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OPW-FMS AVI Solution



M1044-TAG -Automatic Vehicle Identification Tag Writer Guide







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For technician registration, see (missing or bad snippet)

For in-depth training via OPW University, see (missing or bad snippet)



ISO 9001:2015-Certified Quality Management System



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Section 1 Tag Writer Installation

This section shows the procedures necessary to correctly install Tag Writer. If you have Tag Writer installed on your PC you must uninstall the version you have before you can install a new version. If you have not installed Tag Writer on your PC before, you can skip to "Install Tag Writer" on page 12.

Topics in this section include:

- "Uninstall Previous Versions" on the next page
- "Install Tag Writer" on page 12
- "Configure Tag Writer" on page 15
- "Install Drivers" on page 17
- "Unsigned Driver Installations" on page 26



1.1 Uninstall Previous Versions

If you have Tag Writer installed on your PC you must uninstall the version you have before you can install a new version. Use the procedure below that is applicable to the Windows[®] version on your PC.

1.1.1 Uninstall for Windows XP



Click the Windows Start button in the lower left corner of the screen to open the Start menu.



Select Control Panel.



Select the Add or Remove Programs option.

🐻 Add or Re	emove Programs			
1	Currently installed programs:	Show upgates	Sort by: Name	~
Change or Remove	Skype** 4.1		Size	31.13MB 🔷
Programs	赐 SmartDesk		Size	136.0048
1	对 Smart/Fuel DailyPassword		Size	2.46/10
Add New	SQL Server 2008 R2 Management Objects		Size	21.30/10
Programs	SQL Server System CLR Types		See	4.2298
F	TagWriter		Size	28.36MB
AddiRemove	Tagenter 2 YD		Size	6.4798
	Repair			

Find **Tag Writer** on the window that comes into view. **Right Click** the file to open an option menu. Select the **Uninstall** option to remove the file.

1.1.2 Uninstall for Windows[®] 7



Click the Windows Start button in the lower left corner of the screen to open the Start menu.





Select Control Panel.



Select **Uninstall a program** from the Control Panel window.



Control Panel Home	Uninstall or change a program						
View installed updates	To uniostall a second color of from the list and then	slick Universall Channes on Pressie					
Turn Windows features on or	To uninstan a program, select it from the list and then	click onlinistall, change, of Repair.					
off	Organize 💌					10.1	
Install a program from the	Name	Publisher	Installed On	Gra	Verrion		
network	RhoenirSolWebrenice v64	Default Company Name	2/1/2016	244 KB	100		
	PSOI WCEService	OPW Fuel Management Systems	3/1/2016	168 KB	100		
	W Realter Card Reader	Realitek Semiconductor Corn	10/15/2015	100 00	6 3 273 49		
	SAP Crystal Reports runtime engine for .NET Framew	SAP	7/11/2016	215 MB	13.0.13.1597		
	ServiceEngine	OPW Fuel Management Systems	3/1/2016	360 KB	1.0.9		
	SiteConnect		10/17/2016				
	SQL Server Browser for SQL Server 2014	Microsoft Corporation	1/27/2016	9.81 MB	12.0.2000.8		
	SQL Server System CLR Types	Microsoft Corporation	1/27/2016	1.03 MB	10.0.1600.22		
	StarTeam Cross-Platform Client 14.0	Borland	9/7/2016		14.0.4.48		
	StarTeam SDK Runtime 14.0		9/7/2016		14.0.4.19		
	😚 Symantec Endpoint Encryption - Removable Storage	Symantec Corporation	10/19/2015	29.5 MB	8.2.1 MP11		
	😚 Symantec Endpoint Encryption Framework Client	Symantec Corporation	10/19/2015	131 MB	8.2.1 MP11		
	() Symantec Endpoint Protection	Symantec Corporation	7/14/2015	634 MB	12.1.671.4971		
	Synaptics Pointing Device Driver	Synaptics Incorporated	8/30/2017	46.4 MB	19.0.19.63		
	TagWriter	FM5/OTI	10/30/2017	12.6 MB	1.2.1		
(Validity Fingerprint	Validity Sensors, Inc.	10/19/2015	35.0 MB	4.5.133.0		
	Visual Studio 2010 Repair	Microsoft Corporation	1/27/2016	23.3 MB	10.0.40219		
	VEVNC Enterprise Edit	RealVNC Ltd.	10/19/2015		E4.5.1		
	VNC Mirror Driver 1.8.0	RealVNC Ltd.	10/19/2015		1.8.0		
	VNC Printer Driver 1.6.0	RealVINC Ltd.	10/19/2015		1.0.0		
	Yahoo Search Set	Yahoo Inc.	7/19/2017				

Find **Tag Writer** on the window that comes into view. **Right Click** the file to open the option menu. Select the **Uninstall** option to remove the file.

1.1.3 Uninstall for Windows® 8



Push the Windows key plus the C key at the same time. The Charm Bar opens.



Select the Search icon





Type "Control Panel" into the search bar and select the Control Panel button when it comes into view.



Select Uninstall a program from the Control Panel window.



🕒 🗸 🖷 🕨 Control Panel 🕨	Programs Programs and Features				• 49 Search P	rograms and Features	\$
Control Panel Home	Uninstall or change a program						
View installed updates	To uninstall a program, select it from the list and then	click Uninstall, Change, or Repair.					
off	A					(ere	0
Install a program from the	Organize 👻					800	· •
network	Name	Publisher	Installed On	Size	Version		
	PhoenixSqlWebservice_x64	Default Company Name	3/1/2016	344 KB	1.0.0		
	PSQLWCFService	OPW Fuel Management Systems	3/1/2016	168 KB	1.0.0		
	Kealtek Card Reader	Realtek Semiconductor Corp.	10/15/2015		6.3.273.49		
	SAP Crystal Reports runtime engine for .NET Framew	SAP	7/11/2016	215 MB	13.0.13.1597		
	ServiceEngine	OPW Fuel Management Systems	3/1/2016	360 KB	1.0.9		
	SiteConnect		10/17/2016				
	SQL Server Browser for SQL Server 2014	Microsoft Corporation	1/27/2016	9.81 MB	12.0.2000.8		
	SQL Server System CLR Types	Microsoft Corporation	1/27/2016	1.03 MB	10.0.1600.22		
	StarTeam Cross-Platform Client 14.0	Borland	9/7/2016		14.0.4.48		
	StarTeam SDK Runtime 14.0		9/7/2016		14.0.4.19		
	😚 Symantec Endpoint Encryption - Removable Storage	Symantec Corporation	10/19/2015	29.5 MB	8.2.1 MP11		
	🔞 Symantec Endpoint Encryption Framework Client	Symantec Corporation	10/19/2015	131 MB	8.2.1 MP11		
	W Symantec Endpoint Protection	Symantec Corporation	7/14/2015	634 MB	12.1.671.4971		
	Synaptics Pointing Device Driver	Synaptics Incorporated	8/30/2017	46.4 MB	19.0.19.63		
	TagWriter	FMS(OTI	10/30/2017	12.6 MB	1.2.1		
(Validity Fingerprint	Validity Sensors, Inc.	10/19/2015	35.0 MB	4.5.133.0		
	Visual Studio 2010 Repair	Microsoft Corporation	1/27/2016	23.3 MB	10.0.40219		
	VEVINC Enterprise Edit	RealVNC Ltd.	10/19/2015		E4.5.1		
	VNC Mirror Driver 1.0.0	RealVNC Ltd.	10/19/2015		1.8.0		
	VNC Printer Driver 1.6.0	RealVNC Ltd.	10/19/2015		1.6.0		
	Yahoo Search Set	Yahoo Inc.	7/19/2017				
	Currently installed programs Total size: 23 111 programs installed	1 GB					

Find **Tag Writer** on the window that comes into view. **Right Click** the file to open an option menu. Select the **Uninstall** option to remove the file.



