



# Software Heritage

## </> Newsletter </>

Issue #13, December 21st, 2023



### Preserving source code for all, and making it accessible

*"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.."*

- Margaret Mead

The year 2023 is coming to an end, and these last months bring a wealth of remarkable achievements and initiatives that we want to bring to your attention.

**Software, and its source code, is part of our heritage and must be preserved**, and we are excited to announce that [ENEA](#), the Italian National Agency for New Technologies, Energy and Sustainable Economic Development, has successfully launched the [first international mirror of the Software Heritage Mirror Network](#). This is a key milestone in the long term preservation strategy of **all our software commons**, and is the result of long years of technical and organisational development efforts that will make it much easier for the other forthcoming mirrors to go into production.

**Software, and its source code, is a pillar of Open Science**, and [Software Heritage has been recognized by the Global Sustainability Coalition for Open Science Services \(SCOSS\)](#) for its vital role in ensuring continuous access to global research outputs. This acknowledgement reinforces our commitment to being a cornerstone of open science infrastructure. [We look forward to seeing many new members join the newly created Archives and Libraries Interest Group \(ALIG\)](#), which will help leveraging the possibilities offered by Software Heritage to champion best practices for research software accessibility, reusability, and reproducibility.

On the **infrastructural side of Open Science**, groundbreaking work is ongoing in [a dedicated workpackage in the FAIRCORE4EOSC european project](#), to **connect scholarly infrastructures with the Software Heritage archive**. A first visible outcome is the [partnership initiated with the swMATH portal](#) to **bridge mathematical publications with comprehensive software records**, enriching the scholarly landscape.

Last, but not least, [we joined forces with many partners in the SOFair project](#), that aims to generalise the connection between publications and software across all research fields.

**Software, and its source code, is precious knowledge, from which humans and machines can learn**, and we acknowledge the key role of the Software Heritage archive for **machine learning in building responsible large language models for code**, as part of our mission to collect, preserve, and make publicly available the entirety of software source code. As a first step in this direction, [we have](#)

[published our principles for machine learning and building large language models \(LLMs\).](#)

We are excited to welcome [ServiceNow](#) and [Hugging Face](#), as our new gold sponsors: they adhere to these principles, and contribute to the mission to preserve open-source software and promote responsible technology.

In this newsletter you will also see that our dedication to preserving legacy software stories continues with the addition of [Amaya, a pivotal web browser and editor, to Inria's stories collection](#), and find recent news from our growing network of ambassadors. You can now also follow su on Mastodon, as [@swheritage!](#)

Wishing you the best for these end of years festivities, we take the opportunity to encourage you to save the date for our third annual [Symposium on February 1st, 2024](#), at the UNESCO Headquarters. The event, starting at 2 pm, will host high level panellists and speakers and is open for both in-person and online attendees. Secure your spot [by registering now!](#)

**Roberto Di Cosmo**

Co-founder and CEO, Software Heritage

## OUR MISSION

[We collect and preserve software in source code form](#) because software embodies our technical and scientific knowledge and humanity cannot afford the risk of losing it.

Software is a precious part of our cultural heritage. We curate and make accessible all the software we collect because only by **sharing** it we can guarantee its preservation in the very long term.

Collect



Preserve



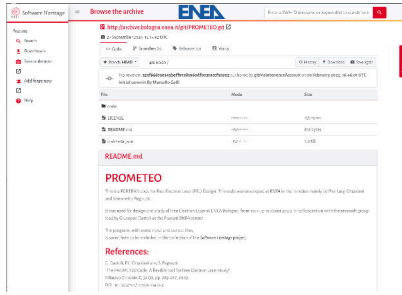
Share



Software Heritage will provide solid, common foundations to serve the different needs of [heritage preservation](#), [science](#), and [industry](#).

[Donate](#)

**IT'S NEW!**



## ENEA opens the first Software Heritage Mirror

We are excited to announce that ENEA, the Italian National Agency for New Technologies, Energy and Sustainable Economic Development, has successfully deployed the first mirror as part of the Software Heritage Mirror Network. This significant development marks a crucial step towards preserving and protecting our software commons.

