NIPLI Reciprocal Attendance Program

Trust and Confidence in the Global Infrastructure

We are pleased to announce a reciprocal attendance arrangement with The Open Group and their third quarterly conference of 1999, taking place the following week (October 25/26) at the Hilton Crystal City, near National Airport.

This conference brings together distinguished speakers from the regulatory, legal, economic, and business communities to explore the issues and challenges of building the trust and confidence necessary to support global eCommerce.

Visit The Open Group for more details and to register directly with The Open Group. ICI members may attend this conference at the US Government and academic rate of $495.

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For General Information regarding NIPLI or this site. Please contact Ms. Kelley E. Clements via email at clements@nipli.org or by calling (202) 296-1258.

This site is best viewed with Netscape Navigator 3.0 or higher or Internet Explorer 4.0 or higher and at a resolution of 800 X 600.
## Open Group Conferences

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<td>Austin, Texas, USA</td>
<td>The Directory-Enabled Enterprise</td>
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<td>23-27 October, 2000</td>
<td>Washington, DC</td>
<td>Security &amp; Critical Infrastructure (subject to revision)</td>
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<td>5-9 February, 2001</td>
<td>San Francisco Bay Area, California, USA</td>
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<td>23-27 April, 2001</td>
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### Archive of past conferences

Please note that certain information relating to Open Group conferences cannot be made available to the general public.

Conferences include the Members Meeting and Program meetings in addition to Plenary sessions.
The Open Group announces a Public License for Motif
Draft 3 of the revision of the Single UNIX Specification now available

Order a Live Free or Die UNIX License Plate!
The Open Group and IEEE to develop joint revision to POSIX and the Single UNIX Specification

Download a copy of the Single UNIX Specification V2

UNIX® is a registered trademark of The Open Group
Spring UniForum 1998

Presentation Overview: Select Start to view slides individually

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UNIX® 98
A Status Update from
The Open Group
UniForum Association
Spring '98 Conference

Andrew Josey
UNIX® Product Manager
Email: a.josey@opengroup.org
http://www.UNIX-systems.org

Agenda
— The UNIX® System, Past and Present
— The Value of Standards
— The Single UNIX Specification
— UNIX 98 Product Standards
— The System Strengths
— UNIX System Futures

The UNIX® Operating System: Mature, Standardized and Start-of-the-Art
- Continual development over the last twenty-five years
- Deployed in millions of installations on nearly every hardware platform
- A reputation of stability and scalability
- Continued innovation as new technologies assimilated
- The popular choice for the internet

UNIX® Past Perceptions
- Uncompromising
- Command line interface required technical competence
- Command line syntax not intuitive
- Interface unfriendly
- Security often nonexistent
- Today, these perceptions are only of historical interest.

UNIX® Present
- A Standard Graphical User Interface
- A Standard definition of the core operating environment
  — The Single UNIX Specification
  — Imitated by many “look-alike” products
- Security up to and including B1
- The Internet server of choice
- Clustering and other high availability innovations available today

UNIX 95 Registered Products

The Value of Standards
- Driven by the need for commonality and the desire to avoid consumer “lock-in”
- Endorsed by US and European Governments
  — Reaffirmed by the United States Government
The Value of Standards (Cont’d)

- Today, all the major vendors have implemented the Single UNIX Specification.
- The UNIX mark is validated using extensive testing and backed up by a unique vendor guarantee - The Open Brand.
- The Open Brand
  - operates under trademark law
  - designates products that are guaranteed to conform to open systems specifications
  - a vendor guarantees that any non-compliance will be fixed within a defined time period.

The Single UNIX Specification

- Designed to give software developers a single set of APIs to be supported by every UNIX system.
- Shifts the focus from incompatible UNIX system product implementations to compliance to a single set of APIs
- If an OS meets the specification and commonly available applications run on it then it is open.

