



Development of Interface between SMPP and CMP



The Summary

Client's MMG (Mobile Messaging Gateway) server currently is based on JMS Technology. Client needed to enhance the functionality of the present system, AGT developed an interface between the SMPP client and the SMSC. This interface was developed using the Java technologies (J2SE). The interface handled all essential features of a server like handling multiple network connections, managing multiple sessions and maintaining huge pools of objects.

The Client

Our client is the pioneer in the Wireless Messaging Server and leading provider of scalable Wireless enablement infrastructure software for enterprise and service Provider.

The Business Requirement

Client's MMG (Mobile Messaging Gateway) server currently is based on JMS (Java Messaging Service) technology. JMS provides a massively scalable architecture. The system supports CMP (Communication Multiplexing Protocol). To enhance the functionality of the present system, client's requirement is to provide SMPP Protocol support, which facilitates the SME (Short Message Entity).

The Solution

The approach was to develop an interface between the SMPP client and the SMSC (Short Message Service Centre) i.e., MMG server. The interface provides two way communications between the client and the server performing following actions:

- Accept the request from the client in the SMPP protocol and route it to the MMG in the CMP.
- Receive the request response from the MMG server in CMP and redirect the equivalent response back to the client through SMPP.

Project Summary

Industry: Telecom

Client Profile: Leading provider of Wireless Messaging Server and enablement infrastructure software

Business Requirements:

Client's requirement is to provide SMPP Protocol support, which facilitates the SME (Short Message Entity)

Solution:

Developed an interface between the SMPP client and the SMSC i.e., MMG server. The interface provides two way communications between the client and the server.

Solution Benefits

- Enhanced functionality
- Connect to the MMG server without any changes to software.



AG Technologies

Following functionalities are supported by the SMPP interface:

- **Bind:** SMPP Bind operation registers an instance of SME with the SMSC system and requests for submission and delivery of messages.
- **Submit:** The operation submits a short message for onward transmission to a specified SME.
- **Enquire Link:** This operation provides a confidence check of the communication path between a SME and a SMSC.

This interface was developed using the Java technologies (J2SE). The interface handled all essential features of a server like handling multiple network connections, managing multiple sessions and maintaining huge pools of objects.

The Solution Benefit

- The MMG server was able to enhance its functionality without any modification to its structure.
- SME that use SMPP to communicate can now connect to the MMG server without any changes to their software.
- The open architecture of the interface is scalable to include new operations as needed by the system requirements.