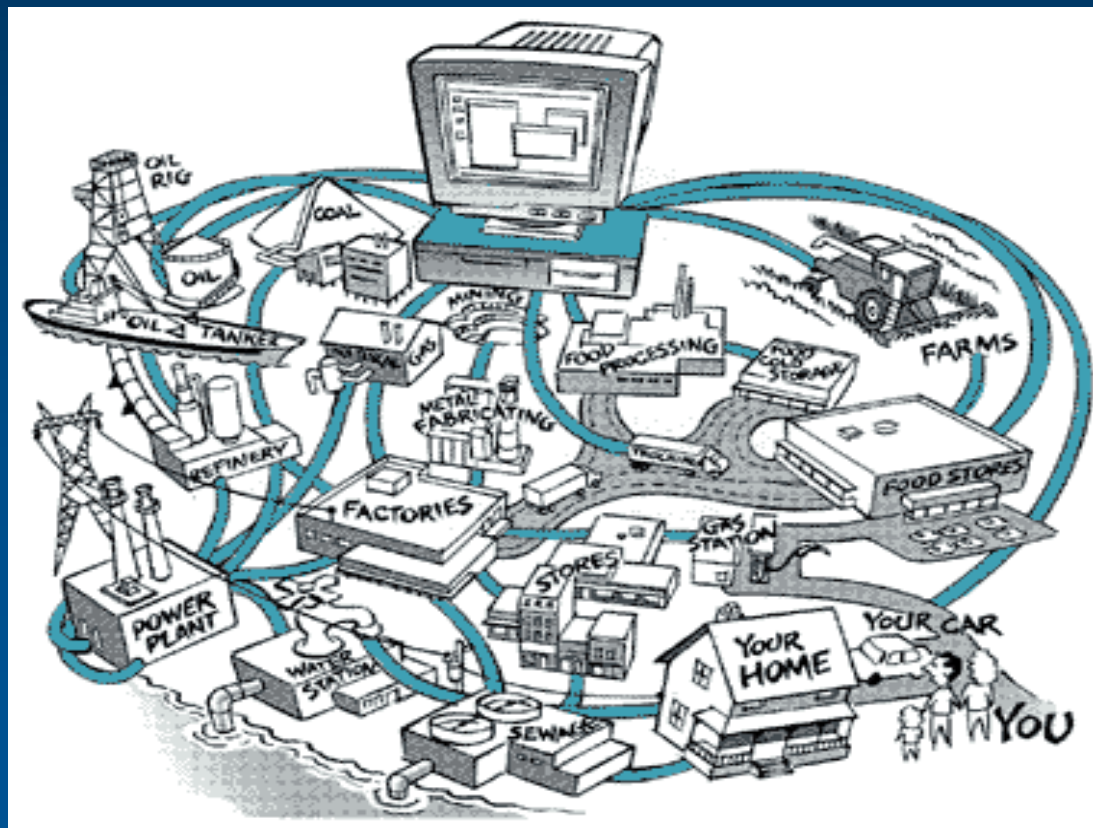
