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# **Austin Group**

## ***Status Update February 2007***

***<http://www.opengroup.org/austin/>***

# Summary

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- ❑ The Austin Group
- ❑ JDOCS Procedures
- ❑ Participation
- ❑ Draft Development Methodology
- ❑ Maintenance Procedures
- ❑ Plenary Meeting Goals
- ❑ Plenary Meeting Deliverables

# The *Austin Group*

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- ❑ The Austin Common Standards Revision Group
- ❑ An open industry initiative to revise the core *POSIX standard* and the *Single UNIX Specification*; standards that lie at the heart of today's open systems
- ❑ Chair and editors from The Open Group

# The *Austin Group*

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- ❑ Electronic participation
- ❑ Participation in the group is free
- ❑ Deliverables:
  - IEEE Std 1003.1 (POSIX.1) (incl former 1003.2)
  - The Open Group Base Specifications Issue 6
  - ISO/IEC 9945
  - (they are the same document!)

# About the *Austin Group*

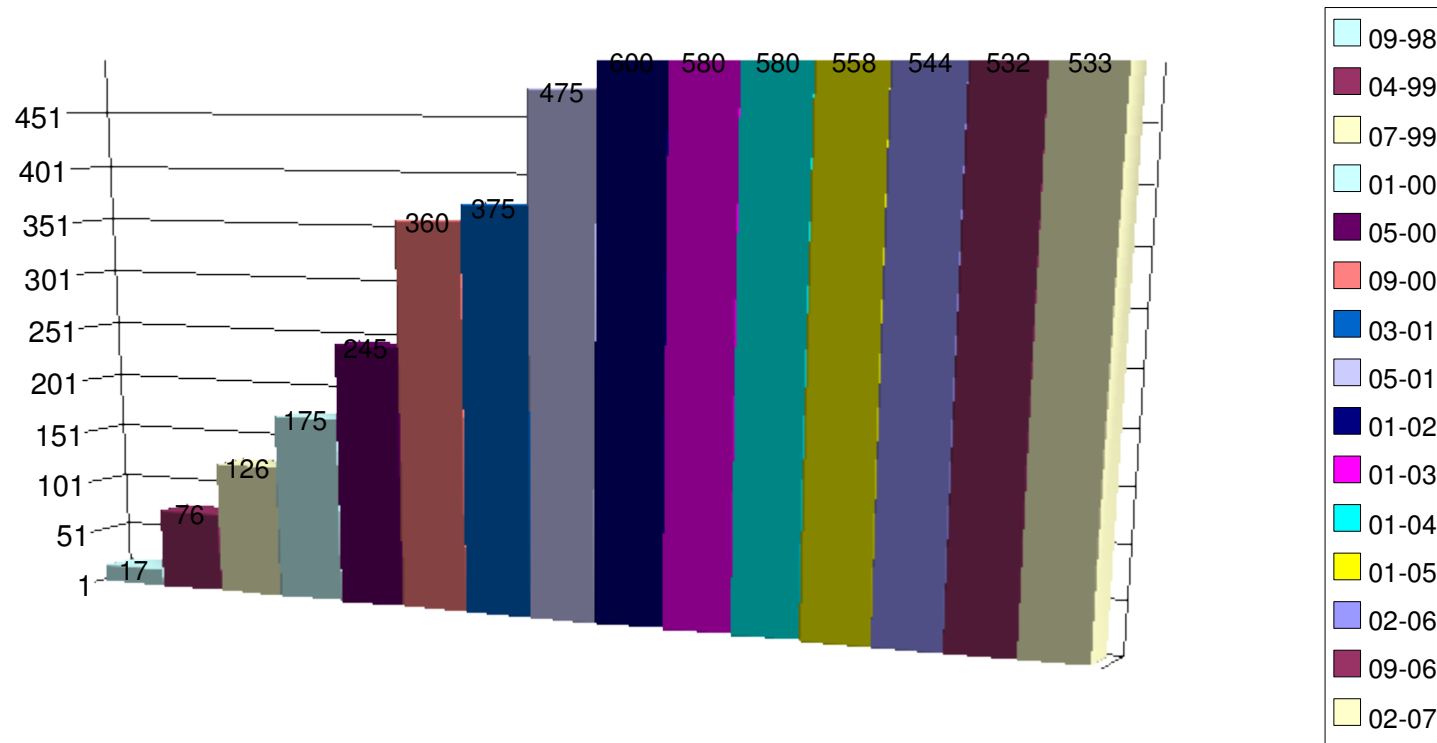
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- ❑ 533 Participants (mailing list members as of February 2007 (was 532 in September 2006))
- ❑ Wide industry support,
  - *IBM, Sun, HP, Fujitsu have certified UNIX 03 systems*
  - *Green Hills and Wind River have certified within the POSIX certification program*
  - *Companies supporting the activity include: AT&T, HP, IBM, Lucent, Microsoft, Red Hat, Siemens, Sun*
  - *Organizations: DoD, USENIX*
- ❑ Participation in the *Austin Group* from the Open Source community includes
  - *The Linux Standard Base, NetBSD, FreeBSD, GNU and many others.*

