

# open



USE



IMPROVE



EVANGELIZE

## OpenSolaris: A Total Project View

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Sun Microsystems

Tokyo, Japan

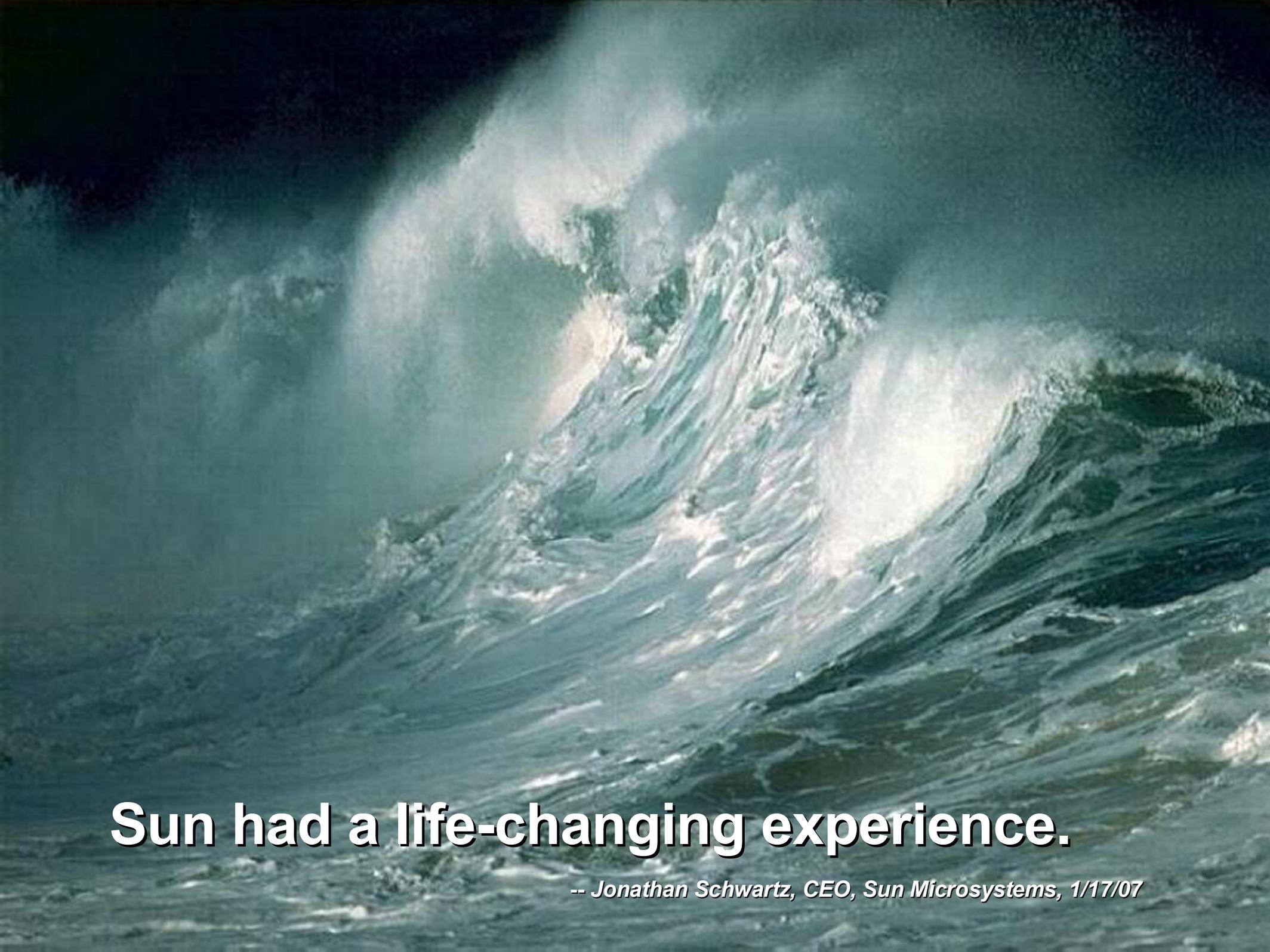
ジム グリサンズィオ サン マイクロシステムズ

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வெளிப்படை

# The OpenSolaris Project

## A 4 Year Project Management Balancing Act

Customers, Privacy Concerns, Legal Issues, Processes,  
Organizational Politics, Market Distributions, PR, Source, Binaries,  
Governance, Infrastructure, Tools, Community Characteristics,  
Existing Dependencies, IR, Bug Tracking, Universities,  
Governments, SCM, Competition, AR, Goals, Transparency,  
Language, Culture, Content, Distance, Business Models, Web site,  
Documentation, Values, Plans, Leadership, Licenses, Marketing,  
Development Models, Testing, Press Leaks, Field Sales, Source  
Analysis, IP, Project Management, Resources, Metrics, Market  
Research, Roadmaps, Trademarks, Branding, Training



**Sun had a life-changing experience.**

*-- Jonathan Schwartz, CEO, Sun Microsystems, 1/17/07*

# What is OpenSolaris?

**openSOLARIS™**

**Source Code  
Binary Distribution  
Community**



# Community

## The First Two Years: A Great Start

- ♦ 78K registrations, 200+ lists, tens of thousands of messages and threads, tens of millions of web forum views and unique visitors.
- ♦ Community Structure: Community Groups (40), Development Projects (160), User Groups (52).
- ♦ Hundreds of contributions: Presentations, Articles, Books, Ports, Graphics, Code, Podcasts, Translations, University Courses, Distributions, Scripts, Documents.
- ♦ Thousands of blogs, multiple IRC channels, 100+ universities using OpenSolaris in CS classes, Japan government deployment.
- ♦ Governance: Charter, Constitution, Development Process.

## The Future: Global Growth & Diversity

- ♦ Kernel/application developers, admins, professors, students, users.



# Source at the Center



BeleniX

Polaris

ZFS ports to BSD,  
FUSE/Linux, Mac OS.  
DTrace ports: BSD,  
Mac OS



## SOLARIS™

Sun's Supported Solaris  
Products & Updates



SXDE, SXCE, Indiana



# opensolaris™

Nevada Source Repository



## Products, Ports, Distributions



Powered by  
Nexenta OS



OpenSolaris based Distribution  
runs from CD

marTux Distribution



bosug

opensolaris™  
<user group>



podcast



# Why?

  
**solaris™ opensolaris™**

**Perfect Opportunity to Build a Community**  
(This was a necessity for growing the Solaris market)

## Three Groups Interested in Building Community

- ♦ Sun executives – expand the Solaris market, offer Solaris in new markets, sell more Solaris systems and services.
- ♦ Solaris engineers – engage developers outside the company, share code, innovate, improve an already great system.
- ♦ Solaris market and community – see the code, optimize apps, contribute to Solaris development, create ports and distros.



