



Workshop Process Manager Field Operations Manager

Executive Summary

Prepared By

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Introduction

AutoDealerVision is an automotive, agricultural and materials handling dealership software product designed to help streamline the way motor dealer and materials handling workshops do business. In particular it is designed to increase workshop productivity and efficiency, and to help elevate customer service levels to the highest possible standards.

AutoDealerVision has an onsite workshop management application (Workshop Process Manager) and an offsite mobile technician management application (Field Operations Manager). Both applications have been designed with user in mind, with an easy and functional tracking system which not only speeds up in-house processes, but gives all staff up to the minute information on the exact status of repair orders, allowing quick and easy updates to customers.

Workshop Process Manager (WPM) was originally conceived due to an expression of interest from a Toyota dealer in implementing an electronic system that would facilitate existing service job management requirements from Toyota's TSM program. This would require provision of accurate and timely means of tracking workshop jobs whilst in progress, recently completed, or scheduled to start work. In consultation with Australia's largest Toyota motor vehicle dealer – Sci-Fleet Toyota – Hi-Powered Networking and HarrisonGraham Technologies worked to expand the model to include much needed functionality with respect to Repair Order (RO) management, scheduling, and job allocation. This includes easy searching functions, email alerts for comments and completed jobs, and recently the option to book jobs in advance with multiple day access.

Field Operations Manager (FOM) was a concept initially discussed with one of Australia's premier material handlers, Toyota Material Handling Queensland. Due to the requirement for offsite management of technicians, the system needed to not only track current repair orders, but the controllers needed a quick and effective way to perform everyday tasks, such as booking jobs well in advance, and tracking parts allocation more consistently. The resulting system (FOM) allowed all of this functionality that was previously not available with the manual system. Field Operations Manager includes quick client search, scheduling, job allocation, the ability to differentiate between urgent and standard jobs and powerful reporting functions.

AutoDealerVision offers DMS integration to several packages including Pentana Solutions DealerPro & ERA2, and EBS. DMS integration is not a requirement, however, and the system can function effectively without any interaction with a DMS system. ADV employs a client/server model, and it is possible to configure ADV to view information in remote locations simultaneously, if suitable network connectivity and means of authentication is provided.

Why Use AutoDealerVision

AutoDealerVision eliminates the need to use a manual system in your workshop. This allows Workshop Controllers, Technicians, Service Advisors and Managers to know the exact status of each repair order at any given time, allowing for greater control and customer service. Customers will no longer have to wait on hold, or be left unattended at the front counter, while Service Advisors check with the technician or controller about the current status of a particular job. With a quick look at the screen they will know straight away whether a job has been started yet, is currently being worked on, or is waiting on parts, etc. The Service Advisors can also be more readily proactive in calling customers to let them know if their vehicle may be delayed or if they need to receive approval for work to continue, just by a glancing at the screen. The Workshop Controller and Service Managers will know if Technicians are continually running over the expected job duration. The controller will also be warned if a job needs to be started to make pickup time. These are only a few of the benefits of using the ADV products at your workshop.

How Workshop Process Manager Works

The process for using ADV: WPM has been based around existing, paper-based systems used in most dealerships today. The system is probably best simplified into a two step process:

Step 1: RO Entry

 RO's are initially entered into WPM via the RO Manager interface. Here, useful data is collected about the RO, and stored in the main system database. For integrated DMS systems, most of this information is populated from the DMS database once the RO number has been entered. ROs can be entered as either standard workshop jobs, or 'express service' jobs, for simple repairs or servicing. These repairs orders can be entered days, weeks or months in advance.