1.2 Install Tag Writer

Open the Tag Writer Installer.

Select the setup.exe file. The Tag Writer Setup Wizard comes into view.



Click Next. The Select Installation Folder screen comes into view.

步 TagWriter	- 🗆 🗙
Select Installation Folder	
The installer will install TagWriter to the following folder.	
To install in this folder, click "Next". To install to a different folder, enter it be	low or click "Browse".
Eolder: C:\Program Files	Browse
	Disk Cost
Install TagWriter for yourself, or for anyone who uses this computer: Everyone Just me	
Cancel < Back	Next >

Click Next. The Confirm Installation screen comes into view.



₿	TagWriter -	. 1	×
Cor	firm Installation		-
Theim	staller is ready to install TagWriter on your computer.		
Click '	'Next'' to start the installation.		
	Cancel < <u>B</u> ack	N	ext >

Click Next. The Installing Tag Writer screen comes into view.

₽	TagWriter	_	□ ×
Installing TagWriter			
TagWriter is being installed.			
Please wait			
	Cancel	Back	<u>N</u> ext >

Wait for the installation to complete. When the installation ends, the **Installation Complete** screen comes into view.



遢	TagWriter -		×
Install	ation Complete		
TagWriter	has been successfully installed.		
Click "Clos	se'' to exit.		
_			
Please use	e Windows Update to check for any critical updates to the .NET Framework.		
	Cancel < Back	Clos	e

Click Close.



1.3 Configure Tag Writer

1.3.1 Registration Center Dialog

To complete the registration procedure you must be connected to the internet. When you first run the Tag Writer you will be prompted to register yourself as an installation center. You will first see the **Centre Details** screen.

Ce	entre Details ×
Installation Centre ID:	1486
Centre Name:	
Country:	
Province:	
City:	
Address:	
Area Code:	
Tel:	
Fax:	
Email:	
	Update

Type the applicable information into the fields. Click Update. The Registration screen will come into view.

1.3.2 Register Tag Writer

	Registration	- 🗆 ×			
		Cancel			
To obtain a new ke (Quote Company II	ey contact:), Product ID, Offline ID):				
Email:	techsupport@oti-africa.co.	za			
Tel.:	+27 21 526 9100				
Company ID:	First Time users				
Expiry Date:	First Time users				
Product ID:	First Time users				
Offline ID: 85111	F8AA4FD1759D563CF915A	AAD5BB			
Registration Ty	/pe				
🖸 Online	C Offlir	ie			
	I				
	Submit Key				
Contraction of the second s					

Note the Offline ID. Type this into the blank field at the bottom of the window. Click Submit Key.



This will assign a Company ID and a Product ID to be used the next time a registration is required. This original key can be used to assign the Company ID and Product ID even once it has expired. You will then get a message telling you the key has expired. You can then follow the steps below.

1.3.3 Renew Registration

	Registration	- 🗆 🗙		
		Cancel		
To obtain a new I (Quote Company	key contact: ID, Product ID, Offline ID):			
Email:	techsupport@oti-africa.co	za		
Tel.: Company ID:	+27 21 526 9100 2			
Expiry Date:	07-07-2016			
Product ID:	1			
Offline ID: 8511	1F8AA4FD1759D563CF915A	AAD5BB		
- Registration 1	уре			
 Online 	C Offli	ne		
[Submit Key]				

The next time a registration is necessary, the registration dialog will come up as in the screen above. You will have two options available: an online or offline registration.

Online

To use the online method to register you must select the **Online** radio button and then click the **Submit Key** button. A valid key in the AVI database is necessary. If one is not available to you, call, 1-877-OPW-TECH (877-679-8324) and request another. It is recommended that you use this method of registration when you first use the Tag Writer as it will give you a longer period of use before it becomes necessary to re-register.

Offline

If you cannot use the online registration method you must email your company ID, Product ID and Offline ID to <u>OPW Fuel Management Systems Technical Support</u>. An offline key will be sent to you. Paste this key into the text box that becomes available when you click the **Offline** radio button. Click the **Submit Key** button and you will again be able to use the Tag Writer as usual.



1.4 Install Drivers

1.4.1 Windows XP



Right click My Computer. Select Manage from the dropdown to open the Computer Management screen.



Select **Device Manager** from the list on the left side of the window.



There are 2 sets of drivers that must be installed. Typically, Windows XP installs the site controller (USB Serial Port or Silicon Labs CP210x USB to UART Bridge) for you however it won't install the Saturn 6000 (OTi Reader USB Com Port). If either doesn't get installed correctly they will appear in the device manager under 'Other Device'. If this is the case you need to do the following:

Found New Hardware Wizard	
	Welcome to the Found New Hardware Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy
	Can Windows connect to Windows Update to search for software? C Yes, this time only C Yes, now and every time Learniect a device (No, not this time) Click Next to continue.
	< <u>Back</u> <u>N</u> ext > Cancel

Select 'No, not this time' and click 'Next'.

Found New Hardware Wizard	
This wizard helps you install software for: USB <-> Serial If your hardware came with an installation CD of Hoppy disk, insert it now. What do you want the wizard to do? Install the software automatically [Recommended] Install from a list or specific location [Advanced] Click Next to continue.	
<u> < B</u> ack <u>N</u> ext > Cancel	

Select 'Install from a list or specific location (Advanced).'





Now select 'Include this location in the search' and deselect 'Search removable media'.

If you know the location of the drivers provided type it in to the text area provided. Alternatively, select 'Browser' and locate the driver folder.

Hardwar	Hardware Installation				
1	The software you are installing for this hardware: OTI Reader CDC has not passed Windows Logo testing to verify its compatibility with Windows XP. (<u>Tell me why this testing is important</u> .) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.				
	Continue Anyway				

If at any point you get presented with the following dialog, click 'Continue Anyway.'



1.4.2 Windows 7



Open device manager by right clicking on 'Computer' and selecting 'Manage.'



Select Device Manager on the left side of the window.



-

Constant Management					
C C C C C C C C C C C C C C C C C C C					
File Action View Help					
🗢 🌳 🙎 🖬 🚊 📓 🖬	(2) (2) (2) (2) (2) (2) (2) (2) (2) (2)				
Computer Management (Local Computer Management (Local Computer Tools Compu	Image: Static is Image: Computer Image: Comput	Actions Device Manager More Actions			
		I			

There are 2 sets of drivers we need to install normally Windows 7 installs the site controller (USB Serial Port or Silicon Labs CP210x USB to UART Bridge) for you however it won't install the Saturn 6000 (OTi Reader USB Com Port). If either doesn't get installed correctly they will appear in the device manager under 'Other Device'. If this is the case you need to do the following:

•	Search automatically for updated driver software
	Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.
+	Browse my computer for driver software

Select 'Browse my computer for driver software.'





If you know the location of the drivers provided type it into the text area provided. Alternatively, select 'Browser' and locate the driver folder.

8	Windows can't verify the publisher of this driver software
	Don't install this driver software You should check your manufacturer's website for updated driver software for your device.
	Install this driver software anyway Only install driver software obtained from your manufacturer's website or disc. Unsigned software from other sources may harm your computer or stea information.

If the dialog above comes into view, select Install this driver software anyway.



