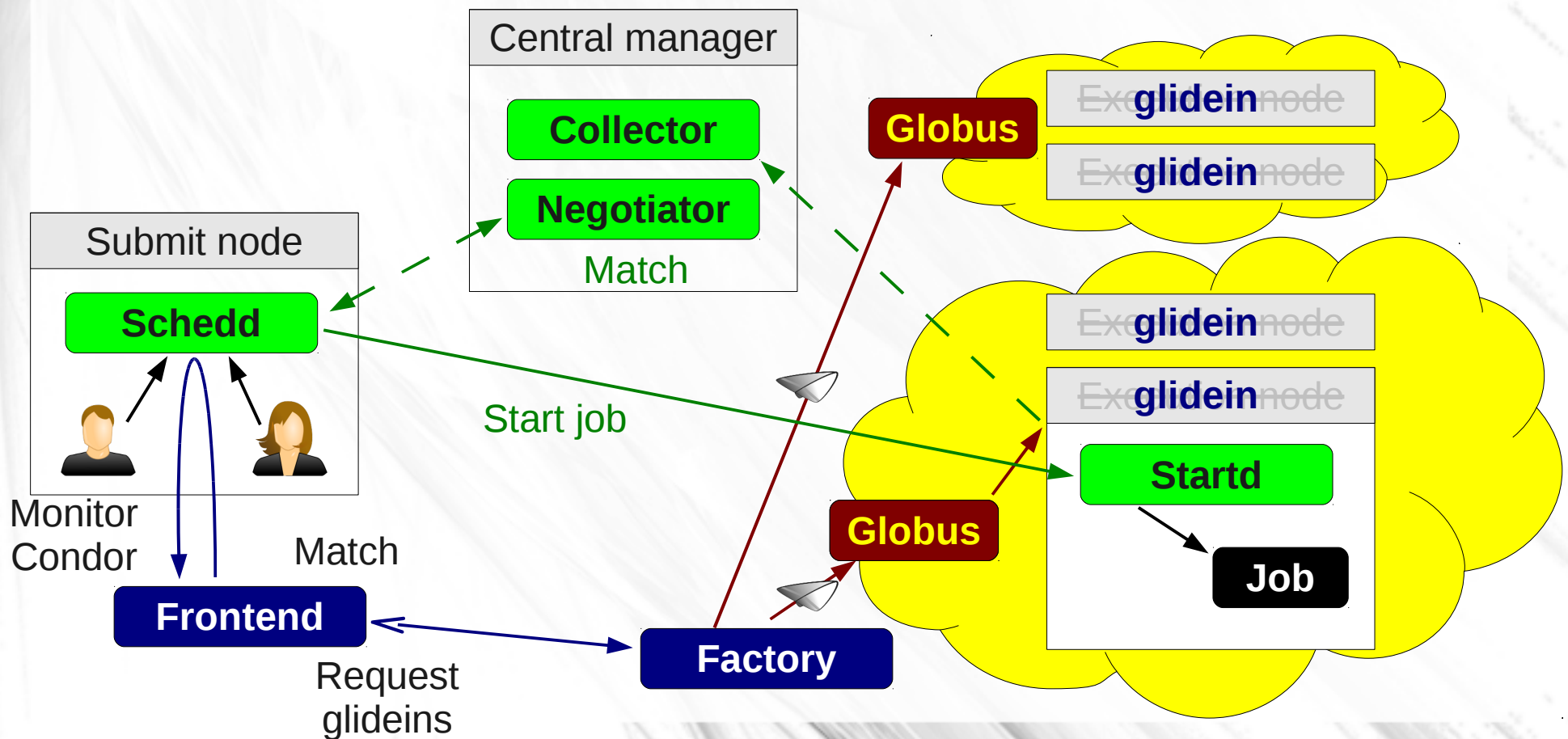


VO Forum

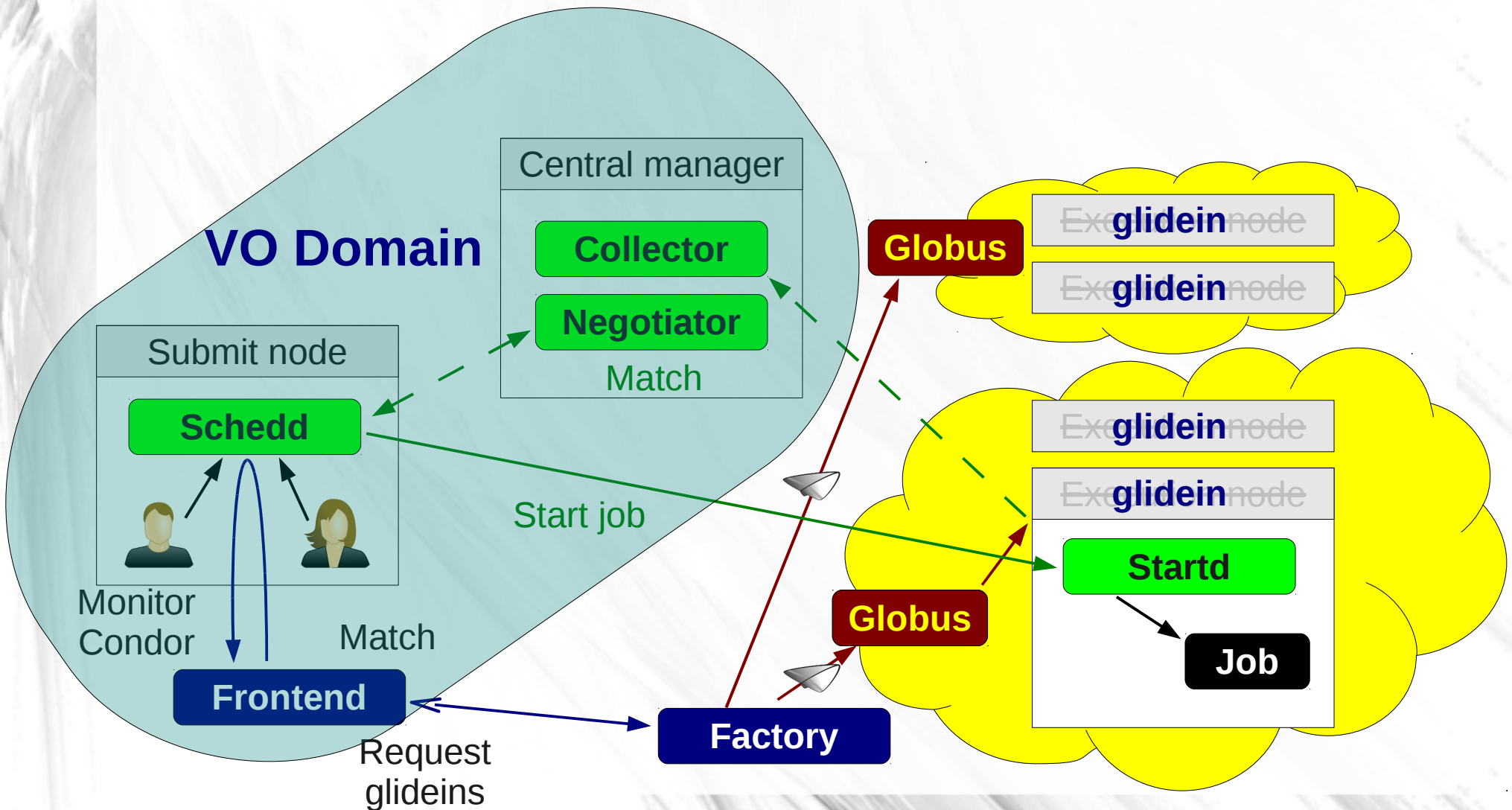
glideinWMS monitoring from a VO Frontend point of view

