

# New iLCSoft developers release v02-03

Software & Analysis Meeting

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# Starting a new developer release cycle

## Compatibility with v02-02 series

### **iLCSoft v02-02 series used for 250 GeV production remains usable**

- Bug fixes will be backported
- Physics backwards compatibility is major concern

### **iLCSoft v02-03 starts a new development cycle**

- Platform for new developments
- Physics backwards compatibility slightly reduced concern
  - No physics validation
- Allows for quicker turnaround cycles for testing new things
- Software stability remains major concern
- Updates to externals are possible

**Files produced with v02-02 series can be used with new release! Files produced with v02-03 might be slightly different from a “physics perspective” (changes in external SW and also in reconstruction).**

# What's new?

## “Externals”

### Upgrade from python2 to python3 (3.8.6)

- Might break some user python scripts, if they have not been made compatible
- **iLCSoft scripts have been updated and should work**
  - Create an issue if you find one that doesn't work

### Upgrade gcc-10.3.0 (from gcc-8.2.0)

- Rather transparent change
- Not binary compatible
  - You need to recompile your packages if you want to use them with v02-03

### Other external packages with latest available version

- ROOT v6.26/06 (from 6.18/04)
- DD4hep v01-20-02 (from 01-11-02)
- Geant4 11.0.2 (from 10.04.p03)

### New packages

- podio v00-14-03
- EDM4hep v00-05

# What's new?

## iLCSoft (a selection)

### MarlinReco v01-33

- New TrackLengthProcessor (split from TOFProcessor)
  - Steering files outside the standard reco chain will need to be updated accordingly
- More robust fitting of subtracks for track length estimation

### KalTest / DDKalTest

- Fix of missing factor 0.5 in Bethe-Bloch parameterisation

### MarlinKinfProcessors v00-05

- Addition of example used for Tutorial

**All packages are made compatible with CMake  $\geq$  3.17 and migrated to use github actions CI**

# New releases

and where to find them

## Software

```
/afs/desy.de/project/ilcsoft/sw/x86_64_gcc10_centos7/v02-03  
/cvmfs/ilc.desy.de/sw/x86_64_gcc103_centos7/v02-03 (*)
```

## ILDConfig

```
/afs/desy.de/project/ilcsoft/sw/ILDConfig/v02-03  
/cvmfs/ilc.desy.de/sw/ILDConfig/v02-03 (*)
```

## Release Notes:

- [iLCSoft v02-03](#)
- [iLCInstall v02-03](#)
- [ILDConfig v02-03](#)

\*currently being deployed. We will send the release announcement email once the release is available

# Summary

- New developers release iLCSoft v02-03
- Switching to newer versions of external software
  - **Most importantly python3**
- Production release v02-02 series remains in place and usable
  - v02-02 series and v02-03 series with some differences in reconstruction
  - **Files from the 250 GeV production can be used with v02-03**
  - Combining files produced with different release cycles has to be handled with care
- Many small changes of iLCSoft packages
- All packages migrated to github actions

**Happy developing. Let us know if you run into any problems!**