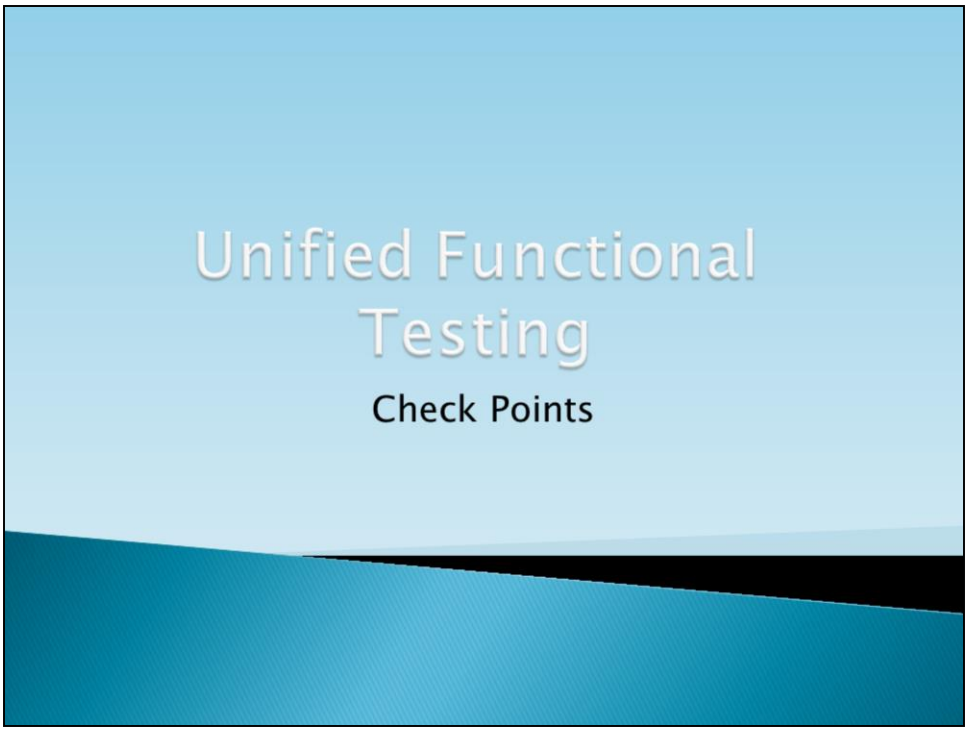

Unified Functional Testing
Check Points

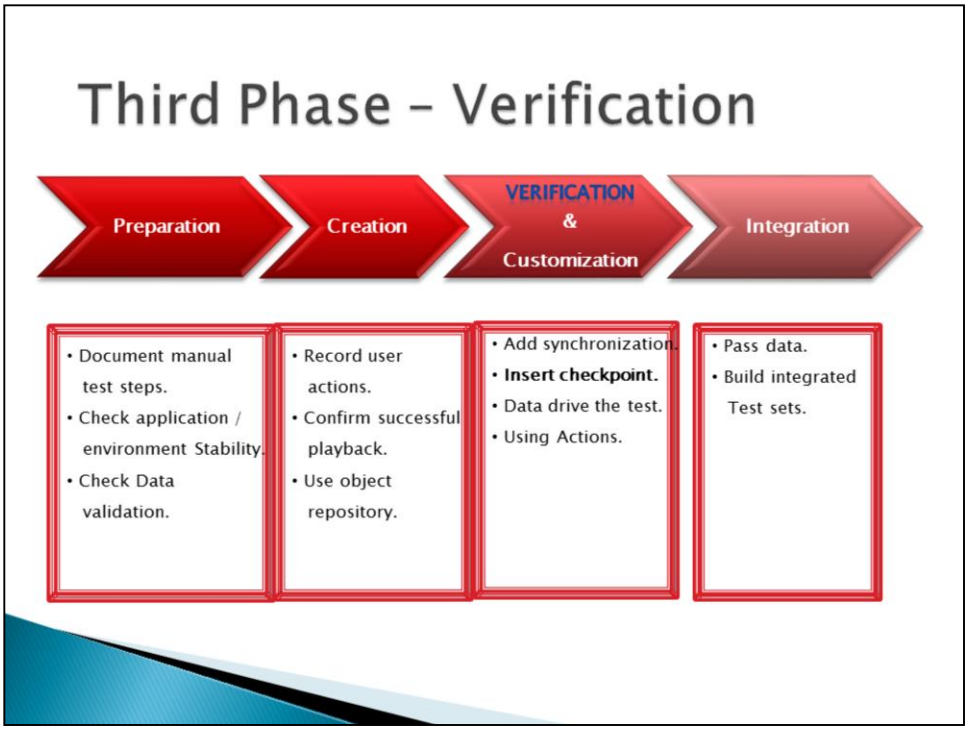
Lesson Objectives

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

- Define standard checkpoints.
- Add standard checkpoints.
- Use a regular expression in order to create a generic checkpoint.
- Add Bitmap Checkpoint

Topics

1. What is a checkpoint
2. Checkpoint types
3. Insert checkpoint
4. Parameterize checkpoint
5. Regular expression
6. View checkpoint result



