

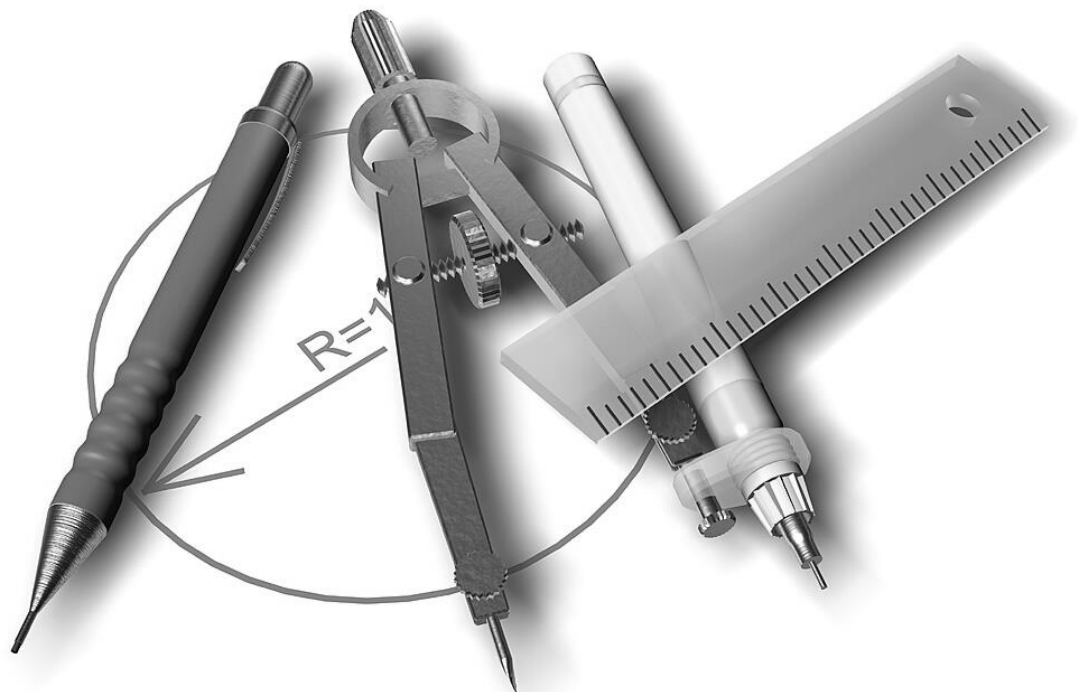
sapere

Thursday, 11 July 2019

Warranty Online

Retra & Complete Service Integration (Policy Connect)

Design Specification



Contents

1.	INTRODUCTION	4
	DOCUMENT PURPOSE	4
	DOCUMENT SCOPE	4
	OVERVIEW	4
2.	CODE	5
	TECHNOLOGY DETAILS	5
3.	SERVER	6
4.	SYSTEM FUNCTIONALITY & SCREEN LAYOUTS	6
	Developer / System Rules	6
5.	WARRANTY ONLINE REQUIRED UPDATES	7
	Policy Connect Service Security	7
	Product Setup	7
	Warranty Cancellation	9
	Columns to be added	9
	Marketing Opt-Out	10
6.	WARRANTY ONLINE SERVICES – FOR RETRA	11
	CreatePolicy	11
	UpdateCustomer	13
	UpdateWarranty	14
7.	WARRANTY ONLINE SERVICES – FOR COMPLETE SERVICE	15
	PushClaim	15
8.	EXPECTED METHODS WITHIN COMPLETE SERVICE	17

Author: David Lee

SaveWarranty	17
9. EXPECTED METHODS WITHIN RETRA	18
SaveClaim	18
SaveCustomer	19
10. TRIGGERS	20
Warranty Online	20
Retra	21
Complete Service	22
11. EXPECTATIONS AND ASSUMPTIONS	23
Third party web methods	23
Customer Product payment methods	23
Error handling	23
12. APPROVED – OUT OF SCOPE CHANGES	24
13. DOCUMENT CONTROL	24
REVISION HISTORY	24
DOCUMENT DISTRIBUTION	24

1. INTRODUCTION

DOCUMENT PURPOSE

Outlines the development which will enable Retra's CRM system to communicate to Pacifica's Complete Service via Warranty Online and vice-versa. Complete Service is also to send claims information to Warranty Online which will then be packaged and sent to Retra's systems.

