

Opera



MISION

Enabling companies to efficiently manage and reduce costs, optimize the work of human and technical resources, monitor and plan daily activities.



PRODUCTS

Geoinformation platform enabled for fast integration and displaying diverse data with focus on managing resources and assets in the field.

What is Opera?



Distributed information system.



Resource and Asset Management system, eGIS and Route Optimization.



Displaying of objects in the field – Mapping.



Remote monitoring and management of events, facilities and resources in the field.



Real-time monitoring, statuses and actions.

OperaEAM MICROSOFT AZURE ARCHITECTURE

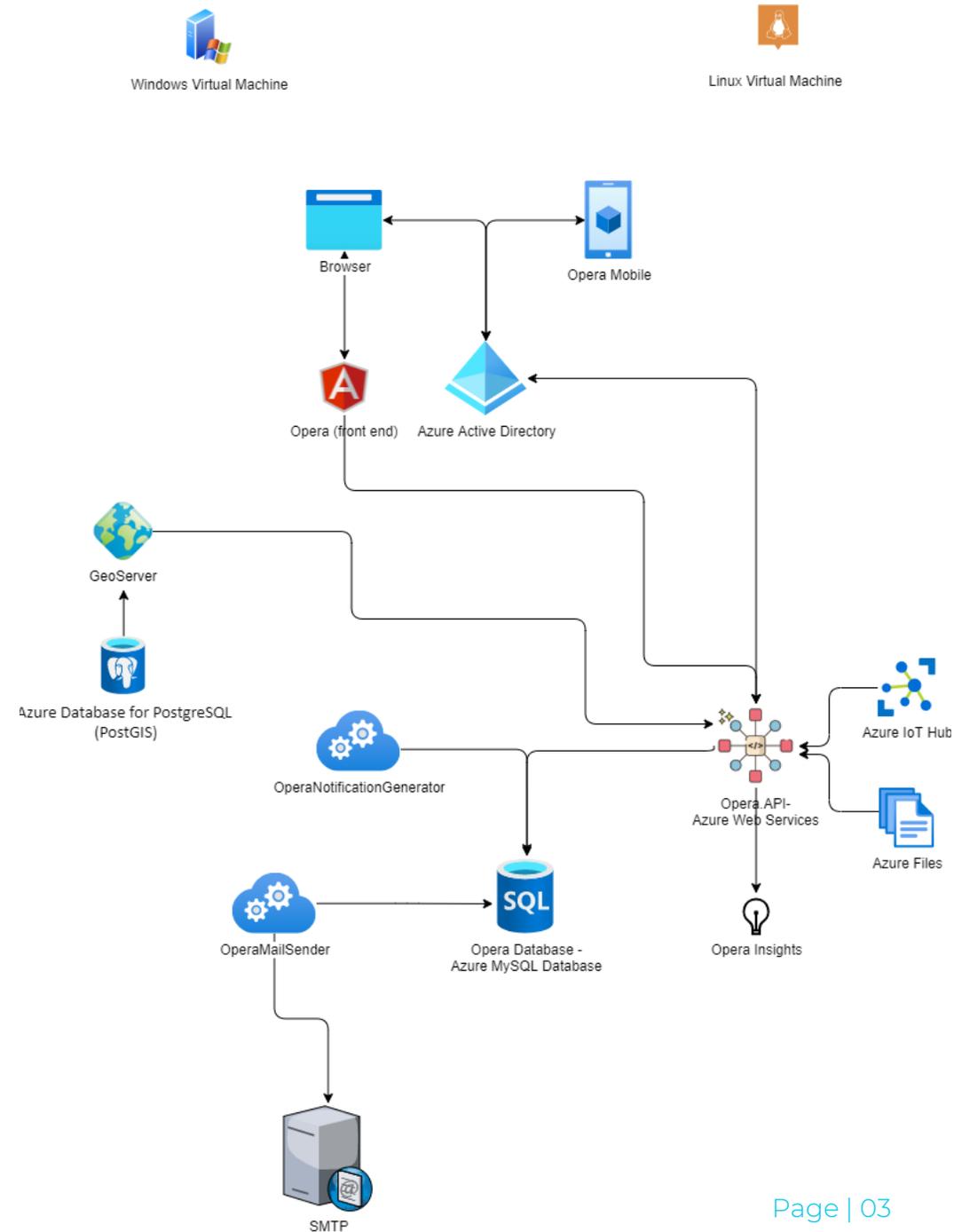
The system uses **Azure service** to provide better performance and better user experience:

- **Azure Active directory**
- **Azure WebService - OperaAPI**
- **CloudService Azure** for OperaNotificationGenerator and OperaMailSender

All data can be stored on **Azure Database for MySQL**.

Uses **Azure files** cached on Windows Servers with **Azure File Sync** for fast access.

