



ADOBE PHOTOSHOP CC 2015

APPLESCRIPT SCRIPTING REFERENCE



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Adobe® Photoshop® CC 2015 AppleScript Scripting Reference for Macintosh®.

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Adobe Photoshop CC 2015 Contents

| | | |
|----------|-------------------------------------|----------|
| 1 | Introduction | 8 |
| 2 | AppleScript Objects..... | 9 |
| | add noise | 10 |
| | adjustment options | 11 |
| | application | 12 |
| | art layer, art layers | 15 |
| | automatic contrast..... | 18 |
| | automatic levels..... | 19 |
| | average..... | 20 |
| | batch options..... | 21 |
| | Bitmap mode options | 23 |
| | blur..... | 25 |
| | blur more | 26 |
| | BMP save options | 27 |
| | brightness and contrast | 29 |
| | Camera RAW open options..... | 30 |
| | change mode options | 32 |
| | channel, channels..... | 33 |
| | clouds | 35 |
| | CMYK color..... | 36 |
| | color balance..... | 37 |
| | color sampler, color samplers | 38 |
| | color value..... | 39 |
| | contact sheet options | 40 |
| | count item, count items..... | 42 |
| | curves..... | 43 |
| | custom filter | 44 |
| | deinterlace | 45 |
| | desaturate | 46 |
| | despeckle | 47 |
| | DICOM open options | 48 |
| | difference clouds..... | 49 |
| | diffuse glow | 50 |
| | displace filter..... | 51 |
| | document, documents..... | 52 |
| | dust and scratches | 56 |
| | EPS open options | 57 |
| | EPS save options | 58 |
| | equalize..... | 60 |
| | export options | 61 |
| | filter options | 62 |
| | font, fonts | 63 |
| | gallery banner options | 64 |
| | gallery color options | 65 |
| | gallery images options | 66 |

| | |
|--|-----|
| gallery options..... | 68 |
| gallery security options..... | 69 |
| gallery thumbnail options..... | 70 |
| gaussian blur..... | 71 |
| GIF save options..... | 72 |
| glass filter | 74 |
| gray color..... | 75 |
| high pass..... | 76 |
| history state, history states | 77 |
| HSB color | 78 |
| Illustrator paths export options | 79 |
| indexed mode options | 80 |
| info-object..... | 82 |
| inversion | 84 |
| JPEG save options | 85 |
| Lab color | 86 |
| layer, layers | 87 |
| layer comp, layer comps | 89 |
| layer set, layer sets | 90 |
| lens blur | 93 |
| lens flare..... | 95 |
| levels adjustment | 96 |
| maximum filter | 97 |
| measurement scale..... | 98 |
| median noise..... | 99 |
| minimum filter..... | 100 |
| mix channels | 101 |
| motion blur..... | 102 |
| no color | 103 |
| notifier, notifiers..... | 104 |
| NTSC colors..... | 105 |
| ocean ripple..... | 106 |
| offset filter | 107 |
| open options..... | 108 |
| path item, path items..... | 109 |
| path point, path points | 111 |
| path point info..... | 112 |
| PDF open options..... | 113 |
| PDF save options | 115 |
| Photo CD open options..... | 118 |
| photo filter | 119 |
| Photoshop DCS 1.0 save options..... | 120 |
| Photoshop DCS 2.0 save options..... | 122 |
| Photoshop save options | 124 |
| PICT file save options | 125 |
| PICT resource save options | 126 |
| picture package options | 127 |
| pinch | 129 |
| Pixar save options | 130 |
| PNG save options | 131 |
| polar coordinates | 132 |

| | |
|-------------------------------------|------------|
| posterize | 133 |
| presentation options..... | 134 |
| radial blur | 136 |
| raw format open options..... | 137 |
| raw save options..... | 138 |
| RGB color | 139 |
| RGB hex color | 140 |
| ripple | 141 |
| save for web export options..... | 142 |
| save options | 144 |
| selection-object | 145 |
| selective color | 146 |
| settings-object | 147 |
| SGI RGB save options | 151 |
| sharpen | 152 |
| sharpen edges | 153 |
| sharpen more..... | 154 |
| shear..... | 155 |
| smart blur | 156 |
| spherize..... | 157 |
| sub path info..... | 158 |
| sub path item, sub path items | 159 |
| Targa save options | 160 |
| text-object..... | 161 |
| texture fill | 169 |
| threshold adjustment | 170 |
| TIFF save options | 171 |
| twirl..... | 173 |
| unsharp mask..... | 174 |
| wave filter..... | 175 |
| XMP metadata | 176 |
| zigzag..... | 177 |
| 3 AppleScript Commands | 178 |
| Overview..... | 178 |
| activate..... | 179 |
| adjust | 180 |
| apply | 181 |
| apply layer style | 182 |
| auto count..... | 183 |
| batch | 184 |
| change mode | 185 |
| close | 186 |
| clear | 187 |
| contract..... | 188 |
| convert | 189 |
| convert color | 189 |
| convert to shape | 189 |
| copy..... | 190 |
| copy merged..... | 190 |
| count..... | 191 |

| | |
|-------------------------------|-----|
| create contact sheet | 192 |
| create PDF presentation | 192 |
| create photo gallery | 192 |
| create photo merge..... | 192 |
| create picture package | 193 |
| create selection | 194 |
| create work path..... | 194 |
| crop..... | 195 |
| cut | 196 |
| delete | 197 |
| delete measurements | 198 |
| deselect | 199 |
| deselect | 199 |
| do action..... | 200 |
| do javascript | 201 |
| doc duplicate | 202 |
| duplicate..... | 202 |
| duplicate..... | 203 |
| equal colors | 204 |
| exists | 205 |
| expand..... | 206 |
| export | 207 |
| export measurements | 208 |
| feather | 209 |
| feature enabled..... | 210 |
| fill | 211 |
| fill path | 211 |
| filter | 213 |
| flatten | 214 |
| flip canvas | 215 |
| grow | 216 |
| import annotations..... | 217 |
| index | 218 |
| invert..... | 219 |
| link | 220 |
| load..... | 221 |
| load..... | 221 |
| make..... | 222 |
| make clipping path..... | 223 |
| make work path | 223 |
| merge..... | 224 |
| merge visible layers..... | 224 |
| move | 225 |
| open | 226 |
| paste..... | 227 |
| Photoshop open dialog | 228 |
| print..... | 229 |
| purge..... | 230 |
| quit..... | 231 |
| rasterize..... | 232 |
| recapture | 233 |

| | |
|---|------------|
| record measurements..... | 234 |
| refresh..... | 235 |
| reset from comp | 236 |
| resize canvas | 237 |
| resize image..... | 237 |
| reveal all | 238 |
| rotate | 239 |
| rotate boundary | 239 |
| rotate canvas..... | 240 |
| save..... | 241 |
| scale..... | 244 |
| scale boundary | 244 |
| select | 245 |
| select | 245 |
| select all | 246 |
| select border | 246 |
| similar | 247 |
| smooth | 248 |
| split channels | 249 |
| store..... | 250 |
| stroke | 251 |
| stroke path..... | 251 |
| translate | 253 |
| translate boundary | 254 |
| trap | 255 |
| trim | 256 |
| unlink | 257 |
| web safe color..... | 258 |
| Appendix A: Event ID Codes | 259 |
| Index | 267 |

1 Introduction

This reference describes the objects and commands in the Adobe® Photoshop® CC 2015 AppleScript dictionary. A companion document, *Photoshop CC 2015 Scripting Guide*, describes basic scripting concepts and the Photoshop object model. This document provides reference details of the Photoshop object model, and additional information on AppleScript-specific features.

This book contains the following sections:

- This introduction, which describes scripting support in Adobe Photoshop CC 2015, and lists changes to the AppleScript interface since the previous release.
- [AppleScript Objects](#), which provides a complete reference for all AppleScript Photoshop DOM objects.
- [AppleScript Commands](#), which provides a complete reference for all AppleScript Photoshop DOM commands.

The objects of the AppleScript dictionary for Adobe Photoshop CC 2015 are presented alphabetically and in tabular format in this chapter. Where appropriate, the object class has two tables:

- **Element** — Lists the classes that inherit from the current class, as well as the methods by which the classes can be referred.
- **Property** — The properties you can use with the object, as well as each property's value type, input status, and description.

The commands that can be used with an object are listed below the object's Properties table.

Sample code for several object classes is given to help illustrate the syntax as well as usage of the object class.

The following sample tables and command list illustrate the format for this chapter.

Elements

| Element | Refer to by |
|----------------------|---|
| <code>channel</code> | name, numeric index, as a range of elements, before after another element, satisfying a test |

Properties

| Property | Value Type | What it is |
|---------------------------------|--|--|
| <code>bits per channel</code> | Valid values: eight one sixteen | The number of bits per channel. |
| <code>component channels</code> | list of channels | Read-only. A list of the component color channels. |
| <code>current channels</code> | list of channel | The selected channels. |
| <code>current layer</code> | layer | The selected layer. |
| <code>info</code> | info-object | Read-only. The document metadata. |

Valid Commands

[change mode](#)
[close](#)
[convert](#)
[count](#)

add noise

Options that may be supplied when applying an Add Noise filter.

The `add noise` class supplies properties for the [filter options](#) class. The `add noise` class is used only to define a record whose properties specify options when applying an Add Noise filter. `add noise` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create an `add noise` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|----------------------|--|-----------------------|
| amount | real | (amount: 0.1% - 400%) |
| distribution | Valid values: Gaussian uniform | |
| monochromatic | boolean | |

The following code sample demonstrates how to apply the add noise filter using the `filter` command of the `add noise` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using add noise -
        with options {class:add noise, amount:2.5, distribution:uniform, -
            monochromatic:false}
end tell
```

adjustment options

Options used with the `adjust` method. The following classes inherit properties from the `adjustment options` class: [automatic contrast](#), [automatic levels](#), [brightness and contrast](#), [color balance](#), [curves](#), [desaturate](#), [equalize](#), [inversion](#), [levels adjustment](#), [mix channels](#), [photo filter](#), [posterize](#), [selective color](#), [threshold adjustment](#).

Valid Commands

[adjust](#)

application

The Adobe Photoshop CC 2015 application object, which contains all other Adobe Photoshop CC 2015 objects.

Elements

| Elements | Refer to by |
|----------|--|
| document | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| font | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| notifier | name, numeric index, as a range of elements, before/after another element, satisfying a test |

Properties

| Property | Value type | What it is |
|-------------------------|---|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| properties | record | All of this object's properties returned in a single record. |
| background color | color value | The color for the document's background color. |
| build | string | Read-only. Information about the application build. |
| color settings | string or color object | The name of selected color setting's set. |
| current document | document | The frontmost document. |
| current tool | string | The name of the current tool selected. |
| display dialogs | Valid Values: always error dialogs never | Controls whether and dialogs are displayed while the script is running. |
| foreground color | color value | The default foreground color (used to fill and stroke selections). |
| free memory | real | Read-only. The amount of unused memory available to Adobe Photoshop CC 2015. |
| frontmost | boolean | Read-only. Indicates whether Adobe Photoshop CC 2015 is the frontmost application. |
| locale | string | Read-only. The language location of the application. |

| Property | Value type | What it is (Continued) |
|-----------------------------|----------------------------|---|
| macintosh file types | list of Unicode text | Read-only. A list of file image types Adobe Photoshop CC 2015 can open. |
| measurement log | measurement log | The log of measurements taken. |
| name | Unicode text | Read-only. The application's name. |
| notifiers enabled | boolean | Indicates whether all notifiers are enabled or disabled.. |
| preferences folder | alias | Read-only. The full path to the Preferences folder. |
| recent files | list of file specification | Read-only. Files in the Recent Files list. |
| scripting build date | Unicode text | Read-only. The build date of the scripting interface . |
| scripting version | Unicode text | Read-only. The scripting interface version. |
| settings | settings-object | Read-only. The application preference settings (equivalent to selecting Edit > Preferences in the Adobe Photoshop CC 2015 application in Windows® or Photoshop > Preferences in Mac OS®). |
| system information | string | Read-only. Runtime details of the application and system. |
| windows file types | list of Unicode text | Read-only. A list of file image types Adobe Photoshop CC 2015 can open. |
| version | Unicode text | Read-only. The Adobe Photoshop version. |

The the first line of the following code sample directs Adobe Photoshop CC 2015 to carry out the script's commands. The second line uses the `activate` command to make Adobe Photoshop CC 2015 the frontmost application.

```

tell application "Adobe Photoshop CC 2015"
    activate
    set fgColor to foreground color
    set bgColor to background color
    set foreground color to {class:RGB color, red:255, green:128, blue:128}
    set background color to {class:RGB color, red:0, green:50, blue:255}
    delay 1
    set foreground color to fgColor
    set background color to bgColor
    tell me to activate
    my dd("name:" & name)
    my dd("locale:" & locale)
    my dd("scripting version:" & scripting version)
    my dd("scripting build date:" & scripting build date)
    my dd("macintosh file types:" & macintosh file types)
    my dd("windows file types:" & windows file types)
end tell

on dd(msg)
    display dialog msg giving up after 1
end dd

```

Valid Commands[activate](#)[purge](#)[quit](#)[refresh](#)

art layer, art layers

Any layer that can contain data. The `art layer` class inherits properties from the [layer, layers](#) class.

Properties

| Property | Value Type | What it is |
|---------------------|---|---|
| best type | type class | Read-only. (Inherited from the <code>layer</code> class) The best type for the object's value. |
| class | class | Read-only. (Inherited from the <code>layer</code> class) The object's class. |
| default type | type class | Read-only. (Inherited from the <code>layer</code> class) The default type for the object's value. |
| index | integer | Read-only. (Inherited from the <code>layer</code> class) The index of this instance of the object. |
| properties | record | (Inherited from the <code>layer</code> class) All of this object's properties returned in a single record. |
| all locked | boolean | (Inherited from the <code>layer</code> class) Indicates whether all of the layer's contents are locked or editable. |
| blend mode | Valid Values: color blend color burn color dodge darken darker color difference dissolve divide exclusion hard light hard mix hue blend lighten lighter color linear burn linear dodge linear light luminosity multiply normal overlay pass through pin light saturation blend screen soft light subtract vivid light | (Inherited from the <code>layer</code> class) The mode used when compositing an object. |

| Property | Value Type | What it is (Continued) |
|--------------------------|---|---|
| bounds | list of real | Read-only. (Inherited from the <code>layer</code> class) A list of coordinates that describes the bounding rectangle of the layer. |
| bounds no effects | list of real | Read-only. (Inherited from the <code>layer</code> class) A list of coordinates that describes the bounding rectangle of the layer not including effects. |
| container | reference | Read-only. (Inherited from the <code>layer</code> class) The object's container. |
| linked layers | list of layers | Read-only. (Inherited from the <code>layer</code> class) The layers linked to this layer. |
| name | Unicode text | (Inherited from the <code>layer</code> class) The layer's name. |
| opacity | real | (Inherited from the <code>layer</code> class) The layer's master opacity (0.0 - 100.0). |
| visible | boolean | (Inherited from the <code>layer</code> class) Indicates whether the layer is visible. |
| background layer | boolean | Indicates whether the layer is a background layer. |
| fill opacity | real | The layer's interior opacity (0.0 - 100.0). |
| grouped | boolean | Indicates whether the layer is grouped with the layer below. |
| kind | Valid Values: blank and white layer brightness contrast layer channel mixer layer color balance layer curves layer exposure layer gradient fill layer gradient map layer hue saturation layer inversion layer levels layer normal pattern fill layer photo filter layer posterize layer smart object layer selective color layer solid fill layer text layer threeD layer threshold layer vibrance layer video layer | Sets the layer's kind (such as 'text layer'). Note: You can use the <code>kind</code> property to make a background layer a normal layer; however, to make a layer a background layer, you must use background layer . Note: Valid only when the layer is empty and when <code>background layer</code> is false. See background layer . |

| Property | Value Type | What it is (Continued) |
|--|-----------------------------|--|
| <code>pixels locked</code> | boolean | Indicates whether the pixels in the layer's image can be edited using the paintbrush tool. |
| <code>position locked</code> | boolean | Indicates whether the pixels in the layer's image can be moved within the layer. |
| <code>text object</code> | text-object | Read-only. The text item that is associated with the art layer. Note: Valid only when <code>kind: text</code> layer. |
| <code>transparent pixels locked</code> | boolean | Indicates whether editing is confined to the opaque portions of the layer. |

Valid Commands

[adjust](#)
[apply layer style](#)
[clear](#)
[copy](#)
[copy merged](#)
[count](#)
[cut](#)
[delete](#)
[duplicate](#)
[exists](#)
[filter](#)
[index](#)
[link](#)
[make](#)
[merge](#)
[move](#)
[rasterize](#)
[rotate](#)
[scale](#)
[translate](#)
[unlink](#)

The following code creates a text layer by creating an art layer and setting its `kind` property to `text` layer.

```
tell application "Adobe Photoshop CC 2015"
    activate

    --create a variable named theDocRef
    --assign the current (active) document to it
    set theDocRef to the current document

    --create a variable for the text layer, create the layer as an art layer object
    --and use the kind property of the art layer object to make it a text layer
    set theTextLayer to make new art layer in theDocRef with properties ~
        {kind:text layer}

end tell
```

automatic contrast

The `automatic contrast` class supplies options properties for the [adjustment options](#) class to automatically adjust the overall contrast and mixture of colors in an RGB image.

The `automatic contrast` class, which is analogous to the Auto Contrast command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply an Auto Contrast adjustment to an image. The `automatic contrast` class can be used only in conjunction with the `adjust` command. It is not possible to get or create an `automatic contrast` object.

See the [adjust](#) command for additional details.

The following code sample demonstrates how to apply an Automatic Contrast adjustment using the `adjust` command of the `automatic contrast` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using automatic contrast
end tell
```

automatic levels

The `automatic levels` class supplies options properties for the [adjustment options](#) class to automatically adjust the black point and white point in an image.

The `automatic levels` class, which is analogous to the Auto Levels command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply an Auto Levels adjustment to an image. The `automatic levels` class can be used only in conjunction with the `adjust` command. It is not possible to get or create an `automatic levels` object.

See the [adjust](#) command for additional details.

The following code sample demonstrates how to apply an Automatic Levels adjustment using the `adjust` command of the `automatic levels` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using automatic levels
end tell
```

average

Options that may be supplied when applying an Average filter.

The `average` class supplies properties for the [filter options](#) class. The `average` class is used only to define a record when using the `filter` command to apply an Average filter. `average` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create an `average` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the average filter using the `filter` command of the `average` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using average
end tell
```

batch options

Options to specify when running a Batch command. See [batch](#).

Properties

| Property | Value type | What it is |
|-----------------------------|---|---|
| destination | Valid values: folder no destination save and close | The type of destination for the processed files (default: no destination). |
| destination folder | alias | The folder location for the processed files. Note: Valid only when <code>destination: folder</code> . See destination . |
| error file | alias | The file in which to log errors encountered. Note: To display errors on the screen (and stop batch processing when errors occur) leave blank. |
| file naming | Valid values: ddmm ddmmyy document name lower document name mixed document name upper extension lower extension upper mmdd mmdyy serial letter lower serial letter upper serial number one serial number two serial number three serial number four yyddmm yyymmdd yyyymmdd | A list of file naming options (maximum: 6). Note: Valid only when <code>destination: folder</code> . See destination . |
| macintosh compatible | boolean | Indicates whether to make the final file names Macintosh compatible (default: true). Note: Valid only when <code>destination: folder</code> . See destination . |
| override open | boolean | Indicates whether to override action open commands (default: false). |

| Property | Value type | What it is (Continued) |
|---------------------------------|---------------|--|
| <code>override save</code> | boolean | Indicates whether to override save as action steps with the specified destination (default: <code>false</code>). Note: Valid only when <code>destination:folder</code> or <code>destination:save</code> and <code>close</code> . See destination . |
| <code>starting serial</code> | number (long) | The starting serial number to use in naming files (default: 1). Note: Valid only when <code>destination:folder</code> . See destination . |
| <code>suppress open</code> | boolean | Indicates whether to suppress the file open options dialogs (default: <code>false</code>). |
| <code>suppress profile</code> | boolean | Indicates whether to suppress the color profile warnings (default: <code>false</code>). |
| <code>unix compatible</code> | boolean | Indicates whether to make the final file name Unix compatible (default: <code>true</code>). Note: Valid only when <code>destination:folder</code> . See destination . |
| <code>windows compatible</code> | boolean | Indicates whether to make the final file names Windows compatible (default: <code>true</code>). Note: Valid only when <code>destination:folder</code> . See destination . |

Bitmap mode options

Options that can be specified when changing the document mode to Bitmap using the `change mode` command. The `bitmap mode` class inherits properties from the [change mode options](#) class.

This class is used to define a record containing properties that specify options when changing a document's mode. `Bitmap mode options` can only be supplied in conjunction with the `change mode` command. It is not possible to get or create a `Bitmap mode options` object. See the [change mode](#) command for more details.

Properties

| Properties | Value Type | What it is |
|--------------------------------|---|--|
| <code>angle</code> | real | The angle (in degrees) at which to orient individual dots (-180 - 180). See screen shape . Note: Valid only when <code>conversion method: halftone screen</code> . |
| <code>conversion method</code> | Valid Values: custom pattern diffusion dither halftone screen conversion middle threshold pattern dither | The conversion method to use (default: diffusion dither). |
| <code>frequency</code> | real | The number of printer dots (per inch) to use (1.0 - 999.99). Note: Valid only when <code>conversion method: halftone screen</code> . |
| <code>pattern name</code> | Unicode text | The name of the pattern to use. Note: Valid only when <code>conversion method: custom pattern</code> . For information about pre-installed valid patterns, see Adobe Photoshop CC 2015 Help on the bitmap conversion command, or view the options available in the Custom Color drop down box after choosing the bitmap conversion command. |

| Properties | Value Type | What it is (Continued) |
|---------------------|---|---|
| resolution | real | The output resolution (in pixels per inch) (default: 72.0). |
| screen shape | Valid values: halftone cross halftone diamond halftone ellipse halftone line halftone round halftone square | The dot shape to use. Note: Valid only when conversion method: halftone screen. |

blur

Options that may be supplied when applying a Blur filter.

The `blur` class supplies properties for the [filter options](#) class. The `blur` class is used only to define a record when using the `filter` command to apply a Blur filter. `blur` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `blur` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the blur filter using the `filter` command of the `blur` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using blur
end tell
```

blur more

The `blur more` class supplies properties for the [filter options](#) class when using the `filter` command to apply a Blur More filter. The `blur more` class is used only to define a record when using the `filter` command to apply a Blur More filter. The `blur more` option can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `blur more` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the blur more filter using the `filter` command of the `blur more` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using blur more
end tell
```

BMP save options

Options that can be specified when saving a document in BMP format. See the [save](#) command for additional details. The `BMP save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a BMP file. `BMP save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `BMP save options` object.

Properties

| Property | Value Type | What it is |
|--------------------------------------|---|---|
| <code>bits per sample</code> | Valid values: A1R5G5B5 A4R4G4B4 A8R8G8B8 eight four one R5G6B5 R8G8B8 sixteen thirty two twenty four X1R5G5B5 X4R4G4B4 X8R8G8B8 | The number of bits per channel (default: twenty four). |
| <code>flipped row order</code> | boolean | Indicates whether to write the image from top to bottom (default: <code>false</code>). Note: Available only when <code>target operating system: windows</code> . See target operating system . |
| <code>RLE compression</code> | boolean | Indicates whether to use RLE compression. Note: Available only when <code>target operating system: windows</code> . See target operating system . |
| <code>save alpha channels</code> | boolean | Indicates whether to save the alpha channels. |
| <code>target operating system</code> | OS2 Windows | The target OS (default: Windows). |

The following code creates the `myOptions` variable to hold the BMP save options, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  make new document
  set myFile to "Data:docsamples:testfiles:BmpTest.bmp"
  set myOptions to {class:BMP save options, bits per sample:sixteen, ~
    flipped row order:false, RLE compression:true, save alpha channels:true,~
    target operating system:Windows}
  save current document in file myFile as BMP with options ~
    myOptions appending no extension without copying
end tell
```

brightness and contrast

The `brightness and contrast` class supplies options properties for the [adjustment options](#) class to adjust the tonal range of an image.

The `brightness and contrast` class, which is analogous to the Brightness/Contrast command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when applying a Brightness/Contrast adjustment to an image. The `brightness and contrast` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `brightness and contrast` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|-------------------------------|------------|--------------|
| <code>brightness level</code> | integer | (-100 - 100) |
| <code>contrast level</code> | integer | (-100 - 100) |

The following code sample demonstrates how to apply a Brightness/Contrast adjustment using the `adjust` command of the `brightness and contrast` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using brightness and contrast ~
        with options {class:brightness and contrast, brightness level:10, ~
            contrast level:10}
    end tell
```

Camera RAW open options

Options that can be specified when opening a document in Camera RAW format. The `Camera RAW open options` class inherits properties from the [open options](#) class.

This class is used to define a record containing properties that specify options when opening a document in raw format. `Camera RAW open options` can be supplied only in conjunction with the `open` command. It is not possible to get or create a `Camera RAW open options` object.

Properties

| Property | Value type | What it is |
|--------------------------------------|---|--|
| <code>bits per channel</code> | Valid values: eight one sixteen thirty two | The number of bits per channel. |
| <code>blue hue</code> | integer | The blue hue of the shot (-100 - 100). |
| <code>blue saturation</code> | integer | The blue saturation of the shot (-100 - 100). |
| <code>brightness</code> | integer | The brightness of the shot (0 - 150). |
| <code>chromatic aberration by</code> | integer | The chromatic aberration B/Y of the shot (-100 - 100). |
| <code>chromatic aberration rc</code> | integer | The chromatic aberration R/C of the shot (-100 - 100). |
| <code>color noise reduction</code> | integer | The color noise reduction of the shot (0 - 100). |
| <code>color space</code> | Valid values: Adobe RGB color match RGB ProPhoto Rgb sRGB | The colorspace for the image. |
| <code>contrast</code> | integer | The contrast of the shot (-50 - 100). |
| <code>exposure</code> | real | The exposure of the shot (4.0 - 4.0). |
| <code>green hue</code> | integer | The green hue of the shot (-100 - 100). |
| <code>green saturation</code> | integer | The green saturation of the shot (-100 - 100). |
| <code>luminance smoothing</code> | integer | The luminance smoothing of the shot (0 - 100). |
| <code>red hue</code> | integer | The red hue of the shot (-100 - 100). |
| <code>red saturation</code> | integer | The red saturation of the shot (-100 - 100). |
| <code>resolution</code> | real | The resolution of the document in pixels per inch (1 - 999). |
| <code>saturation</code> | integer | The saturation of the shot (-100 - 100). |

| Property | Value type | What it is (Continued) |
|----------------------------|---|--|
| settings | Valid values: camera default custom settings selected image | The global settings for all Camera RAW options. Default value: camera default. |
| shadows | integer | The shadows of the shot (0 - 100). |
| shadow tint | integer | The shadow tint of the shot (-100 - 100). |
| sharpness | integer | The sharpness of the shot (0 - 100). |
| size | Valid values: extra large large maximum medium minimum small | The size of the new document. extra large=5120 x 3413 large=4096 x 2731 maximum=6144 x 4096 medium=3072 x 2048 minimum=1536 x 1024 small=2048 x 1365 |
| temperature | integer | The temperature of the shot (2000 - 50000). |
| tint | integer | The tint of the shot (-150 - 150). |
| vignetting amount | integer | The vignetting amount of the shot (-100 - 100). |
| vignetting midpoint | integer | The vignetting mid point of the shot (-100 - 100). |
| white balance | Valid values: as shot auto cloudy custom camera settings daylight flash fluorescent shade tungston | The white balance options for the image. |

The following code opens a camera raw document.

```
tell application "Adobe Photoshop CC 2015"
    set myFilePath to alias "Data:docsamples:testfiles:CanonG1.CRW"
    open myFilePath as Camera RAW with options ~
        {class:Camera RAW open options, bits per channel:eight, ~
        color noise reduction:20, temperature:4200, white balance:cloudy}
end tell
```

change mode options

Options that can be supplied when changing a document's mode using the `change mode` command. See [change mode](#) for additional details.

