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.

Author(s): Srilatha Thirukkovalluri

Company: Intelligroup Asia Pvt Ltd.

Created on: 06 March 2007

Author Bio

Srilatha Thirukkovalluri has around 6 years of experience in ABAP/4 programming techniques using quality-driven methodologies. She is an XI-certified consultant and has expertise in SAP NetWeaver Exchange Infrastructure and Business Server Pages. Currently she is working with Intelligroup Asia Pvt Ltd. as Senior Systems Analyst.

.

Table of Contents

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.

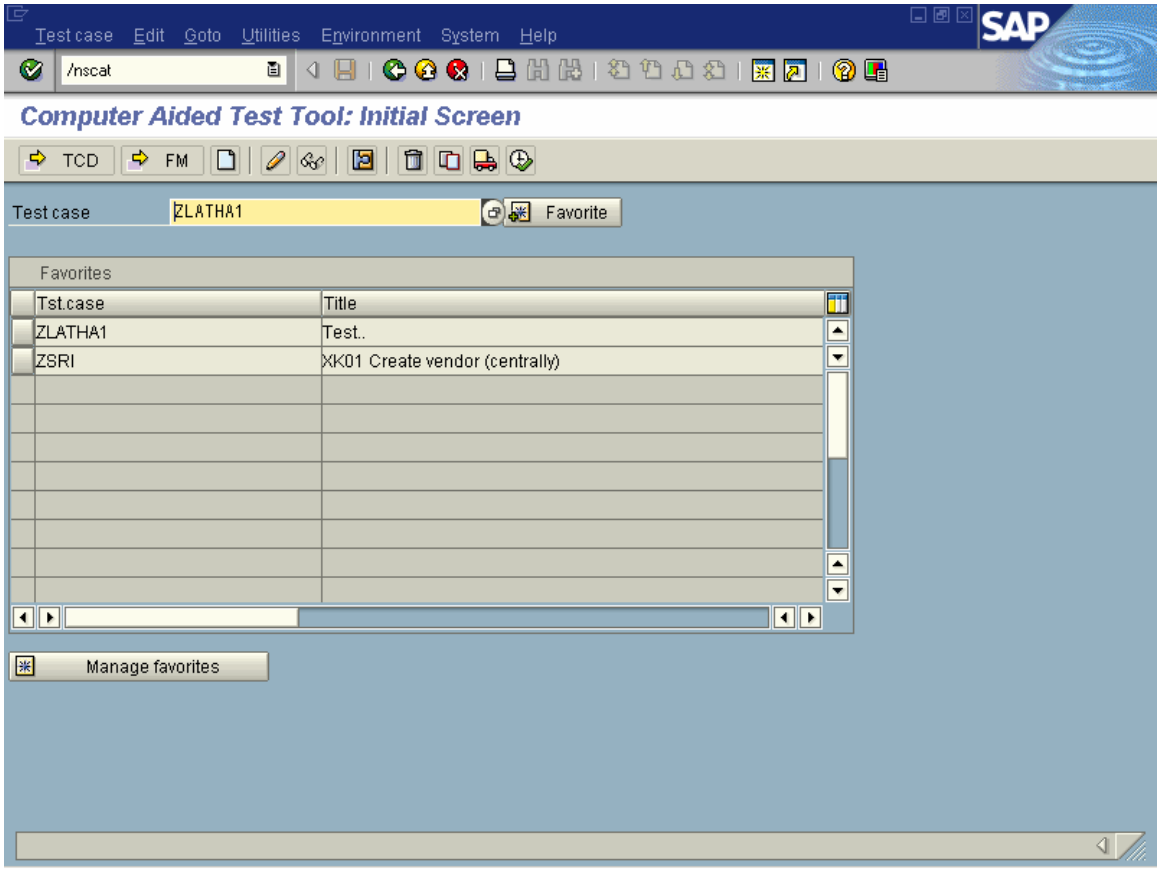
Steps to Create CATT Scripts for Function Modules

Create Test case for function module

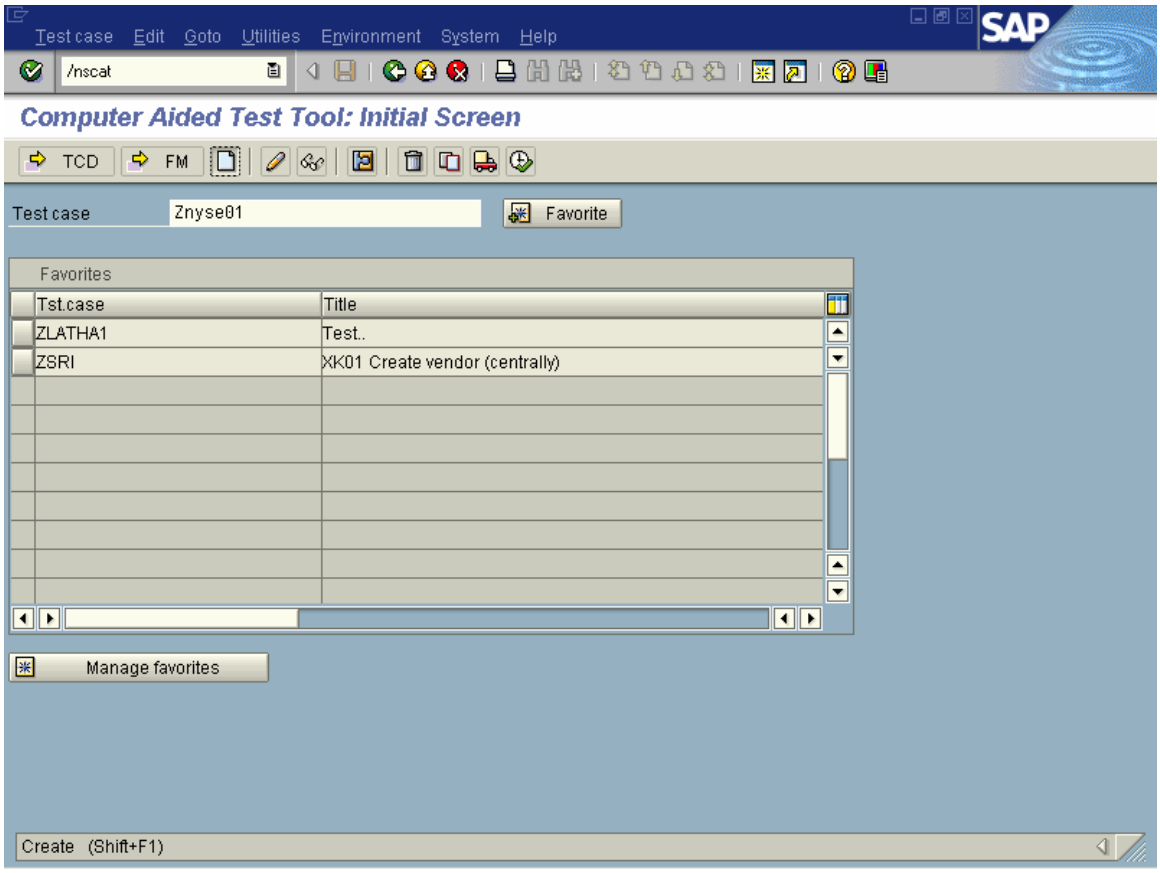
- Download the source file template
- Upload the data from source file
- Checking Error logs

