

Getting started with SmartMove

V1.1 - January 2014

This document describes how to get started with the SmartMove dispatching system.

Contents

1.	murc	Oduction	ɔ
2.	Sum	mary	6
3.	Flee	t Identification	7
3.	.1.	Fleet details	7
3.	.2.	Logo	8
4.	Job .	Attributes	9
5.	Requ	uirements Management	14
6.	Veh	icles	15
6.	.1.	General Properties	15
6.	.2.	Vehicle Attributes	20
6.	.3.	Vehicle Requirements	21
6.	.4.	Meter Interface	21
6.	.5.	Software meter	22
7.	User	rs	26
7.	.1.	Drivers	27
	7.1.1	1. Driver properties	27
	7.1.2	2. Driver attributes	28
7.	.2.	Operators	29
7.	.3.	ExpressBooker (Web) Users	29
8.	Doc	ketKiller Accounts	31
9.	Recu	urring Bookings	32
10.	Z	ones and Layers	33
10	0.1.	Zones	33
10	0.2.	Layers	34
11.	A	rea names, street names and place names	36
1	1.1.	Concepts	36
1	1.2.	Area names	36
1	1.3.	Street names	37
1	1.4.	Place names	39
1	1.5.	SmartBooker Automated booking system	40
12.	N	o-show, Resubmit and Blacklists	41
12	2.1.	No-show	41
12	2.2.	Resubmit	41
1′	2 3	Blacklists	42

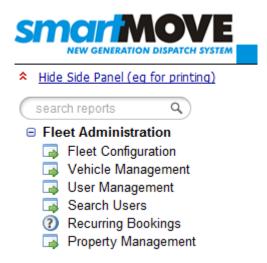
13.	Mes	sages from drivers to passengers (SMS)	43			
14.	Expe	Expenses				
15.	Fare	Calculation Properties	45			
16.	Expi	ressBooker website	47			
17.	App	endix 1 – Defining Zones	49			
17.	1.	Requirements	49			
17.	2.	Google Chrome Browser	49			
17.	.3.	Google Maps	49			
	17.3.1.	Locate the area of operation	49			
	17.3.2.	Panning	49			
	17.3.3.	Zooming	50			
	17.3.4.	Map Detail	50			
17.	4.	Creating Zones	50			
-	17.4.1.	Load the Zone Editor tool	50			
-	17.4.2.	Adding a zone	51			
-	17.4.3.	Modifying a zone	53			
-	17.4.4.	Snapping to boundaries of adjacent zones	53			
-	17.4.5.	Deleting Vertices	54			
	17.4.6.	Deleting Zones	55			
	17.4.7.	Splitting Zones	55			
	17.4.8.	Combining Zones	56			
	17.4.9.	Cutting Zones	57			
	17.4.10). Saving	57			
18.	App	endix 2 – SmartVOIX Text-to-Speech Desktop Installation	59			
18.	1.	Introduction	59			
18.	.2.	Step 1. Download the Cepstral Software	59			
18.	.3.	Step 2. Install the Cepstral Software	59			
18.	4.	Step 3. Enter the licence key	61			
18.	.5.	Step 4. Checking/Correcting Pronunciation	62			
18	6	Phonemes	64			

1. Introduction

SmartMove is a sophisticated dispatching system and some configuration is necessary before a fleet can start operating. This document describes the essential configuration required. More details on fine tuning SmartMove are given in the separate *SmartMove Tuning Guide*.

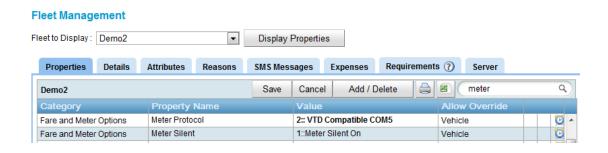
Configuration is done using the *Fleet Management* website. To log in you will need a username and password – this will be allocated to you. Section 7.2 describes how to set up more users (operators) with access to the website.

Once logged in a number of options are presented on the left hand side, as shown below.



These options are referred to extensively in this document and are the primary way to configure and tune the system. The rest of this document describes the information required to start operating.

The term *property* is used describe a piece of information that is used by the SmartMove software. In many cases a property can be defined in several places. For example, the *meter protocol value* might be set as a fleet property, as shown in the following figure, or it may be set for a particular vehicle, as described in section 6.4. The *allow override* field is set to *Vehicle* which means that any value set for a vehicle will take precedence over the value set for the fleet.



This gives great flexibility in the way property values are set. Properties can be set for the entire fleet and modified for some vehicles or even set specifically for particular drivers.

2. Summary

The main steps involved in configuring SmartMove are given in the following table. See the relevant section for more details on what needs to be done.

Торіс	See section	Page
Enter details about the fleet	3	7
Define the job attributes to be used when dispatching.	4	9
Define any requirements (permits, licences, etc) to be enforced.	5	14
Record details about each vehicle in the fleet.	6	15
Record details on each user of the system. A user is a driver, a base operator, or a web user.	7	26
Create accounts to be used when billing account customers.	8	31
Create recurring bookings i.e. repeat bookings or permanent bookings.	9	32
Define zones	10.1	33
For each zone define the "layers" used when searching for a suitable vehicle	10.2	34
Define area names and default zones	11.2	36
Review street names	11.3	37
Define place names	11.4	39
Define no-show reasons and resubmit reasons	12	41
Define messages from drivers to passengers (SMS)	12.3	42
Define expense claim types and payment options	14	44
Define the parameters used to estimate the fare for a trip	15	45
Decide on layout of web booking site	16	47

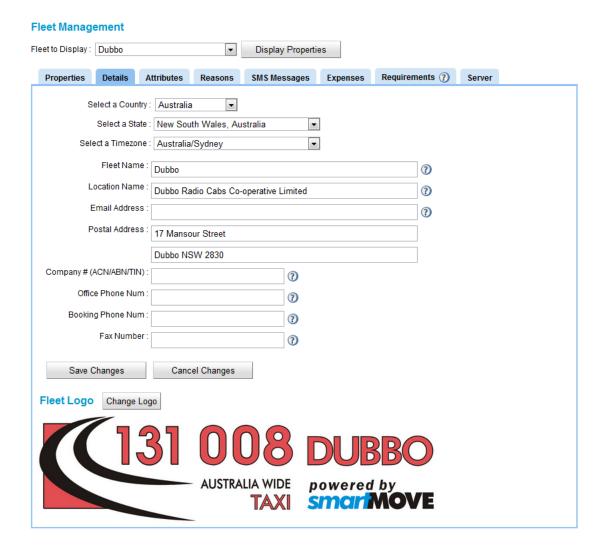
3. Fleet Identification

The *Details* page of the *Fleet Configuration* page on the website is used to record information about your fleet. It is also used to load your logo.

3.1. Fleet details

SmartMove needs to be given some basic details about the fleet. These details are used in various places, such as the account invoices.

Details are entered by selecting the *Details* tab on the *Fleet Configuration* page. The form shown below must be completed. Put the mouse on the '?' icon for information on how the property is used.



3.2. Logo

The logo is used on invoices and in various reports. Some sample logos are given below; note that the text on the right hand side is generated by SmartMove using the details you have supplied.

Taxi-Cabs Swan Hill

PO Box 545

Swan Hill VIC 3585

ABN: 42 323 538 092 Office: (03) 5032 2288 Fax: (03) 5033 2923



Taxi Cabs Bathurst Co-operative Society Limited

PO Box 256

Bathurst NSW 2795 ABN: 96 636 218 423 Office: (02) 6332 3888



Associated Taxis Incorporated

12 Lewis Street Geraldton WA 6530 ABN: 67 338 077 418 Office: (08) 9921 8600 Fax: (08) 9921 3812



Southern Highlands

21 Lyell St Mittagong NSW 2575 ABN: 69 323 836 239 Office: 02 4872 4800

Email: laurie@southernhighlandstaxis.com.au

To ensure that the logo looks reasonable when printed it should be saved with a resolution of at least 300 dpi. The preferred aspect ratio is 5:2 but this is not mandatory.

The logo is uploaded to SmartMove using the *Change Logo* button on the *Details* tab. See section 3.1 above.

4. Job Attributes

Attributes are critical to the operation of SmartMove. They are used to ensure that work is allocated to appropriate vehicles and drivers and it is important that some thought is given to their use.

Typical attributes are shown in the table below:

Attribute	Applies to driver	Applies to vehicle
Maxi		Vehicle is a raised vehicle capable of carrying more than 4 adults.
School Run	Driver is authorised to pick up school children.	Vehicle is authorised to carry school children. (Applies only in some fleets.)
Station Wagon		Vehicle is a station wagon/Estate type car
WAT (Wheelchair Accessible Taxi)		Vehicle is capable of carrying a wheelchair
WAT2		Vehicle is capable of carrying two wheelchairs
Wharf	Driver is authorised to enter a wharf. (Similar attribute could be used for other restricted areas)	Vehicle is authorised to enter a wharf.

In the example above the *Maxi* attribute applies only to the vehicle but the *School Run* attribute applies to both the vehicle and the driver. Both the driver and the vehicle must have that attribute for school work to be allocated to the vehicle.

Attributes are assigned to a booking and SmartMove will ensure that the work is dispatched to a suitable car. The operator can request that an attribute be present (tick) or missing (cross). The following example shows how the attributes are shown on the booking form. This example indicates that a car with a baby capsule is required and it must not be a Maxi.



The driver in the vehicle has some control over jobs that are offered. This is done by putting a tick or a cross next to the attributes that appear in the car. If the driver places a cross next to an attribute then it indicates that the driver does not want work with that attribute set. In other words, if the booking has a tick in that attribute and the car has a cross then the car is not offered the job.

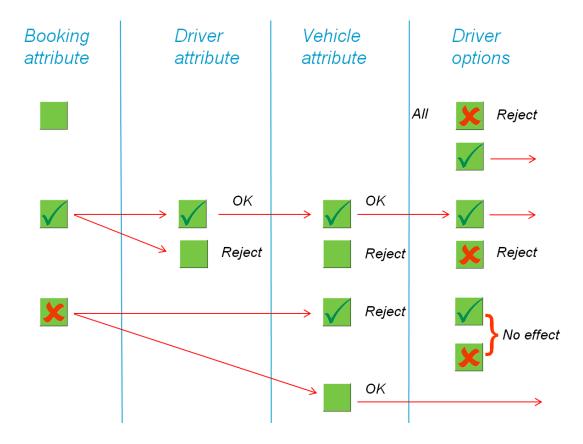


In this example the driver has indicated that *Silver Service* work should not be offered. This may be because the car is temporarily unsuitable for that work – it may need a wash, for example.

In addition to the attributes set up for the fleet the car will also show the attribute "All". Putting a cross next to All indicates that the driver does not want to be considered for general work – rather, the driver only wants work where an attribute has been explicitly selected. This might be used in a WAT vehicle or Maxi that does not want to do general work.

When attempting to find a vehicle to do a job SmartMove will check that the driver is acceptable, that the vehicle is suitable, and that the driver has not refused to accept work with the attributes given in the booking. The following diagram shows the steps involved in this checking.

If an attribute is ticked in the booking and it applies to drivers SmartMove will check that the driver has that attribute. If the attribute applies to the vehicle SmartMove then checks that the vehicle has the attribute. Finally it checks that the driver has the attribute checked. This process is repeated for all the attributes in the booking.

