



Optimization



Visibility



automation

## Cadec PowerVue™

### Advanced Fleet Management Solutions for Operations Visibility, Process Automation and Mobile Asset Optimization

Cadec PowerVue provides actionable information for business executives, fleet and logistics experts, and transportation and distribution managers, to reduce costs, enforce compliance and safety regulations, improve driver productivity and enhance customer service.

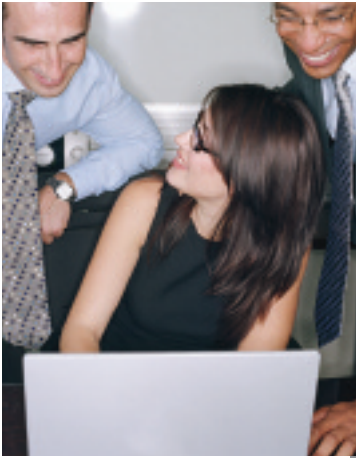
#### Cadec PowerVue

Cadec PowerVue is a fully hosted fleet management solution that combines the power of a web-based, enterprise-class application platform with multiple communications options, and a new, state-of-the-art on-board computer system.

With PowerVue, organizations have a world-class solution that:

- Provides real-time **visibility** into the performance of mobile assets – both vehicles and drivers.
- Delivers unprecedented **flexibility** and **adaptability** to meet your specific business requirements – executive dashboards, in-cab screens and application/data integrations.
- Enables your organization to **automate** many time-consuming, administrative processes associated with delivery operations.
- Increases and accelerates the effectiveness of existing transportation and supply chain infrastructure by **optimizing** those systems with integrated, actionable data.
- Allows businesses to provide unprecedented levels of **customer service** with real-time, proactive identification of delivery status and ETA.
- Empowers managers to accurately measure and influence **driver behavior** through real-time and historical Key Performance Indicator (KPI) dashboards.
- Ensures **compliance** with state and federal regulations.
- Improves driver **safety** and **reduces risk** by identifying high risk drivers and actions.





“Food industry leaders rely on Cadec solutions to drive end-to-end automation”

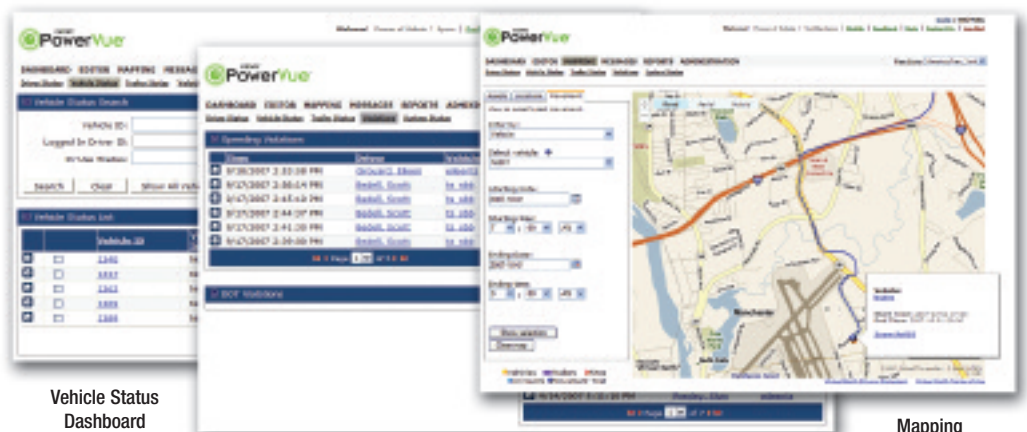


## Can You Maximize the Business Value of Your Fleet?

As a mission critical, yet costly component of a supply chain, businesses that provide or leverage transportation and delivery services require an effective fleet management strategy that optimizes and integrates many disparate processes. Additionally, with the rapid evolution of enterprise IT systems, it is imperative that a strategic fleet management system be designed with web-based, enterprise class application platforms to scale and integrate now and in the future.

Companies that only depend on simple GPS tracking and basic collection of vehicle performance face numerous challenges when maximizing and managing the business value of their fleet:

- How to eliminate the costly, paper-based administrative processes from your delivery operations?
- What does it cost to remain in compliance with DOT logs and state fuel-tax requirements?
- Is your business at risk due to poor driver performance?
- Are you subjected to increased costs due to unauthorized vehicle use, unnecessary idling and DOT fees?
- How do you maximize the capabilities of your existing routing, mapping and supply chain management investments?
- How would your customers rate your levels of service, and what is the financial impact of losing one account?
- Are you using your fleet efficiently? Can you reduce overhead costs with fewer vehicles and maintain operations?
- Can you reduce insurance premiums by proving safe-driver behavior?



