

# Unified Functional Testing

Prepare To Record

# Lesson Objectives

By the end of this Lesson you will be able to:

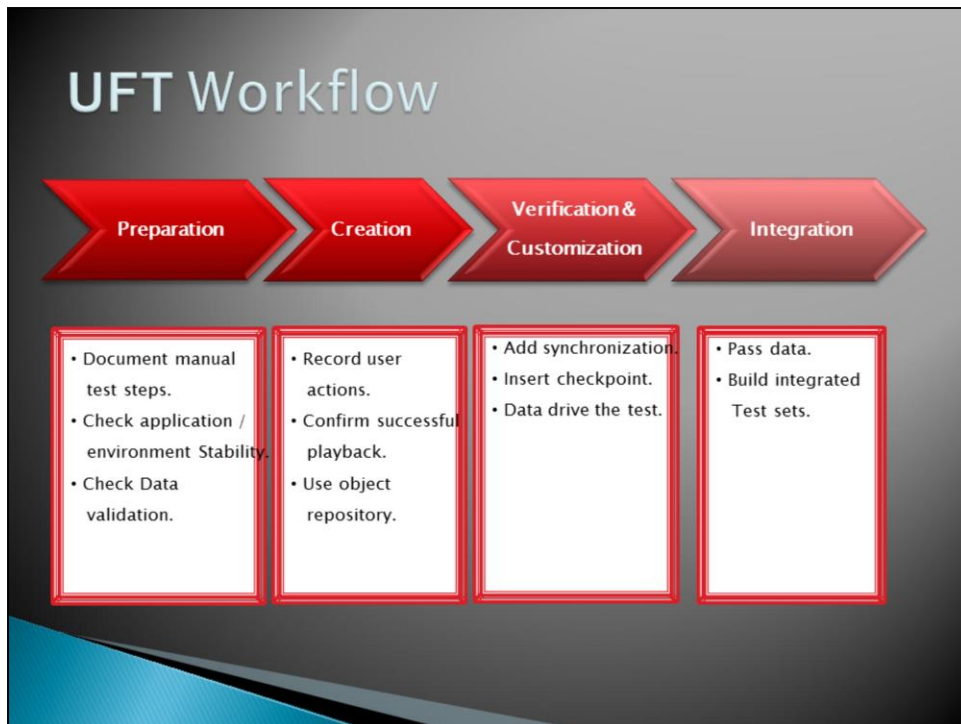
- Understand steps of a business transaction.
- Identify the application under test and its environment.
- Navigate the UFT user interface.
- Prepare the test environment to effectively use UFT.



# Lesson Content

1. Test automation preparations
2. Tests and tests data preparations
3. Environment preparations
4. UFT settings





The workflow for UFT represents the complete lifecycle of automating a functional test. The workflow starts with the Preparation phase, which involves preparing to record a test. In the Creation phase, you record user actions to generate a basic test. In the Verification & Customization phase, you enhance the automated test, and in the Integration phase, you run multiple tests to check the flow of data.

# First Phase – Preparation



In this phase, you prepare for test automation and collect any data needed for the test.

# Understand Test Steps

## ▶ Create Flight Reservation Order

### ■ Steps

- Create a new order.
- Verify that the Insert Done.... message appears, confirming that the new order was successfully generated.
- Document the order number in the test results.
- Verify that multiple new orders can be created using different departure and arrival cities.



# Environment Requirement

Verify that Environment ready for testing:

- Check for stability in the application under test.
- Ensure that the test and tester have permissions to access the database, host systems and input/output data.
- Execute the test case steps manually to determine the expected results.



# Input Data To Be Used

Determine the input data for testing the application:

- Knowledge transfer with tester in order to get valid\invalid data for your test.
- Decide what is the scenario if invalid data is given as input to the application.





# Preparing to Automate a Test

Before start recording the test:

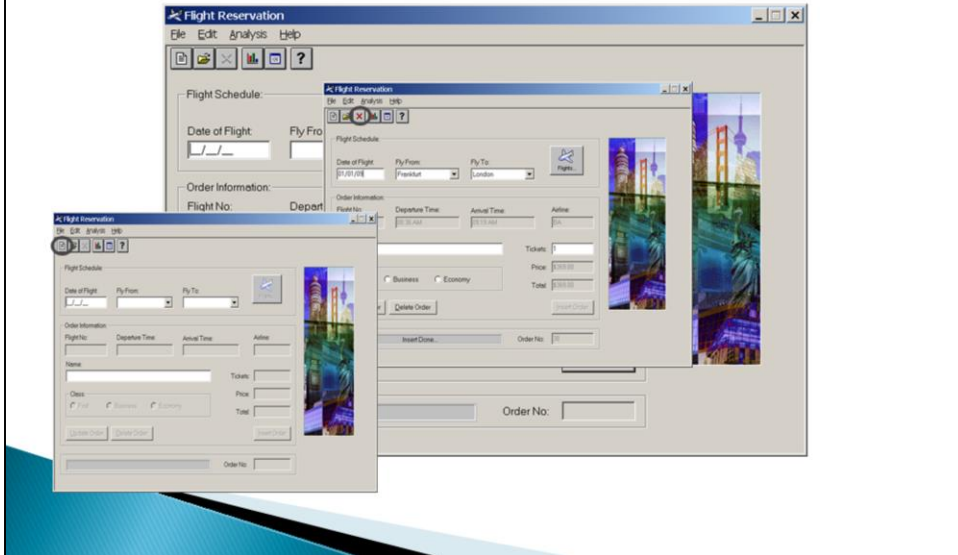
- Identify the start\end conditions for each test case.
- Establish standards for name conventions.

An start condition refers to the state of the AUT prior to a test run.

An end condition refers to the state of the AUT when a test completes its run.

This will ensure that the test can iterate.

# Planning Initial And End Conditions



Before automating a test, you should identify the start and end points for each test case. This refers to the state of the application for initial and end conditions.

**An initial condition** refers to the state of the AUT prior to a test run.

**An end condition** refers to the state of the AUT when a test completes its run. This will ensure that the test can iterate.

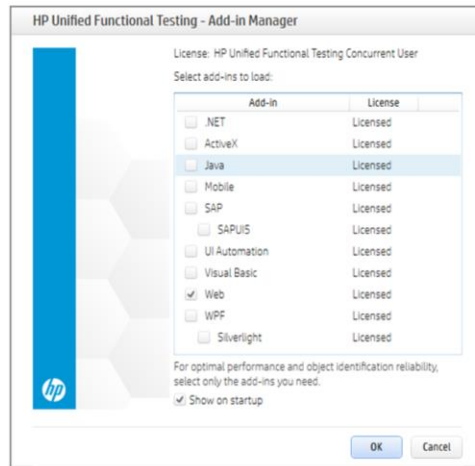
# Launching UFT

While launching UFT:

- Select relevant add-ins.
- Set up UFT 'Options' screen.
- Set up the 'Record and Run Settings' screen.



# Add In Manager

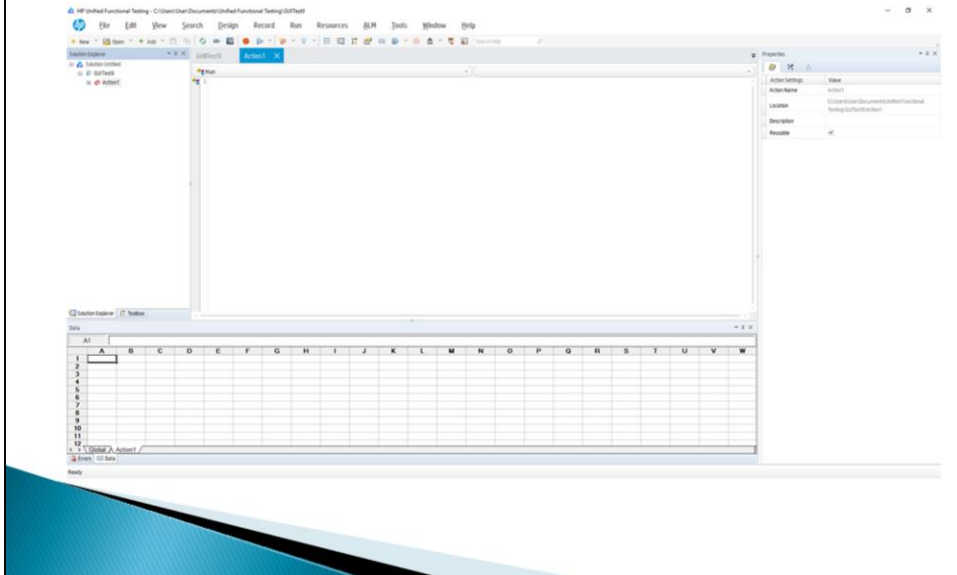


The **ADD-IN MANAGER** dialog box enables UFT to recognize objects in the development environment of AUT.

An object is a graphic user element in an application, such as a button or a list. Tell the participants they will learn about objects later in this course.

