Quick Guide for Brazilian Localization Installation

Applies to:

SAP ERP (All releases)

Summary

This quick guide seeks to provide a simple but at the same time comprehensive step-by-step list of activities that need to be performed in order to install a Brazilian Localization model in a new system. Please use it as a helping hand, never as a project reference or central document. You may also use it as checklist.

Author: Eduardo Rubia

Company: SAP Brasil

Created on: 27 August 2008

Author Bio

26 years, RCA consultant. Expertise: XX-CSC-BR*. Currently located in São Paulo, Brazil.

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Introduction

The following guidelines instruct on how to install localization in a new system.

As already outlined in the abstract, this quick guide seeks to provide a simple but at the same time comprehensive step-by-step list of activities that need to be performed in order to install a Brazilian Localization model in a new system.

It´s recommended using it as a mere helping hand, never as a project reference or central document. It´s also indicated as a checklist or reference guide to aid Localization implementation projects.

Scope

In Scope: assist customizing in ERP systems where Brazilian Localization systems should run for SD and MM modules.

Out of Scope: bypass project planning.

Pre-requisites

Considering the involved system changes, some activities are easier having the following SP levels in your system:

- 4.70, SP22 or SAP note 852302 fully installed
- 5.00, SP05 or SAP note 852302 fully installed
- 6.00, any SP

List of Activities

Environment preparation

Create a new client

It´s highly recommended that you create a new client XXX as a copy from 000. This facilitates Localization installation as client 000 contains standard-delivered customizing entries, which through client copy will be available in the new system.

SAP delivers various tables entries in client 000. So, if it´s not possible to do the suggested client copy, a client compare (transaction SCU0) may be done to adjust the localization client with standard delivered data.

Hint: Please find more information about client compare tool in SAP Notes 91096 e 85087

Create a Country Version Model

This can be done by running transaction o035 for Country 'BR'. This transaction creates a model enterprise structure to be used a reference for the organizational entities definition.

Before running it, be sure to read and understand the documentation for the following IMG activity:
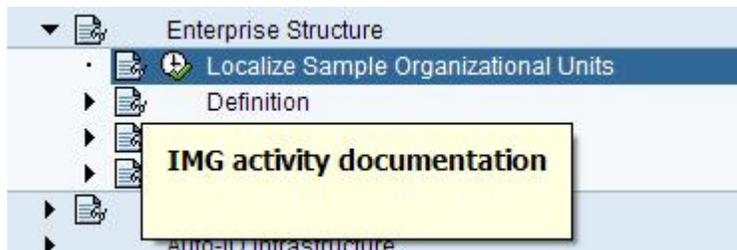
Create a main Company Code

The new Company Code should be a copy from the model generated through o035. As a suggestion, you may create BR99 as a copy from 0001.

Important: You should not change the settings for Company Code 0001, which is a model organizational entity. Use it as a mere reference.

Every time you execute o035 subsequently, all 0001 entities will be overwritten with the content from the chosen country. So, if you have run o035 for Brazil, 0001 organizational structure entities will be set for Brazil. If you later run it for Argentine, 0001 organizational structure will be set for Argentine.

Enterprise structure

Define Valuation level

It´s recommended that you use Valuation level = 'Plant'.

With this, the price determination occurs based on inter-plant movements, and not only on Company Code movements. This is used by most Brazilian organizations.

Storage Location valuation level is not possible.

Define Organizational entities
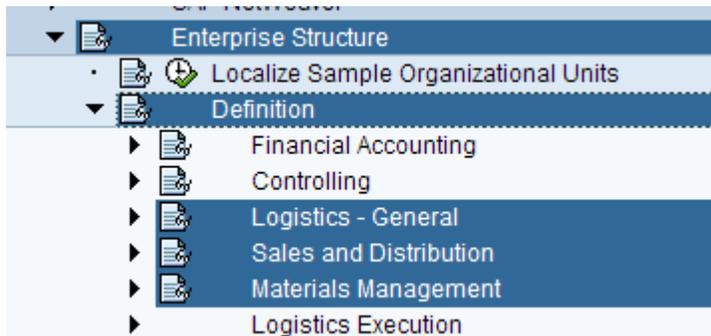
Define the following organization structure entities…:

⇨ Business Places (One per plant)

