Documentation Update

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Updates on Documentation

- Status
- Comments
- Changes for the future
- Discussion/Request for Input

Status

- The sphinx approach to creating documentation seems stable/mature now (continued thanks to everyone!)
  - Slides almost the same as last year 
- We had one update this year – in July
  - Could have more, although can take some effort
- **New** **e-reader** output formats
  - thanks to Anna for both helping and motivating
  - epub (tested), kindle (untested – not sure how….)
- A request for raw source files for alternate translations
  - Provided on condition that the original is referenced and we're not responsible
  - An ad hoc arrangement…
  - Not sure if anything happened here – did anybody read Ukrainian docs?

Comments

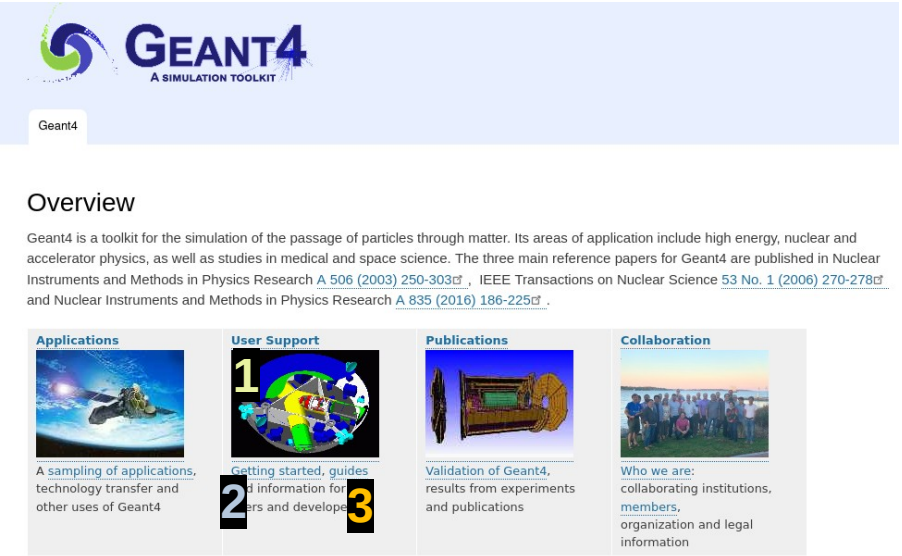
- Can developers please re-base before making a merge request?
  - Not critical, but makes handling merge requests faster 
- Sometimes errors are introduced (by me) and not spotted for some time:
  - e.g. Search was broken at the beginning of July, fixed last week
  - Fix for search resulted in navigation getting truncated….
  - Would be helpful if we could all check things in the documentation regularly
  - I'm happy to have direct e-mails, bugzilla, or whatever
- As we move to a release phase I would encourage everybody to look at the documentation and consider updates required for new features being introduced in 10.7
- Maybe we can avoid the rush in the last days before the release this year???
- **Deadline** is 27th November 2020 for release 10.7
  - If something is coming, would be helpful to let me know in advance and I'm happy to help with conversion/formatting etc….

Future Plans (still pending)

- We will introduce auto-deployment of branches to a “dev” area on the web-site
  - Allows contributors to see their changes almost immediately
  - Links could be shared (e.g. documentation of a beta model)
  - Could also encourage intermediate full releases
- In the longer time it might be time to come back to the division between guides
- As Gunter already mentioned – we have three “landing” pages for documentation
  - Doesn’t make sense (to me)
  - Getting started excludes PhysicsLists and Examples
  - Suggests Intro and FAQ (the shorted and oldest Geant4 docs)
  - Revised during upcoming web-page discussion – before the release?

Documentation Web-pages

- Currently we have 3 (independent) web-pages for documentation “landing”
- Does this make sense?
- Not obvious why clicking the picture takes you somewhere different …
- Some times I forget that I should update in 3 places
- Is the getting started area up to date?
  - e.g. what about physics lists? Examples?
  - Introduction and FAQ are highlighted as first places to go (are oldest docs!!)
  - Is the picture relevant?



