ENSURING OPEN SOURCE COMPLIANCE USING ECLIPSE FOUNDATION TECHNOLOGY

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Bosch Software Innovations
Spearheading the Internet of Things

Market presence
6.2m
connected devices using Bosch IoT Suite

Know-how
800+
IoT experts around the world (Germany, Bulgaria, Singapore, China, Japan)

Experience
250+
IoT international projects in the areas of manufacturing, mobility, energy, home & building, city, agriculture ...

Mobility
Solutions for electro mobility, intermodal transportation, and connected vehicles

Industry
Solutions for connected manufacturing

Agriculture
Solutions to support the sustainable intensification of food production

Energy
Solutions for smart and simple energy management

Smart Home & Building
Solutions for connected homes and commercial buildings

Smart City
Connected solutions for urbanites to make life easy and efficient

Spearheading the Internet of Things

Bosch Software Innovations
Spearheading the Internet of Things
OPEN SOURCE COMPLIANCE PRACTICES
Open Source Management Practices
End-to-End Compliance

- Compliance management is a set of actions that manages OSS components used in products. Companies may have similar processes in place for proprietary components. FOSS components are called "Supplied Software" in the OpenChain specification.

- Such actions often include:
  - Identifying all the FOSS components used in Supplied Software
  - Identifying and tracking all obligations created by those components
  - Ensuring that all obligations have been or will be met
  - Small companies may use a simple checklist and enterprises a detailed process.
Open Source Management Practices
Key Elements

- Artifact Repository
- Source Code Repository
- Software Build
- Software Metadata
- Licenses Metadata
- Open Source Code Archive
- Software Release
- FOSS Bundle

Obligation Identification
What components?
What licenses?
What obligations?
What necessary measures?

Guidance

Obligation Fulfillment
OPEN SOURCE USAGE PATTERNS
Open Source Usage Patterns
Entering Open Source

The four ways of introducing Open Source into your software

- **OSS Mix In**
- **Source Reuse**
- **Library Reuse**
- **Service Reuse**
Open Source Usage Patterns
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AUTOMATING OPEN SOURCE COMPLIANCE WITH OSS TOOLING
Automating Open Source Management
Tooling Landscape
Automating Open Source Management

The Toolchain

- Eclipse Steady
- Commercial Data Provider
- Dependency Track
- Clearly Defined
- SW360
- Fossology
- Software Heritage
- Build System
- Compliance Workflow
- Identification
- Collecting Data
- BOM Management
- Metadata Completion
- Policy Check
- License Obligation Fulfillment

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Ensuring Open Source Compliance

Open Source Solution?

- End-to-End Open Source Management in Enterprises is crucial for compliant usage of OSS

- Avoid vendor lock-in

- Ownership of data is crucial to prevent expensive corner cases

- Free and open data

- Long term solution independent from supplier
  - Successful Open Source means defined State-of-the-Art
Ensuring Open Source Compliance

Outlook

- Communities like the Tooling Landscape Group strive to support Open Source Management by a Turn-Key Solution based completely on Open Source

- Common understanding on the requirements and standardized solutions are coming up on all levels (Processes, Methods, Tooling)

Questions – Just get in touch:
- https://groups.io/g/oss-based-compliance-tooling
- https://accounts.eclipse.org/mailing-list/antenna-dev
- https://dev.eclipse.org/mailman/listinfo/sw360-dev
- https://github.com/heremaps/oss-review-toolkit
EVALUATE THE SESSIONS

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