

## Linux Upgrade: Status and Plans



7.2

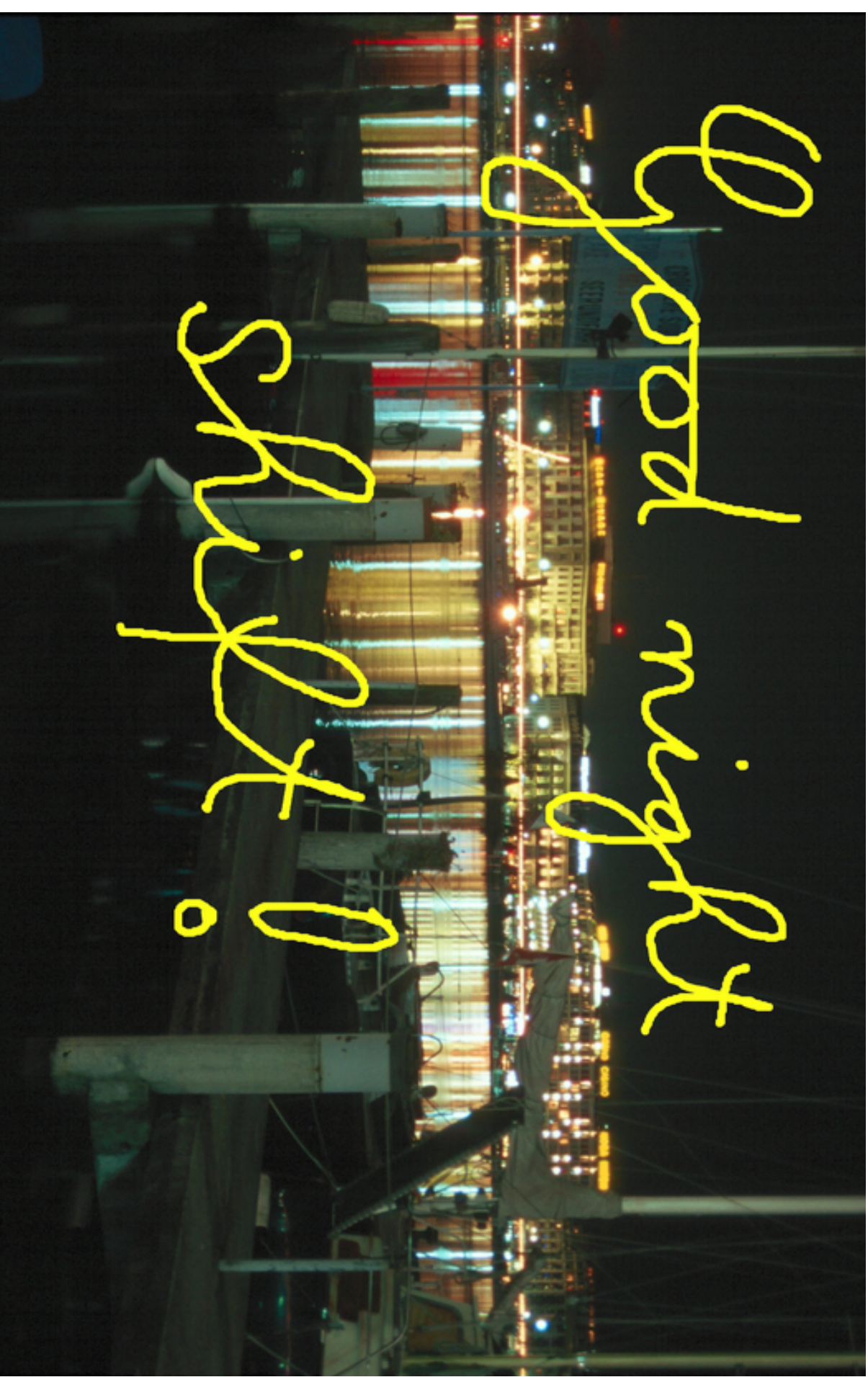
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## A short History of . . . OPAL Offline Computing