⇨ Plants

⇨ Purchasing Organization

⇨ Storage Location

⇨ Sales Organization

⇨ Distribution Channel

⇨ Sales Area

Co-relate Organizational entities
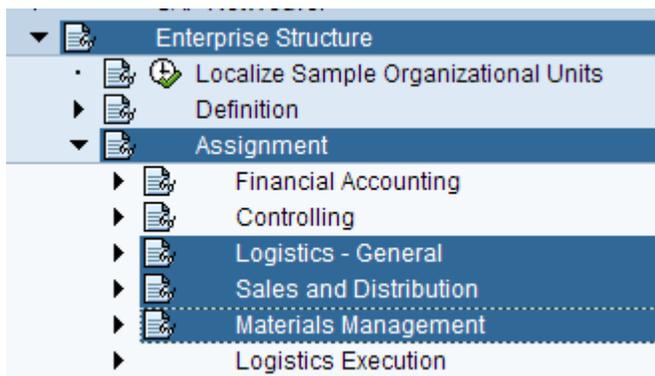
Perform at least the following assignments…:

⇨ Plant to Company Code

⇨ Sales Organization to Company Code

⇨ Distribution Channel to Sales Organization

⇨ Division to Sales Organization

⇨ Purchasing Organization to Company Code

⇨ Plant and Division to Business Area

Define Company Code Global Parameters

This activity will create the financial account data for the Company Code. This is the central data that will spread across the entire organizational structure appended to the Company Code.

Be sure to maintain, inside the Company Code data, at least the following content…:

⇨ The address (at least Country, Region and Jurisdiction Code),

⇨ CNPJ root (official Federal Company number),

⇨ Fiscal year variant.

Customizing sets

Installing a Country Version

The following SAP Help document describes most important activities that need to be followed in order to have Brazilian Localization objects and data available in your system

http://help.sap.com/saphelp_erp60_sp/helpdata/en/c8/149e36d10e057ee10000009b38f889/frameset.htm

So as to facilitate the SAP Help guidelines, and correlate them with this document, the relevant steps are also explained below. So, you may choose either to use this document or the one from the link above. Both are likely to have the same content in a different presentation fashion. While this one is a help guide, the one from the link is the official SAP Help documentation.

Execute Localization CATTs

Use transaction SCAT for that. This transaction will use pre-defined function modules to move Brazilian-specific data to system tables. It will make available two sets of data: Localization Movement Types, on MM side, and SD content (document types, incompleteness procedures, etc…)

a. P40XXXX_CU_BR (MM Movement Types)

   Also see SAP Note 123124 for further information on this CATT.

b. P99CUST_SD_BR (SD data)

   To see the list of updated tables, check function module J_1B_SD_CUSTOMIZER. This module is executed when the CATT is called.

Define Number Range for internal Nota Fiscal document number
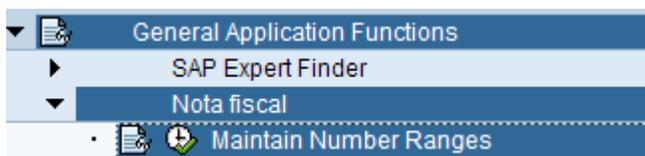
Internal document number refers to field J_1BNFDOC-DOCNUM. This is **not** the external document number, that is, the official Nota Fiscal number. This one will be explained next.

Important: For DOCNUM, only intervals '01' is used in case of normal NFs. Other intervals may be used for Nota Fiscal Eletronica (except '01'). For documentation, please refer to the following coding section:

```
Function module      J_1B_NF_DOCUMENT_NUMB_GET_NEXT

* NF document number is taken from NR 01
  IF i_nr_range IS INITIAL.
    lv_nr_range = '01'.
    lv_object = c_nf.
  ELSE.
* for NFe flexible numbering is possible.
* but never use NR 01!!
    lv_nr_range = i_nr_range.
    lv_object = c_nfe.
  ENDIF.
```

Define External Number Range for External Nota Fiscal number

In this activity you specify one or several number ranges that will be used to generate the external official Nota Fiscal number. Here you will define the leading NF number, that is, the first 6 positions. You define the first 6 digits based on the number groups, better described in section 0.

The rest of the extended number (series and subseries) is built-up based on the settings from the following section 0.

