ZENGLOBAL

0995-224-7045
0991-356-0844

hello@zenglobal.software
www.zenglobal.software

B3 L27 MOPHHA Sasa,
Davao City, 8000
Philippines

Technical Document (TD)

Project Name: SMS Gateway System
Client: Jose Pardillo Rodriguez
Version: 1.0
Date: August 14, 2024

ZENGLOBAL

0995-224-7045
0991-356-0844

hello@zenglobal.software
www.zenglobal.software

B3 L27 MOPHHA Sasa,
Davao City, 8000
Philippines

1. System Architecture

1.1 Overview

The SMS Gateway System is designed to deliver SMS messages across various telecom networks in the Philippines. It leverages a pool of smartphones as endpoints to route SMS traffic efficiently through the most suitable telecom provider, ensuring cost-effective, reliable, and scalable SMS delivery.

1.2 Architecture Diagram

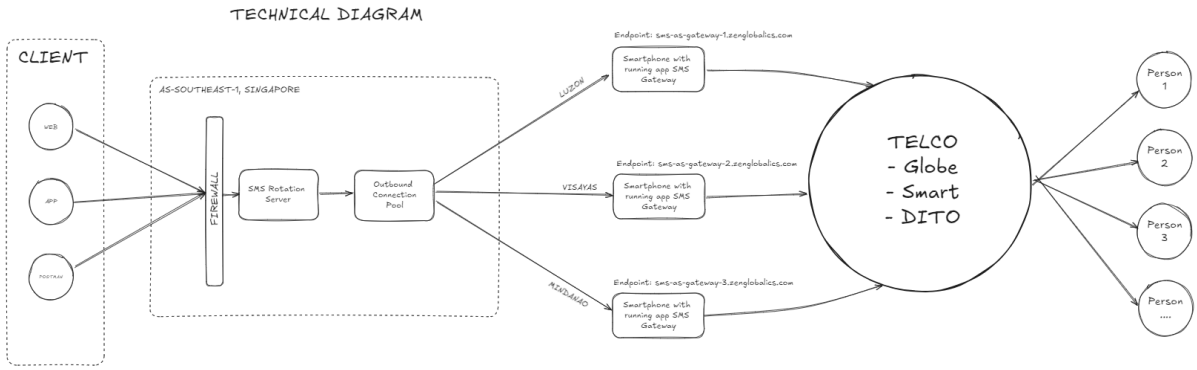

Figure 1: SMS Gateway System Architecture

0995-224-7045
0991-356-0844

hello@zenglobal.software
www.zenglobal.software

B3 L27 MOPHHA Sasa,
Davao City, 8000
Philippines

1.3 Components and Description

Component	Description
Client Access Methods	
• WEB	Represents web applications that interface with the SMS Gateway API to send SMS messages.
• APP	Refers to mobile or desktop applications utilizing the SMS Gateway API for SMS functionalities.
• POSTMAN	Utilized for testing and interacting with the SMS Gateway API directly, often by developers or during system integrations.
Security and Request Handling	
• Firewall	A security layer that ensures only specific ports are open for incoming requests. Protects the system by filtering and controlling network traffic.
SMS Processing Architecture	
• SMS Rotation Server	Manages and processes incoming SMS requests, selecting an available endpoint from the Outbound Connection Pool for optimal performance and load balancing.
Outbound Connection Pool	
• Connection Pool	Maintains all available endpoints, ensuring even distribution of requests among smartphones running the SMS Gateway application.
Endpoints and SMS Delivery	
• Endpoints	Each endpoint represents a smartphone with the SMS Gateway app running, connected to regional telecom networks (Luzon, Visayas, Mindanao) to send SMS messages.
• Telco	Refers to the telecommunication networks (Globe, Smart, DITO) involved in facilitating SMS delivery to recipients.
SMS Recipients	
• Person	The end-users who receive the SMS messages sent by the system, app, or web interfaces. These messages can be transactional, notifications, authentication codes, reminders, etc.

ZENGLOBAL

0995-224-7045
0991-356-0844

hello@zenglobal.software
www.zenglobal.software

B3 L27 MOPHHA Sasa,
Davao City, 8000
Philippines

2. API Documentation

2.1 Overview

The SMS Gateway API allows external systems to send SMS messages via the SMS Gateway System. The API is RESTful and supports JSON format for requests and responses.

2.2 Endpoints

Endpoint	Method	Description	Parameters
/api/3rdparty/v1/message	POST	Send an SMS Message to a specified recipient.	'message', 'phoneNumbers'

3.3 Authentication

All API requests must include an API key as a header parameter. Example

Authorization: Basic Auth xxxxxxx:xxxxxxx

The basic auth can be found on smartphone device that has running sms gateway app and connected to working cloud sms gateway.

4. Deployment Guides

Comprehensive deployment guide can be found on project repository named ReadMe.md