Unleash Electronic Bills of Lading (eBLs) for your network and across trade networks

Peer-to-peer electronic bills of lading (eBLs) for fast, trusted supply chains

With around 90% of trade carried by sea, international trade relies heavily on inefficient and risky paper-based processes. Bills of lading (BL)—the legal title documents exchanged between carriers, freight forwarders, shippers and cargo owners specify the type, quantity, and destination of freight. They function as a receipt of goods and evidence of the contract of carriage between the shipper, carrier and cargo owner, and the document of title as goods move along the supply chain. But paper and manual document handling result in transport delays and reduce opportunities for financing and risk mitigation. While electronic bills of lading (eBLs) have raised hopes of digitizing logistics and trade finance, legal and technology limitations, data privacy concerns and high integration costs have slowed their adoption.



The industry can potentially save more than \$4 billion per year if 50% eBL adoption is achieved.

The Digital Container Shipping Association (DCSA)

Introducing Corda eBL

That's why R3 has developed Corda eBL, an application accelerator on Corda Enterprise, R3's blockchain application development platform, used by the world's fastest-growing trade networks. Corda eBL, which is based on an IGP&I Club* approved legal framework, enables title documents to be exchanged peer-to-peer, with privacy, across trade networks. Harnessing the power of Corda Enterprise, applications built with the platform reduce friction and risk, while proving the authenticity of trade documentation and eliminating double-spend.

Corda eBL enables logistics companies, software vendors and corporates building their own trade applications to offer an eBL solution directly to their existing networks. Unlike other eBL solutions, Corda eBL negates the need for a centralized title registry so firms can gain greater control over their customer relationships and lower the barrier to adoption for end users. Corda eBL also gives end users greater control over their data, enabling the direct transfer of title documents within and across business networks—all without the need for a centralized eBL network.

Unlike paper, eBLs on Corda enable direct information exchange and transfer of ownership, streamlining supply chain processes, increasing security and reducing operational risk. End users can also participate in the growing trade ecosystem, powered by Corda.

Interoperable with business networks established on Corda, Corda eBLs open up access to trade finance, insurance and other financial services from the Corda ecosystem of banks, insurers and corporates, allowing you to embed value-added financial services into your solutions.

Key benefits of Corda eBL

The peer-to-peer benefits of paper, without the friction. The digital promise of eBLs, without centralization.

Digitalize

- Transparency: Enable instant verification of the title holder of goods with information shared directly, on a need-to-know basis
- Efficiency: Reduce turnaround times, costs of errors, disputes and losses related to data mismatches, fraud and claims
- Interoperability and faster settlement: Direct transfer of eBLs across participants and networks, supporting the release of eBLs against payment for delivery versus payment

Decentralize

- Simplified onboarding for end users: Directly offer eBL capabilities to simplify onboarding and maintain control of end-user relationships
- Minimize cost of third-party eBL solutions:
 Reduce the bespoke integrations and loss of visibility that come with centralized eBL solutions
- Built on industry standards: Based on eUCP/UCP 600, ICC Incoterms, ICC e-Terms, UNCITRAL Model Laws on e-Commerce, digital signatures and MLETR. Aligned with Digital Container Shipping Association (DCSA) and Digital Standards Initiative (DSI) to meet evolving eBL data and interoperability standards

Grow

- Improve service quality: Deliver value-added insights and services to increase customer loyalty
- New revenue streams: Enable the exchange of digital trade documents with banks and corporates to enable new finance, payment, settlement, and insurance services
- Capture market share: Provide more efficient turnarounds and better service levels to capture growing trade volumes