by Igor Sfiligoi

glideinWMS architecture

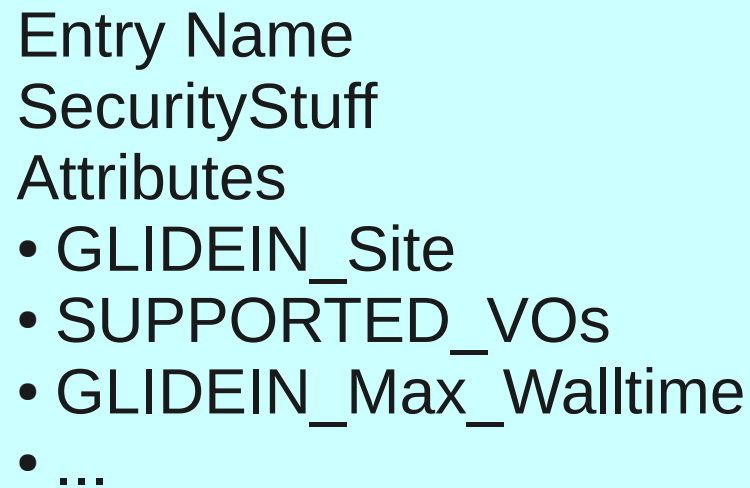


glideinWMS architecture₂



Information flow₁

- Factory to VO Frontend



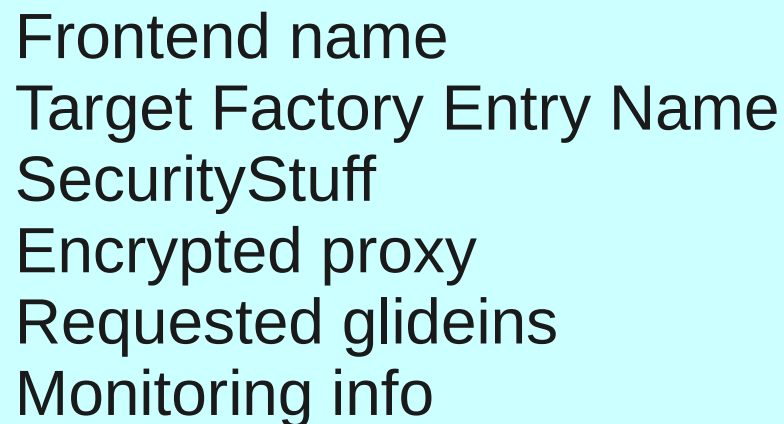
Entry Name
SecurityStuff
Attributes

- GLIDEIN_Site
- SUPPORTED_VO
- GLIDEIN_Max_Walltime
- ...

One per supported site

Information flow₂

- VO Frontend to Factory



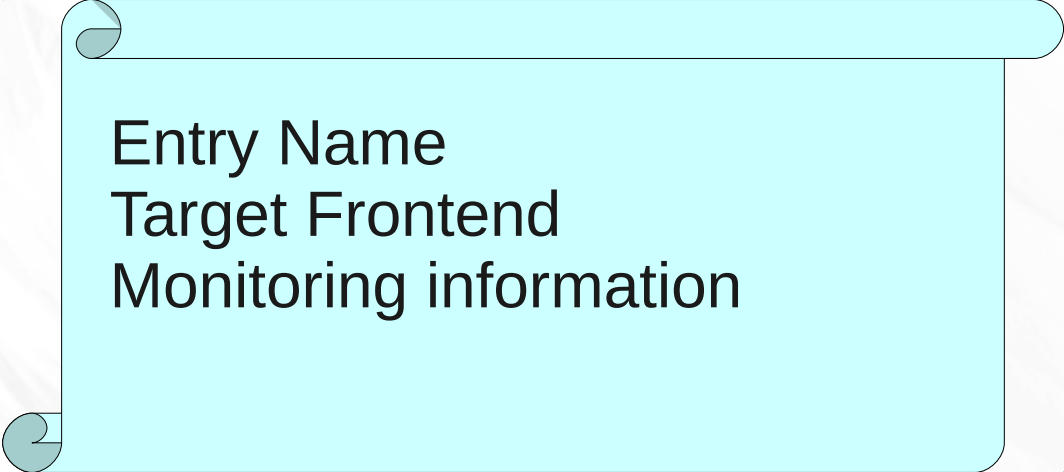
Frontend name
Target Factory Entry Name
SecurityStuff
Encrypted proxy
Requested glideins
Monitoring info

One per matching site

`stringListMember("CMS",GLIDEIN_Supported_VO)`

Information flow₃

- Factory to VO Frontend - Monitoring



Entry Name
Target Frontend
Monitoring information

One per frontend request

Monitoring available

- Log files
- Web monitoring
- Command line tools
- Peeking at the
Factory monitoring

