

eCATT Part I - An Introduction



Applies to:

SAP 5.0

Summary

This is a series of article which will introduce the users to the automated testing tool called eCATT. For easier understanding of the user, the article has been split into a series of eight articles where the user is given introduction to the eCATT, how the user can record and parameterize the script, the concept behind test data container, system data container and test configurator is explained. For the easier user understanding an attempt has been made to combine eCATT theory with some examples and illustrations. The work of exploration has been mainly on the **SAP GUI** recording mode. For the other recording modes like TCD, Web Dynpro applications, the user will have to refer the SAP help. The series of the articles are listed below for user reference.

- eCATT Part 1 - An Introduction
- eCATT Part 2 - Recording a Scenario
- eCATT Part 3 - Parameterization of Script
- eCATT Part 4 - Modularizing Script
- eCATT Part 5 - Conditional Execution
- eCATT Part 6 - System Data Container
- eCATT Part 7 - Test Data Container
- eCATT Part 8 - Test Configuration

I am not claiming anything unique in this document but just a consolidated piece of documentation to explain the SAP GUI recording with examples and illustrations so that a person who wants to work in this space can get a good head start.

Author: Rakesh Kumar Jain
Company: Intel Technology India Pvt. Ltd.
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Author Bio



I am Rakesh Kumar Jain, working for Intel Technology India Pvt. Ltd. I am working as a System Analyst in SAP CRM. I have worked on Interaction Center Webclient, Solution Manager. Most of my primary work is in the Service module of the CRM.

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Objective

The objective behind this article is to give the user an introduction to eCATT – the Functional Testing tool by SAP. In this article we will cover

- Features of eCATT,
- Transaction to initiate eCATT,
- Pre-requisites and settings required before using eCATT.
- A brief introduction to the four important eCATT objects – Test Configurator, Test Data Container, System Data Container and Test Script.
- When one should go for SAP GUI recording mode.

Introduction

Extended Computer Aided Test Tool (eCATT) is an automated testing tool that allows user to create and execute functional tests for majority of the applications running on SAP GUI for windows and SAP GUI for java environments. Like any other automated testing tool, eCATT also works by recording the application which you can parameterize and replay with different data sets or what we normally call as data pools. In order to offer a complete test solution that covers other GUIs, eCATT has interfaces to third party tools like Mercury QuickTest Pro and Mercury Quality Center.

Designed as a successor to existing CATT, it allows users to record and replay any application running under SAP GUI for Windows or SAP GUI for Java. Furthermore, because it is embedded within the SAP application server, it has access to other interfaces such as Function Modules, BAPIs, or the SAP database (so that users can perform checks) and the ABAP runtime so that users can write ABAP routines within their test scripts.

With SAP eCATT, users would be able to test business processes that cross system boundaries. Each command in a test script can have a separate destination so, within one script, a user can call a transaction in the mySAP CRM and also check the table in entries in the R/3 system.

You can migrate your existing test cases from CATT to take advantages of the better features of eCATT. eCATT is also integrated with the Object Navigator SE80.

Features of eCATT

With eCATT You can:

- Test transactions, reports, and scenarios
- Call BAPIs and function modules
- Test remote systems
- Check authorizations (user profiles)
- Test updates (database, applications, GUI)
- Test the effect of changes to customizing settings
- Check system messages

Transaction

Use the following navigation option to access the eCATT in CRM:

Transaction Code	SECATT
SAP Path	SAP Menu→Architecture and Technology, ABAP Workbench→Test Workbench→Test Tools→eCATT

When to go for SAP GUI Recording

- If the transactions run under SAP GUI for Windows or SAP GUI for Java, it can be recorded by either TCD or SAP GUI mode.
- If the transaction doesn't have any activex controls then either SAP GUI or TCD recording mode can be used.
- If the transaction has activex controls and these activex controls ARE MANDATORY for the functionality of the transaction, then you should go SAP GUI recording mode.

Key Features of SAP GUI Recording

- Best suited for transactions having activex controls, and hence it requires the GUI playback mode
- Suitable for load testing.
- Slow when compared to TCD recording mode.



Prerequisites for eCATT

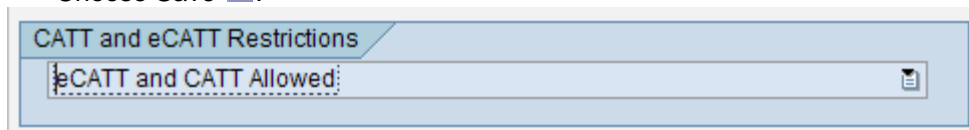
- SAP Web Application Server 6.20 or higher.
- SAP R/3 4.6C or higher.
- Target system must have sufficient support package level and details can be had from SAP note **519858** which contains the up-to-date information.