After creating the automated test , now you need to enhance the test with checkpoints.

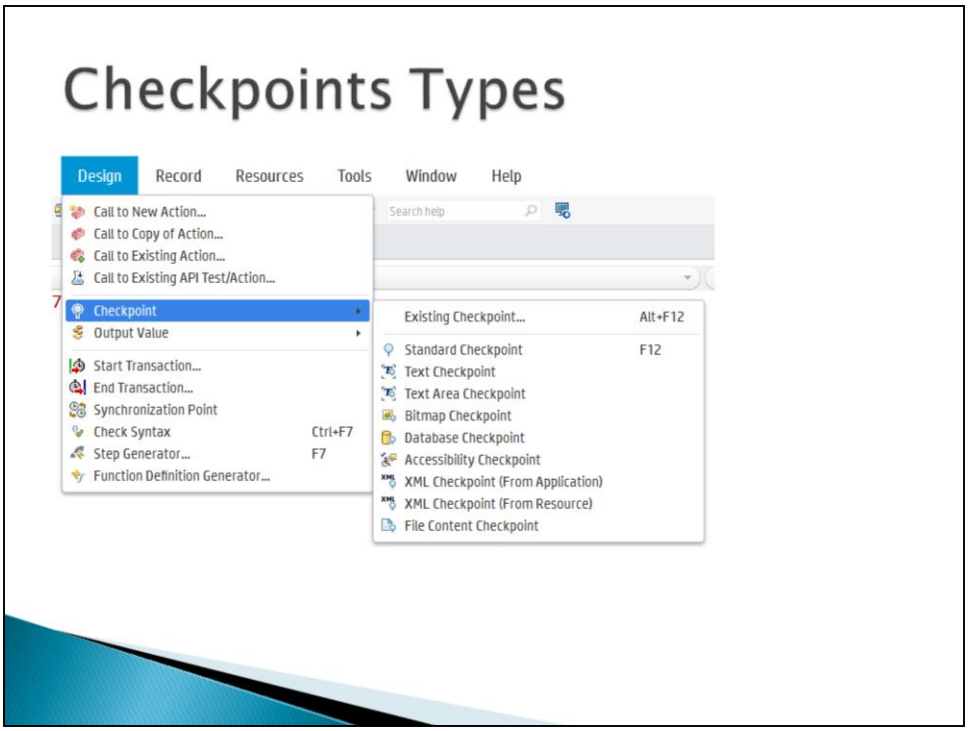
Synchronization and standard checkpoints are different ways to enhance your basic test.

A synchronization point instructs UFT to wait for a specific time or for the object to achieve a certain status before moving on to the next step. You can add a checkpoint so that UFT checks for the message INSERT DONE... to appear before it considers the test successful.

