

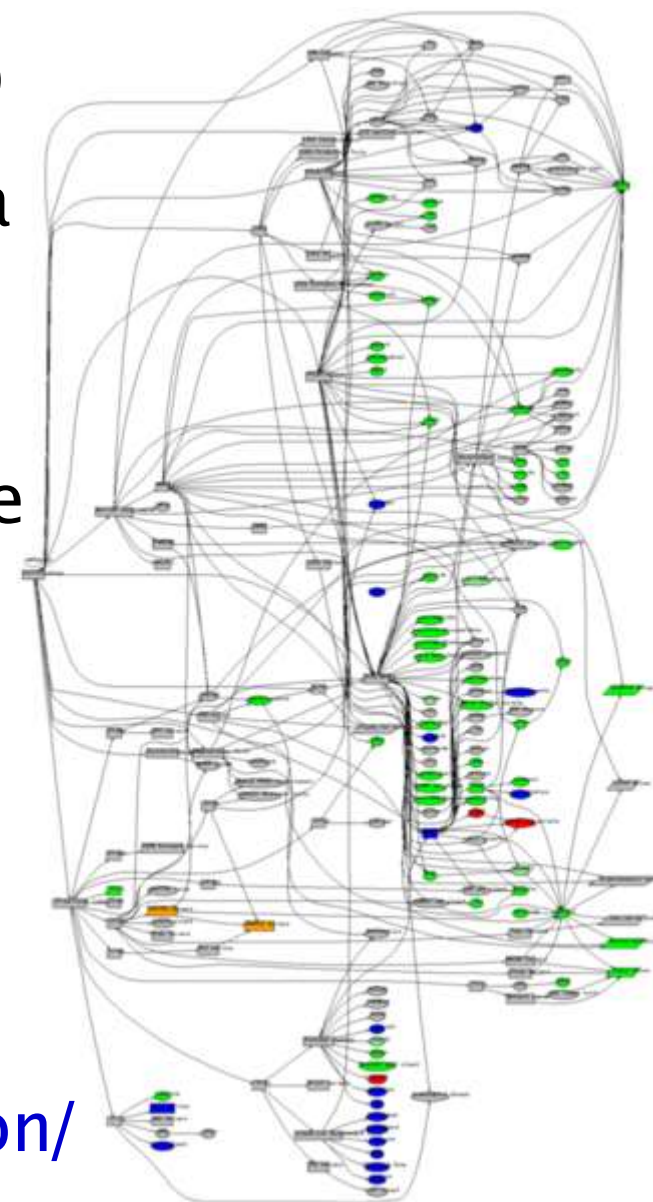
CERN Linux issues for LCG GDB

- Linux certifications at CERN
- CEL3 vs Scientific Linux
- Support issues

Certification & Deployment

(Linux certification at CERN is formalized)

- Certification started in March 2004, on a recompiled version of Red Hat Enterprise3 : **CEL3**
- Initial deployment on beta cluster: June (LXCEL3)
- Smooth migration, according to demand
- Default install for new desktops in summer.
- Details at <http://cern.ch/linux/scientific3/certification/>