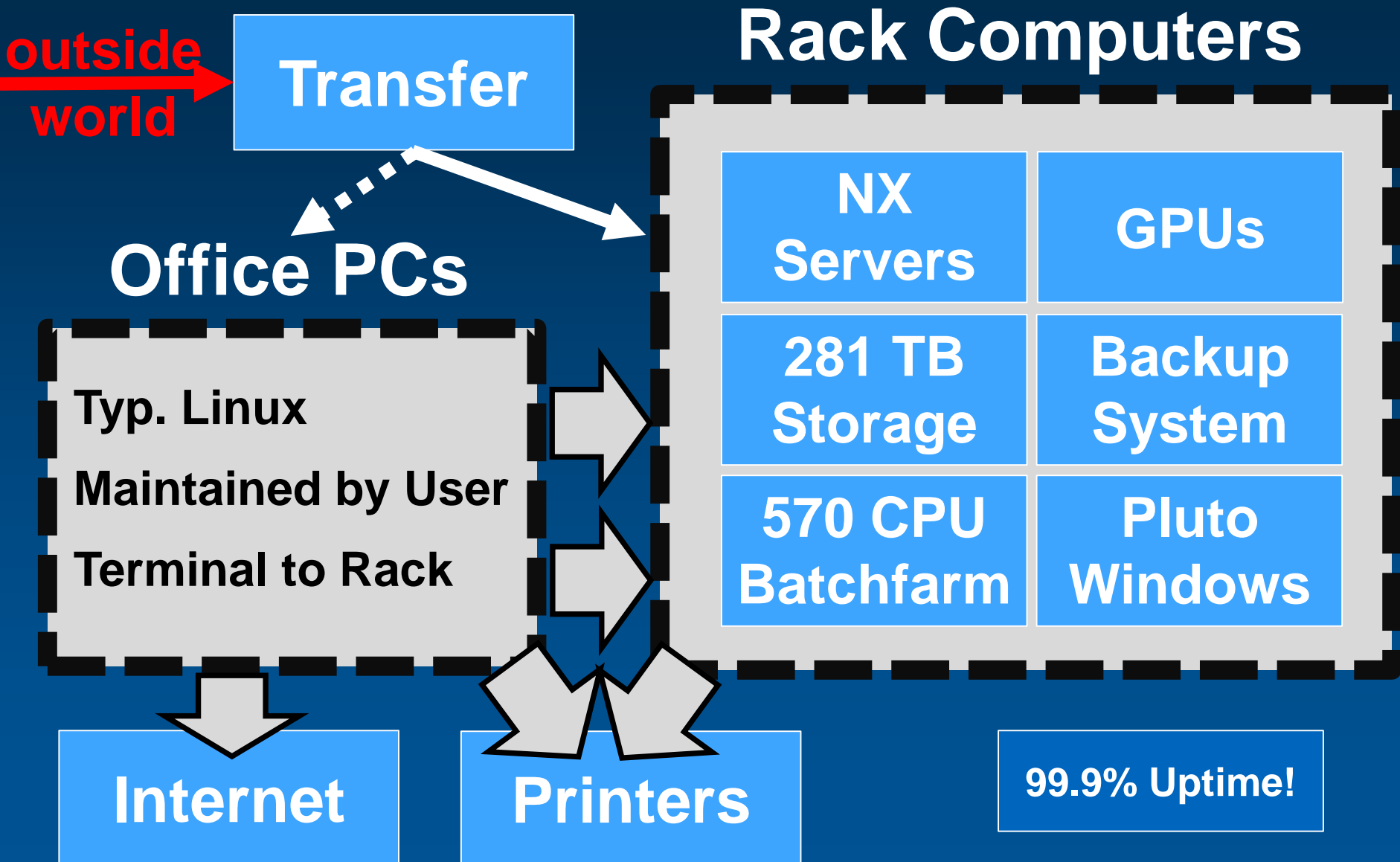