Create Test case for function module

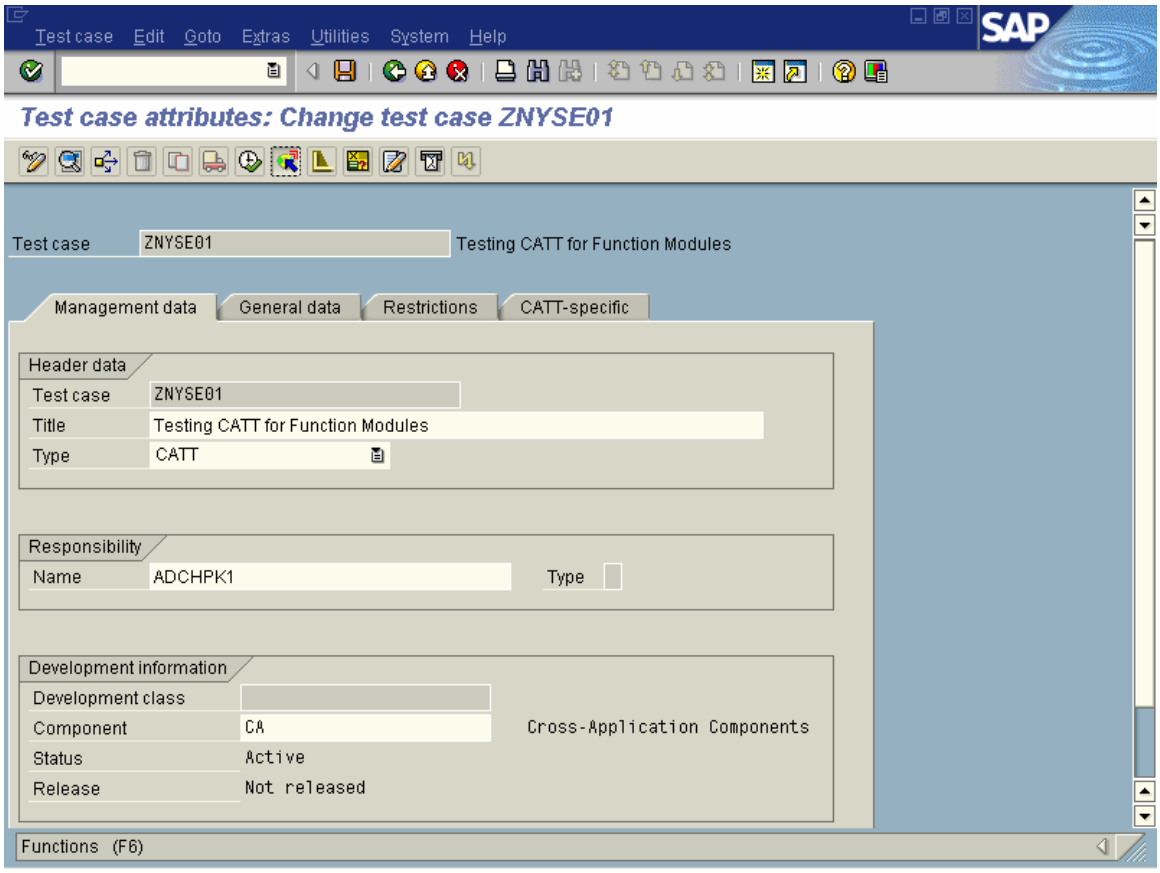
1. Go to Transaction SCAT



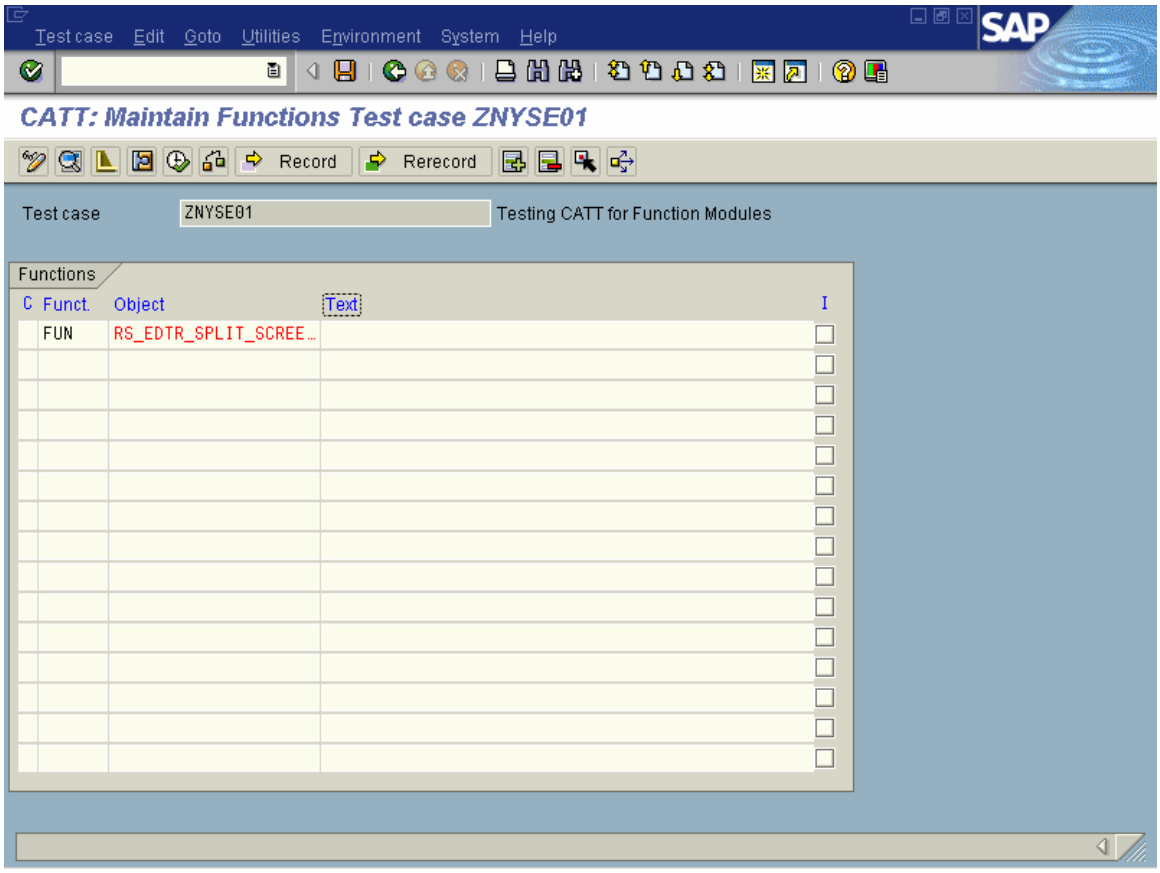
2. Name the Test Case and Press CREATE.



