TG1 Convener's Report to TC39
12 April 2006

Officers

Convener: Mr. Brendan Eich, Mozilla Foundation

Editor: Mr. Jeff Dyer, Adobe Corporation

Meetings

TG1 has weekly teleconferences, and monthly face-to-face meetings, starting in late 2005.

TG1 will be meeting in person 20-21 April 2006, soon after this TC39 meeting, in Redmond, WA, USA, hosted graciously by Microsoft

The next monthly face-to-face meeting after that will be in late May, hosted by Mozilla.

Attendees

The weekly teleconferences have been attended by representatives from members: Adobe Corporation, Apple Computers, Microsoft Corporation, Mozilla Foundation, Opera Software, and invited experts Mr. David Herman of Northeastern University and Professor Cormac Flanagan of University of California Santa Cruz.

Representatives of these same members have attended monthly face-to-face meetings and continue to do so.

Progress

Over the last 6 months, TG1 has had many phone conferences as well as face-to-face meetings.

Early this year we migrated the draft specification for ECMAScript Edition 4 into a wiki, in order to facilitate editing and rapid proposal and commenting.

Using the wiki, TG1 has gathered proposals and clarifications. The period for making new proposals is over, and we are currently focusing on specifying and evaluating candidate proposals.

Our invited experts have been busy prototyping checkable semantic models, evaluating two term rewriting systems and selecting one (Stratego). The goal is to model the type system and a subset of runtime semantics sufficient to prove soundness.

Latest Status

TG1 proposes to open the wiki for read-only public access with comment pages, ideally by 1 June.

We also aspire to build a unified open test suite with which to test emerging implementations.

We expect to have a complete specification by 1 September.

We anticipate work checking the spec, incorporating feedback and possibly actual model language from the checkable semantics, and formatting and polishing, to require at least four months. Therefore we anticipate presenting the completed Edition 4 of ECMA-262 by the end of the first quarter of 2007.

One change from the last report: TG1 intends *not* to fold ECMA-357 (ECMAScript For XML, "E4X") into Edition 4 of ECMA-262 as normative. Some implementations do not interact with XML much or at all. Certain implementations would have difficulty fitting E4X along with Edition 4 in their small-memory target devices. We are including grammatical place-holders for E4X syntax, and we expect to refine ECMA-357 in the future, based on experience with E4X and Edition 4's type system.

Drafts to be submitted to TC for adoption

None

Recommendations

None

Brendan Eich

Convener TG1