

Testing Function Modules Using CATT Scripts

Applies to:

SAP R/3 System.

CATT (Computer Aided Test Tool) is delivered as an integral component of the ABAP/4 Workbench since R/3 release 3.0. It contains all functions required for creating, running, maintaining and logging test procedures.

Summary

CATT is integrated into the R/3 infrastructure and provides a user-friendly recording facility. It has an expert in which complex test scenarios can be created. The CATT concept minimizes test creation resource requirements. It also performs authorization checks. CATT logs test results and stores the logs centrally in the database. CATT can include external test procedures.

In this article we will see how we can test the function modules and check the logs.

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Author Bio

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Procedure

We can call function modules which get values from various application areas for further processing in the test procedure using the function FUN <function module name>. We can check database entries, set table, delete data. etc, in a test procedure or module using a CATT function. The call of function modules in FUN commands are generated dynamically at runtime.

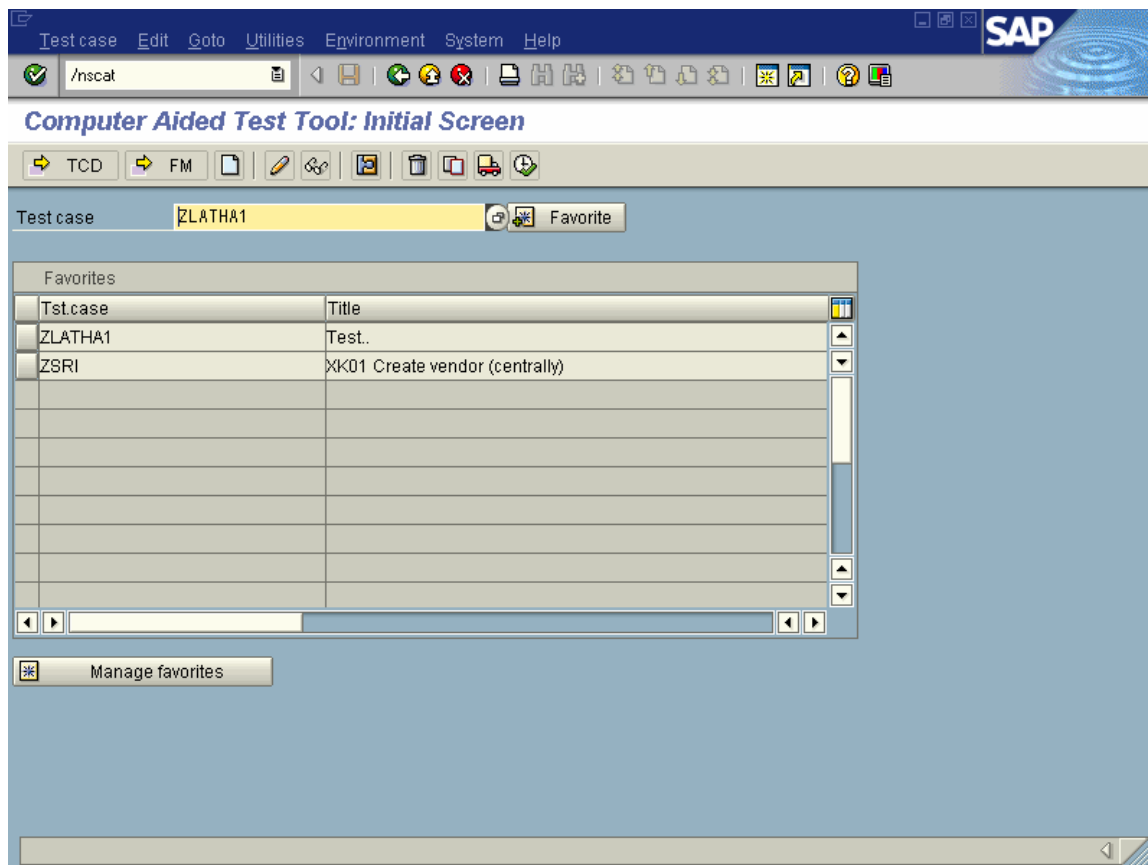
Steps to Create CATT Scripts for Function Modules

