For GUI Testing of SAP Applications

WELCOME TO RATIONAL ROBOT



Use this *Try it!* to discover how easy it is to test the functionality of your SAP R/3 applications. In minutes, you'll understand the power behind Rational Robot's Object Testing® as you quickly record and execute tests that verify:

- ▶ Properties of SAP screen controls
- Values in application fields
- Integrity of your business process flow

If you're using SAP R/3 applications, you need Rational Robot, the leader in automated functional testing of client-server applications.

Robot lets you plan, develop, and execute functional tests for your SAP R/3 application, regardless of your R/3 hardware platform or database server type.

As you use the testing tips in this card on your SAP application, you'll quickly discover how easy it is to record functional tests using Rational Robot.

To find out more about Robot, be sure to take a look at the *Getting Started* with Rational Robot manual as well as the other Robot documentation and online Help.

>>> Find out how Rational puts quality to the test. >>>



Create a repository and log in

Before you can begin testing your SAP application, you need to create a repository. A repository contains all of the information about your testing project including test documents, requirements, scripts, logs, defects, queries, and reports.

Try this:

- Install Rational Robot according to the instructions in the Getting Started with Rational Robot manual.
- ② Click Start > Programs > Rational Suite PerformanceStudio > Rational Administrator.
- 3 Click File > Create Repository.

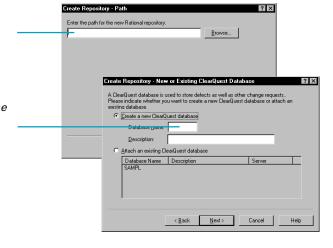
Type C:\SAPRepo for the name of the repository where you'll store your tests.

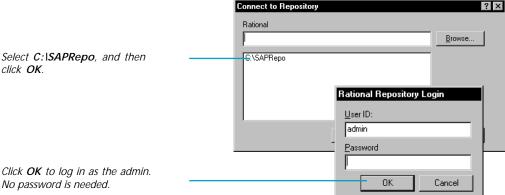
Click Next until you come to the Create Repository - New or Existing ClearQuest Database page. Type **GUI** for the Rational ClearQuest database name. If your application has defects, you'll enter them in this database.

Continue to click Next to accept all of the defaults.

At the end, click Finish, and then click OK.

4 Click File > Connect.





click OK.

Determine the SAP host name and system number

Before you test your SAP application, you also need to determine the host name and system number. You can either ask your system administrator or follow the steps on this page to make a copy of the host name and system number.

► ► Try this:

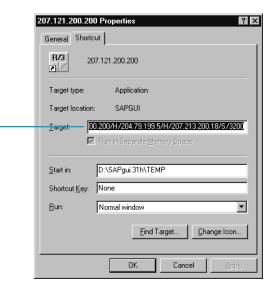
• Right click the SAPGUI icon for your application, and then click Properties.



- 2 In the Properties dialog box, click the Shortcut tab.
- 3 Copy the host name by highlighting it and pressing CTRL+c. You'll need it for the next set of steps.

The host name is a series of one or more computer names and/or IP addresses delimited by slashes and uppercase letters, often with a trailing port number.

You need the host name to connect to your application. (See the next page.)

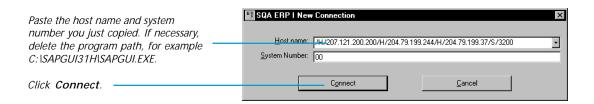


Start your SAP application and Rational Robot

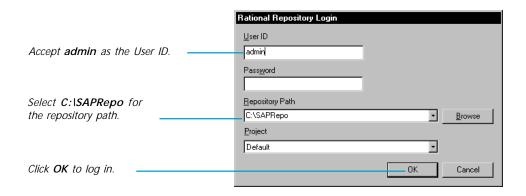
Before you test, you'll start your SAP application and then start Rational Robot.

► ► Try this:

• Click Start > Programs > Rational Suite PerformanceStudio > Rational ERP gui.



- 2 Log into your SAP R/3 application.
- **3** Click Start > Programs > Rational Suite PerformanceStudio > Rational Robot.



