Public

SAP Open Source Report 2025

Creating Shared Value

> Sustained competitiveness depends on an open, collaborative ecosystem. That's why openness and open source are fundamental to SAP's AI strategy. We build on frontier open source models such as Mistral-3, we contribute innovation back to the community with assets like our tabular foundation model sap-rpt-1-oss, and we actively support cross-industry collaborations – from the Linux Foundation's agent-to-agent initiative, to our recent membership in the Agentic AI Foundation. Openness isn't just a principle for us, it's the mechanism through which we ensure our AI creates meaningful, scalable value for our customers.

Dr. Philipp Herzig,
CTO of SAP SE

Forword

Open Source in 2025

In 2025, open source entered a new phase of maturity: Clearer rules, shared responsibility, and growing institutional support are shaping how critical digital infrastructure is built and sustained. Across AI, security, and cloud platforms, the global community strengthened the practices that are needed to build technology that is open, trustworthy, and resilient at scale. Open source is no longer optional for enterprise innovation - it's essential.

SAP's engagement reflects this shift. We focus not only on contributing code, but on shaping the ecosystems, standards, and funding models that make open innovation viable in the long term.

The maturation of open source AI marked a key inflection point this year: Thanks to greater clarity around definitions and governance, open models moved from experimentation to enterprise relevance. SAP contributed to this progress by releasing **sap-rpt-1-oss**, a table native foundation model for relational business data, openly available to the research community and designed for transparency and auditability in core business scenarios.

Financial sustainability was another defining theme of 2025. It became clear that critical digital infrastructure cannot rely on goodwill alone. SAP supported the move toward structured public and private responsibility by advocating for an EU Sovereign Tech Fund and by launching **SAP's central open source** fund, providing direct financial support to those who maintain the open source components on which we depend.

Security and sovereignty increasingly converged. As new regulatory requirements took effect, SAP introduced the **Fork Metadata Standard** to improve software supply chain transparency and Software Bill of Materials (SBOM) integrity. In parallel, we strengthened Europe's open cloud ecosystem by co-founding the **NeoNephos Foundation** under Linux Foundation Europe and by transferring key cloud native projects to a neutral, vendor-independent home.

Open source is driven by people and sustained by shared responsibility. We thank every contributor outside and inside SAP who helped move the ecosystem forward in 2025. Together, we are building the foundation for a secure, sovereign, and open digital future, one contribution at a time.

Peter Giese
Director of SAP Open Source Program Office

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This Open Source Report 2025 outlines how SAP has engaged with open source, drives collaborative innovation, and how openness creates lasting value for our business and the communities we serve.

Editor
SAP Open Source Program Office

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SAP Open Source Milestones

2025

- SAP open sources sap-rpt-1-oss **foundational model**
- SAP joins the **Agentic AI Foundation** (AAIF) as gold and founding member
- SAP is a founding member of the **NeoNephos Foundation**
- SAP open sources the **Architecture Center**, setting an educational foundation for customers and partners

2024

- Publication of SAP Open Source Manifesto
- Founding member of the OpenSearch Software Foundation

2021/22

- Open Source Policy for all SAP employees
- SAP "whole entity" OpenChain certification
- Inaugural member of Linux Foundation Europe

2020

- Launch of "The Open Source Way" podcast
- German Corona Warn-App together with Deutsche Telekom

2017/18

- SAP Open Source Program Office founded
- SAP open sources Kyma and Gardener
- SAP open sources SapMachine (SAP's distribution of OpenJDK)

2015

- SAP is founding member of the Cloud Foundry Foundation

2013

- SAP open sources OpenUI5

2004

- Founding member of the Eclipse Foundation

1998

- Port of SAP R/3 to Linux with contributions to the Linux kernel

Exploring Openness in AI

Introduction

This past year has been a landmark period of progress and acceleration in AI. Developers applied vibe coding for prototyping and gained experience with agentic AI and high-quality large language models (LLMs) for specific development tasks.

With AI-native development across our product landscape and infrastructure layers, SAP is on the verge of a transformative shift in development: Agentic assistants now understand SAP's metadata, semantics, and business logic — not just code syntax.

Two key interoperability protocols, the Model Context Protocol (MCP) initiated by Anthropic and the Agent2Agent (A2A) protocol initiated by Google, are leading the push toward standardized AI integration.

With all the excitement, we must consider AI's benefits as well as potential challenges that require caution, regulation, and governance.

This chapter celebrates our journey in fusing the transformative potential of AI with a steadfast commitment to openness:

- SAP's membership in the **Agentic AI Foundation (AAIF)** as a gold member. AAIF was launched under the Linux Foundation in December 2025.
- **sap-rpt-1-oss**, a free, open source version of SAP's AI foundation model for researchers.
- Open sourced **Model Context Protocol (MCP) servers** that enable agentic development for internal and external developers.
- Contributions to open source projects such as **KServe, Gardener, Istio**, and more, which make up the infrastructure layers of our AI solution.
- SAP's vendor-agnostic approach to **embodied AI**, where agentic code meets robotic autonomy.

Good to know

Vibe coding

The term 'vibe coding' gained popularity in early 2025. It refers to a coding approach that relies on code-generating large language models (LLMs) and AI agents **without reviewing** the results in each step. This can help users quickly generate **prototypes** and basic implementations, often by accepting the AI-generated output without fully under-standing the code. While vibe coding can accelerate early exploration and ideation, it does not inherently ensure reliability, maintainability, or security. As a result, it has significant limitations when used for production-grade software.

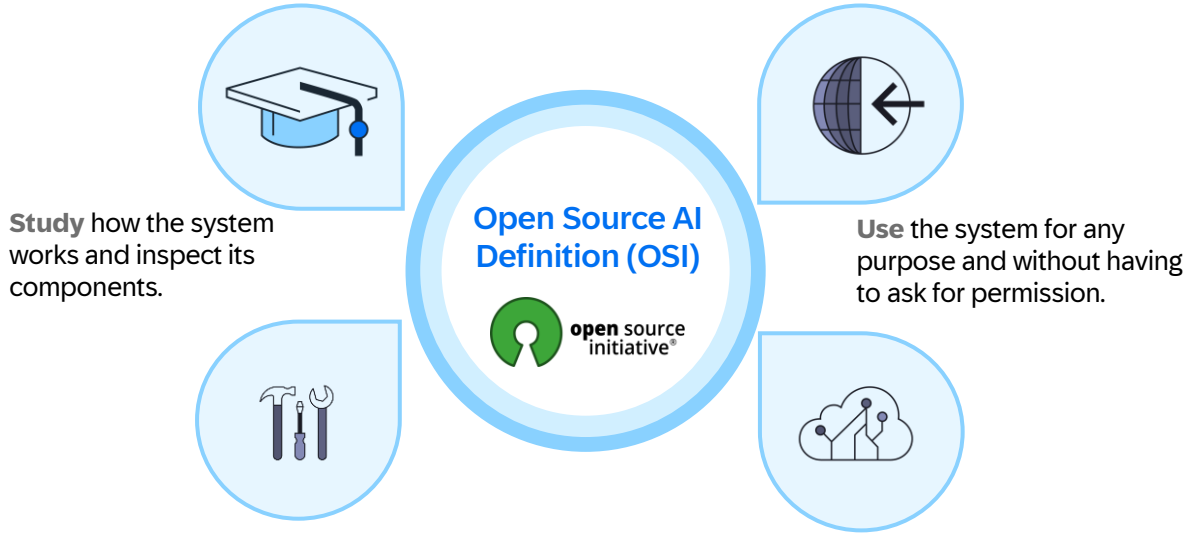
Agent-assisted coding

Vibe coding should not be confused with agent-assisted coding, also referred to as AI-assisted coding or agentic coding. This refers to a coding experience where developers can make use of AI for specific tasks while maintaining **oversight of the code**. Agentic coding will be the way forward for **production-grade software**, as developers can use AI for specific tasks while retaining a deep understanding of the code with this approach. AI might accelerate software implementations, but keeping the code maintainable, reliable, and secure remains the domain of expert know-how.

Openness in AI Systems

The Open Source Initiative (OSI) defines an Open Source AI system as being made available under legal terms that grant the four fundamental freedoms: Study, use, modify, and share the system. Open Source AI systems combine conventional software artifacts – such as code, configuration files, and documentation – with AI-specific elements, including trained model weights and other learned parameters.

