



# Geant4 Website and Forum

Ben Morgan

# Geant4

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.

[Getting started](#)

## Get started

Everything you need to get started with Geant4.

[I'm ready to start!](#)

## Download

Geant4 source code and installers are available for download, with source code under an [open source license](#).

Latest: [11.1.2](#)

## Docs

Documentation for Geant4, along with tutorials and guides, are available online.

[Read documentation](#)

## News

[» More](#)

30 Jun 2023

[Release 11.2.beta](#)

19 Jun 2023

[Release 11.1.2](#)

23 Mar 2023

[2023 Planned Features](#)

# Migration to Jekyll Complete!

A massive Thank You to Anna,  
Dmitri, Alex and Grigorii for all  
of their hard work here!

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## Docs

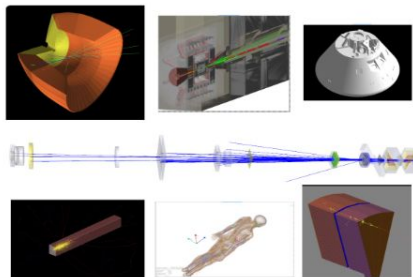
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[Read documentation](#)

## News

[» More](#)

Mirrored by KEK  
<https://geant4.org>



```
template <typename T>
struct G4TaskSingletonEvaluator
{
    using V_type = typename G4Traits::TaskSingletonKey<T>::type;
    using data_type = G4TaskSingletonData<T>;

    template <typename... Args>
    G4TaskSingletonEvaluator(V_type& key, Args&&...)
    {
        using std::runtime_error("Not specialized!");
    }
};

template <typename T>
class G4TaskSingletonDelegator
{
public:
    using pointer = T*;
    using evaluator_type = G4TaskSingletonEvaluator<T>;
    using data_type = G4TaskSingletonData<T>;
    using key_type = typename G4Traits::TaskSingletonKey<T>::type;

    template <typename... Args>
    static void Configure(Args&&... args)
    {

```

## About us

[What is Geant4, where it's used, details on Collaboration.](#)

[Learn More](#)

## Collaboration

[Geant4 team and documents](#)

[Learn More](#)

## Contribute

How external users can contribute to Geant4.

[Learn More](#)

Important that content is kept up to date and accurate - responsibility on ALL of us, so please browse/review regularly!

Also think about what to add, how to organise. Nothing is set in stone and ideas welcome!

Parallel 4a to cover internal content requirements and other resources like Indico

## Events

- 05/12/2023 - 07/12/2023 [15th Geant4 Space Users Workshop](#), Hyatt Place Pasadena, Pasadena (California, USA)
- 16/10/2023 - 20/10/2023 [Geant4 Advanced Course @ CERN](#), CERN, Geneva (Switzerland)
- 26/09/2023 - 28/09/2023 [Geant4 Training Course in Medicine 2023](#), Hokkaido University, Sapporo (Japan)

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- Repository
- Issues 17
- Merge requests 0
- CI/CD
- Security and Compliance
- Deployments
- Packages and registries
- Infrastructure
- Monitor
- Analytics
- Settings

geant4 > geant4-website

**G geant4-website**

Project ID: 107616

Star 3 Fork 13

879 Commits 3 Branches 1 Tag 707.5 MB Project Storage

Geant4 Jekyll public website

Merge branch 'combined-documentation' into 'master'

Gabriele Cosmo authored 1 week ago 0198edb4

master geant4-website / +

Find file Web IDE Clone

- README
- CI/CD configuration
- Add LICENSE
- Add CHANGELOG
- Add CONTRIBUTING
- Add Kubernetes cluster
- Configure Integrations

Name	Last commit	Last update
📁 .vscode	Check spelling	1 year ago
📁 _data	Added 15th Space Users Workshop event...	1 week ago
📁 _includes	Incl...	
📁 _layouts	Upd...	
📁 _plugins	Add...	
📁 _sass	revert to original website	1 year ago

**Like Geant4 itself, website is developed in GitLab:**  
<https://gitlab.cern.ch/geant4/geant4-website>



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geant4 > geant4-website > Issues

Open 17 Closed 59 All 76

Search or filter results... Updated date

**Missing pages from the migration effort** 6 of 7 checklist items completed  
 #61 · created 1 year ago by Alexander Howard

**Import all events from old website to \_data/events.yaml**  
 #76 · created 2 months ago by Benjamin Morgan Jun 30, 2023

**link to the advanced examples of Geant4**  
 #73 · created 5 months ago by Susanna Guatelli

**role upgrade**  
 #72 · created 5 months ago by Krzysztof Genser

**Merge requests permissions**  
 #57 · created 1 year ago by Anna Zaborowska  
 Discussion

**In the main page references on Geant4 publications are not seen**  
 #67 · created 6 months ago by Vladimir Ivantchenko  
 Enhancement

**Nice G4 images/photos**  
 #49 · created 1 year ago by Grigorii Latyshev Minimal product  
 Discussion Enhancement Missing

**How to keep content up to date, especially for publication**  
 #6 · created 2 years ago by Benjamin Morgan  
 Discussion Doing

Use GitLab Issues to report problems, suggest or discuss new features, content etc.