# Participation

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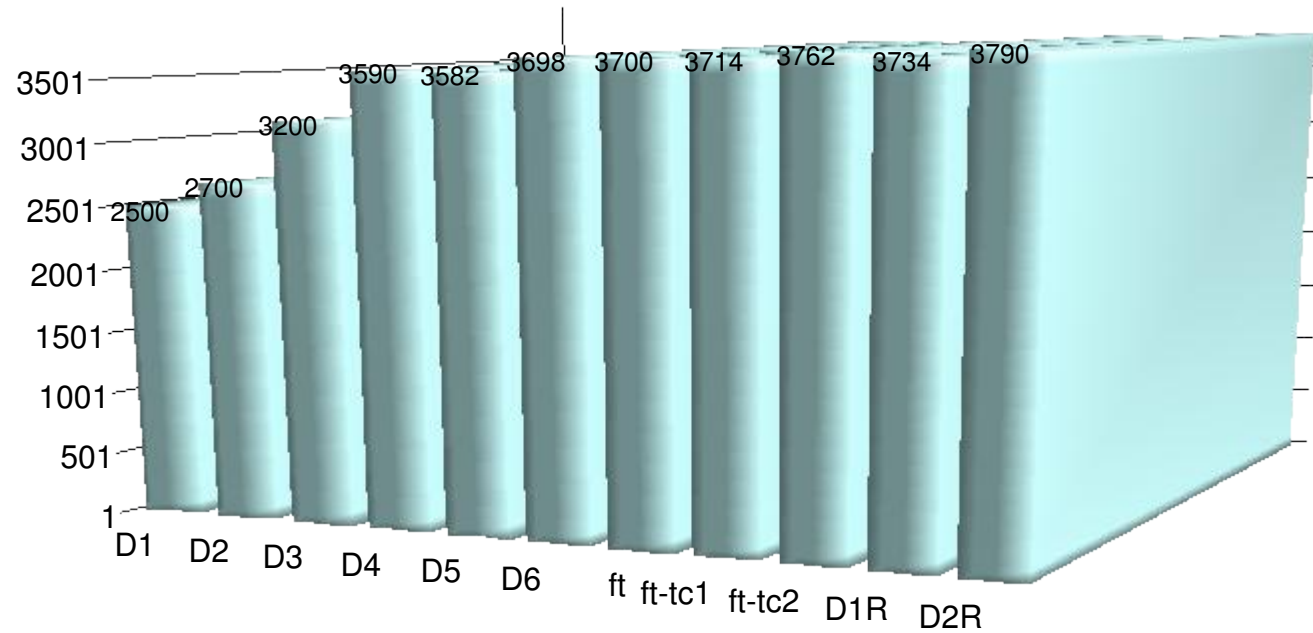
# of Members of the Austin Group Mailing List



# Page Count

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Draft Page count



Note: Ft=2001 edition, D1R... 200x revision

# JDOCS Procedures

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- The Austin Group operates under the JDOCS procedures
- Procedures *approved* by the three organizations
  - IEEE PASC
  - The Open Group
  - ISO SC22
- Officers
  - Chair
  - Three organizational Reps (Ors)



# *Original* Objectives 2001 Edition

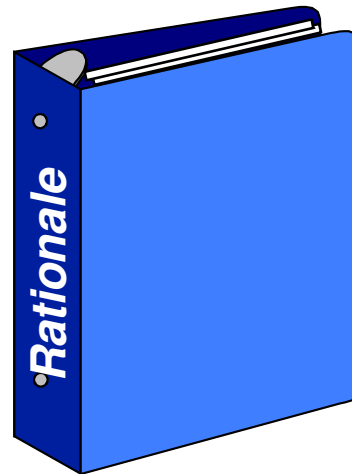
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- ❑ To target the joint specification at the programmer / user rather than the system implementer
- ❑ Organization based on the Core volumes of the Single UNIX Specification, organized alphabetically, and including Rationale
- ❑ To produce a new standard in year 2001.

# The Common Specification

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IEEE Std 1003.1,

ISO/IEC 9945

The Open Group Base  
Specifications

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200x Revision

# 200x *Revision* Objectives

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- ❑ To continue to target the joint specification at the programmer / user rather than the system implementer
- ❑ Organization based on the Austin Group 2004 Edition
- ❑ To update the specification to reflect current existing practice
- ❑ To produce a new standard in year 2008.

# Goals for the 200x revision

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- ❑ Production of a single document to be adopted by multiple parties
- ❑ Minimize the number of changes required to implementations of earlier versions of the Base documents for the revision
- ❑ ...
- ❑ Alignment with the ISO C 1999 standard (and all its TC)

# Base Documents 200x Revision

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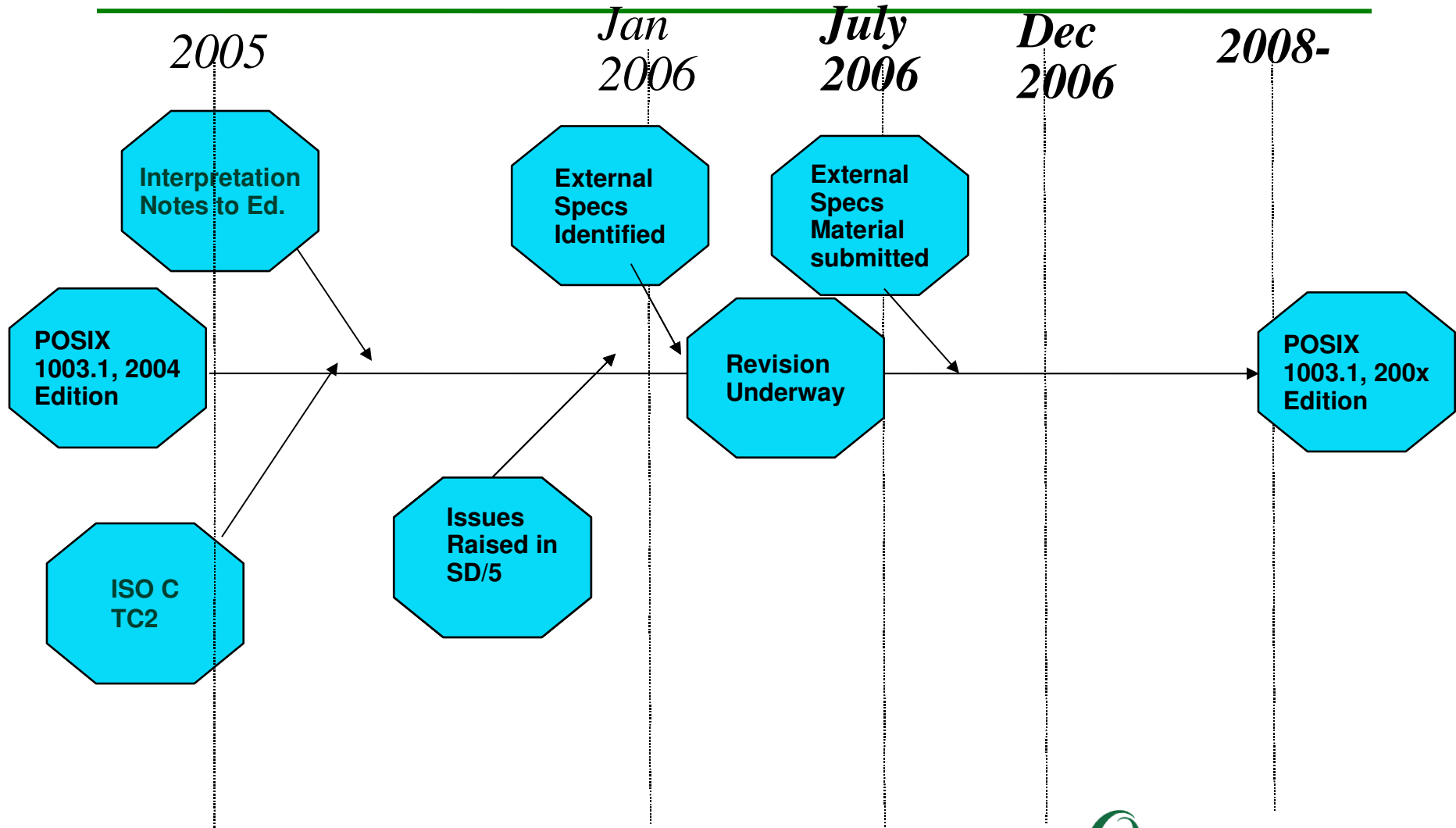
- ❑ IEEE Std 1003.1, 2004 Edition/The Open Group Technical Standard Base Specifications, Issue 6, 2004 Edition/ISO/IEC 9945:2003 Parts 1 to 4, with ISO/IEC 9945:2003/Cor.1:2004(E) Parts 1 to 4
- ❑ ISO/IEC 9899:1999 Programming Languages -- C.
- ❑ The Open Group Extended API Sets Parts 1 through 4

