Red Hat and Condor Project

Matthew Farrellee

Principal Software Engineer

redhat.

Today...

- History
- MRG status
- Open source
- Management
- Cloud

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History

Condor Week 2007
-Red Hat/Condor collaboration
*Condor open source
*Red Hat Madison office

Condor Week 2008
-EC2
-Management

Condor Week 2009
-Collaboration update

Condor Week 2010

Condor Project and Red Hat Collaboration

Condor 7.0 Release
-1st release with source
-Condor into Fedora
-Beta MRG release

Condor 7.2 Release
-UW/Red Hat features
-Red Hat MRG 1.1 GA

Condor 7.4 Release
-Open Source advancement
-UW/Red Hat features

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MRG status

- **Coming up on the 2.0 release**
  - http://www.redhat.com/mrg
  - Based on Condor 7.6 series
  - Red Hat Enterprise Linux 6 support
  - Management console update and additional APIs
  - Increased performance and scalability
  - Hierarchical accounting groups, green computing, parallel universe w/ dynamic slots, ..., over 400 bugs fixed and enhancements made
- **Red Hat Consulting**
  - Strategic planning, pilot and integration testing
  - Integration into standard operating environment
  - Full life-cycle management and migration
  - Custom development around Condor

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Open source

- **Distro maintainers and builders**
- **Ticket tracking system**
  - http://condor-wiki.cs.wisc.edu
- **Source code repository**
  - git clone http://condor-git.cs.wisc.edu/repos/condor.git

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Open source

- **Tickets** (as of 30 Apr 2011)
  - 2,119 total (767 new)
  - 555 defects (266 new)
  - 326 enhancements (181 new)
- By 44 individuals
- From UW, Red Hat, U of Nebraska-Lincoln, CycleComputing, FermiLab, Clemson, Imperial College-London, Wipro

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Open source

- **Commits** (as of 30 Apr 2011)
  - 2,590 in last year
  - About 7 per day for 365 days
  - Just on the release branches, more from topic branches
- By 46 individuals (up 12 from last year)
- From UW, Red Hat, U of Nebraska-Lincoln, FermiLab, SORS, UCSD (up from 2 last year)
- More coming, contributions in review

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Open source

This year's numbers

Count commits over how many days: 365 Go

Developer	Number of commits
~ TOTAL ~	3517
Jaime Frey	378
Greg Thain	332
Timothy St. Clair	332
Dan Bradley	269
Nick LeRoy	256
Josh Slauson	233
Matthew Farrellee	226
John (TJ) Knoeller	188
Peter Keller	147
Ziliang Guo	131
Kent Wenger	112
Peter MacKinnon	112
Cathrin Weiss	97

Last year's numbers

Count commits over how many days: 365 Go

Developer	Number of commits
~ TOTAL ~	3196
Jaime Frey	527
Dan Bradley	409
Matthew Farrellee	392
Peter Keller	260
Nick LeRoy	208
Kent Wenger	204
Timothy St. Clair	156
Greg Thain	146
Ziliang Guo	100
Robert Rati	98
Todd Tannenbaum	82

Go Jaime!

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Management

- Configuration with Wallaby
- Reporting data from daemons
- Management console with Cumin

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Management

- **Configuration with Wallaby**
  - Hope you saw Will and Rob's tutorial
  - http://getwallaby.com
  - http://git.fedorahosted.org/git/grid/configuration-tools.git
  - Also, Albatross project

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Management

- **Reporting data from the negotiator**

```
$ condor_status -negotiator -long
...
LastNegotiationCyclePeriod0 = 25
LastNegotiationCycleMatches0 = 0
LastNegotiationCycleSubmittersFailed0 = ""
LastNegotiationCycleTotalSlots0 = 3570
LastNegotiationCycleSubmittersShareLimit0 = ""
LastNegotiationCycleCandidateSlots0 = 3570
LastNegotiationCycleDuration0 = 5
LastNegotiationCycleRejections0 = 3
LastNegotiationCycleNumJobsConsidered0 = 3
LastNegotiationCycleNumIdleJobs0 = 76017
LastNegotiationCycleTrimmedSlots0 = 210
LastNegotiationCycleMatchRate0 = 0.0
...
```

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Management

- **Reporting data from the schedd**

```
$ condor_status -schedd -long
...
ExitCode100 = 1361
ExitCode107 = 26
JobStartRate = 63.683333
JobCompletionRate = 62.683333
MeanRunningTime = 36.928729
MeanTimeToStart = 1178.614254
JobSubmissionRate = 65.000000
JobsExited = 1387
...
```

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Management

- **Management console with Cumin**
  - http://fedorahosted.org/grid/wiki/Cumin
  - Scalable multi-tier architecture
  - 10,000s of slots and submissions, 100s of page views per second
  - Admin overview – jobs, utilization, performance
  - Admin performance – scheduler
  - User overview
  - User submissions

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid;main.grid.id=

Most Visited | Fedora Project | Grid.git | Condor.git | CondorWiki | New MRG BZ | Condor Manual | Spinning

redhat. Enterprise MRG

Administrator | Your Account | Grid User

Hi, mfarrell | Log out

Grid | Inventory

Pool 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:10:38

grid0.lab.bos.redhat.com

Overview | Submissions | Slots | Schedulers | Negotiators | Quotas | Limits | Details

Summary | Performance | Slot capacity

Job info

Total running jobs	698
Total held jobs	0
Total idle jobs	11715
Total removed jobs	0
Total job ads	**12460**