[Read more](#)

December 12, 2023



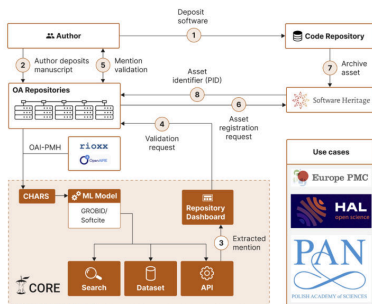
## Viewpoints on software in research at the Gustave Eiffel University

*Interview with Céline Rousselot and Joenio Marques da Costa*

On Nov. 13th, 2023, our ambassador Joenio Marques da Costa delivered a talk during a session of “Rendez-vous Data”, by “Data Univ Eiffel”, the data and software management cluster implemented at Gustave Eiffel University. This local cluster is part of the French national network of clusters dedicated to data management. This network is supported by the French Ministry for Higher Education and Research.

[Read more](#)

December 8, 2023



## Connecting publications and software with SoFAIR

We are thrilled to share the news that Software Heritage is participating in the SoFAIR project, awarded through the CHISTERA Open Research Data & Software Call. This collaborative initiative is geared towards elevating the discoverability and reusability of open research software, aligning with our commitment to advancing the accessibility of software source code artifacts.

[Read more](#)

November 21, 2023

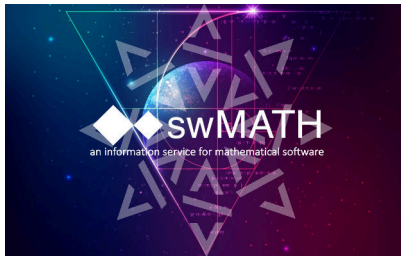


## Software Heritage officially selected for the 5th SCOSS pledging campaign

We are excited to announce that the Global Sustainability Coalition for Open Science Services (SCOSS) board has selected Software Heritage for its next pledging round, recognizing Software Heritage as a crucial open science infrastructure ensuring continuous access to the software code outputs generated by researchers worldwide.

[Read more](#)

November 2, 2023

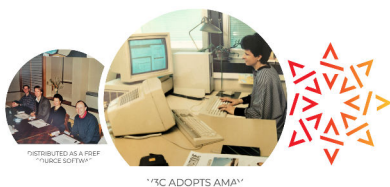


## #swMATH archives the source code developed by mathematicians in Software Heritage!

Modern mathematical research goes beyond conventional publications, encompassing a substantial collection of knowledge embedded in software source code. In recognition of the importance of preserving this wealth of information and in the spirit of encouraging an Open Science ecosystem, a partnership has been established between Software Heritage and the swMATH portal. The swMATH portal serves as a vital link connecting mathematical publications with comprehensive mathematical software records.

[Read more](#)

October 26, 2023



## Unveiling the Amaya Story: A Pioneering Web Browser and Editor

We are delighted to present a new Landmark Legacy Software Story to Inria's stories collection: the story of the web browser and editor Amaya.

[Read more](#)

October 19, 2023



## Software Heritage Statement on Large Language Models for Code

We consider that publicly available source code, and even more so Free and Open Source Software (FOSS), is a digital commons that embodies decades of human creative effort.

As we strive to preserve this vital resource for future generations, we acknowledge the emergence of inquiries regarding the use of the Software Heritage archive for the training of machine learning models, particularly large language models (LLMs) that can automatically generate code to assist with software development tasks.

[Read more](#)

## AMBASSADORS



We invite you to join our [Ambassadors Program](#), where we are seeking enthusiastic organizations and individuals to volunteer and play a vital role in expanding the Software Heritage community!

Become a Software Heritage ambassador to support this effort in your area by:

- presenting Software Heritage, the services it provides, and its long-term mission to key persons in your area;
- sharing information with relevant mailing lists, venues and contacts;
- posting Software Heritage news on blogs and social media;
- identifying code hosting platforms in your area that it is urgent and important to archive;
- updating the Software Heritage team with your community's feedback.

We are welcoming to the ambassadors program:



### Frédéric Santos

We are delighted to introduce our 9th ambassador in 2023, Frédéric Santos!

After a master's degree in applied mathematics, Frédéric has been working since 2010 as a data analyst in PACEA, a research laboratory in archaeological sciences at the CNRS and University of Bordeaux. Specifically involved in the topics of code sharing and computational reproducibility, **becoming a Software Heritage ambassador is a natural extension of his commitment to open science.** In his field, which is getting more and more technical with heavy use of 3D imaging and, more recently, various applications of artificial intelligence, there is a strong need to ensure the long-term availability of source code software.

[Read more](#)

## Interested in becoming a Software Heritage ambassador?

Please tell us a bit about yourself and your interest in the mission of Software Heritage: [info@softwareheritage.org](mailto:info@softwareheritage.org)

## GRANTS



### Helping you to contribute to the mission

Source code is spread around a broad spectrum of code hosting platforms and websites, and developed using a variety of version control systems. In order to collect and archive it properly, and to add features to the archive to better access it, Software Heritage needs expert contributors.

