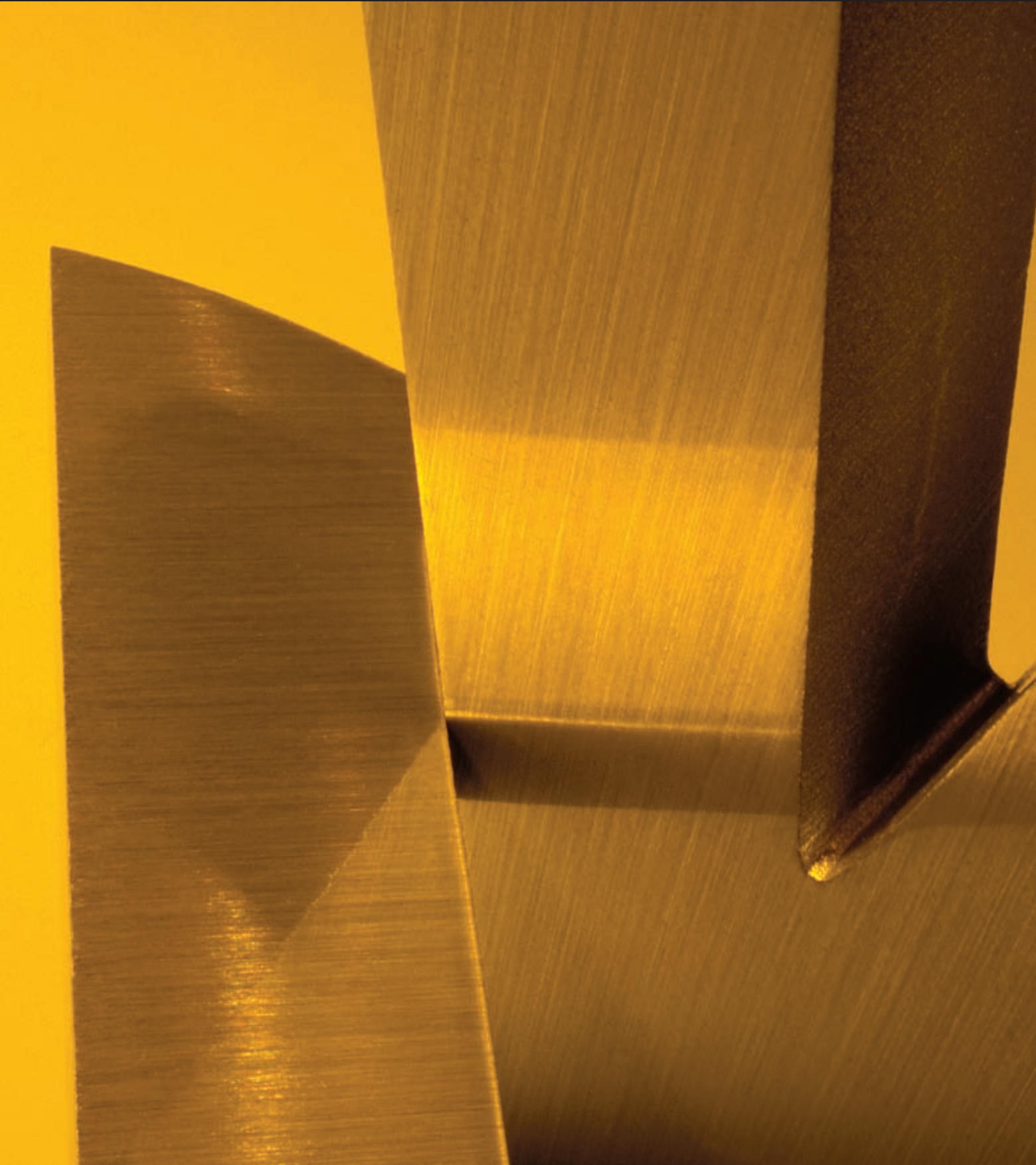


Issue 3 • Number 3

X-RAY

M A G A Z I N E

PUBLISHING, WORKGROUP & ENTERPRISE TECHNOLOGY FOR QUARK USERS



ScriptMaster XT... Jump Starting Your AppleScript Development in QuarkXPress

BY BENJAMIN S. WALDIE

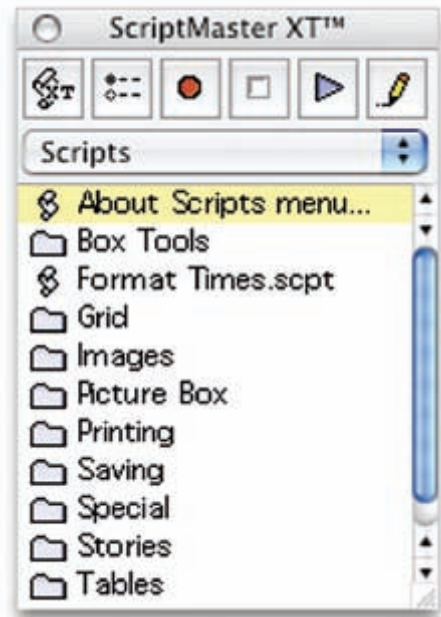
When preparing to implement AppleScript automation into a workflow, one of the most difficult tasks in getting started is learning the AppleScript terminology that is specific to the applications you want to automate. Since every scriptable application uses different AppleScript terminology, there is always some degree of a learning curve that must be overcome when scripting a new application, even for experienced scripters. As you become more familiar with an application's AppleScript terminology, this process will get easier; however, it's getting started that is the hard part.

The first place to begin when preparing to script an application is its AppleScript dictionary, which will contain all of the AppleScript terms that the application will understand. By looking through an application's dictionary, you may be able to determine the proper syntax in order to write the desired code. AppleScript dictionaries can sometimes seem confusing and difficult to navigate, especially for newer scripters.

In some cases, a scriptable application may be recordable, meaning that you can click **SCRIPT EDITOR** **RECORD**, perform the desired tasks manually, and the AppleScript code will be written for you automatically. While this may sound like the holy grail of scripting and automation, it is unfortunately not so. The primary reason for this is that, while a large number of applications are scriptable, precious few of those applications offer the ability to record in AppleScript. In Mac OS 9 and Mac OS X (10.3 and higher), the Finder is one such recordable application. So, you may begin recording tasks in the Finder in order to gain an understanding of how this functionality works and how it can be a benefit to you as you get started with scripting.

If you have dabbled with AppleScripting in QuarkXPress before, then you may have actually tried clicking the **RECORD** button in Script Editor, and performing your task manually so that a record action could be performed. If you have done this, then you probably have noticed that no code was written for you, as QuarkXPress is not recordable in and of itself. Like many other applications, while QuarkXPress is very AppleScript-able, it is not AppleScript recordable.

For those struggling with their QuarkXPress scripting, there is hope. Jintek, LLC, offers an XTensions software module called ScriptMaster XT, which makes



▲ fig. 1