Save to CSV file

Host info

Claimed hosts	684
Unclaimed hosts	219
Unavailable hosts	0
Total hosts	**904**

Show a time-series chart Save to CSV file

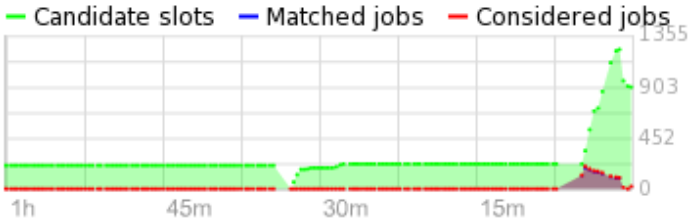
Current negotiator job throughput

Considered jobs	20
Matched jobs	20
Candidate slots	898
Match rate	10.00

Save to CSV file

Recent negotiator job throughput

10 minutes | 1 hour | 1 day



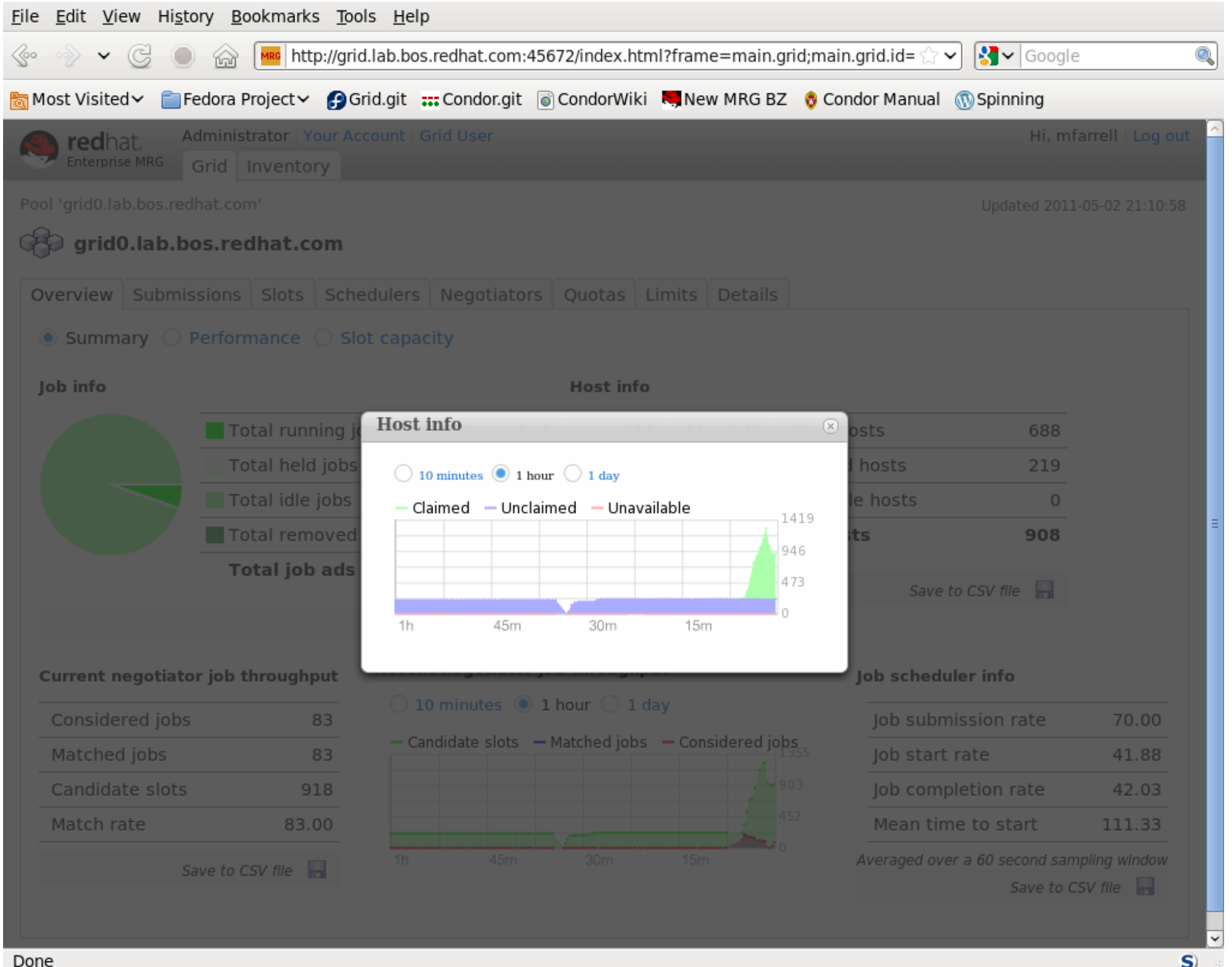
Job scheduler info

Job submission rate	70.83
Job start rate	43.65
Job completion rate	46.80
Mean time to start	107.31

Averaged over a 60 second sampling window

Save to CSV file

Done


File Edit View History Bookmarks Tools Help
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CondorWiki
New MRG BZ
Condor Manual
Spinning
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Grid
Inventory
Pool 'grid0.lab.bos.redhat.com'
Updated 2011-05-02 21:10:58
grid0.lab.bos.redhat.com
Overview
Submissions
Slots
Schedulers
Negotiators
Quotas
Limits
Details
Summary
Performance
Slot capacity
Job info
Host info
Total running j
Total held jobs
Total idle jobs
Total removed
Total job ads
osts 688
hosts 219
e hosts 0
ts 908
Save to CSV file
Host info
10 minutes
1 hour
1 day
Claimed
Unclaimed
Unavailable
1419
946
473
0
1h
45m
30m
15m
Current negotiator job throughput
Considered jobs 83
Matched jobs 83
Candidate slots 918
Match rate 83.00
Save to CSV file
10 minutes
1 hour
1 day
Candidate slots
Matched jobs
Considered jobs
1355
903
452
0
1h
45m
30m
15m
Job scheduler info
Job submission rate 70.00
Job start rate 41.88
Job completion rate 42.03
Mean time to start 111.33
Averaged over a 60 second sampling window
Save to CSV file
Done

Pool 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:11:42

grid0.lab.bos.redhat.com

Overview | Submissions | Slots | Schedulers | Negotiators | Quotas | Limits | Details

» Submit job
» Submit DAG job
» Submit VM job

Search in Description column [Search] [Clear]

Page 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, Next, Last Font S, M, L Limit 25, 50, 100

Description ▲	Owner	Scheduler	Idle	Running	Completed	Held
grid0.lab.bos.redhat.com#165914	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165915	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165916	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165917	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165918	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165919	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165920	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165921	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165922	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165923	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165924	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165925	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165926	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#165927	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?

Most Visited | Fedora Project | Grid.git | Condor.git | CondorWiki | New MRG BZ | Condor Manual | Spinning

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Hi, mfarrell | Log out

Grid | Inventory

Pool 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:12:11

grid0.lab.bos.redhat.com

Overview | Submissions | Slots | Schedulers | Negotiators | Quotas | Limits | Details

» Submit job
» Submit DAG job
» Submit VM job

16600 Search Clear

Page 1 Font S, M, L Limit 25, 50, 100

Description ▲	Owner	Scheduler	Idle	Running	Completed	Held
grid0.lab.bos.redhat.com#166000	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#166001	mfarrell	grid0.lab.bos.redhat.com	50	0	0	0
grid0.lab.bos.redhat.com#166002	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#166003	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#166004	mfarrell	grid0.lab.bos.redhat.com	50	0	0	0
grid0.lab.bos.redhat.com#166005	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#166006	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#166007	mfarrell	grid0.lab.bos.redhat.com	50	0	0	0
grid0.lab.bos.redhat.com#166008	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0
grid0.lab.bos.redhat.com#166009	mfarrell	grid0.lab.bos.redhat.com	0	0	50	0