Create Test case for function module

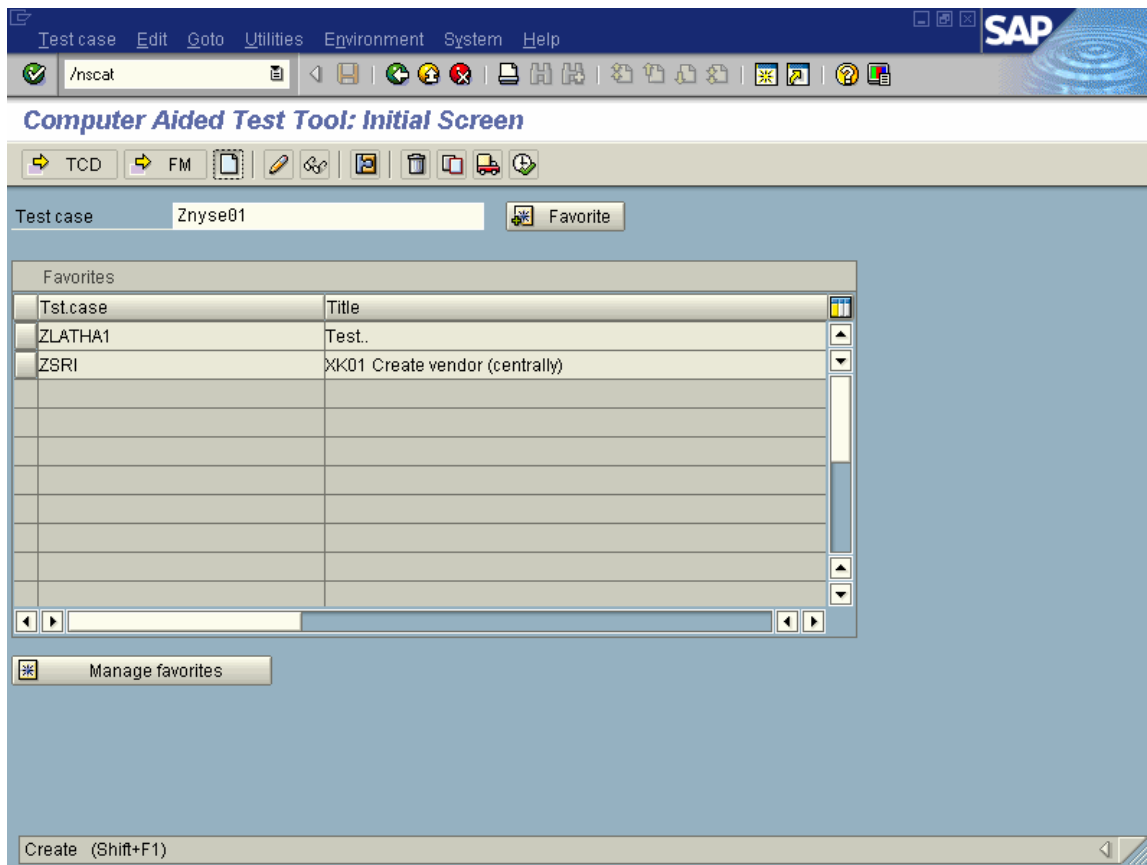
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- Checking Error logs

