The SBO_SP_TransactionNotification Problem

This document explains the problems you can experience due to misconfigurations of the SAP provided Stored Procedure SBO_SP_TransactionNotification

Table of Content

The problem 2
Problem 1: Main window configuration problem 2
Problem 2: Configuration add problem
Problem 3: You get the following error during startup
The solution 4
How to get to the problem
How to determine what the problem is and fix it7
1. Incorrect use of the SBO_SP_TransactionNotification by other add-ons/consultants
2. Incorrect object_type (Normally only an issue if the database have been created prior to SBO2005)
New in 8.8: SBO_SP_PostTransactionNotice
More information



The problem

I receive one of the following 3 errors:

Problem 1: Main window configuration problem

You get the following error during startup:

Error fro	m SAP Business One Addon - B1 Usability Package	x				
Addon:	B1 Usability Package [ID: BOY_USABILITY] [Add-On Version: 3.9.3.0] [SAP Version: Sbo88 (880234)]					
Message:	Could not find the default configuration record. Please restart the add-on to get it generated					
Details:	System Exception: Could not find the default configuration record. Please restart the add-on to get it generated at Config.Controller.ConfigurationController.GetConfiguration() in C:\TFS2010\B1 Usability Package\Main\Source\Code\Modules\Config \Controller.ConfigurationController.ReadySubModules(AddonData addonData, SubModuleCollection subModules) in C:\TFS2010\B1 Usability Package\Main\Source\Code\Modules\Config\Controller.SubModules(AddonData addonData, SubModuleCollection subModules) in C:\TFS2010\B1 Usability Package\Main\Source\Code\Modules\Config\Controller\SubModules\Config\Controller.cs.tine 125 at Config.Module.SetupData() in C:\TFS2010\B1 Usability Package\Main\Source\Code\Modules\Config\Module.cs.tine 350 at SB0.AddonLogic.Addon.SetupData() at SB0.AddonLogic.Addon.Start(AddonData addonData, AddonModules addonModules)					
Source:	Config Method failed: Config.Model.Configuration GetConfiguration() Install No: 0020162055	_				
ОК						
Date: 13-12-2010 13:08:43 Local: US UI: OK DI: OK DB: OEC Computers (TEST_DB) dst_MSSQL2008 User: manager						

Or you are able to show the B1UP main configuration, but unable to check any of the checkboxes



🛞 [Mici

Problem 2: Configuration add problem

When trying to add, update or remove a configuration in B1 Usability Package (Or any other add-on using the technique called Userdefined Object):

Buttons - Config	uration										
Code	FB-021		Us	ers (Empty	= All)						
Formtype	134									Include us	sers O Exclude users
Description	Business Partner N	Master Data									
Formwidth	625		· ·		sizeable forms)						
Formheight Buttonwidth	540				sizeable forms)						
Buttonwidth			(1	notning en	tered: 100 pixel)						
Buttons (Buttons wi	thout name is not s	hown)					Item	Col.	Iden.	Arguments	Universal Function
1: My new but	on	✓ Find	🖌 Add	🗸 ОК	Formatted Search	•					
2:		✓ Find	Add	🗸 ОК	Formatted Search	٣					
3:		✓ Find	Add	🗸 ок	Formatted Search	•					
4:		✓ Find	Add	🗸 ок	Formatted Search	•					
5:		✓ Find	Add	🗸 ок	Formatted Search	٣					
6:		✓ Find	Add	🗸 ок	Formatted Search	•					
7:		✓ Find	Add	🗸 ок	Formatted Search	•					
8:		✓ Find	Add	🗸 ок	Formatted Search	•					
9:		✓ Find	Add	🗸 ок	Formatted Search	•					
10:		✓ Find	Add	🗸 ок	Formatted Search	•					
Active	Cancel										Import Export
											12/13/10

[Microsoft][SQL Native Client][SQL Server]Error converting data type nvarchar to int.(CINF)

Problem 3: You get the following error during startup

ddon:	B1 Usability Package [ID: BOY_USABILITY] [Add-On Version: 3.8.0.0] [SAP Version: Sbo88 (880220)]
lessage:	Could not create default config: -1116 - Could not commit transaction
Details:	System.Exception: Could not create default config: -1116 - Could not commit transaction at SBO.AddonLogic.Control.DatabaseInformationController.CreateDefaultConfig() at SBO.AddonLogic.Addon.SetupData() at SBO.AddonLogic.Addon.Start(AddonData addonData, AddonModules addonModules)