GEANT4
A SIMULATION TOOLKIT

Geant4

Overview

Geant4 is a toolkit for the simulation of the passage of particles through matter. Its areas of application include high energy, nuclear and accelerator physics, as well as studies in medical and space science. The three main reference papers for Geant4 are published in Nuclear Instruments and Methods in Physics Research A 506 (2003) 250-303, IEEE Transactions on Nuclear Science 53 No. 1 (2006) 270-278 and Nuclear Instruments and Methods in Physics Research A 835 (2016) 186-225.

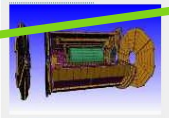
Applications

A sampling of applications, technology transfer and other uses of Geant4

User Support

getting started, guid... information fo... user... and develop...

Publications



Validation of Geant4, ...sults from experiments and publica...

Collabora...

Who we are: collaborating institutions, members, organization and legal ...rmation

GEANT4
A SIMULATION TOOLKIT

Geant4

Home

User Support

1. Getting started
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3. Source code
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   d. GitHub
   e. GitLab @ CERN
4. Frequently Asked Questions (FAQ)
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6. User requirements tracker
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8. Documentation
   a. Introduction to Geant4 [pdf] [epub] [kindle]
   b. Installation Guide: [pdf] [epub] [kindle]
   c. Application Developers Guide [pdf] [epub] [kindle]
   d. Toolkit Developers Guide [pdf] [epub] [kindle]
   e. Physics Reference Manual [pdf] [epub] [kindle]
   f. Physics List Guide [pdf] [epub] [kindle]
9. Examples
10. User Aids
    a. Tips for improving CPU performance

GEANT4
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Geant4

Home » User Support

Getting Started

Find out in a brief overview which describes the project. More detail is provided in the Introduction to Geant4, and in full journal articles NIM A 506 (2003) 250-303, IEEE Nuc. Sci. 53 No. 1 (2006) 270-278 and NIM A 835 (2016) 186-225.

As you encounter questions or problems, please consult the FAQ or take advantage of the user support provided by Geant4 developers.

Installing Geant4

You can begin installing Geant4 by downloading the code from the distribution page. Next, consult the Installation Guide for the instructions required to set up Geant4 in your computing environment.

Building an Application

Once you have installed the toolkit, the Application Developers Guide will provide information and examples for building your own simulation application.

Getting Help

As problems arise, try browsing the user forum to see whether or not your problem has already been encountered. If it hasn't, you can post it and Geant4 developers will do their best to find a solution. This is also a good place to discuss Geant4 topics in general.

GEANT4
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Geant4

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User Documentation

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> *Version: Geant4 10.6* *(Documentation Update: 11th August 2020)*

Welcome to the Geant4 User's Documents page. This page gives you an overview of all available documents which are created and maintained by the Geant4 international collaboration.

GEANT4 is a toolkit for both full and fast Monte Carlo simulation of detectors in High Energy Physics. It is also designed to take into account the requirements of space and cosmic ray applications, nuclear, heavy ion and radiation computations, and medical applications.

The following document gives you a more complete introduction to Geant4.

- Introduction to Geant4 [pdf version] [NEW!! epub version] [NEW!! kindle version]

For information of changes in User's Documents since the last release, please see the following note.

- Changes in User's Documents since the last release

User's Guides

The following five documents comprise a complete set of user's manuals for the Geant4 toolkit. They contain the information necessary to build a simulation at the novice or advanced level, and to make improvements in the toolkit itself.

Discussion/Request for Input

- Videos?!
- Does the division between guides make sense?
- Issues with versions on sphinx?
  - Resolved with updating/migrating to Sphinx 3.X
  - However, search and some formatting had problems
- Should we have a static (docker image) for the deployment, so we don’t have “local” builds?
- How many people would like to see their updates “live”?
- Should we update more often?
  - Effort could become a lot
  - Archiving – does it make sense? (we have git after all) – particularly for the web versions?
- Anything else?