DOCUMENT SCOPE

This document applies to the following systems:

Warranty Online

OVERVIEW

UK Warranty and Retracare has recently entered into a partnership which will require for their IT systems to communicate with each other.

<https://www.retracare.co.uk/> - Retracare are the Extended Warranty arm of RETRA, the UK's leading trade association for independent electrical retailers and servicing organisations. They sell and administer warranties through their own platform however from August 2019 they wish to have Pacifica Group handle the policies' administration.

Retra will still have their internal systems to set warranties up however as they want Pacifica to manage the warranties, they will now send this information to Warranty Online so that it can be processed by Pacifica who will also handle claims. It is expected that warranty information will be transmitted via a batch of new service methods within Warranty Online. Once Warranty Online has this information it will then be transmitted to Complete Service, again via an API. When claims are processed within Complete Service, data will be sent the other way via a set of APIs present within both Warranty Online and Retra.

This document will highlight the API / Web Methods that need creating within Warranty Online and what it expects within both Complete Service and Retra. Furthermore, it will also outline how data from the two platforms will be massaged so that it is compatible across all the platforms.

2. CODE

TECHNOLOGY DETAILS

Warranty Online is built using the following development, frameworks and database technologies:

Web Application

Microsoft .NET (C#) | HTML | CSS | JQuery | KnockoutJS

Database Technologies

SQL Server

3. SERVER

Once the upgrades are completed, they will be merged into the current live copy of the Warranty Online which runs on Pacifica Group's server.

4. SYSTEM FUNCTIONALITY & SCREEN LAYOUTS

Developer / System Rules

The following rules are to be adopted throughout the application unless otherwise specified.

- Format of all dates, unless specified otherwise - dd/mm/YYYY
- Default date for all date pickers, unless specified otherwise – Today's date.
- Default time for all time pickers, unless specified otherwise – Current time.
- Order for all non-numeric dropdown lists, unless specified otherwise – Alphabetical order.
- Order for all numeric dropdown lists, unless specified otherwise – Lowest to highest.
- Default order for data tables, unless specified otherwise – Newest at the top.
- No field will be mandatory unless otherwise specified.

5. WARRANTY ONLINE REQUIRED UPDATES

Policy Connect Service Security

Each third party that wishes to push data into Warranty Online via the 'Policy Connect' API / Web Service will need to be configured as a seller. When the seller uses the API, they will need to pass through the following:

- Seller ID
- Username
- Password

The seller ID is generated automatically within Warranty Online when creating a seller. The username and password however will be set by Pacifica via two new fields on the seller's page within Warranty Online as per below.

Ownership:	UK Warranty
Policy Connect Enabled:	<input type="checkbox"/>
Seller ID: *	1847
Policy Connect Username: *	retra
Policy Connect Password: *	*****

The changes will also allow for the new service (Policy Connect) to be enabled / disabled for this seller.

Where Policy Connect is enabled, any policies which are updated will have the updated information fed into Complete Service or Retra (depending on the change – see 'Triggers').

Product Setup

Months: *	12
Offer Multi-Appliance:	<input type="checkbox"/>
Continuous:	<input type="checkbox"/>
Multi-Appliance:	<input type="checkbox"/>
Includes AD:	<input type="checkbox"/>
Concurrent:	<input type="checkbox"/>
Claimable:	<input type="checkbox"/>
Non Claimable Term in	0

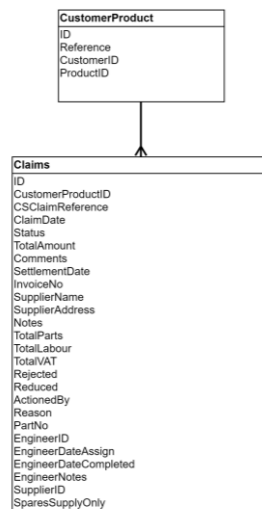
The ability to mark a product as including AD (accidental damage) cover will be added to the product set up screen. This will be required for mapping products from the Retra system to that within Warranty Online.