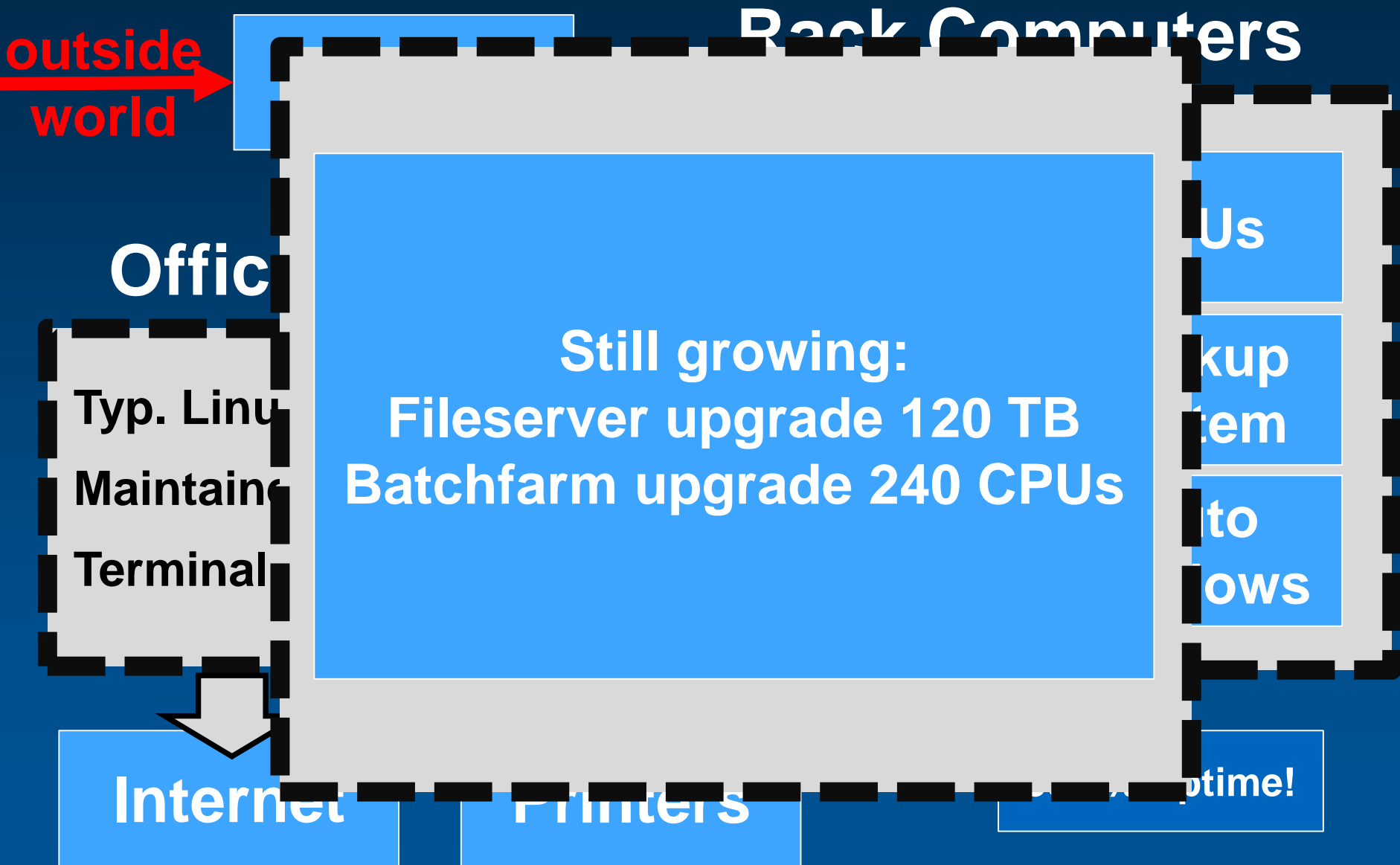