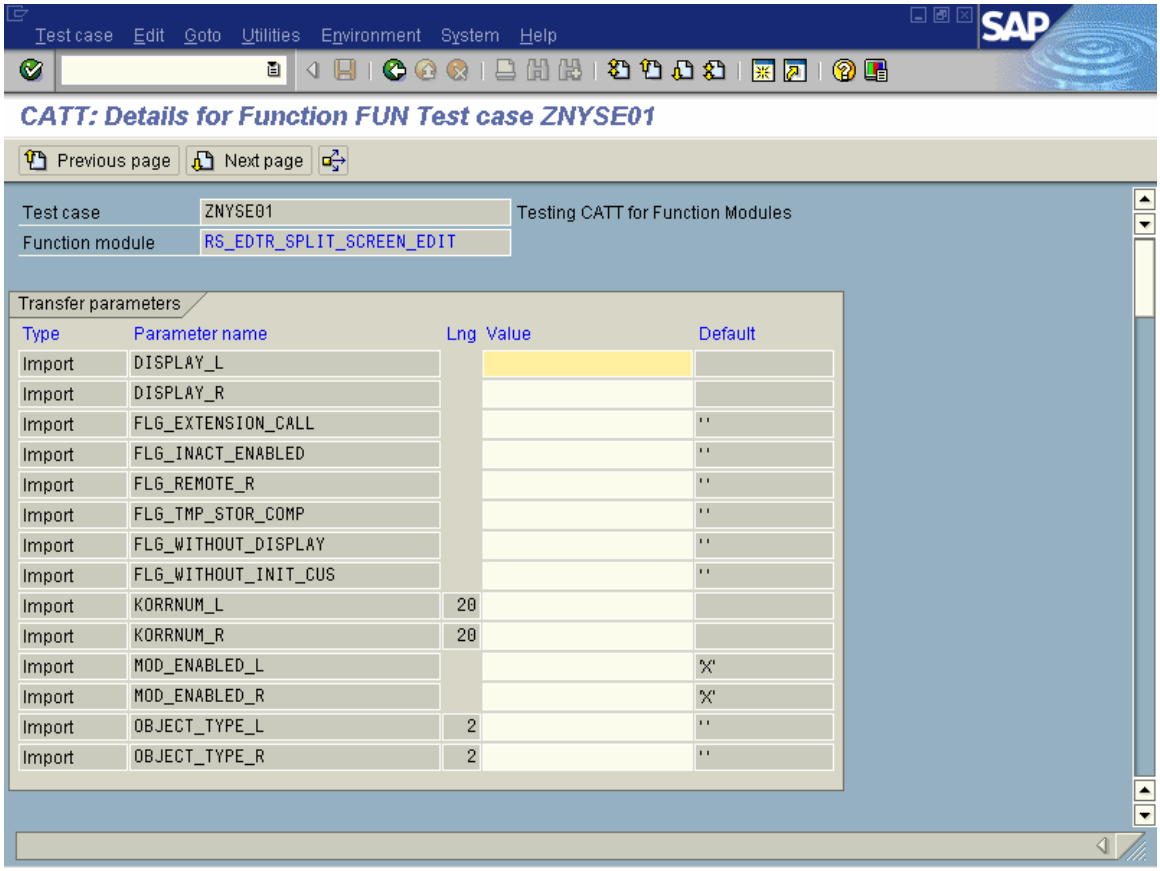
3. Give a TITLE and COMPONENT (Could be CA). And Click on FUNCTIONS (F6). Save the Test Case as a Local Object



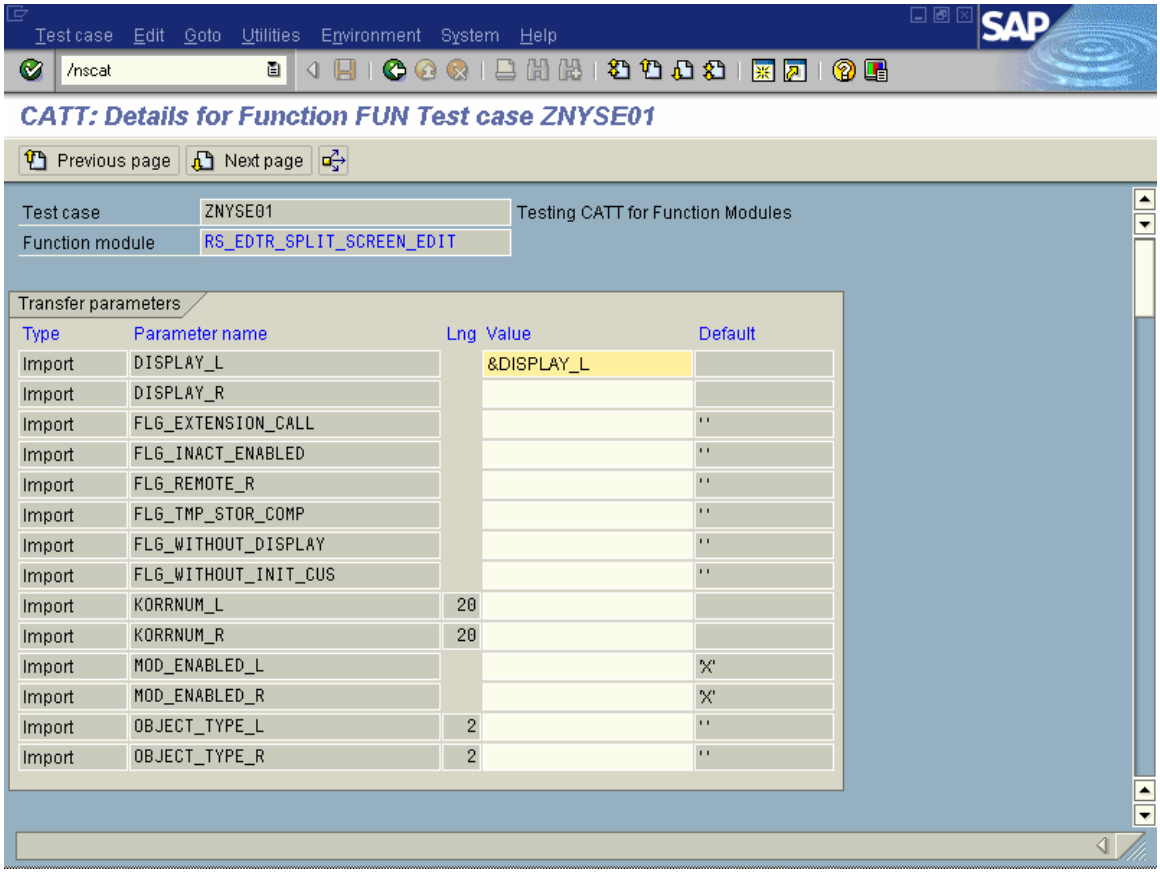
4. Maintain Functions Screen: 1. Enter “FUN” under Functions and under OBJECT, enter the name of the Function Module you wish to test. And DOUBLE CLICK on the Function Module name.