Claims Data

Warranty Online is to be updated so that it can now hold warranty claim data. At present this information is only held within Complete Service.

It will be fed into Warranty Online automatically by Complete Service via a newly created Web Service. Only claims data will be held within Warranty Online and not any details of visits / call outs against the claim.

The data to be held is represented within the below diagram (NOTE: CustomerProduct table does not list all columns).



There will be no screens within Warranty Online that will be used to display this data however it will be exportable via the reporting section.

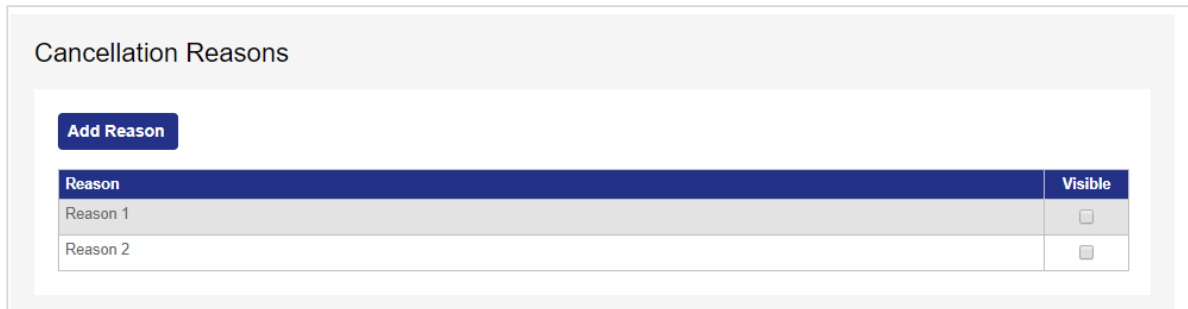
Claims data will be exported within the current report produced by Warranty Online within additional columns which will be displayed at the right-hand side of the spreadsheet as per the below screenshot.

	A	B	C	D	E	F
1	Customer Product ID	Reference	Expiry Date	Claim Date	Total Parts	Total Labour
2		1 REF1	15/08/2019	15/02/2019	100	120
3				10/04/2019	150	120
4				12/05/2019	80	60
5		2 REF2	02/09/2019	15/02/2019	100	120
6				10/04/2019	150	120
7				12/05/2019	80	60
8						

Where a warranty has had multiple claims, the warranty's rows will be repeated (but blank) for each claim as demonstrated above. Filters will be applied that will filter warranties that have had claims within a date range as well as a claim within a total claim amount (filtered on total parts or total labour).

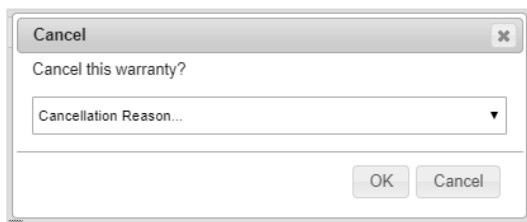
Warranty Cancellation

At present, when warranties are cancelled within Warranty Online, only the person who cancelled the warranty is logged. As part of these updates, Warranty Online will be expanded so that the reason for why the warranty was cancelled is also recorded from a set list of reasons. The cancellation reasons will be driven from a configuration area within Warranty Online which will look like the below and can only be accessed by users that have access to a newly created user role of 'Configuration'.



Reason	Visible
Reason 1	<input type="checkbox"/>
Reason 2	<input type="checkbox"/>

Reasons will not be editable (for reporting purposes) however it will be possible to hide a reason so that it is no longer selectable when cancelling a warranty. Whenever a warranty is cancelled, the admin operative will have to select why the warranty is being cancelled in order to proceed with the cancellation.



In addition to this, the reporting section within Warranty Online will be updated so that the cancellation reason can be included within any produced reports along with who cancelled the warranty.

Columns to be added

The following columns will need to be created within Warranty Online to store all the data that Retra require.

