



Cisco Fleet Management Solution

Business and Technical Challenges in Fleet Management

A commercial enterprise fleet manager is under constant pressure to minimize operational costs. The fleet manager has several approaches to reduce costs that can include an improved MPG program, smarter routing and dispatch as well as preventive maintenance. Further, there is a consistent need to improve fleet utilization that results in maximizing the fleet production and improving customer satisfaction. Fleet managers are increasingly being challenged to improving fleet up time via preventive maintenance and real time problem alerting specific to each vehicle provides optimization and cost reductions which are well beyond standard maintenance schedules used in the past. Optimizing driver productivity with a wide array of driver applications and requirements also provides an ongoing challenge when running a large enterprise fleet. Finally, to meet these challenges requires the fleet manager to effectively integrate the vehicle and driver data into the enterprise network and applications.

Benefits

- **Optimize fleet performance** by using real time vehicle telemetry
- **Decrease fuel costs** with real time location, speed and idle time tracking
- **Reduce carbon footprint** to cut costs by monitoring mileage and driving patterns
- **Increase field employee productivity** with office-in-the-truck technology enabling access to applications and data in the field
- **Reduce OpEx** with the Mobile Corporate WiFi Hotspot allowing multiple mobile devices to share cellular bandwidth

Optimize Fleet Performance and Minimize Costs

The Cisco Fleet Management solution enables an enterprise fleet manager to optimize fleet performance and minimizing costs, while seamlessly integrating the fleet and driver into existing enterprise systems.

- **Decrease Fuel Costs:** With real time location, speed and idle time tracking, the Cisco solution can provide real time and historical feedback to manage driver behavior to improve fuel expenditure. Real time GPS also reduces fuel consumption by optimizing fleet dispatch.
- **Fleet Up-Time:** Real time vehicle telemetry allows the operator to leverage optimally timed preventive maintenance as well as respond to real time alarms to maintain an always on and available fleet.
- **Real Time Vehicle Tracking:** The Cisco solution allows for real time vehicle tracking with geo-fencing to enable alarming on an off route or out of region vehicle, automated work orders upon leaving a job site, or optimal dispatching based on location.
- **Data Minimization:** Connecting the vehicle and driver for real time fleet improvements can create a significant volume of data that can be both costly to backhaul and unwieldy to manage. The Cisco fleet solution, can both minimize that data that is sent from the vehicle as well as provide visual representation of the data volume that is returned to the enterprise.

Solution Components Recommendation

The Cisco Fleet solution is often comprised of the following components:

- Cisco ISR 829: 829 Industrial Integrated Services Routers are compact, ruggedized, Cisco IOS Software routers with support for integrated 4G LTE wireless WAN and wireless LAN capabilities intended for fleet and mass transit vehicles.
- Davra Ruban Software: Provides real time monitoring, tracking and management of fleet based assets while managing the large data set that a fleet generates to drive actionable business insights.
- IPICS: IP based communications and dispatch platform that enables cost effective, large scale fleet to HQ information exchange.
- Video Surveillance Manager and HD Cameras: IP based solution that leverages the network to deliver and receive live and recorded video surveillance with excellent scalability, reliability, and bandwidth management.
- Ignition Sense technology: Maintains network device power while ensuring the vehicle battery isn't drained.

- Cisco Cyber Security to the Fleet: The same industry leading cyber security that is secure and easy to deploy in branch office locations is leveraged in the Cisco Fleet solution. The enables the fleet manager to confidently deploy applications with sensitive data to the fleet without compromising ease of deployment or sustainability.
- Fleet network and application convergence: With the Cisco fleet solution, no longer are multiple fleet networks required to support a fleet and its driver applications. The vehicle telemetry, location, wireless hotspot, worker applications and others can all be converged onto one Cisco in-vehicle router resulting in lower OpEx with respect to carrier fees, and CapEx with respect to in fleet communications equipment.
- Enable in-cab applications such as those to digitize manual driver processes for pre-trip and post-trip reports; automate hours-of-service (HoS) reports to maintain compliance; track and improve CSA scores.

Why Cisco

The Cisco Fleet solution can help an enterprise fleet manager reduce fuel costs by as much as 10-30% while gaining thousands of hours of more productivity from the fleet and its workforce. The solution can also drive a reduction in employee speeding and citations by up to 80%. The reduction in operational costs and improvements in fleet management and worker efficiency have allowed Cisco Fleet customers to achieve an ROI typically in less than 1 year.

Next Steps

To find out more about the Cisco Fleet Management Solution, visit www.cisco.com/go/masstransit.