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# ExtendScript Toolkit CS4 ReadMe

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## 1. Overview

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This document contains a list of new features, changes, and known issues in this ExtendScript Toolkit CS4 (ESTK) release. There is also a section that describes a few hidden gems, like additional Preferences settings.

## 2. New Features in CS4

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The ExtendScript Toolkit comes with an updated and improved user interface that offers enhanced options for configuration, including the capability to create workspaces with different window arrangements.

The Object Model Viewer (OMV) has been upgraded and expanded, providing better documentation.

Other new features:

- The new Object Model Viewer shows all object models in a single window.
- Workspaces define the size, position and visibility of panels.
- Both a Functions panel and a flyout menu in the document window list all functions defined in the currently active document. Select a function in either the panel or the menu to jump directly to that function definition within the document.
- Code completion in the Script Editor can be configured to include any loaded object model dictionary.
- The Script Editor supports triple-quote syntax so strings can span several source code lines.
- The Scripts panel can exclude files and folders whose names begin with a dot character.
- Selecting the 'Reset' menu item resets the JavaScript engine.
- A 'Go to Line' dialog provides a means to jump to a specific line in the source code editor.
- A document can be split into multiple views with each document view reflecting any changes made.
- On Mac OS, there is a "Bring all documents to front" menu item as well as a new option to chose an application frame as on Windows for better management of panels and documents.

Good-to-know options regarding default and saved preferences:

- Press and hold the Shift key during startup to avoid loading preferences.
- Press and hold the Shift key during shutdown to avoid saving preferences.

## 2.1. Find and Replace

The Toolkit supports a limited set of Regular Expression syntax for the Find and Replace dialog:

.	Matches any character
(	Marks the start of a region for capturing a match
)	Marks the end of a capturing region
\<	Matches the start of a word using the editor's current definition of words
\>	Matches the end of a word using the editor's current definition of words
\x	Escapes a character <i>x</i> that would otherwise have a special meaning. For example, \[ is interpreted as a left bracket, rather than the start of a character set
[ . . . ]	A set of characters; for example, [abc] means any of the characters a, b or c. You can also use ranges, for example [a-z] for any lower case character
[ ^ . . . ]	The complement of the characters in a set. For example, [ ^A-Za-z ] means any character except an alphabetic character
^	Matches the start of a line (unless used inside a set)
\$	Matches the end of a line
*	Matches 0 or more times. For example, Sa*m matches Sm, Sam, Saam, Saaam, etc.
+	Matches 1 or more times. For example, Sa+m matches Sam, Saam, Saaam, and so on

In a replace operation, use the captured regions of a match in the replacement expression by using the placeholders \1 through \9. \1 refers to the first captured region, \2 to the second, and so on. For example, if the search string is `Fred\([1-9]\)XXX` and the replace string is `Sam\1YYY`, when applied to `Fred2XXX` this generates `Sam2YYY`.

## 2.2. Adobe Scripts Folder

On first launch, the ESTK creates a folder named Adobe Scripts in the user's Documents folder. This is the folder whose contents the Default favorite in the Scripts panel displays.

When double-clicking a JSX file, the ESTK normally acts as an invisible security filter. Before actually launching the file, a security dialog pops up asking if it is OK to execute the script. The ESTK treats the user's Documents/Adobe Scripts folder as a trusted location. When you double-click a JSX file in that folder, the Toolkit does not display the security alert.

## 2.3. “Don’t show again” in dialogs

Some dialog windows offer the “Don’t show again” option. If you select this option, the ESTK remembers the choices made in this dialog. The next time this dialog would appear, it makes the same choices without showing the dialog.

To make these dialogs display again, click “Reset Dialogs” on the User Interface page in the Preferences dialog.

## 2.4. “Target engine ‘engine name’ is busy!” error message

This error message comes up whenever the ESTK attempts to communicate with the remote JavaScript engine and the engine does not respond. For example, if Photoshop is running and the “New Document” dialog is opened in Photoshop, then Photoshop is in a modal state and unable to communicate with the ESTK.

