Engineering Communities
Organization, Infrastructure, Development

opensolaris

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Living & Managing Globally

A Builder's Approach

Part One

Tools, Processes, Infrastructure

The OpenSolaris Program

A Project Management Perspective to Building an Engineering Community

Customers, Privacy & Legal Issues, Processes, Politics, Market Disruptions, PR, Source, Binaries, **Website Infrastructure**, Tools, **Community Organizing**, Resources, Licenses, Dependencies, Constraints, Bug Tracking, Universities, Governments, SCM, Competition, AR, IR, Goals, Transparency, Language, Culture, Content, Distance, **Open Development**, Governance, Business Models, Documentation, Values, Schedules, Leadership, Marketing, Testing, IP, Press Leaks, **Contributing**, Sales, Project Management, Metrics, Market Research, Applications, Roadmaps, Trademarks, Branding, Distributions, OSUGs, Flame Wars, Conflicts

What is OpenSolaris?
Product, Website, Community

- A supported Sun binary product at .com with a corresponding development project at .org.
- A website platform of applications for global engineering operations and hundreds of open source development projects at .org.
- A global community of users, developers, administrators, and students at .org, .com, and other sites around the world.

Program Profile

- ## Who: Sun + Customers + Developers

- ## What: Code. Product. Website. Community.

- ## Where: opensolaris.org and opensolaris.com.

- ## When: Started in 2005.

- ## Why: To build a developer community.

- ## How: Open Development.

- ## License: Common Development & Distribution License.

- ## Priorities: Distribution. Developers. Users. Infrastructure.

The Opening Sequence

- A Multi-Year Implementation Plan
  - **2003**: Internal discussions start in engineering.
  - 02/04: Discussions go external. Engineering team forms. Research, analysis, diligence begins.
  - **06/04**: Announced in China. 2-part pilot begins. 300 people.
  - 01/05: Site opened. DTrace source published. License and governing board plans announced. 7K sign up.
  - 04/05: Board members announced. First meeting held.
  - **06/05**: Kernel source published.150 engineers blog.
  - 06/05 to present: 65+ releases: source, binaries, tools, tests, projects, consolidations, docs, distros, ports.
  - **05/08**: OpenSolaris binary distribution released.
  - **08-09**: New website, dev infrastructure, product updates.

Governance

- Governance Based on Constitutional Structures
  - OpenSolaris Community Advisory Board → Governing Board
  - Charter, Constitution, Membership, Voting, Structure

- Governance Based on Engineering Operations
  - Open development engineering processes
  - Community contribution processes
  - Project level arrangements.

- Governance Based on Individual Initiative
  - Engage on opensolaris.org, opensolaris.com, other sites, or build your own site or distro and create your own rules.
  - No rules necessary. It's a meritocracy. **Just do it!**

License: CDDL
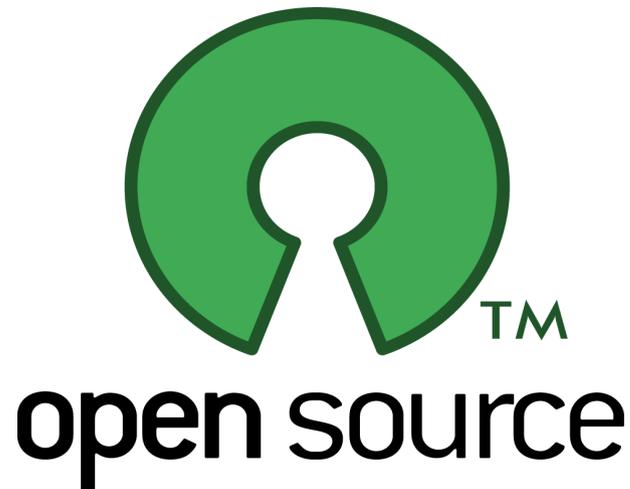
Common Development & Distribution License

- All licensing strategies considered during year-long review.
- Needed to be mixable with other licenses.
- Recommended as a preferred license by OSI.
- Recognized as a free software license by the FSF.
- Based on Mozilla Public License with updates.

Website Infrastructure

What is opensolaris.org?

- Website platform with multiple applications.

- Supporting open development engineering operations, product development projects, and community-building programs.

- Rebuilding the existing site to provide:
  - Complete open development platform for community and product engineering (ON & Nevada development already tied to opensolaris.org in critical ways).
  - More scalability and flexibility to enable expansion and enhancement of features and support – a modular approach.
  - Customized wiki functionality integrated with new user management application & community governance structure.