10 of 10 *Save to CSV file*

Done

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid;main.grid.id=

Most Visited | Fedora Project | Grid.git | Condor.git | CondorWiki | New MRG BZ | Condor Manual | Spinning

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Administrator | Your Account | Grid User

Hi, mfarrell | Log out

Grid | Inventory

Pool 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:12:15

grid0.lab.bos.redhat.com

Overview | Submissions | Slots | Schedulers | Negotiators | Quotas | Limits | Details

Search in Name column | Search | Clear

Page 1 — Font S, M, L — Limit 25, 50, 100

Name ▲	Num users	Total idle jobs	Total running jobs	Total held jobs	Up-time	CPU usage	Image size
grid0.lab.bos.redhat.com	3	14127	676	0	1921	35.69	395MB

1 of 1

Save to CSV file

Done

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid.scheduler;ma

Most Visited | Fedora Project | Grid.git | Condor.git | CondorWiki | New MRG BZ | Condor Manual | Spinning

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Administrator | Your Account | Grid User

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Grid | Inventory

Pool 'grid0.lab.bos.redhat.com' › Scheduler 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:12:40

grid0.lab.bos.redhat.com

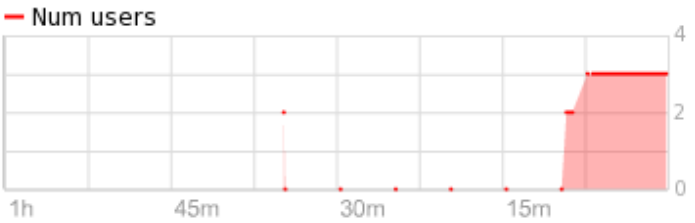
Overview | Submissions | Submitters | Details

General stats | Performance

Statistic	*Value*
Num users	3
Total running jobs	739
Total idle jobs	14906
Total held jobs	0
Total job ads	15649
Total removed jobs	0
Up-time	1921
CPU usage	35.69
Image size	395MB
Registered socket count	6
Memory used	129MB
Monitor self time	2011-05-02 21:12:35.559088

Users

10 minutes | 1 hour | 1 day



Jobs

10 minutes | 1 hour | 1 day

Transferring data from grid.lab.bos.redhat.com...

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid.scheduler;ma

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Administrator | Your Account | Grid User

Hi, mfarrell | Log out

Grid | Inventory

Pool 'grid0.lab.bos.redhat.com' › Scheduler 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:12:56

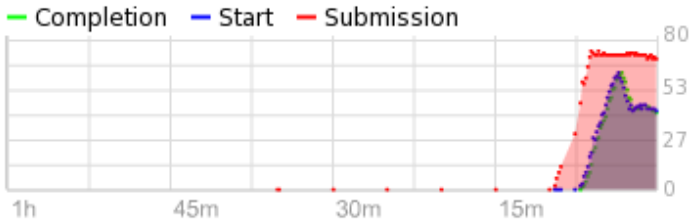
grid0.lab.bos.redhat.com

Overview | Submissions | Submitters | Details

General stats | Performance

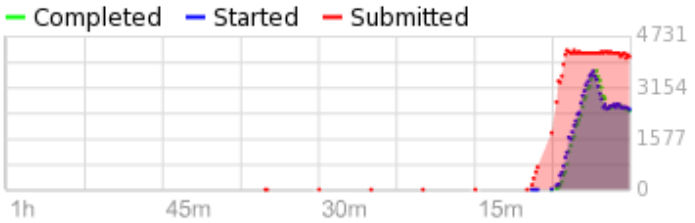
Job rates

10 minutes | 1 hour | 1 day



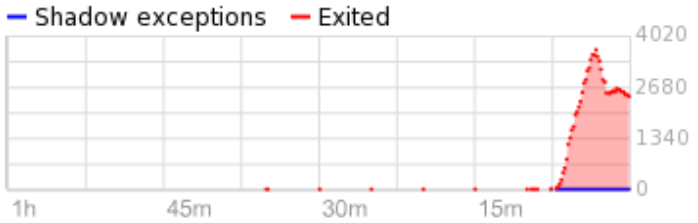
Job totals

10 minutes | 1 hour | 1 day



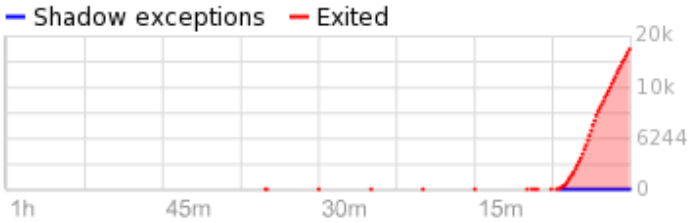
Jobs exited/Shadow exceptions

10 minutes | 1 hour | 1 day



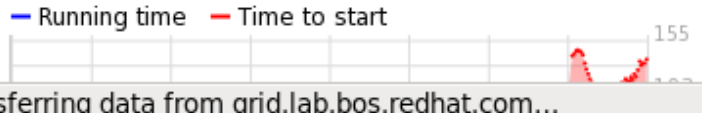
Jobs exited/Shadow exceptions cumulative

10 minutes | 1 hour | 1 day



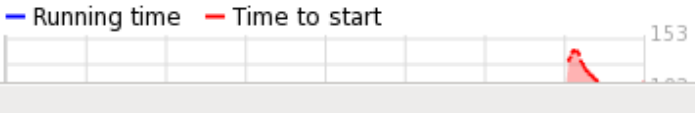
Mean times

10 minutes | 1 hour | 1 day



Mean times cumulative

10 minutes | 1 hour | 1 day



Transferring data from grid.lab.bos.redhat.com...

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid.scheduler;ma

Most Visited Fedora Project Grid.git Condor.git CondorWiki New MRG BZ Condor Manual Spinning

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Administrator | Your Account | Grid User

Hi, mfarrell | Log out

Grid Inventory

Pool 'grid0.lab.bos.redhat.com' › Scheduler 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:13:20

grid0.lab.bos.redhat.com

Overview Submissions Submitters Details

Search in Name column Search Clear

Page 1 Font S, M, L Limit 25, 50, 100

Name ▲	Machine	Schedd name	Idle jobs	Running jobs	Held jobs
grid.one.matt@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	106	374	0
grid.two.matt@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	9857	85	0
mfarrell@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	0	0	1
msg.matt@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	5986	246	0
root@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	0	0	0

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Save to CSV file

Done

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid.scheduler.sut

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Administrator | Your Account | Grid User

Hi, mfarrell | Log out

Grid Inventory

Pool 'grid0.lab.bos.redhat.com' › Scheduler 'grid0.lab.bos.redhat.com' › Submitter 'grid.one.matt@grid0.lab.bos.redhat.com' Updated 2011-05-02 21:13:37

grid.one.matt@grid0.lab.bos.redhat.com

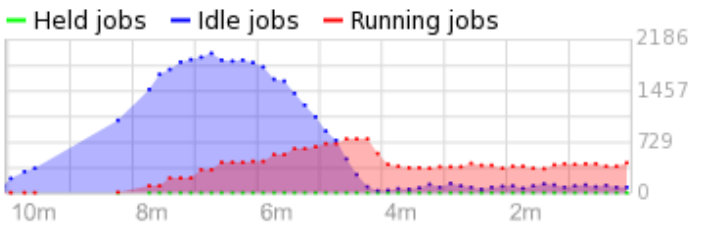
Overview Details

General

Statistic	*Value*
Running jobs	425
Idle jobs	76
Held jobs	0

Jobs

10 minutes 1 hour 1 day



Transferring data from grid.lab.bos.redhat.com...

