

THE PULSE OF FLEET OPERATIONS



With **Netistix**[™] **FleetPulse**[™] vehicle relationship management solution, fleet operators, fleet management service providers and repair service providers can make the best decisions to:

- Lower the cost of fleet maintenance
- Optimize the productivity of vehicles
- Improve the quality of fleet programs
- Improve customer loyalty
- Maximize service bay and technician utilization

FleetPulse lowers the cost of fleet maintenance while improving the quality of the fleet program.

Vital Signs for the Fleet Business

o run fleets at peak efficiency, fleet operators and repair service providers need the best possible vehicle data on which to base their plans and decisions. The Netistix FleetPulse vehicle relationship management (VRM) system unlocks the vital information made available by modern engine control units (ECU) and presents it to the fleet operator or service manager in simple, concise and actionable form.

The **FleetPulse** solution is:

- Touchless no human intervention to obtain vehicle data.
- Timely persistently acquires accurate vehicle data from the field during operation.
- Enterprise-located or available as a web service.
- Flexible and easy to integrate with third-party fleet management services and software solutions.
- Cost-effective, eliminating airtime charges and providing simple plug-and-play installation.
- Private, allowing controlled distribution of information.

How It Works

Netistix FleetPulse combines comprehensive in-operation vehicle diagnostics and cost-effective telematics with customer relationship management. Together, these capabilities provide fleet and repair service operators with the data required to make the best business decisions throughout the fleet ecosystem and over the vehicle's total lifecycle.

Built on standards-based communication architecture, the FleetPulse solution can be deployed within the enterprise or as a web-based system. Three core components comprise the solution (see Figure 1):

• Vehicle Interface Unit (VIU) - selectively extracts key operational data from the vehicle's engine control unit (ECU). The VIU is installed to the on-board diagnostics (OBDII) port in minutes, without compromising vehicle warrantees or wiring integrity. The VIU can extract basic logistical data as well as in-depth

- technical indicators. Each VIU can be accessed using a web browser.
- VIUPoint Site Manager dynamically acquires in-field data from the VIU for relay to the OverVIU Vehicle Information Manager. The VIUPoint is typically deployed at fleet yards, fueling depots and vehicle service areas for convenient collection of vehicle data.
- OverVIU Vehicle Information Manager gathers, analyses and presents data collected by the VIU in actionable format, including alarms, reports and data records. OverVIU synthesizes and presents vital business and technical information to the various users of FleetPulse applications as well as third-party applications and services.

Flexible, Modular Applications

Every fleet business has unique concerns that accurate, effective vehicle data can help to address. The FleetPulse solution is based on a flexible and modular architecture that enables fleets to start with the data they need most, then enhance the solution over time.

Fleet operators and repair service providers can choose from:

- Logistics data (standard) common operating parameters relevant to preventative maintenance schedules, and emergency maintenance indicators such as odometer readings, engine hours, battery voltage, MIL status and more. FleetPulse delivers this data without the need for driver intervention or another human resource to fetch and record the information.
- Fuel and safety information (option) related to fuel consumption and safety, including idling patterns, speed, acceleration trends and more. This application can be designed to track fleet and/or individual vehicle trends, enhancing training and management programs. It is compatible with GPS location tracking systems, and the data is delivered automatically, enabling operators to assess vehicle operations and immediately address problems with key vital signs in the vehicle.



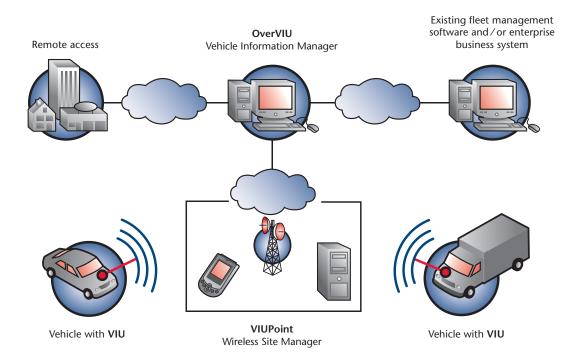


Figure 1: The FleetPulse Solution

- Diagnostics (option) information pertaining to ongoing vehicle operating conditions
 that would not otherwise be detectable until diagnosed in a service bay. This FleetPulse
 option ensures that vehicles are serviced in a timely and proactive manner before
 troubles disrupt service or become very costly. Diagnostics enable preventative vehicle
 maintenance and the many cost savings that entails, including reduced purchase prices
 through advance part orders and fewer emergency repairs. FleetPulse can also report
 pending diagnostic trouble codes (DTCs) which may be indicative of developing problems.
- Emissions data (option) to facilitate compliance with emissions requirements,
 FleetPulse makes the acquisition of emissions data automatic and touchless, enabling fleets to remain compliant with emissions regulations without sacrificing productivity.

