

# Production Coordination

Area Coordinators Meeting  
April 22, 2010

Dan Fraser – Production Coordinator

# OSG Health Monitoring

- All links now on the production page
  - [https://twiki.grid.iu.edu/bin/view/Production  
/WebHome](https://twiki.grid.iu.edu/bin/view/Production/WebHome)
- Usage Chart (past 52 weeks)
- Weekly Calls
- OSG Data movement
- Job/Error ratios
- DOE display showing last 24 hours
- and much more ...

# Solving Production Problems

- Solving problems is a TEAM sport
- The weekly production call has key people from all the teams that are needed to solve problems
  - CMS, Atlas, LIGO, VOs, Engage, Integration, Sites, STG, Security, Operations, Metrics
- Problems accurately prioritized and channeled to the correct avenue
  - Sometimes solved on the call.
- Forewarning to prepare for upcoming issues.

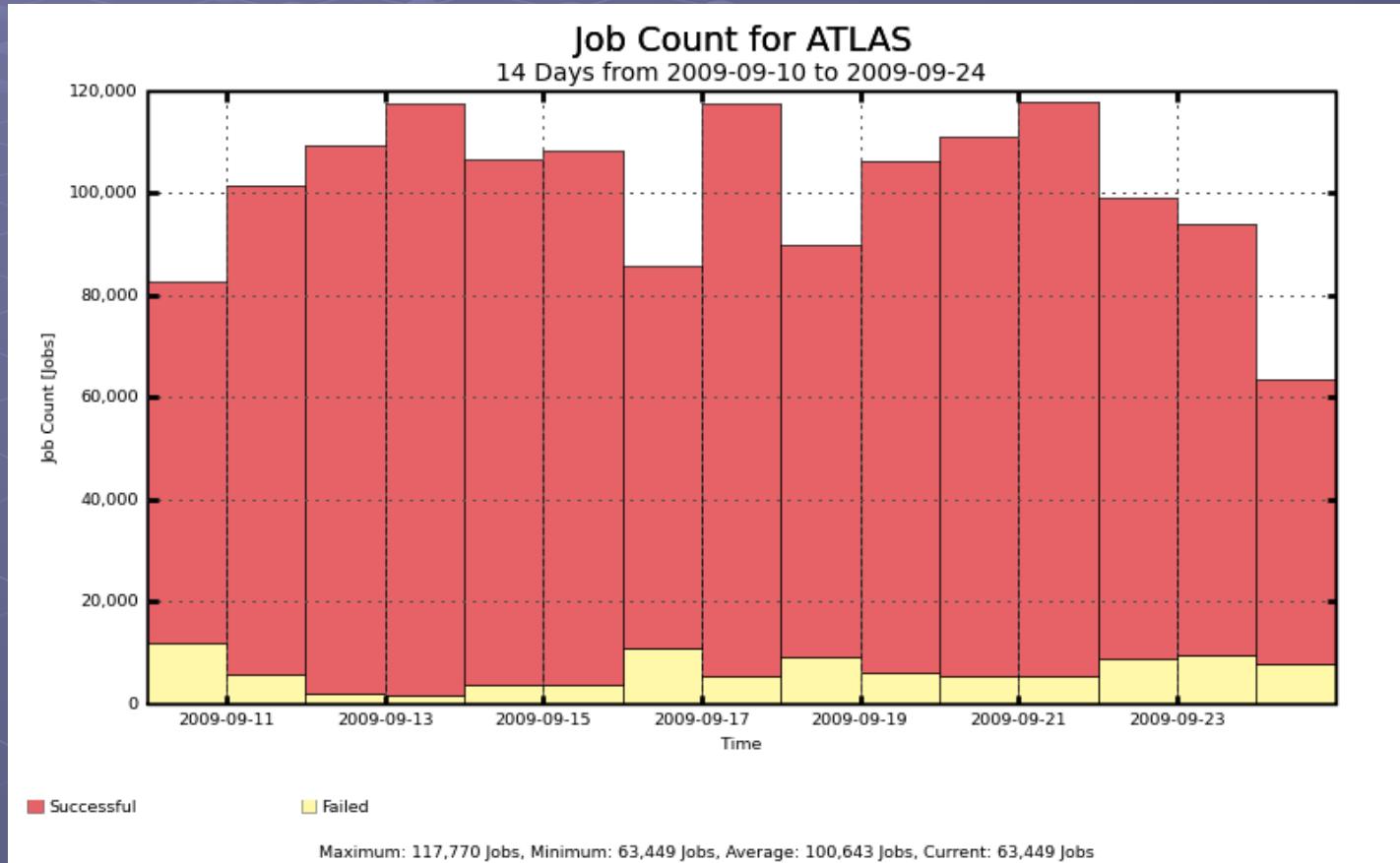
# Some Production Examples...