Create Test case for function module

1. Go to Transaction SCAT



2. Name the Test Case and Press CREATE.



3. Give a TITLE and COMPONENT (Could be CA). And Click on FUNCTIONS (F6).
Save the Test Case as a Local Object

Test case attributes: Change test case ZNYSE01

Test case: ZNYSE01 Testing CATT for Function Modules

Management data General data Restrictions **CATT-specific**

Header data

Test case: ZNYSE01
 Title: Testing CATT for Function Modules
 Type: CATT

Responsibility

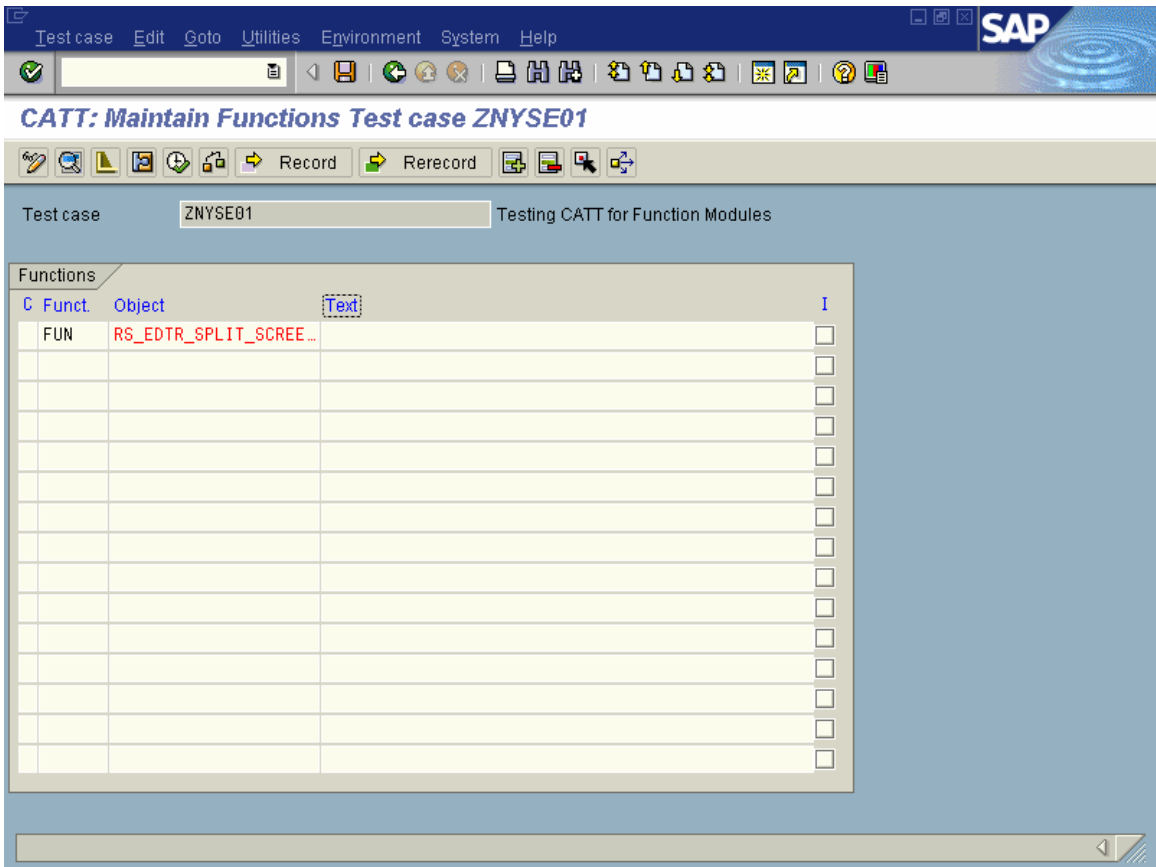
Name: ADCHPK1 Type: ☐

Development information

Development class:
 Component: CA Cross-Application Components
 Status: Active
 Release: Not released

Functions (F6)

4. Maintain Functions Screen: 1. Enter "FUN" under Functions and under OBJECT, enter the name of the Function Module you wish to test. And DOUBLE CLICK on the Function Module name.



5. Here is where you enter the value for each of the IMPORT, EXPORT and TABLES parameter.

Test case Edit Goto Utilities Environment System Help

CATT: Details for Function FUN Test case ZNYSE01

Previous page Next page

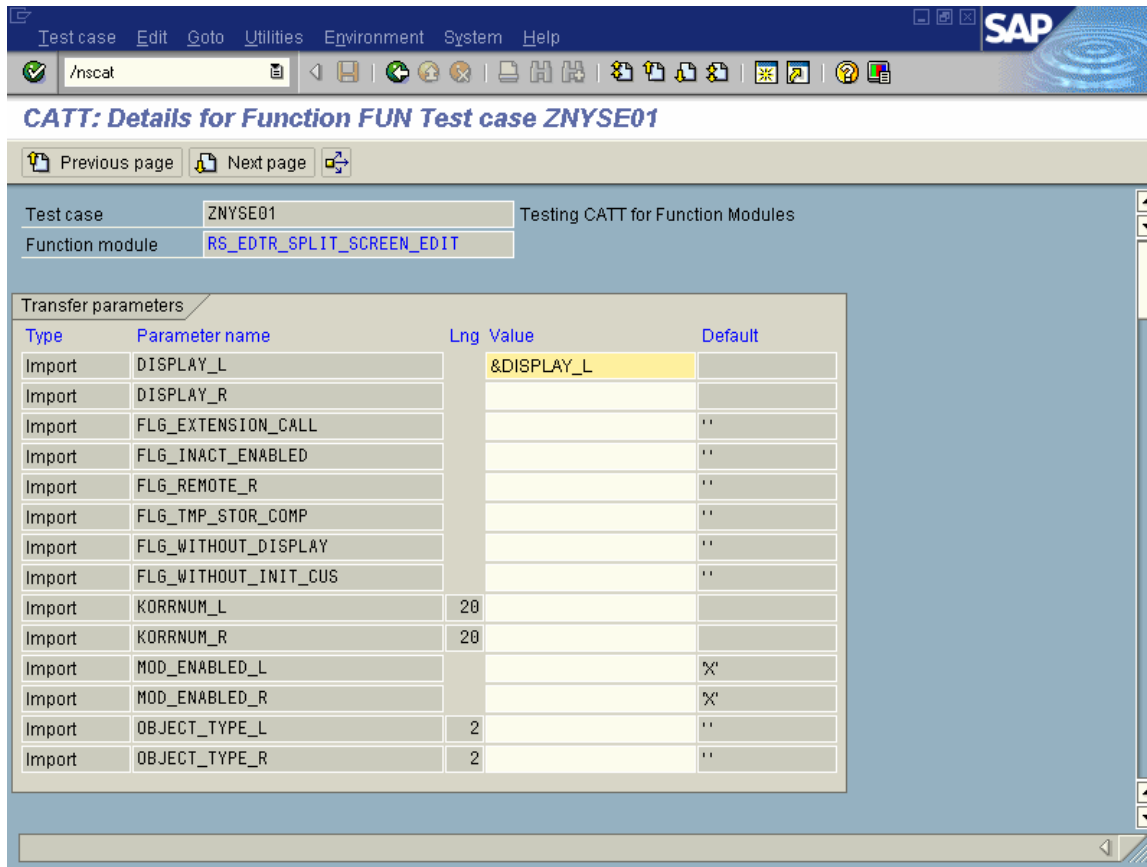
Test case: ZNYSE01 Testing CATT for Function Modules