The NF number format is the following one:
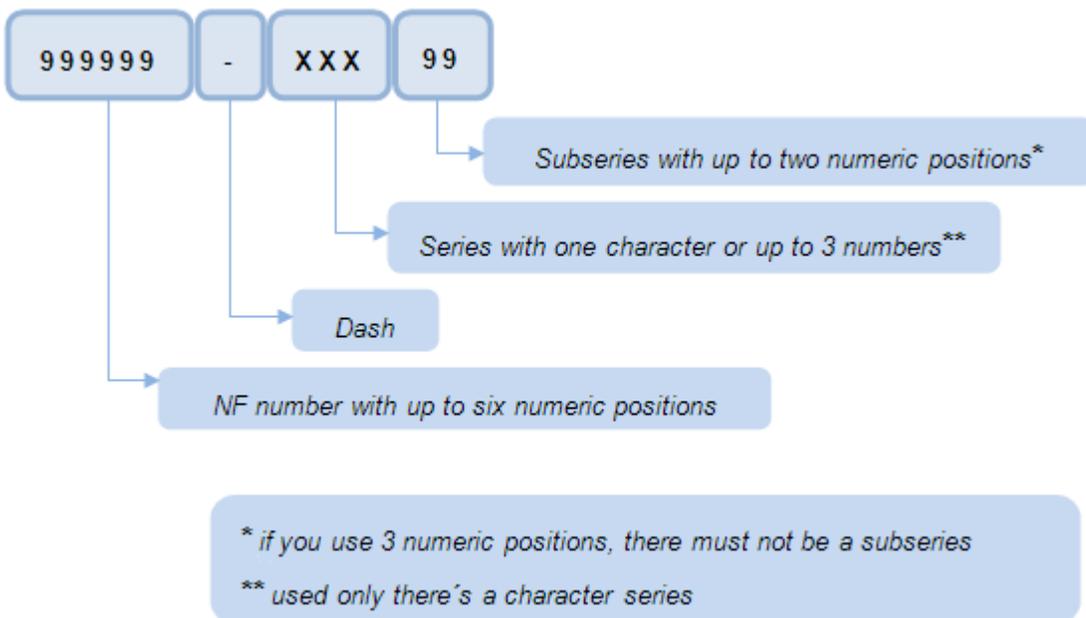
Important: this format is not valid for Nota Fiscal Eletronica. For NF-e, please read section "Nota Fiscal Eletronica".

Define Nota Fiscal Output data

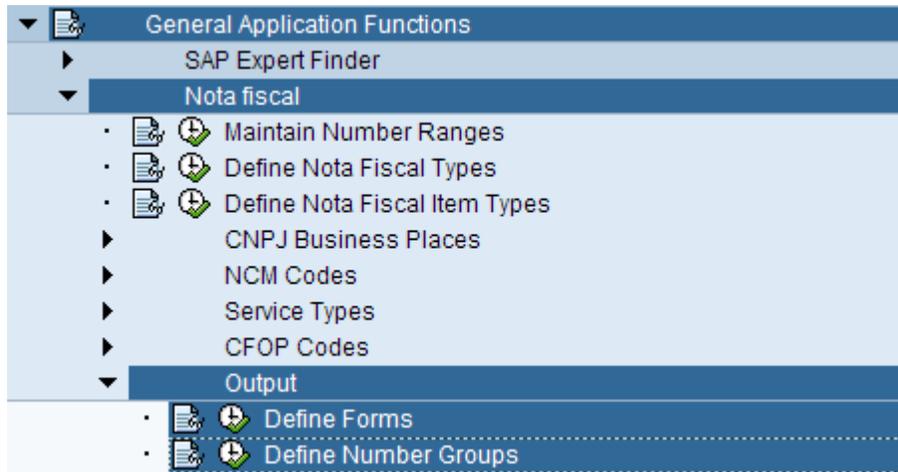**Forms:** system delivers two standard forms: NF01 (outgoing) and NF02 (incoming). You may refine the NF printout by defining more forms. These forms must be assigned to the Nota Fiscal Types, which will trigger printout. (Please see SAP Help link from section 0 for further information).

Number Groups: system delivers standard group 0101UN. These groups are sub-objects of the main NF external number range. You may as well define more groups to refine NF external numbering.

