January 15, 2016

MEMORANDUM FOR: Distribution Email

FROM: Chris Caruso Magee
                                    Configuration Manager, NCEP Central Operations

SUBJECT: Scheduled Operational Changes and Upgrades

NCO College Park

The following accelerated items were implemented last week:

RFC #1641 - Added Multicast routing configurations to allow for dynamic failover of SBN feeds. Implemented on January 12 at 1230Z.

RFC #1642 - The DBNet software running on WCOSS will be migrated to begin using the Solid State Disk (SSD) instead of the spinning disk. Gyre was reconfigured first, beginning on January 13 at 1300Z. Tide will be reconfigured beginning January 27 at 1600Z.

RFC #1643 – NHC_GUIDANCE v1.0.11 – A bug was fixed in NHC Guidance ship model in the sounding calculation in the diagnostic routine (the 'lcmod' subroutine in the 'lsdiag.f' program) due to the physical parameters being out of bounds. The fix allows the 'lsdiag.f' program that converts from pressure to height coordinates for a CAPE calculation to gracefully exit when it detects the interpolation problem.   Implemented on January 14 at 1700Z.

RFC #1644 - Added routes to the Orlando site to support new Surge IP space. Made DNS changes to support new Surge IP space. Implemented on January 14 at 1800Z.

RFC #1656 – HWRF v9.0.18a – The HWRF forecast failed on the 1800Z January 12 run for Atlantic storm AL90 (HRCN Alex) because of the large timestep being used in the Atlantic. A workaround was provided by EMC to run with a smaller timestep and fewer vertical levels in order to get the forecast to run through. This issue will be permanently addressed with the 2016 HWRF upgrade. This workaround was implemented on January 13 at 1200Z.

The following will be implemented the week of January 18, 2016:

RFC #1645 - To allow ecFlow to submit to the Cray XC40 systems (Luna and Surge), the script that submits jobs scheduled by ecFlow to LSF, called 'unixsubmit', will be upgraded. In conjunction with this, a new 'unixkill' and several related utilities, including those that run the WCOSS Switch Procedure, will be updated. To be implemented on January 20 at 1100Z.

RFC #1646 – NCOSRV Dataflow v2.14.3, NCODF Dataflow v2.13.1 – Begin ingesting satellite vegetation data to IDP and switch pulling GOES-E and GOES-W files for nowCOAST from NESDIS's satepsanone server to their DDS. To be implemented on January 19 at 1300Z.

RFC #1647 - The external IP addresses for Surge must be changed. This will require an outage while system changes are made. To be implemented on January 19 at 1300Z.

RFC #1648 - The MADIS dataflow statistics are written to the local filesystem. When the MADIS Help Desk fails over the application on Mondays as part of the standing RFC to prepare for weekly patching, the dataflow statistics are lost and the monitoring history begins on the day of the failover. By writing the intranet data to an NFS volume, the dataflow history and archive of statistics can be preserved and provide a better history of the MADIS dataflow. This is only needed on the operational A/B pairs of servers. To be implemented on January 19 at 1300Z.

RFC #1652 - verf_gridtobs v4.2.2, obsproc_rtma v2.0.6, obsproc_urma v2.0.6 – Three scripts used in the Verf_gridtobs, obsproc_rtma, and obsproc_urma packages will be modified to point to the correct directory locations on WCOSS Phase 2. These scripts are shared with other jobs but those jobs use Phase 1, so without this correction, the RTMA/URMA and Verf jobs were also pointing to Phase 1.   To be implemented on January 19 at 1500Z.

RFC #1653 – gefs_legacy v10.3.4 - Modify the gefs_legacy post cleanup job to save all 00Z sfcsig and sflux files for downstream users. Update the WCOSS mirror job to mirror 378h sfcsig and sflux files to the dev machine. To be implemented on January 19 at 1500Z.

RFC #1654 - The LDM software on the NCODF1/2 systems is being modified to change the feed of LDM observational datasets from NWSTG to using the NCWCP NOAAPort dish. To be implemented on January 20 at 1300Z.

RFC #1655 - This is to create a new public routable VLAN for the Linux Sys Admins, since they are running out of public space. To be implemented on January 20 at 1500Z.