Ongoing Analysis for the Life of the Fleet

Many of today's fleet solutions fall short in their reliance on manually obtained or assumed vehicle data. Human intervention and historical data trends have traditionally been the most cost-effective and efficient means of gathering vital vehicle data.

Today, **Netistix FleetPulse** changes that, enabling more complete vehicle data to be gathered at lower cost than ever before. **FleetPulse** makes ongoing analysis of vehicle data simple and cost-effective, helping to ensure the overall health and life of the fleet. With **FleetPulse**, fleet operators and repair service providers are alerted to impending problems before they become critical and expensive – before they impact the business.

As a complete solution encompassing data retrieval, transport, analysis and presentation, **Netistix FleetPulse** delivers the vital data required throughout the fleet and fleet service ecosystem. With **FleetPulse**, **Netistix** provides the pulse of all fleet operations: vital vehicle data.

FleetPulse helps maximize service bay utilization and improve customer loyalty and satisfaction.

Payback in Less Than One Year

The **FleetPulse** solution offers payback scenarios as rapid as a few months and in some cases almost immediately, by reducing the capital and operational costs of fleets and their vehicles:

- Fewer unnecessary preventative maintenance sessions
- Fewer unscheduled service incidents
- Reduced spending through diagnosis-driven purchase orders
- Lower inventory carrying costs and purchase prices
- Reduced bay time and wait time on vehicles in service
- Optimized fleet productivity and fleet size
- ... and much more.

For more information about Netistix FleetPulse, please visit www.netistix.com, or contact us directly

Netistix FleetPulse Features and Benefits

Features	Benefits
Integrated solution including in-vehicle data acquisition, wireless relay, information databases and graphical analysis and reporting	Own and control your fleet's vehicle data Obtain a complete solution from a single source Scalable to any fleet size
Automated capture of vehicle and diagnostic data while under normal operating conditions	 Access previously unobtainable vehicle information Improve decision-making capabilities Eliminate manual delays and errors Capture and retain operational data to diagnose glitches even when they are not active while in the service bay
Wireless data transfer to OverVIU Vehicle Information Manager	Eliminate airtime charges Focus on vehicle maintenance, not invasive data tracking
Associates vehicle identification number (VIN) with vehicle data as it is sent	Reduce fraud and increase accuracy with authentication of data with specific vehicle
Easy self-installation of in-vehicle unit (VIU) with portability between vehicles	Lower installation costs while maximizing usability
Time- and event-triggered data capture of mileage, engine hours, fuel level readings, route distances and more	Support budget tracking and fuel management processes with timely information (available on some vehicle models) Base maintenance schedules on accurate information Improve service efficiency and vehicle productivity Maximize vehicle life by better managing usage patterns
Optional reporting of drive activity, such as idling, speed, braking and more	Improve safety awareness, fuel consumption and overall driver safety
Compatible with GPS-based location tracking solutions (option as required)	Add vehicle performance and diagnostic data to route planning and location tracking
On-demand collection of engine diagnostic data	 Enhance route planning by ensuring vehicles are available when and where they are needed Detect impending problems early, minimizing repair costs and maximizing vehicle availability Improve service with early, accurate notification of problems to service bay technicians Maximize bay time and improve vehicle service with advanced prognosis/diagnosis Improve parts inventory management
Local data processing and storage	Important information is retained for timely transmission to the fleet operator or repair service organization Vehicle owner or fleet manager can control the distribution of sensitive or non-essential data
Compatible with industry standards for OBDII and scan tools	 Leverage existing technology investments No need to retrain service technicians No impact on vehicle warranty status
OverVIU provides active vehicle awareness and external links to technical assistance information	Reduce knowledge and trust gaps with accurate, advanced information that fleet operators and service technicians can share
OverVIU provides flexible integration to other management systems and support packages	 Leverage existing fleet management investments Maximize work efficiency by maintaining existing systems and user interfaces Reduce cost of producing and handling work orders Leverage specialty fleet services using web services API Enhance customer relationship management programs with timely vehicle data



For a customized payback scenario for your business, contact Netistix today.

Netistix Technologies Corporation 275 Michael Cowpland Drive Kanata, Ontario Canada K2M 2G2

Tel: (613) 599-5443

Fax: (613) 599-6345

Email: info@netistix.com

Web: www.netistix.com

FleetPulse™, Netistix™ and the Netistix logo are trademarks of Netistix Technologies Corporation. Copyright © Netistix Technologies Corporation, all rights reserved. 01-04 PN: 800014