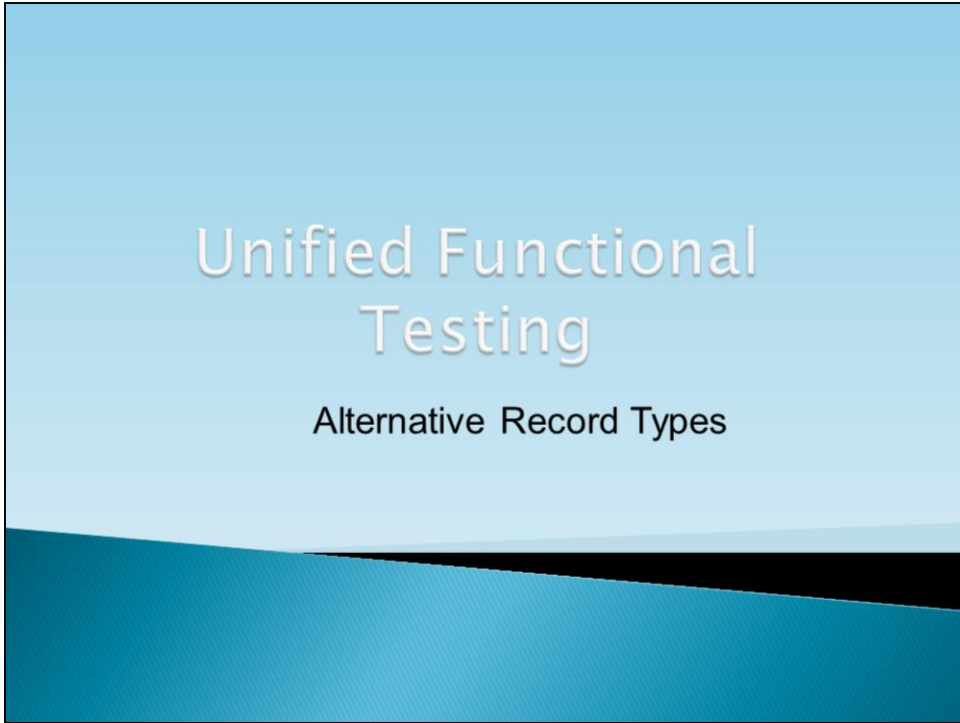


Unified Functional Testing

Alternative Record Types



Lesson Objectives

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

- Handle non standard objects
- Use UFT different ways of recording
- Create virtual objects



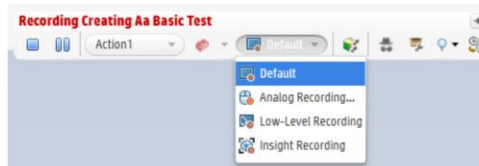
Lesson Content

1. Normal Recording
2. Low Level Recording
3. Analog Recording
4. Virtual Objects
5. Insight Objects



Recording Modes

- ❑ You can record a test in UFT in the following recording modes:
 - Normal
 - Low-level
 - Analog
 - Insight



Any combination of the recording modes can be used in a test

Normal Recording Mode

- ❑ UFT uses the normal recording mode as the default recording mode.
- ❑ In this mode, UFT:
 - Records a step for each interaction with an object.
 - Learns the properties of an object and stores them in the object repository for object identification at run time.

UFT uses the normal recording mode as the default recording mode. In this mode,

UFT records a step for each interaction with an object. The normal recording mode does not depend on window coordinates, desktop coordinates, or screen resolution for a successful test run.

The normal recording mode enables UFT to learn the properties of an object and store them in the object repository for object identification at run time.

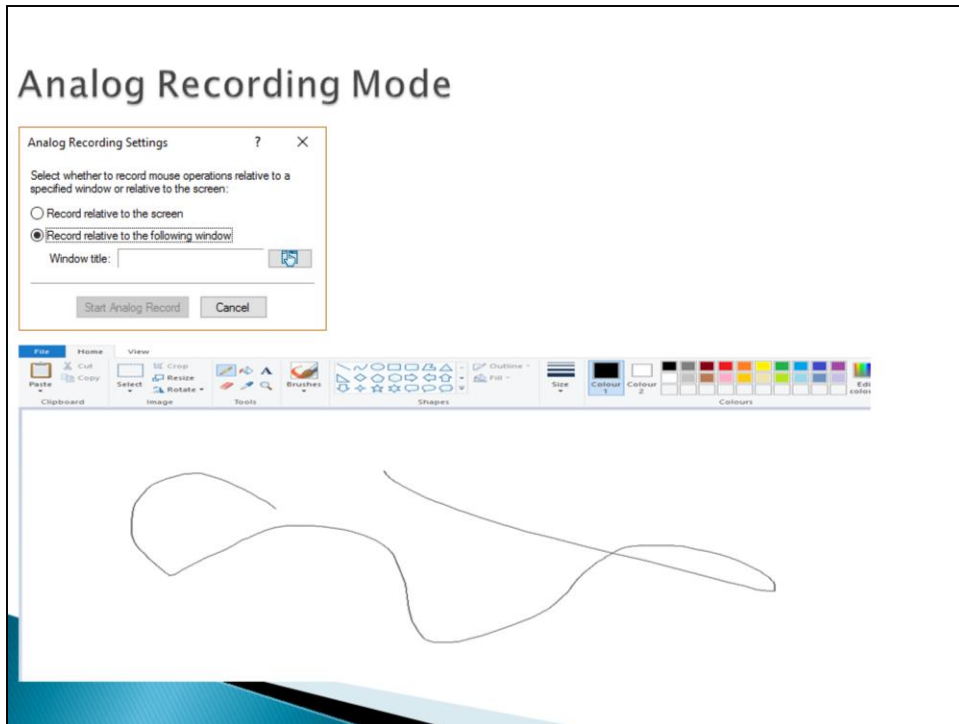
Low Level Recording Mode

- ❑ The low-level recording mode enables you to record on any object in the application, regardless of whether UFT recognizes the object.
- ❑ In low-level recording, UFT:
 - Learns the object properties of run-time objects in the Window class or the WinObject class.
 - Records the exact coordinates of mouse clicks, drag-and-drop movements, and type operations on an object.
 - Records a step for each interaction with an object.

Low-level recording is useful when an application depends on mouse click or keyboard events.

To record a test in the low-level recording mode:

1. Start recording a test in normal mode. At the point where you want to start low level recording, from the floating menu or from the UFT menu bar, select **RECORD→LOW LEVEL RECORDING**.
2. After performing the steps you want to record, from the UFT menu bar, select **RECORD→LOW LEVEL RECORDING to stop the low-level recording**.



Enables you to record the exact mouse and keyboard operations you perform in relation to either the screen or the application window. In this recording mode, UFT records and tracks every movement of the mouse as you drag the mouse around a screen or window.

This mode is useful for recording operations that cannot be recorded at the level of an object, for example, recording a signature produced by dragging the mouse.

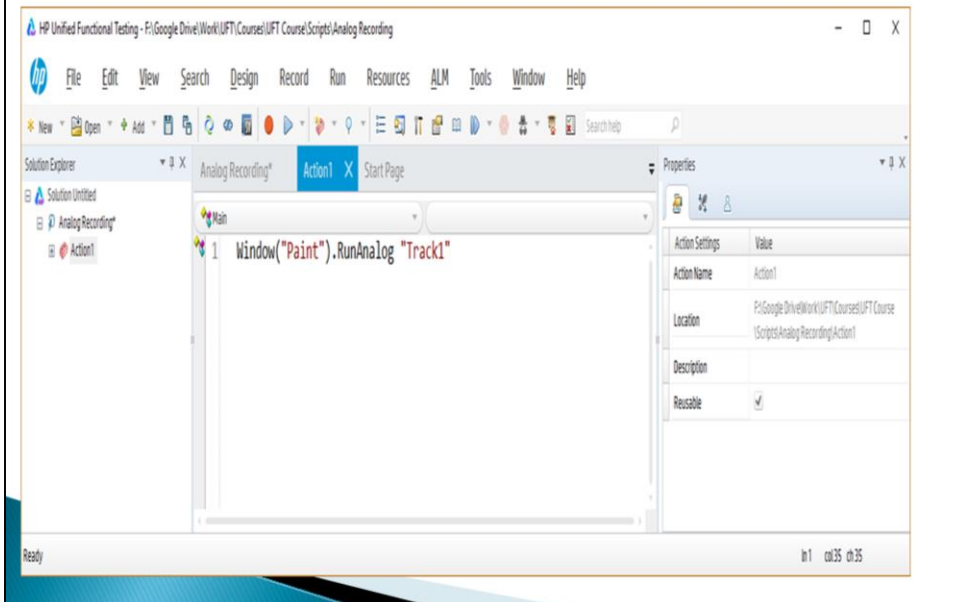
To record a test in the analog recording mode:

1. Start recording a test in normal mode. At the point where you want to start analog recording, from the UFT menu bar, select **RECORD→ANALOG RECORDING**. The **ANALOG RECORDING SETTINGS** dialog box appears.
2. Select one of the following options:
 - **RECORD RELATIVE TO THE SCREEN**: To record mouse clicks, cursor movement, and keyboard input relative to the entire desktop.
 - **RECORD RELATIVE TO THE FOLLOWING WINDOW**: To record clicks, cursor movement, and keyboard input relative to the selected window.
3. Click the pointing hand button, and click the application on which you want to perform analog recording. In the **ANALOG RECORDING SETTINGS** dialog

box that appears, click **START ANALOG RECORD**. The **ANALOG** indicator appears at the bottom of the UFT window.

4. After you perform the steps that you want to record, from the UFT menu bar, select **RECORD→ANALOG RECORDING** to stop the analog recording.

Analog Recording Mode – Cont.



When you record a test in analog record mode:

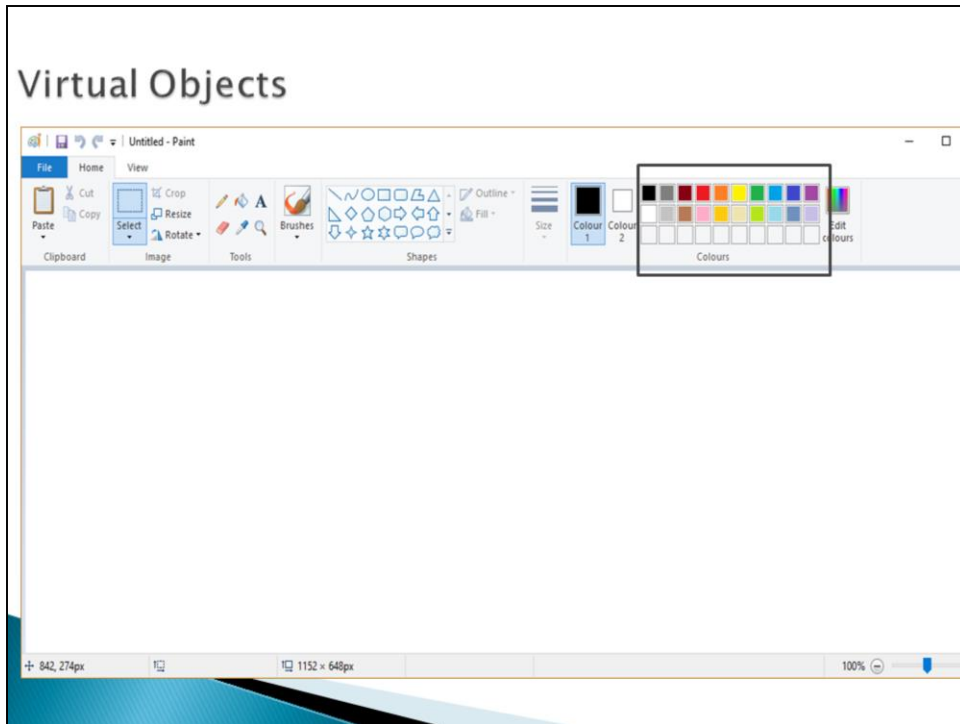
- UFT records a single step for the analog recording session. This step displays the value RUNANALOG in the OPERATION column.
- UFT creates a binary file, ANALOGTRACKLIST.DAT in the ACTION folder.