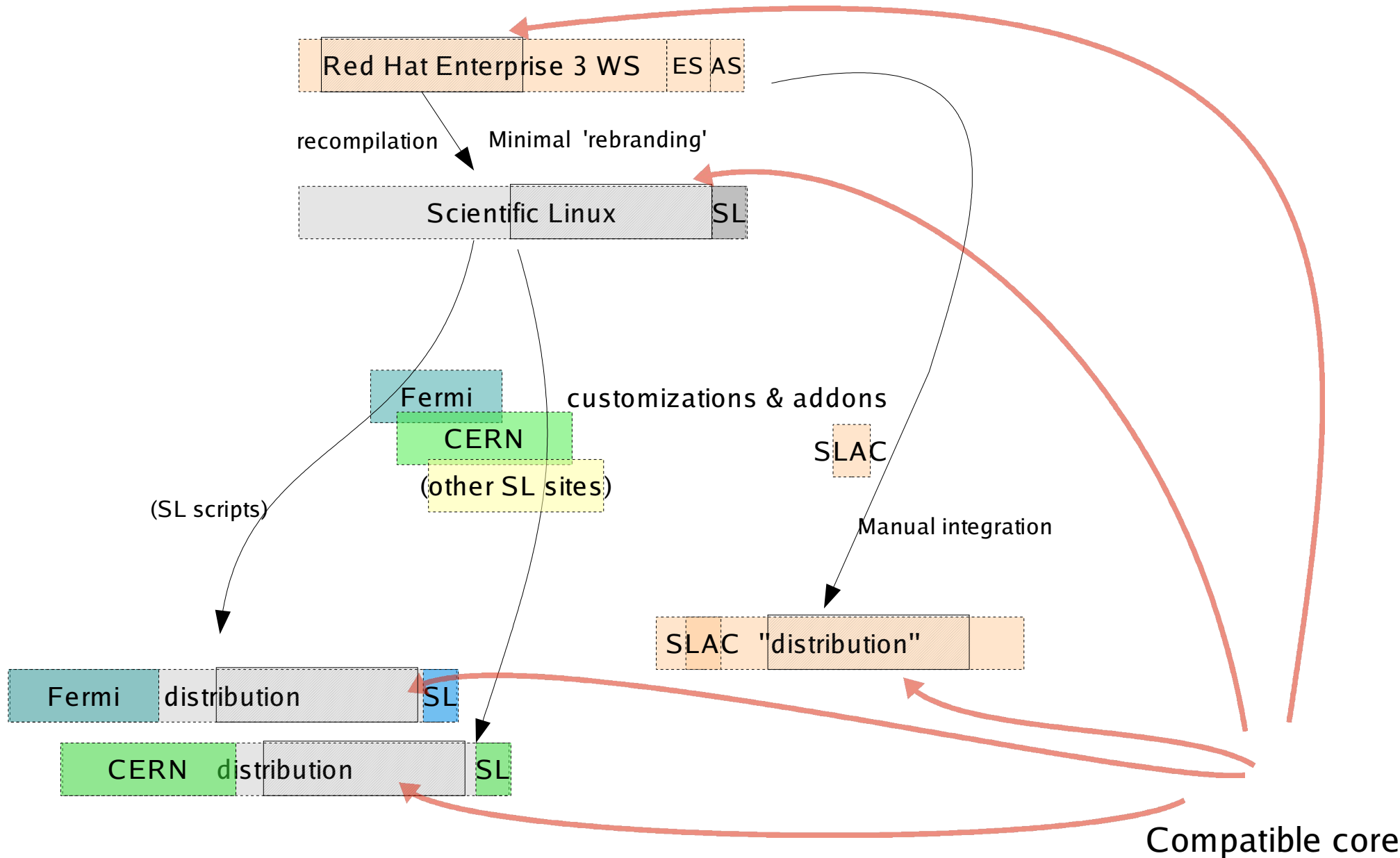
HEPiX 2004: Proposal by CERN and Fermi:

- Fermi has de-Fermiized their own RHE-clone LTS
- CERN decided to support the effort
- Promise for SL to stay binary compatible with Red Hat Enterprise and sites (on core package set, to be defined)
- Experiments & Projects to acknowledge this binary compatibility of SL & RHE
 - = Certify once, run anywhere.
- Positive echo so far.. (labs, EGEE, BaBar)
- CEL3 has been re-based on Scientific Linux

Binary compatible (HEP?) Linuxes

- Commercial Red Hat Enterprise 3 (SLAC, LBNL):
 - Vendor support (for original binaries)
 - Common pricing for HEP sites, geared towards large farms
 - Non-redistributable
- Scientific Linux (Fermi / CERN):
 - Framework for adding site customizations
 - No formal support, site admin is required (but collaboration possible)
 - Freely available and (re-)distributable, not restricted to HEP
- Both:
 - Share majority of code (libraries, executables)
 - Will be modified / customized at sites.

Customized Linux distributions



Caveats

- Modifications:
 - Minimized by need for support (RHE) / desire to stay compatible (SL)
 - But: SL "core" packages not formalized (yet)
- Use of RHE/SL by a project:
 - Explicit dependency listing required ("tagging" won't work)
 - Tools like RPM may help
 - Binary compatibility is the goal, but never 100% guaranteed - automatic validation suites are still useful.

Support issues

- Outside of CERN / Fermi:
 - **No support.** Bug reports may / will be ignored.
 - Local site admin / support is required
 - But: Collaboration

you fix,
 we integrate and re-distribute,
 all other sites can use the fix

Structure inside CERN:

