
FUNCTIONAL SPECIFICATION DOCUMENT (FS)

FOR

WARRANTY POLICIES

TAVANT WARRANTY MANAGEMENT SYSTEM FOR HVAC SBUS (CS, RS, PARTS)

VER 1.0

MARCH 14, 2016



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1 INTRODUCTION

Tavant is working with Trane to customize Tavant Warranty Management Solution as per HVAC's requirements. This document provides business requirements for managing Warranty Policies in new Trane Warranty System.

This document describes how various types of policies can be setup and the stacking of policies.

1.1 PURPOSE

The purpose of this functional specification document is to clearly list down the scope for each change, the behavior of the system before and after implementing the change and any perceived effects/ risks involved on other functionalities due to the change. Specifications and functionalities of the change are captured through Use cases. This document will act as a guide for technical design, development and quality testing to ensure that the changes are implemented and integrated into the current TWMS Single Corporate Instance successfully

1.2 SCOPE

This document covers following information for each business requirement related to Warranty Policy setup:

- a. AS-IS Functionality – Current process explanation
- b. To-Be Process for HVAC
- c. Requirements – Itemized and Verifiable High Level Business Requirements

1.3 DEFINITIONS, ACRONYMS AND ABBREVIATIONS

SN	Abbreviation	Description
1.	ASD	American Standard Distributor
2.	CS or Com	Trane Commercial SBU
3.	Distributor	TPC, IWD, ASD Parts Distributor
4.	RS or Res	Trane Residential SBU
5.	Parts or GP	Trane Global Parts SBU
6.	HVAC	Heating Ventilation and Air Conditioning of IR. Commercial, Residential and Global Parts are SBU s of IR HVAC
7.	CSO	Commercial Sales Office
8.	DSO	Dealer Sales Office
9.	ERO	Emergency Repair Order
10.	GL	General Ledger
11.	IWD	Independent Wholesale Distributor
12.	NA	North America
13.	OEM	Original Equipment Manufacturer
14.	RO	Replacement Order
15.	SIL	Shipment Information Library – Trane System

16.	SPD	Shipment Product Defect
17.	TPC	Trane Parts Center
18.	TWMS	Tavant Warranty Management System – current IR Global Single Instance
19.	WCR	Warranty Claim Request
20.	SIOP	Code used for differentiation
21.	Customer	Consumer of HVAC Product
22.	3 rd Party	Installing Dealer or Servicing Dealer or Contractor who interacts with consumer
23.	STD / Std	Standard
24.	EXT / Ext	Extended
25.	GW	Good Will
26.	BU	Business Unit (SBUs)
27.	TWMS	Tavant Warranty Management System
28.	N/A	Not Applicable

1.4 REFERENCES

Business Requirement Document: Warranty Policies

<http://svn.corp.tavant.com/svnproj/IR-Program/TWMS HVAC/2.Working/Development/Functional Design>

2 SYSTEM FEATURES

Functional Requirements for the following system features are described in detail

2.1 POLICY TYPES

2.1.1 Requirements

PLC-PD-02	1	(Standard Max) Starts on the date of startup and will cover for the months covered from start not exceeding the months covered from shipment.
PLC-PD-03	1	(Standard No Max) Starts on the date of startup and will cover for the months covered from start with no limit on the months covered from shipment.
PLC-PD-04	2	(Extended Max) Starts on the date of startup and will cover for the months covered from start not exceeding the months covered from shipment.
PLC-PD-05	2	(Extended No Max) Starts on the date of startup and will cover for the months covered from start with no limit on the months covered from shipment
PLC-PD-06	2	(Extended Variable Date) Specify the start and end dates manually while applying the policy for Serialized Item (serial number) and Non Serialized Item (sales order mfg., seq. record synced

		from SIL).
NEW 618	1,2	There will be cases where Warranty Administrators will set start / end dates manually. Set through Excel spreadsheet upload process.
PLC-PD-11	1,2,3	'Hours in service' are not required on the Std and Ext policy definitions.
PLC-PD-16	1,2,3	Warranty Admin will be able to group part/items together and: <ul style="list-style-type: none"> a. Specify that policy covers only a specific group of parts. If not specified, policy will cover all parts.
PLC-PD-15	1,2,3	All the labels containing 'Delivery Date' to be modified to 'Start-up Date'. This includes the labels and values used in business unit configurations.
PLC-PD-17	1,2,3	Add a data field to store "True Coverage Months" (for warranty reserve and reporting purpose) in policy definition setup
PLC-PD-18	1,2,3	Will use 'Smart' policy code. Warranty admin will have to follow the policy code standard.
PLC-PD-19	1,2,3	Policy Setup will have new attributes : <ul style="list-style-type: none"> a. Zoning -CS / RS - Initial zoning needs to be set in Install Base. (Note: Zoning details will be defined on InstallBase BRD.) <ul style="list-style-type: none"> i. Have a flag on Install base record to mark Zoning Lock (Y/N) and another for zoning (Residential, Commercial, Both.... If Melissa Database check provides unknown then remains at original default with zoning lock N) b. Terms -Base / Registered <ul style="list-style-type: none"> i. Have a flag on Install Base record to mark Registered (Y/N) and another for terms applicable (Base/Registered) c. Manufacturing country d. Ship-to-State / Province / Country e. Tavant Product (plan to populate Tavant Product with 6th Segment of the SIOP for commercial and Res) f. Tavant Model (plan to populate Tavant model with our Oracle item , if not on Oracle then 6th segment of SIOP for commercial and Res) g. Digit in Tavant item (ex: digit 10=X) (plan to populate Tavant item with Service Model for commercial and Res) h. Tavant Part Group (plan to populate Tavant Part Group with 6th segment of SIOP) i. Type delayed start-up
PLC-PD-22	2	Policy to handle extended warranty updates when delayed start-up warranty is present. Delayed Startup policy Extends the Max from Ship date of all other Extended Policies on the machine/part which also is a type of Max.
PLC-WC-10	1,2	Ability to define coverage types (Standard, Purchase Extended, Part, Field Modification).
PLC-WC-38	1,2,3	Provision to associate a 'country of use' of the product for which the specific coverage is eligible.

		The country code is to be selected from a list of valid countries defined through a 'Country' master.
PLC-WC-63	4	Ability to search for contracts for a combination of assignment parameters (year of installation, model, product type, Coverage type (Base, Registered, Commercial))
PLC-PD-14	4	Should be able to specify the various cost elements (parts, labor, travel etc.) that are covered by each policy. Covered as part of Claim payment
PLC-WC-54	4	Provision to define the claim processing fee (Rebate in Falcon) associated with each Warranty campaign. Covered as part of Claim payment CLM-PM-20
PLC-PD-20	4	To setup Applicability Terms on Policy, the following parameters would be required in the Business Conditions: a. Ship to State Province & Country code b. Owner state, country code c. Dealer address
PLC-PD-21	4	There can be a business scenario, where between two dates, none of the warranty policies might be applicable, so no coverage exists or no coverage except goodwill exist. In such cases, Trane would be able to configure an error message to Distributor, which does not allow Distributor to submit the claim.(Ex:- Message "Out of Warranty") Covered as part of Claim payment
PLC-WC-01	4	While applying coverage on a serial number, sales order, model combination (serial could be null) (during auto/manual Tavant registration) all the applicable policies are fetched which includes Standard, Extended types. The start and end date for each applicable policy is calculated independently based on the type of policy. PLC-WC-01 (except when manually set by the extended warranty upload spreadsheet)
PLC-WC-03	4	Overall warranty end date on equipment should be removed
PLC-WC-02	4	Overall warranty start date on equipment is the minimum start date from all the applicable standard policies.
PLC-WC-04	4	Warranty start date to be renamed as Overall Warranty Start Date on the equipment history page.
PLC-WC-07	4	Need to allow Distributors to make request for start date change with approval from warranty administrator system would update warranty periods based on new start date. The request would require backup documents. (Can be done using commissioning report. Warranty period will be updated based on the start-up date provided. Change required to override the start-up date with the new date provided by CSO). Covered as part of InstallBase