CustomerProduct

- ExternalPolicyID
- CancelledBy
- CancellationNotes
- CancellationType
- WriteOffDate
- DateCreated
- Scheme

Author: David Lee

Customer

- CorrespondencePhoneNo
- CorrespondenceMobileNo

Marketing Opt-Out

<p>Communication & Documentation</p> <p>Secondary Marketing Text: <input type="text" value="Send data to Trust Pilot"/></p> <p>Sales Office Codes: Add Office</p> <p>Manufacturer Warranty Cert: <input checked="" type="checkbox"/></p> <p>Send Notifications: <input checked="" type="checkbox"/></p>	<p>described in our Privacy Policy.</p> <p>We and UK Warranty Limited may have some new and exciting offers or promotions that are not directly related to your product that could be of interest to you, and that we simply don't want you to miss out. If you are happy to receive contact by phone, post, text or email about offers and promotions that are not directly related to your product please tick here. <input type="checkbox"/></p> <p>Send data to Trust Pilot <input type="checkbox"/></p> <p>Register Product</p>
--	--

The seller's page within Warranty Online will be updated so that it is possible to have a second marketing field displayed on the customer registration page.

If the 'Secondary Marketing Text' field is left blank, the second checkbox will not be displayed however if text is supplied then the secondary marketing text will be displayed alongside any defined text.

This new column will also be reportable within Warranty Online's reporting section.

6. WARRANTY ONLINE SERVICES – FOR RETRA

API Endpoint - /PolicyConnect.asmx

Methods will return the following:

- Status – 'success' or 'error'
- Payload – If error, then an error reason will be returned.

CreatePolicy

/PolicyConnect.asmx/PushWarranty

Takes two parameters: Customer, Warranty

Will be called by Retra each time they wish to insert a new warranty. Will return the following:

- Status – 'success' or 'error'
- Payload – CustomerID & WarrantyID. If error, then an error reason will be returned.

Customer

Property	Notes
CustomerID	If anything other than 0, the service will not perform an insert or update. It will however check that the customer ID exists within Warranty Online for the seller ID making the request. If the customer does not exist, then an error will be thrown.
Title	Customer's title
Firstname	
Lastname	
BusinessName	
Address1	
Address2	
City	
County	
Postcode	
Country	
TelephoneNumber	
MobileNumber	
Email	
MailingOptOut	
CorrespondenceAddressLine1	This is the address where correspondence for the warranty will be sent. Only needed should the warranty belong to a landlord where the warranty covers one of his / her properties.
CorrespondenceAddressLine2	
CorrespondenceTown	
CorrespondenceCounty	
CorrespondencePostcode	
CorrespondenceCountry	
CorrespondenceFirstName	
CorrespondenceSurname	

Author: David Lee

CorrespondenceTitle	
CorrespondencePhoneNumber	
CorrespondenceMobileNumber	
CustomerURN	A custom reference number for the customer – not required

Warranty

The warranty's product type will be resolved using the supplied cover period, manufacturer term and if accidental damage cover is provided.

Property	Notes
ExternalPolicyID	Not used within Warranty Online but will be used to store the ID of the product in the originating data source e.g. the warranty ID within Retra's database.
WarrantyReference	Generated within Retra. If a matching reference is found an error is thrown.
Brand	The brand of the appliance. The service will look up the matching brands within Warranty Online and attempt to match up the brand supplied to one contained within Warranty Online. If needed, the service will attempt to match the brand up with one of the configurable brand aliases.
Appliance	The appliance type i.e. washing machine. The service will look up the matching appliances within Warranty Online and attempt to match up the appliance type supplied to one contained within Warranty Online. If needed, the service will attempt to match the appliance up with one of the appliance aliases.
SerialNumber	The serial number of the appliance.
Model	Model number of the appliance
WarrantyStartDate	
WarrantyExpiryDate	
WarrantyPurchaseDate	
PurchaseDate	
PurchasePrice	
CancellationDate	
CancellationBy	
CancellationNotes	
CancellationType	
WriteOffDate	BER (beyond economical repair) date
Scheme	
Retailer	Expected to receive the 'AgentName' from Retra.
StoreTown	Expected to receive the 'BranchID' from within Retra.
WarrantyReference	Generated within Retra. Supplied value will be checked to see if it exists already. If it does, an error is thrown.
WarrantyPrice	The total price of the warranty.
IsPaid	If the premium is paid and up to date
ManufacturerWarrantyLength	These fields will be used to resolve the product type within Warranty Online e.g. where 'ManufacturerWarrantyLength' is 1, and 'CoverPeriodLength' is 2 and 'AccidentalDamageTaken' is true, this would resolve to the 'RET12A' product. It is essential that only one of this products is configured for the seller within Warranty Online as the web service will select the first matching product found which may not be the correct one for the seller.
CoverPeriodLength	
AccidentalDamageTaken	