## 3. Hidden Preferences

The ESTK contains a few hidden settings. These settings can be edited manually by editing the Preferences template file `defs.xml`. The file is located here:

- **Windows:** {Program Files}\Adobe\ExtendScript Toolkit\Required\defs.xml
- **Mac OS:** /Applications/Utilities/Adobe Utilities/ExtendScript Toolkit.app. Control-click the application icon and select "Show Package Contents" to open the package. The file is located here:

Contents/SharedSupport/Required/defs.xml

After editing the file, start the ESTK while holding the Shift key down. This reverts to the default preferences by loading this file. Note that this also removes any keyboard shortcuts, favorites, and so on, that you have set.

### 3.1. “Save This File?” before Debugging

To enable a confirmation dialog asking to "Save this file?" before debugging, set this tag in the `defs.xml` file to **true**:

```
<debug><saveBeforeDebug>false</saveBeforeDebug></debug>
```

### 3.2. The Status Bar

The ExtendScript Toolkit displays the result of the execution of a script in the status bar as well as in the Console. To display the result only in the status bar, set this tag in the `defs.xml` to **false**:

```
<printResult>false</printResult>
```

### 3.3. Data Browser - Limited Length of Characters

Each entry in the Data Browser has a limited length of characters. The limit is defined with the tag in the `defs.xml`:

```
<databrowser><maxLength>64</maxLength></databrowser>
```

### 3.4. Opening Documents in Floating Windows

Newly created documents are by default always opened inside the application frame. To open newly created documents as single floating windows, set this tag in the `defs.xml` to **true**:

```
<document><floatingAppFrame>true</floatingAppFrame></document>
```

On the Mac when there is no application frame, by default newly created documents are tabbed together in the top most document window. By setting the `floatingNoAppFrame` tag in the `defs.xml` to **true**, newly created documents are opened as individual floating windows.

```
<document><floatingNoAppFrame>true</floatingNoAppFrame></document>
```

## 4. Known Issues

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This section explains a few limitations in this version of the ESTK which may be addressed in a future release.

### 4.1. UTF-8 Signature Saved in Files

By default, the ESTK CS4 writes a UTF-8 signature at the beginning of all saved documents. This can cause issues for editors other than the ESTK (e.g. Word Pad) if that signature cannot be properly interpreted when the file is read into one of those editors. To change this default behavior, change the setting in the UTF-8 Signature section of the Documents page of the Preferences dialog to the “Never write signature” option.

### 4.2. Favorites

Aliases are displayed as files in the Scripts pane if the `.jsx` file filter is not used. Aliases to files must also have the same extension in order to display in the Scripts pane.

### 4.3. Window Placement

The ESTK attempts to adjust itself to the current layout of the desktop, including multiple screens. It cannot detect that a screen has been added or removed without the user having notified the operating system first by using the Desktop Properties (Windows) or System Preferences (Macintosh). Also, it attempts to adjust its window size to a new desktop size when it detects that the desktop has changed between program runs. There are circumstances, however, where manual adjustment of the ESTK's windows is necessary.

### 4.4. Windows Font Support

The Preferences panels cannot display East Asian characters if East Asian language support is not installed in Windows. Also, it cannot display files containing East Asian characters correctly if that package is not installed.

### 4.5. Comments in Preprocessor Directives

The ESTK CS4 does not allow comments after a preprocessor directive (such as `#target`). The comment will result in an “... undefined!” error message.

### 4.6. Unrepaired Link to Target Application

When the ESTK is launched and a target application is selected from the drop-down list, if the application is not already running, the ESTK asks whether the target application should be launched. After answering

yes, even if the target application is successfully launched, the link next to the target application name in the ESTK remains broken. Clicking on the green "Run" button will fix the link.

#### **4.7. Debugging Session Termination**

On Mac OS, when using the ESTK to debug a script in a target application, if the script invokes an operating system modal dialog, such as File->Open, the ESTK may terminate the debugging session if the modal dialog is left unattended for a short period of time.

#### **4.8. Viewing Scripting Document on Non-English OS**

If you run the ESTK on one of the supported non-English OSs (French, German, Italian, Japanese, and Spanish) and the ESTK Language preference is set to Default, the "Adobe Intro to Scripting" document on the Help menu will be shown in English. To view the document in the appropriate language, set the Language from the Edit->Preferences menu to the OS language.

#### **4.9. Application Missing from Target Dropdown List**

In rare circumstances due to some unlikely product installation scenarios, the name of an installed target application may not show up in the ESTK dropdown list. If the name of the desired target application is not shown in the ESTK dropdown list, the script to be executed must contain a `#target` directive that specifies the target application.

