



# Software Heritage

## </> Newsletter </>

Issue #12, September 20th, 2023



### Your Actions, Our Collective Impact

*"You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make."*

- Jane Goodall

In the realm of technology, preserving our software heritage isn't just a mission; it's a legacy in the making. As we navigate this digital age, Software Heritage wants to provide a beacon of insight, innovation, and inspiration, ensuring that the codes of today continue to shape the world of tomorrow. In this issue, we share the latest news on the progress in this long term journey.

Contributions from a growing community are essential, and we're delighted to introduce two dynamic new ambassadors, [Bertrand Néron](#) and [Agustín Bethencourt](#), who are on a mission to spread the word about [our important endeavour](#): to collect, preserve, and share all publicly available software source code. Agustín's [first article](#), "[Why did I become a Software Heritage Ambassador](#)," is a must read if you want to know why Software Heritage is important for industry.

Morane Gruenpetter and Benoit Chauvet from [our team](#) took the stage on the [Code4Thought](#) podcast's latest episode to discuss another important area where software preservation is essential, research software: [tune in to listen to this lively conversation with Peter Schmidt!](#)

[Inria](#), the world renowned institute for Research in Digital Science and Technology that hosts Software Heritage, [launched a campaign to identify landmark software source code produced by its members since its creation in 1967](#). *Have you ever wondered where the source codes for the [Cyclades project](#), the first French computer network launched in 1972, are hiding?* If you have worked at, or collaborated with Inria in the past [take our survey now](#) and help us in this effort to rebuild the history of computing. Your insights matter, and [we've extended the deadline to Sept 30th!](#)


To help a growing community of users and contributors make the best of Software Heritage, a new documentation landing page is now available at [docs.softwareheritage.org](#).

As is now customary, the [2023 technical roadmap](#), is publicly available, and a session was dedicated to its key priorities during the ambassadors' plenary meeting: **scaling the infrastructure, bolstering archive resilience, and introducing new features and services.**

You will also find two important novelties on the technical side: on the one hand, the [Software Heritage GraphQL Explorer](#), designed make search and retrieval of information from our archive more flexible, expressive and efficient; on the other hand, we have ve introduced dedicated [save code webhooks in our API](#), a great step to streamline the archiving process for owners of projects hosted on one of the many forges and forge technologies available today.

Last, but not least, an open community effort has been started to create a publicly available

specification for the [SWHID](#), the intrinsic persistent identifier that is used to reference over 30 billion software artifacts in our archive. You can find all the information on this effort and the international working group behind it at [swhid.org](#). This effort will ensure that everybody can benefit from using a SWHID, not only users of Software Heritage, so the acronym now stands for "Software Hash Identifier".

 **Mark your calendars! The next Software Heritage Annual Symposium is just around the corner, set to take place on February 1st, 2024. Save the date and be prepared to join us in this high profile international event!**

## 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

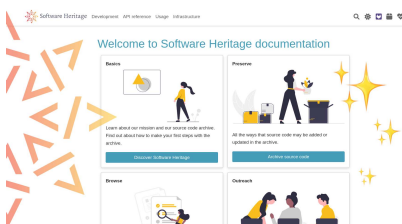


Software Heritage will provide solid, common foundations to serve the different needs of [heritage preservation](#), [science](#), and [industry](#).

Donate

## IT'S NEW!

September 8, 2023

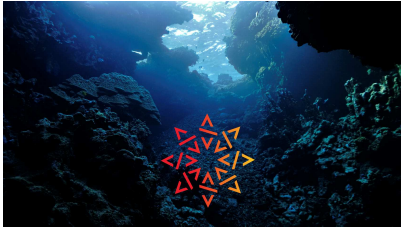


### Software Heritage's Documentation: A Fresh Journey Begins!

Step into the world of Software Heritage with our newly created documentation landing page, available at [docs.softwareheritage.org](#). Here, users and contributors

alike can explore a rich repository of resources and actively participate in the documentation's improvement. Dive in to discover the wealth of knowledge waiting for you!

Read more

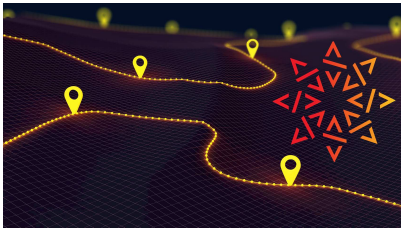


## Deep Dive into the archival of Software Metadata

Software metadata is vital for the classification, curation, and sharing of free and open-source software (FOSS). In a recent presentation at the Software Heritage Ambassador's plenary, Morane Gruenpeter and Valentin Lorentz discussed the collection, preservation, and sharing of software metadata to build the semantic web of FOSS.