Checkpoints–Definition

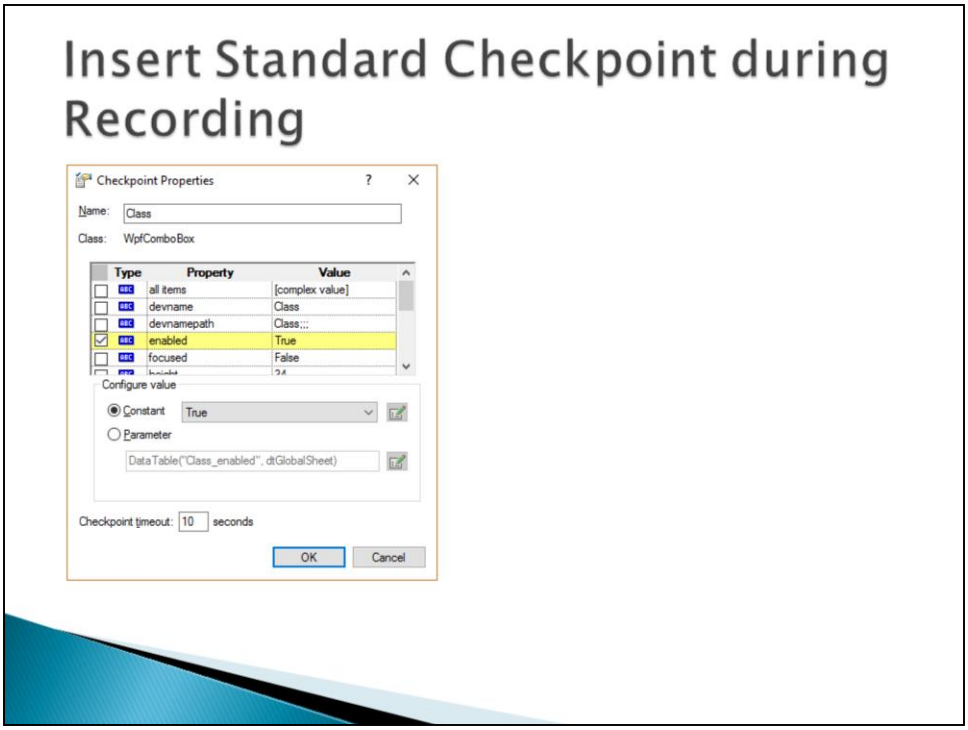
Checkpoint enables you to identify whether the web site or application under test is functioning correctly or not by comparing a current value for particular property with expected value for that property.

The expected values are based on what is recorded and the actual values are based on what occurs during a test run. If the two values match, the checkpoint passes; otherwise, the checkpoint fails. A checkpoint can verify one or more values.



You can insert the following checkpoint types to check various objects in an application.

1. Standard Checkpoint
2. Image Checkpoint
3. Bitmap Checkpoint
4. Table Checkpoint
5. Text Checkpoint
6. Text Area Checkpoint
7. Accessibility Checkpoint
8. Page Checkpoint
9. Database Checkpoint
10. XML Checkpoint
11. File Checkpoint



Standard Checkpoint checks the property value of an object in your application. The standard checkpoint checks a variety of objects such as buttons, radio buttons, combo boxes, lists, and so forth. For example, you can check that a radio button is activated after it is selected or you can check the value of an edit box.