Settings before using eCATT:

If you satisfy the basic pre-requisites for using eCATT then there could be a few settings that you would need to perform before you are able to record and playback a recorded script. These Settings are explained below:

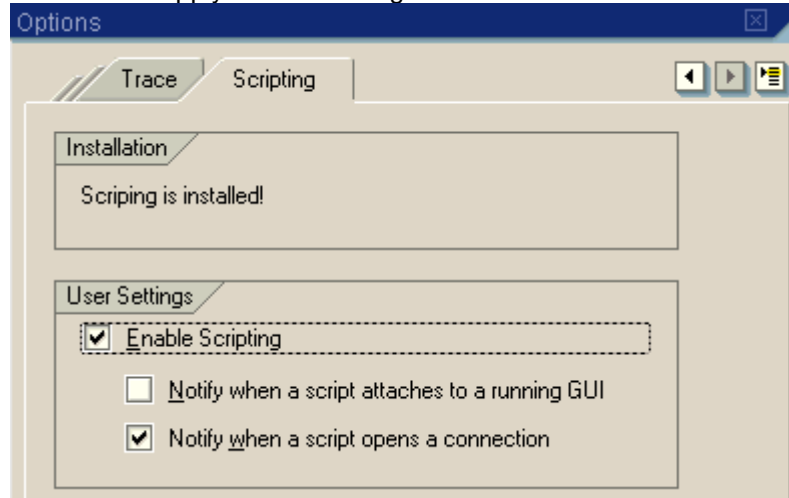
1. Maintaining Table T000

- Start transaction SM31.
- In the Table/View field, enter T000.
- Choose Maintain.
- In the Change View "Clients": Overview screen, select the relevant client and choose  Details.
- In the Restrictions when Starting eCATT field, select an entry that allows eCATT. For more information about the possible entries, use the F1 help on the field. You can choose the value "*eCatt and Catt Allowed*".
- Choose Save .




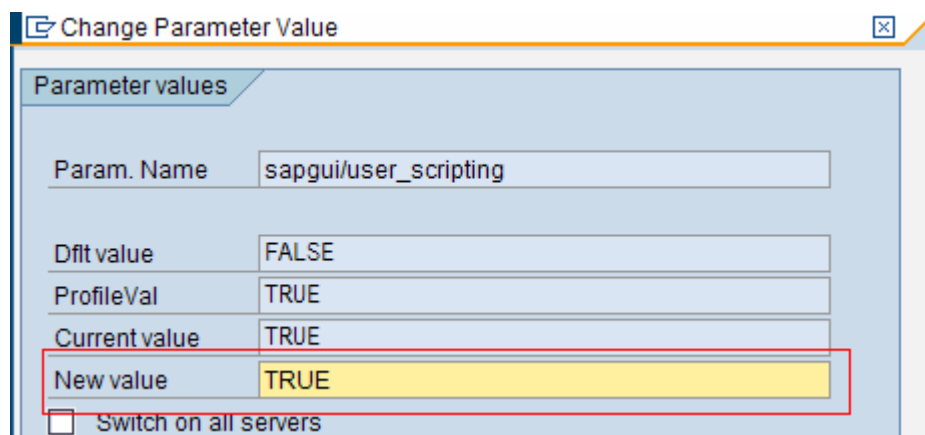
2. Enabling Scripting at the Front End

- Check whether the SAP GUI Scripting component is installed. There is an option for installing this component when installing the SAP GUI.
- On any screen, choose Customizing of local layout.
- Choose Options....
- Choose the Scripting tab.
- Select Enable Scripting.
- Choose Apply. The following screenshot shows the recommended settings.



3. Enabling Scripting at the Back End (Application Server)

- Start transaction RZ11.
- On the Maintain Profile Parameters screen, enter sapgui/user_scripting.
- Choose Display.
- In the Display Profile Parameter Attributes screen, choose Change value.
- Enter TRUE in the New value field.
- Choose Save .



ECATT Objects

There are four main eCATT objects. They are:

1. System data container
2. Test script container
 - a. Versions editor
3. Test data container
4. Test configuration container

System Data Container:

You use the system data editor to create and maintain *system data containers*. The system data container *maps out the system landscape* for the project. It is a central repository which tracks all the environments where you want the eCatt scripts to run. For eg, whether you want eCatt scripts to run in the sandbox or Dev or QA environments. Without System Data container you cannot write test scripts that access other systems. Communication with the target system is by normal RFC. Depending upon the application it may be Type 3 or Type G, H.

