

# IRON Suite Solution

## SIM Server for Mobile Termination

### Key benefits

Simultaneous Bulk SMS & Call Termination

Optimal SIM Selection & Credit Usage

Built-in Human Behavior Simulation

Call Spam Automatic Blacklisting

Real-time Robot Dialer Detection

Recharge & Promotions Management

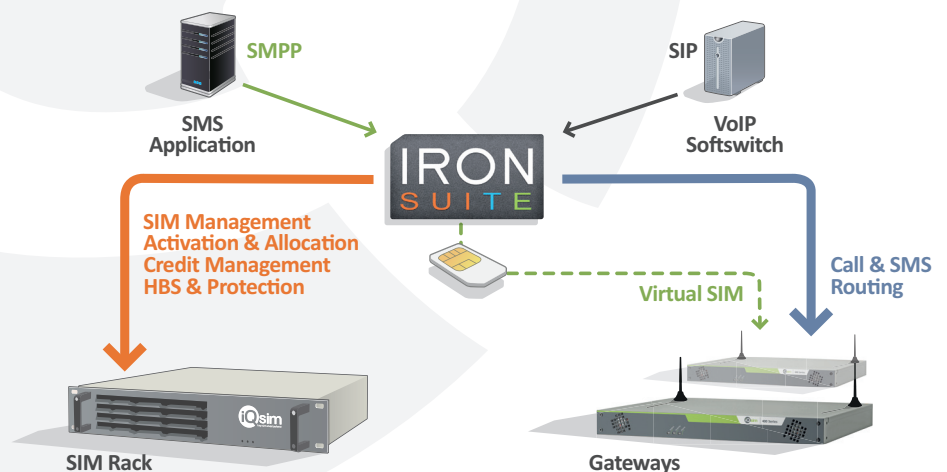
Built-in Multi Provider & Multi Country

Scalable, secured, end-to-end solution

To offer better rates on local mobile networks, Internet Telephony Service Providers (ITSPs) have to **optimize Call Termination costs** and **maximize SIM cards usage**.

IRON Suite, iQsim's SIM Server technology, is born from 10 years of experience in Virtual SIM Management, and offers the most advanced and flexible solution to **terminate voice calls and Bulk SMS** worldwide while **maximizing your revenue** on Call & Bulk SMS Termination services.

iQsim's solution components are outlined in the following diagram:



**GSM/3G Gateways** are deployed SIM-less in countries where you want to offer termination routes; SIM and USIM cards are stored in **SIM Racks** which can be centralized or deployed individually in several countries. Dynamically, the IRON Suite remotely allocates SIM cards to GSM/3G Gateways according to **user-defined rules**.

The IRON Suite selects the most appropriate SIM card according to criteria such as **credit, type of service** (Voice Call, SMS), **country, operator** and **scheduled timing** to ensure that you always take out the best of your SIM cards for the most reliable and profitable route.



# IRON Suite Solution

## IRON Suite End-to-End Solution Components



IRON Suite end-to-end solution for Mobile Termination provides the SIM Server infrastructure required to deliver a full operational solution:



**IRON Suite Appliances** provide pre-installed IRON Suite engines (SIM Manager, Service Controller and SMS Manager) in the required hardware and Linux operating system. Several appliance versions are

available based on the overall scalability and reliability required. By providing a ready-to-use appliance, the solution becomes fast and simple to install, operate and manage!

**GSM/3G Gateways** can be deployed throughout several countries on customer's premises such as retail outlets, small offices and residential environment as well as in colocations. Each gateway requires IP bandwidth and proper GSM/3G coverage in order to handle up to 16 IP to GSM calls and SMS sessions simultaneously.



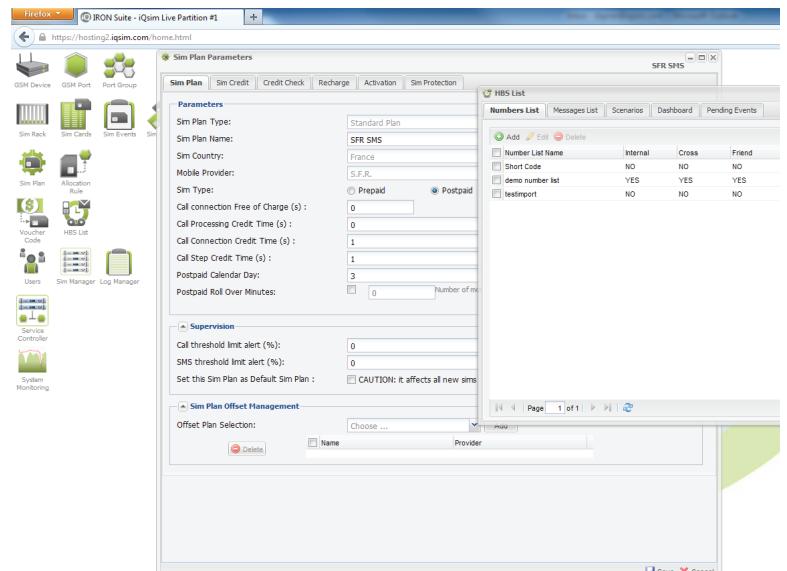
**SIM Racks** provide central SIM cards storage and eliminate the need to physically store the cards in the GSM/3G Gateways.



The iQsim SIM Rack 256 is a 2U hot-swap chassis which allows you to remotely manage your SIM cards. It can be fitted with up to 16 SIM boards, each containing 16 SIM and USIM cards. Multiple SIM Racks can be stacked to offer unlimited SIM card storage and management.