Test case Edit Goto Utilities Environment System Help
SAP
CATT: Maintain Functions Test case ZNYSE01
Record
Rerecord
Test case
ZNYSE01
Testing CATT for Function Modules
Functions
C Funct. Object Text I
FUN RS_EDTR_SPLIT_SCREE...

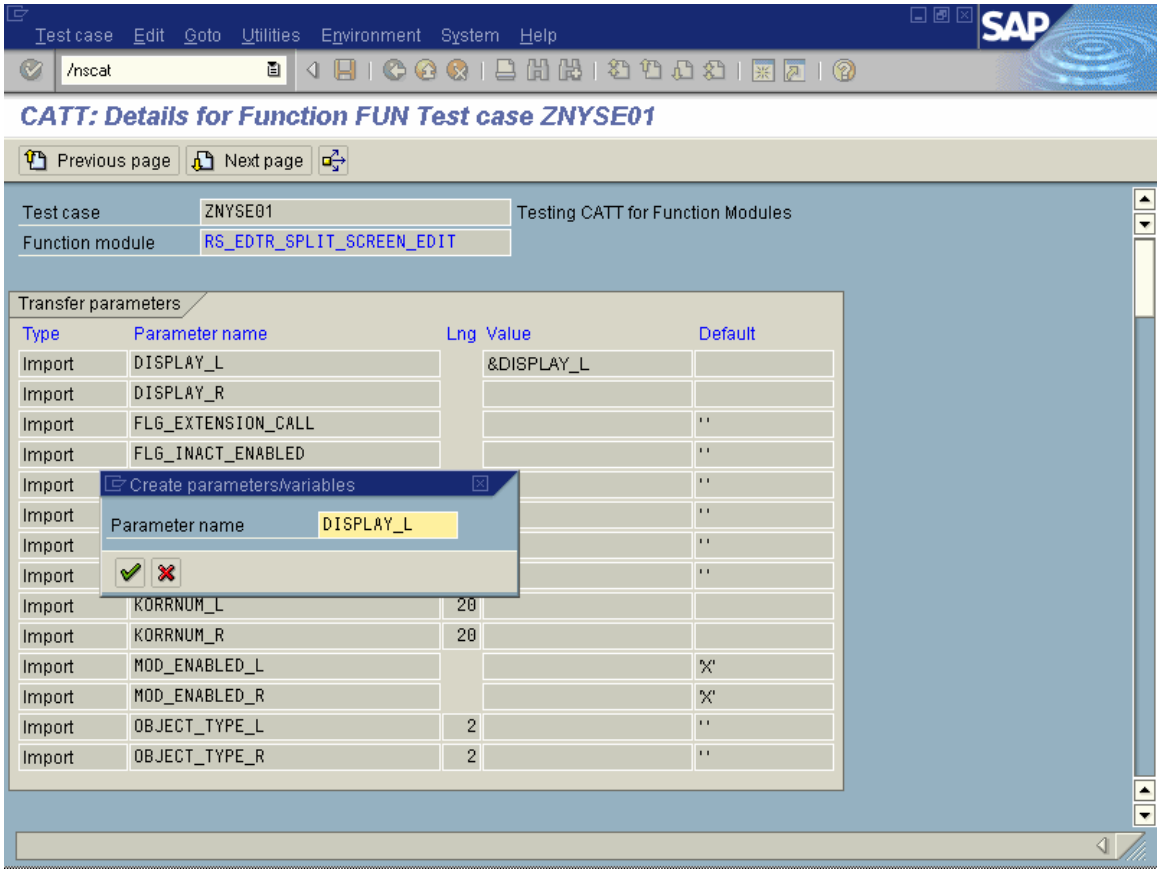
5. Here is where you enter the value for each of the IMPORT, EXPORT and TABLES parameter.



