



Integration Guide | PUBLIC
2019-09-20

Integration Guide for Coverage-based Insurance Solutions

SAP Quotation and Underwriting for Insurance 1.1
Policy Management as part of SAP S/4HANA (FS-PM) 1909

Content

- 1 Introduction. 5**
- 1.1 About this Document. 5
- 1.2 Audience. 6
- 1.3 Software Prerequisites. 6
- 1.4 Terminology. 6
- 1.5 Available Documentation. 7
- 1.6 Post-Installation Setup Checklist. 7
- 2 Creating the Users Needed for the Integration. 9**
- 2.1 Creating a User in FS-PM for RFC Calls and Granting Authorizations 9
- 2.2 Creating a User in FS-PRO. 10
- 3 Configuring RFC Destinations. 12**
- 3.1 Configuring RFC Destinations in Products. 12
- 3.2 Configuring RFC Destinations in the Administrative Console. 13
- 3.3 Testing RFC Destinations. 15
- 4 Configuration Changes Needed for IFBC Push. 16**
- 4.1 Verifying Custom Publishing Services are Selected 16
- 4.2 Static Product Information for IFBC. 17
 - Types of Entities Provided. 17
 - IFBC Components in the Product Modeler. 18
 - Location of the IFBC Components. 18
- 4.3 Defining Static Product Information for IFBC Push. 20
 - Defining Product-level IFBC Components. 21
 - Defining Main Axis IFBC Components. 22
 - Defining Lateral IFBC Components. 24
 - Defining IFBC Integration Services. 25
- 4.4 Choosing Operation Mode for IFBC Import in FS-PRO. 26
- 4.5 Productive System Landscape. 27
- 5 Configuration Changes Needed for FS-PRO Runtime. 29**
- 5.1 Customizations in SAP Policy Management. 29
 - Defining Product Module Groups for Runtime Adapter. 29
 - Assigning Implementation Classes to Product Engine Interfaces. 30
- 5.2 Technical Information for Integration. 30
- 5.3 Credential Handling from FS-PM to FS-PRO. 31
 - Authentication for Product Web Services. 32

	Providing a WSDL for Product Web Services Endpoint at Customer Site.	33
	Defining a Port for a Product Web Services Provider Endpoint.	34
6	Configuration Changes Needed in FS-QUO.	36
6.1	Configuring the Connection in FS-QUO.	36
6.2	Use of XSLT Transformation.	36
6.3	Using INPI Services.	37
	Remote Functions Parameters Mapping Configuration	38
	Mapping INPI Import Parameter.	40
	Mapping INPI Namespaces.	41
	Currency Scaling and INPI Services.	41
	Using the Business Partner Search Adapter in FS-PM.	41
7	Configuration Changes Needed in SAP GP-FS.	42
7.1	Enabling the Business Partner Setting.	42
8	Setting Up Product Replication from FS-PM.	43
8.1	Mapping the IFBC Templates.	43
8.2	Importing IFBC Templates in FS-PRO.	45
	Performing a Delta Check.	47
8.3	Importing PBT Tables.	48
	Understanding Column Updates and the PBT Import.	49
	Overriding the Fraction Decimal for Currency Scaling.	50
8.4	Manually Adding Precision Values for Currency Fields.	51
8.5	Importing Non-IFBC Tables.	51
8.6	Importing CBO Tables.	52
8.7	Viewing the Import Log.	53
8.8	Using the PBT Schema Synchronization.	54
	Performing Database Simulations.	54
	Performing Database Synchronizations.	55
8.9	Entity-based IFBC Import.	55
	Executing an Entity-based IFBC Import.	56
8.10	IFBC Import of FS-PRO Product Data.	56
	IFBC Import.	57
	Assigning Business Transactions.	57
9	Configuring a Product to Allow Change Business Transactions.	58
9.1	Understanding the Change Business Workflow.	60
9.2	Business Transaction (BTX) Framework.	64
9.3	MVA Namespace.	66
10	Using FS-PM for Quotation Calculation.	67
10.1	Configuring RFC Calls Using FS-PM for Quotation Calculation.	67

10.2	Understanding the Workflow Using FS-PM for Quotation Calculation.	68
10.3	APIF Field Mapping Rule Configuration.	69
10.4	Flagging Products for Rating.	70
10.5	Identifying Duplicate Fields.	70
	Suppressing Exceptions on Duplicate Fields.	71
11	Designing the Cash-Before-Cover (CBC) Process.	72
11.1	RFC Configurations Used For CBC.	79
11.2	Configuring Communications for CBC.	79
11.3	Defining Products for CBC.	80
11.4	Making Contracts Relevant for CBC.	80
12	Key Integration Configurations in FS-PRO.	81
12.1	Business Partners.	81
12.2	bpLookup Stem.	81
12.3	Business Partner Address.	82
	Bank Detail.	83
	Pay Card.	83
	Configuring the Fields to Add an Insurable Object.	84
13	Enhancement Options.	87
13.1	Areas to be Enhanced in Different Systems.	87
13.2	Entities and Templates in FS-PRO.	88
13.3	List of Provided Entities.	88
13.4	Supported Enhancement Scenarios.	91
	Using Entities Provided Out-of-the-Box.	91
	Adding New Fields to an Out-of-the-Box Entity.	91
	Adding New Fields in FS-PRO.	92
14	Terms for Included Open Source Software.	96

1 Introduction

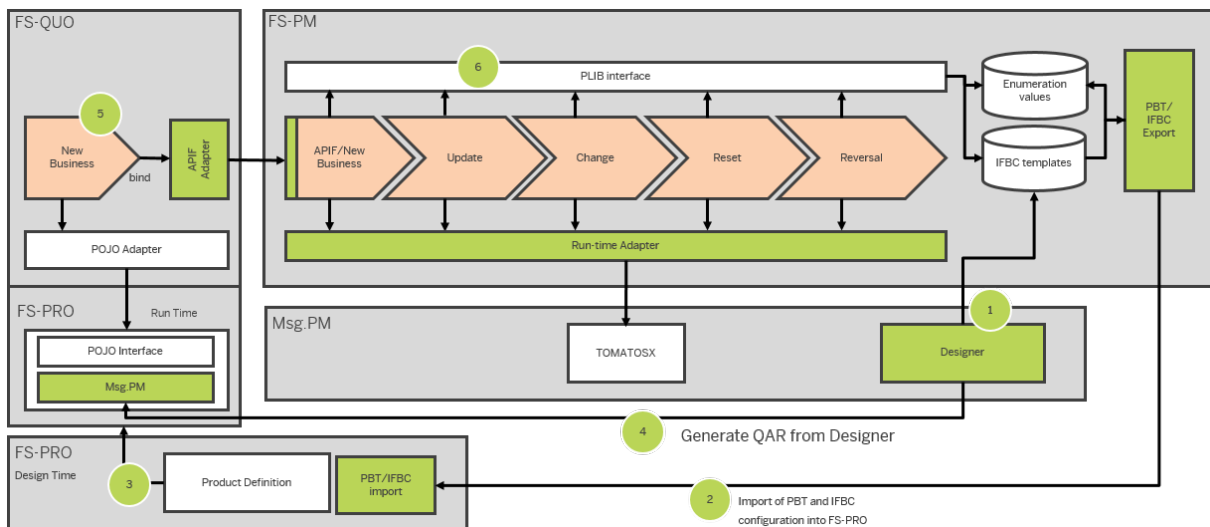
1.1 About this Document

This document provides information on how to combine the following SAP for Insurance components to an integrated insurance solution for product and policy lifecycle management:

- SAP Quotation and Underwriting for Insurance (FS-PRO) for product definition
- SAP Quotation and Underwriting for Insurance (FS-QUO) for writing new business
- Policy Management in SAP S/4HANA (FS-PM) for handling subsequent policy processing
- SAP Business Partner for Financial Services (SAP GP-FS) for providing and storing business partner data

The focus of this document is the creation of the integration solution. It doesn't cover the day-to-day activities and usage of FS-PRO, FS-QUO, and FS-PM. For more information about features and usage, see the references in [Available Documentation \[page 7\]](#).

The following graphic outlines all of the components with their relevant interfaces and msg.PM as the rating engine:



Explanation of diagram:

1. Define products in msg.PM Designer, and publish to FS-PM's IFBC.
2. Import PBT and IFBC product definitions to FS-PRO's Product Modeler.
3. Publish products to FS-QUO.
4. Generate msg.PM runtime product rules file (QAR) in msg.PM Designer.
5. Create quotes in FS-QUO.
6. After issuing, manage policies in FS-PM.

Related Information

[Available Documentation \[page 7\]](#)

1.2 Audience

The document is aimed at system administrators or technical consultants to help them set up the relevant connections between the different components. Furthermore, it provides a guideline for product developers and business analysts on what needs to be considered when defining and publishing an insurance product in FS-PRO that is designed to be consumed by FS-QUO and FS-PM.

It is assumed that you already have a working knowledge of the FS-PRO, FS-QUO and FS-PM applications.

1.3 Software Prerequisites

To use the features described in this document, you will need to ensure that the following releases of the applicable software are installed:

- SAP Quotation and Underwriting for Insurance (FS-QUO) 1.1
- SAP Workplaces for Insurance (FS-IPW) 3.1
- Policy Management as part of SAP S/4HANA (FS-PM) 1909
- SAP Business Partner for Financial Services (SAP GP-FS)

1.4 Terminology

Mapping of FS-PRO and FS-PM Terms

In some cases, different terms are used in FS-PRO and FS-PM to describe the same concept.

These terms are listed in the following table:

Term in FS-PRO	Term in FS-PM
IFBC Column	Characteristic (IFBC)

Term in FS-PRO	Term in FS-PM
IFBC Control Attribute	Attribute (IFBC)

Abbreviations

In the following table, the most important abbreviations used in this integration guide are listed:

Title	Abbreviation
In-Force Business Configurator	IFBC
Application Interface	APIF/INPI
Policy-Based Technology	PBT
Custom Business Object (ABAP term)	CBO

1.5 Available Documentation

Additional documentation is available from the [SAP Help Portal](#):

- [Quotation and Underwriting for Insurance](#)
- [SAP S/4 HANA Insurance for Policy Management](#)
- [Business Partner](#)

1.6 Post-Installation Setup Checklist

This topic describes the post-installation steps that must be performed to complete the setup of an integrated environment with FS-PM, FS-PRO, and FS-QUO.

After you complete these procedures, you can define a product in FS-PRO or test the `Sample Household Product`.

→ Remember

The standalone FS-PM, FS-PRO, and FS-QUO components must be successfully installed following the instructions in their respective *Installation Guides*.

	Post-Installation Procedure	Role	Notes
1	Set up a connection for FS-PRO and FS-PM for product replication.	Technical Consultant or equivalent role	
2	Set up the connection between FS-PRO and FS-PM for IFBC.	Technical Consultant, System Administrator, or equivalent role	
3	Set up the connection between FS-PM and FS-PRO Runtime.	Technical Consultant, System Administrator, or equivalent role	
4	Set up the connection between FS-QUO and FS-PM.	Technical Consultant, System Administrator, or equivalent role	This procedure is required only if you are integrating FS-QUO with FS-PM and FS-PRO.
5	Set up the connection between FS-QUO and SAP GP-FS.	Technical Consultant, System Administrator, or equivalent role	This procedure is required only if you are integrating FS-QUO with FS-PM and FS-PRO.
6	Set up Product Web Services and test rating.	Technical Consultant, System Administrator, or equivalent role	This procedure is required for any product that you define in FS-PRO. Complete this procedure before you test the <code>Sample Household Product</code> .
7	Configure Customizing settings for IFBC import in FS-PM.	Technical Consultant or equivalent role	Do this procedure if you publish an existing product (such as the <code>Sample Household Product</code>) as part of the installation setup. Later, when you define and publish your own products in FS-PRO, perform this step as needed.

Related Information

[Configuration Changes Needed for IFBC Push \[page 16\]](#)

[Setting Up Product Replication from FS-PM \[page 43\]](#)

[IFBC Import of FS-PRO Product Data \[page 56\]](#)

[Defining Product Module Groups for Runtime Adapter \[page 29\]](#)

2 Creating the Users Needed for the Integration

2.1 Creating a User in FS-PM for RFC Calls and Granting Authorizations

You need to create a user with two required authorizations in FS-PM for the RFC call .

Prerequisites

The user must have the authorizations for the following activities:

- Temporary storage of product deliveries in import buffer triggered by sending the IFBC structure from FS-PRO to FS-PM.
- Execution of the IFBC import, including permission for writing transport entries and creating log entries.

Procedure

1. Call up transaction SU01.
2. Create the appropriate user.

Note

In the following documentation, only those settings are described that are relevant for the integration of FS-PRO and FS-PM.

3. On the *Logon Data* tab, enter **system** in *User Type* field (the user should be a system user, not a dialog user).
In all other fields, you can enter the values according to your requirements.
4. On the *Roles* tab, create a new role and grant the relevant authorizations (see the subsequent steps).
5. Double-click the relevant *Role* field.
6. Choose the *Authorizations* tab.
7. In the *Maintain Authorization Data* and *Generate Profiles* section, choose *Change Authorization Data*.
8. Create the authorizations as described in the following table:

Authorization Object	Field	Assigned Values
S_RFC (Authorization Check for RFC Access)	ACTVT (Activity)	16 (Execute)
	RFC_NAME (Name (Allowlist) of RFC object to which access is allowed)	/PM0/ABC_IBC_RECEIVE_GNRL
	RFC_TYPE (Type of RFC object to which access is to be allowed)	FUNC
S_DATASET (Authorization for file access)	ACTVT (Activity)	34 (Write)
	FILENAME (Physical file name)	* (no specific entry required)
	PROGRAM (Program Name with Search Help)	SAPLSTRF
S_TRANSPRT (Transport Organizer)	ACTVT (Activity)	01 (Create or generate)
	TTYPE Request Type (Change and Transport System)	CUST TASK
/PM0/IBCT (FS-PM: Template for In-Force Business Configurator)	/PM0/APPLI (Application ID)	POLICY
	/PM0/ENTIT (Entity ID)	*
	/PM0/OPERA (Template Operation)	AIM
		DEL
		IMP
		LOG
		REL
/PM0/TMPID (Template ID)	*	
/PM0/TMPTY (Template Type)	*	

9. Save your changes.

2.2 Creating a User in FS-PRO

The SOAP message requires a FS-PRO user name and password. You can create a user in the *Role Painter* of the Design Time Administrative Console.

Note

In the *Job Title* panel, select *System*. This category includes the authentication required for product web services.

For information about creating a user in FS-PRO, see [Working with Job Titles](#).

3 Configuring RFC Destinations

3.1 Configuring RFC Destinations in Products

In order to let the system know which destination name will be used in the application, the destination names need to be defined in the product.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Navigate to the SAP Global Reference Object component and open it.
3. Go to **Configuration > Integration > RFC > Remote Function System**.
4. Define the RFC Destination.

A predefined set of system types are provided. You can use the default name or assign a name of your choosing. This will be the name of the RFC Destination that you will create via a properties file in the Administrative Console.

System Type	From System	To System	Destination Name
ifbc	FS-PRO	FS-PM	FSPM_DEST
pbt	FS-PRO	FS-PM	FSPM_DEST
policy	FS-QUO	FS-PM	FSPM_DEST
insuobj	FS-QUO	FS-PM	FSPM_DEST
bpartner	FS-QUO	SAP GP-FS	BP_DEST
searchHelp	FS-QUO	FS-PM	FSPM_DEST
generic	FS-QUO	FS-PM	FSPM_DEST

If the required system type isn't listed, you will need to create a new row, with the new system type and a name.

5. Build the metadata and publish the SAP Global Reference Object.

3.2 Configuring RFC Destinations in the Administrative Console

RFC destination details are configured in a properties file, to allow connections to be integrated into other SAP systems.

Prerequisites

Confirm the destination names for FS-PM and SAP GP-FS RFC connectivity that's defined in the RFC reference object in FS-PRO.

They will be referred to as `<FS-PM_dest_name>` and `<BP_dest_name>` respectively in the following steps.

The `Destination Repository User` on the S/4HANA system must be of the type `DIALOG` (preferred) or `COMMUNICATION` as the connection between FS-QUO and S/4HANA requires the generation of logon tickets for SSO. Furthermore, the S/4HANA system must be configured to support the generation of logon tickets. This can be achieved by adding the following to its profile: `login/create_sso2_ticket = 2`.

Procedure

1. Create a properties file for the FS-PM connection.
 - a. Open a text editor.
 - b. Add the following text to the file and add the appropriate JCo client settings in the file with connection details for the FS-PM system:

```
jco.client.client=  
jco.client.user=  
jco.client.sysnr=  
jco.client.ashost=  
jco.client.lang=
```

where:

client

Specifies the SAP client number.

Three-digit client number; preserve leading zeros if they appear in the number.

user

Specifies the login user ID.

User name for logging in to the SAP system.

Ensure that the User ID entered here has all of the required permissions in FS-PM.

This is a technical user account. SSO/Principal Propagation is not supported.

sysnr

Indicates the SAP system number.

ashost

Identifies the SAP application server.

Host name of a specific SAP application server.

lang

Specifies a login language.

Use the SAP-specific single-character language code.

- c. Save the file as `FSPM_DEST.jcoDestination` to a local directory.
2. Launch Internet Explorer and go to `<quo_runtime_app_url>/csiroot/admin/`.
3. Log in as the `<admin_user>`.
The Runtime Administrative Console will open after a short delay.
4. Upload the files to the file system.
 - a. Go to **System > Edit File System**.
A list of folders appears in the tree, and the folders and files in the selected folder appear in the details panel.
 - b. From the *Path* dropdown list, select *PA - Custom Web Root (Write)*.
 - c. Expand the `resource` folder in the tree and go to the `rfddestination` folder.
 - d. Right-click the `rfddestination` folder, and choose *Upload*.
The *Upload Files* dialog appears.
 - e. Upload both of the destination properties files.
5. Add a new configuration variable for your FS-PM connection password entry.
 - a. In the editor pane, select RFC Standalone Credential Setting from the *Configuration* dropdown list.
 - b. Choose the *Add Config Variable* button.
 - c. Enter `FSPM_DEST_STANDALONE_PWD` in the *Name* field.
 - d. Enter the password for `<FS-PM_dest_name>` in the *Description* field.
 - e. Ensure that the *Mandatory* checkbox is deselected.
 - f. Enter **Encrypt Text** in the *Control* field.
 - g. Ensure that the *Enumeration* field is blank.
 - h. Ensure that the *Default* field is blank.
 - i. Save your changes.
6. Add a new configuration variable for your SAP GP-FS connection password entry.
 - a. In the editor pane, select RFC Standalone Credential Setting from the *Configuration* dropdown list.
 - b. Choose the *Add Config Variable* button.
 - c. Enter `BP_DEST_STANDALONE_PWD` in the *Name* field.
 - d. Enter the password for `<BP_dest_name>` in the *Description* field.
 - e. Ensure that the *Mandatory* checkbox is deselected.
 - f. Enter **Encrypt Text** in the *Control* field.
 - g. Ensure that the *Enumeration* field is blank.
 - h. Ensure that the *Default* field is blank.
 - i. Save your changes.
7. Go to **Configuration > System > Env** in the configuration tree and select *RFC Standalone Credential*.

8. Enter the password of the user for the RFC connection to the FS-PM system in the *Override* field of the `FSPM_DEST_STANDALONE_PWD` property and choose *Save*.
9. Enter the password of the user for the RFC connection to the SAP GP-FS system in the *Override* field of the `BP_DEST_STANDALONE_PWD` property and choose *Save*.
10. Select **System > Reload Configuration Setting** from the menu bar and choose *Reload All Config* for the new password settings to take effect.

Related Information

[Configuring RFC Destinations in Products \[page 12\]](#)

3.3 Testing RFC Destinations

You can verify that the connectivity defined in the destinations is functional.

Context

Note

This functionality is not available in the Design Time Administrative Console.

Procedure

1. Launch Internet Explorer and log in to the Runtime Administrative Console at the following location:
`<pro_runtime_app_url>/csiroot/admin/`.
The Runtime Administrative Console will open after a short delay.
2. Select **System > Test SAP Server Connectivity**.
3. Go to the *Test JCo3 Feature* tab, select the destination and choose *Connect* to test the connection.
4. Repeat these steps for all destinations.

Results

A pop up message indicates whether the connection is valid or invalid.