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid;main.grid.id=

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Administrator | Your Account | Grid User

Hi, mfarrell | Log out

Grid | Inventory

Pool 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:13:46

grid0.lab.bos.redhat.com

Overview | Submissions | Slots | Schedulers | Negotiators | Quotas | Limits | Details

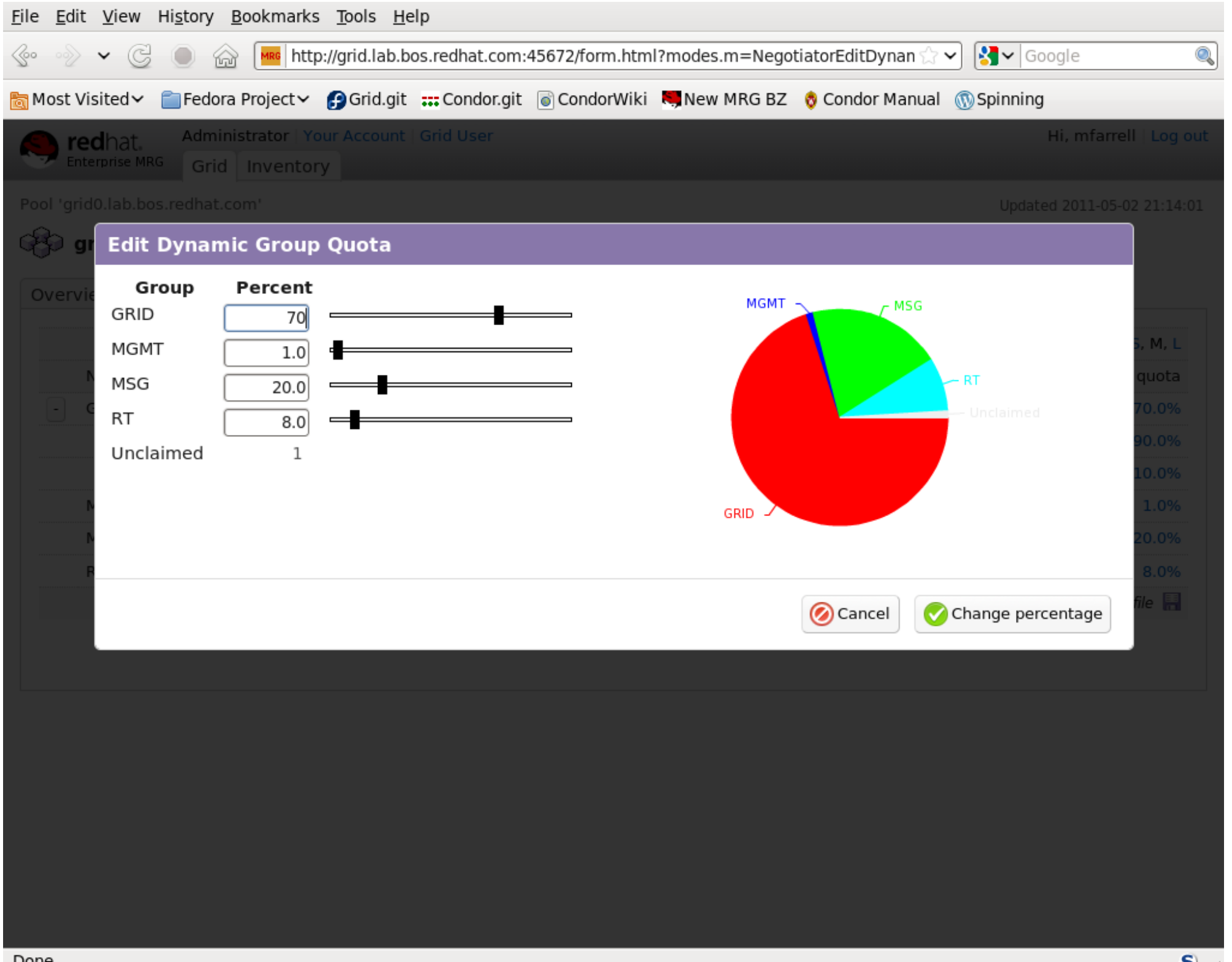
Font S, M, L

	Name	Dynamic quota
-	GRID	70.0%
	ONE	90.0%
	TWO	10.0%
	MGMT	1.0%
	MSG	20.0%
	RT	8.0%

6 of 6

Save to CSV file

Done


File Edit View History Bookmarks Tools Help
http://grid.lab.bos.redhat.com:45672/form.html?modes.m=NegotiatorEditDynan
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Grid
Inventory
Pool 'grid0.lab.bos.redhat.com'
Updated 2011-05-02 21:14:01
Edit Dynamic Group Quota
Group
Percent
GRID
70
MGMT
1.0
MSG
20.0
RT
8.0
Unclaimed
1
MGMT
MSG
RT
Unclaimed
GRID
Cancel
Change percentage
Done

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Grid | Inventory

Pool 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:14:15

grid0.lab.bos.redhat.com

Overview | Submissions | Slots | Schedulers | Negotiators | Quotas | Limits | Details

Search in Name column [Search] [Clear]

