

# Opus Scheduler

## Overview

The inherent power of the Opus Fleet & Distribution Transport Management Centre (TMC) and its use in conjunction with other Opus Fleet & Distribution modules, such as Automatic Vehicle Location (AVL) and electronic Proof of Delivery/Collection (POD/POC), is that it provides real-time visibility of actual progress against plan.

Any transport plan is made up of 3 linked components - a delivery schedule (where and when), a manifest (what) and a resource plan (who).

Consequently, the Transport Management Centre is frequently linked to well established scheduling packages such as Paragon, Inform or Logix.

To compliment existing scheduling interfaces (and with a view to providing a totally integrated end-to-end Fleet Management solution for customers wanting a true one-stop transport solution), Opus Fleet & Distribution provides a low cost Route Scheduling module within the Opus Fleet & Distribution product portfolio.

This powerful, but extremely cost competitive, scheduling system is suitable for a wide range of operational sizes and complexities. It can be used in both strategic planning and tactical (day one for day two or am/pm type) scheduling activities - as well as "what-if" type scenarios.

## Business Benefits

- Reduced planning time and increased flexibility
- Rapid decision support - "what-if" type scenarios
- Accurate plans - for example, least cost mileage and travel times
- Improved vehicle and resource productivity
- Reduced fleet size
- Reduced operating costs
- Improved customer service - through more accurate delivery commitment

## Opus Scheduler - Key Features

- Can be used stand-alone or integrated with the Transport Management Centre
- Low cost, yet powerful
- Easily integrates into "demand generating" systems (Sales Order Processing and Warehouse Management Systems) using "Import Wizard" functionality
- Multi-layered least cost routing algorithms used
- Flexible output - stand-alone, this includes Gantt Chart type displays, customisable reports and driver instructions, integrated into the TMC

▼ CUSTOMER SERVICE

▼ PRODUCTIVITY

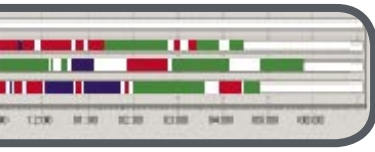
▲ ACCURACY

▲ FLEXIBILITY

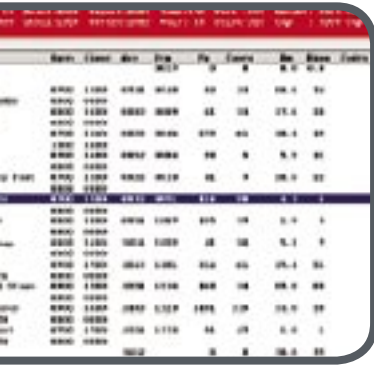
▼ PLANNING TIME

▼ FLEET COSTS

## Functional Summary



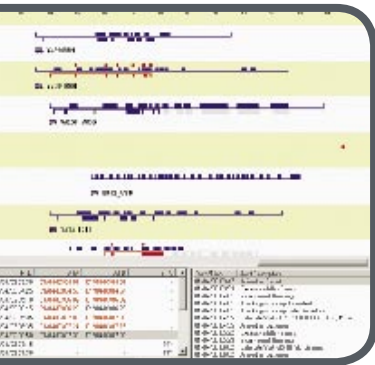
By taking “demand” imports from Sales Order Processing and/or Warehouse Management Systems, which defines what goods (volumetrically classified) need to be delivered to what geographical location and in what time window, coupled with available delivery asset information (both vehicles and drivers), the Opus Scheduler module optimises what deliveries will be made on what route, using what vehicle.



Order	Client	Item	Qty	Unit	Planned	Actual	Cost	Driver	Vehicle
10001	ABC	1000	1000	kg	10	10	100.0	John	Van
10002	ABC	2000	2000	kg	20	20	200.0	John	Van
10003	ABC	3000	3000	kg	30	30	300.0	John	Van
10004	ABC	4000	4000	kg	40	40	400.0	John	Van
10005	ABC	5000	5000	kg	50	50	500.0	John	Van

This decision process often takes only a few minutes to compute and uses vector map sets. It defines distance and road speeds, in conjunction with powerful least cost algorithms to calculate how all goods may be delivered at the minimal cost, including base-line vehicle running costs, driver hourly and overtime rates, own fleet and sub-contractor costs, and “cost of lateness” by customer.

Used as a stand-alone application the schedule output is generated either as a Gantt Chart (rather like the Transport Management Centre’s Electronic Traffic Sheet), customisable reports (which can be exported to applications such as Excel, Access and SQL) and as routes over-laid on raster map-sets. These can also be exported, with text instructions, to form driver trip sheets, either as paper copies, but increasingly, as way-point information on a driver’s mobile data terminal.



This same way-point information can also be used by the TMC to create corridor geofences to monitor route adherence as well as schedule adherence.

When integrated into the Transport Management Centre (TMC), the plan and resources can be viewed and managed within the TMC’s Electronic Traffic Sheet view - the same view which is then used to display actual events as fed back in real-time from any Automatic Vehicle Location black box or proof of delivery application.

Within the Electronic Traffic Sheet the plan can be modified or “tweaked” by simple dragging and dropping of drops and assets between the journey already planned. In the background the Opus Scheduler module will recompute leg times and highlight any potential conflicts. New jobs (for example in courier type applications) are handled in the same manner.



Opus Scheduler benefits from being integratable into the Transport Management Centre (the mechanism by which “actual” data relates to the execution of the journey). If trends emerge during driver debrief that legs of routes are taking longer than planned, then the vector map set (which defines leg times when planning trips) can be automatically refined, thereby continually improving the accuracy of the planning process.