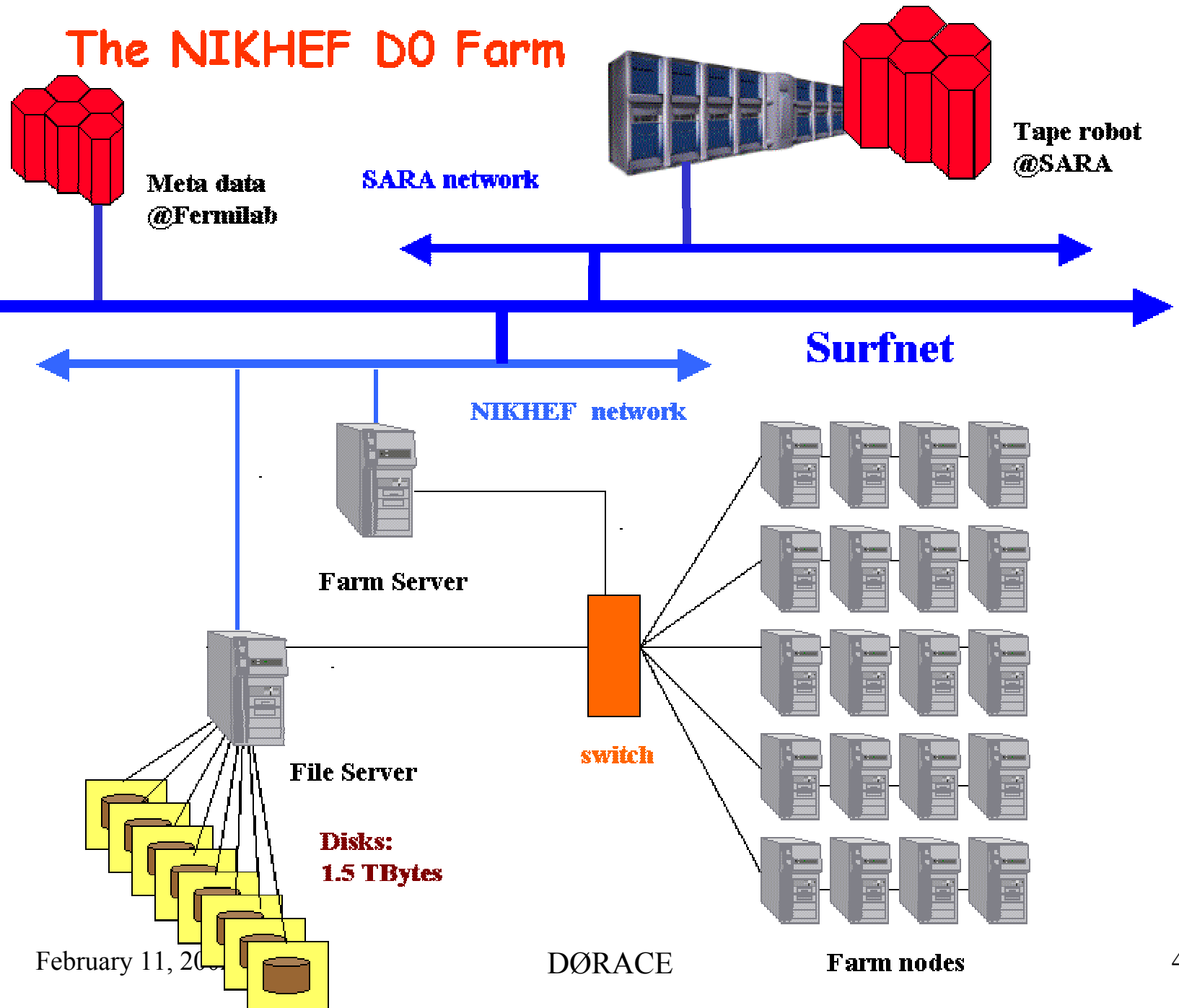# Status report NIKHEF

Willem van Leeuwen

Outline

- NIKHEF DØ farm
  - www.nikhef.nl/~bosk/farm/farm.htm
  - www.nikhef.nl/~a03/farm/status.html
- SAM
- UPS/UPD
- Grid activities @ NIKHEF