# Scope of Changes

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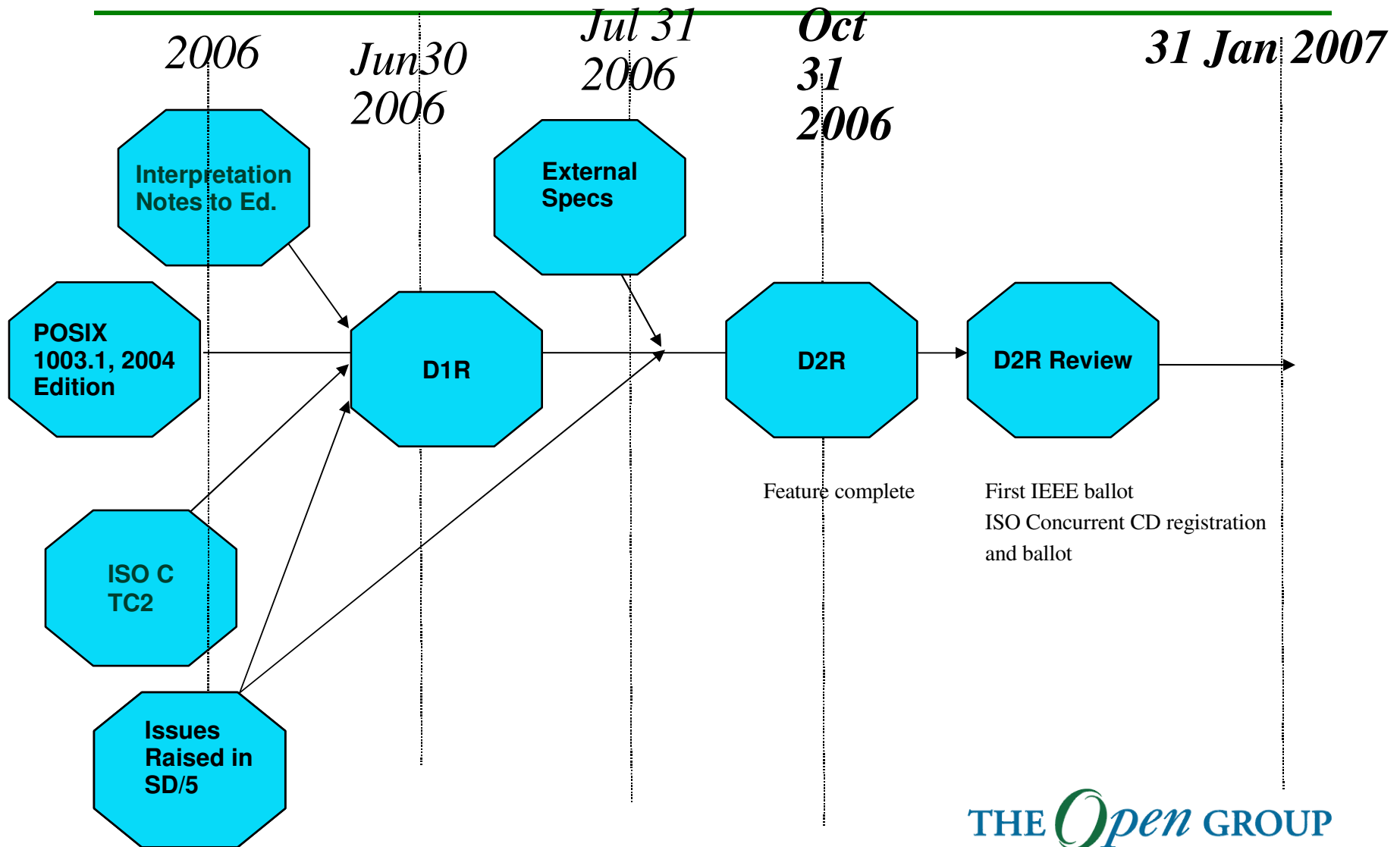
- ❑ Issues raised by defect reports and interpretations
- ❑ Issues arising from ISO TR 24715:2006, "Conflicts between POSIX and the LSB"
- ❑ Changes to make the text self-consistent with the additional material merged
- ❑ Features, marked Legacy or obsolescent in the Base documents, will be considered for withdrawal in the revision
- ❑ A review and reorganization of the options within the standard
- ❑ Alignment with the ISO/IEC 9899:1999 standard including technical corrigendum 2