# Strategy: Open Development

“ otevřený 열린 مفتوح ανοικτό মুক্ত libre  
 मुक्त öppen open 开放的  
 開放的 ओपन মুক্ত libero nyílt  
 開放的 வெளிப்படை açık livre offen

```
static int
open(int startfd, char *filename, int flags, int mode, int createmode)
{
    struct pathnames proc;
    vnode_t *vp;
    file_t *fp;
    struct stat st;
    int error;
    int fd;
    proc.p =
    proc.f =
    if (startfd == DCUID) {
        /* Regular file */
        startfd += 1;
    } else {
        /* We're here via openat() */
    }
    char startchar;
    if (copy(&filename, startchar, sizeof(char))
        return (set_errno(ENFILE));
    }
```

# open(2)

```
/* If startchar is 0 then startfd is ignored
 * If (startchar == '/')
 * startfd = NULL;
 * else {
 *     if (startfd < 0)
 *         return (set_errno(EBADF));
 *     if (startfd > 0)
 *         return (set_errno(EINVAL));
 *     if (startfd < AT_FDCWD)
 *         return (set_errno(EINVAL));
 *     if (startfd == AT_FDCWD)
 *         Make sure we have a valid request.
 *         We must either have a real fd or AT_FDCWD
 *     if (startfd != AT_FDCWD && startfd == NULL) {
 *         error = EINVAL;
 *         goto out;
 *     }
 * }
```

## Working in the open. Talking in the open.

- Engineers building the core development community.
- Multiple groups now building multiple levels of the community.
- Engaging Solaris communities, developers, administrators, customers, ISVs, partners, universities, users.
- Technical experience and personal expression are important to build a community based on merit, reputation, and quality.



# Opening in Context

If Sun ever transitions from a hardware company to be a consulting company, best practices for open sourcing are something it could sell.

- Nat Torkington, O'Reilly Media, 7/06

I think Sun, with this contribution, has contributed more than any other company to the free software community in the form of software. It shows leadership. It's an example I hope others will follow."

- Richard Stallman, Free Software Foundation

Sun's decision to release Verilog source code for the UltraSPARC hardware design under a free software license is an historic step - Sun is showing its profound understanding of the forces shaping our technological future in making this decision.

- Eben Moglen, Software Freedom Law Centre

**SPARC**



**OpenOffice.org**



The Apache Software Foundation  
<http://www.apache.org/>

THE Open GROUP

NFS

Java DB

XML

OpenDS

Java  
Community  
Process

PostgreSQL



OpenSSO  
Open Access . Open Federation

LIBERTY  
ALLIANCE

PROJECT  
LOOKING GLASS

OpenSPARC

java.net

netBeans  
ORG



opensolaris

GRID ENGINE

OpenJDK



Linux



JINI

JXTA  
CONNECTED

Roller



mozilla



Project  
Open ESB



GNOME



Java  
Sun Microsystems

European Commission Report on FLOSS: Sun #1 <http://ec.europa.eu/enterprise/ict/policy/doc/2006-11-20-flossimpact.pdf>



# Opening Over Time

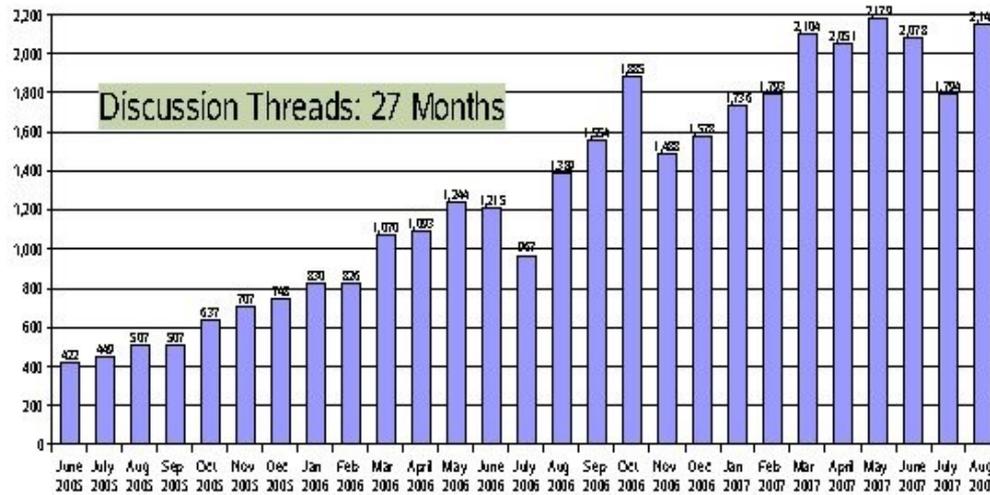
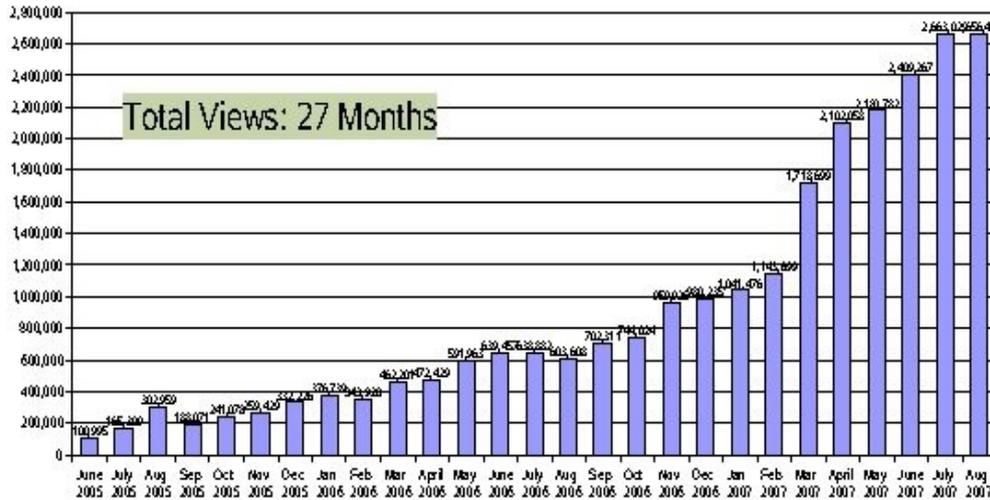
## The Opening Sequence

- **2003:** Internal discussions start in Solaris engineering.
- **2/04:** Discussions move external. Engineering team forms. Research, analysis, and diligence begins.
- **6/04:** Announcement in China. Two-part pilot program begins.
- **1/05:** opensolaris.org opened, DTrace released, announced license and intention to form governing board. 7K sign up.
- **4/05:** Board members announced. First meeting held.
- **6/05:** ON source opened. 150 engineers blog tours of their code.
- **6/05 to present:** 40+ releases: source code (12-20M lines, 40K+ files), binaries, tools, test suites, projects, consolidations, docs.
- **10/07:** OpenSolaris distribution released.