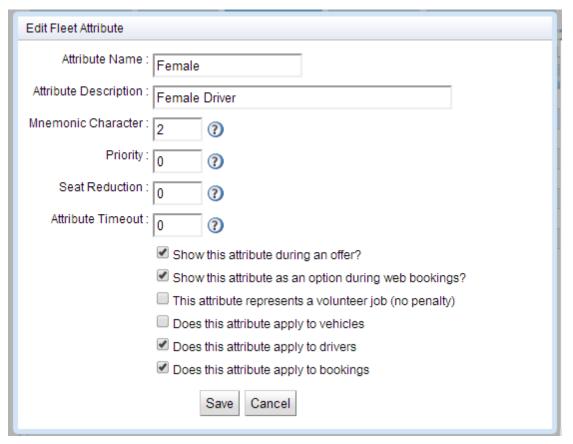


The attributes are set on the *Attributes* tab of the *Fleet Configuration* page. The following example shows the attributes already defined for the fleet.

Fleet Configuration Fleet to Display: Taxis United Ltd. Display Properties Attributes ? Reasons ? Details ? SMS Messages ? Expenses ? Requirements ? Q Attributes: Taxis United Ltd. Add Attribute Any Vehicle All Ν Ν N Female 0 2 Ν Female Driver Ν Sedan Sedan × 0 4 Van 10 Seat 10SeatVan Ν Ν 5 × TMV 0 Ν TMV 0 6 Eftpos Vehicle × Eftpos PUKEKOHE 0 8 Ν N PUKEKOHE WORK ONLY × WAIUKU 0 N WAIUKU ONLY WORK ×

You can define a new attribute by clicking on the *Add Attribute* button, change an existing attribute by clicking on the pencil icon, or remove an attribute by clicking on the red cross.

When adding or editing an attribute a number of fields need to be set. The form used is shown below:



The fields on this form are described below.

Field	Typical Value	Notes	
Attribute Name	WAT	This is the attribute name that will appear on the booking form and in the vehicle. It should be kept short.	
Attribute Description	Wheelchair Accessible Taxi	This is a fuller description of the attribute. This is only used here for documentation.	
Mnemonic Character	5	This field must be set to a single character. It is used as the 'hot key' on the booking form to select the attribute. In the example below pressing ALT+2 will select the Capsule attribute while pressing ALT+3 will select the Wagon attribute. Vehicle Passenger #: 1 Driver	
		2. Capsule 3. Wagon	
Priority	0	This is used to give priority to jobs with a selected attribute. If the priority is set to 5 or above the job is automatically tagged with the <i>No Location Check</i> option. This is intended to force the dispatching of some work. For example, in some fleets wheelchair capable vehicles are legally required to take wheelchair bookings ahead of other work, wherever the work may be.	
Seat reduction	2	This value should be set in cases where the selection of an attribute can affect the capacity of the vehicle. For example, when the 'baby capsule' option is selected one seat position may be lost for the capsule. In this case the seat reduction would be set to 1.	
Attribute timeout	0	If a timeout is entered the attribute is removed from the booking when this number of seconds has passed. It may be used, for example, if a job reserved for the 'duty car' has not been dispatched after 15 minutes.	
Show this attribute during an offer?	Ticked Not ticked	If ticked the attribute will be displayed in the vehicle when the job is being offered. If not ticked the attribute is not displayed in the vehicle.	
Show this attribute as an option during web bookings?	Ticked Not ticked	If ticked the attribute is shown on the web booking page. If not ticked the attribute is not shown on the web booking page. In some cases fleets may wish to restrict the options available to web users. For example a fleet may insist that a wheelchair	

Field	Typical Value	Notes
		booking be made by an operator to ensure that a vehicle will be available when requested.
This attribute represents a volunteer job (no penalty)	Ticked Not ticked	Some jobs are considered to be voluntary and drivers can refuse them without a penalty. Examples are 'dog' – only some drivers are prepared to carry dogs, and 'pick-up' which might be used when a driver is to pick up groceries from a store and deliver them to a house.
		If this field is ticked, jobs with this attribute are considered voluntary. The field should not be ticked if the jobs are not considered voluntary.
Does this attribute apply	Ticked Not ticked	This field should be ticked if the attribute applies to the vehicle otherwise it should not be ticked.
to vehicles?		An example would be the requirement for a vehicle that is capable of carrying a wheelchair.
attribute apply Not ticked otherwise it should not be ticked.		This field should be ticked if the attribute applies to the driver otherwise it should not be ticked.
to drivers?		An example might be the requirement to pick up passengers from a wharf – only drivers authorised to enter the wharf area would be eligible for the work.
Does this attribute apply to bookings?	Ticked Not ticked	This field should be ticked if the attribute is to appear on the booking form. Normally the only attribute that does not appear on the booking form is the 'all' attribute which is automatically associated with every vehicle.

5. Requirements Management

Drivers and vehicles are governed by a host of regulations. In many cases a licence of some sort is required to operate and these licences often have expiry dates attached to them. This section describes how licences can be managed within SmartMove.

Licences can be of various types and the effect of a licence expiring can differ. Some examples will illustrate:

Requirement	Applies to	Effect of expiry
Vehicle is required to be no older than N years	Vehicle	No driver can use the vehicle on the network.
Driver is required to have a current driver's licence	Driver	Driver cannot log in.
Driver is required to have a permit to do a particular class of job e.g. wharf access or school run	Driver	Driver can log on but will not be eligible for work requiring that licence
Gas tank needs to be checked periodically	Vehicle	No driver can use the vehicle on the network.

Note that anything that has an expiry date can be set up here. This includes vehicle inspections and medical checks, for example.

The first stage is to describe the licences that are to be managed. This is done using the *Requirements* section of the *Fleet Configuration* page. Use the 'add requirement' button to set up a new licence.



Details on how to set up requirements are given on the help page. Click on the '?' in the *Requirements* tab to get more information.

6. Vehicles

SmartMove needs to know about the vehicles in the fleet. Some of the information is quite critical to the operation of the system.

6.1. General Properties

Vehicles are managed using the *Vehicle Management* section of the *Fleet Management* website. Select the fleet and the vehicle to see the properties for the selected vehicle. Part of the display is shown below.

Note that these properties can also be set in the *Properties* tab of the *Fleet Configuration* page. The value set on the *Fleet Configuration* page will apply to all the vehicles in the fleet unless overridden for a particular vehicle – the *Meter Protocol* value in the figure below is an example of the fleet value being applied to the vehicle while the *Meter Listen* field is an example where the fleet value has been overridden by setting a value for the vehicle.

Vehicle Management Select the Fleet : Demo2 ▾ Select a Vehicle : SM Demo (SM Demokit) Display Properties General Properties Vehicle Attributes Vehicle Requirements Save Q Cancel Properties for SM_Demo (SM_Demokit) in Demo2 Property Name Fare and Meter Optio Meter Listen 1:: Listen Interactively (No E **U** ^ Fare and Meter Optio Meter Protocol 2:: VTD Compatible COM5 Using the fleet default O O Fare and Meter Optio Meter Silent 1::Meter Silent On Ü Fare and Meter Optio Requires Fare Details (Acco 1:: Show Fare Screen (Can) Could be overridden by a User Fare and Meter Optio Requires Fare Details Non / 2:: Show Fare Screen (Can | Could be overridden by a User

Whilst many properties can be set for the vehicle most are rarely changed after being set for the fleet. The following table lists those that are varied in some fleets. The fields that are critical to the operation of SmartMove are shown in **bold**.

Property Name	Typical Value	Description
Allow driver to override expense defaults	N	If set to Y the driver can change the options that control who is responsible for paying an expense. See section 14 for more details on expenses. If set to N the driver cannot change the options. The values can be changed on the website if necessary using the <i>Edit Vehicle Expenses</i> web page.

Property Name	Typical Value	Description
Autoplot if destination available	Y or N	If set to Y SmartMove will automatically plot to the destination zone when a job is started. This applies only when a destination address is supplied in the booking and does not apply to hail/walk-up jobs as no destination address is available.
		If set to N SmartMove will not automatically plot to the destination zone.
		In either case the driver may plot and re-plot any time the meter is running.
Commissioned	01/07/2011	Date the vehicle started service as a taxi. This field is not used by SmartMove and is available for documentation.
		See also: Decommission Date.
Compliance Date	01/06/2011	Date the compliance inspection was done. This field is of limited use and has largely been replaced by the Requirements Management described in sections 5 and 6.3.
Decommission Date	01/08/2018	Date vehicle must be decommissioned. This field is of limited use and has largely been replaced by the Requirements Management described in sections 5 and 6.3.
		See also: Commissioned.
Disable No Cover	Y or N	Set to Y if the driver is unable to deregister from cover work. If set to N the driver must register for cover to be eligible for work that would not normally be offered.
		See also: Cover in Fleet Configuration
Display customer phone in vehicle	Y or N	If set to Y the phone number in the booking, if present, is displayed in the vehicle. This allows the driver to call the passenger if necessary.
		If set to N the phone number is not displayed. The driver can still send an SMS or call the passenger using the SmartMove unit but is not shown the number.
		See also: Allow Customer SMS in Fleet Configuration
Engine Number		The engine number may be recorded. It is not used by the SmartMove software.
Insurance Paid To	01/07/2012	Expiry date for the vehicle insurance policy. This field is of limited use and has largely been replaced by the Requirements Management described in sections 5 and 6.3.
		See also: Insurance Provider, Insurance Policy

Property Name	Typical Value	Description
		Number.
Insurance Policy Number		Vehicle insurance policy number. This is not used by the SmartMove software and has largely been replaced by the Requirements Management described in sections 5 and 6.3.
		See also: Insurance Provider, Insurance Paid To.
Insurance Provider		Insurance company. This is not used by the SmartMove software.
		See also: Insurance Policy Number, Insurance Paid To.
Meter Listen	0 – Don't listen 1 – Listen Interactively (No EFTPOS)	This property applies when the SmartMove unit is wired to the RS232 interface on a meter. This interface is used to collect fare information directly from the meter.
	2 – Listen Passively	If set to 0 no attempt is made to read data from the meter.
	(EFTPOS)	If set to 1 SmartMove will respond to messages from the meter using the protocol set in the <i>Meter Protocol</i> property. This option is normally used when the meter is not connected to an EFTPOS terminal.
		If set to 2 SmartMove will not respond to messages from the meter – it simply listens to the messages sent by the meter. This option is the one normally used when the meter is wired to an EFTPOS terminal.
		See section 6.4 for more details on the meter interface.
		See also: Meter Protocol, Meter Silent.
Meter Protocol	0 – VTD Compatible COM4	This property applies when the SmartMove unit is wired to the RS232 interface on a meter—see the <i>Meter Listen</i> property.
	1 – CabCharge	This property provides two pieces of information:
	COM4 2 – VTD Compatible COM5	1. The format of the messages sent by the meter. This might be the format defined for the Victorian Taxi Directorate (VTD) or the format defined by CabCharge.
	3 – CabCharge COM5	2. The port on which the device is connected. See the <i>SmartMove Installation Manual</i> for more information. Choices are COM4 or Com5.
		See section 6.4 for more details on the meter interface.
		See also: Meter Listen, Meter Silent.