Vehicle Status Dashboard

Violations Dashboard

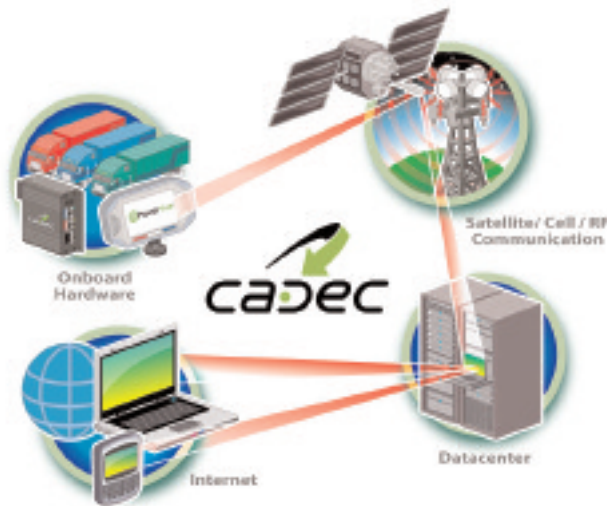
Mapping Dashboard

## Track and Manage Mobile Assets and Delivery Operations

Cadec PowerVue is changing the fleet management landscape with the industry's most reliable, scalable and flexible hosted application for tracking and managing your mobile assets and delivery operations.

Leveraging the most advanced technologies and expertise for software as a service (SaaS) infrastructures, Cadec enables organizations with any sized fleet to benefit from a world-class enterprise application – without the burden of extensive IT resource requirements, lengthy implementations, hardware and software overhead, maintenance and upgrades.

PowerVue is capable of supporting the requirements of the industry's largest fleets, yet configurable and affordable for small- and medium-sized businesses.



- **Align Fleet Intelligence with Supply Chain and Business Objectives** Cadec PowerVue is a centralized fleet management system with customizable, real-time views into an organization's comprehensive mobile asset portfolio: vehicles, drivers, customers, resources and costs. Through executive dashboards, PowerVue gives executives access to real-time information to make fact-based investment decisions using actionable information while ensuring better alignment with business objectives.
- **Industry Standards-based Service Oriented Architecture (SOA) design** PowerVue uses a SOA design built on the Oracle Fusion and 10G platform for unlimited scalability, and application integration based on industry-standard, XML-based web services technology. This unique approach facilitates the development of modular business services that can be easily integrated and reused—creating a truly flexible, adaptable IT infrastructure.
- **Tier One, Fully Redundant Hosting Facility** The PowerVue infrastructure is built with the most advanced IT infrastructure available and hosted in a fully redundant, highly secure, high availability hosting facility. The PowerVue datacenter is also certified SAS70 compliant. With PowerVue, your IT organization will focus more resources and budget on innovation and delivering new business services.

## PowerVue Features

### Visibility

- Sudden Accel / Decel Alerts
- Accident Reporting & Reconstruction
- Patented Electronic Tachograph with Split Screen GPS Location (ETOG)
- Engine (ECM) Fault Codes & Operations (RPM, MPH, Milage, etc.)
- Automatic Border Crossing Notification
- Asset Utilization
- Over/short/damaged Reports
- Equipment Tracking (pallets, dollies and trays)
- Real-time GPS Tracking & Live Vehicle Mapping

### Automation

- Electronic DOT Logs
- State Fuel Tax Reporting
- Geofencing
- Engine De-rate and Starter Lockdown
- Driver Time and Attendance
- Learned Route Assignment
- Automated Report Delivery
- Driver Expenses
- Route Schedules
- Wireless Updates

### Optimization

- Priority-based Data Communication
- Customizable OBC interfaces
- Custom On-Board Applications
- Configurable KPI Dashboards
- Patented Roll-over Prediction
- Custom Data Entry Screens
- Two-way Instant Messaging
- In-cab Navigation, Internet & Multimedia
- Exception-based Reporting and Alerting
- Web-based Access from Any Browser
- Supports Co-drivers
- Industry Standard Platform
- Easy to Use, Touch Screen Application

## Cadec PowerVue Components

The PowerVue solution provides business executives and transportation managers with the ability to optimize their fleet operations for maximum productivity, efficiency and cost savings while maintaining the highest levels of compliance, safety customer service and driver satisfaction.

**PowerVue Office** is a hosted, enterprise-class fleet management application platform that provides a web-based interface and central repository for all mobile asset data. PowerVue Office combines real-time visibility into any driver or vehicle - on-demand from any internet browser - with hundreds of pre-defined, role-based reports and analysis.