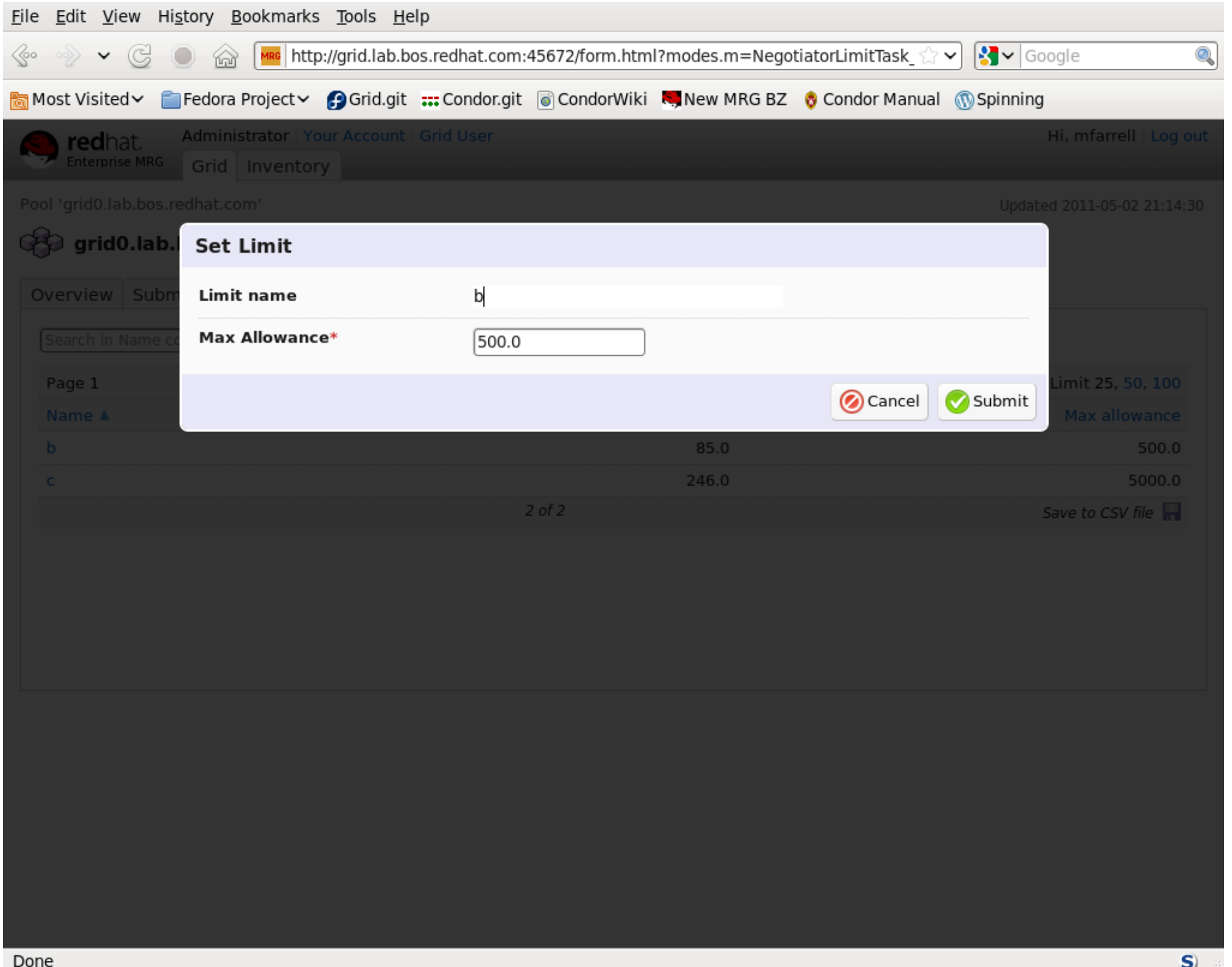
Page 1 — Font S, M, L — Limit 25, 50, 100

Name ▲	Current usage	Max allowance
b	85.0	500.0
c	246.0	5000.0

2 of 2

Save to CSV file

Done


File Edit View History Bookmarks Tools Help
http://grid.lab.bos.redhat.com:45672/form.html?modes.m=NegotiatorLimitTask_
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Fedora Project
Grid.git
Condor.git
CondorWiki
New MRG BZ
Condor Manual
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redhat.
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Your Account
Grid User
Hi, mfarrell
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Grid
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Pool 'grid0.lab.bos.redhat.com'
Updated 2011-05-02 21:14:30
grid0.lab.
Overview
Subm
Search in Name
Page 1
Limit 25, 50, 100
Name
Max allowance
b
85.0
500.0
c
246.0
5000.0
2 of 2
Save to CSV file
Set Limit
Limit name
b
Max Allowance*
500.0
Cancel
Submit
Done

redhat.

Simple user view...

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/usergrid.html?frame=main.overview