Property Name	Typical Value	Description
Meter Silent	0 – Meter Silent Off 1 – Meter Silent	This property applies only when the SmartMove unit is wired to the RS232 interface on a meter – see the <i>Meter Listen</i> property.
	On	If set to 1 the fare details provided by the meter are recorded with the job details separately from the fare declared by the driver. The <i>Fare Discrepancies</i> report lists the jobs where the two amounts differ.
		If set to 0 the amount received from the meter is not recorded separately.
		Note that fare information must be collected for walk-up jobs to be recorded. Either the fare details screens must be used or this property set to 1.
		See also: Requires Fare Details (Account), Requires Fare Details Non-Account.
Registration Due		Expiry date for the vehicle registration. This is not used by the SmartMove software and has largely been replaced by the Requirements Management described in sections 5 and 6.3.
		See also: COI Expiry.
Requires Fare Details (Account)	0 – Never Show Fare Screen	This property applies to bookings that include an account number.
	1 – Show Fare Screen (Cannot Cancel) 2 – Show Fare	If set to 0 the fare screen is not displayed to the driver when the job has been completed and the driver will not be able to record how the fare was paid.
	Screen (Can Cancel)	If set to 1 the fare screen is displayed and the driver must record how the fare was paid.
		If set to 2 the fare screen is displayed but the driver may use the CANCEL button and not record how the fare was paid. This option is not normally used with work on account.
		See also: Meter Silent.
Requires Fare Details Non Accnt		This property applies to bookings that do not include an account number and jobs done without a booking (walk-ups/hails).
		If set to 0 the fare screen is not displayed to the driver when the job has been completed and the driver will not be able to record how the fare was paid.
		If set to 1 the fare screen is displayed and the driver must record how the fare was paid.
		If set to 2 the fare screen is displayed but the driver may use the CANCEL button and not record how the fare was paid. This option is not normally used with

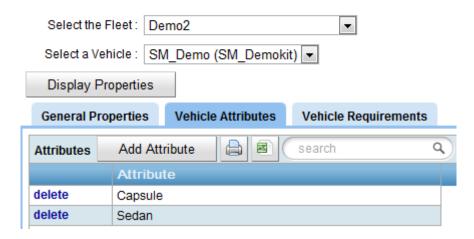
Property Name	Typical Value	Description
		work on account.
		See also: Meter Silent.
Send SMS from vehicle	0 – Don't allow SMS 1 – Allow SMS	If set to 0 any SMS to the passenger will be sent by SmartMove. Any reply sent by the passenger will be lost.
	Send Only 2 – Allow SMS Send and	If set to 1 any SMS to the passenger will be sent from the vehicle. Any reply sent by the passenger will be lost.
	Receive	If set to 2 any SMS to the passenger will be sent from the vehicle. Any reply sent by the passenger will be displayed to the driver as a message.
		See also: Allow Customer SMS in Fleet Configuration.
Show Vehicle on	Y or N	If set to Y the vehicle position is shown on the map.
Map		If set to N the vehicle is not shown on the map.
		See also: Mapping Requires Login.
Soft Meter xxxx		The various <i>Soft Meter</i> properties relate to the software meter available in the SmartMove unit. See section 6.5 for more details.
Vehicle Address		Address where vehicle is normally housed. This is not used by the SmartMove software.
Vehicle Digital IO	Y or N	Set to Y if the meter is wired to the digital input/output line on the SmartMove unit. Otherwise set to N.
		See the <i>SmartMove Installation Manual</i> for more details.
Vehicle Identifier	CAR 6	This string is used to identify the vehicle on most of the screens and reports. Each vehicle in the fleet must be given a different identifier.
Vehicle Inverted Meter	Y or N	This property is used if the meter is not showing the correct state of the vehicle. If the car is shown in SmartMove as engaged when it is vacant, and vacant when the meter is running, then this property should be changed to invert the reading.
Vehicle Meter Description	SCHMIDT V4	This property may be used to record the type of meter fitted in the car. It is not used by the SmartMove software but can be useful information for the SmartMove support staff.
Vehicle Model	FALCON VS	This property may be used to record the vehicle model It is not used by the SmartMove software but can be useful information for the SmartMove support staff.

Property Name	Typical Value	Description
Vehicle Owners ABN	12 345 678 23	The vehicle owner's ABN may be used when generating the invoice for account work.
Vehicle Owners Contact Details	0412 341 463	This property may be used to record the owner's contact details. It is not used by the SmartMove software but can be useful information for the SmartMove support staff.
Vehicle Owners Name	John Doe	This property may be used to record the owner's name. It is not used by the SmartMove software but can be useful information for the SmartMove support staff.
Vehicle Passengers	7	Number of passengers that the vehicle can carry. This information is used when deciding if a vehicle is eligible for a booking.
Vehicle Rego	T1234	Vehicle registration plate number. This is used when configuring the software in the vehicle. It also appears on various reports.
VIN		Vehicle Identification Number. This is not used by the SmartMove software.

6.2. Vehicle Attributes

Normally some of the attributes described in section 4 apply to vehicles and they need to be set on the *Vehicle Attributes* tab on the *Vehicle Management* page. In the example below the vehicle SM_Demo has been given the *Capsule* and *Sedan* attributes

Vehicle Management

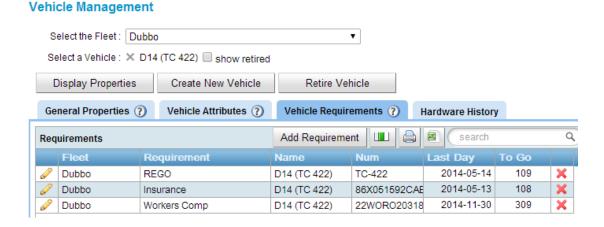


Attributes can be attached to the vehicle by using the *Add Attribute* button or removed by clicking on *delete*.

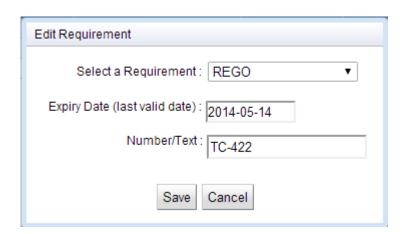
6.3. Vehicle Requirements

Some of the licensing requirements defined in the *Requirements Management section* (section 5) may apply to vehicles. If they do then the relevant information needs to be recorded for each vehicle. This is done using the *Vehicle Requirements* tab of the *Vehicle Management* page.

The following example shows that the *REGO* requirement has been defined. For this vehicle the expiry date has been set to 14 May 2014.



New requirement details can be entered using the *Add Requirement* button and existing details can be added by clicking on the pencil icon. The form used is shown below. Details for a requirement can be removed by clicking on the red cross.



6.4. Meter Interface

This section applies to vehicles that are required to have an approved meter. Note that SmartMove provides a metering function based on the GPS position – this is described in section 6.5 below.

Some cars have the meter wired to the EFTPOS terminal so that the fare to be paid appears on the EFTPOS terminal automatically. In this case the SmartMove unit can be wired so that it simply listens to the information being sent from the meter to the EFTPOS terminal. If the

meter is not wired to the EFTPOS terminal then the meter must be connected directly to the SmartMove unit.

The benefit of connecting the meter to SmartMove is that the fare details for every job are automatically recorded and can be used to produce a variety of reports. See section 8 and the *DocketKiller* reference manual for more details.

The wiring instructions are given in the SmartMove *Installation Guide*. Here we are concerned with how the vehicles are configured. There are two fleet/vehicle properties that must be set:

	Wiring	Meter Listen Property	Meter Protocol Property
Meter wired to EFTPOS terminal	SmartMove is wired to listen to the data passing from the meter to the EFTPOS terminal	2 – Listen passively	Set to VTD if the EFTPOS terminal conforms to the protocol defined by the Victorian Taxi Directorate.
Meter not wired to the EFTPOS terminal	SmartMove is wired directly to the meter.	1 – Listen actively	Set to CabCharge if the EFTPOS terminal conforms to the protocol defined by CabCharge. Other protocols may be defined in future.

6.5. Software meter

Not all cars have a separate meter and SmartMove can be configured to provide a meter capability in the SmartMove unit itself. This is called the *software meter* and uses the GPS position to calculate the distance travelled. The software meter can also be used in applications where a normal meter is not applicable – for a trip outside the normal operating area where special rates apply, for example.

WARNING: the software meter is available only when a GPS signal is available.

The main features of the software meter are:

- 1. Several tariffs can be defined. SmartMove will choose a tariff based on the time, day and the number of passengers but the driver can change to a more suitable tariff if required.
- 2. The rate per kilometre can vary depending on the length of the trip.
- 3. Various extra amounts can be configured and added to the fare by the driver. These might cover the booking fee, toll, airport levy, etc.
- 4. The tariffs are configured on the *Fleet Management* website. Any change made is relayed to a vehicle immediately or as soon as the vehicle is connected.
- 5. The meter can be paused and restarted if required.

The following table lists the properties that apply to the software meter. In many cases the value will be set for the entire fleet on the *Fleet Properties* tab of the *Fleet Configuration* page and will show on the vehicle *General Properties* tab as 'using the fleet default'. However it is possible to configure the software meter for individual vehicles; typically this is done where a special vehicle has completely different rates from other vehicles in the fleet.

Property Name	Typical Value	Description
Soft Meter Enabled	Y	Set to Y if the software meter is enabled. The software meter screen is displayed when a job is started without using a meter. The software meter does not apply for bookings that have the <i>Fixed Price</i> option set.
Soft Meter Allow Tariff Override	Y	Set to Y if the driver is permitted to change the tariff. Set to N if the driver is not permitted to change the tariff for bookings. Note that the driver can always set the tariff for non-booked work.
Soft Meter Extras	[320 Booking fee] [200 Airport levy]	This field must be set to a list of extra amounts the driver is allowed to claim as part of the fare. In the vehicle the driver can claim each extra zero or more times. The field may contain several entries, separated by a comma. The format of each entry is The entry must start with[. The amount in cents. [field separator]. A description for claim. The entry must end with]. In the example given here (on the left) the driver can claim a \$3.20 booking fee and/or a \$2.00 airport levy.
Soft Meter Tariffs	[Tariff1 450 220 6000 20], [DVA 0 200 0 0, ATT:DVA]	This field must be set to a list of tariff definitions that may be used. If more than one definition applies the last one that matches is used. If no tariff matches the first is used (by default). The format of each tariff definition is: The entry must start with [. The name of the tariff. Must be no more than 20 characters to display properly in the vehicle. [(field separator). The flagfall amount in cents. The rate per km. In some cases the rate changes for longer trips. In this case alternative rates can be listed separated by commas. The distance at which the rate applies must be specified before the rate with a colon separator. Examples: 220 – rate of \$2.20/km applies 252,12:352 – rate of \$2.52 applies for the first 12 km. After 12km the rate \$3.52/km will be applied.