PLC-WC-08	4	Need to allow Warranty Administrator to upload template which can add or remove warranties associated to a serial, sales order, model combo. Covered as part of InstallBase
PLC-WC-33	3	Provision to allow a customer to view the warranty contract (coverage terms only for Standard and Extended) for a unit (Serial #, model).
PLC-PD-07	3	(Goodwill Variable Date) Specify the start and end dates manually while applying the policy on a serial number.
PLC-PD-08	3	(Goodwill Max) Starts on the date of startup and will cover for the months covered from start not exceeding the months covered from shipment.
PLC-PD-09	3	(Goodwill from Startup) Starts on the date of startup and will cover for the months covered from start.
PLC-PD-10	3	(Goodwill from Shipment) Starts on the date of shipment and will cover for the months covered from shipment.(Start Policy with Ship Date)
PLC-PD-24	1,2,3	Ability to verify for duplicate coverage assignments for the same coverage type and alert the user when user is trying to create a new coverage.
PLC-PD-25	1,2,3	The system should provide the facility to attach documents to a coverage ID.
PLC-PD-26	1,2,3	If the user modifies the coverage terms, the system should prompt a warning to the user.
PLC-WC-37	1,2,3	Provision to associate a warranty contract with one or more excluded failure codes (e.g.) Dirty Sock, Formicary Corrosion.
PLC-WC-61	3	Ability to define a authorization Policy number for a concession policy (Ex: Premium Dealer programs)
PLC-PD-27	1,2,3	Provision to copy a coverage.
PLC-WC-62	1,2,3	Ability to specify budgeted amount for a concession policy and track the usage of the amount based on concession claims.
PLC-WC-56	4	Provision to allow a select list of users to view the existing limited warranty coverage and any applicable warranty campaign for a given unit serial # Covered as part of InstallBase
PLC-WC-59	4	Ability to ensure that serialized parts have the same limited warranty terms (new parts sold with a limited warranty) irrespective of whether they are sold through RS (Residential Solutions) / Global Parts channels.
PLC-WC-06	3	Must have an integration between Extended Warranty Staging to Tavant to apply Extended Warranty Policies. Policy will be applied immediately for any unit in common retail. For any unit in stock, the policy would be applied at time of Tavant Registration
PLC-WC-30	1	Ability to maintain a list of potential applications (usage categories) for the product that determines warranty contract terms. (e.g.) Residential / Commercial. (Zoning)
New 619	2	Life Time Max: It's the max amount that can be claimed for a particular unit and it's the sum of all claim charged to this policy code. Applicable for All 3 types. Claim should be

		either Denied or Sent for Manual review.
PLC-WC-17	1	In the event that key component groups / sub-assemblies within the product have different coverage durations, then a provision is required to capture the same in the coverage definition screen by 'component group'. (e.g.) Compressor, Outdoor Coil, Indoor Coil, Heat Exchange, Parts. Removed/Installed Parts Grouping.
PLC-WC-15	1	Ability to create a unique coverage assignment based on a combination of Product Type, Model, Year of installation and registered terms (Base/Registered/Commercial)

2.1.2 Functional Design – Use Cases

Use Case # 1 - Standard Policy Definition

Description	Fields required while creating Standard Warranty Policy.
Business Value	The Warranty Admin in TWMS creates warranty Policies. This use case will be defining Standard Policy. Policies can be setup based on different parameters like Max coverage, Zoning, Term type, Additional Criteria, etc., mentioned in the Policy Definition Page.
Actors	Warranty Admin
Current Process/Functionality in TWMS	<p>Warranty Admin is able to create different types of Policies (Standard, Extended and Goodwill) from TWMS application.</p> <p>Standard Policy</p> <p>1. Following are the mandatory fields to be provided while creating Standard Policy: Policy Code, Policy Name, Installer Certification Status, and Warranty Type, Hours in Service/Energy Units Covered, Customer Type, Months Covered From Date Of Delivery, and Active From, Active Until, Priority, Transferable, Products Covered, Item Condition and Ownership State.</p> <p>2. Following are the optional fields present on the Policy Definition Page while creating Standard Policy:</p> <p>Build Date Applicable, Is Attachment Mandatory, Is Third Party Policy, Is Policy Applicable for WR, Forced Selection Needed During WR, Months Covered From Shipment, Comments, Terms and Conditions, Applicability Terms, Pricing, Transfer Fee, Coverage transfer window period from delivery date (in months), Maximum number of transfers to end customers and Dealers Covered.</p>

Proposed Flow

1. Warranty Admin can create Standard Policy Definition selecting “Standard” from the drop list under “Warranty Type” field.
2. ‘Months covered from Date of Delivery’ will be renamed to “Months covered from Startup Date”. Also ‘Date of Delivery/Delivery Date’ will be renamed to ‘Startup Date’ in the entire application for HVAC .

3. Following are the new fields which are added on the Policy Definition Page while creating Standard Warranty Policy:

(i) Coverage Types (mandatory fields):

-If **Max** is selected then 'Months covered from Startup Date' and 'Months covered from Shipment' will be mandatory fields.

-If **No Max** is selected then 'Months covered from Startup Date' will be mandatory and 'Months covered from Shipment' will be disabled.

(ii) **Zoning (mandatory)** field will be added which will capture where the AC Parts are applied. Value will be either Business or Residential. 'Both' option should also be introduced.

(iv) **Term Type (mandatory)** field will be added which will tell whether a policy is applicable for Base terms or Registered terms or both.

(iii) **True Coverage Months (optional)** data field will be added on Policy Definition Page. It will be used for warranty reserve and reporting purpose.

(v) **Manufacturing Country (optional)**-The country where Machine or Part has been manufactured.

(vi) **Ship To Country/State / Province / (optional)**-Ship to address of the Machine or Part which is provided from InstallBase.

(vii) Product/Model value should be provided in the Products covered section (mandatory field).

(viii) Digit in Tavant item (ex: digit 10=X) (**optional**): Admin has to provide nth digit information and value to configure the set up.

For example: If Part number is 0012346000444 then admin can set up condition like 7th digit of item is 6,7,A,B,C. So in this scenario Warranty Policy will be picked only if it satisfies the condition.

(ix) **Country of use (optional)**-Country of the end customer. Admin has to select the country from the drop down list. PLC-WC-38

If the country is UNITED STATES or Canada then in **State/Province of Use** field, drop down list will be displayed and user has to select the value from the list.

If the country is other than United States or Canada then in **State/Province of Use** field won't be mandatory though user can provide the data manually.

Note: Country of Use is the country of the end customer.

4. New section **Removed/Installed Parts Group** will be added next to Products Covered section. User can group different items together which would validate the policy on claim submission when distributor provides same items under Replace /Installed part section.

This section is Optional.

Note: HVAC will continue using Applicability terms on Policy Definition.

Part grouping is not based on the SIOP of the Part. Admin can configure the Part and if same Part is used in Removed/Installed Part then Policy should be picked. [PLC-PD-16]

Note: New feature to include a Part in multiple groups of the same schema needs to be developed. Currently in TWMS a Part can be added to a Single group of a particulate schema.

5. Admin can create different Coverage Types (Standard/Extended/Goodwill) from Policy Definition page. PLC-WC-10

6.If Warranty Admin tries to create a Policy Definition with an existing Policy Name then system will stop the user via an error message stating 'Policy Name Already Exist. Please check for duplicate assignments.'

The system will also check if the Part Group is covered as part of an existing policy definition for the same warranty type and alert the user with a soft warning that this Policy Definition might be duplicate. So Admin can't add same Part Group against same Warranty Type. Uniqueness of the Policy should be maintained based on Warranty Type, Product, Model and Part Group, [Term Type, Zoning, Length\(Coverage\)](#) [PLC-PD-24].

(This feature will be used by Residential HVAC).