The list of add-ins that appears in the **ADD-IN MANAGER** dialog box is dependent on your license. The default add-ins are STANDARD WINDOWS, ACTIVEX, VISUAL BASIC, WEB and UTILITY OBJECTS. Additional add-ins (such as Java , TE and .NET framework) require installing the appropriate software before launching UFT for the add-ins to appear in Add-In Manager. An add-in will be loaded if you check it in the **ADD-IN MANAGER** dialog box.

# User Interface



The UFT user interface consists of several areas. You can focus on areas that correspond to the task you are performing.

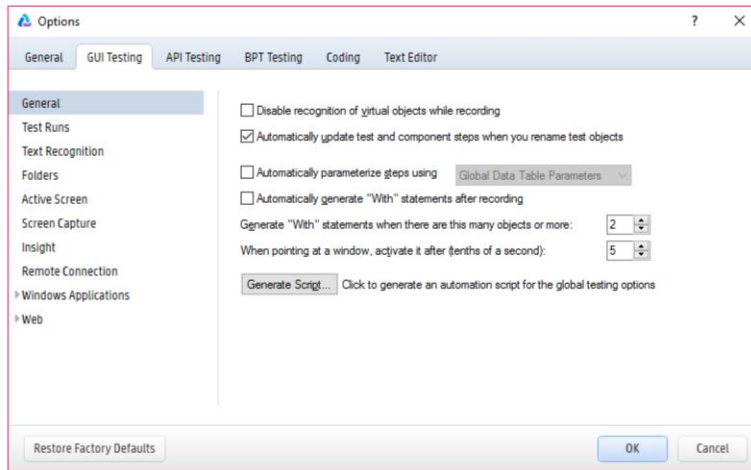
Some key elements of the UFT window are:

- **Title bar:** Displays the name of the current test.
- **Menu bar:** Displays menus of the UFT commands.
- **Keyword View:** Displays recorded user actions in a graphical format.
- **Expert View:** Displays the VBScript code that corresponds to the steps that you create for your test or component.
- **Data Table:** Enables you to parameterize your test.
- **Active Screen:** Displays a screenshot of your application as it appeared when you recorded the test.
- **Debug Viewer:** Contains various of tabs to assist you in debugging your function library, among them: Watch, Variables and Console
- **Errors:** Provides a list of syntax errors in your test or function library scripts.
- **Status bar:** Displays the status of UFT .
- **Tool Box Pane:** Enables to view and open all of the resources (function

libraries, recovery scenarios, and object repositories) in your component.

- **Test Flow Pane:** Contains a visual hierarchy of actions and action calls in the current test, and shows the order in which they are run.
- **Solution Explorer:** Enables you to add, navigate and remove scripts in your solution.

# UFT Options – General Tab



The General tab options affect the general appearance of UFT and other general testing options.

Select **TOOLS -> OPTIONS**. The **OPTIONS** dialog box appears. Click the **General** tab and the **GUI Testing** tab and the **GENERAL** tab.

The 2 General tabs includes the following options:

- Check the **DISPLAY ADD-IN MANAGER ON STARTUP** checkbox to display the ADDIN MANAGER dialog box when you launch the UFT application. This enables testers to select the required add-ins when they invoke UFT
- Check the **CHECK FOR SOFTWARE UPDATES ON STARTUP** checkbox to check for any software updates when you launch the UFT application. This enables you to get latest updates and fixes.
- Check the **AUTOMATICALLY UPDATE TEST AND COMPONENT STEPS WHEN YOU**

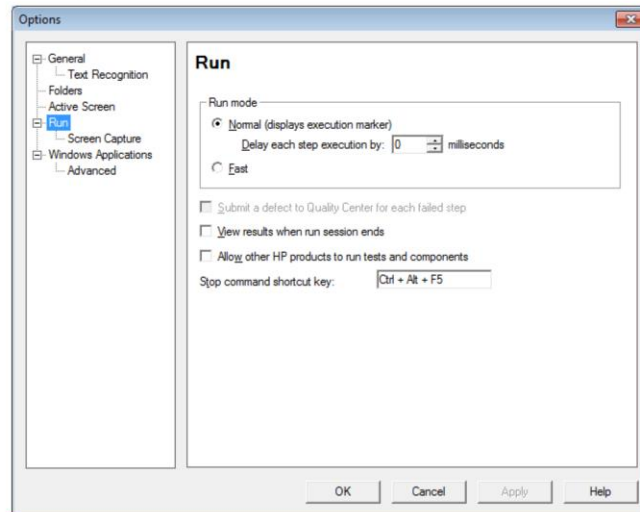
RENAME TEST OBJECTS checkbox to automatically update the test and component steps if you have renamed a test object. This ensures that whenever an object name changes, the UFT test is updated automatically.