Function module: RS_EDTR_SPLIT_SCREEN_EDIT

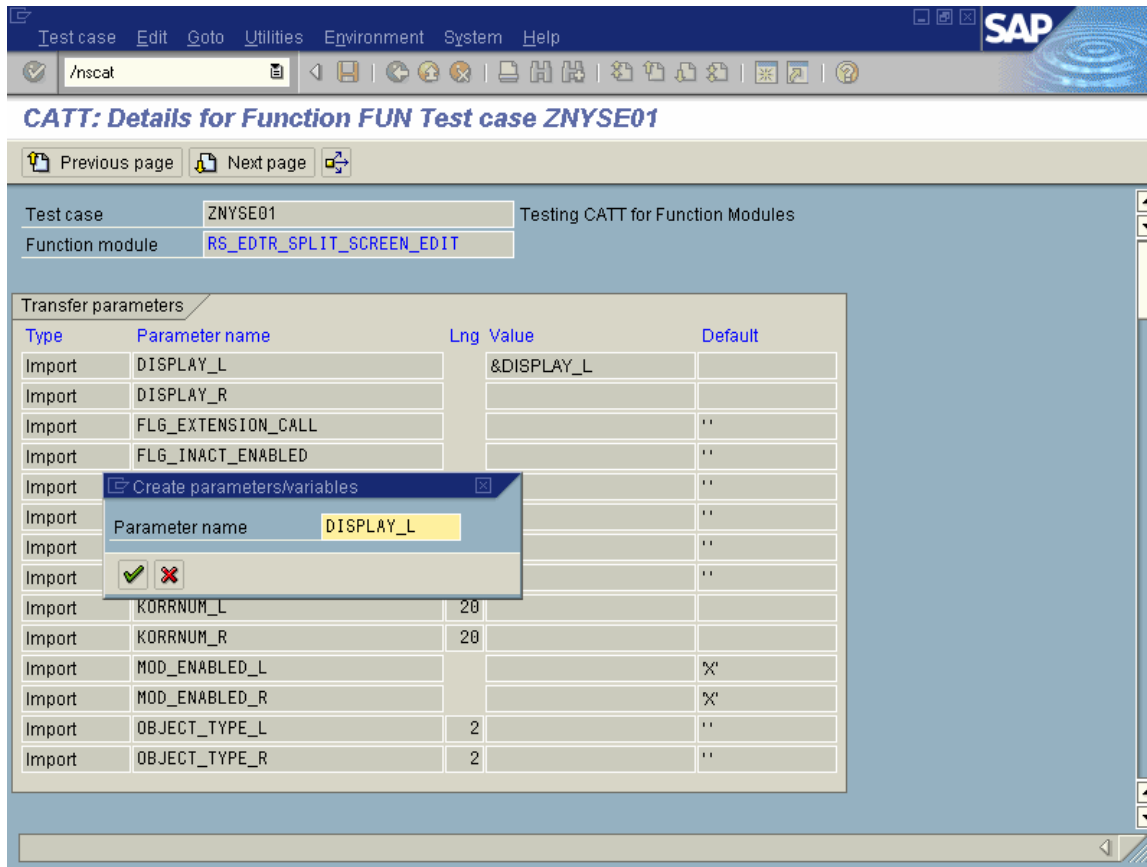
Transfer parameters

Type	Parameter name	Lng	Value	Default
Import	DISPLAY_L			
Import	DISPLAY_R			
Import	FLG_EXTENSION_CALL			''
Import	FLG_INACT_ENABLED			''
Import	FLG_REMOTE_R			''
Import	FLG_TMP_STOR_COMP			''
Import	FLG_WITHOUT_DISPLAY			''
Import	FLG_WITHOUT_INIT_CUS			''
Import	KORRNUM_L	20		
Import	KORRNUM_R	20		
Import	MOD_ENABLED_L			'X'
Import	MOD_ENABLED_R			'X'
Import	OBJECT_TYPE_L	2		''
Import	OBJECT_TYPE_R	2		''

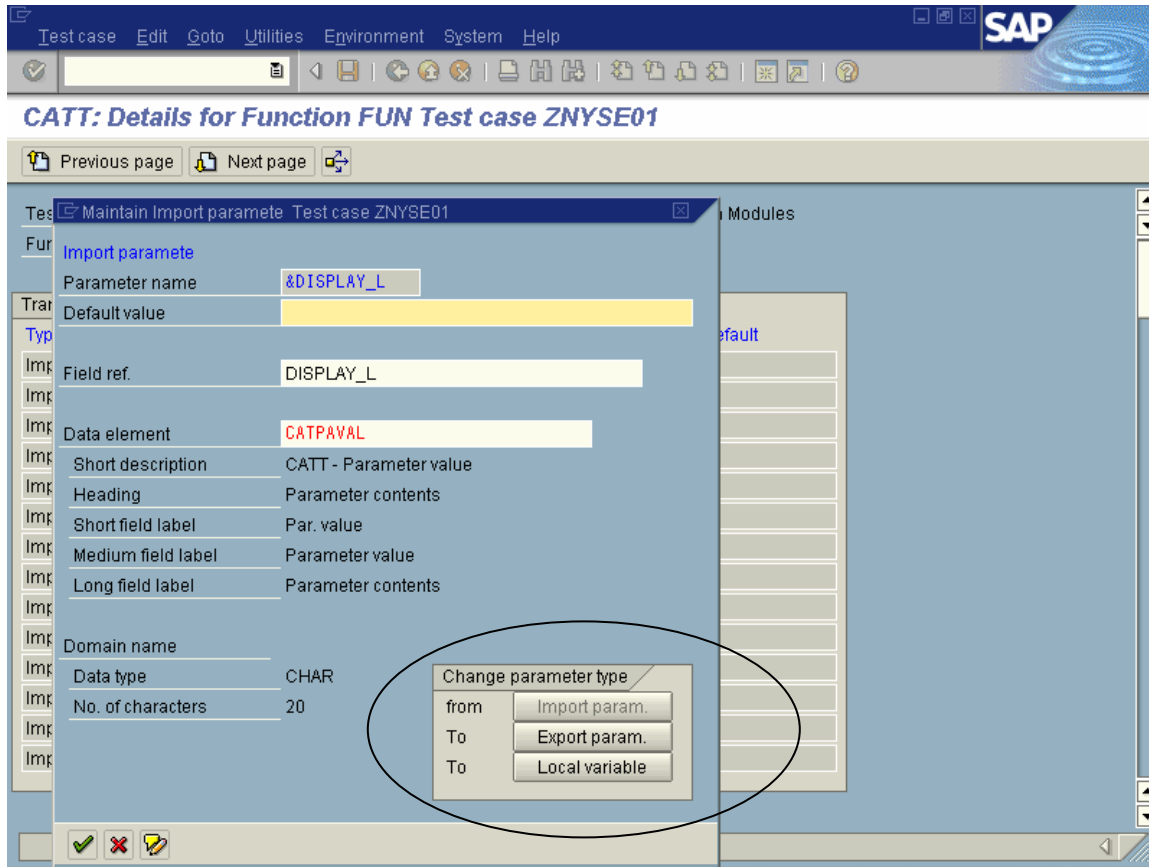
6. Enter a name in the VALUE field, which should be preceded by &. And Double Click on it.