UpdateCustomer

/PolicyConnect.asmx/UpdateCustomer

Takes parameter: Customer

Customer

Property	Notes
CustomerID	If anything other than 0, the service will not perform an update. It will however check that the customer ID exists within Warranty Online for the seller ID making the request. If the customer does not exist, then an error will be thrown.
Title	Customer's title
Firstname	
Lastname	
BusinessName	
Address1	
Address2	
City	
County	
Postcode	
Country	
TelephoneNumber	
MobileNumber	
Email	
MailingOptOut	
CorrespondenceAddressLine1	This is the address where correspondence for the warranty will be sent. Only needed should the warranty belong to a landlord where the warranty covers one of his / her properties.
CorrespondenceAddressLine2	
CorrespondenceTown	
CorrespondenceCounty	
CorrespondencePostcode	
CorrespondenceCountry	
CorrespondenceFirstName	
CorrespondenceSurname	
CorrespondenceTitle	
CorrespondencePhoneNumber	
CorrespondenceMobileNumber	
CustomerURN	A custom reference number for the customer – not required

UpdateWarranty

/PolicyConnect.asmx/UpdateWarranty

Takes parameter: Warranty

Warranty

Property	Notes
ExternalPolicyID	Not used within Warranty Online but will be used to store the ID of the product in the originating data source e.g. the warranty id within Retra's database.
WarrantyReference	Generated within Retra and will be the key to the product that requires updating. If <u>no</u> matching reference is found an error is thrown. If matching reference belongs to another seller an error is thrown.
Brand	The brand of the appliance. The service will look up the matching brands within Warranty Online and attempt to match up the brand supplied to one contained within Warranty Online. If needed, the service will attempt to match the brand up with one of the brand aliases.
Appliance	The appliance type i.e. washing machine. The service will look up the matching appliances within Warranty Online and attempt to match up the appliance type supplied to one contained within Warranty Online. If needed, the service will attempt to match the appliance up with one of the appliance aliases.
SerialNumber	The serial number of the appliance.
Model	Model number of the appliance
WarrantyStartDate	
WarrantyExpiryDate	
WarrantyPurchaseDate	
PurchaseDate	
PurchasePrice	
CancellationDate	
CancellationBy	
CancellationNotes	
CancellationType	
WriteOffDate	BER (beyond economical repair) date
Scheme	
Retailer	Expected to receive the 'AgentName' from Retra.
StoreTown	Expected to receive the 'BranchID' from within Retra.
WarrantyReference	Generated within Retra. Supplied value will be checked to see if it exists already. If it does, an error is thrown.
WarrantyPrice	The total price of the warranty.
IsPaid	If the premium is paid and up to date
ManufacturerWarrantyLength	These fields will be used to resolve the product type within Warranty Online e.g. where 'ManufacturerWarrantyLength' is 1, and 'CoverPeriodLength' is 2 and 'AccidentalDamageTaken' is true, this would resolve to 'RET12A' product type. It is essential that only one of this product is configured for the seller within Warranty Online as the web service will select the first matching product found which may not be the correct one for the seller.
CoverPeriodLength	
AccidentalDamageTaken	

7. WARRANTY ONLINE SERVICES – FOR COMPLETE SERVICE

API Endpoint - /CSConnect.asmx

Methods will return the following:

- Status – 'success' or 'error'
- Payload – CustomerID & WarrantyID. If error, then an error reason will be returned.

PushClaim

Will be called by CompleteService whenever a new claim has been raised, passing information about the claim into Warranty Online. There is no requirement to store service callout information within Warranty Online therefore this information is not going to be captured by the service.

