

# [Vehicle routing software](https://assignbuster.com/vehicle-routing-software/)

Logistics: Vehicle routing software al affiliation Vehicle routing software is software installed in vehicles to help in the distribution, transportation and delivery of goods with the aim of minimizing cost and improving transport efficiency. In solving transportation problem, the use of software plays a vital role in developing models schedules, network plans and delivery and pickup routes. Currently, the transportation community has initiated the use of advanced electronics and information technology to improve the vehicle performance, highways and transit systems. A good vehicle routing software is one that improves transport efficiency and raise service level to their clients. These are several factors that are considered by clients when installing the vehicle routing system; durability, efficiency, installation and maintenance cost and detailed data. This software helps in;
Cost reduction: Routes are created by algorithms that defines the most effective path
Maximum utilization of assets: The available resources are utilized effectively
More confident decision: Access cost data to understand which stops are profitable and which are not
Suitable plan for exceptions and unexpected: It prepares for active changes that will affect routing.
There are several software companies that offer vehicle routing service with both similar and different features . Some of the key features of vehicle routing software’s are constraint programming platform , ability to tackle large and complex species problems, precise modeling , operation research derived routing algorithm and immediate tangible benefits
Below is a table of vendors and the features that may be considered during selection

Appian is transport management software used for truck routing, logistic support analysis and designs. It is the easiest way to make fleet location and routing accessible to both the company and clients. It updates schedules automatically based on the real time GPS feed . It is able to mage easily territory overlaps quick return on investments. It allows incorporation Microsoft excel software. In apian there is resource scheduling and fleet sizing optimization software that provide crucial information for fleet scheduling, strategic growth plan and eliminating unnecessary cost.
MJC2 is vendor that offers powerful planning and optimization solutions. It has advanced planning and scheduling software that is capable of providing automated scheduling and optimizing the operation with minimal manual intervention. This software is user friendly and has powerful scheduling control functionality. It also has e- enabled scheduler that allows web scheduling to be online and able to corporate databases and legacy system. It’s able to address the scheduling of very large distribution operation in real time and provide strategic supply chain management. Some other extra benefits are ability to quickly update round because demand varies, better utilization of resources and long term planning powers
SAITECHS
The vendor has product for real time routing and real time scheduling. There is capability to incorporate real time traffic to enable fleets to respond to customer requirements. It is interfaced with the digital maps such as NAYTEQ which are not expensive . This enables the dispatcher to modify algorithm produced routs as maybe required by the customer. Other features include generation of load manifest, forecasts for delivery requirements and load planning.
UPS
The UPS has single platform for management of stop level information, track drivers and vehicle performance. The installed hardware varies depending on algorithm platform. It use routing that has geographical restrictions and software is integrated with maps for detail information display.
TransCAD
TransCAD has software with single integrated platform that combines GIS and transportation modeling capabilities . It runs on readily available hardware under Microsoft windows and embraces desktop computing standards
Reference
Chan, Yupo. Location Theory and Decision Analysis Analytics of Spatial Information Technology. Berlin: Springer, 2011. Print.