

**Minutes of the:
held in:
on:**

**Ecma TC39-TG1
Phone conference
30th August 2006**

Attendees

- Jeff Dyer, Adobe Systems
- Brendan Eich, Mozilla Foundation
- Graydon Hoare, Mozilla Foundation
- Michael O'Brien, mbedthis
- Dave Herman, Northeastern University
- Lars Hansen, Opera Software
- Cormac Flanagan, UC Santa Cruz
- Doug Crockford, Yahoo!

Agenda

- Recent wiki changes
- Followups from past meetings
- Plans for next meetings

Discussion

- From last week: Dave asks rationale for `cast` in addition to `to`
 - `downcast` (`cast`)
 - user-defined conversion (`to`)
 - predefined conversions between unrelated types (`to`)
 - `function(int) : int @ function(double) : double` is not a cast
 - it be done using “the bit” (`runtime_types_and_conversions`'s “Solution 8”)
 - implicit, or if explicit, via `to` operator?
 - `cast` goes from supertype to subtype (nominal or structural)
 - This is necessary under the hood
 - It's useful in the surface language in some cases, and less verbose than `type switch`
 - Consensus is that we should expose `cast` separately from `to`
 - `* @ int` doesn't need `cast` or `to`.
 - Dave to clean up spec
- documentation/triple_quotes need work
- Interfaces with generic methods and data
 - Graydon: MI means you have to go through vtbls for everything, data as well as methods
 - alternative is to be explicit and require get and set method pair instead of var
 - Jeff: lots of ways to implement, not clear which is best @ defer.
 - Lars: complexity budget full, excepting syntactic sugar

- Graydon: languages (Scala, Fortress) have constraints declared with interface on implementing classes
- Consensus: defer, implementations may experiment
- Dave: can we defer yet future-proof? Seems like reserved by default nature of new syntax suffices

- Implementations
 - Main thing to start to implement: type system in full.
 - Cormac and Dave to push [spec:type_system] forward. Reviewable but not complete next week.
 - Implementors: Lars, Jeff, Dave, some Mozilla?
 - Decimal? Graydon: libgcc has an implementation
 - Lars: need review of number spec – Graydon will do it.

- Another item from last week
 - Union type implicit conversion – first type only rule simplistic?