



# SPDX™

# SOFTWARE PACKAGE DATA

# EXCHANGE™

Kim Weins

SVP Products & Marketing





## What You'll Learn

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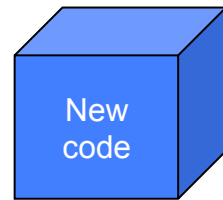
- The Challenges of Open Source Compliance
- How SPDX™ Can Help
- What it Means to You
- How to Participate



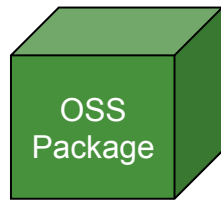
Companies know they  
need to comply with  
open source licenses,  
but doing so can be  
challenging



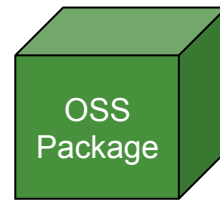
# Open Source Compliance: The Challenge



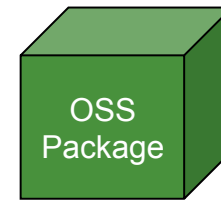
License A



License B  
License C



License D

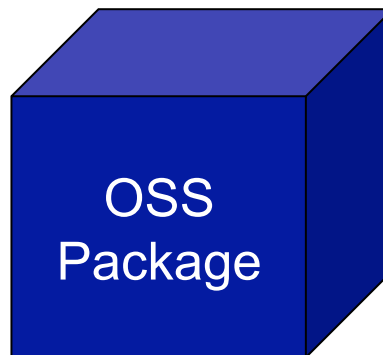


License E



One OSS Package  
= Many Licenses

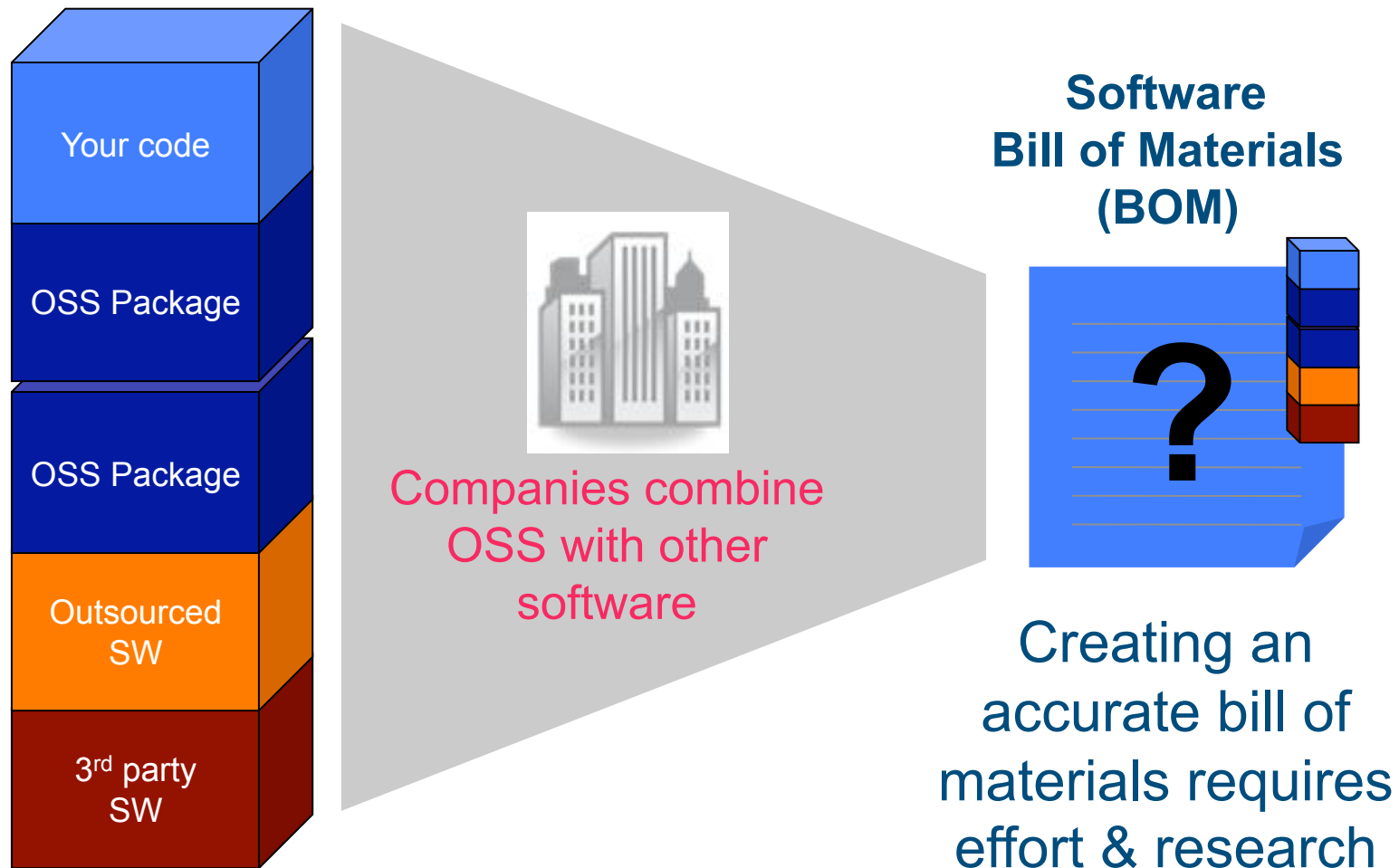
License info for  
OSS is not provided  
in a consistent,  
easy-to-use format



