



VISUAL GSMTM
click and deploy mobile application server

enterprise series

■ Contact Us

■ Singapore Office

32 Maxwell Road #03-13 Singapore 069115

Name : Joshua Lim

Email : joshua@visualtron.com

Phone : +65 62224303 or +65 62224303 ext 103/104/105

Fax: + 65 62224203

Mobile Phone : +65 96550205

■ P.R. China Office

Suite 304, Chuangye Building, Xiamen Pioneering Park,
Hi-Tech Development Zone, Xiamen 361009, Fujian, P.R.C.

Name : Zhuo Xuelun

Email : xuelun@visualtron.com.cn

Phone : +86 592 2199751

Fax: + 86 592 2197771

Mobile Phone : +86 13959270255

VISUALtron Software Corporation

1201 Orange Street, Suite 600

Wilmington, DE 19801, USA

Website: <http://www.visualtron.com>



VisualGSM™ Mobile Application Server

Enterprise Series



Mobile Application Server (Enterprise Series or Enterprise Server) is developed by VISUALtron Software's group of experienced R&D engineers. The server is SQL database* driven to offer a robust, secured, and open-platform powerhouse which can be easily integrated into any corporate environment via Web APIs, SQL, SMTP and command-line interface.

Supported SMS transmission methods includes GSM (via GSM modems), SMPP¹ (Short Message Peer to Peer), HTTP, and all other open APIs (requires separate programming/scripting). You can configure your server to route your messages through a combination of GSM modems and multiple SMPP hosts.

* Supported database engines include Oracle 8i/9i, MS SQL 7.0/2000 and MySQL 3.23/4.

Click 'N Deploy

The click-and-deploy application server comes optionally bundled with an integrated SQL database, industrial standard compliant GSM modem, on-site installation, a 1-year next working day response maintenance contract, and full user/developer documentation. Different components can be ordered separately in different combinations.

RAD or rapid application development features enables programmers to quickly develop, test, and launch standalone or fully Enterprise integrated interactive SMS applications within hours/days.

Redeploying the server or creating another backup server is even easier as the Management Console provides a database export and import function which you can use to reimport your original server data and configurations into a newly deployed instance.

Self-installing patches are provided periodically for you to update new features and bug fixes. Patches can be downloaded directly from our website or automatically detected by the server (on your activation) and then downloaded/deployed.

Powerful Management Console and Web-based Client

It is an easy to maintain and configure server. The management console manager is built for that added convenience which allows administration of the server in both local and remote environments.

Features vital to hassle-free operations such as automatic database housekeeping and backup services are configurable from this console.

A multi-user access-authenticated web client is provided for MS SQL and MySQL versions of Enterprise Series servers. The client comes with full source code and developers are free to use and modify the code.

Scalability and Flexible Licensing Scheme

The VisualGSM Enterprise Series allows you to match your messaging requirement with the growth of your business by offering an upgrade path across different licenses, from Broadcast License to Mission Critical License, so that you invest only in features you require. With the Mission Critical License, you get SMPP support, which allows you to connect to any telco SMSC (that supports SMPP) and process up to 500,000 messages a day.

As VisualGSM Enterprise is database driven, and comes with no restriction on the number of client users or SMS users, you can upgrade its capacity and processing speed simply by upgrading both database software and hardware, e.g. from MySQL on PC Windows machine to Oracle9i on Sun Solaris.



Incorporates 'Smart' load balancing with an option to add multiple GSM modems to better handle heavy SMS loads. Each port/modem can be individually configured to handle either or both incoming and outgoing messages.

Ability to work behind corporate firewalls by accessing external network/web resources via LAN proxy servers. This allows organizations to continue using their current network systems without any interference from VisualGSM.

Built-In Security

Security is enhanced by limiting usage and web-based admin access from pre-configured set of IP addresses and a password protected client/server Console Manager.

Allows service providers to restrict access to important information services to a pre-defined list of privileged users based on their mobile phone numbers, while operating public access services at the same time.

Provides the option to restrict the server to process only local bound SMS messages and ignore overseas messages.

Prevents DOS or denial-of-service sabotage of the system by allowing administrators to configure and preventing the server from accepting messages from 'banned' set of mobile numbers.

Robust

Ability to handle large message volumes and efficient sending rates by temporarily storing/buffering ready to send messages in a built-in SQL database before systematically pushing the message to be sent.

