Sparkplug

Eclipse Sparkplug Membership Prospectus

Who We Are

Sparkplug

The Eclipse Sparkplug Working Group is a group of like-minded companies and organizations that are driving the creation and stewardship of the Sparkplug specification strengthening awareness and adoption through an open branding and compatibility program. Sparkplug is an open source protocol specification that uses MQTT as a transport. The aim of the Sparkplug protocol is to ensure Industrial Internet of Things (IIoT) deployments are open and interoperable. Eclipse Sparkplug reduces complexity by using an MQTT broker as the pillar of the solution architecture, thus avoiding complicated architectures and custom connections.

Global IIoT players such as Canary Labs, Cirrus Link, Chevron, Inductive Automation, HiveMQ, and ORing choose the Sparkplug protocol and related technologies to rationalize access to industrial data, improve the interoperability and scalability of solutions, and provide an overall framework for supporting Industry 4.0.

The working group is currently working on a Technology Compatibility Kit (TCK) and a compatibility logo program that will give the opportunity to solutions providers to certify that their product is Sparkplug compliant. Certified products can be branded Sparkplug compatible. Moreover, the Eclipse Tahu project provides an open source implementation of the Eclipse Sparkplug protocol.

What Our Members Say

Leading players in the IIoT industry are strongly committed to a thriving and sustainable Sparkplug ecosystem based on open source technical specifications and associated implementations hosted by the Eclipse Foundation. Here is what our members say about their Eclipse Sparkplug membership.

"The demand for interoperability of industrial systems has never been stronger. An open source protocol that provides operations with access to the data they need while balancing IT's mandate for security will deliver the adoption of IIoT solutions. MQTT is the necessary protocol, Sparkplug is the needed specification, and the Eclipse Foundation is the perfect steward [...]."

– Jeff Knepper
Executive Director, Canary Labs

"As one of the co-inventors of MQTT over 20 years ago, I couldn't be more pleased to see the Sparkplug specification bring MQTT back into the original market sector it was developed for in the first place. The Eclipse Foundation's successful track record in this space with projects like Eclipse Paho and others is precisely what the emerging IIoT industry requires [...]."

– Arlen Nipper
Chief Technology Officer, Cirrus Link Solutions

"Sparkplug is the ideal means to promote the successful use of MQTT in IIoT applications. A big part of what we do is making it possible to build connected products for applications where safety is critical. As a result, we are excited to provide a highly reliable and highly scalable MQTT broker for customers who are deploying Sparkplug."

– Dominik Obermaier
Chief Technology Officer and Co-Founder, HiveMQ

What Our Members Say

Sparkplug

"For Inductive Automation to join the Eclipse Foundation Sparkplug Working Group as a strategic member was an easy decision. No one company has all the answers and we need a standard - Sparkplug! We want to be part of the solution and participating here allows us to contribute."

– Don Pearson Chief Strategy Officer Inductive Automation

"It is ORing's great honor to work with the Sparkplug Working Group founding members to develop MQTT-Sparkplug technology for the next generation of IoT and smart city solutions. [...] MQTT-Sparkplug is the best solution to solve IoT device compatibility issues and can manage the status of IOT devices in real time."

– Angus Shih Chief Executive Officer ORing

The Opportunity

Sparkplug

Businesses, organizations and individuals join the Eclipse Sparkplug Working Group to drive the evolution and broad adoption of the Sparkplug protocol and related technologies that underpin open and interoperable IIoT solutions.