QuarkXPress recordable. In addition to implementing recordability, ScriptMaster XT also offers a number of other AppleScript-related features, which we will discuss throughout the remainder of this article.

Installing and Accessing ScriptMaster XT

The process of installing ScriptMaster XT is identical to that of many other QuarkXPress XTensions. Simply move the XTensions software module into the **QUARKXPRESS** **XTENSION FOLDER**, and then re-launch QuarkXPress. Once loaded, to display the ScriptMaster XT palette, select **UTILITIES** **SHOW SCRIPTMASTER XT** (see figure 1).

If you have used AppleScripts with QuarkXPress in the past, then you may be familiar with the script menu in QuarkXPress' menu bar. The ScriptMaster XT palette offers an alternative way to trigger scripts from within QuarkXPress, without the need to navigate up to the menu bar.

By default, after installing ScriptMaster XT for the first time, the scripts from QuarkXPress' script menu are displayed in ScriptMaster XT's palette window. Double click on a script to trigger it, or double click on a folder to display any scripts within that folder. A pop-up menu above the list of scripts in the palette displays the names of the folders that make up the path to the folder containing the currently displayed scripts. Select the pop-up menu to choose a folder within the path in order to back out of the current folder structure. With the ScriptMaster XT palette, you can actually navigate to any folder on your hard drive, offering you the ability to store your QuarkXPress scripts virtually anywhere on your machine.

To edit a script that is displayed in the ScriptMaster XT palette, select the script and click the pencil button in the palette's toolbar. Assuming that the script has not been saved as a run-only script, it will be opened and displayed in Script Editor.

Recording Your First AppleScript

While running scripts from within QuarkXPress is important, ScriptMaster XT's true power comes in its ability to record AppleScript code when you perform a task manually.

To begin recording, click **RECORD** in the palette's toolbar. Next, perform the desired tasks manually. Take your time in doing so. Recording AppleScript code can be a slow and tedious process, as ScriptMaster XT must analyze everything that you do. Try to move slowly and consistently, and remember that ScriptMaster XT will record what you do, not necessarily what you want to do. If you make a mistake, it may be recorded. If you forget a step, it cannot be recorded. In addition, be aware that while most tasks in QuarkXPress are scriptable, it is not true of absolutely everything. Therefore, there may be certain tasks that you perform, which are not recorded by ScriptMaster XT.

