# Hardware/Sysadmin/Puppet
## February 6, 2024

- Procurement:
  - CMS and FermiGrid worker nodes (79 CMS, 21 FermiGrid) ready for production.
  - 25 CMS tape dCache servers (NVMe SSD storage) getting installed.
  - Disk storage:
    - 100 CMS servers getting installed.
    - 25 servers for public dCache and Ceph turned over to SSA.
  - 13 GPU servers getting installed.
  - 28 General CMS servers getting installed.

- In process of contacting experiments and other stakeholders with proposed dates for upgrades from SL7 to EL9. Test nodes are available now; target is to do remaining upgrades in April. Some upgrades already done or in progress.

- Puppet: Got the puppet nftables module to work correctly with Podman on EL9.

- HPC:
  - Steady running

- Upgrading from SL7
  - Status:

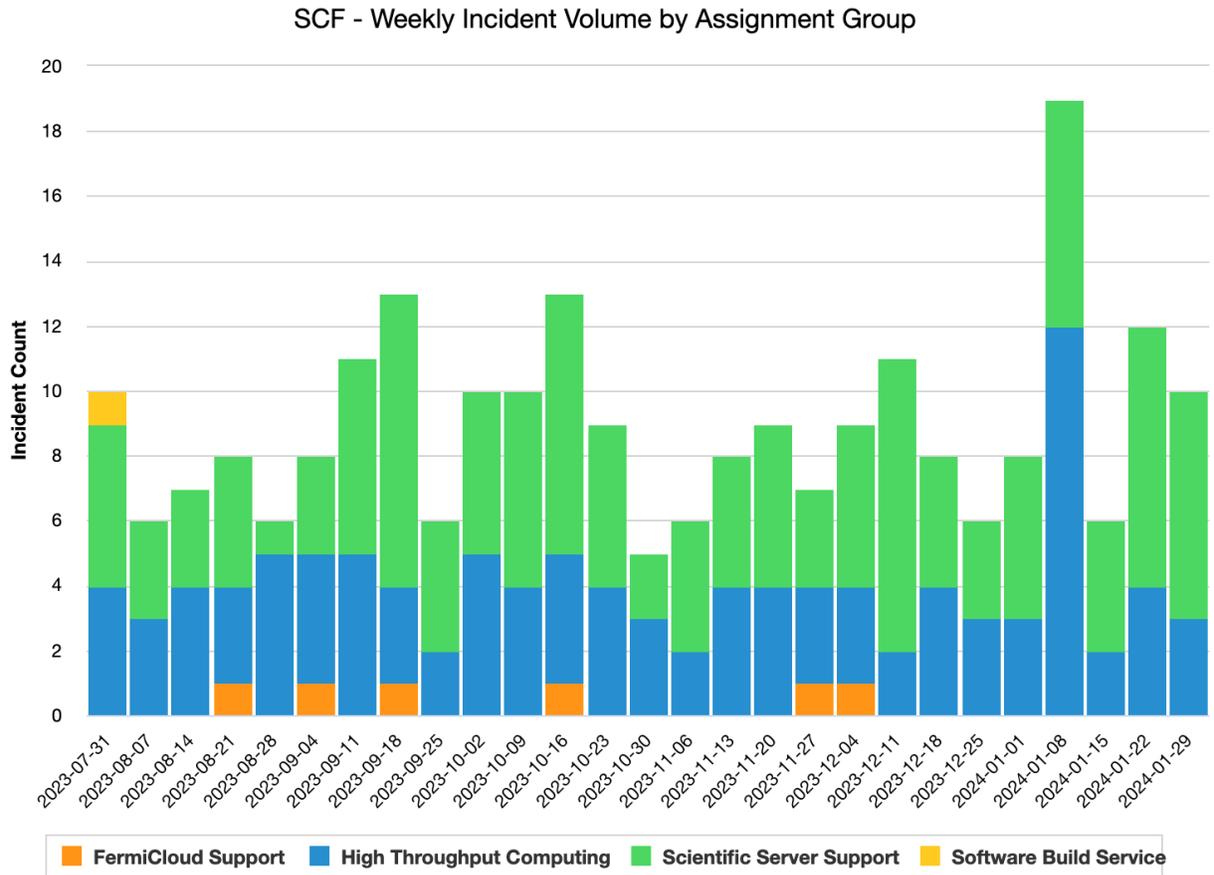| OS version | SL7 | EL8 | EL9 |
|------------|------|-----|-----|
| # nodes    | 1970 | 674 | 539 |

## Other Activities

- OKD
  - Working to increase range allocated for OKD to use, because we are running out of external IP addresses
    - Looks like this will require some downtime on prod clusters
  - OPA fixed on okddev cluster

- Proxmox/RHV/GPCF
  - Fixed consdb issue
  - Did some troubleshooting for VM installs in new CMS cluster
    - One issue was network related
    - Other issues were due to foreman misconfigurations
  - Confirmed OCSInventory is working on CMS Proxmox hosts—the last step needed to meet the Linux baseline
  - Fixed a bug in createvm script where the VM was assigned to the wrong HA group

- Miscellaneous
  - Converting LDAP scripts on ssiimagegpvm server (used to build container images) to python3
  - Working on a new puppet class that imagegpvm servers can use when migrating to Alma 9
  - NAS -> Ceph migrations completed for annie, geant4, lariat, and seaquest (app areas)
  - Fixed problem with broken Alma 8 GPG keys after a fresh install

