Eclipse Science Working Group Charter

Vision

The Science Working Group is composed of commercial and not-for-profit organizations with a shared vision to deliver great scientific and engineering software on the eclipse platform. The intention is to provide an infrastructure for inter-operability between scientific and engineering applications, a framework upon which we can build our own applications while sharing in common functionality. The aim is to define standards which allow functionality to be shared and to do this by concrete java APIs.

The shared layer could do for the science and engineering sector what the eclipse platform has done for application software development: move commonly developed concepts into APIs exposed by extension points and services. The primary areas in which the group has identified are:

1. Data description / definition
2. Plotting, including 1D, 2D and 3D
3. Workflow algorithms and their visualization (GEF, Graphiti, etc.)

This vision will expand over time to include more areas on which modular features can be designed and agreed. Where an eclipse project already exists which meets a common need, we welcome new participants and participate in return with other groups and projects.

Goals

The working group will produce and manage a shared eclipse project which is contributed by members of the group.

The quantitative software development goals are:

1. To produce well defined and designed API s for our core vision concepts including examples of how to use them.
2. To produce one or more implementations of the APIs based on our existing solutions in these areas.
3. To have this code made available in an eclipse project (involves licensing reviews and other eclipse project processes).

In addition to the software goals the group has qualitative goals which include:

1. To promote the usage of core APIs and contribution to them.
2. To increase the robustness and usability of scientific software.
3. To enable interdisciplinary research and development.
4. To solve problems as a community and hence to lower the costs of development.
5. To inspire students and scientists to use and utilize open source software.
6. To help industrial partners to get better products.
7. To help new members understand how to use the APIs and examples.

Governance

There is no fee to be on the steering committee or a member of the group.

<u>Steering Committee</u>
There is a steering committee as described in the Industry Working Group Process document. A steering committee member will provide resources to the group for instance committers to the shared project, technical documents and testing of APIs. Inactivity or inequality with other members contributing in these areas may result in the member of the committee being reclassified as a member participant, subject to a vote of the rest of the committee should they object.

Members of the steering committee will meet at EclipseCon BoF sessons and welcome member participants and new participants to join the sessions. The committee has a mailing list and through it the committee are in close contact regarding the nature of the working group's eclipse project and intended areas of software development. The steering committee will have a yearly meeting to discuss future developments and directions. This meeting will not normally coincide with EclipseCon. It is suggested to be at the site of a committee member. Current members

(TODO*: Need everyone to decide if/how they want to appear*)

- Diamond Light Source Ltd.
- European Synchrotron Radiation Facility
- IFP Energies Nouvelles
- iSencia Belgium
- German Aerospace Center
- MARINTEK
- Oak Ridge National Laboratory
- Paul Scherrer Institute
- University of Hamburg
- Uppsala University

The steering committee has a chair-person whom organises and chairs meetings and BoFs. This is a voluntary position from among those whom contribute the most resources to the working group or are most active in organising the group. This position may be subject to voting where multiple candidates exist. At EclipseCon BoF, the chair may delegate a lead for the BoF when they are not planning to attend.

Voting Procedure

Following a meeting or email discussion, steering members can make use of on-line voting, like doodle, to vote on the issue. This will be done when agreement is not universal or where a steering committee member requests it. It will be organised by the chair, except where the vote is for a chair. Steering committee members are expected to make their views clear on the email list such that a vote can be arranged.

The vote should consist of individuals from steering committee members whom are directly involved in contributing resources. In this way the vote result will be approximately proportional to the contributors. Voting is not private; it is visible on-line, for instance doodle. Steering group members have the right to object to a participant in the vote if they are not contributing resources to the group, the chair will moderate this (subject to further voting on accepting the voter if agreement cannot be reached).

Member Participants

Members may or may not be on the steering committee. They can have their own eclipse projects and/or commercial applications and contribute to the working groups shared APIs at the point where they choose, for instance if they require new functionality – or not to contribute simply reuse. They are not required to run or participate in meetings or contribute code and may provide requirements but will not normally vote in decisions unless they attend meetings. Members will be notified of events in the group by the steering committee.

Applicable Documents

- **Eclipse Bylaws**
- **Industry Working Group Process**
- **Eclipse Membership Agreement**
- **Eclipse Development Process**

Website

The Science Working Group aims to have a web site. The web site may be part of the eclipse project and should be created after the initial eclipse project has delivered some functionality. The steering committee will vote in the details of the site. Once available steering committee members are required to make reference to the site on their web sites and presentations in the case where they have made use of the eclipse science working group code base.

Infrastructure

The Science Working Group infrastructure will be provided by the shared eclipse project. This will provide a git repository and test server.