Name	Computer System	Current Status
LXOPAL	OPAL Linux Cluster	in use
HPOPAL	OPAL HP Cluster	in use
LXPLUS	CERN Public Login Linux Cluster	in use
HPPLUS	CERN Public Login HP Cluster	<b>to be shut down 07/2002</b>
LXBATCH	CERN Batch Mode Linux Cluster	in use
SHIFT	CERN/OPAL Batch Mode Cluster	<b>to be shut down 07/2002</b>
VXCERN	CERN OpenVMS Cluster	shut down 12/2000
SnOPAL	OPAL HP Cluster	shut down 12/1999
OPAL VMS	OPAL OpenVMS Cluster	shut down 12/1999
OPAL Apollo	OPAL Apollo Cluster	shut down 06/1999
CERNVM	CERN IBM Mainframe	shut down 06/1996

In future, CERN support for Linux and Sun only!



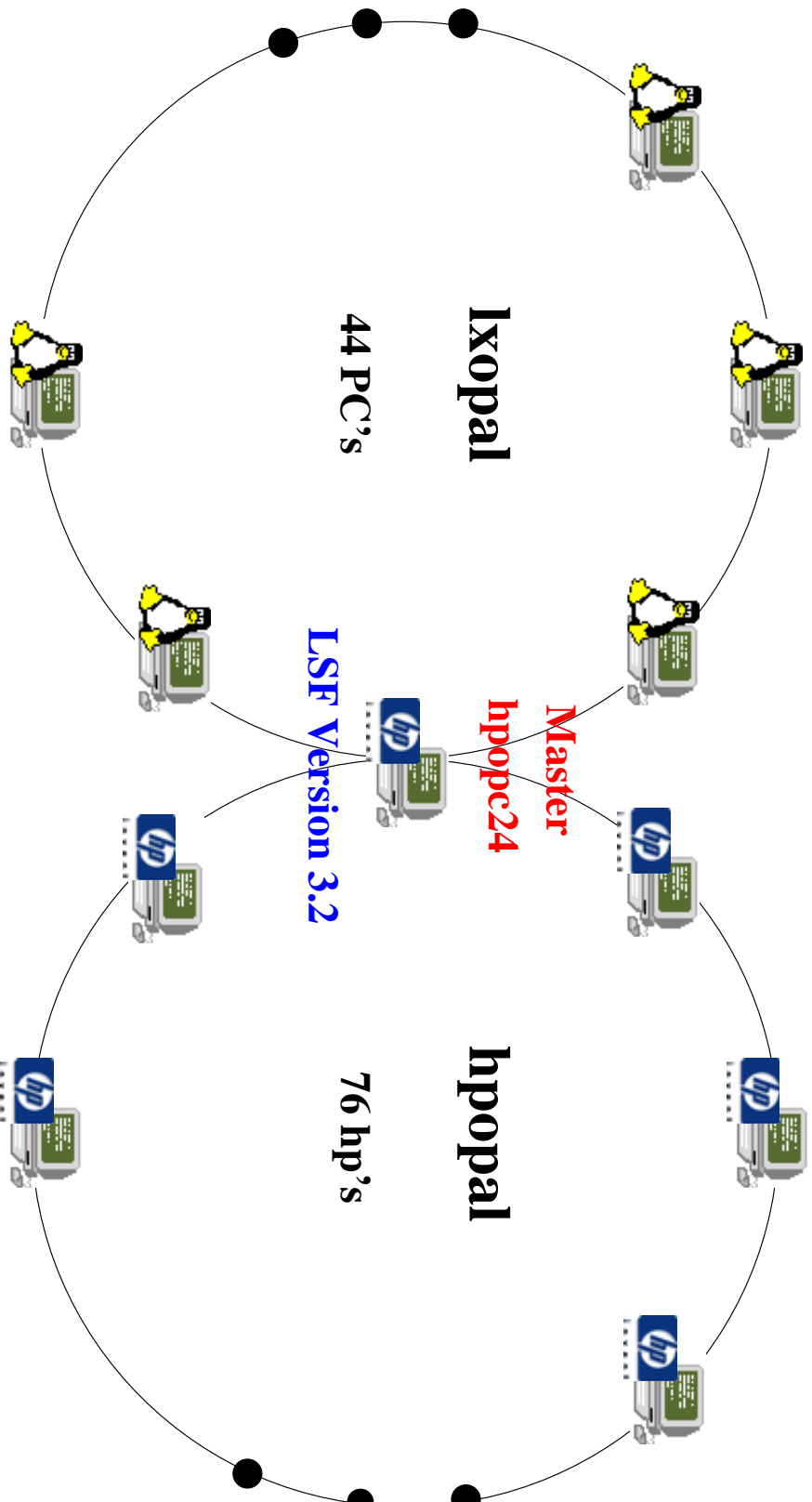




## Sunrise of CERN certified RedHat Linux, Version 7.2.1

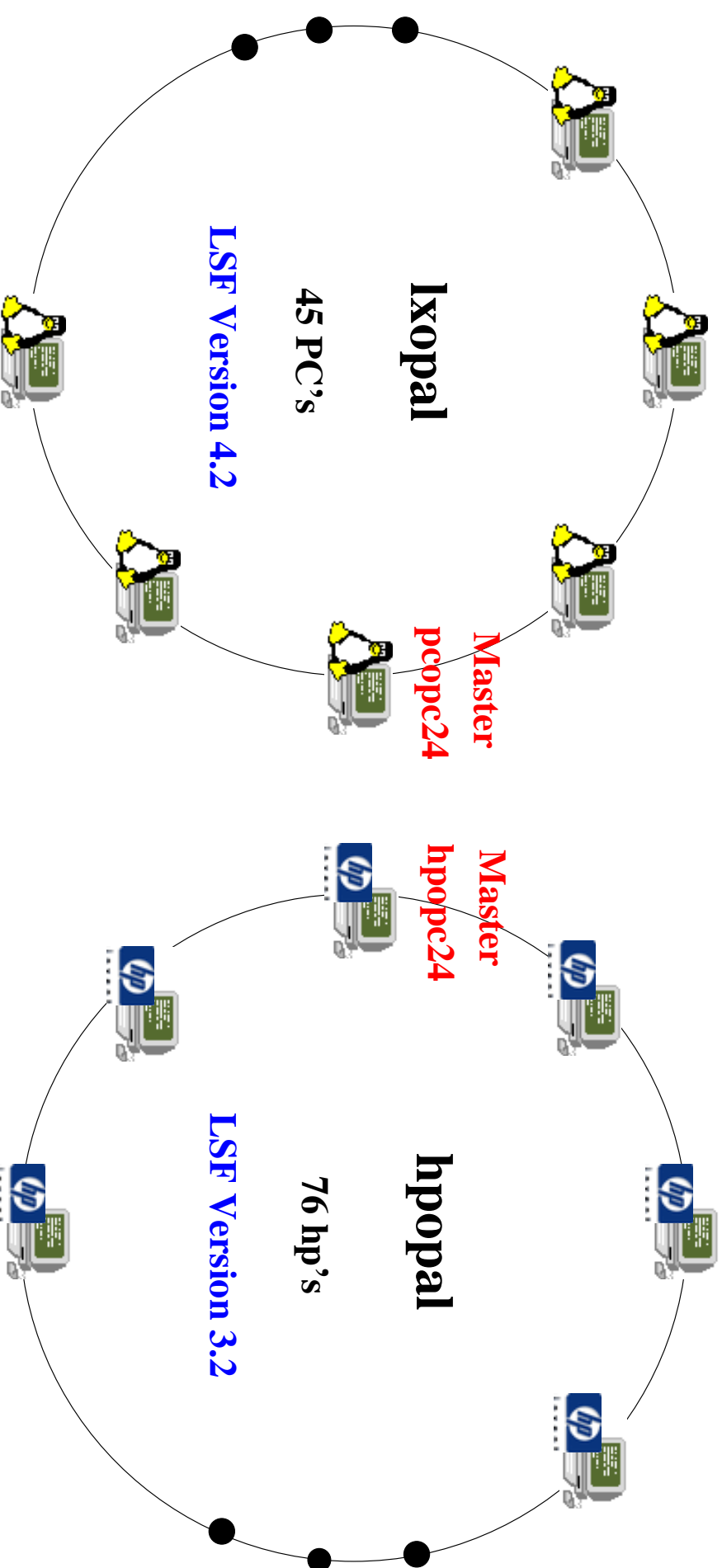
- 19.04.2002 Release of CERN RH 7.2.1 *β* 2.
- 29.04.2002 Start of test installation on pccopc24 using CD images; Several install iterations necessary.
- 13.05.2002 Release of CERN certified RH 7.2.1
- 21.05.2002 Net install of version 7.2.1 on pccopc24; OPAL install scripts fail ⇒ some rewriting necessary.
- 05.06.2002 Only rdist, nfs and LSF still not working; CERN stopped BIS installation support for rdist.
- 19.06.2002 rdist installed via rpm's; Command protocol has to be changed to ssh (1) due to firewall.
- 19.06.2002 Test batch cluster with CERN RH 7.2.1 and LSF 4.2 installed; Accessible via lxplus7.
- 20.06.2002 nfs installation completed on pccopc24; Only LSF is missing right now . . .

