Vedicis Case Study

Software PGW solution for IOT market leader

Overview

An IoT global pioneer has selected Vedicis virtualized Packet Data Network Gateway to rapidly add support for 3GPP 4G IoT devices to its existing platform. Vedicis PGW enables Communication Service Providers to easily deploy a dedicated 4G core network optimized for IoT needs, alongside existing infrastructure. Its massive scalability and highly competitive TCO makes it the perfect platform to address the fast growing IoT market.

Situation

Internet of things technologies are completely changing the way to monitor, control and optimize objects and processes, in every area of activities. Sensors and devices' price has become cost-efficient enough to enable the development of new business cases, fueled by the rapid adoption of cloud based technologies.

IoT uses cases are very diverse, some require extremely low energy consumption in order to deliver an acceptable TCO (water meters, smoke detectors, ...) while others primarily need high bandwidth and low latency (connected cars). Different network technologies have to co-exist to deliver value across all addressable use cases.

Customer profile

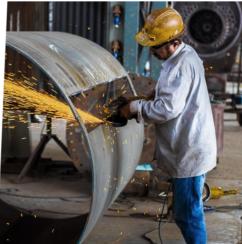
- Worldwide leader in IOT connectivity management, with customers in Europe, China, Australia, Japan and the US.
- Solutions to connect, track, geolocate and manage IOT devices.
- Pioneer in Low Power Wide Area Networking.

Challenge

Vedicis' partner was looking for a cloud-compatible, advanced PDN-GW that could be easily introduced alongside existing infrastructure. Traditional mobile infrastructure providers rely on complex product design, implementing a complete 3GPP architecture and requiring months of complex validation and deployment projects. Moreover, these mobile core platforms are designed for connecting people, whose connectivity requirements are very different from objects encountered in IoT use cases. Mobile subscribers oriented platforms have to manage a relatively low number of devices, demanding a high data throughput with traffic patterns closely matching human activities. On the other hand, billions of IoT devices, with their own traffic patterns, will transmit a few messages per day.

How to enable LTE connectivity with a virtualized and cost-efficient solution, taking into account IoT specificities?



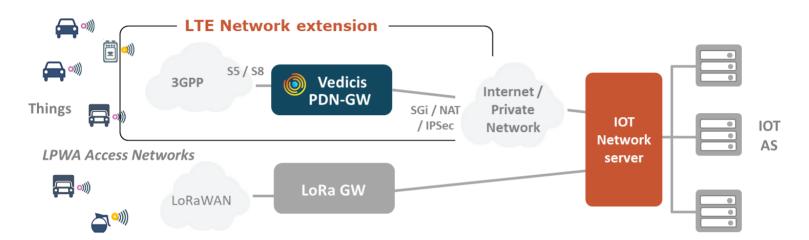


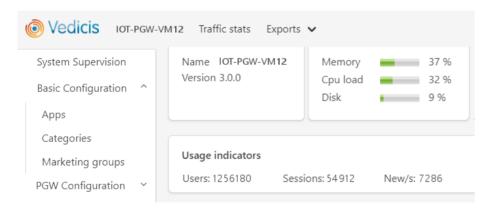


Vedicis solution and key benefits

Virtualized, cloud native PGW

Vedicis Packet Data Network Gateway (PGW) is a fully virtualized software, delivered on VMWare virtualization layer and supporting millions of devices with minimum CPU and RAM requirements. It allows to connect the IoT devices to the Internet or to the management platform of the IOT provider.





Optimized for IOT traffic profile

Vedicis PGW is optimized and adapted to address IOT business case specifics. The product is architected with **dynamic resource allocation**, making possible to support **millions of devices** without scalability and performance issues.

Moreover, Vedicis is able to propose a **software based pricing model** to match with IOT providers' TCO requirements.

Key features

4G connectivity

- NB-IOT and LTE-M
- 3GPP compliant
- Device and fleet

Purpose built IOT features

- Web service provisioning
- Fleet Data records
- HSS connector customization

Advanced capabilities

- Aggregated traffic shaping
- DPI and traffic intelligence
- IP tunneling and NAT support

About Vedicis

Vedicis provides network gateways and platforms such as Packet Gateway (PGW), Wireless Access Gateway (WAG), Evolved Packet Data Gateway (ePDG), IP probes and Deep Packet Inspection Policy and Charging Enforcement Function (DPI-PCEF) to Communication Service Providers (MNOs, MVNO/Es, IOT Service Providers, ISPs). Vedicis innovative platform enables to analyze, control and monetize IP broadband usage thanks to new data subscriptions, OTT partnerships and new IOT services. These solutions are delivered with a cloud native platform, Vedicis Software Service Gateway (SSG) and leverage both 3GPP and open standards to accelerate telecom digital transformation, so that Telecom operators can reap the benefits of more flexibility, faster integration and better ROI.

Please visit www.vedicis.com or email to info@vedicis.com.

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