The four freedoms apply both to a fully functional AI system and to its individual components, such as source code, model parameters, training artifacts, and data-related information. A prerequisite for exercising these freedoms is access to the preferred form to make modifications, ensuring that the system and its components can be meaningfully studied, adapted, and improved.



Dive deeper

Read about the **Open Source AI Definition 1.0** published by the Open Source Initiative and understand how Open Source AI's scope is much broader than open source software (OSS).

Read about how **SAP AI Core** allows you to experiment with and use natural language prompts with a variety of generative AI models in the SAP Generative AI Hub. This includes LLMs that are open to some extent, such as those from Mistral or Llama, released by Meta AI.

Agent Interoperability

Autonomous agents are changing how businesses use technology. These specialized programs can complete tasks across different systems, retrieve data instantly, and make decisions on their own – at least to some degree. But there's a catch: Agents need to be able to talk to each other, and to the tools they are using.

Standardized protocols

Without standardized protocols, organizations face a fragmented landscape where each agent-to-tool or agent-to-agent interaction requires custom integration work. However, this approach doesn't scale: As the number of agents and systems grows, integration complexity increases rapidly, leading to higher maintenance costs and constraining the emergence of coordinated, multi-agent behavior.

Model Context Protocol and Agent2Agent

Two key interoperability protocols are leading the push toward standardized AI integration: The Model Context Protocol (MCP) and Agent2Agent (A2A). These emerging open standards address crucial challenges by eliminating bespoke connections and enabling seamless collaboration between tools, data, and agents. MCP focuses on standardizing how AI models connect to data sources and tools, providing a uniform interface that any compliant application can implement. A2A, meanwhile, establishes conventions for direct agent-to-agent communication, enabling sophisticated multi-agent orchestration and delegation.

Agentic AI Foundation

As a response to the demand of standardization, accessibility, and scalability, the Agentic AI Foundation (AAIF) was founded under the neutral governance of the Linux Foundation. As a gold member, SAP will contribute its expertise in enterprise data models, business process orchestration, and AI governance to help shape open standards that customers can trust – avoiding vendor lock-in while still meeting the highest requirements for compliance, security, and responsible AI.

Good to know

- On Jun 23, 2025, the Linux Foundation launched the Agent2Agent (A2A) project, with an open protocol created by Google for secure agent-to-agent communication and collaboration.
- On Dec 9, 2025, the Linux Foundation announced the launch of the Agentic AI Foundation (AAIF), with donations of leading technical projects including MCP, goose, and AGENTS.md.
- SAP is an active contributor and maintainer of the A2A protocol.
- You can explore the reference architecture for A2A interoperability in enterprise AI.

Responsible Use of Open Source and Generative AI

SAP recognizes the transformative potential of AI and is committed to advancing business AI while also encouraging internal adoption. Given the wide array of tools, applications, and services offering innovative functionalities with AI, development teams, compliance experts, and other decision-makers at SAP need to understand the implications of using generative AI tools—particularly open source offerings.

Balancing innovation and risks

On the one hand, these tools offer accessible, cost-effective solutions that can significantly accelerate innovation. On the other hand, they come with important considerations around resource utilization, compliance, governance, and security. For example, once the use of open source coding agent Cline was permitted (mentioned in the chapter on contributions), it was quickly adopted by developers due to its open source nature.

Beyond company-wide governance, processes, and evaluation, development teams and individuals must strike a balance between the excitement of a playground of great tools and the overall opportunities and risks associated with specific AI features or tools, especially when available as open source.

While many developers explore AI tools with curiosity and experimentation, a central question remains whether AI-generated code is secure, relevant, and of sufficient quality for enterprise use. In addition, GPU consumption and token management must be considered carefully to avoid unnecessary costs resulting from inefficient querying or excessive usage.

Transparency and value realization

SAP maintains detailed documentation of all AI tools under evaluation or approved for use, whether open source or proprietary. We have also established tool-specific mitigation measures with a clear categorization of use cases. The goal is to ensure that the adoption of AI tools provides measurable value, such as efficiency gains, new capabilities, or overall cost-benefit advantages that justify their use.

By carefully navigating these aspects, SAP aims to harness the full potential of AI while mitigating the associated risks.

AI generated code contributions

In 2024, we already published guidelines for AI-generated code contributions to SAP open source software projects on GitHub. All contributors are advised to follow them closely.

Here's what you need to consider:

- **AI tool compliance:** Ensure the tool's terms allow use in open source code.
- **Filter similarities:** Use AI features to suppress or flag third-party similarities.
- **Third-party materials:** Verify permissions and include attributions for any included copyrighted or OSS code.
- **Employer policies:** Adhere to the employer's guidelines if contributing in a work context.

SAP Releases Foundation Model

SAP releases Relational Pretrained Transformer model SAP-RPT-1

SAP announced its new SAP-RPT-1 AI foundation models at TechEd in November 2025. This included the open source version sap-rpt-1-oss which is available on Hugging Face and is of special interest to the research community. While foundation models for text and images are well established, SAP-RPT-1 is designed to address structured business data. Specifically, it makes accurate predictions on tabular data, the format in which most critical enterprise data is stored. Being natively built with this kind of data in mind, it deals with the semantic complexity of business tables and their relationships, something that LLMs struggle with.

One key aspect of SAP-RPT-1 is its flexibility: Requiring no use case-specific training or fine-tuning, it unlocks new opportunities such as predictive scenarios as part of agentic workflows. Releasing an open source version alongside enterprise variants is intended to spark innovation in the field. With the model already downloaded more than 300,000 times (Hugging Face, Nov. 30, 2025), this approach is expected to foster further improvements and innovation from the community.

Good to know

- The power of SAP-RPT-1 lies in a capability called "**in-context learning**". No need for task-specific training or fine-tuning.
- The **table-native design** of SAP-RPT-1 allows for optimized processing of the unique semantics and datatypes found in business data.
- SAP-RPT-1 is pronounced as '**rapid one'.**

Dive deeper

- "A New Paradigm for Enterprise AI: In-Context Learning for Relational Data", a blog post by Philipp Herzig, CTO at SAP, on SAP-RPT-1
- "ConTextTab: A Semantics-Aware Tabular In-Context Learner" - a research paper from SAP about tabular in-context learning, which is the technological basis for sap-rpt-1
- The open source variant sap-rpt-1-oss is available on GitHub & Hugging Face

> The table-native transformer architecture behind SAP-RPT-1 marks a new chapter in how AI understands and leverages relational business data. With the free, non-commercial OSS version sap-rpt-1-oss, we're giving back to the research community and hope to inspire more research in the important domain of AI for relational enterprise data.
>
> **Jonathan von Rueden,**
> Chief AI Officer of SAP

Open Source MCP Servers

Open source MCP servers from SAP

SAP open sourced Model Context Protocol (MCP) servers tailored for UI5, CAP (SAP Cloud Application Programming), and Fiori tools with executable workflows, enhancing AI-driven development directly within the editor. They increase developer productivity and reduce context switching between tools. All three servers can be seamlessly integrated into VS Code and any MCP standalone tool, like Cline, Cursor, and so on.

- MCP server for SAP Cloud Application Programming Model: Facilitates agentic coding for CAP projects with grounding to the CAP model and official guidelines.
- MCP server for SAP Fiori: Generates or modifies SAP Fiori apps.
- UI5 MCP server: Supports the developer by creating new UI5 projects, detects and fixes UI5-specific errors in the code, and provides additional UI5-specific information for agentic AI tools.

What is the Model Context Protocol?

MCP is an open protocol that standardizes how applications provide contextual information to large language models (LLMs). MCP servers expose resources, tools, and prompts to LLM-based applications using this protocol, enabling LLMs to move beyond static knowledge and interact dynamically with real-world systems and data.

Use-cases for MCP servers:

- Connecting LLMs to databases
- Integrating with enterprise systems
- Accessing local file systems
- Interfacing with external APIs
- Building AI-powered development tools

Good to know

The MCP server for SAP Mobile Development Kit (MDK) was also open sourced and SAP continues to invest in developing and open sourcing additional MCP servers.

Dive deeper

- The blog post "SAP Build introduces new MCP Servers to enable agentic development for Enterprise Applications", published in September 2025, introduces SAP's open sourced MCP servers, and also contains links to further articles.
- The webinar "Open Sourced Model Context Protocol (MCP) Servers Supporting BTP Platform Developers", published in November 2025, includes demos of MCP servers for SAP Cloud Application Programming Model (CAP), Fiori elements and UI5, enriching these frameworks with AI.

