



GEANT4
A SIMULATION TOOLKIT




Basic & Extended Examples Common Tasks Status

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WG Group Wiki

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(2018-04-10, IvanaHrivnacova)



N&E Examples WG

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- The link to Wiki pages is available from the WG Web page
 - Access is restricted to Geant4 developers

Examples Review

Obsolete Features

- Closed items in 2018:
 - A list of examples with explicitly defined physics lists and builders reported to PL WG
 - Improve `main()` and remove `G4VIS_USE` and `G4UI_USE` macros to make the function `main()` easier to understand to users in all extended examples:
 - thanks a lot to John Allison
- No new items since the last year
- Remaining items
 - Explicit use of `std::cout`, `std::cerr`, `exit()`
 - The list of examples with the presence of these was updated for geant4-10-05-ref-08

Macros Review

- The list of items to be reviewed is available on [the wiki page](#) together with the lists of unused commands, generated in a semi-automatic way two years ago
- A table for monitoring the progress was added to the page
 - ~ 23 % of all extended examples were reviewed in 2018
 - No updates in 2019
- A mail about this review will be sent to the developers of remaining examples after the CM

Coding Guidelines

- Following the coding guidelines is requested when adding a new example
 - Most of the guidelines are checked semi-automatically
 - With moving to gitlab some of checks via svn hooks were lost (e.g. chaks for tabulations)
- The number of violations was reduced significantly in the past years
- The list of violators (examples files) is available on the wiki page
 - Updated once per year
 - Last update for geant4-10-05-ref-08:
 - 8 violations in member functions names, ~40 data member names, 46 missing separators, 1 long line
- The developers of the examples with guidelines violations were contacted by mail

Build Options in DICOM example

- Discussed already last year but no solution was found
- 3 options
 - “old”, DICOM_USE_DCMTK, DICOM_USE_HEAD
- The optional build is not supported in Geant4 tests
 - A test (reading a reduced file) was prepared by Susanna for the new DICOM_USE_HEAD option for 10.4
 - But we failed to add the test in Geant4 cdash tests due to optional build
- Only the “old” option in Geant4 tests