Define Printing Parameter Assignment

Nota Fiscal numbering is based on the combination of the involved Company Code, Branch and Output Form. In this activity, you should define the output settings for each of the possible combinations.
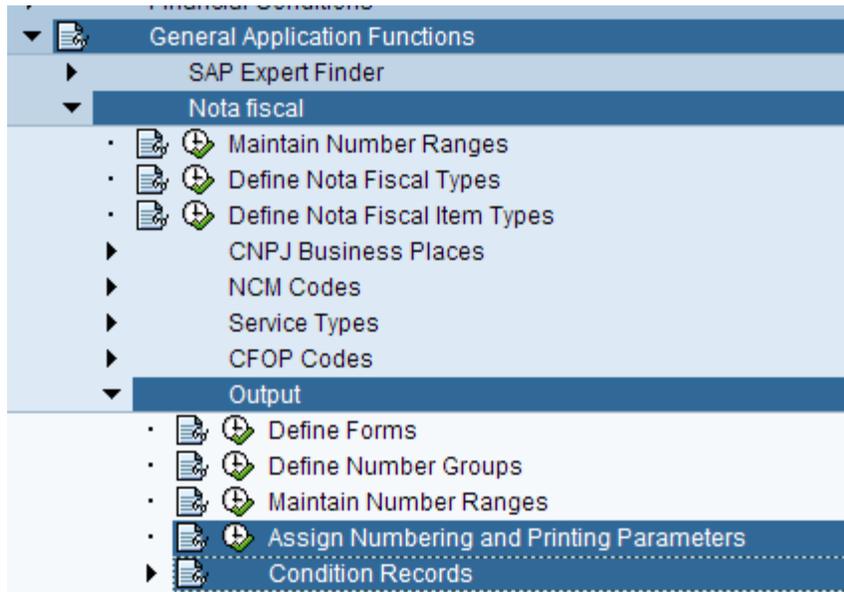
Two activities must be maintained to allow NF printout:

Assign Numbering and Printing Parameters: here you specify the number group, range, series and subseries, as well as the desired printer to be used.

Condition Records: here you must create condition records for the output types linked to the NF form. It´s recommended to create these records based on 'Condition Tables for Output Nota Fiscal', to match the definitions from the previous activity.

Hint: For an enhanced NF printing, read also SAP Note 743361..

Configure CFOP

To implement CFOP, you should follow SAP Note 571848. Basically, the following activities will have to be performed along this note implementation:

a. Execute report J_1BFILLRECTYPES

    This report which will create default entries in table J_1BNFITMRULEV, used basically for CFOP automatic determination and tax presentation in the Nota Fiscal

b. Execute report J_1BCFOP_MIGRATE

    This report will create default entries in the CFOP tables.

Important: Be sure to have file CFOP_2003.txt downloaded into your computer drive before running J_1BCFOP_MIGRATE. This document is available as an attachment to SAP Note 571848.

For further information on the CFOP solution, please read SAP Note 571848 completely.

Create sample NCM codes
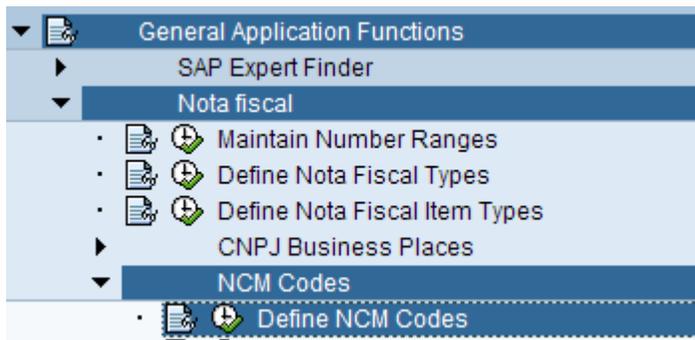
NCM Code is used to identify the material. Brazilian Government makes available an official list of NCM codes, with thousands entries. You may upload into the system the ones your company uses or set up some dummy entries (e.g. NCM1, NCM2, etc) just to allow material identification in the system.

Country	NCM Code	Description
BR	NBM1	NBM code 1
BR	NBM10	NBM code 10
BR	NBM2	NBM code 2
BR	NBM3	NBM code 3
BR	NBM4	NBM code 4

Tax Calculation set-up

The following activities are found under the 'Basic Settings' sub list, found at the IMG path indicated below:

Hint: Some activities can also be found in transaction J1BTAX.

Assign Country to Calculation Procedure

There are two tax calculation procedures in Brazil: TAXBRJ (also called classic) and TAXBRA (also called CBT). In this activity you must choose which one you want to use. You may only use 1 of them. Both are delivered in client 000.

Specify Structure for Tax Jurisdiction Code

The following settings must be done for both TAXBRJ and TAXBRA procedures:

	Sche...	Name	Lg	Lg	Lg	Lg	Tx In
	TAXBRA	Brazil: CBT	3	7			✓
	TAXBRJ	Brazil: External tax calculation	3	7			✓

Important: In Brazil, tax calculation occurs at item level. So, be sure to mark the flag 'Tx In' for the used tax calculation procedure, which will activate line-by-line tax calculation.

