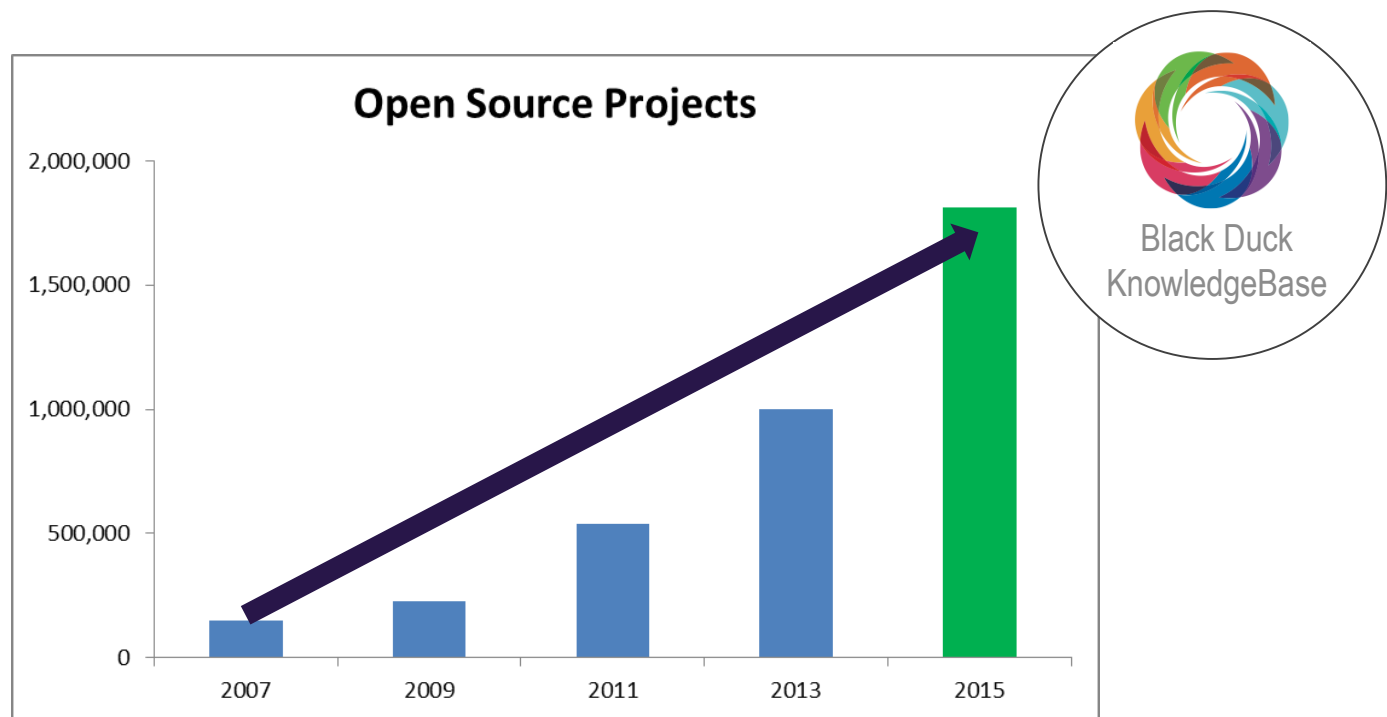




# **BLACK DUCK**

Matthew H. Jacobs, Esq.  
General Counsel, Black Duck Software, Inc.

