



CONNECT THE DOTS



SOFTWARE, APPS & API
For Transit



A company by:

INFODEV
Electronic Designers International





Software & Applications
For Transit



INTRODUCTION

Insoft Research is an Infodev subsidiary dedicated to creating cutting-edge software interfaces for decision makers in the transit industry. Our vast knowledge and experience in passenger counting combined with our technical expertise result in a set of software that produce meaningful graphs, detailed reports and summary analytics.

With our devoted team of programmers, engineers, and designers, we create software tailored to your needs. Insoft Research can provide you and your team a turnkey product that can be easily integrated and customized to help you solve your everyday challenges. InSoft recognize that client's specific analysis and planning are an integral part of business practices in today's transit world, which is why an architectural design service is offered to allow **maximum integration and customization.**



Business Intelligence tools developed exclusively for the Transit Industry.

Insoft's new Business Intelligence (BI) tools will convey all the information you need to make operational and strategic decisions at a glance. By combining detailed reports with summary dashboard, we deliver a turnkey product that gets you the answers you need to solve your transit challenges. **With new user profiles adapted to each individual, from data analysts to top management, we redefine the way people look at transit data.**

Advanced features:

- **Various graph for each report**, new ways to navigate through data and easier to export to various formats.
- **Individual user profiles**: Select your dashboard and reports, configure them the way you like.
- **Share your analysis**: With our single click-sharing system, make your analysis available to your team
- **Improve performances**: Because digging through big data should be fluid, period.



WEBREPORTS NG

Introduction

Our Webreport suite offers many tools to **monitor and analyze everyday transit operations, making it an essential tool for Smart Cities**. Combining detailed tables and visually appealing representations, it presents the information needed to **analyze ridership data, operational productivity, schedule adherence and much more**. A large variety of key performance indicators (KPIs), **selected in collaboration with experts and clients throughout the years**, are available in our list of “performance reports” to highlight the trends in your data. By creating your own personalised report, you can control the level of detail and data representation, saving precious time when analyzing/mining data.

Webreports can be used to analyze the data provided by Infodev’s Automatic Passenger Counting system or bought as a standalone and combined with the APC system you are currently using. Whatever option you choose, you will be sure to **get the most out of your data!**

Features

- Advanced filtering, grouping and sorting options available:
 - Date
 - Day
 - Time
 - Trip
 - Booking
 - Vehicle
 - Stop
 - Route
 - Etc.
- Multiple security features:
 - Manage users
 - Manage roles
 - Manage user privileges
- User-friendly navigation and interface;
- Base package includes over fifteen standard reports;
- Customizable reports;
- Easy visualization and comprehension of data through tables and graphs;
- Easy configuration.



Export in various common format:





WEBREPORTS NG

Reports Available

Ridership Analysis

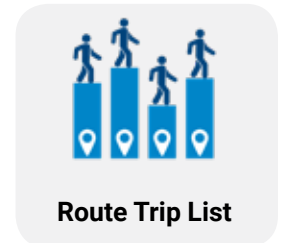
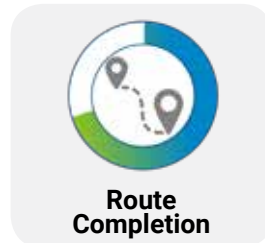
The ridership analysis reports will provide you with crucial data regarding your passengers and their habits in regards to your transit operations. You will have access to summaries concerning the Ins and Outs of passengers at any time during the day. This will allow transit management to better **analyze the affluence of a pattern over a day**, helping them to assign the right number of vehicles per period.

Moreover a comprehensible Stop by Stop report will present **detailed information for each stop event** that has been sampled by every vehicle with APC data equipment.



Productivity Analysis

The productivity analysis data will be available through four different reports: Route Completion, Route Productivity, Route Trip List and Time Period Productivity. These different reports will allow your transit operation to see if there are tendencies for certain pattern or route's coverage, **evaluate the productivity** of a route for every route's patterns, analyze the ridership of every trip scheduled by route and evaluate the productivity of a route for every time period.

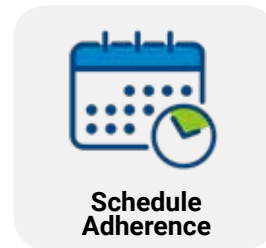




Standard Time Adherence Reports

The time adherence portion of the software is composed of the Scheduled Adherence Report and Route Running Time Summary. The first one is used to provide information about **the schedule adherence of each stop sampled by classifying them in different categories (early, late, on time, etc.)**. The true value of this data will shine when using the grouping feature to retrieve adherence information over a period of time.

As for the Route Running Time Summary, it will provide statistics on the running time of vehicles for a given route and pattern between two selected stops for every period of a day. The purpose of this report is to be able to **evaluate the running time efficiency depending on the period of the day**.