7. New section labeled Attachments will be added on the Policy Definition Page. The Warranty Admin can configure whether the attachment can be shared with Dealer (Distributor). If Admin has marked attachments shared with Dealer on the Definition Page then Dealer can view the attachments on the Equipment History Page under Warranty Coverage section selecting the Policy hyperlink. When Dealer clicks on the Policy hyperlink new pop up comes up, Pop up will have new section Attachments which would display the attachments information [PLC-PD-25].(This feature will be used by Residential HVAC).

8. If Warranty Admin modifies any existing Policy Plan (coverage terms) then system should prompt a warning to the user. An alert box with a warning text example: Are you sure you want to update this Policy Definition will be displayed, if user select yes then only Policy Definition will be updated. If user selects no on the Alert box, then Policy definition won't be updated [PLC-PD-26].

9. Note: [PLC-WC-37] – This requirement is removed as this need not be implemented since it is covered in Applicability terms.

10.Warranty Admin will have an option to clone the details of an existing Policy Definition while creating a new one. Admin will select an existing Policy Definition from the listing Page and click on the Create Policy Definition button then system should prepopulate the details of the Policy Definition except for the Policy Name and policy Code[PLC-PD-27].(This feature will be used by CS and RS).

11. **Budgeted Amount(Optional)** field will be added on Policy Definition Page. This amount will be specified on the Policy at time of Claim validation [PLC-WC-62]. (This feature will be used by CS and RS).

Home
Policy Defin...
New Policy D...

POLICY DETAILS

Policy Code :
Policy Name :
Warranty Type : STANDARD
Build Date Applicable
Is Attachment Mandatory
Is Third Party Policy
Is Policy Applicable for WR
Forced Selection Needed During WR
Max No Max Variable
Months Covered From Startup Date :
Months Covered From Shipment :
Active From : 03/12/2016
Active Until : 03/12/2017
Comments : (4000 characters left)
Priority :
Terms and Conditions : (4000 characters left)
True Coverage Months :
Zoning : BOTH
Term Type : Base Registered

Fig(i)Standard Max Coverage

Home
Policy Defin...
New Policy D...

POLICY DETAILS

Policy Code :
Policy Name :
Warranty Type : STANDARD
Build Date Applicable
Is Attachment Mandatory
Is Third Party Policy
Is Policy Applicable for WR
Forced Selection Needed During WR
Max No Max Variable
Months Covered From Startup Date :
Active From : 03/12/2016
Active Until : 03/12/2017
Comments :
(4000 characters left)
Priority :
Terms and Conditions :
(4000 characters left)
True Coverage Months :
Zoning : BOTH
Term Type : Base Registered

Fig(ii)Standard No Max Coverage

True Coverage Months :

Zoning : ▼

Term Type : ☒ Base ☐ Registered

APPLICABILITY TERMS
ADDITIONAL CRITERIA

Manufacturing Country : ▼

Ship To Country : ▼

Ship To State/Province :

Country of Use : ▼

State/Province of Use :

th Digit in Tavant item is one of

Fig(iii)Additional criteria

Products Covered	
Specify Products/Models/Item Groups	Add Row
CVILLE SOLD - SYSTEM COMPONENTS (SMALL)-913 (MACHINE)	<input checked="" type="checkbox"/>
D'SON BUILT - ROTARY 50HP >912 (MACHINE)	<input checked="" type="checkbox"/>
D'SON BUILT - ROTARY < 50HP-912 (MACHINE)	<input checked="" type="checkbox"/>
D'SON SOLD - SYSTEM COMPONENTS (MEDIUM)-912 (MACHINE)	<input checked="" type="checkbox"/>
NIRVANA < 50HP-913 (MACHINE)	<input checked="" type="checkbox"/>
D'SON BUILT - OIL-FREE-912 (MACHINE)	<input checked="" type="checkbox"/>
UNIGY-913 (MACHINE)	<input checked="" type="checkbox"/>
PEGASUS 50HP <913 (MACHINE)	<input checked="" type="checkbox"/>
Parts Group	Add Row
parts group test 1	<input checked="" type="checkbox"/>
parts group test 3	<input checked="" type="checkbox"/>
parts group test 2	<input checked="" type="checkbox"/>

Fig(iv)Parts Group

Assumptions and Dependencies
1. PLC-PD-12

Superseded items and original items will be added manually (or the same group -to apply warranty.

	<ul style="list-style-type: none"> a. There are some rules to automatically look at the prefix and assign the new item to a group. Large volume is handled this way and specific items will have to be added manually. b. Business will be using applicability on warranty policy setup, configured 'where parts start with xxx'. <p>2. Installer Certification and Customer Type fields on the Policy Definition Page will be removed for HVAC Business Unit. Currently we don't have any BRD associated with this. It will be a new requirement and has to be developed.</p>
Impact on existing BUs	<p>1. Max, No Max and Variable logic will be applicable to all BU's (Subject to other BU Approval).</p> <p>By default, for existing Policies set up Max radio button will be selected. (This is how the current setting are)</p> <p>Coverage Types:</p> <ul style="list-style-type: none"> -If Max is selected then 'Months covered from Startup Date' and 'Months covered from Shipment' will be mandatory fields. -If No Max is selected then 'Months covered from Startup Date' will be mandatory and 'Months covered from Shipment' will be disabled. -Variable type is not applicable for Standard Policy. <p>2. "True Coverage Months" field will be applicable to all BU's. (Subject to other BU Approvals).</p> <p>True Coverage Months is an optional data field and it will be added on Policy Definition Page. It will be used for warranty reserve and reporting purpose.</p> <p>2. All the other new fields (mandatory/optional) going to be introduced on Policy Definition Page won't impact other BU's as it will be BU configurable. These fields will be turned ON for HVAC and Off for other BUs.</p> <p>3. Hours in Service/Energy Units Covered field will be removed for HVAC. There will be BU flag to handle this.</p> <p>4. If any Business Unit is not using Extended Warranty Purchase feature then 'Extended Warranty Purchase End Window Period from Shipment Date', 'Extended Warranty Purchase End Window Period from Delivery Date' and 'Extended Warranty Purchase Start Window Period From Delivery Date' will be removed for Extended Warranty Set Up.</p> <p>There will be a BU Flag which will handle whether to display these fields or not on Policy Definition page.</p>
Business Priority	High
Reference/Expectations	None

Notes	<p>1. Coverage duration will be in months.</p> <p>Customer Type is not a Policy Condition for CS/Parts</p> <p>2. Each policy is associated with a priority. Priority is represented by a number. The smallest number has the highest priority. The larger the number, the lower the priority. Priority will be given in order to achieve stacking concept.</p> <p>3. All the policies start on the Startup Date (Except from Goodwill ship date). This will result in overlapping policies – more than one policy covering a part/machine etc. for the same period. In such cases, the policy with highest priority takes precedence. This is how the stacking of policies (as-is process) will be achieved.</p> <p>4. Note: New feature to include a Part in multiple groups of the same schema needs to be developed. Currently in TWMS a Part can be added to a Single group of a particulate schema.</p> <p>5. Note: Installer Certification Status, Hours in Service/Energy Units Covered, Customer Type fields are not needed for HVAC.</p>
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Use Case # 2 - Extended Warranty Policy Definition - CS Only

Description	Fields required while creating Extended Warranty Policy.
Business Value	The Warranty Admin in TWMS creates warranty Policies. This use case will be defining Extended Policy. Policies can be setup based on different parameters like Max coverage, Zoning, Term type, Delayed Startup, Additional Criteria, etc., mentioned in the Policy Definition Page
Actors	Warranty Admin
Current Process/Functionality in TWMS	<p>Warranty Admin is able to create different types of Policies (Extended) from TWMS application.</p> <p>Extended Policy</p> <p>1. Following are the mandatory fields to be provided while creating Extended Policy: Policy Code, Policy Name, Installer Certification Status, Warranty Type, Hours in Service/Energy Units Covered, Customer Type, Months Covered From Date Of Delivery, Extended Warranty Purchase End Window Period from Delivery Date, Extended Warranty Purchase End Window Period from Shipment Date, Active From, Active Until, Priority, Products Covered, Item Condition and Ownership State.</p> <p>2. Following are the optional fields present on the Policy Definition Page while creating Extended Policy: Is Policy Displayed To Internal Users Only, Build Date Applicable, Is Attachment Mandatory, Is Third Party Policy, Is Policy Applicable for WR, Months Covered From Shipment, Comments, Terms and Conditions, Applicability Terms, Pricing, Transferable, Transfer Fee, Coverage transfer window period from delivery date(in months), Maximum number of transfers to end customers and Dealers Covered.</p>