The following classes inherit properties from the `change mode options` class: [Bitmap mode options](#), [indexed mode options](#).

Valid Commands

[change mode](#)

channel, channels

A channel in a document. A channel can be either a component channel representing a color of the document color model or an alpha channel. You can use alpha channels to store masked areas, selected areas or spot colors.

Properties

| Property | Value Type | What it is |
|----------------------|--|---|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this objects properties returned in a single record. |
| channel color | color value | The channel's color. Note: Not valid when <code>kind: component channel</code> . See kind . |
| container | reference | The object's container. |
| histogram | list of integers | Read-only. A histogram of color values for the channel. Note: Not valid when <code>kind: component channel</code> . For component channel histogram values, use the <code>histogram</code> property of the document object instead. See histogram on page 53. |
| kind | Valid values: component channel masked area channel selected area channel spot color channel | The type of channel. |
| name | Unicode text | The channel's name. |
| opacity | real | The opacity (as percent) to use for alpha channels or the solidity to use for spot channels (0 - 100). Note: Valid only when <code>kind: masked area</code> or <code>kind: selected area</code> . |
| visible | boolean | Indicates whether the channel is visible. |

Valid Commands

[count](#)
[delete](#)
[duplicate](#)

[exists](#)

[index](#)

[make](#)

[merge](#)

clouds

Options that may be supplied when applying a Clouds filter.

The `clouds` class supplies properties for the [filter options](#) class. The `clouds` class is used only to define a record when using the `filter` command to apply a Clouds filter. `clouds` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `clouds` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the clouds filter using the `filter` command of the `clouds` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using clouds
end tell
```

CMYK color

Options that can be specified for a CMYK color: numeric values for the component colors. The `CMYK color` class inherits properties from the [color value](#) class.

This class a property of the [color value](#) object and is used to define a record that specifies options when creating a color value.

Note: If the `mode` of a document is RGB and you specify the color value for a stroke, foreground, or background color property using a `CMYK color` object, Adobe Photoshop CC 2015 translates the CMYK color specification into an RGB color specification. The same thing happens if the document's color mode is CMYK and you specify colors using a `RGB color` object. Since this translation can cause information loss you should specify colors using the color class that matches the document's color mode.

Properties

| Property | Value Type | What it is |
|----------------------|------------|--|
| <code>cyan</code> | real | The cyan color value (as percent) (0.0 - 100.0). |
| <code>magenta</code> | real | The magenta color value (as percent) (0.0 100.0). |
| <code>yellow</code> | real | The yellow color value (as percent) (0.0 - 100.0). |
| <code>black</code> | real | The black color value (as percent) (0.0 - 100.0). |

For an example of how to create and use color values, see [color value](#) and [RGB color](#).

color balance

The `color balance` class specifies options for the [adjustment options](#) class to change the overall mixture of colors in an image for generalized color correction.

The `color balance` class, which is analogous to the Color Balance command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when applying a Color Balance adjustment to an image. The `color balance` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `color balance` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|----------------------------|------------------|--|
| shadows | list of integers | The list of adjustments for shadows (three values (-100 - 100 required). The specified values indicate the color levels for component colors of the document mode, either RGB or CMYK. For CMYK mode, the values represent C, M, and Y. |
| midtone s | list of integers | The list of adjustments for midtones (three values (-100 - 100 required). The specified values indicate the color levels for component colors of the document mode, either RGB or CMYK. For CMYK mode, the values represent C, M, and Y. |
| highlights | list of integers | The list of adjustments for highlights (three values (-100 - 100 required). The specified values indicate the color levels for component colors of the document mode, either RGB or CMYK. For CMYK mode, the values represent C, M, and Y. |
| preserve luminosity | boolean | Indicates whether to preserve the image luminosity. |

The following code sample demonstrates how to apply a color balance adjustment using the `adjust` command of the `color balance` class (inherited from the `adjustment options` super class). This code adjusts only the shadows in the image.

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using color balance ~
        with options {class:color balance, shadows:{45, 4, 5}, ~
            preserve luminosity:false}
    end tell
```

color sampler, color samplers

A color sampler for the document.

Note: For additional information about color samplers, see Adobe Photoshop CC 2015 help on the Color SamplerTool.

Properties

| Property | Value type | What it is |
|----------------------------|-----------------------------|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this object's properties returned in a single record. |
| position | list of real | Read-only. The position of the color sampler in the document. This property can be set using the make command. |
| color sampler color | color value | Read-only. The color of the color sampler. |

Valid commands:

[count](#)
[delete](#)
[exists](#)
[index](#)
[make](#)
[open](#)

color value

A color value. The following classes inherit properties from the `color value` class: [CMYK color](#), [gray color](#), [HSB color](#), [Lab color](#), [no color](#), [RGB color](#), [RGB hex color](#).

The following script creates an RGB color value to use as the fill color for the selection.

```
tell application "Adobe Photoshop CC 2015"
  make new art layer at beginning of current document with properties -
    {name:"MyBlendLayer", blend mode:normal}
  select all current document
  fill selection of current document with contents -
    {class:RGB color, red:255, green:0, blue:0}
end tell
```

Valid Commands

[convert color](#)
[equal colors](#)
[web safe color](#)

contact sheet options

Options that can be specified for a contact sheet. See [create contact sheet](#).

Properties

| Property | Value Type | What it is |
|--------------------------|---|---|
| across first | boolean | Indicates whether to place the images horizontally (left to right, then top to bottom) first (default: <code>true</code>). |
| auto spacing | boolean | Indicates whether to auto space the images (default: <code>true</code>). |
| best fit | boolean | Indicates whether to rotate images for the best fit (default: <code>false</code>). |
| caption | boolean | Indicates whether to use the filename as a caption for the image (default: <code>true</code>). |
| column count | integer | The number of columns to include (1 - 100; default: 5). |
| flatten final | boolean | Indicates whether to flatten all layers in the final document (default: <code>true</code>). |
| font | Valid values: Arial Courier New Helvetica Times New Roman | The font used for the caption (default: <code>arial</code>). |
| font size | integer | The font size to use for the caption (default: 12). |
| height | integer | The height (in pixels) of the resulting document (100 - 2900; default: 720). |
| horizontal offset | integer | The horizontal spacing (in pixels) between images (0 - 29000; default: 1). |
| mode | Valid values: bitmap CMYK grayscale Lab RGB | The document color mode (default: <code>RGB</code>). |
| resolution | real | The resolution of the document in pixels per inch (35 - 1200; default: 72.0). |
| row count | integer | The number of rows to use (1 - 100; default: 6). |

| Property | Value Type | What it is (Continued) |
|------------------------|------------|---|
| vertical offset | integer | The vertical spacing (in pixels) between images (0 - 29000; default: 1). Note: Valid only when <code>use auto spacing: false</code> . |
| width | integer | The width (in pixels) of the resulting document (100 - 2900; default: 576). |

count item, count items

A counted item in the document. See [auto count](#).

Note: The count item feature is available in the Extended Version only.

For additional information about count items, see Adobe Photoshop CC 2015 help on the Count Tool.

Properties

| Property | Value type | What it is |
|---------------------|--------------|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this object's properties returned in a single record. |
| position | list of real | Read-only. The position of the count item in the document. This property can be set when using the make command. |

Valid commands:

[count](#)
[delete](#)
[exists](#)
[index](#)
[make](#)

curves

The `curves` class supplies options for the [adjustment options](#) class to adjust the tonal range of an image. You can also use the curves object to make precise adjustments to individual color channels within an image.

The `curves` class, which is analogous to the Curves command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when applying a Curves adjustment to an image. The `curves` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `curves` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------------|---------------|---|
| <code>curve points</code> | list of lists | The list of lists of coordinates (x and y) that indicate the points that describe the curve. (You must include 2 - 14 points). Tip: For more information, please refer to Adobe Photoshop CC 2015 Help. |

The following code sample demonstrates how to apply a Curves adjustment using the `adjust` command of the `curves` class (inherited from the `adjustment options` super class).

```
--curve points are in {input, output} pairs
--{0,0} & {255,255} are the initial points when you open curves dialog.
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using curves ~
        with options {class:curves, ~
            curve points:{{0, 0}, {25, 10}, {96, 166}, {189, 179}, {255, 255}}}
    end tell
```

custom filter

Options that may be supplied when applying a Custom filter.

The `custom filter` class supplies properties for the `filter options` class. The `custom filter` class is used only to define a record whose properties specify options when applying a Custom filter. `custom filter options` can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `custom filter` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|-----------------------|------------------|--|
| characteristic | list of integers | The filter characteristics (array of 25 values; corresponds to a left to right, top to bottom traversal of the array presented in the user interface). Note: Required parameter values define the filter. Refer to Adobe Photoshop CC 2015 Help for specific instructions. |
| scaling | integer | |
| offset | integer | |

The following code sample demonstrates how to apply a custom filter using the `filter` command of the `custom filter` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using custom filter with options
    {characteristics:{0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 1, 1, 1, 1, 1, 0, 0, 0,
    0, 0}, scaling:2, offset:0}
end tell
```

deinterlace

Options that may be supplied when applying a De-Interlace filter.

The `deinterlace` class supplies properties for the [filter options](#) class. The `deinterlace` class is used only to define a record whose properties specify options when applying a De-Interlace filter. `deinterlace` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `deinterlace` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|-----------------------------|---|---|
| eliminate | Valid values: even fields odd fields | The type of fields to eliminate. |
| create new fields by | Valid values: duplication interpolation | The method to use to create new fields. |

The following code sample demonstrates how to apply the De-Interlace filter using the `filter` command of the `deinterlace` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
  filter current layer of the current document using deinterlace ~
    with options {class:deinterlace, eliminate:odd fields, ~
      create new fields by:duplication}
end tell
```

desaturate

The `desaturate` class supplies options for the [adjustment options](#) class to convert a color image to a grayscale image in the current color mode by assigning equal values of each component color to each pixel.

The `desaturate` class, which is analogous to the Desaturate command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply a desaturation adjustment to a selected layer. The `desaturate` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `desaturate` object.

See the [adjust](#) command for additional details.

The following code sample demonstrates how to apply a Desaturate adjustment using the `adjust` command of the `desaturate` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using desaturate ~
        with options {class:desaturate}
end tell
```

despeckle

Options that may be supplied when applying a Despeckle filter.

The `despeckle` class supplies properties for the [filter options](#) class. The `despeckle` class is used only to define a record whose properties specify options when using the `filter` command to apply a Despeckle filter. `despeckle` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `despeckle` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the despeckle filter using the `filter` command of the `despeckle` filter class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using despeckle -
        with options {class:despeckle}
end tell
```

DICOM open options

Settings related to opening a DICOM format document. The `DICOM open options` class inherits properties from the [open options](#) class.

This class is used to define a record containing properties that specify options when opening a document in raw format. `DICOM open options` can be supplied only in conjunction with the `open` command. It is not possible to get or create a `DICOM open options` object.

Note: `DICOM open options` is available in the Extended Version only.

Properties

| Property | Value Type | What it is |
|----------------------------|------------|--|
| <code>anonymize</code> | boolean | Indicates whether to make the patient information anonymous. |
| <code>columns</code> | integer | Number of columns in n-up configuration. |
| <code>reverse</code> | boolean | Indicates whether to reverse (invert) the image. |
| <code>rows</code> | integer | Number of rows in n-up configuration. |
| <code>show_overlays</code> | boolean | Indicates whether to show overlays. |
| <code>windowlevel</code> | integer | The contrast of the image in Hounsfield units. |
| <code>windowwidth</code> | integer | The brightness of the image in Hounsfield units. |

difference clouds

Options that may be supplied when applying a Difference Clouds filter.

The `difference clouds` class supplies properties for the [filter options](#) class. The `difference clouds` class is used only to define a record whose properties specify options when using the `filter` command to apply a Difference Clouds filter. `difference clouds` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `difference clouds` object.

See the `command` for additional details.

The following code sample demonstrates how to apply the difference clouds filter using the `filter` command of the `difference clouds` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using difference clouds -
        with options {class:difference clouds}
end tell
```

diffuse glow

Options that may be supplied when applying a Diffuse Glow filter.

The `diffuse glow` class supplies properties for the [filter options](#) class. The `diffuse glow` class is used only to define a record whose properties specify options when applying a Diffuse Glow filter. `diffuse glow` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `diffuse glow` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------------|------------|------------|
| <code>graininess</code> | integer | (0 - 10) |
| <code>glow amount</code> | integer | (0 - 20) |
| <code>clear amount</code> | integer | (0 - 20) |

The following code sample demonstrates how to apply the diffuse glow filter using the `filter` command of the `diffuse glow` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using diffuse glow ~
        with options {class:diffuse glow, graininess:5, glow amount:10, ~
            clear amount:10}
end tell
```

displace filter

Options that may be supplied when applying a Displace filter.

The `displace filter` class supplies properties for the [filter options](#) class. The `displace filter` class is used only to define a record whose properties specify options when applying a Displace filter. `displace filter` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `displace filter` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|------------------------------------|--|---|
| horizontal scale | integer | (-999 - 999) |
| vertical scale | integer | (-999 - 999) |
| kind | Valid values: stretch to fit tile | The displacement map type. |
| undefined areas | Valid values: repeat edge pixels wrap around | The method to use to treat undistorted areas. |
| displacement map definition | alias | The location of the desired displacement map. |

The following code sample demonstrates how to apply the Displace filter using the `filter` command of the `displace` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using displace filter ~
    with options {class:displace filter, horizontal scale:250, ~
        vertical scale:350, kind:tile, undefined areas:repeat edge pixels, ~
        displacement map definition:"Data:docsamples:testfiles:displace.psd"}
end tell
```

document, documents

The active containment object for layers and all other objects in the script; the basic canvas for the file.

Note: In Adobe Photoshop CC 2015, a document can also be referred to as an image or a canvas.

Elements

| Element | Refer to by |
|---------------|--|
| art layer | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| channel | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| color sampler | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| count item | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| history state | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| layer comp | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| layer | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| layer set | name, numeric index, as a range of elements, before/after another element, satisfying a test |
| path item | name, numeric index, as a range of elements, before/after another element, satisfying a test |

Properties

| Property | Value Type | What it is |
|---------------------|------------|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | The object's properties returned in a single record. |

| Property | Value Type | What it is (Continued) |
|---|--|---|
| <code>background layer</code> | <code>art layer</code> | Read-only. The background layer for the document. Note: Valid only for documents that have a background layer. |
| <code>bits per channel</code> | Valid values: <code>eight</code> <code>one</code> <code>sixteen</code> <code>thirty two</code> | The number of bits per channel. |
| <code>color profile kind</code> | Valid values: <code>none</code> <code>working</code> | The type of color profile management for the document. Note: If you want to set a custom color profile, do not set a value for <code>color profile kind</code> , but set the appropriate <code>color profile name</code> . Caution: Assigning <code>color profile kind</code> to <code>working</code> when the <code>color profile kind</code> is already set to <code>working</code> results in a Photoshop error. |
| <code>color profile name</code> | Unicode text | The name of color profile for the document. Note: Valid no value is specified for <code>color profile kind</code> (to indicate a custom color profile). |
| <code>component channels</code> | list of channels | Read-only. A list of the component color channels. |
| <code>current channels</code> | list of channel | The selected channels. |
| <code>current history brush source</code> | history state | The current history state to use with the history brush. |
| <code>current history state</code> | history state | The selected history state. |
| <code>current layer</code> | layer | The selected layer. |
| <code>file path</code> | alias | Read-only. The full path name of the document. |
| <code>height</code> | real | Read-only. The document height (unit value). Note: This property can be set when using the make command for document. |
| <code>histogram</code> | list of 256 integers | Read-only. A histogram of values for the composite document. Note: Valid only when <code>mode</code> : <code>RGB</code> ; <code>mode</code> : <code>CMYK</code> ; or <code>mode</code> : <code>indexed color</code> . See mode . |

| Property | Value Type | What it is (Continued) |
|---------------------------------|--|---|
| <code>info</code> | info-object | Read-only. The document metadata. |
| <code>initial fill</code> | Valid values: transparent use background color white | Read-only. The initial fill. Note: Valid only when used as an option with the 'make new document' command. See make . |
| <code>managed</code> | boolean | Read-only. Indicates whether the document is a workgroup document. |
| <code>measurement scale</code> | measurement scale | Read-only. The measurement scale for the document. |
| <code>mode</code> | Valid values: bitmap CMYK duotone grayscale indexed color Lab multichannel RGB | Read-only. The color profile for the document. Note: This property can be set when using the make command for document. |
| <code>modified</code> | boolean | Read-only. Indicates whether the document has been modified since the last save. |
| <code>name</code> | Unicode text | Read-only. The document's name. Note: This property can be set when using the make command for document. |
| <code>pixel aspect ratio</code> | real | The (custom) pixel aspect ratio to use (0.100 - 10.000). |
| <code>quick mask mode</code> | boolean | Indicates whether the document is in the quick mask mode. |
| <code>resolution</code> | real | Read-only. The document's resolution (in pixels per inch). Note: This property can be set when using the make command for document. |
| <code>selection</code> | selection-object | Read-only. The selected area of the document. |
| <code>width</code> | real | Read-only. The document width (unit value). Note: This property can be set when using the make command for document. |
| <code>XMP metadata</code> | XMP metadata | Read-only. Camera raw settings for the image. Note: Valid only for documents opened in Camera Raw format. |

Valid Commands

[auto count](#)
[change mode](#)
[close](#)
[convert](#)
[count](#)
[crop](#)
[deselect](#)
[doc duplicate](#)
[duplicate](#)
[exists](#)
[export](#)
[flatten](#)
[flip canvas](#)
[import annotations](#)
[index](#)
[load](#)
[make](#)
[merge visible layers](#)
[paste](#)
[print](#)
[resize canvas](#)
[resize image](#)
[reveal all](#)
[rotate canvas](#)
[save](#)
[select](#)
[select all](#)
[split channels](#)
[trap](#)
[trim](#)

dust and scratches

Options that may be supplied when applying a Dust & Scratches filter.

The `dust and scratches` class supplies properties for the [filter options](#) class. The `dust and scratches` class is used only to define a record whose properties specify options when applying a Dust & Scratches filter. `dust and scratches` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `dust and scratches` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|------------------------|------------|----------------------|
| <code>radius</code> | integer | (1 - 100) in pixels. |
| <code>threshold</code> | integer | (0 - 255) |

The following code sample demonstrates how to apply the Dust & Scratches filter using the `filter` command of the `dust and scratches` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using dust and scratches ~
        with options {class:dust and scratches, radius:15, threshold:212}
    end tell
```


EPS open options

Settings related to opening a generic EPS document. The `EPS open options` class inherits properties from the [open options](#) class.

This class is used to define a record containing properties that specify options when opening a document in EPS format. `EPS open options` can be supplied only in conjunction with the `open` command. It is not possible to get or create a `EPS open options` object.

Properties

| Property | Value Type | What it is |
|------------------------------|--|---|
| constrain proportions | boolean | Indicates whether to constrain the image proportions. |
| height | real | The image height (unit value). |
| mode | Valid values: CMYK grayscale Lab RGB | The color profile to use as the document mode. |
| resolution | real | The resolution of the document (in pixels per inch). |
| use antialias | boolean | Indicates whether to use antialias. |
| width | real | The image width (unit value). |

The following code opens an EPS document.

```
tell application "Adobe Photoshop CC 2015"
    set myFilePath to alias "Data:docsamples:testfiles:AI11.eps"
    open myFilePath as EPS with options ~
        {class:EPS open options, height:pixels 100, ~
        width:pixels 200, mode:RGB, resolution:72, ~
        use antialias:true, constrain proportions:true}
    end tell
```

EPS save options

Options that can be specified when saving a document in EPS format. See the [save](#) command for additional details. The `EPS save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as an EPS file. `EPS save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create an `EPS save options` object.

Properties

| Property | Value Type | What it is |
|--|--|--|
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>encoding</code> | Valid Values: ASCII binary high quality JPEG low quality JPEG maximum quality JPEG medium quality JPEG | The type of encoding to use (default: <code>binary</code>). |
| <code>halftone screen</code> | boolean | Indicates whether to include the halftone screen (default: <code>false</code>). |
| <code>image interpolation</code> | boolean | Indicates whether to use image interpolation (default: <code>false</code>). |
| <code>PostScript color management</code> | boolean | Indicates whether to use Postscript color management (default: <code>false</code>). |
| <code>preview type</code> | Valid Values: eight bit Mac OS eight bit TIFF JPEG Mac OS monochrome Mac OS monochrome TIFF none | The preview type (default: <code>monochrome TIFF</code>). |
| <code>transfer function</code> | boolean | Indicates whether to include the Transfer functions to compensate for dot gain between the image and film (default: <code>false</code>). |
| <code>transparent whites</code> | boolean | Indicates whether to display white areas as transparent. Note: Valid only when mode of document is <code>bitmap</code> . |
| <code>vector data</code> | boolean | Indicates whether to include vector data. Note: Valid only if the document includes vector data (text). |

The following code creates the `myOptions` variable to hold the `EPS save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    make new document
    set myFile to "Data:docsamples:testfiles:EPSSave.eps"
    set myOptions to {class:EPS save options, embed color profile:true}
    save current document in file myFile as Photoshop EPS with options myOptions appending no extension without copying
end tell
```

equalize

The `equalize` class supplies options for the [adjustment options](#) class to convert a color image to redistribute the brightness values of the pixels in an image so that they more evenly represent the entire range of brightness levels.

The `equalize` class, which is analogous to the Equalize command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply an Equalize adjustment to a selected area. The `equalize` class can be used only in conjunction with the `adjust` command. It is not possible to get or create an `equalize` object.

See the [adjust](#) command for additional details.

The following code sample demonstrates how to apply a Equalize adjustment using the `adjust` command of the `equalize` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using equalize ~
        with options {class:equalize, ~
            curve points:{{45, 4}, {42, 9}, {40, 17}, {36, 22}}}
    end tell
```

export options

Options used with the `export` command. The following classes inherit properties from the `export options` class:

[Illustrator paths export options](#), [save for web export options](#)

Valid Commands

[export](#)

filter options

Options used with the `filter` command.

The following classes inherit properties from the `filter options` class: [add noise](#), [average](#), [blur](#), [blur more](#), [clouds](#), [custom filter](#), [deinterlace](#), [despeckle](#), [difference clouds](#), [diffuse glow](#), [displace filter](#), [dust and scratches](#), [gaussian blur](#), [glass filter](#), [high pass](#), [lens blur](#), [maximum filter](#), [median noise](#), [minimum filter](#), [motion blur](#), [NTSC colors](#), [ocean ripple](#), [offset filter](#), [pinch](#), [polar coordinates](#), [radial blur](#), [ripple](#), [sharpen](#), [sharpen edges](#), [sharpen more](#), [shear](#), [smart blur](#), [spherize](#), [texture fill](#), [twirl](#), [unsharp mask](#), [wave filter](#), [zigzag](#).

Valid Commands

[filter](#)

font, fonts

An installed font. The `font` object is an element of the `application` class. You use the `font` object to retrieve information about the fonts installed on your computer. See [application](#) on page 12 for more information.

Properties

| Property | Value Type | What it is |
|------------------------|--------------|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this object's properties returned in a single record. |
| family | Unicode text | Read-only. The font family. |
| name | Unicode text | Read-only. The text face name. |
| PostScript name | Unicode text | Read-only. The font's PostScript name. |
| style | Unicode text | Read-only. The font's style name. |

The following code uses the standard AppleScript commands `get` and `prompt` to display a dialog that lists the fonts installed on the computer running the script.

```
tell application "Adobe Photoshop CC 2015"
    set fontsInstalled to name of fonts
    log fontsInstalled
end tell
```

Valid commands:

[count](#)
[exists](#)
[index](#)

gallery banner options

Options that can be specified for a Web photo gallery banner.

This class is a property of the [gallery options](#) object and is used to define a record that specifies options when creating a Web photo gallery. Gallery banner options can only be supplied in conjunction with the `create photo gallery` command. It is not possible to get or create a Gallery banner options object.

See the [create photo gallery](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|---|---|
| contact info | Unicode text | Web photo gallery contact info. |
| date | Unicode text | Web photo gallery date (default: current date). |
| font | Valid values: Arial Courier New Helvetica Times New Roman | The font setting for the banner text (default: Arial). |
| font size | integer | The font size for the banner text (1 - 7; default: 3). |
| photographer | Unicode text | Web photo gallery photographer. |
| site name | Unicode text | Web photo gallery site name (default: Adobe Web Photo Gallery). |

gallery color options

Color options that can be specified for a Web photo gallery.

This class a property of the [gallery options](#) object and is used to define a record that specifies options when creating a Web photo gallery. Gallery color options can only be supplied in conjunction with the `create photo gallery` command. It is not possible to get or create a Gallery color options object.

See the [create photo gallery](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------------------|------------|--|
| <code>active link color</code> | RGB color | The color used to indicate an active link. |
| <code>background color</code> | RGB color | The background color. |
| <code>banner color</code> | RGB color | The banner color. |
| <code>link color</code> | RGB color | The color used to indicate a link. |
| <code>text color</code> | RGB color | The text color. |
| <code>visited link color</code> | RGB color | The color used to indicate a visited link. |

gallery images options

Options for the larger images (not thumbnails) in a Web photo gallery.

This class a property of the [gallery options](#) object and is used to define a record that specifies options when creating a Web photo gallery. Gallery images options can only be supplied in conjunction with the `create photo gallery` command. It is not possible to get or create a `Gallery images options` object.

See the [create photo gallery](#) command for additional details.

Note: See [gallery thumbnail options](#) for information on specifying thumbnail image options.

Properties

| Property | Value Type | What it is |
|--------------------------|---|--|
| border | integer | The width (in pixels) of the border between images (0 - 99; default: 0). |
| caption | boolean | Indication of whether to generate image captions (default: <code>false</code>). |
| dimension | integer | The dimensions (in pixels) of a resized image (default: 350). |
| font | Valid values: Arial Courier New Helvetica Times New Roman | The font to use for captions (default: <code>Arial</code>). |
| font size | integer | The font size to use for captions (1 - 7; default: 3). |
| image quality | integer | The quality setting for JPEG images (0 - 12; default: 5). |
| include copyright | boolean | Indication of whether to include copyright information in captions (default: <code>false</code>). |
| include credits | boolean | Indication of whether to include credits information in captions (default: <code>false</code>). |
| include file name | boolean | Indication of whether to include the file name in captions (default: <code>false</code>). |
| include title | boolean | Indication of whether to include the title in captions (default: <code>false</code>). |
| numeric links | boolean | Indication of whether to add numeric links (default: <code>true</code>). |

| Property | Value Type | What it is (Continued) |
|--------------------------------|---|--|
| <code>resize constraint</code> | Valid values: <code>constrain both</code> <code>constrain height</code> <code>constrain width</code> | Indication of whether and how the image should be constrained (default: <code>constrain both</code>). |
| <code>resize images</code> | <code>boolean</code> | Indication of whether to automatically resize images for placement on the gallery pages (default: <code>true</code>). |

gallery options

Options for the `create photo gallery` command.