# Current hp/Ixopal Cluster Setup



Unfortunately, LSF 3.2 and LSF 4.2 are **incompatible!**

## Future Cluster Setup



**Next steps:** - Check completed installation procedure (next week)

- Add special master configuration for pcoppc24 only (soon)
- Migrate complete cluster (not to soon, ICHEP!)

# Linux catches up on Desktop Features . . .

# GNURF

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The image shows a Linux desktop environment with a terminal window and a queue view window. Large red handwritten text "DEIN" is overlaid on the terminal window.

**Terminal Window:**

```

xterm
r{user/r/rabbertz} xlock
r{user/r/rabbertz} xlock
r{user/r/rabbertz} xlock
r{user/r/rabbertz} ksnapsnot
  
```

**Queue View Window:**

Queue Name	Priority	Status	MAX	JL/U	JL/P	IN	NOBS	PEND	RUN	SUSP
hplix	40	open:active	-	30	-	1	0	0	0	0
hplix_admin	70	open:active	-	-	-	1	0	0	0	0
hpopal_mop	30	open:active	-	-	-	2	0	0	0	0
hpopal_mop_fast	50	open:active	-	-	-	2	0	0	0	0
lxopal_mop	30	open:active	-	-	-	1	0	0	0	0
lxopal_mop_fast	50	open:active	-	-	-	1	0	0	0	0
lxopal_tobyo	60	open:active	-	-	-	1	0	0	0	0