- Effort from the entire team
  - CERN BDII not reporting (RG data limit exceeded)
  - CERN BDII not a high priority (working on this)
  - Transition to a Web Services based ticketing service between GOC – BNL
  - Transitioning sites to use the new Gratia collector address (in progress)
  - Urgent security updates for sites running Condor /Gratia
  - LIGO Production running well (Rob E.)
    - Between Rank #1 & #2 on OSG
  - SBGRID now at ~3000 parallel jobs
  - ...

# A View from the Production Coordinator

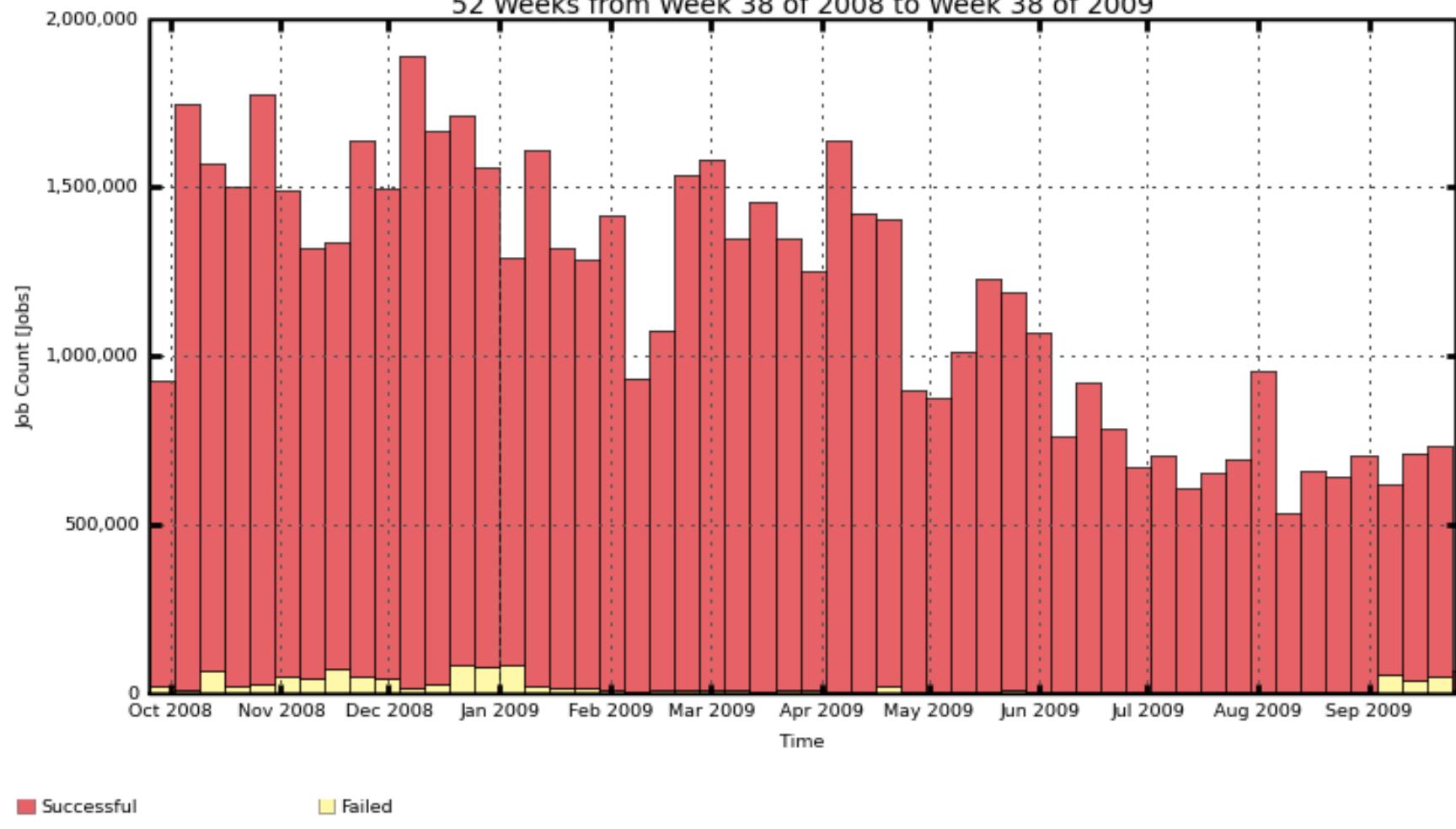
- What are the biggest problems in OSG?
  - Supporting VO's is difficult
    - Lowering the barrier for scaling across sites
      - Site differences often require site-by-site investigation
        - Effort in progress to understand this (Dan, Abhishek)
      - Big win possible with Glide-ins
        - New paper comparing job submission strategies
    - How to get opportunistic storage
      - Current method is to talk to each site...
      - New strategies being explored (Tanya, Brian, Dan)