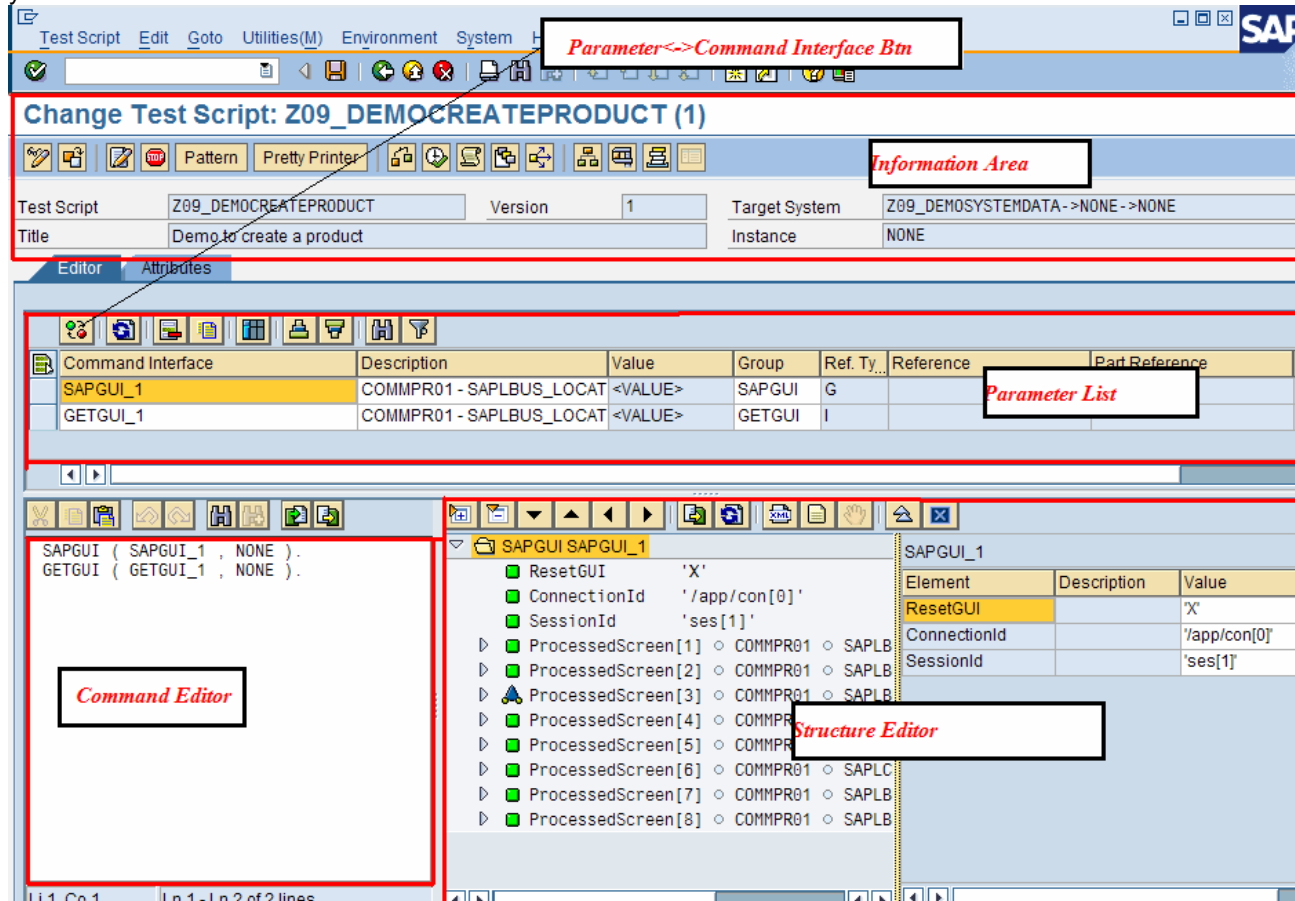
Test Script Container:

You use the test script editor to *create and maintain test scripts*. You can use the *recording* functions, or directly input eCATT commands into the command editor.

The test script editor has the following areas:

- Application Toolbar
- Information Area
- Editor tab
 - Parameter List
 - Command Editor
 - Structure Editor
- Attribute tab

The figure below should give you a brief introduction to the editor. Also these are the things that you will have to work most extensively and hence I suggest one to go through all the menu options once to familiarize yourself.



Test Data Container:

You use the test data editor to create and maintain test data containers.

The parameters in a test data container are maintained independently from any test script. You can modify the test data anytime, without having to modify the script. It wouldn't be wrong to call them as Data pools. You can specify a maintenance system for the test data container, and can also specify a different target system for each parameter. Thus a test data container allows *the maximum degree of reuse and eliminates redundancy* as possible.

Test Configuration Container:

It is used to maintain test configurations object. To execute a script with one or more sets of data, you use a test configuration. A test configuration *contains a reference to a test script, system data container and references to one or more test data containers*. An executed test configuration produces its results in the form of a log which provides a complete information as to whether a test was a pass or a fail.

Related Content

http://help.sap.com/saphelp_nw2004s/helpdata/en/8e/df9f40eb72371be1000000a1550b0/frameset.htm

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