Members joining the Sparkplug Working Group directly impact the future success of hundreds of thousands of automation projects by enabling 'plug and play' IIoT, and take advantage of the following benefits:

- **Maintain** and evolve the Eclipse Sparkplug specification, and have a direct impact on the future success of thousands of automation projects

- **Participate** in a thriving developer community and contribute to the Eclipse Tahu open source implementation of Sparkplug

- **Certify** their Eclipse Sparkplug compliant products and use the relevant compatibility logo and trademarks in their marketing activities

- **Contribute** to the overall technical and business strategies related to Eclipse Sparkplug

- **Educate** others on the benefits of MQTT and Sparkplug technologies to accelerate product development as shown below

- **Contribute** to establish and drive a funding model that enables the Eclipse Sparkplug Working Group and its community to operate on a sustainable basis

- **Play** a role in defining compatibility rules and a compatibility and branding process for implementations of these specifications to ensure application portability

- **Ensure** the Eclipse-defined licensing and intellectual property flows encourage community participation, protect community members, and encourage usage

- **Publicly** demonstrate their support for IIoT and Sparkplug ecosystems, showing their commitment to the technology and its strategic relevance by communicating and evangelizing the technology produced by the Sparkplug Working Group.

The Opportunity

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In a functional perspective, Eclipse Sparkplug technologies provide the following benefits:
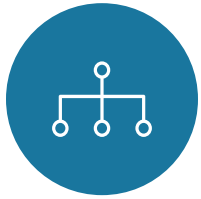
Single source of truth:
Configure Models, Assets, and Process Variables once at the source and deploy to the entire enterprise

Decoupled data:
No longer maintain custom point-to-point connections between various data sources.

Immediate discovery:
New machine Models, Assets, and Process Variable data become immediately available to all subscribers

Inherited security:
Leverages TLS for data transport and requires no open port for edge of network devices.

State Awareness:
Birth and death certificates provide subscribing clients confidence in data validity

An Open, Vendor-Neutral Community

The Eclipse Foundation's clear, vendor-neutral rules for intellectual property sharing and decision-making make it easy to collaborate with other organizations on driving rapid Industrial IoT innovation. The Sparkplug specification is developed in a publicly accessible GitHub repository, using the AsciiDoc open document format. This makes it possible for anyone to contribute to the specification, although the specification project team has the last word about any proposed changes. The Eclipse Development process and Eclipse Foundation Specification Process ensure that a level playing field is maintained among all contributors to a specification and its open source implementation.

Once put into place, the Eclipse Sparkplug compatibility logo program will give the opportunity to the adopters of the technology to certify that their products and solutions properly implement the Sparkplug specification. This certification process will be supported by an open source TCK that any organization will be able to download free of charge. Members of the Eclipse Sparkplug Working Group will be authorized to feature the relevant compatibility logos and trademarks in their marketing once they submit the results of a successful TCK run against their implementation to the Eclipse Foundation.

⚡ Sparkplug COMPATIBLE

Key Services

1. **Development Process** - The Eclipse Foundation community has a well-earned reputation for producing high-quality software, reliably and predictably. The Eclipse Development Process consists of a set of community-driven processes and rules that form our best practices which can be implemented into new open source projects.

2. **Specification Process** - The Eclipse Foundation Specification Process leverages and augments the Eclipse Development Process and adapts it to the context of open source specifications. It ensures specifications are managed and developed openly and transparently by the community.

3. **IP Management** - Eclipse IoT and Sparkplug projects are licensed under the Eclipse Public License (EPL), a commercial-friendly OSI approved license, or other comparable licenses.

4. **Ecosystem Development and Marketing** - The Eclipse Foundation's marketing and technical evangelism programs grow the Eclipse Sparkplug brand, raise awareness and adoption of IIoT open source technologies, promote IIoT community engagement, and showcase the participation of our members in the Eclipse Sparkplug Working Group. We organize a number of activities, including cooperative marketing events with member companies and physical and virtual conferences, and support the IoT community's presence at industry trade shows.

Key Services

5. **Compatibility Logo Program** - Eclipse Sparkplug Working Group members can leverage distinctive logos and trademarks in their marketing for their products that have been certified compatible. This certification is accomplished through the use of an open source TCK which anyone can download free of charge.

6. **IT Infrastructure** - The Eclipse Foundation provides vendor-neutral, reliable, and scalable services for IoT technology developers and users. IT infrastructure services delivered to the Eclipse community include source code repositories, build infrastructure, development-oriented mailing lists and newsgroups, a download site, and website.