Website Profile

- 8,000+ web pages, 10K+ attachments
- 400 lists, 115 forums,13,000 subscribers.
- Tens of thousands of list messages.
- Tens of millions of web forum views.
- 2 SCM systems and 2 DTS
- 150 user groups in 30 countries.
- 212 projects, 47 communities.
- 13 website content translation projects.
- 15 application services
- 25+ computers in 3 data centers: SF, LV, Prague
- Hundreds of blogs, contributions, contributors.

opensolaris.org Services

- **arc.opensolaris.org** Architecture Review Committee case data
- **auth.opensolaris.org** Membership/account management application
- **bugs.opensolaris.org** Bugs-by-mail submission to Sun's Bugster database
- **cr.opensolaris.org** Code review tool
- **defect.opensolaris.org** Open defect tracking
- **hub.opensolaris.org** Beta XWiki-based site
- **jucr.opensolaris.org** Package/spec file submission
- **mail.opensolaris.org** Mailing list management
- **pkg.opensolaris.org** Open source package repositories
- **pkgfactory.opensolaris.org** Automated collection/build/submission of FOSS to jucr.os.org
- **poll.opensolaris.org** Community voting
- **repo.opensolaris.org** Source code management console: Mercurial and Subversion
- **rti.opensolaris.org** Open request-to-integrate (RTI) tool under development
- **src.opensolaris.org** Source browser
- **test.opensolaris.org** Access to test farm

Site Changes – <u>NOW</u>

- ## New infrastructure architecture
  - Addresses issues with original os.org portal application.
  - Enables continued site evolution.

- ## New membership management system
  - Membership management of community data: employee status, SCA on file, commit rights, etc.
  - Registration and single sign-on.
  - Localized into 18 languages.
  - Will enable code commits to be automatically checked against the new database before changes are accepted.
  - Supports current constitution. Flexible for future changes.

- ## Wiki functionality

Welcome to OpenSolaris.org (Main.WebHome) - XWiki - Mozilla Firefox

File   Edit   View   History   Bookmarks   Tools   Help

http://hub.opensolaris.org/bin/view/Main/   Google

Welcome to OpenSolaris.org (M...

Edit   Show   Print   Actions   Watch   Administration

opensolaris

Collectives   Discussions   Documentation   Download   Source Browser   Free CD

jimgris | Log-out | en

MAIN: Welcome to OpenSolaris.org

search...   GO

Collectives
Community Group
Project
User Group

Subsites
Code Reviews
Code Repositories
Package Search
Bugster
Bugzilla
Test Machines
Planet
Mailing Lists
Elections & Polls
ARC Case Logs
Source Juicer
Package Factory
User Authentication

Main Pages

Welcome to
OpenSolaris.org

○ **Documents on this Wiki**

Feature Spot: Welcome to the New OpenSolaris.org Wiki

X-WIKI

The OpenSolaris Website Community migrated opensolaris.org to XWiki on October 26th, 2009 completing phase 2 of the transition. The Transition FAQ includes answers to your questions.

Features and Documentation

Refer to the Site Feature Mapping for an overview of features enabled by the new infrastructure. Refer to the POST-MIGRATION section of the Content Preparations document for additional information about the content migration. Read the updated manual for HowTo instructions for leaders of project, community group, and user group collectives.

Welcome to OpenSolaris.org
We're developing an operating system that provides a rich, coherent platform for building and running applications.

Learn More...

Open Source
The majority of the OpenSolaris code base is distributed under an OSI-approved open source license. Code based on existing open source projects continues to be available under its current license(s), and some binary-only components are covered under the OpenSolaris Binary License.

Compatible
The OpenSolaris code base supports systems that use SPARC® and x86

Community-Driven
OpenSolaris technical communities develop a wealth of features from storage software and ZFS, to comprehensive system analysis tools like DTrace.

Our community represents a wide variety of developers, administrators, instructors and students around the world. *Everyone* has something to contribute.

Contributions...

Join In
Our new network-based package management system, IPS, that is included with the OpenSolaris OS LiveCD needs your package

Sun-Sponsored Links

Find app developer information

DEVELOPERS

New Documentation
Check out the OpenSolaris Information Resources wiki.

OpenSolaris HowTo
Build IPS Software Packages (reg. req'd)

Open Laptop
The first pre-installed OpenSolaris laptops.

Building a New Foundation

- Changes implemented in multiple phases
- Two Major Phase of Work
  - Phase 1: New database and membership management
    - http://auth.opensolaris.org
    - DONE – August 3rd
  - Phase 2: Migration of main site content to XWiki
    - http://hub.opensolaris.org
    - DONE – October 26th
  - Phase 3: Outlining work now. Will update public roadmap.
    - Will involve migration & integration of remaining client apps to Auth and work on features not implemented in Phase 1 or 2 (bug database updates, lists/forums, etc).

Open Development

Open Development: 1

- ## Open Development Infrastructure
  - To enable the community to engage in development.
  - Multi-step, multi-year process to open tools, processes, and infrastructure: source code management, defect tracking, integration tools, source repositories.

