

PRESS RELEASE

Smartrac Launches dLoc – a Breakthrough Document Authentication Solution Leveraging Blockchain

Amsterdam (The Netherlands), November 21, 2016: At the upcoming tradeshow Trustech in Cannes, RFID and IoT pacesetter Smartrac is launching an integrated document verification and authentication solution. This breakthrough solution is based on the company's IoT enablement platform Smart Cosmos, its NFC transponders, and innovative and highly secure blockchain technology provided by partner Factom.

Easy to integrate into existing infrastructures, dLoc is an innovative solution for the reliable authentication of any vital documents, from birth certificates to land titles to medical records. Combining the simplicity of NFC with the functionality of Smart Cosmos and the security of blockchain technology, dLoc provides a feasible, off-the-shelf solution to the challenge of document verification and authentication, hence eliminating the weakest link in the identity chain.

Suitable for virtually any document

The solution can be applied to almost any document, using a printed barcode representing a number, as well as linking personalized data to the document itself. A dLoc sticker is applied to the document. That sticker contains a Smartrac Bullseye NFC inlay, within which is integrated a security chip chosen from a range of different chip platforms with storage capacities between 1kB and 64kB. In addition, dLoc stickers support all the security features, like guilloches, UV print, micro text or latent image normally found in high-security documents.

To enable document authentication in the course of the issuance process, document data is married with the unique ID of the NFC tag to create a 32-bit hash value, which is only recognizable by the issuing agency using a private key. The hash value is stored in Smart Cosmos and backed up in a public blockchain. Once that has happened, the document with the dLoc sticker can be verified using a desktop reader, or more likely, a mobile app on an NFC-enabled phone.

Partnership with blockchain technology leader Factom

Smartrac's proprietary IoT platform Smart Cosmos utilizes Factom's data integrity solutions to encrypt, record, and secure Smart Cosmos entries into its public blockchain. The Factom integration is key to dLoc's superior security. Once the hash value is created, the value itself and every verification (read) process is recorded in Smart Cosmos and the Factom Blockchain.

“dLoc is the first practical document authentication system that utilizes the Factom Blockchain to bridge the data integrity gap between the physical and digital world. We now have a reliable way to secure information on paper-based documents with digital data using blockchain technology. dLoc’s data and identity authentication solution holds great promise for both public and private sectors where paper-based documents are widely used,” says Abhi Dobhal, VP Business Development at Factom.

Seamlessly retracing document history

Leveraging Smartrac and Factom technology, any institution that issues vital records – governments, banks, hospitals, universities – can use its private key to seamlessly retrace each document’s history. In addition, the chip inside the dLoc sticker can store context information, such as images and biometrics, which can be stored as public data or as private data accessible to authorized parties only.

“We are proud to be the first to market with a document authentication solution that combines NFC’s convenience, the IoT’s capabilities and blockchain’s security, while integrating into any issuance authority’s existing system. Offering convincing advantages over traditional QR code-based solutions, dLoc will definitely strengthen our position as a systems integrator in document security, and will meet the needs of governments, banks, hospitals, universities or any other institution that issues vital records,” says Mitch Deyoung, Vice President, Product Management Secure ID & Transactions Business Division at Smartrac.

The innovative document verification and authentication solution dLoc is Smartrac’s entry for this year’s Sesames Awards and will be showcased at **Trustech**, the largest tradeshow event dedicated to trust-based technologies. The event will take place from November 29 to December 1 in Cannes, France. **Visitors can find Smartrac at Booth #Riviera A 050.**

About Smartrac:

Smartrac is the world’s leading supplier of RFID products and IoT solutions, providing both ready-made and customized offerings, suitable for a large number of applications. Smartrac makes products smart, and enables businesses to identify, authenticate, track and complement product offerings. The company’s portfolio is used in a wide array of applications: access control, animal identification, automated fare collection, automotive, border control, contactless payment, electronic product identification, industry, libraries and media management, laundry, logistics, retail, public transport, and many more. Leveraging its global R&D, production and sales network, Smartrac combines physical products with its Internet of Things platform Smart Cosmos, empowering the ecosystem of connected things. Smartrac has its registered headquarters in Amsterdam, the Netherlands. For more information, visit www.smartrac-group.com, www.smart-cosmos.com and follow us on Twitter: [www.twitter.com/SMARTRAC_NV](https://twitter.com/SMARTRAC_NV).

Media contact:

Smartrac Technology Group
Karin Fabri
Head of Corporate Communications & Marketing
Phone: +31 203 050 150
Email: media.relations@smartrac-group.com

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