Proposed Flow

1. Warranty Admin can create Extended Policy Definition selecting Extended from the drop list under Warranty Type field.
 2. 'Months covered from Date of Delivery' will be renamed to Months covered from 'Startup Date'. Also 'Date of Delivery'/'Delivery Date' will be renamed to 'Startup Date' in the entire application for HVAC Business Unit.
 3. Following are the new fields which are added on the Policy Definition Page while creating Standard Warranty Policy:
 - (i) Coverage Types:
 - If **Max** is selected then 'Months covered from Startup Date' and 'Months covered from Shipment' will be mandatory fields.
 - If **No Max** is selected then 'Months covered from Startup Date' will be mandatory and 'Months covered from Shipment' will be disabled.
 - If **Variable** is selected then 'Months covered from Startup Date' and 'Months covered from Shipment' will be disabled.
 - Warranty Start Date and End Date will be provided manually.
 - (iii) **True Coverage Months (optional)** data field will be added on Policy Definition Page.
 - (v) **Manufacturing country (optional)**-The country where Machine /Parts has been manufactured.
 - (vi) Ship-to-State / Province / Country-Ship to address of the Machine/Parts which is provided from InstallBase.
 - (vii) Product/Model value should be provided in the Products covered section.
 - (viii) Digit in Tavant item (ex: digit 10=X) (**optional**): Admin has to provide nth digit information and value to configure the set up.

For example: If Part number is 0012346000444 then admin can set up condition like 7th digit of item is 6,7,A,B,C. So in this scenario Warranty Policy will be picked only if it satisfies the condition.
 - (ix) **Delayed Startup(Optional)**: check box will be added for extended Policy set up. If check box is selected, then Warranty End Date of ANY OTHER EXTENDED MAX POLICY(s) on Equipment will depend on the Max ship date of Delayed Startup policy. [Delayed Startup Policy Extends the Max from Ship date of all other Extended Policies on the machine/part which also is a type of Max.](#)
 - (x) **Country of use (optional)**-Country of the end customer. Admin has to select the country from the drop down list.

If the country is UNITED STATES or Canada then in **State/Province of Use** field, drop down list will be displayed and user has to select the value from the list.

If the country is other than United States or Canada then in **State/Province of Use** field won't be mandatory though user can provide the data manually.

Country of Use is the country of the end customer
 4. New section [Removed/Installed Parts Group](#) will be added below Products Covered section. User can group different items together which would validate the policy on claim submission when distributor is providing same items under Replace/Installed part section.

Note: This will be applicable only if specified on Policy, else this field will be optional.
 5. If Warranty Admin tries to create a Policy Definition with an existing Policy Name then system will stop the user via an error message stating 'Policy Name Already Exist. Please check for duplicate assignments.'
- The system will also check if the Part Group is covered as part of an existing policy definition for the same warranty type

and alert the user with a soft warning that this Policy Definition might be duplicate. So Admin can't add same Part Group against same Warranty Type. Uniqueness of the Policy should be maintained based on Warranty Type, Product, Model and Part Group [PLC-PD-24].(This feature will be used by Residential HVAC).

6. New section labeled Attachments will be added on the Policy Definition Page. The Warranty Admin can configure whether the attachment can be shared with Dealer (Distributor). If Admin has marked attachments shared with Dealer on the Definition Page then Dealer can view the attachments on the Equipment History Page under Warranty Coverage section selecting the Policy hyperlink. When Dealer clicks on the Policy hyperlink new pop up comes up, Pop up will have new section Attachments which would display the attachments information [PLC-PD-25].(This feature will be used by Residential HVAC).

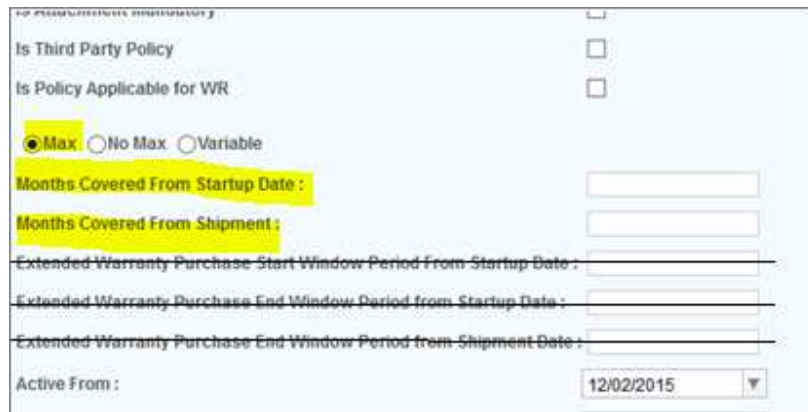
7. If Warranty Admin modifies any existing Policy Plan (coverage terms) then system should prompt a warning to the user. An alert box with a warning text example: Are you sure you want to update this Policy Definition will be displayed, if user select yes then only Policy Definition will be updated. If user selects no on the Alert box, then Policy definition won't be updated [PLC-PD-26]. (This feature will be used by CS and RS).

8. Note: [PLC-WC-37] - Note: This requirement is removed as this need not be implemented since it is covered in Applicability terms.

9. Warranty Admin will have an option to clone the details of an existing Policy Definition while creating a new one. Admin will select an existing Policy Definition from the listing Page and click on the Create Policy Definition button then system should prepopulate the details of the Policy Definition except for the Policy Name and policy Code[PLC-PD-27].

(This feature will be used by CS and RS).

10. **Life Time Max:** It's the max amount that can be claimed for a particular unit and it's the sum of all claim charged to this policy code. Applicable for All 3 types. Claim should be either Denied or Sent for Manual review. New 619



Fig(i) Extended Max Coverage

Customer Type :	DirectCustomer NationalAccount Dealer
Build Date Applicable	<input type="checkbox"/>
Is Attachment Mandatory	<input type="checkbox"/>
Is Third Party Policy	<input type="checkbox"/>
Is Policy Applicable for WR	<input type="checkbox"/>
<input type="radio"/> Max <input checked="" type="radio"/> No Max <input type="radio"/> Variable	
Months Covered From Startup Date :	<input type="text"/>
Extended Warranty Purchase Start Window Period From Startup Date :	<input type="text"/>
Extended Warranty Purchase End Window Period from Startup Date :	<input type="text"/>
Extended Warranty Purchase End Window Period from Shipment Date :	<input type="text"/>
Active From :	12/02/2015

Fig(ii) Extended No Max Coverage

Installer Certification Status :	CERTIFIED
Warranty Type :	EXTENDED
Is Policy Displayed To Internal Users Only	<input type="checkbox"/> Regular Snip
Customer Type :	EndCustomer DirectCustomer NationalAccount Dealer
Build Date Applicable	<input type="checkbox"/>
Is Attachment Mandatory	<input type="checkbox"/>
Is Third Party Policy	<input type="checkbox"/>
Is Policy Applicable for WR	<input type="checkbox"/>
<input type="radio"/> Max <input type="radio"/> No Max <input checked="" type="radio"/> Variable	
Extended Warranty Purchase Start Window Period From Startup Date :	<input type="text"/>
Extended Warranty Purchase End Window Period from Startup Date :	<input type="text"/>
Extended Warranty Purchase End Window Period from Shipment Date :	<input type="text"/>