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Overview Submissions

Updated 2011-05-02 21:23:47

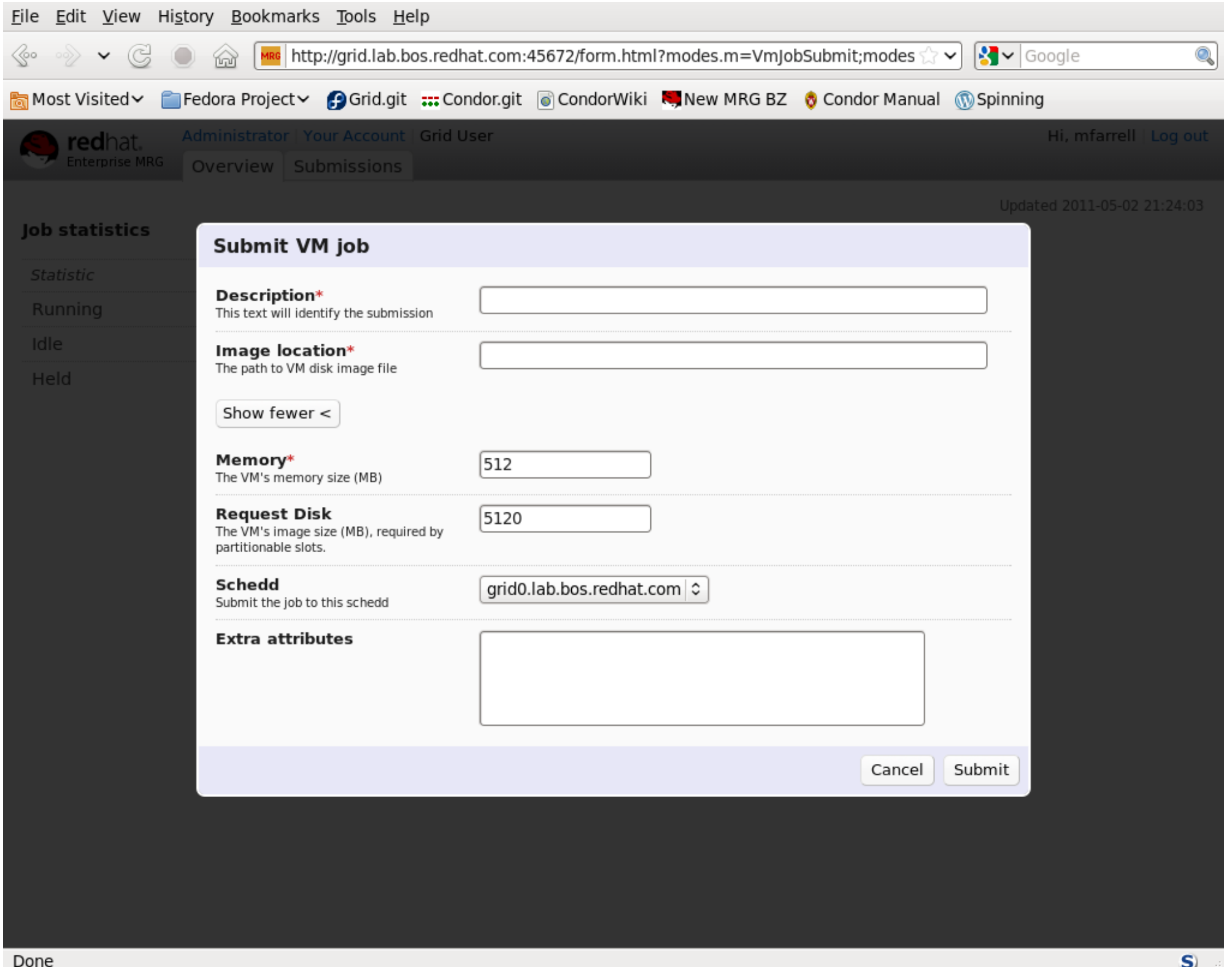
Job statistics

Statistic	*Value*
Running	1173
Idle	31525
Held	1

Tasks

» Submit job
» Submit DAG job
» Submit VM job

Done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http://grid.lab.bos.redhat.com:45672/form.html?modes.m=VmJobSubmit;modes
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Overview
Submissions
Updated 2011-05-02 21:24:03
Job statistics
Statistic
Running
Idle
Held
Submit VM job
Description*
This text will identify the submission
Image location*
The path to VM disk image file
Show fewer <
Memory*
The VM's memory size (MB)
512
Request Disk
The VM's image size (MB), required by partitionable slots.
5120
Schedd
Submit the job to this schedd
grid0.lab.bos.redhat.com
Extra attributes
Cancel
Submit
Done

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/usergrid.html?frame=main.submissions;m

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Overview Submissions

» Submit job
» Submit DAG job
» Submit VM job

Updated 2011-05-02 21:24:36

Search in Description column Search Clear

Page 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, Next, Last

Font S, M, L Limit 25, 50, 100

Description	Idle	Running ▼	Completed	Held
grid0.lab.bos.redhat.com#166205	0	50	0	0
grid0.lab.bos.redhat.com#166208	0	50	0	0
grid0.lab.bos.redhat.com#166639	0	50	0	0
grid0.lab.bos.redhat.com#166642	0	50	0	0
grid0.lab.bos.redhat.com#167363	0	50	0	0
grid0.lab.bos.redhat.com#167366	0	50	0	0
grid0.lab.bos.redhat.com#166211	0	50	0	0
grid0.lab.bos.redhat.com#166214	0	50	0	0
grid0.lab.bos.redhat.com#166217	0	50	0	0
grid0.lab.bos.redhat.com#166220	0	50	0	0
grid0.lab.bos.redhat.com#166223	0	50	0	0
grid0.lab.bos.redhat.com#166645	0	50	0	0
grid0.lab.bos.redhat.com#166648	0	50	0	0
grid0.lab.bos.redhat.com#166651	0	50	0	0
grid0.lab.bos.redhat.com#166655	0	50	0	0
grid0.lab.bos.redhat.com#167369	0	50	0	0
grid0.lab.bos.redhat.com#167372	0	50	0	0
grid0.lab.bos.redhat.com#167375	0	50	0	0
grid0.lab.bos.redhat.com#167378	0	50	0	0
grid0.lab.bos.redhat.com#167360	0	44	6	0
grid0.lab.bos.redhat.com#167381	6	44	0	0

Done

redhat.

About 30 minutes later...

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http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid;main.grid.id=

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Grid | Inventory

Pool 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:45:58

grid0.lab.bos.redhat.com

Overview | Submissions | Slots | Schedulers | Negotiators | Quotas | Limits | Details

Summary | Performance | Slot capacity

Job info

Total running jobs	3360
Total held jobs	0
Total idle jobs	54028
Total removed jobs	0
Total job ads	**83717**

