

US ATLAS

Western Tier 2 Status and Plan

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US ATLAS Tier 2 meeting
University of Texas at Arlington
December 8, 2006

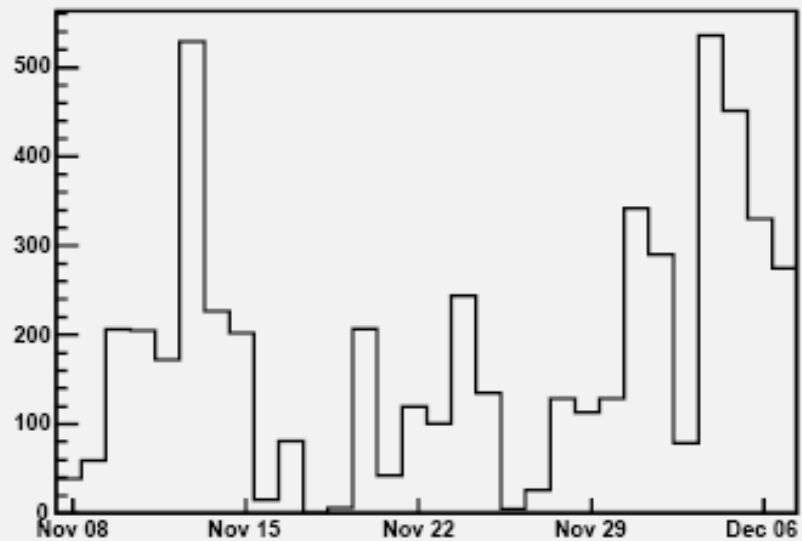
Resource for ATLAS

- ◆ DQ2 site service
- ◆ 2.3 TB NFS space (NetApp) for DQ2 repository
- ◆ 500 GB NFS space for ATLAS production software
- ◆ 7 % fair share of SLAC “shared” LSF batch resource
for Production