The

ANALOGTRACKLIST.DAT file stores the details of the actions that you perform in the analog recording mode.

- UFT consumes more disk space as compared to normal recording.

In the analog record mode, UFT does not record object properties in the object repository because the recording is not done at the object level.

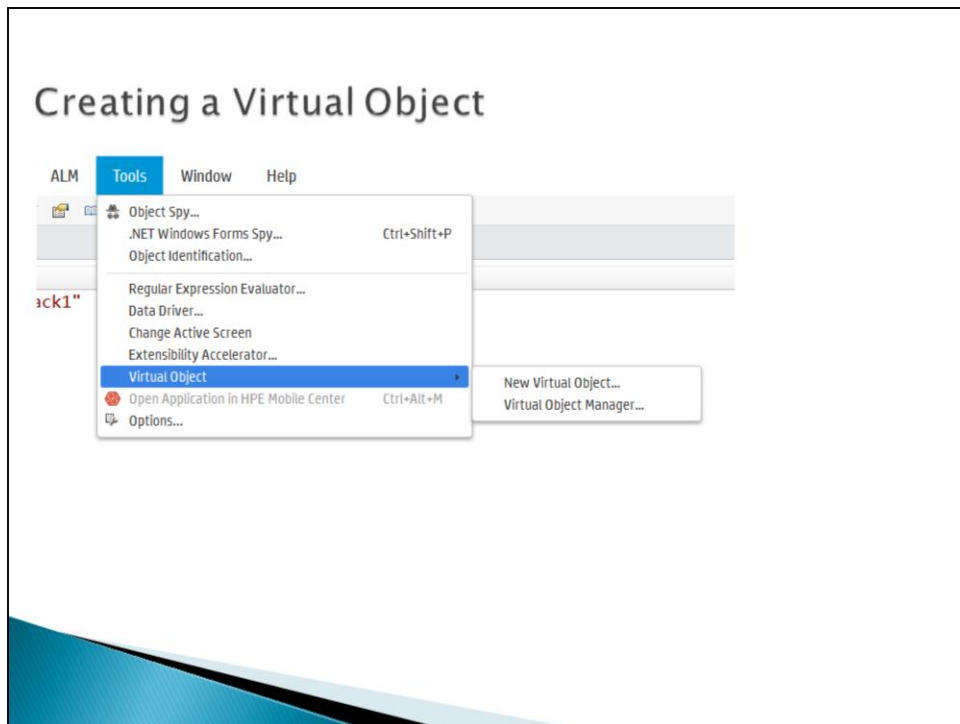


Your application may contain objects that behave like standard objects but are not recognized by UFT. You can define these objects as virtual objects and map them to standard classes, such as a button or a check box.

For example, suppose you want to test a Web page containing a bitmap that the user clicks. The bitmap contains several different hyperlink areas, and each area opens a different destination page. When you create the test, the Web site matches the coordinates of the click on the bitmap and opens the destination page.

To enable UFT to click at the required coordinates during a run session, you can define a virtual object for an area of the bitmap, which includes those coordinates, and map it to the button class. When you run the test, UFT clicks the bitmap in the area defined as a virtual object so that the Web site opens the correct destination page.

Note: UFT does not support virtual objects for analog or low-level recording.