## Web-based Management Interface

is integrated as part of the iQsim end-to-end solution. The web-based intuitive interface allows access anywhere, anytime and to any device as well as full end-to-end management of the services and solution's components. The multi-applications, multi-windows interface provides ease of use, configuration, monitoring and problem resolution. Multi-user management is provided with multiple authorization levels per user.



# SIM Server for Mobile Termination

The state-of-the-art, rich functionalities and services provided by IRON Suite are implemented via three intelligent, rule-based engines that are at the art of iQsim's SIM Server technology:



The **Service Controller** centrally provides **value-added functions** to your GSM/3G gateways deployment. It centralizes **key routing decisions** based on auto-learning and information received from the SIM Manager. It determines the most appropriate routing to **increase your margin**. The Service Controller provides the **optimization** of the overall SIM Control and SIM Protection functionalities by implementing services such as SMS-to-best-SIM distribution, White/Grey/Black number listings, number translation, Mobile Number Portability (MNP) and more.



The **SIM Manager** is the central IRON Suite server which manages **SIM allocation, SIM control** and **SIM protection**. The SIM Manager has knowledge of available SIMs stored in the SIM racks as well as GSM ports status in Gateways. SIM selection and rotation are done through advanced criteria. Prepaid SIM cards become easy to use and control thanks to the embedded **credit control, recharge/top-up** as well as **promotions management**. **HBS traffic simulation** features are natively included to offer SMS and calls generation as well as SIM voice mail management. Traffic is simulated proportionally to the SIM usage via a unique algorithm which reproduces human behavior.



The **SMS Manager** is the IRON Suite server which hosts the SMS Campaigner or manages the interworking with external **SMPP based SMS applications**. When SMS are received through IP, the SMS Manager controls the SMS admission and forwards it to the Service Controller for the most appropriate SIM to send the SMS out.

**Sent and Delivery notifications** are returned to the SMS application once received and will never be lost even if the notification is received days after. The SMS Manager also manages **SMS-reply**. When a SMS-Reply is received, the SMS Manager looks up for the original SMS and delivers the reply to the sender.

## Increase your margin ... Use 120% of your SIMs

Taking out the best of your SIM cards is key to offer your customers **competitive prices while keeping the maximum possible margin**. The IRON Suite controls the use of your SIM cards price plans by making sure that you always place calls and SMS at the lowest cost.

Prepaid SIM recharges, credit synchronization, On-Net/Off-Net limits enforcement are **automatically managed by the IRON Suite**. You just use an intuitive web-based interface to configure it.

In addition, the IRON Suite dynamically adapts itself to **claim bonus and promotions** offered by the GSM/3G providers: These bonuses and promotions offer low rates or free minutes and SMS on your SIM cards at a specific time, based on volume usage or multiple recharges. Take advantage of these free minutes and then benefit from **120% of your SIMs capabilities to maximize your margin!**



# IRON Suite Solution

SIM Server for Mobile Termination

## IRON Suite Products

Whether you start your Mobile Termination business or you already run an existing termination network, iQsim offers you the right SIM Management Technology which fits your needs to start or grow your business safely.

### IRON SIM SERVER ONE

The IRON SIM Server One is the industry first, **all-in-One product** which provides all the SIM Server Management capabilities & features and SIM card storage in one product. Easy to deploy as it does not require any additional server or software, it is the **preferred solution** for small and medium terminators who aim to build a professional Call & Bulk SMS termination network. It helps you to **start easily and grow safely!**

### IRON SUITE SAAS MODE

Benefit from a clustered IRON Suite platform at an affordable price by outsourcing to iQsim the hosting of your **IRON Suite**. IRON Suite hosted services targets **small to medium size termination networks**. The IRON Suite hosted service provides 100% of IRON Suite features through a secure web interface. Let iQsim provide the service while you **concentrate on your business!**

### IRON SUITE

The IRON Suite appliances enables **medium to large Call & Bulk SMS terminators** to invest in their own SIM Management platform. According to your needs, IRON Suite appliances can be stacked to offer **scalability and redundancy**. In addition, IRON Suite appliances offer the capability to partition your system to host partners. Take advantage of **new business opportunities!**

Features	IRON SIM Server One	IRON Suite SaaS Mode	IRON Suite
GSM/3G port capacity	Up to 256 <sup>1</sup>	Up to 128	Unlimited
SIM/USIM Card capacity	5 120 <sup>1</sup>	4 160	Unlimited
Multi Country	Yes	Yes	Yes
SIM Control & Price Plans	Yes	Yes	Yes
Any SIM to any GSM/3G port	Yes	Yes	Yes
SIM and Call CDRs	Yes	Yes	Yes
Call Routing	Yes	Yes	Yes
Anti-Dialer/Blacklisting	Yes	Yes	Yes
External Database Server	No	N/A	Required
Clustering/Partitioning	No	No	Yes
Bulk SMS Termination	Yes	Yes	Yes
Human Behavior Simulation (HBS)	Yes	Yes	Yes
IMEI Control by SLID™	Yes	Yes	Yes

<sup>1</sup> Capacity can be extended through upgrade

#### Headquarters

«Les Algorithmes Aristote A»  
2000 Route des Lucioles  
06410 Biot - France  
Phone: +33 4 97 04 19 30

#### Paris, France

Phone: +33 4 97 04 19 38

#### Kuala Lumpur, Malaysia

Phone: +60 143 239 528

#### São Paulo, Brazil

Phone: +55 11 3526 6745

#### Mexico, DF, Mexico

Phone: +52 559 000 5601



www.iQsim.com

