

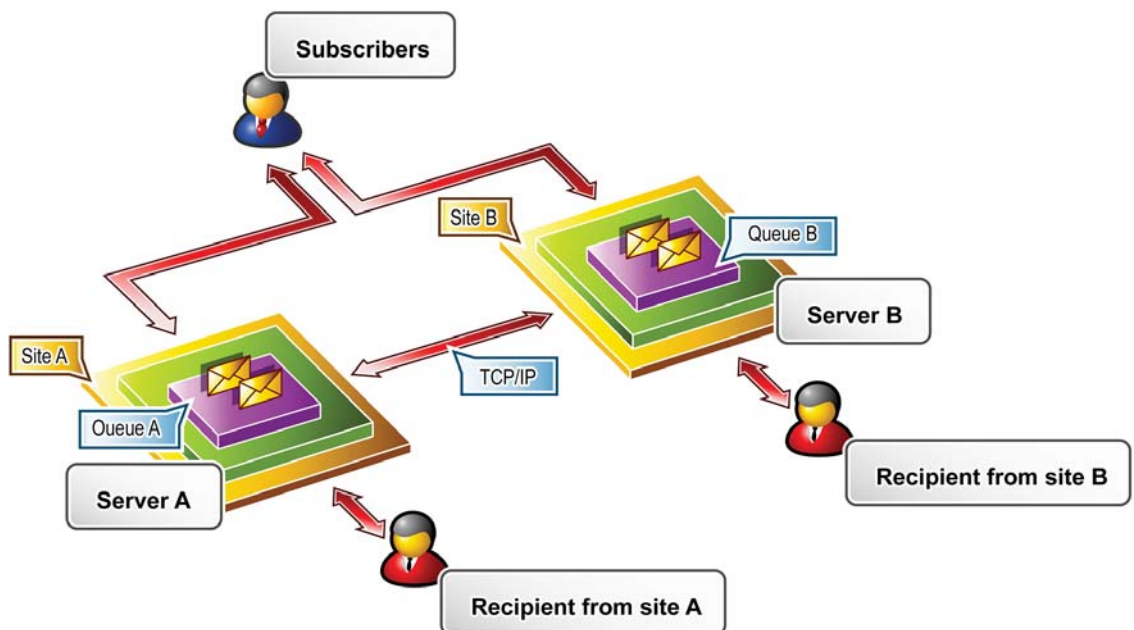
# CBOSSsms based on the NonStop platform



The new implementation of acknowledged CBOSSsms is a hi-end short message service center providing availability and performance never experienced before. The solution has an absolutely different, fully redundant and distributed architecture enabled by the ultra reliable and scalable hardware platform.

New CBOSSsms has been purpose-designed to help service providers successfully overcome these challenges. CBOSSsms guarantees 100% delivery of all messages without any losses, which makes it the solution of choice for Mobile Financial Services and content applications.

The new implementation of CBOSSsms is designed for large network operators serving over 2M subscribers and correspondingly provides high performance per processor (up to 200 messages per second). The solution architecture allows for practically unlimited horizontal scalability and can be upgraded without interruption of service provisioning.



## System Operation

New CBOSSsms allows subscribers to exchange short messages with each other and external applications, including sites, self-service systems, content platforms, etc.

### Enabling reliability

- Reliable storage with absolutely no losses.
- Fully redundant servers.
- Updates and upgrades without service interruption.
- Highly efficient load balancing, providing stable operation even during peak hours.
- Support of distributed operation, guaranteeing data safety and service

availability even in global emergencies and catastrophes.

- Support of the Mated Pair technology in the Active/Active configuration.

The Active/Active configuration includes two or more redundant servers. The following diagram shows the configuration based on two remote servers.

By default, each server processes 50% of the traffic and backs up all the data from another server. If server A fails, server B automatically carries on its work and processes 100% of traffic. As soon as server A is back, the solution returns to default mode. The architecture guarantees fault tolerant processing of all the messages without any losses in any situation.

## Key Features

- **Enabling performance**
  - Direct delivery of messages (transaction mode).
  - Support of high-speed protocols and interfaces: SIGTRAN, HSL (High Speed Links).
  - Practically unlimited horizontal scalability.
- **Enabling rating**
  - Simultaneous support of prepaid and postpaid subscribers.
  - Send- and receive-based rating options.
  - Guarantee that one message will never be billed twice.
- **Enabling administration and statistics**

Using the same platform with CBOSSrtb allows the use of the unified and centralized alarm management and statistics collection. The solution supports DNMP-based statistics export to external systems.
- **Telecommunications standards**

CBOSSsms supports GSM, CDMA, and UMTS.
- **Hardware platform**

CBOSSsms can run on HP NonStop servers including S-series servers with HP Mips processors and NS-series with Intel Itanium 2. The minimum configuration is built on 4-processor S-series servers or 2-processor NS-series servers.
- **Scalability**

CBOSSsms enables practically unlimited scalability through easy and convenient installation of new processors and servers.
- **Protocols and interfaces**

CBOSSsms supports the following protocols: SS7, SMPP, SNMP, ATM, SIGTRAN.

## Integration

- **Integration with billing systems and prepaid platform**

CBOSSsms is fully compatible with different billing systems. It seamlessly integrates with CBOSSrtb on software and hardware level, which provides a convergent solution running on a single server and using the same middleware. The integrated solution has centralized administration and management and supports prepaid SMS rating.
- **Integration with applications**

CBOSSsms supports SMPP, which enables integration with any applications, including Mobile Financial Services and mCommerce services requiring the highest reliability and guaranteed 100% delivery.
- **Integration with network monitoring and statistics collection systems**

CBOSSsms integrates with various OSS and statistics collection systems via SNMP.

## Benefits

- **Unsurpassed reliability and guaranteed 100% uptime**

CBOSSsms provides various redundancy options and uses highly reliable hardware and advanced load balancing, which, coupled with CBOSS expertise in development of full-scale SMSCs, guarantees highest quality of SMS-based services and 100% message delivery.
- **Scalability**

CBOSSsms can scale up to any performance level.
- **Convergence**

CBOSSsms can operate in all modern standards, providing simultaneous support of prepaid and postpaid subscribers.
- **Low operational costs**

CBOSSsms provides easy integration, simple scalability, convenient administration and auto monitoring, which minimizes the total cost of system ownership.

CBOSS (Convergent Business Operations Support System) is a transnational corporation and a world leader in the development of innovative convergent IT solutions for end-to-end automation of telecommunications companies, delivering a competitive edge to telecoms all over the world.

CBOSS Corporation offers the full range of equipment, system and application software and professional services, including consulting, turnkey implementation, technical support, staff training and IT outsourcing, providing telcos with guaranteed operations quality while minimizing operational and capital expenditures.

CBOSS can supply operators, service providers and MVNOs with all components of integrated IT infrastructure and/or services, as well as with full-scale outsourcing options, providing a reliable single point of responsibility.

For more information visit [www.cbossgroup.com](http://www.cbossgroup.com)