To provide highly secure and reliable communication between OperaEAM platform and the devices our system can use **Azure IoT hub**.



SOLUTION COMPONENTS

Fast development

Real-Time Application

Adaptable to any environment

Simple integration with different systems

SOLUTION COMPONENTS



Server



Mobile application



IoT Sensors



WEB application



Tracking devices



Facility monitoring

KEY FEATURES

Real-time functionalities

- Maps / Layers
- Reporting
- Facilities and Assets monitoring
- Alarms and Notifications
- Parameters / Actions / Statuses

Development tools

- PostgreSQL / PostGIS
- MapServer / OS layers / GeoServer
- QGIS
- API Integration / Swagger

INTEGRATED SYSTEMS

AZURE

MQTT / HTTP / IoT

Device Management Systems

GPS / FLEET

ERP

WEB APPLICATION



Working with maps and layers



Resource and asset tracking / Predictive maintenance



Real-time operation monitoring



History and Reporting



Alarming



Workflow



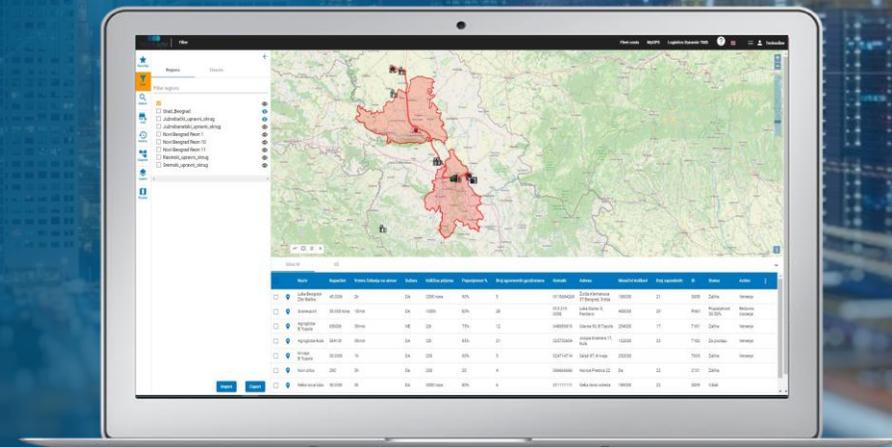
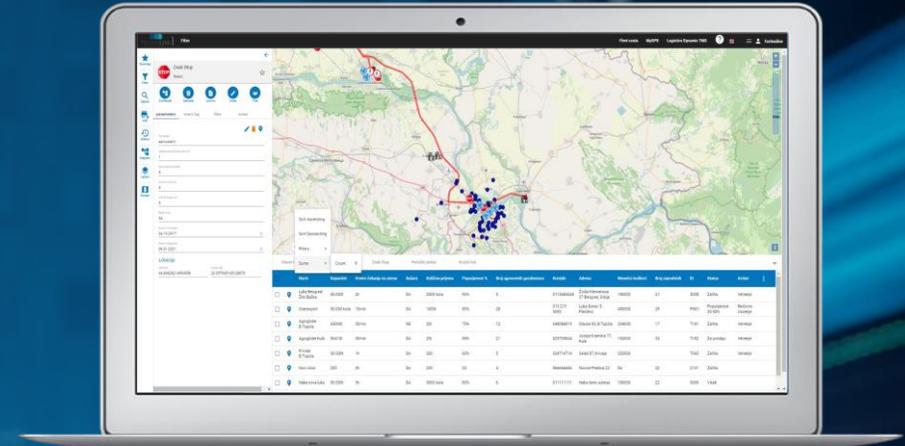
Field force management