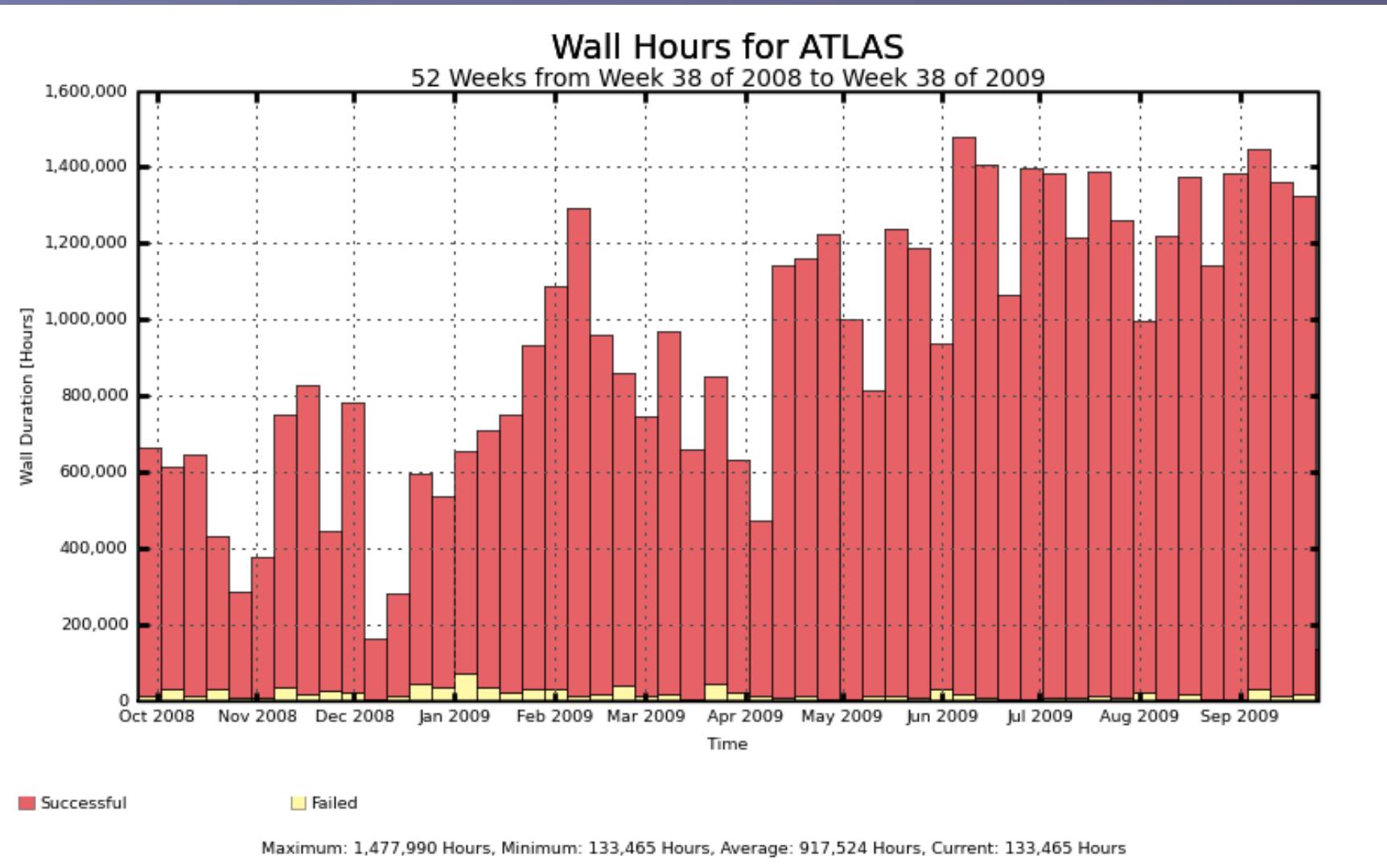
# Job count (2 weeks)