- ## Source Repositories
  - Project Repositories: 332 Mercurial, 67 Subversion
  - ON consolidation mirror repository.
  - Mercurial:
    - ON gate moved to Mercurial internally in Aug 08. Work on development tools and education continues.

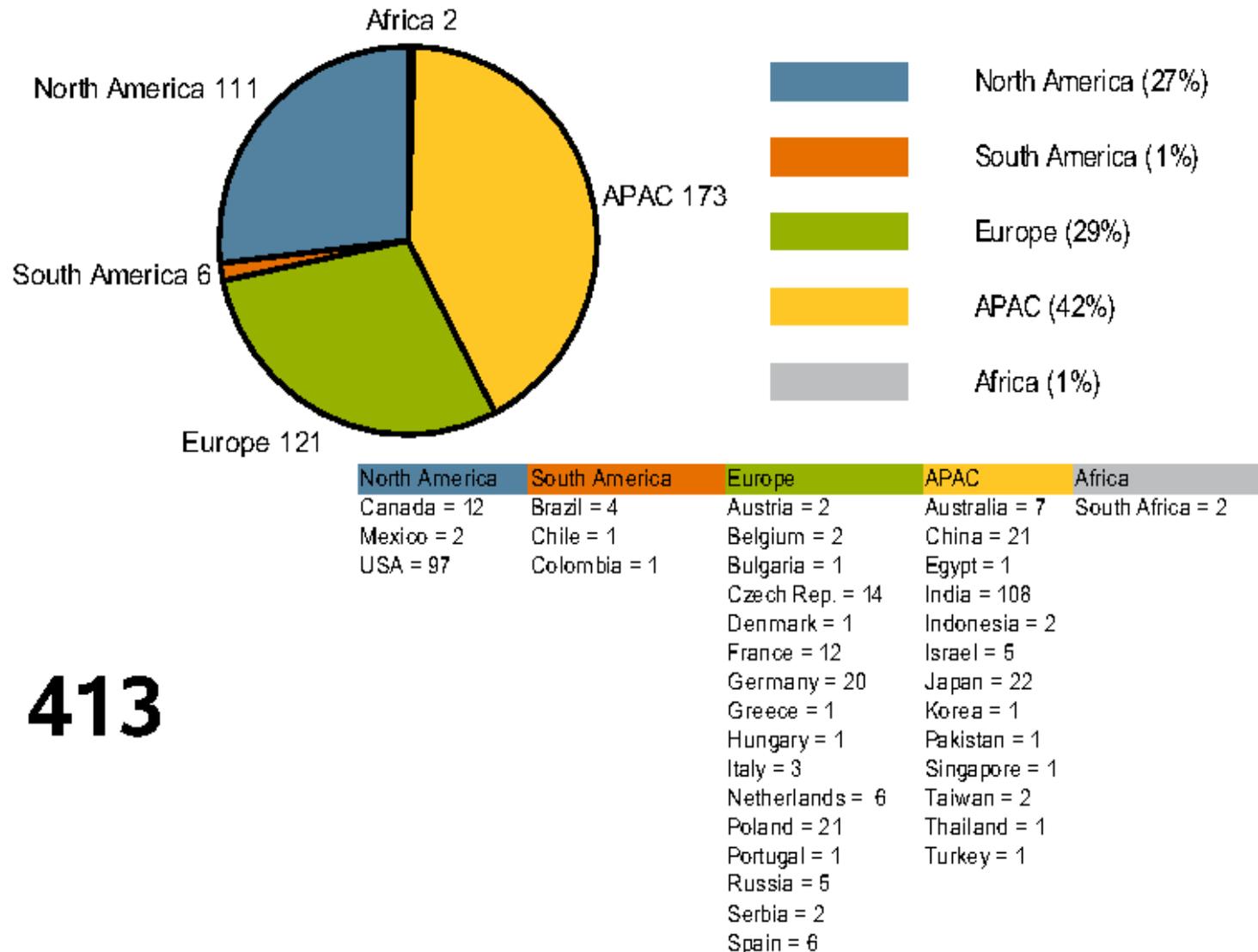- ## Regular Binary Releases

Open Development: 2

- ## Open Development Infrastructure

  - Contribution Programs:

    - Investigating bug/fix-submission project to facilitate code contributions with direct community putbacks.

  - Defect Tracking: Reducing big barrier to participation.

    - bugs.opensolaris.org: Updated with new enhancements but will still not be true Bugster bridge.

    - defect.opensolaris.org: Evolve by upgrading Bugzilla, integrating with Auth and then investigating next steps.

    - 3K bugs via bugs.os.org. 2K via defect.os.org.

    - Working on information architecture to enable development tools to be agnostic regarding defect tracking systems.

Open Development: 3

- ## Sponsor Program: Consolidations
  - Preliminary code contribution process prior to SCM.
  - 196 contributors via sponsor program.
  - 892 contributions offered, 505 integrated.