When finished recording, click **STOP** in the palette's toolbar, and you will be prompted to save your newly recorded script. Once saved, you may navigate to, and trigger the script via ScriptMaster XT's palette window. You may also choose to edit the script in Script Editor. This is usually a good idea, as it will provide you with a chance to review the code that was recorded, and make any necessary adjustments.

The following is an example of a script that was recorded using ScriptMaster XT. This particular script creates a text box on a page, and adds some default text to the box.

```
tell application "QuarkXPress"
  activate
  (* "ScriptMaster XT active" *)
  set tool mode of document 1 to text mode
  make new text box at beginning of
  page 1 of document 1 with properties
  { box shape:rectangular,
  bounds:{ "0.952\","", "1.069\","", "2.533\","",
  "2.863\ "" }
  set tool mode of document 1 to drag mode
  make new text at beginning of story 1
  of text box 1 of page 1 of document 1
  with properties { contents:"this is a
  test"}
end tell
```

Alternatively, rather than recording through the ScriptMaster XT palette, you may choose to record

from an opened Script Editor document by clicking **record** within Script Editor. This can allow you to continue recording manual tasks within other recordable applications, such as the Finder.

Working with Boxes

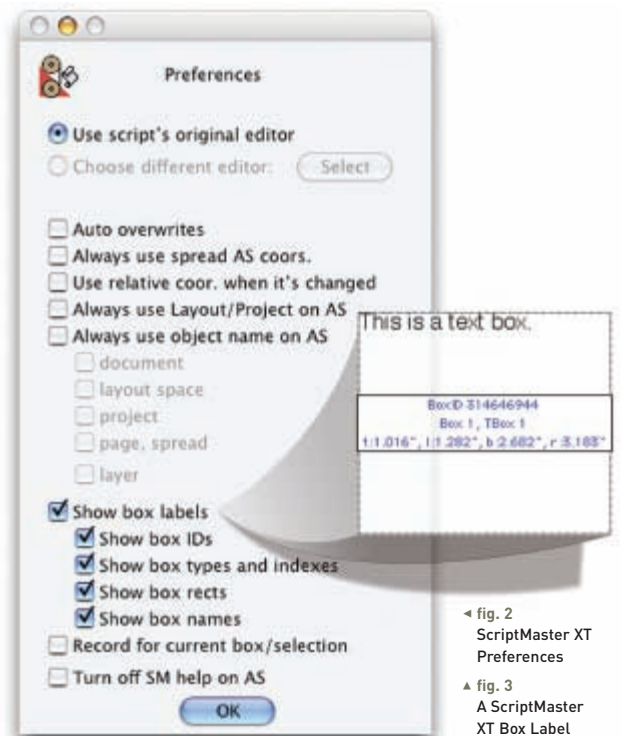
As a QuarkXPress user, you are probably well aware that QuarkXPress documents frequently consist of a large number of text and picture boxes. With this in mind, you must be very specific in how you refer to boxes within your AppleScript code. Referring to a box incorrectly may cause your AppleScript to interact with the wrong box, which, in an automated workflow, can be disastrous. The following example code retrieves the text of the front text box on page one.

```
tell application "QuarkXPress"
  set theText to text of text box 1 of
  page 1 of document 1
end tell
→ "This is a text box."
```

In QuarkXPress, boxes may be sequentially referred to by their index, or rather their order from front to back. If your document contains a large number of boxes, straightening out this order can quickly become difficult. To aid with this process, ScriptMaster XT offers the ability to display box labels. To enable this functionality, click

PREFERENCES in the ScriptMaster XT palette's toolbar. A preferences window will be displayed (figure 2).