Properties

| Property | Value Type | What it is |
|------------------------------------|---|---|
| <code>banner options</code> | gallery banner options | Options related to banner settings. |
| <code>custom color options</code> | gallery color options | Options related to custom color settings. |
| <code>email address</code> | Unicode text | The email address to show on the web page. |
| <code>images options</code> | gallery images options | Options related to images settings. |
| <code>layout style</code> | Unicode text | The style to use for laying out the web page (default: <code>Centered Frame 1 - Basic</code>). |
| <code>preserve all metadata</code> | boolean | Indication of whether to save the metadata in JPEG files (default: <code>false</code>). |
| <code>security options</code> | gallery security options | Options related to security settings. |
| <code>short extension</code> | boolean | Indication of whether to use the short (.htm), as opposed to the long (.html) web page file name extension (default: <code>true</code>). |
| <code>size attributes</code> | boolean | Indication of whether to add width and height attributes for images (default: <code>true</code>). |
| <code>sub folders</code> | boolean | Indication of whether to include files found in the in sub folders of the input folder (default: <code>true</code>). |
| <code>thumbnail options</code> | gallery thumbnail options | Options related to thumbnail settings. |
| <code>UTF8 encoding</code> | boolean | Indication of whether the web page should use UTF-8 encoding (default: <code>false</code>). |

Valid Commands

[create photo gallery](#)

gallery security options

Options for security text in a Web photo gallery.

This class is a property of the [gallery options](#) object and is used to define a record that specifies options when creating a Web photo gallery. Gallery security options can only be supplied in conjunction with the `create photo gallery` command. It is not possible to get or create an `Gallery security options` object.

See the [create photo gallery](#) command for additional details.

Properties

| Property | Value Type | What it is |
|----------------------|---|---|
| content | Valid values: gallery caption gallery copyright gallery credit gallery custom text gallery filename gallery none gallery title | The content to use for Web photo gallery security text (default: <code>gallery none</code>). |
| custom text | Unicode text | Custom text to use for Web photo gallery security text. Note: Valid only when <code>content: custom text</code> . See content . |
| font | Arial Courier New Helvetica Times New Roman | The font to use for Web photo gallery security text (default: <code>Arial</code>). |
| font size | integer | The font size to use for Web photo gallery security text (minimum 1; default: 36). |
| opacity | integer | The opacity (as percent) to use for web page security text (default: 100). |
| text color | RGB color | The web page security text color. |
| text position | Valid values: gallery centered gallery lower left gallery lower right gallery upper left gallery upper right | The position of web page security text (default: <code>gallery centered</code>). |
| text rotate | Valid values: clock wise 45 clock wise 90 counter clock wise 45 counter clock wise 90 zero | The orientation to use for web page security text (default: <code>zero</code>). |

gallery thumbnail options

Options for the thumbnail images in a Web photo gallery.

This class a property of the [gallery options](#) object and is used to define a record that specifies options when creating a Web photo gallery. `Gallery thumbnail options` can only be supplied in conjunction with the `create photo gallery` command. It is not possible to get or create an `Gallery thumbnail options` object.

See the [create photo gallery](#) command for additional details.

Properties

| Property | Value Type | What it is |
|--------------------------|---|---|
| border | integer | The width (in pixels) of the border around thumbnail images (0 - 99; default: 0). |
| caption | boolean | Indication of whether to display captions (default: <code>false</code>). |
| column count | integer | The number of columns on the page (default: 5). |
| dimension | integer | Thumbnail dimensions in pixels (default: 75). |
| font | Valid values: Arial Courier New Helvetica Times New Roman | The font to use (default: Arial). |
| font size | integer | The font size for thumbnail images text (1 - 7; default: 3). |
| include copyright | boolean | Indication of whether to include copyright information for thumbnails (default: <code>false</code>). |
| include credits | boolean | Indication of whether to include credits for thumbnails (default: <code>false</code>). |
| include file name | boolean | Indication of whether to include file names for thumbnails (default: <code>false</code>). |
| include title | boolean | Indication of whether to include titles for thumbnails (default: <code>false</code>). |
| row count integer | integer | The number of rows on the page (default: 3). |
| size | Valid values: gallery custom gallery large gallery medium gallery small | The thumbnail image size (default: <code>gallery medium</code>). |

gaussian blur

Options that may be supplied when applying a Gaussian Blur filter.

The `gaussian blur` class supplies properties for the [filter options](#) class. The `gaussian blur` class is used only to define a record whose properties specify options when applying a Gaussian Blur filter. `gaussian blur` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `gaussian blur` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|------------|--|
| <code>radius</code> | real | The radius in pixels in which to apply the filter. |

The following code sample demonstrates how to apply the Gaussian Blur filter using the `filter` command of the `gaussian blur` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using gaussian blur ~
        with options {class:gaussian blur, radius:200}
end tell
```

GIF save options

Options that can be specified when saving a document in GIF format. See the [save](#) command for additional details. The `GIF save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a GIF file. `GIF save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `GIF save options` object.

Properties

| Property | Value Type | What it is |
|--------------------------------|---|---|
| <code>colors in palette</code> | integer | The number of colors in the Color palette. Note: Valid only when palette: local adaptive; palette: local perceptual; palette: local selective; palette: Mac OS system; palette: uniform; palette: web; or palette: Windows system. See palette . |
| <code>dither</code> | Valid values: diffusion noise none pattern | The dither type to use. |
| <code>dither amount</code> | integer | The amount of dither to use (1 - 100). (default: 75) Note: Valid only when <code>dither: diffusion</code> . See dither . |
| <code>forced colors</code> | Valid values: black and white none primaries web | Forces the inclusion of specified colors. |
| <code>interlaced</code> | boolean | Indicates whether to interlace rows (default: false). |
| <code>matte</code> | Valid values: background color matte black matte foreground color matte Netscape gray none semi gray white matte | The color to use to fill antialiased edges adjacent to transparent areas of the image. Note: When <code>transparency: false</code> , the matte color is applied to transparent areas. See transparency . |

| Property | Value Type | What it is (Continued) |
|------------------------------|--|---|
| palette | Valid values: exact local adaptive local perceptual local selective Mac OS system master adaptive master perceptual master selective previous uniform web Windows system | The type of palette to use (default: local selective). |
| preserve exact colors | boolean | Indicates whether to protect colors in the image that contain entries in the color table from being dithered. Note: Valid only when <code>dither: diffusion</code> . See dither . |
| transparency | boolean | Indicates whether to preserve transparent areas of the image during conversion to GIF format. |

The following code creates the `myOptions` variable to hold the GIF save options, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    make new document
    set myFile to "Data:docsamples:testfiles:GifTest.gif"
    set myOptions to ~
        {class:GIF save options, dither:diffusion, dither amount:46, ~
          preserve exact colors:true, matte:background color matte}
    save current document in file myFile as CompuServe GIF with options ~
        myOptions appending no extension without copying
end tell
```

glass filter

Options that may be supplied when applying a Glass filter.

The `glass filter` class supplies properties for the `filter options` class. The `glass filter` class is used only to define a record whose properties specify options when applying a Glass filter. `glass filter` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `glass filter` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------------------|--|--|
| <code>distortion</code> | integer | (0 - 20) |
| <code>smoothness</code> | integer | (1 - 15) |
| <code>scaling</code> | integer | (50 - 200) as percent. |
| <code>invert texture</code> | boolean | (default: <code>false</code>) |
| <code>texture kind</code> | Valid values: <code>blocks</code> <code>canvas</code> <code>frosted</code> <code>texture document</code> <code>tiny lens</code> | The type of texture to use. Note: You cannot specify <code>texture kind</code> and <code>texture definition</code> at the same time. |
| <code>texture definition</code> | alias | The file that contains the texture image. |

The following code sample demonstrates how to apply the Glass filter using the `filter` command of the `glass` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
  filter current layer of the current document using glass filter ~
    with options {class:glass filter, distortion:20, ~
      smoothness:100, scaling:155, ~
      texture definition:"Data:docsamples:testfiles:texturefill.psd"}
end tell
```

gray color

Options that can be specified for a Gray color: the numeric values of component colors. The `Gray color` class inherits properties from the [color value](#) class.

This class a property of the [color value](#) object and is used to define a record that specifies options when creating color value.

Properties

| Property | Value Type | What it is |
|-------------------------|------------|---|
| <code>gray value</code> | real | The gray value (0.0 - 100.0; default: 0.0). |

high pass

Options that may be supplied when applying a High Pass filter.

The `high pass` class supplies properties for the [filter options](#) class. The `high pass` class is used only to define a record whose properties specify options when applying a High Pass filter. `high pass options` can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `high pass` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|------------|--------------------------|
| <code>radius</code> | real | (0.1 - 250.0) in pixels. |

The following code sample demonstrates how to apply the High Pass filter using the `filter` command of the `high pass` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using high pass ~
        with options {class:high pass, radius:25.5}
    end tell
```

history state, history states

A history state for the document.

Properties

| Property | Value Type | What it is |
|---------------------|--------------|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this objects properties returned in a single record. |
| container | reference | Read-only. The object's container. |
| name | Unicode text | Read-only. The history state's name. |
| snapshot | boolean | Read-only. Indicates whether to the history state is a snapshot. |

Valid Commands

[count](#)
[exists](#)
[index](#)

HSB color

Options that can be specified for an HSB color: the numeric values of component colors. The `HSB color` class inherits properties from the [color value](#) class.

This class a property of the [color value](#) object and is used to define a record that specifies options when creating color value.

Properties

| Property | Value Type | What it is |
|-------------------|------------|---|
| hue | real | The hue value (0.0 - 360.0; default: 0.0). |
| saturation | real | The saturation value (0.0 - 100.0; default: 0.0). |
| brightness | real | The brightness value (0.0 - 100.0; default: 0.0). |

Illustrator paths export options

Options that can be specified when exporting a path item to an Adobe Illustrator® file. See [path item](#), [path items](#) on page 109.

The `Illustrator paths export options` class supplies properties for the [export options](#) class. `Illustrator paths export options` options can be supplied only in conjunction with the `export` command. It is not possible to get or create a `Illustrator paths export options` object.

See the [export](#) command for further details.

Properties

| Property | Value Type | What it is |
|--------------------------|---|---|
| <code>path name</code> | Unicode text | The name of path to export. Note: Valid only when <code>target path:</code> named path. |
| <code>target path</code> | Valid values: all paths document bounds named path | The sort of path(s) to export (default: document bounds). |

indexed mode options

Options that can be specified when changing the document mode to Indexed using the `change mode` command. The `indexed mode` class inherits properties from the [change mode options](#) class.

This class is used to define a record containing properties used to specify options when changing a document's mode. `Indexed mode options` can only be supplied in conjunction with the `change mode` command. It is not possible to get or create a `Indexed mode options` object. See the [change mode](#) command for more details.

Properties

| Property | Value Type | What it is |
|-------------------------------------|---|---|
| <code>colors in palette</code> | integer | The number of colors in the Color palette. Note: Valid only when palette: local adaptive; palette: local perceptual; palette: local selective; palette: Mac OS system; palette: uniform; palette: web; or palette: Windows system. See palette . |
| <code>dither</code> | Valid values: diffusion noise none pattern | The dither type to use. |
| <code>dither amount</code> | integer | The amount of dither to use (1 - 100). Note: Valid only when <code>dither: diffusion</code> . |
| <code>forced colors</code> | Valid values: black and white none primaries web | The type of colors to force into the color palette. |
| <code>matte background color</code> | Valid values: background color matte black matte foreground color matte Netscape gray none semi gray white matte | The color to use to fill antialiased edges adjacent to transparent areas of the image (default: matte white). Note: When <code>transparency: false</code> , the matte color is applied to transparent areas. See transparency . |

| Property | Value Type | What it is (Continued) |
|------------------------------|--|--|
| palette | Valid values: exact local adaptive local perceptual local selective Mac OS system master adaptive master perceptual master selective previous uniform web Windows system | The type of palette to use (default: <code>exact</code>). |
| preserve exact colors | boolean | Indicates whether to protect colors in the image that contain entries in the color table from being dithered. Note: Valid only when <code>dither: diffusion</code> . See dither . |
| transparency | boolean | Indicates whether to preserve transparent areas of the image during conversion to GIF format. |

info-object

Document metadata. This class is a property of the `document` object and is used to define a record containing properties that specify application preferences. See [document](#), [documents](#) on page 52.

Properties

| Property | Value Type | What it is |
|-------------------------------|--|---|
| <code>best type</code> | type class | Read-only. The best type for the object's value. |
| <code>class type</code> | class | Read-only. The object's class. |
| <code>default type</code> | type class | Read-only. The default type for the object's value. |
| <code>properties</code> | record | All of this objects properties returned in a single record. |
| <code>author</code> | Unicode text | |
| <code>author position</code> | Unicode text | |
| <code>caption</code> | Unicode text | |
| <code>caption writer</code> | Unicode text | |
| <code>category</code> | Unicode text | |
| <code>city</code> | Unicode text | |
| <code>container</code> | reference | Read-only. The object's container. |
| <code>copyright notice</code> | Unicode text | |
| <code>copyrighted</code> | Valid values: copyrighted work public domain unmarked | The document's copyrighted status. |
| <code>country</code> | Unicode text | |
| <code>creation date</code> | Unicode text | |
| <code>credit</code> | Unicode text | |
| <code>EXIF</code> | list of lists: list (list {tag, tag data}), ... | Read-only. Camera data that includes camera settings used when the image was taken. Sample list values are: tag = "camera"; tag value = "Cannon". |
| <code>headline</code> | Unicode text | |
| <code>instructions</code> | Unicode text | |
| <code>job name</code> | Unicode text | |
| <code>keywords</code> | list of Unicode text | A list of keywords that can identify the document or its contents. |
| <code>owner url</code> | Unicode text | |

| Property | Value Type | What it is (Continued) |
|--------------------------------|--|------------------------|
| province or state | Unicode text | |
| source | Unicode text | |
| supplemental categories | list of Unicode text | |
| title | Unicode text | |
| transmission reference | Unicode text | |
| urgency | Valid values: four high low none normal seven six three two | |

inversion

The `inversion` class supplies options for the [adjustment options](#) class to invert the colors in an image.

The `inversion` class, which is analogous to the Invert command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply an Invert adjustment to an image. The `inversion` class can be used only in conjunction with the `adjust` command. It is not possible to get or create an `inversion` object.

See the [adjust](#) command for additional details.

The following code sample demonstrates how to apply a Inversion adjustment using the `adjust` command of the `inversion` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using inversion
end tell
```

JPEG save options

Options that can be specified when saving a document in JPEG format. See the [save](#) command for additional details. The `JPEG save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a JPEG file. `JPEG save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `JPEG save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|---|---|
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>format options</code> | Valid values: optimized progressive standard | The download format to use (default: standard). |
| <code>matte</code> | Valid values: background color matte black matte foreground color matte Netscape gray none semi gray white matte | The color to use to fill antialiased edges adjacent to transparent areas of the image (default: white matte). Note: When <code>transparency: false</code> , the matte color is applied to transparent areas. See transparency on page 81. |
| <code>quality</code> | integer | The quality of the produced image (0 - 12; default: 3). |
| <code>scans</code> | integer | The number of increasingly detailed scans to use to display the image on the screen (3 - 5). Note: Valid only when <code>format options: progressive</code> . See format options . |

The following code creates the `myOptions` variable to hold the JPEG save options, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    make new document
    set myFile to "Data:docsamples:testfiles:JpegSave.jpg"

    set myOptions to ~
        {class:JPEG save options, embed color profile:true, ~
        format options:progressive, quality:12, scans:3}
    save current document in file myFile as JPEG with options ~
        myOptions appending no extension without copying
end tell
```

Lab color

Options that can be specified for an Lab color: numeric values for the component colors. The `Lab color` class inherits properties from the [color value](#) class.

This class a property of the [color value](#) object and is used to define a record that specifies options when creating color value.

See the [convert color](#) command for additional details.

Properties

| Property | Value Type | What it is |
|----------------------|------------|-------------------------------|
| <code>value_L</code> | real | The L value (0.0 - 100.0). |
| <code>value_a</code> | real | The a value (-128.0 - 127.0). |
| <code>value_b</code> | real | The b value (-128.0 - 127.0). |

layer, layers

A layer object. The following classes inherit properties from the `layer` class: [art layer](#), [art layers](#), [layer set](#), [layer sets](#).

Properties

| Property | Value Type | What it is |
|----------------------|--|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this object's properties returned in a single record. |
| all locked | boolean | Indicates whether all of the layer's contents are locked or editable. |
| blend mode | Valid Values: color blend color burn color dodge darken difference dissolve exclusion hard light hard mix hue blend lighten linear burn linear dodge linear light luminosity multiply normal overlay pass through pin light saturation blend screen soft light vivid light | The mode to use when compositing an object. |
| bounds | list | Read-only. A list of coordinates that describe the corners of the bounding rectangle of the layer. |
| container | reference | Read-only. The object's container. |
| linked layers | list of layers | Read-only. The layers linked to this layer. |
| name | Unicode text | The layer's name. |

| Property | Value Type | What it is (Continued) |
|----------------|------------|--|
| opacity | real | The layer's master opacity (as percent) (0.0 - 100.0). |
| visible | boolean | Indicates whether the layer is visible. |

Valid Commands

[count](#)
[delete](#)
[duplicate](#)
[exists](#)
[index](#)
[link](#)
[make](#)
[move](#)
[rotate](#)
[scale](#)
[translate](#)
[unlink](#)

layer comp, layer comps

A "snapshot" of a temporary composition of the layers in a document.

Properties

| Property | Value Type | What it is |
|---------------------|--------------|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this object's properties returned in a single record. |
| appearance | boolean | Indicates whether to use layer appearance (layer styles) settings. |
| comment | anything | A description of the layer comp. |
| container | reference | Read-only. The object's container. |
| name | Unicode text | The layer's name. |
| position | boolean | Indicates whether to use layer position. |
| selected | boolean | Read-only. Indicates whether the layer comp is selected. |
| visibility | boolean | Indicates whether to use layer visibility settings. |

Valid Commands

[apply](#)
[count](#)
[delete](#)
[exists](#)
[index](#)
[make](#)
[recapture](#)
[reset from comp](#)

layer set, layer sets

A layer set.

Elements

| Element | Refer to by |
|------------------------|---|
| <code>art layer</code> | name, numeric index, as a range of elements, before/after another element, satisfying a test. |
| <code>layer</code> | name, numeric index, as a range of elements, before/after another element, satisfying a test. |
| <code>layer set</code> | name, numeric index, as a range of elements, before/after another element, satisfying a test. |

Properties

| Property | Value Type | What it is |
|---------------------|------------|---|
| best type | type class | Read-only. (Inherited from the <code>layer</code> class) The best type for the object's value. |
| class | type class | Read-only. (Inherited from the <code>layer</code> class) The object's class. |
| default type | type class | Read-only. (Inherited from the <code>layer</code> class) The default type for the object's value. |
| index | integer | Read-only. (Inherited from the <code>layer</code> class) The index of this instance of the object. |
| properties | record | (Inherited from the <code>layer</code> class) All of this object's properties returned in a single record. |
| all locked | boolean | (Inherited from the <code>layer</code> class) Indicates whether the contents in the layers contained in the layer set are editable. |

| Property | Value Type | What it is |
|-------------------------|--|--|
| blend mode | Valid Values: color blend color burn color dodge darken difference dissolve exclusion hard light hard mix hue blend lighten linear burn linear dodge linear light luminosity multiply normal overlay pass through pin light saturation blend screen soft light vivid light | (Inherited from the <code>layer</code> class) The mode to use when compositing an object. |
| bounds | list | Read-only. (Inherited from the <code>layer</code> class) The bounding rectangle of the layer. |
| container | reference | Read-only. (Inherited from the <code>layer</code> class) The object's container. |
| linked layers | list of layers | Read-only. (Inherited from the <code>layer</code> class) The layers linked to this layer set. |
| name | Unicode text | (Inherited from the <code>layer</code> class) The layer set's name. |
| opacity | real | (Inherited from the <code>layer</code> class) The layer set's master opacity (0.0 - 100.0). |
| visible | boolean | (Inherited from the <code>layer</code> class) Indicates whether the layer set is visible. |
| enabled channels | list of channels | Channels that are enabled for the layer set. Note: Must be a list of component channels. |

Valid Commands

[count](#)
[delete](#)
[duplicate](#)
[exists](#)
[index](#)
[link](#)
[make](#)
[merge](#)
[move](#)
[rotate](#)

[scale](#)
[translate](#)
[unlink](#)

lens blur

Options that can be specified when applying a Lens Blur filter.

The `lens blur` class supplies properties for the [filter options](#) class. The `lens blur` class is used only to define a record whose properties specify options when applying a Lens Blur filter. `lens blur options` can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `lens blur` object.

See the [filter](#) command for additional details.

Properties

| Property | Value type | What it is |
|-------------------------------|---|--|
| <code>amount</code> | integer | The amount of noise (default: 0). |
| <code>blade curvature</code> | integer | The blade curvature of the iris (default: 0). |
| <code>brightness</code> | integer | The brightness for the specular highlights (default: 0). |
| <code>distribution</code> | Valid values: Gaussian uniform | The distribution value for the noise (default: uniform). |
| <code>focal distance</code> | integer | The blur focal distance for the depth map (default: 0). |
| <code>invert depth map</code> | boolean | Indicates whether the depth map is inverted (default: false). |
| <code>iris shape</code> | Valid values: heptagon hexagon octagon pentagon square triangle | The shape of the iris (default: hexagon). |
| <code>monochromatic</code> | boolean | Indicates whether the noise is monochromatic (default: false). |
| <code>radius</code> | integer | The radius of the iris (default: 15). |
| <code>rotation</code> | integer | The rotation of the iris (default: 0). |
| <code>source</code> | Valid values: image highlight layer mask none transparency channel | The source for the depth map (default: none). |
| <code>threshold</code> | integer | The threshold for the specular highlights (default: 0). |

The following code sample demonstrates how to apply the Lens Blur filter using the `filter` command of the `Lens blur` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using lens blur ~
        with options {class:lens blur, radius:13}
    end tell
```

lens flare

Options that may be supplied when applying a Lens Flare filter.

The `lens flare` class supplies properties for the `filter options` class. The `lens flare` class is used only to define a record whose properties specify options when applying a Lens Flare filter. `lens flare` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `lens flare` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|---|--|
| brightness | integer | (10 - 300) as percent. |
| flare center | list | The x and y coordinates of the center of the flare (unit value). |
| lens type | Valid values: Movie Prime Prime 105 Prime 35 zoom | |

The following code sample demonstrates how to apply the Lens Flare filter using the `filter` command of the `lens flare` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using lens flare ~
        with options {class:lens flare, brightness:209, ~
            flare center:{2 as inches, 4 as inches}, lens type:Prime 35}
    end tell
```

levels adjustment

The `levels adjustment` class supplies options for the [adjustment options](#) class to correct the tonal range and color balance of an image.

The `levels adjustment` class, which is analogous to the Levels command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when applying a Levels adjustment to an image. The `levels adjustment` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `levels adjustment` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------------------|------------|---|
| <code>input range start</code> | integer | (0 - 253) |
| <code>input range end</code> | integer | $((\text{inputRangeStart} + 2) - 255)$ |
| <code>input range gamma</code> | real | (0.10 - 9.99) |
| <code>output range start</code> | integer | (0 - 253) |
| <code>output range end</code> | integer | $((\text{outputRangeStart} + 2) - 255)$ |

The following code sample demonstrates how to apply a Levels Adjustment using the `adjust` command of the `levels adjustment` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using levels adjustment ~
        with options {class:levels adjustment, input range start:4, ~
            input range end:245, input range gamma:4.8, ~
            output range start:5, output range end:7}
    end tell
```


maximum filter

Options that may be supplied when applying a Maximum filter.

The `maximum filter` class supplies properties for the [filter options](#) class. The `maximum filter` class is used only to define a record whose properties specify options when applying a Maximum filter. `maximum filter` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `maximum filter` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|------------|----------------------|
| <code>radius</code> | real | (1 - 100) in pixels. |

The following code sample demonstrates how to apply the Maximum filter using the `filter` command of the `maximum filter` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using maximum filter ~
        with options {class:maximum filter, radius:29}
end tell
```

measurement scale

The measurement scale of a document. This class is a property of the document object, see [measurement scale](#).

Note: This feature is available in the Extended Version only.

Properties

| Property | Value Type | What it is |
|-----------------------|-----------------|---|
| pixel length | number (Long) | Read-write. The length in pixels this scale equates to. |
| logical length | number (Double) | Read-write. The logical length this scale equates to. |
| logical unit | Unicode text | Read-write. The logical units for this scale. |

The following code sample shows how to set the properties of the measurement scale object.

```
tell application "Adobe Photoshop CC 2015"
  tell current document
    set pixel length of measurement scale to 1
    set logical length of measurement scale to 100
    set logical units of measurement scale to "My Units"
  end tell
end tell
```

median noise

Options that may be supplied when applying a Median Noise filter.

The `median noise` class supplies properties for the [filter options](#) class. The `median noise` class is used only to define a record whose properties specify options when applying a Median Noise filter. `median noise` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `median noise` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|------------|----------------------|
| <code>radius</code> | real | (1 - 100) in pixels. |

The following code sample demonstrates how to apply the Median Noise filter using the `filter` command of the `median noise` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using median noise ~
        with options {class:median noise, radius:22}
end tell
```

minimum filter

Options that may be supplied when applying a Minimum filter.

The `minimum filter` class supplies properties for the `filter options` class. The `minimum filter` class is used only to define a record whose properties specify options when applying a Minimum filter. `minimum filter` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `minimum filter` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|------------|----------------------|
| <code>radius</code> | real | (1 - 100) in pixels. |

The following code sample demonstrates how to apply the Minimum filter using the `filter` command of the `minimum filter` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using minimum filter ~
        with options {class:minimum filter, radius:29}
end tell
```

mix channels

The `mix channels` class supplies options for the [adjustment options](#) class to modify a targeted (output) color channel using a mix of the existing color channels in the image.

The `mix channels` class, which is analogous to the Channel Mixer command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when applying a Channel Mixer adjustment to an image. The `mix channels` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `mix channels` object.

See the [adjust](#) command for additional details.

Note: Valid only for RGB or CMYK documents.

Properties

| Property | Value Type | What it is |
|--------------------------------|------------------|---|
| <code>output channels</code> | list of anything | <p>A list of channel specifications. For each component channel, you must specify a list of adjustment values (-200 - 200) followed by a 'constant' value (-200 - 200).</p> <p>Note: When <code>monochrome mixing: true</code>, the maximum number of channel value specifications is 1.</p> <p>Note: Valid only when the document mode is RGB or CMYK. See <code>mode</code> in the Properties table of the document, documents class.</p> |
| <code>monochrome mixing</code> | boolean | Indicates whether to use monochrome mixing (default: <code>false</code>). |

The following code sample demonstrates how to apply a Mix Channels adjustment using the `adjust` command of the `mix channels` class (inherited from the `adjustment options` super class). This code assumes an RGB document mode and uses the default value for the `monochrome mixing` property by not specifying a value.

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using mix channels ~
        with options {class:mix channels, ~
            output channels:{red:{-42, 62, 5, 116}, ~
                green:{0, 172, 136, 0}, blue:{-66, 0, 100, -112}}}}
end tell
```

motion blur

Options that may be supplied when applying a Motion Blur filter.

The `motion blur` class supplies properties for the [filter options](#) class. The `motion blur` class is used only to define a record whose properties specify options when applying a Motion Blur filter. `motion blur` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `motion blur` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------|------------|------------------------------|
| angle | integer | (angle: -360 - 360) |
| radius | real | (radius: 1 - 999) in pixels. |

The following code sample demonstrates how to apply the Motion Blur filter using the `filter` command of the `motion blur` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using motion blur ~
        with options {class:motion blur, angle:-224, radius:29}
    end tell
```

no color

An object that represents a missing color. The `no color` class inherits properties from the [color value](#) class.

notifier, notifiers

An event-handler object that tells the script to execute specified code when a specified event occurs.

Note: You can remove a `notifier` object from the Script Events Manager drop-down list by deleting the file named `Script Events Manager.xml` from in the Photoshop preferences folder. See Adobe Photoshop CC 2015 help for more information.