Property Name	Typical Value	Description
		 The speed threshold for the waiting time to apply. If the speed is below the threshold then the time is charged at the rate specified in the previous field. Note that the distance charge still applies. (field separator required only if the following field is present) Qualifiers that controls when the tariff definition applies. Any of the following may be used, separated by commas: TIME: TIME: from>:<to>DAY:<day>ATT:<attribute>where</attribute></day></to> from> is the starting time for the tariff, in 24 hour format is the finishing time for the tariff in 24 hour format day> is the day the tariff applies. May be MON, TUE, WED, THU, FRI, SAT or SUN attribute> is an attribute that must be defined for the booking for the tariff to apply. Examples: ATT:DVA – Booking must have the DVA attribute. TIME:2200:0600 – Booking must be between 10pm and 6am. ATT:DVA, TIME:2200:0600 – Booking must have the DVA attribute AND the pickup time must be between 10pm and 6am. The entry must end with] In the example shown below three tariffs are defined.
		[General 450 220 6000 20],
		[Sunday 500 250,12:350 12000 20.0 DAY:SUN],
		[DVA 0 200 0 0,ATT:DVA]
		The DVA tariff applies to jobs that have the DVA attribute. There is no flagfall and a rate of \$2.00/km is applies. There is no charge for waiting time.
		The Sunday tariff applies only when the day is SUNday. The flagfall is \$5.00; the rate is \$2.50/km for the first 12 kilometres and \$3.50/km thereafter; and a waiting time of \$120/hour is charged whenever the vehicle is travelling at less than 20km/hour.
		The General tariff applies when the others don't apply. The flagfall is \$4.50; the rate is \$2.20/km; and a waiting time of \$60/hour is charged whenever the vehicle is travelling at less than 20km/hour.

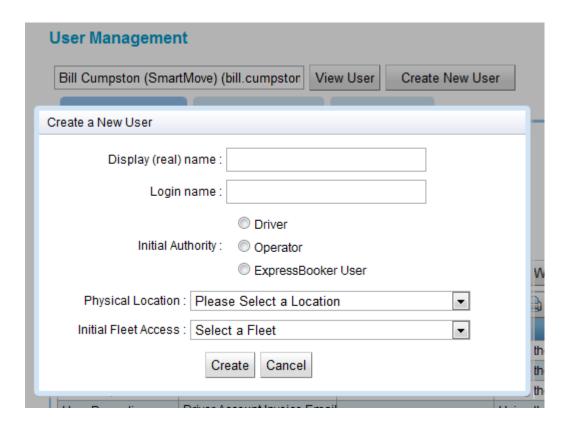
Property Name	Typical Value	Description
Soft Meter Rounding	10 cents	The fare is rounded to a multiple of this amount at the end of the job. Thus if the meter is showing \$10.08 at the end of a job and the rounding is set to 10 then the final fare will be \$10.10.

7. Users

Anyone wanting to access SmartMove must be set up as a user. This is done using the *User Management* section of the *Fleet Management* website.

WARNING: It is important to also remove access when someone leaves.

Select *User Management* on the website to create a new user then click on *Create New User*. There are several categories of users. Drivers use the software in the vehicles; operators use the booking client or the fleet administration website; and ExpressBooker users are those authorised to make bookings using the website.



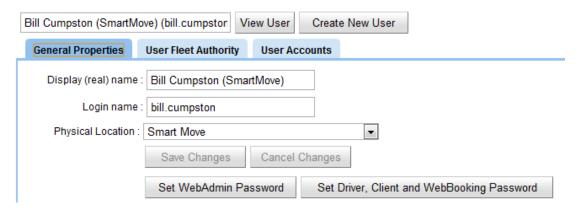
Field	Typical Value	Description
Display (real) name	John Doe	Enter the user's name in a form that will be used for display. This appears in reports so it should accurately describe the person.
Login name	Drivers: 453423	For drivers the <i>login name</i> must be a number. Other users can have an alphanumeric <i>login name</i> .
	Operators: Susan Boyle	
	Express- Booker User:	
	Western Health Clinic	

Physical Location	Bendigo	The <i>physical location</i> defines where the driver is located. It is used to identify drivers that have the same name but live in different towns.
Initial Fleet Access	Bendigo	The <i>initial fleet access</i> specifies the first fleet that the user will be given access to. Most users will have access to only one fleet but call centre operators generally have access to a number of fleets.

Once the user has been created it is possible to add extra information. The extra information recorded will depend on the type of user – see the following sections.

Passwords can be set or reset. For users of the fleet management website use the *Set WebAdminPassword* button; for other users use the *Set Driver, Client and WebBooking Password* button, as shown below.

User Management



7.1. Drivers

Drivers must have a numeric login name as only numbers can be entered in the vehicle. The PIN number is optional but it **must** be used if the driver intends to use the driver website to access end-of-shift reports.

The first time a PIN number is entered in the car it is recorded as the PIN for that driver and must be used every time the driver logs in. Drivers cannot change the PIN – it can either be reset at the base or cleared at the base and reset by the driver.

The PIN number/password can be cleared on the *User Management* page. It can also be cleared using the booking client *Drivers/Reset Password* options.

7.1.1. Driver properties

The following properties can be recorded for each driver.

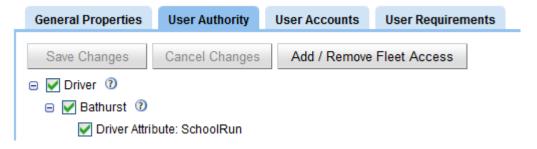
Property Name	Typical Value	Description
ABN		Australian Business Number. Not used in SmartMove.
Address		Address. Not used in SmartMove.

Date Of Birth	01/02/1983	Date of birth. Not used in SmartMove.
Driver Account Invoice Email	john.doe- @gmail.com	May be set to have driver end-of-shift reports e-mailed to the driver.
Driver Rate	50%	Default value for driver's share of income. Used with the end-of-shift report.
Drivers Licence Expiry Date	02/03/2014	Date driver's licence expires. This is not used by the SmartMove software and has largely been replaced by the Requirements Management described in sections 5 and 6.3.
Drivers Licence Number	S123546	Used to record the driver's licence number. This field is not used by SmartMove and has largely been replaced by the Requirements Management described in sections 5 and 6.3.
Land Line Number	03 4567 8901	Phone number. See also: Mobile Phone Number.
Licence Classes	CG	Licence class codes on driver's licence. Not used by SmartMove.
Mobile Phone Number	0456 789 012	Driver's phone number See also: Land Line Number.
Taxi License Expiration	05/06/2017	Date the driver's authority to drive expires. This is not used by the SmartMove software and has largely been replaced by the Requirements Management described in sections 5 and 6.3

7.1.2. Driver attributes

If the attributes described in section 4 include attributes that apply to drivers then the information needs to be recorded for each driver. This is done on the *User Authority* tab, as shown below.

In this example the driver has been given the *SchoolRun* attribute so is eligible for jobs that have the *SchoolRun* attribute set.



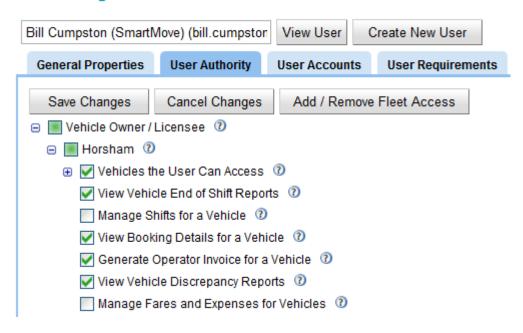
7.2. Operators

SmartMove provides a considerable amount of control over the access given to operators. Operators working in a call centre can be given access to a number of fleets and for each fleet there is control over the level of access permitted. Where appropriate very limited access can be given to some individuals; for example an owner might be given access to some reports for the owner(s) cars only.

Access is set on the *User Fleet Authority* tab of the *User Management* page. Use the *Add/Remove Fleet Access* to give the user access to a fleet or to remove access.

The screen used to control access is shown below.

User Management



In this example the user has access to several reports that would normally be of interest to the vehicle owner or licensee but does not have access to the end-of-shift reports or the screen used to manage fares and expenses.

7.3. ExpressBooker (Web) Users

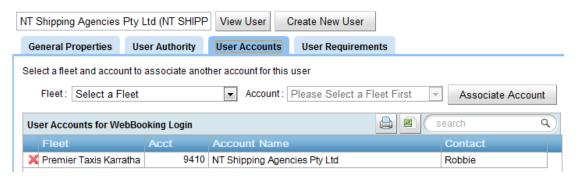
ExpressBooker users are permitted to log in to the web booking system to make and manage bookings. See section 16 for more details on this website.

If the website is not used for some time the user will be logged off but this time can be set for the user.

Property Name	Typical Value	Description
WebBooking Session Timeout	12 hours	The website will time-out if the web site isn't used for this period of time. The user will need to log in again to make or change bookings.

ExpressBooker users are often regular users and in many cases their work is done on account. An account name can be linked to a user using the *User Accounts* tab. An example is given below.

User Management



To associate an account with a web user first select the fleet and an account defined for that fleet then click on the *Associate Account* button.

See section 8 for more information on SmartMove accounts.

8. DocketKiller Accounts

The DocketKiller features of SmartMove provide a sophisticated mechanism for handling the bookkeeping aspects of the business. They can be used in a variety of ways but there are some implications in how vehicles and drivers need to be set up.

Task	Implications
Generate invoices to account customers for all work done on account. Invoice totals can be transferred to an accounting package.	All fares to be included in accounts need to be recorded with each booking. Normally this is done by including the account number in each booking and making it compulsory for drivers to record the fare payable at the end of each job.
Generate invoices from vehicles owners for work done on account. Invoice totals can be transferred to an accounting package.	Usually done only if SmartMove is used to prepare invoices to account customers. Same constraints apply. See above.
Produce end of shift report showing total income and expenses for the shift. Also shows the driver's (bailee's) share of the income.	The fare details for all jobs must be recorded. This includes account work and non-account work as well as walk-up work. If the meter is connected to SmartMove the fare is collected directly from the meter; otherwise the driver must enter the fare at the end of each job. See section 6.4 for more details on connecting a meter.

A number of steps are involved in using DocketKiller. These are:

- 1. A logo for the invoices and invoices is required see section 3.2.
- 2. A set of account numbers needs to be created if using DocketKiller to bill for account work. This is done with the *Add/Edit Accounts* page.
- 3. Options need to be set to force the collection of fares.

If billing for account work then the *Requires Fare Details (Account)* property described in section 6.2 needs to be set to ' $l-Show\ Fare\ Screen\ (Cannot\ Cancel)$ '. Normally this would be set as a fleet option on the *Fleet Configuration* page.

If using the end-of-shift report then both the *Requires Fare Details (Account)* property and the *Requires Fare Details Non Accnt* property need to be set to $'I-Show\ Fare\ Screen\ (Cannot\ Cancel)'$.

See the DocketKiller Reference Manual for more information on the use of the DocketKiller features.

9. Recurring Bookings

Recurring Bookings is the term used in SmartMove for bookings that are repeated from time to time. These may also be known as permanent or repeat bookings.

The concept is simple:

- 1. First you create a *model booking* that gives all the details of the booking required. This is done with the booking client software.
- 2. Then you create a recurring booking entry that tells SmartMove when to create a booking based on the model bookings. This is done using the *Recurring Bookings* section of the *Fleet Management* website.
- 3. Periodically SmartMove will create the bookings required and put them in the pre-booking queue¹. The bookings will be released for dispatch at the times requested.