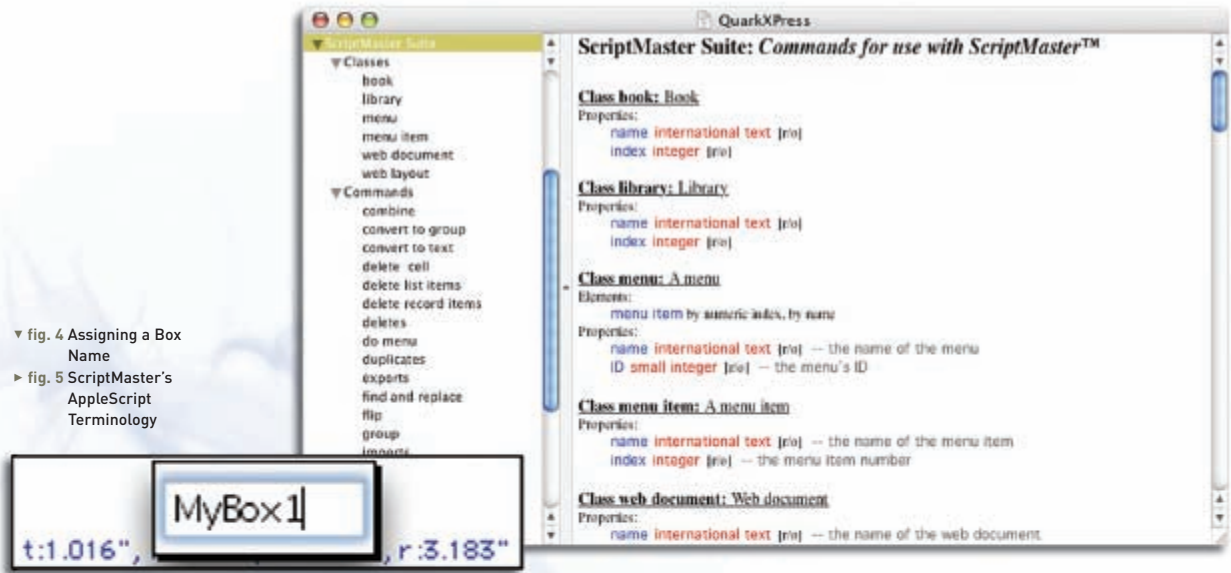
In addition to a number of other preferences, which you are encouraged to explore on your own, you will notice a **SHOW BOX LABELS** checkbox. Select this checkbox, and then select the checkboxes for the types of information that you would like to be displayed in each box's label. Close the preferences window when done by clicking the **OK** button.



◀ fig. 2
ScriptMaster XT
Preferences

▲ fig. 3
A ScriptMaster
XT Box Label

▼ fig. 4 Assigning a Box Name
 ► fig. 5 ScriptMaster's AppleScript Terminology



Once box labels have been enabled, a label box will be displayed above each box on the page. Depending on the options you chose in ScriptMaster XT's preferences, this label box may contain a box ID, box type, index from front to back, top, left, bottom, and right coordinates, and the box's name, if applied. A box's name cannot be specified using QuarkXPress itself. It can only be specified using AppleScript or ScriptMaster XT. To assign a name to a box using ScriptMaster XT, hold down the **OPTION** button, and double click on a box's label and enter the desired name (see figure 4).

When building an automated QuarkXPress-based workflow, assigning unique names to boxes is usually a good idea, as it eliminates the need to rely on the box's index from front to back. The primary reason for this is because new boxes may be added in the future, or existing boxes may be moved, which could cause the boxes within a document to become re-ordered from front to back. This would cause problems in a script that is hard coded to access boxes by index.

AppleScript Terminology Additions

In addition to the incredibly useful features we have already discussed, ScriptMaster XT goes a step further. Once installed, ScriptMaster XT actually extends QuarkXPress' AppleScript language by adding some new AppleScript terminology into QuarkXPress' dictionary. This new terminology can be found in the ScriptMaster suite within QuarkXPress' AppleScript dictionary (see figure 5).

ScriptMaster XT's AppleScript terminology adds the ability to perform tasks that simply aren't possible with the use of QuarkXPress' built-in AppleScript terminology, such as performing a find and replace, step and repeat, and sectioning a document.

The following example code uses ScriptMaster XT's AppleScript terminology to apply section numbering to a document.

```
tell application "QuarkXPress"
    tell document 1
        start section at page 1 prefix
            "A" number "49"
    end tell
end tell
```

In Conclusion

As you can see, ScriptMaster XT easily proves itself to be a valuable tool in the arsenal of anyone implementing QuarkXPress-based AppleScript automation into a workflow. For those new to scripting QuarkXPress, ScriptMaster XT's ability to record AppleScript code while performing tasks manually makes it well worth the cost of the software. For experienced developers, while the ability to record might seem less important, ScriptMaster XT still offers a quick and easy way to view and edit box names and other information, a task that often proves to be time consuming and confusing. In addition, ScriptMaster XT also implements some much-desired AppleScript terminology additions, which are sure to make developing for QuarkXPress even easier.

For additional information about ScriptMaster XT, visit Jintek, LLC's website at <http://www.jintek.com>, or download a demonstration version of ScriptMaster XT today. The demonstration version and the fully functional product, are available from XChange North America at <http://www.xchangen.com/>.

See you in the trenches. ☒