

Logistics & Supply Chain SIG Proposal

Approved - LIVE link is here!

Introduction

The distributed ledger of blockchain could greatly enhance collaboration among shippers, carriers, and forwarders as well as producers and manufacturers. Blockchain can enable reliable tracking of goods in Logistics & Supply Chain, and also can help to reduce delays caused by manual, often "paper-based" processes.

However, there are many challenges to overcome before blockchain can be deployed widely in the logistics & supply chain industry. According to DHL's research, "Likely the biggest challenge will be achieving successful industry adoption through collaboration and even co-opetition between diverse Logistics & Supply Chain stakeholders that have legacy processes and varying interests."

A Hyperledger Logistics & Supply Chain SIG could help address some of these challenges by bringing the collective wisdom of the community in a vendor-neutral, open source manner, using the Hyperledger open-source blockchain framework. Since 2017 we have seen a number of interesting proofs of concept (POCs) and pilots deployed in this sector that is based on Hyperledger frameworks.

The potential for blockchain in Logistics & Supply Chain is significant. However, moving from concepts and pilot applications to actually deploy viable solutions will require the technology to be further developed, organizational transformation and a willingness to collaborate between all stakeholders. It is time to create a platform for our community to share knowledge and build collaborative efforts, learning from each other's experiences, successes, and challenges.

The Logistics & Supply Chain Special Interest Group (LSC-SIG) will be focused on applying distributed ledger technology in general, and Hyperledger technologies in particular, to all relevant use cases in logistics and supply chain industry.

Who can join this SIG:

- This is open to all verticals engaged in blockchain initiatives for logistics & supply chain use cases – e.g. Transportation, Shipping, Semiconductors, Retail, Healthcare, Pharma, etc.
- Types of organizations may include carriers, shippers, manufacturers, 3PL, Software/Hardware vendors, public sector agencies, service providers, consultants, etc.
- The SIG will delve into both technical and business discussions and project activities, in collaboration with Hyperledger's technical steering committee.

Scope

The activities of the LSC-SIG will include:

- Identifying related reference architectures (for example business and integration architecture, technical and infrastructure architecture), frameworks such as Hyperledger [Grid](#), and models (OSI), use cases, current pilots and proofs of concept, and production case studies;
- Sharing stories of successes, failures, opportunities, and challenges;
- Exploring and addressing cross-cutting architectural principles, options, and decisions like performance and scalability, security, identity management, and privacy, and identity in logistic contexts;
- Identifying existing or needed common critical software, middleware, and hardware components that would serve the particular needs of the supply chain.
- Working towards proposing solutions to the problems identified;
- Identifying conferences or other opportunities to connect face to face, as well as submit talks or present as a group at an event.
- Identifying the business community and building an inclusive platform for early adopters to contribute with their experiences.
- Identifying all different protocols across Logistics & Supply Chain to build a standardization across the different parties and efforts.
- Logistics & Supply Chain best practices, awareness of and working in accordance with such rules as customs & import-export regulations.

The LSC-SIG is prohibited from performing or engaging in any form of lobbying or attempts to influence government policy making or regulatory processes. It is also not intended as a platform for the procurement of services.

Sample suitable applications for blockchain technology in Logistics & Supply Chain Management

- CargoSmart has launched a global shipping network/consortium to track goods across the Logistics & Supply Chain using Oracle Blockchain Built on Hyperledger Fabric.
- DHL has created a blockchain-based serialization prototype with nodes in six geographies to track pharmaceuticals across the supply chain. The ledger tracking these medicines may be shared with stakeholders, including manufacturers, warehouses, distributors, pharmacies, hospitals, and doctors. Lab-simulations show how blockchain could handle more than seven billion unique serial numbers and 1,500 transactions per second.
- Niti Aayog is working with Apollo Hospitals and Oracle on applying blockchain (decentralized) technology in pharmaceutical Logistics & Supply Chain management to detect counterfeit drugs.

- In the food supply chain, foodborne outbreaks are a challenge for retailers and grocery stores. They have to get a quick overview of where the food came from and which other products are also affected and have to be removed from the stores. Companies like Walmart and Certified Origins are working to ensure the authenticity and freshness of food ingredients using blockchain technology.

As with all Hyperledger Working and Special Interest Groups, the Logistics & Supply Chain SIG will be open to everyone and an inclusive environment for both technical and non-technical entities.