4 Configuration Changes Needed for IFBC Push

This section describes how to set up the connection between FS-PRO and FS-PM or the replication of static product data (IFBC Push) into the In-Force Business Configurator (IFBC) of FS-PM.

Before you begin, ensure that the following conditions are met:

1. In the `SAP Global Reference Object` in FS-PRO, confirm that the "IFBC" system type is configured and selected in the component `► Configuration ► Integration ► RFC ► Remote Function System ►`.
2. Verify the RFC destination configuration in the Design Time Administrative Console.
3. Verify that the related Custom Publishing Services are selected.
4. Choose Operation Mode for IFBC import.

This replication consists of the following steps:

1. In FS-PRO, send the IFBC structure with the static data of a product to FS-PM.
2. In FS-PM, data is stored in the import buffer.
3. In FS-PM, perform the IFBC import.

Before you can perform these steps, some preparatory configuration steps are required. Data from FS-PRO is transferred to FS-PM and imported to IFBC by calling the RFC-enabled function module `/PMO/ABC_IBC_RECEIVE_GNRL`. This function module is called if you publish a product and the IFBC structure is sent to FS-PM. Before the function module can be called successfully, you must perform the activities described in the following subsections.

4.1 Verifying Custom Publishing Services are Selected


Context

The `SAP Insurance UWA Product Template` object provides the following services that you can run immediately after a product is published:

Send Structure Info to IFBC	Runs the rules in the IFBC Integration Services API in each entity to generate the XML structure that IFBC needs.
Upload & Deploy to Runtime	Uploads the published product JAR to the product repository and deploys it to the Runtime environment of the <i>Product Web Services Manager</i> . The WSDL is generated with the deployment.

By default, these services are selected so that they appear in the *Publish* dialog. You can choose these services when you publish the product. Before you publish a product for the first time, check that these services are selected in your product.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Navigate the *Studio Tree* to locate your product.
3. Open the product .
4. Go to **>> <product_name> > Configuration > Product Services > Custom Publishing >**.
5. Ensure that the Send Structure Info to IFBC and Upload & Deploy to Runtime services are selected on the *Values* tab.

4.2 Static Product Information for IFBC

For every entity that requires a product template in IFBC, the corresponding information must be configured in FS-PRO. After a product is defined and published in the Product Modeler, the product structure, including the corresponding IFBC information, is sent to IFBC using an XML file. The appropriate product templates are then created in IFBC.

By setting up the corresponding information in FS-PRO and IFBC, new policy and endorsement information can be transferred between FS-PM and FS-PRO for rating.

For more information about IFBC, entities, and templates, see the *SAP FS-PM Application Help*.

4.2.1 Types of Entities Provided

The product templates provided in FS-PRO map to IFBC entities provided in FS-PM. For information about the IFBC template values, see the IFBC application help.

The libraries and product templates that are provided in FS-PRO are split into four lines of business:

- SAP PnC Insurance Template Library
- SAP LnA Insurance Template Library
- SAP AUTO Insurance Template Library
- SAP Longterm Insurance Template Library

Note

If you want to define your product to map to IFBC entities that aren't already included in the FS-PRO libraries, contact your SAP implementation team or SAP Support.

4.2.2 IFBC Components in the Product Modeler

In the Product Modeler, all of the main axis and lateral objects in your product include IFBC-related components that define the information required in IFBC product templates. When defining a product, you must select values in these components that map to the IFBC templates. This only applies if you are going to perform an IFBC push from FS-PRO to FS-PM. By using the information in these components, FS-PRO can traverse the product definition and gather information for the XML file for IFBC.

Related Information

[Adding New Fields in FS-PRO \[page 92\]](#)

4.2.3 Location of the IFBC Components

Each entity in the XML file that is published from the Product Modeler and sent to IFBC includes basic data, subordinate information, control attributes, and column details. The following table shows where to define this required information in the Product Modeler:

IFBC Entity Information	Where Defined in the Product Modeler
Basic Data (for example, name and ID)	<p>▶ <code><entity_or_object_name></code> ▶ Identification ▶ SAP <code><object_type_name> Id</code> ▶</p> <p>Example: ▶ <code>Sample Household Contract</code> ▶ Identification ▶ <code>SAP Contract Id</code> ▶</p> <p>You must specify the IFBC template ID in this component using the <code>Templateld</code> field. This value is passed using the <code>PRODUCT_BASE_ID</code> tag in the XML file. If the object that you are defining is used in multiple places (for example, in multiple products) and contain data that is unique to its parent object, you must specify a unique template ID.</p> <p>For example, if a coverage appears in two contracts with different control attribute values, the template ID of the coverage in each contract must be different. Otherwise, if the same template ID is used by the two coverages, the later import will overwrite the earlier one</p>

IFBC Entity Information

Where Defined in the Product Modeler

Subordinates

||| <entity_or_object_name> > Identification > SAP
<object_type_name> Id >

Example: ||| Sample Household Contract > Identification
> SAP Contract Id >

Enter values for the following subordinate information:

- MinCardinality
- MaxCardinality
- AutoInclude Flag

Note

Subordinate information doesn't apply at the product level. Therefore, these columns don't appear in ||| <product_name> > Identification > SAP Product Id >. This is the product-level component.

Control Attributes

||| <entity_or_object_name> > Configuration
> Integration > IFBC <object_type_name> Integration
Services > IFBC Control Attributes >

Example: ||| Sample Household Contract > Configuration
> Integration > IFBC Contract Integration Services > IFBC
Control Attributes >

IFBC Entity Information

Where Defined in the Product Modeler

Column Details (Characteristics/Marks)

|| <entity_or_object_name> > Configuration
> Integration > IFBC <object_type_name> Integration
Services > IFBC Column Details >

Example: || Sample Household Contract > Configuration
> Integration > IFBC Contract Integration Services > IFBC
Column Details >

If a column detail has a range of values, also define the following component:

|| <entity_or_object_name> > Configuration
> Integration > IFBC <object_type_name>] Integration
Services > IFBC Column Details > IFBC Column Ranges >

If a column detail has a default value, also define the following component:

|| <entity_or_object_name> > Underwriting > SAP
Column Default Values >

If a column detail has an enumeration list, also modify the following components:

|| <product_name> > Configuration > Integration > IFBC
Product Integration Services > IFBC Column Lists >

|| <entity_or_object_name> > Reference Data
> Domain Tables >

4.3 Defining Static Product Information for IFBC Push

To create a product that works with FS-PRO and FS-PM, you must define the IFBC-related components in the Product Modeler and specify data that correlates with IFBC product templates.

Proceed as follows:

1. Define product-level IFBC components .
2. Define main axis IFBC components
3. Define lateral IFBC components
4. (Optional) Define IFBC integration services, including setting the language
5. Publish the product and send the IFBC XML

4.3.1 Defining Product-level IFBC Components

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Open your product.
3. Open the `SAP Product Id` component and enter the basic data in a row.

Note

If this object is used in multiple places, you must change the IFBC template ID specified in the `TemplateId` field.

4. Open **Configuration > Integration > IFBC Product/Contract Integration services > IFBC Control attributes** and select the control attributes that apply.

You can override the predefined values with different values.

You can specify a text value for a control attribute in the `TextValue` field.

To select a value from predefined values, select a value from the `DropDownListValue` field.

5. Open **Configuration > Integration > IFBC Product/Contract Integration services > IFBC Column details** and enable the check boxes for the characteristics that apply.

You can override the predefined values with different values.

6. If a column detail has an associated range of values, expand the detail row, and do one of the following in **Configuration > Integration > IFBC Product/Contract Integration services > IFBC Column ranges**:

- Select a row.
- Create a row, enter the low and high values of the range, and select the row.

7. If a column detail has a default value, open the `SAP Column Default Values` component, create a row, enter the column name and its default value, and select the row.

8. If a column detail has an enumeration list, do the following:

- a. In your company library, go to the **Components > Domain Tables** folder, create an object with a `Modifier Type` of Reference, and define the values of the enumeration list in the object.

If the **Components > Domain Tables** folder doesn't exist in your company library, create it.

- b. In your product, open the `IFBC Column Lists` component, create a row, and enter information to define the domain table that you created in your company library.

The `ComponentName` field specifies the component name that contains the enumeration values. This value must match the name defined in the domain table component that you created.

- c. Go to **<product_name> > Reference Data > Domain Tables** folder, add (search and assemble) the domain table that you created in your company library.

If the **Reference Data > Domain Tables** folders don't exist in your product folder, create them.

The [SAP Insurance Base Library](#) > [IFBC Integration Objects](#) > [Components](#) > [Column Lists](#) folder contains predefined domain tables that can assemble in products. In your entity's [Reference Data](#) > [Domain Tables](#) folder, you can add (search and assemble) these domain tables.

- d. Open each domain that you assembled and select all the rows.
- e. Open the following component and specify the *LIST_ID* you defined in the IFBC Column Lists:
[<product_name>](#) > [Configuration](#) > [Integration](#) > [IFBC Product Integration Services](#) > [IFBC Column Details](#).

Related Information

[Location of the IFBC Components \[page 18\]](#)

4.3.2 Defining Main Axis IFBC Components

For each main axis object (such as contracts and coverages) assembled in your product, you must define the IFBC-related components.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Open your product.
3. Open the SAP [<object_type_name>](#) Id component and enter the following basic data in a row:
 - Code
 - Display Name
 - Short Name
 - LobCode
 - EntityType as per FSPM PBT model
 - TemplateID (A user-configured code the begins with an underscore "_")

Note

If this object is used in multiple places, you must change the IFBC template ID specified in the *TemplateId* attribute.

4. Enter the subordinate information in the *Min Cardinality*, *Max Cardinality*, and *Auto Include Flag* attributes.
5. Open the IFBC Control Attributes component and select the control attributes that apply.

You can override the predefined values with different values.

You can specify a text value for a control attribute in the *TextValue* attribute.

To select a value from predefined values, select a value from the *DropDownListValue* attribute.

6. Open the **IFBC Column Details** component and enable the check boxes for the characteristics that apply.

You can override the predefined values with different values.

7. If a column detail has an associated range of values, expand the detail row, and in the **IFBC Column Ranges** component, do one of the following:
 - Select a row.
 - Create a row, enter the low and high values of the range, and select the row.
8. If a column detail has a default value, open the **SAP Column Default Values** component, create a row, enter the column name and its default value, and select the row.
9. If a column detail has an enumeration list, do the following:

- a. In your company library, go to the **Components > Domain Tables** folder, create an object with a *Modifier Type* of Reference, and define the values of the enumeration list in the object.

If the **Components > Domain Tables** folder doesn't exist in your company library, create it.

- b. In your product, open the **IFBC Column Lists** component, create a row, and enter information to define the domain table that you created in your company library.

The *ComponentName* field specifies the component name that contains the enumeration values. This value must match the name defined in the domain table component that you created.

- c. In the **Reference Data > Domain Tables** folder, add (search and assemble) the domain table that you created in your company library.

Note

The **SAP Insurance Base Library > IFBC Integration Objects > Components > Column Lists** folder contains predefined domain tables that can assemble in products. In your entity's **Reference Data > Domain Tables** folder, you can add (search and assemble) these domain tables.

- d. Open each domain that that you assembled and select all the rows.
- e. Open the entity's **IFBC Column Details** component and specify the *LIST_ID* you defined in the **IFBC Column Lists**.

Related Information

[Location of the IFBC Components \[page 18\]](#)

4.3.3 Defining Lateral IFBC Components

For each lateral object (such as limits and deductibles) assembled in your product, you must define the IFBC-related components.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Open your product.
3. Open the SAP `<object_type_name> Id` component and enter the basic data in a row.

Note

If this object is used in multiple places, you must change the IFBC template ID specified in the *TemplateId* attribute.

4. Enter the subordinate information in the *Min Cardinality*, *Max Cardinality*, and *Auto Include Flag* attributes.
5. Open the IFBC Control Attributes component and select the control attributes that apply.
You can override the predefined values with different values.
You can specify a text value for a control attribute in the *TextValue* attribute.
To select a value from predefined values, select a value from the *DropDownListValue* attribute.
6. Open the IFBC Column Details component and enable the check boxes for the characteristics that apply.
You can override the predefined values with different values.
7. If a column detail has an associated range of values, expand the detail row, and in the IFBC Column Ranges component, do one of the following:
 - Select a row.
 - Create a row, enter the low and high values of the range, and select the row.
8. If a column detail has a default value, open the SAP Column Default Values component, create a row, enter the column name and its default value, and select the row.
9. If a column detail has an enumeration list, do the following:
 - a. In your company library, go to the **Components > Domain Tables** folder, create an object with a *Modifier Type* of Reference, and define the values of the enumeration list in the object.
If the **Components > Domain Tables** folder doesn't exist in your company library, create it.
 - b. In your product, open the IFBC Column Lists component, create a row, and enter information to define the domain table that you created in your company library.
The *ComponentName* field specifies the component name that contains the enumeration values. This value must match the name defined in the domain table component that you created.
 - c. In the **Reference Data > Domain Tables** folder, add (search and assemble) the domain table that you created in your company library.

📌 Note

The [SAP Insurance Base Library](#) > [IFBC Integration Objects](#) > [Components](#) > [Column Lists](#) > [Reference Data](#) > [Domain Tables](#) folder contains predefined domain tables that can assemble in products. In your entity's [Reference Data](#) > [Domain Tables](#) folder, you can add (search and assemble) these domain tables.

- d. Open each domain that you assembled and select all the rows.
- e. Open the entity's `IFBC Column Details` component and specify the `LIST_ID` you defined in the `IFBC Column Lists`.

Related Information

[Location of the IFBC Components \[page 18\]](#)

4.3.4 Defining IFBC Integration Services

Optionally, you can modify the rules that define the values for the IFBC *Import Mode Code* and *Clear Table Flag*.

Context

When you are replicating a product from the Product Modeler into FS-PM via an IFBC Import, you will need to set a Language Code for the product if a language other than English is used.

You can also enter comments to publish as part of the XML file for IFBC. These comments provide additional information about the product import.

These settings are defined at the product level.

⚠️ Caution

The definition at the product level includes an `IFBC Integration Services API` component. Don't modify the rules in this component. These rules traverse the product tree and retrieve the basic data, subordinates information, control attributes, and column details for each entity in the tree.

⚠️ Restriction

Do not edit or use the following rules: `getFieldByEntityType`, `getProductAttributes`, `getProductEntities`, `getProductLanguage`, `getProductLists`, and `getProductMarks`

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Open your product.
3. Go to **>> <product_name> > Configuration > Integration > IFBC Product Integration Services > IFBC Integration Services API >**.
4. Modify the *Import Mode Code* or *Clear Table* flag:
 - a. Find and select the *getImportModeCode* or *getClearTableFlag* row.
 - b. Right-click and select *Override* on the menu.
 - c. Open the rule in *Rule Painter*.
 - d. Uncomment the value that you want to assign to the setting, and comment out the other output values.
 - e. Save your changes.
 - f. Build the rule.
5. Enter a comment for the product import:
 - a. Find and select the *getComment* row.
 - b. Right-click and select *Override* on the menu.
 - c. Open the rule in *Rule Painter*.
 - d. In the *result* variable, enter a comment for the product import.
 - e. Save your changes.
 - f. Build the rule.

Related Information

[Choosing Operation Mode for IFBC Import in FS-PRO \[page 26\]](#)

4.4 Choosing Operation Mode for IFBC Import in FS-PRO

In FS-PRO, you must choose the operation mode for the IFBC import.

The following operation modes for the IFBC import are possible:

IV_IMPORT_MODE_CD = '0': This operation mode only tests the RFC interface (`/PMO/ABC_IBC_RECEIVE_GNRL`).
No data will be stored in the import buffer and thus no data can be imported into IFBC.

IV_IMPORT_MODE_CD = '1': This operation mode stores data in the import buffer.

You can import these stored data only manually into IFBC at a later time.

IV_IMPORT_MODE_CD = '2': This operation mode stores data in the import buffer and starts the IFBC import automatically in simulation mode.

You can perform the IFBC import manually as an update run at a later time.

IV_IMPORT_MODE_CD = '3': This operation mode stores data in the import buffer and starts the IFBC import automatically as an update run.

Where to choose the operation mode

See [Defining IFBC Integration Services \[page 25\]](#).

When to use which operation mode

- Use operation mode '3' if there is no indication that unexpected side effects may occur, for example after minor changes to product modules on the FS-PRO side.
- Use operation modes '1' and '2' during the development of new products to keep the risk low that the automatic import of a new product invalidates existing product templates.

4.5 Productive System Landscape






Context

For the integration of FS-PRO and FS-PM, a productive system landscape should consist of the following ABAP systems:

- Development system
- Consolidation or quality system
- Production system

If you send the IFBC structure from FS-PRO to FS-PM, the data should be sent to an appropriate client of the development system. This client must be able to forward IFBC content to subsequent systems in the landscape (for instance, through the consolidation system to the production system). Consequently, the client must be set up in a way that it enables it to handle transport requests.

Procedure

1. Check the client settings in the development system as follows:
 - a. Call up transaction SCC4.
 - b. Select the relevant client.
 - c. Choose the  *Details* icon.
 - d. In *Changes and Transports for Client-Specific Objects* section, ensure that the Automatic recording of changes radio button is enabled.
Only if this isn't the case, perform the following step 2.
2. Configure IFBC for mandatory transports.
 - a. Choose *Define Template Type* in *Customizing for Policy Management* under  *In-Force Business Management*  *Basis*  *In-Force Business Configurator* .
 - b. For the application ID *Policy* and template type *1 (Product Template)*, set the transport options to Transport mandatory .

Results

Once the systems are set up, the publishing of a product in FS-PRO leads to the creation of a transport request. This transport request must be released in the development system once the product templates fulfill the requirements of the product model. Afterward, you can verify the quality in the consolidation system. Once all of the tests that you have performed with your product have the green status, the collected transports can be sent out to the production system.

5 Configuration Changes Needed for FS-PRO Runtime

5.1 Customizations in SAP Policy Management

5.1.1 Defining Product Module Groups for Runtime Adapter

The configuration of new products in FS-PRO (or any other product engine) results in new product modules for the product model classes of the coverage-first data model (such as sales product, product, elementary product or subcoverage).

Context

A product module is tagged with a unique product module ID that has to be assigned in the IFBC control attributes of the respective product module. The product module IDs are part of the static product information that is imported into IFBC.

If a new IFBC product template has been created during import, the following applies: The new product module ID must be assigned to new or existing product module groups in FS-PM so that the *Customizing* settings defined in the product module group Customizing of FS-PM become effective. Without this assignment, policy processing in FS-PM will raise error messages for the new unassigned product modules.

You can find the Customizing activity `Define Product Module Groups` in Customizing for Policy Management under [In-Force Business Management](#) > [Basis](#) > [Basic Settings](#) .

Procedure

1. Select the group dimension INTPM (Integration of Product Manager) and double-click [Assign Product Model Class to Group Dimension](#).
2. Select the product model class PRODUKT and make the following entries:
 - a. At [Product Module Groups](#) level, define a product module group, such as **FSPRO**.
 - b. At [Assignment of Product Module ID to PBS Groups](#) level, assign the product module ID _CONHHLD to product module group FSPRO.
3. Select the product model class VERKAUFSPRODUKT and make the following entries:
 - a. At [Product Module Groups](#) level, define a product module group, such as **FSPRO**.
 - b. At [Assignment of Product Module ID to PBS Groups](#) level, assign the product module ID _POLHHLD to product module group FSPRO.

5.1.2 Assigning Implementation Classes to Product Engine Interfaces

You can find the Customizing activity [Assign Implementation Classes to Product Engine Interfaces](#) in Customizing for Policy Management under [Integration > Product Engine](#).

Make the following entries for the new product module group FS-PRO (which means the product engine FS-PRO):

Interface Name	Entity	Implementation Class to Be Assigned
/PM0/IF_ABR_PM_UTILITY (Analyzes IFBC entries at runtime)	/PM0/ABDAPOLICY	/PM0/CL_ABH_PM_UTILITY
/PM0/IF_ABR_PM_UTILITY (Analyzes IFBC entries at runtime)	/PM0/ABDAPOLPR	/PM0/CL_ABH_PM_UTILITY
/PM0/IF_APP_MAP_PRO (Implementation of the mapping for the service request and service response)	/PM0/ABDAPOLICY	/PM0/CL_APP_MAP_PRO
/PM0/IF_APR_PM_CALCULATION (Product engine interface that is called from within FS-PM)	/PM0/ABDAPOLPR	/PM0/CL_APH_PM_CALCULATION_PRO

Note

The *Entity* field determines if the product module group is interpreted as product module group on sales product level (corresponds to entity /PM0/ABDAPOLICY) or as product module group on product level (corresponds with entity /PM0/ABDAPOLPR).