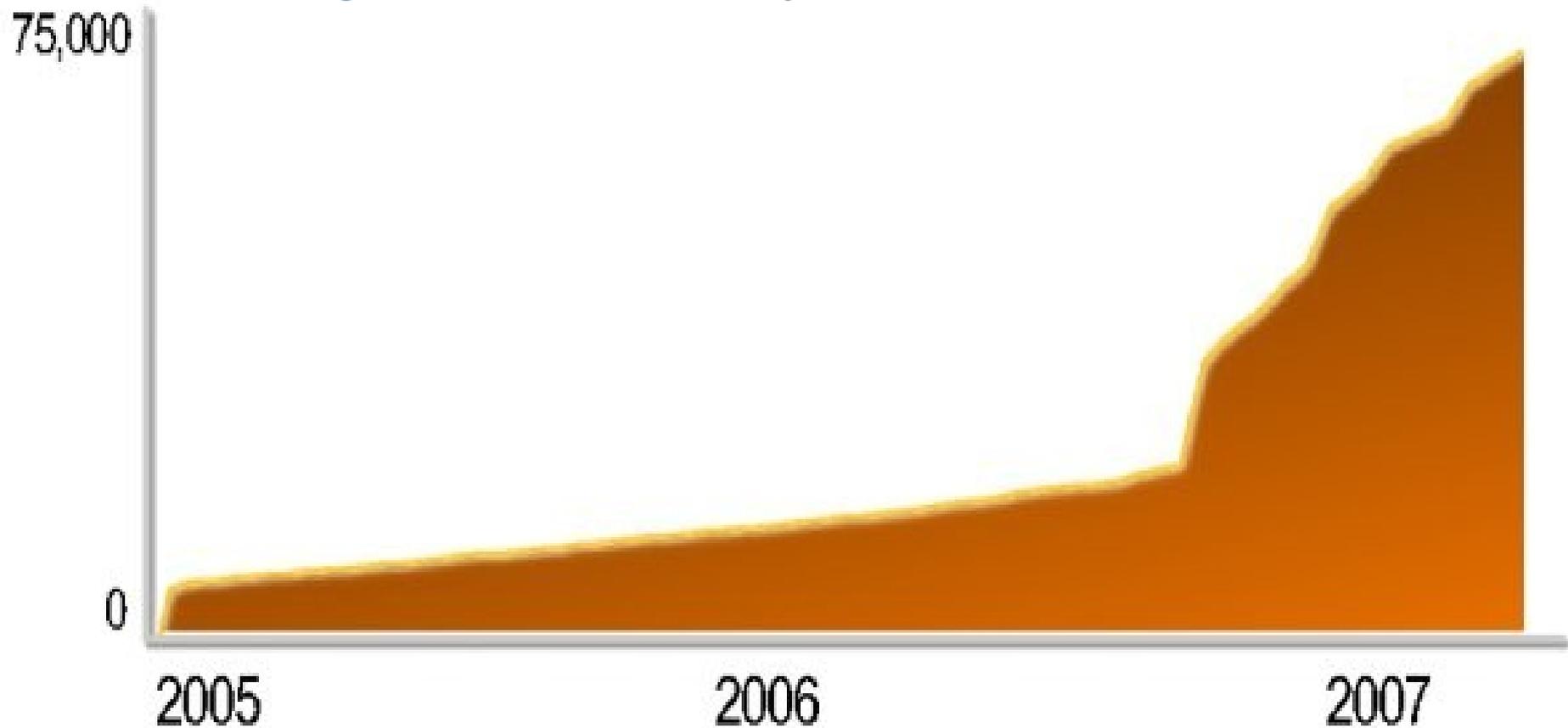
# Growing Conversations

Lists/Forums: 222 | Total Views: 27M | Unique Visitors: 23M | Threads: 37K | Messages: 147K | Subscribers 8K