- SL7 Upgrades
  - sbcgpvm01 installed with Alma 9 (semi-replacement for coupp SL7 gpvms)
  - ailab04 reinstalled with Alma 9
  - theorysrv01 reinstalled with Alma 9
  - theorygpvm01 reinstalled with Alma 9
  - Installed 10 new Alma 9 vms for CMS
  - Installed gm2gpvm-test-al9 Alma 9 VM
  - Installed fcdflnxgpvm01 Alma 9 VM.  Still sorting out configuration details.
  - Working on migrating Harbor to Alma 9, but some difficulties so far
  - ssiimagegpvm01 reinstalled with Alma 9; services migration ongoing
    - Working on migrating 'image' building VM special scripts to Alma 9
    - This will be needed for all the other container "image builder" VMs
  - ssidb updated to Alma 9 (critical for SSI infrastructure)
  - jenkins02: Working on migrating docker to podman/quadlets
  - ssimptest reinstalled with Alma 9

- Installs/Moves/Retirements
  - Working on cmsstor301-388. OS installed on 8 servers
    - Servers from cmsstor330+ on are in multiple states of missing MISCOMP/CMDB information. Working with PREP to untangle.
  - Working on fndcadb/fndcadbbackup
    - Hardware information missing from MISCOMP and CMDB
  - if-globaldtn-01 install in progress
  - Retired dmspuppet1 and dmspuppetgpvm01
  - Retired rexadmingpvm01
  - Retired dmsdcatapeitb03 (hardware issues)
  - Retired gm2cephtest

- Normal operations: 58 logged interventions last 3 weeks—replacing disks, rebooting hung systems, fixing corrupt RPM databases, retiring systems, fixing xinetd issues, clearing caches, fixing hung NFS mounts, fixing Puppet errors, etc.
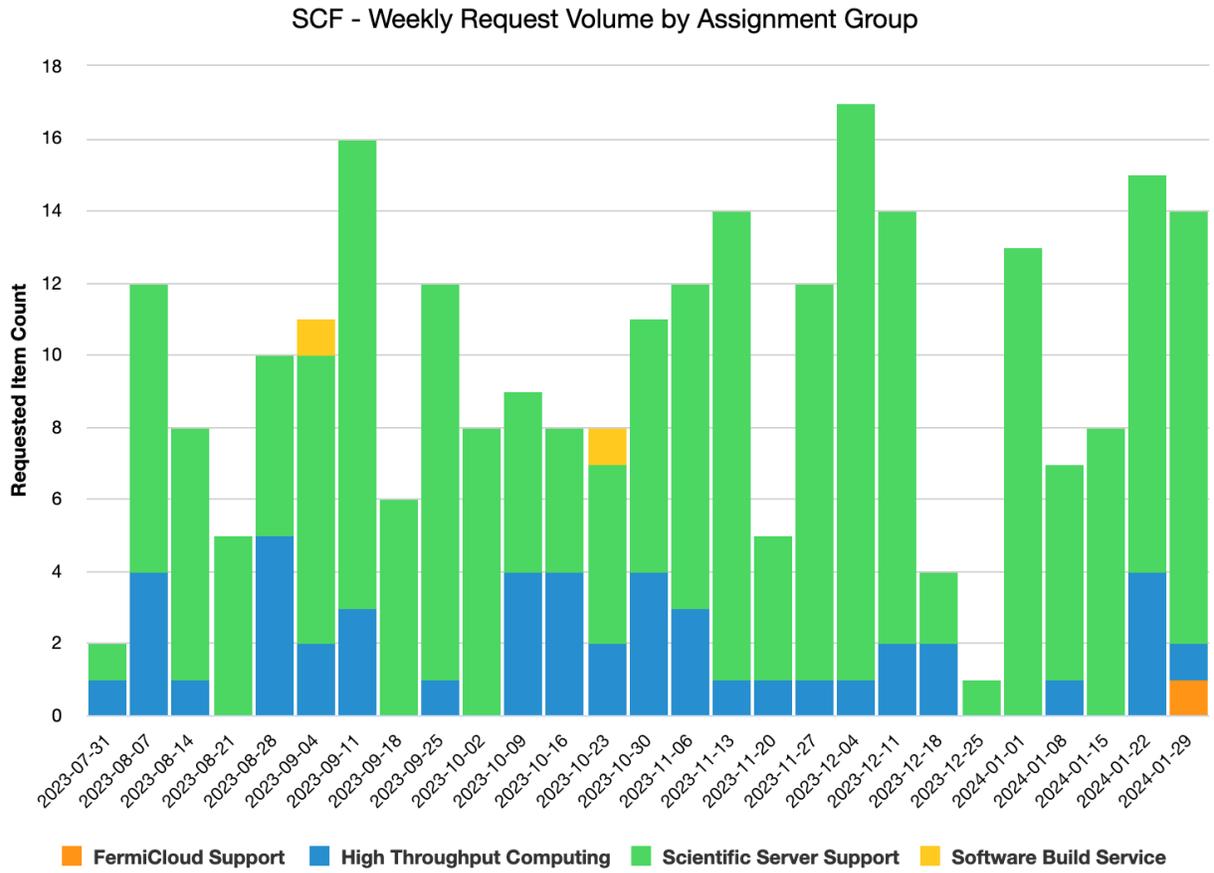

## HPC (High Performance & Parallel Computing
- No news is good news.

# Incidents



SCF - Weekly Incident Volume by Assignment Group

# Requests



SCF - Weekly Request Volume by Assignment Group

# Ticket Trend



SCF - Ticket Trend