Diagnostic Reports

The APC Data Validation report provides more detailed information on every trip and indicates whether or not they've been rejected and the reason for rejection. The data related to the rejected trips won't be used in all other reports. The purpose of this report is to **enable the user to analyze many problems that can occur in the transit**.

The Vehicle Status Summary report provides in-depth diagnostic information for every vehicle on every day of the specified date range. The purpose of this report is to **analyze every vehicle's data to find anomalies and be able to diagnose potential loggers, booking and assignations problems**.





WEBREPORTS NG

Reports Available

Reliability Analysis

The reliability analysis will help your transit agency with the evaluation of a run, a vehicle's run, trip coverage and block coverage. The Run Evaluation was created to provide a **quick overview of every vehicle's reliability** given the amount of sampled data available. As for the Vehicle's Run Evaluation, it will provide you with a more detailed view of every **vehicle's operational data** allowing your organization to make more enlightened decisions.

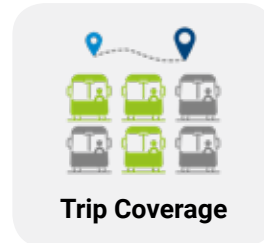
The Trip Coverage report provides **information on every trip's coverage per block and service day type**. For its part, the block coverage report was developed to analyze if there are **tendencies for certain block's coverage** and modify them if necessary. It can also be used by the traffic dispatcher team to assign vehicles equipped with APC system to the blocks with the lowest coverage to get the most accurate passenger counting statistics over the transit.



Run Evaluation



Vehicle Run



Trip Coverage



Block Coverage



PATTERNS NG

Required for WebReports

In order to provide meaningful insight to a transit authority, actual counting events must be matched against scheduled timetable events. Patterns is a powerful software used for the **recognition and processing of the data collected within your fleet and database**. It takes into account the GPS positioning, vehicle number, passenger counting data, as well as routes and journeys.

You can import your data according to several industry standards, for example:

- ACS™ OrbCAD AVL Schedule Interface
- Trapeze™ Standard Data Exchange (TSDE)
- Giro HASTUS™ Export Format
- Google Transit™ Feed Specification (GTFS)
- And many other systems...



VISUAL FLEET



This latest Insoft's web application allows transit operation teams to visualize the fleet in real time. Various data about **location, schedule adherence and occupancy rates are displayed on a city map in real time.**

The data available through this web app is an essential tool for smart cities and transit organization to help improve customer experience. Regarding Infodev's Real-Time Visual Fleet software two different level of functionality are available:

Two levels of functionality available

Visual Fleet—Essentials

In this option, every time the train closes its doors, the data is sent to a back-end server, containing the GPS position, the boarding and alighting. The back-end server processes the data to calculate the load and save the information in a database.

Visual Fleet—Live

Allows the user to see boarding, alighting, load, stops, route and schedule adherence data. It is the optimum real-time solution. This allows the customer to know what their vehicle did, is doing and will do during the day.

Visualize in real time:



GPS Position



Schedule Adherence

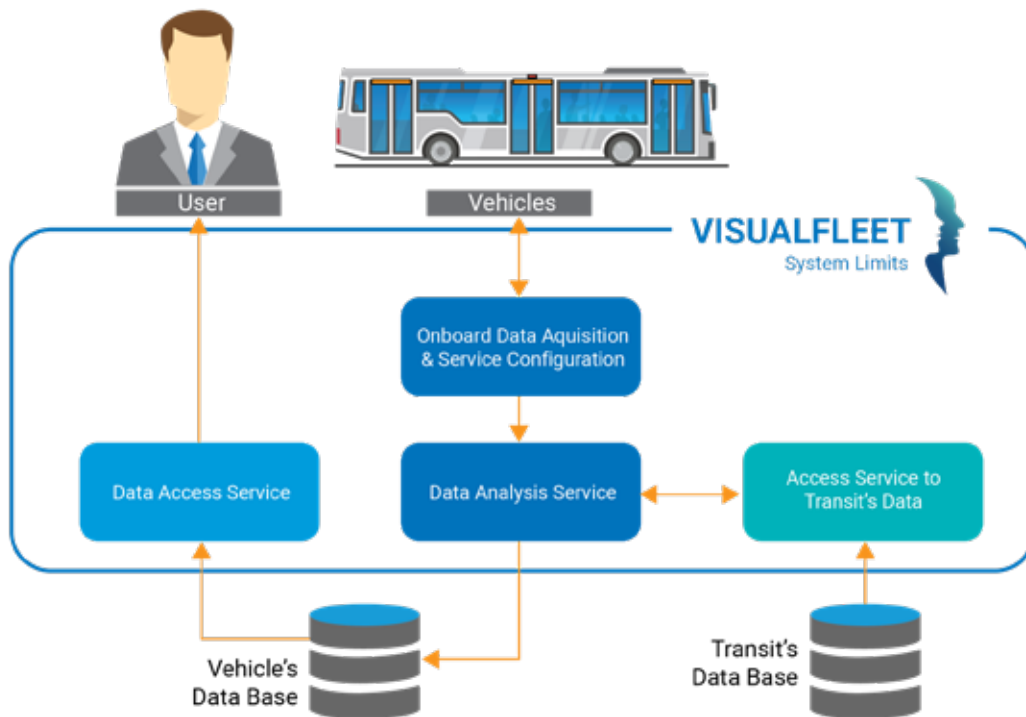


Occupancy Rate



VISUAL FLEET

How it works



API

Take advantage of our knowledge in data processing and data matching!

