

Solutions in Action: Automated Regression Testing Video Transcript

Welcome to Original Software's demonstration series: Solutions in Action. This module will review and demonstrate Original Software's solutions with a focus on automated regression. We will show how Original Software's automated regression solution TestDrive can dramatically accelerate your software quality process and increase your test coverage. We will demonstrate what is involved in creating and maintaining automation, why TestDrive is fundamentally a better approach, how it can be maintained, a major issue for those managing and caring for automation suites and how it can be used on a wide variety of applications in a true end-to-end regression test scenario.

Starting from Qualify let's create a new playlist. A playlist is where you assemble modular test assets into a regression test. In this new playlist let's drag in an existing automation script. We will select a script that will launch and log in to an SAP system and now let's record a new script over that SAP system.

TestDrive now starts and will attach to the SAP system that I already have running. Note in the recording window that the screens are automatically captured and analysed, also note that the annotations of what I am interacting with on the SAP system are easy to read and understand. This is our patented technology called User Interface Annotation. When I stop the recording the script is now added to the playlist.

So, let's add a table of data that I will use to dynamically drive and control the recording inputs of the script. We refer to this as variable data. Variable data can be entered directly into the grid shown, or you can import it from Excel if you prefer. This table has different start and end times and different organisers, it also has a calculated column that contains PowerShell commands or functions, this will dynamically calculate a future date that is a prescribed number of days ahead of the current date. We save the table and give it a name, this table is a test asset that can be used in other playlists.

Now drag the new variable data table into the playlist and then drag the room reservation script inside of it. This will make it so looping variable data rows will happen and each time the script or scripts inside the loop will be invoked. I'm going to set the loop to start and end on specific rows in the table. Now to use this variable data I simply map the inputs from the table to the recorded actions in the script. You can do a lot more than just making the keyboard entry dynamic. Here's how you can change the click target of a double click selection made in the script. **This makes it so I'm using variable data to change what I am double clicking on in the script.** This is done by

selecting the script event that I want to control, then I select the property that needs to be changed, in this case it's that user interface annotation property.

Then I indicate that the variable data column organiser is to be used and that's it no code, TestDrive will guide me through what is needed very intuitively. Now let's run this playlist. The first script which I reused will launch and login to the SAP system. Then the room reservation script will run, this is the first loop within the variable data table. Note that the dates and times are being changed to those provided from the variable data table, also note TestDrive's very advanced technology will allow it to play back as fast as it can without ever going too fast. No coding or any thought is needed on the part of the tester. Here's where the double click is changed using the variable data override of the click target annotation.

Now the same script will run again, this time for the next row of data in the variable data loop. With the run complete a preview of the results is shown. Okay so let's embellish this playlist now with some validations. From the logic panel drag the IF statement onto the playlist on top of the room reservation script. This IF statement test will be evaluated after screen 9 and if the IF statement will get the value from the screen. Now I simply click on the element I want to grab it from and click on the property that I want to compare and I set the IF statement to check if that fields property is not equal to a value from the variable data table and select the future date column there, and to finish this validation I want TestDrive to flag this as an error if this IF statement is true. I also, want to do a similar validation for three other fields on the screen so I will just copy this IF statement and paste it three more times. Now a quick adjustment to each and I'm done. Lastly, I want to check after looping through the variable data runs of this script to see if any errors were found and if there were, I want to fail the playlist run. Also, let's add a check after the SAP login script to be sure it was able to get me logged in. If it is successful it will flag the playlist as passed. Of course, if the following room reservation script has issues it will then fail the run.

To really exploit the power of TestDrive let's enhance the playlist to use a checking rule. Checking rules are reusable checks that can be applied to one or more scripts and here's an example of a checking rule that will check content, monitor PC hardware, running the application and identify screens that are not performing acceptably. The content check here will compare the screen IDs of each screen as the script runs. This could be expanded to check any or all of the content on the screen, it could also be set to identify any added or missing content, not just the differences. This hardware monitor check will report an error if any screen causes the CPU to exceed 15% usage. There are many hardware monitor types to select from here and the performance checking rule is set to report any error if any screen total response build and render time totals more than 7.000 milliseconds, that is 7 seconds. So, with this combined check rule defined I can use it for any script I wish.

Now, let's run that playlist again. After previewing the run I can save it to the repository for reference later, note that it has already marked the run has failed. Opening up the same results I can drill into any portion of the run that has errors and here I can see on screen 3 that there was an error; the total screen time was 10.4 seconds which exceeds 7 seconds.

If I would like to see how all the screens performed that information is at my disposal, just look at the performance plug-in in the results viewer, I can generate a full report of this run, just send the

report output options. This report can be saved in PDF, RTF, HTML and other formats. It can also be emailed directly as well.

As you can see TestDrive is extremely powerful while being very intuitive, you will accelerate your quality process and increase your test coverage. It is designed for ease of use and requires no coding.

It's very robust and dynamic taking advantage of our patented user interface annotation and automatic busy sense, you are not bogged down with the plumbing and wiring of bulletproof automation.

The drag and drop editing is easy to learn and there is no coding to maintained. Since TestDrive supports the broadest user interface technologies, you can create playlists that interact with browsers, Java clients, windows, GUI applications and even green screens. You can grab information from one script playing against a Java client and use it as an input on another script that follows running over a browser. This gives you a rich cross technology end-to-end regression capability that is unrivalled in the industry.

Thank you for viewing this module there are several others to see so please do. If you have any questions simply get in touch with Original Software. Original thinkers and innovators.

About Original Software

With a world class record of innovation, Original Software offers a solution focused completely on the goal of effective application delivery through quality management. By embracing the full spectrum of application quality management across a wide range of applications and environments, the company partners with customers and helps make quality and efficiency a business imperative. Solutions include a quality management platform, manual testing, full test automation and test data management, all delivered with the control of business risk, cost, time and resources in mind.

More than 400 organizations operating in over 30 countries use Original Software solutions. Current users range from major multi-nationals to small software development shops, encompassing a wide range of industries, sectors and sizes. We are proud of our partnerships with the likes of Allianz, Bimbo Bakeries, Costco, CertainTeed, Delta Dental of WI, Euronet. IAT Insurance, O'Reilly Autoparts, Cayman National Bank, Topcon, and DSC Logistics.



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