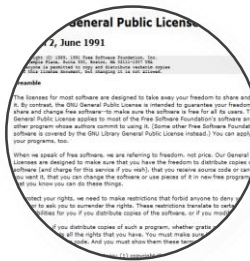
# THE FOSS UNIVERSE IS EVER EXPANDING



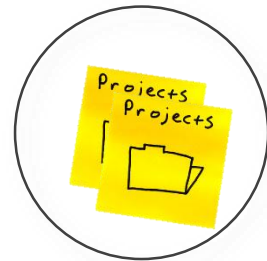
**10+ Million  
staff years**



**>7,500+ sites**



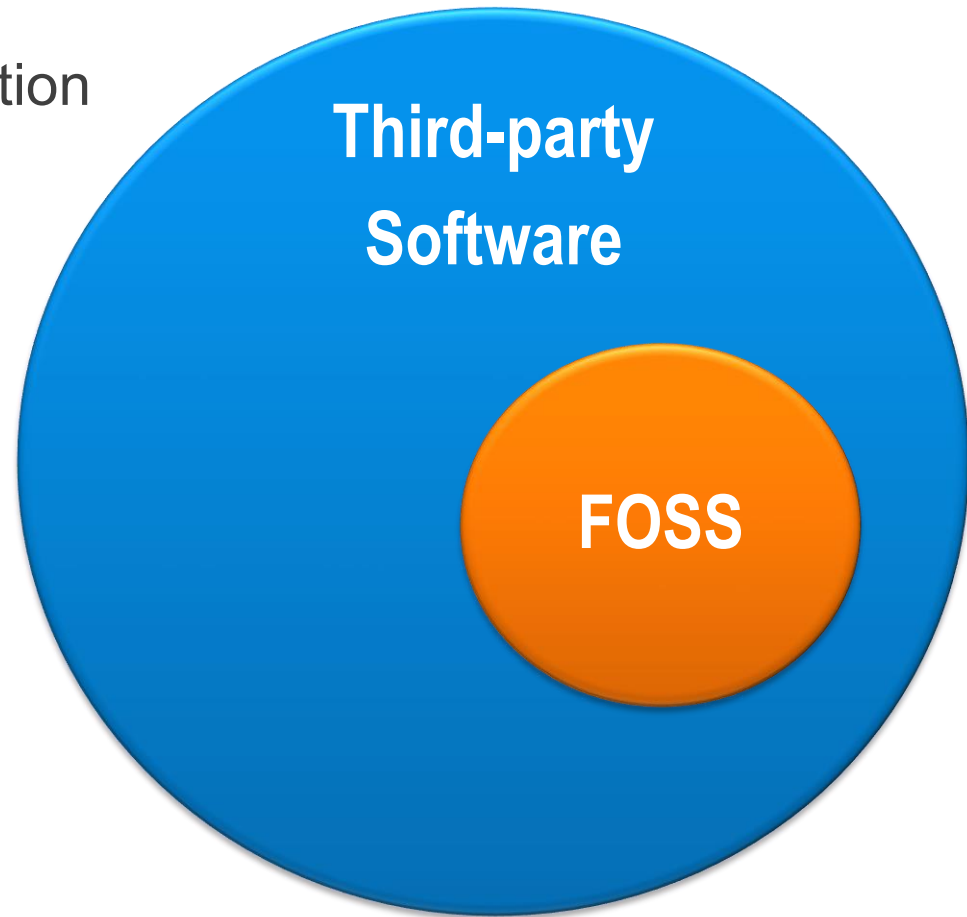
**2,300+ licenses**



**4B+ files/1,000,000 +  
unique projects**

# WHAT IS FOSS?

- It's third party software
- No single “official” definition



# PRIMARY OSS LICENSE CATEGORIES

## Permissive Licenses (Academic)

- Licensee can use, copy, modify and distribute the software
- Licensee is allowed to combine the source with open source or proprietary software
- Licensee is NOT obligated to distribute the source code of derivative works

• BSD

• MIT

## Copyleft Licenses (Viral, Reciprocal)

- Any Licensee modifications to the software (derivative works) must be **distributed** under the same reciprocal OSS license
- Copyleft licenses are substantially more complex than permissive licenses

• GPL

• AGPL

• MPL

See [www.opensource.org](http://www.opensource.org)

# OSS – THE 4 FREEDOMS



1. The freedom to run the program, for any purpose.
2. The freedom to **study how the program works**, and adapt it your needs.
3. The freedom to redistribute copies so you can help your neighbour.
4. The freedom to **improve the program, and release your improvements to the public**, so the whole community benefits.

# OPEN SOURCE DEFINITION

## Open Source Definition

1. Free Redistribution
2. Program must include Source Code and must allow distribution in source code as well as compiled form.
3. Must Allow Modifications and Derived Works
4. Integrity of the Author's Source Code
5. No Discrimination Against Persons or Groups
6. No Discrimination Against Fields of Endeavor
7. Distribution of License – no additional license can be required of others who redistribute the program
8. License Must Not Be Specific to a Product
9. License Must Not Restrict Other Software
10. License Must Be Technology-Neutral – not predicated on any individual technology



## Who is the OSI (Open Source Initiative)?

The OSI are the stewards of the Open Source Definition (OSD) and the community-recognized body for reviewing and approving licenses as OSD-conformant.