Contributions to the AI Infrastructure of SAP BTP

Open source infrastructure components

SAP Generative AI Hub in SAP AI Core is part of SAP Business Technology Platform (SAP BTP) and is largely built on open source components, especially at the infrastructure level. It relies on project Gardener, SAP's open source solution for managing Kubernetes clusters at scale. Combined with project Garden Linux, it provides extended support for GPUs to handle AI workloads. Gardener was among the first Kubernetes distributions to achieve Cloud Native Computing Foundation (CNCF) AI Conformance in November 2025, enabled by collaboration with NVIDIA on GPU support.

On top of this infrastructure layer, SAP delivers key AI services that are also based on open source technologies such as vLLM for LLM model serving, Argo Workflows for workflow execution, KServe for model serving, and Istio for security and traffic management in a multi-tenant environment.

Highlighting selected 2025 contributions

In 2025, SAP contributed to KServe, the industry-standard open source platform for AI inference. These contributions played a role in KServe achieving incubation status within the Cloud Native Computing Foundation (CNCF). Through this work, SAP helped shape vendor-neutral AI inference infrastructure, reinforcing open standards.

In addition, SAP teams have extended Crossplane's capabilities to declaratively manage both SAP-specific and vendor-independent cloud-native infrastructure resources across environments. Crossplane, a CNCF project, enables infrastructure as code through Kubernetes-native APIs.

Dive deeper

- The presentation "GenAI Platform: Challenges of Authentication and Authorization in a Multi-Tenancy Environment" at Istio Day at KubeCon London explains the SAP AI Foundation architecture and the scaling challenges related to logging, workloads, authentication, security, and more.
- The blog post "Gardener Achieves CNCF AI Conformance for Kubernetes" has details on the AI conformance and the corresponding Gardener AI Conformance repository on GitHub contains the test procedures and certification results.

Good to know

- **SAP AI Core** is a proprietary service within SAP BTP. The SAP Generative AI Hub builds on it by integrating generative AI capabilities and providing access to a broad set of both open and proprietary large language models.
- **KServe** is an open source project for serving predictive and generative AI models. It offers a unified, scalable, and framework-agnostic approach to deploying and managing inference workloads in cloud-native environments.
- **vLLM** is purpose-built for the serving of efficient large language models, addressing LLM-specific performance and scalability requirements. SAP's contributions have strengthened vLLM's stability and robustness for enterprise-grade AI workloads.

Open Source AI in the Physical World

SAP explores embodied AI

In 2025, SAP began exploring the emerging domain of embodied AI, which connects AI agents to physical devices such as cameras, drones, quadrupeds, and even humanoid robots, bringing agentic reasoning into real-world business processes. Embodied AI can "automate the non-automatable" by handling unexpected or unpredictable situations across diverse tasks and environments indoors (for example, warehousing) and outdoors (for example, utilities), offshore platforms, and so on.

Openness and open interoperability

Openness is a key enabler here: Robotics is advancing quickly because models, data, software, and even hardware are increasingly open source, and the agent ecosystem is evolving through open interoperability standards such as MCP and A2A. Access to open data is particularly important, as robotics training data is often collected outside traditional enterprise environments, making open source datasets a key accelerator for progress.

As announced at SAP TechEd in Berlin, SAP's approach is vendor-agnostic and ecosystem-driven, with a strong focus on hands-on, applied learning alongside customers on real-world challenges. The result is an open architecture that provides robots with a "business brain" by connecting them to SAP systems, while extending SAP Business AI agent capabilities into the physical world.

Facts and Figures

- Venture capital investment in robotics reached $74 billion over the past five years – more than quantum computing and AI agents combined. Leading start-ups are rapidly scaling capacity (Ellty, 2025).
- By 2028, physical AI will be actively deployed in over 30% of major industries and consumer markets worldwide, up from 5% today (Gartner, 2025b).

Dive deeper

- In the podcast episode "Embodied Intelligence: The AI Revolution in Robotics", published in November 2025, SAP experts discuss embodied AI and robotics and the integration of these technologies in industries.
- The open SAP Architecture Center has an "Embodied AI Agents" reference architecture section.
- Published in November 2025, the news feature "SAP Expands Physical AI Partnerships and Demonstrates Success of New Robotics Pilots" covers new collaborations with leading robotics companies and enterprise partners to jointly drive embodied AI.

Contributions

Facts and Highlights

SAP's dedication to open source is reflected in its substantial contributions across code development, sample code, Software Development Kits (SDKs), documentation, and best practices for reference architectures.

Leading European commercial contributor

SAP is the leading commercial contributor to open source in Europe and ranks among the top 15 commercial organizations globally, according to the Open Source Contributor Index (OSCI).

A big thank you to the 2,147 colleagues who contributed to open source projects (based on OSCI data and contributions up to August 2025). Special recognition goes to the 968 individuals who made more than 10 contributions each.

Different pillars of open source

This report distinguishes between open source projects initiated by SAP teams or individuals and contributions to third-party projects (typically open source components, tools, or solutions, that are used for SAP's internal development, SAP products, or infrastructure).

Highlights 2025

In 2025, several SAP-initiated projects were transferred to the new NeoNephos Foundation to strengthen their independent communities (read more in the chapter on foundations). SAP uses many different open source components. For this reason, contributing to these components with bug fixes, features, documentation, or testing is a clear investment in resilience, influence, and know-how.

In some open source communities and projects, SAP is among the top commercial organizations based on the volume of its employees' year-to-date open source contributions on GitHub:

- **Cloud Native Computing Foundation**
  SAP's contributions to the CNCF eco-system grew by 12% YoY.
- **Cloud Foundry Foundation**
  SAP ranked as number one contributor in 2025 with more than one third of the active contributors.
- **Envoy proxy gateway**
  SAP is among the top five contributors.
- **OpenJDK**
  SAP is among the top three contributors.

Source: OSCI August 2025

968 active contributors

individuals, who each made more than 10 contributions

2000+ contributors

+10% YoY

SAP-Initiated Open Source Projects

In 2025, SAP continued its commitment to open source. This section highlights some SAP-initiated open source projects:

- The **SAP Architecture Center** was open sourced on GitHub in the second half of 2025 and sets an educational foundation for customers and partners. The provision of detailed solution reference architectures lowers the access threshold to SAP's solutions while also supporting effective adoption and creation of efficient, reliable enterprise landscapes.
- After open sourcing the pretrained, table-native AI foundation model **sap-rpt-1-oss** in the second half of 2025, the community responded with enthusiasm and numerous downloads.
- **Project "Gardener"** is one of the first Kubernetes distributions to achieve Kubernetes AI conformance as defined by the CNCF Kubernetes AI Conformance working group.
- Components used for building modern cloud infrastructures, such as **Open Micro Frontend Platform**, and **Platform Mesh**, both initiated by SAP in 2025, are now under neutral governance within NeoNephos.
- **Open Resource Discovery** (ORD) is set to become an accepted industry standard. ORD received the 2025 API Award in the category "Best in API Standards and Specification" by API World.
- **SAPUI5 and OpenUI5** are an example of the coexistence of commercial products and open source projects. The open approach helps users better understand how SAP products work and use them more effectively. Open sourcing an **MCP server** for UI5 received very positive feedback from the internal and external developer communities alike.

Dive deeper

- SAP has released a **relational pretrained transformer model** with an open source version, sap-rpt-1-oss, on Hugging Face. Get started today!
- In the webinar "Start your Architecture Journey with Open Sourced SAP Architecture Center" the participants discuss how solution reference architectures can help you build reliable enterprise landscapes.
- The blog post "AI Conformant Cloud Operating System for a Sovereign Europe" has details of how Gardener achieved official Kubernetes AI Conformance as defined by the CNCF.
- The Open Resource Discovery website has plenty of resources to help you get started with this open protocol.