#### **4.10. Extended Input**

The ESTK does not fully support Extended Input to enter non-Roman characters (such as Japanese). Reconversion is not supported.

#### **4.11. Compiled Scripts**

If a script is compiled to a `.jsxbin` file, the `#target` directive is ignored. Double-clicking a `.jsxbin` file does not execute the script in the application that the `#target` directive defines.

#### **4.12. Documents Preferences**

The following options in the Documents section of the Preferences dialog, take effect only for newly created documents or for documents that were never opened by the ESTK before:

- "Display Line Numbers"
- "Word Wrap"
- "Code Collapse"
- "Enable Syntax Highlighting"
- "Line Endings"

## 4.13. ScriptUI Programming

### 4.13.1. ScriptUI Modal Dialogs

When programming ScriptUI dialogs, the ESTK ignores breakpoints in callback functions if the dialog is modal and the target engine is the ESTK itself. The modal ScriptUI dialog causes the ESTK to go into a modal state, where most of the user interface is disabled. Therefore, it cannot easily switch back into normal debug mode when a breakpoint is hit.

### 4.13.2. `titleLayout` Object

#### 4.13.2.1.

##### `justify` Property

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Changing the `justify` property value inside an existing `titleLayout` object always fails. As a workaround, construct an entirely new JavaScript object with the property values you want and replace the current `titleLayout` property value with this object.

#### 4.13.2.2.

##### `margins` Property

M

Setting the `margins` property to an array always causes a `kErrBadArgument` exception, either when trying to change margins in an existing `titleLayout` object, or constructing an entirely new `titleLayout` object (as in a resource definition). Setting the `margins` property to a single integer value will work in either case.

#### 4.13.2.3.

##### `characters` Property

C

Setting the `characters` property inside an existing `titleLayout` object interferes with the `justify` setting: it always resets it to `'left'`. As a workaround, construct an entirely new JavaScript object with the property values you want and replace the current `titleLayout` property value with this object.

### 4.13.3. The ScriptUI *FlashPlayer* Element

- When programming the ScriptUI *FlashPlayer* element, use care when calling the `loadMovie()` method: it may only be called once in a *FlashPlayer* instance. Note that using `'add ("flashplayer", undefined, "SWF to load")'` to create a *FlashPlayer* results in an implicit call to `loadMovie()`. If you need to re-start a movie that has already been loaded, you must destroy and recreate the *FlashPlayer* the movie is to run in.
- When programming the ScriptUI *FlashPlayer* element, do not use its `playMovie()` or `stopMovie()` methods. These methods are no longer functional (i.e., calling them is allowed, but they have no effect). Remove calls to them from any scripts for safety in future ScriptUI versions. The `loadMovie()` method loads and starts playing the Flash movie.

- **Handling Tab characters in the *FlashPlayer*** - The *FlashPlayer* element has a new creation property `letPlayerHandleTabs` which controls how Tab and Backtab (Shift+Tab) characters are handled when the *FlashPlayer* has the keyboard focus. If `letPlayerHandleTabs` is defined with a true value, Tabs are sent to the *FlashPlayer* element, so ActionScript code running in the player can handle them (or not). If `letPlayerHandleTabs` is undefined or false, Tab and Backtab are treated as keyboard navigation cues to move the keyboard focus to the next or previous element in the tab sequence (this is the normal ScriptUI behavior). For example, given a Window element that you wish to create a *FlashPlayer* element in:

```
var fp = w.add ("flashplayer",undefined, <SWF to load>,
{letPlayerHandleTabs:true});
```

Or you can use the resource format:

```
var resourceDef =
    ""palette {
        fp: FlashPlayer {
            properties:{ letPlayerHandleTabs:true }
        }
    }"";
var w = new Window (resourceDef);
w.fp.loadMovie (<pathname, URL, or File object for SWF file>);
```

Both examples will create a *FlashPlayer* element which handles Tab and Backtab characters.

#### 4.13.4. Window `closeOnKey:'OSCmd+W'`

The ExtendScript Toolkit uses the shortcut key CTRL+W (Windows) / CMD+W (Macintosh) to close the top most document window or the OMV. So when executing a script that implements a window with ScriptUI that defines `closeOnKey: 'OSCmd+W'`, pressing that key combination would never affect the ScriptUI window, although it would close the top most document or OMV.

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