5.2 Technical Information for Integration

All entity structures in the Service Consumer PRODUCT (ABAP Class /PM0/CO_PROXY_PWS_PRO) contain the field *RUNTIME_OBJECT_ID*. This field identifies each entity instance.

CREATE: In case FS-PRO creates a new entity (for instance, it attaches a new clause), the value of the field *RUNTIME_OBJECT_ID* is initial.

CHANGE: The *RUNTIME_OBJECT_ID* that is passed from FS-PM to FS-PRO must remain unchanged in FS-PRO.

DELETE: If an entity instance is passed from FS-PM to FS-PRO, but not returned to FS-PM, it will be deleted in FS-PM.

Processing of Entities

In the following table, you can find a description of how any product engine should process the FS-PM entities. For example:

- In the operation PCRATING, the product engine isn't allowed to insert or delete a coverage. However, the product engine is allowed to update a coverage.
- In the operation PCRATING, the product engine is allowed to insert, update, and delete a clause.

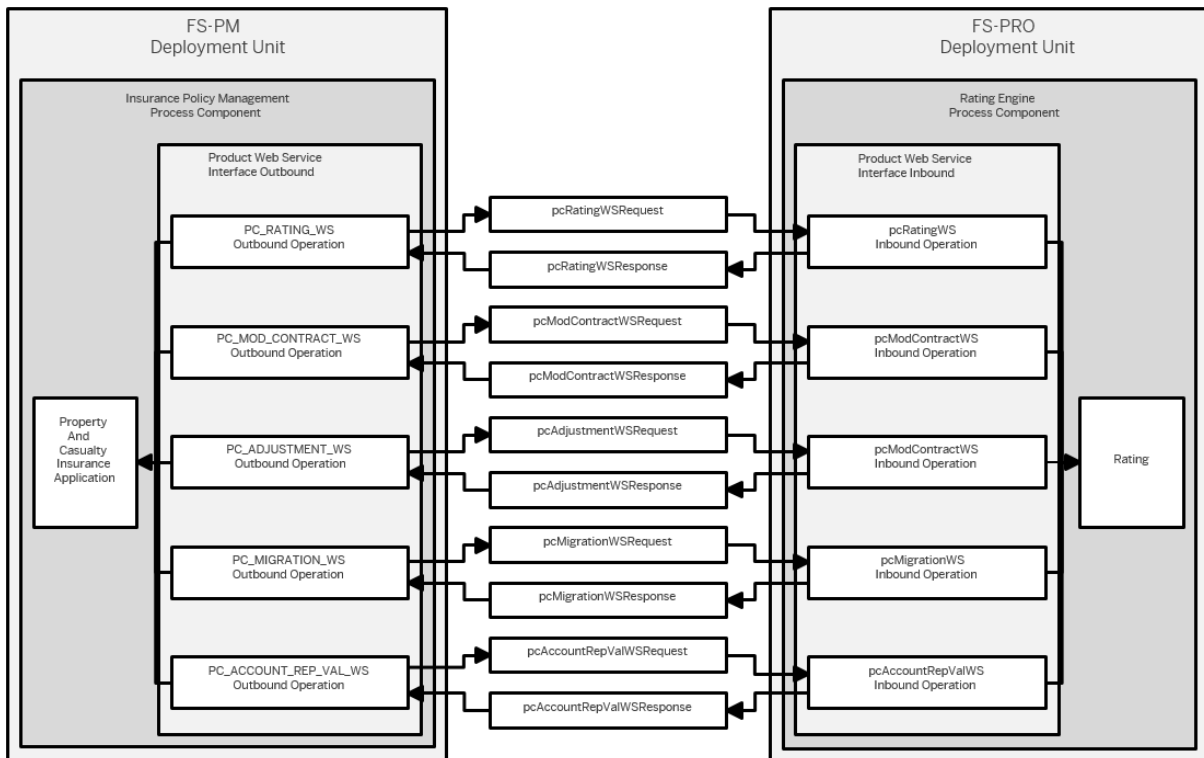
Entity	RATING			MOD_CONTRACT			ADJUSTMENT			MIGRATION			ACCOUNTREPVAL		
	Insert	Update	Delete	Insert	Update	Delete	Insert	Update	Delete	Insert	Update	Delete	Insert	Update	Delete
<i>BASE</i>	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
CLAUSE	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
COV	no	yes	no	no	yes	no	no	yes	no	no	yes	no	no	yes	no
COVPCO	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
COVPAC	no	yes	no	no	yes	no	no	yes	no	no	yes	no	no	yes	no
DEDCTBL	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
<i>DEP</i>	no	yes	no	no	yes	no	no	yes	no	no	yes	no	no	yes	no
<i>INFRD</i>	no	yes	no	no	yes	no	no	yes	no	no	yes	no	no	yes	no
LIMIT	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
POLICY	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
POLPR	no	yes	no	no	yes	no	no	yes	no	no	yes	no	no	yes	no
PPDPAC	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
<i>PPDSTL</i>	no	yes	no	no	no	no	no	no	no	no	no	no	no	no	no
PREM	no	yes	no	no	yes	no	no	yes	no	no	yes	no	no	yes	no
PREMTAX	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
<i>REPVAL</i>	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
<i>RESDEPC</i>	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
SBADR	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
<i>SBINC</i>	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
SUBJECT	no	yes	no	no	yes	no	no	yes	no	no	yes	no	no	yes	no
SUPDC	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

5.3 Credential Handling from FS-PM to FS-PRO

This section describes the configuration of the point-to-point connection between the FS-QUO/FS-PRO Product Web Services (PWS) provider and the corresponding FS-PM product web service consumer.

The Product Web Services are SOAP web services. The service interface contains five synchronous service operations. They follow a query response Transaction Communication pattern. In particular, no data from FS-PM is persisted in FS-PRO.

In the following graphic, you can see the Product Web Services in both systems and the corresponding service operations:



FS-PRO implements a PWS. FS-PM implements the counterpart consumer Product Web Services /PMO/ CO_PROXY_PWS_PRO. This consumer Product Web Services is part of FS-PM standard implementation and doesn't need to be created on the customer side.

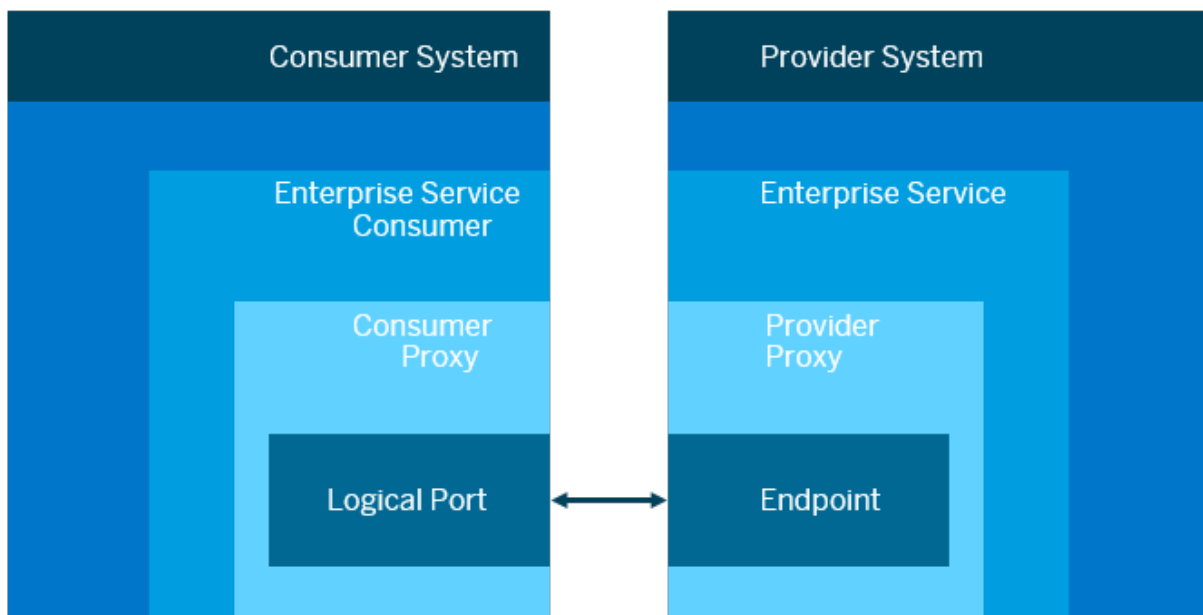
5.3.1 Authentication for Product Web Services

A message-based authentication is required for the Product Web Services. User credentials such as user name and password are passed in the wsse header of a SOAP envelope. In case of an HTTP request, the SOAP envelope is embedded in the HTTP body. A SOAP action in the SOAP header specifies the required service operation.

Maintenance and, in particular, the adding of credentials for a point-to-point connection is handled by defining a logical port in the FS-PM system of a customer system landscape. The logical port represents the counterpart consumer of the PWS provider FS-PRO system of a customer system landscape.

SOAMANAGER generates a port based on a concrete (binding) Web Services Description Language (WSDL) for an endpoint. It contains the following information:

- Functional descriptions
- Transport binding information, such as the URL and access path
- Product web service - policy information



Related Information

[Providing a WSDL for Product Web Services Endpoint at Customer Site \[page 33\]](#)

5.3.2 Providing a WSDL for Product Web Services Endpoint at Customer Site

You must create and store a concrete (binding) WSDL for an FS-PRO Product Web Services endpoint at the customer site.

Prerequisites

Before you generate the WSDL, check that the following settings are configured:

- In the FS-PRO Design Time Administrative Console, the location of the *Product Web Services Manager* is specified, and the `PrePostPublishingEnabled` setting is set to Yes. For information about these settings, see [PC > Env > PC Environment](#).
- In the Product Modeler, the `Upload & Deploy to Runtime` service is selected in your product's `Custom Publishing` component.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Publish the product.
3. Launch Internet Explorer and log in to the Design Time Administrative Console at the following location: `<pro_designtime_app_url>/csiroot/admin/`.
The Design Time Administrative Console will open after a short delay.
4. Go to **Product > Manage Product Web Services**.
5. Choose the *Runtime* tab.
6. In the left panel, choose the name of your product (for example, Sample Household ProductA web service document appears in the right panel).
7. Choose *WSDL*.
A browser window opens, showing the WSDL file.
8. Copy the URL from the browser address bar.
This URL is required when defining a port for a Product Web Services provider endpoint.

Related Information

[Verifying Custom Publishing Services are Selected \[page 16\]](#)

5.3.3 Defining a Port for a Product Web Services Provider Endpoint

As a prerequisite for maintenance and adding credentials for a point-to-point connection, you must define a port for a Product Web Services provider endpoint.

Procedure

1. Call up transaction SOAMANAGER in FS-PM.
2. Select *Web Service Configuration* on the *Service Administration* tab,
The *Web Service Configuration* screen appears.
3. In the *Search Criteria* section, enter the object name `/PM0/CO_PROXY_PWS_PRO` and choose *Search*.
4. Select the internal name `/PM0/CO_PROXY_PWS_PRO` from the *Search Result*.
5. On the *Configurations* tab, select **Create > WSDL Based Configuration**.
6. Enter the *Logical Port Name* according to your requirements. If required, select the *Logical Port is Default* checkbox and choose *Next*.

ⓘ Note

A single logical port must be defined as the default port.

7. Read the Product Web Services concrete (binding) WSDL.

To do so, enter the URL and the credentials (user name and password) for WSDL access.

ⓘ Note

You can find the URL of the WSDL location in the Design Time Administrative Console. For more information, see [Providing a WSDL for Product Web Services Endpoint at Customer Site \[page 33\]](#).

8. Select the binding entry in the *Overview of Possible Combinations Identified by WSDL Document* section.
9. Enter the credentials (user name and password) for the SOAP message-based authentication.
10. If required, adjust the transport binding data. For example, if you change the URL protocol information, you must adapt the port accordingly.
11. On the next tabs, choose *Next* until you reach the *Operation Settings* tab.
12. Choose *Finish*.

Related Information

[Providing a WSDL for Product Web Services Endpoint at Customer Site \[page 33\]](#)

6 Configuration Changes Needed in FS-QUO

6.1 Configuring the Connection in FS-QUO

To send policy XML from FS-QUO to FS-PM, you must configure FS-QUO with the proper connection details.

Procedure

1. Launch Internet Explorer and log in to the Runtime Administrative Console at the following location:
`<pro_runtime_app_url>/csiroot/admin/`.
The Runtime Administrative Console will open after a short delay.
2. Navigate to ► *Configuration* ► *Application* ► *AuthoritySuite* ► *Env* ► *FS-PM Integration Setting* ▾.
3. For each row, set the `Override` attribute to a value that corresponds to the FS-PM environment, and save.
 - Get the values to enter from FS-PM. The values must match in both environments.
 - The FS-PM database only allows three login attempts using the `jco.client.user` and `jco.client.passwd` values. If the login fails after three attempts, the database access locks and you will need to contact the DBA.
4. Navigate to ► *Configuration* ► *Application* ► *AuthoritySuite* ► *Env* ► *Application Environment* ▾.
5. Find the *FSPMBookingServiceEnabled* row, set the `Override` attribute to Yes, and save.
6. Reload the configuration settings.
 - a. Choose ► *System* ► *Reload Configuration Settings* ▾ from the menu bar.
 - b. Choose *Reload All Config*.

6.2 Use of XSLT Transformation

In an integrated environment with FS-PM, when a producer or underwriter issues a policy in FS-QUO, a policy XML is generated. To create a corresponding policy in FS-PM, the following occurs:

- When a policy is bound in FS-QUO, FS-QUO sets the composite keys that FS-PM needs in the URS (memory representation of the policy model), FS-QUO gets the values for the composite keys from the product tables. To determine which values to get, FS-QUO references the `APIF Composite Key Configuration` component in the Product Modeler.

The following figure shows the composite key configuration for the ABDAAGENT table: FS-QUO populates the AGENT_ID column of the ABDAAGENT table in the URS with the unique identifier, PK_ID, from the ABDAAGENT product table. FS-QUO also populates the POLICY_ID column of the ABDAAGENT table in the URS with the SECPOL_ID of ABDAAGENT product table's parent. By default, personal P&C products are configured to reference the SAP Global Reference Object that contains the APIF Composite Key Configuration component. This reference is configured using the GlobalReferenceProductName key in the following component: [▶ <product_name> ▶ Configuration ▶ Config ▶](#).

Note

The APIF Composite Key Configuration component is already configured with the entities that are used for household products. You don't need to modify this component when configuring household products.

- FS-QUO creates the policy XML from the URS.
- FS-QUO uses XSLT to transform the policy XML into a format that FS-PM can consume. FS-QUO provides an XSL style sheet that includes the entities used for Sample Household.
- The transformed data is sent to FS-PM using INPI services.

Note

If you want to add a field to FS-QUO, you must modify the XSL style sheet. For more information about the steps involved in this enhancement scenario, contact your SAP implementation team or SAP Support.

6.3 Using INPI Services

INPI services are required for use with products using msg.PM as the rating engine.

In order to book a new business transaction to FS-PM, the policy data captured in FS-QUO requires to be transformed to the format that INPI services function module can process.

Notes:

- PAGNO_ID is a mandatory INPI field. It is used to ensure that a policy is created once in FS-PM. The field value can be specified in the URS; if not, a default value is assigned by FS-QUO.
- The *Application Date* (APPL_DT) and *Application Receipt Date* (APPLIN_DT) fields are mandatory INPI fields. The field values can be specified in the URS; if not, the current system date will be used by default.
- Store the policy ID returned by FS-PM in *ABDAPOLICY.POLICYNR_TT* field in FS-QUO. Use the APIF Output Parameters to map the value returned by FS-PM to the corresponding field in FS-QUO.
- Create the URS policy data XML as well as the corresponding transformed data XML and write them into file system when *WriteFSPMPolicyDataToFile* configuration is enabled.

6.3.1 Remote Functions Parameters Mapping Configuration

All parameter mappings for all RFCs are maintained within the `Remote Functions Parameters Mapping` component.

The fields are mapped within the *SAP Global Reference Object* within FS-PRO under the following location:

► [Configuration](#) ► [Integration](#) ► [RFC](#) ► [Remote Functions Parameters Mapping](#) ►.

Within the *Values* tab, there are 3 anchored rows. Each anchored row contains a subset of configuration values pertaining to the sub-components *APIF Input Parameter Mapping*, *APIF Composite Key Configuration*, *APIF Transient Fields*, *APIF Reserved Fields* and *APIF Output Parameter Mappings* as follows:

- update* Contains all parameters pertaining to update operations.
These operations only apply to products that use FS-PM for quotation calculation.
- create* Contains all parameters pertaining to create operations.
These operations only apply to all products.
- calculate* Contains all parameters pertaining to calculate operations.
These operations only apply to products that use FS-PM for quotation calculation.

Related Information

[Using FS-PM for Quotation Calculation \[page 67\]](#)

6.3.1.1 Mapping INPI Input Parameters

During transformation, FS-QUO will process each table in the URS policy model and determine whether to include the table in the INPI payload based on the presence of Input Parameter. If a table name is found in the configuration, FS-QUO will retrieve the corresponding input parameter name and add the resulting parameter name and records of data of the table into the INPI payload.

The `APIF Input Parameter Mapping` component located within ► *SAP Global Reference Object* ► [Configuration](#) ► [Integration](#) ► [RFC](#) ► [Remote Functions Parameters Mapping](#) ► contains two columns that need to be mapped to equivalent FS-PM values:

- InputParameter** Contains the input parameter for table groups in the INPI payload.
- TableNames** Contains a list of the FS-QUO table names.

6.3.1.2 Mapping INPI Composite Keys

The composite keys are used by FS-PM to reconstruct the hierarchical structure of a policy model from a flat structure. FS-QUO gets the values for the composite keys from the associated table and sets them in the URS policy model.

To determine which value to get and which field to set, FS-QUO references the `APIF Composite Key Configuration` component in the Product Modeler.

The `APIF Composite Key Configuration` component located within [SAP Global Reference Object > Configuration > Integration > RFC > Remote Functions Parameters Mapping](#) contains four columns that need to be mapped to equivalent FS-PM values:

TableName	Contains the FS-PM table name, as used by FS-PRO.
SourceColumnName	Contains the source column name in FS-QUO.
TargetColumnName	Contains the target column name from FS-PM.
Order	Defines the order in which the composite keys are returned back from FS-PM so that they can be mapped correctly. This attribute only applies to products that use FS-PM for quotation calculation.

⚠ Caution

Don't change the sort order. If you create a new entity within FS-PM, the composite key sort order needs to be considered.

6.3.1.3 Mapping INPI Transient Fields

There are fields in the FS-PRO data model that don't exist in the FS-PM data model. These fields need to be excluded from INPI booking services. These fields are called transient fields and need to be identified.

The `APIF Transient Fields` component located within [SAP Global Reference Object > Configuration > Integration > RFC > Remote Functions Parameters Mapping](#) contains two columns that need to be mapped to equivalent FS-PM values:

TableName	Contains the FS-PM table name, as used by FS-PRO.
TransientColumnNames	Contains the list of fields to be excluded from INPI payload for the corresponding table name.

6.3.1.4 Mapping INPI Reserved Fields

There are fields in both the FS-PRO and FS-PM data models that are expected to be empty by the INPI services function module. These fields are called reserved fields.

If the reserved fields aren't empty, the function module will raise an exception. This configuration is maintained separately from Transient Fields configuration for update purpose.

During transformation, FS-QUO will exclude the reserved fields from the INPI payload. To determine which table name and fields to be marked as reserved for the INPI payload, FS-QUO references the `APIF Reserved Fields Configuration` component in the Product Modeler.

The `APIF Reserved Fields` component located within [SAP Global Reference Object > Configuration > Integration > RFC > Remote Functions Parameters Mapping](#) contains two columns that need to be mapped to equivalent FS-PM values:

TableName	Contains the FS-PM table name, as used by FS-PRO.
ReservedColumnNames	Contains the list of fields to be marked as reserved for the INPI payload XML for the corresponding table name.