Define Tax Jurisdiction Codes

Tax Jurisdiction code uniquely identifies the location of organization structure entities. E.g.: Plant, Branch, Vendor, Customer, etc. It´s an information fundamentally required for tax calculation in Localization.

There are 2 views that need to be maintained regarding Tax Jurisdiction Codes: **V_TTXJ** and **J_1BTXJURV**. You should maintain both of them. Data to be used as reference for Jurisdiction Code tables filling can be retrieved from Brazilian Geography institution [IBGE](#).

Define Tax Regions

▼	📝		Basic Settings
▼			Brazil
·	📝	🕒	Define Brazilian Tax Regions and Assign to Geograph. Regions
·	📝	🕒	Define Tax Regions for Foreign Customers/Vendors

In this activity you define the tax regions for Brazil. Each tax region must have a corresponding geographical region, which stands for the actual province/state/department where the goods movement takes place. There can be several tax regions assigned to the same geographical region. This is useful in case, for example, your company has different taxation inside the same province, or if there is a tax free zone inside the same geographical location (e.g. Zona Franca de Manaus). System delivers default entries in this table.

In case your company also imports/exports directly to/from foreign partners, a Localization tax jurisdiction code must be defined for them as well. To allow that, you must define dummy codes to identify external partner locations. Example entries in Tax Regions for Foreign Customers/Vendors (default) are shown below:

	Country	For. country	Tax Region
	BR	⊡	XE
	BR	ES	XE
	BR	FR	XE
	BR	US	XX

:

Define Logical Destination for Tax Jurisdiction Code Determination

	Ex	Event	Function Module	RFC Destination
	E	JUR	J_1BTAXJUR_DETERMINE_NEW	
	C	TAX	J_1BCALCULATE_TAXES	

The logical destination is used for Jurisdiction Code auto-determination and for classic tax calculation (TAXBRJ). So, if you´re using TAXBRA, only the entry for Event 'JUR' is needed. Nevertheless, it´s recommended having all the above entries, in case mixed scenarios exist in your system.

The defined functions are called automatically according to the event. E.g.: when creating a vendor master, after filling in the region and postal code, J_1BTAXJUR_DETERMINE_NEW will be called to automatically determine the right Jurisdiction Code

Activate External Tax Calculation

TTXD: View of External System					
	Sche...	Ext...	tax interface vers.	RFC Destination	Update RFC destination	TC
	TAXBRA	C				☑
	TAXBRJ	C				☑

Here you link the used procedure to the external events.

Additionally, you may choose whether you want the system to automatically re-determine wrong jurisdiction codes or if an error message should be output when the chosen jurisdiction code doesn´t match the address data. For the first behavior, turn on the flag 'TC' (recommended). Otherwise, set it off.

Assign Postal Codes to Tax Jurisdiction Codes

In Brazil, Jurisdiction Codes can be automatic determined based on the combination of postal code (ZIP code, also called CEP in Brazil). To allow that, table J_1BTREG_CITYV must be customized. In this table, you can define a Jurisdiction Code to a range of Postal Codes for a given Region.

Example entries would be:

Assign Tax Jurisdiction Codes to Ranges of Postal Codes				
R...	From-PCode	To-PCode	Jurisdiction Code	Text
AM	000-700	10000-800	ZF 1234567	Manaus (Zona Franca)
RS	10000-500	10000-600	RS 4304606	Porto Alegre
SP	10000-100	10000-200	SP 3550308	São Paulo 1
SP	10000-300	10000-400	SP 3550309	São Paulo 2

Define Sequence for SD Tax Law Determination

In SD, flexible tax law determination is possible. To choose how they should be determined, you must customize this activity. The recommended sequence is the following one:

Sequence for Tax Law Determination		
	Sequence in Tax ...	Source for Tax Law Determination
	1	0 Tax Exception Tables ▼
	2	1 Item Category Table ▼
	3	2 Customer Master ▼

Tax Laws and Tax Situations

Tax laws are system-specific keys used to specify which type of tax calculation occurs at item level. Each tax law has a related tax situation, which is an official code. In the system, ICMS and IPI have default tax situations delivered by standard. No activity is this required for them.

On the other hand, ISS, PIS and COFINS tax laws and tax situations must be defined manually. This is better explained next.

ISS, PIS and COFINS Tax Law and Tax Situation

ISS: ISS tax laws and tax situations can be defined without any required pre-requisites.

