

LoRa Cloud enables customers to develop IoT solutions faster using Cloud-based services



Where once companies bought their own servers, cloud computing has changed the landscape. Customers of cloud computing providers can avoid the expenses of physical hardware and innovate based on their applications and data.

To complement its silicon offering and help customers get the most from the features they offer, Semtech offers four Cloud-based services.

The first service

is Join Server, a security service that removes complexity and risk associated with customers having to deal with provisioning their own device keys. The Join Server handles key material for sets of devices from one or more manufacturers. Devices are grouped into batches with consecutive EUI ranges. Each batch has a unique root key, which is used to derive other keys such as Network Session Key, such that private keys never leave the device. Together with pre-provisioned device keys, the Join Server service offers reinforced

security and LNS flexibility. It is offered as a SaaS solution.

The second service

is Geolocation Solver. Previously, geolocation required a full GPS chip in the device and the ability to calculate everything on the device. This uses up battery life very quickly. The location service combines the features of Semtech's LoRa Edge™ LR1110, which can scan GNSS satellites as well as Wi-Fi SSIDs and partitions the processing between the Cloud and the device to get the location. This results in extending the battery life of an IoT tracker device to potentially years compared to weeks to months available from existing GPS solutions. The Cloud service provides both indoor and outdoor geolocation, and automatic OTA updates of the Almanac.

The third service

is Modem Services, focused around configuring and managing the modem at a very detailed level. Features and benefits include uplink data services, modem status/configuration ser-

vices, and a full and limited functionality option. This service is also offered as a SaaS solution.

The latest service

introduced at Embedded World 2022 was its breakthrough SaaS chip-to-Cloud service, LoRa Cloud™ Locator, that uses Semtech's LoRa Cloud Modem & Geolocation services. The new service gives customers the opportunity to experience firsthand the power of devices powered by LoRa Edge and evaluate the accuracy and power consumption capabilities of the LoRa Edge platform which offers an ultra low-power and cost-effective solution for indoor/outdoor asset tracking use cases. LoRa Cloud Locator features built-in serverless technology and delivers a simple end-to-end experience for customers to evaluate LoRa Edge implemented in various ecosystem trackers, either on a private or public LoRa-WAN network.

LoRa Cloud Locator is designed specifically to work with trackers using Semtech's LoRa Edge LR-series chips with minimal effort. Once configured on the service, together with Semtech's LoRa wireless radio frequency technology for transmission to the Cloud, customers are able to view the tracker location on the map in typically in less than 15 minutes.

Those interested in LoRa Cloud Locator can purchase a LoRa Edge-enabled tracker, create a LoRa Cloud Locator account and discover how LoRa Edge unlocks new use cases across the entire global supply chain. To access the service, customers can visit locator.loracloud.com, where they can browse a selection of compatible trackers by Semtech, Browan, Digital Matter, Mimiq, and Miromico. Orders run through CalChip Connect and Indesmatech, two leading

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LoRaWAN hardware distributors based in respectively North America and Europe. After purchasing a tracker, customers can log in to the application, register their tracker and view its location on a map using a browser on either their desktop or mobile device.

To make a success

of any IoT application, customers must build an end-to-end solution. With LoRa Cloud, Semtech enables customers to develop those solutions faster, take advantage of all the capabilities in Semtech's silicon offering and bring solutions to market much more quickly.

The LoRa Developer Portal is an idea-sharing, educational, networking, and technical support platform designed exclusively for innovators and business professionals who have a strong interest in deploying LoRa Technology based Internet of Things (IoT)



and machine-to-machine (M2M) solutions. The LoRa Developer Portal offers many benefits including technical support, exclusive resources and a catalog of hundreds of LoRa-based

commercially available products and services. The LoRa Developer Portal provides members with extensive content, including software to help developers bring LoRa-based solutions to

life faster, libraries of technical documentation, videos, technical journals, and a knowledge base in which developers can interact with other like-minded peers and technical experts. ◀