



MIMOS Big Data Crowdsourcing Platform (Mi-Flash)

The rapid growth in data in the social domain requires a medium to ingest, analyse and visualise traditional and new information sources. Moving towards smart cities, it is especially crucial for city councils and local authorities to have instantaneous access to a variety of information for city operations and planning. Mi-Flash offers a big data crowdsourcing platform that is able to consume, analyse and visualise huge amounts of structured, unstructured and device data for management convenience.

Overview

Mi-Flash is a big data crowdsourcing platform that harvests, analyses and visualises vast amounts of data. Structured, unstructured and device data is replicated and distributed for fast results. Mi-Flash is based on multiple and customised Solr and Hadoop technologies and is able to handle huge and multi-format data such as traffic, telco, social data and more.

Features

Mi-Flash comprises the following features:

- **Big Data Capacity**
Mi-Flash is able to handle, verify and visualise huge data of up to one billion records.
- **Multi-Format Data Consumption**
Most standard data formats as well as GIS data is consumable by Mi-Flash.
- **Analytics Integration**
Mi-Flash is able to be integrated with statistical libraries for analytics while data is being generated.
- **Instantaneous Visualisation**
Mi-Flash dashboards are easily customisable and will auto update in real time.

Technology Benefits

The main impacts of Mi-Flash are:

- **Traffic Incident and Congestion Management**
Centralised information network base containing multiple data sources such as highway and public transport reports, traffic (e.g. Waze) data and CCTV data for traffic for accident and congestion management and traffic redirection.
- **Public Infrastructure Repairs and Maintenance**
Crowdsourced social information is used to quickly address road and public amenities' disruption of service so accurate and effective repairs and maintenance are carried out.
- **Future Infrastructure and Services Planning**
Multiple information inclusive of sentiments of citizens on social media are drawn as input for future infrastructure and services planning for cities.

System Requirements

Mi-Flash	
Minimum Production Server Requirements	
Database	Database Server a. 4-core, 16GB RAM, 500GB Hard Disk b. Ubuntu 16.04 or CentOS 7 c. PostgreSQL 9.6
Application	Application Server a. 4-core, 16GB RAM, 50GB Hard Disk b. Ubuntu 16.04 or CentOS 7 c. Java JDK 8 and NGINX 10.15
Big Data Cloud	Big Data Nodes (5 units) a. 8-core, 32GB RAM, 500GB HDD b. Ubuntu 16.04 or CentOS 7 c. Java JDK 8 * depending on complexity and size of data
Network	Network (1 Unit) a. 1Gbe Switch

Technology Summary

Mi-Flash

A big data crowdsourcing platform that harvests, analyses and visualises vast amounts of data.

Industries: Enterprise, Government, City Councils

Features

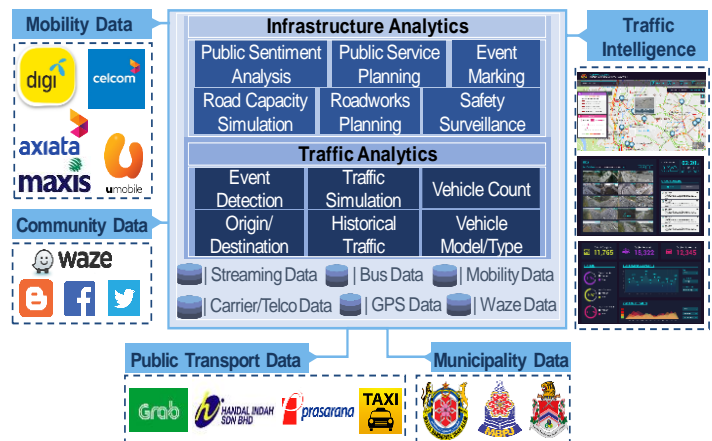
- Big data capacity
- Multi-format data consumption
- Analytics integration
- Instantaneous visualisation

Technology Benefits

- Traffic incident and congestion management
- Public infrastructure repairs and maintenance
- Future infrastructure and services planning



MIMOS Mi-Flash dashboard screens



MIMOS Mi-Flash system diagram

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