# Austin Group Hi-Level Roadmap

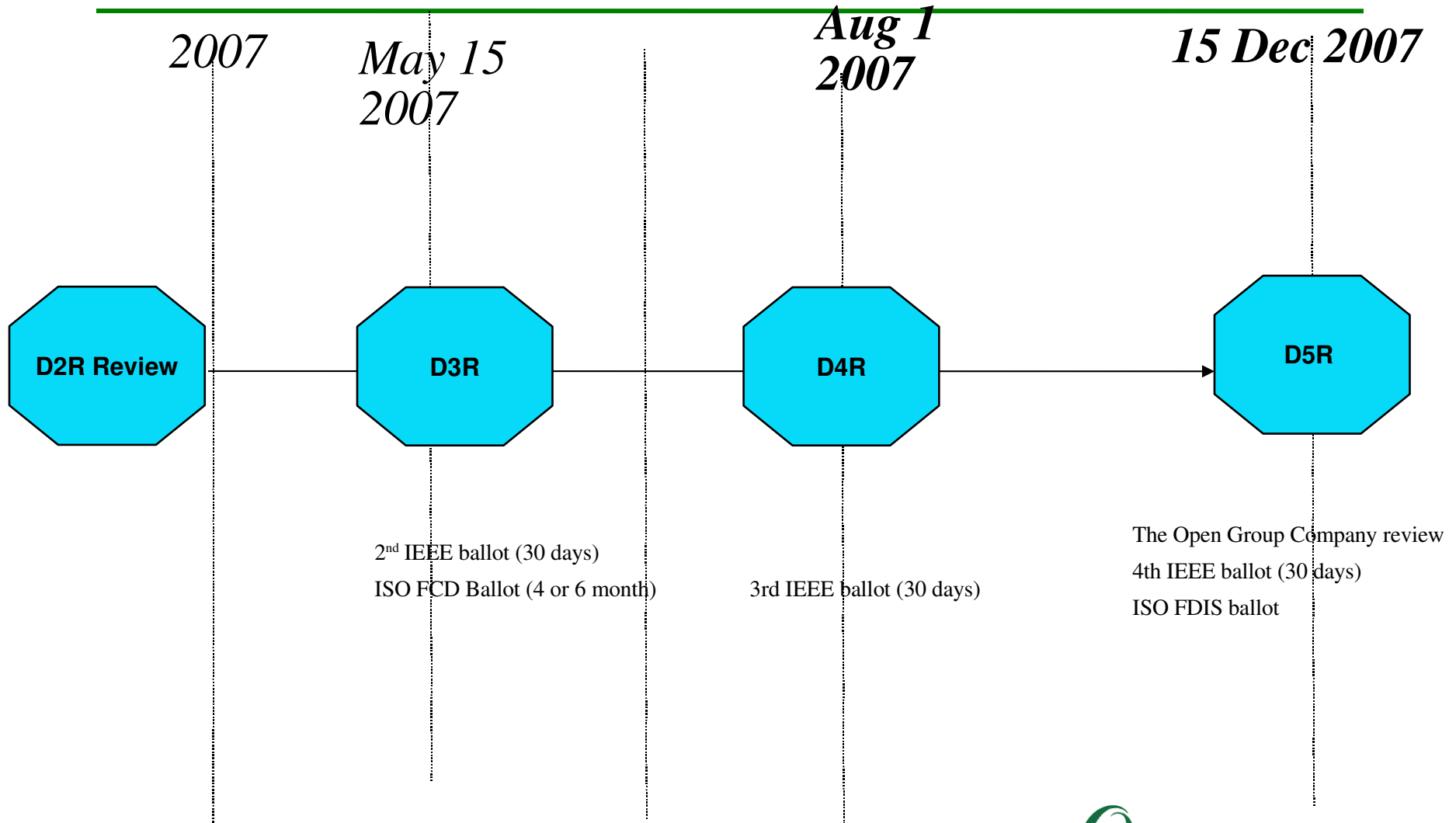




# Austin Group Roadmap 2006



# Austin Group Roadmap 2007



# Meeting Goal

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- The goal of this meeting is to review draft 2 comments for the 200x revision, and continue processing inbound defect reports so that they can be addressed in draft 3

# Meeting Outputs

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- Instructions to the editors for D3R
  - D2R aardvark reports
  - SD5 changes arising from aardvark reports on the 2004 edition
  
- Workplan update
  - An updated roadmap for the revision



## Draft Development Methodology

# Aardvark “The bug eater”

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- ❑ *A formal commenting format*
- ❑ *Used to collect written comments on specific review documents.*
- ❑ *Phrased in terms of specific wording changes.*
- ❑ *Bugs submitted in this way can then be more easily discussed at relevant working group meetings, or voted on by email.*