Properties

| Property | Value type | What it is |
|---------------------------|------------|---|
| <code>best type</code> | type class | Read-only. The best type for the object's value. |
| <code>class</code> | type class | Read-only. The object's class. |
| <code>default type</code> | type class | Read-only. The default type for the object's value. |
| <code>index</code> | integer | Read-only. The index of this instance of the object. |
| <code>properties</code> | record | All of this object's properties returned in a single record. |
| <code>event</code> | string | Read-only. The event ID in four characters or a unique string that the notifier is associated with. |
| <code>event class</code> | string | Read-only. The class ID of the event: the class of the object the event is applied to. Four characters or a unique string. Note: When an <code>event</code> applies to multiple types of objects, you use this property to distinguish which object this <code>notifier</code> applies to. For example, the Make event (<code>"Mk "</code>) applies to documents (<code>"Dcmn"</code>), channels (<code>"Chnl"</code>) and other objects. |
| <code>event file</code> | file | Read-only. The path to the file to execute when the event occurs/activates the notifier. |

Valid commands:

[`count`](#)
[`delete`](#)
[`exists`](#)
[`index`](#)
[`make`](#)

NTSC colors

Options that may be supplied when applying the NTSC colors filter.

The `NTSC colors` class supplies properties for the [filter options](#) class. The `NTSC colors` class is used only to define a record whose properties specify options when using the `filter` command to apply an NTSC colors filter. `NTSC colors` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `NTSC colors` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the NTSC colors filter using the `filter` command of the `motion blur` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using NTSC colors
end tell
```

ocean ripple

Options that may be supplied when applying an Ocean Ripple filter.

The `ocean ripple` class supplies properties for the [filter options](#) class. The `ocean ripple` class is used only to define a record whose properties specify options when applying an Ocean Ripple filter. `ocean ripple` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create an `ocean ripple` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|-------------------------------|------------|------------|
| <code>ripple size</code> | integer | (1 - 15) |
| <code>ripple magnitude</code> | integer | (0 - 20) |

The following code sample demonstrates how to apply the Ocean Ripple filter using the `filter` command of the `ocean ripple` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using ocean ripple ~
        with options {class:ocean ripple, ripple size:4, ripple magnitude:2}
end tell
```

offset filter

Options that may be supplied when applying an Offset filter.

The `offset filter` class supplies properties for the [filter options](#) class. The `offset filter` class is used only to define a record whose properties specify options when applying an Offset filter. `offset filter options` can be supplied only in conjunction with the `filter` command. It is not possible to get or create an `offset filter` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|--------------------------|---|---|
| horizontal offset | real | (unit value) (min/max amounts depend on layer size). |
| vertical offset | real | (unit value) (min/max amounts depend on layer size). |
| undefined areas | Valid values: repeat edge pixels set to layer fill wrap around | The method to use to fill areas left undefined when the image is moved. |

The following code sample demonstrates how to apply the Offset filter using the `filter` command of the `offset filter` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using offset filter ~
        with options {class:offset filter, horizontal offset:3 as centimeters,~
            vertical offset:2 as centimeters, undefined areas:wrap around}
    end tell
```

open options

Options used with the open command.

The following classes inherit properties from the open options class: [Camera RAW open options](#), [DICOM open options](#), [EPS open options](#), [PDF open options](#), [Photo CD open options](#), [raw format open options](#).

Valid Commands

[open](#)

path item, path items

An artwork path.

Elements

| Element | Refer to by |
|---------------|--|
| sub path item | numeric index, as a range of elements, before/after another element, satisfying a test |

Properties

| Property | Value Type | What it is |
|---------------------|---|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this object's properties returned in a single record. |
| container | reference | Read-only. The object's container. |
| entire path | list of sub path info objects | Read-only. The item's sub paths. |
| kind | Valid values: clipping normal text mask vector mask work | The type of path. |
| name | Unicode text | The path item's name. |

The following code creates a path in three segments that end up looking like an ice cream cone: two connected diagonal lines that form a V (or the "cone"), and a curved line that arcs above the V to create a 2-d ice cream cone.

```
tell application "Adobe Photoshop CC 2015"
    set ruler units of settings to pixel units
    set type units of settings to pixel units

    set docRef to make new document with properties {height:700, width:500, name:"Snow Cone"}

    set pathPointInfo1 to {class:path point info, kind:corner point, anchor:{100, 100}, left direction:{100, 100}, right direction:{100, 100}}
    set pathPointInfo2 to {class:path point info, kind:corner point, anchor:{150, 200}, left direction:{150, 200}, right direction:{150, 200}}
```

```
set subPathInfo1 to {class:sub path info, ¬
    entire sub path:{pathPointInfo1, pathPointInfo2}, ¬
    operation:shape xor, closed:false}

set pathPointInfo3 to {class:path point info, kind:corner point, ¬
    anchor:{150, 200}, left direction:{150, 200}, right direction:{150, 200}}
set pathPointInfo4 to {class:path point info, kind:corner point, ¬
    anchor:{200, 100}, left direction:{200, 100}, right direction:{200, 100}}
set subPathInfo2 to {class:sub path info, ¬
    entire sub path:{pathPointInfo3, pathPointInfo4}, ¬
    operation:shape xor, closed:false}

set pathPointInfo5 to {class:path point info, kind:corner point, ¬
    anchor:{200, 100}, left direction:{200, 100}, right direction:{200, 100}}
set pathPointInfo6 to {class:path point info, kind:corner point, ¬
    anchor:{150, 50}, left direction:{100, 50}, right direction:{200, 50}}
set pathPointInfo7 to {class:path point info, kind:corner point, ¬
    anchor:{100, 100}, left direction:{100, 100}, right direction:{100, 100}}
set subPathInfo3 to {class:sub path info, ¬
    entire sub path:{pathPointInfo5, pathPointInfo6, pathPointInfo7}, ¬
    operation:shape xor, closed:false}

set newPathItem to make new path item in docRef with properties ¬
    {entire path:{subPathInfo1, subPathInfo2, subPathInfo3}, ¬
    name:"Snow Cone", kind:normal}

end tell
```

Valid Commands

[count](#)
[create selection](#)
[delete](#)
[deselect](#)
[duplicate](#)
[exists](#)
[fill path](#)
[index](#)
[make](#)
[make clipping path](#)
[select](#)
[stroke path](#)

path point, path points

Information about a [path point info](#) object.

Tip: You do not use the path point object to create a path point. Rather, you use the path point object to retrieve information about a path point. To create points that describe path segments, see [path point info](#).

Properties

| Property | Value Type | What it is |
|------------------------|---|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| index | integer | Read-only. The index of this instance of the object. |
| properties | record | All of this object's properties returned in a single record. |
| anchor | list | Read-only. The position (coordinates) of the anchor point. |
| container | reference | Read-only. The object's container. |
| entire path | list of sub path info objects | Read-only. The item's sub paths. |
| kind | Valid values: corner point smooth point | Read-only. The type of point. |
| left direction | list | Read-only. The location of the left-direction ('in' position) point. |
| right direction | list | Read-only. The location of the right-direction ('out' position) point. |

Valid Commands

[count](#)
[exists](#)
[index](#)

path point info

A point on a path, expressed in three sets of coordinates:

- anchor point
- left direction point
- right direction point

For paths that are straight segments (not curved), the coordinates of all three points are the same.

For curved segments, the coordinates are different; the difference between the anchor point and the left or right direction points determines the arc of the curve. You use the left direction point to bend the curve “outward” or make it convex; you use the right direction point to bend the curve “inward” or make it concave.

Properties

| Property | Value Type | What it is |
|------------------------|---|--|
| anchor | list of coordinates | The position (in x and y coordinates) of the anchor point. |
| kind | Valid values: corner point smooth point | The type of point. |
| left direction | list of coordinates | The location (in x and y coordinates) of the left-direction (‘in’ position) point. |
| right direction | list of coordinates | The location (in x and y coordinates) of the right-direction (‘out’ position) point. |

Valid Commands

[exists](#)

PDF open options

Settings related to opening a generic PDF document. The `PDF open options` class inherits properties from the [open options](#) class.

This class is used to define a record containing properties that specify options when opening a document as a PDF file. `PDF open options` can be supplied only in conjunction with the `open` command. It is not possible to get or create a `PDF open options` object.

Properties

| Property | Value Type | What it is |
|------------------------------------|--|--|
| <code>bits per channel</code> | Valid values: eight one sixteen thirtytwo | The number of bits per channel. |
| <code>constrain proportions</code> | boolean | Deprecated for Adobe Photoshop CC 2015. |
| <code>crop page</code> | Valid values: art box bleed box bounding box crop box media box trim box | The method of cropping to use. |
| <code>height</code> | real | Deprecated for Adobe Photoshop CC 2015. |
| <code>mode</code> | Valid values: CMYK grayscale Lab RGB | The color model to use. |
| <code>name</code> | Unicode text | The name of the document. |
| <code>object</code> | integer | The number of 3d objects to open. |
| <code>page</code> | integer | The page to which to open the document. |
| <code>resolution</code> | real | The resolution of the document (in pixels per inch). |
| <code>suppress warnings</code> | boolean | Indicates whether to suppress warnings when opening the document. |
| <code>use 3d object number</code> | boolean | If true, the 3d property refers to using 3d object; if false, then <code>use page number</code> is used. |
| <code>use antialias</code> | boolean | Indicates whether to use antialias. |

| Property | Value Type | What it is (Continued) |
|------------------------|------------|--|
| use page number | boolean | Indicates whether the value specified in the <code>page</code> property refers to a page number or an image number. If <code>usePageNumber = false</code> , the <code>page</code> property refers to an image number. See page . |
| width | real | Deprecated for Adobe Photoshop CC 2015. |

The following code opens a PDF document.

```
tell application "Adobe Photoshop CC 2015"
  set display dialogs to never
  set myFilePath to alias "Data:docsamples:testfiles:PdfTest.pdf"
  open myFilePath as PDF with options ~
    {class:PDF open options, height:pixels 100, width:pixels 200, mode:RGB, ~
      resolution:72, use antialias:true, page:1, constrain proportions:false}
end tell
```

PDF save options

Options that can be specified when saving a document in PDF format. See the [save](#) command for additional details. The `PDF save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a PDF file. `PDF save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `PDF save options` object.

Properties

| Property | Value Type | What it is |
|--------------------------------------|--|--|
| <code>color conversion</code> | boolean | Indicates whether to convert the color profile to a destination profile. |
| <code>descripton</code> | Unicode text | Description of the save options to use. |
| <code>destination profile</code> | Unicode text | Description of the final RGB or CMYK output device, such as a monitor or a press standard. |
| <code>downgrade color profile</code> | boolean | Deprecated for Adobe Photoshop CC 2015. |
| <code>down sample</code> | Valid values: none PDF average PDF bicubic PDF subsample | The down sample method to use. |
| <code>down sample limit</code> | real | Limits downsampling or subsampling to images that exceed this value in pixels per inch. |
| <code>down sample size</code> | real | The size to downsample images if they exceed the limit in pixels per inch. |
| <code>eight convert</code> | boolean | Indicates whether to convert a 16-bit image to 8-bit for better compatibility with other applications. |
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>embed fonts</code> | boolean | Deprecated for Adobe Photoshop CC 2015. |
| <code>embed thumbnail</code> | boolean | Indicates whether to include a small preview image in Adobe PDF files. |

| Property | Value Type | What it is (Continued) |
|---------------------------------|--|--|
| encoding | Valid values: JPEG JPEG 2000 high JPEG 2000 lossless JPEG 2000 low JPEG 2000 med JPEG 2000 med high JPEG 2000 med low JPEG high JPEG low JPEG med JPEG med high JPEG med low none ZIP ZIP 4 | The encoding or compression method to use (default: ZIP). |
| image interpolation | boolean | Deprecated for Adobe Photoshop CC 2015. |
| JPEG quality | integer | The quality of the produced image (0 - 12; default: 10). Note: Valid only when <code>encoding</code> : JPEG. See encoding . |
| output condition | Unicode text | An optional comment field for inserting descriptions of the output condition. The text is stored in the PDF/X file. |
| output condition ID | Unicode text | Identifier for the output condition. |
| PDF compatibility | Valid values: PDF 13 PDF 14 PDF 15 PDF 16 | The PDF version to make the document compatible with. |
| PDF standard | Valid values: none PDFX1a2001 standard PDFX1a2003 standard PDFX32002 standard PDFX32003 standard | The PDF standard to make the document compatible with. |
| preserve editing | boolean | Indicates whether to reopen the PDF in Adobe Photoshop CC 2015 with native Photoshop data intact. |
| presetfile | Unicode text | The preset file to use for settings. Note: This option overrides other settings. |
| profile inclusion policy | boolean | Indicates whether to show which profiles to include. |
| registry name | Unicode text | URL where the output condition is registered. |

| Property | Value Type | What it is (Continued) |
|------------------------------|------------|--|
| save alpha channels | boolean | Indicates whether to save the alpha channels. |
| save annotations | boolean | Indicates whether to save the annotations. |
| save layers | boolean | Indicates whether to save the documents layers. |
| save spot colors | boolean | Indicates whether to save the spot colors. |
| transparency | boolean | Indicates whether to use transparency (default: <code>true</code>). |
| tile size | integer | Compression option. Note: Valid only when <code>encoding: JPEG 2000</code> . |
| transparency | boolean | Deprecated for Adobe Photoshop CC 2015. |
| use outlines for text | boolean | Deprecated for Adobe Photoshop CC 2015. |
| vector data | boolean | Deprecated for Adobe Photoshop CC 2015. |
| view | boolean | Indicates whether to open the saved PDF in Adobe Acrobat. |
| web optimize | boolean | Indicates whether to improve performance of PDF files on Web servers. |

The following code creates the `myOptions` variable to hold the PDF save options, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    set theDocRef to make new document
    set myFile to "Data:docsamples:testfiles:PDFSave.pdf"

    --create a variable that contains a color object of the RGB color class
    --whose color is red
    set theTextColor to {class:RGB color, red:255, green:0, blue:0}

    -- create a text layer
    set theTextLayer to make new art layer in theDocRef with properties ~
        {kind:text layer}

    --Set the contents, size, position and color of the text layer
    set contents of text object of theTextLayer to "Hello, World!"
    set size of text object of theTextLayer to 36
    set position of text object of theTextLayer to {0.75 as inches, 1 as inches}
    set stroke color of text object of theTextLayer to theTextColor
    set myOptions to ~
        {class:PDF save options, embed color profile:true, ~
        save alpha channels:true, vector data:true, use outlines for text:true}
    save current document in file myFile as Photoshop PDF with options ~
        myOptions appending no extension without copying
end tell
```

Photo CD open options

DEPRECATED. Options that can be specified when opening a Kodak Photo CD (PCD) files, including high-resolution files from Pro Photo CD discs. The `Photo CD open options` class inherits properties from the [open options](#) class.

This class is used to define a record containing properties that specify options when opening a Photo CD document. `Photo CD open options` can be supplied only in conjunction with the `open` command. It is not possible to get or create a `Photo CD open options` object.

Properties

| Property | Value Type | What it is |
|---------------------------------|--|--|
| <code>color profile name</code> | Unicode text | The profile to use when reading the image. |
| <code>color space</code> | Valid Values: Lab 16 Lab 8 RGB 16 RGB 8 | The colorspace for the image. |
| <code>orientation</code> | Valid Values: landscape portrait | The image orientation. |
| <code>pixel size</code> | Valid Values: extra large large maximum medium minimum small | The image dimensions. extra large = 1024x1536 large = 512x768 maximum = 2048x3072 medium = 256x384 minimum = 64x96 small = 128x192 |
| <code>resolution</code> | real | The image resolution (in pixels per inch). |

The following code opens a Photo CD document.

```
tell application "Adobe Photoshop CC 2015"
    set myFilePath to alias "Data:docsamples:testfiles:IMG0001.PCD"
    open myFilePath as Photo CD with options ¬
        {class:Photo CD open options, color profile name:"Adobe RGB (1998)", ¬
        color space:RGB 8, resolution:72, orientation:landscape, pixel size:medium}
end tell
```

photo filter

The `photo filter` class supplies options for the [adjustment options](#) class to adjust the layer's color balance and temperature.

The `photo filter` class, which is analogous to the Photo Filter command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply a Photo Filter adjustment to an image. The `photo filter` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `photo filter` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|----------------------------------|-----------------------------|---|
| <code>with contents</code> | color value | The color hue adjustment to use for the image. |
| <code>density</code> | integer | The density of the filter effect as a percent. (default:25) |
| <code>preserve luminosity</code> | boolean | Indicates whether to preserve luminosity (i.e. the image is not darkened by adding the color filter.) |

Photoshop DCS 1.0 save options

Options that can be specified when saving a document in Photoshop DCS 1.0 format. See the [save](#) command for additional details. The `Photoshop DCS 1.0 save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a Photoshop DCS 1.0 file. `Photoshop DCS 1.0 save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `Photoshop DCS 1.0 save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|--|---|
| <code>DCS</code> | Valid Values: color composite grayscale composite no composite PostScript | The DCS color to use (default: color composite). |
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>encoding</code> | Valid Values: ASCII binary high quality JPEG low quality JPEG maximum quality JPEG medium quality JPEG | The type of encoding to use (default: binary). |
| <code>halftone screen</code> | boolean | Indicates whether to include the halftone screen (default: false). |
| <code>image interpolation</code> | boolean | Indicates whether to use image interpolation (default: false). |
| <code>preview type</code> | Valid Values: eight bit Mac OS eight bit TIFF JPEG Mac OS monochrome Mac OS monochrome TIFF none | The type of preview (default: eight bit Mac OS). |
| <code>transfer function</code> | boolean | Indicates whether to include the Transfer functions to compensate for dot gain between the image and film (default: false). |
| <code>vector data</code> | boolean | Indicates whether to include vector data (un-rasterized text) (default: false). |

The following code creates the `myOptions` variable to hold the `Photoshop DCS 1.0 save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    activate
```



```
set theDocRef to make new document
set myFile to "Data:docsamples:testfiles:DCS1.eps"

-- create a text layer
set theTextLayer to make new art layer in theDocRef with properties -
    {kind:text layer}

--Set the contents, size, position and color of the text layer
set contents of text object of theTextLayer to "Hello, World!"
set size of text object of theTextLayer to 36
set position of text object of theTextLayer to {0.75 as inches, 1 as inches}
set theTextColor to {class:RGB color, red:255, green:0, blue:0}
set stroke color of text object of theTextLayer to theTextColor
set myOptions to -
    {class:Photoshop DCS 1.0 save options, embed color profile:true,-
    vector data:true}
save current document in file myFile as Photoshop DCS 1.0 with options -
    myOptions appending no extension without copying
end tell
```

Photoshop DCS 2.0 save options

Options that can be specified when saving a document in Photoshop DCS 2.0 format. See the [save](#) command for additional details. The `Photoshop DCS 2.0 save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a Photoshop DCS 2.0 file. `Photoshop DCS 2.0 save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `Photoshop DCS 2.0 save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|--|---|
| <code>DCS</code> | Valid Values: color composite grayscale composite no composite PostScript | The DCS color to use (default: no composite PostScript). |
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>encoding</code> | Valid Values: ASCII binary high quality JPEG low quality JPEG maximum quality JPEG medium quality JPEG | The type of encoding to use (default: binary) |
| <code>halftone screen</code> | boolean | Indicates whether to include the halftone screen (default: false). |
| <code>image interpolation</code> | boolean | Indicates whether to use image interpolation (default: false). |
| <code>multifile DCS</code> | boolean | Indicates whether to save color channels as multiple files or a single file (default: false). |
| <code>preview type</code> | Valid Values: eight bit Mac OS eight bit TIFF JPEG Mac OS monochrome Mac OS monochrome TIFF none | The type of preview (default: eight bit Mac OS). |
| <code>save spot colors</code> | boolean | Indicates whether to save the spot colors. |
| <code>transfer function</code> | boolean | Indicates whether to include the Transfer functions to compensate for dot gain between the image and film (default: false). |
| <code>vector data</code> | boolean | Indicates whether to include vector data (un-rasterized text) (default: false). |

The following code creates the `myOptions` variable to hold the `Photoshop DCS 2.0 save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    set display dialogs to never
    set theDocRef to make new document
    set myFile to "Data:docsamples:testfiles:DCS2.eps"

    -- create a text layer
    set theTextLayer to make new art layer in theDocRef with properties ~
        {kind:text layer}

    --Set the contents, size, position and color of the text layer
    set contents of text object of theTextLayer to "Hello, World!"
    set size of text object of theTextLayer to 36
    set theTextColor to {class:RGB color, red:255, green:0, blue:0}
    set position of text object of theTextLayer to {0.75 as inches, 1 as inches}
    set stroke color of text object of theTextLayer to theTextColor
    set myOptions to ~
        {class:Photoshop DCS 2.0 save options, embed color profile:true, ~
            save spot colors:true, vector data:true}
    save current document in file myFile as Photoshop DCS 2.0 with options ~
        myOptions appending no extension without copying
end tell
```

Photoshop save options

Options that can be specified when saving a document in PSD format. See the [save](#) command for additional details. The `PSD save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a Photoshop file. `PSD save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `PSD save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|------------|---|
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>save alpha channels</code> | boolean | Indicates whether to save the alpha channels. |
| <code>save annotations</code> | boolean | Indicates whether to save the annotations. |
| <code>save layers</code> | boolean | Indicates whether to save the layers. |
| <code>save spot colors</code> | boolean | Indicates whether to save the spot colors. |

The following code creates the `myOptions` variable to hold the `Photoshop save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  set theDocRef to make new document
  set myFile to "Data:docsamples:testfiles:PSDSave.psd"

  -- create a text layer
  set theTextLayer to make new art layer in theDocRef with properties ~
    {kind:text layer}

  --Set the contents, size, position and color of the text layer
  set contents of text object of theTextLayer to "Hello, World!"
  set size of text object of theTextLayer to 36
  set position of text object of theTextLayer to {0.75 as inches, 1 as inches}
  set theTextColor to {class:RGB color, red:0, green:64, blue:255}
  set stroke color of text object of theTextLayer to theTextColor
  set myOptions to ~
    {class:Photoshop save options, embed color profile:true, ~
      save spot colors:true, save alpha channels:true, save annotations:true, ~
      save layers:true}
  save current document in file myFile as Photoshop format with options ~
    myOptions appending no extension without copying
end tell
```

PICT file save options

Options that can be specified when saving a document in PICT format. See the [save](#) command for additional details. The `PICT file save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a PICT file. `PICT file save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `PICT file save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------|---|---|
| compression | Valid Values: high quality JPEG low quality JPEG maximum quality JPEG medium quality JPEG none | (default: none). |
| embed color profile | boolean | Indicates whether to embed the color profile in the document. |
| resolution | Valid Values: eight four sixteen thirty two two | The number of bits per pixel. |
| save alpha channels | boolean | Indicates whether to save the alpha channels. |

The following code creates the `myOptions` variable to hold the `PICT file save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  activate
  close documents saving no
  make new document
  set myFile to "Data:docsamples:testfiles:PICTSave.pct"

  set myOptions to -
    {class:PICT file save options, compression:maximum quality JPEG, -
      embed color profile:true, save alpha channels:false, resolution:thirty two}
  save current document in file myFile as PICT file with options -
    myOptions appending no extension without copying
end tell
```

PICT resource save options

Options that can be specified when saving a document as a PICT resource. See the [save](#) command for additional details. The `PICT resource save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a PICT resource file. `PICT resource save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `PICT resource save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|---|---|
| <code>compression</code> | Valid Values: high quality JPEG low quality JPEG maximum quality JPEG medium quality JPEG none | (default: none). |
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>name</code> | Unicode text | The name of the PICT resource. |
| <code>resolution</code> | Valid Values: eight four sixteen thirty two two | The number of bits per pixel. |
| <code>resource id</code> | integer | The ID of the PICT resource (default: 128). |
| <code>save alpha channels</code> | boolean | Indicates whether to save the alpha channels. |

The following code creates the `myOptions` variable to hold the `PICT resource save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  make new document
  set myFile to "Data:docsamples:testfiles:PicResorce.pic"
  set myOptions to ¬
    {class:PICT resource save options, embed color profile:true, ¬
      save alpha channels:true, name:"My PICT resource", resolution:sixteen}
  save current document in file myFile as PICT resource with options ¬
    myOptions appending no extension without copying
end tell
```

picture package options

Options that can be specified for a picture package. See [create photo gallery](#).

| Property | Value type | What it is |
|----------------------|--|---|
| content | Valid values: caption text copyright text credit text filename text no text origin text user text | The content information (default: <code>user</code>). |
| content text | string | The picture package custom text. Note: Valid only when <code>content</code> : <code>user</code> text. See content . |
| flatten final | boolean | Indicates whether all layers in the final document are flattened (default: <code>true</code>). |
| font | Valid values: Arial Courier New Helvetica Times New Roman | The font used for security text (default: <code>arial</code>). |
| size | real | The font size used for security text (default: <code>12</code>). |
| layout | Unicode text | The layout to use to generate the picture package (default: <code>"(2) 5x7"</code>). |
| mode | Valid values: bitmap CMYK grayscale lab RGB | The color profile to use as the document mode (default: <code>RGB</code>). |
| opacity | integer | The web page security opacity as a percent (default: <code>100</code>). |
| resolution | real | The resolution of the document in pixels per inch (default: <code>72.0</code>). |
| text color | RGB color | The color to use for text. |

| Property | Value type | What it is (Continued) |
|----------------------------|---|--|
| <code>text position</code> | Valid values: gallery centered gallery lower left gallery lower right gallery upper left gallery upper right | The text position (default: gallery centered). |
| <code>text rotate</code> | Valid values: clock wise 45 clock wise 90 counter clock wise 45 counter clock wise 90 zero | The orientation to use for text (default: zero). |

pinch

Options that may be supplied when applying a Pinch filter.

The `pinch` class supplies properties for the [filter options](#) class. The `pinch` class is used only to define a record whose properties specify options when applying a Pinch filter. `pinch` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `pinch` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|------------|--------------|
| <code>amount</code> | integer | (-100 - 100) |

The following code sample demonstrates how to apply the Pinch filter using the `filter` command of the `pinch` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using pinch ~
        with options {class:pinch, amount:40}
    end tell
```

Pixar save options

Options that can be specified when saving a document in Pixar format. See the [save](#) command for additional details. The `Pixar save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a Pixar file. `Pixar save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `Pixar save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|------------|---|
| <code>save alpha channels</code> | boolean | Indicates whether to save the alpha channels. |

The following code creates the `myOptions` variable to hold the Pixar file save options, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    make new document
    set myFile to "Data:docsamples:testfiles:PixarSave.pxr"

    set myOptions to {class:Pixar save options, save alpha channels:true} -

    save current document in file myFile as Pixar with options -
        myOptions appending no extension without copying
end tell
```

PNG save options

Options that can be specified when saving a document in PNG format. See the [save](#) command for additional details. The `PNG save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a PNG file. `PNG save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `PNG save options` object.

Properties

| Property | Value Type | What it is |
|--------------------|------------|---|
| compression | integer | (0 - 9) (default: 0). |
| interlaced | boolean | Indicates whether rows should be interlaced (default: <code>false</code>). |

The following code creates the `myOptions` variable to hold the `PNG save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
    make new document
    set myFile to "Data:docsamples:testfiles:PngTest.png"
    set myOptions to {class:PNG save options}
    save current document in file myFile as PNG with options myOptions appending no extension without copying
end tell
```

polar coordinates

Options that may be supplied when applying a Polar Coordinates filter.

The `polar coordinates` class supplies properties for the [filter options](#) class. The `polar coordinates` class is used only to define a record whose properties specify options when applying a Polar Coordinates filter. `polar coordinates` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `polar coordinates` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|-------------|---|--------------------------------------|
| kind | Valid Values: polar to rectangular rectangular to polar | The type of polar conversion to use. |

The following code sample demonstrates how to apply the Polar Coordinates filter using the `filter` command of the `polar coordinates` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using polar coordinates ~
        with options {class:polar coordinates, kind:rectangular to polar}
end tell
```

posterize

The `posterize` class supplies options for the [adjustment options](#) class to specify the number of tonal levels for each channel and then map pixels to the closest matching level.

The `posterize` class, which is analogous to the Posterize command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply a Posterize adjustment to an image. The `posterize` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `posterize` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------|------------|------------|
| levels | integer | (2 - 255) |

The following code sample demonstrates how to apply a Posterize adjustment using the `adjust` command of the `posterize` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using posterize -
        with options {class:posterize, level:15}
end tell
```

presentation options

Options for the `create PDF presentation` command. See [create PDF presentation](#).

