

3151428 - How to Enable a Single Pricing Procedure for Multiple Countries or Regions

Component: SD-BF-PR (Sales and Distribution > Basic Functions > Pricing), Version: 2, Released On: 29.08.2024

Symptom

You do business in multiple countries or regions with different tax laws. Hence you have several pricing procedures containing tax conditions that have been set up differently. However, such a setup requires these pricing procedures to be carefully aligned with each other, because it's not possible to account for different countries or regions requiring different tax setups in a single pricing procedure.

After you have implemented this solution, you must perform extensive tests to ensure that everything works as expected.

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Environment

- Sales
- SAP S/4HANA Cloud Public Edition

Resolution

Reason and Prerequisites

For the described solution, a business role with the following business catalogs is required:

Business Catalog Name	Business Catalog ID
Extensibility - Custom Logic	SAP_CORE_BC_EXT_BLE
Extensibility - Transport Management - Export	SAP_CORE_BC_SL_EXP
Extensibility - Transport Management - Import	SAP_CORE_BC_SL_IMP
Sales - Configuration	SAP_CA_BC_IC_LND_SDo_PC

Basic knowledge about pricing and ABAP development is also required.

Solution

General Concept

The goal of this article is to describe a possible solution for realizing pricing procedures for multiple countries or regions in a tax-relevant business context. That is, how to combine tax condition types from different country or region-dependent pricing procedures into a single pricing procedure. Therefore, you need to ensure that the system only searches for and finds different conditions for the countries or regions that they are relevant for. Furthermore, you must consider the following:

- Some condition types are only valid for a subset of countries or regions, but already have additional logic assigned.
- Sometimes the same condition type has different settings for different countries (for example, formulas, account keys, and so on).
- Some countries require exclusion between tax conditions.

Since tax conditions are often flagged as mandatory, it's not an option to simply maintain only condition records for some countries. This would result in a pricing error. Instead, you must fully leverage the possibilities that pricing requirements offer by using your own custom logic. Doing so allows you to either activate or deactivate condition types that are normally mandatory.

In the following, we describe how to create custom logic for requirements must be implemented and configured accordingly. We demonstrate how to use your own custom requirements to control which condition types are valid according to the given country or region where the tax must be reported. Furthermore, we show you how to deal with the restricted validity of some condition types and how to overcome the issues resulting from the different settings across different pricing procedures by creating new condition types when it becomes necessary.

Setting Up a Pricing Procedure for Multiple Countries

As an example, this article describes how to combine the pricing procedures for Germany, Spain, and Portugal into a single custom pricing procedure. As you can see from Figure 1, the three procedures only differ by their tax calculation. These different tax calculations result from different condition types and their configuration, for example, regarding the 'Alt. Calc. Cndn Amnt' field in the pricing procedure for Spain. Based on this, different solutions are possible. These solutions are detailed below.

Procedure: A10002 Materials (Germany)														
Procedures - Control Data														
Reference Step Overview														
Step	Cou...	Con...	Description	From ...	To Step	Man...	Re...	Stati...	Rele...	Print Type	Subtotal	Requirem...	Alt. Calc. ...	Alt. Cndn...
<input type="checkbox"/>	140	0	DC01 Division / Customer	0	0					a		2	0	0
<input type="checkbox"/>	150	0	DM01 Material	0	0					a		2	0	0
<input type="checkbox"/>	160	0	DPG2 Customer Price Group	0	0					a		2	0	0
<input type="checkbox"/>	170	0	DPG3 Material Price Group	0	0					a		2	0	0
<input type="checkbox"/>	180	0	DPG4 Customer/Mat.Pr.Grp	0	0					a		2	0	0
<input type="checkbox"/>	190	0	DPG5 Cust. Grp/Mat.Pr.Grp	0	0					a		2	0	0
<input type="checkbox"/>	200	0	DRG1 % Gross Amount 1	100	0					a		2	0	0
<input type="checkbox"/>	210	0	DRN1 % Net Amount 1	0	0					a		2	0	0
<input type="checkbox"/>	220	0	DRQ1 +/- as to Quantity 1	0	0					a		2	0	0
<input type="checkbox"/>	230	0	DRV1 Fixed Amount 1	0	0					a		2	0	0
<input type="checkbox"/>	240	0	DRW1 +/- as to Grss Wght1	0	0					a		2	0	0
<input type="checkbox"/>	300	0	Sum Surcharges/Discounts	101	299							0	0	0
<input type="checkbox"/>	310	0	PNP0 Net Price	0	0							2	6	3
<input type="checkbox"/>	700	0	Net Amount 1	0	0					a	2	0	2	0
<input type="checkbox"/>	850	0	TTX1 Output Tax	0	0					A		10	0	16
<input type="checkbox"/>	899	0	DRD1 Rounding Off	0	0							13	16	4
<input type="checkbox"/>	900	0	Total Amount	0	0							0	4	0
<input type="checkbox"/>	910	0	DCD1 Cash Discount Gross	0	0							9	0	11