- ## Notable Community Contributions: Projects
  - ksh93, Emancipation: significant contributions.
  - SPARC disassembler: first community re-implementation.
  - Czech: first translation of Solaris messages.
  - Auth: 17 language translations from G11N Community.
  - Mercurial, XWiki, Bugzilla: requirements & selection.
  - LatencyTOP project integrated from Intel.
  - New device driver integrated from Myricom.
  - DTrace and distro contributions: core code.

- ## Surprise
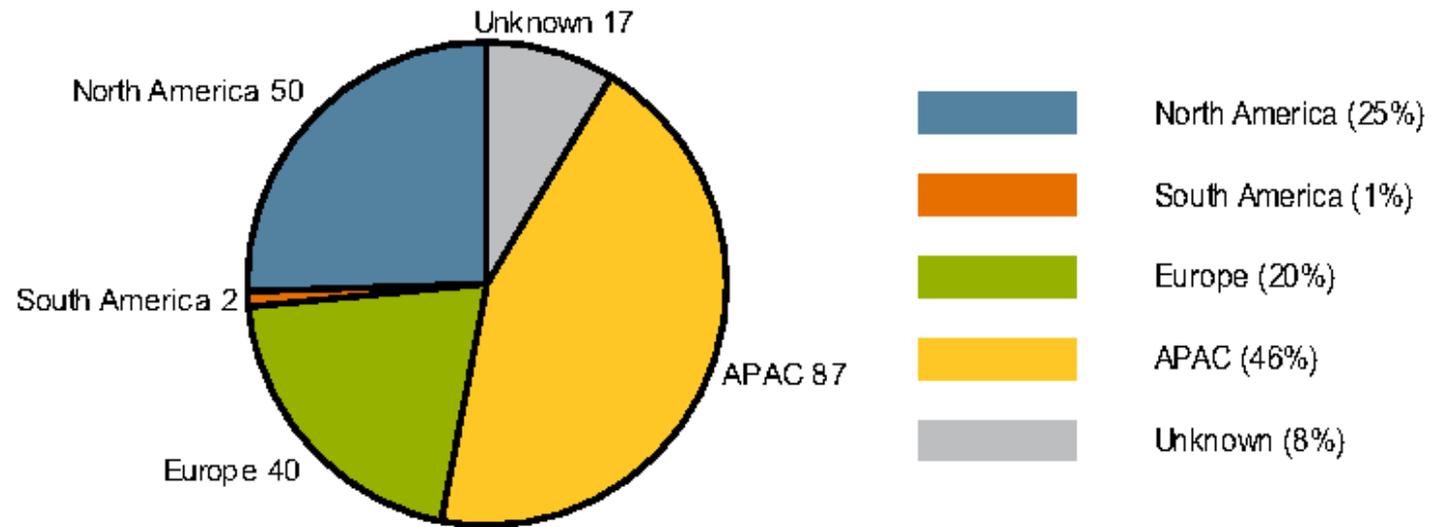 - First contribution 3 days post launch, integrated 2 weeks later!

OpenSolaris Contributor Agreements 10/30/09

Africa 2
North America 111
South America 6
Europe 121
APAC 173

- North America (27%)
- South America (1%)
- Europe (29%)
- APAC (42%)
- Africa (1%)

Total: 413

North America	South America	Europe	APAC	Africa
Canada = 12	Brazil = 4	Austria = 2	Australia = 7	South Africa = 2
Mexico = 2	Chile = 1	Belgium = 2	China = 21	
USA = 97	Colombia = 1	Bulgaria = 1	Egypt = 1	
		Czech Rep. = 14	India = 108	
		Denmark = 1	Indonesia = 2	
		France = 12	Israel = 5	
		Germany = 20	Japan = 22	
		Greece = 1	Korea = 1	
		Hungary = 1	Pakistan = 1	
		Italy = 3	Singapore = 1	
		Netherlands = 6	Taiwan = 2	
		Poland = 21	Thailand = 1	
		Portugal = 1	Turkey = 1	
		Russia = 5		
		Serbia = 2		
		Spain = 6		

OpenSolaris Sponsor Program Contributors 10/30/09

	North America (25%)
	South America (1%)
	Europe (20%)
	APAC (46%)
	Unknown (8%)

Pie chart labels: Unknown 17, North America 50, South America 2, Europe 40, APAC 87

North America	South America	Europe	APAC	Unknown
Canada = 4	Brazil = 1	Austria = 1	Australia = 3	Unknown = 17
Mexico = 1	Colombia = 1	Belgium = 2	China = 5	
USA = 45		Czech Rep. = 4	India =73	
		Denmark = 1	Israel = 2	
		France = 3	Japan = 2	
		Germany = 11	Singapore = 1	
		Netherlands = 3	Thailand = 1	
		Poland = 2		
		Portugal = 1		
		Russia = 1		
		Serbia = 1		
		Switzerland = 1		
		UK = 9		