Whenever the record has been created / updated within Warranty Online, Warranty Online will then attempt to push this information into Retra's Web Service.

Takes parameter: Claim

Property	Notes
CSClaimReference	Required and will be the link between Warranty Online and Complete Service. If this exists within Warranty Online then the record will be updated otherwise a new record will be inserted.
ClaimDate	Date the claim was raised
Status	
TotalAmount	The claim's value
Comments	
Settlement Date	
Warranty Reference	The reference that is stored within Warranty Online. When Warranty Online sends the product information to Complete Service this reference is sent to and held within Complete Service and is used to provide the link between Warranty Online and Complete Service. This reference will be validated to ensure that the product exists within Warranty Online. If it does not, then an error will be returned.
InvoiceNo	
SupplierName	
SupplierAddress	
Notes	
TotalParts	The amount spent on parts
TotalLabour	The amount spent on labour
TotalVAT	Total amount of VAT
Rejected	If the claim has been rejected
Reduced	??? PLEASE CONFIRM WHAT THIS MEANS
ActionedBy	Name of the agent (initials or full name?)
Reason	Reason for fault
PartNo	Number of the part that was needed – what happens if two parts are required – two separate claims?
EngineerID	To confirm???
EngineerDateAssigned	Date the job was assigned to an engineer
EngineerDateCompleted	Date the job was completed

Author: David Lee

EngineerNotes	
SupplierID	???
SparesSupplyOnly	Set to true if the claim did not require any labour

8. EXPECTED METHODS WITHIN COMPLETE SERVICE

SaveWarranty

It is expected that Complete Service contain a secured endpoint that can be called by Warranty Online that can be used to push warranty / customer information. The object shall represent the following.

PLEASE CHECK THAT ALL REQUIRED DATA IS PRESENT

Property	Notes
WarrantyReference	The reference number for the warranty. Will be used as the link between Complete Service and Warranty Online.
FirstName	Customer's first name
Surname	Customer's surname
Title	Customer's title
Business Name	If a business customer, then the name of the business otherwise blank
Address1	
Address2	
City	
County	
Postcode	
Country	
Telephone Number	
Mobile Number	
Email	
Seller Name	The name of the seller – in this case Retra
CustomerURN	Customer Unique Reference Number
ProductCode	The product code against the Warranty Type within Warranty Online e.g. MO1
Brand	Brand name for the covered appliance
Appliance	Appliance type i.e. washing machine
SerialNumber	Appliance's serial number
PurchaseDate	
PurchasePrice	
ExpireDate	
Model	
WarrantyPrice	

9. EXPECTED METHODS WITHIN RETRA

SaveClaim

Will be called whenever claims data is saved into Warranty Online.

Property	Notes
ID	On first push to Retra this will be 0 but it is expected that Retra will return this back to Warranty Online so that Warranty Online can store this and use it to update the claim record.
Scheme	The value stored within Warranty Online when the policy was first created
PolicyNo	The policy reference that was generated by Retra and is saved within
ClaimNo	The claim reference as generated within Complete Service
ClaimDate	The date the claim was raised
Status	If open in complete service, '1', when settled '4'. If rejected, 3.
Comment	Recorded comments against the claim within Complete Service
SettlementDate	The date the claim was closed within Complete Service
RefundValue	The refund value within Warranty Online. WHAT TRIGGERS A REFUND AND HOW IS IT CALCULATED?
FaultCodeId	
InvoiceNo	
SupplierName	
SupplierAddress	
Notes	
TotalParts	Cost of total required parts
TotalLabour	Cost of total labour
TotalVAT	
Rejected	
Reduced	
ActionedBy	The name (from Complete Service) of the agent who processed the claim
Reason	Fault description
RefundDate	Will be the date that the warranty was cancelled within Warranty Online
PartNo	Part number, supplied by Complete Service. HOW DO WE HANDLE MULTIPLE PARTS? DIFFERENT CLAIMS FOR EACH PART?
PaymentMethodId	Will always be set to '5' – paid to retailer
EngineerId	The ID of the engineer within Complete Service
EngineerDateAssign	Date the job was assigned
EngineerDateCompleted	Date the job was completed
EngineerNotes	Notes for the engineer
SupplierID	Will return BranchD as per Warranty Online (held within the 'StoreTown' field within WOL)
SparesSupplyOnly	Always set to false

SaveCustomer

Will be used to save updated information customer information within Warranty Online into Retra.