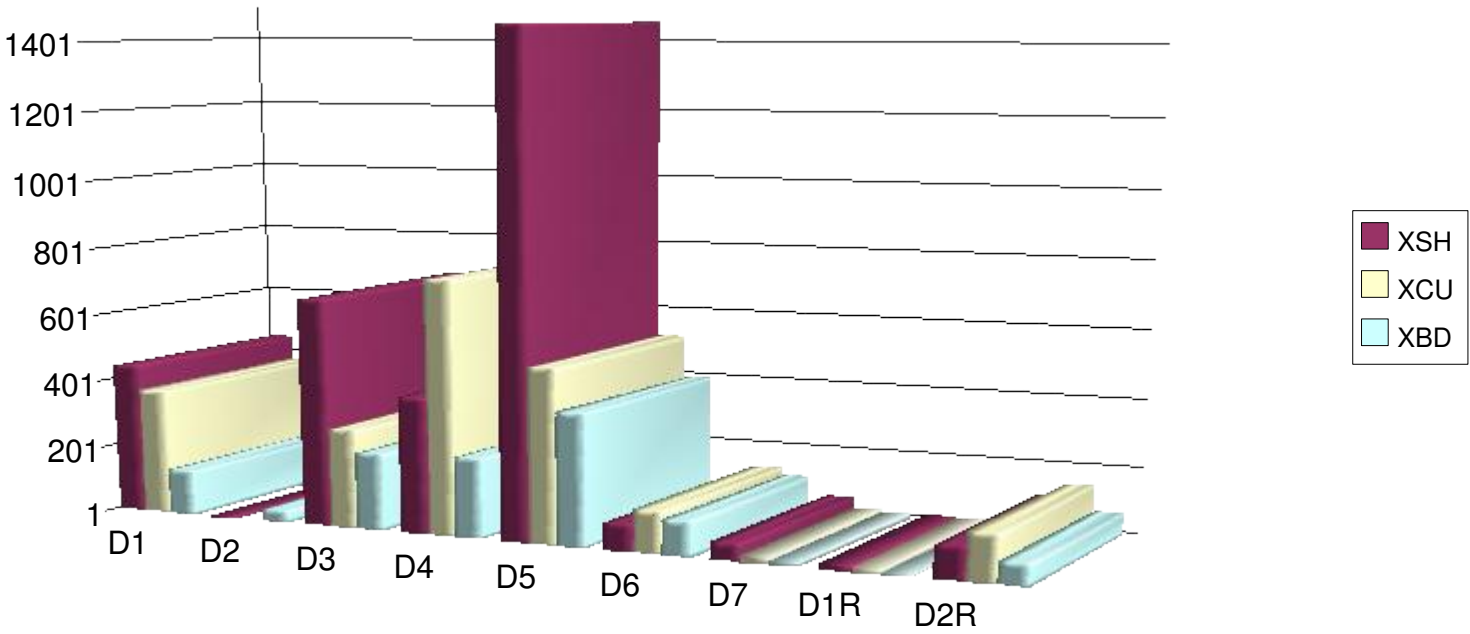
# Aardvark Classifications

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- ❑ Objections
  - *If you would vote against approval of the submission if that issue is not resolved*
- ❑ Comments
  - *Where you believe a better solution is available, but the issue would not cause you to vote no*
- ❑ Editorials
  - *Not discussed at the meeting unless the editors wish to*

# Aardvark Totals (Drafts)

Aardvark counts



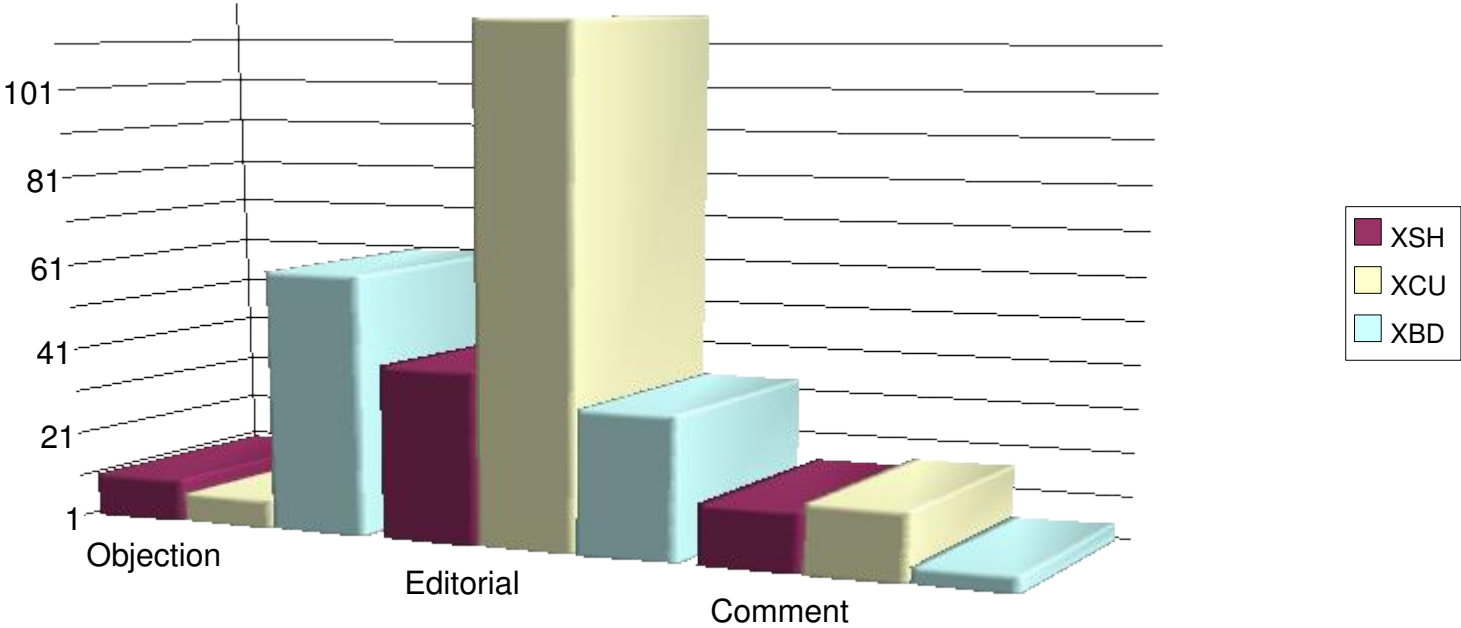
Note: D1-D7 = 2001 Edition, D1R- = 200x Edition



# Aardvark Comments (D2R)

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Aardvark counts



Note: D1-D7 = 2001 Edition, D1R- = 200x Edition

# Pro-forma Responses

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- ❑ R1.Reject: The requirement is from a base document and to change it is out of scope. Bringing it in scope would require an interpretation, corrigenda or resolution from the appropriate body.
- ❑ R2. Reject: this interface is not a candidate for Legacy, the list of Legacy interfaces was considered in TBD and is now final. It is widely used in historic practise and deprecating this interface would break the contract with the application developer.
- ❑ R3. Reject: we cannot see the problem at the referenced lines, as such this comment is non-responsive.
- ❑ R4: Reject: no action is specified in the aardvark comment.
- ❑ R5: Reject; The review team disagrees with the problem statement because.. ... {further rationale needed}
- ❑ R6: Reject: The review team believes that accepting the proposed change would decrease consensus.
- ❑ R7: Reject: The review team considers the interface name part of existing practise and should be left as is.