D Count			Finished 0	_	_	_	_		-			Sche	eduled Warni	ings: 1	0	lver Ti	me Warrings: 1	0	Express (Workshop) Al
press R nallocate		Progress 4 When b Stoppage 2 In Off	el Align 0 ice 2						RO	Mana	ger				F	ick Up	Warnings: 2	Date	Monday	, 6 October	2008
Job	RO	Gustomer Name	Tech		Queue	SA		Vehicle Type	Rego	Scheduled Time	Started Time	Est. Dur.	Pick-Up	107,9	Coste	Galled	Comments			Job Statu	s
1	RBX606	ERIC PAGEHANIFY	6965 Mat	~	1	BD	~	CONMODOR	248IOL		10:58 AM	2.40	4:00 PM				DK: 10:58 AM: P & DK: 10:58 AM: 90			Job Sto	opage
2	RBX624	DON FERGUSON	6058 Ray	~	1 🗸	BD	~	RODEO	882KZX			1.20	11:00 AM							Not Sta	ted
3	RBX603	HARVEY COLDICOTT	6967 Michael	~	1	AG	~	ASTRA	323FZY		11:13 AM	3.10	5:00 PM				DK: 11:00 AM: P& DK: 11:00 AM: 75			In Progr	ess
4	RBX589	WORN FINANCIAL	6031 Gary	~	1	RH	~	UTILITY	976LBL		11:01 AM	2.20	1:00 PM			~	DK: 11:01 AM: RT DK: 11:01 AM: 1S	, BLUE1	TOOTH	In Office	
5	RBX571	JULIET HANCOCK	6029 Noel	~	1 🚩	AT	¥	RODEO	634KOF		11:02 AM	0.10	3:00 PM				DK: 11:02 AM: LIS	т		In Progr	ess
6	RBX619	DAVID VIYERS	6061 Mat	~	1	BD	~	CANRY	436LDH		11:03 AM	1.10	5:30 PM				DK: 11:03 AM: W. DK: 11:03 AM: BE		DLINING	Job Sto	opage
7	RBX643	RALPHWEATHER	6017 Jayme	~	1 🔽	AG	~	CONMODOR	WRX24T	1:00 PM		0.50	12:00 PM				DK: 11:04 AM: LIG	HT ON		Not Sta	ted
8	RBX620	LUTHERAN CHURCH	6920 Michael	~	1	BD	~	CONMODOR	867KSD		11:05 AM	1.20	3:00 PM			~	DK: 11:05 AM: RT DK: 11:05 AM: 15			In Office	,
9	RBX064	LAURAN CRAMPTON		~	1 🚩]	~	ASTRA	LOZ84			2.20	4:00 PM				DK: 11:05 AM: PA	RK SENS	SORS	Unalloc	ated
10	RBX595	OLIVE CLISSOLD	6058 Ray	~	1 🚩	AG	~	ZAFRA	377JCB	11:00 AN		1.10	12:00 PM				DK: 11:06 AM: SE	RVICE, V	VINDOW	Not Sta	ted
11	RBX653	WESTPOINT	6061 Mat	~	1 💌	BD	~	C/SPORT	232IPO			1.90	5:30 PM				DK: 11:08 AM: 60H	, TYRE,	BAR	Not Sta	ted
12	RBX613	GRAHAM GOODALL	6058 Ray	~	1	BD	~	RODEO	031HIC			5.30	4:00 PM 7/10/2008				DK: 11:09 AM: 40/ FAN	50K, WI	NDOW, CD	Not Sta	ted
13				~	~		Y					0.00									
14				~	~		~	1				0.00					DK: 11:17 AM: TO	VALUE AND	CTADT		
15	RBX651	ANDREA MOORHEAD	6017 Jayme	~	1	BD	*	ASTRA	588HRV		11:17 AM	1.00	4:30 PM				BONNETT	iv ini, Ni	JOINNI,	In Progr	ess
16	RBX887	ROBERT REIS	6031 Gary	~	1 🔽	BD	¥	ADVENTRA	RSR78		11:19 AM	2.30	12:00 PM				DK: 11:19 AM: 45	, BFF		In Progr	ess .
17	RBX657	JOHN STRICKLAND		~	1 🔽	BH	~	CAPTIVA	646JVP			0.50	12:00 PM				DK: 11:19 AM: HA	RD TO S	TART	Unalloc	sted

Figure 1: Entering RO information into RO Manager

 Workshop Controllers, or other nominated personnel, can then allocate jobs to technicians by their technician code, and also allocate the associated Service Advisor for that job. Estimated job duration must be entered at this time, or retrieved from the DMS, if available.

Step 2: Ongoing RO Management

- As the workday progresses, Workshop Controllers can start, stop, reallocate and reschedule jobs as required. The WPM system provides visual alerts for jobs that might run overtime, or that will not be completed before the customer pickup time (based on estimated job time), alerting the Workshop Controller and Service Advisor that the customer may need to be called.
- As jobs are marked as completed by the Workshop Controller, Service Advisors are optionally emailed to advise them of job completion, in addition to visual cues from the Process Control Board, enabling the customer to be contacted as soon as possible to organise pickup.

