop ifps_aly
first.
```

**(DR 17609)**

**Problem. prepare\_grib2 executable failed.**

Previously, the prepare\_grib2 executable did not work during the SWIT. **(DR 17382)**

**Problem. SVCBU Gui on tbw3 displays incorrect message.**

The following incorrect message was displayed on the SVCBU Gui at tbw3. This message was displayed before and after the run of any service backup functions. "YOU CURRENTLY EXPORTING YOUR GRIDS TO THE CENTRAL SERVER." **(DR 17692)**

**Problem. ifps combined crontab needs to move from dx2cron to dx4cron.**

In the crontab templates, the ifps combined crontab was moved from dx2cron to dx4cron. **(DR 17313)**

**Problem. Problems with PostGres conversion.**

IFPS Service Backup Test Cases #2,9, and 10 failed. (DR 17284)

**Problem. Service backup failed to import config & grids; ssh.**

Previously, while attempting to go into service backup for WFO ILM, backup would fail while importing failed sites configuration. Error message would pop-up when progress bar reached

20%: import\_config\_and\_grids.bat" returned an error. (DR 17162)

### **Problem. Multidomain testbed unable to initiate Service Backup.**

When launching IFPS Service Backup, the software checks to make sure there is only one IFPS Informix database. In the case of a multiple domain system (AFC, VRH, TBW4), three IFPS Informix databases should be present (alu, aer, afc). For all systems, the software looks at the value of \$IFPS\_DOMAINS and adds the current host's name as allowable IFPS Informix databases. At WFO AFC, this means ifps\_alu, ifps\_aer, and ifps\_afc are allowable databases since \$IFPS\_DOMAINS there is "alu aer" and the machine is named "afc". At TBW4, the software will only allow ifps\_alu, ifps\_aer, and ifps\_tbw4. In other words, the software thinks that the (valid) ifps\_afc Informix database is an artifact of a previous Service Backup run, and prompts the user to delete it. The Service Backup software should be modified to let Service Backup running on VRH or TBW4 know that ifps\_afc is a valid database and should be allowed. (DR 16834)

## **5.12 Crons**

### **Problem. restartRadar cron missing after OB7.1**

The following cron was missing after the OB7.1 installation. It was previously found on the dsswap crontab

```
# Radar ingest  
2,6,11,14,18,22,26,31,35,39,43,47,51,56 * * * * csh -c  
`${FXA_HOME}/bin/restartRadar' > /dev/null 2>&1
```

The cron was not transitioned from the DS to a DX. Without this cron, the ORPGCommsMgr, should it fail, will not restart itself. This could have caused substantial data loss in a critical weather situation. (DR 17807)

### **Problem. METAR-to-Shef decoder failing on certain wind remarks.**

Previously, the cron-scheduled OB6 metar2shef job is aborted on products that contain a certain kind of wind remark information (i.e., they contain WND in the remarks section). This caused a backlog of METAR products to continue until manual intervention is taken to remove the offending product. (DR 17386)

### **Problem. Restore ypmake commands to root crons on DS1.**

The root ds1 MC/Service Guard cluster crons have the ypmake commands restored to them. (DR 17303)

### **Problem. New fxa cron job required.**

New application implemented to replace retired IFPS program. It requires that it run periodically, several times per hour, on a machine where /data/adapt/avnfps/grids filesystem is visible, px2f is preferable. (DR 16931)

### 5.13 Documentation

**Problem. Make GFE doc available to users.**

Ron Smith pointed out that there was an extensive set of GFE user documentation available on the workstations, but there was no link to it in the Documentation area of the AWIPS System Monitor. (DR 17407)

**Problem. Update Documentation URLs.**

The OB7.1 documentation URLs were updated and the link to GFE documentation was provided. (DR 17405)

**Problem. Update Documentation URLs.**

In DR 17405, the OB7.1 documentation URLs are updated. Also, a link to GFE documentation was provided. A link for avnfps documentation was added. (DR 17752)

**Problem. IFPS Users Guide Documentation Changes.**

Changes to the IFPS Service Backup help files was needed, since for OB7.1 there is a move from dx1/dx2 to dx3/dx4 servers. (DR 17276)

**Problem. Unable to run GFE automation test on DX4 due to performance problem**

When the GFE automation tests were run on dx4-tbw3 many of the automated test cases failed. But, when it was run on dx2-tbw3 all the automated test cases passed. The performance on dx4 was very slow compared to the dx2. (DR 17480)

### 5.14 NWRWAVES

**Problem. NWRBrowser is not receiving products.**

Warngen Hazard text products are not being pushed to the NWRWAVES Browser after being transmitted from the Text Workstation (i.e. CCCSVRXXX, CCCTORXXX). The /data/fxa/siteConfig/textApps directory includes the correct trigger entries. However the transmitted products are not getting pushed to the /data/fxa/trigger directory and as a result, the NWRWAVES process is not getting kicked off. (DR 17675)

**Problem. NWRWAVES release and crontab need to be put into OB7.1.**

The NWRWAVES package went out as an emergency release in OB6. It has been requested that this package be a part of the full OB7.1 install. Also, ingest.crontab.nwrwaves was updated in the OB6 emergency release, and this needs to be checked into the appropriate OB7.1 workset. (DR 17412)

**Problem. Some products are not being sent to CRS.**

Previously, two problems were noted.

