GEANT4 WEB SITE:
TIME FOR CHANGE? - II

Dmitri Konstantinov   IHEP, Protvino
Grigory Latyshev   IHEP, Protvino
Anna Zaborowska   CERN
Alex Howard

On behalf of Geant4 Web Task Force.

Virtual Geant4 Collaboration Meeting, 2021
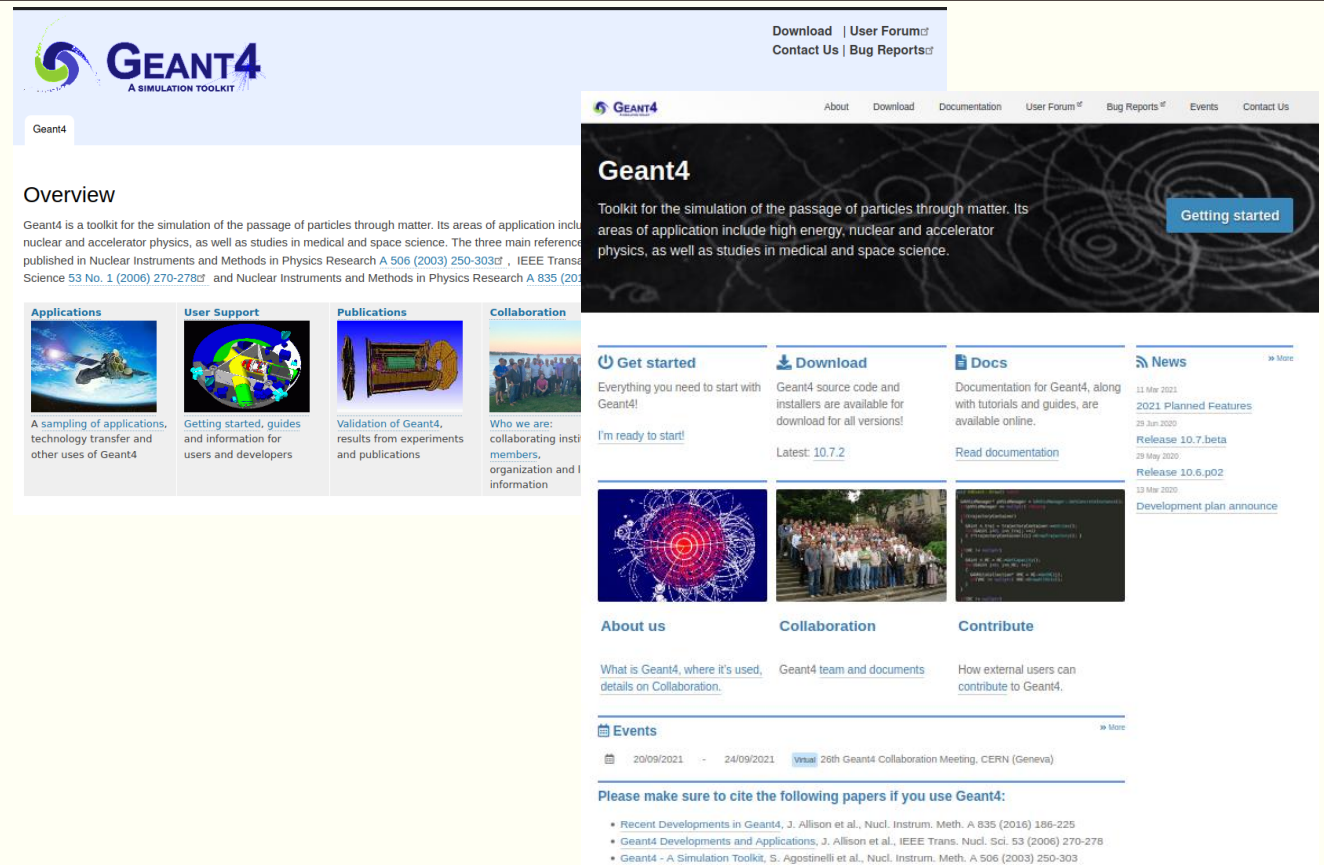
Introduction

- During the last CM we had a discussion about our web pages and agreed for having dedicated meeting.

- In December of 2020 we (Anna, Grigorii & Dmitri) took the initiative of proposing a new web site.

- After Anna's presentation at SB meeting a dedicated "task force" was created.

https://geant4-dev.web.cern.ch/

History

2011: Geant4 site is based on HTML + SSI (SLAC team, can be wrong here)

First Drupal Prototype created by CERN summer student (2011):

2011: "Porting Geant4 website to Drupal" (link) Leszek Ślażyński (CERN summer student)

Thinking about migration to DRUPAL (2011-2013):

2011: "Geant4 website: Time for change?" (link) Gunter F., Geant4 collaboration workshop

2013: "GEANT4 Web Site Issues" (link), Michael H. Kelsey, Geant4 collaboration workshop

Migration of Geant4 site to Drupal 6 (201? - 2017)

2015: "Migration to Drupal, Status" (link), Gunter F., Geant4 collaboration workshop

2017: "Migrating Geant4 web-site" (link), Gunter F., Geant4 collaboration workshop

Migration from Drupal6 to Drupal7 (2017 – 2019)

2018: "Geant4 web-siteS" (link), Gunter F., Geant4 collaboration workshop

New prototype of G4 web site based on Jekyll is created, presented by Anna Z. to the SB.