												Over Time Wa	arnings: 5	O Expre	ss 🔿 Wr	arkshop () All
									R ● Manag	ər		Pick Up Warn	ings: 9	Date Frid	ву , 4	July	2008
Job	RO	Tech	*	Queue	SA		Job Status		Comments	Vehicle Type	Rego	Started	Est. Dur.	Pick-Up	W/A	Costed	Called
57	D24162	6058 Ray	~	1	AG	*	In Office	~	AG: 2:58 PM; CAR IS OVERNIGHT TIL 11AM, PART WILL BE HERE @ 8:304M 27/8 PLS REPLACE PART AND REASSESS. DK: 9:08 AM; LACKING POWER UNDER ACCELERATION (This tob was stopped automatically on 3/07/2008) (This job was stopped automatically on 3/07/2008)	ASTRA	573GCS	2:07 PM 1/07/2008	5.00	9:00 AM 3/07/2008	•	•	
34	D24310	6020 O'Grady	*	1	BD	*	In Office		DK: 8:35 AM: PROGRAM REMOTE		646JHO	10:11 AM	0.20	10:30 AM			
13	D24288	6020 O'Grady	•	1	BD	~	Job Stoppage	~	DK: 8:14 AM: 50K SERVICE AND CHANGE COOLANT	COMMODORE	231HYB	8:14 AM	2.00	3:00 PM			
51	D24277	6020 O'Grady	~	1 ~	AG	~	In Progress	~		COMMODORE	166KTG	11:03 AM	1.20	2:00 PM			C
21	D24273	6965 McBean	~	1	BD	~	In Office	*	DK: 8:13 AM: ***********************************	BARINA	654JYL	7:57 AM	1.50	10:00 AM		~	
40	DD24270	6967 O'Brian	~	1	AT	~	In Progress	¥	DK: 10:42 AM: P/S FLUSH AND ON CAR INJECTOR SERVICE			11:05 AM	1.20	2:00 PM			
12	D24276	6967 O'Brian	~	1	BD	~	In Office	~	DK: 8:13 AM: ***********************************	JF VIVA	142JMU	7:57 AM	1.60	10:00 AM			E
24	D24293	6967 O'Brian	~	1	BD	۷	Not Started	~	DK: 10:43 AM: 60K SERVICE AND COOLANT WARNING LIGHT ON	VZ COMMODORE	245JEU		2.00	2:00 PM	•		
47	D24122	6967 O'Brian	•	1 🕨	AT	~	Job Stoppage	~	DK: 10:49 AM: ROOF NOT OPERATING	TIGRA	737LAP	6:24 PM 30/06/2008	500.00	4:00 PM 3/07/2008			
50	D24271	6967 O'Brian	~	1	AT	~	Tech Finished	~	DK: 10:36 AM: 3K SERVICE	CAPTIVA	173KVU	10:36 AM	0.50	12:00 PM			
10	D24286	6061 Stolar	~	1	BD	~	In Progress	~	BD: 8:41 AM: SCUDS PLEASE MATE BD: 8:41 AM: ok to do work except bonnet struts DK: 7:56 AM: 180K SERVICE	COMMODORE	561FBR	7:57 AM	1.00	2:00 PM			
41	D24290	6061 Stolar	~	1	BD	~	Not Started	¥	DK: 10:12 AM: SERVICE VEHICLE LIGHT ON		290IYG		1.00	2:00 PM			
62	D24183	6018 Luke	~	1	AT	~	Job Stoppage		DK: 4:12 PM: GEARBOX AT GEARBOX SHOP DK: 9:01 AM: TOWED IN - POSSIBLE CLUTCH		631JXE	2:09 PM 1/07/2008	4.00	5:00 PM			E
31	D24281	6018 Luke	~	1	AT	~	Tech Finished	~	DK: 8:39 AM: 110K SERVICE	RODEO	353KPP	10:31 AM	1.00	12:00 PM			

Figure 3: Column and Sorting (Technician Sort Order shown) of RO Management using the RO Manager Interface

