

# Doing it Right: Open Source Compliance Executive Guide

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A banner for the Korea Linux Forum. It features a dark red background with white text. The text "KOREA LINUX FORUM" is prominently displayed in large, bold, sans-serif capital letters. Above it, in smaller white capital letters, is "A LINUX FOUNDATION EVENT". In the background, there are faint, semi-transparent logos for "Google" and "Linux", and some other text like "What's Going?", "Open Source", "Intel &", "Creator a", and "Fellow".

**KOREA LINUX  
FORUM**

A LINUX FOUNDATION EVENT

# Abstract

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**Wednesday, November 13 • 11:20am - 12:10pm**

## Doing it Right: Open Source Compliance Quick Executive Guide - Ibrahim Haddad, Samsung

The past decade has witnessed an unprecedented adoption of open source software by enterprises for the various advantages it offers. This massive adoption of open source software came with legal and compliance responsibilities. Enterprises and development organizations have since then started establishing policies around open source usage (and contribution), and implementing engineering development processes to insure that software products that deploy are in compliance. This presentation provides a guide to doing compliance the right way (one of many) with an overview on setting up an open source compliance program and institutionalizing best practices.

# Disclaimers

**I am not a lawyer.  
This presentation is not a legal advice.  
I advise the Samsung compliance team.**



# Executive View on OSS Compliance

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- **Why**
- **When**
- **How**
- **Who**

# Why?

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- **Why**
- **When**
- **How**
- **Who**

# Why?

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- **Why**
- **When**
- **How**
- **Who**

# Why?

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- **Why**
- **When**
- **How**
- **Who**

# Why?

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- **Why**
- **When**
- **How**
- **Who**



# You are not alone

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- **Why**
- **When**
- **How**
- **Who**

# Clear is the new Smart

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- **Clear governance**
- **Clear policies**
- **Clear processes**
- **Clear guidelines**

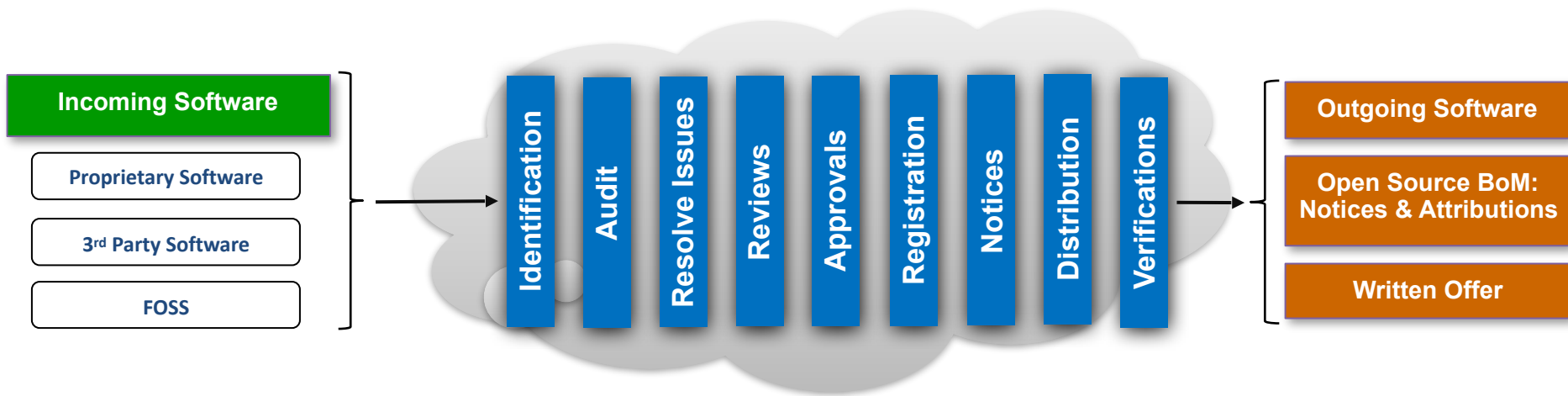
# Just like wine, your practices get better with time!

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- Clear governance
- Clear policies
- Clear processes
- Clear guidelines

# Example of a Usage / Compliance Process

(Used to approve the inclusion of open source code in a commercial product)



For a detailed discussion about the compliance process, please refer to the Linux Foundation compliance publications available from <http://compliance.linuxfoundation.org>.