SAP-Initiated Open Source Projects

AI

AI Models

sap-rpt-1-oss

AI Interoperability

UI5 MCP server
Fiori MCP server
CAP MCP server
MDK MCP server

Infrastructure

Cloud Runtimes & Services


Gardener NN


Garden Linux NN


Project Kyma NN


IronCore NN


Platform Mesh NN


CobaltCore NN


Greenhouse NN


Konfidence NN


Open Managed Control Plane NN

SAP Cloud Infrastructure

Specifications / Protocols


Open Component Model (OCM) NN


Open Resource Discovery (ORD) NN

Frameworks

Frontend


OpenUI5


UI5 Web Components


OpenMFP NN


Luigi NN


Fundamental Library

Backend


SAP Cloud Application Programming Model (CAP) *)


United Metadata NN

Developer Experience

Languages, Tooling, Docs


Code Pal for ABAP


ABAP Cleaner


SAPMachine


SAP Architecture Center

SDKs


SAP Cloud SDK for AI

Security

Foxhound


Open Key Chain Manager NN


Privileges


Credential Digger

NN projects transferred to NeoNephos foundation

*) partly open sourced

Fork Metadata Standard and Further SAP-Initiated Projects

Forking – a common practice in open source

Development teams may 'fork' (or copy) open source projects and continue using these forks internally within an organization, independent of the upstream (original) project. A common reason for this is the need to add a certain feature to the project that cannot be integrated into the upstream project for business reasons. Once such forks are created, several challenges arise, particularly in the areas of Software Bill of Materials (SBOM) management and vulnerability management.

New regulations in these areas, such as the EU Cyber Resilience Act (CRA), have been introduced and will come into effect soon. They require end-to-end SBOM and vulnerability management across all products made available on the affected markets. To the best of our knowledge, there is no dedicated standard or best practice that specifically addresses the recording, tracking, and analysis of the status and provenance of organization-internal forks of an open source project.

SAP's open source Fork Metadata Standard

Therefore, we propose the introduction of a new "Fork Metadata Standard" (FMS) to record all relevant aspects of such forks, including the original project and the upstream synchronization status. FMS features a structured, platform-agnostic format, primarily based on a new file called FORK.yaml, accompanied by additional information in the README and CHANGELOG. This data can then be reused by SBOM management systems to track the provenance of software components used in a product or service.

The specification was open sourced in November 2025 and is currently in an early stage. We plan to make dedicated releases, add examples, GitHub Pages and more details in the months ahead. Stay tuned.

This project is open to feature requests, suggestions, and bug reports using GitHub. Contributions and feedback are encouraged and welcome!

Two more projects open sourced in 2025

Project Kernseife allows you to flexibly assess the usage of SAP objects in your system, for example, the technical debt regarding clean core principles, based on a customizable classification.

SAP also open sourced the **Sailing Analytics** solution. This allows all interested parties to contribute to the solution, fork it, or host it themselves. This solution was used at the Olympic Games in both Paris and Tokyo and has helped analyze sailing regattas since 2011. Over 500 million wind speeds and directions have been recorded over the years.

Good to know

Since 2025, SAP Cloud Infrastructure, formerly known as SAP Converged Cloud, has a new home on GitHub. It is an API-first, self-service, open source-based (OpenStack, Kubernetes), Infrastructure-as-a-Service stack, running in SAP data centers.

Adoption by Third-Parties

At SAP, we believe in the power of collaboration and the vital role of the open source ecosystem to drive innovation. As stated in our Open Source Manifesto, we recognize how open source enables global minds to collaborate, share, and advance technology together.

The SAP Open Source Program Office extends its sincere appreciation to every contributor. These three quotes from external adopters illustrate the collaboration with our external ecosystem. We look forward to continued innovation and meaningful collaboration in the future:

1. **Transferring Gardener** under neutral governance to the NeoNephos Foundation not only strengthens the project's long-term sustainability, but also secures continued investment in co-development.

> At STACKIT, we build on Gardener to provide our customers with fully managed Kubernetes clusters. By actively contributing to the Gardener open source project, we **shape its roadmap together** with the community to fit our common needs.

Tim Ebert
Cloud Engineer at STACKIT Kubernetes Engine; Gardener Maintainer and Steering Member

2. **MCP servers** give context-aware assistance, enabling agentic development, refactoring, test generation, or the retrieval of API references. SAP open sourced MCP servers that help developers use UI5, Fiori elements, or CAP together with AI functionalities.

> Great to see SAP's MCP servers for CAP, UI5, and Fiori available as open source! I can run them in my own environment, look under the hood, and quickly **see how they behave in real projects**. The direct collaboration between users and developers makes the servers better for everyone.

Marian Zeis
Independent SAP Developer

3. **Solution reference architectures** support you to build reliable enterprise landscapes. Open sourcing the SAP Architecture Center encourages collaboration and helps refine these architectures for a broader set of use cases.

> I added an SAP solution blueprint to these GitHub-based reference solution architectures, sharing best-practices with other solution architects. The contribution guide was of high quality and the **guidance from the SAP team** was very helpful.

Abhijeet Kulkarni
SAP Lead, Oil Assets, Glencore UK Ltd.

Contributions to Third-Party Projects

SAP teams and individual employees actively contribute to open source communities, enhancing open tools, infrastructure, or various development frameworks. To be assigned the role of a maintainer, or to be part of a steering committee, is a distinction earned through trust and expertise.

Here are some success stories about SAP maintainers or contributors that led to upstream contributions in third-party projects of strategic relevance. Through their quotes, we share their personal views, experiences, and motivations. Thank you to everyone who contributed in 2025!

1. SAP became a major contributor to the envoy proxy gateway in 2025. This open source project enhances microservice management for SAP BTP by offering comprehensive API gateway features, such as traffic management, security, and observability.

Read more in the case study "From Evaluation to Integration: SAP's Journey with Envoy Gateway".

> Our contributions, guided by the project's GA roadmap, focused on **enhancing features, improving reliability,** and implementing robust processes. Multiple SAP developers have contributed to the project, and several were promoted to steering committee, maintainer and reviewer positions.

Guy Daich,
Chief Development Architect, SAP
Lead contributor and Steering Committee member at Envoy Gateway

2. In 2025, multiple teams and individuals contributed to the autonomous open source coding agent **Cline**, which now integrates seamlessly with SAP AI Core. Developers working with SAP AI Core can now use Cline and its functionality with access to cutting-edge AI models available through SAP AI Core, based on the latest large language models.

Read more in the blog post "Cline Meets SAP AI Core: Unified AI Power for SAP Developers".

> The initial idea of writing an extension for VS Code started with a pilot, which was then maintained in an **independent fork** and ultimately **contributed back** into the official Cline VS Code extension repository!

Rafael Schardosin,
Principal Software Engineer, SAP

Contributions to Third-Party Projects

3. The contributions by the SAP AI Core team to **KServe** have been instrumental in the project's recent acceptance into CNCF incubation. KServe provides standardized AI inference capabilities on Kubernetes, supporting both generative and predictive AI workloads across multiple AI frameworks. The challenge was to create a vendor-neutral, scalable platform that handles enterprise AI demands while remaining simple enough for quick deployments.

Read more in the blog post "KServe becomes a CNCF incubating project".

"As a **KServe maintainer**, I contributed to technical steering, community governance, and adoption validation. SAP AI Core's production deployment experience provided crucial feedback for enterprise-scale features. The open source approach was essential for creating industry-wide standards for AI inference.

Lize Cai
Senior Developer, SAP
and KServe Maintainer

4. In 2025, SAP Cloud Infrastructure, SAP's own IaaS platform, adopted **Perses**, an open source CNCF project for dashboard visualization. Our contributions extended Perses' capabilities by introducing the Perses **MCP Server**, enabling AI-powered dashboard management for Perses users.

Read more in the blog post "Introducing the Perses MCP Server".

"Working closely with the community of Perses was essential for making Perses enterprise-ready. Through contributing features, fixing bugs, driving design decisions, and participating in weekly community discussions, I **became a maintainer** in May 2025.

Akshay IB
Developer, SAP
and Perses Maintainer

Good to know

LiteLLM: The open source gateway harmonizes access to LLM providers from code-based agent frameworks. With our contributions, SAP customers can make use of enterprise-ready SAP GenAI Hub orchestration services from agentic frameworks with LiteLLM integration to implement their business solutions (listen to this talk).

OpenJDK: SAP is among the top three contributors to OpenJDK. In 2025, SAP engaged with lead maintainers for long-term support of release 17 and 25. Also, we enhanced the monitoring and supportability of the JDK through JEP 509 "JFR CPU-Time Profiling" this year.

Foundations

Facts and Highlights

In 2025, SAP expanded its engagement with foundations and non-profit organizations that provide neutral governance and enable open source collaboration across companies and global communities. Beyond organizational memberships, the foundations' ecosystem is also attracting a broad and active developer community. In addition, these organizations increase the visibility of many open source projects at major open source and technology events, or meetups.