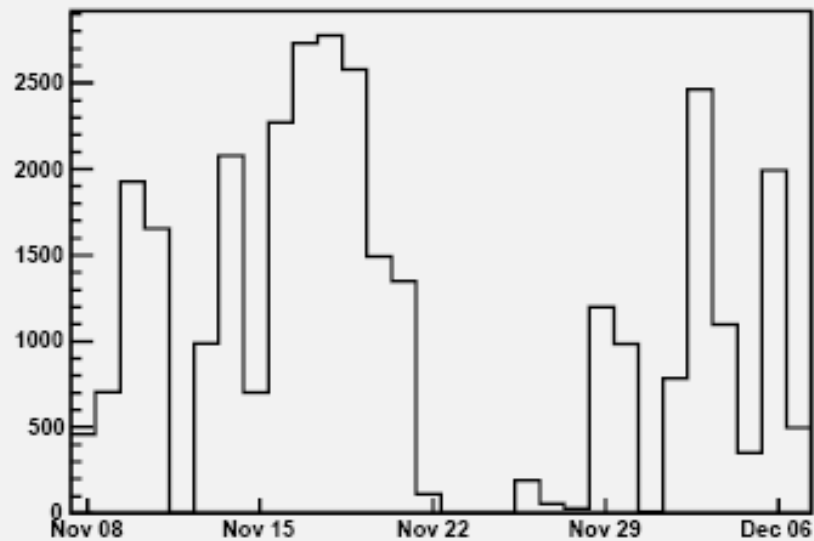
100-250 simultaneous jobs are typical

- ◆ Grid infrastructure. Gatekeeper/gridftp, GUMS

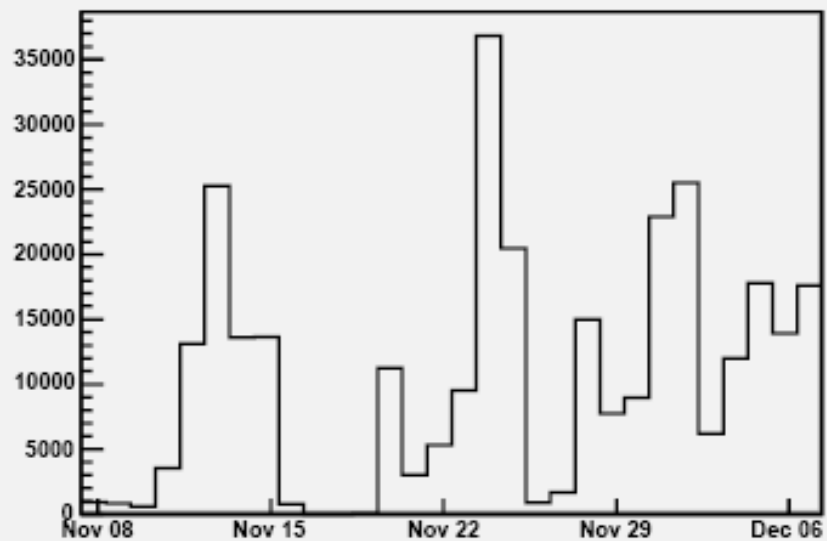
of finished Panda jobs



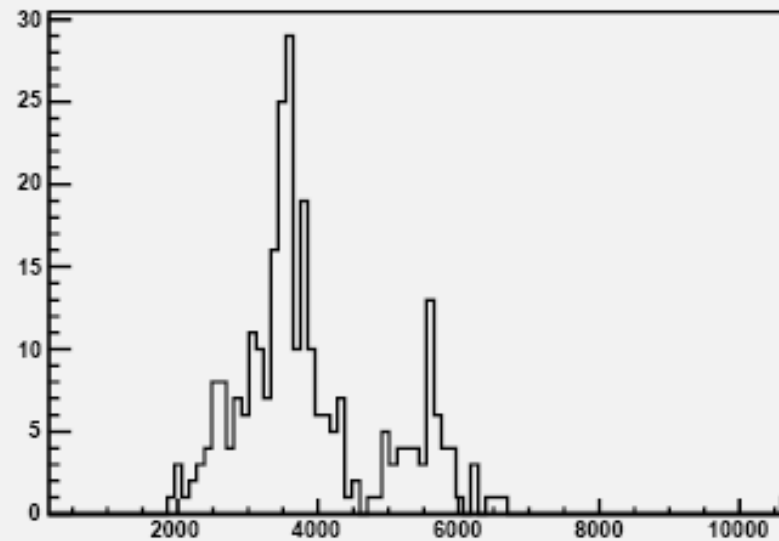
of empty pilot jobs

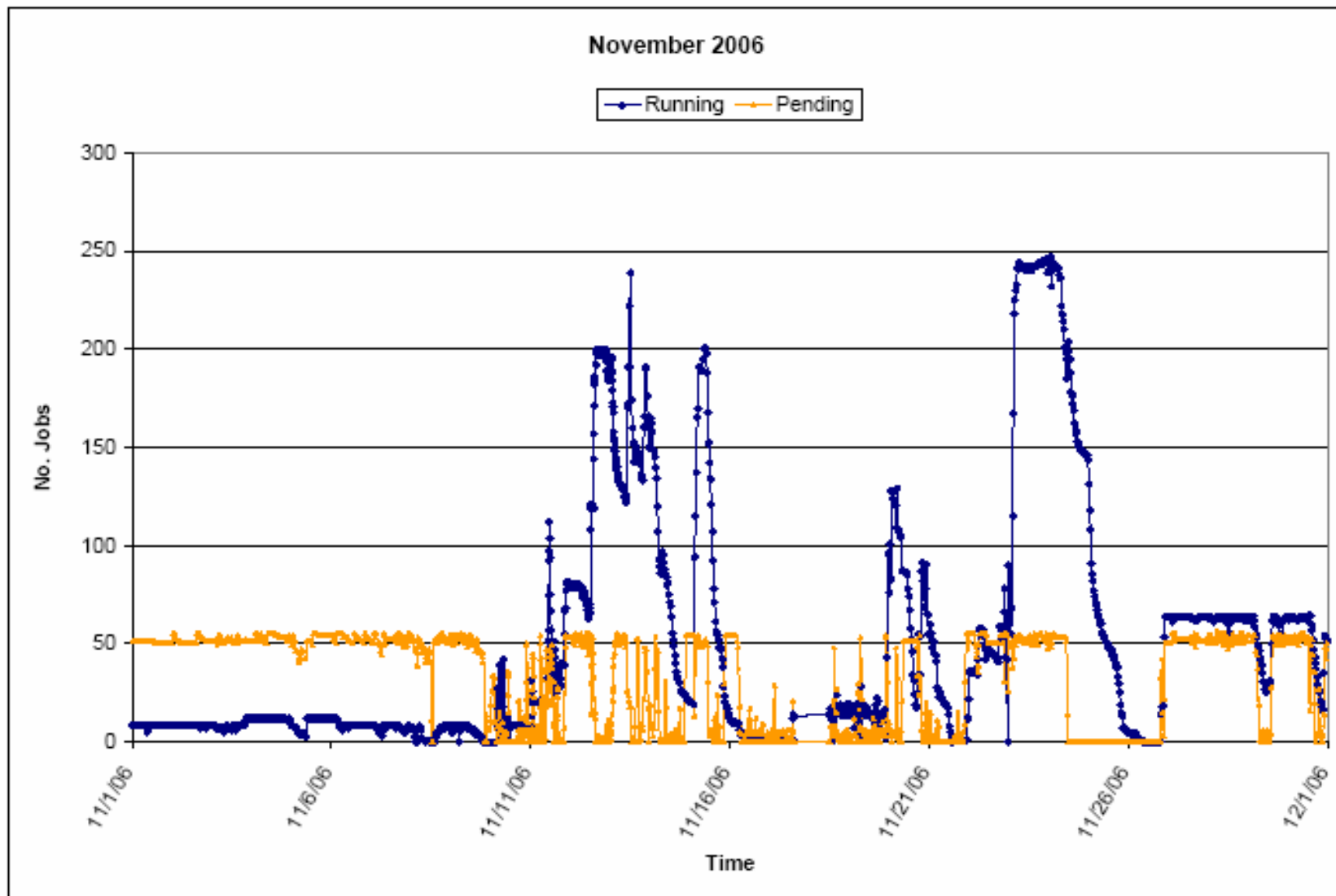


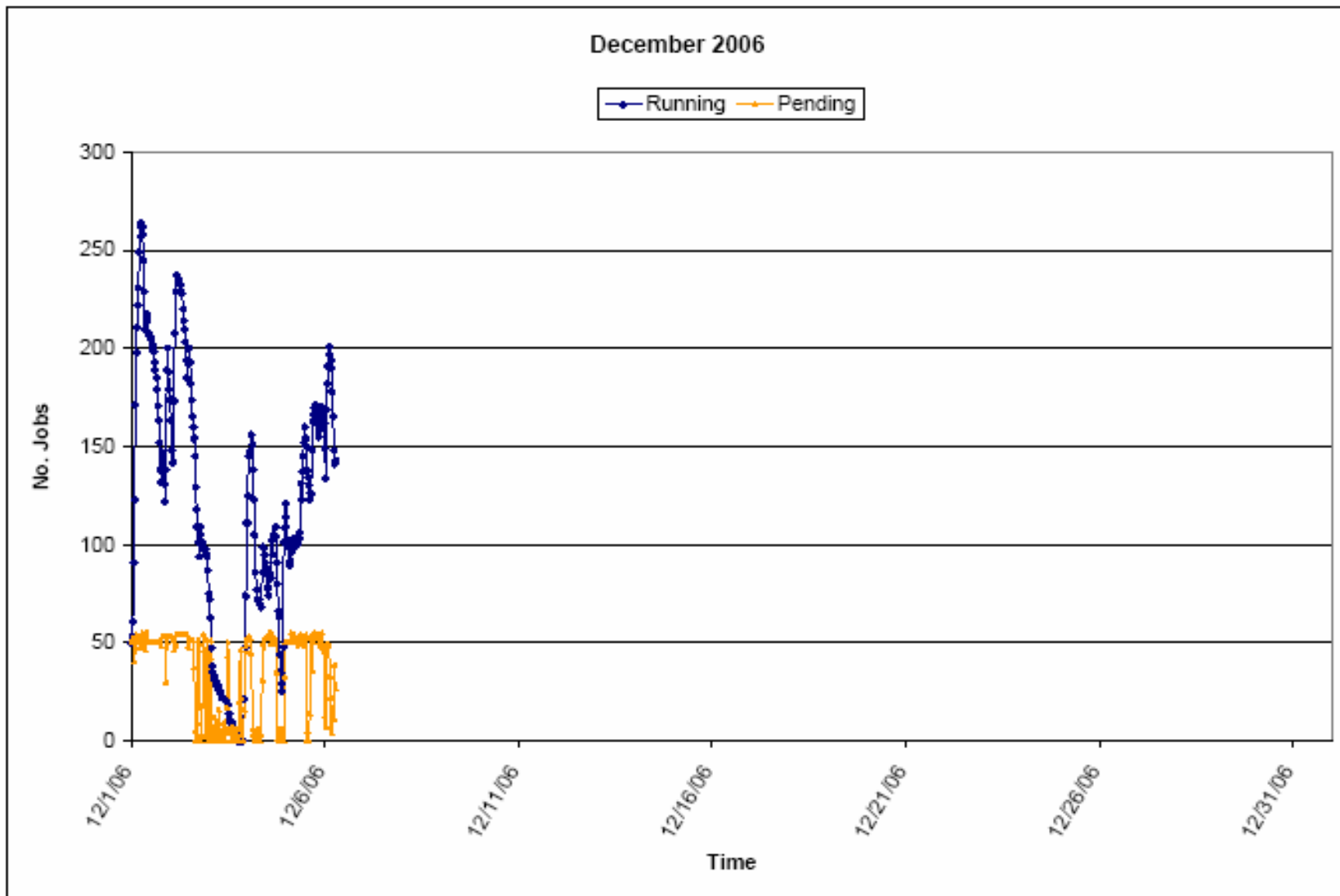