Save to CSV file

Host info

Claimed hosts	3360
Unclaimed hosts	210
Unavailable hosts	0
Total hosts	**3570**

Show a time-series chart | Save to CSV file

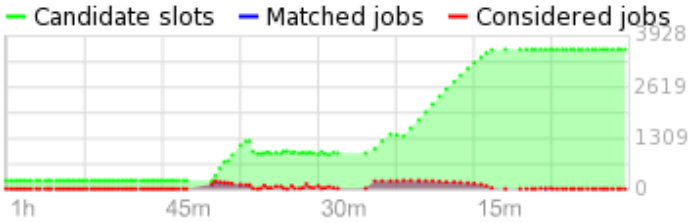
Current negotiator job throughput

Considered jobs	3
Matched jobs	0
Candidate slots	3570
Match rate	0.00

Save to CSV file

Recent negotiator job throughput

10 minutes | 1 hour | 1 day



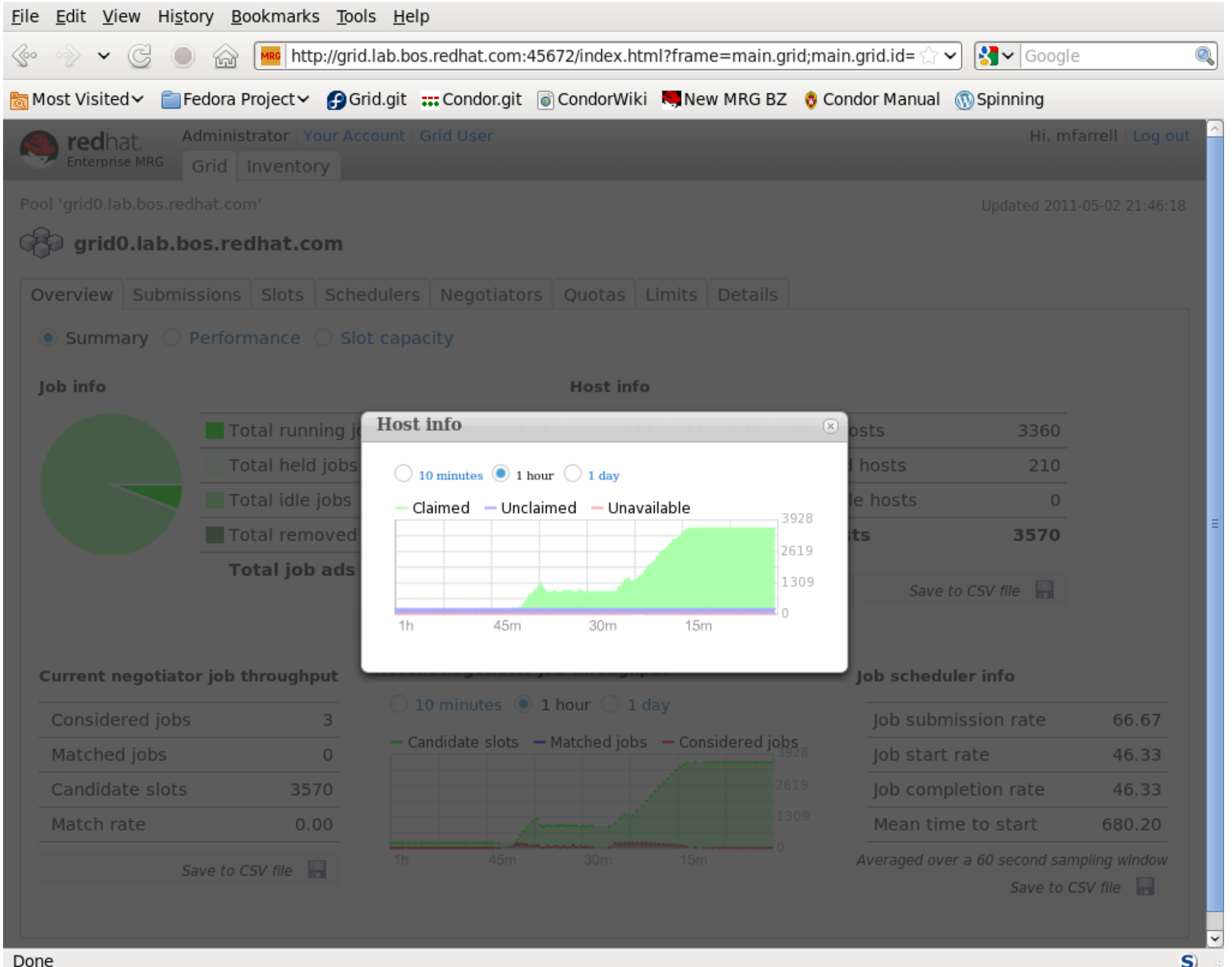
Job scheduler info

Job submission rate	65.83
Job start rate	48.65
Job completion rate	48.65
Mean time to start	674.72

Averaged over a 60 second sampling window

Save to CSV file

Done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Grid
Inventory
Pool 'grid0.lab.bos.redhat.com'
Updated 2011-05-02 21:46:18
grid0.lab.bos.redhat.com
Overview
Submissions
Slots
Schedulers
Negotiators
Quotas
Limits
Details
Summary
Performance
Slot capacity
Job info
Host info
Total running j
Total held jobs
Total idle jobs
Total removed
Total job ads
osts 3360
hosts 210
e hosts 0
ts 3570
Save to CSV file
Host info
10 minutes
1 hour
1 day
Claimed
Unclaimed
Unavailable
3928
2619
1309
0
1h
45m
30m
15m
Current negotiator job throughput
Considered jobs 3
Matched jobs 0
Candidate slots 3570
Match rate 0.00
Save to CSV file
10 minutes
1 hour
1 day
Candidate slots
Matched jobs
Considered jobs
3928
2619
1309
0
1h
45m
30m
15m
Job scheduler info
Job submission rate 66.67
Job start rate 46.33
Job completion rate 46.33
Mean time to start 680.20
Averaged over a 60 second sampling window
Save to CSV file
Done

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid.scheduler;ma

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Grid | Inventory

Pool 'grid0.lab.bos.redhat.com' › Scheduler 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:46:49

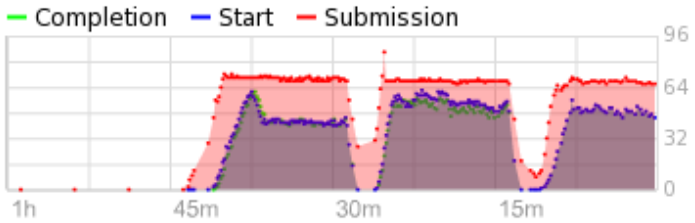
grid0.lab.bos.redhat.com

Overview | Submissions | Submitters | Details

General stats | Performance

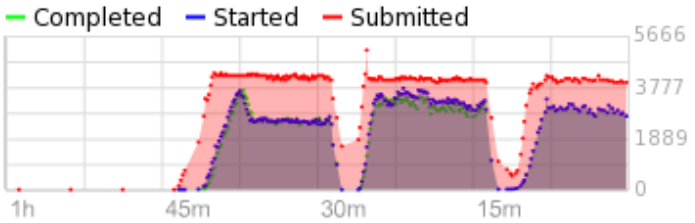
Job rates

10 minutes | 1 hour | 1 day



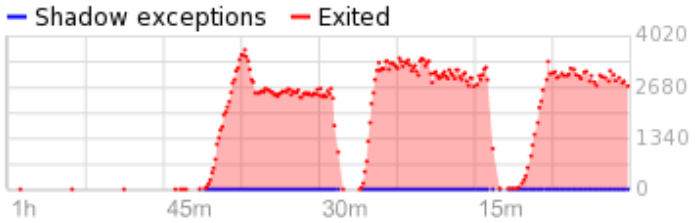
Job totals

10 minutes | 1 hour | 1 day



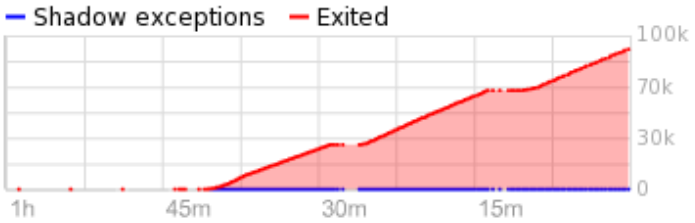
Jobs exited/Shadow exceptions

10 minutes | 1 hour | 1 day



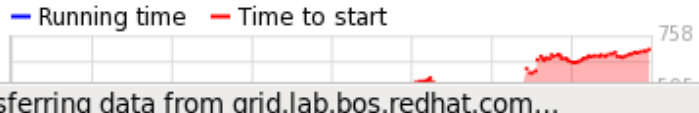
Jobs exited/Shadow exceptions cumulative