7. Press ENTER on this pop-up.



8. On this screen you can choose to give it a Default Value or leave it as it is. This procedure will continue for all Fields that needs to be populated in the Function Module. All these fields are actually listed in STEP 6. Give them all a Name, preceded by &, and Double Click on them and give a Default Value or leave it as it is. But make sure to SELECT if it is a IMPORT PARAMETER or EXPORT PARAMETER. This decides the Values that be returned from the Function Module.



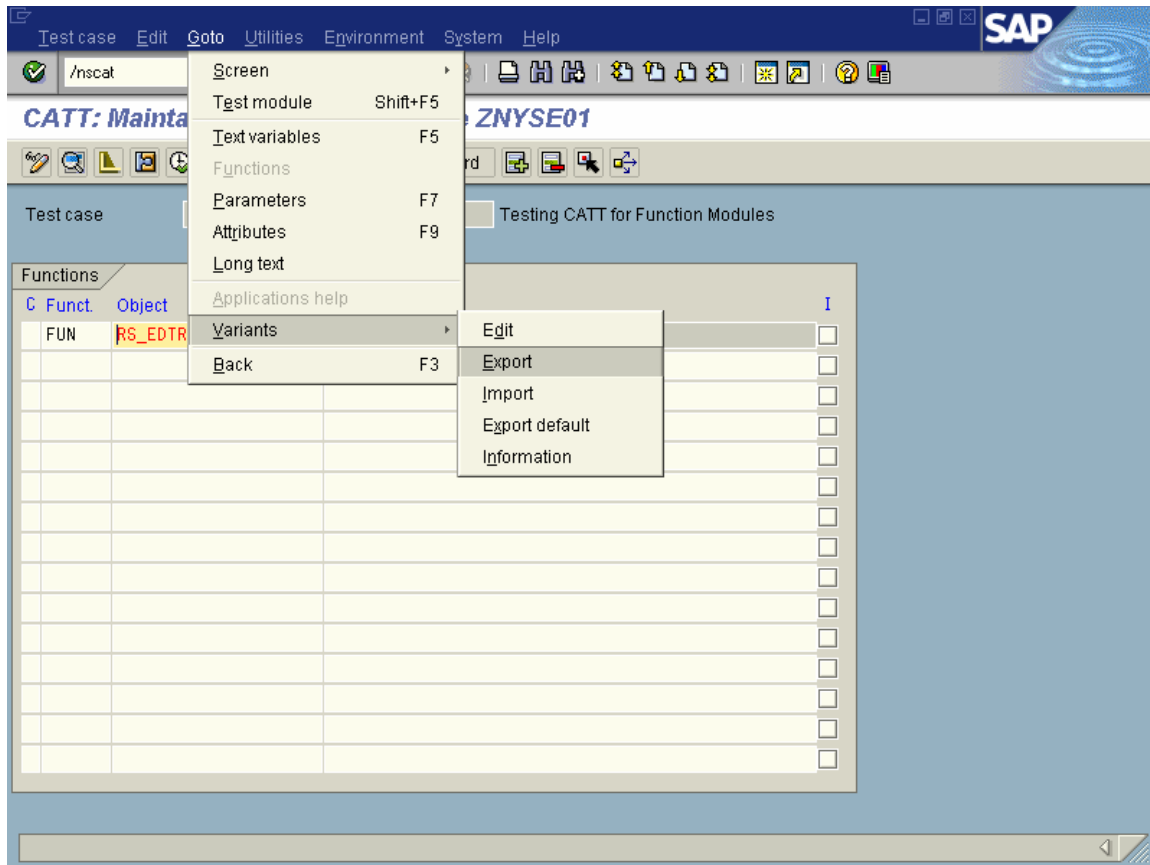
9. These are the fields that are populated :

The screenshot shows the SAP CATT interface for a function module test case. The title bar indicates the test case is 'ZNYSE01' and the function module is 'RS_EDTR_SPLIT_SCREEN_EDIT'. The 'Transfer parameters' section is expanded, showing a table of parameters.