# Balloting

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- ❑ Committee draft balloting
- ❑ Concurrent IEEE and ISO balloting
- ❑ The Open Group company review ballot
- ❑ Recirculation ballots
- ❑ TC ballot processes

# Draft Maintenance Procedures

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- ❑ See Austin/112r2
- ❑ Aardvark defect reports are generated and accepted
- ❑ Production of responses to aardvark defect reports including
  - technical corrigenda
  - interpretations
- ❑ A policy on new work items proposed for a future revision.

# Scope of Technical Corrigenda Changes

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- ❑ a. In scope of the original project.  
[http://www.opengroup.org/austin/docs/austin\\_9r6.txt](http://www.opengroup.org/austin/docs/austin_9r6.txt)
- ❑ b. Non-controversial ( a TC is intended to pass ballot at the first attempt)
- ❑ c. No new APIs (functions/utilities), however it may add enumeration symbol and non-function #defines and reserve additional namespaces.
- ❑ d. Typical use to fix contradictions in the standard, add consistency between the standard and overriding standards, and to fix security-related problems

# Interpretations Process

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- ❑ An interpretation does not change the meaning of the standard.
- ❑ Notes to the editor (not part of the formal interpretation) are expected to be considered in the next revision of the standard.
- ❑ An interpretation may be controversial.
- ❑ There are formal rules for the interpretations process, and proforma guidelines for responses

# New Work Items

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- ❑ From time to time, an aardvark defect report may propose new work items that are outside the scope of maintenance
- ❑ The Austin Group is not a development body for new material apart from integration issues arising from the merger of the approved standards that were the Base documents into the revision.

# Criteria for New Work Items

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- ❑ 1. A written specification must exist that has undergone a formal consensus based approval process and is suitable for inclusion.
- ❑ 2. There must be an implementation, preferably a reference implementation.
- ❑ 3. The specification must be "sponsored" by one of three organizations (The Open Group, IEEE, SC22) within the Austin Group,
- ❑ 4. Submitters must provide an outline plan of the editing instructions to merge the document with the Austin Group specifications



# Further Information

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- ❑ The Austin Group
  - *<http://www.opengroup.org/austin>*
- ❑ *The IEEE PASC Web Site*
  - *<http://www.pasc.org>*
- ❑ *The Single UNIX Specification*
  - *<http://www.UNIX-systems.org>*

# How You Can Help?

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- ❑ To participate in the *Austin Group*, visit the web site (you can join the mailing lists)
  - <http://www.opengroup.org/austin/>

# Background Slides

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How we got to here....

