

## Linux topics

### State of DESY Linux 5 discussion

### Notebook support

## DL5: why and when

- DL4 is based on SuSE 7.2 Professional
- SuSE 7.2 was released July 2001
  - is showing its age now
    - KDE2
    - glibc too old for recent gcc versions
  - SuSE provides security patches for 2 years
    - doing this ourselves is too much effort
- Ambitious schedule:
  - June
    - decision on DL5 base distribution
  - August
    - provide DL5 to early adopters, volunteers
  - October
    - DL5 default on new installations

## selection criteria for DL5 base distribution

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- should have a sufficient time to live
  - security and bug fixes by distributor
  - 2 years limit is forcing us right now
    - even if we'd like to keep DL4, we couldn't
- should come with recent software
  - glibc, gcc (new C++ ABI since version 3.2)
  - KDE, application software
- should be supported by 3<sup>rd</sup> party vendors
  - software (compilers...) & hardware (notebooks...)
- should fit well with HEP, GRID, ...

## DL5 distributions considered

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- Red Hat
  - Professional
  - Enterprise Server / WorkStation
- SuSE
  - Professional
  - SuSE Linux Enterprise Server / SuSE Linux Desktop
- Debian
  - Stable "woody"
  - Unstable "sarge" (or is it "sid"?)

## debian

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- . PROs
  - no license troubles
  - no monetary cost
  - long life time
    - . but undefined
  - good patches support
    - . but: for Stable only
    - . no commitment to 100% compatibility
  - very complete
- . CONs
  - software in Stable is old (like DL4)
  - no release date for next Stable
    - . this year? next year?
  - no commitment to timely, compatible patches for Unstable
  - poor support by 3<sup>rd</sup> party vendors

## Red Hat Professional

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- . PROs
  - de facto HEP standard
    - . but which one?
      - HEP uses 7.x today
      - current is 9
  - no license troubles
  - no monetary cost
  - good 3<sup>rd</sup> party support
  - fairly complete
  - CERN considers going for version 10
- . CONs
  - life time: 10-12 months
    - . 6 months after next release (4-6 months)
    - . 1 year DL release cycle?
    - . start working on public beta releases?
  - "... a vehicle for exposing new technology to the community" (RedHat)

## Red Hat ES/WS

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- targeted at professional customers, not SOHO
- no free download, but product and updates still GPL
  - cost is 1k € per year for 1 ES +1 WS systems
    - for "Red Hat Network" services & support
    - Sales is unable to talk about site licenses ("not yet")
- patches provided for 5 years
- reduced number of packages
  - true for all Enterprise distributions
- current version 2.1 corresponds to Professional 7.x
  - next release Q3-Q4, no beta yet, betas are not public

## SuSE Professional

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|---|---|
| <ul style="list-style-type: none"><li>• PROs<ul style="list-style-type: none"><li>– life time: 2 years</li><li>– very complete</li><li>– up to date</li><li>– some 3<sup>rd</sup> party support</li><li>– no monetary cost</li><li>– little license troubles</li><li>– comes with<ul style="list-style-type: none"><li>• AFS</li><li>• globus</li></ul></li></ul></li></ul> | <ul style="list-style-type: none"><li>• CONs<ul style="list-style-type: none"><li>– life time: 2 years</li><li>– common misconception about YaST license<ul style="list-style-type: none"><li>• though it's ok for HEP</li></ul></li><li>– considered less compatible with HEP, GRID than Red Hat<ul style="list-style-type: none"><li>• again: which Red Hat ?</li></ul></li></ul></li></ul> |
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## SuSE Enterprise

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- no free download, but product still (mostly) *GPL*
  - exceptions: truetype fonts, Codeweavers Wine
  - cost is 1.5 k € per year for 1 SLES +5 SLD systems
    - for "SuSE Maintenance Web" services & support
    - Sales is able and willing to talk about site licenses
- patches provided for 5 years
- reduced number of packages
  - additional ones possible for a fee
- current version 8 corresponds to Professional 8.1
  - SLD has more recent KDE

## DL5: summary

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- 6 months ago, the decision would have been easy
  - Red Hat Professional best choice
  - Enterprise Desktops were not available
  - SuSE Professional was not in good shape
- since then, conditions have changed
  - Red Hat reduced support time from 2 years to 1
  - mature SuSE Professional available
  - Enterprise Desktops available
    - and SuSE's is even up to date

## DL5: Options

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- Red Hat Professional, effective ttl  $\approx$  10 months
  - at least some HEP institutes are heading there
  - they also talk about throwing money at Red Hat for extending the support time
  - can DESY wait for the outcome ?
  - too late for version 9 anyway
- SuSE 8.2 Professional, effective ttl  $\approx$  1½ years
- SuSE SLES8/SLD8, effective ttl  $\approx$  4 years  $\approx$   $\infty$ 
  - buy one, install many, or
  - negotiate licensing with SuSE

## DL5: next steps

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- Evaluation Matrix will be presented and discussed in Linux User Meeting in HH next week
- if DL5 is important to you:
  - do come, and speak up
  - or brief me, and I'll speak up
- continue talking to SuSE about Enterprise products
  - licensing terms, additional packages, cooperation
- talk to HEP community
- hopefully, take a reasonable decision for DL5 soon
  - if it's not reasonable & available today, it's DL6