



Alai Secure

CASE STUDY: ALAI SECURE

Introduction

In the year 2012, Alai Telecom launched Alai Secure, the first M2M mobile operator in the Spanish market exclusively devoted to the Machine to Machine communications. It provides value added services to monitor, control and manage mobile and fixed devices. The target is the corporate and business market.

Alai Telecom

Alai Telecom is a privately owned Intelligent Network Operator registered since 2006 and the only operator in Spain fully oriented to the corporate market.

The service portfolio is a complete set of Intelligent Network solutions such as IVR, Routing Manager, Call Recording, Virtual ACD, Security Suite, International Intelligent Network Traffic, Virtual PBX, ...

Alai realised heavy investments to offer carrier grade geo-redundant platforms and interconnections, and focused the R&D to enhance the security capabilities of all the products and services designed to protect customer's communications

In 2012 Alai adds "Alai Secure" mobile services to its telecom strategy and becomes a global communications solution provider for the corporate market, a playing field usually reserved for the Network Operators.

Alai TELECOM

Alai Secure

It provides mobile telecommunications services as an M2M Operator on the Ingenium Outsourcing Services (IOS) platform, connected to the Orange network in Spain.

The service combines the Alai Telecom Intelligent Network expertise with its secure M2M solutions. This new combination provides an accurate answer to the telecommunications needs of many companies compelled to adapt their communication systems and services to the new rules and regulations, and boosts their competitiveness.

M2M challenges

Companies face key challenges when designing their telecommunications and need to guarantee:

- The security of the service.
- 100% operational availability.
- 0% hyperactivity.

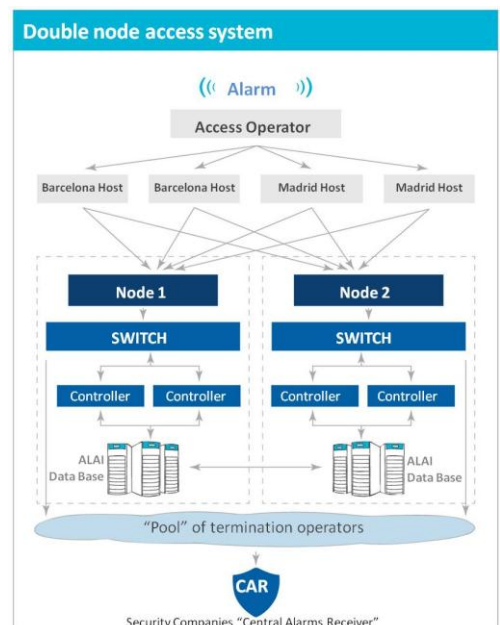
These are major issues when devices on the field suffer accidents, technical failure, or third party intrusion attempts, and deepens for sectors with critical communications needs that can never miss a call or an alarm, such as eHealth, social care, telecare alarms, and security companies who protect human lives and corporate facilities.

Solution

The competitiveness differentiation is based on:

- The double node infrastructure to prevent any call to be missed and to provide optimal call quality.
- Encrypted communications carried through Data and SMS VPN between the customer central systems and the devices deployed on the field to ensure highest security standards.

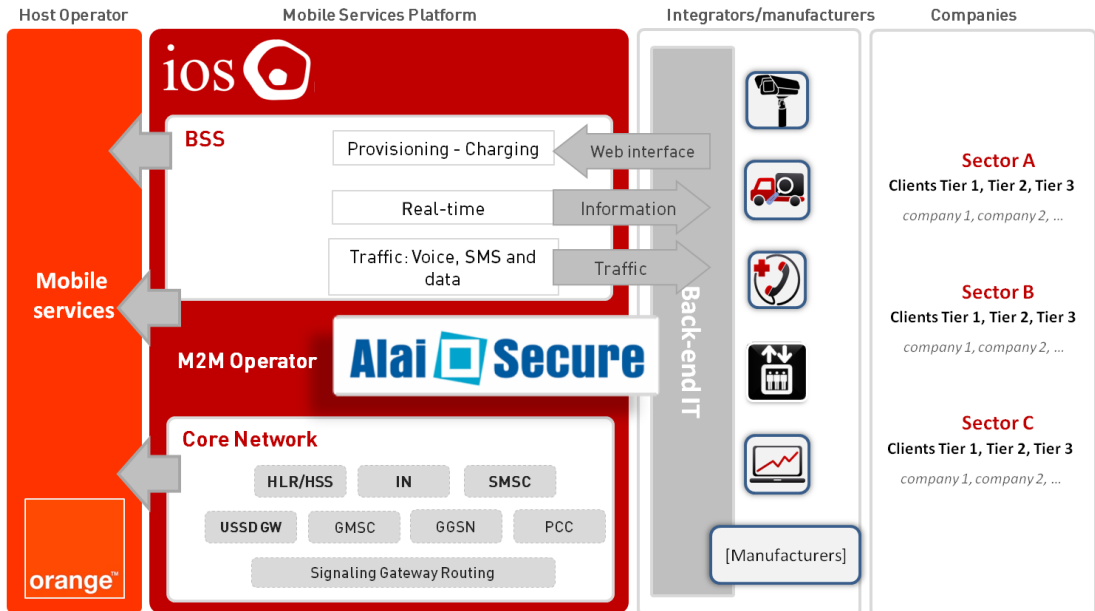
ALAI Secure communications systems are designed to ensure that all the SIM cards deployed on customer's devices get connected only to its IP addresses pool, and receive communications only from the customer central systems. The communications are then protected from service denial attacks.



