Black Duck Representation in W3C Workshop on Web and Automotive

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Participant's Interest & Background

Black Duck Software is the leading provider of strategic advisory consulting, products and professional services for automating the management, governance and secure use of OSS at enterprise scale of development processes. These offerings enable companies to shorten time-to-market and reduce development costs while mitigating the management, compliance and security challenges associated with open source development.

Among over 1000 of Black Duck's customers are many automotive companies, including members of the GENIVI Alliance and GENIVI itself. These companies look to Black Duck for open source compliance strategy, program development and training in industry best-practices. Black Duck's offerings, including the Black Duck Suite, Olliance OSS Think Tank, FOSS strategy consulting and OSS / Supply Chain Maturity Model (www.olliancegroup.com and thinktank.olliancegroup.com), allow GENIVI OSS community members to benefit from open source and manage its complexity while also allowing other stakeholders—including legal, IT, security, export and purchasing personnel—to access timely and relevant information to effectively manage business risks.

With the Black Duck Suite, automotive developers, ISVs and other GENIVI members can choose from an array of features to tailor a solution to their individual IVI implementations. The Suite makes it easier to implement best practices while streamlining development and making the most efficient use of development resources. This includes the broad set of management, compliance, and security problems that surface when open source components are used at significant scale in software development. Features that address these problems include a searchable internal catalog, a customizable approval workflow, and the industry's most comprehensive KnowledgeBase of open source information (www.blackducksoftware.com/knowledgebase).

Point of View

Now is an exciting time in the Automotive SW development – with the formation and recent opening up of GENIVI Alliance to non-member OSS developers, the industry gained momentum to continue its transformation to a community-based development and innovation model. With that, come the enablement for and challenges associated with "multi-source" development, where automotive IVI and other platforms will be increasingly comprised of SW components that originate from a variety of developers and the companies they are affiliated with.

While the resulting technologies will open up the car "computing stack" to Web-connected apps and other Cloud-based service offerings, there are strong safety considerations that include a range of issues from driver distraction, to security & quality, to OSS IP license compliance of underlying SW components.

The rapid development process of resulting Automotive / Web-enabled products for this highly regulated global industry drives the need for a transparent and well-managed SW supply chain. The maturing SPDX protocol (SW Package Data Exchange, www.spdx.org), under the umbrella of Linux Foundation, creates an opportunity to establish a common way to exchange SW package information across all members of such SW supply chains, including revision control and license compliance information – particularly critical for OSS/FOSS-based offerings.

Suggestions for Follow Up

As an active member of GENIVI Alliance, a co-chair of SPDX group, and an organizer of OSS Think Tank conferences on standards, strategies and developer communities, Black Duck has a wealth of experience with helping organize and run efficient and transparent supply chains for OSS-based Web offerings for Automotive industry. We spent a lot of time helping our clients with improving quality and reducing costs of OSS-based development initiatives and creating global developer communities to improve rates of innovation and industry adoption in new markets.

We look forward to participating in this W3C / Intel workshop to explore with other members of the industry opportunities to standardize offerings in this space, potentially becoming an actively contributing member of the resulting standards body, should one be formed.

We also look forward to sharing our vision, insights and recommendations for these initiatives based on real life use cases from engagements with hundreds of clients we've had across the North America, Europe and Asia/Pacific regions to collaboratively define standards that will help improve global software supply chains for Web-based applications for Automotive market.

Proposed Areas of Discussion

We propose that our discussion topics for this presentation cover the following areas, as they relate to *improving quality and reducing costs through Web/OSS technologies* and, ultimately, *expanding markets for automotive applications*:

- OSS License Compliance challenges and collaboration best practices in Automotive R&D

- OSS Supply Chain management issues and ways to improve visibility and transparency of BoM (Bill of Materials), including leveraging SPDX and proprietary extensions to the evolving standard

- Automating quality, security and IP/copyright obligations through code scanning best-practices.