Fig(iii) Extended Variable

True Coverage Months :	<input type="text"/>
Zoning :	BUSINESS
Term Type :	<input checked="" type="radio"/> Base <input type="radio"/> Registered <input type="radio"/> Both
Delayed Startup :	<input type="checkbox"/>

Fig(iv)Delayed Startup field

Assumptions and Dependencies	<p>1. Installer Certification and Customer Type fields on the Policy Definition Page will be removed for HVAC Business Unit. Currently we don't have any BRD associated with this. It will be a new requirement and has to be developed.</p>
Impact on existing BUs	<p>1. Max, No Max and Variable logic will be applicable to all BU's (Subject to other BU Approval).</p> <p>By default, for existing Policies set up Max radio button will be selected. (This is how the current setting are)</p> <p>Coverage Types:</p> <p>-If Max is selected then 'Months covered from Startup Date' and 'Months covered from Shipment' will be mandatory fields.</p> <p>-If No Max is selected then 'Months covered from Startup Date' will be mandatory and 'Months covered from Shipment' will be disabled.</p> <p>- If Variable is selected then 'Months covered from Startup Date' and 'Months covered from Shipment' will be disabled. Warranty Start Date and End Date will be provided manually.</p> <p>2. "True Coverage Months" field will be applicable to all BU's. (Subject to other BU Approvals).</p> <p>True Coverage Months is an optional data field and it will be added on Policy Definition Page. It will be used for warranty reserve and reporting purpose.</p> <p>3. All the other new fields (mandatory/optional) going to be introduced on Policy Definition Page won't impact other BU's as it will be BU configurable. These fields will be turned ON for HVAC and Off for other BUs.</p> <p>4. Hours in Service/Energy Units Covered field will be removed for HVAC. There will be BU flag to handle this</p> <p>5. If Business Unit is not using Extended Warranty Purchase feature then 'Extended Warranty Purchase End Window Period from Shipment Date', 'Extended Warranty Purchase End Window Period from Delivery Date' and 'Extended Warranty Purchase Start Window Period From Delivery Date' will be removed for Extended Warranty Set Up.</p> <p>There will be a BU Flag which will handle whether to display these fields or not on Policy Definition page.</p>
Business Priority	High
Reference/Expectations	<p>1. Specifying Warranty Start Date and End Date for Extended Variable Policy will be done through upload or through the Extended Warranty integration. (This requirement will be covered as part of Install base Fs) PLC-PD-06</p>
Notes	<p>1. Coverage duration will be in months.</p> <p>2. Each policy is associated with a priority. A number represents priority. The smallest</p>

number has the highest priority. The larger the number, the lower the priority. Priority will be given in order to achieve stacking concept.

3. All the policies start on the Startup Date. This will result in overlapping policies – more than one policy covering a part/machine etc. for the same period. In such cases, the policy with highest priority takes precedence. This is how the stacking of policies (as-is process) will be achieved.

4. Budgeted Amount: is not applicable for Extended Warranty Policy.

Use Case # 3 - Goodwill Policy Definition

Description	Fields required while creating Goodwill Plan.
Business Value	The Warranty Admin in TWMS creates warranty Policies. This use case will be defining Goodwill Policy. Policies can be setup based on different parameters like Is Start Date Shipment Date, Max coverage, Zoning, Term type, Additional Criteria, etc., mentioned in the Policy Definition Page
Actors	Warranty Admin
Current Process/Functionality in TWMS	<p>Warranty Admin is able to create different types of Policies (Goodwill) from TWMS application.</p> <p>Goodwill Policy</p> <p>1. Following are the mandatory fields to be provided while creating Goodwill Policy: Policy Code, Policy Name, Installer Certification Status, Warranty Type, Customer Type, Active from, Active Until, Products Covered, Item Condition and Ownership State.</p> <p>2. Following are the optional fields present on the Policy Definition Page while creating Goodwill Policy: Build Date Applicable, Is Third Party Policy, Comments, Terms and Conditions, Applicability Terms, Pricing, Transferable, Transfer Fee, Coverage transfer window period from delivery date (in months), Maximum number of transfers to end customers and Dealers Covered.</p>

Proposed Flow

1. Warranty Admin can create Goodwill Policy Definition selecting Goodwill from the drop list under Warranty Type field.
2. 'Months covered from Date of Delivery' will be renamed to Months covered from 'Startup Date'. Also 'Date of Delivery'/'Delivery Date' will be renamed to 'Startup Date' in the entire application for HVAC Business Unit.
3. Following are the new fields which are added on the Policy Definition Page while creating Standard Warranty Policy:
 - i) Coverage Types:

- New field '[Start Policy at Ship Date](#)' will be added only for Goodwill Policy.
Please refer below table for calculating Start and End Date for different types of Goodwill Plan:

Goodwill					
Coverage Type	Start policy at Ship Date	Applicable for CS	Applicable for RS	Start Date	End Date
Max	N	Y	N/A	Start Up Date	Min Date (Start Up Date + Months Covered from Start Up Shipment Date+ Months Covered from Ship Date)
Max	Y	N/A	N/A	Shipment Date	Min Date (Start Up Date + Months Covered from Start Up Shipment Date+ Months Covered from Ship Date)
No Max	N	N/A	N/A	Start Up Date	Start Up Date + Months Covered from Start Up
No Max	Y	N/A	Y	Shipment Date	Start Up Date + Months Covered from Start Up

-If **Variable** is selected then 'Months covered from Startup Date' and 'Months covered from Shipment' will be disabled. Also '[Start Policy at Ship Date](#)' field will be disabled. Warranty Start Date and End Date will be provided manually. [This feature will be applicable for Commercial and Global Parts]

(ii)**Zoning (mandatory)** will be added which will capture where the AC Parts are applied. Value will be either Business or Residential. '[BOTH](#)' option should also be there for all Warranty Types. Currently Zoning is a mandatory field on Policy Definition Page for HVAC BU. By Default, it will be set the value of Business Unit.

(iii)**Term Type (mandatory)** will be added which will tell whether a policy is applicable for Base terms or Registered terms or both.

(iv) **True Coverage Months (optional)** data field will be added on Policy Definition Page.

(v)**Manufacturing country (optional)**-The country where Machine /Parts has been manufactured.

(vi)Ship-to-State / Province / Country-Ship to address of the Machine/Parts which is provided from InstallBase.

(vii)Product/Model value should be provided in the Products covered section.

(viii)Digit in Tavant item (ex: digit 10=X) (**optional**): Admin has to provide nth digit information and value to configure the set up.

For example: If Part number is 0012346000444 then admin can set up condition like 7th digit of item is 6,7,A,B,C.So in this scenario Warranty Policy will be picked only if it satisfy the condition.

(ix)**Country of use (optional)**-Country of the end customer. Admin has to select the country from the drop down list.

If the country is UNITED STATES or Canada then in **State/Province of Use** field, drop down list will be displayed and user

has to select the value from the list.

If the country is other than United States or Canada, then in **State/Province of Use** field won't be mandatory though user can provide the data manually.

Country of Use is the country of the end customer

4. New section ~~Parts Group~~ 'Installed/Removed Parts Group' will be added under Products Covered. User_ can group different items together which would validate the policy on claim submission when distributor is providing same items under Replace part/Installed part section. [Need to Rename Parts Group as 'Installed/Removed Parts Group'](#).

5. If Warranty Admin tries to create a Policy Definition with an existing Policy Name then system will stop the user via an error message stating 'Policy Name Already Exist. Please check for duplicate assignments.'

The system will also check if the Part Group is covered as part of an existing policy definition for the same warranty type and alert the user with a soft warning that this Policy Definition might be duplicate. So Admin can't add same Part Group against same Warranty Type. Uniqueness of the Policy should be maintained based on Warranty Type, Product, Model and Part Group [PLC-PD-24].(This feature will be used by Residential HVAC).

