

1. Part of the idea behind “Egg”
2. Tour of the NET2
3. How this might be useful for T3s

# Existing Tier-3's

- T3's associated with T2 or T1:
  - There are 8 institutes whose T3 resources are closely coupled to a T2 or a T1 operations at the same institutes. The analyzers at these institutes have a number of slots dedicated for T3 computing.
- T3gs:
  - T3gs is a T3 which are full Grid sites capable of accepting Grid jobs from outside. There are 4 institutes which expect to operate T3gs's in 2010.
- T3g:
  - T3g is a T3 which is connected to the Grid to receive data but does not accept jobs from outside. There are 12 institutes who operate this type of T3, currently.
  - The setup of these T3's vary enormously. 4 of these institutes take advantage of the University of Departmental computing service or cluster. The others are standalone.
  - Most of these plan an expansion in 2010 (based on ARRA funds)

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Funding: National Science Foundation.

*Minimal Economic Distributed Computing*, [arXiv:0902.4730v1](https://arxiv.org/abs/0902.4730v1)

Directory

File

Process

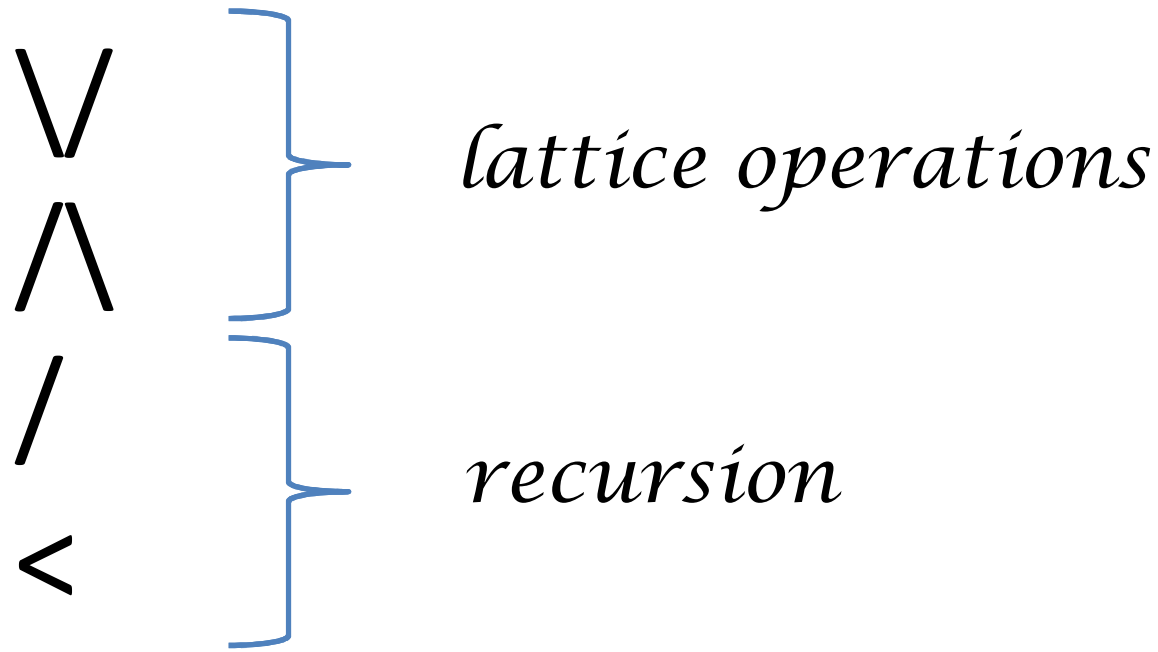
Web site

Computer

Tier 2 center

Organization

Person



`{ size:5, text:foo } {}`

( X < ({depth:3},0) ∨ Y/foo ) / { }

$( X < (\{depth:3\},0) \vee Y/foo ) / \{ }$

Introduce some named caches:

. ~ @ ls cd ...

$(d,0) \rightarrow d$

$X/\{ \} \rightarrow X/$

$(X < Y)/\{ \} \rightarrow X Y$

$X \vee Y \rightarrow X Y$

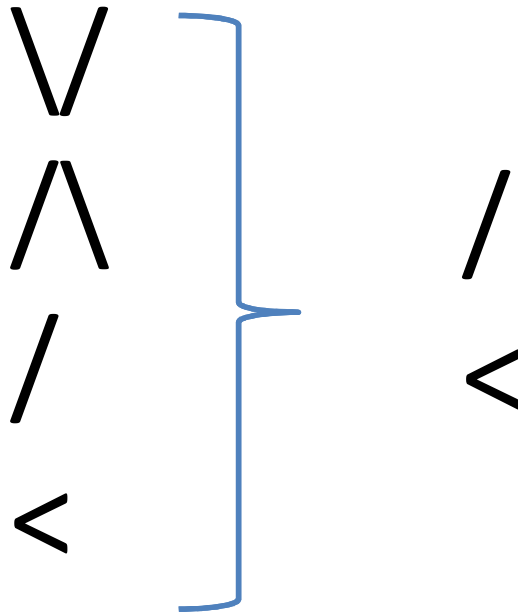
$X = ls, Y = .$

$( X < (\{depth:3\},0) \vee Y/fo\bar{o} ) / \{ \}$



$ls\ depth:3\ ./fo\bar{o}$





{ size:5, text:foo } {}

```
xterm
@,home,NET2
@,home,NET2
@,home,NET2
@,home,NET2
@,home,NET2 sm
name-----summary-----
Boston.....Boston NET2 site
Harvard.....Harvard NET2 site
Tufts.....Tufts site
daily.....Daily NET2 Summary
data.....ATLAS data at NET2
exercises....Special events
grid.....ATLAS T2 gatekeepers
panda.....Panda sites worldwide
quarterlies..Quarterly statistics
wiki.....Wiki
workers.....Worker nodes
@,home,NET2
```

```
xterm
panda.stageout_max5: 0, 39
panda.startTime: 2009-10-29 06:36:21 -> 2009-10-30 07:24:23
since: 2009-10-29 06:36:21 -> 2009-10-30 07:24:23
panda.stateChangeTime: 2009-10-29 10:13:30 -> 2009-10-30 07:47:13
panda.taskBufferErrorCode#: 100/36
panda.taskBufferErrorDiag#: 2
killed by Panda server : upstream job failed/35
killed by /DC=org/DC=doegrids/OU=People/CN=Nurcan/1
panda.taskID#: 80219/26
panda.transExitCode#: 9/21, 6/19, 40/12, 0/4, 20/2, 99/1
panda.transformat
```

```
@,home,daily panda plt.pi
97 1026676186{panda.com
@,home,daily
@,home,daily sm
name-----summary-----
batch.....NET2 batch jobs at all sites
clocks.....clocks on the worker nodes
current.....Real time log entries
errors.....Errors from today's log entries
logs.....NET2 log files
network.....LAN ping times
panda.....NET2 Panda failed jobs
pandaUS.....NET2 Panda failed jobs
processes.....Python processes on BU worker nodes
rsv.....RSV probes
services.....Site services
subscriptions..DQ2 subscriptions
temperatures...NET2 machine room temperatures
@,home,daily
```