6.3.2 Mapping INPI Import Parameter

Additional parameters can be specified which direct how the INPI services issued quotes are handled by the FS-PM system. For example, when booking a quotation in FS-QUO it's typically imported into FS-PM as a *Released* policy. However there are circumstances where the booked quotation should be imported but in an *Application* state.

Note

The following configuration doesn't apply to products that use FS-PM for quotation calculation.

The leading *Parameters* section in the INPI XML contains the Import Parameter details for the booked quotation.

The `APIF Import Parameters` component within the `SAP Global Reference Object` contains five columns that are mapped for INPI services booking:

InputParameter	Contains the parameters that direct handling of the INPI services in FS-PM.
ValueType	Indicates the value that is passed in the XML. This control is a dropdown list and the possible values are as follows: <ul style="list-style-type: none">Default The default FS-PM parameter value is used.Static Sets the parameter value from the <i>StaticValue</i> column.Rule Sets the parameter value from the rule defined in the <i>ServiceAPIName</i> column.
StaticValue	Contains the user-defined static value.
ServiceAPIName	Contains the user-defined rule.
Arguments	Contains the user-defined arguments.

Related Information

[Using FS-PM for Quotation Calculation \[page 67\]](#)

6.3.3 Mapping INPI Namespaces

Namespace details aren't stored within the FS-PRO or FS-QUO data models. However when booking a quotation to FS-PM, the prefix needs to be included for fields with a namespace other than "PMO".

The `Namespace Mapping` component in the `SAP Global Reference Object` allows for the configuration of these field / namespace mappings. The component contains 2 columns that need to be configured:

QualifiedColumnName	Specifies the data model field with a namespace other than PMO.
NameSpace	Specifies the namespace prefix that will be appended to the field name in the INPI services XML.

Note

All INPI fields with a namespace other than "PMO" should be configured in this component.

INPI payload creation will look up the mapping in this component to send the correct namespace at the time of booking

6.3.4 Currency Scaling and INPI Services

Currency scaling is a mechanism within the INPI services XML export process. This mechanism adjusts currency values to ensure the correct decimal place scaling within the source (FS-QUO) and target (FS-PM) systems.

For more information about defining currency scaling, see [Understanding Currency Scaling](#).

6.3.5 Using the Business Partner Search Adapter in FS-PM

To use the search adapter of SAP Business Partner for Financial Services (SAP GP-FS) in FS-PM, you must copy the search helps from FS-PM to SAP GP-FS. For more information, see SAP Note [2020087](#).

7 Configuration Changes Needed in SAP GP-FS

The procedures in this section are required only if you are integrating FS-QUO with FS-PM and FS-PRO.

SAP Business Partner for Financial Services (SAP GP-FS) manages business partner data (for example, account names and addresses). To create new business partners from FS-QUO (for example, add an account), FS-QUO must be able to connect to SAP GP-FS. When an underwriter or producer adds a business partner in FS-QUO, FS-QUO sends a request to SAP GP-FS. SAP GP-FS creates the partner and returns the new partner ID to FS-QUO. FS-QUO stores this partner ID and sends this information along with the policy data at binding time.

Important:

There may be multiple instances of Business Partner in the landscape. FS-QUO must be connected to the Business Partner that the corresponding FS-PM is connecting to. FS-QUO searches for Business Partners (Policy Holder, Premium Payer, etc.) from the connected Business Partner and adds Business Partner to the connected Business Partner instance.

For example, suppose that you create a business partner for FS-QUO, but searching for a partner doesn't produce results. This might mean that FS-QUO is connected to SAP GP-FS, but there is a connection issue between FS-PM and SAP GP-FS. As another example, if you can't create an account in FS-QUO, there is a connection issue between FS-QUO and SAP GP-FS.

For more information about SAP GP-FS, see the *FS-PM Application Help*.

7.1 Enabling the Business Partner Setting

You can enable the business partner setting in the Administrative Console.

Procedure

1. Launch Internet Explorer and log in to the Runtime Administrative Console at the following location:
`<pro_runtime_app_url>/csiroot/admin/`.
The Runtime Administrative Console will open after a short delay.
2. Navigate to ► [Configuration](#) ► [System](#) ► [Env](#) ► [Business Partner Setting](#) ▾.
3. Locate the *BusinessPartnerEnabled* row and set the *Override* attribute to *Yes*.
4. Reload the configuration settings.
 - a. Choose ► [System](#) ► [Reload Configuration Settings](#) ▾ from the menu bar.
 - b. Choose [Reload All Config](#).

8 Setting Up Product Replication from FS-PM

You can use out-of-the box templates to inherit from and create your own templates and use these for your IFBC template replication from FS-PM.

There are four items you can import from FS-PM:

- IFBC templates
- PBT channel model structures
- Non-IFBC relevant entities (Global domain tables)
- CBO—customizing tables

Before you import the templates, you must complete the following prerequisites:

- Configure RFC destinations in products
- Configure RFCs destinations in the Administrative Console
- Map the IFBC Template Import

8.1 Mapping the IFBC Templates

Before attempting to import, you need to map the templates that comprise an FS-PM product to the corresponding target parent template within FS-PRO.

Context

Mapping can be done either manually or by importing a comma delimited file. If a CSV file for a specific product has been configured and loaded it will supersede any manual configurations in the target template.

Notes:

- You only need to perform this task for the products you intend to import from FS-PM.
- You must complete all preparation work before you can use IFBC import.
- Only those templates that have been specified in the Module Configuration or CSV Configuration are eligible to be imported and assembled in FS-PRO. This may result in a partial import of a product.
- When a template is imported, the Primary Language value for the template is determined by the value of the `GlobalPrimaryLanguage` setting. For more information about the `GlobalPrimaryLanguage` setting, see [System > Env > Globalization Setting](#).
- If you want to import a template in multiple languages, you would define this in the `ImportLang` value. Go to [► PC > Env > IFBC Replication Setting](#) in the Design Time Administrative Console and include a comma-delimited list of the languages to be imported.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Go to the Product Repository in Product Studio.
3. Create a folder called `Template Library` and label the *Modifier Type* as Configuration Group.
4. Create a `Components` folder in the `Template Library` folder, for the enum list import and label the *Modifier Type* as Component Folder.
5. Create a folder in the `Template Library` folder for each *Object Modifier Type* (from FS-PM).
For example, `Contracts`, `Coverages`, `Premiums`, `Policyholders`, and so on.
6. Create one template inside of each folder that you created using the following naming convention:
`<company_name><LoB><object>` template based on the SAP `<LoB><object>` template.
Each folder should contain the template for the correct LoB and Object that you want to import such as `LnA` for Life Product Import or `PnC` for PnC Product Import.

For example, in the `Premiums` folder if you want to import a Life line business product, you must create a new object with the following details:

- Name: ABC Company LnA Premium Template
- Modifier Type: Premium
- Based On: SAP LnA Premium Template

There are three objects which are common across all lines of business, and their naming convention uses Common instead of LoB, such as the SAP Common Premium Payer Template. For these objects you must create a new object with the following details:

- Name: ABC Company Common Premium Payer Template
- Modifier Type: Premium Payer
- Based On: SAP Common Premium Payer Template

7. If you want to manually assign the template ID, perform the following steps:
 - a. For each template that you created, double-click the template to open it.
 - b. Choose the `Identification` folder from the *Product Tree* and select `SAP <object> id`.
 - c. Select the *ProductModuleId* column on the *Values* tab, and fill in the values for the product template IDs from FS-PM for the object category that you want to import.
If more than one template ID exists, separate each ID with a comma.
8. If you want to assign the template IDs by importing the information from a CSV file, perform the following steps:
 - a. Create a CSV file for a single product and name the file using the following format
`<product_name>SalesProductTemplateID.csv`.
There must be one blank space in the file name, after the product name value.
 - b. Populate the file with the following values for each template occupying a single line and separated by a comma:
 - Parent Template
 - Template Version
 - ProductModuleID

The order in which the templates are listed in the file won't affect the import.

- c. Save your changes.
- d. Launch Internet Explorer and go to `<pro_designtime_app_url>/csiroot/admin/`.

The Design Time Administrative Console will open after a short delay.

- e. Go to **System > Edit File System**.
 - f. Go to **PA - Custom Integration Folder (Write) > productengine**.
 - g. Create a sub-folder under `productengine` named `replication`.
 - h. Upload the CSV file to the `replication` folder.
 - i. Save your changes.
9. Repeat these steps for all objects you want to import.

Next Steps

Ensure that all the templates belonging to the Sales product that you are trying to import are released in FS-PM before you attempt to import the product in FS-PRO.

8.2 Importing IFBC Templates in FS-PRO

After you complete the prerequisites, you replicate the products that were created from the templates and then begin the template import process.

Prerequisites

Only those templates that have been specified in the Module Configuration or CSV Configuration are eligible to be imported and assembled in FS-PRO. This may result in a partial import of a product.

Context

Note

Choose [Refresh List](#) to retrieve an updated list of available products from FS-PM.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`

The Product Modeler will open after a short delay.

2. Choose **Tools > Product Replication** from the menu bar.

The *Product Replication* window appears.

3. Choose the *IFBC Import* tab.

This tab contains a list of available FS-PM product templates that you can import. You can also search for a template by Template ID or Template Name.

The following list provides descriptions of the IFBC Import columns:

Template ID	The identification number for the template.								
Template Name	<p>The name of the FS-PM template that you can import.</p> <p>If the template name contains any special characters, they will be replaced with a blank space during import into FS-PRO. For example, a template named 'New+Coverage' will become 'New Coverage'.</p> <p>If the first character of the template name is a special character, it will be stripped from the name during import into FS-PRO. For example, a template named '+NewCoverage' will become 'NewCoverage'.</p> <p>If the template name begins with a numeric character, it will be converted to its text equivalent during import into FS-PRO. For example, a template named '33NewCoverage' will become 'Three3NewCoverage'.</p>								
Delta Check	<p>The pop up window for Template Update that reconciles old and new templates and makes a recommendation whether or not to import.</p> <p>See the Performing a Delta Check [page 47] topic.</p>								
Last Import in FS-PRO	The date and time when templates were last imported.								
Status	<p>The status of the template.</p> <p>The possible values are:</p> <table><tr><td>Success</td><td>All IFBC templates that were configured in FS-PM were successfully imported and assembled in FS-PRO.</td></tr><tr><td>Failed</td><td>Errors were encountered during the import.</td></tr><tr><td>In Progress</td><td>The IFBC templates are in the process of being imported and assembled or updated in FS-PRO.</td></tr><tr><td>Continue</td><td><p>A partial import was performed, based on templates that were configured in FS-PRO.</p><p>There remain templates that haven't been imported, assembled or updated in FS-PRO.</p></td></tr></table>	Success	All IFBC templates that were configured in FS-PM were successfully imported and assembled in FS-PRO.	Failed	Errors were encountered during the import.	In Progress	The IFBC templates are in the process of being imported and assembled or updated in FS-PRO.	Continue	<p>A partial import was performed, based on templates that were configured in FS-PRO.</p> <p>There remain templates that haven't been imported, assembled or updated in FS-PRO.</p>
Success	All IFBC templates that were configured in FS-PM were successfully imported and assembled in FS-PRO.								
Failed	Errors were encountered during the import.								
In Progress	The IFBC templates are in the process of being imported and assembled or updated in FS-PRO.								
Continue	<p>A partial import was performed, based on templates that were configured in FS-PRO.</p> <p>There remain templates that haven't been imported, assembled or updated in FS-PRO.</p>								

4. Select the checkboxes to the left of the *Template ID* column for the templates that you want to import.
5. Optionally, use the *ID Update* button to update the cardinality values on the ID records for all assembled templates under the product.
6. Choose *Import*.

While the import is being executed, each template is assigned a status of In Progress and the checkbox for the template is deselected.

Note

You can only import five products at a time. Otherwise, you receive an error message. Note that the import process could take some time if the templates have a large amount of content.

Next Steps

Perform a Delta Check, if necessary.

8.2.1 Performing a Delta Check

A delta check is a process that reconciles old and new templates.

The delta check tells you when the product was last imported and updated and makes sure that FS-PM and FS-PRO have the same version of the product. It also makes a recommendation as to whether or not an import should be attempted.

Notes:

- An import must have been performed before a delta check can be attempted.
- A delta check doesn't delete templates; it just makes recommendations. You must manually delete templates, if needed.

When you select the icon in the *Delta Check* column, the *Template Update* window appears with the following information:

Template ID	The identification number for the template.
Template Name	The name of the FS-PM template that you can import.
Last Update in FS-PM	The date and time when templates were last updated.
Last Import in FS-PRO	The date and time when templates were last imported.
Import Required	System recommendation if import is required.

Note

When a subordinate template is flagged as deleted in FS-PM, FS-PRO will disassemble that template from the product (parent template). This means that the subordinate template isn't deleted, but that the relationship between the product and the template is severed.

8.3 Importing PBT Tables

On the *PBT Import* tab, you import PBT tables. If you don't see the table you want, you can also search for a table by Table Description.

Context

Once you import a column the first time in FS-PRO, any changes you make to this column in FS-PM must be done manually in FS-PRO.

Note

Namespace details aren't stored within the FS-PRO or FS-QUO data models.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Choose **Tools > Product Replication** from the menu bar.
The *Product Replication* window appears.
3. Select the templates on the *PBT Import* tab that you want to import by selecting the checkbox to the left of the *Table Description* column.

Note

If you want to import any tables that aren't in the list, contact SAP development.

4. Choose *Import*.

Restriction

Don't delete any items from the system repository or issues can occur. SAP isn't responsible for items you delete from the system repository.

The following list describes the PBT Import columns:

Table Description	The name of entity that you are importing from FS-PM.
Table Name	The name of the table you are importing. Each table name begins with one of the following prefixes, based on the type of product: <ul style="list-style-type: none">• ABDA–Basis• APDA–P&C• ALDA–Life

	<ul style="list-style-type: none"> • MDA–Auto
SAP Data Definition Name	The location where the columns are getting stored.
	<div style="border: 1px solid #ccc; background-color: #f9f9f9; padding: 5px;"> <p>Note</p> <p>You can import new columns that you added to the table in FS-PM.</p> </div>
Last Import in FS-PRO	The date and time when templates were last imported.
Status	The status of the template (Success or Failed).

8.3.1 Understanding Column Updates and the PBT Import

During an import of PBT tables, there are some circumstances in which updates may not be applied to the *Type*, *Length* and/or *Precision* values for existing columns:

- *Type* value changes in FS-PM aren't applied if the prior *Type* is TEXT, DATE, BOOLEAN or CLOB.
- *Type* value changes in FS-PM are applied when changing between number types (NUMBER, CURRENCY).
- For TEXT *Type* columns any increases in *Length* are applied. Decreases aren't applied.
- For NUMBER and CURRENCY Types, increases in *Length* are applied provided that the increase isn't less than the *Precision* increase. For example:
 - If *Length* value increases by 2 and *Precision* value increases by 1, then the *Length* value increase is applied.
 - If *Length* value increases by 2 and *Precision* value decreases by 2, then the *Length* value increase is applied.
 - If *Length* value increases by 2 and *Precision* value increases by 3, then the *Length* value increase isn't applied.
- For NUMBER and CURRENCY types, increases in *Precision* are applied provided that the increase is less than or equal to the *Length* increase.
 - If *Length* increases by 2 and *Precision* increases by 1, then the *Precision* increase is applied.
 - If *Length* decreases by 2 and *Precision* increases by 1, then the *Precision* increase isn't applied.
 - If *Length* increases by 2 and *Precision* increases by 3, then the *Precision* increase isn't applied.

If a situation occurs where the *Type*, *Length* and/or *Precision* values for existing columns aren't updated, the column must first be deleted from the FS-PRO Table definition and dropped from the database. The PBT import can then be re-executed to re-import the revised column.

8.3.2 Overriding the Fraction Decimal for Currency Scaling

The fractional decimal for a specified currency that is defined in the ISO 4217 standard may not be the precision needed for currency scaling. An alternate precision can be defined within a CSV file.

Context

⚠ Restriction

The currency scaling feature is available for use with coverage-based products only. It is not supported for risk-based products.

The default location for the `CurrencyDecimalPlaceDef_default.csv` file is in the following FS-QUO `CSI_HOME` sub-directory: `<CSI_HOME>/as/custom/web/resource/CurrencyDecimalPlaceDef_default.csv`

When attempting to determine the precision, FS-QUO will initially attempt to lookup the currency fraction from the `CurrencyDecimalPlaceDef_default.csv` file. If a currency isn't found in the CSV then the currency fraction from the ISO 4217 standard will be returned and applied.

Procedure

1. Launch Internet Explorer and log in to the Design Time Administrative Console at the following location:
`<pro_designtime_app_url>/csiroot/admin/`.

The Design Time Administrative Console will open after a short delay.

2. Go to ► **System** ► **Edit File System** ►.
3. From the *Path* dropdown list, select *PA - Custom Web Root (Write)*.
4. Navigate to the *resource* folder.
5. Download the file.
6. Edit it to define the new fractional decimal value.
A fractional decimal needs to be defined for each currency.
7. Save your changes.
8. Upload the updated file.

8.4 Manually Adding Precision Values for Currency Fields

For PBT Import to work with multi-currency, you must manually add *Precision* values for specific columns.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Add the following *Precision* values for the Product Modeler data definitions area:
 - [SAP DD Manual Cost Posting Template](#) > [Column](#) > [DEBIT_AM](#) >
 - [SAP DD Manual Cost Posting Template](#) > [Column](#) > [MACCCOSTS_AM](#) >
 - [SAP DD Coverage](#) > [Column](#) > [BPML_AM](#) >

Note

2 is the amount you must specify for *Precision*.

3. Build and sync the flowstore to update your database.

Note

Sync flowstore will require attention from a database administrator since the precision will increase without increasing the overall data length. Your database administrator must alter the column precision and also perform some temporary data porting for any existing data due to the precision changes on existing columns.

8.5 Importing Non-IFBC Tables

On the *Non-IFBC Import* tab, you import non-IFBC tables.

Context

→ Tip

Initially, the window takes time to populate. Once populated, the table data appears. If you don't see the table you want, you can also search for a table by table description. Italicized names are out-of-the-box tables, and tables you imported are non-italicized.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Choose **Tools > Product Replication** from the menu bar.
The *Product Replication* window appears.
3. Select the *Non-IFBC Import* tab.
4. Select the templates you want to import by selecting the checkbox to the left of the *Table Description* column.

There is no limit to how many tables you can import.

Note

If you want to import any tables that aren't in the list contact SAP development.

5. Choose *Import*.

Restriction

Don't delete any items from the system repository or issues can occur. SAP isn't responsible for items you delete from the system repository.

The following list describes the non-IFBC columns:

Table Description	Name of entity that you are importing from FS-PM.
Table Name	Name of the table you are importing.

Note

If you are importing tables that begin with the letter T (for example, T006), the import process takes time.




Last Import in FS-PRO	Date and time when templates were last imported.
Status	Status of the template (Success or Failed).

8.6 Importing CBO Tables

Use the *CBO Import* tab to import the tables.

Prerequisites

There is mandatory configuration that must be applied in FS-PRO before attempting a CBO Import. For more information, see the following SAP Notes:

- [2198767](#) 
- [2198768](#) 
- [2198761](#) 

Procedure

1. Create an extended global reference object in the `Template Library` in the Product Modeler. This is where the imported CBO tables are stored.

You can assign any name that you like to this extended global reference object. However, if you choose a name other than the system default (`SAP Extended Global Reference Object`), you will need to perform Step 2. If you use the system default name, you can skip to Step 3.

2. If you did not use the default name for the new object, then you must update the value of a configuration variable in the Design Time Administrative Console so that the CBO import works correctly:
 - a. Log in to the Design Time Administrative Console.
 - b. Choose **► System ► Edit Configuration Settings ►** from the menu bar.
 - c. Navigate to **► Configuration ► PC ► Env ► IFBC Replication Setting ►**.
A table appears.
 - d. Find `ExtendedGlobalRefObject` in the *Name* column of the table.
The default column lists the system default name.
 - e. Enter the new name that you want to call the object in the *Override* column.
 - f. Save your changes.
3. Return to the Product Modeler.
4. Go to **► Tools ► Product Replication ►**.
5. Select the *CBO Import* tab.
6. Enter the name of the table you want to import.
If there is more than one table, separate the table names with a comma.
7. Choose *Import*.

Results

The CBO table is imported.

8.7 Viewing the Import Log

The *Import Log* tab on the *Product Replication* window helps you to understand the status of the template import process. The tab displays all logs, grouped by import type: IFBC, PBT, NON-IFBC and CBO.