Problem 4: You get the following error during startup

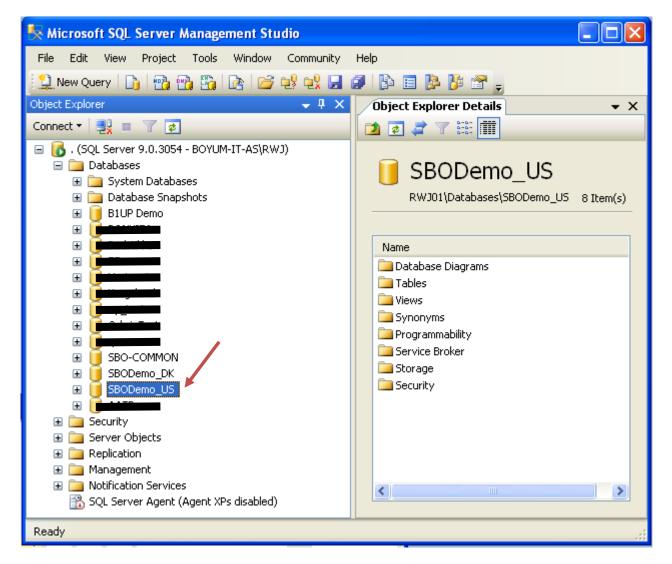
Error	from SAP Business One Addon - B1 Usability Package
Addon:	B1 Usability Package [ID: BOY_USABILITY] [Add-On Version: 5.0.1.0] [SAP Version: Sbo881 (881321)]
Messag	ge: Error creating table: BOY_SBO_PARTNER (-1116 - Could not commit transaction)
Details	SBO.UdtException: Error creating table: BOY_SBO_PARTNER (-1116 - Could not commit transaction) at SBO.DI.Metadata.UserDefinedTables.Add(String tableName, String tableDescription, BoUTBTableType tableType, Boolean& metadataChanges) at SBO.AddonLogic.Addon.SetupTables(Boolean& metadataChanges) at SBO.AddonLogic.Addon.Start(AddonData addonData, AddonModules addonModules)

(The table mentioned in the error might be different, and it can also refer to an issue adding a UDF, KEY or UDO, but since tables are created first in add-ons it is most likely to see the issue with a table)

The solution

How to get to the problem

On your SAP server go to the SQL Server Management Studio



🧏 Microsoft SQL Server Management Studio		
🛄 New Query 🕞 📸 📸 🎇 🖻 📁 👾 🕄 💭 🧊	E	> 🌽 🖀 💂
Object Explorer 🗸 🖓	×	Object Explorer Details 🛛 👻 🗙
Connect 🕶 🖳 🕎 👩		过 🛃 🦨 🍸 🏥 🏢
🖃 间 SBODemo_US		
표 🚞 Database Diagrams		间 dbo.SBO SP T
🕀 🧰 Tables		<u> </u>
🕀 🧰 Views		RWJ01\Databases\ 1 Item(s)
😠 🧰 Synonyms		
Programmability Stored Procedures		News
Sured Procedures System Stored Procedures		Name
Image: Image	=	Parameters
🗉 🌉 dboTmSp_AliasUpdateAfter	-	
🗉 🌉 dboTmSp_AliasUpdateBefore		
표 🛃 dboTmSp_ControlAccountUpgrade_OCRD		
🗉 📴 dboTmSp_ConvertGrpLine_OACT		
🗉 📴 dboTmSp_ExpnsUpdateOnDocs		
🕀 🌄 dboTmSp_FormattedSearchUpdate		
😠 🔄 dboTmSp_MthDate_Update_JDT1		
😠 📑 dboTmSp_RestoreIsCommited_OIBT 🕀 📑 dboTmSp_SetCategoryAtOFPR		
Image: Test and the set of th		
■ abov_msp_setLineNumAtDOC3		
🗉 🥁 dboTmSp_SetLineSeqAtDOC4		
😠 🔄 dboTmSp_SetLineSeqAtPMN5		
표 📑 dboTmSp_SetUniqueDocEntryAtOCRD		
🗉 📴 dboTmSp_ShekelUpdate		
🕀 🔝 dboTmSp_UpdateCreateDateOnOINM		
😠 🔤 dboTmSp_UpdateDoubleName		
⊞ 📑 dboTmSp_VariableUpdate_OUQR ⊞ 📑 dboTmSp_VatSumCalc		
	~	
Ready		