# Community Growth

Registered Community Members 06/05-06/07



# OpenSolaris at School

Altai State University, AMET, Anhui University, Beijing Technology & Business University, Beijing University of Aeronautics & Astronautics, Blagoveschensk State Pedagogic University, Central China University of Science & Technology, Chengdu University, China Agricultural University, China Science & Technology University, China University of Mining Technology (Beijing), China University of Mining Technology (Xuzhou), Chongqing University, Chongqing University of Post and Telecommunications, Columbia, Dalian Polytechnic University, Fresno City College, Guangdong University of Technology, Hanoi University of Technology, Hanze University of Technology, Harbin Institute of Technology, Hebei University of Technology, HuaZhong Normal University, Hubei University of Technology, Instituto de Formacion y Educacion Superior, Jiangnan University, Kemerovo State University, Kiev National Technical University, Lanzhou University, Nantong University, National University of Defense Technology, Neusoft Institute of Information, Ningxia University, NIT, Warangal, Northwestern Illinois University, Northwestern PolyTechnical University, Novosibirsk State University, Petrozavodsk State University, St. Petersburg State University, Shanghai Jiaotong University, Singapore Ministry of Education, South China University of Technology, Suzhou Vocational University, Tel Aviv University, Universidad Abierta InterAmericana, Universidad Nacional Autonoma de Mexico, Universite Catholique de Louvain, University of Indonesia, University of Science and Technology Liaoning, University of Vienna, Uppsala University, Xi'an Institute of Post & Telecommunication, Zhongnan University of Economics & Law, Agricultural University of Hebei, Bannari Amman College of Engineering, Beihang University, Beijing Agriculture University, Beijing Institute of Technology, Beijing JiaoTong University, Beijing Normal University, Beijing Science & Technology University, Beijing University of Post & Telecommunications, Beijing University of Technology, Brown University, Capital Normal University, Center China Normal University, ChangChun University of Technology, Chengdu Electronical College, Chengdu University of Information Technology, China University of Geosciences, Dalian Institute of Light Industry, Dalian JiaoTong University, Dalian University, Dalian University of Technology, Dartmouth, Defence Science and Technology University, East China University of Science and Technology, Fudan University, George Mason University, Guangdong Education Institute, Guangdong SongShan College, Guangdong University of Foreign Studies, Guangzhou University, Guangzhou University of Technology, HangZhou Normal College, Hebei Polytechnic College, Henan Agricultural College, Henan Judicial Officer College, Henan University of Technology, HuaZhong Science and Technology University, India Institute of Science, Inner Mongolia Agricultural University, Israeli Ministry of Education, Ji'Nan University, JiangXi Normal University, JiuJinag University, LiaoNing Normal University, Nanjing Agricultural University, Nanjing University of Technology, NanKai University, NIT Trichy, Northeastern PolyTechnical University, Northwest Agriculture and Forestry University, Northwestern, Notre Dame, Ohio State University, Peking University, Penn State, PESIT, QiLu Software School, ShaanXi Normal University, Shandong University, Shandong JiaoTong University, Shanghai University, South China Normal University, St. Paul College, Tongji University, Tsinghua University, UCLA, UCSD, University of Electronic Science & Technology of China, University of Minnesota, University of Queensland, University of Science and Technology Beijing, University of Science and Technology China, UVCE, WuHan University, WuHan University of Technology, WuYi University, Xi'an JiaoTong University, XiDian University, XiYou University, YanCheng Institute of Technology, Zhejiang Chinese Medical University, Zhejiang University

# Management Tools

**License**  
grants rights

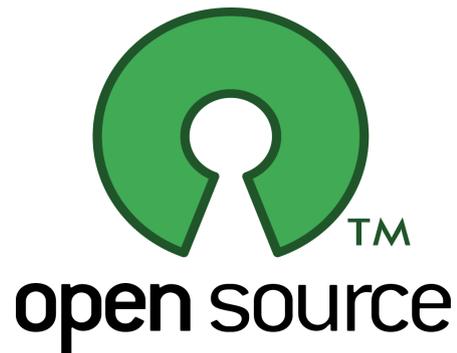
**Infrastructure**  
enables open development

**opensolaris™**  
community participation

**Governance**  
fosters independence and meritocracy



# License



## Common Development & Distribution License

- All licensing strategies considered for OpenSolaris.
- 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 (MPL) with updates.
- Enables the OpenSolaris project to grow in multiple ways.



# Governance

## OpenSolaris Governing Board

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

## Governance Based on Meritocracy

- Board and community membership, leadership, election procedures, decision processes, conflict resolution, community structure, priorities, relationship with Sun and other organizations.
- Constitution approved by Sun in 1/07 and ratified by a community vote in 3/07 with the election of a new 7 member OGB.
- Charter/Constitution: openly written, discussed, argued, iterated.



# Open Development

## OpenSolaris Development Model Emerges

- ♦ **Opening Development Process & Infrastructure**
- ♦ Specifications, conversations, decisions, repositories, ARC cases, code reviews, projects and consolidations, policies – all moving open. Working toward live source gates.
- ♦ All contributors to follow development process and earn committer status over time – just like Sun engineers.
- ♦ SCM: a direct result of community interaction and contribution. **Mercurial**: default, distributed system. **Subversion**: for projects requiring SVN or a centralized system.
- ♦ New bug tracking tools being specified in the community.

## Key New Development Projects

- ♦ Packaging, Install, Emancipation, Intel, Project Indiana.



# More Open Development

## Request Sponsor Project

- Designed to engage external community in a preliminary code contribution process prior to deployment of SCM infrastructure.
- Bug fixes and enhancements offered. Sun engineers pair with contributors for approval process, testing, integration.
- 50+ engineers working with 89 contributors. 1,300 bugs reported, 310 submissions, **187 putbacks**, 91 in progress, 35 awaiting sponsor, 57 closed. 7 ARC cases complete, 4 in process.

## Notable Community Contributions to Projects

- SCM, ksh93, Emancipation – significant community contributions.
- Intel – first putbacks from corporate engineering agreement.
- First clean-room re-implementation: SPARC disassembler.
- First contribution 3 days post launch. Integrated 2 weeks later!



# OpenSolaris Testing

Test Suites, Self-Service Testing, Test Farm

<http://opensolaris.org/os/community/testing/>

opensolaris

Test Farm (demo)



## About OpenSolaris

Project Overview  
FAQ Center  
Roadmap  
Governing Board  
Site Map

## Communities

Portal  
Nevada Community  
All Communities

## Projects

Portal  
All Projects

## Code

Source Browser  
Download  
Tools  
Bug Database

## Connect

Register  
Discussions  
Blogs  
Announcements  
Events  
News  
Related Links

<b>User</b>	jimgris
<b>SCA</b>	sun
<b>Reservations</b>	1 / 1
<b>Waitlists</b>	1 / 1
<b>Expire Date</b>	2007-11-06

[Sign out](#)

[Home](#) [Reserve](#) [Help](#)

## Reserve Test Farm Systems

Spec	Type	Proc	Arch	Hostname	Status
<a href="#">Spec</a>	t2000	Sparc	sun4v	t2000-010137	Available
<a href="#">Spec</a>	x4200 M2	opteron	amd64	x4200-010105	Reserved
<a href="#">Spec</a>	x4600 M2	opteron	amd64	x4600-010101	Reserved