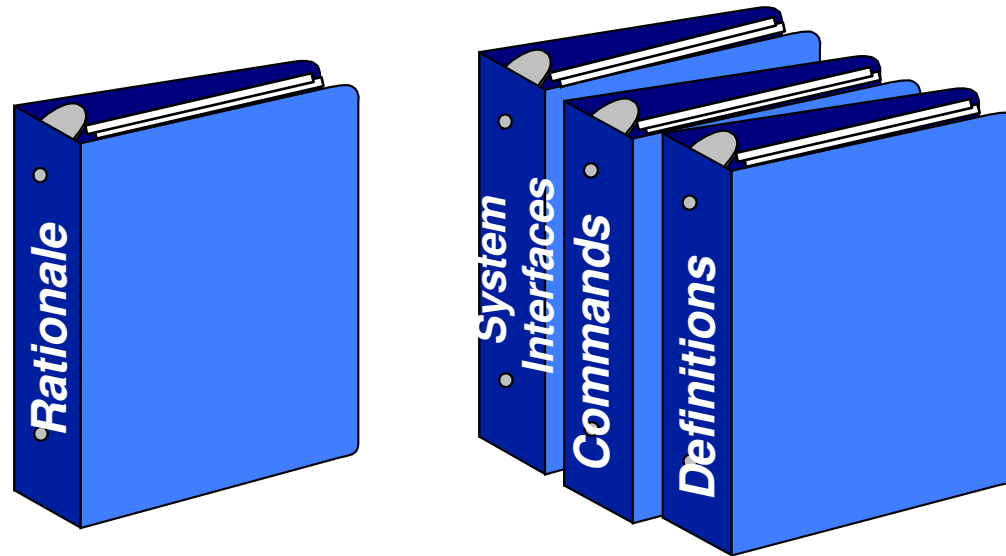
# Scope of the 2001 Edition

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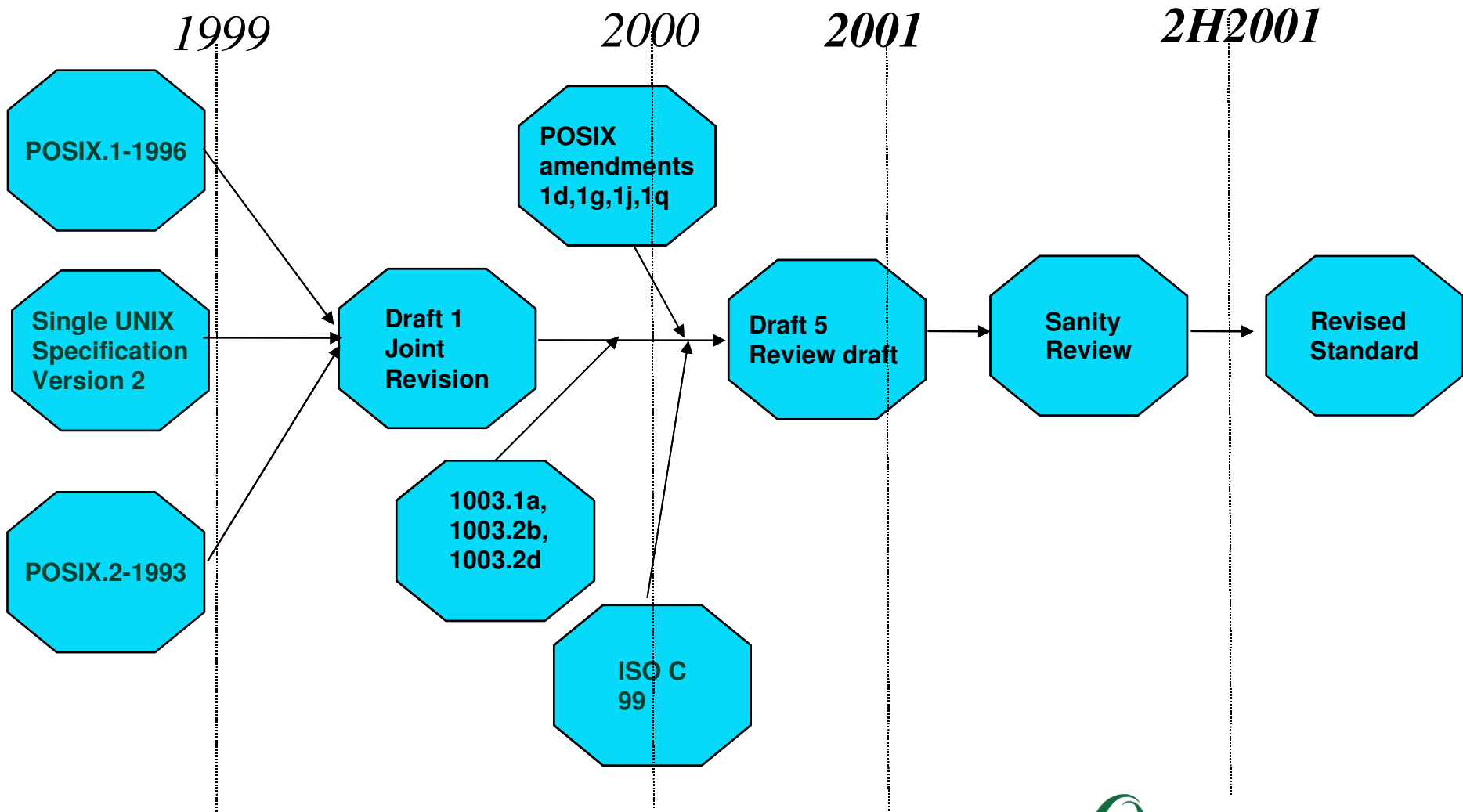
- ❑ Production of a single document to be adopted by multiple parties
- ❑ Minimize the number of changes required to implementations of earlier versions of the Base documents for the revision
- ❑ Limit new work items to those related to integration and consistency, resolving any conflicts
- ❑ Alignment with the ISO C 1999 standard

# Document Set

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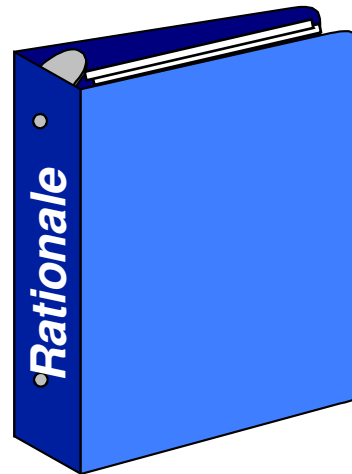
# Roadmap 2001 Edition



# The Common Specification

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THE *Open* GROUP



IEEE Std 1003.1,

ISO/IEC 9945

The Open Group Base  
Specifications Issue 6

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# Approvals Status 2001 Edition

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- ❑ The Open Group September 12<sup>th</sup> 2001
- ❑ IEEE December 6<sup>th</sup> 2001
- ❑ ISO/IEC 9945:2002 Parts 1 thru 4, November 2002
- ❑ Published in hardcopy (3700 pages, 9kg!!),  
electronic and CDROM

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# Technical Corrigendum 1

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- ❑ IEEE December 2002
- ❑ The Open Group February 2003
- ❑ *2003 Edition of Specifications published March 31<sup>st</sup> 2003*
- ❑ *ISO/IEC 9945:2003 August 2003*

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# Technical Corrigendum 2

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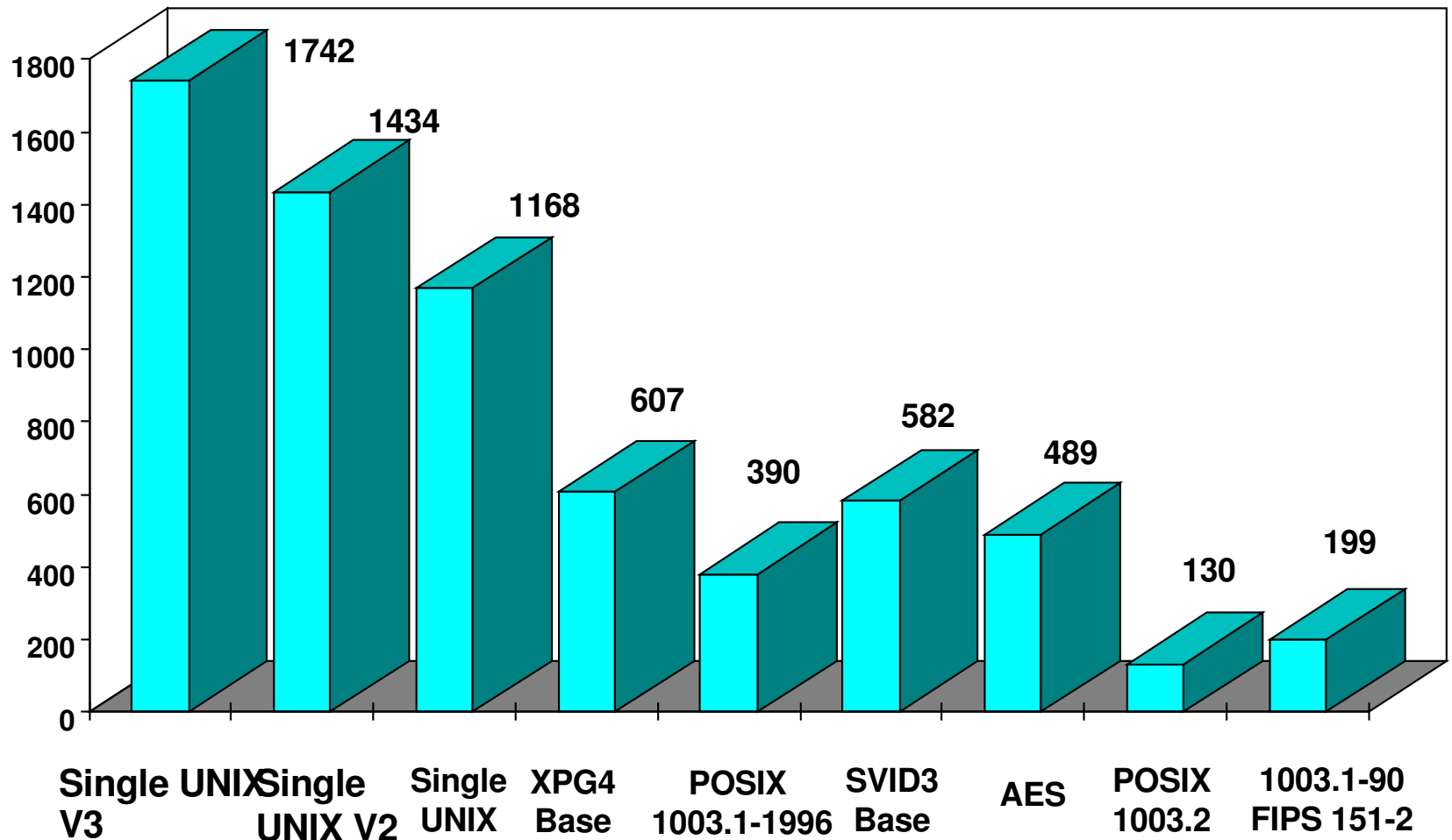
- The Open Group December 2003
- IEEE February 2004
- *2004 Edition published April 30th 2004*
  - *IEEE Std 1003.1, 2004 Edition*
- *ISO Technical Corrigenda approved Sep 2004*

