



# **Espresso Instant Messaging – Carrier Edition: SMSC Integration**

***A VIRTUALTHERE WHITEPAPER***

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## Expresso IM – Carrier Edition: SMSC Integration

### PREFACE

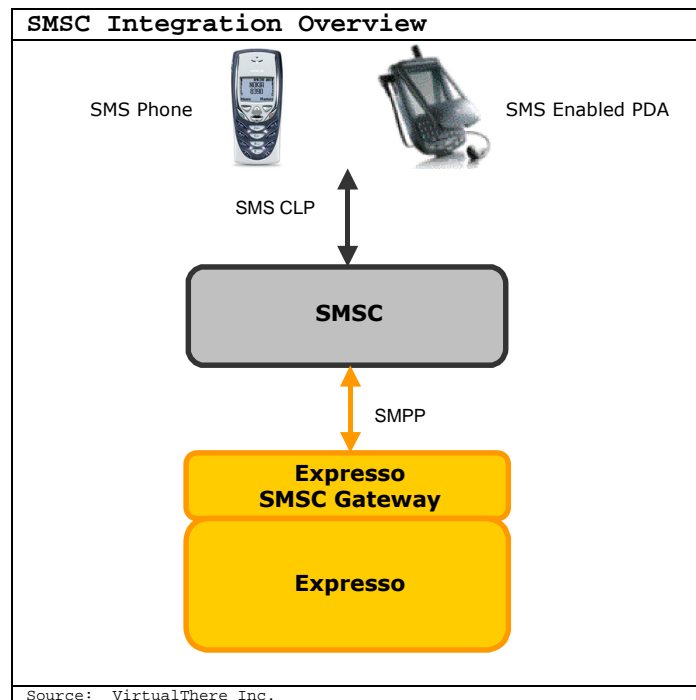
Expresso Instant Messenger is an innovative approach to conventional instant messaging (IM). Integrating the best of both PC-based instant messaging and mobile messaging along with support for rich multimedia across multiple platforms, users enjoy a powerful communications environment for both business and personal use.

The purpose of this document is to assist wireless network operators to understand the issues relevant to integrating Expresso IM – Carrier Edition with their existing SMS infrastructure.

### EXPRESSO SMSC GATEWAY

The Expresso SMSC Gateway provides a solution for wireless network operators to connect a Short Message Service Centre (SMSC) with the Expresso IM platform. The Gateway uses the operator's existing SMS infrastructure to enable end-users to access instant messaging functionality on existing handsets.

The Expresso SMSC Gateway is integrated with the main Expresso IM platform. Depending on your deployment requirements, the Expresso IM platform and Expresso SMSC Gateway may reside either (a) inside a carrier's network, or (b) can be hosted and managed by VirtualThere.



The Expresso SMSC Gateway provides wireless network operators with a seamless, two-way connection between their SMS network and instant messaging users. The SMSC Gateway



connects with the SMSC using the SMPP<sup>1</sup> protocol, thus enabling connectivity with SMSC's provided by CMG, Comverse, Logica, Sema and others<sup>2</sup>.

## SYSTEM FEATURES

Other system level features of Espresso SMSC Gateway include:

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### Reliable

Espresso SMSC Gateway was designed from the ground up to meet very high standards of reliability required for deployment in network carrier environments. Espresso's intelligent architecture provides support for various levels of multi-way redundancy guaranteeing that messaging integrity is maintained even in the event of component failures.

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### Scalable

Espresso SMSC Gateway efficiently scales from small systems supporting thousands of messages per day, to large-scale systems requiring support for millions of messages per day. Modular components can be run on separate servers.

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### Rapid Time-to-Market

Using the Espresso SMSC Gateway, carriers can instantly launch SMS-based mobile instant messaging services while bypassing the complexities associated with developing a custom interface to the SMSC.

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### Multilingual Support

Espresso SMSC Gateway supports UTF-8, allowing a wide range of languages to be offered.

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### Open API

The Espresso SMSC Gateway may also be used to enable carriers and developers to create and provide other SMS-based value added services. The Espresso SMSC Gateway APIs provides an easy to use interface between the servers used to run value added services and the mobile operator's network.

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### Message Splitting

Espresso SMSC Gateway automatically handles the splitting and concatenation of SMS messages.

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### Management

Espresso SMSC Gateway requires minimal system management and is designed for unattended operation.

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### Logging and Troubleshooting

Extensive logging features can integrate with external billing applications and enables administrators to quickly identify and resolve problems.

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<sup>1</sup> Short Message Peer to Peer. An industry standard messaging protocol designed to simplify integration of data applications with wireless mobile networks.

<sup>2</sup> UCP and CIMD2 protocols can be supported upon request. Please contact your VirtualThere representative for further details.



## **CONCLUSION**

The Espresso SMSC Gateway was developed by VirtualThere to work in conjunction with the Express IM – Carrier Edition product. Together these components enable the rapid launch of SMS-based instant messaging services by wireless network operators.

By deploying Espresso SMSC Gateway, wireless network operators can also leverage existing SMSC infrastructure to quickly and simply deploy a wide range of SMS-based value added services.

Please contact VirtualThere for further information on this exciting new product.

## **CONTACT INFORMATION**

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## VirtualThere Inc.

### ***CORPORATE OVERVIEW***

VirtualThere designs, develops and deploys a comprehensive family of value-added mobile applications, collectively called the Espresso products. VirtualThere's Espresso products enable wireless network operators and service providers to offer messaging services to their mobile customers. Solutions range from the core Espresso instant messaging platform on which carriers and service providers can develop unique customer-focused applications, to an immediately deployable service comprised of the core platform plus pre-packaged Espresso-ready applications, for the fastest time to market of compelling mobile messaging services.

VirtualThere's Technology Lab is focused on developing SMS applications, location based services, and advanced GPRS and third-generation (3G) wireless applications for mobile network operators.

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