# OTHER *INTERESTING* FOSS LICENSES

- Beer-ware



- Tofu



- Fender Stratocaster



- No-nuke



- Chicken Dance



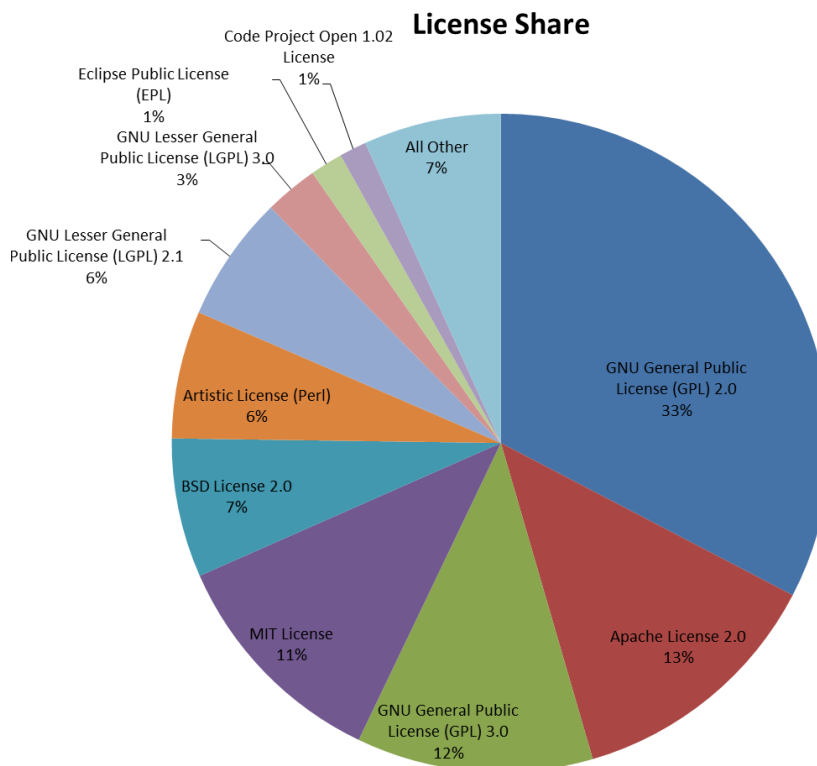


# TOP 20 OPEN SOURCE LICENSES

Rank	License
1	GNU General Public License (GPL) 2.0
2	Apache License 2.0
3	GNU General Public License (GPL) 3.0
4	MIT License
5	BSD License 2.0
6	Artistic License (Perl)
7	GNU Lesser General Public License (LGPL) 2.1
8	GNU Lesser General Public License (LGPL) 3.0
9	Eclipse Public License (EPL)
10	Code Project Open 1.02 License
11	Microsoft Public License
12	Mozilla Public License (MPL) 1.1
13	Common Development and Distribution License (CDDL)
14	BSD 2-clause "Simplified" or "FreeBSD" License
15	Common Public License (CPL)
16	zlib/libpng License
17	Academic Free License
18	GNU Affero GPL v3
19	Microsoft Reciprocal License (Ms-RL)
20	Open Software License (OSL)

Ranked according to number of open source projects using the license:

- Top 10 licenses account for **93%**
- Top 20 licenses account for **97%**
- GPL family of licenses account for **53%**



Source: [//www.blackducksoftware.com/oss/licenses#top20](http://www.blackducksoftware.com/oss/licenses#top20) April 2014



# THE GOOD NEWS / BAD NEWS

**Gartner**

Research

ID Number: G00210068

Publication Date: 24 January 2011

## Survey Analysis: Overview of Preferences and Practices in the Adoption and Usage of Open-Source Software

Laurie F. Wurster, Bob Igou, Zeynep Babat

Gartner conducted a primary research survey of 547 IT leaders in organizations (excluding technology and service providers) in 11 countries in the second half of 2010. The goal was to determine current and future open-source software (OSS) adoption and usage habits. Results suggest that organizations continue to focus on OSS as a method to lower costs; however, OSS usage gains increased respect over previous survey results as a key element in corporate business strategies.

### Key Findings

- All responding organizations deploy OSS in one of the following methods:

- Executed in some department for specific requirements
- Consistently used in all departments throughout the organization
- Strategically used to gain competitive advantage
- Used only as prototype to prove value

- More than half the organizations surveyed have adopted OSS solutions as part of their IT strategy, with nearly one-third citing benefits of flexibility, increased innovation, shorter development times and faster procurement processes. Lower total cost of ownership was a key driver.