1.4.3 Windows 8



Push the Windows key plus the C key at the same time. The Charm Bar will open.



Select the Search icon



Now type 'Device Manager' into the search bar and select the Control Panel option which appears.



🚔 Device Manager	- 🗆 ×
<u>File Action View H</u> elp	
▲ Audio inputs and outputs ▶ ▲ Audio inputs and outputs ▶ ■ Batteries ▶ ■ Disk drives ▶ ■ Display adapters ▶ ■ Diplay adapters ▶ ■ Monitors ▶ ■ Monitors ▶ ■ Monitors ▶ ■ Other devices ▶ ■ Other devices ▶ ■ Other devices ▶ ■ Other devices ▶ ■ Ports (COM & LPT) ♥ Ports (COM & LPT) ♥ Printer Port (LPT1) ♥ Processors ▶ ■ Print queues ▶ ■ Print queues ▶ ■ Storage controllers ▶ ▲ Sound, video and game controllers ▶ ▲ Storage controllers ▶ ■ Universal Serial Bus controllers	

There are 2 sets of drivers we need to install, the normal Windows 8 installs the site controller (USB Serial Port or Silicon Labs CP210x USB to UART Bridge) for you however it won't install the Saturn 6000 (OTi Reader USB Com Port). If either doesn't get installed correctly they will appear in the device manager under 'Other Device'. If this is the case you need to do the following:

1.4.3.1 Installation of Drivers

Right click the driver you need to install and select the update driver option.





If you encounter the above error message please move onto 'Enabling unsigned driver installations' before returning to the next step.

•	Search automatically for updated driver software Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.
÷	Browse my computer for driver software Locate and install driver software manually.

Select 'Browser my computer for driver software.'

n de la companya de l	×
📀 🗕 Update Driver Software - OTI Reader USB Com Port	
Browse for driver software on your computer	
Search for driver software in this location:	
C:\Users\win8test\Downloads\SerialUS8Drivers\Saturn6000\x64 V	
✓ Include subfolders	
Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device and all driver software in the same category as the device.	
<u>N</u> ext Cancel]

If you know the location of the drivers provided type it in to the text area provided. Alternatively, select 'Browser' and locate the driver folder.





If the dialog above comes into view, select Install this driver software anyway.

1.4.4 Unsigned Driver Installations



Push the Windows key plus the C key at the same time. The Charm Bar will open.



Select Settings from the Charm Bar



	Setting Start Personalise	S	
	Tiles Help		
We			
	Network	■()) 67	Unavail
Phe	Notifications	U Power	Keybo
		Notifications	Notifications Power

Select 'Change PC Settings' at the bottom right of the screen.



Select 'Update and Recovery' at the bottom of the menu on the left.





Select 'Recovery' from the menu.

Cho	ose an option
\rightarrow	Continue Exit and continue to Windows 8.1
11	Troubleshoot Refresh or reset your PC, or use advanced tools
ψ	Turn off your PC

Select 'Troubleshoot.'



©	Trou	bleshoot
	2	Refresh your PC If your PC isn't running well, you refresh it without losing your file
	<u>O</u> ,	Reset your PC If you want to remove all of your you can reset your PC completed
	έΞ	Advanced options

Select 'Advanced Options.'



files,

Select 'Start-up Settings.'



Startup Settings

Press a number to choose from the options below:

Use number keys or functions keys F1-F9.

1) Enable debugging

2) Enable boot logging

3) Enable low-resolution video

4) Enable Safe Mode

5) Enable Safe Mode with Networking

6) Enable Safe Mode with Command Prompt

7) Disable driver signature enforcement

8) Disable early launch anti-malware protection

9) Disable automatic restart after failure

Press F10 for more options Press Enter to return to your operating system

Push '7' on the keyboard.

You can now return to "Installation of Drivers" on page 24 above.



1.4.5 Windows 10

• Click the link below (or copy and paste into a browser) to get the necessary Issuing Unit drivers.

https://urldefense.proofpoint.com/v2/url?u=https-3A__www.dropbox.com_sh_ 9w5ed6bv0vpy6m_AABZqToW-5Fntg7WkJDH4vs1NRa-3FdI-3D0-26preview-3DCP210x-5FVCP-5FWindows-5Fnew-5FSC.zip&d=DwMFAg&c=IBOdtJkw7mis4tB3vCHqFQ&r=IwPB971DNGgZC_X8FFFYm_ CpCReG3HNeD5v-2-Z8iCw&m=8VCMnDP9XKP0oQEXymVx9J_ nfkpUIbGdSni3FsTztjQ&s=eI3fZtxN-Cm89VG9haIHsKE1dFo_jMOIWC2ek9ZKaCg&e=

- You will find the zip folder, CP210x_VCP_Windows_new_SC.zip.
- Click the Download button to save this folder to your PC.
- When the download is complete, extract all files to a new folder on your PC.
- Find the version of Windows 10 (32-bit or 64--bit) that is installed on your PC:



Right click the Start button.

System

Click System.

System type 64-bit operating system, x64-based processor

- The System type will come into view
 - If the System type shows the 64-bit operating system, you must install the 64-bit version of the driver: CP210xVCPInstaller_x64.exe.
 - If the System type shows the 32-bit operating system, you must install the 32-bit version of the driver: CP210xVCPInstaller_x86.exe.
- Make sure that the setup files are run as Administrator so that these files are installed correctly.



NOTE: If you have a problem with the driver installation, call Tech Support at (877)-679-8324.



Section 2 RFN Configuration

An instructional video, "AVI - Programming the RFN," is available on the <u>OPW Global channel</u> on YouTube. Scan the QR code below or use the link to open the video in a browser.



https://www.youtube.com/watch?v=U6cvhWNeqpE

To do this procedure you must have:

- Tag Writer software
- Issuing Unit
- RFN to be configured

Open the Tag Writer software and make sure that your Issuing Unit is connected to the correct Com Port that shows on the Main Screen.

		R	Ø		
Exit	Detect	Read Tag	Write Tag	New Tag	About RFN Setup Diagnostic
Tag Function		A - Vehic	le Tag	^	m Detected Vehicles Vehicle Registatio
Vehicle Regis	tration	0			
Мас					
Data Structur	e Version	20			Com Port
Encrypted		0 - No E	ncryption		
Odometer Pu	lses/km	0			SC Number
Current Odo		0			SCO V
Engine Currer	nt Hrs	0			
Engine Pulse	/Hr	0			

1. Select **RFN Setup** from the Tag Writer Main Screen. The **RFN Unit Configuration** screen will come into view.



		RF	Unit Con	figuration	1		
Unit # Serial # XX XXXXXXX	-Modify F	E Unit Nur	iber	4 Man:			Get
	Currents	_		HAL			Get
	Change	to: 0		Service	シー		Get
		Cha	ange 🕇	Utilities:			Get
				Boot Pro	tocol:		Get
Parameters				Boot:			Get
Unit number:			an	Baca.			Get
Master S/C #		Get	Set		2		Get All
Use master S/C for dire	ect commands:	On	Off				
RFN LED Control:	•	Get	Set				
Slot #		Get	Set				
Passive tag serial:		Get					
RFN serial:	-						
Battery voltage:		Get					
Working time:		Get	Reset				
Current Cons.		Get	Reset	a	ck the "Save E	xit" button to write the	e
Time to shutdown:	Seconde	Get	Set		ected Krivito t m	ain form	e
THE REPORT OF T	DCCU ND						

- 2. Select the Scan button. Wait for the serial numbers to show in the list (in the top left of the screen).
- 3. Select the applicable Serial Number from the list.
- 4. In the Modify RF Unit Number panel type the correct Unit Number into the Change to field.
- 5. Click the **Change** button. The Unit Number adjacent to the applicable Serial Number in the list will change.
- 6. Click **Exit** to complete the procedure. You can now program the RFN numbers in the Fuel Site Controller.