CPU Time in SLAC hours



CPU Time distribution in SLAC minutes (last 24 hours, long jobs)







- ◆ Have > 23 non-SLAC ATLAS users
- ◆ Access to LSF by local ATLAS users
- ◆ Local users also use DQ2

Sometimes interfering with Production

- ◆ AFS space for ATLAS software Kit and environment
- ◆ 2.65 TB NFS work space for local ATLAS users
- ◆ ATLAS release mirrors
- ◆ Western Tier 2 site web page

Purchasing Plan

- ◆ Revised plan: 2/3 CPU and 1/3 Storage
- ◆ Asking Quote for the following configuration:

- 64 CPU nodes, 256 CPU cores

SUN X2200M2 : 2 x AMD Opteron 2214

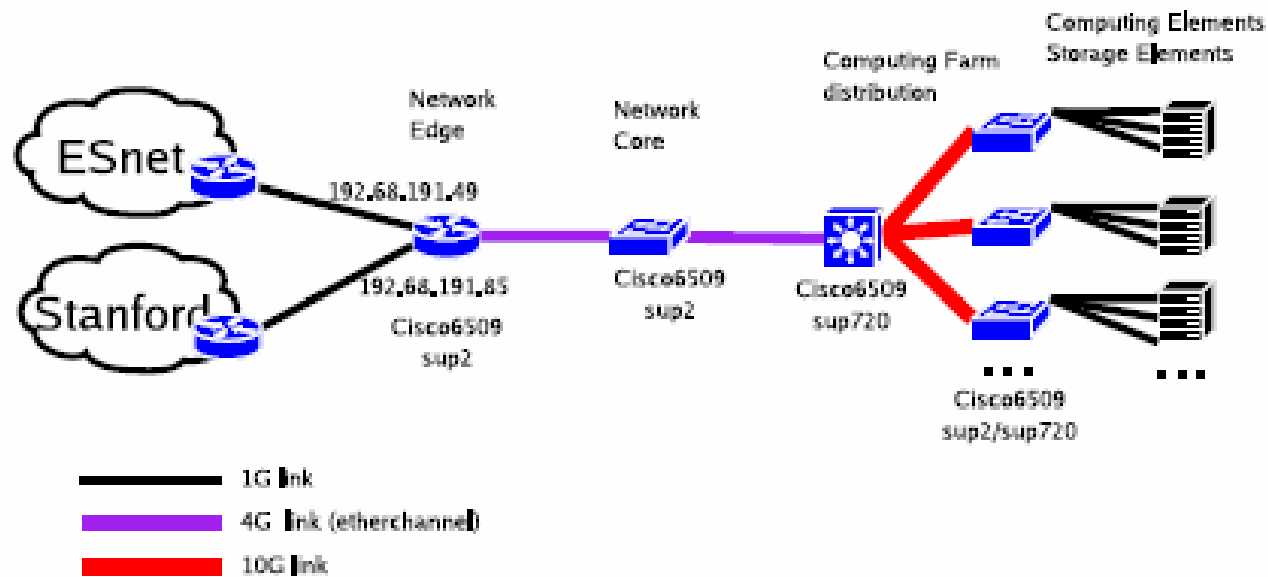
4 CPU cores, 8 GB memory, 2 x 250GB SATA disk