Open calls for cascading grants may be available to fund your contributions: look at the [NLnet foundation](#) and the recently announced [NGI Search](#), and contact us for a letter of support if you think you can apply with a proposal that contributes to the long term mission of Software Heritage.

## YOU CAN HELP!



The Software Heritage archive will serve the needs of the many, from [cultural institutions](#) to [scientists](#) and [industries](#).

Everyone can help us achieving these ambitious goals and there are several ways to help.



### Become a sponsor

Pursuing our roadmap for the archive requires significant resources. We welcome companies, institutions, and individuals who would like to join our sponsorship program and sustain the Software Heritage.

[Discover our sponsorship program!](#)



### Tackle scientific challenges

Building, maintaining, and exploiting the universal source code archive poses relevant scientific challenges. We welcome scientists who would like to contribute to this mission by participating in our research activities.

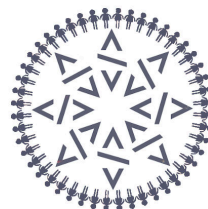
[Join our research community!](#)



### Code with us

All the software we develop ourselves is open source. We welcome contributors that are willing to delve into it and help us building the many components that are needed to make the archive progress towards the next milestones.

[Dive into the code!](#)



### Host a mirror

Institutions and companies from all around the world are welcome to join our mirror program. This is essential to prevent information loss, and will greatly simplify access to humankind's software heritage.

[Contact us to host a mirror!](#)



Discover the growing number of [institutions, organizations and companies that sponsor Software Heritage](#), and those that express support for the [software preservation mission](#). [Take a look at their testimonials!](#)

Individual [donations](#) are also most welcome, in any amount, just click on the button below to give to the mission.

Donate

SELECTED MILESTONES





Discover five years of Software Heritage in just five minutes! 🎥

July 29, 2021

## Software for Open Science: a leap forward



In 2018, the French national plan for Open Science recognized Software Heritage as a key initiative for supporting research software, leading to the creation of a dedicated working group. **Three years later, software is now fully recognized as a pillar of Open Science in the second national plan unveiled by the French Ministry of Research in July 2021.**

[👉 Read more.](#)

October 10, 2019

## Curating and archiving landmark legacy source code: you can help!



We were delighted to make a step forward about an important and urgent challenge in October 2019: collecting and curating landmark legacy source code written by pioneers of the digital age, many of which were still around, and willing to contribute their knowledge, but only for a limited time.

[Read more.](#)

February 26, 2019

## Software Heritage for Open Science

February 26, 2019

## The Paris Call is here: calling for action to sustain Software Source Code!





*Part of our Heritage, Pillar  
of our Present, Enabler  
of our Future*

On July 4th 2018 was unveiled the French national plan for Open Science, that identifies Software Heritage as one key initiative to support. Today we are delighted to welcome the French Ministry of Research as our first gold sponsor, contributing effectively to our efforts. On this occasion, we are happy to recall why Software Heritage is building an infrastructure that plays a key role for Open Science.

[Read more.](#)

In April 2017, Inria entered into a framework agreement with UNESCO to uphold our mission of collecting, preserving, and sharing all available source code.

In June 2018, at UNESCO Headquarters, we launched the Software Heritage Archive to the public.

As part of our ongoing partnership, we helped bring together a group of experts at the UNESCO Headquarters and it resulted in the creation of the Paris Call, which now accessible online.

[Read more.](#)

April 4, 2017



### Raising awareness for Software Source Code preservation and access

At Unesco's headquarters in Paris, a formal partnership agreement has been signed between Unesco and Inria to establish a framework for collaboration on preserving the knowledge embedded in software source code, and making it

widely available.

[👉 Read more.](#)

## 2022 ANNUAL REPORT



### The Software Heritage annual report is out!

We are pleased to announce the release of our annual report for 2022. This document provides a comprehensive overview of Software Heritage's mission, progress, and achievements.


It highlights the expansion of our source code collection, user-facing improvements, and community engagement efforts, and expresses gratitude to our sponsors and supporters. [We invite you to access and share the report as we continue working together to preserve humankind's software heritage.](#)

Thank you for your continued support!

[Read more](#)

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You can read news from Software Heritage [on our blog](#), follow us on  [Mastodon](#), [X](#), [LinkedIn](#) and also our [RSS flux](#)!

You can watch Software Heritage's presentations on our YouTube [video channel](#)!

And if you missed our newsletter's first issues, consult the [archive](#)!

*Let's spread the word!*