Properties

| Property | Value Type | What it is |
|--------------------------------|--|---|
| <code>auto advance</code> | boolean | Indicates whether to auto advance images when viewing the presentation (default: <code>true</code>). Note: Valid only when <code>presentation:</code> <code>true</code> . See presentation . |
| <code>include file name</code> | boolean | Indicates whether to include the file name for the image (default: <code>false</code>). |
| <code>interval</code> | integer | The number of seconds before the view is auto advanced (default: 5). Note: Valid only when <code>auto advance:</code> <code>true</code> . See auto advance . |
| <code>loop</code> | boolean | Indicates whether to loop after the last page of the presentation. Note: Valid only when <code>auto advance:</code> <code>true</code> . See auto advance . |
| <code>magnification</code> | Valid Values: actual size fit page | The magnification type to use when viewing the image. |
| <code>PDF options</code> | PDF save options | Options to use when creating the PDF file. |

| Property | Value Type | What it is (Continued) |
|---------------------|--|--|
| presentation | boolean | Indicates whether the file type is presentation (default: <code>false</code>). Note: <code>false</code> indicates a Multi-Page document. |
| transition | Valid Values: blinds horizontal blinds vertical box in box out dissolve glitter down glitter right glitter right down none random split horizontal in split horizontal out split vertical in split vertical out wipe down wipe left wipe right wipe up | The transition from one image to the next (default: <code>none</code>). Note: Valid only when <code>auto advance:</code> <code>true</code> . See auto advance . |

Valid Commands

[create PDF presentation](#)

radial blur

Options that may be supplied when applying a Radial Blur filter.

The `radial blur` class supplies properties for the [filter options](#) class. The `radial blur` class is used only to define a record whose properties specify options when applying a Radial Blur filter. `radial blur` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `radial blur` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|--------------------|--|------------------------------------|
| amount | integer | (0 - 100) |
| blur center | real | This is the position (unit value). |
| blur method | Valid Values: spin zoom | The type of blur effect to use. |
| quality | Valid Values: best draft good | |

The following code sample demonstrates how to apply the Radial Blur filter using the `filter` command of the `radial blur` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using radial blur with options -
        {class:radial blur, amount:35, blur center:12, blur method:spin,
        quality:draft}
end tell
```


raw format open options

Settings related to opening a raw format document. The `raw format open options` class inherits properties from the [open options](#) class.

This class is used to define a record containing properties that specify options when opening a document in raw format. `raw format open options` can be supplied only in conjunction with the `open` command. It is not possible to get or create a `raw format open options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|-----------------------------------|--|
| <code>bits per channel</code> | integer | The number of bits for each channel (8 or 16). |
| <code>byte order</code> | Valid Values: IBM PC Mac OS | The order in which bytes will be read. Note: Valid only when <code>bits per channel</code> : 16. |
| <code>header size</code> | integer | The number of bytes of information that appears in the file before actual image information begins; that is, the number of zeroes inserted at the beginning of the file as placeholders (0 - 1919999). |
| <code>height</code> | integer | The image height (in pixels). |
| <code>interleave channels</code> | boolean | Indicates whether to store color values sequentially. |
| <code>number of channels</code> | integer | The number of channels in the image (1 - 56). Note: The value of <code>number of channels</code> cannot exceed the number of channels in the image. When <code>bitsPerChannel</code> : 16, only the following values are valid: 1, 3, or 4. See bits per channel . |
| <code>retain header</code> | boolean | Indicates whether to retain the header when saving the document. Note: Valid only when header size is 1 or greater. |
| <code>width</code> | integer | The image width (in pixels). |

The following code opens a raw format document.

```
tell application "Adobe Photoshop CC 2015"
    set myFilePath to alias "Data:docsamples:testfiles:Fern.raw"
    open myFilePath as raw with options ~
        {class:raw format open options, bits per channel:8, ~
        header size:0, height:480, width:400, number of channels:3, ~
        retain header:true, interleave channels:true}
    end tell
```

raw save options

Options that can be specified when saving a document in raw format. See the [save](#) command for additional details. The `raw save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a raw file. `raw save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `raw save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|------------|--|
| <code>save alpha channels</code> | boolean | Indicates whether alpha channels should be saved. |
| <code>save spot colors</code> | boolean | Indicates whether the spot colors should be saved. |

The following code creates the `myOptions` variable to hold the `raw save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  make new document
  set myFile to "Data:docsamples:testfiles:RawSave.raw"

  set myOptions to -
    {class:raw save options, save alpha channels:true, save spot colors:false}
  save current document in file myFile as raw with options -
    myOptions appending no extension without copying
end tell
```

RGB color

An RGB color specification: numeric values for the component colors (red, green, and blue). The `RGB color` class inherits properties from the [color value](#) class.

This class a property of the [color value](#) object and is used to define a record that specifies options when creating a color value.

If the `mode` of a document is RGB and you specify the color value for a stroke, foreground, or background color property using a `CMYK color` object, Adobe Photoshop CC 2015 translates the CMYK color specification into an RGB color specification. The same thing happens if the document's color mode is CMYK and you specify colors using a `RGB color` object. Since this translation can cause information loss you should specify colors using the color class that matches the document's color mode.

Properties

| Property | Value Type | What it is |
|--------------|------------|--|
| red | real | The red color value (0.0 - 255.0; default: 255 . 0). |
| green | real | The green color value (0.0 - 255.0; default: 255 . 0). |
| blue | real | The blue color value (0.0 - 255.0; default: 255 . 0). |

The following code creates a color value using the `RGB color` class, assigns the color to the variable `theTextColor`, and then uses the variable to set the text color to the `RGB color`.

```
tell application "Adobe Photoshop CC 2015"
    activate

    --create a variable named theDocRef
    --assign the current (active) document to it
    set theDocRef to the current document

    --create a variable that contains a color object of the RGB color class
    --whose color is red
    set theTextColor to {class:RGB color, red:255, green:0, blue:0}

    --create a variable for the text layer, create the layer as an art layer object
    --and use the kind property of the art layer object to make it a text layer
    set theTextLayer to make new art layer in theDocRef with properties ~
        {kind:text layer}

    --Set the contents, size, position and color of the text layer
    set contents of text object of theTextLayer to "Hello, World!"
    set size of text object of theTextLayer to 36
    set position of text object of theTextLayer to {0.75 as inches, 1 as inches}
    set stroke color of text object of theTextLayer to theTextColor
end tell
```

RGB hex color

A hexadecimal specification of an RGB color. The `RGB hex color` class inherits properties from the [color value](#) class.

Properties

| Property | Value Type | What it is |
|------------------------|--------------|---|
| <code>hex value</code> | Unicode text | The hex representation of an RGB color. |

ripple

Used to apply the Ripple filter. The `ripple` class inherits properties from the [filter options](#) class.

Options that may be supplied when applying a filter to a layer or selection. See the [filter](#) command for additional details.

This class is used to define a record containing properties used to specify options when applying a filter. `ripple` options can only be supplied in conjunction with the `filter` command. It is not possible to get or create a `ripple` object.

Properties

| Property | Value Type | What it is |
|--------------------------|---|--------------|
| <code>amount</code> | integer | (-999 - 999) |
| <code>ripple size</code> | Valid Values: large medium small | |

The following code sample demonstrates how to apply the Ripple filter using the `filter` command of the `ripple` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using ripple with options ~
        {class:ripple, amount:345, ripple size:small}
end tell
```

save for web export options

Options that can be specified when optimizing a document for the web or devices.

The `save for web export options` class supplies properties for the `export options` class. `save for web export options` options can be supplied only in conjunction with the `export` command. It is not possible to get or create a `save for web export options` object.

See the [export](#) command for further details.

Properties

| Property | Value type | What it is |
|--------------------------------|---|--|
| <code>blur</code> | real | Applies blur to the image to reduce artifacts (default: 0.0). |
| <code>color reduction</code> | Valid values: adaptive black white custom reduction grayscale macintosh colors perceptual reduction restrictive selective windows colors | The color reduction algorithm (default: selective). |
| <code>colors in palette</code> | integer | The number of colors in the palette (default: 256). |
| <code>dither</code> | Valid values: diffusion noise none pattern | The type of dither (default: diffusion). |
| <code>dither amount</code> | integer | The amount of dither (default: 100). Note: Valid only when <code>dither:diffusion</code> . See dither . |
| <code>interlaced</code> | boolean | Indicates whether to download in multiple passes; progressive (default: false). |
| <code>lossy</code> | integer | The amount of lossiness allowed (default: 0). |
| <code>matte</code> | RGB color | The colors to blend transparent pixels against. |
| <code>optimized size</code> | boolean | Indicates whether to create smaller but less compatible files (default: true). Note: Valid only when <code>format:JPEG</code> . See web format . |

| Property | Value type | What it is (Continued) |
|----------------------------------|--|---|
| <code>png eight</code> | boolean | Indicates the number of bits; <code>true = 8</code> , <code>false = 24</code> (default: <code>true</code>). Note: Valid only when <code>format : PNG</code> . See web format . |
| <code>quality</code> | integer | The quality of the produced image (0 - 100 as percentage; default: 60). |
| <code>transparency</code> | boolean | Indication of transparent areas of the image should be included in the saved image (default: <code>true</code>). |
| <code>transparency amount</code> | integer | The amount of transparency dither (default: 100). Note: Valid only if <code>transparency : true</code> . See transparency . |
| <code>transparency dither</code> | Valid values: diffusion noise none pattern | The transparency dither algorithm (default: none). |
| <code>web format</code> | Valid values: CompuServe GIF/ JPEG/ PNG/ Wireless Bitmap | The file format to use (default: CompuServe GIF). |
| <code>web snap</code> | integer | The tolerance amount within which to snap close colors to web palette colors (default: 0). |
| <code>with profile</code> | boolean | Indicates whether to include the document's embedded color profile (default: <code>false</code>). |

save options

Options used with the save command. The following classes inherit properties from the `save options` class: [BMP save options](#), [EPS save options](#), [GIF save options](#), [JPEG save options](#), [PDF save options](#), [Photoshop DCS 1.0 save options](#), [Photoshop DCS 2.0 save options](#), [Photoshop save options](#), [PICT file save options](#), [PICT resource save options](#), [Pixar save options](#), [PNG save options](#), [raw save options](#), [SGI RGB save options](#), [Targa save options](#), [TIFF save options](#).

Valid Commands

[save](#)

selection-object

The selection of the document.

Properties

| Property | Value Type | What it is |
|---------------------|--------------|---|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| properties | record | All of this object's properties returned in a single record. |
| container | reference | Read-only. The object's container. |
| bounds | list of real | Read-only. The bounding rectangle of the entire selection |
| solid | boolean | Read-only. Indicates whether the bounding rectangle is solid. |

Valid Commands

[clear](#)
[contract](#)
[copy](#)
[copy merged](#)
[cut](#)
[deselect](#)
[expand](#)
[feather](#)
[fill](#)
[grow](#)
[invert](#)
[load](#)
[make work path](#)
[rotate](#)
[rotate boundary](#)
[scale](#)
[scale boundary](#)
[select](#)
[select all](#)
[select border](#)
[similar](#)
[smooth](#)
[store](#)
[stroke](#)
[translate](#)
[translate boundary](#)

selective color

The `selective color` class supplies options for the [adjustment options](#) class to modify the amount of a process color in a specified primary color without affecting the other primary colors.

The `selective color` class, which is analogous to the Selective Color command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply a Selective Color adjustment to an image. The `selective color` class can be used only in conjunction with the `adjust` command. It is not possible to get or create a `selective color` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|-------------------------------|---------------------------------------|---|
| <code>selection method</code> | Valid Values: absolute relative | The method to use for interpreting selective color adjustment specifications: <code>absolute</code> = % of the whole; <code>relative</code> = % of the existing color amount. |
| <code>reds</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>yellows</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>greens</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>cyans</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>blues</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>magentas</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>whites</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>neutrals</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |
| <code>blacks</code> | list of reals | Array of 4 values: cyan, magenta, yellow, black. |

settings-object

Preferences for the Adobe Photoshop CC 2015 application.

Properties

| Property | Value Type | What it is |
|--|---|---|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| properties | record | All of this object's properties returned in a single record. |
| additional plugin folder | alias | The path to an additional plug-in folder. Valid only when use additional plugin folder: true. See use additional plugin folder . |
| append extension | Valid Values: ask no yes | Save files with extensions on Windows. |
| ask before saving layered TIFF | boolean | Indicates whether to ask the user to verify layer preservation options when saving a file in TIFF format. |
| auto update open documents | boolean | Indicates whether to automatically update open documents. |
| beep when done | boolean | Indicates whether to beep when a process finishes. |
| cache levels | integer | The number of images to hold in the cache (1 - 8). |
| color picker | Valid Values: Adobe color picker Apple color picker plug in color picker Windows color picker | |
| column gutter | real | The width of the column gutters (in points). |
| column width | real | The width of the columns (in points). |
| create first snapshot | boolean | Indicates whether to automatically make first snapshot when a new document is created. |
| display color channels in color | boolean | Indicates whether to display component channels in the Channels palette in color. |

| Property | Value Type | What it is (Continued) |
|------------------------------|--|---|
| dynamic color sliders | boolean | Indicates whether to display dynamic sliders in the Channels palette. |
| edit log items | Valid Values: concise detailed sessiononly | The options for editing history log items. Valid only when <code>use history log: true</code> . See use history log . |
| export clipboard | boolean | Indicates whether to retain Adobe Photoshop CC 2015 contents on the clipboard after you exit the application. |
| font preview size | Valid Values: none preview huge extra large preview large preview medium preview small | Indicates whether to show font previews in the type tool font menus. |
| full size preview | boolean | (Mac only.) Indicates whether to display image previews as full size images or thumbnails. |
| gamut warning opacity | real | (0 - 100 as percent). |
| grid size | Valid Values: large medium none small | The size to use for squares in the grid. |
| grid style | Valid Values: dashed line dotted line solid line | The formatting style for non-printing grid lines. |
| grid subdivisions | integer | (1 - 100) |
| guide style | Valid Values: dashed line solid line | The formatting style for non-printing guide lines. |
| icon preview | boolean | (Mac only.) |
| image previews | Valid Values: ask no yes | The behavior mode to use when saving files. |
| interpolation method | Valid Values: bicubic bicubic sharper bicubic smoother bilinear closest neighbor none | The method to use to assign color values to any new pixels created when an image is resampled or resized. |

| Property | Value Type | What it is (Continued) |
|--|--|--|
| <code>keyboard zoom resizes windows</code> | boolean | Indicates whether to automatically resize the window when zooming in or out using keyboard shortcuts. |
| <code>Mac OS thumbnail</code> | boolean | (Mac only.) Indicates whether to create a thumbnail when saving the image. |
| <code>maximize compatibility</code> | Valid Values: always ask never | Indicates whether and when to maximize compatibility when opening Adobe Photoshop CC 2015 (PSD) files. |
| <code>maximum RAM use</code> | integer | Maximum percentage of available RAM used by Adobe Photoshop CC 2015 (5 - 100). |
| <code>nonlinear history</code> | boolean | Indicates whether to allow non-linear history. |
| <code>number of history states</code> | integer | The number of history states to remember (1 - 100). |
| <code>other cursors</code> | Valid Values: precise standard | The type of pointer to use. |
| <code>painting cursors</code> | Valid Values: brush size precise standard | The type of pointer to use. |
| <code>pixel doubling</code> | boolean | Indicates whether to halve the resolution or (double the size of pixels) to make previews display more quickly. |
| <code>point size</code> | Valid Values: postscript size traditional size | The point/pica size. |
| <code>recent file list length</code> | integer | The number of items in the recent file list (0 - 30) |
| <code>ruler units</code> | Valid Values: cm units inch units mm units percent units pica units pixel units point units | The unit that the scripting system will use when receiving and returning values. Note: For properties that accept ruler unit values (such as <code>height of document</code>); the values cannot be provided as <code>mm</code> or as <code>cm</code> . These unit types are not recognized by the AppleScript terminology. |
| <code>save log items</code> | Valid Values: both log file metadata | Options for saving the history items. |
| <code>save log items file</code> | alias | The file in which to save the history log. |

| Property | Value Type | What it is (Continued) |
|--|---|---|
| <code>save palette locations</code> | boolean | Indicates whether to make new palette locations the default location. |
| <code>show Asian text options</code> | boolean | Indicates whether to display Asian text options in the Paragraph palette. |
| <code>show English font names</code> | boolean | Indicates whether to list Asian font names in English. |
| <code>show slice numbers</code> | boolean | Indicates whether to display slice numbers in the document window when using the Slice tool. |
| <code>show tool tips</code> | boolean | Indicates whether to show pop up definitions on mouse over. |
| <code>smart quotes</code> | boolean | Indicates whether to use curly or straight quote marks. |
| <code>type units</code> | Valid Values: mm units pixel units point units | The unit type-size that the numeric inputs are assumed to represent. |
| <code>use additional plugin folder</code> | boolean | Indicates whether to use an additional folder for compatible plug-ins stored with a different application. |
| <code>use history log</code> | boolean | Turn on and off the history logging |
| <code>use lowercase extension</code> | boolean | Indicates whether to use lowercase for file extensions. |
| <code>use Shift key for tool switch</code> | boolean | Indicates whether to enable cycling through a set of hidden tools. |
| <code>use video alpha</code> | boolean | Indicates whether to enable Adobe Photoshop CC 2015 to send transparency information to your computer's video board. (Requires hardware support.) |
| <code>Windows thumbnail</code> | boolean | (Requires hardware support.) Indicates whether to create a thumbnail when saving the image. |

SGI RGB save options

Options that can be specified when saving a document in SGI RGB format. See the [save](#) command for additional details. The `SGI RGB save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a SGI RGB file. `SGI RGB save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `SGI RGB save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|------------|---|
| <code>save alpha channels</code> | boolean | Indicates whether to save the alpha channels. |
| <code>save spot colors</code> | boolean | Indicates whether to save the spot colors. |

The following code creates the `myOptions` variable to hold the `SGI RGB save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  make new document
  set myFile to "Data:docsamples:testfiles:MySGIRGB.rgb"
  set myOptions to {class:SGI RGB save options, save alpha channels:true, ↵
    save spot colors:true}
  save current document in file myFile as SGI RGB with options ↵
    myOptions appending no extension without copying
end tell
```

sharpen

Options that may be supplied when applying a Sharpen filter.

The `sharpen` class supplies properties for the [filter options](#) class. The `sharpen` class is used only to define a record whose properties specify options when using the `filter` command to apply a Sharpen filter. `sharpen` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `sharpen` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the Sharpen filter using the `filter` command of the `sharpen` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using sharpen with options end tell
```


sharpen edges

Options that may be supplied when applying a Sharpen Edges filter.

The `sharpen edges` class supplies properties for the [filter options](#) class. The `sharpen edges` class is used only to define a record when using the `filter` command to apply a Sharpen Edges filter. `sharpen edges options` can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `sharpen edges` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the Sharpen Edges filter using the `filter` command of the `sharpen edges` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using sharpen edges
end tell
```

sharpen more

Options that may be supplied when applying a Sharpen More filter.

The `sharpen more` class supplies properties for the [filter options](#) class. The `sharpen more` class is used only to define a record when using the `filter` command to apply a Sharpen More filter. `sharpen more` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `sharpen more` object.

See the [filter](#) command for additional details.

The following code sample demonstrates how to apply the Sharpen More filter using the `filter` command of the `sharpen more` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using sharpen more
end tell
```

shear

Options that may be supplied when applying a Shear filter.

The `shear` class supplies properties for the [filter options](#) class. The `shear` class is used only to define a record whose properties specify options when applying a Shear filter. `shear` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `shear` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|------------------------|--|--|
| curve | list of points | A list of curve coordinates (x, y) that define the points that describe the shear curve. You must provide x and y coordinates for a minimum of 2 points. |
| undefined areas | Valid Values: repeat edge pixels wrap around | The method to use to treat undistorted areas or areas left blank in an image to which the a filter in the Distort category has been applied. |

The following code sample demonstrates how to apply the Shear filter using the `filter` command of the `shear` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using shear with options ~
        {class:shear, curve:{{12, 4}, {12, 8}, {8, 13}}, undefined areas:wrap around}
    end tell
```

smart blur

Options that may be supplied when applying a Smart Blur filter.

The `smart blur` class supplies properties for the [filter options](#) class. The `smart blur` class is used only to define a record whose properties specify options when applying a Smart Blur filter. `smart blur` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `smart blur` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|------------------|--|--|
| radius | real | (0 - 1000) |
| threshold | real | (0 - 1000) |
| quality | Valid Values: high low medium | |
| mode | Valid Values: edge only normal overlay edge | The method to use for smart blurring: edge only, overlay edges: Apply blur only to edges of color transitions; normal: Apply blur to entire image. |

The following code sample demonstrates how to apply the Smart Blur filter using the `filter` command of the `smart blur` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using smart blur with options ~
        {class:smart blur, radius:765, threshold:88, quality:high, mode:normal}
    end tell
```

spherize

Options that may be supplied when applying a Spherize filter.

The `spherize` class supplies properties for the `filter options` class. The `spherize` class is used only to define a record whose properties specify options when applying a Spherize filter. `spherize` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `spherize` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------------|---|---|
| <code>amount</code> | integer | (-100 - 100) |
| <code>mode</code> | Valid Values: horizontal normal vertical | The curve (or stretch shape) to use for the distortion. |

The following code sample demonstrates how to apply the Spherize filter using the `filter` command of the `spherize` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using spherize with options ~
        {class:spherize, amount:27, mode:normal}
end tell
```

sub path info

Sub path information (returned by the `entire path` property of the [path item, path items](#) class).

You add sub path information to a path by passing a `sub path info` object to the [make](#) command (through the [entire path](#) property) for a `path item` object. This method creates the `sub path item` objects associated with each `sub path info` object, and returns a `path item` object that is the path represented by all the sub paths.

Note: For an example of creating sub path info object, see [path item, path items](#).

Properties

| Property | Value Type | What it is |
|------------------------------|--|--|
| <code>closed</code> | boolean | Indicates whether the path describes an enclosed area. |
| <code>entire sub path</code> | list of path point info objects | The sub path item's path points. |
| <code>operation</code> | Valid Values: shape add shape intersect shape subtract shape xor | The sub path's operation on other sub paths. |

Valid Commands

[exists](#)

sub path item, sub path items

An array of `path point info` objects that describes a straight or curved segment of a path.

Tip: You do not use the `sub path item` object to create a sub path. Rather, you use the `sub path item` object to retrieve information about a sub path. To create sub paths, see [sub path info](#).

Elements

| Element | Refer to by |
|-------------------------|---|
| <code>path point</code> | numeric index, as a range of elements, before after another element, satisfying a test |

Properties

| Property | Value Type | What it is |
|------------------------------|--|--|
| <code>best type</code> | type class | Read-only. The best type for the object's value. |
| <code>class</code> | type class | Read-only. The object's class. |
| <code>default type</code> | type class | Read-only. The default type for the object's value. |
| <code>index</code> | integer | Read-only. The index of this instance of the object. |
| <code>properties</code> | record | All of this object's properties returned in a single record. |
| <code>closed</code> | boolean | Read-only. Indicates whether the sub path item describes an enclosed area. |
| <code>container</code> | reference | Read-only. The object's container. |
| <code>entire sub path</code> | list of path point info objects | Read-only. The sub path item's path points. |
| <code>operation</code> | Valid Values: shape add shape intersect shape subtract shape xor | Read-only. The sub path's operation on other sub paths. |

Valid Commands

[count](#)
[exists](#)
[index](#)

Targa save options

Options that can be specified when saving a document in Targa format. See the [save](#) command for additional details. The `Targa save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a Targa file. `Targa save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `Targa save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------|---|---|
| resolution | Valid Values: sixteen thirty two twenty four | The number of bits per pixel (default: twenty four). |
| RLE compression | boolean | Indicates whether to use RLE compression (default: true). |
| save alpha channels | boolean | Indicates whether to save the alpha channels. |