The KTAs Computer System



- **Infrastructure**
- **Services**
- **Printing**
- **Software**
- **How to use**
- **Helpdesk**





E62

SFB

ENA

Our System!

ZTL

E15

ECP

E18

What do we provide Part I

Cluster

CentOs 7

Software

Tape Archive

Private Website

Windows Machine

Batch farm

/scratch space

VPNless login

...

Office

Fixed IPs

LRZ support

Git browser

SVN

OwnCloud

TFTP/ PXE

Hardware/ Spares

Support

...

Others

Proxy

Monitoring

Browser Shell

Archive

Databases

Seminar Room

Printer

Scanner/Fax

...

Webserver

`/home/[ADS]/public_html (chmod -R 744 /home/[ADS])`

Proxy

tunnel into the MWN

Windows Terminal server

Powerpoint, Office, Solidworks, Comsol, etc.

Access: `rdesktop pluto.ktas.ph.tum.de`

Don't save files locally on pluto!!!

Remote login

`transfer.ktas.ph.tum.de` (outside MWN)

Own Cloud

`transfer.ktas.ph.tum.de/owncloud/`

Git Repository with Browser

`transfer.ktas.ph.tum.de/django/gitbrowser`

SVN Repository

`svn.ktas.ph.tum.de`

Rack Computers (NX, Slimfast)

Fast 16 Core 64 GB linux computers

Backupped home folder (daily!)

Unbackupped disk space (281 TB)

/scratch0 ... /scratch9

Tape Archive on request

valuable exp data should be put there

Grid Computers (here at TUM)

570 Cores batchfarm computers with SLURM

Software (/home/software)

compiled, maintained and running software

Office Computers (as terminals)

- hardware (Room 2152)
- maintenance by yourself!
- pxe boot available

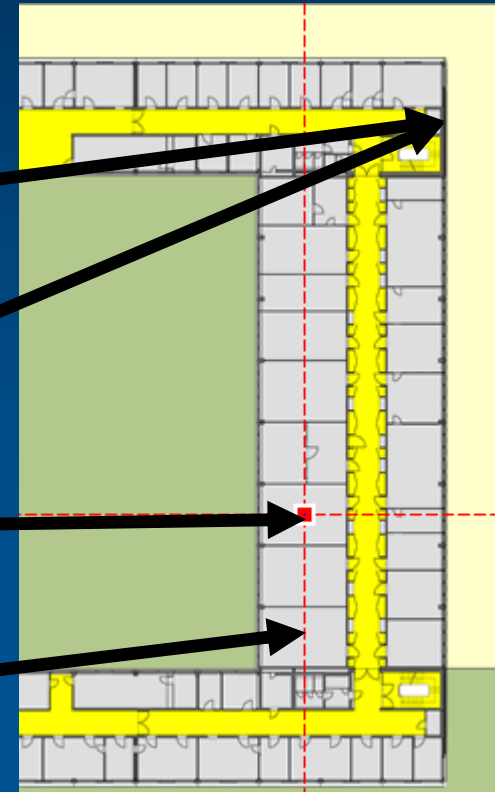
Printers:

Kammerl
dada.e12.ph.tum.de

Kammerl
beuys.e12.ph.tum.de

Office 2152
hermes.e12.ph.tum.de

Office 2172
mops.e12.ph.tum.de



Ubuntu Desktop



SendFolder



Simple Scan



sendFiles

1. Open Simple Scan
2. make sure SendFolder is empty
3. Scan your documents to SendFolder
4. execute sendFiles
5. delete your files from SendFolder

/home/software/

- **Geant**
- **Eclipse**
- **HADES**
- **CALIFA**
- **Root**
- **etc.**

/home/software/scripts

initialization for lots of software

Additional software can be installed by admin on request

A) Connect to the “Rack” system

```
ssh -Y [ADS]@nx1.ktas.ph.tum.de
```

outside MWN use

```
ssh -Y [ADS]@transfer.ktas.ph.tum.de
```

Use of ssh key authentication is recommended!!

B) x2go client

Download and use Proxy via transfer

C) Windows Terminal Server

```
rdesktop -f -r disk:home=~ / pluto.ktas.ph.tum.de
```

http://transfer.ktas.ph.tum.de

The image shows two browser windows. The left window displays the main website 'Welcome to the KTA Computer System' with a navigation menu. The right window shows a 'Computer Status' monitoring page with a table of system resources.

