Product Overview
This is a sophisticated system for scheduling vehicle reservations for organizations that maintain their own pool of vehicles. The system maintains an inventory of vehicles by type, ascertains availability of a vehicle of the selected type for the requested length of time, assigns vehicles from the pool just-in-time to distribute mileage, calculates the distance of multi-hop travel using a geographic database, and accommodates charging by time and/or mileage. The system also allows for maintenance scheduling and long term "open ended" use of a vehicle.

Benefits
This system was developed for the US Army Corps of Engineers, New England District (NAE). Prior to its implementation, NAE used emails to request a vehicle reservation and all tracking was done on paper or spreadsheet. While it might seem that reserving a vehicle from a relatively small pool is straight forward, this is in fact not the case: there are overlapping reservation periods, multiple vehicle types, scheduled maintenance, need to track mileage and charges, and other factors that make paper reservations a nightmare. This resulted in vehicles of the correct type not being available on the requested dates, lost reservations, required the use of considerable labor, and required that “extra” vehicles be purchased to handle the deficiencies. It has been shown that proper resource scheduling can achieve considerable returns.

The Ceonex Vehicle Reservation System built on our experience with NAE and addresses the above issues. The savings in administrative costs has been substantial and the system is credited with allowing the district to operate with fewer vehicles than would have been otherwise required.

Bottom line: ROI of less than a year.
Features
Reservation features include

- Uses network authentication (no separate log in)
- Uses Active Directory to determine user list
- Requires Corps specific charging information – Work Item and PR&C
- Allows for “multi-hop” trips
- Calculates expected mileage for trips
- Allows for multiple vehicle types such as sedan, van, truck, suv
- If a vehicle of the requested type is not available for the duration of a trip, offers choice of types that are
- Allows “trips” to be saved for easy subsequent reuse

Administrative features include

- Complete automation of vehicle assignment
- Assigns lowest mileage available vehicle of required type first
- Single click vehicle check-out
- Enter mileage to check vehicle in
- Automated calculation of charges based on mileage and vehicle rate by type of vehicle
- Automated maintenance reminders based on mileage and interval
- Maintenance scheduling
- Allows for permanent vehicle assignment
- Vehicle disposition retains data
- Reports include pool usage percent by day of week over any desired interval and specific employee(s) usage.

Future Enhancements
Vehicle Reservation System can be integrated with CEFMS to validate charging information. We would also expect to integrate it with FEMS for vehicle information when that system becomes operational.

Enhancement direction will be largely determined by licensee preferences.
**Screens**

Reservation Screen (non administrators see only the new and my reservation tabs)
Confirmation

Vehicle Reservation System

Reservation Confirmation
We have reserved a Van for Richard Neathead for the dates 06/09/2011 through 06/09/2011.
Your initial destination is Manchester, NH.
The rental will be charged to MAC: WJ3M452412345423 Risk Zone: 01643269889642
Estimated mileage: 107. Estimated cost: 8
Your reservation number is 642. Please remember to fuel up the government vehicle upon return.
Early Departure: You may pick up vehicle after 3PM the day before. If you are planning on taking a government vehicle home, please click here for more information.
Thank you!
For further assistance please call Andrea x532 or Janet x388

My Reservations

Vehicle Reservation System
Administrative Screens

Vehicle List
Vehicle Detail (includes reservation query)

Schedule Maintenance
Reservation List (main day to day working screen)

Reservation Detail
Reports (queries are available on most screens)

Sample Usage Report

Average Sedan Usage by Day of Week from 1/1/2009 - 12/30/2009

Percent In Use

<table>
<thead>
<tr>
<th>Day Of Week</th>
<th>In Use</th>
<th>Available Vehicles</th>
<th>Percent Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Mon</td>
<td>5.77</td>
<td>12</td>
<td>48.08</td>
</tr>
<tr>
<td>2-Tue</td>
<td>8.40</td>
<td>12</td>
<td>70.03</td>
</tr>
<tr>
<td>3-Wed</td>
<td>8.54</td>
<td>12</td>
<td>71.15</td>
</tr>
<tr>
<td>4-Thu</td>
<td>9.12</td>
<td>12</td>
<td>75.06</td>
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<tr>
<td>5-Fri</td>
<td>6.19</td>
<td>12</td>
<td>53.00</td>
</tr>
</tbody>
</table>