[Read more](#)

August 8, 2023

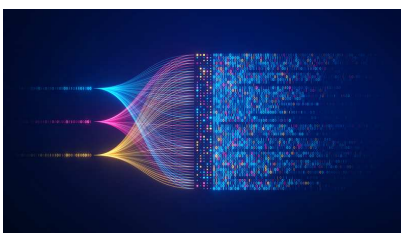


## Software Heritage priorities in the 2023 technical roadmap

Starting in 2021, Software Heritage has been annually releasing a technical roadmap, a common practice in Open Source projects, to guide their development team and engage the user and contributor community in sharing their current priorities. Lately, there's been a concerted effort to emphasize the latter, including a dedicated session during the ambassadors' plenary meeting led by Benoît Chauvet, Software Engineering Manager at Software Heritage. The central message highlights the archive's continuous growth, both in size and visibility, leading to three core priorities: scaling the infrastructure, bolstering archive resilience, and introducing new features and services. The 2023 technical roadmap represents a tangible manifestation of these key objectives.

[Read more](#)

July 25, 2023



## Software Heritage GraphQL Explorer: More power to your APIs

As a crucial component of the Software Heritage mission, sharing the amassed and safeguarded source code with stakeholders is of utmost importance. We excitedly introduced the latest innovation, the Software Heritage GraphQL Explorer, designed to enhance the search and retrieval of information from our archive. While Software Heritage's REST APIs offer a straightforward means of accessing archive data, the GraphQL Explorer presents a highly efficient alternative harnessing the capabilities of GraphQL, enabling clients to craft robust queries and seamlessly retrieve server data.

[Read more](#)

July 3, 2023



## Join us in Preserving Inria's Software Heritage: A Call to Contribute



In the endeavour to safeguard Inria's software legacy, Software Heritage, in partnership with the Inria alumni network and the Direction of Culture and Scientific Information (DCIS) of Inria, extends a warm invitation for your participation in enriching the inventory of software heritage curated at Inria since its inception. Join us in this meaningful effort!

[Read more](#)

June 23, 2023



### The first SWHID publicly available specification is out!

Identifying software artifacts and versions precisely is crucial for various stakeholders, including industry, academia, cultural heritage, and public administration. Software Heritage addresses this by utilizing SWHIDs, unique identifiers that ensure clear software referencing and retrieval. Over 30 billion software artifacts in the archive are currently identified using SWHIDs. To enhance their utility, an open process is underway to create a publicly accessible specification, facilitating broader adoption. The SWHID Working Group, initiated on March 27th, aims to provide clarity on SWHID concepts and specification tools through webinars and resources available on their website. Collaboration and transparency are encouraged to meet these objectives.

[Read more](#)

June 1, 2023



### Webhooks are here: Integrate Software Heritage with Your Development Workflow!

We're thrilled to announce a significant advancement in our mission to collect, preserve, and share all software source code. To simplify the process for developers, we've introduced dedicated save code webhooks in our API. These webhooks serve as a vital automation tool, bridging events and actions within code hosting platforms. They enable predefined actions to be triggered when specific repository events occur, and Software Heritage is now fully equipped to support them, streamlining the archiving process. Exciting times ahead for code preservation!

[Read more](#)

May 26, 2023



### Software Heritage and Computer Graphics Replicability Stamp Initiative Collaborate to Ensure Open and Reproducible Science

We are pleased to announce that the Computer Graphic Replicability Stamp Initiative (GRSI) platform has adopted Software Heritage to archive and reference research software. Since 2016, the GRSI is an initiative

of researchers from the computer graphics community supported by a growing list of publishers, journals, and conferences in this area (including ACM TOG, IEEE TVCG, Wiley CGF, Elsevier C&G, CAGD and CAD). The GRSI aims to promote replicable and reproducible research.

[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:



**Bertrand Néron**

We are thrilled to introduce our 8th ambassador in 2023, Bertrand Néron! With a profound dedication to promoting knowledge sharing, Bertrand is eager to contribute to the worldwide movement for open and reproducible research as a Software Heritage ambassador.

[Read more.](#)



**Agustín Benito Bethencourt**

We are delighted to introduce Agustín Benito Bethencourt as our 7th ambassador for this year! With a strong belief that every software and data organization, whether profit-driven, non-profit, or governmental, should understand the significance of Software Heritage, Agustín brings a passionate commitment to spreading this crucial knowledge.

[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.

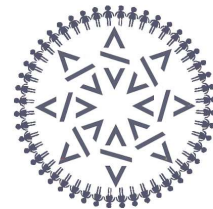
[Join our research community!](#)



### 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



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**

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

second national plan unveiled by the French Ministry of Research in July 2021.

[Read more.](#)

knowledge, but only for a limited time.

[Read more.](#)

February 26, 2019

### Software Heritage for Open Science



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.](#)

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*

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](#)



You can read news from Software Heritage [on our blog](#), follow us on [Twitter](#), [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!*