Drupal

Drupal is a free and open-source web content management system (CMS) written in PHP

"*Drupal is often the best choice for complex, content heavy, and high traffic websites, as well as those with large resource libraries and databases. Drupal is extremely powerful, flexible, functional, and secure. In general, Drupal is more suited to large and complex sites.*"

Does Geant4 website fell into this description?

"Drupal is awesome. Drupal is flexible. But Drupal is also hard."

ROOT Project experience:

ROOT also migrated to Drupal from simple hand-written pages, but they quickly realized that they can not hire a Drupal specialist when they have a problem. ROOT Project moved to Jekyll.

Learning curve for popular CMS

ModX   Joomla!
Wordpress   Drupal

Does Geant4 community has enough expertise and manpower

to support, develop and improve Geant4 Drupal website?

geant4-dev.web.cern.ch
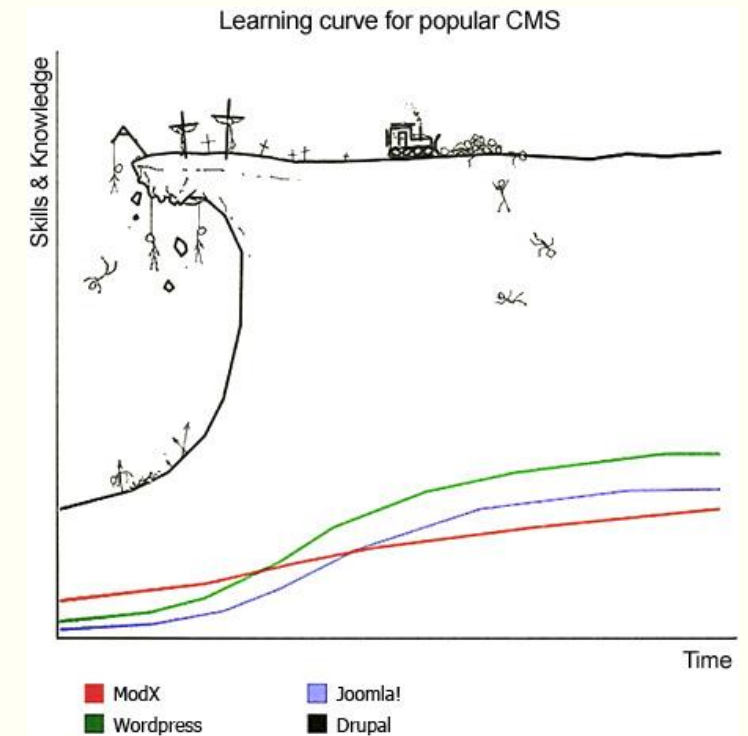
What is Jekyll?

What is Jekyll?

Jekyll is a static site generator based on Ruby (you don't need to know ANY Ruby) that takes MD files and builds a static site using gitlab/github using bootstrap and the Liquid theming engine. Totally customizable.

Drupal 8 end of life is scheduled for **November 2nd, 2021 ;-)**

Jekyll advantages/comparison with Drupal.

- Both Jekyll(MIT) and Drupal(GNU GPL) are open-source projects.

- Jekyll generates a static web site which is ,by definition, more secure than dynamic web application, can be run by Apache or NGinX.

- There is no underlying database as for Drupal(MySQL) behind Jekyll, all files, content are hosted by gitlab/github in well-structured and transparent way:

  https://gitlab.cern.ch/geant4/geant4-website

 With every new modification the site has to be rebuild and redeployed, done with gitlab CI.

- Jekyll perfectly fits to Geant4 scale, Jekyll fits ROOT which has more content.

- Jekyll provides a lots of nice free themes while Drupal doesn't.

- Unlike Drupal, Jekyll does not use WSYIWYG, it uses MD files for content -> you cannot edit a page online, you will need to create a MR/PR to git repo.

What is done

- New web site based on Jekyll with a structure taking into account basic functionality and needs and having transparent navigation is created.

- Using GitLab CI it is deployed after each merge done to master branch.

- Also CI checks for broken links which are frequent problem for website.

- It contains almost all main pages:
  - About us
  - Collaboration
  - How to contribute
  - Events
  - News
  - Links to geant4 documentation.
  - Links to external G4 sites (User Forum, Bug Reports).
  - Download page.
  - Basic working group pages with unified structure.

What is missing – content-wise

- many general Geant4 pages seem to be outdated and need to be refreshed/revised. When was such content revised last time?
  - For example, https://geant4-dev.web.cern.ch/about/ is taken "as is" from G4 website.
  - list of publications is stuck at 2018: https://geant4.web.cern.ch/publications
  - list of presentations..?
  - Add some descriptions – roles, details about SB, OB, WGs, Technical Forum…

- complete migration of Working group pages – decide what to keep/what to drop.

- recent and good looking pictures from various fields.

- no good place or need for protected parts – steering board internal page. It can be hosted by a project in CERN gitlab, seems to be workable solution.

The current G4 Drupal web site has same problems with outdated info.

The migration is a good opportunity to revise old content, reshresh it or drop if obsolete.

Summary

The new working, nice looking and almost complete protype for official Geant4 website is created.

- It uses Jekyll which has a number of advantages over Drupal for Geant4 scope.
- The web site source files are hosted by CERN and web site deployment is done via GitLab CI.

From my point of view it is very close to production version and we need somehow to push it forward.

To be done:

- A revision of general content was done more then 10 years ago and need to be done again.
  - It would be nice to make a call for volunteers.
- Together with working group coordinators finalize migration of WG pages.
- Find working workflow for Geant4 publications and talks (or drop it)
- Write a documentation and tutorial describing how to update pages/to create new one.