

Software Coordinators Report

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ILD SW&Ana Meeting, Jan 17, 2018

- Activities since last week
- iLCSoft
- Monte Carlo Test Production
- Software Pre-Meeting
- Summary and Outlook

- Generators: nothing new
 - most issues fixes
 - some checks pending
- Simulation models: nothing new
 - models validated
 - used for test production
- Reconstruction
 - see talk on low pt tracking by S.Lu

- continued to address large number of compiler warnings in current iLCSoft
 - mostly due to `-Wefl-c++`
- core packages are should be now free of warnings:
 - LCIO
 - Marlin
 - Gear
 - LCCD
 - aidaTT, KalTest
- will continue to address warnings in *tracking packages*

need package authors to take care of their (sub)package, e.g. in MarlinReco

- almost all warnings should be easy to fix, e.g.
 - should be initialized in the member initialization list [-Wefc++]
- can be fixed with *default member initializers* in class declaration

```
struct A{  
    A() ;  
    double d{} ;  
    float f = 42. ;  
    MCParticle* p = nullptr ;  
};
```

- values will be used in all c'tors initializer lists
- unless other values specified explicitly there

- the previous example will cause the following warning
has pointer data members but does not override A(const& A) [-Weffc++]
- this can be easily fixed by either **implementing**, deleting or defining default copy and assignment:

```
struct A{  
    A(const& A) = delete ;  
    A& operator=(const& A) = delete ;  
    A() ;  
    // ...  
};
```

```
struct A{  
    A(const& A) = default ;  
    A& operator=(const& A) = default ;  
    A() ;  
    // ...  
};
```

- other warnings (unused variables, shadowed variables, ...) should be trivial to fix



- issue reported last week:
- missed to create *tape pool* for directory `ilc/prod/ilc/mc-opt` at DESY-SE
 - this caused overflow of the *disk pool*
 - added some **more disk** to finish the test production
- long term:
 - create a *tape pool* for the mass production
 - details to be sorted out ...

test production has now been completed

- please check and validate the samples !

- meeting of software and analysis experts
- 18-19 February 2018 at KEK
- detailed presentations and expert discussions on:
 - detector performance benchmarking (tools)
 - high-level reconstruction
 - physics analyses (tools)
- agenda:

<https://agenda.linearcollider.org/event/7839/overview>

please register if you plan to attend !

- test production for optimization is **completed**
- continue to test and validate
- address identified issues in the software and production system
 - low pt tracking ? (see talk S.Lu)
- continue to remove *compiler warnings* from iLCSoft builds

aiming at a production release before Ichinoseki meeting ...