Work behind the scenes

The work behind the scenes is driven by many individuals with different tasks and responsibilities: technical contributions, leadership roles in Technical Steering Committees or Governing Boards, as well as organizational tasks and speaking engagements at conferences and events. Individuals can hold different roles such as maintainer, reviewer, approver, contributor in different projects and working groups which reflect their level of expertise, engagement, and responsibility.

SAP's pivotal role for new European foundation

SAP was a founding member of a new foundation under Linux Foundation Europe (LFEU), called NeoNephos. Launched in the spring of 2025, the foundation has experienced strong adoption across the European cloud and open source ecosystem. We explain in more detail why this foundation is a milestone for the IPCEI-CIS*) initiative, enabling state-aid-supported projects aimed at co-financing efforts to build a seamless, sovereign, multi-provider cloud and edge-continuum across Europe.

Memberships and engagements

This chapter gives an overview of SAP's memberships and highlights some of SAP's collective efforts with other enterprises and open source communities under the neutral governance of different foundations such as the Eclipse Foundation, the Linux Foundation and related organizations.

* IPCEI-CIS: Important Project of Common European Interest–Next Generation Cloud Infrastructures and Services

Good to know

- **Open source foundations** are vendor-neutral, non-profit organizations, which steward the open source ecosystems around certain technologies and open source projects.
- Open source foundations own and manage the intellectual property (IP) of open source projects and drive technical roadmaps and governance. They ensure that projects are managed in a secure, transparent, and sustainable manner.
- Most open source foundations are steered by a governing board and technical committees.
- SAP has a seat on various governing boards, such as the Eclipse Foundation, Linux Foundation Europe, CNCF, NeoNephos Foundation, OpenSearch Software Foundation or Cloud Foundry Foundation.

SAP Memberships 2025

Linux Foundation
Silver member

Linux Foundation | Europe
Founding & Silver member

Cloud Native Computing Foundation
Platinum member

Cloud Foundry Foundation
Founding & Platinum member

Agentic AI Foundation
Founding & Gold member

NeoNephos
Founding member

Open Search Software Foundation
Founding & Premier member

Open Source Security Foundation
General member

Eclipse Foundation
Founding & Strategic member

Open API Initiative
Founding member

Todo Group
General member

OSPO Alliance
General member

Open Invention Network
General member

Oasis Open
Sponsor member

Industrial Digital Twin Association
General member

NeoNeophos Foundation

On Mar 31, 2025, the Linux Foundation Europe announced the launch of the **NeoNephos Foundation,** an open platform for the development of open software. SAP's goal, as proclaimed during our KubeCon keynote walk-on to an audience of thousands: "Make Cloud Native Sovereign".

SAP is a founding member of this initiative which, by the end of 2025, spanned more than 12 projects and over 400 repositories. Eleven of these projects were transferred by SAP. As of December 2025, 15 member companies, including established industry players like Deutsche Telekom and STACKIT, are part of this foundation.

In the next section we reflect on the situational circumstances that led up to this moment, illustrating SAP's pivotal role in shaping this initiative.

> "I am excited to collaborate with our partners in building an open and inter-operable cloud infrastructure for Europe. Through this we are strengthening digital sovereignty, fostering transparent innovation, and enabling resilient, future-proof systems across vendor-neutral ecosystems, built on established open source standards.

Christian Neu, Governing Board Chair NeoNephos Foundation, and member of SAP's OSPO

12+
projects

SAP together with the other members have transferred 12 projects already to NeoNephos and 3 more are planned.

400+
repositories

Check out these repositories on GitHub.

15
members

Check out all members on the NeoNephos Website!

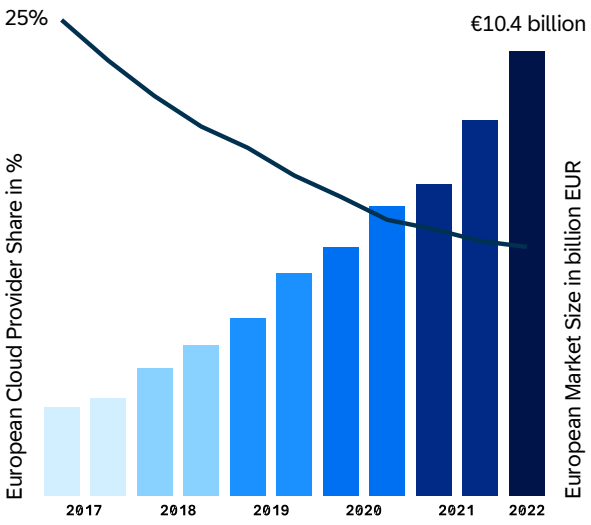
Good to know

SAP holds leadership roles in NeoNephos' Technical Advisory Council (TAC) and Governing Board (GB).

From IPCEI-CIS to ApeiroRA

For years, the growth of the cloud market has continued unabated, yet European providers struggle to benefit from the increased market size, as shown in the figure below.

European Cloud Provider Share in % and European Market Size in billion EUR



Source: srgresearch

The lack of interoperability within key parts of the cloud native tech stack has allowed vendors to entrench themselves within the ecosystem, inhibiting others from establishing themselves. Since this situation was unlikely to resolve itself without external intervention, on Dec 23, 2023, the EU initiated a funding program called Important Project of Common European Interest–Next Generation Cloud Infrastructures and Services, **IPCEI-CIS**.

This initiative, positioned under the **8ra** trademark, provides state aid to participating companies and organizations addressing the need for seamless cloud-to-edge usage.

The **Apeiro Reference Architecture** (ApeiroRA) is SAP's contribution to IPCEI-CIS.

With its neutral governance under Linux Foundation Europe, **NeoNephos Foundation** secures the long-term continuation of the shared development model of ApeiroRA, beyond the limited nature of an IPCEI project.

Supported by:
Federal Ministry for Economic Affairs and Energy
IPCEI-CIS initiative
Funded by the European Union
NextGenerationEU

8ra CLOUD·EDGE CONTINUUM

Find more info about ApeiroRA and its architecture on apeirora.eu

Check out all ApeiroRA projects.

ApeiroRA ↓ NeoNephos

Project Highlights 2025

Infrastructure

ApeiroRA projects can be independently adopted in existing environments or integrated seamlessly with one another. For instance, combining IronCore, Gardener, and Platform Mesh creates a platform on bare metal, including a runtime environment and service management layer, making it ideal for building full-featured application platforms. All projects on this page were transferred to NeoNephos Foundation in 2025.

IronCore Project is an open source, Kubernetes-native Infrastructure-as-a-Service (IaaS) platform that lets operators manage compute, storage, and networking resources through declarative APIs. It provides fully declarative provisioning and lifecycle management of bare metal resources.

- In 2025, it achieved full Gardener integration for declarative bare metal shoot clusters, unifying Kubernetes provisioning for on-premise and cloud.
- Cloud Hypervisor provider next to libvirt/KVM, enabling lightweight, secure VM management.

Project Gardener gives you a solid foundation to deliver and operate fully-managed Kubernetes clusters at scale, both in public and private cloud scenarios.

- Gardener hosted three Hackathons in 2025.
- Gardener introduced In-Place Node Updates. Certain updates can now be applied directly to existing worker nodes without requiring their replacement.
- At the end of 2025 Gardener has around 20 adopters (Adopters | Gardener).

Platform Mesh builds on the Kubernetes API and resource model to establish multi-provider interoperability, allowing services to be discovered, ordered, and orchestrated through kubectl using Kubernetes Resource Model as the common language. It is the hub of the Apeiro Reference Architecture, connecting service providers and consumers across the cloud-edge continuum.

- In 2025, SAP contributed upstream to kcp.io, kube-bind.io, and multicluster-runtime.
- SAP released Platform Mesh v0.1 with local setup and an example service (Getting Started). In addition, SAP gave a talk at FOSDEM 2025 in Brussels: "Building Europe's Platform Mesh: Cloud-Native APIs for Multi-Provider Integration and Digital Sovereignty"

Project Highlights 2025

Application Lifecycle, Delivery, and API Management

The lifecycle and delivery projects shown here provide a control layer for interoperable, secure, and automated application operations — independent of the underlying infrastructure.

Open Component Model (OCM) is your one-stop Software Bill of Delivery (SBOD) for packaging, signing, transporting and deploying artifacts–preserving end-to-end security, integrity and provenance. OCM is used by Kyma and Gardener and across NeoNephos for complex infrastructure delivery-at-scale.