Find the database in question and navigate to the Programmability > Stored Procedures Folder

Find the stored procedure called dbo.SBO_SP_TRansactionNotification; right click it and choose modify.

dbo.SBO_SP_TransactionNotificatio dbo.TmSp_AddSqlUser	New Stored Procedure	
	RAL diff.	
dbo.TmSp_ChooseCIN4Correction	Modify	
dbo.TmSp_ChooseINV4Correction	Execute Stored Procedure	
🛛 📴 dbo.TmSp_ConGrpLine_OACT_recu		
🛃 dbo.TmSp_ConvertGrpLine_OACT	Script Stored Procedure as	
🔄 dbo.TmSp_DragOn	View Dependencies	
🔄 dbo.TmSp_DragOnPk		
dbo.TmSp_FifoGetINM_Records	Reports •	1
	-	-1
	Rename	



This will open up the code to the stored procedure that holds the problem. The following screenshot show the code without any modifications .

```
(local).5B0Dem... SQLQuery2.sql Object Explorer Details
 USE [SBODemo_US]
 GO
 /****** Object: StoredProcedure [dbo].[SBO_SP_TransactionNotification] Script Date:
 SET ANSI_NULLS ON
 GO
 SET QUOTED_IDENTIFIER ON
 GO
 ALTER proc [dbo].[SBO_SP_TransactionNotification]
 @object_type nvarchar(20),
                                      -- SBO Object Type
 @transaction_type nchar(1), -- [A]dd, [U]pdate, [D]elete, [C]ancel, C[L]ose
 @num_of_cols_in_key int,
 @list_of_key_cols_tab_del nvarchar(255),
 @list_of_cols_val_tab_del nvarchar(255)
 AS
 begin
 -- Return values
 declare @error int -- Result (O for no error)
 declare @error message nvarchar (200) -- Error string to be displayed
 select @error = 0
 select @error message = N'Ok'
 _____
                            _____
 -- ADD YOUR CODE HERE
 _____
 -- Select the return values
 select @error, @error message
 end
```

NB: As this is a legal stored procedure to modify there might be something in the ADD YOUR CODE HERE Section depending on the other add-ons you are running.

How to determine what the problem is and fix it

There can be one of two problems wrong with the code (or in some cases both)

NB: BOYUM IT A/S CANNOT TAKE ANY RESPONSIBILITY IN THE CHANGES YOU MAKE IN THE SBO_SP_TRANSACTIONNOTIFICATION SINCE EACH CASE IS UNIQUE, AND YOU SHOULD ALWAYS MAKE A BACKUP OF THE ORIGINAL BEFORE PROCEEDING.

1. Incorrect use of the SBO_SP_TransactionNotification by other add-ons/consultants

This can only happen in the case where you find code in the ADD YOU CODE HERE section. Some add-ons add code here to implement their features and also some consultants use it for custom modification.

IF YOU KNOW WHO ARE RESPONSIBLE FOR THE CUSTOM CODE, YOU SHOULD CONTACT THEM AND CONFRONT THEM WITH THE ISSUE. ELSE YOU CAN SAVE AND SEND A COPY OF YOUR CODE OR TAKE A SCREENSHOT TO BOYUM IT SUPPOT AT support@boyum-it.com and we will take a look at it and advice you on the misconfiguration.