Type	Parameter name	Lng	Value	Default
Import	TRDIR_WA_R-IDATE	8		
Import	TRDIR_WA_R-ITIME	6		
Import	TRDIR_WA_R-LDBNAME	20		
Import	TRDIR_WA_R-UCCHECK	1		
Export	COMPARE_RESULT			
Table	LINEINDEX_L-LINE	72	&LINEINDEXL	
Table	LINEINDEX_R-LINE	72	&LINEINDEXR	
Table	SOURCE_L-LINE	72	&SOURCE_L	
Table	SOURCE_R-LINE	72	&SOURCE_R	
Exception	04 PARAMETER_INVALID			

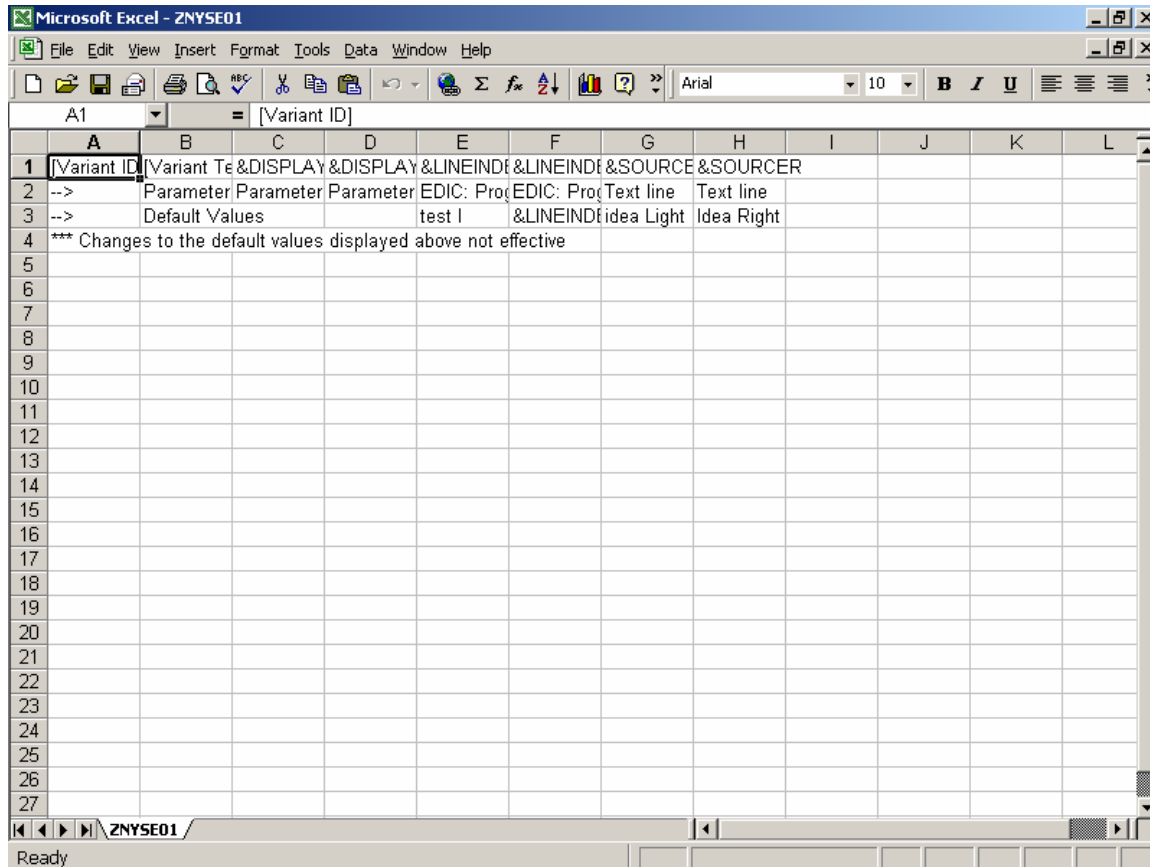
Download the source file template

10. Go back to the MAINTAIN FUNCTIONS TEST CASE screen and SAVE the Test case. Then GOTO → VARIANTS → EXPORT. Select a File and path where you would like the File to be downloaded. And TRANSFER.



11. Open this file from its location in EXCEL.

This is how it would look :



You can delete the column 4. Column 1 holds the name for each field that you have given in STEP 6&7. As mentioned in Column 4, any changes to default values for this test case in the Excel sheet will have no effect.