6. New section labeled Attachments will be added on the Policy Definition Page. The Warranty Admin can configure whether the attachment can be shared with Dealer (Distributor). If Admin has marked attachments shared with Dealer on the Definition Page, then Dealer can view the attachments on the Equipment History Page under Warranty Coverage section selecting the Policy hyperlink. When Dealer clicks on the Policy hyperlink new pop up comes up, Pop up will have new section Attachments which would display the attachments information [PLC-PD-25].(This feature will be used by Residential HVAC).

7. If Warranty Admin modifies any existing Policy Plan (coverage terms) then system should prompt a warning to the user. An alert box with a warning text example: Are you sure you want to update this Policy Definition will be displayed, if user select yes then only Policy Definition will be updated. If user selects no on the Alert box, then Policy definition won't be updated [PLC-PD-26].(This feature will be used by Residential HVAC).

8. Note: [PLC-WC-37] - This requirement is removed as this need not be implemented since it is covered in Applicability terms.

9. Authorization Number: [PLC-WC-61]

Authorization number will be displayed on all types of claims. However, this field will be a mandatory field if claim picks a Goodwill coverage. Else this field will be non-mandatory on claim page1. This will be a free text without any logic. This is mandatory only if "Authorization Number Required" check box is checked (Policy Definition)

Page 1 of 2

Business Unit:

Residential HVAC

Dealer Name:

[Specify Dealer Number](#)

Third Party Name:

Serial Number:

Work Order Number:

Date of Failure:

Claim Type:

Machine ▾

Authorization Number:

[Click here to file non serialized claim](#)

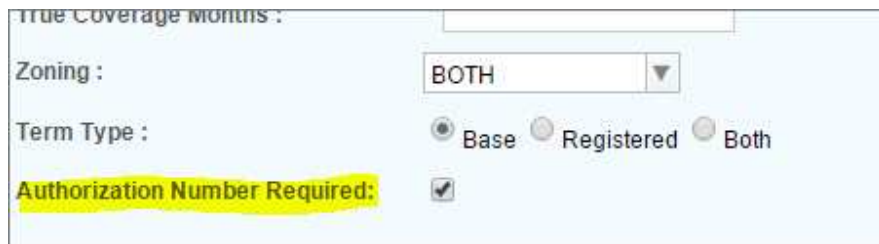
Commercial Policy:

☐

Date of Repair:

"Authorization Number Required" Field will be added on Policy Definition Page only for Goodwill Policy. (This feature will

be used by Residential HVAC). (This is for approval prior to replacement like the VS drive)



If this check box is checked on the Goodwill policy and if the same policy is picked on the claim, then Authorization number field will be a mandatory field.

Else if this check box is unchecked on policy and even if the same policy is picked on the claim, then Authorization number field will be a non-mandatory field.

10. Warranty Admin will have an option to clone the details of an existing Policy Definition while creating a new one. Admin will select an existing Policy Definition from the listing Page and click on the Create Policy Definition button then system should prepopulate the details of the Policy Definition except for the Policy Name and policy Code[PLC-PD-27].(This feature will be used by Residential HVAC).

11. **Budgeted Amount(Optional)** field will be added on Policy Definition Page. This amount will be specified on the Policy at time of Claim validation [PLC-WC-62]. This will be used by CS and RS.

Assumptions and Dependencies	None
Impact on existing BUs	<ol style="list-style-type: none"> 'Is Start Date Shipment Date' field will be common to all Business Units (Subject to other BU Approval). New field 'Start Policy at Ship Date' will be added only for Goodwill Policy. Validation message while creating Policy with same Policy Name will be common to all Business Units (Subject to other BU Approval). If Warranty Admin tries to create a Policy Definition with an existing Policy Name then system will stop the user via an error message stating 'Policy Name Already Exist. Please check for duplicate assignments.' [PLC-PD-24] Adding attachments on the Warranty Definition Page will be common to all Business Units (Subject to other BU Approval). New section labeled Attachments will be added on the Policy Definition Page. The Warranty Admin can configure whether the attachment can be shared with Dealer. If Admin has marked attachments shared with Dealer on the Definition Page, then Dealer can view the attachments on the Equipment History Page under Warranty Coverage section selecting the Policy hyperlink. When Dealer clicks on the Policy hyperlink new pop up comes up, Pop up will have new section Attachments which would display the attachments information[PLC-PD-25]. Alert message while modifying an existing Policy will be common to all Business Units (subject to other BU Approval).

	<p>If Warranty Admin modifies any existing Policy Plan (coverage terms) then system should prompt a warning to the user. An alert box with a warning text example: Are you sure you want to update this Policy Definition will be displayed, if user select yes then only Policy Definition will be updated. If user selects no on the Alert box, then Policy definition won't be updated[PLC-PD-26].</p> <p>5. Cloning of Policy feature will be common to all Business Units (subject to other BU Approval).</p> <p>Warranty Admin will have an option to clone the details of an existing Policy Definition while creating a new one. Admin will select an existing Policy Definition from the listing Page and click on the Create Policy Definition button then system should prepopulate the details of the Policy Definition except for the Policy Name and policy Code[PLC-PD-27]</p> <p>6. All the other mandatory/optional fields on Policy Definition Page won't impact other BU's as it is BU configurable.</p> <p>7. Installer Certification and Customer Type fields on the Policy Definition Page will be removed for HVAC Business Unit.</p> <p>8. True Coverage Months field will be applicable for all BU's(Subject to other BU Approvals). True Coverage Months (optional) data field will be added on Policy Definition Page. It will be used for warranty reserve and reporting purpose.</p> <p>9. Hours in Service/Energy Units Covered field will be removed for HVAC.</p>
Business Priority	Medium
Reference/Expectations	<p>1.[PLC-WC-06]Must have an integration between Extended Warranty Staging to Tavant to apply Extended Warranty Policies. Policy will be applied immediately for any unit in common retail. For any unit in stock, the policy would be applied at time of Tavant Registration.</p> <p>This will be covered as part of InstallBase Functional Design document.</p>
Notes	<p>1. Goodwill coverage should not be shown to the Dealer (Distributor) on the warranty coverage section of equipment history page.</p>

Use Case # 4 - Policy Definition Search

Description	Ability to search for contracts for a combination of assignment parameters (year of installation, model, product type, Coverage type (Base, Registered, Commercial)).
Business Value	Warranty Admin will be able to search the Policies based on different search criteria. This will help in managing the Warranty Policies.
Actors	Warranty Admin

Proposed Flow

New Search (Predefined Search) will be added for Policy Definition view. Admin should be able to search Policies using following criteria:

-Policy Code

-Policy Name

-True Coverage Months

-Year Of Installation 'Policy Available During' (i.e. This is Active From to Active Till)

-Term Type

-Zoning

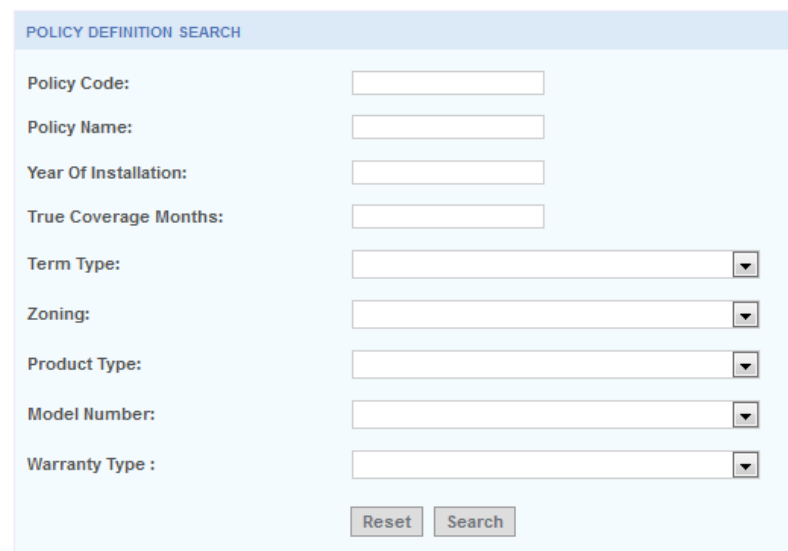
-Product Type

-Model Number

-Warranty Type

There are three types of Warranty Types: Standard, Extended and Goodwill.