PIS/COFINS: before defining PIS/COFINS tax situations and tax laws, you must install SAP Note 981123. After installing it, you can define them. The corresponding IMG activity can be found under the 'Basic Settings' activity sub list or in transaction J1BTAX.

Assign Company Code to Document Date for Tax Determination

Tax calculation in Brazil is based on the tax rates and bases retrieved from the Brazilian tax tables, which among key fields, has a validity date for the condition records. By default, system will use the 'Posting Date' of the document to search for valid tax rates.

However, in case you want to use the 'Document Date' (i.e., date of the document creation), you must choose that option under *Financial Accounting -> Financial Accounting Global Settings -> Tax on Sales/Purchases -> Calculation -> Assign Company Code to Document Date for Tax Determination.*

CBT-specific settings

This section is required only for CBT (TAXBRA).

In order to cope with requirements to allow Condition-Based Tax Calculation (CBT TAXBRA), you must additionally to the above activities, perform also the ones specified in SAP Note 664855 attachment (Docu_CBT_302.doc), hereon referred to simply as '**CBT document'**.

Taking into account that this is a very extensive SAP Note, the most important requirements are summarized below, with the respective CBT Document sections.. This seeks to ease the CBT implementation.

Important: Nevertheless, keep in mind that this document <u>does not</u> substitute SAP Note 664855 in any way. You still must refer to that documentation as a formal and official reference.

Below follows a list of activities for CBT.

IMG Path: *Financial Accounting -> Financial Accounting Global Settings -> Tax on Sales/Purchases -> Basic Settings -> Brazil -> Condition-Based Tax Calculation.*

    a.   Activate Condition Generation

Activate Condition-Based Tax Calculation	
Country	Active
BR	☑

    b.   Specify Calculation Procedures for Condition-Based Tax Calculation

Usage	A
Application	TX

Calculation Procedures for Condition Based Tax Calculation		
Procedure	CBT Act.	Description
TAXBRA	☑	Brazil, Condition-Based

    c.   Create Tax Codes

Please refer to CBT document sections, "5.14 customizing FI/MM Tax Codes" and "10.13 Tax Codes". The later instructs on how to set up the tax codes.

Important: The tax codes creation has to be done manually. It´s not possible to create them automatically, due to technical restrictions from table T007A.

Same way, transporting tax codes among systems is not possible. Thus, tax code transport report RFTAXIMP also cannot be used.

In case there are multiple clients where CBT Localization needs to be implemented, this activity (tax code creation) has to be repeated in each of them.

d.   Set 'Tax Relevance = 2' for tax codes SE and IE

Through SE16, table T007A modify field TXREL for MWSKZ 'SE' and 'IE'. Set TXREL = '2'.

This requires SAP* profile.

e.   Create default condition records for conditions BIC6 and BCI1

Access transaction FV11, and create +100% records for Condition Types BIC6 and BCI1.

	C...	Description	Amount	Unit	Valid From	Valid to
Country						
	BR	Brazil	100,000	%	01.01.2000	31.12.9999

f.   Create default tax rates in J_1BTXDEF

These table entries are used as a reference for some condition records generation. Therefore, you must have default rates for ISS, ICMS and IPI predefined. Example:

	Tax	Valid from	Tax Rate
	ICMS	01.01.1995	12,00
	IPI	01.01.1995	10,00
	ISS	01.01.1995	5,00

g.   Create condition table 601

Please refer to CBT Document, section "10.1.1 Create Condition Table 601".

h.   Adjust Access Sequences:

The following access sequences need to be adjusted through J1BTAX, as indicated in the informed sections from the CBT Document.

Application TX (MM):

➔ *BRS1 (see Table 10-16: Access Sequence BRS1 – steps and field assignment)*

➔ *BRS2 (see Table 10-17: Access sequence BRS2 – steps and field assignment)*

Application V (SD):

➔ *ISS1 (see Table 10- 42: Access Sequence ISS1 - steps and field assignment)*

➔ *ISS2 (see Table 10- 43: Access Sequence ISS2 - steps and field assignment)*

i.   Create Dynamic Tax Groups

In transaction J1BTAX, click on

Consider section "5.5 Tax Groups of Dynamic Exceptions" of the CBT Document to perform this activity.

j.   Assign Dynamic Tax Groups to Condition Table

Please refer to CBT Document section "10.10 Assignment of Tax Rate Tables to Condition Tables".