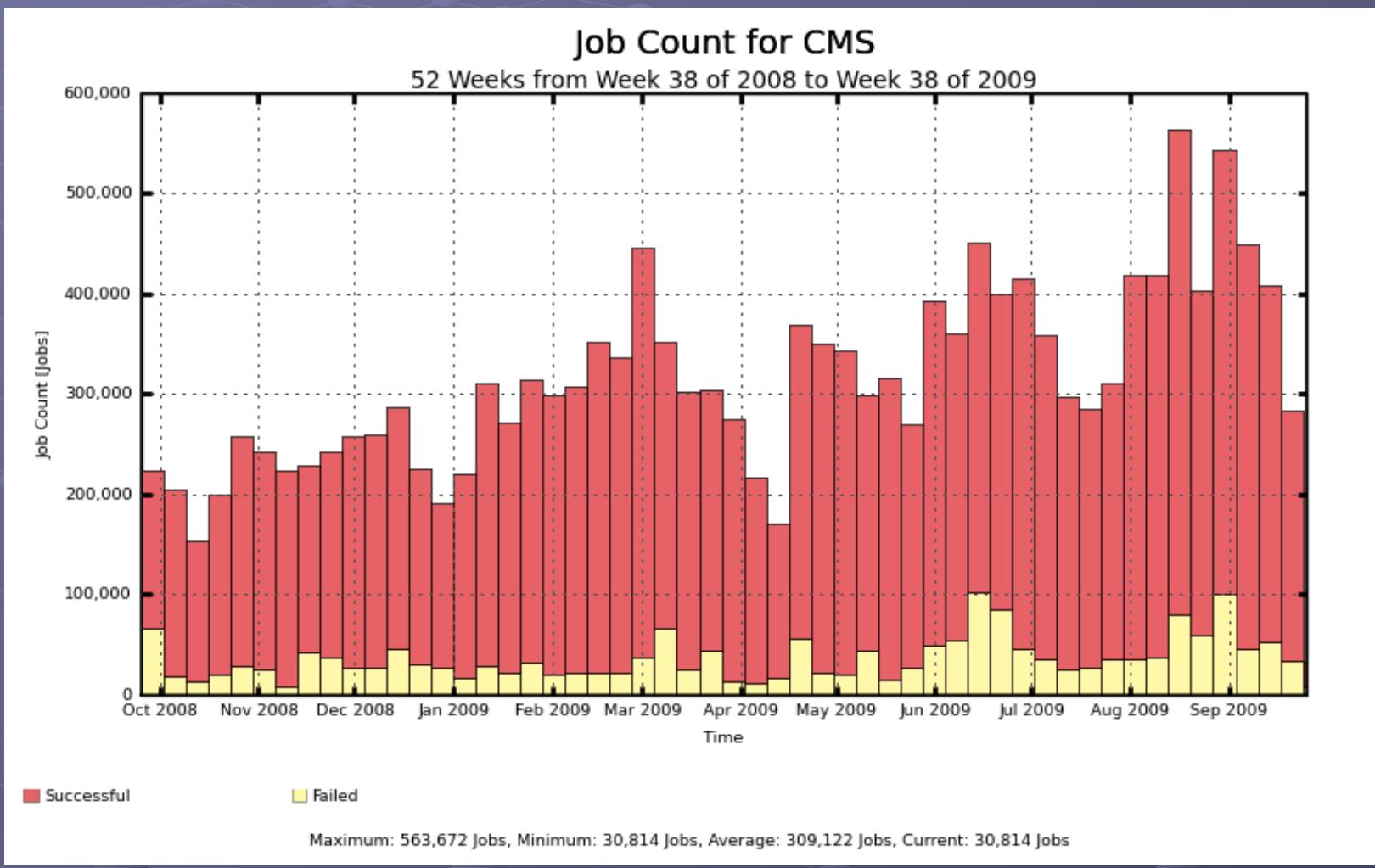
## Job Count for ATLAS

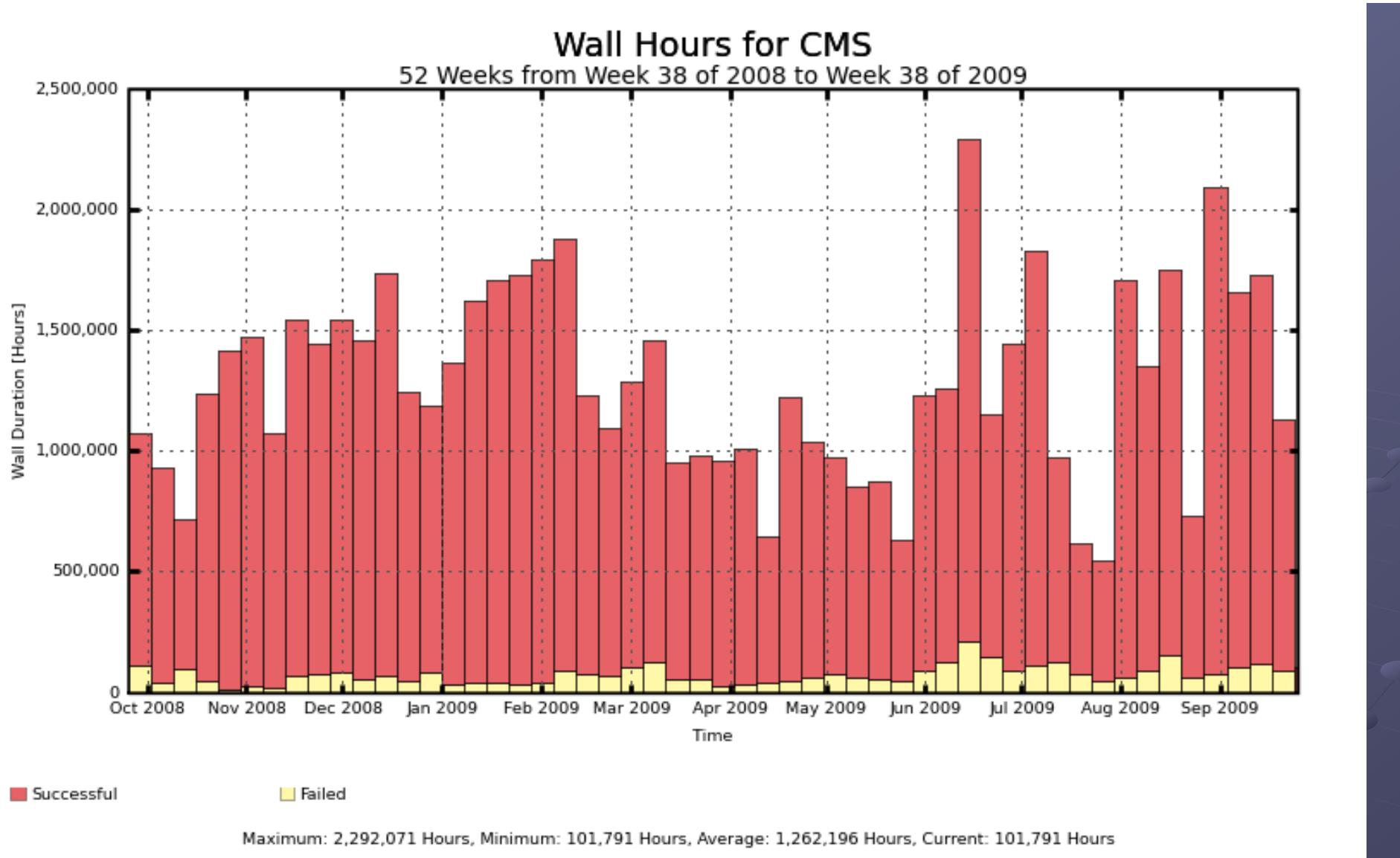
52 Weeks from Week 38 of 2008 to Week 38 of 2009





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[http://t2.unl.edu/gratia/xml/failed\\_dn\\_site\\_hours\\_bar?vo=cms&title=Daily%20CMS%20Wasted%20Hours%20By%20User%20and%20Site](http://t2.unl.edu/gratia/xml/failed_dn_site_hours_bar?vo=cms&title=Daily%20CMS%20Wasted%20Hours%20By%20User%20and%20Site)

# Example Problems

- Handling of job pre-emption (LIGO / D0)
- VO Package Validation probe needed
  - GIP “truth in advertising”
- LIGO switch to GT2 and also Condor-G job submission
- Condor scaling limits in GridMon (Atlas)
- Globus LSF gatekeeper bug (D0/CMS)
- Security Drill successes (for T1)
- Gratia probe introduction & ITB testing

# Example Issues cont.

- STEP09 monitoring (partially successful)
- IceCube management of opportunistic storage
- Gratia file transfer data catch up
- Transition from VORS to myOSG
- New location for RSV probes and ability to update from the “production” cache
  - Also, ensure that config\_OSG does not update the probes automatically
- Root Cause Analysis of CMS BDII outage

# Example Issues cont.

- Plan to localize data transfer information and upload summary transfer packets.
- Globus memory leak was causing frequent reboots at BNL.
- Site name mapping problem to enable different names internal to OSG.
- OIM display difference (http vs https)
- Site admin meeting & materials prep to help sites upgrade to OSG 1.2.

# Example Issues cont.

- Condor problem with directory creation in a multiple gateway scenario. (Nebraska)
- Gratia collector problem with handling records that accumulate faster than they can be processed.
- LIGO/Pegasus transition to use BDII data instead of central probe data.