

# Try it! For GUI Testing of SAP Applications

## Welcome to Rational Robot SAP

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If you're testing SAP R/3 applications, you need Rational Robot, a component of Rational Suite TestStudio. Rational Robot is the leader in automated testing of client/server applications.

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 tests that verify:

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

Robot lets you record functional tests against your SAP R/3 application, regardless of R/3 hardware platform or database server type.

As you use these testing tips, you'll quickly discover how easy it is to record functional tests on your SAP application using Rational Robot. To find out more about Rational Robot, see the Rational Robot and TestManager documentation and online Help.

## Create a Project and Log In

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Before you begin testing your SAP application, create a *project*. A project contains all of the information about your testing effort, including test plans, test cases, requirements, test scripts, logs, defects, queries, and reports.

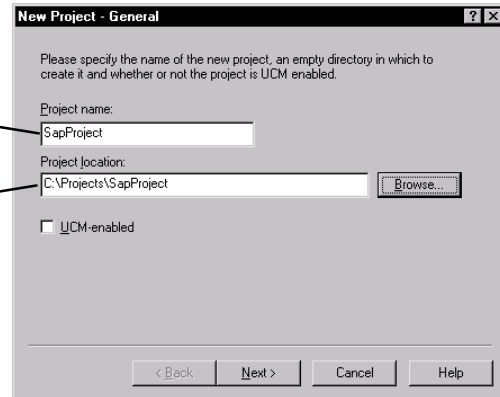
Try this:

- 1 Install Rational Robot according to the instructions in the *Installing Rational Testing Products* manual.
- 2 Click **Start > Programs > Rational product-name > Rational Administrator**.

3 Click **File > New Project**.

Type **SapProject** for the name of the project.

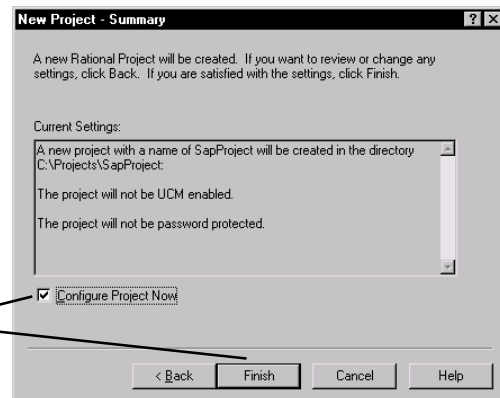
Type **C:\Projects\SapProject** as the location of the project.



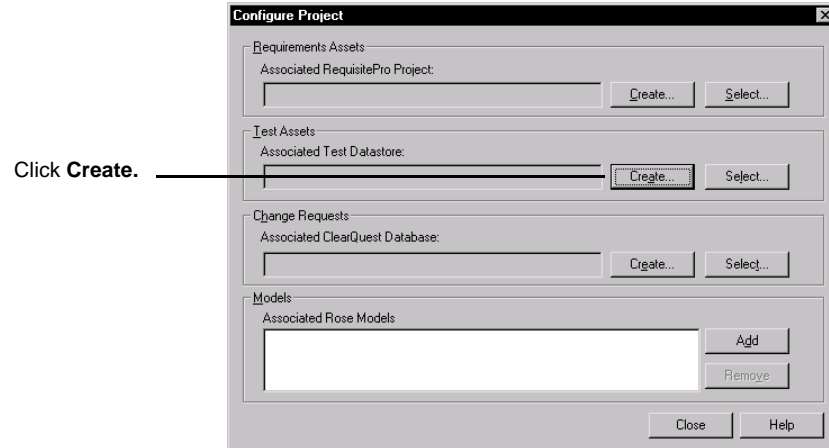
**Note:** You do not need to make the project UNC-enabled.

4 Click **Next** until you see **New Project - Summary**.

Make sure that the **Configure Project Now** box is selected, and then click **Finish**.

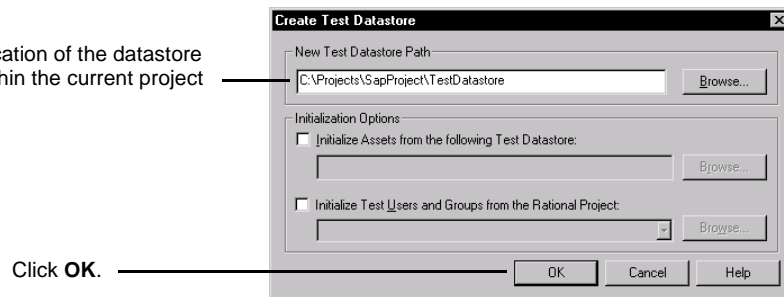


- 5 At the Configure Project dialog box, click **Create** in the Test Assets section.

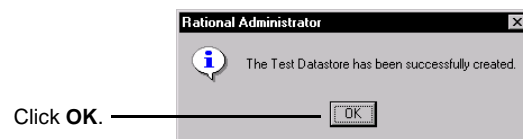


- 6 Verify the location of the datastore in the directory of the current project.

The default location of the datastore directory is within the current project directory.