# People Involved in the Compliance Process

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- |   |  |
|---|--|
| • <b>Developers / Software Architects</b>                             | <b>I write code</b>  |
| • <b>Software Development Managers</b>                                |  |
| • <b>Open Source Compliance Staff</b>                                 | <b>I approve technical merit for oss usage</b>   |
| • <b>Legal Counsel</b>  |  |
| • <b>Compliance Officer (aka Director or Manager of Open Source )</b> | <b>I scan code and report results</b><br><b>I review scan results and advise</b><br><br><b>I manage and execute compliance</b> |

# Practical Legal Advice at Your Fingertips

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- **License playbooks**
- **License compatibility information**
- **License classification information**
- **Approved software interaction methods**
- **Checklists**

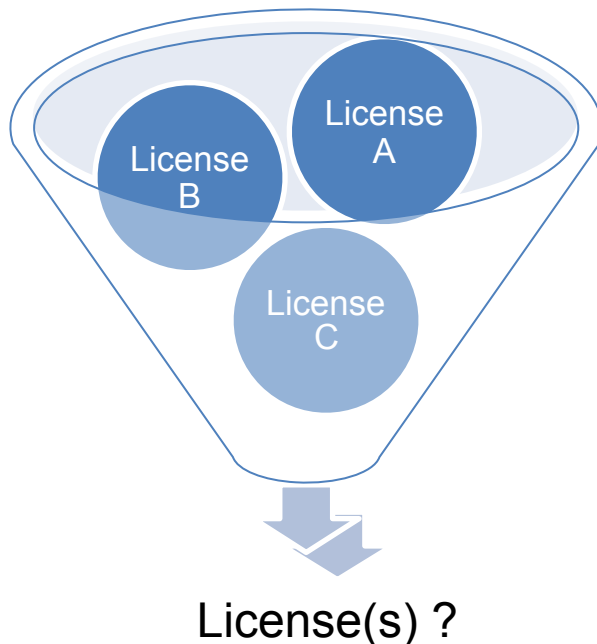
# 1. License Playbooks

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- **An easy to read and understand summary of licenses intended for software developers.**
- **For each commonly used license provide a playbook that includes:**
  - **Name / Version / URL**
  - **Executive Summary**
  - **Grant**
  - **Limitations**
  - **Warranty**
  - **Obligations**
  - **Patent Notes**
  - **Etc.**

## 2. License Compatibility Matrix

- License compatibility issues arises when developers combine code from different sources into a single work.
- A license compatibility matrix is an easy visual method to identify if License-A is compatible with License-B.



*Incoming Licenses = A + B + C*  
*Outgoing License(s) = ?*



# License Compatibility Matrix: Elaborate Example

		I want to release a project under:					
		GPLv2 only	GPLv2 or later	GPLv3 or later	LGPLv2.1 only	LGPLv2.1 or later	LGPLv3 or later
I want to copy code under:	GPLv2 only	OK	OK <a href="#">[2]</a>	NO	OK: Convey project under GPLv2 only <a href="#">[7]</a>	OK: Convey project under GPLv2 only <a href="#">[7][2]</a>	NO
	GPLv2 or later	OK <a href="#">[1]</a>	OK	OK	OK: Convey project under GPLv2 or later <a href="#">[7]</a>	OK: Convey project under GPLv2 or later <a href="#">[7]</a>	OK: Convey project under GPLv3 <a href="#">[8]</a>
	GPLv3	NO	OK: Convey project under GPLv3 <a href="#">[3]</a>	OK	OK: Convey project under GPLv3 <a href="#">[7]</a>	OK: Convey project under GPLv3 <a href="#">[7]</a>	OK: Convey project under GPLv3 <a href="#">[8]</a>
	LGPLv2.1 only	OK: Convey code under GPLv2 <a href="#">[7]</a>	OK: Convey code under GPLv2 or later <a href="#">[7]</a>	OK: Convey code under GPLv3 <a href="#">[7]</a>	OK	OK <a href="#">[6]</a>	OK: Convey code under GPLv3 <a href="#">[7][8]</a>
	LGPLv2.1 or later	OK: Convey code under GPLv2 <a href="#">[7][1]</a>	OK: Convey code under GPLv2 or later <a href="#">[7]</a>	OK: Convey code under GPLv3 <a href="#">[7]</a>	OK <a href="#">[5]</a>	OK	OK
	LGPLv3	NO	OK: Convey project and code under GPLv3 <a href="#">[8][3]</a>	OK: Convey code under GPLv3 <a href="#">[8]</a>	OK: Convey project and code under GPLv3 <a href="#">[7][8]</a>	OK: Convey project under LGPLv3 <a href="#">[4]</a>	OK
I want to use a library under:	GPLv2 only	OK	OK <a href="#">[2]</a>	NO	OK: Convey project under GPLv2 only <a href="#">[7]</a>	OK: Convey project under GPLv2 only <a href="#">[7][2]</a>	NO
	GPLv2 or later	OK <a href="#">[1]</a>	OK	OK	OK: Convey project under GPLv2 or later <a href="#">[7]</a>	OK: Convey project under GPLv2 or later <a href="#">[7]</a>	OK: Convey project under GPLv3 <a href="#">[8]</a>
	GPLv3	NO	OK: Convey project under GPLv3 <a href="#">[3]</a>	OK	OK: Convey project under GPLv3 <a href="#">[7]</a>	OK: Convey project under GPLv3 <a href="#">[7]</a>	OK: Convey project under GPLv3 <a href="#">[8]</a>
	LGPLv2.1 only	OK	OK	OK	OK	OK	OK
	LGPLv2.1 or later	OK	OK	OK	OK	OK	OK
	LGPLv3	NO	OK: Convey project under GPLv3 <a href="#">[9]</a>	OK	OK	OK	OK

### 3. License Classification

- An easy way to understand the approval process for different licenses and the course of action needed when using these licenses.