Procedure: A24002 Serials (Spain)														
Procedures - Control Data														
Reference Step Overview														
Step	Cou...	Con...	Description	From ...	To Step	Man...	Re...	Stati...	Rele...	Print Type	Subtotal	Requirem...	Alt. Calc. ...	Alt. Cndn...
<input type="checkbox"/>	180	0	DPG4 Customer/Mat.Pr.Grp	0	0					a		2	0	0
<input type="checkbox"/>	190	0	DPG5 Cust. Grp/Mat.Pr.Grp	0	0					a		2	0	0
<input type="checkbox"/>	200	0	DRG1 % Gross Amount 1	100	0					a		2	0	0
<input type="checkbox"/>	210	0	DRN1 % Net Amount 1	0	0					a		2	0	0
<input type="checkbox"/>	220	0	DRQ1 +/- as to Quantity 1	0	0					a		2	0	0
<input type="checkbox"/>	230	0	DRV1 Fixed Amount 1	0	0					a		2	0	0
<input type="checkbox"/>	240	0	DRW1 +/- as to Grss Wght1	0	0					a		2	0	0
<input type="checkbox"/>	300	0	Sum Surcharges/Discounts	101	299							0	0	0
<input type="checkbox"/>	310	0	PNP0 Net Price	0	0							2	6	3
<input type="checkbox"/>	700	0	Net Amount 1	0	0					a	2	0	2	0
<input type="checkbox"/>	845	0	TES2 IGIC Output Tax	0	0					A		10	0	16
<input type="checkbox"/>	850	0	TTX1 Output Tax	0	0					A		10	38	16
<input type="checkbox"/>	851	0	TES1 Equalization tax	0	0					A		10	0	16
<input type="checkbox"/>	899	0	DRD1 Rounding Off	0	0							13	16	4
<input type="checkbox"/>	900	0	Total Amount	0	0							0	4	0
<input type="checkbox"/>	910	0	DCD1 Cash Discount Gross	0	0							9	0	11
<input type="checkbox"/>	930	0	PCIP Internal Price	0	0						B	4	0	0
<input type="checkbox"/>	950	0	Profit Margin	0	0							0	11	0

Procedure: A35002 Serials (Portugal)														
Procedures - Control Data														
Reference Step Overview														
Step	Cou...	Con...	Description	From ...	To Step	Man...	Re...	Stati...	Rele...	Print Type	Subtotal	Requirem...	Alt. Calc. ...	Alt. Cndn...
<input type="checkbox"/>	160	0	DPG2 Customer Price Group	0	0					a		2	0	0
<input type="checkbox"/>	170	0	DPG3 Material Price Group	0	0					a		2	0	0
<input type="checkbox"/>	180	0	DPG4 Customer/Mat.Pr.Grp	0	0					a		2	0	0
<input type="checkbox"/>	190	0	DPG5 Cust. Grp/Mat.Pr.Grp	0	0					a		2	0	0
<input type="checkbox"/>	200	0	DRG1 % Gross Amount 1	100	0					a		2	0	0
<input type="checkbox"/>	210	0	DRN1 % Net Amount 1	0	0					a		2	0	0
<input type="checkbox"/>	220	0	DRQ1 +/- as to Quantity 1	0	0					a		2	0	0
<input type="checkbox"/>	230	0	DRV1 Fixed Amount 1	0	0					a		2	0	0
<input type="checkbox"/>	240	0	DRW1 +/- as to Grss Wght1	0	0					a		2	0	0
<input type="checkbox"/>	300	0	Sum Surcharges/Discounts	101	299							0	0	0
<input type="checkbox"/>	310	0	PNP0 Net Price	0	0							2	6	3
<input type="checkbox"/>	700	0	Net Amount 1	0	0					a	2	0	2	0
<input type="checkbox"/>	850	0	PTX1 Output Tax	0	0					A		10	0	16
<input type="checkbox"/>	899	0	DRD1 Rounding Off	0	0							13	16	4
<input type="checkbox"/>	900	0	Total Amount	0	0							0	4	0
<input type="checkbox"/>	910	0	DCD1 Cash Discount Gross	0	0							9	0	11
<input type="checkbox"/>	930	0	PCIP Internal Price	0	0						B	4	0	0
<input type="checkbox"/>	950	0	Profit Margin	0	0							0	11	0

Figure 1: Standard pricing procedure for Germany (top), Spain (middle) and Portugal (bottom)

Implementing Requirements to Restrict Tax Condition to Specific Countries or Regions

For more information about how to create and apply custom logic, see [Creating Custom Logic](#).

For more information about requirements in the context of pricing, see [Custom Logic: Requirement](#). Be aware that, in the present context, you must select 'Requirement for Document Item'.

Using simplified examples based on the pricing procedures in Figure 1, we illustrate how to utilize requirements to control whether a condition type is considered for multiple countries or regions.