Where appropriate a 'diary' can be used with a recurring booking. This provides an extra level of control over when bookings are created. The public holiday diary is one diary but any number can be created.

Some examples will illustrate how diaries are used:

- 1. A recurring booking might require a taxi every Monday morning except when it is a public holiday. In this case the recurring booking will exclude days in the public holiday diary.
- 2. A recurring booking might require a taxi every school day. In this case a diary would be created for the school terms and the recurring booking will include only days in the school term diary.
- 3. A recurring booking might require a taxi every weekday unless it is a university holiday. Here we exclude days in the university holiday diary.

If using diaries it is important that they be kept up to date.

The figure below shows an example of the *Recurring bookings* page. The first entry is for a booking on a fortnightly schedule with the booking every second Monday.

Recurring Bookings



See the help page for more information on setting up recurring bookings. This can be obtained by clicking on the '?' icon next to the words *Recurring Bookings*.

¹ The *Period Scheduled Release Days* fleet property controls how far in advance bookings are created. The *Period Scheduled Polling* fleet property controls how frequently SmartMove checks for bookings.

10. Zones and Layers

10.1. Zones

Zones are critical to the operation of SmartMove as they affect how work is allocated to vehicles. This section describes how the zones are set up.

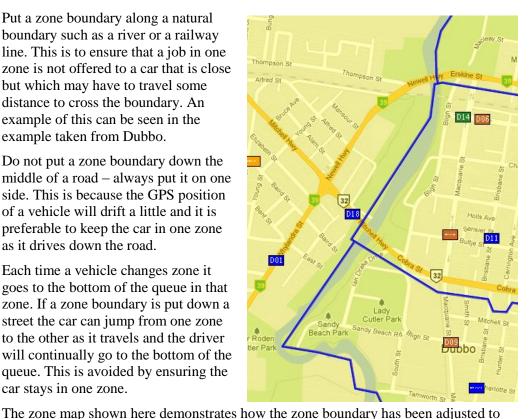
Each area in and around the town is given a zone name. Any name can be used but it should be a name that drivers will readily identify with. The names are used throughout SmartMove.

The precise steps for creating zones are given in *Appendix 1 – Defining Zones*. Some general guidelines that should be followed are:

- 1. Put a zone boundary along a natural boundary such as a river or a railway line. This is to ensure that a job in one zone is not offered to a car that is close but which may have to travel some distance to cross the boundary. An example of this can be seen in the example taken from Dubbo.
- 2. Do not put a zone boundary down the middle of a road – always put it on one side. This is because the GPS position of a vehicle will drift a little and it is preferable to keep the car in one zone as it drives down the road.

Each time a vehicle changes zone it goes to the bottom of the queue in that zone. If a zone boundary is put down a street the car can jump from one zone to the other as it travels and the driver will continually go to the bottom of the queue. This is avoided by ensuring the car stays in one zone.

ensure cars stay in a zone. The zone boundary running parallel to Cobra Street runs parallel to the streets but slightly away. At one point on the right of the picture the zone boundary has been adjusted to ensure that a commercial area is entirely in the zone. This is shown in more detail on the satellite view. This adjustment means that cars in the car park will stay entirely in one zone.





3. Have zones that go well beyond the town boundaries. This is to ensure that vehicles travelling out of town are generally within a zone. In the example below the zoning for Mornington Peninsula has been extended to include all of Melbourne, including Tullamarine Airport. This is because the vehicles frequently travel to Melbourne for one reason or another.

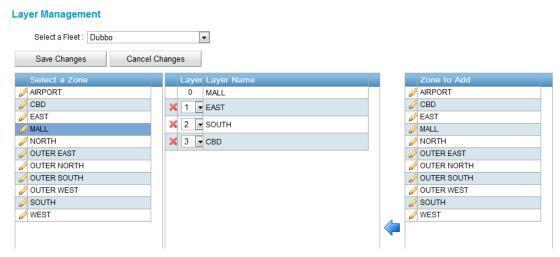


10.2. Layers

Once the zones are set up it is necessary to tell SmartMove how they should be used. If a job is waiting in a zone SmartMove needs to be told which zones to search to look for a vehicle. This is done separately for each zone.

Using the *Layer Management* section of the *Fleet Management* website take each zone in turn and define the zones to be searched. In the example below we are looking at the MALL zone in Dubbo. SmartMove will start by looking for a car in the MALL zone. If no suitable car is found it will look in EAST, then it will look in SOUTH, and finally it will look in CBD. (This is a simplification of the dispatching rules.)

To add a zone click on the zone name on the right hand side then click on the blue arrow to add the zone to the list. To remove a zone simply click on the red cross next to the name. To change the order the zones are searched set the number for each zone. It is permissible to have more than one zone with the same number —zones with the same number will be searched together.



Normally the outer zones will be searched before the inner zones as a driver in an outer zone will usually be happy to get a booking that will take the car back into the centre of town.

11. Area names, street names and place names

11.1. Concepts

The handling of addresses in SmartMove is done using the concept of street names, place names, and area names.

An area name is a name commonly used by a caller to describe the area they are in. In a city the area name will normally be the suburb but in smaller towns the area name may be the name of a locality in or near the town. Note that the area name is the name used by the caller and it is completely separate from the zone name used within SmartMove for dispatching.

A street name is a name that must have some sort of prefix and a place name must not have a prefix. Some examples will illustrate how the names are used:

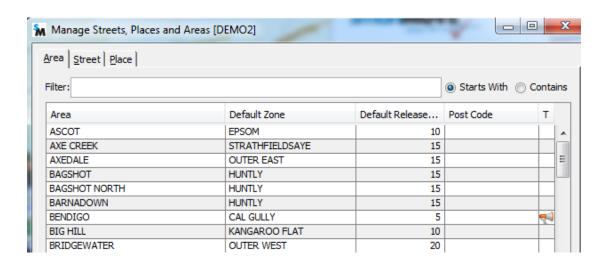
Address given by caller	Prefix	Street name	Place name	Area name
14 Barngana Road, Cable Beach	14	Barngana Road		Cable Beach
Aruacaria Accommodation, Ewingsdale			Aruacaria Accommodation	Ewingsdale
2 Acklin Court, Varsity Lakes	2	Acklin Court		Varsity Lakes

When making a booking only names recorded in the system are allowed. This is to prevent spelling mistakes. A new name can be entered at any time by using the F11 key (or Booking/Manage Address) in the client software.

The following sections describe the process in more detail.

11.2. Area names

The area name list contains the names that are accepted as valid area names. These are the names used by callers and there is no harm in having more than one area name for the address if different callers use different names.



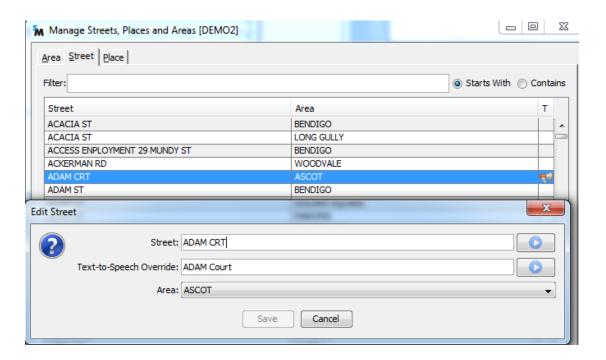
Version 1.1— January 2014 — Page 36

The fields recorded are:

Name	Typical value	Explanation
Area	BIG HILL	Name commonly used by customer when making bookings.
Default Zone	KANGAROO FLAT	This is the zone that will be used for any address entered with this area name when no other information is available. SmartMove learns the location of each address; this zone is used only when location information is not available.
Default Release Time	15 minutes	This values specifies the release time for pre-bookings using this area name. A pre-booking will be released for dispatch this many minutes before the pickup time.
Postcode	5031	This is the postcode/zip code for the area. It is used in some reports.
Text-to- speech override	if alternative text has been supplied for the automated booking system.	If the automated booking system described in section 11.5 does not pronounce the area name properly it is possible to provide an alternative spelling to be used. Often simple changes to the spelling will lead to a more acceptable pronunciation. If necessary the name can be entered as phonemes.

11.3. Street names

The street name list contains the names that are accepted as valid street names. A street name differs from a place name in that it must have a prefix when used.



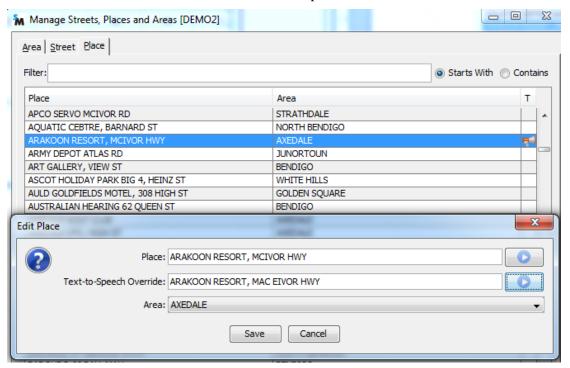
Version 1.1— January 2014 — Page 37

The fields recorded are:

Name	Typical value	Explanation	
Street	ADAM CRT	Street name. This name is sent to the driver and may contain abbreviations.	
Area	ASCOT	Area name associated with the street name. In the example above ACACIA ST has been used with two area names. This is quite normal and can occur in several situations	
		 When a street passes through more than one area When the same street name is used in different parts of a town When different callers have used a different area name when giving the street name. The area names associated with the street name are 	
		offered on the booking form. However the operator may enter any area name and a new entry is created in this table automatically whenever a new association is made. Invalid entries can be removed if necessary.	
Text-to- Speech Override	if alternative text has been supplied for the automated booking system (SmartBooker).	If the automated booking system described in section 11.5 does not pronounce the area name properly it is possible to provide an alternative spelling to be used. Often simple changes to the spelling will lead to a more acceptable pronunciation.	
		The automated system does not recognise CRT and will say "ADAM CRT" as "ADAM C R T". This can be corrected by entering "ADAM Court" as the name to be used.	
		The automated system will say CT as Connecticut. Again this can be corrected by giving an alternative spelling.	

11.4. Place names

The place name list contains the names that are accepted as valid place names. A place name differs from a street name in that it must **not** have a prefix when used.



The fields recorded are:

Name	Typical value	Explanation
Place	ARAKOON RESORT, MCIVOR HIGHWAY	Place name. This name is sent to the driver and may contain abbreviations.
Area	ASCOT	Area name associated with the place name. Unlike street names it is unusual for a place name to be associated with more than one area name but it can happen with large corporations such as supermarkets that have a number of outlets.
Text-to- Speech Override	if alternative text has been supplied for the automated booking system (SmartBooker).	If the automated booking system described in section 11.5 does not pronounce the area name properly it is possible to provide an alternative spelling to be used. Often simple changes to the spelling will lead to a more acceptable pronunciation.
		In the example shown above the name MCIVOR has been spelt as MAC EIVOR to get a more acceptable pronunciation.

11.5. SmartBooker Automated booking system

The automated booking system linked to SmartMove – called SmartBooker – gives callers the opportunity to make a booking without talking to an operator. Using the caller's phone number (callerid) it invites the caller to select one of the four addresses most commonly used by that caller. i.e

"Press 1 for pickup at 17 High Street

"Press 2 for pickup at K-Mart"

Etc

The caller may specify a pickup time and may request a wheelchair vehicle.