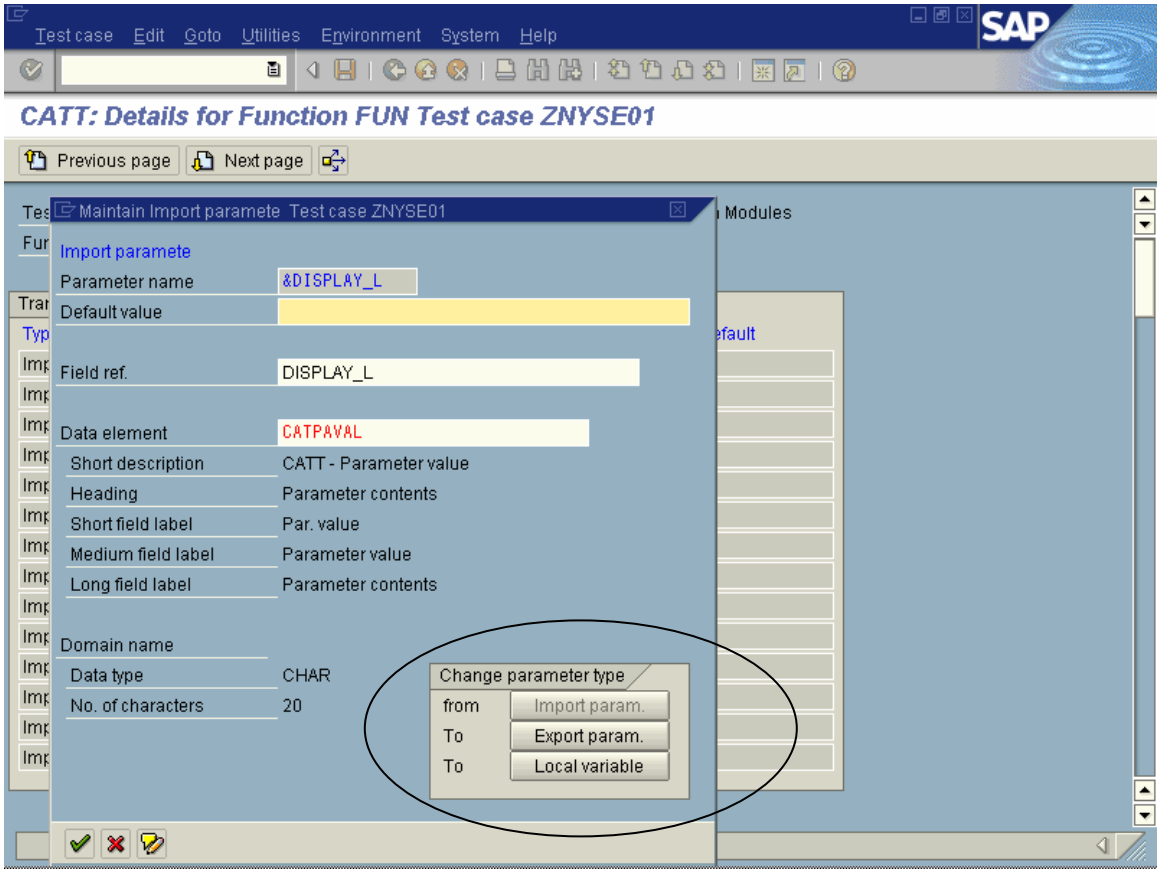
6. Enter a name in the VALUE field, which should be preceded by &. And Double Click on it.



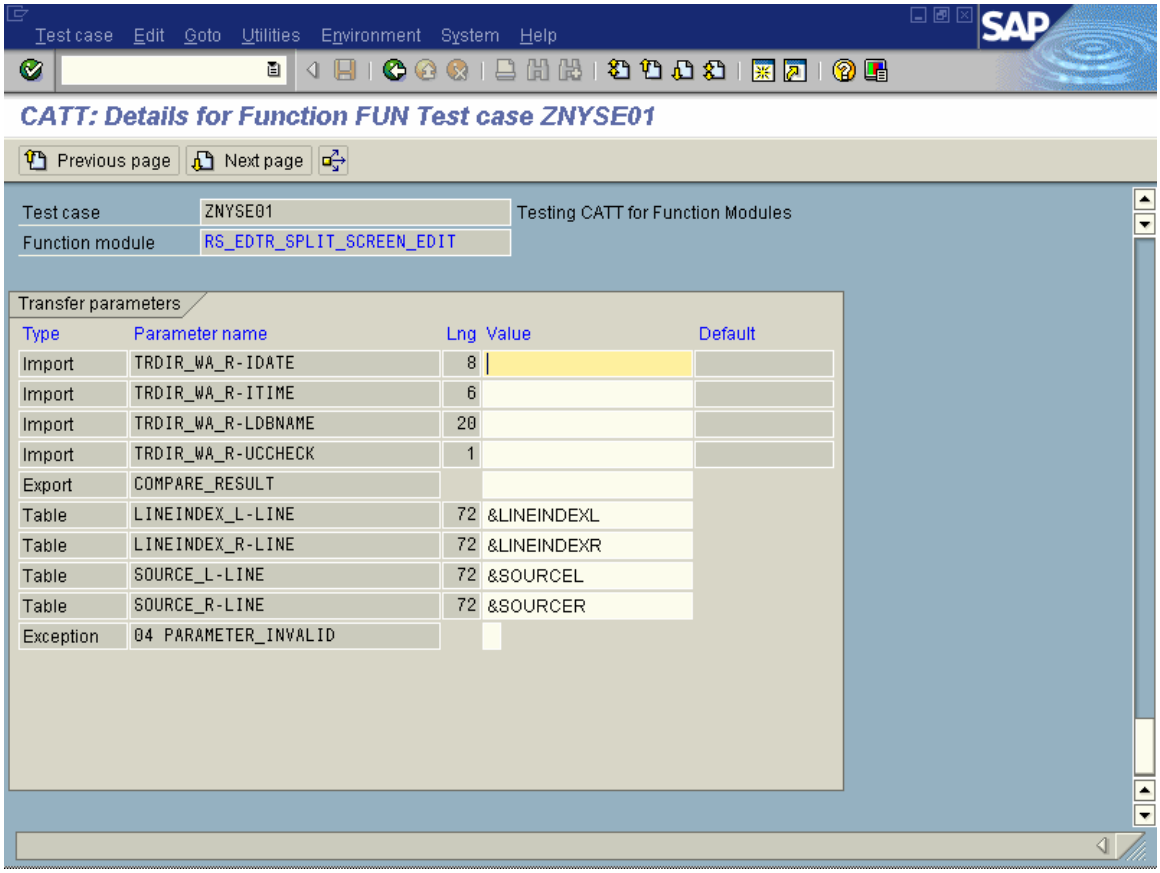
7. Press ENTER on this pop-up.



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.