 RO Manager has many functions including the ability to individually customise the interface to the user specifications. The user is able to sort any columns' and may filter jobs by a particular column value. Search functions allow repair orders to be tracked down by their RO number, rego or job (or key tag) number. Users have the ability to print reports with the same layout as the current day sheet information, allowing the workshop controller and service advisors to have greater control over planning and tracking their current and future days work.

vise the customer.
OK Cancel Edit Existing Comments

Figure 4: Inbuilt Message System for Urgent Comment Notification

• RO Manager also has the optional feature of an inbuilt message system which allows the Workshop Controller and Service Advisor to receive urgent messages in relation to their repair orders in either a pop-up or email form. These messages update automatically on RO Manager.

The Process Control Board

• The Process Control Board is updated in real time from the RO manager system. It provides a quick visual means for Service Advisors to check the status of a customer job, eliminating the need for them to physically go and check the current status board, or find and/or communicate with the Workshop Controller or technicians. This can mean a customer enquiry as to the status of their vehicle can be answered literally in seconds rather than minutes, undoubtedly greatly improving customer satisfaction with the service team at the dealership.



Not Started In Progress	Job Stoppage Tech Indiana Wheel Algo	
Logged in as: System Admin		<u> </u>
	Finne 5. December 10	

Figure 5: Process Control Board for Current Days Repair Orders

• The Process Control Board is configurable to show up to 24 hours at a time, and has customisable status indicators (over and above the standard compulsory statuses) to suit dealership requirements.

					CON	TROL B	OARD					
fech Name	6am	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm
at cBean-6965					1 0261 80			10 592,040 AG				
ay esbit-6058					2 UNIREG AG	11 UNREG BD						
chael Drian-6967					3 UNREG BD			3(C) UNREG ED 3(C) UNREG				
chael Grady-6920					4 UTJ321 AG			EO				
ıy Rolfe-6031					5 079JINZ UD		9 BJB60 AG					
errin-6029					6 6611X(3 8D							
at Stolar-6061					7 081HTN RD							
yme ilson-6017					14 672K RL RH		16 444,HB RH					

Figure 6: Control Board with Allow Drag Option

- The Process Control Board also has an option to allow unallocated Workshop jobs to be moved from RO Manager onto the Control Board and moved around the board as required.
- Jobs that have been moved onto or around the board will automatically update in RO Manager.
- The drag option allows workshop controllers to use the board as a day planner for their technicians.
- It is conceivable that dealerships could display this board in service waiting areas (for example on a flat panel monitor or plasma/LCD TV). This we believe would not only give a waiting customer the capability to view their own vehicle's status, but also give an appreciation for the advanced technology used by the dealership to ensure the most efficient means of returning their vehicle in a timely manner.

How Field Operations Manager Works

Like WPM, the process for using ADV: FOM has been based around existing, paper-based systems used in most dealerships today. The system is probably best simplified into a two-step process:

Step 1: RO Entry

• RO's are initially entered into FOM via the add job screen. Here, useful data is collected about the RO, and stored in the main system database. RO's can be entered as either standard workshop jobs or urgent jobs.

ADV - Field O	peration Manag	jer - Change J	lob									J
Client							Job Details -					
Client Name	POZZEBONS - STA	NTHORPE				•	Technician	12-Bob Tuohy	•	Lodged Date 16/0	0172008 9:08:52 AM	1
Location [-1	Controller	Paul Bell	•	Lodged By Paul	IBell	-
							Date	16/01/2008	-	All RO Status		•
Comments							Time	At 💌	-	Queue 1	* *	
SERVICE DO	NT SEND DREW	ELLLWOOD RD)			<u> </u>	Contact	TONY			Credit Check Perform	ned
							Contact Ph	0439530498		C Select New Date	e to Boll Job	
								, Urgent Job?		11/02/2008	Select Date	
J						~		orgen(300 r		1		
Repair Orders												
Job Type	R0 Number	Rego	Model	Frame	Machine Hrs	W	ork Description		Parts Due	Rolled To	RO Status	-
Retail	💌 RG5235	14774	2SDK8	14774		FUL	L SERVICE , F	AN BELT AND		11/02/2008	Job Stopp 💌	
Retail	F RG5236	30798	42-4FG15	30798		SEF	RVICE			11/02/2008	Job Stopp 💌	
Retail	R G5237	110816	42-6FG15	31133		SEF	RVICE			11/02/2008	Job Stopp 💌	
Retail	▼ RG5238	14617	02-5FG15	14617		SEF	RVICE			11/02/2008	Job Stopp 💌	
	▼ RG6963		5FB18			CH	ECK PROBLEM	WITH MACHINE		11/02/2008	Job Stopp 💌	
Hire	F RG6964	HF2123	42-7FG25	20829						5/02/2008	In Office 📃 💌	
Hire	¥	HE2123	42-7EG25	20829		SE	BVICE			11/02/2008	Joh Stopp 🔍	-
Credit Check	Allocate R0:	s Delete	RO De	lete Job						(JK Cano	el