Crash recovery feature that allows the system to persistently send messages not sent; for example as a result of power failure, once the server is restored.

Self-diagnosis and problem resolution feature allows the system to self-detect configuration conflicts, hardware failures and resolve such issues automatically if possible; and if not, reallocate the current workload to another server in the workgroup to realize an "Always ready to send" attitude.

Built-in self-maintenance function refreshes/purges server and database cache memory every night for smoother continuous running performance. Can be toggled off.

Error handling

The GSM network is at times unstable, and VisualGSM detects if a message is sent successfully, and retries on network failure (as defined by ESTI GSM standards). Built-in diagnosis capability refreshes COM ports and GSM modems whenever a hardware bottleneck is found. A fault reporting system emails the administrator when such bottlenecks are encountered.

Open architecture

Configuration, messages, and logs are stored in an open database where professional reporting tools like crystal reports can be used to generate custom-on-demand reports. In addition, these information can also be shared with other applications.

Support

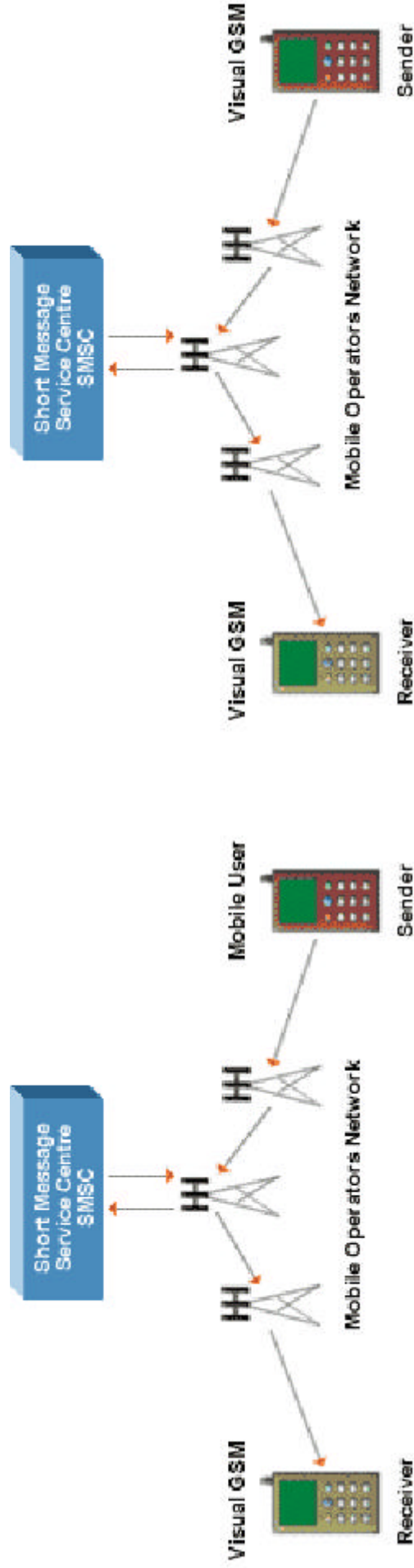
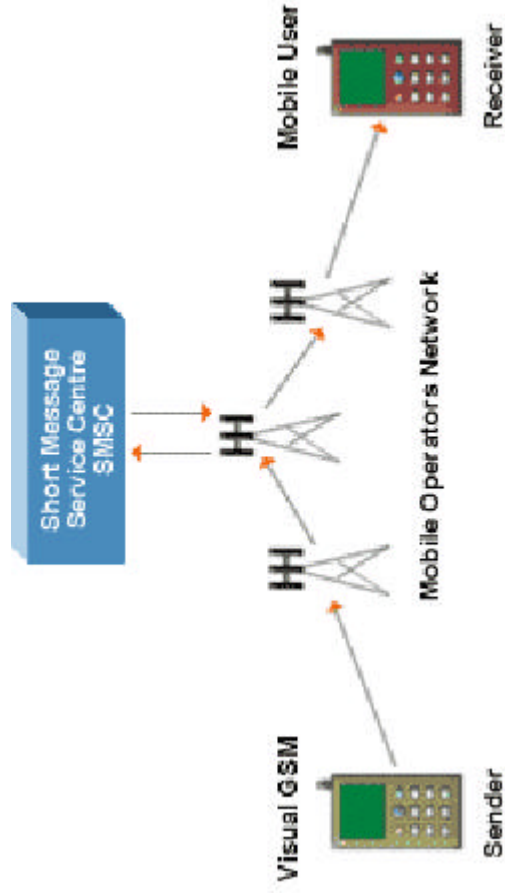
Businesses that require even faster support have the option of an 8 hours or 4 hours response support packages offered by our partners.