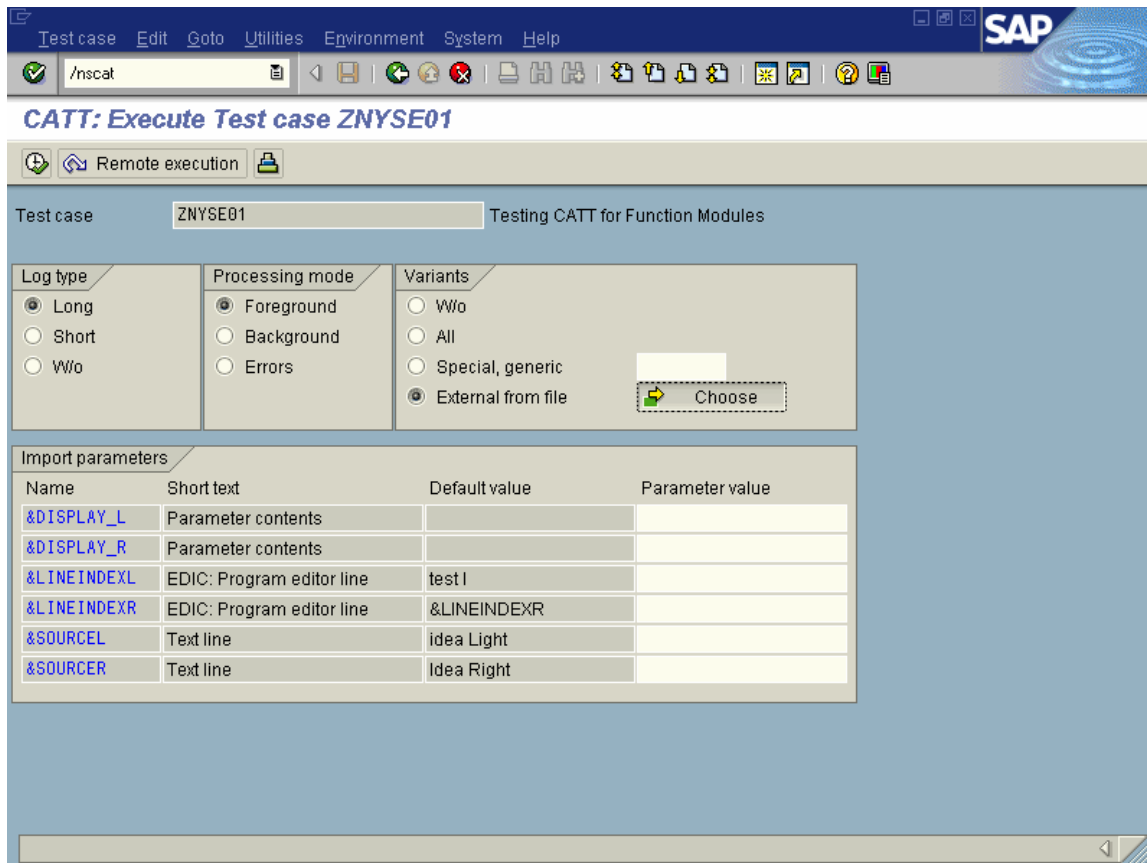
12. Now you can enter multiple test cases on this spreadsheet, as shown in the highlighted section

	B	C	D	E	F	G	H
1	[Variant Text]	&L	&R	&LINE	&LINELEFT	&LINERIGHT	
2	Parameter texts	Parameter contents	Parameter contents	EDIC: Program editor line	Text line	Text line	
3	Default Values	X	X	JUNK	Line 1	Line 1	
4		X	X	TEST	Line 2	Line 2	
5		X	X	TEST	Line 3	Line 4	
6							
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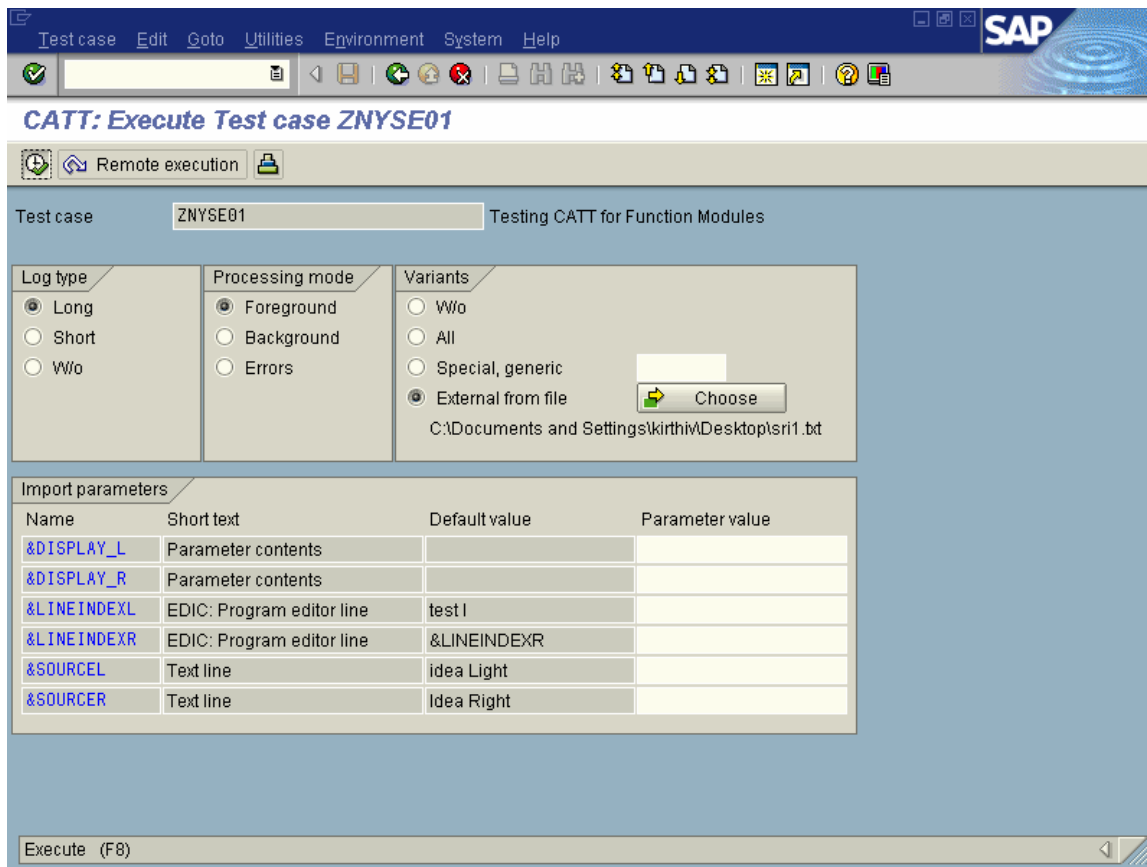
For each of values, in this case JUNK, TEST and TEST, CATT will run that many times. SAVE this file with all the values for which you would like to test the Function Module. Now Using this file we would RUN the Test Case.