The NIKHEF DØ farm

- Batch server (hoeve [farm])
  - Boot/Software server
  - Runs mc_runjob
- File server (schuur [barn])
  - Runs SAM
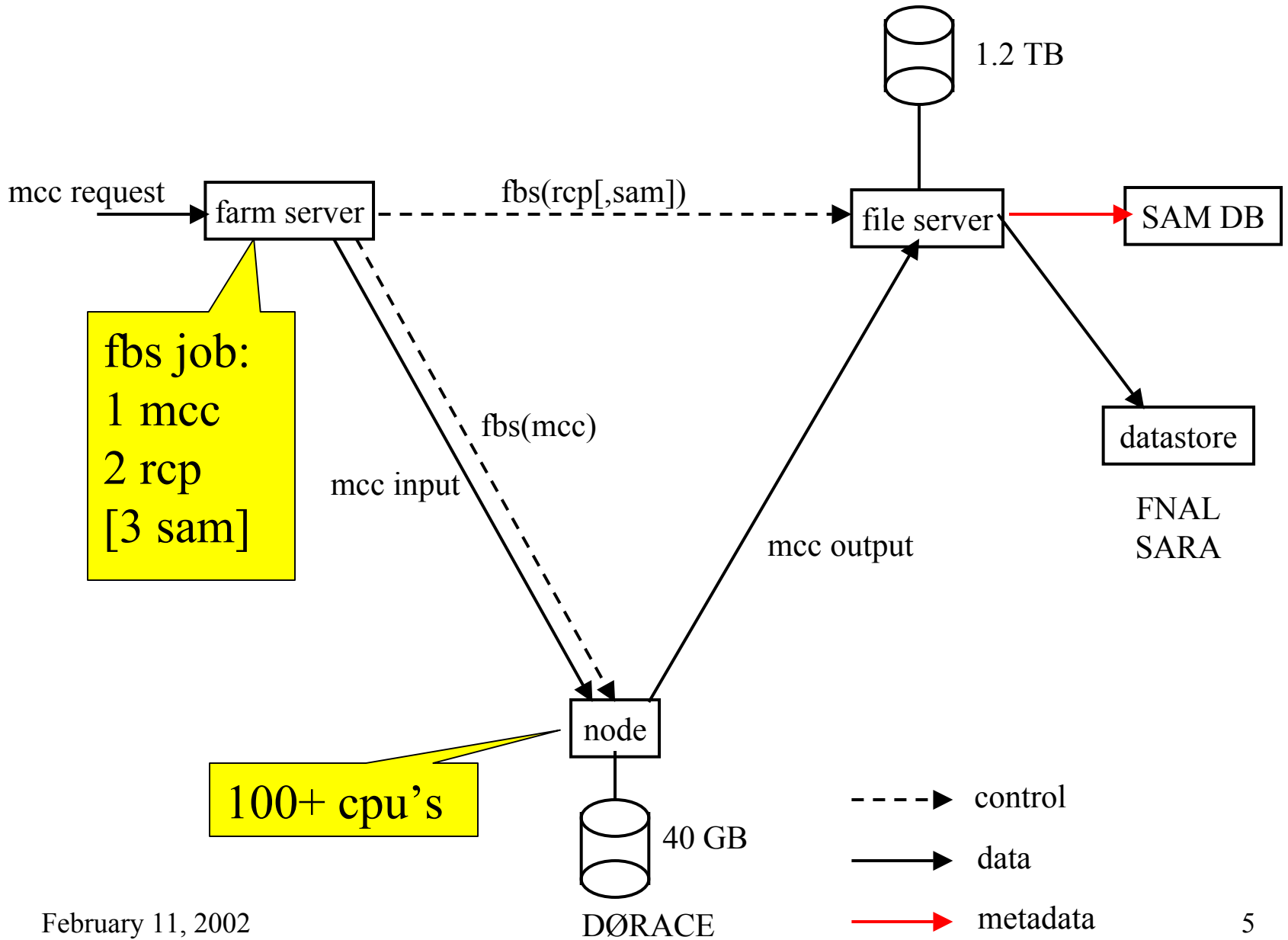- 50 + dual cpu nodes
  - Run MC jobs

