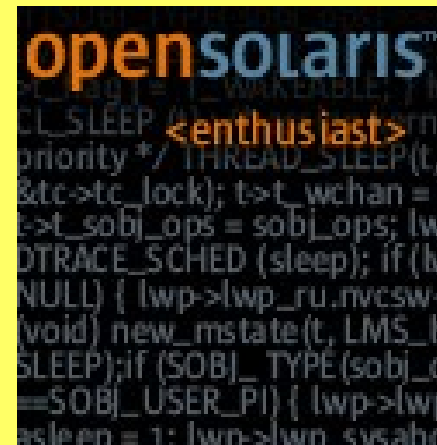


## Open Solaris

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## When it all started

- 12.2003 reliable “rumors”
- 09.2004 Pilot
- 12.2004 OSI approved CDDL
- 01.2005 DTrace sources available
- 06.2005 Open Solaris

## What is Open Solaris?

- It's **NOT** a distribution
  - You can make your own distribution based on OS
  - There are already Open Solaris based distributions
- Current development sources
- Infrastructure
  - Mailing lists, web forums, ...
  - Documentation, HOW-TOs, ...
  - Source browser and searcher
  - Source Code Management

## What is actually available?

- Whole kernel
- Most drivers
- Most system libraries and utilities
- X11, JDS, Networking – more coming
- Some bits are available in binary only

## They won't open source ZFS - really?

- ZFS is also available
- SMF is also available
- DTrace is also available
- Zones are also available
- ... you name it

## So Open Solaris is Solaris?

Not exactly – Solaris is a distribution which is based on Open Solaris.

Solaris also contains additional products and you can get support

But there are other distributions also based on Open Solaris.

## CAB – Community Advisory Board

- 5 members
  - 2 from Sun (Simon Phipps, Casper Dik)
  - 2 from the Pilot (Al Hopper, Rich Teer)
  - 1 from open source community (Roy Fielding)
- Responsible for governance proposal

## CDDL - Common Development and Distribution License

- OSI approved
- Based on Mozilla Public License (MPL)
- File based
- Allows binaries and other licenses

## CDDL vs. GPL

- GPL requires whole project to be GPL
- Unfortunately due to GPL viral nature you can't use both in one project
- You can have GPL apps in Open Solaris
- CDDL means more freedom than GPL

## Terminology

- Nevada – code name for Solaris 11
- ON – OS/Net consolidation
  - Kernel
  - Libs
  - Zones, ZFS, DTrace, SMF
  - Most of /bin /sbin

## How to start?

- Install Open Solaris based distribution
- Every project has its mailing list
- Most general is opensolaris-discuss@
- <http://bugs.opensolaris.org>

## Source Browser

- Inspect the source
- <http://cvs.opensolaris.org/source/>
  - Uses Open Grok
  - Allows to easily navigate thru source
  - Fastest way to find something
  - Really fast
  - Sometimes better than documentation

## Reporting bugs

- You can report a bug without a contract
- You can expect feedback
- Sometimes you'll get answer faster than using formal (support) channels
- Most of Sun engineers are there

## Contributing code

- Every consolidation has its own rules
- ON has special rules
  - Your code has to be cstyle checked
  - Your code has to be reviewed
  - Architectural review may be needed

## How to sent bug fixes?

- Discuss your changes first
- Check <http://bugs.opensolaris.org>
- Download latest sources
- Make fix, test it
- Request a “sponsor”
  - [request-sponsor@opensolaris.org](mailto:request-sponsor@opensolaris.org)

## Community Bug Fixes

- 57 bug fixes integrated so far
- ~70 in-progress
- Some community fixes are already in S10
- [http://opensolaris.org/os/bug\\_reports/request\\_sponsor/](http://opensolaris.org/os/bug_reports/request_sponsor/)

## Can I compile it?

- Yes, you can – it's really easy
- You can use GCC or Sun Studio
- Sun Studio is free
- Where is 'make menuconfig'?

## How to compile ON?

- Download source
- Install tools (compilers, etc.)
- Edit config file
- *nightly ./opensolaris.sh*
- It takes <1h on modern x86/x64 servers

## Open Solaris based distributions

- Solaris Express
- SchilliX
- NexentaOS
- BeleniX
- marTux

## SchilliX

- First Open Solaris based distribution
- Released just 3 days after Open Solaris!
- Created by Jorg Schilling
- Co-developed by Fabian Otto
- <http://schillix.berlios.de/>

## BeleniX



- First released on 10.2005
- LiveCD distribution
- Xfce, KDE
- Moinak Ghosh – lead developer
- <http://www.belenix.org/>

## NexentaOS

- Debian/Ubuntu with Open Solaris
- ~6,500 packages so far
- x86/x64 only
- <http://www.gnusolaris.org/>



# Open Solaris



## Solaris Express

- Development version of Solaris 11
- Build from Open Solaris once a month
- Most robust build is chosen
- Support offered if needed
- Available on x86/x64 and SPARC
- <http://www.sun.com/software/solaris/solaris-express/>

## Solaris Express Community Release

- Development version of Solaris 11
- Build from Open Solaris every two weeks
- Less tested but has all the latest
- Available on x86/x64 and SPARC
- <http://www.opensolaris.org/os/downloads/on/>

## Cool stuff

- Open Solaris on PowerPC
- Project Nemo
- Project Crossbow
- New Installer
- iSCSI

## Your voice matters

You can influence not only small things but also top Open Solaris technologies like Zones, DTrace, SMF, ZFS, name it.

## Participate

Open Solaris is all about participation.

Share your comments, ask questions.

Share your ideas.

Contribute your code.

You can learn a lot just by looking...

## Q&A



chandam © 2005

Laris, the Fast and Slender Loris

## Links

- Open Solaris <http://www.opensolaris.org>
- Open Solaris Source Browser <http://cvs.opensolaris.org>
- NexentaOS <http://www.gnusolaris.org/>
- BeleniX <http://www.belenix.org/>
- Solaris Express <http://www.sun.com/software/solaris/solaris-express/>
- Solaris Express CR <http://www.opensolaris.org/os/downloads/on/>
- marTux <http://user.cs.tu-berlin.de/~mbeinsx/marTux/>