Sample 1: The problem

This is a sample of a SBO_SP_transactionNotification that have been modified incorrectly by a consultant that incorrectly misunderstood the type of the @object_type variable.

```
SET ANSI NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
ALTER proc [dbo].[SBO SP TransactionNotification]
@object type nvarchar(20), -- SBO Object Type
@transaction type nchar(1),
                                   -- [A]dd, [U]pdate, [D]elete, [C]ancel, C[L]ose
@num_of_cols_in_key int,
@list of key cols tab del nvarchar(255),
@list of cols val tab del nvarchar(255)
AS
begin
-- Return values
declare @error int
                              -- Result (0 for no error)
declare @error message nvarchar (200) -- Error string to be displayed
select @error = 0
select @error message = N'Ok'
IF(@object_type = 13)
                                                        Issue
BEGIN
    --Do stuff on A/R Invoice
END
IF(@object_type = 17)
                                                        Issue
BEGIN
    --Do stuff on Sales Order
END
-- Select the return values
select @error, @error message
end
```

As you can see, there have been added a few SQL-IF's that check if the @object_type is of type A/R Invoice ('13') or if the object_type is a sales order ('17'), but the consultant expected that all values of @object_type was numeric (a number), but it is not for Userdefined Objects and User-defiend tables (Indicated by the fact that object_type is of type nvarchar(20) and not INT.



Sample 1: How to fix it

The problem here is that @object_type is assumed numeric and not alphanumeric. 13 and 17 are inserted as numeric values and therefore a conversion will take place every time the line is executed. This automatic conversion will work for types like A/R invoice (which @object_type is '13') but for custom object_types like B1UP - Function Buttons (which @object_type is 'BOY_BUTTONS') this conversion will fail.

The fix how-ever is quite easy. All you need to do is assure that all checks are done on an alphanumeric level.

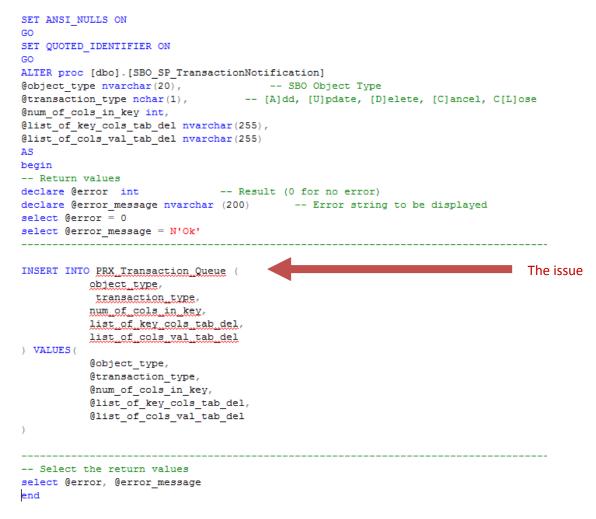
Correct	Incorrect
<pre>IF(@object_type = '13') BEGIN Do stuff on A/R Invoice END</pre>	<pre>IF(@object_type = 13) BEGIN Do stuff on A/R Invoice END</pre>
<pre>IF(@object_type = '17') BEGIN Do stuff on Sales Order END</pre>	IF(@object_type = 17) BEGIN Do stuff on Sales Order END
All we do is add ' ' around the values	

If you find it hard to find all instances in a very long modification you can alternative do the following

```
Incorrect
                 Correct
               _ _ _ _ _ _ _ _ _ _ _ .
 IF(ISNUMERIC(@object type) = 1)
 BEGIN
     IF(@object_type = 13)
                                              IF(@object type = 13)
     BEGIN
                                              BEGIN
          --Do stuff on A/R Invoice
                                                   --Do stuff on A/R Invoice
     END
                                              END
     IF(@object_type = 17)
                                              IF(@object_type = 17)
     BEGIN
                                              BEGIN
                                                   --Do stuff on Sales Order
          --Do stuff on Sales Order
     END
                                              END
               _____
 END
   Here we surround the 'Incorrect' code to only run if
      the object_type in fact is numeric
```

Sample 2: The problem

This is a sample of a SBO_SP_transactionNotification that have been modified incorrectly by another addon (In this case a Praxis Add-on).



As you can see, there have been added an extra INSERT SQL statement and that is the issue since it is not able to accept the data given to it.



Sample 2: How to fix it

Since the INSERT SQL here was not expecting alphanumeric we need to make sure that it is only executed when the @object_type is numeric.