It tells you what was imported, how much time it took to import, and why it failed (if unsuccessful).

- [INFO] gives you general status information on the import.
- [SEVERE] tells you why the import failed.

8.8 Using the PBT Schema Synchronization

The PBT Schema Synchronization performs an analysis of the differences between the remote system and your SAP system. You perform either of the following functions:

- Simulation—to review database table differences before any changes or reconciliations are made.
- Synchronization—to perform a database synchronization immediately.

Note

SAP recommends you perform a simulation before you synchronize your databases.

8.8.1 Performing Database Simulations

You can run a database simulation before synchronizing the schema.

Procedure

1. Launch Internet Explorer and log in to the Design Time Administrative Console at the following location:
`<pro_designtime_app_url>/csiroot/admin/`.
The Design Time Administrative Console will open after a short delay.
2. Go to **Product > PBT Schema Synchronization**.
A *PBT Schema Synchronization* dialog box appears with options to simulate or synchronize.
3. Choose *Simulate*.

Results

If there were no errors in the simulation, you receive the following message: `No issues found in test simulation. You may now perform the actual synchronization.`

If there were errors in the simulation, you can review those errors and make any updates before running the synchronization.

8.8.2 Performing Database Synchronizations

Synchronizing the database performs an analysis of the differences between the remote system and your SAP system.

Procedure

1. Launch Internet Explorer and log in to the Design Time Administrative Console at the following location:
`<pro_designtime_app_url>/csiroot/admin/`.
The Design Time Administrative Console will open after a short delay.
2. Go to **Product** > **PBT Schema Synchronization**.
A *PTB Schema Synchronization* dialog box appears with options to simulate or synchronize.
3. Choose *Synchronize*.

Results

If there were no errors in the synchronization process, you receive the following message: *Successfully synchronized schema. Please build metadata to complete the entire process.*

If there were errors, you must fix the errors and repeat the synchronization process.

To build metadata, see [Building All Objects of a Type](#).

8.9 Entity-based IFBC Import

An entity-based IFBC Import allows you to choose what portion of a product to process during IFBC Import, instead of having to import the entire product every time.

To implement this type of import, you will need to create a new type of CSV file. The content of the CSV file must have the format of: `<ParentTemplateObject>, <VersionNo>, <EntityType>`.

Next, you will need to create a folder in CSIHome to house the entity-based mapping CSV files:

1. Log on to the Administrative Console.
2. Go to **System** > **Edit File System**.
3. From the *Path* dropdown list, select *PA – Custom Integration Folder (Write)*.
4. Expand productengine/replication.
5. Add a new folder called **entitybased**.
6. Navigate to the **entitybased** folder and upload any entity-based mapping CSV files into here.

8.9.1 Executing an Entity-based IFBC Import

Context

An entity-based IFBC Import allows you to choose what portion of a product to process during IFBC Import, instead of having to import the entire product every time.

Procedure

1. Login to Product Modeler.
2. Navigate to ► [Tools](#) ► [Product Replication](#) ► [IFBC Import](#) ► tab.
3. Select a product to import.
Entity-based import only works for one product at a time.
4. Select ► [Import](#) ► [Entity Based](#) ►.
5. Select a mapping file from the [Mapping File](#) dropdown.
6. Select one or more Contract to import and select [Import](#).
A confirmation message is displayed.
7. Verify that the information is correct, and select [OK](#).

Results


A new IFBC Import job will be kicked off to process this entity-based import. You can track the progress via the [Scheduled Activity Manager](#) or by going to ► [Tools](#) ► [Product Replication](#) ► [Import Log](#) ► tab.

8.10 IFBC Import of FS-PRO Product Data

In addition to the actual IFBC import, you must adapt the following [Customizing](#) settings after the IFBC import has been executed:

- Product Module Group Customizing in FS-PM
- Assignment of Business Transactions

8.10.1 IFBC Import

Depending on the operation mode you choose in FS-PRO, either the IFBC import is started automatically or you must start the IFBC import manually. If you have to start the IFBC import manually, perform the Customizing Activity [Execute Import of FS-PRO Product Data](#) in Customizing for Policy Management under [► In-Force Business Management > Basis > In-Force Business Configurator](#) . For more information, see the documentation of the Customizing activity.

8.10.2 Assigning Business Transactions

To execute business transactions for new IFBC product templates created during the import, you must assign these business transactions to the corresponding IFBC product templates.

For more information, see the [Assignment of Business Transactions](#) topic from the SAP Policy Management at [Insurance Policy Management Overview](#) product page on the help portal.

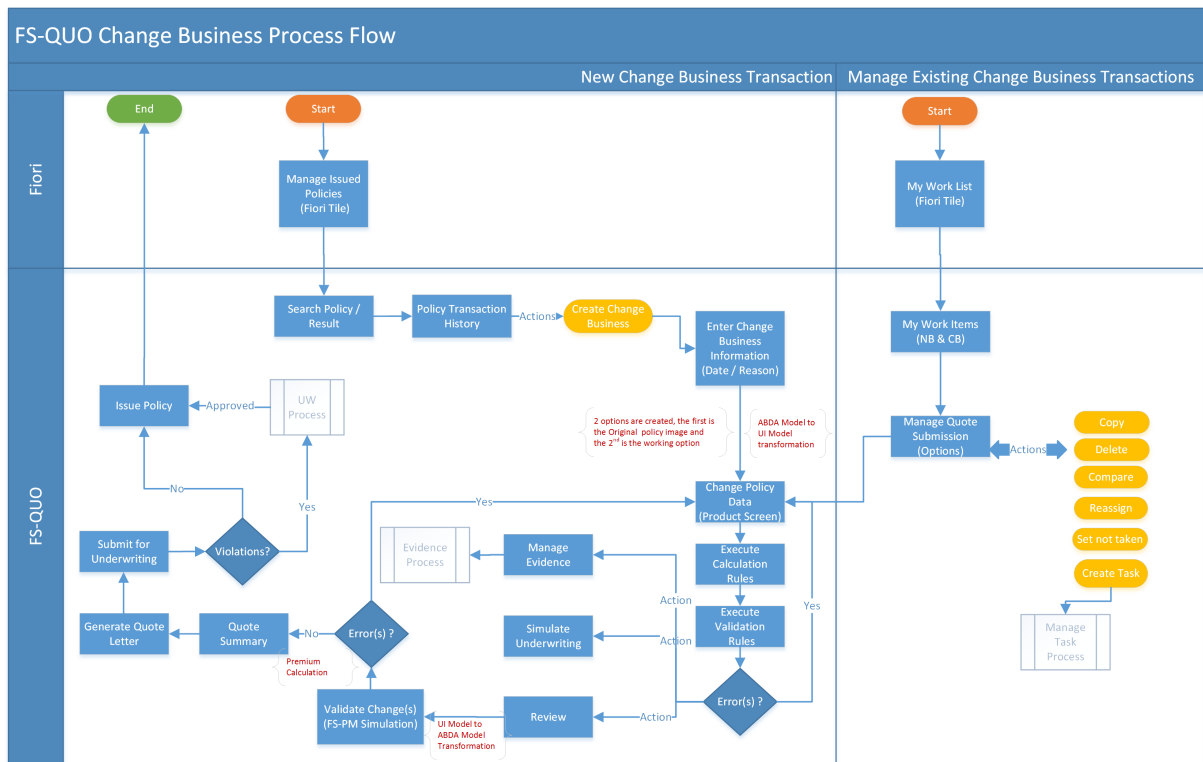
9 Configuring a Product to Allow Change Business Transactions

You can create a product that allows the creation of New Business and also allow Change Business transactions.

This functionality is exposed in FS-IPW via a Fiori tile called *Manage Issued Policies*.

Change Business Process Flow

The following diagram indicates the process flow for a product that has been configured for the Change Business workflow:



Restrictions and Limitations

The Change Business workflow is available only for solutions that include an integration with FS-PM version 1909 and later.

Support of change business is for coverage-based products only. This workflow is not available for risk-based products.

The following FS-QUO features are not supported in the Change Business workflow:

- Out of sequence changes (Undo/Redo)
- Cash Before Cover (CBC)
- Multi-currency
- Counteroffers

Creating a Product

You can quickly create a product that employs a Change Business workflow by using the sample Auto product (SAP S4 PR Motor Vehicle Insurance) templates. For guidance about creating a product, see [Creating a Product Using the Sample Auto Product Templates](#).

Note

In order to enable the Change Business functionality for a product, you need to set the `ChangeBusiness` attribute, under the [Extended Underwriting Application Configuration](#) > [Available Product](#) component.

Configuring RFCs

All of the RFC functions are located in [SAP S4 Global Reference Object](#) > [Configuration](#) > [Integration](#) > [RFC](#) > [Remote Function System](#).

Functionality	Business Function Name	RFC Name
Search based on policy	SEARCH_POLICY	/PM0/ABT_SVC_POL_FIND
Search based on account (policy holder or representative)	SEARCH_ACCOUN_BANK	/PM0/ABB_BP_SEARCH_BANK_ES
	SEARCH_ACCOUNT_CCARD_DETAILS	/PM0/ABB_BP_SEARCH_CCARD_DD_ES
	SEARCH_HELP	BAPI_HELPVALUES_GET
	SEARCH_ADR	/PM0/ABB_BP_SEARCH_ADR_Q_ES
	SEARCH_QUO_ADDRESSDATA	/PM0/ABB_QUO_ADDRESSDATA_GET
	SEARCH_ADR_DETAILS	/PM0/ABB_BP_SEARCH_ADR_Q_ES_2
	SEARCH_ACCOUNT_ADR_DETAILS	/PM0/ABB_BP_SEARCH_ADR_DD_ES
Header details	READ_POLICY	/PM0/ABT_SVC_POL_READ
Transaction details	SEARCH_APPLICATION	/PM0/ABT_SVC_APPL_FIND

Configuration for Business Transaction (BTX) Execution

Every product will have business transactions (BTXs) that are possible on a policy configured in IFBC. A similar BTX configuration must be maintained for every product in FS-QUO.

1. Push the product to FS-PM.
2. Manually perform the BTX assignment in FS-PM's IFBC.
3. The same set of BTXs will need to be manually configured in the product in FS-QUO.

Note

This process is not automated.

Business transactions are located in ► [SAP S4 PR Motor Vehicle Insurance](#) ► [Configuration](#) ► [Integration](#) ► [BTX](#) ►.

There are three components in FS-QUO for the BTX Framework:

Available BTXs This component is the FS-QUO-equivalent of the FS-PM assignment of business transactions in IFBC.

Note

In IFBC, BTXs are assigned at different levels (policy, contract, coverage, etc). In FS-QUO, BTXs are all assigned at the product level.

BTX Configuration This component allows users to specify the order of BTX execution, the operation that can be performed (example: update, delete, create) on entities, specify the table and the column set that are modifiable for the BTX

BTX Update This component allows users to specify the exclusion of columns in a BTX.

Excluded Columns The excluded columns will not be sent to FS-PM during BTX execution.

For more information about working with the BTX Framework, see the [Business Transaction \(BTX\) Framework \[page 64\]](#)

9.1 Understanding the Change Business Workflow

This topic describes the workflow of a product that has been designed to include change business transactions. This functionality is exposed in FS-IPW via a Fiori tile called [Manage Issued Policies](#).

Note

Change Business functionality is demonstrated in products that were created using a non-hierarchical UI model. The [SAP S4 PR Motor Vehicle Insurance](#) templates are provided out of the box to help you get started. For more information, see [Creating a Product Using the Sample Auto Product Templates](#)

→ Remember

For Change Business functionality to be enabled in a product, you need to set the `ChangeBusiness` attribute, under the ► [Extended Underwriting Application Configuration](#) ► [Available Product](#) ► component.

The Change Business workflow begins with the user searching for a policy that was issued in FS-PM, either via the policy number or account information.

Search based on policy	If the policy is found in the FS-PM system, the result will be displayed in the user's worklist.
Search based on account (policy holder or representative)	If the user searches for policies based on account information (the account must be a policy holder or a representative), all the policies belonging to the account will be retrieved and displayed in the worklist. A maximum of 100 results will be displayed on screen.

The user will select a policy from the worklist. Once the user selects the policy from the worklist, they then navigate to the next screen where the header details are displayed for the policy (this is a static screen).

For the displayed policy, a grid is displayed with details of all the transactions that were applied on the policy. If a Change Business transaction was created in FS-QUO, the submission number will be displayed in the grid.

ⓘ Note

If you have archived the submission numbers, it won't be displayed. The submission number must exist in the database.

A [Create Change Business](#) button will be available on the transaction grid. The button will be visible on the UI only under the following circumstances:

- The product has been configured in FS-QUO with Change Business enabled
- There are no other transaction on the policy with a status of `in-process`

Otherwise, the button will be hidden on the UI.

When the user selects the [Create Change Business](#) button, a new screen is displayed where the user can enter the effective date of "change" to be applied and the reason for the change. The user then presses [Next](#) and confirms the information to proceed.

ⓘ Note

Once the information on the [General Info](#) screen is confirmed, no change of `Effective Date` is possible.

Once confirmed, a new submission is created in FS-QUO with two quote options:

- Option 1 is the baseline option
- Option 2 is the option on which the user will be making changes

⚠ Restriction

If an open submission exists for a change then no new change business can be started.

An external change application is created in FS-PM, the data of the policy as on that effective date, is transformed and displayed in the FS-QUO UI / eApp. The change application is locked in FS-PM.

Next, the UI needs to be transformed from FS-PM's ABDA data model to FS-QUO's Quote data model via transformation rules. For example, the sample Auto product uses the `SAP Transformation Rules Component -> transformPolicyModelDatatoUIModel` rules.

To create a change external option in FS-PM, `/PMO/ABT_SVC_CHGREQ_CRT` RFM is called.

For the sample Auto product to demonstrate a consistent user experience between the New Business workflow and the Change Business workflow, a "partial universal change" approach has been implemented in the FS-QUO UI. This means that the eApp loaded for Change Business appears the same as New Business. Data is retrieved from FS-PM and the ABDA data model is transformed to the Quote data model.

Every product will have business transactions (BTXs) that are possible on a policy configured in IFBC. In FS-QUO for every product similar configuration has to be maintained for the product. For the sample Auto product, three BTXs are configured out of the box.

For a universal change approach, the UI for Change Business must be configured to ensure that for any changes made on the UI, there is a corresponding BTX that supports the change. If the UI that is used for New Business is implemented for Change Business and there are columns that are available (for example, insurable object) for which the BTX is not configured, then the columns must be made read-only on the UI. .

A new column `TXN_TYPE_CD` in the `POLICY_TXN` table has been introduced in the FS-QUO database. It is recommended that this flag be used to write rules for New Business vs Change Business.

When the user does **not** change the data on the eApp:

- If they press the [Save](#) icon, the premium will be recalculated and displayed
- If they press the [Review](#) button, an error or warning message will be displayed as no changes were made. The framework in FS-QUO identifies the changes made on the quote with the baseline quote option. If there are no differences found, then no BTXs will be derived and sent for simulation at review quote.
- If they press the [Simulate Underwriting](#) button, an underwriting decision will be given for the agent (the same as in the New Business workflow)

Note

Out of the box, the same underwriting rules are applicable for New Business and Change Business. You can choose to write different underwriting rules for Change Business (using the `TXN_TYPE_CD` flag).

Note

The only difference between the New Business and Change business underwriting workflow is that counteroffer is disabled for Change Business.

- If they upload an evidence, it will be uploaded at the policy level only. This restriction is for products created with the UI data model only.

When the user **does** change the data on the eApp:

- If they press the [Save](#) icon, the premium will be calculated and displayed
- If they press the [Simulate Underwriting](#) button, an underwriting decision will be given for the agent (the same as in the New Business workflow)

Note

Out of the box, the same underwriting rules are applicable for New Business and Change Business. You can choose to write different underwriting rules for Change Business (using the `TXN_TYPE_CD` flag).

Note

The only difference between the New Business and Change business underwriting workflow is that counteroffer is disabled for Change Business.

- If they upload an evidence, it will be uploaded at the policy level only. This restriction is for products created with the UI data model only.

If they press the [Review](#) button after a change has been made (for example, adds a coverage or changes the premium frequency), the following actions will occur:

1. FS-QUO will determine all the differences on the quotation compared to the baseline option (Option 1).
2. Once the delta is identified, FS-QUO calls an RFC (/PM0/ABT_SVC_CHGBTXPROPS_GET) and gets the information from FS-PM to know what are the columns that are modifiable for the BTX.
3. FS-QUO also looks for the IFBC configuration to check the fields that are modifiable.
4. Once the delta is identified, the BTX to be applied is identified, columns are identified for the BTX that are modifiable, and the actual BTX RFCs are called in FS-PM in "simulate mode". Only when the policy is being issued are all of the BTXs applied in "update mode" in FS-PM.

Copy Quote

When an option is copied for a quote option with transaction type `change business`, the new quote option is created with the data from the source option (that is, the option being copied from). The newly "copied" quote option will create a new external change option application in FS-PM during the copy process.

The principle is that all quote options for Change Business will have a corresponding external change option in FS-PM. The rest of the copy functionality is the same as for New Business

Compare Quote

The functionality remains the same as with the New Business workflow.

Delete Quote

The functionality remains the same as with the New Business workflow.

Generate Quote Letter

The functionality remains the same as with the New Business workflow.

Discard

The *Discard* button will be visible if there is an external change option open from FS-QUO when the user goes to a transactions screen within the *Manage Submission* screen. Once the user selects the submission and presses *Discard*, all quotes within the submission will be refused. Corresponding external change applications in FS-PM will also be refused.

9.2 Business Transaction (BTX) Framework

Every product will have business transactions (BTXs) that are possible on a policy configured in IFBC.

For every product in FS-QUO, a similar configuration has to be maintained for the product:

1. Push the product to FS-PM.
2. Manually perform the BTX assignment in FS-PM's IFBC.
3. The same set of BTXs will need to be manually configured in the product in FS-QUO.

Note

This process is not automated.

Sample business transactions can be viewed in ► [SAP S4 PR Motor Vehicle Insurance](#) ► [Configuration](#) ► [Integration](#) ► [BTX](#) ►.

→ Remember

For Change Business functionality to be enabled in a product, you need to set the `ChangeBusiness` attribute, under the ► [Extended Underwriting Application Configuration](#) ► [Available Product](#) ► component.

There are three components in FS-QUO for the BTX Framework:

Available BTXs This component is the FS-QUO-equivalent of the FS-PM assignment of business transactions in IFBC.
The technical names and descriptions of the BTXs need to be configured in FS-QUO.

Note

In IFBC, BTXs are assigned at different levels (policy, contract, coverage, etc). In FS-QUO, BTXs are all assigned at the product level. Also, if there is a change identified and there is no respective BTX configured, then an error will be displayed.

BTX Configuration

This component allows users to specify the order of BTX execution, the operation that can be performed on entities, specify the table and the column set that are modifiable for the BTX.

Within the BTX Configuration for a product, the corresponding BTX operations need to be configured (such as, update, delete, create). Within the BTX operations, the corresponding BTX matching criteria and derived updates need to be configured.

As an example, let's say that a BTX named Change Insured Object is configured within a BTX Configuration. And let's say that updates are made to the Insured Object columns via the eApp created with the sample Auto product: the Parking Area value is changed. Within the BTX operations, an update is only possible on the POLPR_ABDASUBJCT table. Since the Parking Area value is changeable on the UI, this column has to be specified under the BTX matching criteria.

When the user changes the Parking Area value at Runtime, the BTX framework identifies the BTX operations (based on the BTX matching criteria) and the corresponding BTX to be executed.

If you don't configure the Parking Area value in the BTX matching criteria and change the Parking Area value, then no business transaction can be determined and an error will be issued.

BTX Update Excluded Columns

This component allows users to specify the exclusion of columns per entity in a BTX. The excluded columns will not be sent to FS-PM during BTX execution. You can specify whether inserting or updating records is possible. For example, if the update record for the POLPR_ABDASUBJCT table is set to "0" and a user changes any of the insured object columns at runtime, then the system won't allow the change and an error will result. This configuration additionally allows users to define whether updates or inserts are possible on entities.