2.1 ARTWare[™] AVI Configuration

For more information on ARTWare, refer to the M3034 ARTWare Fuel Control Software Reference Guide.

Open the ARTWare FSC Configuration Utility.

ARTWare 3.13 - 0 File View Globa	GregSite.mdb : IAT SETUP I Settings Online Conn	ection Help	(1			- 0 >
Site ID Short Name	Address	City State	Zp Code			
000 IAT SETUP 001 OPW FUEL 002 ROGERS 003 RWCK 004 ODOM BUG 005 X0000000 010 407	Sitte S	Hodgkins IL Hodgkins IL Hodgkins IL Hodgkins IL Hodgkins IL Hodgkins IL Hodgkins IL	60525 60525 60525 60525 60525 605 605 605			
Site	Pu	np Controllers	Eum	*	Ieminals	Networks
Site Information Site ID: Shot Name: Address City: Zip Code: Phone: - FSC3000 Informatio Senal Number:	000 [AT SETUP 6900 Santa Fe Drive Hodgkins 60525 [708]485-4200	State L		mmunication Options Direct COM Port Settings Port: Baud Rate: Data Bats: Panty: Stop Bits:	V 20M12 V 20M12 V 7 V 2Ven V 2Ven V	Save Delete <u>Reset</u> Printer/USB Tanks Petronet
- Additional Options - Non Intervention: Display Type:	None None Fleet Link AVI	Enter Odome	ster at FIT Language			Direct Pump Control Read

- 1. On the "ARTWare" Home Screen, select the **site** to be configured from the list in the top panel.
- 2. In the Additional Options panel, select AVI from the Non Intervention dropdown.
- 3. Click Save.
- 4. Select the Pump Control tab.

a A	RTWare 3.1	13 - Gre	gSite.mdb	IAT SE	TUP						-		×
File	View G	lobal Se	ttings Or	nline	Connection Help								
Cont	roller ID In	stalled	Unit Type	Allow	Hose Restrictions								
1	Y	es	DPC	No									
2	Y	es	PCM	No									
3	Ŷ	es	PCM	No									
4	Ň	0	PLM	No	(\mathbf{S})								
a I	Ý	68	KROO	No									
ž	N	0	PCM	No					6				
8	N	o	PCM	No					6				
	ş	ite			Pump Controllers	γ	Ev	mps		<u>T</u> erminals	 Netw	<i>i</i> orks	
											A	dd	
											De	lete	
					Pump Controller -						-		
					Installed						E	eset	
					A. COMPANY								
						Controller	D: [1	-					
						11.3.7							
						Unix Ty	DPC	-					
							Jose Bestric	tions					
						1_ A0044	Tose mesuic	ligens					
												1	
					L						Re	sad	



- 5. In the *Pump Controllers* tab select the applicable **Pump Controller** to be used from the list in the top panel
- 6. Select the **Pumps** tab.



- 7. On the Pumps tab, click the **Advanced** button in the *AVI* panel (in the bottom left of the screen). The "RFN Setup" screen will come into view.
- 8. Select the applicable **RFN#** to be configured from the list panel.
- 9. Enter the Serial Number of the applicable RFN in the RFN Serial Number field.
- 10. Check the Pause/Resume box if the Pause/Resume option will be used. This option lets the user stop fuel dispensing for a specified time and not close the sale.
- 11. Enter the applicable (user preference) **interval** (in seconds) for the Pause/Resume option in the *Inactivity Timeout* field. The default value is three (3) seconds to a maximum of 999 seconds.



NOTE: Do steps 8 thru 11 again to configure additional RFNs.

- 12. When all applicable RFNs have been configured, click Save.
- 13. Click **OK** to close the *RFN Setup* screen.



File View Global Setting	mdb:IAT SETI s Online C	UP onnection He	lp.								- 0	×
Position Installed Number	Poll ID PPU	MaxQty Han	fle TO Miss	ing Pulse TO	First TO	Fueling TO	Pump S	entry				
1 Yes 1 2 Yes 2 3 No 3 4 No 4 5 No 5 6 No 5 6 No 5	3 10 4 100 0 100 0 100 0 100 0 100 0 100 0 100 0 100	100 10 10 60 10 60 10 60 10 60 10 60 10 60 10 60 10 60	30 60 60 60 60 60		60 60 60 60 60 60 60	5 10 10 10 10 10	Yes No No No No			ć		
8 No 8	0 100	10 60	60		60	10	No	6	5	(1)	6	
Site		Pump Controller	; Y	IF	umps			Ierm	5	- <u></u>	Networks	-
Pumps for Controller #1 (DPC Position: 1 _ Pump #: 1 Poll ID: 3	□ Installed □ Use pump s □ Supports do Max Quantity	entry Ilar auth (100 (sec) 10 (sec) 30 sec) 60 0) 5	Hose 1: 2: 3: 4: 5: 6: 7: 8:	Product Tyg UNLEADED MID-GRADE PREMIUM UNLEADED UNLEADED UNLEADED UNLEADED		ank #: Tank 1 - Tank 1 -	Totalizer: 7.7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Totals: 7.7 0 0 0 0 0 0 0 0 0 0 0 0 0	Installed	BFN# 1 v None v None v None v None v None v None v	Save Delete Eccet	

- 14. Back on the *Pumps* tab, Select the applicable **Position number** (Pump) to set up an RFN.
- 15. In the *Hoses* panel, select the applicable **RFN number** from the *RFN#* drop-down(s) to be used for each of the product types that have been defined. All configured RFN numbers will be shown in the drop-down list.
- 16. Click the **Save** button to complete the RFN configuration in ARTWare.



2.2 LED Configuration

Log in to InSite and do the steps in the procedure that follows.



1. Select the **RFN** button on the ribbon on the left side of the screen.

	VIS ADMIN	MAINTENACE	REPORT	2	INSITE		LANG eng	▼ >> Users Pas	word Logout
	up cito	: admin							
	INSILE Con	nected to OPW Site(10.35.3.242)						<u>×</u> 2 2	VIS Build v
	EPRM EPRCRON EPRTP	EPRTAP EPRFTP SWATCHOOG			2018-12-07 19:09 PM	CONFIGURATION > RFN USER	INTERFACE		-
				Confouration Model Bas	ic Configured for pay				
0	(1 - 1)							()	
	🕺 🔟 RFN USER	INTERFACE							
-10		RFN User int	erface State:						
	RPN	State ID	LED Control Reset	LED Power up Reset	LED Power Up State ID	Battery Change Control	Date Time	StatusStatus 🔪 🦉	
	1	11	?	?	2	?	2018-12-07 19:04:02 1	EDI	Del
	2	11	1	?	2	?	2018-10-01 22:20:30 1	2	Del
In the	3	11	1	2	2	2	2018-10-01 22:20:36 1		Del
	- 4	1	?	2	2	2	2018-12-07 16:59:10 1		Del
	5	11	1	?	2	?	2018-10-01 22:20:37 1		Del
	0	0	1	?	2	?	2018-10-01 22:20:33 1		Del
	7	0	1	?	2	?	2017-04-13 10:55:11 1		Del
	8	0	1	?	2	?	2017-04-13 10:55:11 1		Del
	9	0	1	?	2	?	2017-04-13 10:55:11 1		Del
	10	0	1	?	2	?	2017-04-13 10:55:11 1		Del
	13	0	1	?	2	?	2018-12-07 17:28:57 1		Del
	20	0	1	2	2	?	2016-08-15 01:41:53 1		Del
	30	0	1	2	2	?	2018-10-02 22:12:33 1		Del
	41	1	?	2	2	2	2018-10-22 22:09:44 1	2	Del
	21 C						-		

2. Select the **Edit** button for the applicable *RFN number* (the icon will change to a red Edit button when clicked and the screen that follows will come into view).