- 2025 saw the start of a completely modular reference library and Kubernetes controllers in the form of the Open Component Model.
- OCM has become a key maintainer of a new deployment orchestration system: kro (Kubernetes Resource Orchestrator), powering deployments with directed acyclic graphs in joint collaboration with AWS, Google, and Microsoft.

Open Resource Discovery (ORD) is an open protocol for the decentralized publishing and discovery of application and service metadata. It provides a structured schema for metadata such as endpoints, capabilities, documentation links, and ownership details, ensuring that application resources like APIs, events, data products, and AI agents can be discovered, understood, and integrated consistently across different systems and marketplaces.

- In 2025, Model Context Protocol (MCP) and Agent2Agent (A2A) support were added.
- It covers both runtime and design-time perspectives.

Good to know:
ORD lets each application self-publish rich, standardized metadata, and describe connected taxonomies. This enables aggregators to stitch this information into the first application-level knowledge graphs for navigation, search, and analysis.

Project Konfidence, a software delivery framework, will be open sourced in 2026 under NeoNephos to allow SaaS providers to develop, deploy and deliver their software into the Cloud-Edge Continuum. SAP uses the underlying solution, Deploy with Confidence (DwC), for more than 50 of their own business applications. Learn more in the webinar "Efficient Microservices Delivery with Project Konfidence" replay.

Project Konfidence addresses these requirements

- Ring deployments.
- Management of feature toggles.
- Automated delivery.

NeoNephos' Path to Linux Foundation

Linux Foundation as our strategic home

The Linux Foundation (LF) was selected to safeguard SAP's investments in ApeiroRA and to collaborate on new projects with other industry partners. NeoNephos' relationship to the Linux Foundation allows SAP to move within the cloud-native community ecosystem as an equal player to other established initiatives that coexist within the LF ecosystem. This common umbrella simplifies the meshing of our respective communities and amplifies our voice: "Make Cloud Native Sovereign" by hosting projects that promote interoperable, secure, and conformant software.

NeoNephos today and beyond

As shown in our timeline on the next page, eight members joined within six months of launch, proving strong support for our vision of European cloud-native full-stack sovereignty. SAP demonstrates its commitment to open source by creating ApeiroRA and supporting it long-term with NeoNephos.

We value each contribution because, while we have set the wheels in motion, each additional commit increases momentum, setting us on a path for NeoNephos to become deeply woven into the fabric of cloud native.

> NeoNephos shows how open source and collaboration can make digital sovereignty practical. I value this initiative because it turns shared challenges into shared open source solutions that everyone in the sovereign cloud ecosystem can build on.

Dr. Christian Weiss
Governing Board Member NeoNephos Foundation, Chief Architect IPCE-CIS for T-Systems International

> Through collaborating with industry partners, we advance the governance and stability of open source, opening new markets and ensuring consumers' rights through greater digital transparency and security.

Stephan Ilaender
Governing Board Member NeoNephos Foundation, Field CTO STACKIT

NeoNephos Project Landscape

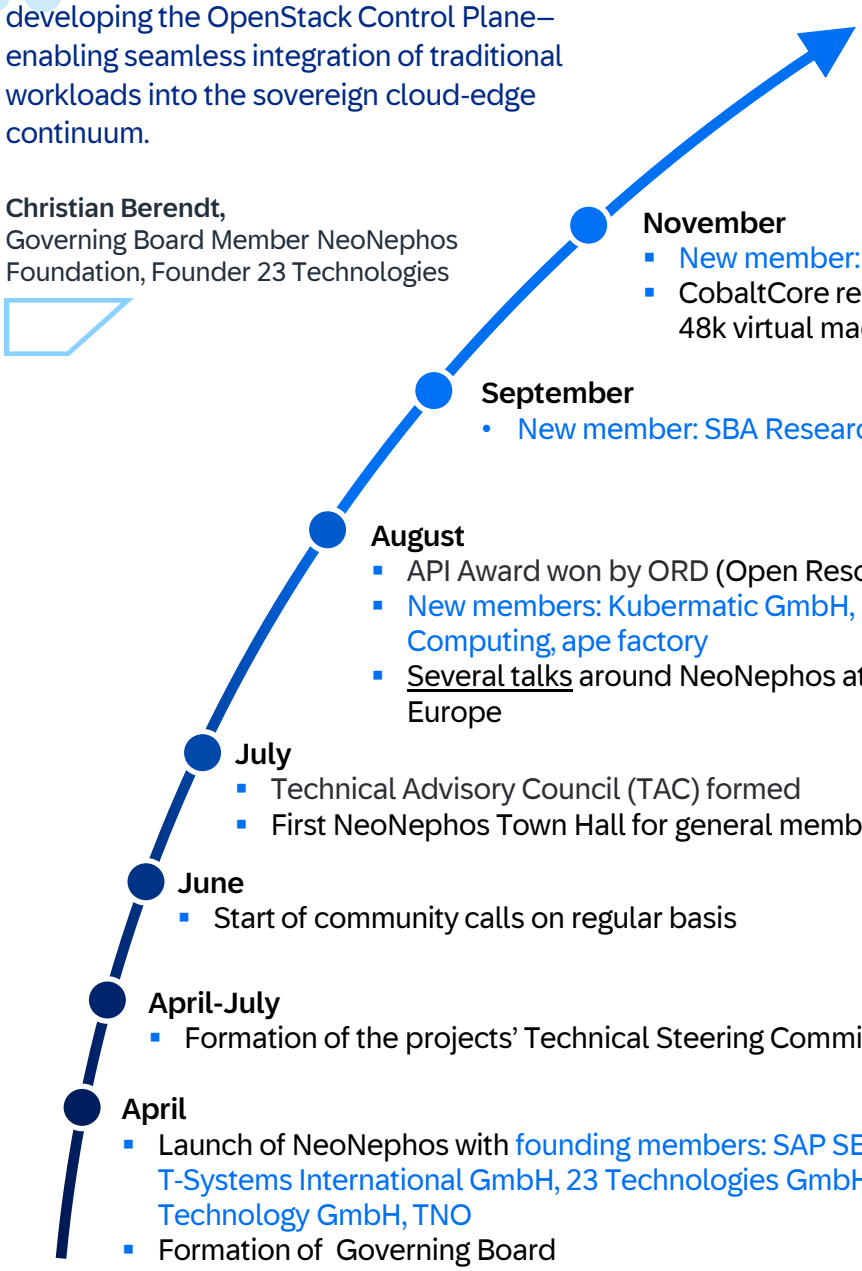
Federation	Management	Application	Data	Service Orchestration	Cloud Edge Platform	Virtualization
Platform Mesh	Open Component Model	Open Micro Frontend Platform	Open Resource Discovery	Open Managed Control Plane	Garden Linux	CobaltCore
Katalis	Greenhouse	Luigi			Gardener	IronCore

1 Link to Source

NeoNephos timeline

> As part of CobaltCore, we are actively developing the OpenStack Control Plane–enabling seamless integration of traditional workloads into the sovereign cloud-edge continuum.

Christian Berendt,
Governing Board Member NeoNephos Foundation, Founder 23 Technologies



March 2026
Outlook: NeoNephos presence and sponsoring at KubeCon 2026

November
- New member: plusserver
- CobaltCore research paper published with 48k virtual machines dataset

September
- New member: SBA Research

August
- API Award won by ORD (Open Resource Discovery) - Article
- New members: Kubermatic GmbH, Liquid Reply, Nearby Computing, ape factory
- Several talks around NeoNephos at Open Source Summit Europe

July
- Technical Advisory Council (TAC) formed
- First NeoNephos Town Hall for general members held

June
- Start of community calls on regular basis

April-July
- Formation of the projects' Technical Steering Committees (TSC)

April
- Launch of NeoNephos with founding members: SAP SE, STACKIT GmbH & Co. KG, T-Systems International GmbH, 23 Technologies GmbH, Clyso GmbH, Cyberus Technology GmbH, TNO
- Formation of Governing Board

Watch

- Recording of the Side Event @ Summit on European Digital Sovereignty
- What is? videos on YouTube

Read

- Research paper related to CobaltCore. The SAP Cloud Infrastructure Dataset: A Reality Check of Scheduling and Place-ment of VMs in Cloud Computing.

SAP's Engagement in Foundations

Cloud Native Computing Foundation (CNCF)

SAP has been an active CNCF member since 2017 in order to leverage and contribute to cloud-native solutions. As a platinum member, SAP is part of the governing board and the legal committee, shaping the strategic direction of the foundation.

