## PowerPoint 2004 AppleScript Reference

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# Using the PowerPoint Dictionary 

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## About the PowerPoint AppleScript Dictionary

The Microsoft PowerPoint AppleScript Dictionary provides comprehensive access to the classes and commands you need for programmatically controlling PowerPoint by using AppleScript. The PowerPoint AppleScript Dictionary is based on the Visual Basic object model for PowerPoint, and as such its terminology and syntax closely mirror the terminology and syntax used in Visual Basic. As a result of this close relationship with Visual Basic, the PowerPoint AppleScript Dictionary might appear more complex and less "English-like" than other AppleScript Dictionaries.

## Using classes and commands

Classes and commands in the PowerPoint AppleScript Dictionary often have many properties and parameters. Many of these properties and parameters are represented by enumerations - or lists of constants rather than text or numbers or Boolean operators. These enumerations use many of the same words as their parameters or properties and are usually descriptive of what they represent. Because of the nature of the AppleScript language and the complexity of the underlying object model, expressions containing several properties and parameters can be very long and often look confusing. In such cases, it is helpful to use parentheses to separate out one property from another to make your scripts easier to read. Additionally, you will find that the PowerPoint object model is very deep, requiring several layers to access certain objects. You might find it helpful to use variables to store these objects and reduce the complexity of your script.

As in other applications, optional command parameters are denoted in the dictionary by square brackets [ ]. Class properties always have default values, which means that when you create new objects it is not necessary to supply values for all of the properties. Properties denoted by [r/o] are read-only and cannot be set once an object exists. However, when you use the make command to create new objects, most read-only properties can be set by using the with properties clause. For more information about the properties available for various objects, see the object's entry in the Dictionary Reference portion of this guide.

## Working with shapes (drawing objects)

Shapes, or drawing objects, are represented by the shape object. Shapes on slides are numbered sequentially, regardless of the shape type. For example, if a slide has a text box, a place holder and an AutoShape, you can refer to those shapes as follows:

```
text box 1 of slide 1 of active presentation
place holder 2 of slide 1 of active presentation
shape 3 of slide 1 of active presentation
```


## Setting properties for a shape

Many formatting properties of shapes aren't set by properties that apply directly to the shape object. Instead, related shape attributes are grouped under secondary objects, such as the fill format object, which contains all the properties that relate to the shape's fill, or the line format object, which contains all the properties that are unique to the border around the object. To set properties for a shape, you must first return the object that represents the set of related shape attributes and then set properties of that returned object. For example, you use the fill property to return the fill format object, and then you set the fore color property of the fill format object to set the fill foreground color for the specified shape, as shown in the following example.

```
set myDocument to slide 1 of active presentation
set fore color of fill of shape 1 of myDocument to ({255, 0, 0} as RGB color)
```


## Applying a property or command to several shapes at the same time

In the user interface, you can perform some operations with several shapes selected; for example, you can select several shapes and set all their individual fills at once. There are other operations you can perform only with a single shape selected; for example, you can edit only the text in a shape if a single shape is selected.

If you can perform an operation on multiple selected shapes in the user interface at the same time, you can often do the programmatic equivalent by applying the appropriate properties and commands to the shapes list. The following example applies a gradient fill to all of the shapes on slide 1 of the presentation.

```
set myDocument to slide 1 of active presentation
set myShapes to (get shapes of myDocument)
preset gradient myShapes style horizontal gradient variant 1 ᄀ
    gradient type gradient brass
```

Even if you cannot perform an operation on several shapes in the user interface at the same time by selecting them and then using a command, you can perform the equivalent action programmatically by looping through the shapes list that contains the shapes you want to work with, and applying the appropriate properties and commands to the individual shape objects in the list. The following example loops through all the shapes on myDocument and adds text to each shape that is an AutoShape.

```
set myDocument to slide 1 of active presentation
repeat with sh in (get shapes of myDocument)
    if shape type of sh is shape type auto then
        insert the text " (version 1)" at the end of ᄀ
        text range of text frame of sh
    end if
end repeat
```


## Microsoft Office Suite

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## Microsoft Office Suite Classes

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Class: assistant

## Plural

## assistants

## Elements

## balloon

Represents the Microsoft Office Assistant.
Use the office assistant property of the application class to return the assistant. Only one assistant object can be active at a time. Use the visible property to display the Assistant.
By default, the Office Assistant is off. The default Assistant is Max. To select a different Assistant programatically, use the file name property.