	VIS ADMIN		MAINTENACE	REPORTS	INSITE	Land eng V >> Users Persword Logout
	insite	User: admin Connected 6	o OPW Site(10.35.3.242)			
	EPRVI EPRCRON E	PRTP 📕 EPRTAP	EPRETP 🛑 WATCHDOG		2016-12-07 13:09 FM	GURATION > RPN USER INTERFACE
	[®] L [®] RFN U	SER INT	FERFACE	Configuration Mode	Bare Configurad for opw	UPDATE C
	REN: *				LED POWER UP STATE: *	
	1				RFN Polling	Υ
G	$(3)^{}$	_			Battery Change Control: *	
					C On	•
6	LED Control Reset: *				Status: *	
(On					•
	LED POWER UP STA	JTE: *			-	
	On				•	

3. Make sure that **ON** is selected in the dropdown for each of these fields:



- a. LED Control Reset
- b. LED POWER UP STATE
- c. Battery Change Control
- d. Status
- 4. Click the **UPDATE** button.

VIS AE	DMIN	MAINTENACE	REPORTS	5	INSITE		LANG	ng 🔻 >>	Users Passwo	na Logo
inc	cito User: a	admin								
11 12	Sille Conne	ected to OPW Site(10.35.3.242)						2	K 📝 📖	VIS Buik
		RTAP 📕 EPRFTP 🛢 WATCHDOG		2	018-12-07 19:10 PM	CONFIGURATION > RFN USER I	NTERFACE			
-	6									
	J/			Configuration Mode: Basis	Configured for opw					
(k -	t »)									
1	L RFN USER	INTERFACE								
6										
<u> </u>	🖉 No restart requ	ired								
									0	
<u>s</u>	Updated data s	uccessfully							•	
S	Updated data s	uccessfully							•	
<u> </u>	Updated data s	uccessfully							•	
S. 🗸	Updated data s	RFN User inte	rface State:						8	
	Updated data s	RFN User inte State 10	rface State: LED Control Reset	LED Power up Reset	LED Power Up State ID	Battery Change Control	Date Time	StaturState	•	8
1	Updated data s	RFN User inte	rface State: LED Control Resol	LED Power up Roset	LED Power Up State ID 2	Battery Change Control	Date Time 2018-12-07 19:04:02	StatusState		X Del
1 2	Updated data s	RFN User inte State D	rface State: LED Control Reset	LED Power up Reset	LED Power Up State ID 2	Battory Change Control	Date Time 2018-12-07 10-04-02 2018-10-01 22-20-36	SahuStati 1		Del Del
	Updated data s	RFN User inte State D 11 11	rface State: LED Control Reset 1 1	LED Power up Reset 1 7 7	LED Power Up State ID 2 2	Battory Change Control 1 7 7	Date Time 2018-12-07 18:04:02 2018-10-01 22:20:38 2018-10-01 22:20:38	StatusStatu 1 1		Del Del
1 1 2 3 4	Updated data s	RFN User inte sate to 11 11 11	rface State: LED Control Reset 1 1 3 7	LED Power up Raset 1 7 7 7	LED Power Up State ID 2 2 2 2	Battery Change Control 1 7 7 7	Date Time 2018-12-07 19-04-02 2018-10-01 22:20-38 2018-10-12 22:0-38 2018-12-07 10:59:10	StatusStatu 1 1 1	© : : : : : : : : : : : : : : : : : : :	Del Del Del Del
1 1 2 3 4 5	Updated data s	RFN User inte State D 11 11 11 11 11	Iface State: LED Control Roset 1 1 7 1	LED Power up Naset 1 7 7 7	LED Power Up State ID 2 2 2 2 2	Battery Change Control 1 7 7 7 7	Date Time 2016-12-01 16/04-02 2018-10-01 22:20:36 2016-10-01 22:20:36 2016-10-01 22:20:37	StatusStatu 1 1 1 1	• • • • • • • • • • • • • • • • • •	Del Del Del Del Del Del
1 1 2 3 4 5 0	Vpdated data s สห	RFN User inte Stee D 11 11 11 11 11 10 0	rface State: LED Control Reat 1 1 7 1 1 1	LED Power up Reset 1 7 7 7 7 7 7	LED Power Up State ID 2 2 2 2 2 2 2 2 2	Batany Change Control 1 7 7 7 7 7 7	Date Time 2018-12-07 19:04-02 2018-10-07 19:04-02 2018-10-07 12:20:38 2018-10-07 12:20:38 2018-10-07 12:20:38	StatusStatu 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Del Del Del Del Del Del Del Del
1 1 2 3 4 5 5 7	Updated data s	RFN User inte Suite D 11 11 11 11 1 1 0 0	rface State: LED Control Reset 1 1 7 7 9 1 1	LED Power up Reset 1 2 2 7 7 7 7	LED Power Up State ID 2 2 2 2 2 2 2 2 2 2 2	Battery Change Control 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Date Time 2016-12-07 16/04-02 2016-10-07 22:20:36 2018-10-07 22:20:36 2016-12-07 16:56:10 2016-10-07 22:20:37 2016-10-07 22:20:37 2016-10-07 22:20:33	StatusState 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0	Del Del Del Del Del Del Del Del
1 2 3 4 6 7 8	Updated data s	RFN User inte state D 11 11 11 1 1 0 0 0	rface State: LED Control Reset 1 1 7 7 1 1 1 1 1	LED Power up Roset 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	LED Power Up State ID 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Battery Okarge Control 1 7 7 7 7 7 7 7 7 7 7	Data Time 2019-10-01 192-04-02 2019-10-01 22:20:38 2019-10-01 22:20:38 2019-10-01 22:20:37 2019-10-01 22:20:37 2019-10-01 22:20:37 2017-04-13 10:55:11	StatusStatu 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Del Del Del Del Del Del Del Del Del Del
1 2 3 4 5 6 7 8 9	PUpdated data s	REN User inte sens D 11 11 11 11 0 0 0 0 0	rface State: LED Control Reset 1 1 7 1 1 1 1 1 1 1 1 1 1 1 1	LED Power up Reset	LED Power Up State ID 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Buttury Change Control 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Detti Time 2018-12-07 162-402 2018-10-07 222-038 2018-10-07 222-038 2018-10-07 222-038 2018-10-07 222-037 2018-10-07 222-033 2017-04-13 10:85:11 2017-04-13 10:85:11	StatusStatu 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0	Del Del Del Del Del Del Del Del Del
1 2 3 4 5 6 7 8 0 10	Updated data s RN	RFN User inte Steel D 11 11 11 11 0 0 0 0 0 0 0 0 0 0 0 0 0	rface State: LED Control Reat 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1	LED Power up Roset 1 2 7 7 7 7 7 7 7 7 7 7 7 7 7	LED Power Up State ID 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Batany Change Control 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Date Time 2019-16-01 22-20-36 2019-16-01 22-20-36 2019-16-01 22-20-36 2019-16-01 22-20-37 2019-16-01 22-20-33 2017-04-13 10:050:11 2017-04-13 10:050:11 2017-04-13 10:050:11	StatusStatu 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0	Del Del Del Del Del Del Del Del Del Del
1 2 3 4 5 6 7 8 0 10 13	RN Updated data s	RFN User inte suit to 11 11 11 10 0 0 0 0 0 0 0 0 0 0 0 0 0	rface State: LED Control Resol 1 1 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1	LD Powr up Roart 7 7 7 7 7 7 7 7 7 7 7 7 7	LED Power Up State ID 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Battery Charge Control 1 7 7 7 7 7 7 7 7 7 7 7 7 7	Dels Time 2016-1607 1894 00 2016-1607 22:030 2016-1607 22:030 2016-1607 22:030 2016-1607 22:037 2017-0413 105511 2017-0413 105511 2017-0419 105511 2017-0419 105511	StatusStatu 1 1 1 1 1 1 1 1 1 1 1 1 1	······································	Del Del Del Del Del Del Del Del Del Del
1 2 3 4 5 6 7 7 8 0 10 10 120	NPA Updated data s	RFN User inte see 0 11 11 11 12 0 0 0 0 0 0 0 0 0 0 0 0 0	rface State: LED Connot Resot 1 1 2 2 7 1 1 1 1 1 1 1	120 Power up Noot 1 2 2 2 7 7 7 7 7 7 7 7 7 7 7 7 7	LD Power Up State ID 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Netary Charge Control 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Des 7464 2016-10-01 22.03 2016-10-01 22.03 2016-10-01 22.03 2016-10-01 22.03 2017-20-11 026-01 2017-20-11 026-01 2017-20-11 026-01 2017-20-11 026-01 2017-20-11 026-01 2017-20-11 026-01 2017-20-11 026-01 2016-10-01 71:20-07	StatusStatu 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	Del Del Del Del Del Del Del Del Del Del
1 2 3 4 6 6 7 8 0 10 13 20 0	Updated data s RN	RFN User Inte RFN User Inte 90000 11 11 11 10 0 0 0 0 0 0 0 0 0 0 0 0 0	rface State: ID: Convoltencet 1 1 1 1 1 1 1 1 1 1 1 1 1	LD Pauer up Root 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	LD Power Up State D 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Batary Charge Control S T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T	Date Tree 2016-10-07 10-04 02 2016-10-07 22:03 6 2016-10-07 22:03 6 2016-10-07 22:03 6 2016-10-07 22:03 7 2016-10-06 22:03 7 2017-04-11 05:05:11 2017-04-11 05:05:11 2017-04-11 05:05:11 2017-04-11 05:05:11 2017-04-10 10:05:11 2016-10-07 21:03 7 2016-04-05 01:41:20	StatusStatu 1 1 1 1 1 1 1 1 1 1 1 1 1		Del Del Del Del Del Del Del Del Del Del
1 1 2 3 4 5 0 7 8 0 10 13 20 30 0 41	NY Updated data s	UCCESSFUILY REN User Inte 11 11 11 1 0 0 0 0 0 0 0 1 1	rface State: LID Cover Inout 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 2	LD Power up Houst. 1 7 7 7 7 7 7 7 7 7 7 7 7 7	LED have Up State ED 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Belley Charge Coted 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Data Timo 2016-12/11 06-002 2016-12/01 22:03 80 2016-12/02 22:03 80 2016-12/01 22:03 2016-12/01 22:03 2017-04-10 12:03 2017-04-10 12:05 11 2017-04-10 12:05 11 2017-04-10 12:05 11 2017-04-10 12:05 11 2016-12/02 2012 23 2016-10-02 2012 23 2016-10-02 2012 43	StatusStatu 1 1 1 1 1 1 1 1 1 1 1 1 1		Del Del Del Del Del Del Del Del Del Del

