

## Product Information

# Descartes Area Planner



## The Next-Generation Planning Solution for Small Package and LTL Operators and Couriers

Small package carriers, less-than-truckload (LTL) carriers and couriers are constantly faced with the challenge of managing markets, stations, and terminal pick-up and delivery areas in the most cost-effective and efficient means possible. The key challenge that stands in the way of achieving that goal is the variability of demand and managing the mix of standard and time-definite services. Manual approaches typically used to plan operations are not up to the task. On any given day, hundreds – or even thousands – of delivery vehicles are dispatched from multiple locations to meet same day or time-specific delivery requirements. High-density routes can require as many as 100 stops per day, a number that is impractical for a planner to optimize without planning technology.

Complexity is further compounded by the requirement to control rising variable and fixed costs, more customer service expectations, and competitive pressures as more carriers diversify into courier type services.

Descartes Area Planner is a Routing, Mobile & Telematics (RMT) solution that has been specifically designed for small package, LTL carriers and couriers to help them improve pick-up and delivery productivity and dramatically lower their costs, without having to implement drastic changes to daily route activities. Developed in conjunction with one of the world's leading small package carriers, Descartes Area Planner combines advanced planning features with mobile wireless-enabled tracking technology so that LTL operators and couriers can "right size" their fleets and determine operational requirements. Through advanced optimization, this solution effectively addresses the unique issues of logistics companies with high volumes of pick-ups and deliveries and a highly variable customer base.

The functionality and flexibility of this solution enables carriers to minimize operational costs and ensure successful execution of time-determinant delivery services without the need for infrastructure changes.

## Features

Descartes Area Planner leverages the power of the Descartes Global Logistics Network (GLN), one of the world's largest multimodal networks of transportation providers and their customers.

Descartes Area Planner is a SaaS application that provides a scalable solution capable of handling massive datasets in a rich and intuitive graphical solution.

Descartes Area Planner is made up of two main components:

**Route Plan** – This component works with available data to establish parameters and shift times for defining daily deliveries, scheduled stops and routing. The output – known as route traces – provides an outline of stops/sequences with geographic representation of the path a vehicle is expected to follow so users can view the route temporally and spatially and generate appropriate metrics.

**Dataset Management** – The component collects historical, theoretical and actual data sets on drivers, stops, locations, area metrics, time commitments and volumes to allow users to improve planning, analysis and reporting. This data is used to feed the Route Planning function. Especially critical are the tools for creating and managing the theoretical datasets that allow for what if analysis and testing of how resilient a route plan is to daily and seasonal volume fluctuations. For example, an analyst may choose to generate a theoretical data set for planning which queries the historical database to generate a data set representative of a "1000 stop Monday".

## Potential Benefits

**Greater Flexibility and Insight** – The variable network approach of Descartes Area Planner goes beyond the fixed network used by traditional systems to enable better modeling of network demand, pick-up and delivery density and capacity.

**Reduced Costs** – Area Planner uses simulation techniques to help managers determine the right number of vehicles and drivers and the requirements to support time-critical services before delivery.

**Improved Real-time Accuracy** – When used in conjunction with Descartes Dispatch and either Descartes' or partner's mobile technology, Descartes Area Planner can receive the actual performance of drivers and areas to plan for continuous improvement. This helps ensure that strategies developed in area planner deliver the greatest operational value.

**Reduced Complexity** – Descartes Area Planner is an on-demand, software-as-a-service (SaaS) solution that requires minimal infrastructure change, can be rapidly deployed, and deliver a rapid return on investment.

**Improved Productivity Through Effective Reporting** – Area Planner can generate manifests and driver route books to help drivers stay on plan, and route reports and metrics to help quantify the productivity of route plans, loading and dispatch.

**Enhanced Customer Service** – Area Planner helps generate robust plans that meet customer service requirements. When that plan is executed and monitored with Descartes Dispatch and either Descartes' or partner's mobile technology for real-time tracking of field activities, organizations can provide more accurate delivery windows, as well as notify customers of any unexpected delays.

**Flexible Territories** – Allow a territory to flex in size based on the days volume as needed. The goal is to keep a route/worker in their core area while allowing flexibility to adapt to variable demand.

**Rich GIS** – High performance mapping, geocoding, polygon and territory boundary display and manipulation, and location management are all included in Descartes Area Planner.