Figure 1: Entering RO information into Field Operations Manager

 Workshop Controllers, or other nominated personnel, can then allocate jobs to technicians, enter the repair orders attached to the job, allocate RO's and add any other information that may be required. The job status and any updated information is changed in the add/change job screen.

Jobs can be added days, weeks, months or even years in advance eliminating the need to manually diarise service jobs. At any time the user is able to view future dates which enables better utilisation of time and technicians.

Step 2: Ongoing Field Operations Management

• As the workday progresses, Workshop Controllers can start, stop, reallocate and reschedule jobs as required. All urgent jobs are displayed in red at the top of the screen for easy visual access. If a job is In Progress it will display the repair order in green. Once jobs are completed they are marked In Office and the line appears black and drops to the bottom of the screen.

		05 Not Star		ch Finished 0		0										
ge nall	nt 2 located 7	5 In Progr 9 Job Stop	ess 4 <mark>Aw</mark> opage 190 <mark>Su</mark>	v <mark>aiting Parts</mark> 0 blet 6			Ope	ratio	ons	M	anager	Date D	isplayed V	/ednesday, 13 Febru	Jary 1	2008 💌
ſ	Client		Contact	Contact	Comments	Time	Technician	Controlle	Tune	Qu	Started	RO	Rego	Work	Urg	Job
		HS - LAR	Name	Number 0439604758		1.010	29-Darren		1900	1	8/02/2008 12:44 PM	110	mogo	Description 3 MACHINES N	⊡	Status Job Stopp
	UNNING PA		PAUL	0433004730			20-Darrvl		Retail	1	0/02/2000 12:441 M			ELECRICAL PR		Not Started
_		AUSTRA		38959536	III IIII		41-Rob Sc			1		RG7301	HF1659	BLOWN SIDE S		Not Started
1	EE GEES B		DEAK	0413342244			49-Luke G		Retail		8/02/2008 1:21 PM	RG7322	C30576	NO GO PEDAL		Job Stopp.
-				0410042244	BEPAIR		33-Guy Be			1	0/02/2000 1.2111 M	1101 322	HF2467	GAS FILL VALV		Not Started
					REPAIR		33-Guy Be		THIC	1			111 2401	BOTTLE NEED		Not Started
			JOHN PER		REPAIR		03-Marco		Hire		8/02/2008 2:20 PM	RG7329	T00169	BLOWN SIDE S		Sublet
	KZO NOBEL		KIM LITTEE	3892-8888	SERVICE		48-Kyle Bu		Hire	1	13/02/2008 3:30 PM	1101020	BT07269	SERVICE		In Progress
A	KZO NOBEL	·YERON	KIM LITTEE	3892-8888	SERVICE		48-Kvle Bu	Guy B	Hire	1	13/02/2008 3:30 PM		BT07266	SERVICE		In Progress
	KZO NOBEL		KIM LITTEE	3892-8888	SERVICE		48-Kyle Bu		Hire	1	13/02/2008 3:30 PM		BT04058	SERVICE		In Progress
	KZO NOBEL		KIM LITTEE	3892-8888	SERVICE		48-Kyle Bu		Hire		20/12/2007 10:58	RG3084	HF2709	SERVICE	Γ	In Progress
A	.P.I RICHL	ANDS			SERVICES		53 John R	Nigel	Hire	1	9/11/2007 9:46 AM	R94427	HF2652	s		Job Stopp.
A	.P.I RICHL	ANDS			SERVICES		53John R	Nigel	Retail	1			HF2652	DAMAGED LIFT		Not Started
Ρ	GH OXLEY		SCOTT		REPAIR		14-Gary Box	Nick	Hire	1	18/10/2007 1:21 PM	R97474	HF2091	NEEDS NEW D		Job Stopp.
D	AIRYFARM	ERS · TO			CHECK MA		51-Drew	Nick	Hire	1	29/11/2007 10:26		HF2392	CHECK BATTE		Job Stopp.
D	AIRY FARM	ERS - BO	GREG	3432 6246			48-Kyle Bu	Nick	Retail	1	14/11/2007 12:33	RG0079	HF2220	HEADGUARD D	Г	Job Stopp.
D	OBOY 1 -				REPAIR		41-Rob Sc	Nick	Hire	1		R93264	HF1726	REKIT LIFT CYL		Not Starter
Е	NERGEX - E	BANYO	FRED	34075455			03-Marco	Nick	Retail	1	13/12/2007 8:14 AM	R99365	1234F	P/STEER BRUS		Job Stopp.
A	MH DINMOI	RE -	KEVIN	38102144	REPAIR		32-Claude	Wayn	Hire	1			HF1484	PICK UP OLD G		Not Started
A	MH DINMOI	RE -					23-Mark N	Nick	Hire	1	8/02/2008 3:31 PM	RG1157	HF1900	LEVER BUSHE		Job Stopp.
A	MH DINMOI	RE -					23-Mark N	Nick	Hire	1	8/02/2008 3:31 PM	RG3719	HF1983	CHAINS, H/BRA		Job Stopp.
A	MH DINMOI	RE -					23-Mark N	Nick	Hire	1	8/02/2008 3:31 PM	R95906	HF2177	NEEDS NEW C		Job Stopp.
FI	IRST FLEET	- ACACIA	NOEL	0413881001	REPAIR		39-Wayne	Nick	Hire	1	22/11/2007 9:18 AM	RG0899	BT03458	NEEDS NEW H		Job Stopp.
С	ELLNET ·		MARK		SERVICE		49-Luke G	Guy B	Retail	1	18/01/2008 8:13 AM	RG5482	BT07450	NEED COVER F		Job Stopp.
ι.	INDSAY BR	OS TRAN	JOSH	0409607582	BEPAIR		23-Mark N	Paul B	Hire	1	26/11/2007 1:54 PM	RG1383	HF2963	FIT STANDARD	П	Job Stopp.