5. The two messages above will show (No Restart Required, Updated data successfully).



NOTE: A question mark (?) in a field shows that the software has not completed a query of that parameter. This is normal.



2.3 Advanced RFN Configuration

		RF U	Jnit Conf	iguration	×
Unit # Serial #	- Modify RF l	Jnit Numb	oer	Firmware	
				Main:	Get
	Current:	I		на	Get
	Change To:	0			Get
		Char		Service:	Get
	_	Cha		Utilities:	
Parameters				Boot Protocol:	Get
Unit number:		Sca	an	Boot:	Get
Master S/C #		Get	Set	Base:	Get
Use master S/C for direct comm	ands:	On	Off		Get All
		Get	Set	L	
RFN LED Control:					
Slot #		Get			
Passive tag serial:		Get			
RFN serial:					
Battery voltage:		Get			
Working time:		Get	Reset		
Current Cons.		Get	Reset	Click the "Save Exit" button to write the	
Time to shutdown:	Seconds	Get	Set	main form	
The shutdown time has a factor	Jeconds	Get All			
of 10 any units will be truncated	I			Exit Save & Exit	

2.3.1 RFN LED Control

Select option 2, External LED Control.

2.3.2 Time to Shutdown

The RFN takes this many seconds to shut down. The timer is reset since the last time something changed the state of the RFN (movement or a command). If you find the RFN is shutting down during transactions, this option should be increased.



2.4 Diagnosis Utility

Select Co	onfigurat	ion Ty	pe	
	Passed	Total	Additional Info.	
Wired Inlet Antenna	0	10		0
Passive Tag as Inlet Antenna	0	10		0
Passive Tag Only	0	10	2	0
Passive Tag Combo Test	0	10		0
	0	10		0
	0	10		0
Run Test Suite	Legend		Stop a	al Tests
VID Serial:		= Not rur	Re	set
RFN Number: Scans will not be successful if VID/BFN com		= Runnin	g Save F	Reports
are down.				

The dialog above is used by an installer to diagnose a communications issue on site.

2.4.1 General Configurations

- The number of times a test occurs is calculated by the total number of text boxes.
- You must specify the VID and/or the RFN to be used before you can start the test. The applicable text box(es) become available when you select the Test Suite.
- Make sure all proximity devices are in range of their applicable antennas before doing a full suite of tests.
- You can only do one test at a time. Other actions cannot be done while a test is in progress.
- If a Test or Test Suite must be stopped, click the Stop all Tests button.
- Click the **Save Report** button to save test information.
- Click the **Reset**button to reset the form and all saved tests. Make sure all necessary tests are saved before you reset so important data is not removed.

2.4.2 VID Comms Test

1. The **VID Comms Test** does a check on the communication between the site controller and the VID.



- 2. The **NID Test** tests the function of the NID. This test communicates the NID's serial number through the VID and if the VID give a result to the Site Controller the test fails.
- 3. VID Read/Write tests if the VID can keep and return data to the host PC. This procedure reads the data off of the VID and then writes the read data back to the VID.

2.4.3 Passive Tag as Inlet Antenna

Easy Fuel	Diagnosis	Utility		×
Sel	ect Tes	t		
	Passed	Total Add	ditional Info.	
VID Comms Test	0 /	10	-	\odot
NID Test	0 /	10	-	۲
VID Read/Write Test	0 /	10	-	۲
	0 /	10	-	۲
	0 /	10	-	۲
	0 /	10	-	۲
Run Test Suite	Legend -		Stop all	Tests
VID Serial:		= Not run	Rese	et 🔤
RFN Number:		- Complete	Save Re	ports
are down.		- complete	Clos	e

- 1. The VID Comms Test tests the communication between the site controller and the VID.
- 2. The **RFN Comms Test** tests the communication between the site controller and the RFN.
- 3. The **Passive Tag Comms Test** tests the communication between the site controller and passive tag through the RFN.
- 4. VID Read/Write tests if the VID can keep and return data to the host PC. This procedure reads the data off of the VID and then writes the read data back to the VID.
- 5. The **RFN Signal Test** gets the signal strength of the RFN and shows the average signal during the test.
- The VID Serial via Passive Tag continuously does a check to make sure that the serial number of the passive tag is in the memory of the VID.