The NIKHEF DO Farm

Meta data @Fermilab

SARA network

Tape robot @SARA

Surfnet

NIKHEF network

Farm Server

File Server

switch

Disks: 1.5 TBytes

mcc request

farm server

fbs(rcp[,sam])

file server

SAM DB

1.2 TB

fbs job:
1 mcc
2 rcp
[3 sam]

fbs(mcc)

mcc input

mcc output

datastore

FNAL
SARA

100+ cpu's

node

40 GB

DØRACE

control

data

metadata

February 11, 2002

5

SAM @ NIKHEF

- Stores metadata in database at FNAL
  - sam declare import_<jobstep>.py
  - scripts prepared by mc_runjob
- Stores files
  - on tape at fnal via cache on d0mino
  - on disk of teras.sara.nl and migrated to tape
  - sam store --descrip=import_<jobstep>.py [--dest=teras.sara.nl:/sam/samdata/y01/w42]

SAM @ SARA

- No need to install SAM or UPS/UPD ☺

- Declare teras directories in SAM as destination

- Access protocol
  - May 2001   rcp
  - October 2001   bbftp
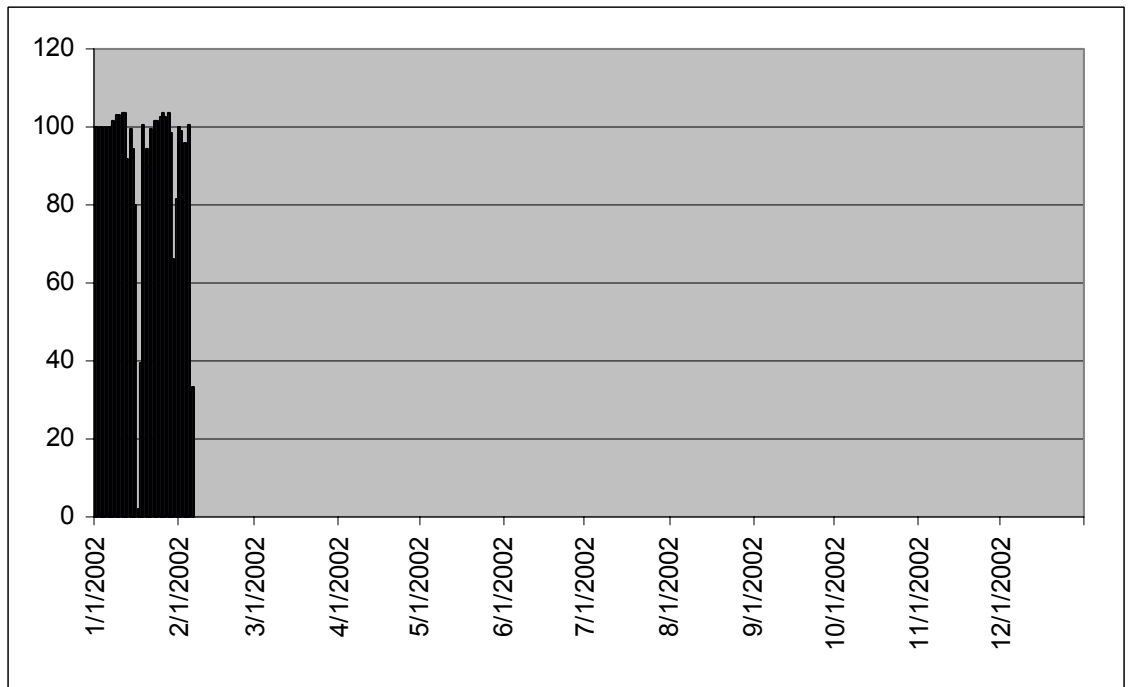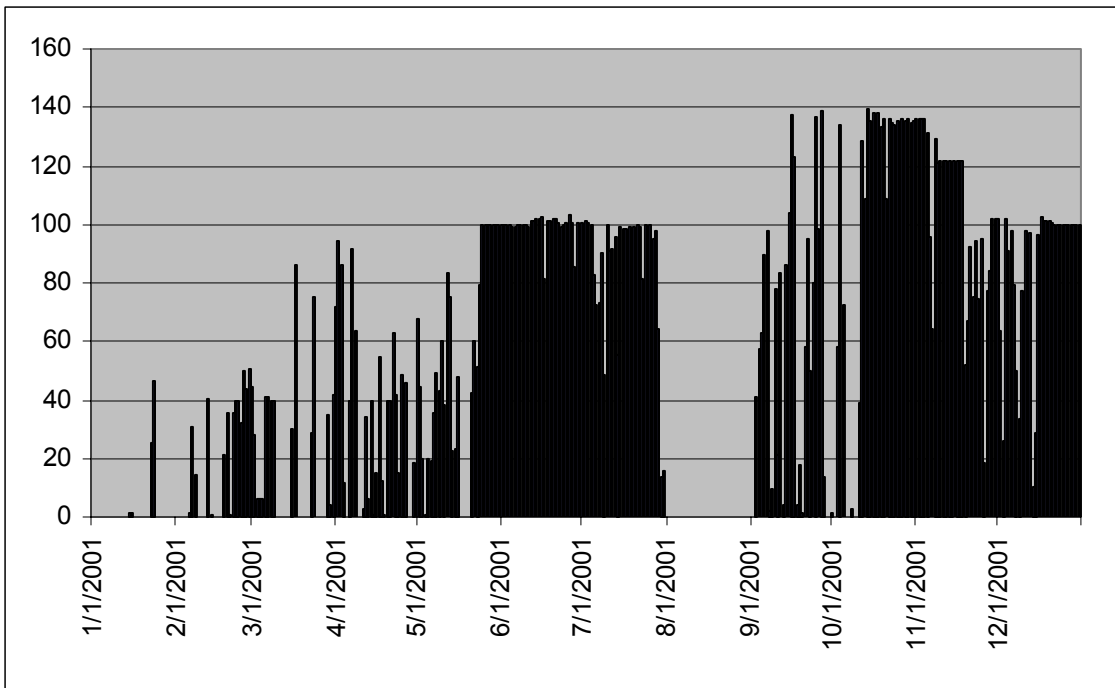 - ??:   gridftp

SAM @ NIKHEF

- is full simplex
  - declare/store only
- Recommended action: Relax
  - submit parallel streams of 50 reco and recoanalyze files
    - eventually wait for 6 hours
  - resubmit files which failed

UPS/UPD

- was difficult to install
- dØrace prescription works fine
  - for generic, not for DØ configuration
  - do not forget to unalias setup
- still complicated
  - many configuration options
    - different directory structures
  - still editing of database files necessary

grid activities @ nikhef

- European Data Grid
  - Testbed
    - Alice farm
    - LHCb farm
- Dutch Data Grid
  - DAS cluster
    - 200 Dual Pentium-III nodes, distributed over 5 universities
- http://www.dutchgrid.nl/

February 11, 2002

Conclusions

- NIKHEF DØ farm is
  - easy to use (Antares, L3)
  - easy to clone (Nijmegen)
  - part of DØ data grid
  - moving (slowly) to grid standards
- need for sam input is growing