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## README.md

### Geant4 Website

Jekyll-based website for the Geant4 Toolkit, served from <http://geant4.web.cern.ch>.

### Getting Started

Jekyll, as described on its [website](#) is a

... static site generator. It takes text written in your favorite markup language and uses layouts to create a static website. You can tweak the site's look and feel, URLs, the data displayed on the page, and more.

You can therefore think of it as a "website compiler" and so other code development:

- Install Jekyll
- Build, test, edit site
- Submit changes through Merge Request(s)
- Review/Publish

A comprehensive guide to installing Jekyll on a variety of in single user mode (i.e. without sudo or root privileges)

```
export GEM_HOME=$(ruby -e 'puts Gem.user_dir')
export PATH=${GEM_HOME}/bin:$PATH
```

Note that more recent (>3.0) versions of Ruby and Gem

Then to install Jekyll and additional dependencies, simply

```
$ bundle install
```

**Main README.md file walks you through**

- Installing Jekyll, building/viewing local copy of site
- Using Merge Requests to submit changes (*identical to Geant4 itself!*).
- Geant4 specifics such as data on members, working groups

**Feedback welcome, could also hold tutorial if sufficient interest (post an Issue!)**

Search

GEANT4.WEB.CERN.CH

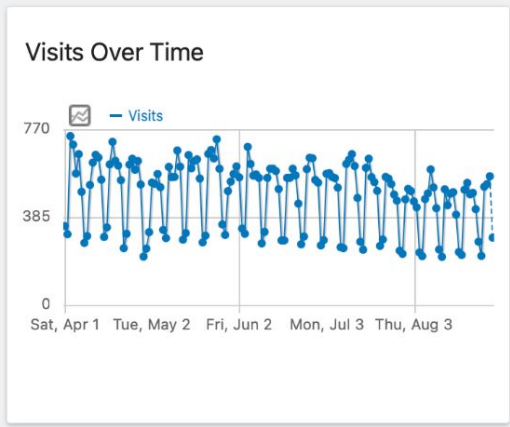
FROM 2023-04-01 TO 2023-08-31

ALL VISITS

DASHBOARD

NEW UPDATE: MATOMO 4.15.1

- Dashboard
- Visitors
- Behaviour
- Acquisition
- Goals
- Custom Reports
- Marketplace



### Device type

TYPE	VISITS
Desktop	67,401
Smartphone	5,382
Phablet	276
Tablet	248
Unknown	33

1-5 of 15 [Next >](#)

### Movers and Shakers

PAGE URLS	UNIQUE PAGEVIEWS	EVOLU
docs	+26515	+367

PAGE TITLES	UNIQUE PAGEVIEWS	EVOLU
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### Downloads

DOWNLOAD URL	UNIQUE DOWNLOADS
cern.ch	35,686
geant4-userdoc.web.cern.ch	12,318

### Channel Types

CHANNEL TYPE	VISITS
--------------	--------

# Website Analytics

CERN WebEOS deployment uses **Matomo** to analyse visits to main and mirror sites.

# Downloads

DOWNLOAD URL	UNIQUE DOWNLOADS	DOWNLOADS
+ cern.ch	35,686	43,055
+ geant4-userdoc.web.cern.ch	12,318	13,439
+ gitlab.cern.ch	11,628	13,543
+ geant4.web.cern.ch	1,307	1,423
+ indico.cern.ch	128	149
+ geant4.org	63	77
+ www.geant4.org	32	34
+ geant4-dev.web.cern.ch	19	23
+ translate.google.com	11	12
+ geant4-web-cern-ch.translate.goog	1	1
+ geant4.slac.stanford.edu	1	1

1-11 of 11



100

# Downloads

Long term ask for download metrics - not fully complete, but good **lower** limits now.



# Downloads

Data library/release notes downloads

DOWNLOAD URL	UNIQUE DOWNLOADS	DOWNLOADS
cern.ch	35,686	43,055
geant4-userdoc.web.cern.ch	12,318	13,439
gitlab.cern.ch	11,628	13,543
/geant4/geant4/-/archive/v11.1.1/geant4-v11.1.1.tar.gz	2,568	3,076
/geant4/geant4/-/archive/v11.1.2/geant4-v11.1.2.tar.gz	2,045	2,385
/geant4/geant4/-/archive/v11.1.1/geant4-v11.1.1.zip	1,776	2,077
/geant4/geant4/-/archive/v11.1.2/geant4-v11.1.2.zip	1,364	1,547
/geant4/geant4/-/archive/v10.7.4/geant4-v10.7.4.tar.gz	459	527
/geant4/geant4/-/archive/v11.1.1/geant4-v11.1.1.tar	280	329
/geant4/geant4/-/archive/v11.1.2/geant4-v11.1.2.tar	167	183
/geant4/geant4/-/archive/v10.7.0/geant4-v10.7.0.tar.gz	154	170
/geant4/geant4/-/archive/v11.1.0/geant4-v11.1.0.tar.gz	141	157