- 3 Fileservers, 54 TB (useful space?)

SUN Fire V240: 3 x 6 TB tray (model 6140)

- ◆ Cisco Switch ports

SLAC HPC Current Network

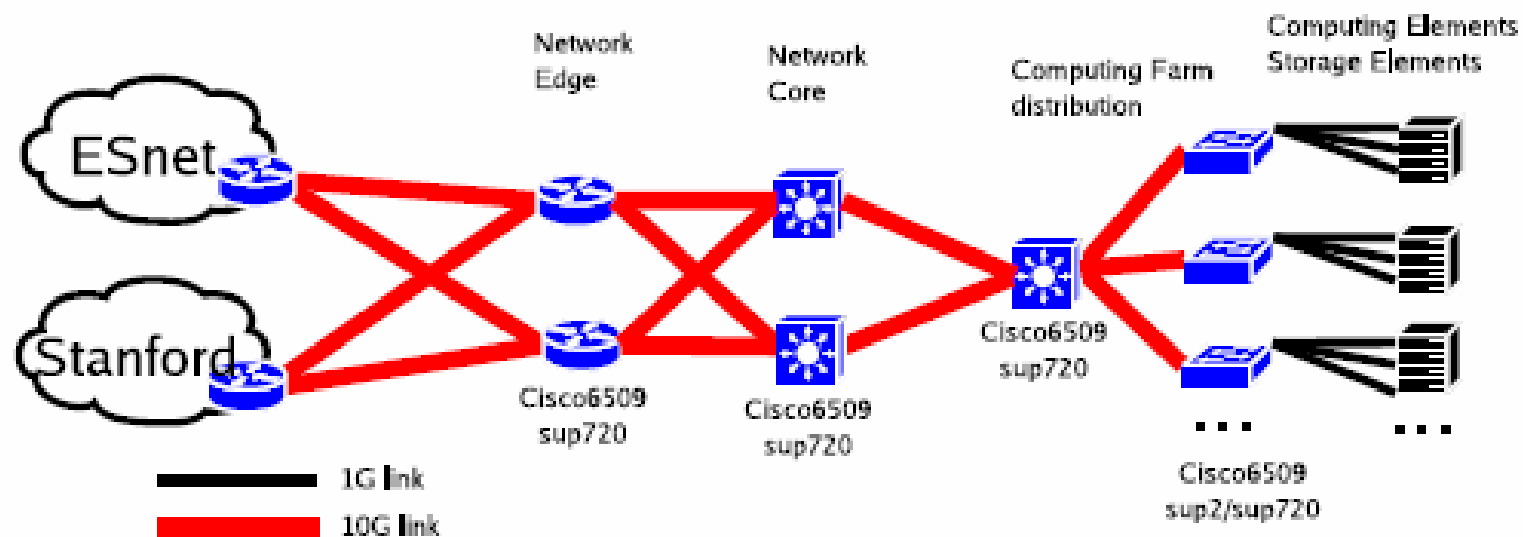


Depicted is the typical network path for a computing node (CE or SE)
The SLAC site is AS 3671 subnet 134.79.0.0/16