The following code creates the `myOptions` variable to hold the `Targa save options`, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  make new document
  set myFile to "Data:docsamples:testfiles:TargaSave.tga"

  set myOptions to {class:Targa save options, resolution:sixteen, -
    RLE compression:true, save alpha channels:true}

  save current document in file myFile as Targa with options -
    myOptions appending no extension without copying
end tell
```


text-object

The text item contained in an art layer. A `text-object` is a property of an art layer class whose `kind` property value is `text layer`. `text-object` is used only to define a record whose properties specify options for a text layer. `text-object` options can be supplied only in conjunction with a text layer; it is not possible to get or create a `text-object` object.

See [art layer](#), [art layers](#) for additional details.

Properties

| Property | Value Type | What it is |
|----------------------------------|--|--|
| <code>best type</code> | type class | Read-only. The best type for the object's value. |
| <code>class</code> | type class | Read-only. The object's class. |
| <code>default type</code> | type class | Read-only. The default type for the object's value. |
| <code>properties</code> | record | All of this object's properties returned in a single record. |
| <code>alternate ligatures</code> | boolean | Indicates whether to use alternate ligatures. |
| <code>antialias method</code> | Valid Values: crisp none sharp smoothing strong | The method of antialiasing to use. |
| <code>auto kerning</code> | Valid Values: manual metrics optical | The auto kerning option to use. |
| <code>auto leading</code> | boolean | Indicates whether to use a font's built-in leading information. |
| <code>auto leading amount</code> | real | The percentage to use for auto (default) leading (0.01 - 5000.00 in points). Valid only when <code>auto leading: true</code> . See auto leading . |
| <code>baseline shift</code> | real | The baseline offset of the text (unit value). |
| <code>capitalization</code> | Valid Values: all caps normal small caps | The text case. |
| <code>container</code> | reference | Read-only. The object's container. |
| <code>contents</code> | Unicode text | The actual text in the layer. |

| Property | Value Type | What it is (Continued) |
|---|--------------|--|
| desired glyph scaling | real | <p>The desired amount (percentage) to scale the horizontal size of the text letters (50 - 200; at 100, the width of characters is not scaled).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: minimum glyph scaling and maximum glyph scaling.</p> |
| desired letter scaling Note: 'letter scaling' is basically equivalent to 'Letter Spacing' in the Adobe Photoshop CC 2015 application Justification dialog (Select Justification on the Paragraphs palette menu). | real | <p>The amount of space between letters (100 - 500; at 0, the width of characters is not scaled).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: minimum letter scaling and maximum letter scaling.</p> |
| desired word scaling Note: 'word scaling' is basically equivalent to 'Word Spacing' in the Adobe Photoshop CC 2015 application Justification dialog (Select Justification on the Paragraphs palette menu). | real | <p>The amount (percentage) of space between words (0 - 1000; at 100, no additional space is added between words).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: minimum word scaling and maximum word scaling.</p> |
| faux bold | boolean | Indicates whether to use faux bold. |
| faux italic | boolean | Indicates whether to use faux italic. |
| first line indent | real | The amount (unit value) to indent the first line of paragraphs (-1296 - 1296). |
| font | Unicode text | The text face of the characters. |

| Property | Value Type | What it is (Continued) |
|--|--|---|
| <code>height</code> | real | The width of the bounding box (unit value) for paragraph text. Note: Valid only when <code>kind: paragraph text</code> . See kind . |
| <code>horizontal scale</code> | integer | Character scaling (horizontal) in proportion to vertical scale (0 - 1000 in percent). See vertical scale . |
| <code>horizontal warp distortion</code> | real | The horizontal distortion of the warp (-100 - 100 as percent). |
| <code>hyphen limit</code> | integer | The maximum number of consecutive lines that can end with a hyphenated word. |
| <code>hyphenate after first</code> | integer | The number of letters after which hyphenation in word wrap is allowed (1 - 15). |
| <code>hyphenate before last</code> | integer | The number of letters before which hyphenation in word wrap is allowed (1 - 15). |
| <code>hyphenate capitalized words</code> | boolean | Indicates whether to allow hyphenation of capitalized words. |
| <code>hyphenate words longer than</code> | integer | The minimum number of letters a word must have in order for hyphenation in word wrap to be allowed (2 - 25). |
| <code>hyphenation</code> | boolean | Indicates whether to allow hyphenation in word wrap. |
| <code>hyphenation zone</code> | real | The distance at the end of a line that will cause a word to break in unjustified type (0 - 720 pica). |
| <code>justification</code> | Valid Values: center center justified fully justified left left justified right right justified | The paragraph justification. |
| <code>kind</code> | Valid Values: paragraph text point text | The type of the text wrap to use. |

| Property | Value Type | What it is (Continued) |
|---|--|--|
| language | Valid Values: Brazilian Portuguese Canadian French Danish Dutch English UK English USA Finnish French German Italian Norwegian Nynorsk Norwegian Old German Portuguese Spanish Swedish Swiss German | The language to use. |
| leading | real | The leading amount (unit value). |
| left indent | real | The amount (unit value) of space to indent text from the left (-1296 - 1296). |
| ligatures | boolean | Indicates whether to use ligatures. |
| maximum glyph scaling | real | <p>The maximum amount (percentage) to scale the horizontal size of the text letters (50 - 200; at 100, the width of characters is not scaled).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: desired glyph scaling and maximum glyph scaling.</p> |
| maximum letter scaling Note: 'letter scaling' is basically equivalent to 'Letter Spacing' in the Adobe Photoshop CC 2015 application Justification dialog (Select Justification on the Paragraphs palette menu). | real | <p>The maximum amount of space to allow between letters (100 - 500; at 0, the width of characters is not scaled).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: minimum letter scaling and desired letter scaling.</p> |

| Property | Value Type | What it is (Continued) |
|---|------------|--|
| maximum word scaling Note: 'word scaling' is basically equivalent to 'Word Spacing' in the Adobe Photoshop CC 2015 application Justification dialog (Select Justification on the Paragraphs palette menu). | real | <p>The maximum amount (percentage) of space to allow between words (0 -1000; at 100, no additional space is added between words).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: minimum word scaling and desired word scaling.</p> |
| minimum glyph scaling | real | <p>The minimum amount (percentage) to scale the horizontal size of the text letters (50 - 200; at 100, the width of characters is not scaled).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: maximum glyph scaling and desired glyph scaling.</p> |
| minimum letter scaling Note: 'letter scaling' is basically equivalent to 'Letter Spacing' in the Adobe Photoshop CC 2015 application Justification dialog (Select Justification on the Paragraphs palette menu). | real | <p>The minimum amount of space to allow between letters (100 - 500; at 0, the width of characters is not scaled).</p> <p>Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification.</p> <p>The following values are also required: desired letter scaling and maximum letter scaling.</p> |

| Property | Value Type | What it is (Continued) |
|---|---|--|
| minimum word scaling Note: ‘word scaling’ is basically equivalent to ‘Word Spacing’ in the Adobe Photoshop CC 2015 application Justification dialog (Select Justification on the Paragraphs palette menu). | real | The minimum amount (percentage) of space to allow between words (0 -1000; at 100, no additional space is added between words). Note: Valid only when justification: center justified; justification: fully justified; justification: left justified; or justification: right justified. See justification . The following values are also required: desired word scaling and maximum word scaling . |
| no break | boolean | Indicates whether to allow words to break at the end of a line. Tip: When enacted on large amounts of consecutive characters, <code>noBreak: true</code> can prevent word wrap and thus may prevent some text from appearing on the screen. |
| old style | boolean | Indicates whether to use old style type. |
| position | list | The position of origin for the text. The list must contain two values (unit value). Tip: Setting the <code>position</code> property is basically equivalent to clicking the text tool at a point in the document to create the point of origin for text. |
| right indent | real | The amount of space (unit value) to indent text from the right (-1296 - 1296). |
| Roman hanging punctuation | boolean | Indicates whether to use Roman Hanging Punctuation. |
| size | real | The font size (unit value). |
| space after | real | The amount of space (unit value) to use after each paragraph (-1296 - 1296). |
| space before | real | The amount of space (unit value) to use before each paragraph (-1296 - 1296). |
| strike thru | Valid Values: off strike box strike height | Options for text strikethrough. |
| stroke color | color value | The text color. |

| Property | Value Type | What it is (Continued) |
|---------------------------------------|--|--|
| <code>text composer</code> | Valid Values: Adobe every line Adobe single line | The composition method to use to evaluate line breaks and optimize the specified hyphenation and justification options. Note: Valid only when <code>kind: paragraph text</code> . See kind . |
| <code>text direction</code> | Valid Values: horizontal vertical | The text orientation. |
| <code>tracking</code> | real | The amount of uniform spacing between multiple characters (-1000 - 10000). Tip: Tracking units are 1/1000 of an em space. The width of an em space is relative to the current type size. In a 1-point font, 1 em equals 1 point; in a 10-point font, 1 em equals 10 points. So, for example, 100 units in a 10-point font are equivalent to 1 point. |
| <code>underline</code> | Valid Values: left off right | Options for text underlining. |
| <code>vertical scale</code> | integer | Character scaling (vertical) in proportion to horizontal scale (0 - 1000 in percent). See horizontal scale . |
| <code>vertical warp distortion</code> | real | (-100 - 100 as percent). |
| <code>warp bend</code> | real | (-100 - 100 as percent). |
| <code>warp direction</code> | Valid Values: horizontal vertical | |

| Property | Value Type | What it is (Continued) |
|-------------------|--|---|
| warp style | Valid Values: arc arc lower arc upper arch bulge fish fish eye flag inflate none rise shell lower shell upper squeeze twist wave | |
| width | real | The width of the bounding box (unit value) for paragraph text. Note: Valid only when kind: paragraph text. See kind . |

Valid Commands

[convert to shape](#)
[create work path](#)
[exists](#)

The following code creates a text item in the art layer `textLayer`, and then uses the `contents`, `justification`, and `stroke color` properties of the `text-object` class to define the text item. For the second document, the text layer is set up using `set` properties.

```
tell application "Adobe Photoshop CC 2015"
    activate
    set doc to make new document
    set textLayer to make new art layer of doc with properties {kind:text layer}
    set contents of text object of textLayer to "Hello, World!"
    set position of text object of textLayer to {4 as inches, 1 as inches}
    set justification of text object of textLayer to right
    set stroke color of text object of textLayer to ~
        {class:RGB color, red:255, green:0, blue:0}

    set doc to make new document
    set textLayer to make new art layer of doc with properties {kind:text layer}
    set properties of text object of textLayer to {contents:"Hello, World!",~
        position:{4 as inches, 1 as inches}, justification:right, ~
        stroke color:{class:RGB color, red:255, green:0, blue:0}, size:40}
end tell
```


texture fill

Options that may be supplied when applying a Texture Fill filter.

The `texture fill` class supplies properties for the [filter options](#) class. The `texture fill` class is used only to define a record whose properties specify options when applying a Texture Fill filter. `texture fill` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `texture fill` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|------------------------|------------|--|
| <code>file path</code> | alias | The full path to the texture file. Must be a grayscale Photoshop file. |

The following code sample demonstrates how to apply the Texture Fill filter using the `filter` command of the `texture fill` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using texture fill with options -
        {class:texture fill, file path:"Data:docsamples:testfiles:texturefill.psd"}
end tell
```

threshold adjustment

The `threshold adjustment` class supplies options properties for the [adjustment options](#) class to convert grayscale or color images to high-contrast, B/W images by converting pixels lighter than the specified threshold to white and pixels darker than the threshold to black.

The `threshold adjustment` class, which is analogous to the Threshold command in the Adobe Photoshop CC 2015 application, is used only to define a record containing properties that specify options when using the `adjust` command to apply a Threshold adjustment to an image. The `threshold adjustment` class can be used only in conjunction with the `adjust` command. It is not possible to get or create an `threshold adjustment` object.

See the [adjust](#) command for additional details.

Properties

| Property | Value Type | What it is |
|--------------|------------|------------|
| level | integer | (1 - 255) |

The following code sample demonstrates how to apply a threshold adjustment using the `adjust` command of the `threshold adjustment` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using threshold adjustment ~
        with options {class:threshold adjustment, level:36}
end tell
```

TIFF save options

Options that can be specified when saving a document in TIFF format. See the [save](#) command for additional details. The `TIFF save options` class inherits properties from the [save options](#) class.

This class is used to define a record containing properties used to specify options when saving a document as a TIFF file. `TIFF save options` can only be supplied in conjunction with the `save` command. It is not possible to get or create a `TIFF save options` object.

Properties

| Property | Value Type | What it is |
|----------------------------------|---|---|
| <code>byte order</code> | Valid Values: IBM PC Mac OS | The order in which the document's bytes will be read. (The default is <code>ByteOrder.MACOS</code> when running on Mac OS and <code>ByteOrder.IBM</code> when running on a PC.) |
| <code>embed color profile</code> | boolean | Indicates whether to embed the color profile in the document. |
| <code>image compression</code> | Valid Values: JPEG LZW none ZIP | The compression type to use (default: <code>none</code>). |
| <code>interleave channels</code> | boolean | Indicates whether the channels in the image will be interleaved. (default: <code>true</code>) |
| <code>JPEG quality</code> | integer | The quality of the produced image (0 - 12), which is inversely proportionate to the amount of JPEG compression. Note: Valid only when <code>image compression: JPEG</code> . |
| <code>layer compression</code> | Valid Values: RLE ZIP | The method of compression to use when saving layers (as opposed to saving composite data). Note: Valid only when <code>save layers: true</code> . See save layers . |
| <code>save alpha channels</code> | boolean | Indicates whether to save the alpha channels. |
| <code>save annotations</code> | boolean | Indicates whether to save the annotations. |
| <code>save image pyramid</code> | boolean | Indicates whether to preserve multiresolution information (default: <code>false</code>). |
| <code>save layers</code> | boolean | Indicates whether to save the layers. |
| <code>save spot colors</code> | boolean | Indicates whether to save the spot colors. |
| <code>transparency</code> | boolean | Indicates whether to save the transparency as an additional alpha channel when the file is opened in another application. |

The following code creates the `myOptions` variable to hold the TIFF save options, then uses the [save](#) command to save the document with the specified options.

```
tell application "Adobe Photoshop CC 2015"
  make new document
  set myFile to "Data:docsamples:testfiles:TiffSave.tif"

  set myOptions to ¬
    {class:TIFF save options, embed color profile:true, ¬
      image compression:JPEG, JPEG quality:4, save layers:true, ¬
      save spot colors:true}

  save current document in file myFile as TIFF with options ¬
    myOptions appending no extension without copying
end tell
```

twirl

Options that may be supplied when applying a Twirl filter.

The `twirl` class supplies properties for the [filter options](#) class. The `twirl` class is used only to define a record whose properties specify options when applying a Twirl filter. `twirl` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `twirl` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|--------------|------------|--------------|
| angle | integer | (-999 - 999) |

The following code sample demonstrates how to apply the Twirl filter using the `filter` command of the `twirl` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using twirl with options ~
        {class:twirl, angle:47}
end tell
```

unsharp mask

Options that may be supplied when applying an Unsharp Mask filter.

The `unsharp mask` class supplies properties for the [filter options](#) class. The `unsharp mask` class is used only to define a record whose properties specify options when applying an Unsharp Mask filter. `unsharp mask` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create an `unsharp mask` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|------------------------|------------|--------------------------|
| <code>amount</code> | real | (1 - 500 as percent) |
| <code>radius</code> | real | (0.1 - 250.00 in pixels) |
| <code>threshold</code> | integer | (0 - 255) |

The following code sample demonstrates how to apply the Unsharp Mask filter using the `filter` command of the `unsharp mask` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using unsharp mask with options -
        {class:unsharp mask, amount:437, radius:17.8, threshold:255}
end tell
```

wave filter

Options that may be supplied when applying a Wave filter.

The `wave filter` class supplies properties for the `filter options` class. The `wave` class is used only to define a record whose properties specify options when applying a Wave filter. `wave filter` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `wave` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|-----------------------------------|--|--|
| <code>number of generators</code> | integer | (1 - 999) |
| <code>minimum wavelength</code> | integer | (1 - 998) |
| <code>maximum wavelength</code> | integer | (2 - minimum wavelength + 1) |
| <code>minimum amplitude</code> | integer | (1 - 998) |
| <code>maximum amplitude</code> | integer | (2 - minimumAmplitude + 1) |
| <code>horizontal scale</code> | integer | (1 - 100 as percent) |
| <code>vertical scale</code> | integer | (1 - 100 as percent) |
| <code>wave type</code> | Valid Values: sine square triangular | |
| <code>undefined areas</code> | Valid Values: repeat edge pixels wrap around | The method to use to fill areas left blank by the wave distortion. |
| <code>random seed</code> | integer | The number to use to control random wave lengths. |

The following code sample demonstrates how to apply the Wave filter using the `filter` command of the `wave` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    filter current layer of the current document using wave filter ~
        with options ~
            {class:wave filter, number of generators:1 ~
              , minimum wavelength:1, maximum wavelength:100 ~
              , minimum amplitude:5, maximum amplitude:10 ~
              , horizontal scale:100, vertical scale:100 ~
              , wave type:sine, undefined areas:repeat edge pixels, random seed:0}
        end tell
end tell
```

XMP metadata

Camera raw image file settings stored in an XMP file in the same folder as the raw file with the same base name and an XMP extension.

Properties

| Property | Value Type | What it is |
|---------------------|--------------|--|
| best type | type class | Read-only. The best type for the object's value. |
| class | type class | Read-only. The object's class. |
| default type | type class | Read-only. The default type for the object's value. |
| properties | record | All of this object's properties returned in a single record. |
| container | reference | Read-only. The object's container. |
| raw data | Unicode text | The raw XML form of file information. |

zigzag

Options that may be supplied when applying a Zigzag filter.

The `zigzag` class supplies properties for the [filter options](#) class. The `zigzag` class is used only to define a record whose properties specify options when applying a Zigzag filter. `zigzag` options can be supplied only in conjunction with the `filter` command. It is not possible to get or create a `zigzag` object.

See the [filter](#) command for additional details.

Properties

| Property | Value Type | What it is |
|---------------|---|----------------------------|
| amount | integer | (-100 - 100) |
| ridges | integer | (0 - 20) |
| style | Valid Values: around center out from center pond ripples | The type of zigzag to use. |

The following code sample demonstrates how to apply the Zigzag filter using the `filter` command of the `zigzag` class (inherited from the `filter options` super class).

```
tell application "Adobe Photoshop CC 2015"
    activate
    filter current layer of the current document using zigzag ~
        with options {class:zigzag, amount:-45, ridges:13, style:pond ripples}
end tell
```

This chapter provides a complete reference for the commands in the Adobe Photoshop CC 2015 AppleScript dictionary. The commands are presented alphabetically.

The commands supported by each object, with links to the detailed descriptions here, are listed in [‘AppleScript Objects’ on page 9](#).

Overview

This chapter describes the commands in the Adobe Photoshop CC 2015 AppleScript dictionary, as well as some of the important standard AppleScript commands. The AppleScript dictionary itself shows only that the command returns an object, or that the command takes an object reference as a parameter; it does not show the specific objects that can respond to a particular command. Not all Adobe Photoshop CC 2015 objects can respond to all commands. This reference details which objects respond to which commands, and what type of object each command returns (if any).

The following information is given for each command.

| Column heading | What it means |
|-------------------|--|
| Parameters | Constants, keywords, and values needed by the command. <ul style="list-style-type: none">• Variable values to be supplied are shown in bold.• Literal terms and constants are shown in plain type.• Items surrounded by brackets [] are optional. |
| What it is | An explanation of the parameters. |
| Objects supported | Which objects support the command and/or which objects the command can operate upon. The <code>document</code> object, for example, supports the command <code>close</code> , but not the command <code>quit</code> . |
| Returns | Many commands return values (text, numbers, lists, and object references). This column shows you what kind of reference you can expect the command to return (if any). |

activate

Makes an application active; that is, makes Adobe Photoshop CC 2015 the frontmost application.

| Parameters | What it is | Objects supported | Returns |
|------------|------------|-----------------------------|---------|
| none | | application | nothing |

The the first line of the following code sample directs Adobe Photoshop CC 2015 to carry out the script's commands. The second line uses the `activate` command to make Adobe Photoshop CC 2015 the frontmost application.

```
tell application "Adobe Photoshop CC 2015"
    activate
end tell
```

Note: Adobe Photoshop CC 2015 must be the frontmost application when executing any command that deals with the clipboard. Use `activate` to ensure that Adobe Photoshop CC 2015 is the active application. See the clipboard commands for examples:

[copy](#)

[cut](#)

[paste](#)

adjust

Applies an adjustment to one or more art layers.

| Parameters | What it is | Objects supported | Returns |
|--|--|--|---------|
| adjust art layer | The art layer object or objects to be operated upon. | art layer , art layers | |
| using anything | The options class used to invoke the method. Note: The class must be a class that inherits from adjustment options . | automatic contrast automatic levels brightness and contrast color balance curves desaturate equalize inversion levels adjustment mix channels posterize selective color threshold adjustment | |
| [with options adjustment options] | The options that can be specified for the command. | | |

The following code sample demonstrates how to apply an Automatic Contrast adjustment using the `adjust` command of the `automatic contrast` class (inherited from the `adjustment options` super class).

```
tell application "Adobe Photoshop CC 2015"
    adjust current layer of the current document using automatic contrast end tell
```

apply

Applies the specified layer comp to the document.

| Parameters | What it is | Objects supported | Returns |
|-------------------------------|---|--|---------|
| <code>apply layer comp</code> | The layer comp object or objects to be operated upon. | layer comp , layer comps | nothing |

The following code creates two art layers and a layer comp, then applies the layer comp to the document.

```
tell application "Adobe Photoshop CC 2015"
    activate

    --create a variable named theDocRef
    --assign the current (active) document to it
    set theDocRef to the current document

    --create two art layers and make a layer comp
    set layer1 to make new art layer in theDocRef with properties ~
        {visible:true}
    set layer2 to make new art layer in theDocRef with properties ~
        {visible:true}
    set layerComp1 to make new layer comp in theDocRef with properties ~
        {visibility:true, name:"First Document State"}
    apply layerComp1
end tell
```

apply layer style

Applies a layer style to the specified art layer.

| Parameters | What it is | Objects supported | Returns |
|--|---|--|---------|
| <code>apply layer style</code> <code>art layer</code> | The art layer object or objects to which you want to apply the style. | art layer , art layers layer , layers | |
| <code>using</code> Unicode text | The name of the layer style to apply. | | |

The following code creates a text layer by creating an art layer and setting its `kind` property to `text layer`, then applies the Sunset Sky layer style to the layer. The layer style is taken from the apply Layer Style list in the Layers palette in the Adobe Photoshop CC 2015 application.

```
tell application "Adobe Photoshop CC 2015"
    activate

    --create a variable named theDocRef
    --assign the current (active) document to it
    set theDocRef to the current document

    --create a text layer and apply a style
    set layer1 to make new art layer in theDocRef with properties ~
        {kind:text layer}
    set properties of text object of layer1 to {contents:"This is myTest.", ~
        size:60, position:{0.5 as inches, 3 as inches}}
    try
        apply layer style layer1 using "Sunset Sky (Text)"
    on error
        --load default styles for localized version
        try
            open file "Data:docsamples:testfiles:Default Styles.asl"
        end try
        apply layer style layer1 using "Sunset Sky (Text)"
    end try

end tell
```

auto count

Counts the objects in an image. Creates a `count item` object for each object counted. See [count item](#), [count items](#).

Note: The auto count feature is available in the Extended Version only.

For additional information about how to set up objects to count, please see the Count Tool in the Adobe Photoshop CC 2015 Help

| Parameters | What it is | Objects supported | Returns |
|----------------------------------|---------------------------------------|--|---------|
| <code>auto count document</code> | The document to count objects in. | document , documents | |
| <code>from channel</code> | The channel to use for counting. | channel , channels | |
| <code>threshold integer</code> | Threshold to use for counting (0-255) | | |

batch

Runs the batch automation routine. This is analogous to using the Batch command in Adobe Photoshop CC 2015.

| Parameters | What it is | Objects supported | Returns |
|---|---|-------------------------------|--------------|
| <code>batch</code> Unicode text | The name of the action to play. Note: The case of letters in the Action name must match the case of the name in the Actions palette. | | Unicode text |
| <code>from files</code> <code>list of alias</code> | The list of files to operate on. | | |
| <code>from</code> Unicode text | The name of the action set containing the action being played. Note: The case of letters in the Action Set name must match the case of the name in the Actions palette. | | |
| [with options batch options] | Options for batch automation. | batch options | |

change mode

Changes the color mode of the document.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| change mode document | The document object or objects to be operated upon. | document , documents | |
| to bitmap/CMYK/grayscale/ indexed color/Lab/ multichannel/RGB | The mode to change to. | | |
| [with options change mode options] | Options for changing the mode. | Bitmap mode options indexed mode options | |

close

Closes a document.

| Parameters | What it is | Objects supported | Returns |
|------------------------|---|---|---------|
| object reference | The document to close. | document , documents | nothing |
| [saving yes/no/ask] | Specifies whether to save the document before closing (default: ask). | | |

► Closing a document

```
-- Close the first document and prompt the user with a "Save as" dialog
tell application "Adobe Photoshop CC 2015"
    activate
    close document 1 saving ask
end tell
```

clear

Clears the currently selected object.

| Parameters | What it is | Objects supported | Returns |
|------------|--|--|---------|
| clear | Deletes the selected object and does not copy it to the clipboard. | art layer , art layers selection-object | |

contract

Contracts the selection.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>contract</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | <code>selection-object</code> | |
| by <code>real</code> | The amount to contract the selection (unit value). | | |

convert

Converts the document from using one color profile to using another.

| Parameters | What it is | Objects supported | Returns |
|--|--|---|---------|
| <code>convert document</code> | The document object or objects to be operated upon. | document , documents | |
| <code>to profile Unicode text</code> | The name of the color profile to convert to. Either a string that names a specific color profile or Working RGB, Working CMYK, Working Gray, Lab Color (meaning one of the working color spaces or Lab color). | | |
| <code>intent absolute colorimetric/perceptual/relative colorimetric/saturation intent</code> | The conversion intent. | | |
| <code>[blackpoint compensation boolean]</code> | Indicates whether to use black point compensation. | | |
| <code>[dithering boolean]</code> | Indicates whether to use dither (default: true). | | |

convert color

Converts an object from one color model to another.

| Parameters | What it is | Objects supported | Returns |
|--|--------------------------------|-----------------------------|-------------|
| <code>convert color color value</code> | The color to convert. | color value | color value |
| <code>to CMYK/grayscale/HSB/Lab/RGB/RGB Hex</code> | The color model to convert to. | | |

convert to shape

Converts the text item and its containing layer to a fill layer with the text changed to a clipping path.

| Parameters | What it is | Objects supported | Returns |
|---|--|-----------------------------|---------|
| <code>convert to shape text-object</code> | The text-object object or objects to be operated upon. | text-object | |

copy

Copies the current selection to the clipboard.

| Parameters | What it is | Objects supported | Returns |
|------------|------------|--|---------|
| copy | | art layer , art layers selection-object | |

copy merged

Copies the current selection, including the data from all visible layers, to the clipboard.

| Parameters | What it is | Objects supported | Returns |
|-------------|------------|--|---------|
| copy merged | | art layer , art layers selection-object | |

Note: Commands that manipulate the clipboard (`cut`, `copy`, and `paste`) require that Adobe Photoshop CC 2015 be the frontmost application during these operations. Use [activate](#) to bring Adobe Photoshop CC 2015 to the front before executing a `copy` command. No error is returned if there is no selection to copy. If the application is not frontmost, an error is returned.

count

Counts the elements of a specified type contained in a specified object.

| Parameters | What it is | Objects supported | Returns |
|-------------------------------|--|--|---------|
| count object reference | The object whose elements are to be counted. | art layer , art layers channel , channels color sampler , color samplers count item , count items document , documents font , fonts history state , history states layer , layers layer comp , layer comps layer set , layer sets notifier , notifiers path item , path items path point , path points sub path item , sub path items | integer |
| [each type class] | The class of the objects to count. | | |

Notes

With the optional `each` term, use the singular form for the object type to be counted; for example, `art layer` rather than `art layers`. If you don't use `each`, you can use the singular or plural form.

