

Introduction

The Eclipse Foundation is an independent non-profit corporation based in Brussels. The foundation provides a global community of individuals and organizations with a mature, scalable, and business-friendly environment for open source software collaboration and innovation. The foundation is home to the Eclipse IDE, Jakarta EE, and over 375 and growing open source projects, specifications, and frameworks for many technology areas, including: cloud and edge applications, the Internet of Things, artificial intelligence, automotive, systems engineering, distributed ledger technologies, and open processor designs. This has placed the Eclipse Foundation as the largest open source organization in Europe with an established international reach and

reputation for contributing to global innovation. The Eclipse Foundation is supported by over 300 members from across Europe, the Americas and Asia, including industry leaders who have embraced open source as a key enabler for their business strategies.

The open source development model fosters digital transformation in Europe and beyond. In order to capture the value creation and innovation opportunities for a technologically autonomous Europe, stronger links should be built between EU member states, European institutions, and open source communities.

Europe's Largest Open Source Organization

The Eclipse Foundation is the largest open source organization in Europe as measured in members, developers, and projects.



- 170 member organizations in Europe such as BOSCH, CEA, DAIMLER TSS, the Fraunhofer Institute, SAP, RedHat
- Over 900 developers in Europe
- Operating in Europe for 7 years through the Eclipse Foundation Europe GmbH
- Long-time and respected supporter of and contributor to the European research programs

The Open Source Model

The goal of the Eclipse Foundation is to continue the growth and diversification of open source technologies. The foundation furthers the vision of a global institution building on strong institutional relationships and leveraging a competitive level playing field to enable the free flow of open software, and speeding up Europe's industrial transformation and post-Covid economic recovery. This strategy ensures that investments in open source projects are more sustainable. Contributing to strategic open source projects represents a transformation in the culture of innovation, and is key to

ensuring emerging technologies are fit for Europe and benefit industries and developer communities worldwide.

The open source model of collaboration unleashes the innovative potential of bringing together Europe's leading industrial companies, multitude of SMEs and top-tier research institutions, from different member states and beyond. As such, open source plays a fundamental role in driving European technological and green transformation that will directly benefit industrial organizations and society as a whole.

A Proven Governance Framework

With 15 working groups and growing, the Eclipse Foundation provides an open and vendor-neutral governance framework for collaborative development for specific technology domains. The working groups include Jakarta EE, Edge Native, Eclipse IoT, and more. These groups enable industry collaboration and coordination across many open source projects and support the shared development of specifications, marketing strategy, test environments, and other joint initiatives to

drive industry adoption. The Foundation actively works to attract and foster new working groups focused on emerging technologies.

The Eclipse Foundation's legal and intellectual property management processes enable members to collaborate safely, and provide companies with the legal assurance that they can successfully embed open source technologies into their commercial products.

Facts at a Glance



375+
Projects



240M+
Lines of Code



330+
Members



€13B+
Shared Investment



1600+
Developers



15
Working Groups



35
Staff Members

Research Projects

The Eclipse Foundation works with European researchers and academics to help them create, evolve, and sustain open source software projects and diverse communities that capture the results of their research so they can be disseminated and commercialized to solve real-world challenges. The Eclipse Foundation is dedicated to building and supporting vibrant open source communities that make software innovations available to the public.

Through Horizon 2020, we are supporting the SmartCLIDE research project. The project proposes a new smart cloud native development environment based on the coding-by-demonstration principle and its goal is to find new ways to boost the adoption of cloud and Big Data solutions in small and medium-sized enterprises and public sector organizations.

With more than 80 partners from all over Europe, the EU-funded Arrowhead Tools research project is Europe's largest Automation and Digitization Engineering project. The project focuses on advanced digitization and automation tools that will bridge the gaps that hinder the IT/OT integration by introducing new technologies in an open source platform while leveraging the design and run-time engineering between IoT and the "System of Systems".

The Eclipse Foundation partners with projects funded by different organizations, including Horizon 2020, ITEA 3, The Electronic Components and Systems for European Leadership (ECSEL), and the Bundesministerium für Bildung und Forschung (BMBF).

Strategic Focus Areas



Cloud Native Technologies

The Eclipse Foundation provides a collaborative environment for the world's leading Java ecosystem players to advance open source enterprise Java technologies for the cloud. The foundation drives the evolution and broad adoption of de facto standards for cloud development tools, including language support, extensions, developer workspace definition and more.

The EU is currently pursuing European High Impact Projects to develop data processing infrastructures, data sharing tools, architectures and governance mechanisms and EU member states are driving Gaia-X - the ambitious European cloud network infrastructure project – initiated by German Economy Minister Peter Altmaier and backed by the European Commission and France, as well as close to 100 companies. The Eclipse Foundation aims to support initiatives like the Gaia-X project and to help European cloud initiatives emerge through a strong open source approach.



Industrial IoT & Edge

The foundation's Eclipse IoT Working Group is the world's leading open source community for IoT spanning over 45 projects from more than 40 members and over 8 million lines of code produced. Eclipse IoT projects have been adopted by companies across verticals to deliver commercial IoT solutions and services. The foundation enables leaders to collaborate on an end-to-end IoT architecture that is secure, flexible, and fully based on open source and open standards.

The Edge Native Working Group drives the evolution and broad adoption of Edge Computing-related technologies, building off a mature code base that's already widely deployed in production environments, receives strong endorsements and participation from industry heavyweights, and results in strong collaborations with other industry organizations.

Many of the most significant trends in business today - Industry 4.0, cloud and edge applications, and AI/machine learning - are driven by the open source model. Eclipse BaSyx supported by the Fraunhofer Institute is a great example of a project with the potential to address the objectives of Industry 4.0 with the participation of an ecosystem of stakeholders. The Eclipse Foundation provides the core of collaboration for Industry 4.0 to succeed based on Open Source Software frameworks.

Strategic Focus Areas Continued



Artificial Intelligence

The Eclipse Foundation enables the development of ethical AI that will transform the industry and society and provides leading automotive original equipment manufacturers (OEMs), their suppliers, and partners with a sustainable, transparent, and vendor-neutral platform to collaborate on commercial-grade platforms for distributed artificial intelligence, machine learning, and deep learning. The Eclipse Foundation is exploring future collaborations on trustworthy AI, predictable AI, explainable AI, as well as ethical and secured AI in line with EU values and privacy and data rights. The foundation is actively exploring collaborations with existing and future programs like AI4EU.



Automotive

Automotive industry leaders collaborate with the Eclipse Foundation on open source to deliver complex platform software, drive industrial-scale collaboration, and accelerate innovation. The openADx Working Group is centered around the autonomous driving toolchain and aims to bring transparency and better integration capabilities into the autonomous driving tool space. This industry-wide initiative is of special interest for OEMs, Tier 1s, and tool and technology vendors. The openADx Working Group was initiated by Bosch and now comprises contributors from the industrial, research, and start-up worlds.

Privacy and Data Protection

The Eclipse Foundation is dedicated to ensuring data protection and privacy capabilities evolve alongside innovation. The foundation is a partner in the H2020 research project, PDP4E, that aims to define new methods and tools for GDPR compliance through privacy and data protection engineering. The PDP4E project

aims to put engineers in the loop, integrating privacy and data protection into engineering practice, by extending existing methods and tools, currently applied by mainstream engineering work, with features dealing with privacy and data protection.

Connect with the Eclipse Foundation

To connect with the staff of the Eclipse Foundation and learn more about the role of open source as an enabler for European industry collaboration, visit eclipse.org/europe or contact us at eclipse-europe@eclipse.org.