Direct transfer of eBLs across trade networks

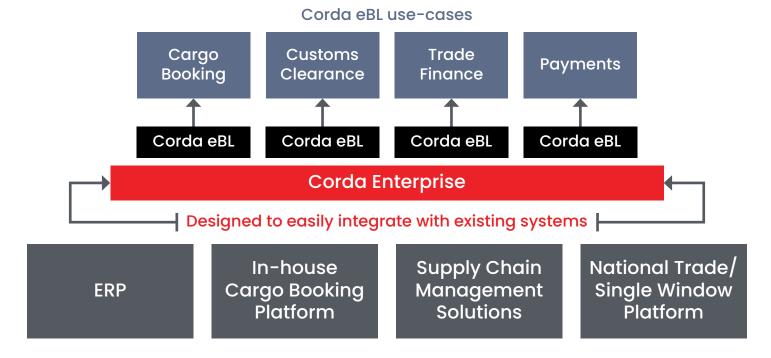
Corda eBL is built using the legal framework approved by the International Group of Protection and Indemnity Clubs that R3 acquired from Singapore-based software developer E-Title Authority in 2020.

Based on Corda Enterprise, Corda eBLs can be transferred, peer-to-peer. This eliminates the use of novation and attornment or the need for a central registry to manage title transfer.

Corda eBL on Corda Enterprise can deliver greater value from supply chain digitalization projects through new applications that:

- Embed value-added finance and risk mitigation services: Gain new revenue from integrated supply chain finance, payment, cash management and insurance services
- Transform the cargo booking experience:
 Reduce operational risks and costs for importers, exporters and carriers with a differentiated service offering
- Accelerate customs clearance and trade compliance: Reduce turnaround times and the risk of trade-based fraud.

Fig 1. Integrate with existing infrastructure to connect your network and deliver value-added eBL offerings



Corda eBL consists of:

- A software development kit (SDK): An industry standard API to more rapidly develop applications on Corda Enterprise
- A built-in legal rulebook*: Recognized by the International Group of P&I Clubs (IGP&I), our built-in legal framework will ensure liability coverage and insurance for carriers, shipping agents and other companies using Corda eBLs
- Membership service*: A management application that provides access to Corda Network, on which Corda eBLs are registered, verified and can be transferred across business networks, on Corda Network

Get started with Corda eBL Public Preview

R3 is now onboarding Corda eBL Public Preview customers, ahead of general availability later in 2021. The Public Preview is an early adopter program to provide access to the latest features and run R3-supported pilots with other participants and end users.

- Get early access to new capabilities ahead of peers and competitors
- Achieve faster time-to-market by accelerating development of industry solutions on Corda Enterprise
- Discover insights and best practices around the use of eBLs to help refine your operating model
- Collaborate with R3 by sharing your requirements to help shape the Corda eBL roadmap and feature design

The Public Preview is available to Corda Enterprise customers and evaluation users and requires a Corda eBL development license.

If you're not a Corda Enterprise customer, **trial it now**. We are also available to discuss your specific needs and to assess how you may be able to leverage Corda eBL on Corda Enterprise. **Contact us** today to start the conversation.

^{*}The Public Preview is suitable for pilot transactions, for testing and development purposes only. eBLs created during pilot will not be covered by the IGP&I Club, or on the production Corda Network. These features will be included in the generally available version, to be released later in 2021.



About us

R3 is an enterprise software firm that is pioneering digital industry transformation. With our foundation in enterprise blockchain technology, we power solutions that deliver trust across the financial services industry and beyond.

R3's enterprise blockchain platform Corda is digitalizing the processes and systems that firms rely on to connect and transact with each other and has more than 350 institutions deploying, servicing and building on it. Our Conclave platform harnesses the promise of confidential computing and Intel® SGX technologies. Conclave empowers businesses to develop applications that analyze and process sensitive data from multiple parties—all without compromising on confidentiality.

Our customers and partners have access to an ecosystem of leading systems integrators, cloud providers, technology firms, software vendors, corporates and banks. To ensure our customers derive the greatest value from their investment, we provide services and support to shorten time-to-market, as well as guidance on implementation, integration and building blockchain business networks.

Learn more at www.r3.com, www.corda.net, and www.conclave.net.





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