Website Content:

- Welcome to the KTA Computer System**
- Helpdesk**
 - [People](#)
 - [Introduction and overview over the system](#)
 - [Short introduction to SLURM with examples](#)
 - [How to... Batchfarm](#)
 - [How to... KTA Services](#)
- PSI Seminar**
 - [PSI SS16](#)
 - [PSI WS16/17](#)
 - [PSI SS17](#)
 - [PSI WS17/18](#)
- TUMLab**
 - [TUMLab Webpage](#)
- Journal Club**
 - [Journal Club SS17](#)
 - [Journal Club WS17/18](#)
- Services**
 - [Nagios Monitoring](#)
 - [Outlook Online](#)
 - [Archive](#)
 - [OwnCloud](#)
 - [Papers](#)
 - [Gitbrowser](#)
 - [Batchfarm Monitor](#)
 - [Browser Shell](#)
 - [Indico](#)
- Monitoring**
 - [Computers](#)
 - [GPU](#)
 - [Printers](#)
 - [Office Computers](#)
 - [Diskspace](#)

Computer Status Table:

name	status	cpu	ram	ads	/var/tmp	/tmp	/var
cronos	available	51%	22%	active	0%	0%	0%
transfer	available	31%	57%	active	0%	0%	0%
nx1	available	4%	9%	active	1%	1%	49%
nx2	available	6%	10%	active	1%	1%	68%
nx3	available	9%	8%	active	1%	1%	49%
slimfast	available	10%	3%	active	1%	1%	77%
brett	available	0%	2%	active	1%	1%	43%
lambert	available	0%	0%	active	1%	1%	49%
ash	available	0%	0%	active	1%	1%	25%
vasquez	available	0%	5%	active	1%	1%	27%
morse	available	0%	0%	active	1%	1%	38%
dallas	available	0%	1%	active	1%	1%	42%
ripley	available	0%	5%	active	1%	1%	34%
bishop	available	0%	1%	active	1%	1%	26%
parker	available	0%	5%	active	1%	1%	27%
monk	available	0%	1%	active	1%	1%	25%
kane	available	0%	1%	active	1%	1%	35%
kermit	available	0%	0%	active	1%	1%	41%
ernie	available	0%	0%	active	1%	1%	59%
bert	available	2%	0%	active	1%	1%	53%
piggy	available	0%	1%	active	1%	1%	11%
grover	available	0%	1%	active	1%	1%	22%
bigbird	available	0%	0%	active	1%	1%	45%

user access: nagiosuser
password: default

The screenshot shows the Nagios Core web interface. At the top, there's a navigation bar with 'Nagios Core on tra...' and a search bar containing 'transfer.ktas.ph.tum.de:8080/nagios/'. Below the navigation bar, there are three summary boxes: 'Current Network Status' (Last Updated: Tue Jan 30 09:12:41 CET 2018), 'Host Status Totals' (Up: 30, Down: 0, Unreachable: 0, Pending: 0), and 'Service Status Totals' (Ok: 363, Warning: 4, Unknown: 0, Critical: 0, Pending: 0). A left sidebar contains various menu items like 'General', 'Current Status', 'Tactical Overview', 'Map', 'Hosts', 'Services', 'Host Groups', 'Service Groups', 'Problems', 'Reports', 'Graphs', and 'System'. The main content area is titled 'Status Grid For All Host Groups' and shows a table for the 'batchfarm (batchfarm)' host group. The table has columns for 'Host', 'Services', and 'Actions'. The 'Services' column contains links to various service status pages for each host, such as '/tmp', '/var', '/var/tmp', 'Cores', 'Current Load', 'Memory', 'Mount Points', 'Munge', 'PING', 'Root Partition', 'Slurm-Daemon', 'Swap Usage', 'Winbind', 'GPU 0', 'GPU 1', and 'GPU 2'. The 'Actions' column contains icons for host actions like refresh, search, and help.