Rational Administrator displays some status messages, and then tells you that it created the Test Datastore successfully.



- 7 Click **Close** at the Configure Project dialog box.

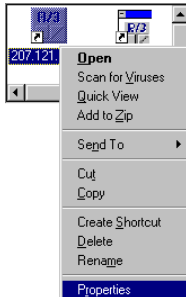
## Determine the SAP Host Name and System Number

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Before you test your SAP application, you also need to determine your host name and system number. Follow the steps on this page to make a copy of the host name. Ask your system administrator for the system number.

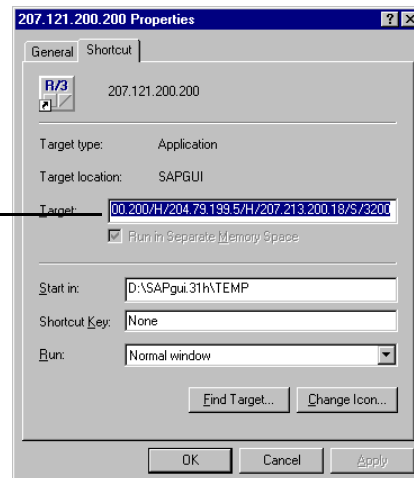
Try this:

- 1 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**.

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 exact host name to connect to the application in the next set of steps.

- 4 Try it! For GUI Testing of SAP Applications

## Start Your SAP Application and Rational Robot

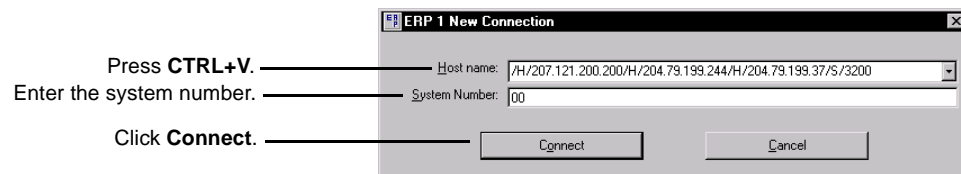
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Before you test, start your SAP application and then start Rational Robot.

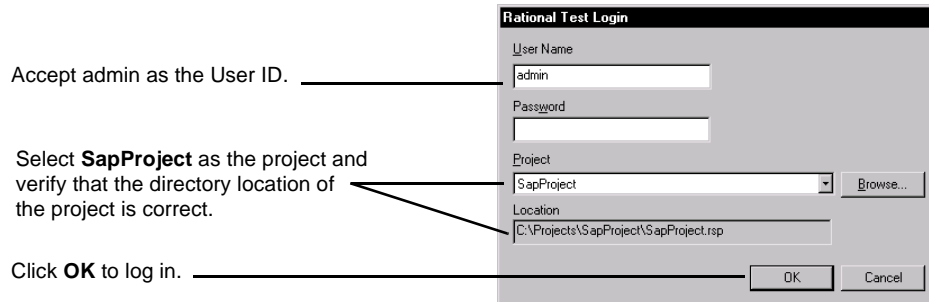
Try this:

- 1 Click **Start > Programs > Rational product-name > Rational Test > ERP > Rational ERP gui.**
- 2 In the Host Name box, paste the host name that you just copied by pressing **CTRL+V**, enter the system number, and then click **Connect**.

If the program path is part of the host name, delete the program path.



- 3 Log in to your SAP application.
- 4 Click **Start > Programs > Rational product-name > Rational Robot.**



## Record and View the Test Script

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When you record a test script, you 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 still finds them on playback because Robot identifies controls by their Visual Basic object names.

Try this:

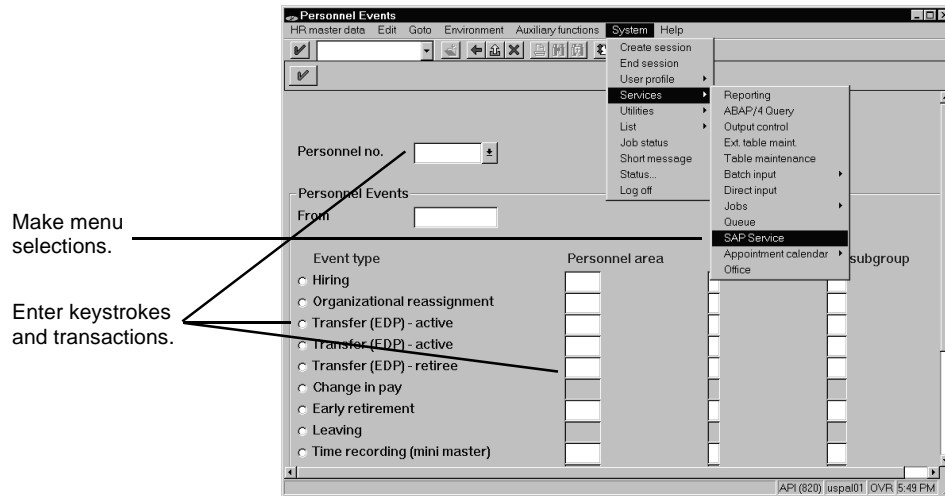
### 1 Start recording.