Upload the data from source file

- Now EXECUTE the Test Case. And Choose the Radio Button “EXTERNAL FROM FILE” and Click “CHOOSE”, to select the File in which you have Saved with all the values.

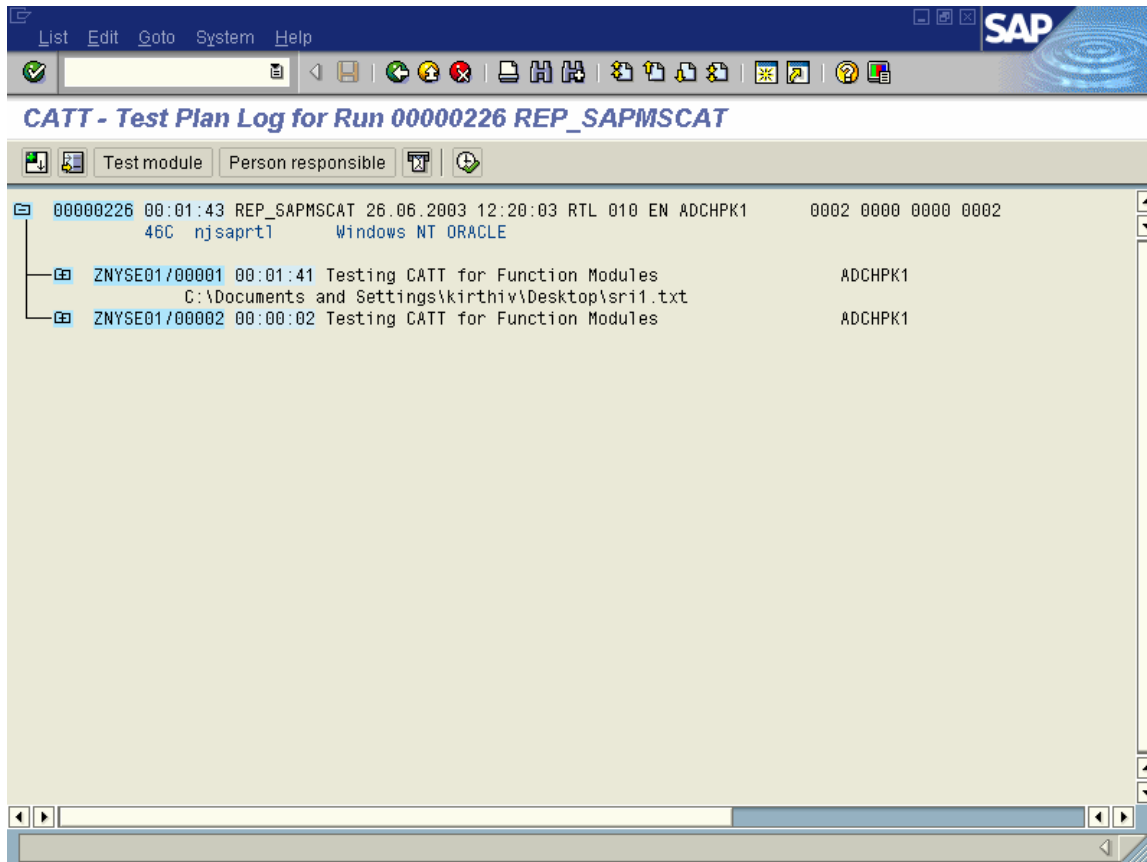


14. After the File Path and Name appears under the CHOOSE button, Click on Execute. Make sure the EXCEL Sheet has been closed when you EXECUTE. You would see the Uploading Message in the Status Bar at the bottom.



Checking Error logs

The Test Case would get executed for each and every Test Case in the File. After the Completion of which you can see the Status in LOG:



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