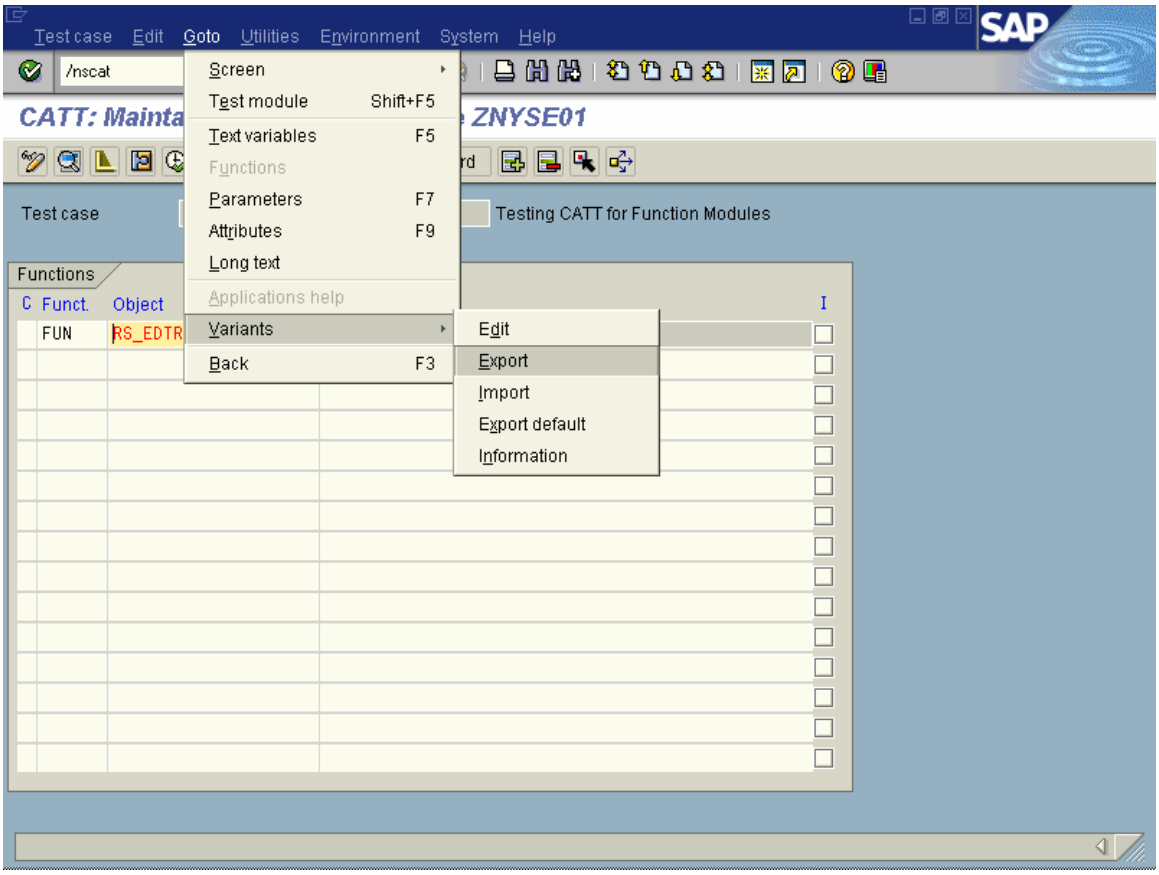


9. These are the fields that are populated :



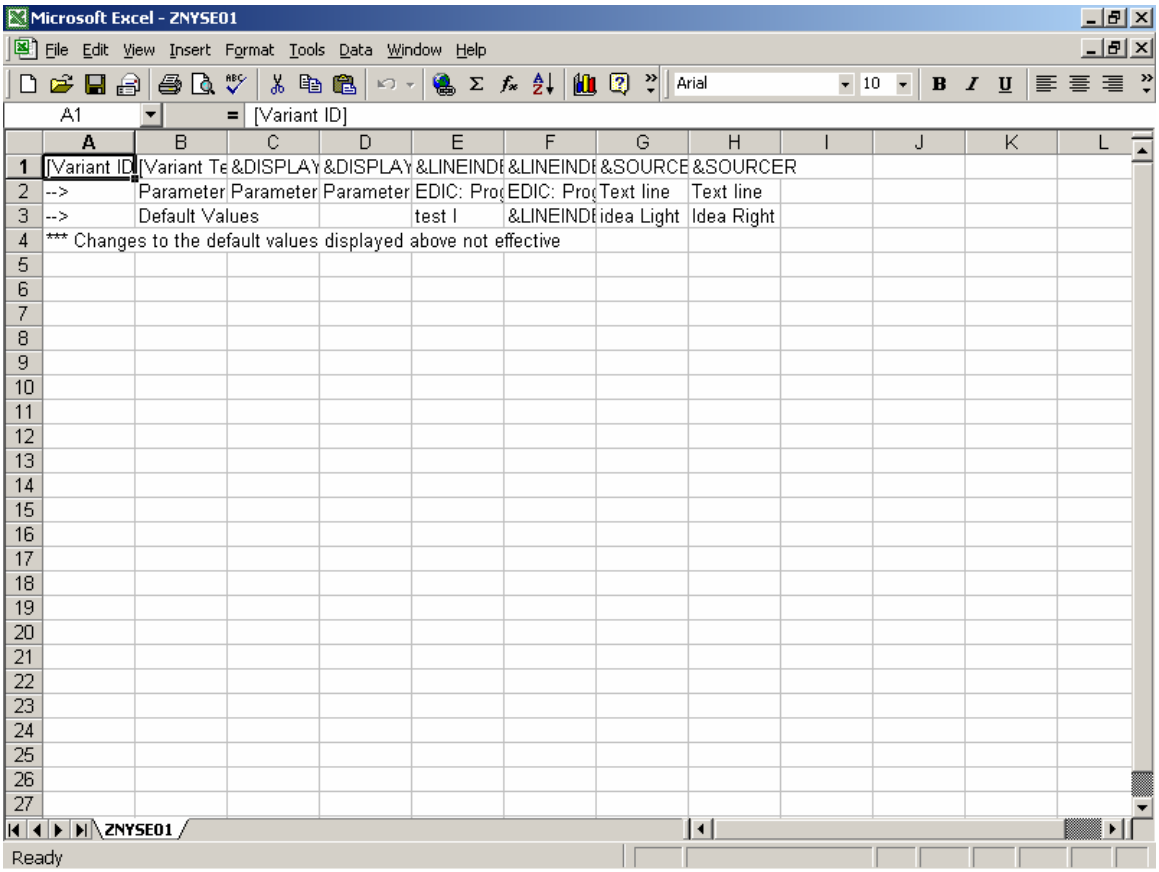
Download the source file template

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.