Log files₁

- Log files contain the most info
 - One snapshot every cycle
 - One line per matched entry

```
[date]           Jobs in schedd queues
[date] Idle (match eff  old  uniq )  Run ( here  max )  |  Glideins  |  Request
[date] 375( 1088  375  339    0) 1162( 422 10000) | 422   0   422 | 40  2306 Up  CMS_T2_US_Florida_pg
[date] 339( 1017  338  303    0) 1162( 357 10000) | 359   1   357 | 40  2252 Up  CMS_T2_US_Nebraska_Husker
[date]  0(    0    0    0    0)  0(    0 10000) |  0   0    0 |  0    0 Up  CMS_T2_US_Nebraska_Red
[date]  0(    0    0    0    0)  0(    0 10000) |  0   0    0 |  0    0 Up  CMS_T3_US_Omaha_ff3
[date]  0(    0    0    0    0)  0(    0 10000) |  0   0    0 |  0    0 Up  CMS_T3_US_Omaha_ff
...cut...
[date]           Jobs in schedd queues
[date] Idle (match eff  old  uniq )  Run ( here  max )  |  Glideins  |  Request
[date] 2887(10635 2886 2778    1) 4540( 1393 3870k) | 1456   1  1454 |  0    0 Up  Sum of useful factories
[date]  0(    0    0    0    0)  0(    0    0) |  0   0    0 |  0    0 Down Sum of down factories
[date]  845(  845  845  845  845)  8(    0    0) |  0   0    0 |  0    0 Down Unmatched
```


Log files₂

- Info about what your jobs

```
Jobs in schedd queues
Idle (match  eff  old  uniq )  Run ( here  max )  Factory
 375( 1088   375   339    0)  1162(  422 10000) CMS_T2_US_Florida_pg
 339( 1017   338   303    0)  1162(  357 10000) CMS_T2_US_Nebraska_Husker
   0(    0    0    0    0)    0(    0 10000) CMS_T2_US_Nebraska_Red
   0(    0    0    0    0)    0(    0 10000) CMS_T3_US_Omaha_ff3
   0(    0    0    0    0)    0(    0 10000) CMS_T3_US_Omaha_ff
...cut...
```

- Totals, too

```
Jobs in schedd queues
Idle (match  eff  old  uniq )  Run ( here  max )  Factory
2887(10635  2886  2778    1)  4540( 1393 3870k) Sum of useful factories
```

Log files₃

- Info about the started glideins

```
      Glideins
Total Idle  Run  Factory
  422     0   422 CMS_T2_US_Florida_pg
  359     1   357 CMS_T2_US_Nebraska_Husker
    0     0     0 CMS_T2_US_Nebraska_Red
    0     0     0 CMS_T3_US_Omaha_ff3
    0     0     0 CMS_T3_US_Omaha_ff
...cut...
```

- Totals, too

```
      Glideins
Total Idle  Run  Factory
  1456     1  1454 Sum of useful factories
```

Log files₄

- Info about the requests

```
Request
Idle MaxRun Down Factory
  40   2306 Up   CMS_T2_US_Florida_pg
  40   2252 Up   CMS_T2_US_Nebraska_Husker
   0     0 Up   CMS_T2_US_Nebraska_Red
   0     0 Up   CMS_T3_US_Omaha_ff3
   0     0 Up   CMS_T3_US_Omaha_ff
...cut...
```

- Totals, too

```
Request
Idle MaxRun Down Factory
   0     0 Up   Sum of useful factories
```

Log files₅

- Look also for disabled sites

```
Jobs in schedd queues
Idle (match  eff  old  uniq )  Run ( here  max )  Factory
    0(    0    0    0    0)    0(    0    0)  Sum of down factories
```

- And jobs that don't match

```
Jobs in schedd queues
Idle (match  eff  old  uniq )  Run ( here  max )  Factory
   845(   845   845   845   845)    8(    0    0)  Unmatched
```