► Counting normal path items in a document

```
-- This script shows the user how many paths
-- are normal paths out of the total number in document 1
tell application "Adobe Photoshop CC 2015"
    set pathCount to count each path item of document 1
    set numberNormal to ~
        count (path items of document 1 whose kind is normal)
    display dialog numberNormal & " of " & pathCount ~
        & " paths are normal in this document." as string
end tell
```

create contact sheet

Creates a contact sheet from multiple files. This was deprecated in Photoshop CS4.

| Parameters | What it is | Objects supported | Returns |
|--|---|---------------------------------------|--------------------------------|
| from files list of alias | A list of the input files to include in the contact sheet. | | Unicode Text (an empty string) |
| [with options contact sheet options] | Options that can be specified for creating the contact sheet. | contact sheet options | |

create PDF presentation

Creates a PDF presentation file. This was deprecated in Photoshop CS4.

| Parameters | What it is | Objects supported | Returns |
|---|---|--------------------------------------|---|
| from files list of alias | A list of the input files to include in the presentation. | | Unicode text that can be cast to the file path. |
| to file file specification | The location of the output file. | | |
| [with options presentation options] | Options that can be specified for the PDF presentation. | presentation options | |

create photo gallery

Creates a web photo gallery. This was deprecated in Photoshop CS4.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|--------------|
| from folder anything | A folder for or list of input files to include in the presentation. | file specification (for a folder), or list of alias | Unicode text |
| to folder alias | The location for output files. | | |
| [with options gallery options] | Options that can be specified for the photo gallery. | gallery options | |

create photo merge

Merges multiple files into one.

| Parameters | What it is | Objects supported | Returns |
|---------------------------------|-------------------------------------|-------------------|--------------------------------|
| from files list of alias | A list of the input files to merge. | | Unicode text (an empty string) |

create picture package

Creates a picture package from multiple files. This was deprecated in Photoshop CS4.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|--------------------------------|
| from files list of alias | A list of the input files to include in the picture package. | | Unicode text (an empty string) |
| [with options picture package options] | Options that can be specified for creating the picture package. | picture package options | |

create selection

Makes a selection object from the specified path; the [selection-object](#) can be accessed through the [selection](#) property of the document object.

| Parameters | What it is | Objects supported | Returns |
|---|---|--|---------|
| <code>create selection</code> path item | The path item object or objects to be operated upon. | path item , path items | |
| [feather amount real] | The feather amount in pixels. | | |
| [antialiasing boolean] | Indicates whether to use anti aliasing for the selection. | | |
| [operation diminished/extended/intersected/replaced] | The operation mode for the selection. | | |

create work path

Creates a work path based on the text object.

| Parameters | What it is | Objects supported | Returns |
|---|--|-----------------------------|---------|
| <code>create work path</code> text-object | The text-object object or objects to be operated upon. | text-object | |

crop

Crops the document.

| Parameters | What it is | Objects supported | Returns |
|----------------------------|--|--|---------|
| <code>crop document</code> | The document object or objects to be operated upon. | document , documents | |
| <code>bounds list</code> | The area to crop (unit value). A list of four coordinates that mark the portion remaining after cropping, in the following order: left, top, right, bottom. | | |
| <code>[angle real]</code> | The angle of the cropping bounds (default: 0.0). | | |
| <code>[width real]</code> | The width of the resulting document (unit value). | | |
| <code>[height real]</code> | The height of resulting document (unit value). | | |

cut

Cuts the current selection to the clipboard.

| Parameters | What it is | Objects supported | Returns |
|------------|---|---|---------|
| cut | Deletes the selected object and copies it to the clipboard. | art layer , art layers , selection-object | |

Note: Commands that manipulate the clipboard (`cut`, `copy`, and `paste`) require that Adobe Photoshop CC 2015 be the frontmost application during these operations. Use [activate](#) to bring Adobe Photoshop CC 2015 to the front before executing a `copy` command. No error is returned if there is no selection to copy. If the application is not frontmost, an error is returned.

delete

Removes an element from an object.

| Parameters | What it is | Objects supported | Returns |
|---|---|--|---------|
| <code>object reference</code> or list (of <code>object references</code>) | Contained object or objects to delete. | <code>art layer</code> , <code>art layers</code> <code>color sampler</code> , <code>color samplers</code> <code>count item</code> , <code>count items</code> <code>channel</code> , <code>channels</code> <code>layer</code> , <code>layers</code> <code>layer comp</code> , <code>layer comps</code> <code>layer set</code> , <code>layer sets</code> <code>notifier</code> , <code>notifiers</code> <code>path item</code> , <code>path items</code> | nothing |

► Deleting a layer

```
-- This script deletes the top layer in the document
tell application "Adobe Photoshop CC 2015"
    activate
    set doc to make new document
    make new art layer of doc
    delay 1
    if (count layers of doc) > 1 then
        delete layer 1 of doc
    end if
end tell
```

delete measurements

Exports the measurement data to a file.

| Parameters | What it is | Objects supported | Returns |
|-------------------------------------|--|-------------------|---------|
| <code>delete measurement log</code> | The measurement log object or objects to be operated upon. | | |
| <code>range</code> | Which measurements to export. Default to selected. | | |

deselect

Deselects the selected object.

| Parameters | What it is | Objects supported | Returns |
|------------------------------|--|--|---------|
| <code>deselect object</code> | The object or objects to be operated upon. | document , documents selection-object | |

deselect

Deselects the path item. No path item is selected. (For Path Suite).

| Parameters | What it is | Objects supported | Returns |
|------------------------------|--|--|---------|
| <code>deselect object</code> | The object or objects to be operated upon. | path item , path items | |

do action

Plays an action from the Actions Palette.

| Parameters | What it is | Objects supported | Returns |
|--|--|-------------------|---------|
| <code>do action</code> Unicode text | The name of the action to play. Note: The Action name is case sensitive. Be sure to enter the Action name exactly as it appears in the Actions palette. | | |
| <code>from</code> Unicode text | The name of the Action Set containing the Action to be played. Note: The Action Set name is case sensitive. Be sure to enter the Action Set name exactly as it appears in the Actions palette. | | |

do javascript

Executes a JavaScript.

| Parameters | What it is | Objects Supported | Returns |
|--|---|-------------------|--------------|
| do javascript anything | The JavaScript code or file (.js or .jsx) to execute. | | Unicode text |
| [with arguments list of anything] | The arguments to pass to the JavaScript routine. | | |
| [show debugger before running/ never/ on runtime error] | Indication of when, if at all, to show the debugger (default: <i>never</i>). | | |

For an example of executing JavaScript code from AppleScript, see the *Photoshop CC 2015 Scripting Guide*

doc duplicate

Duplicates a document with parameters.

| Parameters | What it is | Objects supported | Returns |
|---|--|--|--------------------------------------|
| <code>doc duplicate document</code> | The document to duplicate | document , documents | reference to the duplicated document |
| [name Unicode text] | The name for the duplicated document. | | |
| [merge layers only boolean] | Indicates whether only the merged layers are duplicated. | | |

duplicate

Duplicates a document without parameters.

| Parameters | What it is | Objects supported | Returns |
|---------------------------------|---------------------------|--|--------------------------------------|
| <code>duplicate document</code> | The document to duplicate | document , documents | reference to the duplicated document |

duplicate

Duplicates one or more objects.

| Parameters | What it is | Objects supported | Returns |
|---|---|--|--|
| <code>duplicate object reference</code> | The object to duplicate | art layer , art layers channel , channels layer , layers layer set , layer sets path item , path items | reference to the duplicated object |
| <code>[to location reference]</code> | The new container (parent object) for the object. | | |
| <code>[with properties record]</code> | <i>Not applicable for Photoshop objects.</i> | | |

equal colors

Determines whether the specified colors are visually equal.

| Parameters | What it is | Objects supported | Returns |
|---------------------------------------|---|-----------------------------|---------|
| <code>equal colors color value</code> | The original color with which to compare. | color value | boolean |
| <code>with color value</code> | The color to which to compare the original color. | | |

exists

Determines whether an object exists.

| Parameters | What it is | Objects supported | Returns |
|-----------------------------|-----------------------------------|--|----------------------|
| object reference | The object to test for existence. | Any object except <code>application</code> | <code>boolean</code> |

► Check if a document exists

```
-- Check if a document exists and beep twice if one does
tell application "Adobe Photoshop CC 2015"
    if exists document 1 then
        beep 2
    end if
end tell
```

expand

Expands the current selection.

| Parameters | What it is | Objects supported | Returns |
|-----------------------------------|---|----------------------------------|---------|
| expand selection-object | The selection-object object or objects to be expanded. | selection-object | |
| by real | The amount by which to expand the selection (unit value). | | |

export

Exports the document.

| Parameters | What it is | Objects supported | Returns |
|--|--|--|---------|
| <code>export document</code> | The document object or objects to be operated upon. | document , documents | |
| <code>in file specification</code> | The file to export to. | | |
| <code>[as Illustrator paths/save for web]</code> | The type of export (default: <code>Illustrator paths</code>). | | |
| <code>[with options export options]</code> | Options that can be specified for the export type. | Illustrator paths export options save for web export options | |

export measurements

Exports the measurement data to a file.

| Parameters | What it is | Objects supported | Returns |
|-------------------------------------|--|-------------------|---------|
| <code>export measurement log</code> | The measurement log object or objects to be operated upon. | | |
| <code>data points</code> | Array of identifiers of data points to export. The order of the data points is respected in the exported file. Defaults to data points visible in Measurement Log palette. | | |
| <code>in file specification</code> | The file to export to. | | |
| <code>range</code> | Which measurements to export. Default to selected. | | |

feather

Feathers the edges of the current selection.

| Parameters | What it is | Objects supported | Returns |
|---|---|---|---------|
| <code>feather</code> <code>selection-object</code> | The object or objects to be operated upon. | <code>selection-object</code> | |
| by <code>real</code> | The amount of the edge to feather (unit value). | | |

feature enabled

Determines whether the specified feature is enabled.

| Parameters | What it is | Objects supported | Returns |
|--|------------|-----------------------------|---------|
| feature enabled "photoshop/extended" "photoshop/standard" "photoshop/trial" | | application | boolean |

fill

Fills the current selection.

| Parameters | What it is | Objects supported | Returns |
|---|---|---|---------|
| <code>fill</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| <code>with contents</code> <code>anything</code> | A color object or history state object. | CMYK color color value gray color history state, history states HSB color RGB color RGB hex color | |
| <code>[blend mode</code> <code>behind mode/</code> <code>clear mode/</code> <code>color blend/</code> <code>color burn/</code> <code>color dodge/darken/</code> <code>difference/dissolve</code> <code>/divide/</code> <code>exclusion/hard</code> <code>light/</code> <code>hard mix/hue blend/</code> <code>lighten/</code> <code>linear burn/</code> <code>linear dodge/</code> <code>linear light/</code> <code>luminosity/</code> <code>multiply/normal/</code> <code>overlay/</code> <code>pin light/</code> <code>saturation blend/</code> <code>screen/soft</code> <code>light/subtract/</code> <code>vivid light]</code> | The color blend mode to use (default: normal). | | |
| <code>[opacity integer]</code> | The fill opacity (default: 100 as percent). | | |
| <code>[preserving transparency</code> <code>boolean]</code> | Indicates whether to preserve the transparencies. | | |

fill path

Fills the path with the specified information.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>fill path path item</code> | The path item object or objects to be operated upon. | path item , path items | |
| <code>[with contents anything]</code> | The color of the fill for this path. | CMYK color color value gray color history state , history states HSB color RGB color RGB hex color | |
| <code>[blend mode behind mode/clear mode/ color blend/color burn/ color dodge/darken/ difference/dissolve/ exclusion/hard light/ hard mix/hue blend/ lighten/linear burn/ linear dodge/ linear light/luminosity/ multiply/normal/overlay / pin light/ saturation blend/ screen/soft light/ vivid light]</code> | The blending mode to use for the path's fill. | | |
| <code>[opacity real]</code> | The opacity of the path's fill. | | |
| <code>[antialiasing boolean]</code> | Indicates whether to use anti aliasing for the selection. | | |
| <code>[preserving transparency boolean]</code> | Indicates whether to preserve the transparency of the fill for this path. | | |
| <code>[feather amount real]</code> | The feather amount in pixels. | | |
| <code>[whole path boolean]</code> | Indicates whether to use all subpaths during the fill. | | |

filter

Applies a filter to one or more art layers.

| Parameters | What it is | Objects supported | Returns |
|---|--|--|---------|
| <code>filter art layer</code> | The art layer object or objects to be operated upon. | art layer , art layers | |
| using <code>anything</code> | The options class used to invoke the method. Note: The class must be a class that inherits from filter options . | | |
| [with options <code>filter options</code>] | The options that can be specified for the method. | All classes that inherit from filter options | |

flatten

Flattens all layers in the document.

| Parameters | What it is | Objects supported | Returns |
|-------------------------------|---|---|---------|
| <code>flatten document</code> | The document object or objects to be operated upon. | <u>document</u> , <u>documents</u> | |

flip canvas

Flips the canvas horizontally or vertically.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>flip canvas</code> <code>document</code> | The document object or objects to be operated upon. | <u>document</u> , <u>documents</u> | |
| <code>direction</code> <code>horizontal/vertical</code> | The direction in which to flip the canvas. | | |

grow

Grows the current selection to include all adjacent pixels falling within the specified tolerance range.

| Parameters | What it is | Objects supported | Returns |
|---------------------------------|---|---|---------|
| grow selection-object | The selection-object object or objects to be operated upon. | <u>selection-object</u> | |
| tolerance integer | (0 - 255) | | |
| antialiasing boolean | | | |

import annotations

Imports annotations into the document.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>import annotations</code> <code>document</code> | The document object or objects to be operated upon. | <u>document</u> , <u>documents</u> | |
| <code>from alias</code> | The document from which to import the annotations. | | |

index

Gets an element from the specified element.

| Parameters | What it is | Objects supported | Returns |
|------------|--|--|------------------|
| item key | The object or objects to be operated upon. | art layer , art layers color sampler , color samplers , count item , count items channel , channels document , documents font , fonts history state , history states layer , layers layer comp , layer comps layer set , layer sets notifier , notifiers path item , path items path point , path points sub path item , sub path items | object reference |

invert

Inverts the selection.

Tip: To invert an art layer, see the [inversion](#) adjustment option.

| Parameters | What it is | Objects supported | Returns |
|--|---|----------------------------------|---------|
| <code>invert</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |

link

Links the layer with another layer.

| Parameters | What it is | Objects supported | Returns |
|-------------------|--|--|---------|
| link layer | The layer object or objects to be operated upon. | art layer , art layers layer , layers layer set , layer sets | |
| with layer | The layer to link to. | | |

load

Loads a support document.

| Parameters | What it is | Objects supported | Returns |
|----------------------|-----------------------|--|---------|
| load document | The document to open. | document , documents | |

load

Loads a selection from a channel.

| Parameters | What it is | Objects supported | Returns |
|---|--|--|---------|
| load selection-object | The selection-object object or objects to be operated upon. | selection-object | |
| from channel | The channel from which to load the selection. | channel , channels | |
| [combination type diminished/extended / intersected/replaced d] | The method to use to combine the channel contents with the existing selection (default: replaced). | | |
| [inverting boolean] | Indicates whether to select the inverse of the channel contents (default: <i>false</i>). | | |

make

Creates a new object and returns a reference to newly created object.

| Parameters | What it is | Objects supported | Returns |
|---------------------------------------|---|--|---------------------|
| <code>new type class</code> | The class of object to create. Note: The term <code>new</code> is optional. | art layer , art layers channel , channels color sampler , color samplers , count item , count items , document , documents layer , layers layer comp , layer comps layer set , layer sets notifier , notifiers path item , path items | object reference |
| <code>at location reference</code> | Location at which to insert new object. | | |
| <code>[with properties record]</code> | Any property of the object you wish to set at creation. | | |
| <code>[with data anything]</code> | Any data needed for creation that is not a property. | | |

► Creating layer objects

```
-- Make 2 layers, one at the top and one at the bottom
-- demonstrating the power of location references like beginning and end
```

```
tell application "Adobe Photoshop CC 2015"
    set doc to make new document
    set background layer of layer 1 of doc to false
    set topLayer to make new art layer ~
        at beginning of doc with properties {name:"Top Layer"}
    set bottomLayer to make new art layer ~
        at end of doc with properties {name:"Bottom Layer"}
end tell
```

make clipping path

Makes the current path item the clipping path for this document.

| Parameters | What it is | Objects supported | Returns |
|---|---|--|---------|
| <code>make clipping path</code> <code>path item</code> | The path item object or objects to be operated upon. | path item , path items | |
| <code>[flatness real]</code> | Tells the PostScript printer how to approximate curves in the path (0.2 - 100). | | |

make work path

Makes the current selection item the work path for the document.

| Parameters | What it is | Objects supported | Returns |
|--|---|----------------------------------|---------|
| <code>make work path</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| <code>[tolerance real]</code> | The tolerance in pixels. | | |

merge

Merges an art layer or layer set into the layer below, or merges a spot channel into the component channels. Merging a layer or layer set returns a reference to the resulting layer. Merging a channel does not return any value.

| Parameters | What it is | Objects supported | Returns |
|---|--|---|--|
| <code>merge art layer/channel/layer/ layer set</code> | The object or objects to be operated upon. | art layer , art layers , channel , channels , layer , layers , layer set , layer sets | Merging a layer or layer set returns a reference to the resulting layer. Merging a channel does not return any value. |

merge visible layers

Flattens all visible layers in the document.

| Parameters | What it is | Objects supported | Returns |
|--|---|--|---------|
| <code>merge visible layers document</code> | The document object or objects to be operated upon. | document , documents | |

move

Moves one or more objects to a new location; returns references to the moved object or objects at the new location.

| Parameters | What it is | Objects supported | Returns |
|--|--|--|---|
| <code>move</code> object reference or list (of object references) | Object or objects to move. | art layer , art layers layer , layers layer set , layer sets | object reference or list (of object references) |
| <code>to</code> location reference | New location of the object or objects. | | |

Notes

Objects cannot be moved between documents.

► Moving layers

```
-- This script moves the bottommost, non-background layer, to after the first layer
tell application "Adobe Photoshop CC 2015"
    activate
    set doc to make new document
    tell doc
        set background layer of layer 1 to false
        make new art layer with properties {name:"Top Layer"}
        make new art layer with properties {name:"Buttom Layer"}
        move first layer to after last layer
    end tell
end tell
```

open

Opens one or more specified document file(s).

| Parameters | What it is | Objects supported | Returns |
|---|--|---|---------|
| <code>open file specification</code> | The file to be opened. | N/A | nothing |
| as Alias PIX/BMP/Camera RAW/ CompuServe GIF/ DICOM/ Electric Image/EPS/ EPS PICT preview/ EPS TIFF preview/Filmstrip/JPEG/ PCX/PDF/Photo CD/ Photoshop DCS 1.0/ Photoshop DCS 2.0/ Photoshop EPS/ Photoshop format/ Photoshop PDF/PICT file/ PICT resource/Pixar/PNG/ Portable Bitmap/raw/ Scitex CT/SGI RGB/ SoftImage/Targa/ TIFF/Wavefront RLA/ Wireless Bitmap | The type of file to open. Note: Photo CD is deprecated. Note: DICOM is available in the Extended version only. | | |
| [showing dialogs always/error dialogs/never] | The type of dialogs, if any, to allow when the script is run. | | |
| [smart object <code>boolean</code>] | Indicates whether to create a smart object around the document opened. (Default:false) | | |
| with options open options | Options for opening a particular type of file. | Camera RAW open options DICOM open options EPS open options PDF open options Photo CD open options raw format open options | |

► Opening a PDF file

This script sample opens a PDF document.

```

tell application "Adobe Photoshop CC 2015"
    set myFilePath to alias "Data:docsamples:testfiles:PdfTest.pdf"
    open myFilePath as PDF with options ~
        {class:PDF open options, height:pixels 100, width:pixels 200, ~
            mode:RGB, resolution:72, use antialias:true, page:1, ~
            constrain proportions:false}
    end tell

```

paste

Paste the clipboard contents into the current document.

| Parameters | What it is | Objects supported | Returns |
|---|--|--|---------|
| <code>paste [clipping to selection boolean]</code> | Indicates whether to paste the clipboard contents into the current selection (default: <code>false</code>). | document , documents | |

Note: Commands that manipulate the clipboard (`cut`, `copy`, and `paste`) require that Adobe Photoshop CC 2015 be the frontmost application during these operations. Use [activate](#) to bring Adobe Photoshop CC 2015 to the front before executing a `copy` command. No error is returned if there is no selection to copy. If the application is not frontmost, an error is returned.

Photoshop open dialog

Uses the Photoshop open dialog box to allow you to select files to open.

| Parameters | What it is | Objects supported | Returns |
|-----------------------|------------|-------------------------------------|----------------------------|
| Photoshop open dialog | | document, documents | list of file specification |

print

Prints one or more documents or files.

| Parameters | What it is | Objects supported | Returns |
|---|--|--|---------|
| <code>print anything</code> | Document or list of documents, or file or list of files to be printed. | document , documents | nothing |
| [source space <code>document space/</code> <code>proof space</code>] | The color space for source (default: <code>document space</code>). | | |
| [print space Unicode text] | The color space for the printer. Can be nothing (that is, the same as the source); or <code>Working RGB</code> , <code>Working CMYK</code> , <code>Working Gray</code> , <code>Lab Color</code> (meaning one of the working color spaces or Lab color); or a string specifying a specific colorspace (default: <i>nothing</i>). | | |
| [intent absolute <code>colorimetric/</code> <code>perceptual/</code> relative <code>colorimetric/</code> <code>saturation intent</code>] | The color conversion intent (default: <code>relative colorimetric</code>). Note: Valid only when the print space is different than the source space. | | |
| [blackpoint compensation boolean] | Indicates whether the color conversion should use black point compensation (default: <code>true</code>). Note: Valid only when the print space is different than the source space. | | |

► Print a document

```
-- Print the current document
tell application "Adobe Photoshop CC 2015"
    print document 1
end tell
```

purge

Purges one or more caches.

| Parameters | What it is | Objects supported | Returns |
|---|----------------------|--|---------|
| <code>purge</code> <code>all caches/</code> <code>clipboard cache/</code> <code>history caches/</code> <code>undo caches</code> | The caches to purge. | <code>application</code> | |

quit

Forces Adobe Photoshop CC 2015 to quit.

| Parameters | What it is | Objects supported | Returns |
|------------|------------|-----------------------------|---------|
| none | | application | nothing |

Notes

If there is Adobe Photoshop CC 2015 data on the clipboard, Adobe Photoshop CC 2015 displays a dialog asking if you want to save the clipboard for other applications. To prevent this dialog from being displayed, send the following command to the frontmost application

```
set the clipboard to {}
```

► Quitting Adobe Photoshop CC 2015

```
tell application "Adobe Photoshop CC 2015"
  activate
  set the clipboard to {}
  close every document saving no
  quit
end tell
```

rasterize

Rasterizes the contents of an art layer.

| Parameters | What it is | Objects supported | Returns |
|--|--|--|---------|
| <code>rasterize art layer</code> | The art layer object or objects to be operated upon. | <code>art layer</code> , <code>art layers layer</code> , <code>layers</code> | |
| <code>affecting</code> <code>all linked layers/</code> <code>entire layer/</code> <code>fill content/</code> <code>layer clipping</code> <code>path/</code> <code>shape/text contents</code> | The layers or layer contents or components to rasterize. | | |

recapture

Recaptures the current layer state(s) for this layer comp.

| Parameters | What it is | Objects supported | Returns |
|-----------------------------------|---|--|---------|
| <code>recapture layer comp</code> | The layer comp object or objects to be operated upon. | layer comp , layer comps | |

record measurements

Exports the measurement data to a file.

| Parameters | What it is | Objects supported | Returns |
|-------------------------------------|--|-------------------|---------|
| <code>record measurement log</code> | The measurement log object or objects to be operated upon. | | |
| <code>data points</code> | Array of identifiers of data points to export. The order of the data points is respected in the exported file. Defaults to data points visible in Measurement Log palette. | | |
| <code>source</code> | Source of the measurements to record. | | |

refresh

Pauses the script while the application refreshes.

| Parameters | What it is | Objects supported | Returns |
|------------|--|-----------------------------|---------|
| refresh | Wait for the application to redraw the current document. | application | |

reset from comp

Resets the layer comp state to the document state.

| Parameters | What it is | Objects supported | Returns |
|---|---|--|---------|
| <code>reset from comp</code> layer comp | The layer comp object or objects to be operated upon. | <u>layer comp</u> , <u>layer comps</u> | |

resize canvas

Changes the size of the canvas.

| Parameters | What it is | Objects supported | Returns |
|---|---|--|---------|
| <code>resize canvas document</code> | The document object or objects to be operated upon. | document , documents | |
| <code>[width real]</code> | The desired width of the canvas (unit value). | | |
| <code>[height real]</code> | The desired height of the canvas (unit value). | | |
| <code>[anchor position bottom center/ bottom left/ bottom right/ middle center/ middle left/ middle right/ top center/top left/ top right]</code> | The anchor to resize around (default: middle center). | | |

resize image

Changes the size of the image.

| Parameters | What it is | Objects supported | Returns |
|--|---|--|---------|
| <code>resize image document</code> | The document object or objects to be operated upon. | document , documents | |
| <code>[width real]</code> | The desired width of the canvas (unit value). | | |
| <code>[height real]</code> | The desired height of the canvas (unit value). | | |
| <code>[resolution real]</code> | The resolution (in pixels per inch). | | |
| <code>[amount real]</code> | The amount of noise value when using preserve details (range: 0 - 100). | | |
| <code>[resample method automatic/ bicubic/ bicubic automatic/ bicubic sharper/ bicubic smoother/ bilinear/ closest neighbor/ none/ preserve details/]</code> | The method to use for resampling pixels (default: bicubic). | | |

reveal all

Expands the document to show clipped sections.

| Parameters | What it is | Objects supported | Returns |
|----------------------------------|---|--|---------|
| <code>reveal all document</code> | The document object or objects to be operated upon. | <u>document, documents</u> | |

rotate

Rotates the object.

| Parameters | What it is | Objects supported | Returns |
|---|--|---|---------|
| <code>rotate layer or selection-object</code> | The object or objects to be operated upon. | art layer , art layers layer , layers layer set , layer sets selection-object | |
| <code>angle real</code> | The number of degrees to rotate. A positive angle will rotate the canvas clockwise; a negative value will rotate the canvas counter-clockwise. | | |
| [<code>anchor position</code> <code>bottom center/</code> <code>bottom left/</code> <code>bottom right/</code> <code>middle center/</code> <code>middle left/</code> <code>middle right/</code> <code>top center/</code> <code>top left/top right</code>] | The anchor point around which to rotate the layer (default: middle center). | | |

rotate boundary

Rotates the boundary of the selection-object.

| Parameters | What it is | Objects supported | Returns |
|---|--|----------------------------------|---------|
| <code>rotate boundary selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| <code>angle real</code> | The number of degrees to rotate. A positive angle will rotate the canvas clockwise; a negative value will rotate the canvas counter-clockwise. | | |
| [<code>anchor position</code> <code>bottom center/</code> <code>bottom left/</code> <code>bottom right/</code> <code>middle center/</code> <code>middle left/</code> <code>middle right/</code> <code>top center/</code> <code>top left/top right</code>] | The anchor point around which to rotate the layer (default: middle center). | | |

rotate canvas

Rotates the canvas.

| Parameters | What it is | Objects supported | Returns |
|---|--|--|---------|
| <code>rotate canvas</code> <code>document</code> | The document object or objects to be operated upon. | <u>document,</u> <u>documents</u> | |
| <code>angle</code> real | The number of degrees to rotate. A positive angle will rotate the canvas clockwise; a negative value will rotate the canvas counter-clockwise. | | |

save

Saves an Adobe Photoshop CC 2015 document. Returns a reference to the saved document.

| Parameters | What it is | Objects supported | Returns |
|--|---|--|-------------------------|
| <code>save document</code> | The document to save. | document , documents | object referenc e |
| [in file specification] | The file to save to, specified as a string containing the full file path or an alias. If not specified, the document is saved to its existing file. | | |
| [as Alias PIX/ BMP/ CompuServe GIF/ Electric Image/ JPEG/ PCX/ Photoshop DCS 1.0/ Photoshop DCS 2.0/ Photoshop EPS/ Photoshop format/ Photoshop PDF/ PICT file/ PICT resource/ Pixar/ PNG/ Portable Bitmap/ raw/ Scitex CT/ SGI RGB/ SoftImage/ Targa/ TIFF/ Wavefront RLA] | The file type to which to save. Note: To save a file in Wireless Bitmap format, use the export comand, and save for web export options . | | |
| [copying boolean] | save as copy leaving original open. Unsaved files cannot be saved as copy. | | |

| Parameters | What it is | Objects supported | Returns |
|---|---|--|---------|
| [appending lowercase extension/ no extension/ uppercase extension] | append an extension to the document name | | |
| [with options save options] | The save options for the specified file type. | BMP save options EPS save options GIF save options JPEG save options PDF save options Photoshop DCS 1.0 save options Photoshop DCS 2.0 save options Photoshop save options PICT file save options PICT resource save options Pixar save options PNG save options raw save options SGI RGB save options Targa save options TIFF save options | |

This example shows to batch process folders of Adobe Photoshop CC 2015 documents, saving each as a PDF file with specific settings.

```
-- Process all files in folders dropped on this script
-- (when saved as an applet)
-- Save each Adobe Photoshop CC 2015 file as a PDF file.
on run
    tell me to open {choose folder}
end run

on open droppedItems
    set destFolder to choose folder with prompt "Destination folder?"
    repeat with anItem in droppedItems
        tell application "Finder"
            -- Make sure each item processed by this script is a folder
            if class of item anItem is not folder then
                -- Not a folder, notify the user of the error
                display dialog "Please drop only folders on this script"
            else
                -- A folder, get the Adobe Photoshop CC 2015 files and process them
                set fileList to (every file of anItem whose creator type is ~
                    "8BIM") as alias list
            end if
        end tell
        SaveFilesAsPDF(fileList, destFolder)
    end repeat
end open

-- fileList is a list of aliases to Photoshop files
-- destFolder is an alias to a folder where the PDF files are to be saved
on SaveFilesAsPDF(fileList, destFolder)
    set destPath to destFolder as string
    repeat with aFile in fileList
        tell application "Finder" to set fileName to name of aFile
    end repeat
end SaveFilesAsPDF
```

```
    set newFilePath to destPath & fileName & ".pdf"
    tell application "Adobe Photoshop CC 2015"
        open aFile
        save current document in file newFilePath as Photoshop PDF ¬
            with options {class:PDF save options, PDF compatibility:PDF 15,¬
                preserve editing:true}
        close current document saving no
    end tell
end repeat
end SaveFilesAsPDF
```

scale

Scales the object to the specified size.