New section will be added under left pane of Warranty Admin>>Manage Warranty Policies. Admin can search the policies based on the criteria and also download the result.



Fig(i)Predefined Search(Policy Definition)

Assumptions and Dependencies

None

Impact on existing BUs

Search feature will be common for all BU's(Subject to other BU Approvals).
Zoning and Term Type field will be displayed only to HVAC Business Units.

	Policy Code, Policy Name, Year Of Installation, Product Type, Model Number and Warranty Type will be search criteria for other Business Units.
Business Priority	Medium
Reference/Expectations	<ol style="list-style-type: none"> 1. This is covered as part of Claim Payment Functional Design - PLC-PD-14 2. Note: New parameter to be added in Applicability Terms (Business Condition) <ol style="list-style-type: none"> 1.Ship To Country 2.Ship To State/Province 3.Owner State, country_code 4. Dealer Address <p><u>Note: Dealer Address This will be a validation Rule on Term Registration. This will be a new requirement This is part of IB.</u></p> <p>Above fields will be added in Warranty Business Condition so that Admin can add the same in Applicability Terms and use it while creating the Policy.</p> 3. This is covered as part of Claim Payment Functional Design - PLC-PD-21 4. This is covered as part of Install Base Functional Design - PLC-WC-01 5. This is covered as part of Install Base Functional Design - PLC-WC-03 6. Warranty Start date and Warranty End Date will be removed from Equipment History Page from Equipment Info. This is covered as part of Install Base Functional Design PLC-WC-04 7. This is covered as part of Install Base Functional Design - PLC-WC-07 8. This is covered as part of Install Base Functional Design - PLC-WC-08 9. This is covered as part of Install Base Functional Design-PLC-WC-02 10. This is covered as part of Install Base Functional Design-PLC-WC-56
Notes	None

2.2 WARRANTY COVERAGE - FIELD MODIFICATION/RETROFIT

2.2.1 Requirements

PLC-WC-42	1	Provision to specify the campaign execution type (e.g.) Mandatory, Recommended and 'Fix on Fail'.
PLC-WC-65	1	Rename "Field Modification" to "Campaign Retrofit" through out the application for HVAC. This should not impact existing BU
PLC-WC-45	1	Ability to define the list of removed & replacement part numbers along with the quantity - that can be claimed against a specific warranty campaign. Part Source drop down needs to be added to the Campaign Setup to determine the source of the Part.
PLC-WC-12	1	FM Ability to create different coverages under a specific Coverage Type and define each unique coverage with a bulletin number, coverage description, effective date and expiration

		date.
PLC-WC-46	1	Ability to define the max. labor hours / Labor amount that can be claimed against each warranty campaign.
PLC-WC-45		Ability to define the list of removed & replacement part numbers along with the quantity - that can be claimed against a specific warranty campaign. Part Source drop down needs to be added to the Campaign Setup to determine the source of the Part.

2.2.2 Functional Design – Use Cases

Use Case # 1	Use Case # 1 - Field Modification/ Retrofit Set up
Description	<p>Provision to specify the campaign execution type (e.g.) Mandatory, Recommended and 'Fix on Fail'.</p> <p>Ability to define the list of removed & replacement part numbers along with the quantity - that can be claimed against a specific warranty campaign. Part Source drop down needs to be added to the Campaign Setup to determine the source of the Part.</p> <p>One new columns Sales Order Number will be added in the existing serial number upload template. Validation should be added so that sales order number and model number should be mandatory for loading non serialized units in campaign.</p>
Business Value	Warranty Admin configures retrofit campaigns for the units.
Actors	Warranty Admin
Current Process/Functionality in TWMS	<p>Warranty Admin is able to create/modify Field Modification set up from TWMS application.</p> <p>1. Following are the mandatory fields to be provided while creating Campaign set up: Field Modification Code, Field Modification Class, Start Date, End Date and Field Modification Description in English (US) on Field Modification Page 1.</p> <p>Admin has to download the template from the link 'Click to download the serial number upload template.' And load the data in the template and load the information in the application.</p> <p>2. All the sections mentioned on the Field Modification Page 2 is optional.</p>

Proposed Flow

Warranty Admin can create Retrofit set up.

1. Field Modification will be renamed to **Retrofit** for HVAC.

2. New Campaign Class '**Mandatory, Recommended, Fix on Fail**' will be added in the Class section.

"Should be published to Dealer(Distributor)?" Yes/No check box will be added on the Retrofit Page1 which would define type of Retrofit. There are three types of Retrofit:

-**Mandatory**-As soon as Campaign set up is created the affected serial number will be notified in the Pending Retrofit inbox of the Distributor. Distributor can file Retrofit Claim within the Retrofit End Date.

-Recommended: Workflow same as Fix on Fail Type.

-Fix on Fail: Admin will create Retrofit Set up but Distributor won't be notified in the Pending Retrofit inbox. There will be separate workflow for this type of Retrofit claim (will be covered in Claim Submission Functional Design document).

3. New Column 'Sales Order Number' will be added in the Serial Number Upload template. For Serialized Item user has to provide only Serial number where as for Non Serialized Item user has to provide Sales Order Number along with Model number.

Validation should be added so that sales order number and model number should be mandatory for loading non serialized units in campaign.

3. Part Source drop down will be added for Removed and Installed Part section on Retrofit Page 2. Though this will be an optional drop down list. If Admin has configured, then it will be populated on Part Source section under Component Replaced part section of the Claim Page 2 and also Dealer (Distributor) can modify this value.

4. On Field Modification(Retrofit) set up page 2 **Maximum labor hours/labor Amount** will be added which would be claimed against Campaign[PLC-WC-46].(This feature will be used by Residential HVAC).

5. Ability to define the list of removed & replacement part numbers along with the quantity - that can be claimed against a specific warranty campaign. Which already exists. However, Part Source drop down needs to be added to the Campaign Setup to determine the source of the Part.

Assumptions and Dependencies	1. Assuming Bulletin number as Field Modification Code, coverage description as Field Modification Description in English(US),effective date as Start Date, expiration date as End date. PLC-WC-12
Impact on existing BUs	<p>"Field Modification" will be renamed to "Retrofit" only for HVAC BUs.</p> <p>Retrofit upload template will be applicable only for HVAC BU.</p> <p>Following fields will be applicable to all the business units but will be admin configurable:</p> <ul style="list-style-type: none"> Part Source Maximum labor hours/labor Amount Sales order number <p>Multi unit retrofit claims will be applicable for <u>both CS and RS</u> BU.</p> <p><u>For RS only single unit Retrofit claim.</u></p>
Business Priority	High
Reference/Expectations	None
Notes	Requirement is that the notification to distributor Pending queue is configurable. CLM-FM-07 When Field Modification has been configured to "notify dealer an email notification must be sent to the CSO (dealer)s. This applies to all retrofit types, but will primarily be used with Mandatory.

3 NEED CLARIFICATION:

Requirement ID	Description	Comments
PLC-WC-19	Ability to define the cap for covered amounts for Parts and Labor in currency terms for each IR Trane Business Unit.	Will be managed via Business Rule
PLC-WC-20	Provision to define miscellaneous charges (e.g.) (Sublet for Refrigerant) and associate one or more miscellaneous charges with a warranty contract.	Business will decide, Tavant has the possible options. (New Labor Code or capture as part of Misc Parts)
PLC-WC-21	Provision to define a cap (max. amount) for each miscellaneous charge associated with the warranty contract.	Will be managed via Business Rule
NEW 616	Must have integration between Extended Warranty Staging to Tavant to apply Extended Warranty Policies. Policy will be applied immediately for any unit in common retail. For any unit in stock, the policy would be applied at time of Tavant Registration. This is covered in Integration	. This is covered in Integration

34 EXISTING FEATURES IN TWMS

Below is the list of requirements which are currently existing in TWMS. Tavant will be preparing a separate document explain all such requirements with relevant screenshots.