Figure 2: Ongoing Field Operations Management

• Field Operations Manager has reporting options as well as quick client search, RO search, rego search, the ability to filter jobs via technicians, controllers, job status or client and a quick sort order function on all columns.

Client				`•	Filter	auo	115 1	VIa	anager	Date Dis	played We	ednesday, 13 Februar,	y 200	18 💌
with the second s	Contact Name	Contact Number	Comments	Time	Technician	Controlle	Туре	Qu	Started	RO	Rego	Work Description	Urg	Job Status
AUSTRAL MASONRY	WHITEY		REPAIR		20-Darryl G	Paul	Retail	1	6/02/2008 1:43 PM	RG7077	CBL 06	NEED QUOTE		Job Stopp
CUNNING PAUL & TRA	PAUL	0412585602	REPAIR		20-Darryl G	Paul	Retail	1				ELECRICAL PR		Not Starte
DAIRY FARMERS	PAUL	0419245472	REPAIR		20-Darryl G	Paul	Retail	1	19/12/2007 11:34			WHEEL SEIZED		Job Stopp
DAIRY FARMERS	craig	0407131224	caloundra G		20-Darryl G	Paul	Retail	1	7/02/2008 8:07 AM	RG7150		NEEDS HEAD S		Job Stopp
WEYERHAEUSER AUS	BRIAN				20-Darryl G	Nick	Hire	1	25/01/2008 2:14 PM	RG4894	HF2218	STEER PINS &B	Γ	Job Stopp
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6166	FOL 31	SERVICE MACHI		Job Stopp
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6167	FOL 35	SERVICE MACHI		Job Stopp
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6168	FOL 40	5000 HR SERVICE		Job Stopp
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6169	FOL 50	SERVICE MACHI		Job Stop
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6170	FOL 52	SERVICE MACHI		Job Stop
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6171	FOL 53	1000HR SERVICE		Job Stop
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6172	FOL 54	SERVICE MACHI		Job Stopp
FOLLOWMONT TRANS	JOHN	3865-3137	SERVICING		20-Darryl G	Bill Ha	Retail	1	8/02/2008 3:50 PM	RG6173	FOL 55	1000 HR SERVICE		Job Stopp
CSR HUMES - MEEAND	TERRY		REPAIR		20-Darryl G	Paul	Hire	1	1/02/2008 9:01 AM	RG6687	HF2113	STEER LINKS A	Γ	Job Stopp
PENFOLD PROJECTS	STEVE	0418708510	REPAIR M		20-Darryl G	Paul	Retail	1		RG6730		1ST SERVICE		Not Starte
SUNSTATE COATINGS	PAT		REPAIR		20-Darryl G	Paul	Retail	1		RG7158	HF2741	STEER TYRES	Γ	Sublet
SUNSTATE COATINGS	PAT		REPAIR		20-Darryl G	Paul	Hire	1		RG7304	HF2740	NEED HORN	Γ	Not Starte
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		54932266	BEPAIR		20-Darrvl G	Paul	Retail	1				PEDALS LOCKED	Г	Not Starte

