

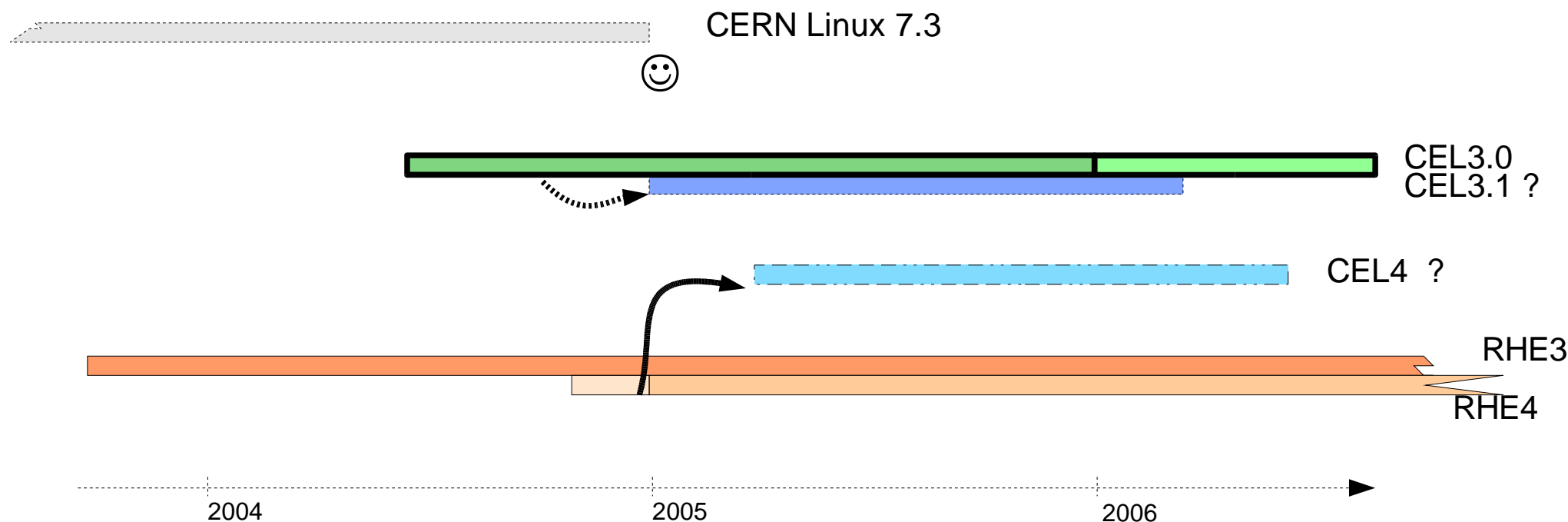


# CERN Linux strategy in 2004/2005

## CERN & Linux in 2004

- Redhat negotiations took too long. Decision to go self-supported in Feb 2004 (time pressure & cost advantage).
- CERN will deploy a recompiled version of Red Hat Enterprise 3 in summer 2004, supported (inside CERN) until 12/2005 = CEL3
- This version is freely available (except for some products). No license from Red Hat required.
- No support from CERN for external institutes. Collaborations welcome, binary compatibility to both Fermi/SL and RH is goal.
- Certification under way, ETA: July 2004.

# Strategy



## Long(er)-term:

- Discussion inside CERN on CEL3 lifetime
- HEPiX for collaboration / standardization.



## (possible) confusion:

- CERN also buys licenses from Red Hat.
  - CERN will test Red Hat support model in 2004
    - Suitable offer finally received
    - Buy 200 RHE-3 WS licenses, including support
    - Buy “Technical Account Manager”
    - See whether money is well spent.
  - CERN-related projects (EGEE) may decide on Red Hat Enterprise as reference platform
  - ORACLE DB servers need an OS license to be supported.  
Fixed # of machines, running RH AS 2.1 = nothing new.

## Possible 2005 scenario:

**IF** the RH evaluation is positive (other labs' experiences are welcome):

- Could start from Redhat Enterprise binaries
- (minimal) CERN changes (AFS, CERN add-ons)
- Package the result (a mixture of Redhat and CERN-built binaries)
- Offer this inside CERN, licence fees paid by CERN to Redhat
- Outside sites which want this need also pay the licence fee to Redhat (using the same conditions as offered to CERN)
- The Red Hat packages would be supported by Red Hat, rest by CERN (support for outside institutes needs to be discussed).

## Thoughts on “Unified HEP Linux”

- Good: de-facto unification in 2004 on Red Hat Enterprise 3
  - But: HEP will never move in lockstep
    - Various site customizations (e.g. SL framework)
    - Differing schedules & policies for applying patches
    - Legacy environments
- ⇒ Users / Experiments need to be conscious of dependencies
- technical: ”sanitized” building environments, dep. tracking on deployment (RPM, JDL)
  - administrative: external library vetting, validation suites
  - How much effort do we need to spend to “certify once, run (almost) everywhere” ?

## CEL3 Legalities

- All SRPMS available via anonymous FTP, no contract
- All recompiled at CERN/Fermi and self-hosted.
- Similar to Fermi LTS (SL), Whitebox, Caosity, TAOLinux
- Red Hat is aware of CEL3.
- Risk analysis:
  - Red Hat does not own the majority of packages (licensee), and needs to provide sources for GPL products to customers (current: provide all sources to everybody)
  - Red Hat has service, support & license mixture (access to updates via RHN, installation support, additional installations)
  - Worst-case: Red Hat cuts all relations with CERN – no more ORACLE support, no more updates. But: have working distribution, “graceful degradation”