Details	Hostname	Type	Proc	CPU#	Memory	Max	User	Project	Status
<a href="#">Details</a>	t2000-010127	t2000	Sparc	32	16 GB	3 Days	jwttest	bug 6534222	Reserved
<a href="#">Details</a>	t2000-010129	t2000	Sparc	32	16 GB	3 Days	jwtalker	Migration Project	Reserved
<a href="#">Details</a>	t2000-010131	t2000	Sparc	32	16 GB	5 Days	joerg	connection test	Reserved Waitlist Full
<a href="#">Details</a>	t2000-010133	t2000	Sparc	32	16 GB	3 Days	brandorr	beta test	Reserved Waitlist Full
<a href="#">Details</a>	t2000-010135	t2000	Sparc	32	16 GB	3 Days	jimgris		<a href="#">Cancel Reservation</a>
<a href="#">Details</a>	t2000-010137	t2000	Sparc	32	16 GB	3 Days			Available
<a href="#">Details</a>	t2000-010139	t2000	Sparc	32	16 GB	7 Days			Available
<a href="#">Details</a>	t2000-010141	t2000	Sparc	32	16 GB	3 Days			Available
<a href="#">Details</a>	x4200-010105	x4200 M2	opteron	4	8 GB	3 Days	quim		Reserved Waitlist Full
<a href="#">Details</a>	x4200-010107	x4200 M2	opteron	4	8 GB	5 Days	dysun	demo	Reserved
<a href="#">Details</a>	x4200-010109	x4200 M2	opteron	4	8 GB	3 Days			Unavailable
<a href="#">Details</a>	x4200-010111	x4200 M2	opteron	4	8 GB	5 Days	test		Reserved
<a href="#">Details</a>	x4200-010113	x4200 M2	opteron	4	8 GB	5 Days	devnull	Bug #6504438 and Pol	Reserved Waitlist Full
<a href="#">Details</a>	x4600-010101	x4600 M2	opteron	8	32 GB	3 Days	jwtalker	test farm beta	<a href="#">Leave Waitlist</a>



**We need to make OpenSolaris something you can touch, something you can “Download Now!” and run on your laptop to try the latest from the OpenSolaris community.**

*-- Ian Murdock, Chief of Operating Systems Strategy, Solaris Marketing*

# Project Indiana

## An OpenSolaris Binary Reference Distribution

- Focus: easy to access, easy to use, easy to maintain.
- Single CD install. Fully re-distributable.
- Core kernel, system libraries/utilities, new network package software, ZFS as default file system, full Gnome desktop.
- Based in part on existing engineering projects for Packaging, Install, and Modernization. Open community discussions.
- Unique Solaris capabilities: Upgrade rollback via ZFS snapshots, AMP stack with integrated DTrace probes, binary compatibility.
- More familiar experience for Linux developers.
- Sun-supported packages on sun.com and community-supported packages on opensolaris.org.



# Easier to Acquire

## Solaris Express

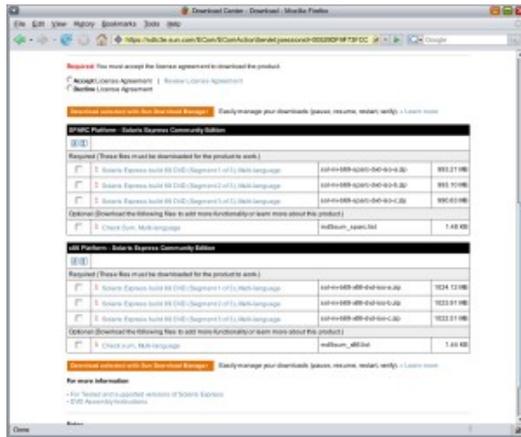


6 CDs

## Indiana



Single CD



Sun Download Center



Fully Re-distributable



# Easier to Install

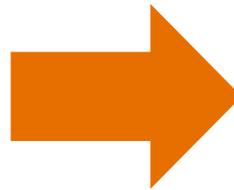
```
File System and Disk Layout

The summary below is your current file system and disk layout, based on the
information you've supplied.

NOTE: If you choose to customize, you should understand file systems, their
intended purpose on the disk, and how changing them may affect the operation
of the system.

File sys/Mnt point Disk/Slice                               Size
-----
/                   c0d0s0                               5098 MB
swap                c0d0s1                               596 MB
overlap            c0d0s2                               16355 MB
/export/home       c0d0s7                               10636 MB

F2_Continue  F3_Go Back  F4_Customize  F5_Exit  F6_Help
```

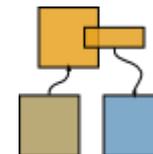


Dwarf Caiman Install Project

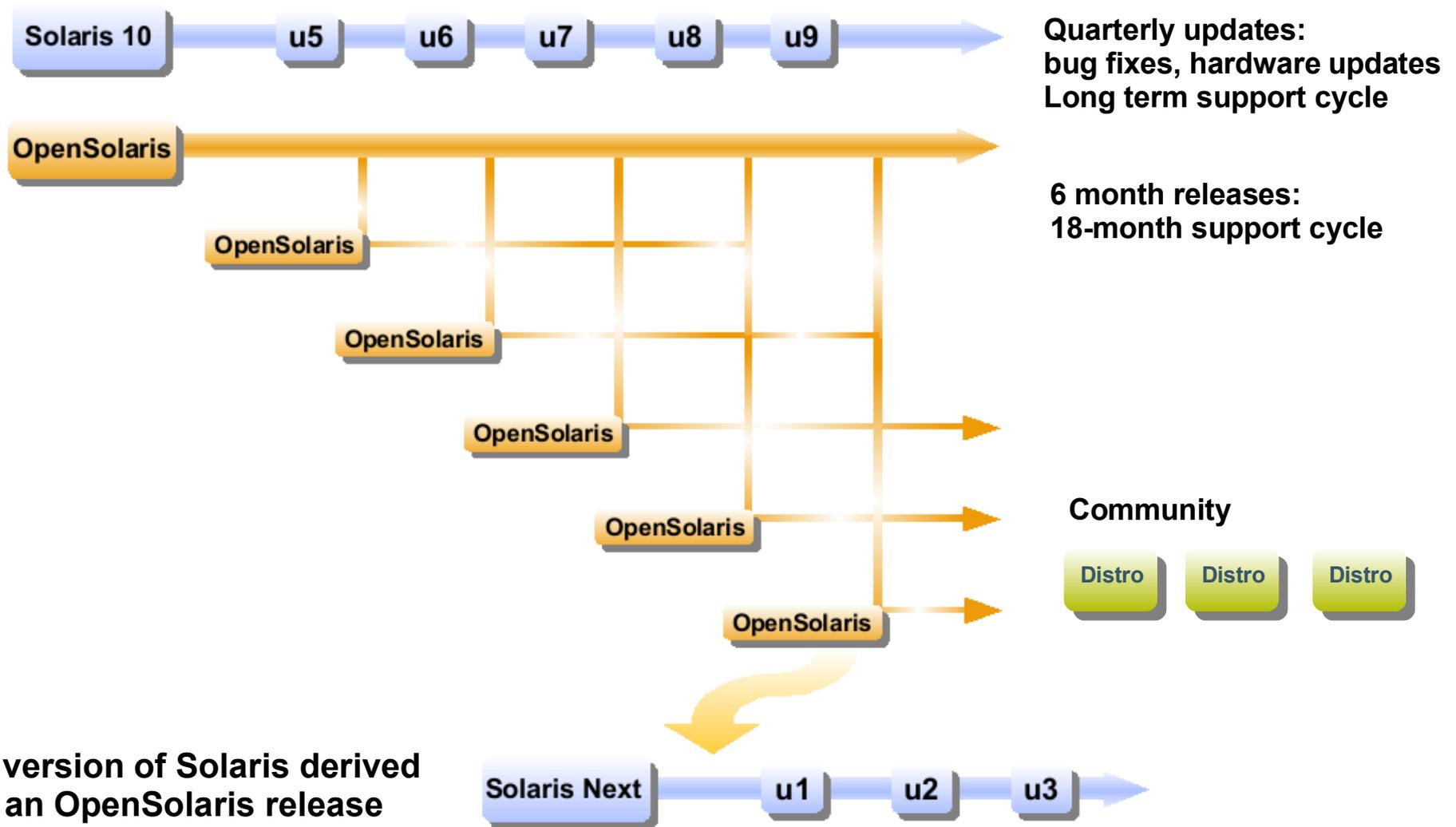
<http://opensolaris.org/os/project/caiman/>