k.   Create Tax Table entries

After setting up the framework to use CBT, you are able define the tax rates, bases and other settings for each tax type calculation. This is done inside transaction J1BTAX, in table J_1BTX*.

l.   Migrate Tax Groups into Access Sequences

Every time you create a new dynamic tax group, the following activity has to be performed.
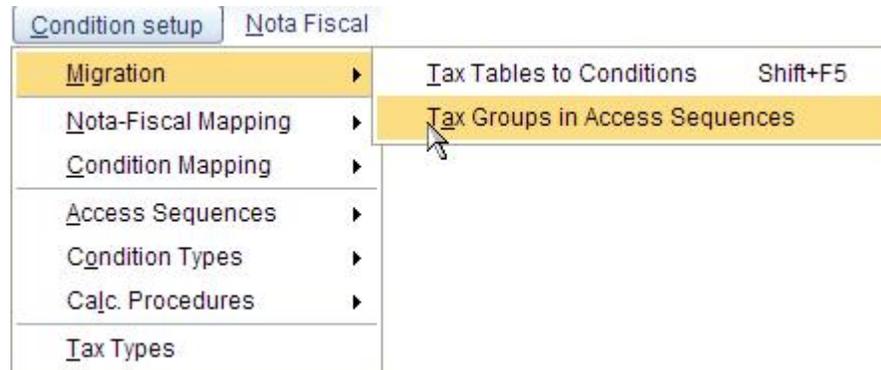
You can find further information under the CBT Document, section "5.6 Access Sequences".

m.   Migrate Tax Tables into Condition Records

Every time you create a new tax table entry, having turned on 'Condition Generation' will automatically generate corresponding condition records. This activity, though, needs to be run once after finalizing the above customizing, in order to convert into condition records any existing entries from tax tables. You should also run it after performing massive changes in tax tables (e.g. tax rates, tax laws, tax code, etc)..
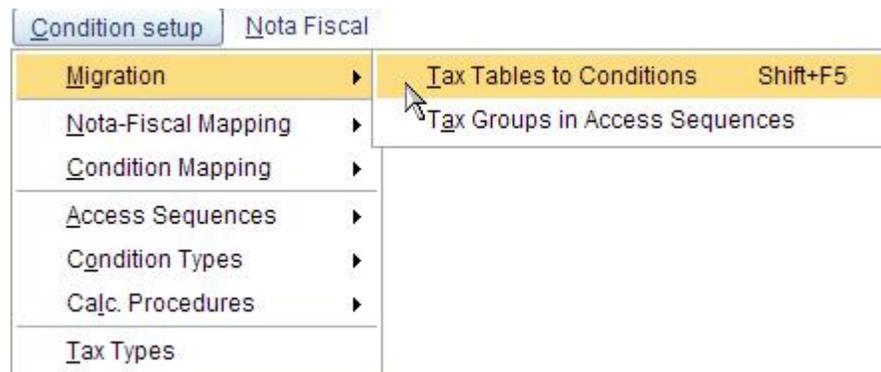
You can find further information under the CBT Document, section "5.17.2 Convert Tax Data to Condition Records"

n.   CBT Consistency Check

Having performed all the above steps for CBT, you may check for the customizing consistency using standard report J_1B_CBT_CONSIST. Please find richer information on how to use this report in SAP Note 686780.

o.   Additional SAP Notes required for CBT:

After concluding the customizing, also install the following SAP Notes (including customizing)

o   *SAP Note 748252*

o   *SAP Note 770860*

o   *SAP Note 1061205*

Create manual condition records for Taxes in SD

Some SD condition records must have manual records created. How to do that is explained in the following SAP Help thread:

http://help.sap.com/saphelp_erp60_sp/helpdata/en/5b/25e53759ed340be10000009b38f8cf/frameset.htm

Important: You won´t be able to generate these condition records until you create tax codes in the system. This is valid for TAXBRJ and TAXBRA methodologies.

Assign Tax Codes for Non-Taxable Transactions

To allow tax law determination for tax-exempt processes (e.g. subcontracting component shipment), you must define a default tax code to the company code. Do to that, access Transaction OBCL and assign tax codes IE and SE to Incoming/Outgoing non-taxable transactions in the defined Company Code.

	Co...	Company Name	City	Input ta...	Output t...
	BR99	Default Brazil Comp. Code	Brazil	IE	SE

Notes Installation

Having performed all the above steps, still it´s recommended installing the following SAP Notes in your new system. Their implementation activities, of course, will vary according to your SP level. In some cases, just the customizing will be needed. In other cases also DDIC/repository objects creation and coding installation will be needed. So, be sure to read the indicated SAP Notes before actually considering it installed.