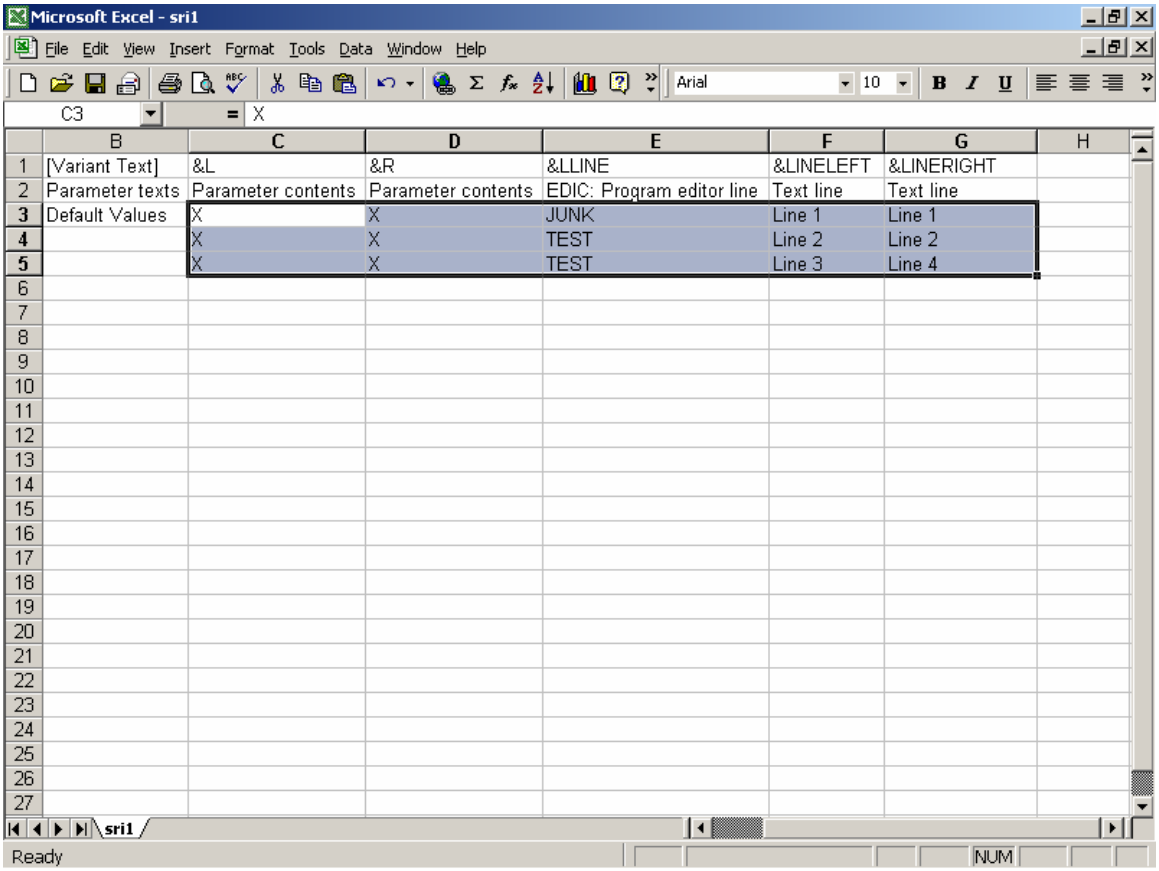
11. Open this file from its location in EXCEL.

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

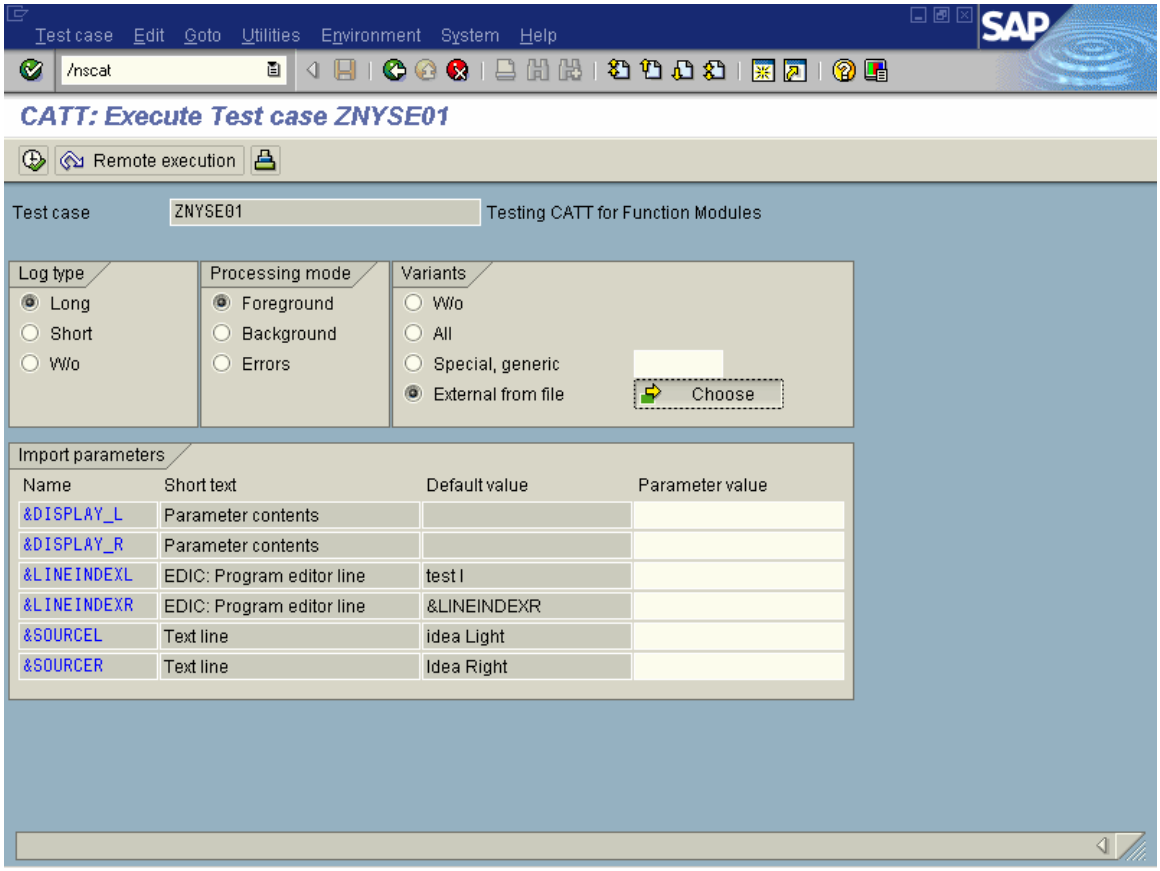


	B	C	D	E	F	G	H
1	[Variant Text]	&L	&R	&LLINE	&LINELEFT	&LINERIGHT	
2	Parameter texts	Parameter contents	Parameter contents	EDIC: Program editor line	Text line	Text line	
3	Default Values	X	X	JUNK	Line 1	Line 1	
4		X	X	TEST	Line 2	Line 2	
5		X	X	TEST	Line 3	Line 4	