Figure 3: Field Operations Management Filtering Option

Security Systems

By default, security systems are in place to require authenticated access to view or change data, and some data can only be changed by users of a particular access level.

DMS system database information is obtained in a read-only manner, to ensure that the system can in no way effect the integrity of DMS data. Systems administrators can view and alter (fine-tune) DMS queries.

Support Systems

By default the system records most errors in an internal database table for analysis by Hi-Powered Networking support personnel. This information can also be made available to Dealership IT Managers and staff for internal support if required.

Pricing Model

AutoDealerVision has taken hundreds of man-hours to develop and test, and to provide the best solution for installation, updates, and support, it is only offered as a subscription based product. Licensing is based on a per dealership site (i.e.: per workshop), per month model, and this includes the initial software provisioning, ongoing support, and minor feature upgrades in addition to the standard bug-fix or patches. For the most part, client installation is simple and most people can accomplish this with very little instruction. Generally we recommend professional installation of the backend server system by Hi-Powered Networking, to ensure optimum results. This attracts a once-off fee that is quoted based on each site's particular situation.

Conclusion

As mentioned earlier, AutoDealerVision has many more features and utilities than can be outlined in this summary. Hi-Powered Networking and HarrisonGraham Technologies look forward to implementing and installing our product, and hope to follow up in the future with more products designed at helping dealers provide better service and support to their customers.

For more information or to request an onsite demonstration please visit the ADV website at <u>www.autodealervision.com.au</u> or contact Hi-Powered Networking either via Telephone (07) 3624 3740, or via email: <u>adv@hi-powered.net</u>.

Appendix A: System Requirements

Client:

- Windows XP Professional SP2 or Windows Vista Business or better.
- Windows 2003 Server Standard or better (Terminal Services clients).
- Requires Microsoft .NET Framework 3.0 or better.
- PC with 2.0Ghz processor (3.0Ghz recommended), minimum 256Mb RAM (512Mb recommended), 100Mb of free Disk space, and suitable LAN connectivity (Ethernet or Wireless)

Server:

- Microsoft SQL Server 2005. Express editions (freely available) supported for siteautonomous installations, but please note limitations of the express system before electing to use this product. Centralised installations supported via SQL Server Standard edition or better. If in doubt please contact Hi-Powered Networking.
- For Workshop Controller Systems running SQL Server Express edition : At least 3.0Ghz processor, 1Gb of RAM (2Gb recommended), 200Mb of free disk space, Ethernet based LAN connectivity highly recommended.
- For dedicated SQL Server installations, please consult with Hi-Powered Networking to obtain suitable requirements.

Network:

• Depending on update frequency, and average 1-10kbits/sec of bandwidth, per user, to the SQL server.

DMS Integration:

- CFS/DealerPro Authenticated user and password on MySQL RDBMS
- ERA2 Authenticated user for IBM Universe 2 RDBMS additional licensing may be required. UniRPC server must be configured and running.
- EBS Requires a custom module from EBS. Please contact Hi-Powered Networking for more information.
- Other DMS integration is currently under development, please feel free to contact Hi-Powered Networking to find out about the development status for your system.