License A  
License B  
License C  
License D  
License E

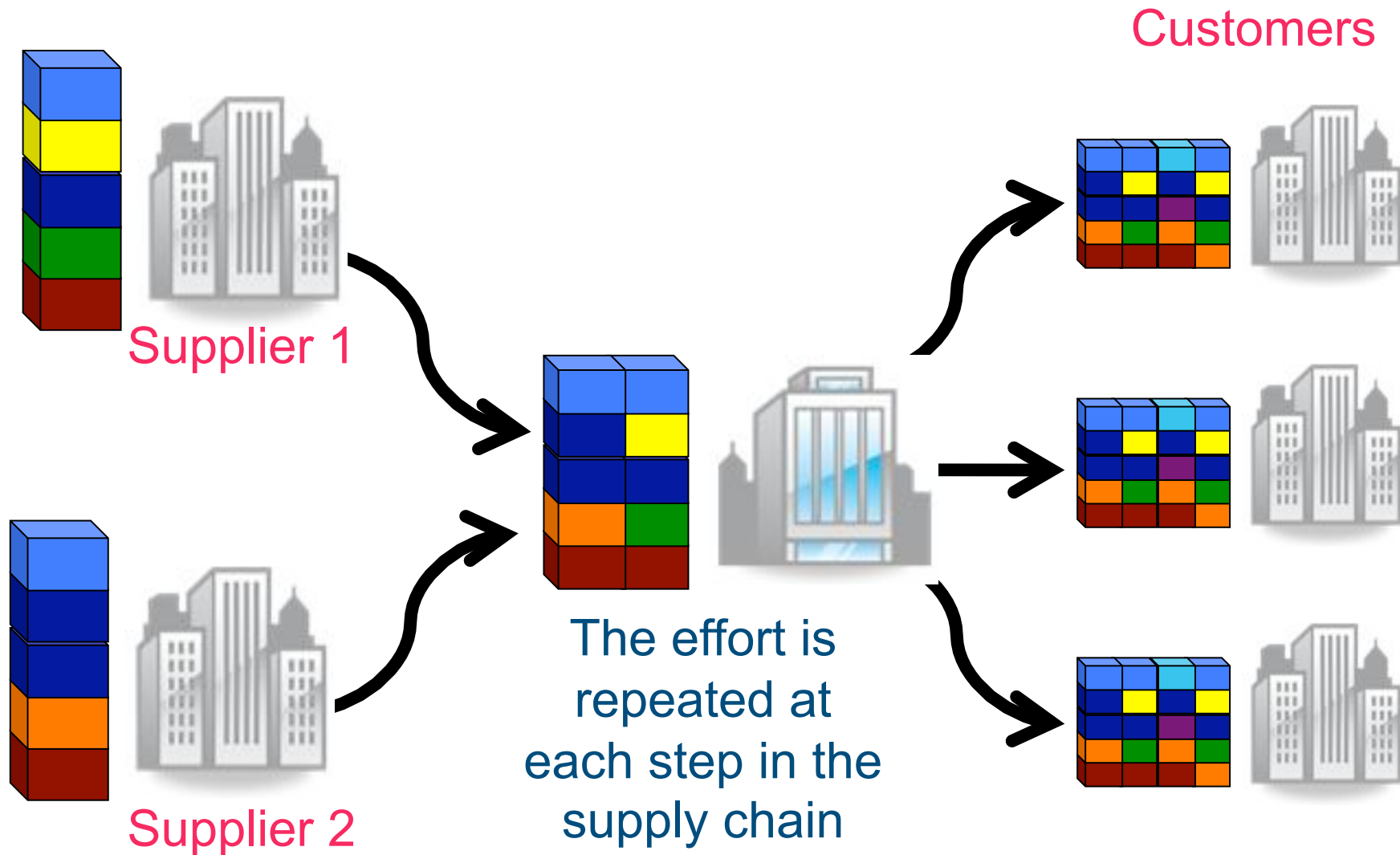


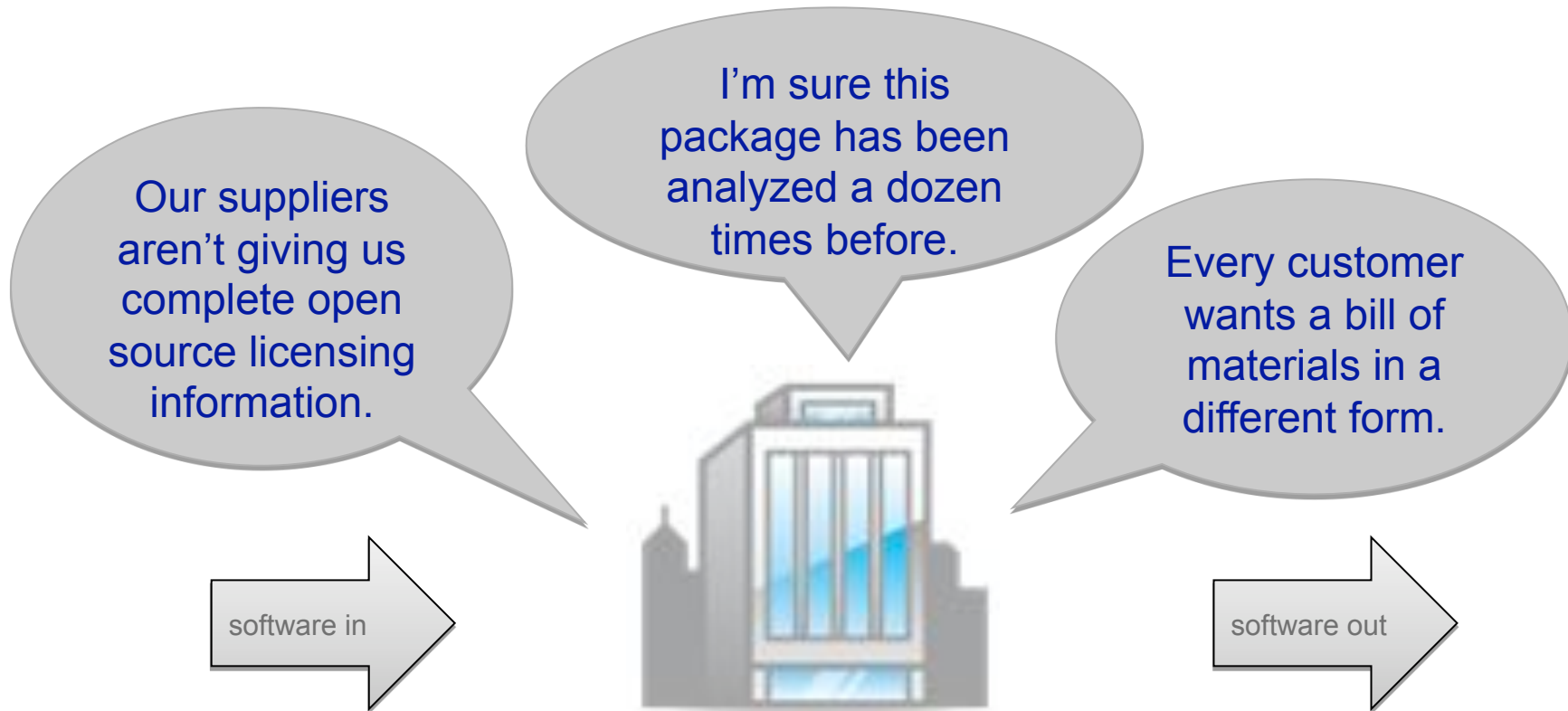
# Open Source Compliance: The Challenge





# Open Source Compliance: The Challenge





**We need a standardized format for a software Bill of Materials that can be used throughout the supply chain**



# Software Package Data Exchange™ (SPDX™)

- **SPDX™** - A standard format for communicating the components, licenses and copyrights associated with a software package.
- Key pillar in Linux Foundation's Open Compliance Program







## Benefits

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- Reduce burden of providing information in different formats for different consumers
- Avoids due diligence redundancy where packages are re-analyzed
- Enable better compliance with open source licenses

✓ Just the facts!