- 1) There is a syntax error in the AWIPS baseline file /awips/fxa/bin/sendToNWR. The error appears to be on line 679:

```
logProblem "incomplete transfer of $filename\n"
```

In the procedure (Dispatch) that this line occurs in, the filename variable is not defined. This error shows up in the logStreamExpect logfile (from DS1) as:

```
00:50:54.050 TclLogStream.C PROBLEM: Unexpected error: can't read
"filename": no such variable
```

This syntax error is keeping the true error from being reported which is that file failed to transfer to CRS within the timeout period. This is also why messages are getting stuck in the "Pending" directory.

- 2) The MAIN problem causing this is that CRS is getting overwhelmed by too many messages and is timing out during transfers. Nancy Helderman has researched this, and it appears CRS can get overload by as few as six concurrent transfers. This problem affects any AWIPS process that sends files to the /data/fxa/workFiles/nwr/ready directory. The script that monitors this directory is called. **(DR 17370)**

## 5.15 Grib

### **Problem. GRIB log files need to be purged.**

In OB71, a log file was introduced to provide info for the process\_grid\_files operations. The script has a bug in it which prevents it from properly purging itself. Therefore, the script will slowly grow and grow. The typo bug in the script can be corrected to properly purge the file. **(DR 17441)**

## 5.16 ShefDecoder

### **Problem. Shefdecoder fails to send 60-minute reports to GagePP.**

The SHEFdecoder has the option to send hourly precip reports on to the Gage Precipitation Processor (GagePP). The GagePP then uses these for input into the MPE (Multi-sensor Precipitation Estimator) operations. Hourly reports are usually encoded as 2001 (this is a SHEF duration encoding scheme). The 2001 is translated as one hour. However, there is also a seldom-used way to define the duration as hourly by using the duration code of 60; translated as 60 minutes. Currently, this definition (i.e. 60) is not accepted, and it should be since SHEF format rules allow this. The decoder was modified to allow the 60 to be recognized. **(DR 17442)**

### **Problem. Number of SHEF Messages Saved.**

The line containing `* /ispan/hydro 2000*` in `*dx1:/awips/fxa/data/fxa-data.purge*` ((and on dx2) needed to be commented out because the number of file in this directory can exceed 2000 during normal operations. The upgrade took over 9.5 hours. During this time over 4,800+ shef products were queued up for processing. If this line was not commented out, the RFC would have lost more than half of the products in /data/data/ispan/hydro. The number of files saved needs to be at least 7500. **(DR 17877)**

## 5.17 Key West

### **Problem. KEY WEST: Text workstation files must be updated.**

In order to support the EYW to KEY identifier change, the file awipsSites.txt was updated. (DR 17445)

### **Problem. A Tampa Bay config file still needs the Key West site change.**

D-2D/src/localization/localData/TBW-mainConfig.txt still refers to EYW for the Key West site. This was updated to KEY. (DR 17327)

## 5.18 AVNFPS

### **Problem. Flight Category Monitoring issues incorrect messages sporadically.**

Previously, the message, once set, was not updated. This affected rules that do not have user-defined messages set in it's configuration file. (DR 17700)

### **Problem. SVCBU Gui on tbw3 displays incorrect message.**

Previously, the following incorrect message was displayed on the SVCBU Gui at tbw3. This message is displayed before and after run of any service backup functions.