Account Keys for Tax Posting

SAP Note 630603

This SAP Note regards to Account Keys customizing in the system. Use transaction OBCN to check the note´s indications.

DIFAL

a.　　SAP Note 679372

This note delivers basic DIFAL scenarios.

Before installing this note, you must have previously created report ZBKCOPYMVTBR as explained in SAP Note 679371.

b.　　SAP Note 844630

This note is required only in case you´re running on TAXBRJ. It delivers additional DIFAL scenarios to different business processes. For TAXBRA, the scenarios for DIFAL there described are not support (although you can adapt them by yourself).

Stock Transport Order

SAP Note 199233

This note instructs on how to set-up a Stock-Transport Order process using Nota Fiscal in Brazil. For TAXBRA system, SAP Note 888805 is also required.

After customizing the system, also perform the following additional customizing:

c.　　Assign a Vendor Master to goods supplying plants:

XK01 -> Purchasing Data -> Assign Plant to Vendor

d.　　Assign a Customer Master to goods receiving plants:

IMG -> Materials Management -> Purchasing -> Purchase Order -> Set up Stock Transport Order

e.　　Customized LE/MM interface

IMG -> Materials Management -> Purchasing -> Purchase Order -> Set up Stock Transport Order

Services Management

SAP Note 947670

This note delivers the Localization for Services Management. The required activities that need to be followed after the coding implementation are described in the note attachment "User_Guide_MMSRV_BR".

Withholding Taxes

There are basically two scenarios for withholding taxes: Normal and Accumulated. The first one refers to the conventional withholding taxes whereas the second refers to the scenario where the values are summed to a minimum level to trigger withholding.

The following activities are required to use each of the scenarios.

Important: for the accumulation scenario, also the normal customizing is required.

    a.   Normal Withholding

To use the normal withholding, you must follow the customizing guide from SAP Note 747607 attachment (Classic or CBT tax calculation), thoroughly.

Important: Even though some customizing object entries are delivered with client 000, some data may not be available in your system. Therefore, a complete check-up is recommended, comparing the mentioned document guidelines and your system.

    b.   Accumulation

To use accumulation withholding, proceed as follows:

        i.   *Install SAP Note 1006866*

        ii.   *Install SAP Note 815720*

Important: If you´re using TAXBRA, the customizing settings indicated in this note attachment are not required. In this case, you should stick only to the DDIC objects creation, as well as repository and coding implementation.

Do the customizing only if you´re using TAXBRJ.

        iii.   *Install SAP Note 916003*

Important: only TAXBRA

    c.   Withholding Tax Base definition

The withholding taxes base calculation is flexible. You may choose which taxes should compose the tax base by following the instructions from SAP Note 779617.

Purchase for Resale with PIS and COFINS

 a. Scenario I

 SAP Note 947218

 b. Scenario II

 SAP Note 1063650 and SAP Note 1088901

Nota Fiscal Eletronica

Nota Fiscal Eletronica is not covered in this document. Please refer to central SAP Note 989115 for further information on the solution.

SPED (Sistema Público de Escrituração Digital)

SPED is not covered in this document. Please refer to central SAP Note 1000130 for further information on this solution.

Rounding in SD

Rounding logic in SD is better explained in central SAP Note 791240.

It´s highly recommended reading it, as some rounding scenarios are just now workable. Take special attention to the 'Limitation' section of this note.

Other relevant SAP Notes on this subject are: 904935, 1111697, 1116026 and 1222950.

Other Information Sources

As already outlined in the introduction, this document is a mere quick guide to aid you on going through a Brazilian Localization installation process. Due to that, it is meant not to cover all possible business scenarios existing in a real company. To help you exchange information on subjects not covered here, please consider the following SAP and non-SAP communities, focused in SAP Localization:

SAP Sources **SAP**	Outside Sources
SAP SDN Globalization Room	ASUG Brasil
https://forums.sdn.sap.com/forum.jspa?forumID=254	www.asug.com.br
SAP Wiki	LocalizationForum.com
https://www.sdn.sap.com/irj/sdn/wiki	www.localizationforum.com
SAP Expert Forums	
https://www.sdn.sap.com/irj/sdn/forums	

Related Content

Country Version Installation

Country Information

Country specific add-ons to ECC 5.0

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