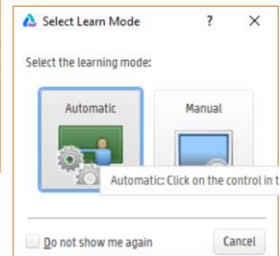
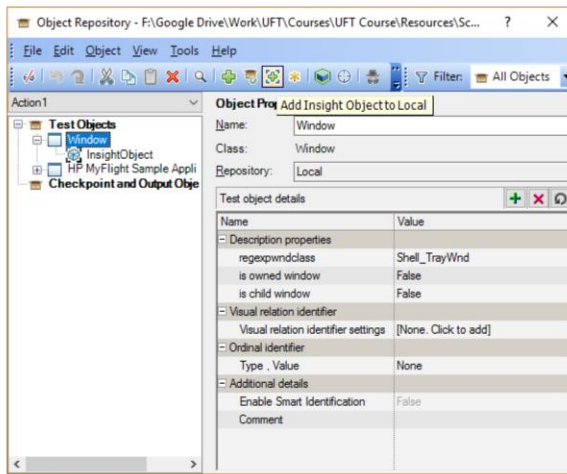
To create a virtual object:

1. On the UFT menu bar, select **TOOLS** → **VIRTUAL OBJECTS** → **NEW VIRTUAL OBJECT** to open the **WELCOME TO THE VIRTUAL OBJECT WIZARD** page.
2. Click **NEXT**. The **MAP TO A STANDARD CLASS** page appears. From the **CLASS** list, select the class to which you want to map the virtual object, and click **NEXT**. The **MARK VIRTUAL OBJECT** page appears.
3. Click **MARK OBJECT**. The cross-hairs symbol appears. Use the cross-hairs symbol to mark the area for the virtual object. Ensure that the object areas for multiple virtual objects do not overlap.
4. On the **MARK VIRTUAL OBJECT** page, click **NEXT**. The **OBJECT CONFIGURATION** page appears.
5. In the **IDENTIFY OBJECT USING** section, select the **PARENT ONLY** option or the **ENTIRE PARENT HIERARCHY** option, and click **NEXT**.
6. In the **SAVE VIRTUAL OBJECT** page that appears, specify a name for the virtual object and the collection in the **NAME** and **COLLECTION NAME** fields, respectively.
7. Select the **YES** option if you want to create more virtual objects. Otherwise, select **NO**, and click **FINISH**.

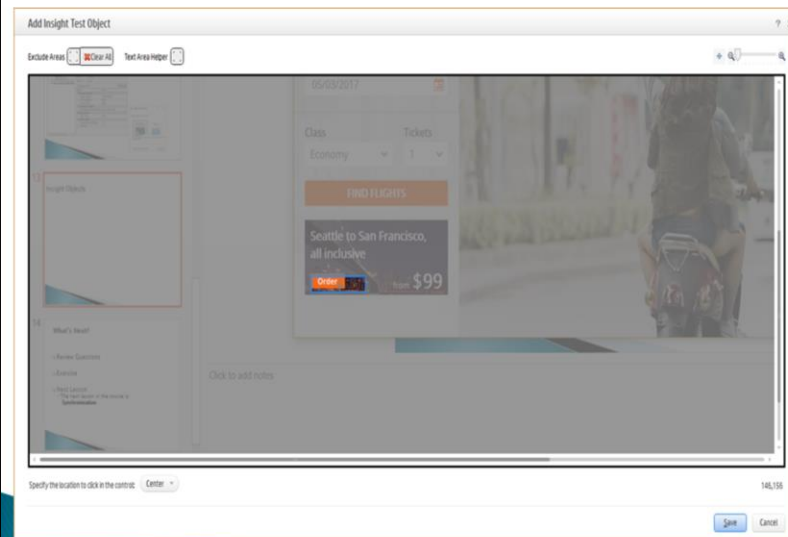
Insight Objects

- ❑ UFT can recognize a part of the screen or an object by it's look.
- ❑ Insight object can be learned during recording or through the OR.
- ❑ Unlike virtual object, not dependent on location
- ❑ Use this option:
 - Object is not recognized by UFT.
 - There is no unique attributes to recognize this object.
 - It's not a real object but a section in an object, E.g. clicking a certain part of a map.

Insight Objects



Insight Objects



Insight Objects



What's Next?

- Review Questions
- Exercise
- Next Lesson
 - The next lesson in the course is:
CheckPoints



End of Lesson