Total: 196

OpenSolaris Sponsor Program 10/30/09

Total: 892
Awaiting Sponsor: 1%
In Progress: 10%
Integrated: 57%
Closed: 11%
Suspended: 22%
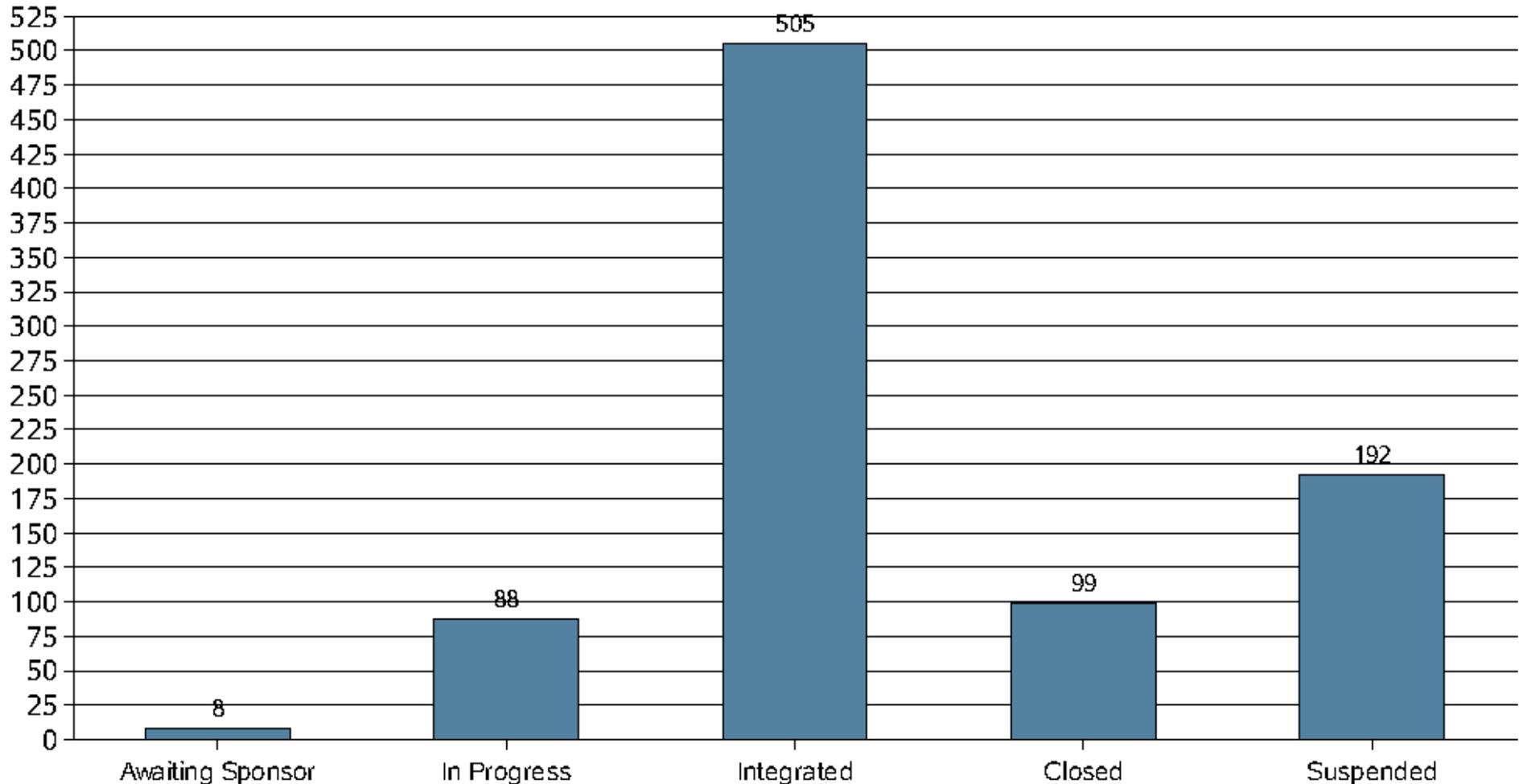
Organizations Participating

- AMD: Code integrations and Project on site.

- Intel: Code integrations and multiple Projects on site.

- Myricom: Code integrations.

- NEC: Project on site.

- NSA: Project on site.

- Ohio State University: Code integrations.

- Sine Nomine: Project on site.

- Songbird: Project on site.

OpenSolaris 2009.06

A product developers use to get work done, a tool for organizers to build community, and a base for Solaris Next.