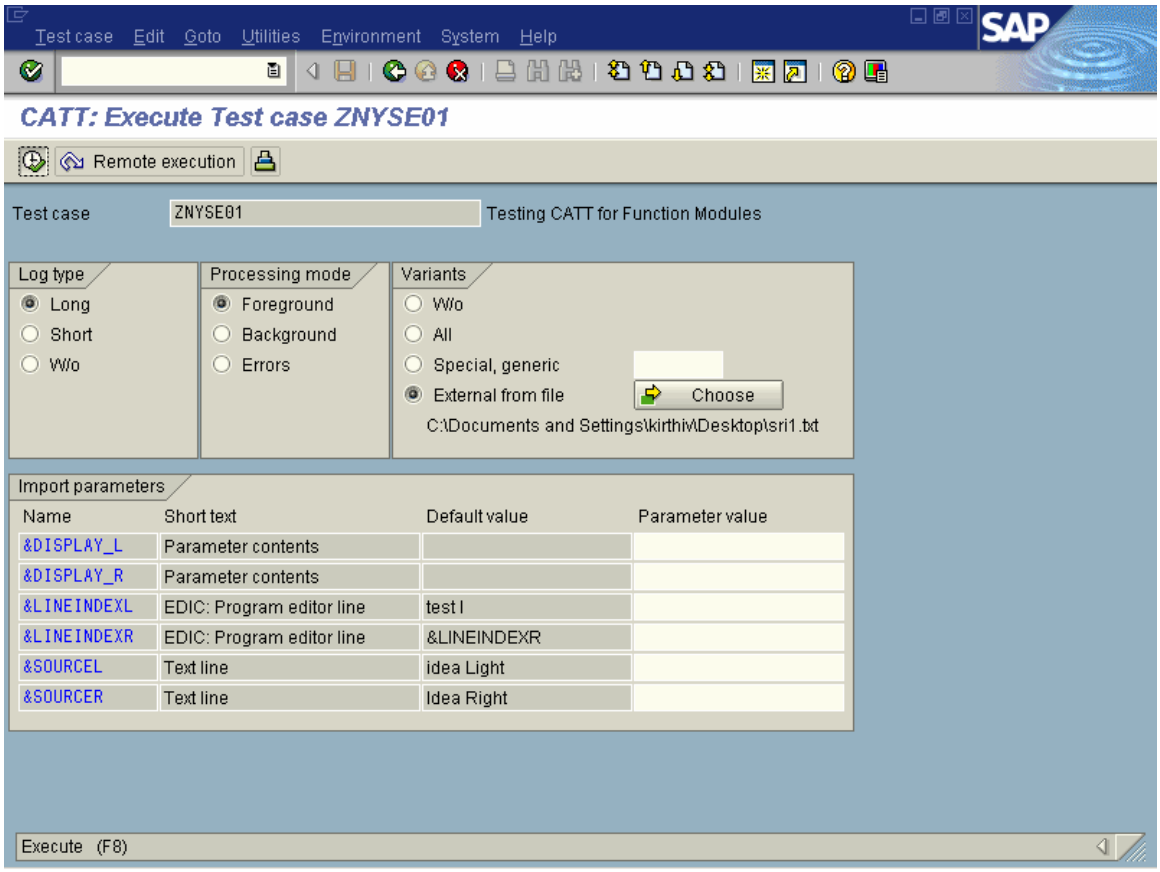
For each of values, in this case JUNK, TEST and TEST, CATT will run that many times. SAVE this file with all the values for which you would like to test the Function Module. Now Using this file we would RUN the Test Case.

Upload the data from source file

13. 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.

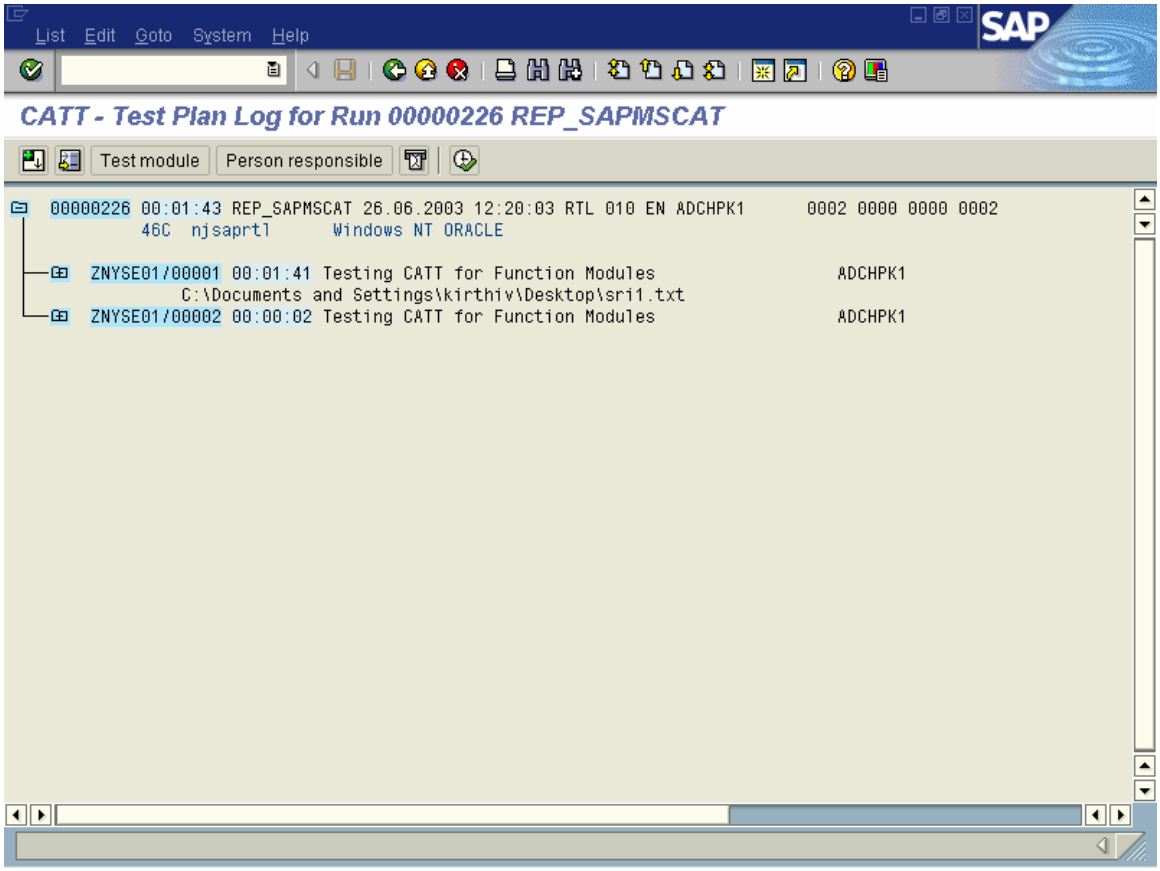


14. After the File Path and Name appears under the CHOOSE button, Click on Execute. Make sure the EXCEL Sheet has been closed when you EXECUTE. You would see the Uploading Message in the Status Bar at the bottom.



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:



Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.