The following example turns on, displays, and animates the Assistant.
set assistant on of office assistant to true
set visible of office assistant to true
set animation of office assistant to greeting

## Properties

animation
Returns or sets an animation action for the Office Assistant. When this property is applied to the assistant object, the Assistant is animated immediately (if it is visible). When this property is applied to the balloon object, the Assistant is animated only while the balloon is displayed.
Can be one of the following constants:

```
appear idle
begin speaking
character success major
checking something
disappear
empty trash
gesture down
gesture left
gesture right look up left
gesture up look up right
get artsy printing
get attention major saving
get attention minor searching
get techy
get wizardy
goodbye
listens to computer
look down
look down left
look down right
look left
look right
look up
sending mail
thinking
working at something
greeting writing noting something
```

assist with help
True if the Office Assistant appears when the user presses the HELP key to display Help. Read/write.
If this property is set to False, the Help window appears instead of the Office Assistant.
This property corresponds to the Respond to HELP key option (Office Assistant dialog box, Options tab).
assist with wizards
True if the Office Assistant provides online Help with wizards. Read/write.
This property corresponds to the Help with wizards option (Office Assistant dialog box, Options tab).
assistant item
Returns the text associated with the Office Assistant. Read-only.
assistant on
True if the Office Assistant is enabled. Read/write.
balloon error
Returns a value that indicates the last recorded balloon error. Read-only.
Can be one of the following:
bad picture The balloon contains a graphic that couldn't be displayed because the file reference doesn't exist or because the graphic isn't a valid PICT file.
bad reference The balloon contains an unrecognized or unsupported reference.
buttonless modal The balloon you attempted to display is modal, but it contains no buttons. The balloon won't be shown because it can't be dismissed.
button modeless The balloon you attempted to display is modeless, contains no buttons, and has no procedure assigned to the callback property. The balloon won't be shown because a callback procedure is required for modeless balloons.
none No error was encountered.
bad character The balloon contains an ASCII control character other than CR or LF and greater than 32 .
out of memory The balloon won't appear because there is insufficient memory.
too big The balloon is too big to appear on the screen.
other The balloon won't appear because some other error occurred; for example, another modal balloon is already active.
feature tips
True if the Office Assistant provides information about using application features more effectively. Read/write.
This property corresponds to the Using features more effectively option (Office Assistant dialog box, Options tab).
file name
Returns or sets the name of the file for the active Office Assistant. Read/write.
The Office Assistant files are installed in the Microsoft Office 2004/Office/Assistants folder.

## keyboard shortcut tips

True if the Office Assistant displays Help about keyboard shortcuts. Read/write.
This property corresponds to the Keyboard shortcuts option (Office Assistant dialog box, Options tab).

## left position

Returns the horizontal position of the Office Assistant window (in points) relative to the screen.
mouse tips
True if the Office Assistant provides suggestions for using the mouse effectively. Read/write.
This property corresponds to the Using the mouse more effectively option (Office Assistant dialog box, Options tab).
move when in the way
True if the Office Assistant window automatically moves when it's in the way of the user's work area. For example, the Office Assistant will move if it's in the way of dragging or dropping or in the way of keystroke entries. Read/write.
This property corresponds to the Move when in the way option (Office Assistant dialog box, Options tab).
name
Returns the name of the Office Assistant currently in use. Read-only.
sounds
True if the Office Assistant produces the sounds that correspond to animations. Read/write.
If a sound card is not installed, this property has no effect.
tip of the day
True if the Office Assistant displays a special tip each time the Office application is opened.
Read/write.
This property corresponds to the Show the Tip of the Day at startup option (Office Assistant dialog box, Options tab).
top
Returns the vertical position of the Office Assistant window (in points) relative to the screen.. visible

True if the Office Assistant is visible. Read-write.