10 minutes | 1 hour | 1 day



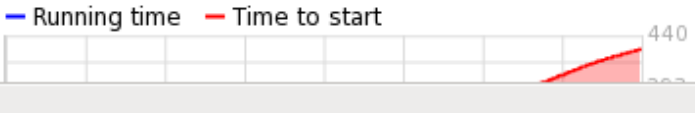
Mean times

10 minutes | 1 hour | 1 day



Mean times cumulative

10 minutes | 1 hour | 1 day



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Grid Inventory

Pool 'grid0.lab.bos.redhat.com' › Scheduler 'grid0.lab.bos.redhat.com'

Updated 2011-05-02 21:47:35

grid0.lab.bos.redhat.com

Overview Submissions Submitters Details

Search in Name column Search Clear

Page 1 Font S, M, L Limit 25, 50, 100

Name ▲	Machine	Schedd name	Idle jobs	Running jobs	Held jobs
grid.one.matt@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	3168	1465	0
grid.two.matt@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	36389	496	0
mfarrell@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	0	0	1
msg.matt@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	15904	1399	0
root@grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	grid0.lab.bos.redhat.com	0	0	0

5 of 5

Save to CSV file

Done

File Edit View History Bookmarks Tools Help

http://grid.lab.bos.redhat.com:45672/index.html?frame=main.grid.scheduler.sut

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Grid | Inventory

Pool 'grid0.lab.bos.redhat.com' › Scheduler 'grid0.lab.bos.redhat.com' › Submitter 'grid.one.matt@grid0.lab.bos.redhat.com' Updated 2011-05-02 21:48:10

grid.one.matt@grid0.lab.bos.redhat.com

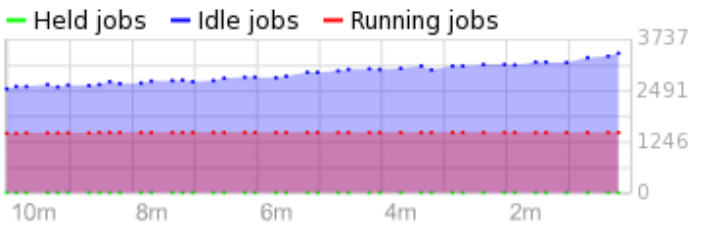
Overview | Details

General

Statistic	*Value*
Running jobs	1465
Idle jobs	3396
Held jobs	0

Jobs

10 minutes | 1 hour | 1 day



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Cloud

- **Red Hat Summit 2011 going on now (May 3-6)**
  - http://www.redhat.com/summit
  - Many cloud announcements
- **Condor is positioned as a core technology**
  - http://www.redhat.com/cloud/cloudforms/
  - Deltacloud interface to Condor
  - Condor scheduling to deltacloud resources

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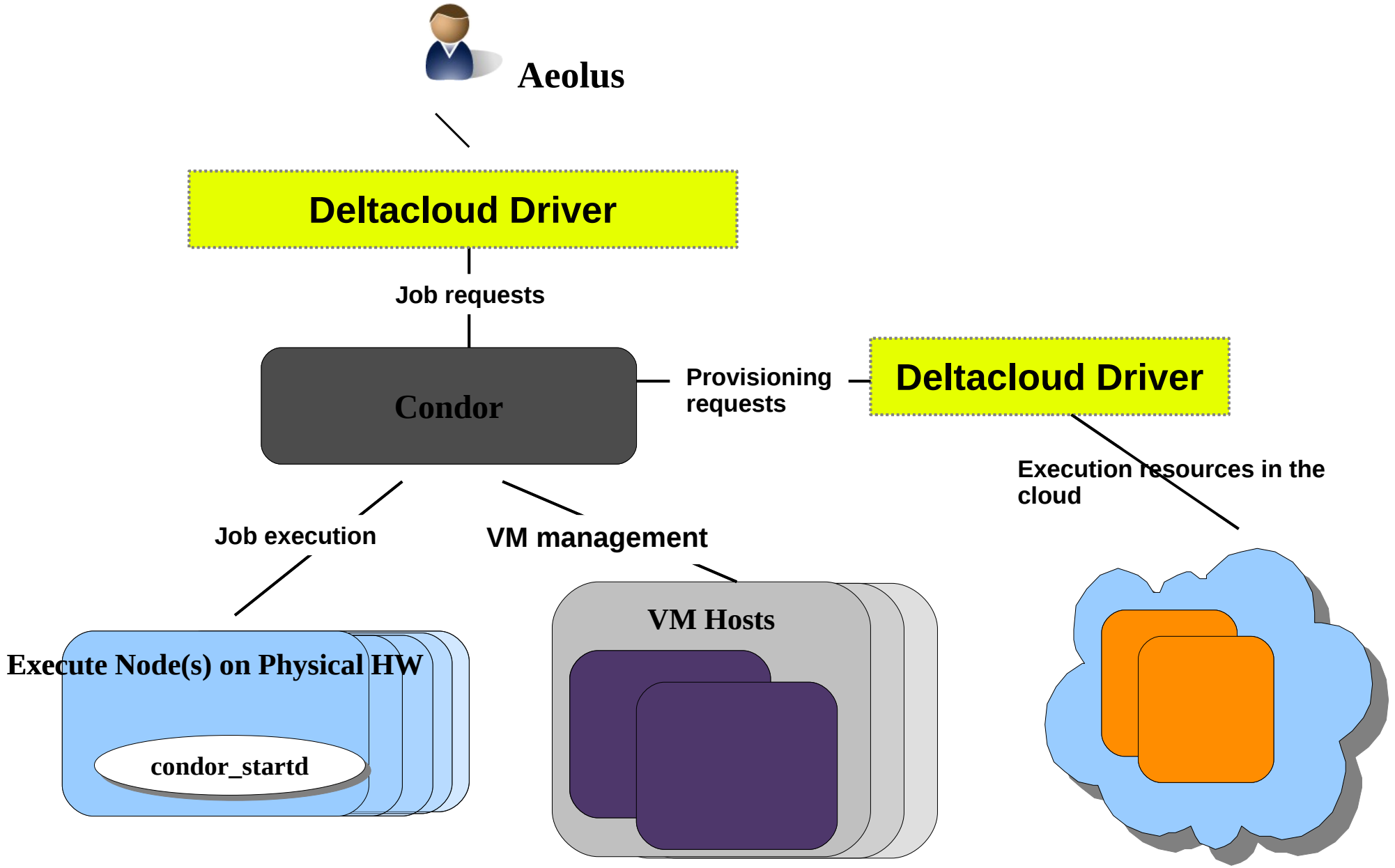
Cloud

- **Condor scheduling to deltacloud resources**
  - http://aeolusproject.org
- **Deltacloud interface to Condor**
  - http://git.fedorahosted.org/git/condor-cloud.git
- **Benefits of Aeolus management on Condor resources**
  - Cloud policy management
  - Status and statistics across clouds
  - Image management
  - IaaS solution
  - ...

Integration points via deltacloud



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