It has not been requested that updated warranty information within Warranty Online be sent to Retra therefore it is not included within this specification document.

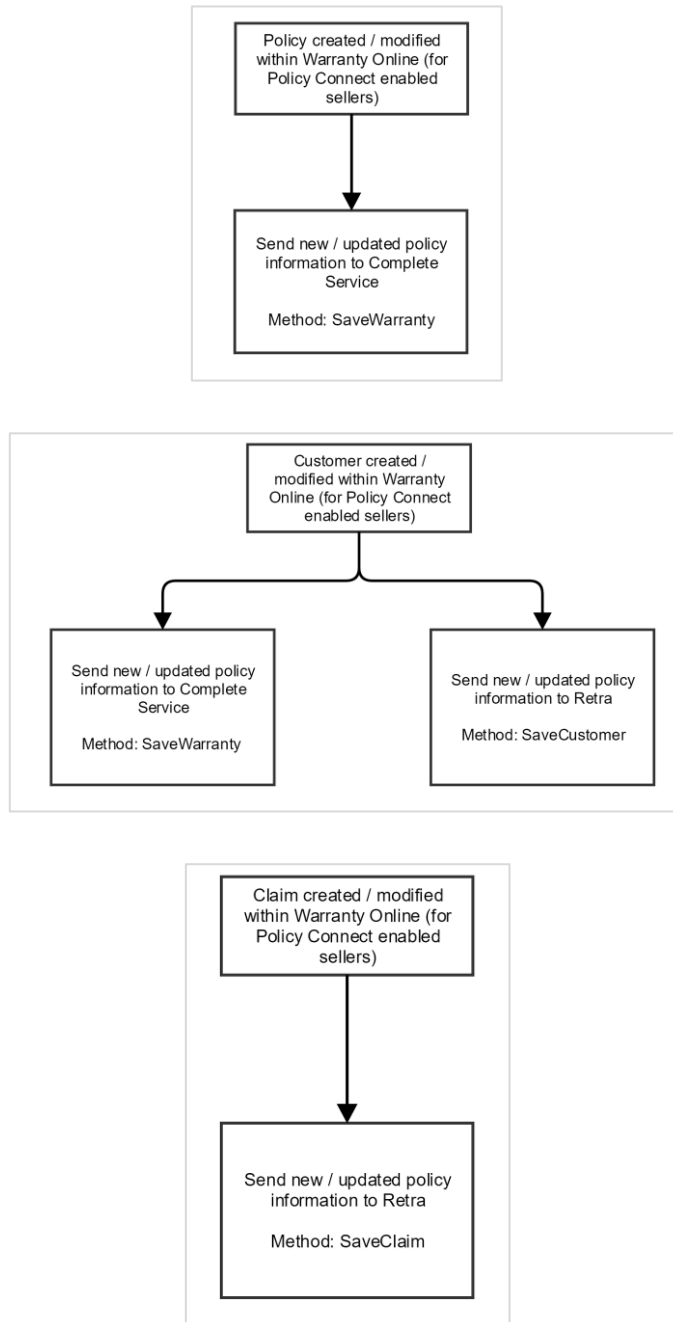
Property	Notes
PolicyID	Will map to the ExternalPolicyID that is held within Warranty Online. This ID will be used to update the customer to which the policy is attached.
Title	
Firstname	
Lastname	
BusinessName	
Address1	
Address2	
City	
County	
Postcode	
Country	
TelephoneNumber	
MobileNumber	
Email	
CorrespondenceAddressLine1	
CorrespondenceAddressLine2	
CorrespondenceTown	
CorrespondenceCounty	
CorrespondencePostcode	
CorrespondenceCountry	
CorrespondenceFirstName	
CorrespondenceSurname	
CorrespondenceTitle	
CorrespondencePhoneNumber	
CorrespondenceMobileNumber	

10. TRIGGERS

Should any of the requests from Warranty Online to either Retra or Complete Service fail, an email will be sent to a nominated email address, initially set to adam.muflahi@ukwarranty.com notifying of the failure.