PowerVue's web interface provides new levels of end-user customization to adjust to the way each person needs to view their data. Customers can create role-based dashboards to present data to different types of stakeholders within the organization. Fleet managers can view information on vehicle locations and estimated delivery times, for instance, while the CFO can track DOT fees. Fleet managers can even create customer service portals for their clients to view real-time information on when to expect their deliveries, including a map that tracks truck locations.

**PowerVue Advanced Applications** are designed to extend and enhance the functionality of PowerVue based on specific business requirements:

TempTracker / DoorTracker – Monitor and alarm on critical vehicle components to protect and ensure successful delivery of food and perishable items.

DeliveryTracker – Integrated hand-held device provides end-to-end automation of complete delivery process, including signature capture and bar-code scanning.

**PowerVue Bridge** - Yet another first for Cadec, PowerVue Bridge is the first and only fleet management system built using web services and SOA technology. The PowerVue Bridge integration platform provides seamless integration, using proven industry standards (SOAP, WSDL, XML, etc.). With PowerVue Bridge integrations, fleet data can be easily tied to other systems in a company's supply chain – dispatch, routing, fuel tax, DOT compliance and supply chain management applications can now leverage the detailed fleet intelligence collected by PowerVue. More importantly, solutions are easily sustainable based on the loosely coupled nature of XML-based services in a service-oriented architecture.

**PowerVue On-Board Computer-OBC** is designed with your drivers in mind. A new two-piece design consists of a low-profile, intelligent telematics system running Microsoft Windows CE 5.x, and a separate, color touch-screen driver interface.

- Seamlessly run custom/third party applications on the OBC
- OBC can be dynamically updated wirelessly
- Internet-ready Windows CE 5.x operating system
- Two-piece design allows for largest, full-color, touch-screen OBC, and minimal downtime for repairs
- Integrated, touch-screen display eliminates the need for costly external peripherals/components
- Four built-in USB ports for easy offload of data and/or integrated multimedia devices



Real-time, Configurable Dashboards



OBC Login



Telematics Unit



Driver Interface



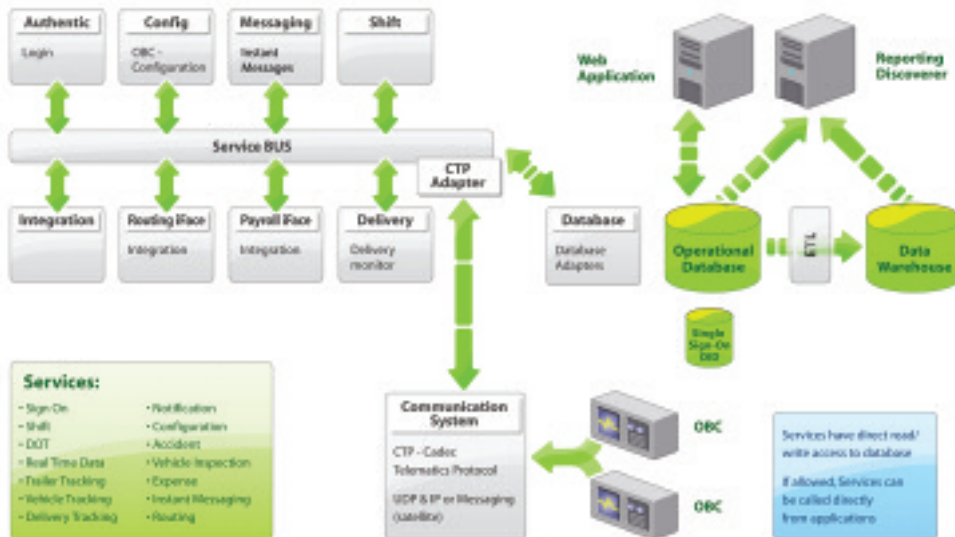
## SOA Extends Your Supply Chain Into the Cab of Your Trucks

Enterprise technologies are rapidly evolving from traditional, client/server designs to service-oriented architecture. The adoption of SOA is allowing organizations to become more agile, and transforms siloed data into actionable information across many business functions and processes. PowerVue's SOA design provides real-time information pertaining to vehicles, drivers, deliveries, customers and more to be easily integrated into mission critical supply chain, HR and financial management systems.

While simple, browser-based tools are limited to providing access over the web, PowerVue's use of web-services technology combined with its dynamic web interface provides new levels of end-user customization to adjust to the way each person needs to see their data, as well as easy integration to systems throughout the supply chain. Users can easily create role-based dashboards to present data to different types of stakeholders within the organization and even create customer service portals for their clients to view real-time information on when to expect their deliveries, including a map that tracks truck locations.