- 3rd release, main project in the community.
- IPS and package manger improvements.
- SPARC support. Automated install.
- Networking improvements.
- More hardware/driver support.
- Desktop enhancements.
- New software repositories.
- Storage additions, developer tools.
- **Contribute Packages** **http://hub.opensolaris.org/bin/view/Main/package**
- Dev forum: http://opensolaris.org/jive/forum.jspa?forumID=197

http://opensolaris.com/get/

Part Two

People, Growth, Contributions

Community organizing is <u>personal</u>. It's an art, not a science. It involves technology and infrastructure, but it's <u>all about</u> <u>people</u> and it's based on <u>relationships</u> of <u>trust</u>.

Get Involved!

- There are no short cuts. <u>It takes time</u>.

- Take the initiative. Assert yourself.

  - Find a Community or Project. Join the list, observe, introduce yourself, ask questions, start small.

  - Offer to do something <u>specific</u>: Fix something. Translate something. Write some code. Start a UG. Submit a bug. Port a package. Get a commitment from leaders to engage.

  - Go and do that something. Actually **do** it.

  - Ask leaders to walk you through their contribution process.

  - No process? Write one. No leaders? Be one.

- Participate

  - http://hub.opensolaris.org/bin/view/Main/participate

OpenSolaris Governing Board

- ## OpenSolaris Governing Board
  - Initially: Community Advisory Board (CAB). Community elected two, Sun appointed two and selected one.
  - CAB started during pilot program and grew into OpenSolaris Governing Board (OGB) with an expanded mandate.

- ## Governance Based on Meritocracy
  - Board and community membership, leadership, elections, decisions, conflict resolution, community structure, priorities.
  - Constitution approved by Sun 1/07 and ratified by community vote 3/07 with the election of the new 7-member OGB.
  - Charter/Constitution: written in the open.
  - Multiple simplification and reorganization attempts.

Community Structure

Community Groups, Projects, User Groups
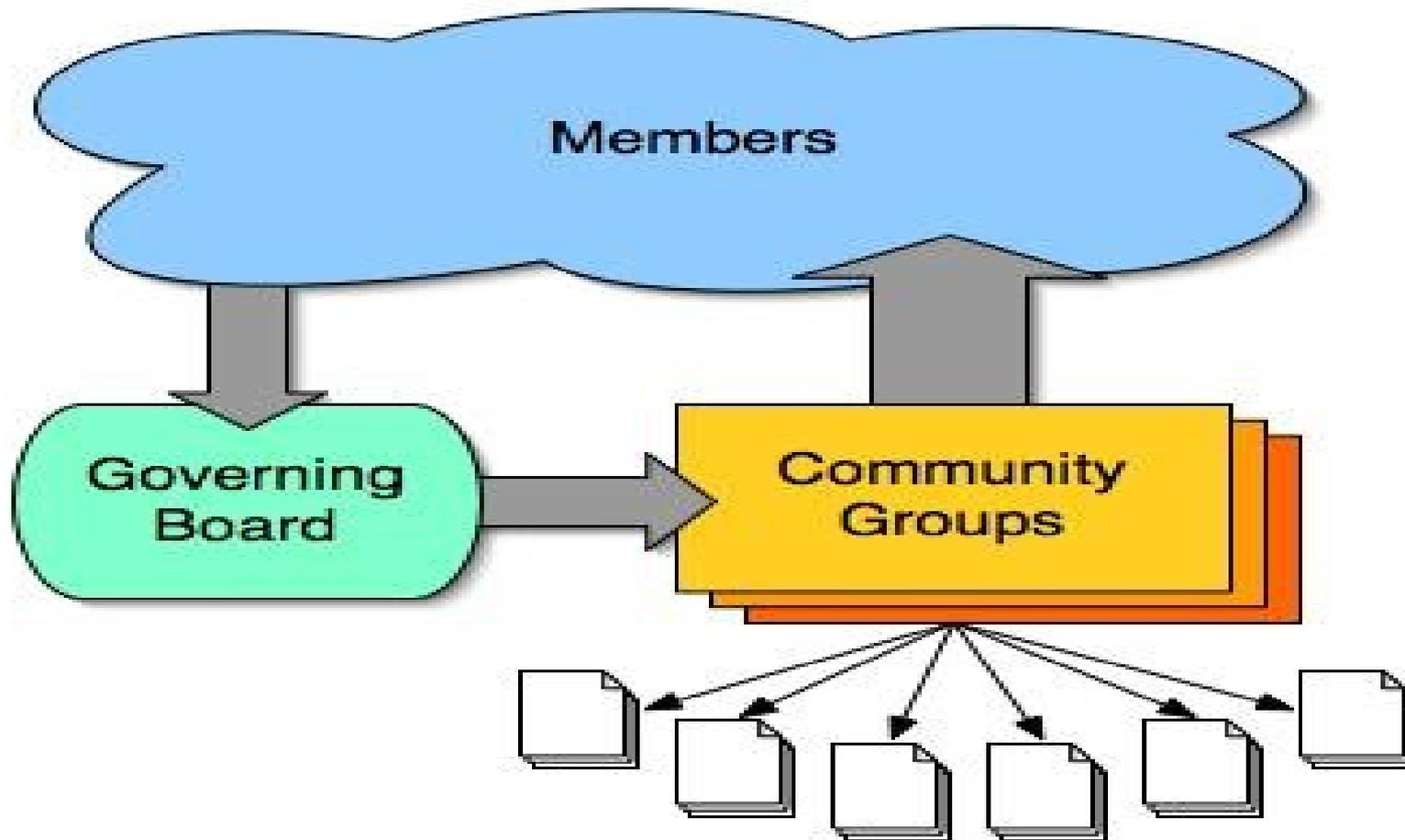
Contributions

