

The data is a cleansed data set consisting of

- 1) Syslog data
- 2) slurm (job) data
- 3) raw system data

SAND2011-0740P

for the same time period on the glory cluster (02-11-2009 thru 03-01-2009).

The following items have been anonymized in the slurm tables and the logs:

- 1) usernames
- 2) job names
- 3) ip addresses
- 4) users' unix paths (where discoverable)
- 5) application names (where discoverable)

The following items have been removed from the slurm tables

- 1) system partitions (e.g. nw)
- 2) WCTool accounts (e.g., FY09XXXX)

The following items have been kept for diagnostic purposes:

- 1) references to system accounts such as root, mysql, nobody, news as a user
- 2) references to system applications such as avahi, mysql

Note: a smaller data set consisting of only the slurm data and raw system data was previously approved for release by you (John Noe).

Example data:

1) Syslog:

```
Feb 23 09:30:29 glory234 ntpd[5318]: synchronized to #IP-2#, stratum 2
Feb 23 10:28:41 glory234 xinetd[5301]: START: mshell pid=2923 from=#IP-1#
Feb 23 10:28:41 glory234 pam_slurm[2923]: access granted for user root (uid=0)
Feb 23 10:28:42 glory234 in.mrshd[2923]: pam_unix(mrsh:session): session opened for user
root by (uid=0)
Feb 23 10:28:42 glory234 in.mrshd[2924]: root@glory145 as root: cmd='uptime'
Feb 23 10:28:43 glory234 in.mrshd[2923]: pam_unix(mrsh:session): session closed for user
root
Feb 23 10:28:43 glory234 xinetd[5301]: EXIT: mshell status=0 pid=2923 duration=2(sec)
Feb 23 10:48:43 glory234 -- MARK --
Feb 12 09:01:54 glory0 in.mrshd[20805]: root@glory145 as root: cmd='PATH2 start'
Feb 23 11:08:28 glory234 APP20 invoked oom-killer: gfp_mask=0x201d2, order=0, oomkilladj=0
Feb 12 09:08:17 glory234 in.mrshd[30422]: root@glory145 as root: cmd='PATH3 USER267 start'
Feb 24 13:49:43 glory110 in.mrshd[13257]: root@glory121-ib as root: cmd='df -h PATH1'
Feb 12 10:09:04 glory234 in.mrshd[32659]: root@glory145-ib as root: cmd='PATH3 USER267
stop'
Feb 12 09:05:53 glory214 in.mrshd[29550]: root@glory145 as root: cmd='ps -ef | grep APP32
| grep -v grep | wc -l'
Feb 13 13:04:20 glory145 dhcpd: DHCPREQUEST for #IP-34# (#IP-15#) from 00:30:f1:5a:26:eb
via eth3: ignored (not authoritative).
Feb 23 10:05:08 glory120 sshd[13306]: pam_unix(sshd:session): session opened for user
USER565 by (uid=0)
```

2) Slurm:

```
mysql> select * from job_table limit 2;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| id      | deleted | jobid | associd | wckey | wckeyid | uid   | gid   | cluster |
partition | blockid | account | eligible | submit | start   | end   |
suspended | timelimit | name   | track_steps | state | comp_code | priority | req_cpus |
alloc_cpus | alloc_nodes | nodelist
```

```

node_inx | kill_requid | qos | resvid |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
+-----+-----+-----+-----+
+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 3061 | 0 | 11478 | 0 | 0 | 16305 | 16305 | glory | 0 |
| NULL | 0 | 1233696177 | 1233696177 | 1234044674 | 1234390289 | 0 |
0 | JOB221 | 0 | 6 | 1 | 0 | 16 | 256 |
0 | glory[255,261-265,267-268,273,276-282] | NULL | 0
| 0 | 0 | 11488 | 0 | 0 | 16305 | 16305 | glory | 0 |
| NULL | 0 | 1233698768 | 1233698768 | 1234044674 | 1234390289 | 0 |
0 | JOB369 | 0 | 6 | 1 | 0 | 16 | 256 |
0 | glory[89,129,131,181,185-188,193,195-197,243-245,254] | NULL | 0
| 0 | 0 |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
+-----+-----+-----+-----+
+-----+-----+-----+-----+
+-----+-----+-----+-----+
2 rows in set (0.00 sec)

```

```

mysql> select * from slurm_job_log limit 2;
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | jobid | username | userid | jobname | jobstate | partition | timelimit |
starttime | endtime | nodelist | nodecount |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+
| 13071 | 11973 | USER643 | 18638 | JOB510 | FAILED | | 1080 |
2009-02-10 16:45:30 | 2009-02-11 00:12:07 |
glory[9,11,80,84,86,105,112,134-136,205,217,219,250,253,259] |
16 |
| 13072 | 12000 | USER643 | 18638 | JOB150 | FAILED | | 2880 |
2009-02-11 00:12:08 | 2009-02-11 00:35:51 |
glory[11,70-76,79-80,84,86,88,93-96,98-100,105,112,134-136,201,205,217,219,250,253,259] |
32 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

```

3) Raw system:

- 1) components (e.g., nodes, racks) numbered and named, but no ip addresses
- 2) components (e.g., nodes, racks) their relative location (e.g., numerical representation that indicates that node 1 is in the same rack as node 2 and is above it)
- 3) data tables for information from lmsensors, /proc/meminfo, edac like:

```

mysql> select * from MetricNodeActiveValues limit 5;
+-----+-----+-----+-----+
| TableKey | CompId | Value | Time |
+-----+-----+-----+-----+
| 1 | 106 | 315536 | 2009-02-11 14:05:27 |
| 2 | 106 | 315564 | 2009-02-11 14:06:28 |
| 3 | 106 | 315616 | 2009-02-11 14:07:28 |
| 4 | 106 | 315724 | 2009-02-11 14:08:29 |
| 5 | 106 | 315508 | 2009-02-11 14:09:32 |
+-----+-----+-----+-----+
5 rows in set (0.01 sec)

```