To add a checkpoint during recording a test:

1. While RECORDING select **DESIGN→CHECKPOINT→STANDARD CHECKPOINT.** The cursor changes to a pointing hand.

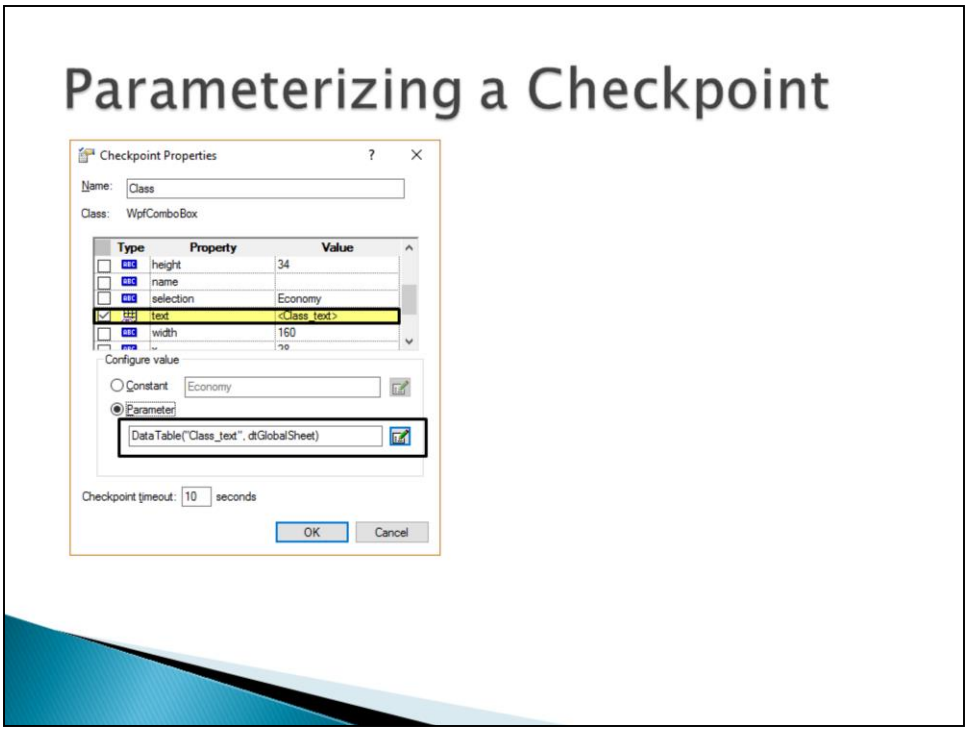
2. In the FLIGHT RESERVATION window, click the object that you want to check with the pointing hand cursor. The OBJECT SELECTION - CHECKPOINT PROPERTIES dialog box appears.

3. In the OBJECT SELECTION - CHECKPOINT PROPERTIES dialog box, click **OK.** The CHECKPOINT PROPERTIES dialog box appears.

4. Check the properties for which you want to add checkpoints and uncheck all other properties. The value of the property appears in the CONSTANT field.