2.4.4 Passive Tag Only

Easy Fuel I	Diagnosis	Utility		×
Sel	ect Tes	st		
	Passed	Total Addit	ional Info.	
RFN Signal Test	0 /	10	-	۲
RFN Comms Test	0 /	10		۲
Passive Tag Comms Test	0 /	10		۲
Passive Tag Read/Write Test	0 /	10	-	۲
	0 /	10	-	۲
	0 /	10	-	۲
Run Test Suite	-Legend -		Stop all	Tests
VID Serial:		= Not run	Res	et
RFN Number:		= Running = Complete	Save R	eports
are down.			Clos	se

- 1. The **RFN Signal Test** gets the signal strength of the RFN and shows the average signal during the test.
- 2. The RFN Comms Test tests the communication between the site controller and the RFN.
- 3. The **Passive Tag Comms Test** tests the communication between the site controller and passive tag through the RFN.
- 4. The **Passive Tag Read/Write Test** is used to do a check of the passive tag to make sure it can read and write data.



Section 3 Tag Writer Operation

3.1 Vehicle Identification Device (VID)

mmands Options Help						
Ext Detect	Read Tag Write Tag	New Tag	About	RFN Setup	Diagnostic	
Tag Function	A - Vehicle Tag	^		SC Num	Detected Vehicles	Vehicle Number
Vehicle Registration	0					
Product Code			-	XII I		
PIN Offset(PVV)	0000		Com Port	- N		
Language Code	1 - Local		COM3 (SR	1		
Mileage Indicator	0 · Not Req.		SC Number			
Card Type	0 - Invalid		SC1 -			
Pin Type	0 - Single DES					
Request for Inputs	1 - Driver code		NO NO			
Service Code	0		Altendant			
Data Structure Version	5 - AvaiNew		Miterioan			
Odometer Pulses/km	0		Driver			
Current Odo	0		Private			
Engine Current Hrs	0		Standalone			
Engine Pulse/Hr	0		Patting	111		
ISO Number	0		- r destive			
Install Date	2015/07/07		Мар Туре			
Expiry Date	2015/07/07		AviaNew -			
Code	0 - Normal Transaction					
Validity	0 - Invalid		RF Unit #	-		
RET Version	0		1			
Site ID	0					
Fueling Status	1 - Successful		Authenticat	e		
Last Volume	0		Shutdown	1		
Fuel Grade	6 - Any Fuel Type	~	BFN			
			1	L		

3.1.1 Smart Tag Issuing Unit

To edit a VID from the Tag Writer you must have a site controller connected. Select the site controller from the Com Ports combo box that is populated during the initialization.



3.1.2 Detect a VID

Click the **Detect** button. The Tag Writer detects all powered VIDs in range and shows them in the list on the right side of the main window.

		🏏 😼	
Exit Detect	Read Tag Write Tag New Tag	About RFN Setup Diagnostic	
Tag Function	A - Vehicle Tag	SC Num Detected Vehicles Vehicle Numc	
Vehicle Registration	0	Idle 1 01040C8B test	
Product Code		1 01035221 NPC3131	-
PIN Offset(PVV)	0000	Lom Port	
Language Code	1 - Local		
Mileage Indicator	0 - Not Req.	SC Number	
Card Type	0 - Invalid	SC 1 👻	
Pin Type	0 - Single DES		
Request for Inputs	1 - Driver code	VID	
Service Code	0	Attendent	
Data Structure Version	5 - AvaiNew		
Odometer Pulses/km	0	Driver	
Current Odo	0	Private	
Engine Current Hrs	0	Standalone	
Engine Pulse/Hr	0	Patrice	
ISO Number	0	L Passive	
Install Date	2015/07/07	Мар Туре	
Expiry Date	2015/07/07	GenSecure 👻	
Code	0 - Normal Transaction		
Validity	0 · Invalid	RF Unit #	
RET Version	0		
Site ID	0		
Fueling Status	1 - Successful	Authenticate	
Last Volume	0	Shutdown	
Fuel Grade	6 - Any Fuel Type	RFN	

3.1.3 Read the VID Information

Select the applicable VID from the list on the right panel, right click and select **Read** from the dropdown *or* click the **Read Tag** button on the toolbar. This populates the memory map on the left panel with the information currently stored on the tag.

The correct memory map automatically loads when you read a tag/VID. However, the Tag Writer loads information from the tag so if the tag is new and/or doesn't have correct information an incorrect memory map can be loaded. You must manually select the Map Type from the options in the middle of the main window.

3.1.4 Write the VID information

When the tag has been read you can change the information that is necessary for the VID. When complete, right click the same tag and select the **Write** option *or* click the **Write** button on the toolbar.

3.1.5 New Tag Button

This button is not used at this time.



3.2 Passive Tags

		016	ate : 07-07-2	ter - Expiry D	Tag Writ			
							Options Help	mmands
		3	<i>©</i>	~	Ø			-
	Diagnostic	RFN Setup	About	New Tag	Write Tag	Read Tag	Detect	Exit
ehicles Vehicle Number	Detected Vehicles	SC Num		^	le Tag	A · Vehic	1	Tag Function
NPC3131	01039E21	1	Idle			0	stration	Vehicle Reg
O (P)	00930C96	511				1	re Version	Data Structu
			Corn Port			0	ilses/km	Odometer Po
		1	COM3 (SR -			0		Current Odo
			SC Number			0	nt His	Engine Curre
		1	SC1 -			0	/Hr	Engine Pulse
		·	-			0		ISO Number
		1	MD		/07	2015/07		Install Date
		<	Allowdowt		/07	2015/07		Expiry Date
			Attendant		al Transaction	0 - Norm		Code
			Driver		đ	0 - Invali		Validity
			Private			0		RET Version
		î	Standalone			0		Site ID
			Develop		essful	1 - Succ	10	Fueling State
			Passive			0		Last Volume
			Мар Туре		uel Type	6 - Any F		Fuel Grade
			Generic 💌			0	lume	Maximum Vo
			-			0	lance	Minimum Dis
			RF Unit #			0	er	Last Odome
			68	0		0		Installer ID
						0		Maximum Oil
			Authenticate			0 - None		Oi ID
		1	Shutdown			0	dometer	Calibration 0
			RFN	~	/07	2015/07) ate	Last Refuel
	Controller	DEVICE - Site I	HFN	MI : Generic xml	/07	2015/07)ate	Last Refuel

The passive tags operate in much the same way as the VID however when the tag is detected you need to enter the **RFN number** into the *RFN Unit* # text box. When a passive tag is detected the registration number has a (**P**) added to the end.

Push the Shutdown RFN button to shut down all RFNs not in use.

NOTE: When Tag Writer is closed it automatically shuts down the last RFN used. It should be standard procedure to manually shut down RFNs not in use to make sure that they are off.



3.2.1 Right Click Menu



NOTE: Not all the options are available to the Passive tags.