▶ ▶ For more about Rational repositories, see the *Using Rational Administrator* manual. ▶ ▶ ▶

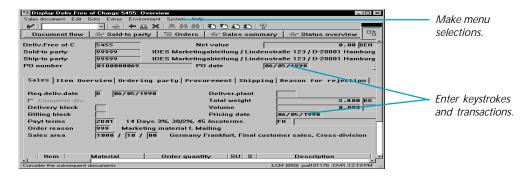
Record and view the script

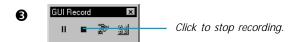
When you record, you'll use Robot's **Object-Oriented Recording**® to test controls, independent of their positions in the GUI. If controls change locations or their text changes, Robot will still find them on playback because Robot identifies controls by their Visual Basic object names.

► ► Try this:



2 Navigate through the application. Rational Robot records whatever you do.





The actions you just recorded appear as a script in Robot.



Test a control's properties

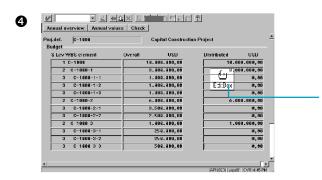
Robot offers many verification points for use during recording. (See the list on the last page.) One of the most powerful — Object Properties — lets you capture the properties of any control, even a hidden one. Robot's easy-to-use **Object Testing**® lets you inspect and verify all of a control's properties.

► ► Try this:









Keeping the mouse button depressed, move the Object Finder tool around the window, and look at the TestTip that describes each control. Point to an Edit Box and release the left mouse button. Click **OK** in the Select Object dialog box.

Notice how Robot captures all of a control's properties. Scroll through the list of properties, and then click **OK** to complete the Object Properties test. Then go to the next page to try another test.

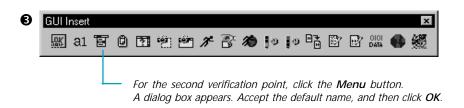
Test all of the items in a menu

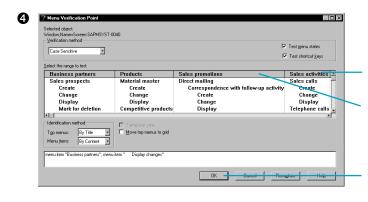
Rational Robot's Object-Oriented Recording can inspect and verify all of the menu options in a window with one simple test — the Menu verification point.











Rational Robot captures all of the menus and submenus from the window, including active and inactive picks.

By clicking on the top of any column, you can select just the submenu items in the menu. By clicking any individual item, you can select only it, or you can select more than one item by pressing CTRL+click.

Click OK to complete the test.

What's next

You've just tested some of the controls in your SAP application. To record more tests, try an Alphanumeric test on text controls or try an Object Properties test on any of the controls you haven't tested.

When you're done, stop recording by pressing this button on the **GUI Record** toolbar:



The value of verification points becomes even more apparent when you play them back. During playback, verification points identify changes or unintentional errors in an application as it evolves. This lets you correct any errors *before* you deliver the application to customers.

For playback instructions, see the *Using Rational Robot* manual. Before you play back the scripts you recorded, return to the window where you began the recording. And make sure that it's in the same state it was when you began the test. If any verification point fails on playback, just double-click the failure in the Rational LogViewer to see why.

To play back a script, press this button on the Robot toolbar:



For more information about using Rational Robot to create tests for your SAP applications, see the *Using Rational Robot* manual.

Rational Robot verification points

Use these verification points to ensure delivery of high-quality applications to your customers.

ΟK	Object Properties — Captures and tests properties of visible and hidden controls.	Ē	Menu — Captures and tests text, shortcut keys, and the state of menus in as many as five levels of submenus.
OIOI DATA	Object Data — Captures and tests data from visible and hidden controls.	2	Window Image — Captures a window as a bitmap image.
a1	Alphanumeric — Captures and tests alphanumeric data in objects that contain text.	réi	Region Image — Captures a specific region of the screen as a bitmap image.
	Clipboard — Captures and tests alphanumeric data copied to the Clipboard.	?	Window Existence — Verifies the existence and status of a specific window or dialog box.

▶ ▶ For more about verification points, see the *Using Rational Robot* manual. ▶ ▶ ▶