No learning is required – the system simply offers addresses the caller has used before. Typically this system can handle 30-50% of a fleet's bookings.

In about 5% of cases the pronunciation of the street or place name will be less than ideal. To handle this situation an alternative spelling can be provided that will be used in the text-to-speech translation. CT, for example, will translate to Connecticut but if the spelling is changed to COURT the system will say it correctly.

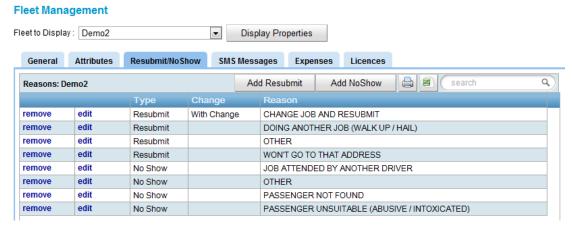
A licence for the text-to-speech software must be installed in order to test and correct the pronunciation. For more information see Appendix 2 – SmartVOIX Text-to-Speech Desktop Installation.

12. No-show, Resubmit and Blacklists

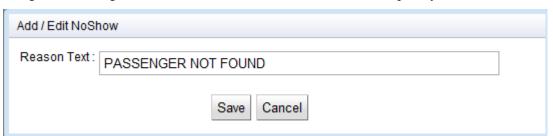
12.1. No-show

If the driver cannot do a job for any reason the job is marked as a 'no-show'. There are several reasons why a driver may not do the job and the driver must select a reason from a list presented in the vehicle. Up to four reasons can be displayed in the vehicle.

The *Resubmit/NoShow* tab on the *Fleet configuration* page is used for setting the reasons. The page is shown below.



Use the *Add NoShow* button to add a reason – the form is shown below. Use the *edit* button to change the wording or the *remove* button to remove the reason completely.

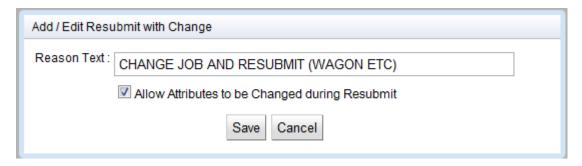


12.2. Resubmit

Similarly there are several reasons why a driver may need to resubmit a job so that the booking is given to another driver. Again the driver must select a reason from the list of possible reasons. Up to four reasons can be displayed in the vehicle.

SmartMove allows the driver to change a booking before it is resubmitted. There are three reasons why a driver may wish to do this: the vehicle or driver is unsuitable, in which case the job attributes can be changed; the passengers aren't ready and want to delay the pickup, in which case the pickup time can be changed; or the vehicle cannot carry the required number of passengers, in which case the number can be changed so a suitable vehicle is dispatched.

If adding or editing a *resubmit* reason the following form is displayed. Tick the checkbox if the driver can change the booking.



12.3. Blacklists

Blacklists are used in SmartMove to limit the cars and drivers that are considered eligible for a booking. There are three possibilities:

- 1. A driver can blacklist an address or a passenger. This may be used, for example, if a female driver is reluctant to pick up a particular passenger.
- 2. A passenger can blacklist a driver. This might be used when a passenger doesn't want to be picked up by a divorced spouse or if a passenger has an objection to travelling a driver.
- 3. The fleet can blacklist an area, an address or a passenger.

In this context a *passenger* is identified by a phone number (callerid). Thus if the driver blacklists a passenger then the phone number in the driver's booking is used and any future bookings that contain that phone number will not be given to the driver.

There are several fleet properties that control the blacklist feature. These are listed in the following table.

Name	Typical value	Explanation
Enable Blacklist Features in Vehicle	Y or N	Set to Y if drivers are to be allowed to blacklist an address or a passenger.
		Change this property if you would prefer to use some other name instead of "blacklist".
Enable Blacklist Listing in Vehicle	Y or N	Set to Y if drivers are to be allowed to review their list of blacklisted addresses and passengers.

The *Manage Blacklists* page on the fleet management website is used to create new blacklist entries and correct or remove existing entries.

13. Messages from drivers to passengers (SMS)

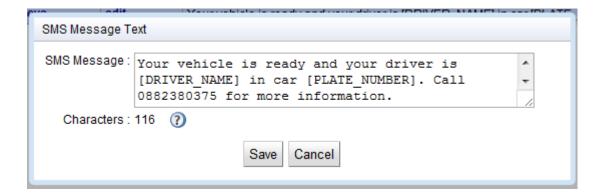
SmartMove can be configured to allow the driver to send a pre-configured SMS to the passenger. Typically this would advise the passenger that the car is delayed or is waiting.

Up to four messages can be configured on the *SMS Messages* tab of the *Fleet Configuration* page. A typical display is given below.



Add a new message with the *Add SMS Message* button. Click on *edit* to change an existing message or click on *remove* to delete a message.

The form used to define the message text is shown below. Some text can be substituted in the message: the text '[DRIVER_NAME]' will be changed to the driver's display name (see section 7.1.1) and the text '[PLATE_NUMBER]' will be changed to the vehicle rego (see section 6.1).



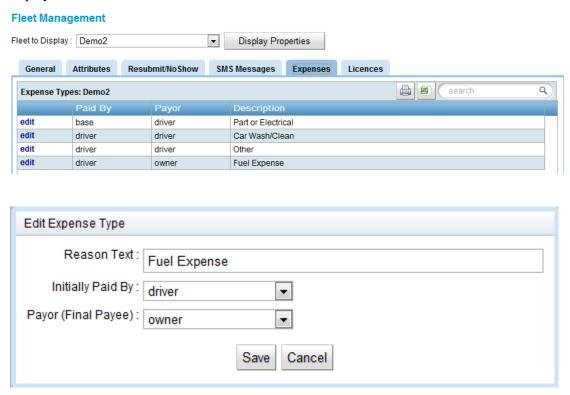
The estimated number of characters in the message is displayed. Note however that the length can vary when text is substituted in the message.

14. Expenses

Any expenses incurred by the driver can be recorded in SmartMove. They will then appear on the end-of-shift report.

To allow the expense to be correctly split between the owner and the driver SmartMove needs to be told who paid for the item and who is ultimately responsible for the payment. For example a driver may need to buy a replacement light bulb but maintenance of the vehicle is the owner's responsibility. Alternatively the driver might buy fuel and have it charged directly to the owner but the cost might be shared between the owner and the driver.

The expenses are defined on the *Expenses* tab of the *Fleet Configuration* page. A typical display is shown below.



Field	Typical value	Explanation
Reason Text	Fuel expense	This is the expense name displayed in the vehicle. It should be kept short.
Initially Paid By	Driver	This field records who initially paid the expense. Possible values are <i>Driver</i> , <i>Owner</i> , <i>Base</i> , <i>Split</i> .
Payor (Final Payee)	Owner	This field records who is ultimately responsible for the expense. Possible values are <i>Driver</i> , <i>Owner</i> , <i>Base</i> , <i>Split</i> .

The fleet property *Allow Driver to Override Expense Defaults* controls whether the driver can change the values set here.

15. Fare Calculation Properties

The booking form and the web booking form provide a mechanism for calculating the estimated cost of a trip. Given a pickup and drop-off address SmartMove will use Google Maps to get an estimate of the distance to be travelled and will use that to calculate the estimated fare.

The fare is calculated as

<flag fall> + <estimated distance> × <per kilometre rate>

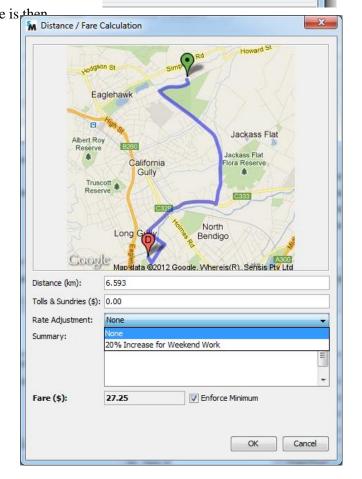
but a number of properties on the *General Properties* page of the *Fleet Configuration* page control the calculation. These are listed below.

Property Name	Typical value	Effect		
Fare Calculation Distance Padding Rate	10%	This property allows for some padding to be added to the estimated distance. It is expressed as a percentage to be added.		
Fare Calculation Distance Round Value	0.1km	This property affects the distance used to estimate the fare by causing the distance to be rounded. See the <i>Fare Calculation Distance Rounding Up Only</i> property for details on how this value is used.		
		No rounding is done if this value is zero.		
Fare Calculation Distance Rounding Up Only	Y and N	If this property is Y then the distance used to estimate the fare is always rounded <u>up</u> to the nearest value specified in the <i>Fare Calculation Distance Round Value</i> property.		
		If this property is N then the distance used to estimate the fare is rounded to the nearest value specified in the <i>Fare Calculation Distance Round Value</i> property.		
		See also Fare Calculation Distance Round Value		
Fare Calculation Flag Fall	\$5.40	This property is used when calculating the estimated fare for a job. It gives the flag fall to be used.		
Fare Calculation Hourly Rate	\$50	This property is used for vehicles booked on a time basis. It specifies the cost per hour for hiring the vehicle.		
Fare Calculation KM Rate	\$1.67	This property is used when calculating the estimated fare for a job. It gives the rate per kilometre to be used.		
Fare Calculation Minimum	\$10	This property is used when calculating the estimated fare for a job. It gives the minimum fare to be quoted.		
Rate Options Increase for when calculating the estim		This property allows different formulas to be used when calculating the estimated fare for a job. A list may be given and the entries separated by commas.		
	[-5% 5% Discount for	Each entry in the list must contain a scaling factor to be applied to the basic calculation and a description.		

Property Name	Typical value	Effect	
Thus if one ha		The two fields are separated by a and enclosed in []. Thus if one has 20% extra for work after midnight one would write	
		[20% 20% extra after midnight]	
Fare Calculation Round Up Only	Y or N	If this property is Y then the final fare estimate is always rounded <u>up</u> to the nearest value specified in the <i>Fare Calculation Round Value</i> property.	
		If this property is N then the fare is rounded to the nearest value specified in the <i>Fare Calculation Round Value</i> property.	
Fare Calculation Round Value	\$5	This property affects the final fare estimate by causing the fare to be rounded. See the <i>Fare Calculation Round Up Only</i> property for details on how this value is used.	
		No rounding is done if this value is zero.	

The fare estimate is obtained by clicking on the *Calc* b form.

The Google Maps estimate of the fare is displayed. The operator can choose the rate to be used – in this example the operator can choose between the standard rate and the rate that includes an extra 20% for weekend work.



Fixed Price?

Calc..

16. ExpressBooker website

The *ExpressBooker* part of SmartMove allows clients to make internet bookings. The website can be made available to the general public or can be limited to registered ExpressBooker users – see section 7.3 for details on setting up these users. Public users can make bookings. Registered users can make and manage bookings.

Setting up the *ExpressBooker* website is outside the scope of this document but some thought needs to how it will appear and how it will be integrated into existing websites.

Fleets can specify what appears at the top and at the bottom of each *ExpressBooker* page. Any text or graphics can be used and a few examples are given below. Note that only the first one has used a footer.