7. **Market research** - Our annual IoT Developer and IoT Commercial Adoption surveys are widely cited in the IT press and beyond. Working group members get access to the complete data set and additional insights.

8. **Community activities** - The Eclipse Foundation organizes monthly calls for the working group, enabling member organizations to receive project updates and exchange about business opportunities. The working group also organizes webinars through the Virtual IoT Meetup on meetup.com, reaching to audiences outside the core members of the working group.

Membership in the Eclipse Sparkplug Working Group

The Eclipse Sparkplug Working Group offers three levels of membership: Strategic, Participant, and Guest. Please see the Eclipse Sparkplug Working Group Charter for full details.

Membership in the Eclipse Sparkplug Working Group

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Strategic Members

Strategic Members are organizations that view IIoT standards and technologies as strategic to their organization and are investing significant resources to sustain and shape the activities of this working group.

Strategic Members of the Eclipse Sparkplug working group must be at least a Contributing Member of the Eclipse Foundation, and have a minimum of 3 developers participating on Eclipse Sparkplug projects, and made at least one accepted commit or pull request to a Sparkplug project within the last 12 months.

Participant Members

Participant Members are typically organizations that deliver products or services based on open IIoT standards and technologies, or view IIoT standards and technologies as strategic to their organization. These organizations want to participate in the development and direction of an open IIoT ecosystem.
Participant Members of the Eclipse Sparkplug Working Group must be at least a Contributing Member of the Eclipse Foundation.

Membership in the Eclipse Sparkplug Working Group

Guest Members

Guest Members are organizations which are Associate members of the Eclipse Foundation who have been invited for one year, renewable, by the Steering Committee to participate in particular aspects of the activities of the Working Group. Typical guests include R&D partners, universities, academic research centers, etc. Guests may be invited to participate in committee meetings at the invitation of the respective committee, but under no circumstances do Guest members have voting rights. Guest members are required to execute the Eclipse Sparkplug Participation Agreement.

For more information on all the benefits of Eclipse Foundation memberships, the annual fees structure for Foundation memberships, and more, download the Eclipse Foundation Membership Prospectus.

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Membership Fees

The following fees have been established by the Eclipse Sparkplug Steering Committee. The following are the annual fees associated with each class of membership in the Eclipse Sparkplug Working Group. All working group fees are in USD. These fees for participation in the Sparkplug Working Group are separate from the fees for Membership At-Large in the Eclipse Foundation. All members of Eclipse Working Groups are required to be at least Contributing Members of the Eclipse Foundation.
The following requirements are included:

- Strategic members are required to execute the Sparkplug Participation Agreement.
- Strategic members are required to commit to three (3) years of membership.

Eclipse Sparkplug Strategic Member Annual Participation Fees

Annual Corporate Revenues > $1 billion	$20,000
Annual Corporate Revenues > $500 million but less than or equal to $1 billion	$15,000
Annual Corporate Revenues > $100 million but less than or equal to $500 million	$10,000
Annual Corporate Revenues > $10 million but less than or equal to $100 million	$5,000
Annual Corporate Revenues > $10 million	$1,500

Membership Fees

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Sparkplug Participant Member Annual Participation Fees

- Participant members are required to execute the Sparkplug Participation Agreement.

Corporate Revenue	Annual Fees
Annual Corporate Revenues greater than $1 billion	$10,000
Annual Corporate Revenues less than or equal to $1 billion but greater than $10 million	$5,000
Annual Corporate Revenues less than or equal to $10 million	$500

Sparkplug Guest Member Annual Participation Fees

Guest members pay no annual fees, but are required to execute the Sparkplug Participation Agreement.

Sparkplug

Join us!

To join the Eclipse Sparkplug Working Group or learn more about the advantages of membership, please contact the Membership Coordination Team at membership@eclipse.org.