Installation & Packaging Community Group

<http://opensolaris.org/os/community/install/>



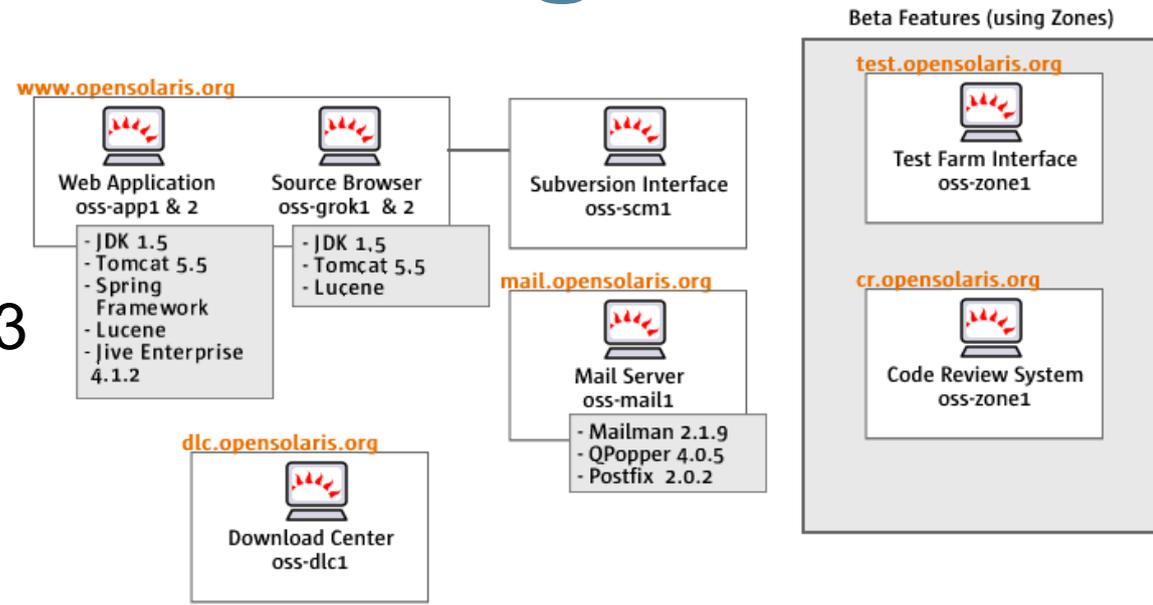
# Proposed Release Model



# opensolaris.org

## Infrastructure

- Self hosted from the start.
- 5 public sites running on 13 x86 Nevada systems in a San Francisco datacenter.



## Applications

- Database-driven portal written in Java. A dozen applications. Being re-designed to support more scalability and modularity.
- Features: user registration, content management, mail lists integrated with web forums, multiple SCM systems, blog aggregations, code review tools, bug reporting, voting.
- Site source code opened for community development.



# 11 Country Portals

Project: 日本ポータル  
プロジェクトの概要  
FAQ センター  
一般的な内容に関する FAQ  
はじめての開発者のための FAQ  
Web サイトに関する FAQ  
Common Development and Distribution License (CDDL) に関する FAQ  
OpenSolaris パイプライセンスに関する FAQ  
Public Documentation License (PDL) に関する FAQ  
OpenSolaris の商標とロゴの使用に関する FAQ  
Sun Contributor Agreement (SCA) に関する FAQ

ライセンス  
Blogs  
Announcements  
Events  
News  
リンク  
ダウンロードセンター  
ディスカッション  
OpenSolaris コミュニティ:  
Nevada 開発  
OpenSolaris 開発者向けウォークスライド

OpenSolaris プロジェクトとは  
OpenSolaris プロジェクトは、オープンソースコミュニティであり、OpenSolaris テクノロジーのコラボレーション、話し合いの場です。  
コミュニティは、広く世界中さまざまな人々から成り立っています。システムに機能を追加する開発者の人々、新しいアプリケーションやプラットフォームにテクノロジーをカスタマイズしている人々、データセンターにおいて、Solaris テクノロジーを提供しているシステム管理者の人々、大学においてオペレーティングシステムの研究を行っている教育者および学生の人々、テクノロジーを探求している、あるいは、OpenSolaris が新しい機会を提供することを発見しようとしている新しいユーザの人々です。  
OpenSolaris のソースコードは、すでに最先端ですが、技術革新は、いたるところで起きており、皆さんの参加を歓迎いたします。以下がコミュニティから提供されています。  
プロジェクトの概要とロードマップ(英文)を参照することから始めて下さい。  
(Solaris オペレーティングシステムの情報が必要な場合は、こちら日本語、英語を参照して下さい。)  
ほとんどありとあらゆるトピックに関する話し合いが行われている [ディスカッション](#)。

Japan  
<http://jp.opensolaris.org/>  
Poland  
<http://pl.opensolaris.org/>  
China  
<http://cn.opensolaris.org/>  
France  
<http://fr.opensolaris.org/>  
India  
<http://in.opensolaris.org/>  
Spain  
<http://es.opensolaris.org/>  
Mexico  
<http://mx.opensolaris.org/>  
Brazil  
<http://br.opensolaris.org/>  
Germany  
<http://de.opensolaris.org/>  
Russia  
<http://ru.opensolaris.org/>  
Czech Republic  
<http://cz.opensolaris.org/>