| Parameters | What it is | Objects supported | Returns |
|--|---|--|---------|
| <code>scale layer or selection-object</code> | The object or objects to be operated upon. | art layer , art layers layer , layers layer set , layer sets selection-object | |
| [horizontal scale <code>real</code>] | The amount to scale the layer horizontally (default: 100.0 as percent). | | |
| [vertical scale <code>real</code>] | The amount to scale the layer (default: 100.0 as percent). | | |
| [anchor position <code>bottom center</code> / <code>bottom left</code> / <code>bottom right</code> / <code>middle center</code> / <code>middle left</code> / <code>middle right</code> / <code>top center</code> / <code>top left</code> / <code>top right</code>] | The anchor point around which to rotate the layer (default: <code>middle center</code>). | | |

scale boundary

Scales the boundary of selection.

| Parameters | What it is | Objects supported | Returns |
|--|---|----------------------------------|---------|
| <code>scale boundary selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| [horizontal scale <code>real</code>] | The amount to scale the layer horizontally (default: 100.0 as percent). | | |
| [vertical scale <code>real</code>] | The amount to scale the layer (default: 100.0 as percent). | | |
| [anchor position <code>bottom center</code> / <code>bottom left</code> / <code>bottom right</code> / <code>middle center</code> / <code>middle left</code> / <code>middle right</code> / <code>top center</code> / <code>top left</code> / <code>top right</code>] | The anchor point around which to rotate the layer (default: <code>middle center</code>). | | |

select

Changes the selection. (For Photoshop Suite.)

| Parameters | What it is | Objects supported | Returns |
|---|---|--|---------|
| <code>select object</code> | The object or objects to be operated upon. | document , documents selection-object | |
| <code>region list of anything</code> | A list of corners of the selection (in pixels). | | |
| [combination type <code>diminished/extended / intersected/replaced</code>] | The method to use to combine the new selection with the existing selection (default: replaced). | | |
| [feather amount <code>real</code>] | The feather amount (default: 0.0). | | |
| [antialiasing <code>boolean</code>] | Indicates whether to use antialiasing (default: <code>true</code>). | | |

select

Makes the path item the active or selected path item. (For Path Suite.)

| Parameters | What it is | Objects supported | Returns |
|-------------------------------|--------------------------|--|---------|
| <code>select path item</code> | The path item to select. | path item , path items | |

select all

Selects the entire image.

| Parameters | What it is | Objects supported | Returns |
|----------------------------------|---|--|---------|
| <code>select all document</code> | The document object or objects to be operated upon. | document , documents selection-object | |

select border

Selects the border of the selection.

| Parameters | What it is | Objects supported | Returns |
|---|---|----------------------------------|---------|
| <code>select border selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| <code>width real</code> | The width of the selection (unit value). | | |

similar

Grows the selection to include pixels throughout the image falling within the tolerance range.

| Parameters | What it is | Objects supported | Returns |
|---|---|----------------------------------|---------|
| <code>similar</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| <code>tolerance integer</code> | | | |
| <code>antialiasing</code> <code>boolean</code> | | | |

smooth

Cleans up stray pixels left inside or outside a color-based selection within the radius specified in pixels.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>smooth</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | <code>selection-object</code> | |
| <code>radius integer</code> | The sample radius in pixels (0 - 100). | | |

split channels

Splits the document's channels.

| Parameters | What it is | Objects supported | Returns |
|--|---|--|--------------------------|
| <code>split channels</code> <code>document</code> | The document object or objects to be operated upon. | <code>document</code> , <code>documents</code> | list of document objects |

store

Saves the selection as a channel.

| Parameters | What it is | Objects supported | Returns |
|--|---|----------------------------------|---------|
| <code>store</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| <code>into channel</code> | The channel to save the selection to. | | |
| [combination type <code>diminished/extended</code> <code>/</code> <code>intersected/replaced</code> <code>d</code>] | The method to use to add the selection to the existing contents of the channel (default: <code>replaced</code>). | | |

stroke

Strokes the selection.

| Parameters | What it is | Objects supported | Returns |
|---|---|----------------------------------|---------|
| <code>stroke</code> <code>selection-object</code> | The selection-object object or objects to be operated upon. | selection-object | |
| <code>using color anything</code> | The stroke color. | | |
| <code>width integer</code> | The stroke width (in pixels). | | |
| <code>[location</code> <code>center/inside/outside]</code> | The stroke placement (default: center). | | |
| <code>[blend mode</code> <code>behind mode/clear</code> <code>mode/</code> <code>color blend/color</code> <code>burn/</code> <code>color dodge/darken/</code> <code>difference/dissolve/</code> <code>exclusion/hard light/</code> <code>hard mix/hue blend/</code> <code>lighten/linear burn/</code> <code>linear dodge/</code> <code>linear</code> <code>light/luminosity/</code> <code>multiply/normal/overla</code> <code>y/pin light/</code> <code>saturation blend/</code> <code>screen/soft light/</code> <code>vivid light]</code> | The color blending mode to use (default: normal). | | |
| <code>[opacity integer]</code> | The opacity of the stroke (default: 100 as percent). | | |
| <code>[preserving</code> <code>transparency boolean]</code> | | | |

stroke path

Strokes the path with the specified information.

| Parameters | What it is | Objects supported | Returns |
|--|---|--|---------|
| <code>stroke path path item</code> | The path item object or objects to be operated upon. | path item , path items | |
| <code>[tool art history brush tool/ background eraser tool/ blur tool/brush tool/ burn tool/ clone stamp tool/ color replacement tool/ dodge tool/eraser tool/ healing brush tool/ history brush tool/ pattern stamp tool/ pencil tool/sharpen tool/ smudge tool/sponge tool]</code> | The tool to use when stroking the path. | | |
| <code>[simulate pressure boolean]</code> | Indicates whether to simulate the pressure when using the tool. | | |

translate

Moves a layer or selection the specified amount (in pixels) relative to its current position.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>translate layer or selection-object</code> | The object or objects to be operated upon. | art layer , art layers layer , layers layer set , layer sets selection-object | |
| [delta x real] | The horizontal transformation (unit value). | | |
| [delta y real] | The vertical transformation (unit value). | | |

translate boundary

Moves the selection relative to its current position.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>translate boundary</code> selection-object | The selection-object object or objects to be operated upon. | <u>selection-object</u> | |
| [delta x real] | The horizontal transformation (unit value). | | |
| [delta y real] | The vertical transformation (unit value). | | |

trap

Applies trapping to a CMYK document.

| Parameters | What it is | Objects supported | Returns |
|----------------------|---|--|---------|
| trap document | The document object or objects to be operated upon. | document , documents | |
| width integer | The trap width in pixels. | | |

trim

Trims the transparent area around the image on the specified sides of the canvas.

| Parameters | What it is | Objects supported | Returns |
|--|---|---|---------|
| <code>trim document</code> | The document object or objects to be operated upon. | document , documents | |
| [<code>basing trim on bottom right pixel/ top left pixel/ transparent pixels</code>] | The color of, or type of, pixels to base trim on (default: <code>top left pixel</code>). | | |
| [<code>top trim boolean</code>] | Indicates whether to trim away the top of document (default: <code>true</code>). | | |
| [<code>left trim boolean</code>] | Indicates whether to trim away the left of document (default: <code>true</code>). | | |
| [<code>bottom trim boolean</code>] | Indicates whether to trim away the bottom of document (default: <code>true</code>). | | |
| [<code>right trim boolean</code>] | Indicates whether to trim away the right of document (default: <code>true</code>). | | |

unlink

Unlinks the layer.

| Parameters | What it is | Objects supported | Returns |
|---------------------------|--|--|---------|
| <code>unlink layer</code> | The layer object or objects to be operated upon. | art layer , art layers layer , layers layer set , layer sets | |

web safe color

Finds the closest web safe color for a color.

| Parameters | What it is | Objects supported | Returns |
|---------------------------------|--------------------------|--|-----------|
| for color value | The color to be changed. | CMYK color gray color HSB color Lab color no color RGB color RGB hex color | RGB color |

Appendix A: Event ID Codes

The following table lists events and their four-character ID codes or string identifiers for use with the `notifier` object.

Note: Do not include single quotes (') with four-character IDs in your code. The single quotes are used in this table to illustrate the placement of required spaces in codes that do not contain four letters. However, string identifiers, which are longer than four characters, require double quotes in the code.

Tip: If you can't find the event you want to use for notification in this table, you can use `ScriptListener` to determine the event ID code. See the `ScriptListener` documentation in the Action Manager chapter of the *Photoshop CC 2015 Scripting Guide*.

| Event | 4-char ID or String |
|------------------|---------------------|
| 3DTransform | 'TdT ' |
| Average | 'Avrg' |
| ApplyStyle | 'ASty' |
| Assert | 'Asrt ' |
| AccentedEdges | 'AccE' |
| Add | 'Add ' |
| AddNoise | 'AdNs ' |
| AddTo | 'AddT' |
| Align | 'Algn' |
| All | 'All ' |
| AngledStrokes | 'AngS' |
| ApplyImage | 'AppI' |
| BasRelief | 'BsRl ' |
| Batch | 'Btch' |
| BatchFromDroplet | 'BtcF' |
| Blur | 'Blr ' |
| BlurMore | 'BlrM' |
| Border | 'Brdr' |
| Brightness | 'BrgC' |
| CanvasSize | 'CnvS' |
| ChalkCharcoal | 'ChlC' |
| ChannelMixer | 'ChnM' |

| Event | 4-char ID or String |
|---------------|--|
| Charcoal | 'Chrc ' |
| Chrome | 'Chrm ' |
| Clear | 'Cler ' |
| Close | 'Cls ' |
| Clouds | 'Clds ' |
| ColorBalance | 'ClrB' |
| ColorHalftone | 'ClrH' |
| ColorRange | 'ClrR' |
| ColoredPencil | 'ClrP' |
| ContactSheet | "0B71D221-F8CE-11d2-B21B-0008C75B322C" |
| ConteCrayon | 'CntC' |
| Contract | 'Cntc' |
| ConvertMode | 'CnvM' |
| Copy | 'copy' |
| CopyEffects | 'CpFX' |
| CopyMerged | 'CpyM' |
| CopyToLayer | 'CpTL' |
| Craquelure | 'Crql ' |
| CreateDroplet | 'CrtD' |
| Crop | 'Crop' |
| Crosshatch | 'Crsh ' |
| Crystallize | 'Crst ' |
| Curves | 'Crvs ' |
| Custom | 'Cstm' |
| Cut | 'cut ' |
| CutToLayer | 'CtTL' |
| Cutout | 'Ct ' |
| DarkStrokes | 'DrkS' |
| DeInterlace | 'Dntr' |
| DefinePattern | 'DfnP' |
| Defringe | 'Dfrg' |
| Delete | 'Dlt ' |
| Desaturate | 'Dstt ' |

| Event | 4-char ID or String |
|------------------------|--|
| Deselect | 'Dslc' |
| Despeckle | 'Dspc' |
| DifferenceClouds | 'DrfC' |
| Diffuse | 'Dfs ' |
| DiffuseGlow | 'DfsG' |
| DisableLayerFX | 'dlfx' |
| Displace | 'Dspl' |
| Distribute | 'Dstr' |
| Draw | 'Draw' |
| DryBrush | 'DryB' |
| Duplicate | 'Dplc' |
| DustAndScratches | 'DstS' |
| Emboss | 'Embs' |
| Equalize | 'Eqlz' |
| Exchange | 'Exch' |
| Expand | 'Expn' |
| Export | 'Expr' |
| JumpTo | 'Jpto' |
| ExportTransparentImage | "02879e00-cb66-11d1-bc43-0060b0a13dc4" |
| Extrude | 'Extr' |
| Facet | 'Fct ' |
| Fade | 'Fade' |
| Feather | 'Fthr' |
| Fibers | 'Fbrs' |
| Fill | 'Fl ' |
| FilmGrain | 'FlmG' |
| Filter | 'Fltr' |
| FindEdges | 'FndE' |
| FitImage | "3caa3434-cb67-11d1-bc43-0060b0a13dc4" |
| FlattenImage | 'FltI' |
| Flip | 'Flip' |
| Fragment | 'Frgm' |

| Event | 4-char ID or String |
|------------------|---------------------|
| Fresco | 'Frsc ' |
| GaussianBlur | 'GsnB ' |
| Get | 'getd ' |
| Glass | 'Gls ' |
| GlowingEdges | 'GlwE ' |
| Gradient | 'Grdn ' |
| GradientMap | 'GrMp ' |
| Grain | 'Grn ' |
| GraphicPen | 'GraP ' |
| Group | 'GrpL ' |
| Grow | 'Grow ' |
| HalftoneScreen | 'Hlfs ' |
| Hide | 'Hd ' |
| HighPass | 'HghP ' |
| HSBHSL | 'HsbP ' |
| HueSaturation | 'HStr ' |
| ImageSize | 'ImgS ' |
| Import | 'Impr ' |
| InkOutlines | 'InkO ' |
| Intersect | 'Intr ' |
| IntersectWith | 'IntW ' |
| Inverse | 'Invs ' |
| Invert | 'Invr ' |
| LensFlare | 'LnsF ' |
| Levels | 'Lvls ' |
| LightingEffects | 'LghE ' |
| Link | 'Lnk ' |
| Make | 'Mk ' |
| Maximum | 'Mxm ' |
| Median | 'Mdn ' |
| MergeLayers | 'Mrg2 ' |
| MergeLayersOld | 'MrgL ' |
| MergeSpotChannel | 'MSpt ' |

| Event | 4-char ID or String |
|----------------|--|
| MergeVisible | 'MrgV' |
| Mezzotint | 'Mztn' |
| Minimum | 'Mnm ' |
| ModeChange | "8cba8cd6-cb66-11d1-bc43-0060b0a13dc4" |
| Mosaic | 'Msc ' |
| Mosaic_PLUGIN | 'MscT' |
| MotionBlur | 'MtnB' |
| Move | 'move' |
| NTSCColors | 'NTSC' |
| NeonGlow | 'NGLw' |
| Next | 'Nxt ' |
| NotePaper | 'NtPr' |
| Notify | 'Ntfy' |
| Null | typeNull |
| OceanRipple | 'OcnR' |
| Offset | 'Ofst' |
| Open | 'Opn ' |
| Paint | 'Pnt ' |
| PaintDaubs | 'PntD' |
| PaletteKnife | 'PltK' |
| Paste | 'past' |
| PasteEffects | 'PaFX' |
| PasteInto | 'PstI' |
| PasteOutside | 'PstO' |
| Patchwork | 'Ptch' |
| Photocopy | 'Phtc' |
| PicturePackage | "4C1ABF40-DD82-11d2-B20F-0008C75B322C" |
| Pinch | 'Pnch' |
| Place | 'Plc ' |
| Plaster | 'Plst' |
| PlasticWrap | 'PlsW' |
| Play | 'Ply ' |

| Event | 4-char ID or String |
|--------------------|--|
| Pointillize | 'Pntl ' |
| Polar | 'Plr ' |
| PosterEdges | 'PstE' |
| Posterize | 'Pstr' |
| Previous | 'Prvs' |
| Print | 'Prnt ' |
| ProfileToProfile | 'PrfT' |
| Purge | 'Prge' |
| Quit | 'quit' |
| RadialBlur | 'RdlB' |
| Rasterize | 'Rstr' |
| RasterizeTypeSheet | 'RstT' |
| RemoveBlackMatte | 'RmvB' |
| RemoveLayerMask | 'RmvL' |
| RemoveWhiteMatte | 'RmvW' |
| Rename | 'Rnm ' |
| ReplaceColor | 'RplC' |
| Reset | 'Rset ' |
| ResizeImage | "1333cf0c-cb67-11d1-bc43-0060b0a13dc4" |
| Reticulation | 'Rtcl ' |
| Revert | 'Rvrt ' |
| Ripple | 'Rple' |
| Rotate | 'Rtte' |
| RoughPastels | 'RghP' |
| Save | 'save' |
| Select | 'slct ' |
| SelectiveColor | 'SlcC' |
| Set | 'setd' |
| SharpenEdges | 'ShrE' |
| Sharpen | 'Shrp' |
| SharpenMore | 'ShrM' |
| Shear | 'Shr ' |
| Show | 'Shw ' |

| Event | 4-char ID or String |
|--------------------|---------------------|
| Similar | 'Smlr' |
| SmartBlur | 'SmrB' |
| Smooth | 'Smth' |
| SmudgeStick | 'SmdS' |
| Solarize | 'Slrz' |
| Spatter | 'Spt ' |
| Spherize | 'Sphr' |
| SplitChannels | 'SplC' |
| Sponge | 'Spng' |
| SprayedStrokes | 'SprS' |
| StainedGlass | 'StnG' |
| Stamp | 'Stmp' |
| Stop | 'Stop' |
| Stroke | 'Strk' |
| Subtract | 'Sbtr' |
| SubtractFrom | 'SbtF' |
| Sumie | 'Smie' |
| TakeMergedSnapshot | 'TkMr' |
| TakeSnapshot | 'TkSn' |
| TextureFill | 'TxtF' |
| Texturizer | 'Txtz' |
| Threshold | 'Thrs' |
| Tiles | 'Tls ' |
| TornEdges | 'TrnE' |
| TraceContour | 'TrcC' |
| Transform | 'Trnf' |
| Trap | 'Trap' |
| Twirl | 'Twrl' |
| Underpainting | 'Undr' |
| Undo | 'undo' |
| Ungroup | 'Ungr' |
| Unlink | 'Unlk' |
| UnsharpMask | 'UnsM' |

| Event | 4-char ID or String |
|------------|---------------------|
| Variations | 'Vrtn' |
| Wait | 'Wait' |
| WaterPaper | 'WtrP' |
| Watercolor | 'Wtrc' |
| Wave | 'Wave' |
| Wind | 'Wnd ' |
| ZigZag | 'ZgZg' |
| BackLight | 'BacL' |
| FillFlash | 'File' |
| ColorCast | 'ColE' |

Index

A

- actions
 - playing 200
- Add Noise filter 10
- adjust command
 - options for 11
 - using 180
- adjustment options 11
- anchor points 111, 112
- annotations 171, 217
- application
 - activating 179
 - bringing to front 12
 - checking if feature enabled 210
 - colors 12
 - preference settings 13
 - properties 12
 - quitting 231
 - version 13
- art layers
 - See layers
- auto kerning 161
- auto leading 161
- average filter 20

B

- background color
 - application 12
 - as fill 54
 - galleries 65
 - RGB documents 36
- background layer 16, 53
- baseline shift 161
- Batch command 21
- batch command 184
- beep 147
- bitmap documents
 - opening 226
 - saving 27
 - specifying options for 23
- bitmap images See bitmap documents
- black and white images 170
- Blur filter 25
- blur filters
 - Blur 25
 - Blur More 26
 - Gaussian Blur 71
 - Glass 74
 - Lens Blur 93
 - Motion Blur 102
 - Radial Blur 136
 - Smart Blur 156
- Blur More filter 26
- BMP documents
 - saving 61, 144
- BMP documents See bitmap documents

- brightness
 - equalizing 60
 - specifying options 29

C

- caches
 - levels 147
 - purging 230
- camera raw documents
 - opening 30, 108, 226
- canvas
 - flipping 215
 - resizing 237
 - trimming 256
- captions
 - contact sheets 40
 - document 82
 - gallery images 66
 - gallery thumbnails 70
 - picture packages 127
- change mode command 185
 - indexed mode 80
 - options 32
- channels
 - activating 53
 - colors 33
 - creating 222
 - current 53
 - displaying in color 147
 - loading from 221
 - merging 224
 - mixing 101
 - specifying type 33
 - splitting 249
- clipboard commands 179
- clipping paths
 - defining 109
 - from path 223
 - from text 189
- close command 186
- Clouds filter 35
- CMYK color 36
- color picker 147
- color samplers 38
 - creating 222
- colors
 - adjusting 180
 - balancing 37
 - changing mode 185
 - channels 33
 - comparing 204
 - converting 189
 - correcting 37
 - inverting 84
 - modifying 146
 - none 102
 - process colors 146
 - text 166
 - web save 258

- column gutter 147
- commands
 - clipboard 179
 - See individual commands
- CompuServe GIF documents
 - opening 226
- Compuserve GIF documents
 - saving 72
- contact sheets
 - columns 40
 - dimensions 41
 - rows 40
- contrast
 - adjusting 180
 - automatic 18
 - specifying options 29
- copying 190
- copyright
 - document 82
 - gallery images 66
- count items 42
 - creating 222
- counting 191
- credits
 - documents 82
 - gallery images 66
 - gallery thumbnails 70
 - picture packages 127
- cropping 194
- cursors 149
- curved segments (paths) 112, 158, 159
- curves
 - adjusting 43, 180
 - in paths 112
- Custom filter 44

D

- DCS 1.0 documents
 - opening 120, 226
 - saving 61, 144
- DCS 2.0 documents
 - opening 226
 - saving 61, 122, 144
- De-Interlace filter 45
- delete command 197
- delete measurements 198
- deleting, objects 197
- desaturate command 46
- deselect command
 - for documents 199
 - for path item 199
 - for selection-object 199
- Despeckle filter 47
- dialogs
 - display modes 12
 - suppressing 22
 - types 12
- DICOM format documents
 - opening 48, 108

- Difference Clouds filter 49
- Diffuse Glow filter 50
- Displace filter 51
- distort filters
 - Diffuse Glow 50
 - Displace 51
 - Ocean Ripple 106
 - Pinch 129
 - Polar Coordinates 132
 - Ripple 141
 - Shear 155
 - Spherize 157
 - Twirl 173
 - Wave 175
 - Zigzag 177
- documents
 - closing 186
 - color samplers 52
 - converting 189
 - creating 222
 - cropping 194
 - current 12
 - duplicating 202
 - elements of 52
 - exporting 207
 - flattening 214
 - flipping 215
 - loading 221
 - location 53
 - measurement scale 54
 - metadata 54
 - opening 226
 - opening with Photoshop dialog box 228
 - printing 229
 - saving 186, 241
 - size 53–54
 - updating automatically 147
- duplicating 202, 203
- Dust & Scratches filter 56

E

- elements 9
- EPS documents
 - opening 57, 108, 226
 - saving 58, 61, 144
- equalizing 60
- event IDs
 - using ScriptListener to find 259
- event-handler 104
- EXIF 82
- exporting
 - documents 207
 - to Illustrator 79, 198, 207, 208, 234
 - to Web 142, 198, 207, 208, 234
- extensions 147

F

- feature enabled command 210
- file extensions 147

filter command 10, 62
Also see individual filters
 filters *See individual filters*
 filters, applying 213
 filters *See individual filters*
 fonts
 Asian 150
 English names 150
 family 63
 PostScript name 63
 foreground color 12

G

galleries
 banner options 64
 color options 65
 layout 68
 mage options 66
 options 68
 security 69
 thumbnail options 70
 Gaussian Blur filter 71
 GIF documents
 saving 61, 72, 144
 Glass filter 74
 gray color 75
 grids 148
 guides 148

H

hanging punctuation 166
 headline 82
 hex color 140
 High Pass filter 76
 highlights
 adjusting 37
 brightness of 93
 threshold 93
 histograms
 composite document 53
 history states
 activating 53
 number to keep 149
 properties 77
 HSB color 78
 hyphenation 163

I

image pyramid 171
 images
 black and white 170
 compressing 171
 inverting colors 84
 resizing 237
 interpolation 148

J

JavaScript, executing from Applescript 201

JPEG documents
 opening 226
 saving 61, 85, 144
 justification 163

K

kerning 161
 keyboard behavior 149
 keywords 82

L

Lab color 86
 layer comps
 applying 181
 creating 222
 options 89
 recapturing 233
 resetting 236
 layer sets
 creating 222
 locking contents 90
 layers
 activating 53
 blend mode 15
 creating 222
 linked 15, 16
 linking 87, 220
 locking contents 15, 87
 making visible 15
 merging 224
 rasterizing 232
 sample code 17
 styles 182
 type of 16
 unlinking 257
 leading 161
 left direction points 111, 112
 Lens Blur filter 93
 Lens Flare filter 95
 levels
 adjusting 96, 180
 automatic 19
 ligatures 164
 linking 220
 links
 active 65
 visited 65
 load command
 for documents 221
 for selection-object 221

M

Maximum filter 97, 100
 Median Noise filter 99
 memory, available 12
 merging
 channels 224
 layers 224

metadata 54, 82, 176
midtones 37
Minimum filter 100
Motion Blur filter 102
move command 225

N

notifier object 104
notifiers
 creating 222
 event IDs 259
NTSC colors filter 105

O

objects
 moving 225
 rotating 239
 scaling 244
Ocean Ripple filter 106
Offset filter 107
opacity
 channels 33
 fill (layers) 16
 gamut warning 148
 layer sets 91
 layers 16, 88
 picture packages 127
open command 108
optimizing 142
other filters
 Custom 44
 High Pass 76
 Maximum 97
 Minimum 100

P

paragraphs
 spacing 166
 text 163
pasting 227
path items *See* paths
path points
 defined 112
 kind of 111
path segments 112, 158, 159
paths
 closing 158
 creating 112, 222
 deselecting 199
 exporting to Illustrator 79
 filling 211
 path type 109
 retrieving information 111
 selecting 245
 stroking 251
PDF documents
 opening 108, 113, 226
 saving 61, 115, 144

PDF presentations
 creating 192
 formatting 134
 looping 134
 transition type 135
Photo CD documents
 opening 108, 226
Photo CD documents, opening 118
photo filter adjustment 119
Photoshop documents
 maximizing compatibility 149
 opening 226
 saving 61, 124, 144
Photoshop open dialog command 228
PICT files
 opening 226
 saving 125, 144
PICT resource documents
 opening 226
 saving 126, 144
picture packages 127
Pinch filter 129
Pixar documents
 opening 226
 saving 130, 144
plugins 147
PNG documents
 opening 226
 saving 131, 144
point size 149
point text 163
Polar Coordinates filter 132
posterizing 133
PostScript fonts 63
preferences 147
previewing 148
printing 229
properties 9
property
 measurementLog 13
PSD documents
 maximizing compatibility 149
 saving 124
purging 230

Q

quick mask mode 54

R

Radial Blur filter 136
rasterizing 232
raw format documents
 opening 108, 137, 138
 saving 144
refresh command 235
RGB colors
 defining 139
 hex colors 140
right direction points 111, 112

Ripple filter 141
ruler units 149

S

save command 144, 232
 Also see individual document formats
Script Events Manager 104
scripting build date 13
scripting version 13
select command
 for document 245
 for path item 245
 for selection-object 245
selections 145
 clearing 186
 contracting 188
 creating 194
 deselecting 199
 expanding 206
 feathering 209
 filling 211
 growing 216
 inverting 219
 loading 221
 selecting 245
 storing as channel 250
 stroking 251
selective colors 146
settings 147
SGI RGB documents
 saving 144, 151
shadows
 adjusting 37
 camera raw documents 31
Sharpen Edges filter 153
Sharpen filter 152
sharpen filters
 Sharpen 152
 Sharpen Edges 153
 Sharpen More 154
 Unsharp Mask 174
Sharpen More filter 154
Shear filter 155
Smart Blur filter 156
smart quotes 150
smoothing 248
snapshot 77
Spherize filter 157
straight segments (paths) 112, 158, 159
strike thru 166

T

Targa documents
 saving 144, 160
text
 coloring 166
 contents 161
 converting to path 189
 indenting 164

 kerning 161
 kind 163
 orientation 167
 picture package 127
text composer 167
text layers
 content 16
 creating 16
Texture Fill filter 169
threshold
 adjusting 180
threshold adjustments 170
thumbnails
 gallery images 70
 Mac OS 149
 Windows 150
TIFF documents
 opening 226
 saving 144, 171
 saving layers in 147
trapping 255
trimming 256
Twirl filter 173
type units 150

U

units 149, 150
Unsharp Mask filter 174
urgency 83

V

video alpha 150
video filters
 De-Interlace 45
 NTSC colors 105
visibility
 channels 33
 layer sets 91
 layers 16, 88
visible layers
 merging 224

W

warp 167
Wave filter 175
Web photo galleries
 See galleries
work paths 109
 creating 194
 creating from selection 223

X

XML 176
XMP metadata 176

Z

Zigzag filter 177