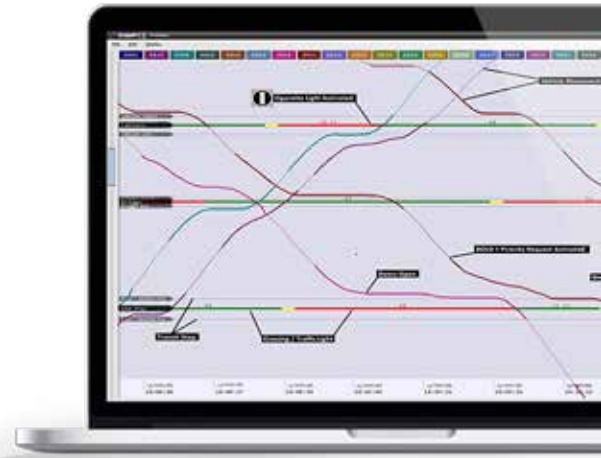
Our team takes charge of the first steps for you. We process the data for an optimal match with your database information and then share the results through an API (Application Programming Interface). We do not provide you with random data; **we use our expertise in processing and matching in order to deliver a powerful, accurate, versatile and easy to use API.**

Infodev API **simplifies the software integration process**, while providing truly accurate results adjusted to your schedules and overall operations. This means that you'll have access to all the data you need to create visually appealing and user-friendly apps for your users.



TRAFFIC FLOW OPTIMIZER

One of the major reasons for delays in public transportation is definitely the waiting time at traffic lights. Insoft's PRIOFEUX solution is an **essential asset to maximize** the routes of your vehicles. Our systems calculate in real time the estimated arrival of the vehicle in order to extend the green light or to shorten the time at the red light. Our software platform also **enables advanced analysis**, after data processing, to optimize the route. Our calculations allow for an efficient and safe transition for all road users.



ENERGY ANALYZER

Software tools used for **calculating, analyzing, predicting, and optimizing energy consumption** for electric and conventional vehicles, allow you to improve several aspects of your fleet:

- Energy consumption;
- Fuel costs;
- Decreased environmental impact.



GSD

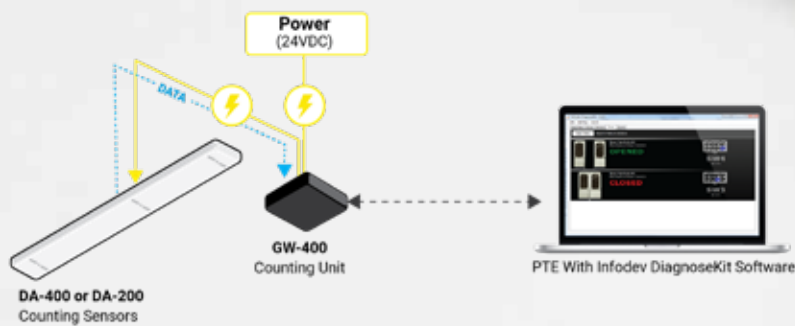
Garage Server Daemon (GSD) is a communication platform **acting as a bridge between on-board computers and the internal network** of a transport company (IP, Wifi, Ethernet, Cellular, etc.). The software manages the process of detecting on-board computers when they arrive at the maintenance garage as well as the management of tasks such as:

- Retrieval of data,
- Updating of micro-software,
- Diagnostic functions
- Requests for real-time information from third-party applications (eg VisualFleet)



DIAGNOSEKIT

DiagnoseKit is a Windows-based software that diagnoses and evaluates the performance of your Infodev onboard APC equipment. It makes troubleshooting easy and efficient for your team thanks to the multiple monitoring tabs.



DiagnoseKit Standard Software Setup



Graph

Monitor's sensors signal levels (and optical door switch when available) in real time.



Scope

Representation in time of the sensor level signal.



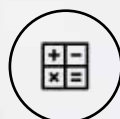
Sensors

Verifies the communication between the GW-400, the sensor and the basic electronic optical operation.



Doors

Show in real time the state of the door switch signal and indirectly if doors are opened or closed.



Counts

Provides the In/Out counts of all APC sensors controlled by the data logger.



a company by:



Contact us

Insoft is a company owned and operated by Infodev EDI. Infodev's head office is located in Quebec City, Canada.

For more information regarding our technology and our most recent achievements, please contact us.



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