

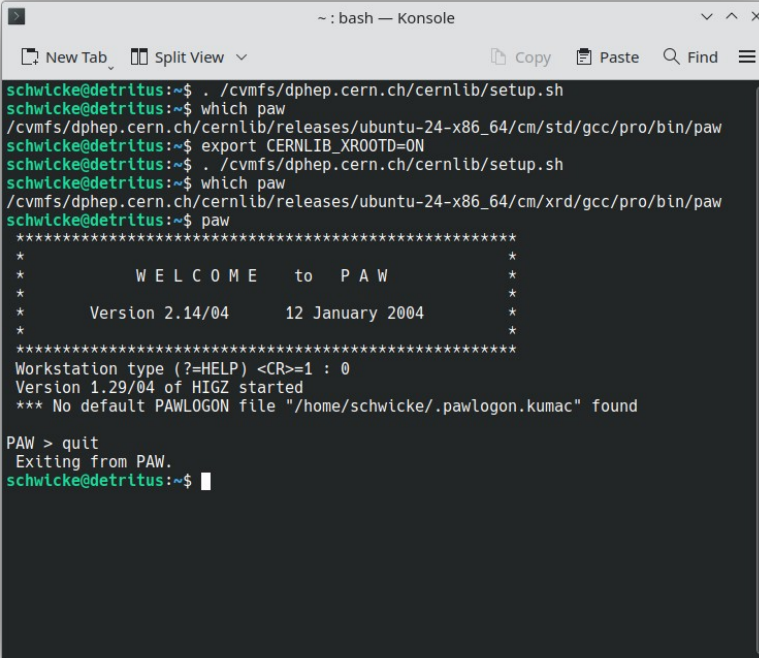
Community CERNLIB status

- Latest release highlights:
 - cvmfs area available
 - Initially populated for review
- Latest release: (unchanged)
 - 2025.02.25.0
 - Free code only

Community CERNLIB status

Patch ready for automatic export to CVMFS

- All free binaries which we build in the CI
- Distinguish different OS version via OSTAG, e.g. “rhel-9-x86_64” or “scientificsl-4-i386”
- Setup script available in top directory



```
schwicke@detritus:~$ ./cvmfs/dpheap.cern.ch/cernlib/setup.sh
schwicke@detritus:~$ which paw
/cvmfs/dpheap.cern.ch/cernlib/releases/ubuntu-24-x86_64/cm/std/gcc/pro/bin/paw
schwicke@detritus:~$ export CERNLIB_XROOTD=0N
schwicke@detritus:~$ ./cvmfs/dpheap.cern.ch/cernlib/setup.sh
schwicke@detritus:~$ which paw
/cvmfs/dpheap.cern.ch/cernlib/releases/ubuntu-24-x86_64/cm/xrd/gcc/pro/bin/paw
schwicke@detritus:~$ paw
*****
*
*           W E L C O M E   t o   P A W           *
*
*           V e r s i o n   2 . 1 4 / 0 4       1 2   J a n u a r y   2 0 0 4       *
*
*****
Workstation type (?=HELP) <CR>=1 : 0
Version 1.29/04 of HIGZ started
*** No default PAWLOGON file "/home/schwicke/.pawlogon.kumac" found

PAW > quit
Exiting from PAW.
schwicke@detritus:~$
```

```
schwicke@detritus:~$ . /cvmfs/dpheap.cern.ch/cernlib/setup.sh
schwicke@detritus:~$ which paw
/cvmfs/dpheap.cern.ch/cernlib/releases/ubuntu-24-x86_64/cm/std/gcc/pro/bin/paw
schwicke@detritus:~$ export CERNLIB_XROOTD=ON
schwicke@detritus:~$ . /cvmfs/dpheap.cern.ch/cernlib/setup.sh
schwicke@detritus:~$ which paw
/cvmfs/dpheap.cern.ch/cernlib/releases/ubuntu-24-x86_64/cm/xrd/gcc/pro/bin/paw
schwicke@detritus:~$ paw
*****
*
*           W E L C O M E           t o   P A W           *
*
*   Version 2.14/04           12 January 2004           *
*
*****
Workstation type (?=HELP) <CR>=1 : 0
Version 1.29/04 of HIGZ started
*** No default PAWLOGON file "/home/schwicke/.pawlogon.kumac" found

PAW > quit
Exiting from PAW.
schwicke@detritus:~$
```

```
~ : bash — Konsole
New Tab Split View
Copy Paste Find
schwicke@detritus:~$ . /cvmfs/dpheap.cern.ch/cernlib/setup.sh
schwicke@detritus:~$ which paw
/cvmfs/dpheap.cern.ch/cernlib/releases/ubuntu-24-x86_64/cm/std/gcc/pro/bin/paw

~ : bash — Konsole
New Tab Split View
Copy Paste Find
schwicke@detritus:~$ export CERN_LEVEL=2025.02
schwicke@detritus:~$ . /cvmfs/dpheap.cern.ch/cernlib/setup.sh
schwicke@detritus:~$ which paw
/cvmfs/dpheap.cern.ch/cernlib/releases/ubuntu-24-x86_64/cm/std/gcc/2025.02/bin/paw
schwicke@detritus:~$
```

```
* *
*****
Workstation type (?=HELP) <CR>=1 : 0
Version 1.29/04 of HIGZ started
*** No default PAWLOGON file "/home/schwicke/.pawlogon.kumac" found

PAW > quit
Exiting from PAW.
schwicke@detritus:~$
```



Community CERNLIB status

- `/cvmfs/dphep.cern.ch/cernlib` : options
 - `CERN_LEVEL = "pro"` : set to tag name for specific tag
 - `CERNLIB_XROOTD=OFF` or `ON` for xrd support
 - `CERNLIB_COMPILER=gcc` to select compiler. Use `g77` for very old builds, e.g. for SLC4
 - `CERNLIB_IMAKE="im"` or `"cm"` to select imake or cmake build
- Note: we do not provide the full matrix of all possible builds

Community CERNLIB: discussion

- Upcoming challenges (or threats)
 - gcc/gfortran language changes
 - Discussions around dropping 32bit support
 - Does this involve kernel support for 32bit ?
 - If so, impact for 32bit based container images ?
 - Any impact on memory management (like on Apple) ??
 - X11 future
 - Removal of things like Motif has started, e.g. in RHEL10
 - To be checked in detail if this affects as well Xt and friends
 - We may have to move to GTK4 longer term