Key Features

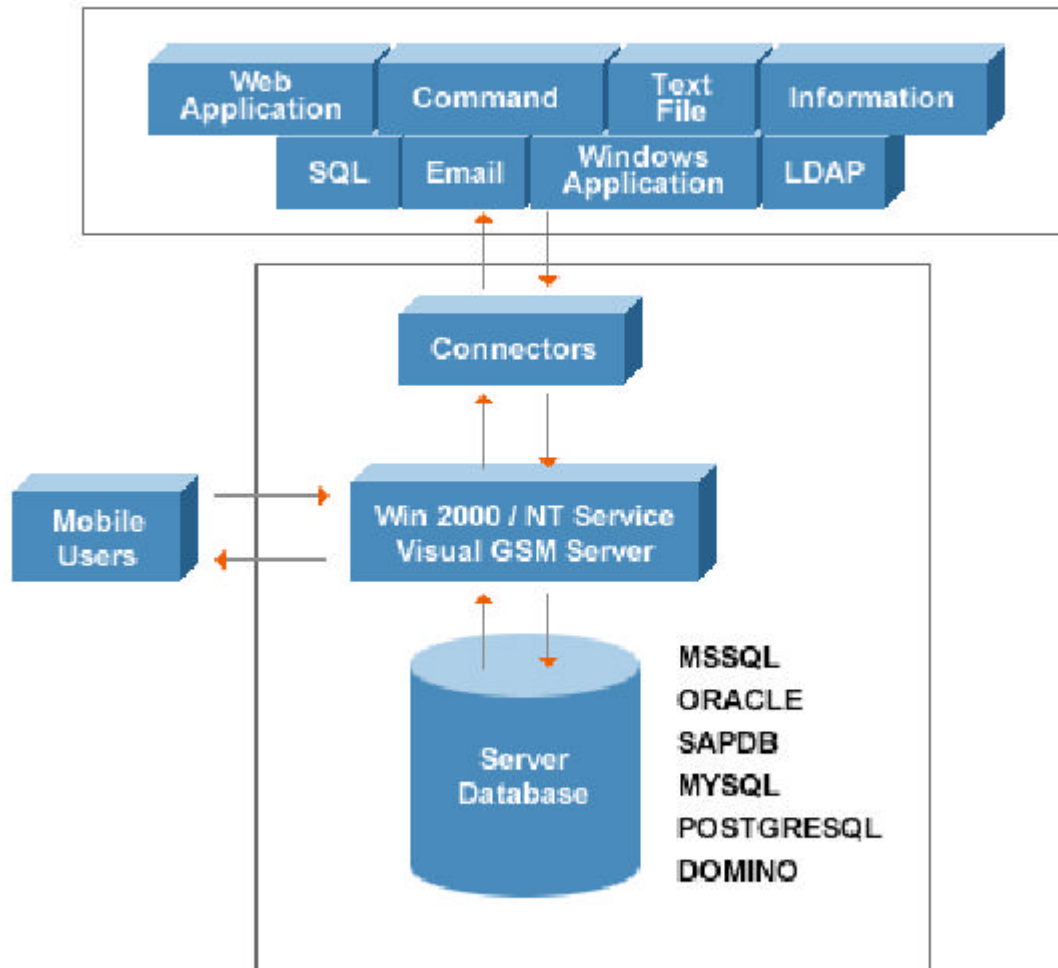
- Easy to deploy and maintain mobile application server SQL database.
- Send TEXT/SMART SMS (flash, operator logo, ringtone) via GSM modem. Multi-part operator logo and ringtones are supported.
- Can be configured to restrict overseas SMS.
- Allows broadcast with multiple phone numbers. Interface via HTTP/Command-line from within LAN and the Internet.
- Provides Web/HTTP and command-line API to send/broadcast messages. Documentation for direct SQL insert to message outbox included.
- Allows receiving of SMS via GSM modem. All messages received and sent will be logged and stored in an integrated database. A built-in error log helps user track and troubleshoot problems.
- A user-friendly graphical user interface for the management console allows administrators to assign unique keywords to specific CGI/Java Servlets/native programs to trigger a response. This means if an incoming SMS has a keyword followed by some parameters, the server will pass these parameters to a program associated with the keyword, triggering an interactive response.
- Console provides a 'Test' function allowing programmers to test their scripts in quickly by simulating actual mobile messaging test procedures on the computer. This RAD function can improve development speed/efficiency by up to 100%.
- Management Console allows remote management of server from the Internet. The features highlighted includes database management for keywords (2-way messaging), logged messages (both receive and send), error log (for troubleshooting and application development), and user access permission.