<u>Permissive</u>	<u>Modifications to be released</u>	<u>Patent Clause</u>	<u>Not Allowed</u>
License-A License-B License-C License-D	License-E License-F License-G	License-H License-I License-K	License-L License-M
<b>Notes:</b> Source code licensed under these licenses is pre-approved and can be combined with proprietary software.	<b>Notes:</b> Modifications made to source code licensed under these license must be released back	<b>Notes:</b> Due to patent clause, you must discuss with legal counsel about your planned usage.	<b>Notes:</b> Company policy prohibits use of source code under these licenses.
Pre-approved	Requires approval of engineering manager	Requires Legal Counsel approval	Not approved

## 4. Approved Software (License) Interactions

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**The goal is to understand how a specific software component interacts with other software components and the method of interaction:**

- Components that are Open Source (used “as is” or modified)
- Components that are proprietary
- Components originating from third party software providers
- Component dependencies
- Communication protocols
- Linkage method Dynamic versus static linking
- Components that live in kernel space versus user space
- Use of shared header files
- Etc.

# Software Interactions

## Legend



Proprietary



3<sup>rd</sup> Party Commercial



GPL



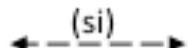
LGPL



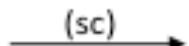
FOSS Permissive



Function call



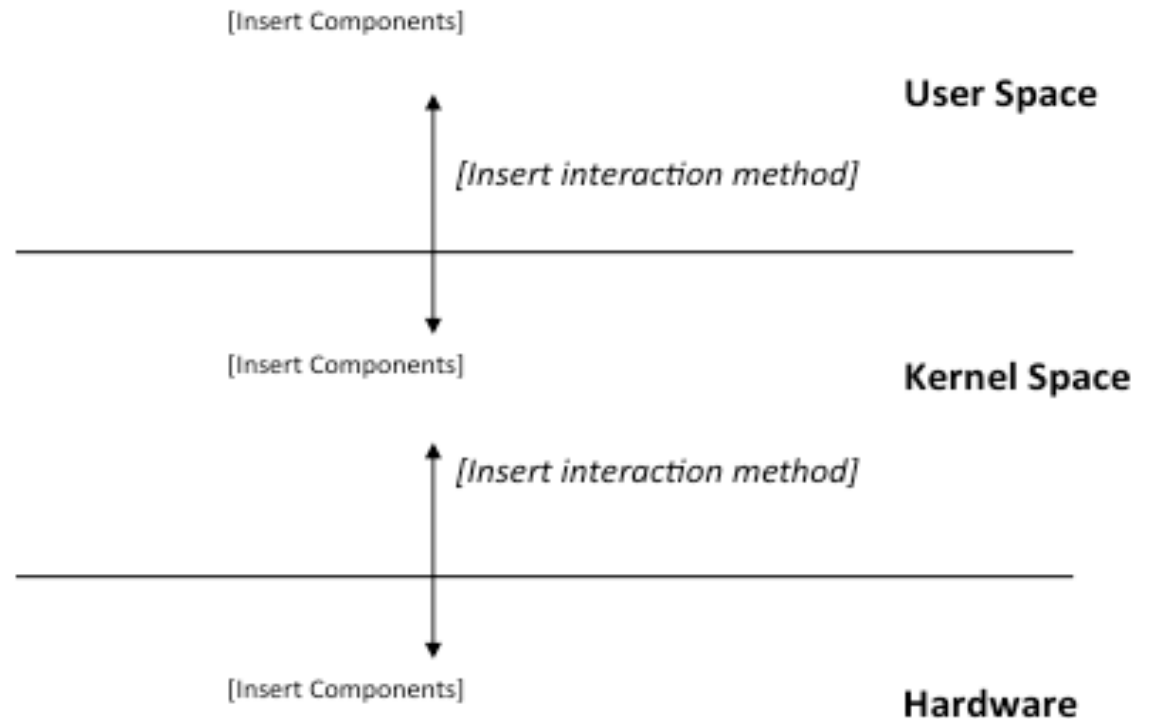
Socket interface



System call



Shared headers



# Software Interactions

<u>Can Dynamically Link To</u>	License-A	License-B	License-C	License-D
License-A	X	X	X	X
License-B		X		X
License-C	X		X	
License-D		X	[Requires approval]	X

<u>Can Statically Link To</u>	License-A	License-B	License-C	License-D
License-A	X		X	
License-B		X	[Requires approval]	
License-C	X		X	
License-D	[Requires approval]			X

# Thank you.

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