Requirement ID	Description	Type	Applicable BU
PLC-PD-01	Types of policies - Standard Base, Standard Registered, Extended and Good Will.	Exists	
PLC-PD-12	Warranty Admin will be able to setup policies based on Product, Model, Item Groups, Distributors and Distributor Groups.	Exists	
PLC-PD-14	Will be able to specify the various cost elements (parts, Labor, travel etc.) that are covered by each	Exists	

Requirement ID	Description	Type	Applicable BU
	policy.		
PLC-WC-13	Ability to assign a unique coverage ID to each unique coverage. This coverage id is auto generated based on a system logic.	Exists	
PLC-WC-14	In addition to Coverage ID, each contract defined should have a unique Coverage Code. Coverage Code is automatically generated as a concatenation of the codes of select parameters in the contract definition.	Exists	
PLC-WC-15	Ability to create a unique coverage assignment based on a combination of Product Type, Model, Year of installation and registered terms (Base/Registered/Commercial)	Exists	
PLC-WC-17	In the event that key component groups / sub-assemblies within the product have different coverage durations, then a provision is required to capture the same in the coverage definition screen by 'component group'. (e.g.) Compressor, Outdoor Coil, Indoor Coil, Heat Exchange, Parts	Exists	
PLC-WC-18	Ability to associate a coverage level of warranty expenses (Parts, Labor and Other or a combination of these) to a Coverage. System should have a provision to specify default settings for the above three flags. (Y/N)	Exists	
PLC-WC-19	Ability to define the cap for covered amounts for	Exists	

Requirement ID	Description	Type	Applicable BU
	Parts and Labor in currency terms for each IR Trane Business Unit.		
PLC-WC-20	Provision to define miscellaneous charges (e.g.) (Sublet for Refrigerant) and associate one or more miscellaneous charges with a warranty contract.	Exists	
PLC-WC-21	Provision to define a cap (max. amount) for each miscellaneous charge associated with the warranty contract.	Exists	
PLC-WC-22	Ability to create and maintain revisions to existing warranty coverage of all types. Revisions to coverage can be changes to the name of coverage description, coverage assignments, etc.	Exists	
PLC-WC-24	The System should not commit a new coverage, unless all the mandatory fields have been entered on the coverage.	Exists	
PLC-WC-25	The system will have the ability to identify coverage with the business unit associated with it which means that Contracts will be set at the Tavant BU level.	Exists	
PLC-WC-26	The system should have the ability to define coverage based on in-service date (installation date or ship date)	Exists	
PLC-WC-27	Ability to allow create, edit aPLnd view privileges for the contract definition by Warranty Admin.	Exists	

Requirement ID	Description	Type	Applicable BU
PLC-WC-29	Ability to specify the Coverage Duration in years, months, days.	Exists	
PLC-WC-30	Ability to maintain a list of potential applications (usage categories) for the product that determines warranty contract terms. (e.g.) Residential / Commercial.	Exists	
PLC-WC-31	Ability to capture internal comments for each coverage	Exists	
PLC-WC-32	Ability to inactivate warranty coverage if the coverage is not applicable anymore	Exists	
PLC-WC-34	The Coverage End date has to be greater than start date	Exists	
PLC-WC-35	The Coverage Start date should allow future date	Exists	
PLC-WC-36	Provision to exclude a specific component / sub assembly from the coverage. (e.g.) panels, filters.	Exists	
PLC-WC-39	Provision to define warranty campaigns.	Exists	
PLC-WC-40	Provision to specify a campaign type (e.g.) recalls, field programs.	Exists	
PLC-WC-41	Provision to associate a special bulletin with the warranty campaign and capture the special bulletin number and attach the bulletin document with the campaign.	Exists	

Requirement ID	Description	Type	Applicable BU
PLC-WC-43	Provision to specify the eligible list / range of models and unit serial numbers along with specific failure for the campaign	Exists	
PLC-WC-44	Provision to associate a start date and end date for the warranty campaign.	Exists	
PLC-WC-45	Ability to define the list of removed & replacement part numbers along with the quantity that can be claimed against a specific warranty campaign. Part Source drop down needs to be added to the Campaign Setup to determine the source of the Part.	Exists	
PLC-WC-47	Ability to specify the list of miscellaneous charges allowed for a warranty campaign.	Exists	
PLC-WC-50	Provision to extend the end date of a campaign after campaign approval - based on appropriate transaction privileges	Exists	
PLC-WC-51	Provision to amend the list of serial numbers associated with a campaign. A serial number cannot be removed if a valid warranty claim already exists for that campaign.	Exists	
PLC-WC-52	Provision to track the list of serial numbers in a campaign for which the necessary service / repair actions have been completed and the claim has been generated.	Exists	

Requirement ID	Description	Type	Applicable BU
PLC-WC-53	Provision to track the list of serial numbers included in a campaign for which the service - repair - claim actions are pending.	Exists	
PLC-WC-54	Provision to define the claim processing fee (Rebate in Falcon) associated with each Warranty campaign.	Exists	
PLC-WC-55	Ability to define claim approval workflows for warranty campaigns	Exists	
PLC-WC-57	Ability to capture extended warranty coverage terms (Ex: Currency, Retail Price, Wholesale cost, Admin Cost, Promo Cost, Sales Commission %, and Support Cost) in which the coverage ID is available.	Exists	
PLC-WC-58	Ability to define the warranty contract associated with a specific part warranty	Exists	
PLC-WC-59	Ability to ensure that serialized parts have the same limited warranty terms (new parts sold with a limited warranty) irrespective of whether they are sold through RS (Residential Solutions) / Global Parts channels.	Exists	
PLC-WC-16	Provision to specify the coverage provided in terms of multiple product life measures (e.g.) time, cycles, usage hours	Exists	<u>Residential</u>
PLC-WC-23	Ability to query and view changes made to	Exists	<u>Residential</u>

Requirement ID	Description	Type	Applicable BU
	warranty coverages		
PLC-WC-28	Provision to specify the data elements on a Coverage definition that can be tracked from a change history / audit trail perspective.	Exists	<u>Residential</u>
PLC-WC-49	Provision to identify the third party service provider(s) associated with a campaign. (Preferably as a supplier / trading partner) as a claim based payments need to be made to this service provider in Accounts Payable.	Exists	<u>Residential</u>
PLC-WC-09	Configure an error message so that it gets displayed when a specific group of parts requires review. The same will be achieved during claim submission through business condition that uses Item review watch list	Exists	
PLC-WC-11	Ability to define customer specific warranty contracts. The selection of a customer code in coverage definition should be 'optional'. For generic coverages applicable across all customers, an association with customer is not required. In the event that a coverage has been defined and has already been referred to in product registration and (or) claim, a business rule is required to validate any change to this data value.	Exists	<u>Residential</u>
NEW 616	Must have integration between Extended Warranty Staging to Tavant to apply Extended Warranty Policies. Policy will be applied immediately for any unit in common retail. For any unit in stock, the policy would be applied at time of Tavant Registration. This is covered in Integration	Exists	
NEW 618	There will be cases where Warranty Administrators will set start / end dates manually. Set through Excel spreadsheet upload process.	Exists	

Requirement ID	Description	Type	Applicable BU
PLC-WC-60	Ability to define concession types in a policy contract (Ex: Labor Concession, Parts Concession)	Exists	<u>Residential</u>
PLC-WC-64	Need to allow a Warranty Admin to add a Std Policy for a given serial number. Warranty Coverage upload can be used.	Exists	
PLC-WC-65	Rename "Field Modification" to "Campaign Retrofit" through out the application for HVAC. This should not impact existing BU	Exists	

45__NON-FUNCTIONAL REQUIREMENTS

NONE