5. Modify the value of the property, if required.

6. Click **OK** to insert the checkpoint.

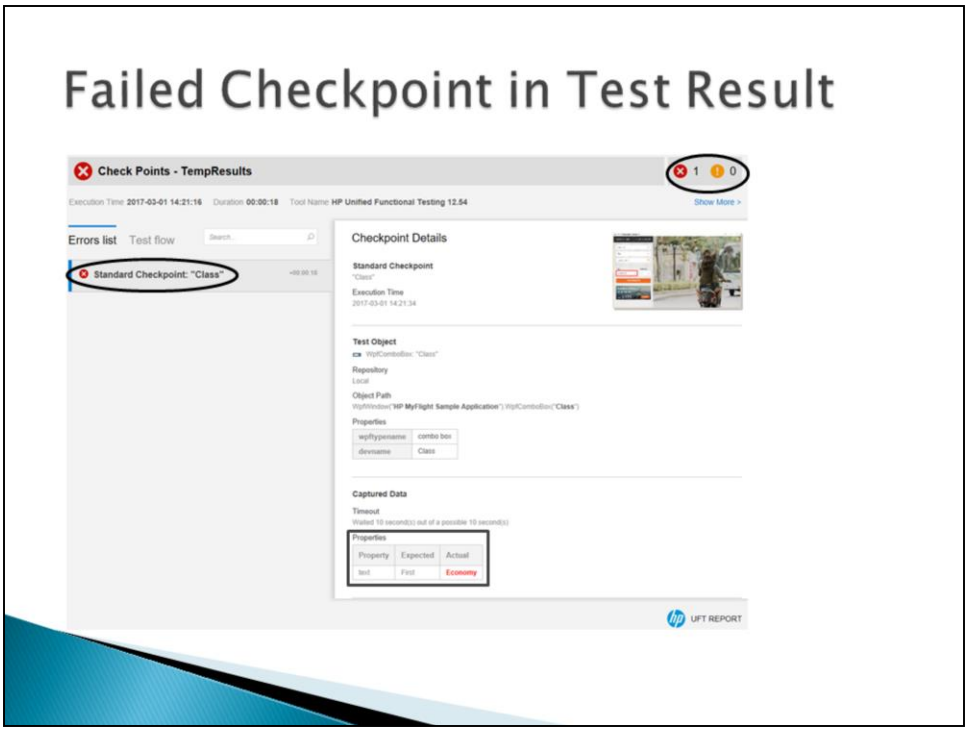


You can use parameterized expected values to make your checkpoints dynamic. A dynamic checkpoint is a checkpoint that can check for any value generated at run time.

You can set parameterized expected values on:

- An object property in Object Repository
- A checkpoint on a parameterized field

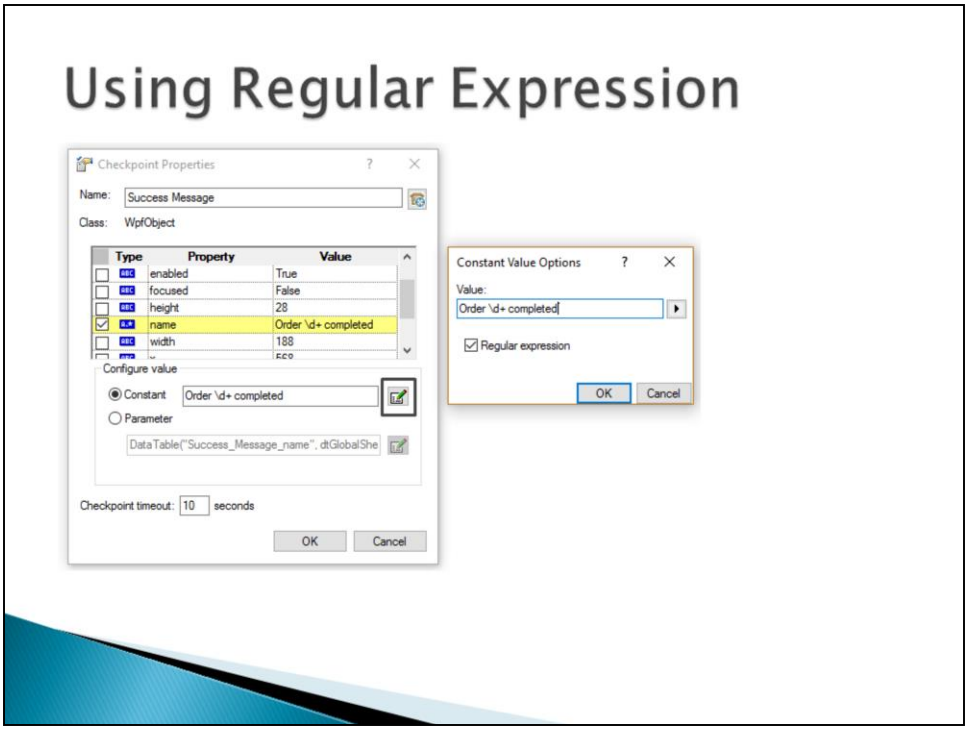
For example, if a checkpoint is dependent on an input value that is parameterized, you can link the checkpoint to the input value parameter.