Options

- Read: Reads the VID/passive tag.
- Write: Writes the VID/passive tag.
- Calibration: Opens the calibration submenu.
 - Odometer: Start or Stop VID calibration or calibrate the VID for a GOS unit. Odometer & Hour Meter 1: Same as above but for odometer and hour Meter 1. Hour Meter 1-3: Sets the Hour meter to 14400.
 - Passive: Calibrates the VID as a passive VID (this is not the same as a passive tag).
 - Reset Activity: When you start a calibration the Tag Writer hides the other calibration options. This gives access to them.
- Recalibration: Recalibrates a tag.
- Reset: Resets the Odometer value or one of the three (3) hour meter values.
- SC Version: Gets the Site Controller version number.
- VID Version: Gets the VID version number.
- Add Vehicle: Adds a vehicle to the list.
- Remove Vehicle: Removes a vehicle from the list.
- Nozzle Test: Opens the nozzle Test Dialog (not used at this time).
- Speed(kph): Opens the speedometer dialog.



3.2.1.1 GOS Calibration

The procedure for GOS Calibration is shown below.

Tag Writer - Expiry Date : 2 mmands Options Help	∫ [®] (3)						;
	3	<u></u>	Ì	5			
Exit Detect	Read Tag Write Tag	New Tag	About	RFN Setup	Diagnostic		
Tag Function	A · Vehicle Tag	^		SC Num	Detected Vehicles	Vehicle Regist	ation
- Vehicle Registration	LAB VID2		Idle	0	0103EF76	LAB VID2	
Mac	1876054628				0103EFAA 0103EE8D	VID21235	
Data Structure Version	20		Com Port		/		
Encrypted	1 · Encrypted		2 🗸				
Odometer Pulses/km	0		SC Number		(4)		
Current Odo	23541		SC 0 👻	[
Engine Current Hrs	0						
Engine Pulse/Hr	0		VID				
ISO Number	0		Devive				
Install Date	2000/00/00		- rassive				
Expiry Date	2000/00/00						
Code	0 · Normal Transaction						
Validity	0 · Invalid						
RET Version	0						
Site ID	0						
Fueling Status	0 · Unsuccessful		Мар Туре				
Last Volume	0		Generic_S 💌				
Fuel Grade	1 · High Octane		BE Linit #				
Maximum Volume	0						
Minimum Distance	0						
Last Odometer	23541		Authenticat	e			
Installer ID	2128		Chuadau	1			
Maximum Oil	0		RFN				
DillD	0 · None	~		1			

- 1. Select **Detect** from the top ribbon. The detected VIDs will populate in the list on the right side of the screen.
- 2. Select the applicable **Detected Vehicle**.
- 3. Select **Read Tag** from the top ribbon. The available information for the selected vehicle tag will populate in the list on the left side of the screen.
- 4. Right-Click the applicable **VID** to be calibrated in the *Vehicle Registration* column of the list of VIDs on the right side of the screen. A selection menu will come into view.



Read		Odometer Start
Write		Odometer & Hourmeter 1 End End
Calibration	▶ *	OBD GOS Unit
Recalibration		Hour Meter 1
Reset	•	Hour Meter 2
SC Version		Hour Motor 3
VID Version		
Add Vehicle		6
		GOS Unit Calibration
		Start Odo: 0
	$\overline{7}$	PPK: 5000

5. Make the selections that follow in the menu path:

Calibration > Odometer > GOS Unit - the GOS Unit Calibration screen will come into view.

- 6. Enter the current **Odometer** reading (in applicable miles or kilometers) in the *Start Odo* field.
- 7. Click the Calibrate button.



mmands Options Help	,	3				
	<u> </u>		Ø	5		
Exit Detect	Read Tag Write Tag	New Tag	About	RFN Setup	Diagnostic	
Tag Function	A · Vehicle Tag	^		SC Num	Detected Vehicles	Vehicle Registatic
Vehicle Registration	LAB VID2		Idle	0	0103EF76	LAB VID2
Мас	1876054628	1			0103EFAA 0103EF8D	VID21235
Data Structure Version	20		Com Port	_ .	0	
Encrypted	1 - Encryptes		2 -	1		
Odometer Pulses/km	8045 🥕		SC Number			
Current Odo	23541		SC 0 🗸	1		
Engine Current Hrs	0		,			
Engine Pulse/Hr	0		VID			
ISO Number	0		Dessing			
Install Date	2000/00/00		Passive			
Expiry Date	2000/00/00					
Code	0 - Normal Transaction	Wr	ito Succe	seeful		
Validity	0 · Invalid		le Succe	ssiu		
RET Version	0					
Site ID	0		OK			
Fueling Status	0 - Unsuccessful			AI		
Last Volume	0				<u>)</u>	
Fuel Grade	1 - High Octane		- PE I Init #			
Maximum Volume	0		Fr Unic#	-		
Minimum Distance	0					
Last Odometer	23541		Authentica	ate		
Installer ID	2128			1		
Maximum Oil	0		Shutdown RFN			
DillD	0 - None	~		4		

- 8. Enter the number **8045** in the *Odometer Pulses/km* field as shown above.
- 9. Click **Write Tag** from the top ribbon.
- 10. Click **OK** on the popup confirmation screen to complete the procedure.

3.2.1.2 Site Controller Version Window

Site Cont	troller Version Info				
Response:	\$433_11020d				
RF Frequency:	433MHz				
Hardware Version:	11				
Software Version:	020d				
RFN Capable					
[]					

Enter this dialog window from the right click menu on the VID/Passive tag list.

- Response: This is the actual version number.
- RF Frequency: the Frequency of the Site Controller.
- Hardware Version: Version of the site controller's hardware.



• Software Version: Version of the site controller's software.

3.2.1.3 VID Version

VID Version					
7 Vehicle Reg Number:	test				
0805. Base Version:	Base 010801.				
0805. Boot Version:	BootApp 010804.				
rol 010801. HAL Version:	HAL Vid22 010801.				
0801. Utilities Version:	BootUtils 010801.				
Close					
	VID Version Vehicle Reg Number: Vehicle Reg Number: Base Version: Boot Version: HAL Version: Utilities Version: Close				

This dialog gets the different versions of the VID.

The VID is queried when the dialog opens. The version types are for each label.

3.2.1.4 Nozzle Test

3.3 VID Calibration

To calibrate a VID, right click and select the applicable VID. Select **Start** for the applicable Calibration option. This section shows the odometer and hour meter options.

The sequence of windows that shows below comes into view. Enter the applicable information:

Start Hourmeter Calib	ration	×
Current Hours:		
Start	Cancel	

Enter the current hours on the vehicle to be calibrated.



Start Calibration ×	
Start Odo: 0	
Start Cancel	

Enter the current odometer on the vehicle which to be calibrated.



Appendix A - Re-Register Tag Writer

If you experience issues with a registration that shows expired before its expiration date you can reset your registration as follows:

- 1. Contact OPW-FMS Tech Support at, 1-877-OPW-TECH (877-679-8324). You will be given a new registration key.
- Go to the Registration screen and select the Ctrl + Shift & R keys. The screen below will come into view.



3. Select Yes. The screen below will come into view.

TagWriter	×
i	The registration key was reset successfully
	ОК

- 4. Select OK.
- 5. Tag Writer will close. Re-open Tag Writer.
- 6. You will be prompted to register again. Enter your new registration key that was provided by Tech Support.

If you still have issues, call OPW-FMS Tech Support at, 1-877-OPW-TECH (877-679-8324) for assistance.



Revisions

Revision #	ECO	Effective	Software Version	Key Changes
0	1547	3/22/2019		Initial Release
1	1617	7/3/2019	na	Add Re-registration procedure as Appendix



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