Work Products

This group would strive to remain an action-oriented group, where we work together on projects that have tangible timelines and outputs for the benefit of the community.

We are open to what the "work products" of the group will be: documents, new project proposals, reports, demos, videos, infographics. The aim is to bring the industry together and enable collaboration that simplifies and promotes adoption of blockchain for the industry as a whole.

The group should aim to identify common ground for collaboration between members, tackling the biggest challenges of the space. The LSC-SIG may also host sub-groups, and in-person meetings intended to accelerate the SIG's mission and foster a sense of community among members.

LSC-SIG Home Page and Mailing List:

Home Page and Meeting: <https://wiki.hyperledger.org/x/rwCw>

Join Mailing List: <https://lists.hyperledger.org/g/supply-chain-sig>

Collaborators (other groups):

This SIG will report its progress to the TSC and collaborate with other Hyperledger working groups, Linux Foundation staff, and the project maintainers.

This SIG will also work with the Hyperledger Brand and Marketing teams to ensure that the materials developed to meet the brand and trademark guidelines.

This SIG will align and collaborate with other core Hyperledger working groups and projects especially in the areas of Architecture, Performance and Scalability, Identity and Smart Contracts and Integration.

Interested Parties:

The following individuals have already expressed an interest in joining this SIG, and we hope they will become contributors over the first year:

List of interested parties listed with their consent, including name, association,

1. Ricardo Garcia, ScanTrust SA,
2. Sebastien HENOT, Business Innovation Renault-Nissan-Mitsubishi Alliance, MOBI (Vehicle Identity workgroup)
3. Allan Gulley, Senior Manager - Blockchain Strategy at Auburn University RFID Lab
4. Joshua Satten, Wipro Limited, Blockchain Partner - NA,
5. Hitarshi Meenketu Buch, Wipro Limited, Blockchain Lead Technical Architect,
6. Gilles Gravier, Wipro Limited, Senior Manager - Open Source,
7. Ralph Verhlest, VISMA EBPI, Technical Strategy Manager, Business Development Lead Blockchain,
8. Stephen J Rogers - VP of Blockchain Initiatives for Supply Chain - IBM Industry Platforms,
9. Bobbi Muscara / Ledger Academy (Learning Materials Working Group)
10. Lucy Hakobyan, MOBI.dlt
11. Arlen Stark, BITA
12. Siddharth Jain, Johnson & Johnson
13. Stefan Rehm, Founder at Intelipost,
14. Jonathan Chevalier, Chief Blockchain Architect,
15. Michael Ribet, Product Development Manager, Sofbang
16. Srikanth Sripathi, Blockchain Competency Head, Infosys Limited
17. Gurdeep Kalra, Blockchain SME, Infosys Limited
18. Jimjees Abraham, Chief Innovation Officer, ChainDigit
19. Wilfred Ruijsch, Enterprise Solutions Project Director,
20. Jai Suri, Sr. Director Product Management, Oracle
21. Amim Knabben, Open Source Engineer
22. Sacha Uhlmann, Chief Product Officer, modum.io
23. David McLaughlin, Director, RSM US LLP
24. Christian Winzeler, Director, RSM US LLP
25. Beverly Macy, LA Blockchain Lab, UCLA Anderson
26. Evelyn Mei, Product Strategy Manager, Oracle Supply Chain Management Cloud
27. Dominic Regan, Senior Director EMEA - Logistics, Oracle
28. Edmund To, Software Engineer, Industrie&Co
29. Zelda Leung, Everledger
30. Clive Boulton, Supply Chain/ERP Architect and Software Engineer, Independent.

Proposed Chair

The following individual(s) have volunteered to serve as the initial Chair, and a Vice-Chair's of the SIG:

SIG Chair: Jay Chugh, Senior Director, Oracle Cloud,

Vice Chair: Joshua Satten, Blockchain Partner North America, Wipro Limited

Note: There is an opportunity to re-elect new Chair and Vice Chair roles every 3 months. Anyone can raise their hands if they have ideas on taking this SIG to new heights. We will have the SIG members decide via an online poll/survey on who they want to pick as their chair, vice chair once a quarter.

NOTE: As part of this proposal, the Hyperledger SIG working processes as described here will be followed: <https://wiki.hyperledger.org/groups/sig-application>