# Software Management

Gunter Folger Geant4 Genova Workshop 4-July-2001

# Topics

- Release Management
- Migration to ISO C++, status and plan
- Code clean-up
- Web page management
- Problem Reporting System, CVS, etc...

## Release Management

- Planning of release, release period
- Preparation of release
  - Q/A testing; CC informed on results
  - Specials: e.g. add Geant4 Liability Disclaimer
  - Files for distribution through web
  - Central installation on AFS

#### **GEANT4** Liability Disclaimer

• Add to most source code files

Done for release branch

Still to be done for HEAD

- Planned for mid of next week, unless...

- Any constructive critics on text of disclaimer?

#### Geant4 Disclaimer:

// \* DISCLAIMER // \* // \* The following disclaimer summarizes all the specific disclaimers \* // \* of contributors to this software. The specific disclaimers, which \* // \* govern, are listed with their locations in: // http://cern.ch/geant4/license // \* Neither the authors of this software system, nor their employing \* // \* institutes, nor the agencies providing financial support for this \* // \* work make any representation or warranty, express or implied, \* // \* regarding this software system or assume any liability for its \* // \* use. // \* This code implementation is the intellectual property of the \* // \* GEANT4 collaboration. // \* By copying, distributing or modifying the Program (or any work \* // \* based on the Program) you indicate your acceptance of this \* \* statement, and all its terms. 

#### Geant4 Release distribution

- Source and compiled formats
  - Source tar files



#### Geant4 Release distribution

• Library tar files for supported platforms



## **Central Installation**

- Central installation in
  - /afs/cern.ch/sw/geant4/releases/..
    - ../share/geant4.3.2 or ../share/geant4.3.1.ref01
    - ../specific/redhat61/gcc-2.95.2/geant4.3.2
- Archive and shared libraries
- debug libraries for releases
- Persistency enabled
- Enabled UI/GUI/VIS/Analysis drivers:
  - UI: Terminal, GAG, Xaw Xm, Wo
  - VIS: Dawn (file, network), Opacs, OpenGL
  - Analysis(Linux ONLY): JAS, Lizard, Lab

## Migration to ISO C++

- First discussed at GEANT4-ESA Workshop in 1999
  - Each WG to estimate effort and present plan
- Current status:
  - Many categories done
  - Categories with explicit G4RW... (simple grep)
    - digits+hits
    - event
    - g3tog4
    - intercoms
    - Materials
    - persistency
    - processes/electromagnetic, both standard & low EM
    - processes/hadronic
    - tracking
    - visualization

#### Code Clean-up

. . . . .

- Software Quality
  - Use of unintiialised variables
  - Assignment to/from wrong type
- gcc has options for strict rules
- Will be default from now on
- Correct header files first!
  - Experiments already use strict options
  - Sloppiness in G4 headers seen by many users

#### Geant4 Web

- Criticized frequently:
  - Geant4 external review
    - More frequent updates
    - Private pages

– Design iteration suggested as milestone for 2001



Web master

- Few active authors
- No WG (or part of) for web
- No web team

#### Actions for Geant4 Web

- Review existing pages
  - Volunteers?
  - Result:
    - Proposal for new layout, at least top level
    - Suggestions for other improvements
- Group of content providers needed
- Associate with WG