Transactions supported by the Change Business framework, with out-of-the-box configuration via the templates:

Change Payment Frequency	Create and Process Coverage	Edit Insured Object
--------------------------	-----------------------------	---------------------

Transactions supported by the Change Business framework, with the appropriate manual configuration by customers:

Create and Process Contract	Change Beneficiary	Change Discount Protection
Create and Process Coverage Package	Edit Limit	Change Exchange Rate Data
Change Main Due Date	Change Adjustment	End Adjustment
Exclude Coverage	Exclude Sub coverage	Change Adjustment
Change Policyholder	Change Creditor	Change Duration
Change Commission Participant	Change Clause	Change Benefit/Premium
Change Premium Payer	Change Deductible	Change CBC Amount Payer
Change Surcharge/Discount		

Unsupported transactions:

Product Change	Sales Product Change	Execute Reversal
Reverse Manual Rating	Execute Manual Rating	Process Premium Waiver
Annul Premium Waiver	Request CBC Amount	Determine CBC Category

9.3 MVA Namespace

Any column in FS-PM that uses the /MVA/ prefix must be mapped to their equivalent FS-PRO columns using the `Namespace Mapping` component. Normally, there is no namespace required for FS-PRO tables, but if a product in FS-PRO uses the FS-PM Auto Add On tables, an equivalent namespace configuration needs to be maintained for the runtime integration.

This is required to Push / create an application during the Review Quote process.

The component can be found in ► [SAP S4 Global Reference Object](#) ► [Configuration](#) ► [Integration](#) ► [Namespace Mapping](#) and requires two attributes:

QualifiedColumnName

Enter the column name from the FS-PM Auto Add On tables, if used.

NameSpace

For an auto product, the value for this attribute should be MVA.

Not all columns are mapped out-of-the-box, using the sample product.

Use of this component is required based on the product definition and entities being used.

10 Using FS-PM for Quotation Calculation

FS-QUO uses FS-PM for premium calculation handling.

The premium calculations are performed within FS-PM itself. An application is created in FS-PM during the review quote process.

This design offers the following advantages:

- Centralizes premium handling.
- Ensures consistency in premium output by avoiding any differences due to rounding errors.
- Improves efficiency by eliminating the need to maintain duplicate configurations like taxes, check-and-derive rules, and so on, across components in different systems.

You must set a flag for each product to ensure FS-PM is used for premium calculation handling. Based on this flag, a product service will be called. This product service is located in the [Sample Insurance UWA Product Template](#) under [► Configuration ► Product Services ► Service API ▾](#). In the *Values* tab, the *Service Name* is `isNGTARrelevant` and returns `true` if the given product will use FS-PM to calculate quotes, or `false` otherwise.

10.1 Configuring RFC Calls Using FS-PM for Quotation Calculation

A set of RFCs are configured within FS-PRO using FS-PM for quotation calculation.

Several actions are performed on the FS-PM system via RFC call.

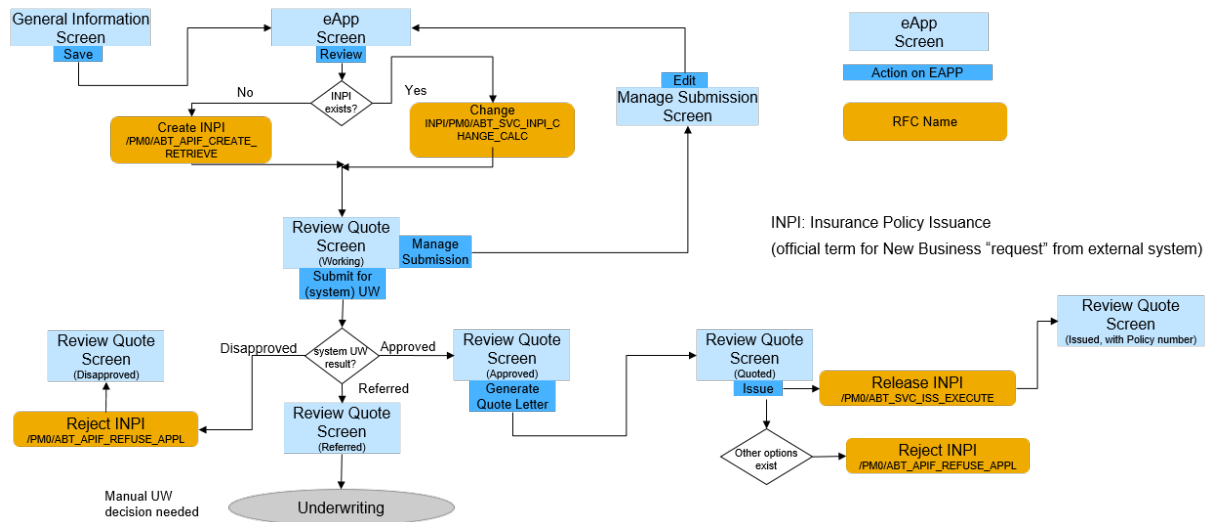
The RFC calls are mapped within the *SAP Global Reference Object* within FS-PRO under the following location: [► Configuration ► Integration ► RFC ► Remote Function System ▾](#). Within the *Values* tab, expand the *Application* anchored row which contains the *Business Function Name* and the *RFC Name*.

The following apply:

- | | |
|--------------------------------------|---|
| CREATE_AND_RETRIEVE | Creates, calculates and retrieves the application within FS-PM. |
| UPDATE_AND_CALCULATE | Updates, calculates and retrieves the application within FS-PM. |
| ISSUE_APPLICATION | Issues the application within FS-PM. |
| REFUSE_APPLICATION | For submissions with multiple options, if any one option is <i>Issued</i> then the applications corresponding to other quote options within the submission will be <i>Refused</i> within FS-PM. |

10.2 Understanding the Workflow Using FS-PM for Quotation Calculation

The following diagram illustrates the workflow with associated RFC calls using FS-PM for quotation calculation:



Additional Notes

- Once you create a quotation and select *Review* within the eApp, there are two possible options:

Quote Option Exists The quote option exists within FS-QUO. An `UPDATE_AND_CALCULATE` RFC request is made to FS-PM which modifies and recalculates your application and displays the results on the UI.

Quote Option Does Not Exist The quote option doesn't exist within FS-QUO. FS-QUO makes a `CREATE_AND_RETRIEVE` RFC request to FS-PM. An application is created in FS-PM and the calculated results are displayed on the UI.

- Selecting *Manage Submission* returns you to the eApp where you can change any of your quote options. If you select *Review* again, FS-QUO performs the same operations described in the previous point.
- Selecting *Submit for Underwriting* submits your quote option for underwriting. There are three possible results once submitted:

Quote Option is Disapproved If FS-QUO disapproves the quote option, FS-QUO makes a `REFUSE_APPLICATION` RFC request to FS-PM which refuses the corresponding application that was created for the quote option.

Quote Option is Referred The quote option requires manual underwriting.

Note

If an underwriter rejects a quote option, the corresponding application in FS-PM is `Refused`. If a quote option is referred and needs a counteroffer, the change is done on the existing application for the quote option.

Quote Option is Approved The quote option is approved.

4. Once a quote letter is generated, if you select *Issue*, FS-QUO makes an `ISSUE_APPLICATION` RFC request to FS-PM which releases the corresponding application for the quote option. Since only one quote option can be issued within a submission, all other quote options within the same submission are refused within FS-PM.

10.3 APIF Field Mapping Rule Configuration

Certain fields returned from FS-PM require rectification.

When you use FS-PM for quotation calculation, the *APIF Field Mapping Rule* configuration component exists to be able to apply defined rules on configured fields to ensure data consistency.

The fields are mapped within the *SAP Global Reference Object* within FS-PRO under the following location:

► *Configuration* ► *Integration* ► *RFC* ► *APIF Field Mapping Rule* ►. Within the *Values* tab, the mapping is as follows:

<i>Table Name</i>	The table that holds the field requiring rectification.
<i>Column Name</i>	The name of the field requiring rectification.
<i>Rule Type</i>	The predefined rule, which is applied to the field.

Rule Types

Removal of Leading Zeros

The removal of leading zeros rule has a *Rule Type* value of `[RemoveLeadingZero] - RemoveLeadingZero`. When this rule is applied to a given field, any leading zeros are removed. This rule helps to ensure consistency in data representation for things like UI rendering, and so on.

Example

For integer values like 50, 100, 200, FS-PM may return these values as 0050, 0100, 0200. After applying the removal of leading zeros rule, these values then become 50, 100, 200 respectively.

10.4 Flagging Products for Rating

You must set a flag in your product to enable quotation calculation by FS-PM. This is a mandatory step for all products in the integration.

Context

⚠ Caution

You need to complete the quotation process for all in-flight (not yet issued) quotes before enabling the flag.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Navigate to your product in the *Product Studio*
3. Navigate to ► *Identification* ► *SAP Product Id* ▾ in the *Product Tree*.
4. On the *Values* tab, enter a value of **1** for the *NGTA Method* attribute.
5. Save your changes.
6. Repeat this process for every product in your library.

10.5 Identifying Duplicate Fields

Duplicate fields may exist as a result of incorrect fields or tables used in configuration.

Since FS-PM is used for quotation calculation, data is retrieved from FS-PM for things such as premiums, policy information, and so on. This data needs to be mapped back to the correct tables within FS-QUO. There are instances where you may have data in the same fields within base tables **and** extension tables. Base table names contain the string **ABDA** whereas extension table names contain the string **ALDA** or **AMDA** or **APDA**.

For example, the field `INSAMOUNTABS_AM` resides in the base table `COV_ABDABNF` as well as in the extension table `COV_ALDABNF`. Data existing in this field for **both** tables is no longer supported. In this case, only the `INSAMOUNTABS_AM` field within the base table `COV_ABDABNF` should be populated.

Since the location and number of these types of issues is hard to determine when using FS-PM for quotation calculation, if any such duplication is found, an exception or error is displayed which identifies the problematic field or table. Your database administrator should correct this duplication by removing the duplicate content from the extension table and fixing any references from within the eApp or rule as noted in the error message.

10.5.1 Suppressing Exceptions on Duplicate Fields

You can suppress exceptions generated as a result of duplicate fields.

Context

An Administrative Console setting is provided which allows you to control whether or not to display an error message for any duplicate fields found at Runtime.

Procedure

1. Launch Internet Explorer and log in to the Runtime Administrative Console at the following location:
`<pro_runtime_app_url>/csiroot/admin/`.
The Runtime Administrative Console will open after a short delay.
2. Choose **System > Edit Configuration Settings** from the menu bar.
3. Naavigate to **Configuration > Application > AuthoritySuite > Env > Application Environment**.
4. Find the *SuppressExceptionOnDuplicateFields* row. The default value is set to **No**, which displays an error message for any duplicate fields found at Runtime. Setting the *Override* field to **Yes**, does **not** display an error message.
5. Reload the configuration settings as follows:
 - a. Choose **System > Reload Configuration Settings** from the menu bar.
 - b. Choose *Reload All Config*.

11 Designing the Cash-Before-Cover (CBC) Process

Cash-Before-Cover (CBC) for Life insurance contracts is a process mandating that a certain amount of a premium must be paid by the Insured (or the CBC payers) so that the quotation can be issued to an In-Force Policy.

In FS-PRO, each life insurance product can be designed to follow one of following CBC scenarios:

- | | |
|--------------------------------------|---|
| Cash After Underwriting | The actual payment (or cash) can be requested only when underwriting is completed. |
| Cash Before Underwriting | Underwriting can be processed only when the CBC amount is received in full from the customer. |
| Cash Parallel to Underwriting | The process of underwriting and the payment can happen in parallel. |

→ Tip

As pertains to CBC, underwriting refers manual underwriting, not system underwriting.

⚠ Restriction

CBC is only applicable to individual quotes, not master or group. CBC is also not supported for products created using the sample Auto product (SAP S4 PR Motor Vehicle Insurance).

Enabling a CBC process requires the integration of the FS-QUO, FS-CD and FS-PM applications. The three systems interact in the following way:

- A CBC amount is requested from FS-QUO.
- An RFC call is made to FS-PM to post the CBC amount in FS-CD.
- FS-CD notifies FS-PM when a full payment is received.

⚠ Restriction

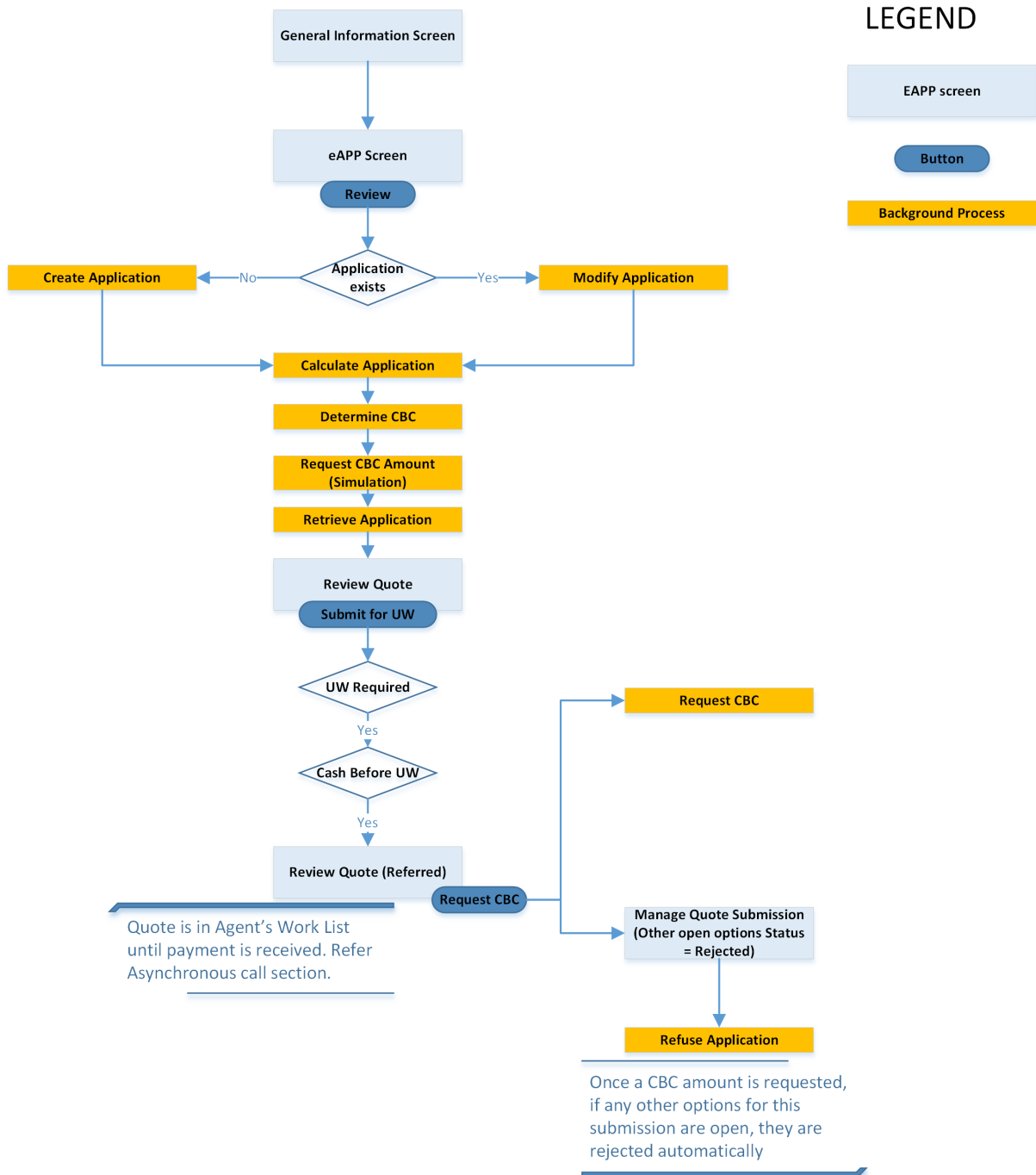
Partial payments aren't supported for CBC; only full payment is supported.

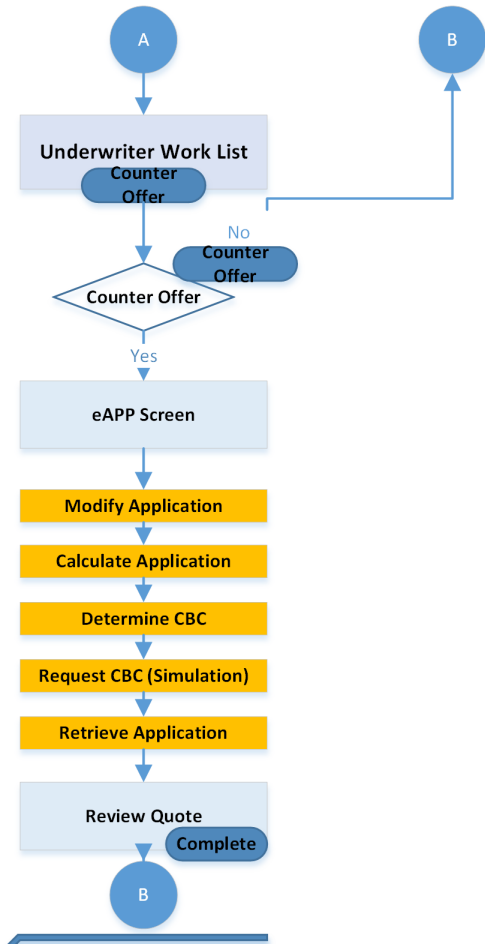
If no payment is made, or if payment is late, FS-QUO is notified by FS-PM:

- FS-CD informs FS-PM that no payment has been received.

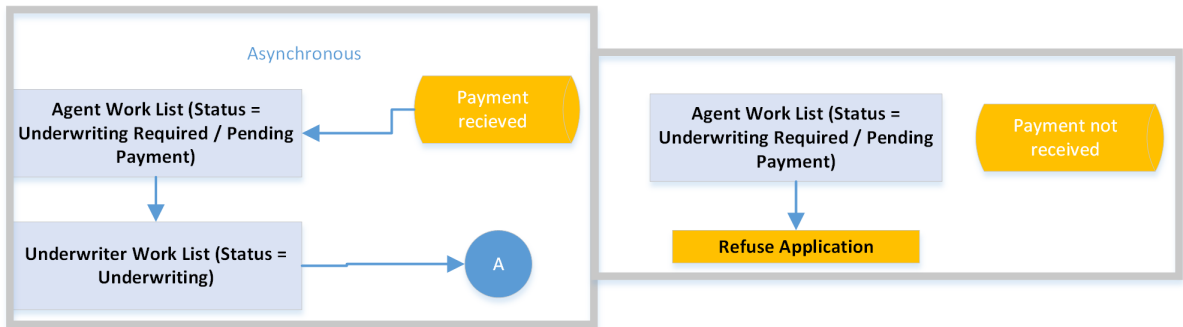
Sample: Workflow for Cash Before Underwriting

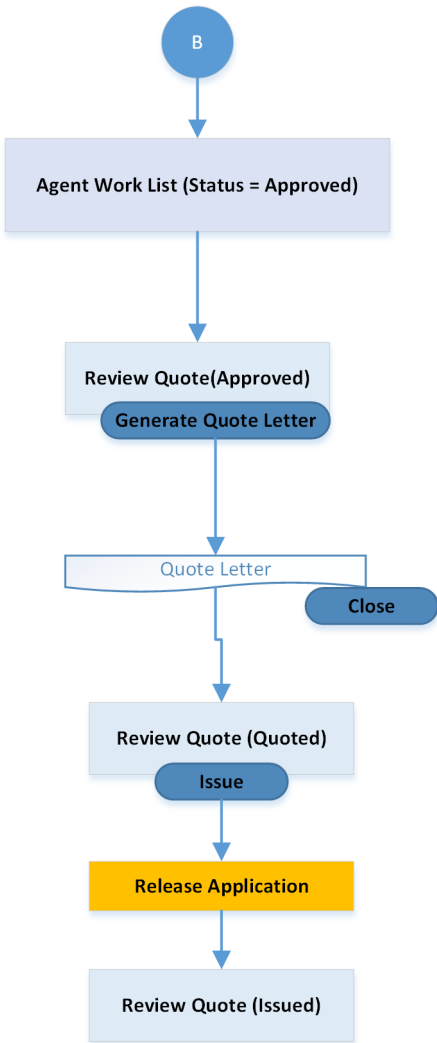
The following diagrams demonstrate a possible Cash Before Underwriting workflow:





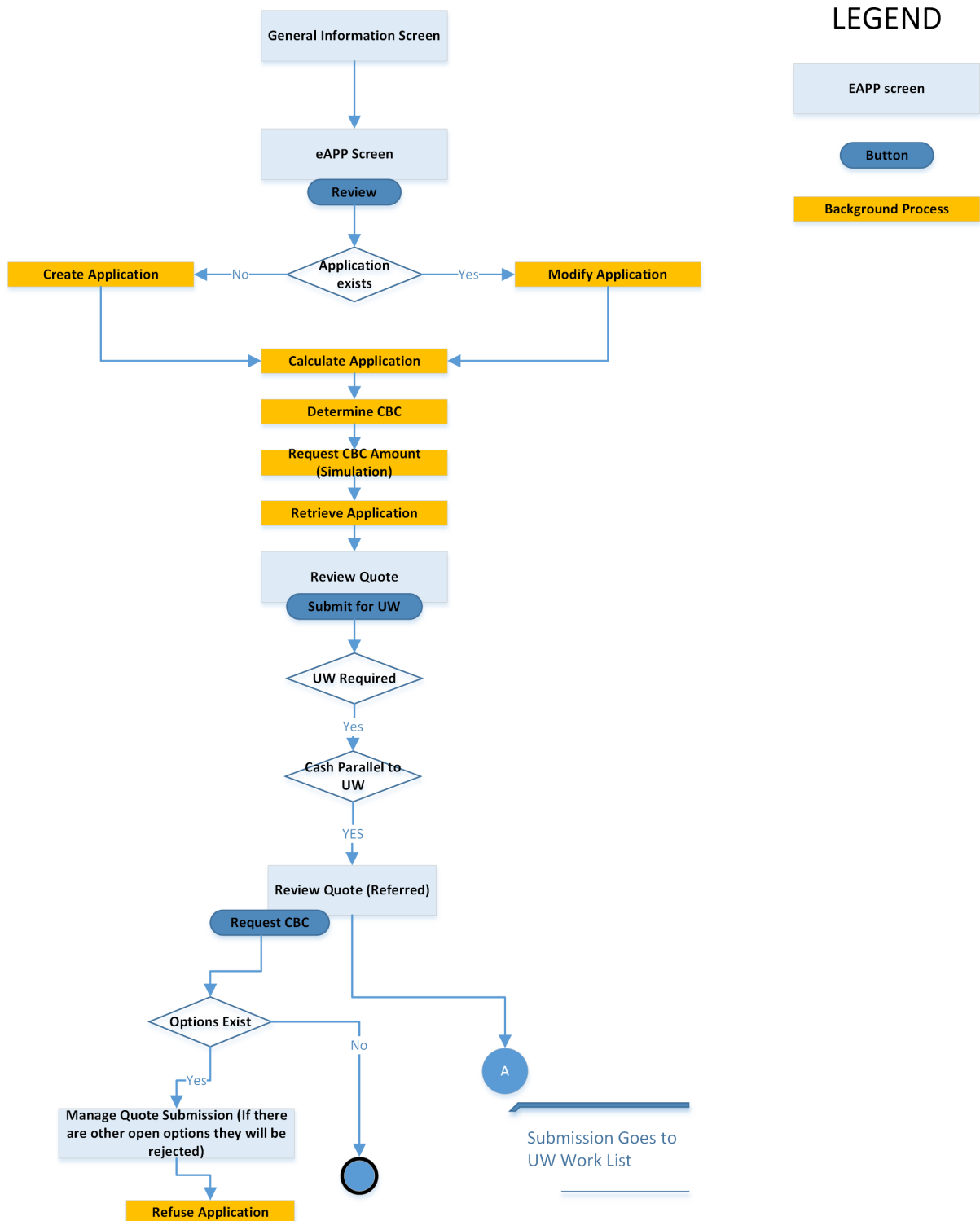
Submission Goes to Agent's Work List

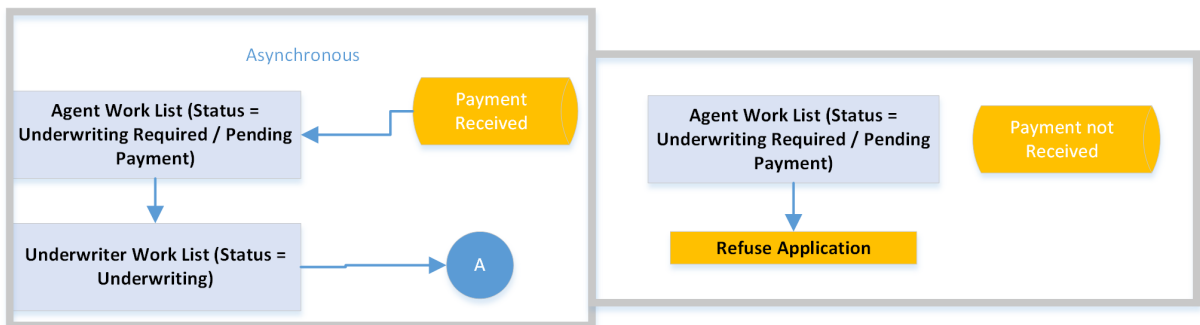
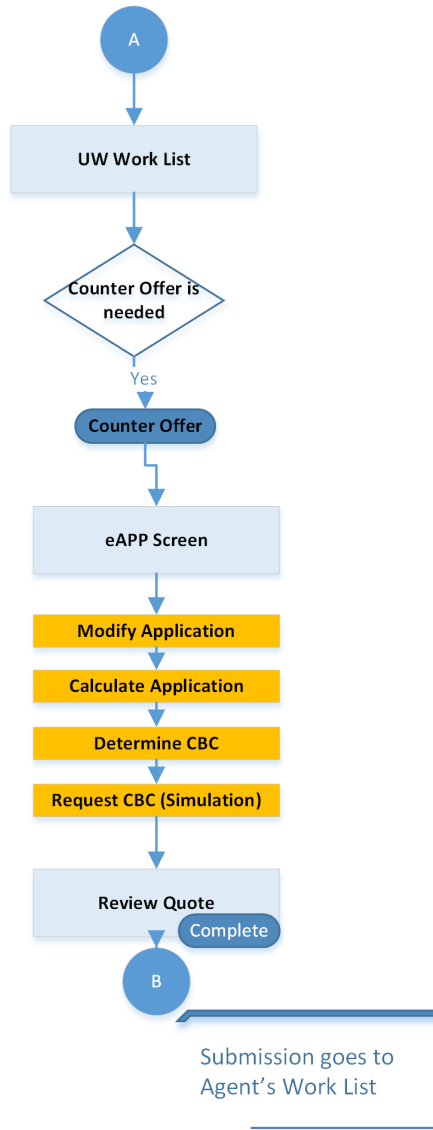


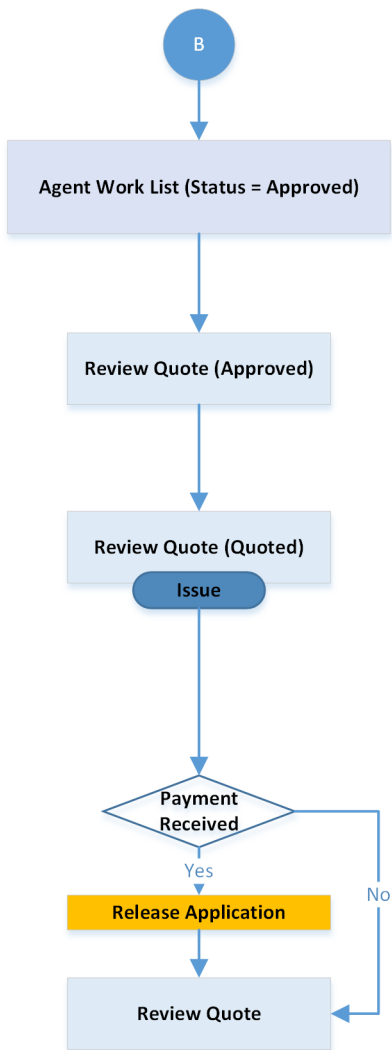


Sample: Workflow for Cash Parallel to Underwriting

The following diagrams demonstrate a possible Cash Parallel to Underwriting workflow:







If payment is received before the Underwriting is completed, FS-PQM will issue the Policy. If Payment is not received and the Underwriting is completed, then issuance is not possible until payment is received.

Related Information

[Using FS-PM for Quotation Calculation \[page 67\]](#)

[Flagging Products for Rating \[page 70\]](#)

[Using FS-PM for Quotation Calculation \[page 67\]](#)

[Flagging Products for Rating \[page 70\]](#)

11.1 RFC Configurations Used For CBC

A set of RFCs are configured within FS-PRO to implement a CBC process.

As part of the CBC configuration, several actions are performed on the FS-PM system via RFC call.

The RFC calls are mapped within the *SAP Global Reference Object* within FS-PRO under the following location: ► *Configuration* ► *Integration* ► *RFC* ► *Remote Function System* ▾. Within the *Values* tab, expand the *Application* anchored row which contains the *Business Function Name* and the *RFC Name*. The following apply to the CBC:

<i>CBC_CATEGORY</i>	Determines the CBC category for the application in FS-PM.
<i>CBC_REQUEST</i>	Requests the CBC amount for the application in FS-PM.

11.2 Configuring Communications for CBC

As part of configuring a CBC process for your FS-QUO, you need to configure communication between FS-QUO and SAP S/4 HANA Insurance for Policy Management (FS-PM) using OData.

Procedure

1. **Optional:** If you don't want to use the default RFC destination name INSURANCE_QUO, start transaction SPRO.
 - a. Navigate to activity ► *SAP Insurance* ► *Policy Management* ► *Integration* ► *Process Primary Settings for Interfaces to External Systems* ▾.
 - b. Change the logical destination name for the *QU Quotations* entry.
2. Start transaction SM59 (Configuration of RFC Connections).
 - a. Create a new *HTTP Connections to External Server*.
 - b. Go to the *Technical Settings* tab.
 - c. Enter the name of the destination in the *RFC Destination* field.
For example, INSURANCE_QUO.
 - d. Enter *ODATA Service Host* in the *Host* field.
 - e. Enter */A2A/csiroot/ipw/quo/odata.svc* in the *Path Prefix* field.
 - f. Go to the *Logon & Security* tab.
 - g. Select *Basis Authentication*.
 - h. Enter the user credentials in the *User* and *Password* fields.

11.3 Defining Products for CBC

In order for a product to be included in a CBC process, the following conditions must exist:

- The product must use FS-PM for quotation calculation.
- The product must be configured with a specific CBC scenario.

To make a product NGTA-relevant, the *NGTA Method* attribute must be set with a value of **1**. This flag must be set for each individual product that will use a CBC process.

Next, you have to design a CBC process for a product. Each product can be part of a single CBC scenario; individual products can't be designed to use multiple scenarios.

You design a product for the scenario by setting a flag. This flag is found directly under the root level of the product tree in the **Identification > SAP Product Id** component. Within the *Values* tab, set a value for the `CBCFlowForUW` attribute for the desired process:

- To enable the *Cash before Underwriting* process, set the `CBCFlowForUW` attribute to **1**.
- To enable the *Cash parallel to Underwriting* process, set the `CBCFlowForUW` attribute to **2**.
- To enable the *Cash after Underwriting* process, set the `CBCFlowForUW` attribute to **3**.

11.4 Making Contracts Relevant for CBC

To make a contract relevant to a CBC process, you need to set the `CBC_CATEGORY` attribute. The attribute has two possible values:

- *CBC Amount with Payment Obligation*
- *CBC Amount without Payment Obligation*

Note

Regardless of the value assigned to this attribute in FS-PRO, a payment must be received in full for the quotation to be issued as an In-Force policy.

This attribute is found directly under the root level of the product tree in the **Contracts > Configuration > Integration > IFBC Control Integration Services > IFBC Control Attributes** component.

When FS-PRO replicates a product from FS-PM, you need to ensure that the IFBC control attribute's value (`CBC_CATEGORY`) for the contract is identical in FS-PM and FS-PRO. If this value isn't identical, you will need to change the value manually in FS-PRO after replication for every CBC-relevant contract.

Note

It's possible to override the assigned `CBC_CATEGORY` value in FS-PM and redetermine the CBC category using custom logic in a Business Add-In (BADI). In such a situation, you need to extend the `isCBCrelevant` product service with similar logic.

12 Key Integration Configurations in FS-PRO

This section describes the key Design Time integration configurations needed to successfully integrate FS-PRO with FS-PM.

12.1 Business Partners

SAP Business Partner for Financial Services (SAP GP-FS) manages business partner data (for example, producer names and addresses). In the Product Modeler, you must configure the corresponding business partner objects in your product. The provided templates include policyholder, agent, beneficiary, and premium payer objects. The *SAP Insurance Reference Data Model* dictates where these business partner objects can be assembled in your product.

If you are integrating with FS-QUO, an underwriter or producer can add a business partner to a policy. To enable this function, a connection for FS-QUO and SAP GP-FS must be configured so that adding business partner data can be added.

The proper JavaScript code must be included in the eApp fields so that the data can be transferred from FS-QUO to SAP GP-FS.

Notes:

- Producer and account information fields appear in both the FS-QUO general information screens and the eApplication. In the eApplication, the producer ID is automatically populated with the ID of the producer selected in the screen. However, for accounts, you must select the same account in the eApplication as you entered in the general information screens. FS-PM uses the account information in the eApplication. In FS-PM, the producer is a commission contract partner, and the account is a policyholder.
- To search for business partners, FS-QUO uses the FS-PM remote function calls to SAP GP-FS.

12.2 bpLookup Stem

A stem is a short name that represents a Java class. These classes contain related functions that you can use in rule expressions in the Product Modeler.

Context

For example, the `com.camilion.as.stem.FSPMIntegrationBPLookupStemclass` (bpLookup stem) contains a `getAddressListByPartnerId` function. You can define a rule that calls this function to load addresses with a specified partner ID for a coverage.

Procedure

1. Define a rule in *Rule Painter*.
2. In the *Expression Editor*, enter the name of the stem that contains the function that you want to use, or you can click the *Function Picker* icon and populate the *Stem List*.

The stem is the first element (the rule object) in the expression.

3. Enter a period (.) following the stem name.
The *Functions List* dialog box opens and displays a list of functions for the specified stem.
4. Select the function that you want use.

The function signature is added to the expression.

Whenever a stem is specified, the `ServiceCommand` is passed to the rule. For the key `MasterResultSet` and `ResultSet`, you must specify a reference to the `POLICY_QUOTE` result set.

5. Complete the rule expression as appropriate.
For example, Using the `bpLookup` stem.

12.3 Business Partner Address

Previously, logic was embedded within the javascript to return the business partner address based on the selected record (partner ID). This logic was replaced with a stem function that accomplishes the same thing:

```
CALL getAddressListByPartnerId IN LIBRARY bpLookup WITH <partnerId[String]>,  
<partnerTypeName[String]>, <role[String]>, <maxRow[int]>
```

Functions:

partnerId[String]	Bank Account records should be returned for the specified business partner record (partner ID).
partnerTypeName[String]	Filter results based on the business partner type.
payMethod[String]	Filter results based on the pay method (for example, Bank Collection).
role[String]	Filter results based on the business partner role.
maxRow[int]	Specifies the number of business partner bank account records that should be returned.

Note

The benefit of a stem is that it can be used to return multiple addresses (and list them in a dropdown list).

12.3.1 Bank Detail

The `getBankAccountInfoByPartnerId` function searches for and returns all configured bank accounts for the specified Business Partner `Partner ID`.

Functions:

<code>partnerId[String]</code>	Bank Account records should be returned for the specified business partner record (partner ID).
<code>partnerTypeName[String]</code>	Filter results based on the business partner type.
<code>payMethod[String]</code>	Filter results based on the pay method (for example, Bank Collection).
<code>role[String]</code>	Filter results based on the business partner role.
<code>maxRow[int]</code>	Specifies the number of business partner bank account records that should be returned.

12.3.2 Pay Card

The `getBankAccountInfoByPartnerId` IN LIBRARY `bpLookup` WITH `<partnerId[String]>`, `<partnerTypeName[String]>`, `<payMethod[String]>`, `<role[String]>`, `<maxRow[int]>`.

Functions:

<code>partnerId[String]</code>	Bank Account records should be returned for the specified business partner record (partner ID).
<code>partnerTypeName[String]</code>	Filter results based on the business partner type.
<code>payMethod[String]</code>	Filter results based on the pay method (for example, Bank Collection).
<code>role[String]</code>	Filter results based on the business partner role.
<code>maxRow[int]</code>	Specifies the number of business partner bank account records that should be returned.

For more information, see [Coverage-based Development Guide](#).

12.3.3 Configuring the Fields to Add an Insurable Object

Context

If the lateral object represents an insured object, you must configure the `Extended Underwriting Application Configuration` object. You must also configure the associated `eApp Screen` with a JavaScript function that calls a servlet to add an insured object.

Procedure

1. Open the insured object at the template level.

Example: `<company> Insurance UWA Insured Object Template`

Note

If your questions are specific to your product, you can define them in the model view object in the product instead of the template. For example, in the `Sample Household Product`, choose `Sample Household Product > Contracts > Sample Household Contract > Coverages > Sample Household Coverage > Insured Objects > Sample Home Contents Insured Object`.

2. Choose the `Model View` object.

Example (template level): `<company> Insurance UWA Insured Object Template > User Interface > SAP Insured Object Model View`

Example (sample product): `Sample Household Product > Contracts > Sample Household Contract > Coverages > Sample Household Coverage > Insured Objects > Sample Home Contents Insured Object > Sample Home Contents Insured Object > User Interface > Sample Household Insured Object Model View`

3. In the `Configuration` folder, open the `Config` object, and modify the `REFERENCE_PRODUCT` as needed.

4. Choose the following component and define the questions in the main grid: `Questions > <insured_object_name> Questions`.

Example (template level): `Questions > SAP Insured Object Questions`

Example (sample product): `Questions > SAP Household Insured Object Questions`

5. Design how the questions appear on the screen, as follows:

- a. Choose `Views > <insured_object_name> Questions`.

Example (template level): `Views > SAP Insured Object Views`

Example (sample product): `Views > SAP Household Insured Object View`

- b. Open *Questionnaire Painter*.
 - c. Design how the questions appear on the screen.
 - d. Configure a *Create Insurable Object* button.
 - e. Select the button and expand the *Event Handlers* tab.
 - f. Enter `createInsurableObject()` in the *onclick* field, and choose *Apply*.
6. Configure which fields to display in the create insurable object view, as follows:
- a. Open the following object: `Product Studio > Product Repository > <company_library> > Configuration Objects > Extended Underwriting Application Configuration >`
 - b. Choose the following component: `Insurable Objects > Insurable Object Categories >`
 - c. Expand the *Home* row.

The *Insurable Object Types* component appears.

Note

You can create rows for additional categories.

- d. Add rows for the insurable object types.

Note

A *Home Contents* row is already configured in this component for the *Home* category.

- e. Expand the row for the insurable object type that you want to configure fields for.

For example, expand the *Home Contents* row.

The *Insurable Object Fields* component appears.

- f. Select the rows for the fields that you want to display in the *Create Insurable Object* view, and modify the column values as needed.

Note

If the field to display is a dropdown list, in the *FieldComponentName*, specify a value that matches a component in the *Field Data* folder.

7. In the eApplication where you want to show the insured object view, do the following:

- a. Open the appropriate eApp Screen.