Contributions offered and contributions wanted

Source Code, Scripts, Help, Presentations, Graphics, User Groups, Conferences, Translations, Ads, University Courses, Training Materials, Screencasts, Videos, Wikis, Evangelism, Photography, Advocacy, Artwork, Documentation, Articles, Blogs, Podcasts, Repositories, Mirrors, Websites, Tutorials, Speeches, Development Process, Input Methods, Drivers, Feedback, Bug Reports, SCM, DTS, Distributions, Books, Ports, Governance, Applications, Packages ...

Projects, Communities, User Groups, Sponsor Program, Other Sites

Challenges

- ## What we want

  - Creative and motivated people who write code and content and who organize, translate, test, evangelize, whatever.

  - People who can solve problems.

  - People who can <u>cut</u> <u>through</u> <u>bureaucracy</u>.

- ## The challenge

  - No single method to engage. No single access point.

  - Lots of information spread out all over the place. It can be confusing – but there is opportunity in confusion!

- ## Engaging the challenge

  - We are documenting how to contribute, pointing to those who are contributing, and re-engineering the website to make it easier to work with us and others around the world.

File   Edit   View   History   Bookmarks   Tools   Help

https://translate.sun.com/opencti/ | https://translate.sun.com/opencti/

How to Translate OpenSolaris ... | Community Translations : Weblog | openCTI - Open Community ...

Sun microsystems   translate.sun.com   *Help Us Understand One Another...*   Log In

Project Explorer

search

- Top Projects
  - OpenSolaris
  - Netbeans
  - GlassFish

Home   Explorer   Terminology

WELCOME TO THE NEW

SUN OpenCTI TOOL!

> Use a brand new Sun Community Translation Interface and translate open-source project to the language of your choice
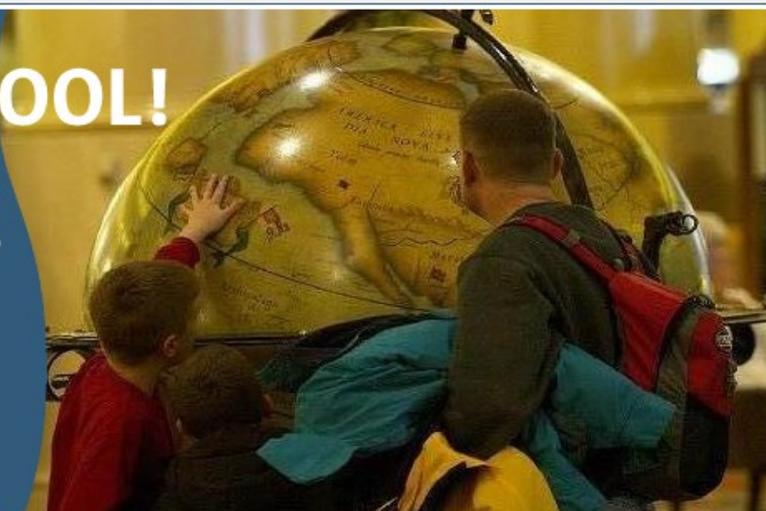
Are you ready to contribute to your open-source community with translations? Then this is the right place to be - **The New Sun Open Community Translation Interface** allows you to join your fellow community users and translate open-source project to the language of your choice.

As you can see the Community Translation Interface is hosting many projects like **OpenSolaris, NetBeans, GlassFish and others**. If you are ready to contribute please join our translation community. All you need to do (if you haven't done it yet), is to register to Sun Community Translation Interface tool. We hope you will enjoy it.

Found A Bug / Need New Feature? - just visit **OpenCTI Bug Tracking System**, search in database and file a new request.

Share your comments/suggestions for improvement - you can join **CTI discussion forums** or you can contact us directly at **cti/AT/sun.com**. Thanks in advance for your feedback.

News: The New Sun OpenCTI release is out!