 Interpretation



# The SPDX™ Group

Open Source Organizations
End-Users
Integration & Services
Device OEMs
Applications
OS Distributions
Systems
Semiconductor Vendors



...and others

Participation is from a range of organizations and across various roles



# The SPDX™ Specification

- Version 1.0 beta - available
- Soliciting Beta sites and feedback

A screenshot of the SPDX website's draft specification page. The page title is "SPDX specification - DRAFT 20100807". The navigation menu includes "Home", "Specification", "Participation", "Blog", and "Organization". The page content includes a search bar, a "Navigate SPDX" sidebar with links like "Using The SPDX Spec" and "Developing The SPDX Spec", and a main content area with a "Table of Contents" section listing items such as "1. Rationale", "2. Identification Information", and "3. Common Overview Information". The page also features a rich text editor toolbar and a "Disable rich-text" link at the bottom.

Identification Info

Source of this SPDX™ file

Package Info

Associates an SPDX™ file with a software package (tarball, zip, archive)

Non-Standard Licenses

Text of licenses that are not in the SPDX™ standard list

Per File Info

License associated with each file



# SPDX™ Standard Licenses

## SPDX™ license repo

License Identifier	Recognized Exceptions	Full name of License
AFL-3.0		Academic Free License 3.0
AGPL-3.0		(GNU) Affero General Public License v3
APL		Adaptive Public License
ASL-2.0		Apache License, 2.0
APSL-2.0		Apple Public Source License 2.0
Artistic-2.0		Artistic license 2.0
AAL		Attribution Assurance License
BSD-4-Clause		BSD 4-clause "Original" or "Old" License
BSD-3-Clause		BSD 3-clause "New" or "Revised" License
BSD-2-Clause		BSD 2-clause "Simplified" or "FreeBSD" License
BSL-1.0		Boost Software License 1.0
CATOSL-1.1		Computer Associates Trusted Open Source License 1.1
CC-BY-1.0		Creative Commons Attribution 1.0
CC-BY-NC-1.0		Creative Commons Attribution Non Commercial 1.0
CC-BY-ND-1.0		Creative Commons Attribution No Derivatives 1.0
CC-BY-SA-1.0		Creative Commons Attribution Share Alike 1.0
CC-BY-NC-ND-1.0		Creative Commons Attribution Non Commercial No Derivatives 1.0
CC-BY-NC-SA-1.0		Creative Commons Attribution Non Commercial Share Alike 1.0
CC-BY-2.0		Creative Commons Attribution 2.0
CC-BY-NC-2.0		Creative Commons Attribution Non Commercial 2.0
CC-BY-ND-2.0		Creative Commons Attribution No Derivatives 2.0
CC-BY-SA-2.0		Creative Commons Attribution Share Alike 2.0
CC-BY-NC-ND-2.0		Creative Commons Attribution Non Commercial No Derivatives 2.0
CC-BY-NC-SA-2.0		Creative Commons Attribution Non Commercial Share Alike 2.0

List of most common licenses (100+)

Include common exceptions

Standardized license names

Exact text of licenses available on SPDX™ website – URLs won't change



- Tools Needed
  - Viewers
  - Validators
  - Create SPDX™ file
  - Read SPDX™ file
- Open Source Tools
  - “Pretty Print” viewer for SPDX™
  - License scanning tools (Fossology, Ninka)
  - More to come...
- Commercial Tools
  - Scanning tools expected to provide SPDX™ support



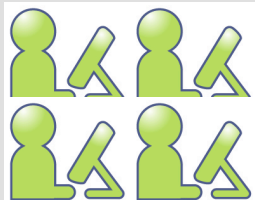
## What it Means to You

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**Embedded & SW  
Supply Chains**

Save Time/Money  
Better Compliance



**Open Source  
Developers**

Help Users Comply  
With Your Licenses



**Consumers of  
SW & OSS**

Understand the Licenses  
of the Code You Use





## Get Involved

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- Read the Spec
- Join the SPDX™ Group
- Provide Feedback
- Try it Out
- Become a Beta Site
- Contribute
  - We need Business, Marketing, Technical, Legal people to help
- Talk to Others
  - Your Company, Supply Chain Partners, Community Members



## Contact Info

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- See:
  - <http://www.spdx.org>
- Contact Me:
  - Kim Weins [kim.weins@openlogic.com](mailto:kim.weins@openlogic.com)
- Other SPDX™ Contacts:
  - Phil Odenice (co-chair) [podence@blackducksoftware.com](mailto:podence@blackducksoftware.com)
  - Kate Stewart (co-chair) [stewart@linux.com](mailto:stewart@linux.com)
  - Martin Michlmayr (FOSSBazaar liason) [tbm@hp.com](mailto:tbm@hp.com)



# QUESTIONS?

Thank you!