QTP

**About QTP:** Quick Test Professional is an automated functional test tool. It helps tester to perform automated regression testing in order to find the missing gaps, error/defect in contrary to the actual result of the application.

|  |  |
| --- | --- |
| Advantages | Disadvantages |
| Developing automated tests using VBScript doesn’t required highly skilled coder | QTP works in windows operating system only. |
| It is easy compared to other oops languages | Not all the versions of browser supported. Testers need to wait for patch to release for each one of the major versions. |
| Easy to use, ease of navigation, result validation and report generation | It is a commercial tool, licence is very costly |
| It is already integrated with HP QC which enables easy scheduling and monitoring | Even though the scripting time is less. The execution time is relatively high as it puts load on RAM & CPU. |
| It can be also used for mobile Application testing |  |

**Object Repository:**

Object Repository is a collection of object and properties with which QTP will be able to recognize the object and act on it.

**Types of Object Repository:**

There are two types of object repository

1. Local Object Repository:

As name suggest, Object Repository is applicable only for that Action.

2 ways to open Object Repository

1. Resource 🡪 Object Repository.

2. Ctrl + r

**2. Shared Object Repository:**

The Object Repository is shared across actions/modules which would be mapped for two or more actions. Shared object repository is open be Resource 🡪 Object Repository Manager.

|  |  |
| --- | --- |
| Local Object Repository | Shared Object Repository |
| It is available one for each action | It is available for multiple test and multiple action |
| Available for each test by default | Usually used in framework considering reusability and maintainability |
| It is editable in object repository by default | It is read only by default but it is editable in Object Repository Manager. |
| It is saved with extension .bdb | Extension. Tsr |
| It Should be used when not many tests are working on the same screens of the application under test. | SOR Should is used when there are different scripts interacting with the same type of the object. |

Adding object to the Repository:

Once the object repository open click “Add object symbol +” on the menu.

Here only the logical name can be changed. Not other property of the object.

Actions:

It helps tester to divide scripts into groups of QTP statements are called Actions.

Types of actions:

There are three types of actions:

Non-reusable action - An action that can be called only in that specific test in which it has been designed and can be called only once

Reusable action - An action that can be called multiple times any test in which it resides and can also be used by any other tests

External Reusable action - It is a reusable action stored in another test. External actions are read-only in the calling test, but it can be used locally with the editable copy of the Data Table information for the external action

**Action types**

**Insert call to New Action 🡪 Inserts new actions from the existing action**

**Insert call to copy of action 🡪inserts a copy of an existing action**

**Insert call to existing action 🡪 inserts a call to existing re-usable action**

**Datatables:**

A DataTable, similar to Microsoft Excel helps testers to create data driven test cases that can be used to run an Action multiple times.

There are two types of Datatables.

Local Data Table - Each action has its own private data table also known as local data table which is can also be accessed across actions.

Global Data Table - Each test has one global data sheet that is accessible across actions.

**Synchronization:**

Synchronization point is the time interface between Tool and Application under test. Synchronization point is a feature to specify delay time between one step and another of the test script.

**Types of Synchronization:**

QTP inbuilt Synchronization point – File 🡪 Settings 🡪Run tab

Web inbuilt synchronization point – File 🡪 Settings 🡪 Web tab

Wait property (Property name, Property value, timeout value)

Exist (timeout value) – Dynamic wait

Wait (timeout value) – Static wait

**Debugging:**

Debugging, in automation testing context, is a systematic process of spotting and fixing the coding issues in the automation scripts so that the script will be more robust and can spot the defects in the application.

By pressing “F9” a breaking point is place on the line of code.

Error Handling:

There are 3 possible types of error. They are

1. Syntax Error – code error by pressing Ctrl + F7 we can fix that

2. Logical Error – like loop error, that can be find only by using output report

3. Run time Error

Run time error can happen during run time. Script trying to perform something but unable to do so.