Please enter y	our username and password
Username	
Password	
	Login

Please ring (03) 5441 8116, Or/ Email: admin@bendigotaxis.com.au for help setting up.



smar Move

Green Tomato Cars

Please enter your username and password

Username

Password

Login







Username	
Osemanie	
Password	

17. Appendix 1 – Defining Zones

17.1. Requirements

- A computer that's able to access the internet;
- A web browser.

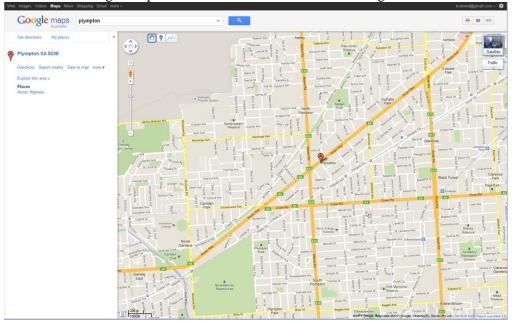
17.2. Google Chrome Browser

We recommend using the Google Chrome browser (http://www.google.com/chrome) since other browsers may not be fully compatible with Google Maps and may behave differently.

17.3. Google Maps

Google Maps (http://maps.google.com) is a mapping service which allows users to view maps (streets and satellite views) from all around the world. Google Maps will be used to help define the zones in the fleet's area of operation. It is advisable that you familiarise yourself with Google Maps before proceeding with creating zones.

17.3.1. Locate the area of operation



17.3.2. Panning

If you are familiar with Google Maps or Google Earth, moving around the maps is exactly the same and is accomplished by panning. Panning means moving from side to side, or up and down, it is how you move to a different area of a map. This can be accomplished by either:

1. Using the directional arrows in the top left of the map. Push the appropriate arrow to move in that direction.

2. Once you are used to the concept of panning, it can be accomplished much easier by simply grabbing the map and moving it. Simply *press and hold the left mouse button* and move the mouse in the direction you would like to move the map while continuing to hold the left mouse button. This will *drag* the map.

17.3.3. Zooming

Zooming refers to being closer or further from the map. This will change how much of the map you can see at once, and also affect the quality of the map. The more you zoom in, the more detail you can see (individual streets, even individual properties). There are 3 ways of zooming:

- 1. Using the zoom slider in the top left of the map (directly below the pan tool) as pictured to the right.
- 2. Once you are confident with navigating around the map, the mouse can be used to zoom in quickly by double clicking the left mouse button at the point that you want to zoom in on; this will zoom in one level.
- 3. If you have a mouse with a scroll wheel, you can scroll up/down to zoom in/out.

17.3.4. Map Detail

You can view Google Maps in two views – satellite or map view. By default Google Maps displays the map view showing streets and natural features as basic vectors. Satellite view shows the map using aerial photos which might be useful when trying to locate a particular landmark. Note that both views may show outdated data. Change between these views by clicking on the buttons on the top right of the map.



Note: It is recommended that you make the window as large as possible on your screen to make working with the maps as easy as possible.

17.4. Creating Zones

It is recommended that you consider starting your first zone in the middle of your fleet's area of operation then work outwards. This generally means defining the CBD as the first zone.

When creating your zone, remember, use natural boundaries as the border to your zone (creeks, train lines etc) to help create a segment where getting from any point in that zone to any other point in that zone is relatively quick. Be sure to consider where you ranks are, it is ideal to have a commonly used rank within the CBD.

17.4.1. Load the Zone Editor tool

1. Log into the Fleet Management Website and select the **Zone Editor** menu item. The Zone Editor tool will be displayed:



Ensure your fleet is displayed in the **Select a Fleet** dropdown list.

17.4.2. Adding a zone

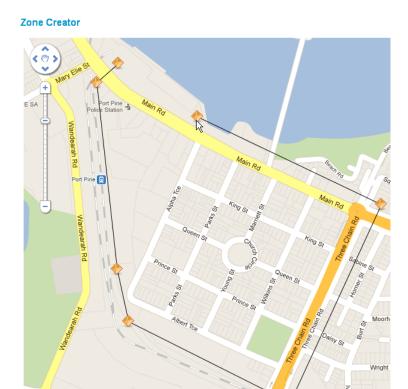
- 1. Pan and Zoom the map so that the area you wish to create a zone around is visible in detail. Zoom to a level where you can easily see the individual street names if possible, this will allow you to create an accurate zone.
- 2. Click on the map to start creating a zone. Continue to select points around the area; you will notice the points (vertices) being joined and a shape being created as you continue to click. Take note of the following:
 - a. Use a distant point to create a straight line between them, or more frequent point to follow the contour of a boundary or street.
 - b. Ensure that a boundary *never* runs down the middle/centre of a street, a street must always be in one zone or the other. This means you should run the boundary along one edge of the road, or directly through the centre of a block or river.
 - c. Make it *obvious* which side of the road you would like the boundary on.



Version 1.1— January 2014 — Page 51

Notes: Notice the train track was followed (following it as a natural boundary. Note also that the zone included the whole of Three Chain Rd, not just the middle of the street.

3. When you have completed the shape, click on the first vertex to complete the shape.



This will create a zone. You will need to give the zone a name. In this example, the zone was named **CBD**.

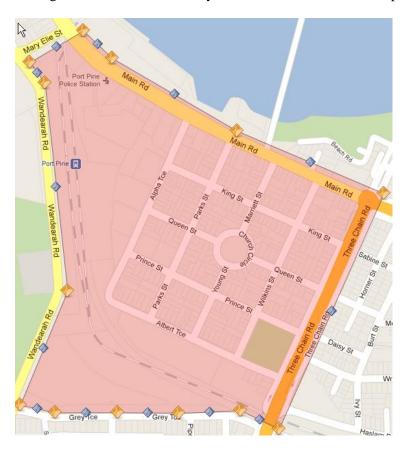


Note: Please ensure you use capital letters when naming the zone. Using meaningful zone names will help both operators and drivers learn the zone names (eg. WOOLWORTHS, as a name for the zone around the Woolworths shopping complex).

Note: Remember during the zone creation you can still pan and zoom as required to design the zone.

17.4.3. Modifying a zone

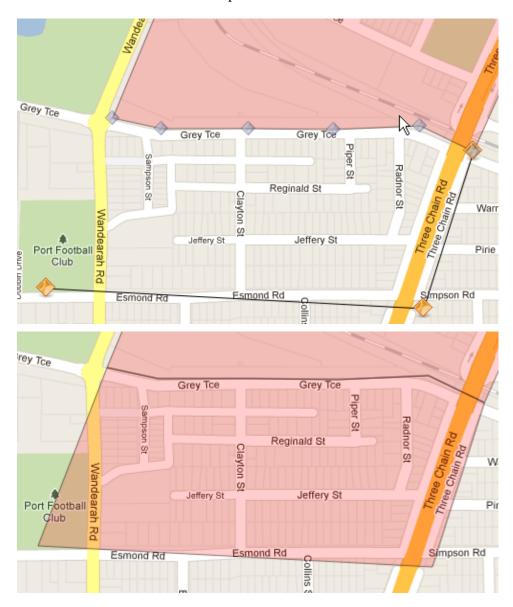
1. You can move the zone boundaries by dragging the big yellow vertex . To add more vertices, click on the zone to select it. Drag the smaller purple vertex . Adding more vertices will allow you to follow boundaries more precisely.



17.4.4. Snapping to boundaries of adjacent zones

- 1. When adding a zone adjacent to another zone you will want to follow the existing boundary of the adjacent zone. In this case, you will want to snap to the vertices of the zone that you are modifying/adding to the vertices of the adjacent zone.
- 2. To snap a vertex of an adjacent zone, hover the mouse over the adjacent zone to reveal the vertices of the adjacent zone that can be snapped to.

3. Click on one of those vertices to snap to that vetex.



Note: You can only snap to a big yellow vertex.

Note: Avoid leaving blank space between the zones even if it is wasteland or swamp etc. Developments are happening all the time and it is good to have these areas included in a zone.

17.4.5. Deleting Vertices

- 1. To delete a vertex, click on the zone that you want to delete a vertex from.
- 2. Press the **Delete** button. The button's label will be bolded to highlight that the Editor is in Delete mode.



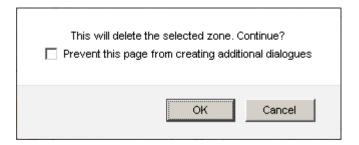
3. Click on the vertex to delete it. If a vertex cannot be deleted, the Zone Editor tool will tell you.

17.4.6. Deleting Zones

- 1. A whole zone can be deleted. To delete a zone, click on the zone that you want to delete.
- 2. Press the **Delete** button. The button's label will be bolded to highlight that the Editor is in Deletion mode.



3. Click on the zone again to delete it. A dialogue box will be displayed asking for confirmation. Press either **OK** to confirm or **Cancel** to dismiss the dialogue box.

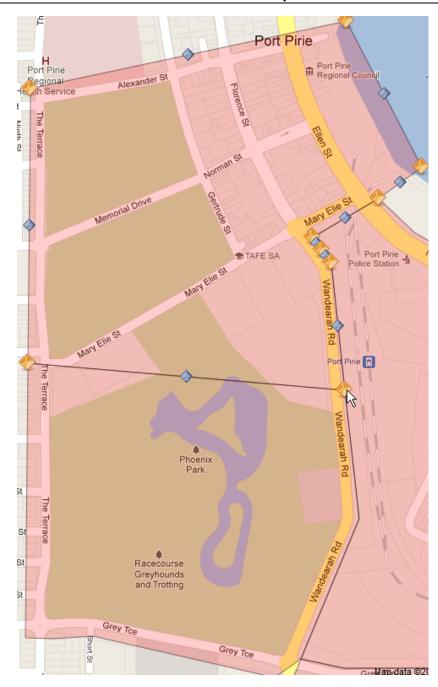


17.4.7. Splitting Zones

- 1. A zone can be split into two smaller zones. The split will occur between the two vertices that are selected. The vertices can be either the big yellow vertex or the small purple vertex.
- 2. To split a zone, click on the zone that you want to split.
- 3. Press the **Split** button. The button's label will be bolded to highlight that the Editor is in Splitting mode.



4. Click on the two first vertex then click on the second vertex. The split will occur between those two vertices.



17.4.8. Combining Zones

- 1. To combine two zones, there has to be only one small purple vertex separating the two zones.
- 2. To combine two zones, click on one of the zones that you want to combine.
- 3. Press the **Delete** button. The button's label will be bolded to highlight that the Editor is in Delete mode.



4. Click on the small purple vertex that is separating the two zones. The line separating the two zones should disappear and the two zones should become one



17.4.9. Cutting Zones

- 1. Sometimes, it may be necessary to create a small zone within a larger zone. A typical example is you may want a small rank zone within the larger CBD zone. We use the term "cutting" to describe the process where a shape is cut out of another zone and a new zone is created assuming that cut out shape.
- 2. To cut a zone, select the larger zone.
- 3. Press the **Cut** button. The button's label will be bolded to highlight that the Editor is in Cutting mode.



4. Start clicking/adding vertices within the larger zone as if you were creating a new zone.



17.4.10. Saving

1. To save your work, press the **Save Zones** button. Remember to save regularly.

Continue to add zones, ensuring that ALL areas within the fleet's regular operating area are covered by a zone. It is ideal to have smaller zones in the central busier areas to improve response times, and then increase the size of the zones as you expand out into the regional and farming areas. The zones can be whatever shape is required.