Host	Services	Actions
ash.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load Memory Mount Points Munge	
bert.ktas.ph.tum.de	PING Root Partition Slurm-Daemon Swap Usage Winbind /tmp /var /var/tmp Cores Current Load GPU 0 GPU 1 GPU 2 GPU 3 Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage	
bigbird.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load GPU 0 GPU 1 GPU 2 GPU 3 Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage	
bishop.ktas.ph.tum.de	/tmp /var /var/tmp Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
brett.ktas.ph.tum.de	/tmp /var /var/tmp Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
dallas.ktas.ph.tum.de	/tmp /var /var/tmp Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
ernie.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load GPU 0 GPU 1 GPU 2 GPU 3 Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage	
grover.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load GPU 0 GPU 1 GPU 2 GPU 3 Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage	
kane.ktas.ph.tum.de	/tmp /var /var/tmp Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
kermil.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
lambert.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
monk.ktas.ph.tum.de	/tmp /var /var/tmp Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
morse.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
parker.ktas.ph.tum.de	/tmp /var /var/tmp Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
piggy.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load GPU 0 GPU 1 GPU 2 GPU 3 Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage	
ripley.ktas.ph.tum.de	/tmp /var /var/tmp Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	
vasquez.ktas.ph.tum.de	/tmp /var /var/tmp Cores Current Load Memory Mount Points Munge PING Root Partition Slurm-Daemon Swap Usage Winbind	

(Useful) apps

```
*****
      Welcome to the KTAS computer system!
*****

( Hello Benjamin Heiss )
-----
  o   ^ ^
  o (oo)\_____)\ \
      (\_____)\ \
        ||----w |
        ||

gu92joq@nx3$ mensa
+++ Mensaplan Dt 30. Jan 09:04:22 CET 2018 +++
Tagesgericht 1
Bulgur mit Karotten, Fenchel und Sellerie [Gl,GlW,Kn,Sl]
Tagesgericht 3
Berner Röstigratin(GQB) mit Bergkäse [Ei,Kn,Mi]
Aktionssessen 2
Schinkennudeln (Vorderschinken) mit Zwiebeln und Ei
(S)(2,3,8)[Ei,Gl,GlW,Kn,Mi]
Aktionssessen 8
Green-Thai-Curry vom Rind (GQB) (R)[Kn]
gu92joq@nx3$ mvv
next U-Bahn to Klinikum Grosshadern
--> 1 Min
--> 11 Min
--> 21 Min
--> 31 Min
--> 41 Min
gu92joq@nx3$ █
```

- TUM-PC
- Login via [ADS]-login
- Skype, Vidyo etc. + camera installed
 - Use as a video conference room
 - Note: you might get blocked elsewhere using skype
- Datatransfer via
 - USB
 - `smb://nas.ads.mwn.de/tuph/e62`

Send an email to all KTAs members:

kta.seminar@ph.tum.de

Send an email to E62 employees:

denseandstrange@ph.tum.de

More mailings lists available on request!

- early alpha draft version will be released soon!
- open for suggestions on improvement required by users (YOU!)

Version 1.0

User Computer Manual E62

Benjamin Heiss^{1*} Steffen Maurus^{2*}

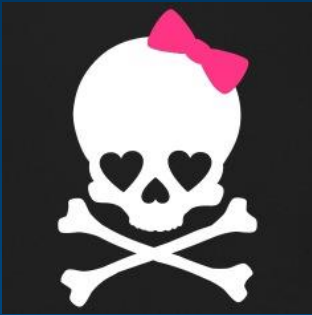
Abstract
Computer Manual for the E62 computer grid. This manual is intended to give a short overview and introduction how to use our system. If you notice some mistakes or want to add something to this manual, please feel free to contact us.
1*: benjamin.heiss@ph.tum.de, 2*: steffen.maurus@tum.de

Contents

1 Infrastructure	2
2 Batch Farm	3
2.1 Check List Jobs	3
2.2 Jobs not finished	3
2.3 Monitoring	4
2.4 Typical Mistakes	4
2.5 Tipps	4
3 Services	4
3.1 Cluster	4
3.2 Office	5
3.3 Other	5
3.4 Seminar Room	5

... calculate on **transfer**

... store tons of useless data



... install global software in your home dir



... run CPU/ RAM consuming software on NX, use slimfast/ batchfarm instead

Do not do illegal stuff, run copyright protected software etc.

You are responsible!

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