**System Status Window (top right):**

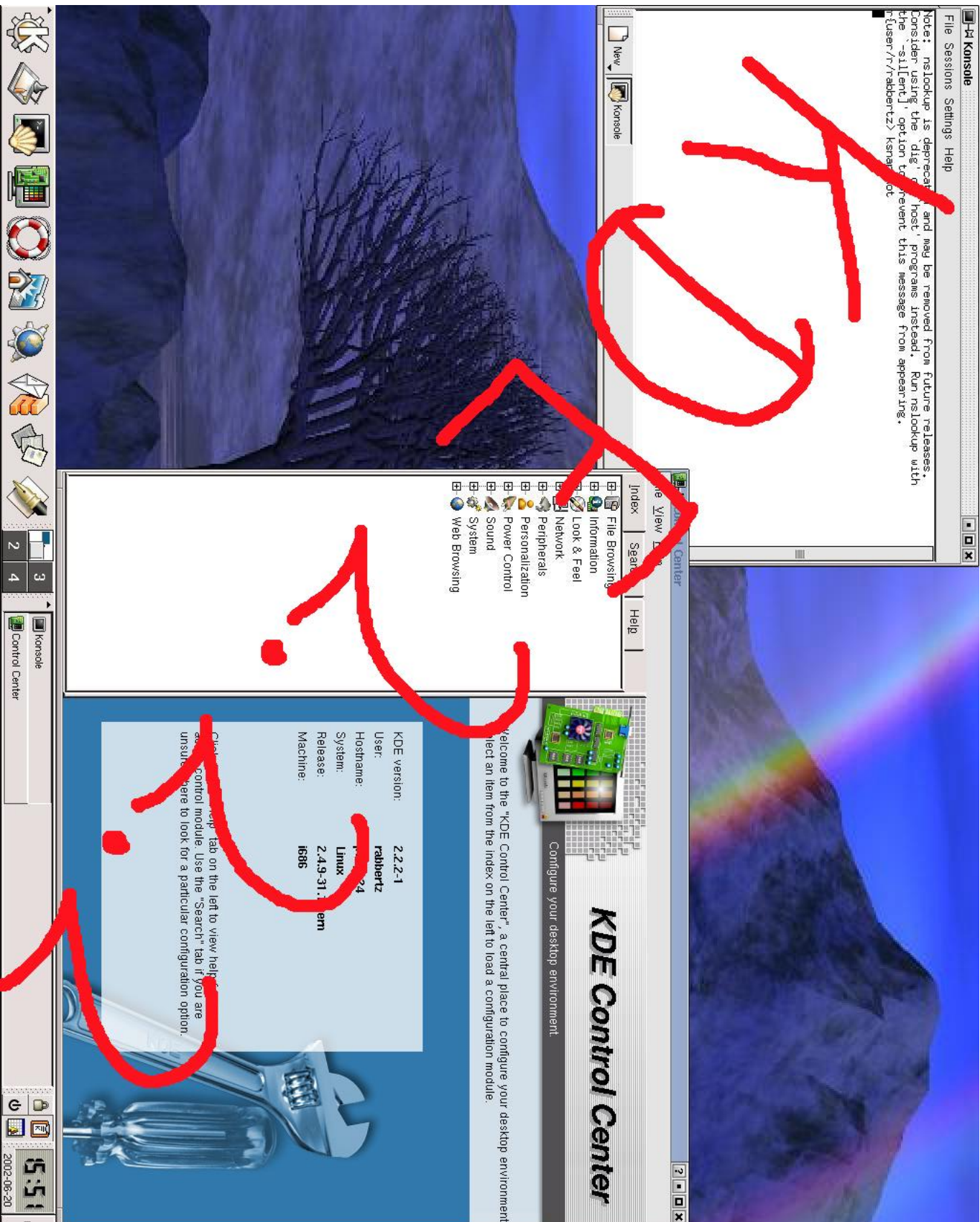
```

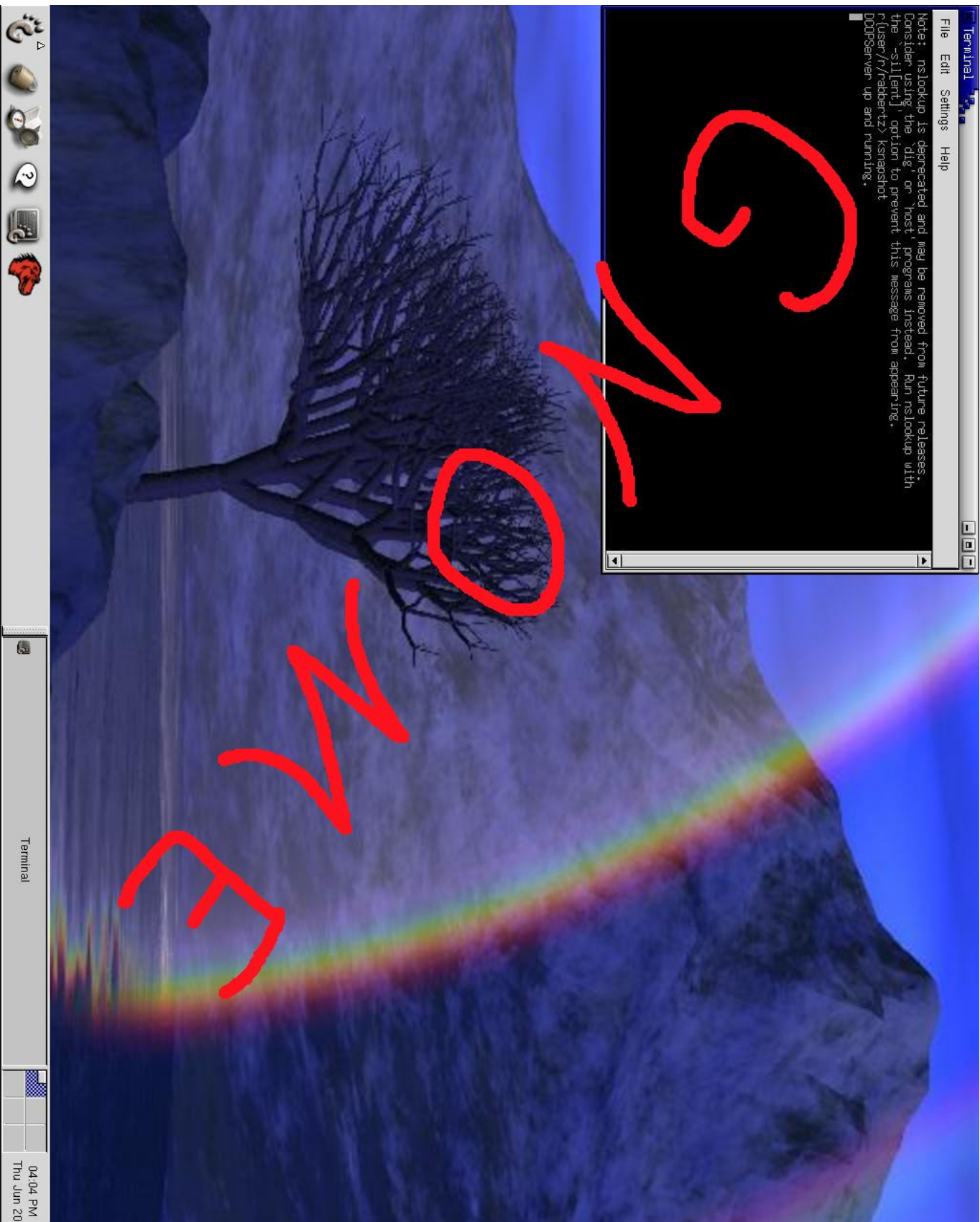
LOAD 0.0  PROCS/MIN
CPU 82%  USER/NICE/SYS/FREE
MEM 252M  USED/SWAP/BUF/CACHE
SWAP 0    IN/OUT/TDLE
PAGE 0    READ/WRITE/TDLE
DISK263K  INTS (0-23)
  