In 2025, xRegistry, the extensible registry for metadata management, was accepted as a sandbox project by the CNCF. SAP made contributions to the specification that underpins xRegistry interoperability.

We have contributed to many more CNCF governed projects such as Istio, Kubernetes, Knative, Crossplane, Envoy, External Secrets Operator, and Lima–some of them are referred to in the chapters about AI and contributions.

According to Linux Foundation insights, SAP has increased its overall contributions to CNCF projects by 12% year over year.

OpenSearch Software Foundation

In the year since SAP became a founding member of the OpenSearch Software Foundation we have strengthened our position in the foundation to support the project path toward full openness, enterprise-readiness, and collaboration with other OSS initiatives.

With OpenSearch being a crucial component of our observability strategy, we enhanced application observability by fostering support for OpenTelemetry in OpenSearch. (corresponding pull request).

SAP also contributed a fundamental enterprise feature to the OpenSearch stack: support for a FIPS*-compliance mode.

SAP manages more than 10,000 clusters across hyperscalers with OpenSearch and probably runs the largest OpenSearch installation worldwide.

*) Federal Information Processing Standard

Dive deeper

- The keynote at KubeCon + CloudNativeCon North America in November 2025 emphasized the announcement of SAP as an initial participant in the Certified Kubernetes AI Conformance Program. This initiative establishes community-led standards for running AI workloads on Kubernetes, ensuring consistency and portability across platforms.
- Listen to the podcast on OpenSearch with members of the Technical Steering Committee and Observability Technical Advisory Group (TAG), and find out how OpenSearch has grown into an AI-powered platform for search, analytics, and observability (published in October 2025).
- The keynote at OpenSearchCon 2025 North America covered open governance, open collaboration, and accelerating innovation with AWS, NVIDIA, and SAP.

SAP's Engagement in Foundations

Eclipse IDE Working Group

Since 2021, SAP has been a founding member of the Eclipse IDE Working Group. The group was established to ensure the long-term sustainability, integrity, and evolution of Eclipse IDE products. In 2025, SAP contributed to four releases of the Desktop IDE, which were shipped that year.

To strengthen its commitment to the Eclipse IDE ecosystem, SAP became a platinum member of the IDE Working Group in 2025.

> As a founding member of the Eclipse IDE Working Group, SAP plays a pivotal role in shaping the future of the ecosystem. With active contributions, dedicated community engagement, and platinum membership in 2025, SAP continues to drive innovation at the core of the Eclipse platform.
>
> **Sonja Liénard**, Head of ABAP Platform

Dive deeper

- In the Open Source Way podcast episode "ABAP and Open Source – A Senior Manager's Perspective" (published in November 2025), Sonja Liénard shares insights into SAP's history and contribution to the Eclipse ecosystem and the importance of open source collaboration.
- In the blog post "SAP's Engagement in the Eclipse IDE Working Group" (published in December 2025), Matthias Becker looks back over the engagement in 2025.

Cloud Foundry Foundation (CFF)

Cloud Foundry remains one of the most widely relied-upon runtimes in the SAP BTP portfolio. As a Platinum member, SAP holds leadership positions on both the Governing Board and the Technical Oversight Committee (TOC).

Key 2025 achievements include official IPv6 support, Cloud Native Buildpacks integration for secure container builds, new service binding methods, and customizable routing algorithms.

SAP's active participation in Cloud Foundry Day events in North America and its sponsorship of the event in Europe (see the blog post "SAP Perspective from Cloud Foundry Day Europe 2025" which has links to session presentations), combined with deep technical contributions across working groups, ensure the platform continues to evolve to meet enterprise customer needs while maintaining reliability and security at scale.

OASIS

In 2025, SAP collaborated as part of the Technical Committee on a new specification of the Data Aggregation Extension for OData to advance those parts of the functionality already used in SAP products toward OASIS Standard status.

Communities

Examples of Community Engagement

The value of active participation

Open source works best as a dynamic and interactive ecosystem. The greatest value of open source does not come from passive use, but from active engagement and participation. At SAP, we encourage community engagement as we observe that colleagues move closer to roadmaps, recognize risks earlier, and can influence foundational technologies that underpin our products and development infrastructure.

Examples of community engagement

Community members such as contributors, maintainers, members of working groups, or experts sharing their knowledge at conferences, meet-ups, webinars, or podcasts, contribute to the collaborative value creation of open source.

On the following pages, we highlight some of SAP's community engagements through events. SAP actively participated in major conferences by delivering presentations, sponsoring events, and setting up booths. It is the personal connections that enable collaboration built on trust and commitment in open source projects, strengthening the collaborative spirit essential to open source.

Facts and Figures

- The SAP Open Source Program Office (OSPO) has hosted webinars on open source topics since 2020.
- Did you miss one of our open source webinars, such as the discussion about open source MCP servers or the open sourced Architecture Center? You can find all the replays in our webinar archive.
- SAP's podcast "The Open Source Way" has over 50 episodes and was launched in 2020.
- The InnerSource Commons episode of The Open Source Way podcast features an interview with Danese Cooper, founder of the InnerSource Commons Foundation.

Dive deeper

- **Replays, slide decks, and publications** of SAP related open source content are available on the Open Source and InnerSource Publications page on the community page.
- Check out **upcoming events** and featured open source content on the SAP Open Source community page or search for the tag 'open source' if you have an SAP community user to learn about the latest open source blog posts.

Event Highlights Europe

KubeCon + CloudNativeCon, Europe

At this major cloud-native open source event, hosted by the CNCF in April 2025, SAP had a keynote walk-on to announce the NeoNephos Foundation. SAP, as a sponsor of this event, was showcasing its cloud-native open source projects at a busy booth. Also, SAP experts supported the Cloud Foundry booth. In addition, there was a presen-tation at the co-hosted Istio Day.

London
April 2025

KubeCon, organized by CNCF, is the world's leading Kubernetes event since 2015, attracting 10,000+ attendees including developers, cloud providers, and project maintainers.

UI5con Developer Conference, Germany

SAP hosted and organized UI5con and led sessions on OpenUI5 framework innovations. Internal and external experts showcased updates and strengthened ties with the front-end developer community. Find recordings, pictures, and further information about this event in St. Leon-Rot, Germany on the UI5con webpage.

St. Leon-Rot
June 2025

UI5con is the annual highlight for the UI5 community for almost a decade. More than 1400+ participants in 2025. In 2026, UI5con takes place in India for the first time.

re>≡CAP 2025 Developer Conference, Germany

This conference organized by SAP focuses on the SAP Cloud Application Programming Model (CAP) with experts delivering technical sessions on CAP, including architecture updates and hands-on workshops. Check out the recordings and pictures.

St. Leon-Rot
June 2025

reCAP with 1400+ participants is an opportunity to network with experts and to be part of shaping the future of CAP.

Container Days, Germany

SAP delivered sessions on Platform Mesh in the context of NeoNephos, and OpenMCP, connecting with Kubernetes operators. The talks demonstrated SAP's progress in composable, multi-cluster cloud architectures.

Hamburg
September 2025

Organized by Kubermatic, Container Days is one of Europe's top Kubernetes engineering events, running for nearly a decade.

InnerSource Summit, Germany

InnerSource Summit celebrated the 10th anniversary of InnerSource Commons in November 2025. SAP hosted this event in its Berlin office and gave the keynote and an additional presentation. This event took place around the clock in three different locations: Berlin, Yokohama, and New York, hosted by different organizations. Check out the session recordings.

Berlin
November 2025

Run by InnerSource Commons, the summit is the global reference point for InnerSource best practices for a decade now.

Event Highlights North America and India

UN Open Source Week, US

SAP presented its perspective on digital sovereignty and open infrastructure, aligning the principles of NeoNephos with global public digital goods efforts. The session by SAP's Open Source Program Office head, Peter Giese, demonstrated SAP's commitment to responsible open technology at an international level.

New York
June 2025

Organized by the United Nations (UN), the event convenes public-sector bodies, NGOs, open source leaders and policy-makers from 30+ countries.

OpenSearchCon North America, US

At OpenSearchCon North America in September 2025, SAP presented in the keynote together with AWS and NVIDIA.

SAP also participated in OpenSearchCon Europe in April 2025 with a presentation on enhancing application observability with OpenSearch and OpenTelemetry.