1. Restrict Validity of Condition to Specific Countries or Regions

With this step, you assign a requirement to a specific condition in the pricing procedure so that the condition is only valid for specific countries or regions. With the implementation of requirement 3000001 (see Coding 1), the system checks whether condition types are only considered for Germany. With this, you can activate or deactivate conditions with respect to specific countries.

Table 1: Example pricing procedure combining commonly used condition type Output Tax (DE) (TTX1)

Step	Condition Type	Description	...	Requirement	...
10	PPRo	Price		2	
100		Gross Amount			
...					
850	TTX1	Output Tax (DE)		3000001	
900		Total Amount			

You can set up the requirement by using variable 'doc_attributes-departurecountry' in an IF- or CASE-statement and using variable 'pricingrequirementsisfulfilled = abap_true' for appropriate countries.

Coding 1: Example implementation of requirement 3000001

```
pricingrequirementsisfulfilled = abap_false.
```

```
IF doc_attributes-departurecountry = 'DE'.
```

```
    pricingrequirementsisfulfilled = abap_true
```

```
ENDIF.
```

2. Apply Additional Logic to Country or Region-Specific Requirement

Equivalent to the example above (Table 1), but considering additional logic, the example implementation of requirement 3000001 (see Coding 2) calls a standard requirement.

As shown in Coding 2, you can use class 'cl_prg_doc_itm_requirement' and method 'is_fulfilled' to call requirements. With this, no extra implementation effort is necessary from your side.

Coding 2: Implementation of requirement 3000001 considering additional logic

```
pricingrequirementsisfulfilled = abap_false.
```

```
IF doc_attributes-departurecountry = 'DE'.
```

```
    pricingrequirementsisfulfilled = cl_prg_doc_itm_requirement=>get_instance( )->is_fulfilled( 10 ).
```

```
ENDIF.
```

3. Define Additional Country or Region-Specific Condition Type

In the configuration of the pricing pricing procedures (Germany vs. Spain, see Figure 1), for condition TTX1, there are different values assigned in the 'Alt. Calc. Cndn. Amnt' field. Therefore, you create an additional condition type for Spain: Output Tax (ES) (ZXS1), which can be configured appropriately (see Table 2). The configuration of condition type ZXS1 is equal to condition type TTX1, but condition type TTX1 is set as the reference condition type (see Figure 2). You must implement requirements (3000001/3000002) to be valid only for the corresponding countries.

Table 2: Example pricing procedure including condition types of multiple countries or regions

Step	Condition Type	Description	...	Requirement	Alt. Calc. Cndn Amnt
10	PPRo	Price		2	
100		Gross Amount			
...					
850	TTX1	Output Tax (DE)		3000001	
852	ZXS1	Output Tax (ES)		3000002	38
900		Total Amount			

Figure 2: ZX1S – Condition Details

4. Apply Condition Exclusion to Specific Countries or Regions

Due to the combination of pricing procedures, (tax-relevant) condition types can be valid for multiple countries or regions. This also applies to defined condition exclusions.

In the standard procedure for Spain, a condition exclusion defines that TES2 excludes TTX1. With reference to the initial example (see Figure 1), this would also be true if TES1 is valid for Germany, too. To handle this, you must create a new condition type and configure the condition exclusion appropriately. Since we already created ZX1S, we can adjust the settings of the corresponding condition exclusion so that the condition exclusion can only be true for Spain.

The proposed approach of using new condition types is recommended to control condition exclusions differently for countries.

5. Combine Pricing Procedure for Countries DE/ES/PT

Table 3 shows a combined pricing procedure based on the procedure given in Figure 1 and considering insights from the scenarios above. You must implement requirements (3000001/3000002/3000003) to be only valid for the corresponding countries.

Table 3: Pricing procedure combining the above scenarios and an additional country

Step	Condition Type	Description	...	Requirement	...
10	PPR0	Price		2	
100		Gross Amount			
...					
850	TTX1	Output Tax (DE)		3000001	
851	TES2	IGIC Output Tax (ES)		3000002	
852	ZXS1	Output Tax (ES)		3000002	38
853	TES1	Equalization Tax (ES)		3000002	
860	PTX1	Output Tax (PT)		3000003	
900		Total Amount			

Keywords

cross-country pricing procedure, pricing procedure for multiple countries, country-dependent condition type, country-dependent requirement, country-dependent formula

Attributes

Key	Value
Other Components	Sales and Distribution > Basic Functions > Pricing > Pricing (Public Cloud) (SD-BF-PR-2CL)

Products

Products
SAP S/4HANA Cloud Public Edition all versions
SAP S/4HANA Cloud all versions

This document is referenced by

SAP Note/KBA	Component	Title
2907372		<u>UPDATE: Restriction Note for RITA in SAP S/4HANA CE2005 and further Releases: 'Registration for Indirect Taxation Abroad: Not supported Apps, Countries and Processes.'</u>