```

**Job List Window (bottom right):**

Sub_Time	Job_Name
pend Jul 3 13:51:30 2000	r001195p0003
pend Jul 3 13:51:37 2000	r001195p0009
pend Oct 19 13:44:14 2001	d2061nd_ job
pend Oct 25 09:24:02 2001	d2081nd_ job
pend Nov 17 14:04:41 2001	d192hms_ job
pend Dec 21 16:11:41 2001	r011729p0651







## Documentation / Location

CERN Linux Homepage: <http://cern.ch/linux>

CERN RH72 floppy images: </afs/cern.ch/project/linux/redhat/cern/7.2.1/i386/images>

- [bootnet.img](#) for net install via nsf

CERN RH72 CD images (*700 MB!*): </afs/cern.ch/project/linux/redhat/cern/7.2.1/iso>

- [crh721\\_cd1.iso](#) and [crh721\\_cd2.iso](#) for installation via CD

**Ixopal Page:** <http://opal.web.cern.ch/opal/computing/Ixopal>; not yet updated.

**OPAL Primer:**

A new version to replace the vintage version from July 1998 is in preparation

→ George Lafferty

First measure taken for the computing chapter: [Throw away about 95% of it!](#)

There's more to follow . . .

## Outlook

End of this month I will leave Geneva for Karlsruhe and since yesterday I know that my new address will **not be Under the bridge no. 19** . . .

But **instead** of saying

**Bye Bye**

it will be

**See Ya!**

For Karlsruhe I will be involved in CMS/CDF and as secondary CERN experiment I have put . . . **OPAL!**

**Good Luck**

to **Simone** who will take over the responsibility for the hp/lxopal cluster!





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NEED TO DECIDE?



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DON'T  
WANT TO  
KNOW.