Once you have completed adding all the zones, ensure to save the work that you have done using the Save.

18. Appendix 2 – SmartVOIX Text-to-Speech Desktop Installation

18.1. Introduction

This document provides the installation details for installing Cepstral text-to-speech application which is utilised by the SmartMove Dispatch Client for overriding Interactive Voice Response (IVR) pronunciation.

The Dispatch Client gives the Fleet Manager/Operator the ability hear the pronunciation of Areas/Streets/Places as would be heard by a customer using the IVR system. The Fleet Manager/Operator then has the ability to make changes to the pronunciation if necessary.

The Cepstral text-to-speech application is free to download and use (with limitations). The Call Centre will need to purchase a licence from Cepstral for it to work without limitations.

18.2. Step 1. Download the Cepstral Software

Using a web browser, go to http://cepstral.com/downloads/. Here, you'll find installation files for different voices. Find the voice that your Call Centre's IVR system uses and then download the relevant file for your operating system. For example, if your IVR system uses UK English – Lawrence and the computer running the Dispatch Client is a Windows Vista (32bit) machine, the file

http://downloads.cepstral.com/cepstral/windows/Cepstral_Lawrence_windows_5.1.0.msi would need to be downloaded:

		UK English		
Lawrence	Mac OS X	72,612 KB	5.2.0	History FAQ Issues
	Windows 32	67,600 KB	5.1.0	History FAQ Issues
	Windows 64	[filesize]	5.2.0b3	History FAQ Issues
	i386-Linux	64,188 KB	5.1.0	History FAQ Issues
	x86-64-Linux	64,400 KB	5.1.0	History FAQ Issues
	Sparc-Solaris	64,700 KB	5.0.0	History FAQ Issues
	i386-Solaris	64,232 KB	5.1.0	History FAQ Issues

18.3. Step 2. Install the Cepstral Software

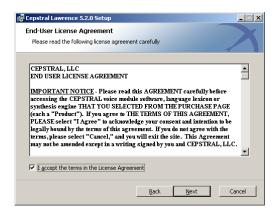
1. Execute the file that was downloaded from the previous step. It may take a few seconds to start running – please be patient.

2. The **Welcome** dialogue will be displayed.



Click the **Next** button.

3. The **End-User Licence Agreement** dialogue will be displayed.



Tick the licence acceptance check box then click the **Next** button.

4. The **Choose Setup Type** dialogue will be displayed.



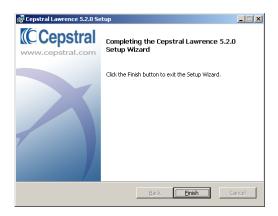
Click the **Typical** button.

5. The **Ready to Install** dialogue will be displayed.



Click the **Install** button.

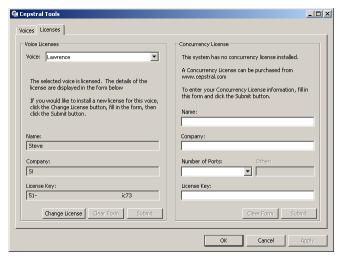
6. Once installation has been completed, the **Completing the Cepstral Setup Wizard** dialogue will be displayed.



Click the **Finish** button.

18.4. Step 3. Enter the licence key

- 1. Run the Cepstral Tools program via Start->Programs->Cepstral->Cepstral Tools.
- 2. The **Cepstral Tools** dialogue will be displayed.

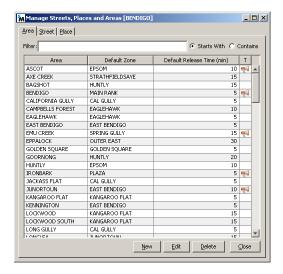


3. Click the **Licenses** tab.

- 4. Enter the **Name**, **Company** and **License Key** fields with the information received from SmartMove.
- 5. Click the **Submit** button then the **OK** button.

18.5. Step 4. Checking/Correcting Pronunciation

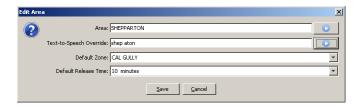
- 1. Load the SmartMove Dispatch Client.
- 2. Press F11. The Manage Streets, Places and Areas dialogue will be displayed.



- 3. You will notice a "T" column in the table. The column will show a megaphone icon if the pronunciation of the Street, Place or Area has been overridden by you. Initially, no Streets, Places or Areas will have been overridden.
- 4. To check the default pronunciation of the Street, Place or Area, double click on an entry in the table. The **Edit Street/Place/Area** dialogue will be displayed.



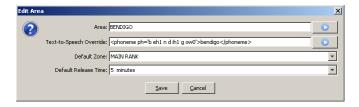
- 5. To listen to the default pronunciation, press the **Play** button next to the original name.
- 6. To override the pronunciation, type an alternative spelling in the **Text-to-Speech** field and press the corresponding **Play** button to hear the pronunciation.



The spelling you use in the second field affects only the pronunciation and does not appear anywhere. You can be creative in how you spell names to achieve the result you want. For example, try 'SHEP ATON' instead of 'SHEPARTON' or 'MILDJURA' instead of 'MILDURA'.

If you still cannot get the right pronunciation you will need to spell the name out in phonemes. A full list of the possible phonemes is given in section 18.6. An example for the word "BENDIGO" is given here:

<phoneme ph='b eh1 n d ih1 g ow0'>bendigo</phoneme>



7. Continue to modify the spelling through trial and error until you are happy with the pronunciation. Press the **Save** button to save the changes.

18.6. Phonemes

	UK English					
t	[t]ap - [t] ae1 p wa[t]er - w ao1 [t] er0 ba[t] - b ae1 [t]	sh	[sh]ip b - [sh] ih1 p [s]ure - [sh] uh1 r o[c]ean - ow1 [sh] ah0 n cla[sh] - k l ae1 [sh]	er	[ear]th - [er1] th b[ir]d - b [er1] d m[er]ge - m [er1] jh off[er] - oa1 f [er0]	
р	[p]at - [p] ae1 t cam[p]er - k ae1 m [p] er0 sto[p] - s t oa1 [p]	zh	vi[s]ion - v ih1 [zh] ah0 n ca[s]ual - k ae1 [zh] uh0 l mira[g]e - m ih0 r a1 [zh]	ah	[a]bout - [ah1] b aw0 t b[u]t - b [ah] t m[o]nkey - m [ah1] ng k i0	
b	[b]ook - [b] uh1 k a[b]rupt - ah0 [b] r ah1 p t ri[b] - r ih1 [b]	h	[h]ello - [h] eh1 l ow0 loop[h]ole - l uw1 p [h] ow0 l	а	f[a]ther - f [a1] dh er0 d[a]nce - d [a1] n s c[ar] - k [a1]	
d	[d]one - [d] ah1 n ca[d]et - k ah1 [d] eh1 t ba[d] - b ae1 [d]	m	[m]an - [m] ae1 n co[mm]on - k a1 [m] ah0 n ga[m]e - g ey1 [m]	oa	[o]n - [oa1] n c[o]ffee - k [oa1] f i0 p[o]t - p [oa1] t	
k	[c]amera - [k] ae1 m r ah0 li[k]ely - l ay1 [k] l i0 ar[ch]itect - a1 [k] ih0 t eh0 k t ja[ck] - jh ae1 [k]	n	[n]ew - [n] j uw1 ca[nn]on - k ae1 [n] ah0 n ma[n] - m ae1 [n]	ao	[aw]e - [ao1] b[ou]ght - b [ao1] t d[oor] - d [ao1] r s[aw] - s [ao1]	
g	[g]ood - [g] uh1 d bi[gg]er - b ih1 [g] er0 pe[g] - p eh1 [g]	ng	ba[ng] - b ae1 [ng] sitti[ng] - s ih1 t ih0 [ng]	uh	b[oo]k - b [uh1] k f[u]ll - f [uh1] l c[ou]ld - k [uh1] d	
ch	[ch]art - [ch] a1 t [c]ello - [ch] eh1 l ow0 na[t]ure - n ey1 [ch] er0 cat[ch] - k eh1 [ch]	r	[r]eason - [r] i1 z ah0 n ba[rr]el - b ae1 [r] ah0 l	uw	[00]ps - [uw1] p s m[00]n - m [uw1] n f[00]l - f[uw1] l ch[ew] - ch [uw1]	

jh	[j]ack - [jh] ae1 k di[g]it - d ih1 [jh] ih0 t sol[d]ier - s ow1 l [jh] er0 fu[dg]e - f ah1 [jh]	ı	[l]ate - [l] ey1 t me[ll]on - m eh1 [l] ah0 n fu[ll] - f uh1 [l]	ay	[i]vy - [ay1] v i0 pr[i]de - p r [ay1] d b[uy] - b [ay1]
f	[f]at - [f] ae1 t tele[ph]one - t eh0 l ih0 [f] ow1 n stu[ff] - s t ah1 [f] lau[gh] - l a1 [f]	w	[w]ater - [w] ao1 t er0 q[u]een - k [w] i1 n cob[w]eb - k a1 b [w] eh0 b [wh]ether - [wh] eh1 dh er0	aw	[ou]t - [aw1] t h[ou]se - h [aw1] s c[ow] - k [aw1]
v	[v]arious - [v] e@1 r i0 ih0 s ha[v]e - h ae1 [v] o[f] - ah1 [v]	j	[y]ellow - [j] eh1 l ow0 b[ea]uty - b [j] uw1 t i0 will[i]am - w ih1 l [j] ah0 m n[e]ws - n [j] uw1 z	oy	[oy]ster - [oy1] s t er0 b[oy] - b [oy1]
th	[th]in - [th] ih1 n ma[tth]ew - m ae1 [th] j uw0 ba[th] - b a1 [th]	i	sh[ee]p - sh [i1] p k[ey] - k [i1]	ow	[o]bey - [ow0] b ey1 fl[oa]t - fl ow1 t m[ow] - m [ow1]
dh	[th]en - [dh] eh1 n ba[th]ing - b ey1 [dh] ih0 ng brea[th]e - b r i1 [dh]	ih	[i]m[a]ge - [ih1] m [ih0] jh b[i]t - b [ih1] t sh[i]p - sh [ih1] p	ey	[a]te - [ey1] t b[a]con - b [ey1] k ah0 n spr[ay] - s p r [ey1]
s	[s]it - [s] ih1 t [ps]ychology - [s] ay0 k a0 l ah0 jh i0 mi[c]e - m ay1 [s] ma[ss] - m ae1 [s]	eh	[e]nd - [eh1] n d g[e]t - g [eh1] t f[ea]ther - f [eh1] dh er0	e@	[air] - [e@1] f[air]ly - f [e@1] l i0 th[ere] - dh [e@1]
z	[z]ero - [z] i1 r ow0 [x]ylophone - [z] ay1 l ah0 f ow0 n qui[z] - k w ih1 [z] boy[s] - b oy1 [z]	ae	[a]frica - [ae1] f r ih0 k ah0 c[a]t - k [ae1] t b[a]nk - b [ae1] ng k	i@	[ear]ring - [i@1] r ih0 ng w[ea]ry - w [i@1] r i0 h[ere] - h [i@1]