Eclipse Science Working Group Charter

November 2020 - Revision history at end.

Purpose

The Science Working Group (SWG) works to solve the problems of making science software inter-operable and interchangeable.

The SWG, hosted by the Eclipse Foundation, is a collaborative effort involving industry, academia, and government to develop reusable open source software for scientific research. The SWG provides governance and infrastructure to establish common principles, and enable a collaborative approach to producing technologies used for interdisciplinary analysis of scientific data. The group may package components to regularly release a trusted distribution of software. Group efforts help permeate concepts and capabilities to different research areas which allows serendipitous discoveries to be made.

Interoperability is essential for scientific research. To address this issue, the SWG will strive to collaboratively develop well defined interfaces, models, definitions, algorithms, and reusable software libraries, services, and applications.

The SWG will strive to become an essential forum for engagement with industry including adoption of SWG output and contribution to SWG initiatives.

Scope

The SWG is language and platform agnostic and develops software in the following domains:

- Standard descriptions and definitions of scientific data.
- Processing and management of 1D, 2D and 3D data including both structured and unstructured grids.
- Plotting and visualizations of data in 1D, 2D and 3D.
- Workflow algorithms and their visualization.
- Machine learning, artificial intelligence and data mining.
- Modeling and simulation projects related to the physical sciences, including but not limited to physics, chemistry, biology, geology, and hydrology.
- Modeling and simulation projects related to the social sciences, including but not limited to sociology and psychology.

- Applied mathematics projects such as common math libraries and mesh management tools and with the exception of cryptography.
- Infrastructure to support scientific computing, such as tools for job launching and monitoring, parallel debugging, and remote project management.
- Control systems for analytical hardware.

Connections with other groups

The SWG will also work in collaboration with other related groups and Standards organizations in order to avoid fragmentation and duplication of effort. A particularly close relationship is anticipated with other Eclipse Foundation working groups such as LocationTech and IoT.

The SWG acknowledges the contribution of projects such as the Eclipse Parallel Tools Platform (PTP) project, which has been developing infrastructure and tools for scientific computing for over a decade. The SWG intends to utilize and build upon infrastructure of this nature wherever possible.

Governance and Precedence

All SWG members must be parties to the Eclipse Foundation Membership Agreement, including the requirement set forth in Section 2.2 to follow the Bylaws and then-current policies of the Eclipse Foundation, including but not limited to the Intellectual Property and Antitrust Policies.

Online voting will be used as a mechanism for the steering committee to make decisions. A vote may be organized by any member. Voting rights are described below. A vote is a way of gauging preference from active members of the group.

In the event of any conflict between the terms set forth in this SWG Charter and the Eclipse Foundation Bylaws, Membership Agreement, Eclipse Development Process, Eclipse Working Group Process, or any policies of the Eclipse Foundation, the terms of the Eclipse Foundation Bylaws, Membership Agreement, process, or policy shall take precedence.

Applicable documents

Add "The following governance documents are applicable to this charter, each of which can be found on the Eclipse Foundation Governance Documents page or the Eclipse

Foundation Legal Resources page:

- Eclipse Foundation Bylaws
- Eclipse Foundation Working Group Process
- Eclipse Foundation Working Group Operations Guide
- Eclipse Foundation Membership Agreement
- Eclipse Foundation Intellectual Property Policy
- Eclipse Foundation Membership Process
- Eclipse Foundation Development Process
- Eclipse Foundation Trademark Usage Guidelines
  - Eclipse IP policy

Participation guidelines and membership

There are 4 levels of participation in the SWG. The rights and responsibilities are as follows.

Guest Members

Guest members are persons or organizations of note that are invited by the Steering Committee to participate for a 1 year term, without dues, with the following obligations. Guest membership is intended as a prelude to full participation.

Guest members are required to:

- Be an Eclipse Foundation member in good standing.
- Regularly participate in the Working Group meetings.
- Guest members are non-voting members.

Participating Members

Participant Members are organizations that view the SWG technology as an important part of their organization's activities. These organizations want to participate in the development of the ecosystem.

Participating members are required to:

- Be an Eclipse Foundation member in good standing.
- Regularly participate in the Working Group meetings.
- Participant members are voting members.

Steering Committee Members

Steering Committee Members are organizations that view SWG technology as strategic to their organization and are investing resources to sustain and shape the activities of this group.

Steering committee members are required to:

- Be a Strategic, ~~Enterprise~~ or Contributing~~Solutions~~ member of the Eclipse Foundation in good standing.
- Provide sustained year-over-year development from two or more persons, that contribute to the activities of the group. The activities can include:
  - committers working on Eclipse open source projects that support the group's roadmap
  - creation of roadmaps and technical documents (including, for example, architectures, blueprints and best practices) supporting the group's work
  - evangelism and community development for the working group and other activities agreed to by the Steering committee
- Participate in the working group meetings and provide timely feedback on the working group documents.
- Provide announcement support for working group announcements, releases, and other output.

Steering Committee members are voting members.

Steering Committee members also:

- Nominate and vote to invite Guest and Participant members (without dues).
- Identify and vote to remove members.
- Propose and vote on SWG charter modifications.

Committer Members

SWG projects are full fledged Eclipse Foundation projects, and committers for SWG projects have all the rights and privileges that entails.

In addition, the SWG Steering Committee will have 1 committer representative nominated and elected by their SWG committer peers. 1 additional elected committer representative will be added for every 3 Steering Committee members. SWG elections shall use single transferable voting.

Charter Version History

November, 2020 - Updates in support of the Eclipse Foundation corporate restructuring