SunOpenCTI

Tools

Vocabulary   History

Comments

Workgroups   Languages

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Based on **OpenCTI** project

Launch   openCTI - Open Community Translation Interface - Mozilla Firefox   Fri Nov 13, 4:00 PM   En

Advocacy & OSUGs

- ## The Advocacy Community Group

  - Grew from 3 CGs: Marketing, User Groups, Immigrants.
  - Took 3 months to gain consensus, build, and consolidate website properties. Migrated 50 OSUGs to Projects.

- ## OpenSolaris User Groups

  - 150 UGs in dozens of countries → over 5,000 people.
  - Largest single group in the entire community.
  - Leadership meetings, t-shirts, books, support: Teresa G.

- ## Participate

  - advocacy-discuss@opensolaris.org and osug-leaders
  - Edit Advocacy's XWiki pages.
  - Start an OSUG with an XWiki space & list on os.org.
  - Easy process. Engage and leverage entire OS community.

OpenSolaris in Japan

- Multi Phase, Long Term Approach

  - Local & International
  - User Groups, Conferences, Dev Projects
  - Sun Customer Base
  - Tokyo Linux User Group
  - Tokyo Hackerspace
  - BarCamps in Tokyo & Yokohama
  - Tokyo2Point0
  - Cross Cultural Engineering
  - Sun g11n, marketing, engineering, education

- Contributions in Japan

  - Distributions (Jaris, EeePC), books, translations, portal, articles, presos, drivers, USB creator, mirrors, blogs, IRC ...

Japan OpenSolaris User Group

Sun Customer Base

Tokyo Linux User Group

Tokyo BarCamp

Tokyo Hackerspace

Tokyo2Point0 & CGM
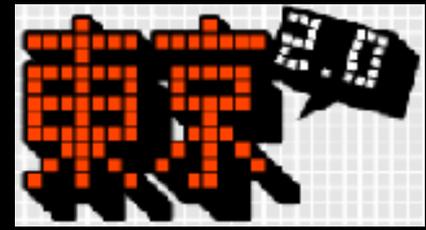
Lounge, Nomikai, JPOSUG, TSUG

Cross Cultural Engineering

Finally, Please Remember …

Your voice matters. <u>Express it</u>.

Get Involved!

Be bold.

Contribute

Having your voice listened to is a privilege that's earned in proportion to the contribution level, not the volume level.
-- Alan Burlison

Take Action!

Ideas are expressed in <u>code</u>. The implementation <u>is</u> the idea. – Bryan Cantrill

Patience … Long Term

Quick OpenSolaris Resources

Community Organizing

http://blogs.sun.com/jimgris/entry/building_opensolaris_communities
http://blogs.sun.com/jimgris/entry/running_successful_opensolaris_user_groups
http://opensolaris.org/os/community/advocacy/usergroups/ug-leaders/
http://opensolaris.org/os/community/advocacy/newsletter/

Website Infrastructure: Code, Plans Discussions

http://hub.opensolaris.org/bin/view/Main/roadmap
http://hub.opensolaris.org/bin/view/Community+Group+web/
http://hub.opensolaris.org/bin/view/Project+website/
website-discuss@opensolaris.org

Open Development

http://hub.opensolaris.org/bin/view/Project+opendev/

Help

http://opensolaris.org/jive/forum.jspa?forumID=31

Download & Distros

http://hub.opensolaris.org/bin/view/Main/downloads

Contributing

http://hub.opensolaris.org/bin/view/Main/participate http://hub.opensolaris.org/bin/view/Main/package

Mailing Lists

http://mail.opensolaris.org/mailman/listinfo

That's it. Thank you!

Jim Grisanzio, Sr. Program Manager, OpenSolaris Open Development Team
Sun Microsystems, Inc., Tokyo, Japan, http://blogs.sun.com/jimgris | jim.grisanzio@sun.com

The content in this presentation comes from the OpenSolaris Open Development Team and the OpenSolaris community. The open development content was created in collaboration with Bonnie Corwin, Sr. Engineering Manger, OpenSolaris Open Development Team http://blogs.sun.com/bjc/. Request Sponsor slides by Bonnie Corwin. Photo of Jiaotong University in Beijing, China by Jim Grisanzio. Photo of Japan by NASA. All other photos by Jim Grisanzio. XWiki graphics: http://www.xwiki.org/xwiki/bin/view/Main/Goodies

Alan Burlison quote: http://mail.opensolaris.org/pipermail/ogb-discuss/2007-October/001511.html
Bryan Cantrill quote: http://mail.opensolaris.org/pipermail/ogb-discuss/2007-May/000683.html

The OpenSolaris Open Development Team: A a software development group in Solaris Engineering that builds and supports opensolaris.org (web applications, multi-site server facilities, open development tools, governance/development processes, content, contribution programs), and also contributes core engineering resources to the OpenSolaris distribution. Members of the team were involved in the original organization at Sun that created the OpenSolaris program in 2004, and the current participants are located in the United States, Canada, Europe, and Asia.

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