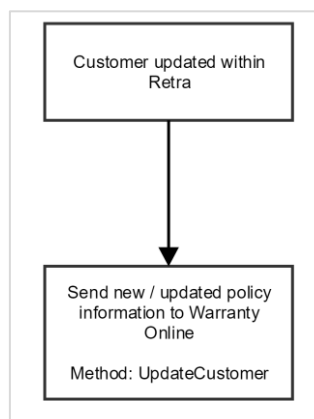
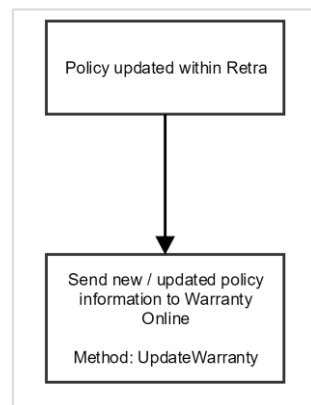
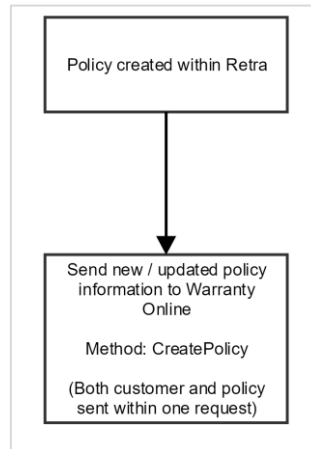
Warranty Online

The below details the triggers that will be set up within Warranty Online that will call the third-party web services.



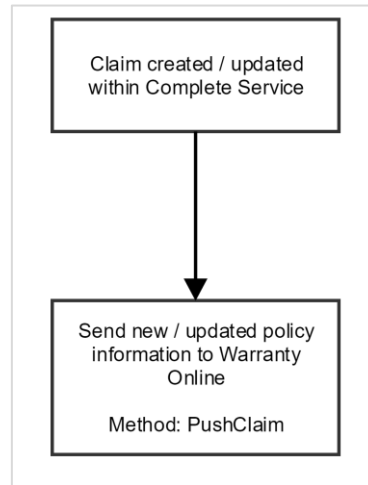
Retra

Below are the expected trigger events within Retra.



Complete Service

Below are the expected trigger events within Complete Service.



11. EXPECTATIONS AND ASSUMPTIONS

Third party web methods

It is expected that these perform validation where needed and return meaningful errors e.g. if attempting to update a customer that does not exist then the error returned will make this clear.

Customer Product payment methods

No provision is having been made to set up or administer payments for warranties that are created via the new API and it is assumed that the collection of payments for such warranties are being handled externally to Warranty Online.

Error handling

Wherever any of the new API / Web Service methods within Warranty Online fail they will return a meaningful error. It is expected that this error will be inspected by the calling application and handled appropriately.

Should any of the methods within Warranty Online fail an email will be sent to a nominated email address alerting that person to the error.

12. APPROVED – OUT OF SCOPE CHANGES

This section will detail any changes added to the specification after it was signed off as ready for development or changes beyond the originally quoted for works that have been quoted for and have been approved to go into the specification document by the client.

13. DOCUMENT CONTROL

Contents	Details
Document Name	Design Specification
Author(s)	David Lee
Classification	In commercial confidence with Pacifica Group

REVISION HISTORY

Date	Author	Description	Version
11-07-19	David Lee	First draft for review	0-1

DOCUMENT DISTRIBUTION

Role	Name	Company
Operations Director	Paul Drake	Sapere
Technical Director	Shaun Merifield	Sapere
Lead Developer	David Lee	Sapere
Sales Director	Adam Muflahi	UK Warranty
Project Manager	Mark Billinge	Retra
Owner	Ken Francis	Glenfield Software
Managing Director	Neil Martin	UK Warranty
Development manager	Angela Mills	Fixzone
Analyst Programmer	Vijayasanthi Murugan	Fixzone

End of Document