Web monitoring

- Historical info

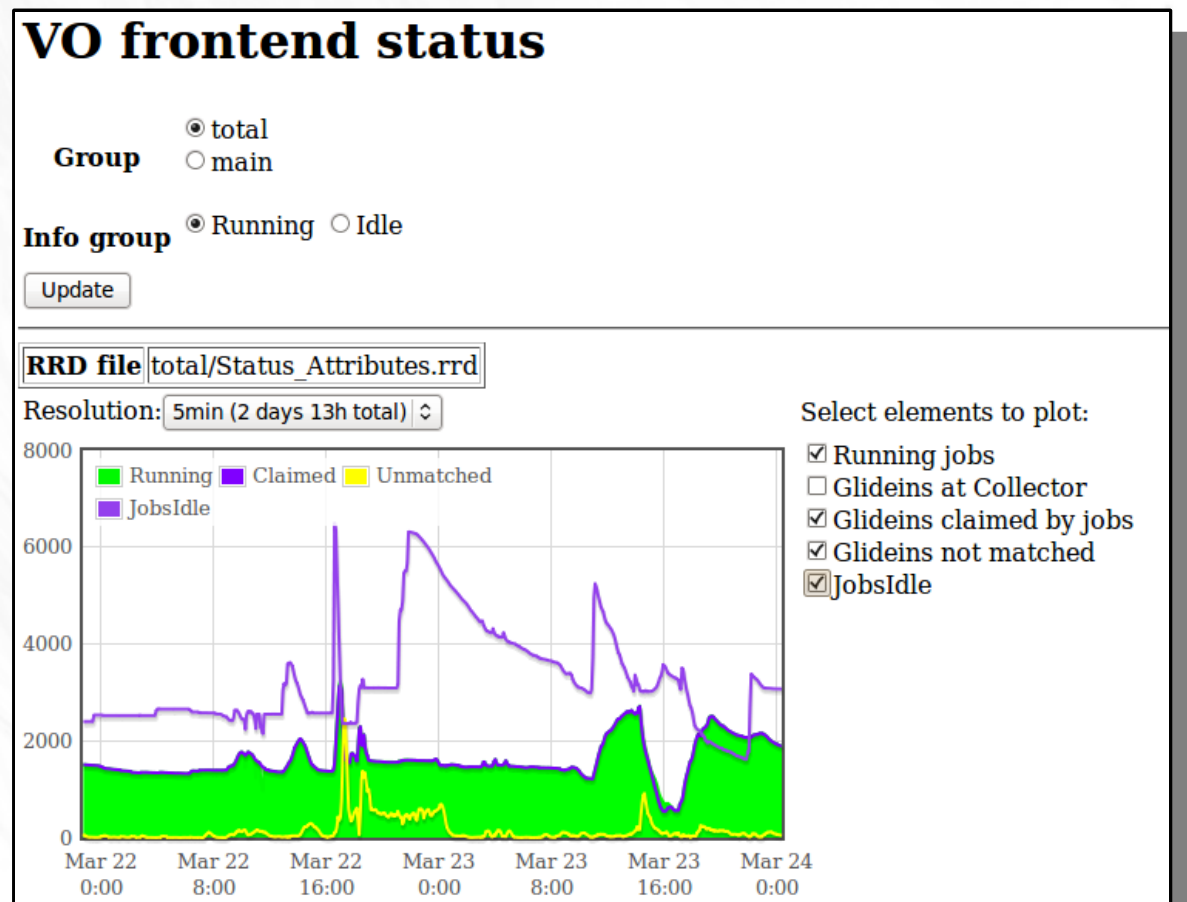
http://<node>/vofrontend/monitor/frontend_<id>/frontendStatus.html

- Frontend
Web server
page

- Fully client side
(javascript)

- Many options
- Zoomable

No per-entry view



Command line tools

- Standard condor tools
 - condor_q
 - condor_status
 - ... with all its options
- Glidein enhanced version
 - glideinWMS/tools/glidein_status.py

Other Condor monitoring

- Condor provides CondorView
http://www.cs.wisc.edu/condor/manual/v7.4/3_2Installation.html#9015
- You can buy fancy Web monitoring from CycleComputing
<http://cyclecomputing.com/products/cycleserver/overview>
- And many more

Peeking at the factory

- The factory also has its own Web monitoring
 - Turns out to be currently much better than the frontend one
- If everything else fails, you can peek at it
http://glidein-1.t2.ucsd.edu:8319/osg_gfactory/factoryStatusNow.html

**But not a supported service of the OSG factory.
We reserve the right to block access at any time.**

What's coming

- Frontend Web monitoring will likely get better in the near future
 - Burt may want to comment on plans
- One new page already done and scheduled for 2.5.2