"YOU CURRENTLY EXPORTING YOUR GRIDS TO THE CENTRAL SERVER." (DR 17692)

### **Problem. TAF Decoder fails on corrected TAFs recieved from NWSTG.**

Previously, NWS Telecommunications Gateway strips correction headers from the TAF issued by AvnFPS software. Thus when these TAF arrive back to the WFO, AvnFPS wrongly faults timestamps in the product since it cannot determine it was a corrected product. (DR 17328)

### **Problem. Only current time series Plot can be loaded.**

Previously, when selected, the previous time series plot of any guidance source (e.g., GFS-MOS, NGM-MOS) did not plot accordingly. (DR 17468)

### **Problem. 'M1/4SM' should be flagged in TAF as incorrect**

M1/4SM should be flagged in TAF as incorrect. Previously, TAF QC does not flag this. (DR 17470)

### **Problem. Error when adding new TAF product**

An error message was received as "Program bug - please report. while adding a new TAF product on the TAF Product Configuration window. (DR 17454)

### **Problem. Cannot monitor baseline IFPS gridded information**

While supporting ceiling/visibility experiment and it's changing requirements, it was discovered that monitoring the typical, baseline, suite of parameters from IFPS grids was broken as a side-

effect. Forecasters will lose the capability to easily monitor/co-ordinate their forecasts between public and aviation desks, i.e., grid monitoring is broken. **(DR 17538)**

**Problem. Flight Category Monitoring issues incorrect messages sporadically.**

Previously, the message, once set, is not updated. This affects rules that do not have user-defined messages set in its configuration file. **(DR 17700)**

**Problem. AvnFPS: Error when adding new TAF product.**

Previously, received an error message "Program bug - please report. Details in the log file" while adding a new TAF product on the TAF Product Configuration window. **(DR 17454)**

**Problem. Improve staging and installation scripts for CM.**

Previously, several mishaps occurred while creating CM tarballs for installation at Keane. **(DR 17409)**

**Problem. Minor bugs/issues found during testing.**

Minor issues were found entering SIT

- 1) Misspelling of the word 'effect' for dialog.
- 2) Missing message history GUI for TWEB editor.
- 3) Proper version information showing date/time of release.
- 4) Only basic rules for Impact QC delivered.

**(DR 17408)**

**Problem. New Raytheon BUFR decoder changes variable names in GFS LAMP netCDF files.**

Previously, output from new decoder used different netCDF variable names and so for AvnFPS to correctly use the GFS LAMP guidance, its code was changed to retrieve all the data. **(DR 17351)**

**Problem. METAR monitoring fails in AvnFPS.**

Previously, under certain observed conditions and TAF forecast, AvnFPS will stop monitoring for a airport. As it turned out, an updated python file was overlooked and was not checked in. **(DR 17350)**

**Problem. Save stats in tabular form does not work**

Previously, attempts to save statistical data from Wind Rose GUI resulted in an exception. **(DR 17308)**

**Problem. Balloon Font cannot be set from AvnWatch GUI.**

Previously, AvnWatch setup GUI manipulated a resource called \*Balloon.Label.Font which is a CLASS resource and not an object. **(DR 17307)**

**Problem. Ceiling height for only few or scattered layer(s) should be unlimited.**

Additional check needed to be made when reading in data from IFPS verses MOS guidance. Former source provided predominate height regardless of whether ceiling is present, while MOS does not. The TafGen.py needs to take this into account when creating a guidance TAF. (DR 17286)

**Problem. MVFR conditions shall not be hardcoded.**

By hard-wiring MVFR condition in the code, it effectively limits the range of flexibility potentially provided by the associated configuration files for TafGen.py and results in sub-optimal guidance TAFs. (DR 17285)

**Problem. Exceptions from threads not captured in log files.**

It was discovered during testing of AvnFPS3.2 code that exceptions generated by threads are not captured in the log files. (DR 17251)

**Problem. TafGen.py failed for NGMMOS when oncl group occurred at later periods.**

In the make\_ocnl method of TafGen, not enough check for existence of the 'sky' group before g['sky'] is executed. Most of the time, this turns out okay, but it failed for NGM MOS at later hours where projections are 6 hours apart instead of 3 hours. It is also a problem from MosData.py that failed to create the dictionary file correctly for 6-hour interval NGMMOS. (DR 17244)

**Problem. Use conditional ceiling and height for PROB and TEMPO groups.**

Previously, the ceiling and visibility are assumed to be the same as that in the prevailing group. (DR 17242)

**Problem. Precip intensity needs revision.**

Previously, the current algorithm used QPF to derive intensity, which seemed to generate more heavy and moderate precipitation than expected. (DR 17241)

**Problem. AvnFPS Tabulated LAMP should display precipitation/tstm categories.**

LAMP produces precipitation/tstm categories yes/no, which should be displayed in the tabulated format. (DR 17218)

**Problem. METAR OB missing data and is grayed out on application; bad OB.**

An observation was grayed out in AVNFPS.

