



## PRESS RELEASE

### Avnet and Trusted Objects bring an end-to-end security solution for NB-IoT networks running on the CoAP protocol

**HONG KONG, SAR, CHINA and AIX EN PROVENCE, FRANCE, June 25, 2018 – Avnet and Trusted Objects, announce a new step in Edge Device to Cloud security with a NB-IoT demonstration running the CoAP protocol adapted to resource-constrained communication conditions.**

NB-IoT (Narrowband IoT) networks are currently being deployed worldwide, leading to an increased demand for end-to-end security in the Internet of Things. To deliver a solution satisfying these requirements, Avnet and Trusted Objects are demonstrating a secure end-to-end connection between a Secure Element and a Cloud platform using the CoAP protocol (Constraint Application Protocol). Thanks to a close cooperation, Avnet and Trusted Objects have managed to establish a security channel on NB-IoT/UDP, paving the way for a rapid adoption of the CoAP protocol.

The Constraint Application Protocol (CoAP) is a specialized Internet Application Protocol for resource-constrained devices that are often met in the NB-IoT network environment. Its architecture is based on User Datagram Protocol (UDP), a light-weight protocol used by apps to deliver a faster stream of information by doing away with error-checking. The benefits are better lead times in connection establishment and better battery performance.

The security of the connection between the Edge Device and the Cloud server is based on a Secure Element running Trusted Objects secure firmware, and a DTLS stack also provided by Trusted Objects and embedded into the Secure Element. A separate security channel between the Edge Device and the Cloud is enabling payload encryption and decryption, as well as strong authentication. It is also allowing certificate exchange between the device and the cloud server.

Sami Anbouba, CEO of Trusted Objects, declares: "End-to-end security is essential to create trust in the IoT ecosystem. Trusted Objects contributes to

creating trust thanks to its global end-to-end approach based on its Secure Element and systems expertise. The NB-IoT CoAP security is an important milestone of Trusted Objects development.”



The secure channel on NB-IoT with CoAP protocol demonstration will be visible on Avnet booth (Hall N1, stand N1.E50) at the Mobile World Congress, Shanghai, a must-attend industry event in Asia, on 27 – 29 June 2018.

## About Trusted Objects

Trusted Objects is a leading independent player in the Secure IoT market, providing innovative embedded firmware, to dramatically enhance the security of connected devices.

The TOSF embedded secure firmware has been successfully ported into a Secure MCU, leading to a family of Secure Element (SE) fully optimized for battery-powered devices, certified and being the root of trust to meet the end-to-end security needs of the IoT.

Trusted Objects also delivers a set of services and systems including security assessment, personalization engine, keys and certificates management, fast prototyping to accelerate the deployment of comprehensive solutions that meet the highest security requirements.

## Contact

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