LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY
- LIGO -
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Operating Procedures for the LIGO/LSC Software Change Control Board		
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LSC and LIGO

This is an internal working note of the
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Charter of the Software Change Control Board (SCCB)

1. The purpose of the SCCB:

   The LIGO Lab and the LSC have adopted software specifications that are intended to foster widespread use and collaborative development of well-tested analysis packages. In order to meet this goal, the software and software specifications must remain reasonably stable so the ground won't be shifting under the developers. On the other hand, as real problems are identified, changes may need to be made. The charge to the SCCB is to strike a balance between stability and flexibility of the software. They should do this by adding order, common sense and some inertia to the change process. The purpose of this charter is to lay out how the SCCB should operate.

2. The software governed by the SCCB:

   The LSC Software Coordinator in conjunction with the LIGO Lab directorate will decide what is to be governed by the SCCB. The list of items that are formally under the charge of the committee will be appended to this document.

   As a general rule, the initial drafting of software specifications should be done by working groups and not by the SCCB. Only after the specifications have had some "field testing" should they be placed under the purview of the SCCB.

3. Procedure for requesting a change:

   An individual or group should submit a written (email) request for software changes to the LSC Software Coordinator [currently agw@gravity.phys.uwm.edu]. In most cases, this should be a light-weight, one-page email. The request should include:

   (a) a description of the change.

   (b) the rationale behind the requested change, including the (dis)advantages of (not) making the change.

   (c) an estimate of the impact of the change on other systems and software.

   (d) a plan for implementing the change that addresses who will do the work.

4. The criterion for making a change:

   The change should be adopted if the benefits outweigh the costs of making the change.

5. The SCCB decision process should include:

   (a) iteration with those requesting the changes.

   (b) technical input from the Board itself, or others the Board feels should be consulted.

   (c) an assessment of the impact of (not) making the change.

   (d) input from the Lab and the LSC hierarchy, as well as other projects (GEO, VIRGO, TAMA, etc.) that might be affected by the change. In particular, the SCCB will work with the Lab to honor agreements with other projects that pertain to jointly maintained software specifications.

   (e) input from the rank and file code developers that might be affected by the change.

(f) the viability of the plan for implementing the change.

(g) common sense.

The committee will try to reach a consensus on whether the change should be adopted. In the absence of a clear consensus, the board will formally vote on the changes. The software coordinator will break tie votes.

6. Responsibilities of the LSC Software Coordinator in the SCCB process:

(a) Make sure that requested changes move through the process, i.e. pass the information to the committee, convene the meetings, etc..

(b) Set the pace and priorities for the decision process. Some changes are urgent, others are trivial, and still others things can (should) wait.

(c) Inform the Lab Directorate and the LSC spokesperson what changes are before the committee. This is to insure they have an opportunity for input regarding scheduling and coordination with other projects.

(d) Insure that the rank and file programmers are notified and have a chance to comment on significant changes.

(e) If the SCCB concludes that a change should be made, the Software Coordinator will act on behalf of the LSC spokesperson and LSC Executive Committee to see that the change is carried out.

SCCB Members:
The LSC Software Coordinator (in consultation with the LSC spokesperson) will appoint the members of the SCCB. Currently, they are:

1. Stuart Anderson

2. Jolien Creighton

3. John Zweizig

Software specifications formally under the SCCB's purview (as of April 2001):

1. The LAL Spec. [Formally known as "Numerical Algorithms Library Specification and Style Guide", dcc number T990030. The most up-to-date version can always be found in the developers LAL CVS archive.] Significant changes to LAL Spec that are pending before the committee will be announced on the LAL developers email lists.

2. The FRAME Spec. [Formally known as "Specification of a Common Data Frame Format for Interferometric Gravitational Wave Detectors (IGWD)", dcc T970130-D-E].

Maintaining this document:
The LSC Software Coordinator will maintain the LaTeX source for this document in the LAL code development archive. The most up to date version can be found there. A pdf version of this document will be kept in the LIGO document control center.