



# Helix SMS Optimizer



**Make it streamlined**  
— with rapid delivery of high-volume SMS traffic

The Helix SMS Optimizer from RealNetworks provides all the elements you need for a fully integrated, scalable system that reliably and rapidly delivers high-volume SMS.

## The Opportunity

It can be argued that aside from voice, SMS (short for “Short Message Service”) has been the only true “killer app” among all the new mobile services. Originally SMS was designed as a one-way information channel for mobile operators so they could send announcements and notifications to their subscribers. However, as soon as user devices evolved to support sending SMS messages, the resulting traffic rates shot up at a blistering pace. Today, SMS is considered a mature technology supported by almost every network.

Around the world, the use of mobile messaging services continues to grow at a fast pace and deliver solid revenues to mobile service providers. For the younger generation, for whom messaging is a new form of communication and entertainment, messaging is used to engage and interact like never before. The rise in popularity of messaging has resulted in significant revenue profits for mobile service providers with premium SMS playing an increasing role in messaging revenues.

## The Solution

Mobile marketing campaigns, special events, and media programs can cause heavy surges in the sending of SMS messages which can overload mobile network operators’ messaging infrastructures. The main network component in the SMS chain is the Short Message Service Center (SMSC). The SMSC was originally designed and optimized for person-to-person (P2P) messaging. The Helix SMS Optimizer from RealNetworks offloads application-originated traffic from the SMSCs and transmits mass deliveries directly to the mobile network through dedicated SS7 connections. The result is streamlined, balanced messaging operations for value-added services and person-to-person traffic.

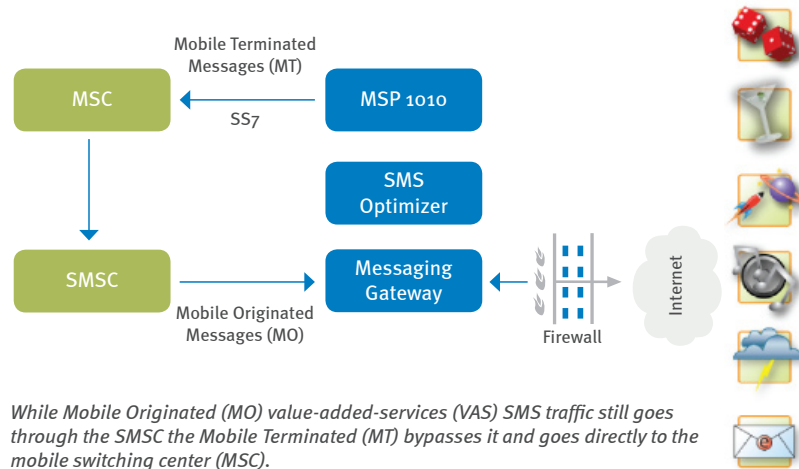
As messaging traffic has exploded, mobile operators have been concerned with scaling to meet demand while also seeking ways to make SMS more profitable. The traffic rate is already excellent, user awareness is great, and the viral effect is definitely at play—so the first way to increase profitability is with cost savings. While dramatically improving the service level of both P2P and application-to-person SMS, the

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Helix SMS Optimizer also enables the mobile operator to gain cost efficiencies. Because there is no need to make changes in the existing messaging infrastructure capacity to maintain a flexible multi-vendor environment, the SMS Optimizer can bring about savings in SMS operations.

## How It Works

The Helix SMS Optimizer improves SMS delivery and saves infrastructure costs by balancing messaging traffic and off-loading application-originated traffic from the SMSC. This diversion enables the rapid sending of mass mobile-terminated SMS messages through a direct SS7 connection.



The Helix SMS Optimizer is positioned in the network between the messaging gateway and the Mobile Switching Center (MSC). From the perspective of the gateways and MSCs, it appears to be a regular SMSC and therefore does not cause interruptions in the network flow.

A typical SMS Optimizer deployment consists of two parts: the messaging server and the signaling server. The messaging server is based on the Helix Messaging Gateway, which includes a message database and provides persistent message queues. The modular structure of the Helix Messaging Gateway allows highly customizable configuration, flexible routing, and excellent scalability. The signaling server in the SMS Optimizer (MSP 1010) is a high-performance, general purpose SS7 signaling server that provides support for redundant, highly available configurations.

There are two deployment options – the Helix SMS Optimizer can be deployed as a stand-alone solution or as an integrated feature module of the Helix Messaging Gateway. As a stand-alone solution, it provides a direct delivery path for SMS, thus bypassing the SMSC completely. Integrated with the Helix Messaging Gateway, the SMS Optimizer can manage all value-added SMS services and offer the following benefits:

- Enables extremely high mobile-terminated SMS delivery capacity
- Brings faster delivery times by eliminating SMSC from message transmission
- Protects limited and expensive SMSC capacity for its core function (person-to-person messaging)
- Deploys alongside the existing SMSC with no impact on the architecture
- Handles mobile-terminated SMS billing (bill on delivery) for post- and prepaid customers
- Provides detailed SMS delivery information back to applications
- Enables access to all Helix Messaging Gateway service APIs, such as the HTTP API

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## The Real Difference

For over ten years, RealNetworks has provided products and services that make digital entertainment more accessible for consumers. As “traditional entertainment” continues to extend itself into the digital and mobile campaigns and programs, the need for reliable, cost-effective message delivery solutions becomes more and more important. The Helix SMS Optimizer from RealNetworks allows mobile operators to meet the demands of today’s mobile messaging campaigns by enhancing the performance of high volume value-added and application-based messaging. Our SMS Optimizer can be deployed as an extension of the Helix Messaging Gateway, a proven, carrier-grade service delivery platform for all SMS and MMS value-added services that enables mobile network operators to maximize their mobile VAS revenues and dramatically reduce the time to market for new service applications.

## Contact Us

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