Example: `Sample Home Contents Coverage > User Interface > Data Capture > eApplication > eApp Section > eApp Screen >`

- b. Add a row for the *Insured Object Screen*, and edit the *Screen Id*.
- c. In the *Questionnaire Layout Painter*, add the insured object view to the layout.
- d. In the layout, select the `<insured_object>` *Level View* that was added.
- e. Choose *Custom Javascript* from the right panel and paste the following code:

```
function createInsurableObject(){
    var url = "/csiroot/cservlet/ASIntegrationServlet?
event=CREATE&isSave=false&tbl=mo";
    var features =
'toolbar=no,location=no,status=no,menubar=no,scrollbars=no,resizable=yes,wi
dth=890,height=680';
    var insuObjWin = window.open(url,'targetWindow',features);
    insuObjWin.focus();
}
```

```
function updateValue(ids, values) {
    for(var i=0; i<ids.length; i++)
    {
        var column_id = "table_name."+ids[i] ;
        if(document.getElementById(column_id)!=null)
        {
            document.getElementById(column_id).value =
            trim(values[i]);
        }
    }
}
```

8. Choose *Apply*.

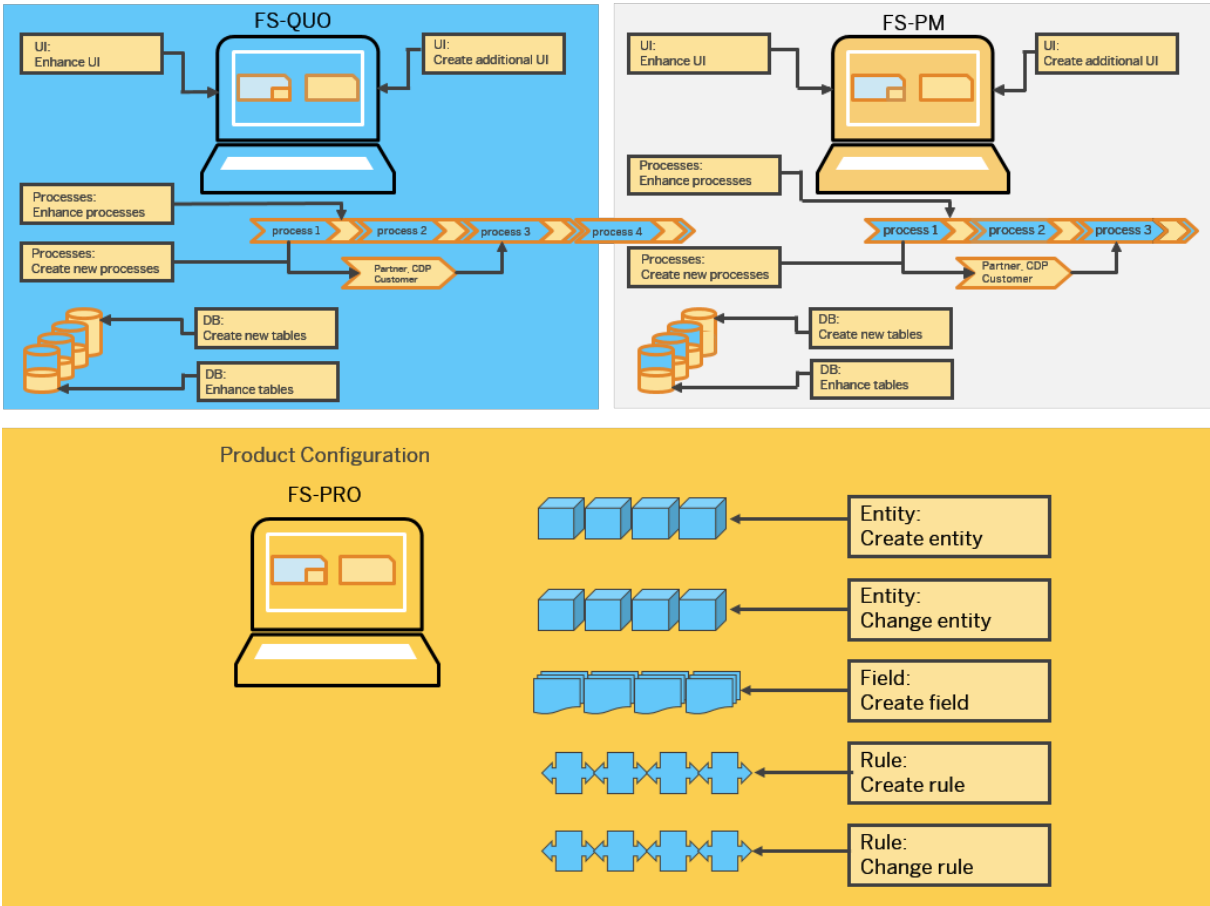
13 Enhancement Options

13.1 Areas to be Enhanced in Different Systems

You can enhance the current integration scenario between the systems FS-PRO, FS-QUO, and FS-PM in the following areas:

- User interface (in each system)
- Process/coding (in each system)
- Database (in each system)
- Interfaces between the three systems FS-PRO, FS-QUO, and FS-PM

In the following graphic, you can see the possible enhancement options:



13.2 Entities and Templates in FS-PRO

To enhance FS-PRO, FS-QUO, and FS-PM, you need to know where and how information is typically grouped and stored. The grouping is realized through entities.

The integration scenario differentiates between the following entities:

Entities Used for the Sample Household Product

- Examples for these entities are part of the `Sample Household Product` that is included in the shipment.
- You can use these examples and create your own products based on the FS-PRO templates provided.
- These examples should give guidance how typical product requirements and rating can be implemented (for instance, the adding and removal of a clause in the `Product Web Services (PWS)` depending on a condition can be learned from the `Underinsurance Waiver Clause` in the `Sample Household Product`).

Note

Customer specific products will deviate from these examples.

Entities not used in the `Sample Household Product` such as **Beneficiary, Contract Bundle, Coverage Bundle**

- These entities aren't part of the `Sample Household Product` since, from a business perspective, they don't make sense for a simple household insurance product.
- However, these entities are provided in the shipment and ready for use, but you won't find examples of these assembled in a sample product.
- Customers should be able to add these entities to their products easily if they add the appropriate product definition.

Note

Contact SAP development if you want to use an entity that isn't provided out-of-the-box.

13.3 List of Provided Entities

This topic lists the entities that are provided out-of-the-box.

In the following tables, you can find a list of used entities:

Auto Entities

Technical Name	Title
/MVA/AMDABM	Bonus-Malus
/MVA/AMDACLAIMSU	Calculate Claim Surrender
/MVA/AMDACLPART	Bonus-Malus - Claim Comparison
/MVA/AMDACOV	Auto Coverage
/MVA/AMDAEXEQMT	Special Equipment
/MVA/AMDAPCMP	Premium Comparison
/MVA/AMDAPOLPR	Auto Contract
/MVA/AMDATR	Region Class Type

Other Entities

Technical Name	Title
/PM0/ABDAAGENT	Representative
/PM0/ABDABNF	Benefit
/PM0/ABDABNFCRY	Beneficiary
/PM0/ABDACBCPAYR	CBC Amount Payer
/PM0/ABDACLAUSE	Clause
/PM0/ABDACOV	Coverage
/PM0/ABDACOVPCO	Subcoverage (P and C)
/PM0/ABDACOVpac	Coverage Bundle
/PM0/ABDACRDITOR	Creditor
/PM0/ABDADEDCTBL	Deductible
/PM0/ABDADEP	Dependency
/PM0/ABDADEPREL	Dependency Assignment
/PM0/ABDADISTREL	Distribution Plan Relationship
/PM0/ABDAEXREF	External Reference
/PM0/ABDAEXTPCL	Related Policy Claim

Technical Name	Title
/PM0/ABDAEXTPOL	Related Policy
/PM0/ABDAINFRD	Dynamic Adjustment
/PM0/ABDALIMIT	Limit
/PM0/ABDAPOLHLDR	Policyholder
/PM0/ABDAPOLICY	Policy
/PM0/ABDAPOLPR	Contract
/PM0/ABDAPPDPAC	Contract Package
/PM0/ABDAPREM	Premium
/PM0/ABDAPRMPAYR	Premium Payer
/PM0/ABDAREPVAL	Reported Value
/PM0/ABDARESDEPC	Process-Dependent Condition
/PM0/ABDASBADR	Insured Object Address Assignment
/PM0/ABDASBINC	Object Management
/PM0/ABDASUBJCT	Insured Object
/PM0/ABDASUPDC	Surcharge/Discount
/PM0/ALDAADDPY	Special Deposit Payer
/PM0/ALDABNF	Life Benefit
/PM0/ALDACOLLECT	Collection
/PM0/ALDACOV	Life Coverage
/PM0/ALDAINDINC	Individual Maximum Subsidized Premium
/PM0/ALDAPARTPAY	Partial Payment
/PM0/ALDAPOLPR	Contract
/PM0/ALDAPREM	Premium
/PM0/ALDAPREMDEP	Premium Deposit
/PM0/ALDAPROJEC	Model Calculation
/PM0/ALDASSHEAD	Shift Switch Header
/PM0/ALDASSWITCH	Shift Switch
/PM0/ALDASUBSAG	Subsidy Agency
/PM0/APDACOV	P and C Coverage
/PM0/APDAPOLPR	P and C Contract
/PM0/ABDASBINC	Insured Extension

13.4 Supported Enhancement Scenarios

SAP supports the following enhancement scenarios:

- Customer wants to use entities provided out-of-the box
- Customer wants to add new fields to an entity

13.4.1 Using Entities Provided Out-of-the-Box

This topic describes how to enhance the integration scenario with entities provided out-of-the box.

Enhancement of processes in FS-PM (optional)

- In FS-PM, for more information about the enhancement options of processes, see the following references:
 - *Enhancement Guide for SAP Policy Management (BAAdIs)*
 - *Enhancement Guide for SAP Policy Management (Enhancement of Standard Business Transactions)*
 - Customizing for Policy Management under [▶ In-Force Business Management ▶ Basis ▶ Business Processes ▶ Business Add-Ins \(BAAdIs\) ▶](#)
- In FS-PRO: New rules, etc.

Related Information

[Adding New Fields in FS-PRO \[page 92\]](#)

13.4.2 Adding New Fields to an Out-of-the-Box Entity

This topic applies if you are using FS-PRO as your product engine.

Enhancement of database (mandatory)

- You must enhance the database in FS-PM. For more information, see *Enhancement Guide for SAP Policy Management (DDIC Enhancements)*
- You must enhance the database in FS-PRO.
- You must enhance the database in FS-QUO.

For more information, contact your SAP implementation team or SAP Support.

Enhancement of user interface (optional, since in some cases no UI is needed)

- Enhancement of UI in FS-PM. For more information, see *Enhancement Guide for SAP Policy Management (Changes to User Interface)*.
- Enhancement of UI in FS-PRO
- Enhancement of UI in FS-QUO

For more information, contact your SAP implementation team or SAP Support.

Enhancement of interfaces (optional, since in some cases interfaces are not affected)

- FS-PM -> FS-PRO:
 - Call of Product Web Service (PWS)
- FS-PM -> Other systems, like FS-CM, FS-CD, FS-ICM, FS-RI etc. (see *Enhancement Guide for SAP Policy Management (Integration with Other Components)*).

Enhancement of processes (optional)

- In FS-PM:
 - *Enhancement Guide for SAP Policy Management (BAdIs)*
 - *Enhancement Guide for SAP Policy Management (Enhancement of Standard Business Transactions)*
 - Customizing for *Policy Management* under ► *In-Force Business Management* ► *Basis* ► *Business Processes* ► *Business Add-Ins (BAdIs)* ►
- In FS-QUO: For more information, contact your SAP implementation team or SAP Support.
- FS-PRO: New rules, and so on.

13.4.3 Adding New Fields in FS-PRO

To add a new field to an entity, you must modify the product in the Product Modeler. For example, you might want to record a new date value for policies. You must add the date field to a contract in the product.

Note

If you want to add the new field to FS-QUO, additional modification is required. For example, to get the date value from a customer, you can add the field to the FS-QUO UI so that producers or underwriters can enter a value. For help with this FS-QUO modification, contact your SAP implementation team or SAP Support.

13.4.3.1 Adding the New Field to IFBC Column Details

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Open your product.
3. Open the entity object that you want to add a new field to.
4. Open the following object: `> <entity_or_object_name> > Configuration > Integration > IFBC > <object_type_name> Integration Services > IFBC Column Details >`.
5. Add a row for the new field, and select it.
6. This definition specifies the new field as a characteristic (mark).

Note

If the corresponding attribute doesn't exist in the PBT, you must add it to the appropriate channel model. Otherwise, the IFBC import won't work properly. For more information about adding attributes to the PBT, see the PBT documentation.

13.4.3.2 Updating the Policy Model Schema

Context

New fields should be added directly to the out-of-the-box policy model schema, based on the line of business. For example, for PnC products you would add new columns to `SAPInsurancePnCPolicyModelSchema`, for LnA products you would add new columns to `SAPInsuranceLnAPolicyModelSchema` and for auto products you would add new columns to `SAPInsuranceAutoModelSchema`.

It is recommended that you extend a single schema for each line of business. For example, create and maintain a single schema for all auto products.

→ Tip

Avoid creating custom schemas, as you will need to manually update them when new entities are added to default templates during FS-PRO software upgrades.

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Open your product.
3. Navigate to the schema:
 - `<product_name>` > *Configuration* > *Integration* > *Product Web Services* > *XML Definitions* > *SAPInsurancePnCPolicyModelSchema* >
 - `<product_name>` > *Configuration* > *Integration* > *Product Web Services* > *XML Definitions* > *SAPInsuranceLnAPolicyModelSchema* >
 - `<product_name>` > *Configuration* > *Integration* > *Product Web Services* > *XML Definitions* > *SAPInsuranceAutoModelSchema* >
4. Add a new simple element for each new field.
5. Save your changes.

13.4.3.3 Updating the Data Model

You must add the new field to a table (data definition) in the data model.

If you want to add a field that is common to products in all lines of business, add the field to the appropriate SAP Insurance Reference Data Model basis table in the following location: `> Product Studio > Product Repository > <company_library> > Data Definitions > Extended >`.

If you want to add a field that is specific to personal and commercial (P&C) products, add the field to the appropriate P&C extended table in the following location: `> Product Studio > Product Repository > <company_library> > Data Definitions > Extended > PnC >`.

If you want to add a field that is specific to auto products, add the field to the appropriate auto extended table in the following location: `> Product Studio > Product Repository > <company_library> > Data Definitions > Extended > Auto >`.

13.4.3.4 Building and Publishing the Product

Procedure

1. Launch Internet Explorer and log in to the Product Modeler at the following URL: `https://<pro_designtime_app_url>/csiroot/ii/pc/`
The Product Modeler will open after a short delay.
2. Open your product.
3. Build the metadata, questionnaire views, screens, and rules.
4. Publish your product and send the structure info to IFBC.

Results

The appropriate product templates are updated in IFBC. FS-PM can transfer corresponding policy and endorsement information to FS-PRO for rating using product web service requests.

14 Terms for Included Open Source Software

This SAP software contains also the third party open source software products listed below. Note that for these third party products, the following special terms and conditions shall apply:

1. This software was developed using ANTLR.
2. gSOAP

Part of the software embedded in this product is gSOAP software. Portions created by gSOAP are Copyright (C) 2001-2004 Robert A. van Engelen, Genivia inc. All Rights Reserved.

THE SOFTWARE IN THIS PRODUCT WAS IN PART PROVIDED BY GENIVIA INC AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

3. SAP License Agreement for STLport SAP License Agreement for STLPort between SAP Aktiengesellschaft Systems, Applications, Products in Data Processing Neurottstrasse 16 69190 Walldorf, Germany (hereinafter: SAP) and you (hereinafter: Customer)
 1. Subject Matter of the Agreement
 1. SAP grants Customer a non-exclusive, non-transferrable, royalty-free license to use the STLport.org C++ library (STLport) and its documentation without fee.
 2. By downloading, using, or copying STLport or any portion thereof Customer agrees to abide by the intellectual property laws, and to all of the terms and conditions of this Agreement.
 3. The Customer may distribute binaries compiled with STLport (whether original or modified) without any royalties or restrictions.
 4. Customer shall maintain the following copyright and permissions notices on STLport sources and its documentation unchanged: Copyright 2001 SAP AG
 5. The Customer may distribute original or modified STLport sources, provided that:
 - The conditions indicated in the above permissions notice are met;
 - The following copyright notices are retained when present, and conditions provided in accompanying permission notices are met:

Copyright 1994 Hewlett-Packard Company

Copyright 1996,97 Silicon Graphics Computer Systems Inc.

Copyright 1997 Moscow Center for SPARC Technology.

Copyright 1999,2000 Boris Fomitchev

Copyright 2001 SAP AG

Permission to use, copy, modify, distribute and sell this software and its documentation for any purposes is hereby granted without fee, provided that the above copyright notice

appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose.

It is provided "as is" without express or implied warranty.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purposes is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Moscow Center for SPARC makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Boris Fomitchev makes no representations about the suitability of this software for any purpose. This material is provided "as is", with absolutely no warranty expressed or implied.

Any use is at your own risk. Permission to use or copy this software for any purpose is hereby granted without fee, provided the above notices are retained on all copies.

Permission to modify the code and to distribute modified code is granted, provided the above notices are retained, and a notice that the code was modified is included with the above copyright notice.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purposes is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. SAP makes no representations about the suitability of this software for any purpose. It is provided with a limited warranty and liability as set forth in the License Agreement distributed with this copy.

SAP offers this liability and warranty obligations only towards its customers and only referring to its modifications.

2. Support and Maintenance SAP does not provide software maintenance for the STLport. Software maintenance of the STLport therefore shall be not included. All other services shall be charged according to the rates for services quoted in the SAP List of Prices and Conditions and shall be subject to a separate contract.

3. Exclusion of warranty

As the STLport is transferred to the Customer on a loan basis and free of charge, SAP cannot guarantee that the STLport is error-free, without material defects or suitable for a specific application under third-party rights. Technical data, sales brochures, advertising text and quality descriptions produced by SAP do not indicate any assurance of particular attributes.

4. Limited Liability

1. Irrespective of the legal reasons, SAP shall only be liable for damage, including unauthorized operation, if this (i) can be compensated under the Product Liability Act or (ii) if caused due to gross negligence or intent by SAP or (iii) if based on the failure of a guaranteed attribute.



2. Irrespective of the legal reasons, SAP shall only be liable for damage, including unauthorized operation, if this (i) can be compensated under the Product Liability Act or (ii) if caused due to gross negligence or intent by SAP or (iii) if based on the failure of a guaranteed attribute.
 3. In the case of Art. 4.2 above, SAP shall not be liable for indirect damage, consequential damage caused by a defect or lost profit.
 4. SAP and the Customer agree that the typical foreseeable extent of damage shall under no circumstances exceed EUR 5,000.
 5. SAP and the Customer agree that the typical foreseeable extent of damage shall under no circumstances exceed EUR 5,000.
 6. The exclusion or the limitation of claims in accordance with the present Art. 4 includes claims against employees or agents of SAP.
4. Adobe Document Services Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and / or other countries. For information on Third Party software delivered with Adobe document services and Adobe LiveCycle Designer, see SAP Note [854621](#).

Important Disclaimers and Legal Information

Hyperlinks

Some links are classified by an icon and/or a mouseover text. These links provide additional information.

About the icons:

- Links with the icon : You are entering a Web site that is not hosted by SAP. By using such links, you agree (unless expressly stated otherwise in your agreements with SAP) to this:
 - The content of the linked-to site is not SAP documentation. You may not infer any product claims against SAP based on this information.
 - SAP does not agree or disagree with the content on the linked-to site, nor does SAP warrant the availability and correctness. SAP shall not be liable for any damages caused by the use of such content unless damages have been caused by SAP's gross negligence or willful misconduct.
- Links with the icon : You are leaving the documentation for that particular SAP product or service and are entering an SAP-hosted Web site. By using such links, you agree that (unless expressly stated otherwise in your agreements with SAP) you may not infer any product claims against SAP based on this information.

Videos Hosted on External Platforms

Some videos may point to third-party video hosting platforms. SAP cannot guarantee the future availability of videos stored on these platforms. Furthermore, any advertisements or other content hosted on these platforms (for example, suggested videos or by navigating to other videos hosted on the same site), are not within the control or responsibility of SAP.

Beta and Other Experimental Features

Experimental features are not part of the officially delivered scope that SAP guarantees for future releases. This means that experimental features may be changed by SAP at any time for any reason without notice. Experimental features are not for productive use. You may not demonstrate, test, examine, evaluate or otherwise use the experimental features in a live operating environment or with data that has not been sufficiently backed up.

The purpose of experimental features is to get feedback early on, allowing customers and partners to influence the future product accordingly. By providing your feedback (e.g. in the SAP Community), you accept that intellectual property rights of the contributions or derivative works shall remain the exclusive property of SAP.

Example Code

Any software coding and/or code snippets are examples. They are not for productive use. The example code is only intended to better explain and visualize the syntax and phrasing rules. SAP does not warrant the correctness and completeness of the example code. SAP shall not be liable for errors or damages caused by the use of example code unless damages have been caused by SAP's gross negligence or willful misconduct.

Bias-Free Language

SAP supports a culture of diversity and inclusion. Whenever possible, we use unbiased language in our documentation to refer to people of all cultures, ethnicities, genders, and abilities.

© 2025 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company. The information contained herein may be changed without prior notice.

Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

Please see <https://www.sap.com/about/legal/trademark.html> for additional trademark information and notices.