Const	
Correct	Incorrect
,	
<pre>IF(ISNUMERIC(@object_type) = 1)</pre>	
BEGIN	
INSERT INTO PRX_Transaction_Queue (INSERT INTO PRX_Transaction_Queue (
object_type,	object_type,
transaction_type,	transaction type,
num_of_cols_in_key,	num of cols in key,
list_of_key_cols_tab_del,	list of key cols tab del,
list_of_cols_val_tab_del	list of cols val tab del
) VALUES () VALUES (
<pre>@object_type,</pre>	<pre>@object_type,</pre>
<pre>@transaction_type,</pre>	<pre>@transaction_type,</pre>
<pre>@num_of_cols_in_key,</pre>	@num of cols in key,
@list_of_key_cols_tab_del,	@list of key cols tab del,
@list of cols val tab del	@list of cols val tab del
))
END	
Here we surround the 'Incorrect' code to only run if	
the object_type in fact is numeric	

Sample 3: The Problem

If there in the incorrect reference to non-existing database object in the code this can cause issue as well.

-- ADD YOUR CODE HERE SELECT * FROM SOME TABLE THAT DOES NOT EXIST

Here there are code that refer to a table that does not exist (Perhaps it existed at some point but was later removed but this modification referring to it was left there). In such a case no objects can be added at all in the SAP database and this code should be removed in 99% of the cases.

In very rare case this have been added as an add-on is about to make the tables but due to a change in SBO8.81 this modification can also affect the creation of the tables as the action of creating a table now

also is sent through the SBO_SP_TransactionNotification and you end you with Problem 3 failing to create the user table/field/key/udo.

Sample 3: The Fix

In such a case the ISNUMERIC(@object_Type) trick is not enough as UDT/UDF/UDK/UDO have objecttypes '153', '152', '193' and '206' that are all numeric and also records are added to these tables (using @object_type '137'). For that reason you need to something like this if you can't remove the missing object reference.

```
-- ADD YOUR CODE HERE

IF((ISNUMERIC(@object_type) = 1 AND @object_type NOT IN ('153', '152', '193', '206', '137')))

BEGIN

SELECT * FROM SOME_TABLE_THAT_DOES_NOT_EXIST

END
```

2. Incorrect object_type (Normally only an issue if the database have been created prior to SB02005)

Please find the following line of code

@object_type nvarchar(20), -- SBO Object Type

And make sure that the type is "nvarchar(20)"... if there instead of "nvarchar(20)" shows "int" you have found the problem.

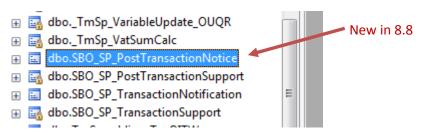
Correct	Incorrect
<pre>@object_type nvarchar(20),</pre>	<pre>@object_type int,</pre>
<pre>@transaction_type nchar(1),</pre>	<pre>@transaction_type nchar(1),</pre>
@num of cols in key int,	@num of cols in key int,
@list of key cols tab del nvarchar(255),	<pre>@list of key cols tab del nvarchar(255),</pre>
@list of cols val tab del nvarchar(255)	@list of cols val tab del nvarchar(255)

To fix the problem simply replace the "int" with "nvarchar(20)" and

• Press F5 or the execute button to apply the change.

New in 8.8: SBO_SP_PostTransactionNotice

Prior to SAP Business One 8.8 it only place you were allowed to add SQL was the SBO_SP_TransactionNotification. In SBO 8.8 and higher SAP now also have a variant of the "SBO_SP_TransactionNotification" called "SBO_SP_PostTransactionNotice"



This stored procedure run after the normal "SBO_SP_TransactionNotification", but other than that they both have the same structure and can both hold the issue. If you have the issues mentioned in this document and that trying the above fixes you still have issue, you should check the "SBO_SP_PostTransactionNotice" for the same flaws using the same methods.

More information

If you like to know more, please check out the following SAP notes describing the problem on <u>http://service.sap.com/notes</u>:

- Note number: 967470
- Note number: 1070297
- Note number: 841475

Detailed information about the SBO_SP_Transaction Notification can be found at: (https://www.sdn.sap.com/irj/servlet/prt/portal/prtroot/docs/library/uuid/e991e2b9-0901-0010-0395ef5268b00aaf)