

Austin Group Progress Report

The Austin Group was formed in September 1998 with the intention of handling the ongoing development of the core POSIX standards in a joint development effort between ISO, IEEE and The Open Group. All three organizations had been involved in the previous POSIX developments, but there was considerable duplication of effort, particularly with respect to the Single UNIX Specification and the core POSIX standards.

A set of joint operating procedures (known as JDOCS) were developed, and agreed on by all three organizations. JDOCS requires each of the three organizations to approve any specification individually.

From the JTC 1/SC 22 perspective, WG 15 was the working group responsible for POSIX, and hence the WG that handled the interface to this new development mechanism. It is important to note that the Austin Group is not a separate entity, and has no legal standing of its own. It is simply what the group consisting of members of each of the three organizations calls itself when it is considering POSIX matters. WG 15 created two rapporteur groups, one to handle the development of the JDOCS procedures (with Keld Simonsen as the Lead Rapporteur), and the other to act as the WG 15 entity whenever the Austin Group held meetings. This second group was lead by Nick Stoughton.

The procedures RG concluded its work by approving the JDOCS document.

The document development group has been represented at almost every Austin Group meeting since September 1998 (apologies have been presented at approximately five teleconferences).

As documents (specifications) become ready for some form of approval, they are balloted separately by each of the three organizations. Since the POSIX specification is an international standard, such balloting is a letter ballot of SC 22 members.

To date, there have been three full letter ballots issued, and all approved, through this mechanism: POSIX:2001 (a full revision), Technical Corrigendum 1 (2002), and Technical Corrigendum 2 (2003). The first of these deliverables, the full revision of POSIX, involved a total restructuring of the specification, and had an extensive scope. This scope is available at http://www.opengroup.org/austin/docs/austin_9r6.txt.

The following list highlights all of the approvals by all three organizations on the Austin Group specifications:

- Sep 15 2004, ISO/IEC published Technical Corrigenda ISO/IEC 9945:2003/Cor-1:2004
- April 2004, IEEE and The Open Group publish 2004 Edition of the standard.

- April 2004, ISO/IEC ballot for TC2 passes.
- December 2003/February 2004, The Open Group and IEEE Approve Technical Corrigendum 2
- August 2003 - ISO/IEC publish 2003 edition of standard
- February 2003 - The Open Group and ISO Approve Technical Corrigendum Number 1
- December 11 2002 -- IEEE approves Technical Corrigendum Number 1.
- November 14 2002 -- ISO/IEC announces International approval of the standard.
- September 19 2002 -- The standard has passed its final FDIS ballot at ISO .
- December 6th 2001 -- the IEEE Standards Board approves the Austin Group Specification as IEEE Std 1003.1
- October 11 2001 -- The ISO/IEC Second FCD Ballot Passed.
- Sept 12 2001 -- The Open Group approves the Austin Group Specification as an Open Group Technical Standard.

The specification is published independently by each organization. However, whichever way it is obtained, it is the *same* specification. The basic methodology of this approach has been described as “write once, adopt everywhere”. An HTML version of the specification is freely available via The Open Group. This level of openness has led to a much wider adoption of the specification, and all of the leading Open Source operating systems, while possibly not strictly conforming, and least adopt the vast majority of interfaces. IBM's AIX5, and Green Hills' Integrity 5 PPC products have been certified by The Open Group as fully conforming.

The Austin Group us about to hold its ninth face to face meeting. However, it also meets approximately twice a month via teleconference. A large amount of the discussion on issues occurs on the email lists run by The Open Group. The primary list has approximately 600 participants involved, including

- AT&T
- Bull SA.
- Canada Customs and Revenue Agency
- Cognos, Inc
- DKUUG
- FreeBSD
- Future Technologies, Inc.
- Hewlett Packard Company
- IEEE Inc.
- International Business Machines, Corporation.

- Investmentclub BAXX GbR
- Linux Standard Base
- Lockheed Martin
- Marconi Communications
- Microsoft
- Mount Bonnell, Inc.
- NetBSD
- Perennial
- Red Hat Inc.
- Rogue Wave Software, Inc.
- Sun Microsystems Inc.
- SuSE Linux AG
- The Open Group
- The University of Alberta, Canada
- The US Department of Defense
- USENIX Association.

The Open Group also runs a certification program

As the five year reaffirm/revise/withdraw deadline approaches, the Austin Group is considering material for a new revision. Several new items have been proposed, and will be discussed at the forthcoming meeting. These include:

- Interpretation / defect resolutions deemed to complex or controversial for a technical corrigenda.
- Resolution of conflicts between POSIX and the LSB, DIS 233360.
- Additional common APIs (based on glibc interfaces)
- Access Control Lists (based on the abandoned POSIX.1e and POSIX.2c projects)
- High Resolution timestamps (there will probably be no development on this, as the original proposer has withdrawn the item; however it is still on the agenda)

At the September 2004 SC 22 meeting, Nick Stoughton was appointed the interim Organizational Representative from SC 22 to the Austin Group. The new POSIX Advisory Group should form a recommendation on the future of this position. Mr Stoughton has indicated his willingness to continue in this role.