[“Service denial attacks” to security companies happen when thousand of SMS messages are sent to the SIM card installed on a security device. During the time needed to process this messages flood the device communications are not fully operative and the customer is not protected. The solution provided block unauthorised messages at the operator level and do not reach the device]

IOS “Mobile Platform Services” benefits

- A comprehensive 2G/3G Network infrastructure
- High flexibility solutions to fit customer needs
- A complete set of Value Added Network Services
- The IOS BSS solution provides a Self Care access for its customers enabling operational flexibility and customer self management.



The "Self Management Platform" enables ALAI Secure customers to

- Manage SIM cards in real time without any third party assistance needed.
- Configure its own price plans for Voice, Data, and SMS.
- Route Intelligent Network numbers of its own customers.
- Assign IP addresses.
- Get traffic reports from any SIM card deployed, and many more functionalities.

The "Consumption control" module detects in real time when a SIM card consumption reaches higher levels than expected. It prevents the Bill Shock. The customer can then decide to authorise or solve the excess consumption of the device with the SIM card.

The screenshot shows the Alai Secure web interface. The main window displays the 'Datos Generales de la Línea' (General Line Data) for a SIM card. A pop-up window titled 'Ver Consumo' (View Consumption) is open, showing a table of consumption data for the selected SIM card.

| Fecha actual | Fecha inicio | Fecha fin | Tipos | Internet | Llamadas Sin | Costo | Volúmenes | Móviles |
|---------------------|---------------------|---------------------|---------------|----------|--------------|-------|-----------|---------|
| 20-07-2013 20:33 | 19-07-2013 20:33 | 19-07-2013 20:33 | Internet | 60,0007 | 0,1212 | € | | |
| 20-07-2013 00:30 | 19-07-2013 00:30 | 19-07-2013 00:30 | Llamadas Sin | 62,3301 | 0,1207 | € | | |
| 19-07-2013 09:42 | 19-07-2013 09:42 | 19-07-2013 09:42 | SMS Recibidos | 62,3301 | 0,0000 | € | | |
| 19-07-2013 09:42 | 19-07-2013 09:42 | 19-07-2013 09:42 | SMS | 0,0000 | -0,0000 | € | | |
| 19-07-2013 14:01:27 | 19-07-2013 14:01:27 | 19-07-2013 14:01:27 | Internet | 72,6683 | 0,0000 | € | | |
| 17-07-2013 14:01:27 | 17-07-2013 14:01:27 | 17-07-2013 14:01:27 | Internet | 64,2245 | 0,0000 | € | | |
| 17-07-2013 13:48:55 | 17-07-2013 13:48:55 | 17-07-2013 13:48:55 | Internet | 0,5732 | 0,0000 | € | | |
| 17-07-2013 13:37:43 | 17-07-2013 13:37:43 | 17-07-2013 13:37:43 | Internet | 1,1611 | 0,0000 | € | | |
| 17-07-2013 13:33:34 | 17-07-2013 13:33:34 | 17-07-2013 13:33:34 | Internet | 0,5303 | 0,0000 | € | | |
| 17-07-2013 13:16:32 | 17-07-2013 13:16:32 | 17-07-2013 13:16:32 | Internet | 1,2579 | 0,0000 | € | | |
| 17-07-2013 13:14:05 | 17-07-2013 13:14:05 | 17-07-2013 13:14:05 | Internet | 0,4482 | 0,0000 | € | | |
| 17-07-2013 13:10:35 | 17-07-2013 13:10:35 | 17-07-2013 13:10:35 | Internet | 0,6133 | 0,0000 | € | | |
| 17-07-2013 13:09:19 | 17-07-2013 13:09:19 | 17-07-2013 13:09:19 | Internet | 0,4482 | 0,0000 | € | | |
| 17-07-2013 13:05:47 | 17-07-2013 13:05:47 | 17-07-2013 13:05:47 | Internet | 1,0576 | 0,0000 | € | | |
| 17-07-2013 13:04:06 | 17-07-2013 13:04:06 | 17-07-2013 13:04:06 | Internet | 0,5703 | 0,0000 | € | | |
| 17-07-2013 12:58:32 | 17-07-2013 12:58:32 | 17-07-2013 12:58:32 | Internet | 0,7754 | 0,0000 | € | | |
| 17-07-2013 12:45:10 | 17-07-2013 12:45:10 | 17-07-2013 12:45:10 | Internet | 0,5234 | 0,0000 | € | | |
| 17-07-2013 12:42:16 | 17-07-2013 12:42:16 | 17-07-2013 12:42:16 | Internet | 1,1279 | 0,0000 | € | | |
| 17-07-2013 12:36:49 | 17-07-2013 12:36:49 | 17-07-2013 12:36:49 | Internet | 0,4482 | 0,0000 | € | | |
| 17-07-2013 12:27:24 | 17-07-2013 12:27:24 | 17-07-2013 12:27:24 | Internet | 1,4482 | 0,0000 | € | | |

ALAI Secure High Performance SIM card



ALAI issued the new "High Performance SIM Card" in 2014 designed for M2M communications.

This new SIM card is certified with the highest security, connectivity, robustness and reliability standards.

Designed to last up to five more times than regular SIM cards, it lowers the replacement costs.

Its performance has been enhanced for field operations as it has been designed for extreme temperatures, humidity, vibrations and shocks. Customers benefit then from lower incidents, travels and replacements.