- The top corporatewide Gartner-defined key initiatives supported by the use of OSS are: (1) data management and integration; and (2) application development, integration, architecture, governance and/or overhaul.

- Only one-third of responding organizations have a formal OSS policy in place. The remaining respondents indicate no policy or have an informal process for approving OSS adoption.

- OSS makes up nearly one-third of responding organizations' overall enterprise software portfolio (applications and infrastructure), which is interestingly about the same as the proportion of internally developed software.

- Nearly half the respondents have investigated OSS because they believe a strategic part of their business can be monopolized by one or two vendors.

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Average Enterprise uses  
29% open source code.

“50% of companies will face  
challenges due to lack of  
FOSS policy and  
management”

# REAL WORLD EXAMPLE

**“Over 80% of the software in our handsets is open source”**

Carl-Eric Mols, Head of OSS, Sony Mobile Communications



**Xperia™ Z**

Experience the best of Sony  
in a smartphone

Introducing the precision engineered full  
HD smartphone

Coming soon

Available colors

■ ● ●

SONY

10:35  
Thursday January 3

WALKMAN Album Movies PlayStation Mobile

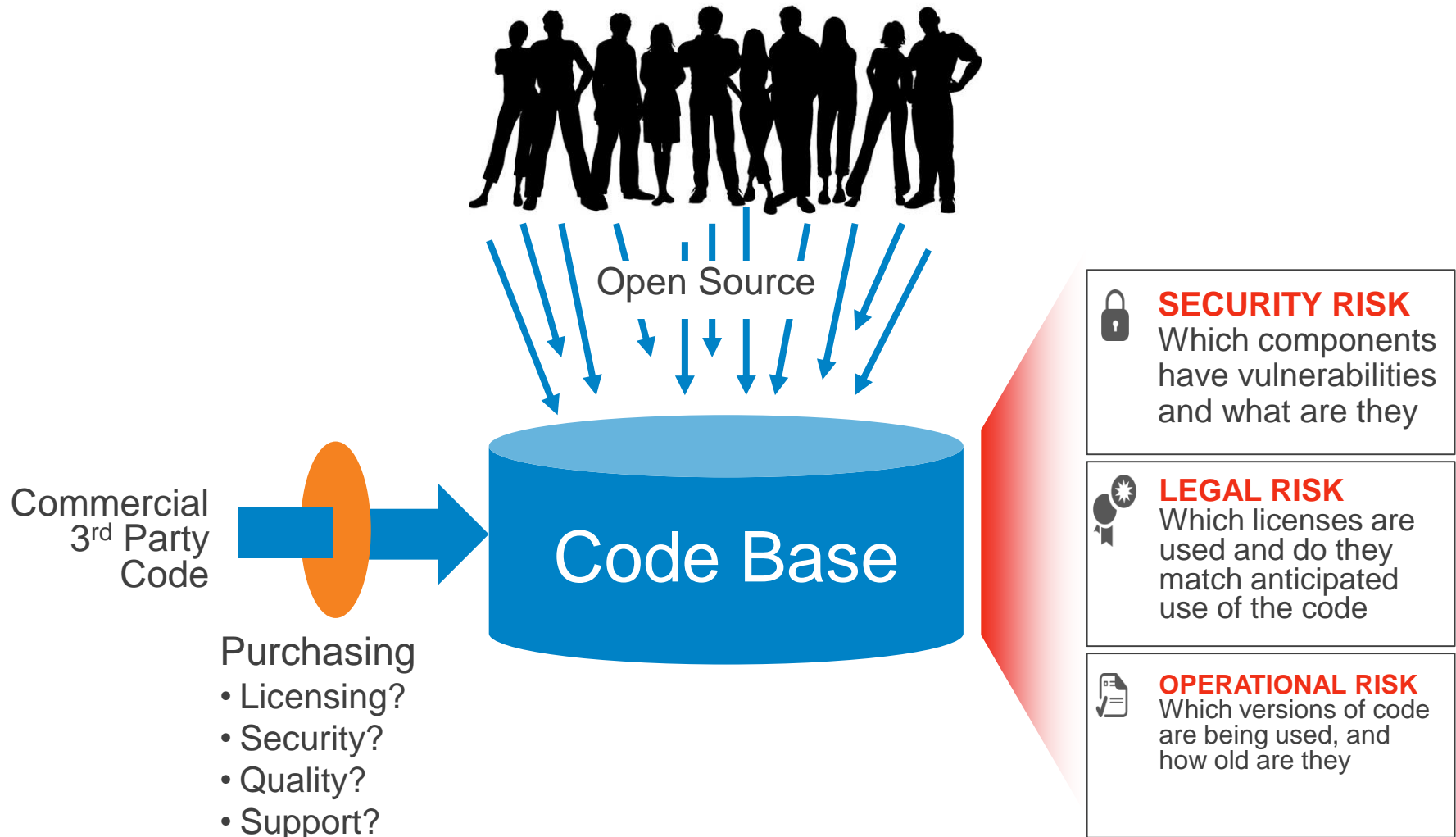
XPERIA

"Its spec sheet will  
have gadget fans  
drooling with tech  
lust"

2013  
CES  
HOT  
Stuff

© 2013 Sony Mobile Communications Inc.

# MULTI-SOURCE DEVELOPMENT; CODE ENTERS A CODE BASE UNCHECKED



# OPEN SOURCE ADOPTION IN ENTERPRISE ORGANIZATIONS

A typical Enterprise IT organization has thousands of applications and uses hundreds of open source components

Some apps  
Up to 90+% Open  
Source

ENTERPRISE  
AVERAGE  
30%

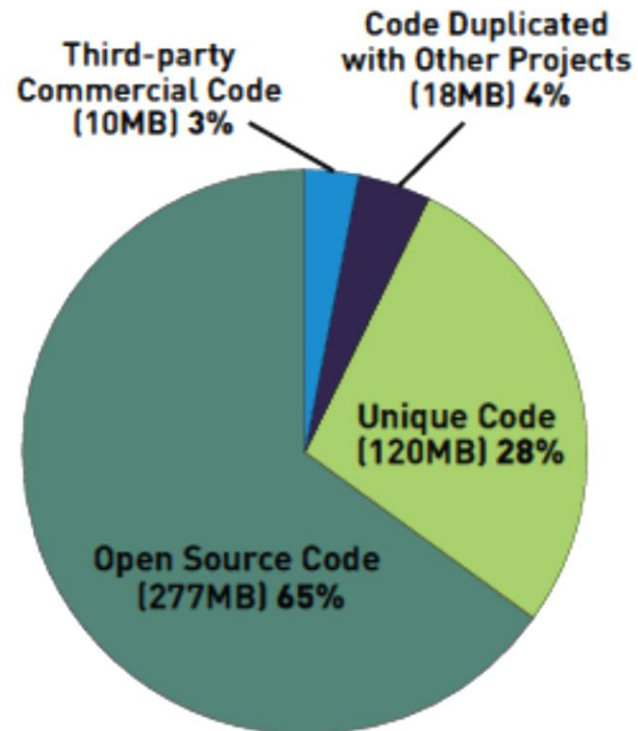
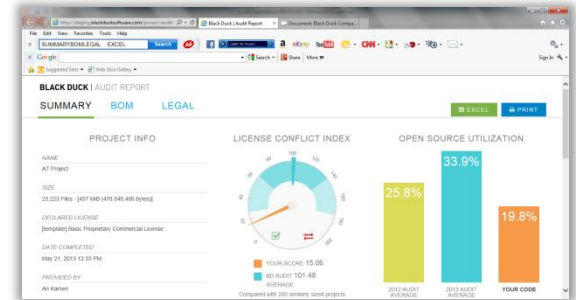


Fig. 1. Open source and Proprietary code base composition.  
*UK Investment Bank Trading Application.*

# BLACK DUCK'S EXPERIENCE ANALYZING CODE

- 99% of code audits find open source.
- 95% of audits find unknown open source
- 75% of audits contain unknown licenses.
- 50% of code audits contain GPL.
- Audits on average contain 33% open source.
- 5% of M&A deals never materialize due to our findings



# WHY INVESTORS & ACQUIRERS CARE

- Investors and Acquirers are asking about OSS use & compliance
- Current Litigation: compliance is an important issue
  - Versata v. Ameriprise
  - Ximpleware v. Ameriprise
- M&A OSS Problems:
  - Longer/Larger Escrows
  - Purchase Price Erosion
  - Costly Remediation