# Values

Everything we do should support these values

## Engineering Values

Performance  
 Security, Availability  
 Manageability  
 Reliability, Compatibility  
 Serviceability  
 Platform Neutrality

[http://opensolaris.org/os/community/on/os\\_dev\\_process/](http://opensolaris.org/os/community/on/os_dev_process/)

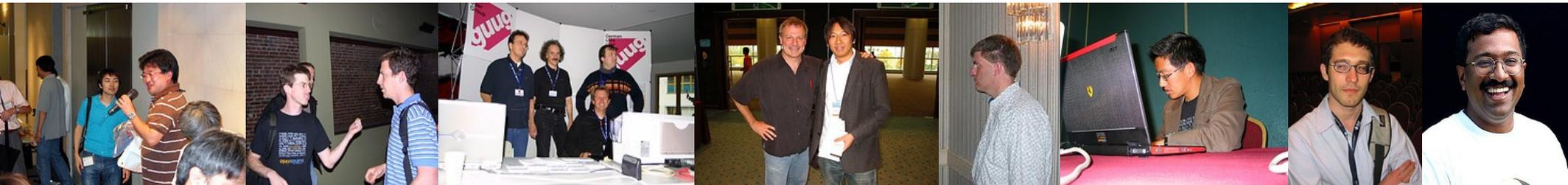
## Community Values

Honesty  
 Openness  
 Independence  
 Transparency  
 Quality  
 Respect

<http://opensolaris.org/os/about/>

The project has been successful in keeping to the original Solaris ethos while developing a strong OpenSolaris community.

— Peter Tribble, OpenSolaris developer, ZDNet, 5/06





**The Community is vastly more innovative and powerful than any single company.** *Jonathan Schwartz, CEO, Sun, 5/15/07*

# open



USE



IMPROVE



EVANGELIZE

## Thank you!

Jim Grisanzio

Community Manager, OpenSolaris Engineering

[jim.grisanzio@sun.com](mailto:jim.grisanzio@sun.com) | <http://blogs.sun.com/jimgris/>

Photos: Jim Grisanzio, Chandan, Joe G., Dave Miner, Dennis Clarke, Alan Hargreaves, Petr Sumbera, Joey Guo, Cyril Plisko, Moinak Ghosh, Lisa Week, Teresa Giacomini, Patrick Finch, Martin Man, Adhari Mahendra, Qingye Jiang, Ted Leung. Website graphic: Derek Cicero. "open" artwork and slide design: Chandan.

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開  
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मुक्त  
ಮುಕ್ತ  
livre  
libero  
ముక్త  
开放的  
açık  
open  
nyílt  
•••••  
ΠΙΠΠ  
オープン  
livre  
ανοικτό  
offen  
otevřený  
öppen  
открытый  
வெளிப்படை

# Optional Slides

# OpenSolaris Resources

- OpenSolaris <http://opensolaris.org/os/>
- OpenSolaris Starter Kit <http://get.opensolaris.org/>
- Advocacy Community Group <http://opensolaris.org/os/community/advocacy/>
- User Groups <http://opensolaris.org/os/community/advocacy/usergroups/ug-leaders/>
- Development Process (draft) [http://opensolaris.org/os/community/onnv/os\\_dev\\_process/](http://opensolaris.org/os/community/onnv/os_dev_process/)
- Source Code Management <http://opensolaris.org/os/community/tools/scm/>
- Governing Board <http://opensolaris.org/os/community/ogb/>
- Governance <http://opensolaris.org/os/community/ogb/governance/> | Charter <http://opensolaris.org/os/community/ogb/charter/>
- Communities <http://opensolaris.org/os/communities/>
- Projects <http://opensolaris.org/os/projects/>
- Source Code <http://opensolaris.org/os/downloads/>
- Distributions <http://opensolaris.org/os/downloads/>
- Source Browser <http://cvs.opensolaris.org/source/>
- Participation <http://opensolaris.org/os/communities/participation/>
- Code Contributions [http://opensolaris.org/os/bug\\_reports/request\\_sponsor/](http://opensolaris.org/os/bug_reports/request_sponsor/)
- Bug Activity: [http://opensolaris.org/os/bug\\_reports/](http://opensolaris.org/os/bug_reports/)
- ARC Cases from Community Code [http://opensolaris.org/os/bug\\_reports/arc\\_table/](http://opensolaris.org/os/bug_reports/arc_table/)
- Request Sponsor <http://opensolaris.org/os/community/on/crt/>
- Sponsor Tasks <http://opensolaris.org/os/community/on/crt/sponsor-tasks/>
- Licensing of OpenSolaris <http://opensolaris.org/os/licensing/> & <http://sun.com/cddl/>
- Licensing Paper from Sun [http://www.sun.com/software/opensource/whitepapers/free\\_open\\_licensing.pdf](http://www.sun.com/software/opensource/whitepapers/free_open_licensing.pdf)
- Road map <http://opensolaris.org/os/about/roadmap/>
- Blogs <http://opensolaris.org/os/blogs/> | <http://planet.opensolaris.org/> | <http://opensolaris.org/os/blogs/?startDate=2005-06-14>
- Discussions <http://www.opensolaris.org/jive/index.jspa> | [#opensolaris](http://irc.freenode.net)
- Presentations <http://opensolaris.org/os/community/advocacy/>
- Photos <http://www.flickr.com/photos/tags/opensolaris>
- Metrics <http://opensolaris.org/os/community/marketing/metrics/latest/>
- Newsletter <http://opensolaris.org/os/community/advocacy/newsletter/>
- Sun in Open Source <http://sun.com/opensource> | <http://www.sun.com/software/opensource/learnmore.jsp>
- Install & Related Projects <http://opensolaris.org/os/community/install/> | <http://opensolaris.org/os/project/caiman/>
- Project Indiana <http://opensolaris.org/os/project/indiana/>
- Newbies <http://www.opensolaris.org/os/newbies/>