# Why Lower Limit?

Don't have metrics from GitLab/GitHub on source downloads **directly** from them 9



New pinned posts with advice on what info to provide, how to post/ask questions effectively. Can add others if you feel they are needed

all categories ▾ Latest Top Categories

Topic	Replies	Views	Activity
<p><b>🔒 📌 Tips for effective and successful posting</b></p> <p>Getting Started</p> <p>This forum is intended to help with problems and answer questions on the Geant4 toolkit, whether that be to develop applications using it, to request or contribute new features, or generally discuss and communicate about... read more</p>	2	64	7d
<p><b>🔒 📌 How to post code snippets</b></p> <p>Getting Started</p> <p>To effectively help with coding/output problems, we need to see that code or output clearly. Discourse provides all the tools here to make this easy once you know how to use them. There are really only two simple guideli... read more</p>	8	537	Feb 13
<p><b>Why the G4AutoLock class object did not work?</b></p> <p>Getting Started</p>	0	4	1h
<p><b>Double Counting electrons in SteppingAction</b></p>	8	57	10h

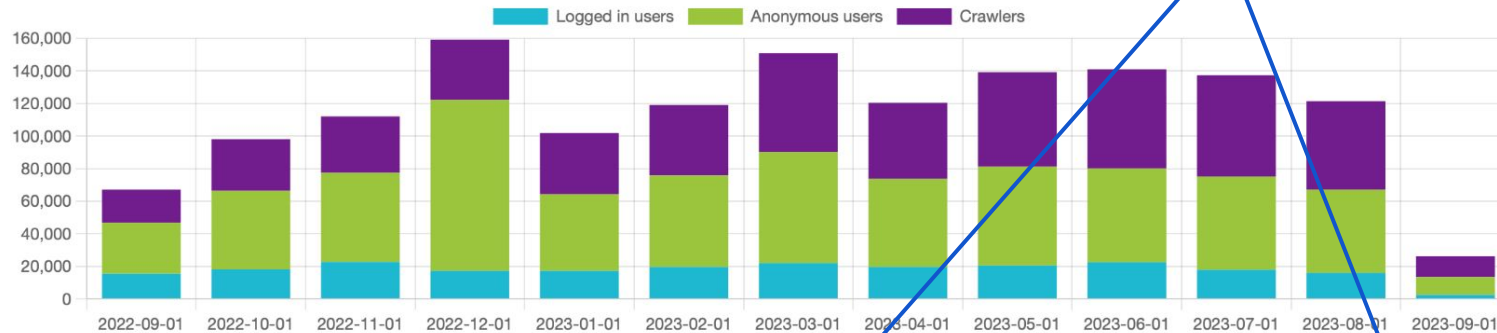
# Discourse Forum

Please review and answer posts at your best effort - posts remaining unanswered leaves a bad impression.

## Community health

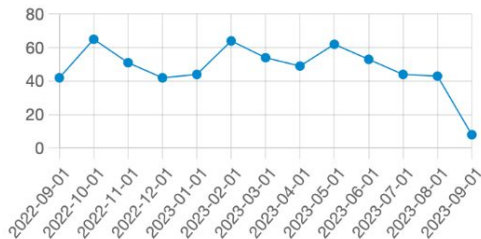
Forum is pretty active, though replies per topic relatively low.

### Consolidated Pageviews ?



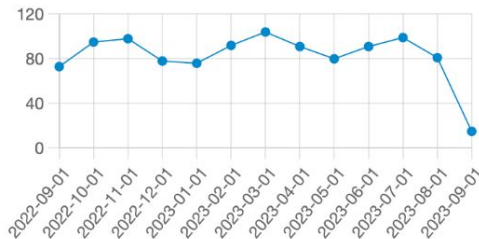
### Signups ?

621 ▲



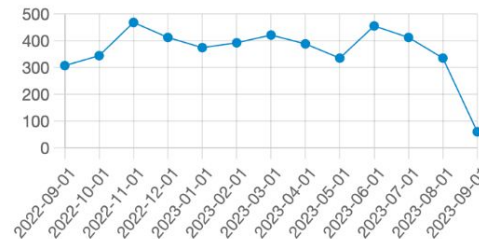
### Topics ?

1.1k ▲



### Posts ?

4.7k ▲



### DAU/MAU ?

22% ▲



### Daily Engaged Users ?

11 ▲



### New Contributors ?

351 ▲



# Final Observations

- Website analytics are available if you need them, just ask Software Management if you wish to browse with the use case
  - *Can also provide summary statistics of specific metrics if you need*
- Forum remains active, so **please make it a priority** to respond to user questions!
- One minor observation from the forum is that users are still installing the 10.7 series, even if starting from scratch.
  - *Not completely clear why this is the case*



# Questions, Discussion