On the Robot toolbar, click to start recording. Type a name for the test script, such as **SAPTest1**, and then click **OK**.

### 2 Navigate through the application. Robot records all actions against the user interface.

**Note:** The interface of your SAP application may differ from the screen shots displayed here.

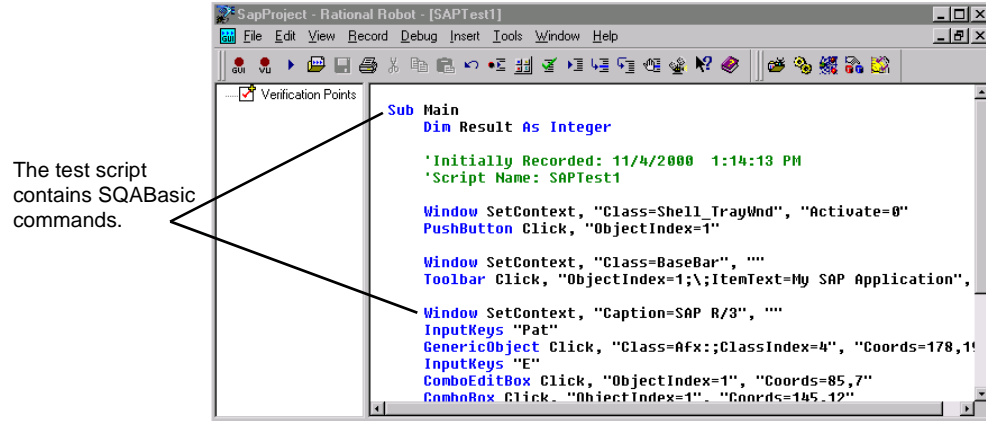


### 3 Stop recording.



Click to stop recording.

Rational Robot generates a test script based on the actions you just recorded.



## 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:

- 1 Start recording.



On the Robot toolbar, click to start recording. Type a name for the test script, such as **SAPTest2**, and then click **OK**.

- 2 Display the GUI Insert toolbar.



Click to display the GUI Insert toolbar.

### 3 Set verification points.

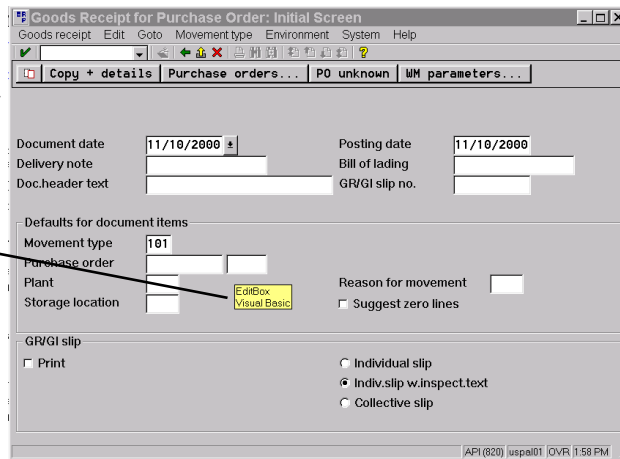


For the first verification point, click the **Object Properties** button. A dialog box appears. Accept the default name, and then click **OK**.

### 4 Test a control.

Keeping the mouse button depressed, move the Object Finder tool (hand cursor) 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.



## 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.

Try this:

#### 1 Start recording.



On the Robot toolbar, click to start recording. Type a name for the test script, such as **SAPTest3**, and then click **OK**.

#### 2 Display the GUI Insert toolbar.



Click to display the GUI Insert toolbar.



### 3 Set verification points.

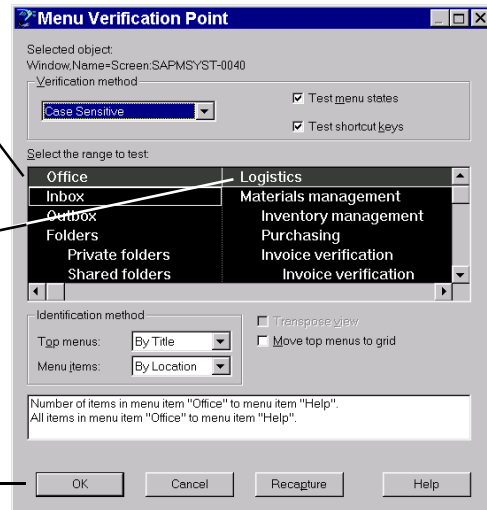


For the second verification point, click the **Menu** button.  
A dialog box appears. Accept the default name, and then click **OK**.

### 4 Test the menu items.

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, press the Stop Recording button on 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 Test Log window 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

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

	Captures and tests properties of visible and hidden controls.		Captures and tests text, shortcut keys, and the state of menus in as many as five levels of submenus.
	Captures and tests data from visible and hidden controls.		Captures a window as a bitmap image
	Captures and tests alphanumeric data in objects that contain text.		Captures a specific region of the screen as a bitmap image.
	Captures and tests alphanumeric data copied to the Clipboard.		Verifies the existence and status of a specific window or dialog box.

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