PowerVue's SOA-based design uses industry-standard, XML-based web services technology for unmatched adaptability, performance and scalability



- Services:**
- Sign-On
  - Shift
  - DOT
  - Real Time Data
  - Trailer Tracking
  - Vehicle Tracking
  - Delivery Tracking
  - Notification
  - Configuration
  - Accident
  - Expense
  - Instant Messaging
  - Routing

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## On-board Computing Innovation and Flexibility

PowerVue provides substantial on-board processing power and memory, a flexible, open, supportable operating system, and exceptional connectivity options (both to the OBC in the truck, and wirelessly from the OBC to PowerVue Office) so that current and future services, even those which may not be envisioned today, can be economically and effectively utilized. Examples within a vehicle may include tire pressure monitoring, on-board scales, rollover detection, auto-trailer ID, load temperature monitoring, trailer door open detection, hub reading, document printing/scanning and more.

## Hardware Specifications

Processor	PXA270 @512 Mhz
Memory	32 Meg Flash 128 Meg RAM Plus 1GB SD Flash (Upgradable)
Flash Disk Controller	Datalite for 5.0
OS	Windows CE 5.0
Serial Ports	4 - RS232 DB9 connector
Vehicle Interface	J1708 / J1587, J1939
Optional Plugin	OBDII, Mechanical, Other
USB Ports	4
Analog Switch Inputs	5
Switch Outputs	4
Compact Flash Slot	1
SDIO Slot	1
External Speaker Jack	1
External Microphone Jack	1
Automotive-Rated Color TFT LCD Display	
Wide operating Temperature -30 to +85 C	
Rugged, Withstands High Vibration and Shock	
Chip On Glass (COG) Construction	
Heavy Duty Metal Frame	
Sunlight Readable Image	
300 to 1 Contrast Ratio	
400 Nit Brightness	
Full Brightness Over Long-life LED Backlight	
No Inverter Required	
.110" -thick Glass for Ruggedness	
Two Watts of Audio Output	
RoHS-Compliant	
Configurable 2-piece Design	

Cadec's approach to wireless connectivity between the truck and the office is also flexible. The Cadec PowerVue On-Board Computer (OBC) does not embed the wireless component into the mobile hardware. Customers may choose to maintain and negotiate their own wireless carrier agreements, or go directly through Cadec. This provides Cadec customers with flexibility and choice across Verizon, Sprint, Alltel 1xRTT, Nextel iDen, AT&T GPRS, 802.11 and LEO satellite. Future 3G and 4G networks are easily accommodated thanks to communications control software built on a foundation that prioritizes the wireless options and interests of each Cadec client.

### Increase Timeliness and Accuracy of Information

Cadec's wireless communications approach enables more data throughput at lower cost and the ability to prioritize data elements (based on data importance, size, etc.) for the wireless paths they will take. This directly impacts timeliness. Accuracy of information is driven by the use of the intelligent technologies in PowerVue. Whenever possible, data fields in a vehicle are pre-filled based upon integration with third party applications, or from other sources (GPS, engine connection). If data cannot be pre-filled, a dropdown menu is offered. Only when those two options do not fit the need will a driver need the touchscreen keyboard to type.

Ease-of-use for drivers (minimized keystrokes), and the lock-in of as many data elements as possible, end-to-end in the system, for each load translates to accuracy. Additionally, the collection of speed and RPM data per second, and GPS position every 50 feet, ensures a depth and precision of operational data that can be used for safety, accident reconstruction, maintenance, fuel mileage improvement, etc. No other fleet management vendor can match the memory, processing power, or communications management available in PowerVue.

### Why Cadec?

For over 30 years Cadec has set the standard for fleet management solutions. Our continued innovation and use of advanced technologies leveraged throughout the Cadec solution, makes PowerVue the most flexible, customizable and scalable system available to meet the needs of large, medium and small fleets.

PowerVue couples Cadec's decades of experience providing business process automation and telematics to the transportation industry with a new scalable and open standards-based architecture. The result is a single integrated software solution that unifies systems, and streamlines processes to drive better business performance at a lower cost of ownership. The result is lower transportation costs, improved customer service and optimized asset utilization. No other fleet management system provides the flexibility and customization needed to address the business challenges faced by today's leading transportation companies.

**Cadec – driving end-to-end automation.**

### For More Information

For more Information on Cadec PowerVue, please call 1.800.252.2332 or email [sales@cadec.com](mailto:sales@cadec.com). See Cadec on the Web at [www.cadec.com](http://www.cadec.com) or [www.powervue.com](http://www.powervue.com).