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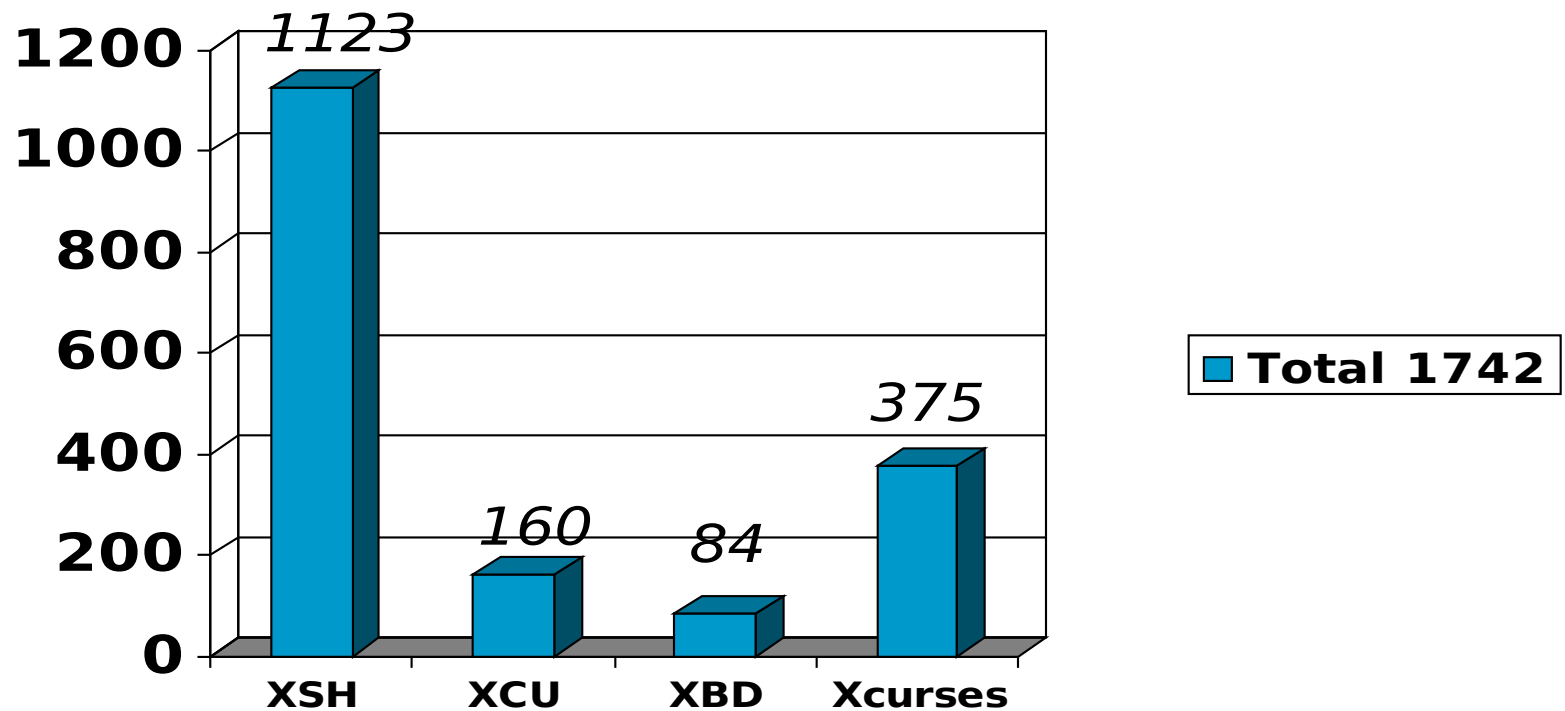
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# Portability Functions



# Interface Count (2001 Edn)

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Note: XSH, XCU and XBD are in the Common Specifications

# Formal Standards Alignment

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- ❑ IEEE Std 1003.1, 2004 Edition (POSIX.1)
- ❑ ISO/IEC 9945:2003 (ISO-POSIX) + ISO TC1
  - The Base Specifications Issue 6 is technically identical to POSIX.1 and ISO-POSIX, they are all one and the same document
- ❑ ISO/IEC 9899:1999, Programming Languages – C (ISO C)

# Documentation Grants

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- ❑ Linux Man pages project
- ❑ FreeBSD Project
- ❑ NetBSD project
- ❑ Heirloom Toolkit and other tools (Gunnar Ritter)
- ❑ Joerg Schilling pax and find
- ❑ Jens Schweikhardt Book

# Firefox Search Plugin

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- ❑ Add the Austin Group specification to your Firefox Search or Mozilla Search Sidebar
- ❑ <http://mycroft.mozdev.org/download.html?name=unix.org&submitform=Search>