The following items are in progress:

RFC #1505 – NCODF Dataflow v2.13.0 - Make machines sbn1and sbn2 operational, including LDM configurations and network devices supplying the NOAAPort feed. This work is in support of the MRMS-RIDGE2 (Radar Integrated Display with Geospatial Elements 2) IDP project and will feed the development IDP. Changes will be made by both IDSB and IWSB. The IDSB Dataflow team will support LDM, and IWSB will support the infrastructure components. Implementation began on November 25 at 1200Z and was to be completed by November 30. A solution to the NOAAPORT problem may have been found. This RFC should be completed by January 20.

The following items were withdrawn:

RFC #1638 - Modify the puppet master's external_nodes node.rb script to make the node.rb script more verbose in order to enhance its logging. Was to be implemented on January 13 at 1400Z; withdrawn because a patch came out which resolved the issue.

RFC #1639 - Prepare test Conduit systems. These test systems will allow NCO to test enhancements to the Citrix load balancer configuration for Conduit without affecting the operational Conduit systems. Was to be implemented on January 13 at 1500Z; withdrawn because NCO personnel realized they can use Boulder equipment to test the changes without affecting operations.

The following NCO RFCs were approved with an implementation date TBD:

RFC #1357 – RTOFS global v1.1.0 – Major upgrade of the Global RTOFS model. See the TIN at: http://www.nws.noaa.gov/os/notification/tin15-36global-rtofsaaa.htm for details. This was advertised as having an October 6 implementation date but this implementation was postponed due to a delay in the Navy's HYCOM model upgrade. Once the HYCOM upgrade is implemented, the Global RTOFS will be scheduled for implementation. Notification will be given in advance so users may prepare for any changes which may affect them. This upgrade of the Global RTOFS was approved by the NCEP Director.

NCO Silver Spring – NWSTG

The following accelerated items were implemented this past week:

None

The following will be implemented the week of January 18, 2016:

RFC #1651 - The TG BUFR Migration Tool (BMT) function will be made operational on the IDP College Park system. BMT systems at Silver Spring will stay as backup for IDP. To be implemented on January 19 at 1400Z.

The following items are in progress:

None

NCO Silver Spring – One NWSnet (OPSnet)

The following accelerated items were implemented this past week:

None

The following will be implemented the week of January 18, 2016:

RFC #4384 – Grant access to the NWSTG FTP ingest for the International Ice Patrol. To be implemented on January 19 at 1500Z.

RFC #4388 – Grant access to the NWSTG Sybase Utility Center for an NCO/Office of Central Processing employee. To be implemented on January 19 at 1500Z.

The following items are in progress:

None

NCO Kansas City

The following accelerated items were implemented this past week:

RFC #1640 - Modified the logging pattern on the College Park NIDS web servers in order to match the .mo and .md pattern, and to prevent out of space issues. Implemented on January 11 at 1800Z.

The following will be implemented the week of January 18, 2016

RFC #1650 - NIDS Forecast v 2.5.16 – Update to the NIDS forecast, to include the following fixes and enhancements: a) the "Hourly Weather Graph" link (renamed to "Hourly Weather Forecast") and the "Mobile Weather" link were updated to use the exact same lat/lon as the page itself (currently rounded, or using the observation lat/lon); b) the Extended Forecast had a typo for "New Years Day" as "New: Years Day" for the icon label. To be implemented on January 19 at 1400Z.

The following items are in progress:

None

NCO OCONUS

The following accelerated items were implemented this past week:

None

The following will be implemented the week of January 18, 2016:

None

The following items are in progress:

None

NCO Boulder

The following accelerated items were implemented this past week:

None

The following will be implemented the week of January 18, 2016:

None

The following items are in progress:

None

RFCs that are security-related are not included in the RFC Memo.

---- OPERATIONAL ANNOUNCEMENTS ----

1. The WCOSS Implementation Standards are available at

   http://www.nco.ncep.noaa.gov/pmb/docs/.

   Please adhere to these standards when submitting changes for the WCOSS.

2. Upcoming major changes to NCEP's production suite and details on any product or timing changes associated with upcoming implementations can be viewed at the following website:

   http://www.nco.ncep.noaa.gov/pmb/changes/

Test data for major changes should be available six weeks prior to implementation. Anyone wishing to receive formal notice of the final pre-implementation testing and the opportunity to provide feedback on the proposed changes can subscribe to the Model Evaluation mailing list via:

https://lstsrv.ncep.noaa.gov/mailman/listinfo/ncep.list.modelevalinfo

3. Maintenance of subscriptions to the Scheduled Operational Changes and Upgrades mailing list can be performed via the following website:

https://lstsrv.ncep.noaa.gov/mailman/listinfo/ncep.list.rfcmemo