The User Driven Process

50 Popular Applications

Formal and Detected Standards

Application Coverage by Specification

For Ten Representative Applications

Portability functions (UNIX 95)

http://www.unixsystems.org/posixx

The Single UNIX Specification Version 2

Formal Standards Alignment

- Builds on the foundation of latest international standards
  - mandates POSIX options to form a rich foundation which you can depend on
  - ISO/IEC 9945-1:1996 (POSIX) (System Interfaces)
    - Classic POSIX.1 functionality plus...
    - Filetime
    - Threads
  - ISO/IEC 9945-2:1992 (Shell & Utilities)

Mandated POSIX.1 Options

File System
Interactive
Memory Protection
Networks
Processes
Threads
Sockets
Segmentation
Swap
Protection
Restricted
Shared
Sieve
Exec
No SUID

UNIX 98 New Features Derivation

UNIX 98 Threads - Benefits

- A single thread to execute all applications, running simultaneously on the same physical hardware.
- Supports application inheritance, even on non-threaded applications.
- Supports application threading, even on non-threaded applications.
- Built upon POSIX Threads with extensions.

UNIX 98 Product Standards

  - UNIX 98 - "the Base"
  - UNIX 98 Workstation
    - UNIX 98 plus CDE
  - UNIX 98 Server
    - UNIX 98 plus Internet Server capabilities

UNIX 98 Threads and 64-bit

- The single UNIX Specification has been updated for 64-bit systems, including the updates and additions to the UNIX 98 specification.
- The UNIX 98 specification includes significant improvements for 64-bit systems, including...
- New features for internet and intranet services.
- http://www.unix-systems.org/standard/unix98/
**UNIX 98 Realtime**
- Historically UNIX has been a timesharing system
- Today's applications have more stringent performance and robustness requirements
- Require predictable execution characteristics and precise timing.
- A new UNIX Realtime extension introduced based on POSIX 1003.1b
  - http://www.UNIX-systems.org/vision/whatsnew/realtime.html

**UNIX 98 and the Year 2000**
- The Single UNIX Specification has been reviewed for Year 2000 alignment
- A white paper has been produced for existing users giving practical advice for users
- Year 2000 changes incorporated into Single UNIX Specification for UNIX 98

**UNIX Server**
- Captures existing de-facto practice
- Includes a platform-independent Internet Server Product Standard
- Additional functionality over existing UNIX 98 Product standard includes:
  - The Internet Protocol Suite
  - Java Support (JRE 1.1)
  - Internet capabilities to support network computing

**UNIX 98 Server - Internet Services**

**UNIX System Strengths**
- UNIX systems retain high-end system strengths
  - Stability and reliability
  - Scalability
  - High throughput
  - Database engine
  - Internet support

**Stable, Reliable and Mature**
- Stable, Reliable and Maturity
  - Safe, not risky
  - 25-year heritage of end-user development and use
  - Strong growth market
    - $122 billion installed base
    - 150 countries
  - $39 billion market currently, growing to $50 billion in year 2000

**Mission Critical**
- Proven Mission-Critical Capabilities
  - Widely deployed across industries and applications
  - 92% of all Internet servers
  - Majority of all scalable enterprise databases, on-line transaction processing systems, and enterprise client/server applications
  - 24×7×52

**UNIX Futures - Key IT Trends**
- The emergence of Network computing
- Knowledge Management
- Digital media replacing physical objects
- UNIX is the optimal platform to take advantage of the latest IT trends. Continuing evolution to address scalability issues, and new technologies such as IPv6

**UNIX Systems - The Future**
- The leading operating system for mission- and business-critical computing applications, the open UNIX system environment provides unmatched maturity, throughput, reliability, stability and scalability, supported by multiple vendors.

**Further Information**
- World Wide Web
  - http://www.UNIX-systems.org
  - http://www.UNIX-systems.org/vision/3/
  - http://www.opengroup.org/wgproducts/
  - 609 pages
  - CD-ROM with the full 3000 page Specification in HTML and PDF
  - http://www.UNIX-systems.org/gosolo2/