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last update 10/19/2006

Provided by SLAC network group : Les Cottrell and Antonio Ceseracchi

SLAC HPC Network Plan



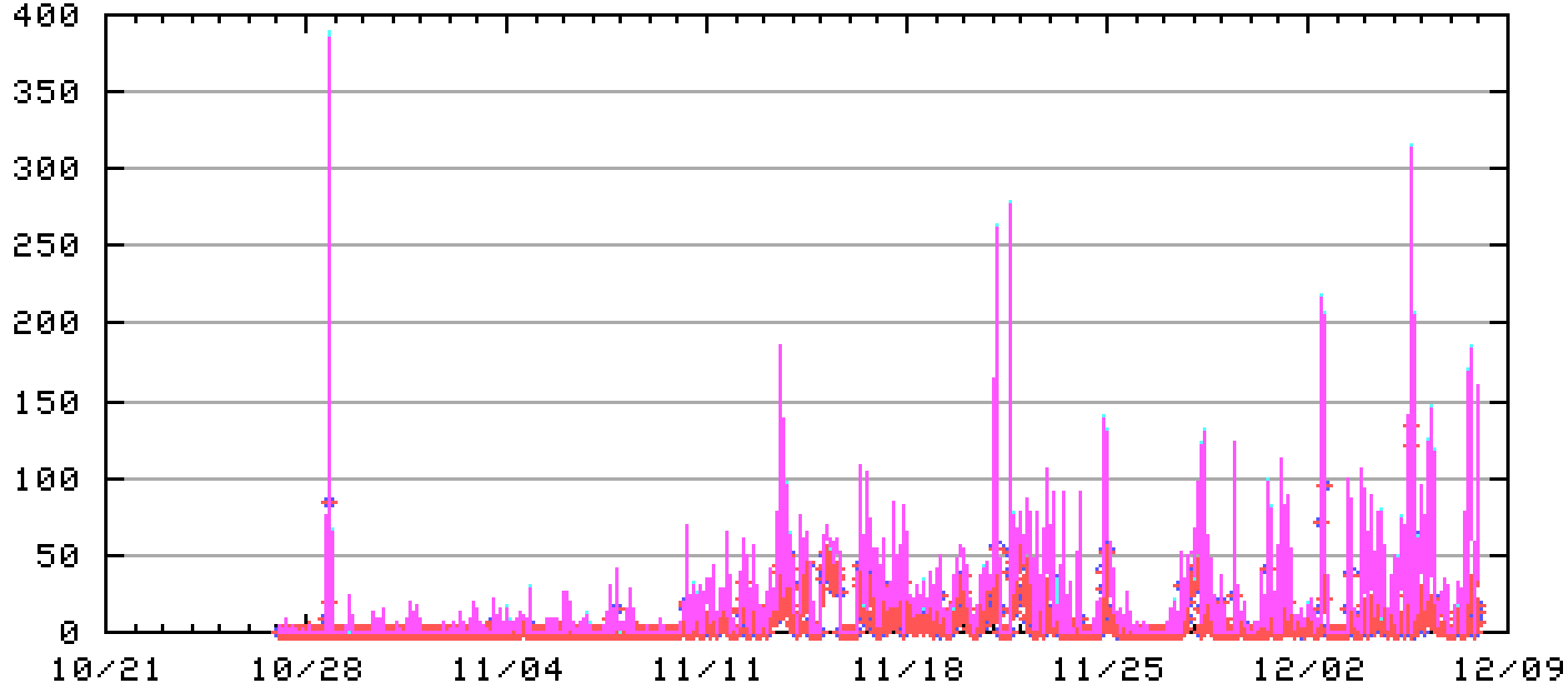
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SWH-FARMCORE1:9/1-141-x1025 (F-1000(Fixed)Mb-v84)<->OSGSERV01
Mbits/sec



Challenges

- ◆ High Maintenance of DQ2 site service
 - Debugging DQ2 logs is a daily job
 - Frequent restart of DQ2 site services
 - Web interface to LRC is still a security concern

And a well known LRC database password
- ◆ Unpredictable CPU usage of jobs
 - Difficult to adjust batch queues, reduce batch utilization
- ◆ Condor-G leaves behind orphan job status files.