# Code

01. 01/25/05: DTrace Source Code
- 02. 06/14/05: OS/Networking Consolidation Source Code**
03. 10/28/05: JDS Consolidation Source Code
04. 11/10/05: DevPro Consolidation: SCCS/make Binaries
05. 11/15/05: OpenGrok Source Browser Source Code
06. 11/16/05: ZFS Project integrated into ON build 27
07. 01/27/06: Network Storage Consolidation Source Code
08. 02/22/06: DevPro Consolidation: libm/libmvec Source Code
09. 02/28/06: DevPro Consolidation: libmtsk Binaries
10. 03/06/06: Install Consolidation: Packaging Tools Source Code
11. 03/29/06: SFW Consolidation Source Code
12. 03/31/06: Documentation Consolidation: Source: ZFS Administration Guide. Device Driver Tutorial
13. 03/31/06: X Window System Consolidation Source Code
14. 05/10/06: Globalization Consolidation: Source for OS/Net Consolidation Message Files
15. 05/31/06: Docs Consolidation: Source: Solaris Dynamic Tracing Guide. System Administration Guide: Solaris Containers -- Resource Management and Solaris Zones
16. 06/12/06: DevPro Consolidation: medalib Source Code
17. 06/26/06: Companion CD Source Code
18. 06/30/06: Documentation Consolidation: Source: OpenSolaris Developer's Reference. Solaris Containers: Resource Management and Solaris Zones Developer's Guide
19. 07/28/06: Documentation Consolidation: Source: Solaris Volume Manager System Administration Guide. Solaris Express Installation Guide: Basic Installations
20. 08/31/06: Documentation Consolidation: Source: Solaris Trusted Extensions Installation and Configuration Guide. Solaris Trusted Extensions Label Administration. Solaris Trusted Extensions User's Guide. Solaris Trusted Extensions Transition Guide. Solaris Trusted Extensions Developer's Guide. Solaris Express Installation Guide: Solaris Flash Archives (Creation and Installation). System Administration Guide: Basic Administration. System Administration Guide: Advanced Administration
21. 09/11/06: BrandZ Project integrated into ON build 49
22. 09/26/06: DevPro Consolidation: SUNWlibC (C++ runtime libraries) Binaries
23. 09/29/06: Documentation Consolidation: Source: Application Packaging Developer's Guide. DTrace User Guide. Solaris Trusted Extensions Administrator's Procedures
24. 10/06/06: Solaris PowerPC source release
25. 10/20/06: SPARC Graphics Consolidation: Device Driver Binaries
26. 11/30/06: Documentation Consolidation: Source: Solaris Express Installation Guide: Custom JumpStart and Advanced Installations. Solaris Express Installation Guide: Planning for Installation and Upgrade. Solaris Tunable Parameters Reference Manual. System Administration Guide: Security Services.
27. 12/08/06: Man Page Consolidation: Source for an initial set of 356 man pages.
28. 12/18/06: ON Test: Source for the NFSv4 Test Suite
29. 12/19/06: DevPro Consolidation: Source for SCCS and make
30. 12/22/06: Globalization Consolidation Source Code
31. 01/18/07: Globalization Consolidation: Source for multiple translations
32. 01/26/07: Man Page Consolidation: Source for a second set of 2790 man pages
33. 02/20/07: Docs Consolidation: Source: System Administration Guide: IP Services
34. 04/12/07: Docs Consolidation: Source: System Admin Guide: Naming and Directory Services (DNS, NIS, and LDAP). System Administration Guide: Network Services
35. 05/24/07: Man Page Consolidation: Source for third set of 622 man pages
36. 06/26/07: ZFS test suites source and binaries
37. 06/26/07: pNFS Code and BFU archives
38. 06/28/07: Solaris Cluster

**And more opening all the time.**

**10,000,000 lines | 35,000 files**

More source in projects. More releases to come

<http://opensolaris.org/os/about/roadmap/>

# Starting in a Storm

I believe they'll have a hard time getting much of a community built up. Linus Torvalds, 12/04

Solaris is apparently a buggy piece of crap. -- Linus Torvalds, 7/07

I'm in active competition with them, and so I hope they die. Linus Torvalds, 2/05

It's a great shame that OpenSolaris still exists. I wish they had killed it. Andrew Morton, 8/07

It's a facade. There's lots of marketing, but no community to speak of. Dan Frye, IBM, 8/06

I think that OpenSolaris is a little bit of a game Sun is playing to try to get good PR. But I don't think it's in the spirit of true open source. Ross Mauri, IBM, 8/06

Sun open sources to much fanfare but not much avail, examples include Solaris. Peter Yared, 5/06

Sun made its operating system -- Solaris -- available as open source. Sort of. Stuart Cohen, OSDL, 5/06

Look at those who blindly open source. Solaris -- 2 million lines of code. Useless. Alfred Chuang, CEO, BEA

It's too late. Marc Fleury, JBoss, 11/04

This is a defensive, 'me-too' move on Sun's part. Laura DiDio, Yankee Group, 11/04

I generally don't think that there is a following there. Scott Handy, VP of IBM's Linux Strategy

# Support

**The OpenSolaris community is thriving.** Stephen O'Grady, industry analyst, Redmonk, 3/06

**There's lots of interest in Solaris.** Peter T. Brown, executive director, FSF 10/07

**The biggest strategic enabler is Sun's community development license.** Paul Murphy, ZDNet, 6/06

**Sun took the bold step of open sourcing its crown jewel.** Tom Yager, InfoWorld, 9/06

**Solaris has attracted a vigorous community.** Charles Babcock, InformationWeek, 4/06

**The move to OpenSolaris has been a good one.** Bill Zeitler, SVP, IBM Systems Group, in Cnet, 4/06

**They're pushing the envelope.** Tony Iams, Ideas International, Cnet, 4/06

**Sun's commitment to community development is unquestionable.** InfoWorld, 12/06

**They have the world's fastest growing open source community.** Paul Murphy, ZDNet, 4/06

**It does sound like a good offer.** Linus Torvalds, Cnet 6/07, commenting about a dinner offer from Jonathan Schwartz.

**The open sourcing of Solaris allows us to exist.** -- David Young, CEO, Joyent, 8/07

**There are a lot of customers that love Solaris and are loyal to it.** Bill Zeitler, SVP, IBM Systems, 8/07

**Open Source drew us to Solaris.** -- Kirk Skaugen, VP, Intel Server products, 1/07

# What is OpenSolaris?

# openSOLARIS™

An open engineering project based on a subset of the Solaris source code. It's all about the **code** and the **community** and the **market** that results from all those developers working on all that code and all those deployers and users running that code.

It's also a work in progress. We've been opening the code and infrastructure while still building and shipping Solaris! And things are evolving fast now.