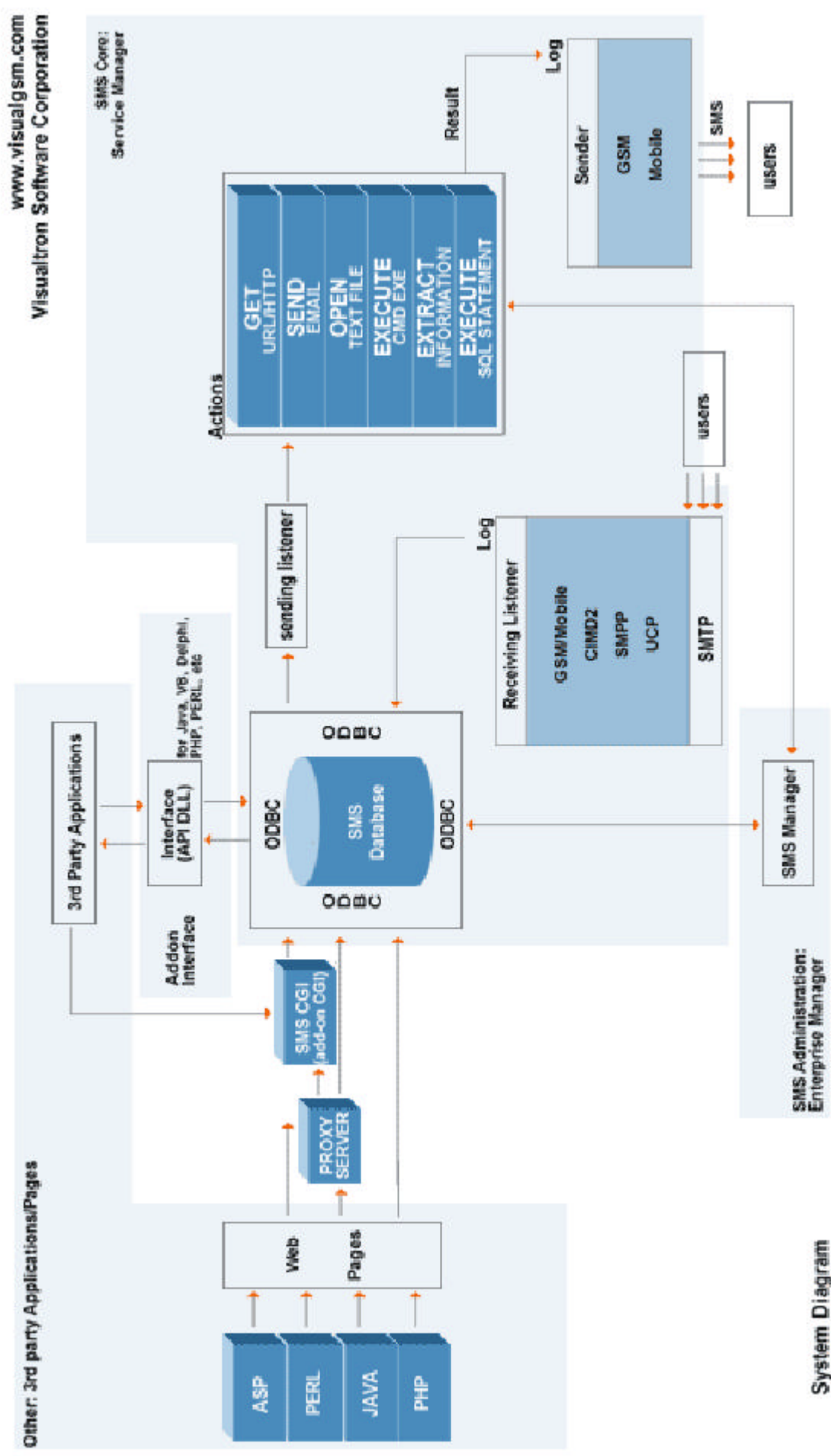




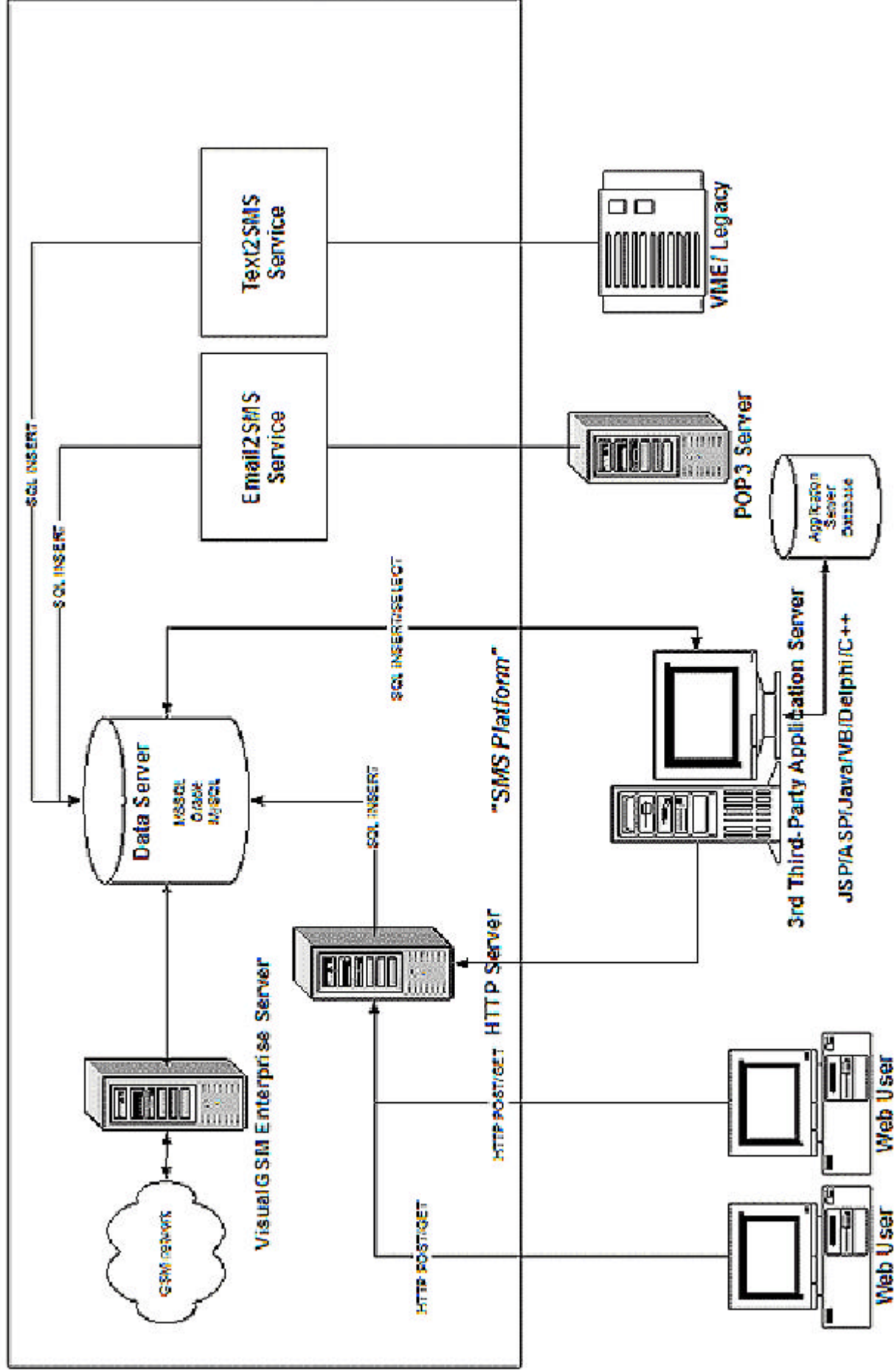
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Visual GSM Data / Information
Flow Diagram



System Diagram



DATA FLOW SYSTEM DIAGRAM