Route optimization



Fleet management



MOBILE APPLICATION



Workforce - Efficient field work



Real-time visualization



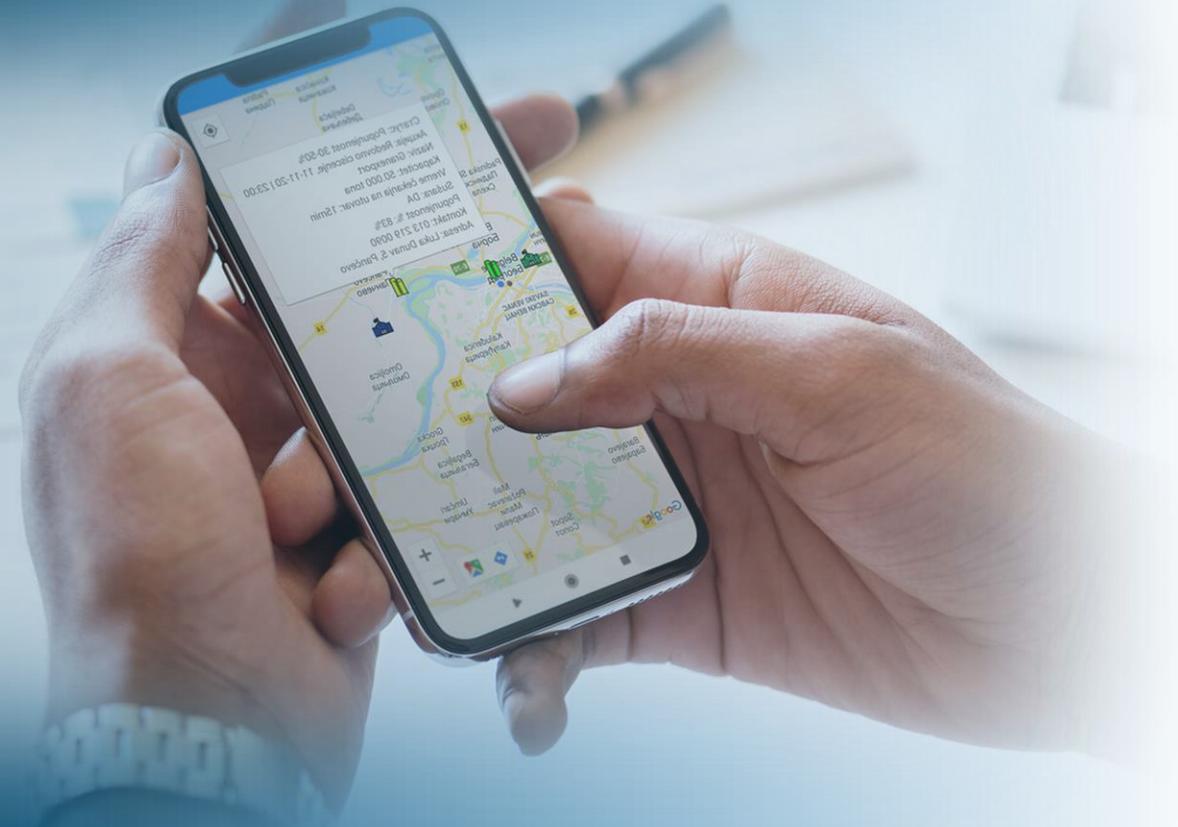
Object recognition and GPS positioning



Status changing / Entering comments, images, actions



Work orders



SOLUTIONS AND SYSTEMS



Enterprise Asset Management



IoT Platform



Logistic and Transport Optimization System



Fleet Cost Optimization System



Computerized Maintenance Management System



eGIS – Enterprise Geographic Information System





ENTERPRISE ASSET MANAGEMENT



Map display of areas (fields, plots, production areas, roads).



Map display of objects on the field (tree, silo, building, factory).



Assets described with arbitrary number of parameters & attributes.



Status and action tracking.



Predictive maintenance.



Reports, alarms and notifications.



LOGISTIC MANAGEMENT SYSTEM



System for dynamic routing of the vehicles.



Maintenance monitoring and planning.



Record of all costs.



External system integration:

- ERP
- WMS
- SAP
- FLEET



Statuses, alarms and reminders.



Automatic creation of consignment lists according to the optimal order of unloading the goods.



Display of generated optimal routes on the map.



FLEET COST OPTIMIZATION



Location tracking.



Record of all costs.



Statuses, alarms, reminders.



Reporting.



Monitoring and maintenance planning.



Predictive maintenance.



Availability and usage.



Dynamic routing.

USE CASES



Enterprise Asset Management

Manage, monitor, maintain your internal and/or customer's resources in the field.

Location, status and activities of assets and resources.



Geo-Information System

Geographic Information System (GIS) provides a geographically oriented view of resources.

The map allows the analysis and display of geographically related data and their location.



Data and Application Integration

Integration of diverse data and applications into a single system.



Field Service

Planning and creating work orders, monitoring the status and realization of orders as well as the status of resources.



Fleet Management

Monitoring and analysis of all fleet costs.

Cost optimization.



Route Optimization

Automated route planning saves you from hours of manual planning and provides you with the most efficient route for your vehicles.

In a way tailored to your needs, route optimization avoids unnecessary fuel and resource consumption.



Asset Tracking

Management of locations and statuses of assets via IoT sensors.

Remote monitoring and controlling.



Logistics & Supply Chain

Use asset tracking to gain operational insight into your supply chains.

Track the location of materials and identify delays before they lead to disruption.



Predictive maintenance

Thanks to preventive maintenance with condition-based monitoring and cost control. Service plans, order management, maintenance notifications, work schedules make you complete with your equipment management.



Environmental Monitoring - IoT

By gathering information from a network of highly distributed sensors and acting on critical events in real time, you have totally control over your assets.