San Jose, CA
September 2025

Launched in 2022, these events hosted by the Linux Foundation gather experts in logging, search, and distributed observability. They attract practitioners building next generation telemetry pipelines.

Open Source India (OSI), India

As an Associate Sponsor, SAP delivered three major talks on open source contribution, Gardener, and AI governance. SAP's booth drew strong engagement from India's extensive open source talent pool, strengthening developer outreach at scale.

Bengaluru
November 2025

Running for 20+ years, OSI is India's largest open source event, with 5,000-10,000 attendees.

Learn more

Find an overview of presentations, publications, and recordings by SAP related to open source on the Open Source and InnerSource Publications community page.

Direct Contributor Funding

SAP uses a variety of open source projects with diverse governance models and capacities. Some are maintained by commercial entities, others by foundations, and many are sustained by individual maintainers who volunteer their time and resources.

Central fund for individual (external) maintainers

In 2025, we piloted a new approach to provide direct financial support to individual maintainers and smaller projects, complementing our ongoing engagements with larger entities and code-based contributions. After a successful pilot with three projects, we expanded the program using a central fund across SAP. Through this central fund, we prioritized direct support for widely used open source projects across SAP maintained by individual contributors.

We also opened a nomination route: Colleagues can propose projects or maintainers for funding. SAP employees who contributed to open source in 2025 were invited to vote on which nominated projects should receive funds.

Combining central selection with colleague nominations and voting, we selected fifteen additional projects and maintainers to receive monthly support for one year.

We are reviewing the program and refining our processes following this initial round, with plans for further funding cycles in 2026 to support more projects and maintainers.

Good to know

Europe's digital infrastructure depends on open source software, yet critical projects often lack sustainable support. Dedicated funding through initiatives like the German Sovereign Tech Fund, and the proposed EU Sovereign Tech Fund ensure these foundational technologies remain secure and resilient. Public investment addresses market gaps, particularly for smaller projects with few maintainers that underpin essential systems. Supporting open source ecosystems reduces dependency on external providers, strengthens innovation, and safeguards digital sovereignty.

SAP's commitment—through advocacy and funding—demonstrates how public-private collaboration can sustain vital open source infrastructure, ensuring long-term stability and security for Europe's digital future.

Dive deeper

- At **FOSDEM 2026**, we will present insights, context, and motivation behind our funding initiative in the session "An Enterprise Perspective on Open Source Funding."
- SAP authored a foreword for Funding Europe's Open Digital Infrastructure, reinforcing SAP's role in shaping EU-level open source funding strategy.

Culture

InnerSource Collaboration Model

Conway's Law

Have you heard of Conway's Law, an adage named after the computer programmer Melvin Conway? It states: "Organizations which design systems are constrained to produce designs which are copies of the communication structures of these organizations." In simpler terms, the structure and interactions within a software system tend to mirror the structure and communication patterns of the organization that built it.

How do development teams at SAP collaborate on cross-topics and overcome this challenge? What enables communication and internal collaboration? In this section, we share some insights on how development teams at SAP collaborate, which networks and forums exist, and which project setups are in place at SAP for open source contributors and users.

Collaboration model based on InnerSource methodology

SAP has developed a cross-company collaboration model called Cross Product Alignment (CPA) to address the challenges posed by Conway's Law in aligning architecture decisions and technology guidelines across different lines of business. This model ensures that guidelines are adopted consistently and that application development teams create integrated, unified solutions.

Examples of successfully applying this method based on InnerSource principles include working groups for Open Source and InnerSource, driven by the SAP Open Source Program Office. Within these working groups, different workstreams are treated as 'epics' in the context of agile development. Documents such as the forking guidelines or even this report were successfully co-developed within such workstreams.

Facts and figures about the CPA collaboration model

- The CPA collaboration model is the **largest InnerSource project** within SAP: Over 5,000 colleagues are involved, 35 working groups, 179 active work streams, 43 active technology guidelines, and numerous frontrunner implementations (November 2025).
- The CPA model is also being used for **non-architecture topics**, such as for improving SAP's open source governance processes and documents.
- **A central tool** supports the review process where subject matter experts from different lines of business review and cast votes.
- **Approvals** require a two-thirds majority for guidelines or documents to come into effect.

SAP's Open Source Champion Network

Local multipliers

To address the growing importance of open source and ensure coverage across SAP's global development locations, an organized network of open source enthusiasts foster a thriving open source culture within SAP. These so-called champions are local ambassadors, multipliers, and open source experts who work closely with the SAP Open Source Program Office (OSPO). They lead local roll-in and roll-out activities, represent SAP's open source efforts at internal and external events, serve as the first point of contact for open source topics, and act as trusted advisors to their developer colleagues.

Good to Know

- The champions network was launched in 2018.
- The network currently comprises 21 lab locations with 36 SAP open source champions worldwide.
- In 2025, jointly with the OSPO team, there were regional focus areas for dedicated local activities in India, China, and Brazil.

Local meet-ups, hybrid sessions on different open source topics, as well as casual gatherings such as lunches, strengthen relationships among developers and stakeholders with open source-related expertise and are important for sharing information and know-how.

Local Communities

Local flavors

As open source and InnerSource are about collaborating across many different types of boundaries, including geographical and cultural ones, it is important to acknowledge the challenges of leading a large global community while also embracing global diversity. The SAP Open Source Program Office has begun establishing local communities jointly with the open source champions to complement our already existing global communities. With this, we can cater to local needs and differences, empowering our different locations to innovate locally and share know-how globally.

> Open source and InnerSource are critical to how SAP builds technology and develops talent across the organization. Through shared ownership and collaboration, engineers learn and solve complex problems together. As our communities continue to grow, the depth of participation reflects the culture of collaboration we've built.
>
> **Sindhu Gangadharan**
> MD, SAP Labs India
> Head, Customer Innovation Services, SAP
> President, Indo German Chamber of Commerce

Activities (internal) in India

- LeadTogether is a collaborative initiative uniting communities to drive innovation and cross-team collaboration. It includes an open source and InnerSource forum led by OSPO, with monthly meetups focused on knowledge sharing, best practices, and community discussions.
- The Developer Experience Community links developers with engineering experts and equips them with AI tools, modern processes, and the right frameworks. OSPO sessions cover open source compliance, contribution at SAP, and practical InnerSource use cases.

Activities (internal) in China

- In China, the SAP OSPO organized local internal open source meet-ups jointly with the champions, sponsored by local management and hosted in SAP's lab locations in Shanghai, Beijing, and Xi'an.
- In 2025, the OSPO has also onboarded champions in new locations, such as Beijing and Chengdu.

Activities (internal) in Brazil

- *Internal Hacktoberfest*, SAP Labs Latin America: Inspired by DigitalOcean's hacktoberfest event (hacktoberfest.com) our champions in Brazil organized a local hands-on event where they invited colleagues onsite to learn about open source and how to apply its culture and methods internally with InnerSource.

What's Next?

Outlook 2026

The expansion of enterprise and agentic AI depends significantly on industry-wide standardization. Interoperability frameworks like Model Context Protocol (MCP) and the Agent2Agent (A2A) protocol provide shared communication standards and methods for agent identification. We are looking forward to helping further standardize the evolution of open source AI as a founding member of the **Agentic AI Foundation** (AAIF). As we advance this mission through AAIF, SAP also reaffirms its commitment to open source in our AI development.

As 2026 begins, SAP will sponsor Europe's largest open source conference, **FOSDEM**, and deliver numerous talks. Throughout the year, we'll maintain presence at conferences like KubeCon and Open Source India (OSI), sharing expertise and engaging in a global dialogue and collaboration on open source.

We will further invest in funding open source contributions and actively contribute to strengthen innovation, ensure sustainable investments, and safeguard digital sovereignty.

In 2026, SAP will continue its commitment through ongoing engagement with the open **Apeiro Reference Architecture** and long-term support via **NeoNephos**.

These efforts reflect the industry's growing maturity in open source adoption. SAP recognizes open source's significant value and remains committed to promoting its secure, compliant use while aligning with emerging legal requirements. Fostering collaborative development culture remains essential to our open source journey.

Thank you for your ongoing support and participation in 2025. Your dedication and enthusiasm count!

Ulrike Fempel
Program Lead,
SAP Open Source
Program Office

Related links and references:

- opensource.sap.com
- SAP GitHub
- SAP Open Source Publications
- Podcasts: The Open Source Way
- SAP Open Source Manifesto on GitHub

Get in contact:

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