The top right pane displays detailed results of the selected checkpoint, including its status (**Passed** or **Failed)**, the date and time the checkpoint was run, and the portion of the checkpoint timeout interval that was used (if any). It also displays the values of the object properties that are checked, and any differences between the expected and actual property values.

The bottom right pane displays the image capture for the checkpoint step (if available).

The left pane display with a red X failed checkpoint.



When creating a standard checkpoint to verify the property values of an object, you can set the expected value of an object's property as a regular expression so that an object with a varying value can be verified.

For example, in the Flight Reservation application, a different order number is generated every time you run a test. To accommodate these changing order numbers, you can use checkpoints with regular expressions so that UFT can recognize the generated order number.

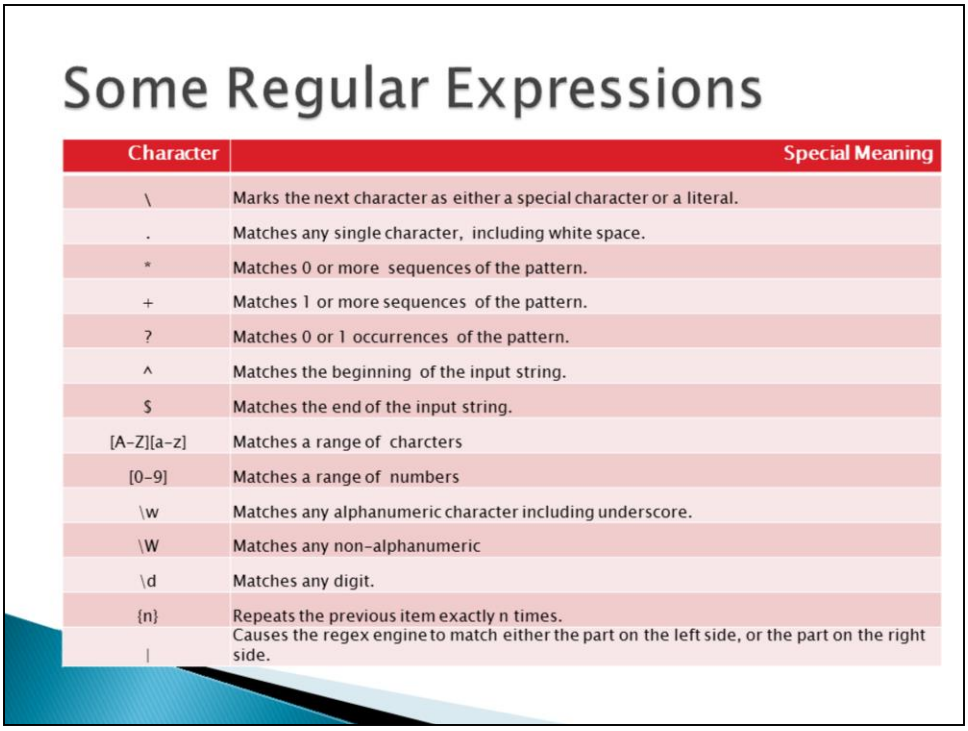
To use a regular expression in a checkpoint:

1. In the CHECKPOINT PROPERTIES dialog box, ensure that the CONSTANT option is selected and click the **CONSTANT VALUE OPTIONS** button**.** The **CONSTANT VALUE** OPTIONS dialog box appears.

2. Check the **REGULAR EXPRESSION** check box**.**

3. In the VALUE field, type the regular expression.

4. Click **OK.**



Regular Expression for date format MM/DD/YY - (0[1-9]|1[012])/(0[1-9]|[12][0-9]|3[01])/(\d\d).

The first part -> (0[1-9]|1[012]) – match to Month format (01-12)

The second part -> (0[1-9]|[12][0-9]|3[01]) – match to Day format (01-31)

The third part -> (\d\d) – match to Year format (00-99)

The delimiters between parts is “/”

What's Next?

- Review Questions
- Next Lesson
  - The next lesson in the course is: **Debugging**

End of Lesson