- Click **RESTORE FACTORY DEFAULTS** to restore the layout of the UFT window so that it displays the panes in their default sizes and positions.

- Check the **VIEW RESULTS WHEN RUN SESSION ENDS** check box to view the TEST RESULTS window after every test run.



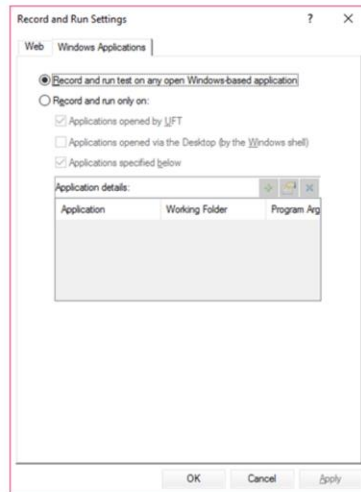
# UFT Options – Run Tab



The Run tab options affect how UFT runs tests and components and displays run session results in the Test Results window.

- Select **NORMAL** to ensure that the execution arrow appears to help troubleshoot your test. Delay each test step to help with debugging.
- Check the **ALLOW OTHER MERCURY PRODUCTS TO RUN TESTS AND COMPONENTS** checkbox if you want to use UFT with other HP products such as Performance Center and Quality Center.
- Check the **SAVE STILL IMAGE CAPTURES TO RESULTS** checkbox to save screen shots in the test results. Selecting **ON ERRORS AND WARNINGS** displays a screen shot whenever there is an error or a warning while running your test.
- Check the **SAVE MOVIE TO RESULTS** checkbox to if you want to save a movie of your test run.

## Record and Run Settings – Windows Applications Tab



The **RECORD AND RUN SETTINGS** dialog box appears the first time you click the **RECORD** button in a new test. This dialog box has a tab for each add-in that you selected. By default, the **WINDOWS APPLICATIONS** tab is activated.

You can manually display this dialog box by selecting **AUTOMATION -> RECORD AND RUN SETTINGS**.

As a best practice, you should select the **RECORD AND RUN TEST ON ANY OPEN WINDOWS-BASED APPLICATION** option when specifying the record and run settings for UFT.

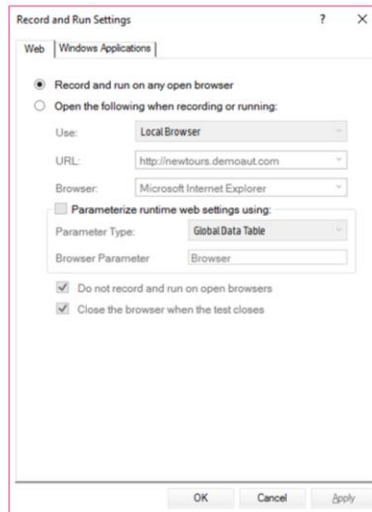
The **RECORD AND RUN ONLY ON** option provides you alternate options for recording and running an application.

The options are:

- **APPLICATIONS OPENED BY UFT:** This option enables you to record and run applications that are opened through UFT only.
- **APPLICATIONS OPENED VIA THE DESKTOP (BY THE WINDOWS SHELL):** This option enables you to record and run applications that are opened through Windows desktop.
- **APPLICATIONS SPECIFIED BELOW:** This option enables you to record and

run applications that are specified in the APPLICATION DETAILS area. Give a demo of how to select an application if you check this option.

## Record and Run Settings – Web Tab



Before you start a record session on Web-based applications, you need to set the record and run settings for the Web application that you want to test.

To set the record and run settings:

1. From the UFT menu bar, select **AUTOMATION** → **RECORD AND RUN SETTINGS**. The **RECORD AND RUN SETTINGS** dialog box appears. displays the RECORD AND RUN SETTINGS dialog box.

2. Click the **WEB** tab.

The WEB tab is available only if you check the WEB check box in the ADD-IN MANAGER dialog box.

3. Select any one of the following options:

- **RECORD AND RUN TEST ON ANY OPEN BROWSER**: Enables UFT to record a test in Internet Explorer and run the test on any supported Web browser.

- **OPEN THE FOLLOWING ADDRESS WHEN A RECORD OR RUN SESSION BEGINS**: Enables UFT to automatically open a new browser session to record and run the test using the specified URL address.

## What's Next?

- ▶ Review Questions
- ▶ Next Lesson
  - The next lesson in the course is:  
**Creating A Basic Test**



End of Lesson