## Class: balloon checkbox

Represents a check box in the Office Assistant balloon.
Use balloon checkbox index, where index is a number from 1 through 5, to return a single balloon checkbox object. There can be up to five check boxes in one balloon; each check box appears when a value is assigned to its checkbox text property.

## Remarks

Balloon check boxes display the user's choices until the user dismisses the balloon. To record the user's choice as soon as the user clicks the button beside the label, see the topic on balloon labels.

## Microsoft Office Suite

## Properties

balloon checkbox item
Returns the text associated with the balloon check box. Read-only.
checkbox text
Returns or sets the text displayed next to a check box in the Office Assistant balloon.
Read/write.
checked
True if the specified check box in the Office Assistant balloon is checked. Read/write. name

Returns the name of the check box label. Read-only.
Class: balloon

## Plural

balloons

## Elements

## balloon checkbox

## balloon label

Represents the balloon in which the Office Assistant displays information. A balloon can contain controls such as check boxes and labels.

Only one balloon can be visible at a time. However, it's possible to define several balloons and display any one of them when needed. For more information, see "Defining and Reusing Balloons" later in this topic.

To make the specified balloon visible, use the show balloon command. Use the call back property to run procedures based on selections from modeless balloons (balloons that remain visible while a user works in the application).

The following example creates a balloon that contains tips for saving entered data.

```
set newbal to make new balloon of office assistant
set balloon type of newbal to bullets
set icon of newbal to icon tip
set balloon button of newbal to buttons ok cancel
set heading of newbal to "Tips for Saving Information."
repeat 3 times
    make new balloon label at the beginning of newbal
end repeat
set labe1 text of balloon labe1 1 of newbal to "Save your work often."
set label text of balloon label 2 of newbal to "Install a surge protector."
set label text of balloon label 3 of newbal to "Exit your application properly."
show balloon newbal
```


## Defining and Reusing Balloons

You can reuse balloon objects you've already created by assigning the object to a variable and displaying the variable when you need it. This example defines ba11oon1, ba11oon2, and ba11oon3 separately so they can be reused.

```
set balloon1 to make new balloon of office assistant
```

set heading of balloon1 to "First balloon"

Set balloon2 to make new balloon of office assistant
set heading of balloon2 to "Second balloon"

Set balloon3 to make new balloon of office assistant
set heading of balloon3 to "Third balloon"
show balloon balloon1
show balloon balloon2
show balloon balloon3
Alternatively, instead of using separate variables, you can place the balloon object into an array.

## Properties

balloon button
Returns or sets the type of button displayed at the bottom of the Office Assistant balloon. When you create a new balloon, this property is initially set to OK. Read/write.

Can be one of the following:
buttons abort retry ignore buttons back close buttons back next close buttons back next snooze button cancel buttons next close button none button ok
buttons ok cancel buttons retry cancel buttons search close buttons tips options close buttons yes all no cancel buttons yes no cancel
buttons yes no
balloon mode
Returns or sets the type of balloon displayed. Read/write.
Can be one of the following:

- auto down balloon - Balloon is instantly dismissed when the user clicks anywhere on the screen.
- modal balloon - This is the initial default setting. User must dismiss the balloon before he or she can return to working in the application.
- modeless balloon - User can work in the application while the balloon is visible. When this value is used, a value for the call back callback property is also required. When you create a new balloon, this property is initially set to modal balloon.
balloon text
Returns or sets the text displayed after the heading but before the labels or check boxes in the Office Assistant balloon. Read/write.
You can specify a graphic to display by using the following syntax:
\{type location sizing_factor\},
where
type is pict (Macintosh PICT file).
location is the resource id or the path and file name.
sizing_factor specifies the width of the pict.
balloon type
Returns or sets the type of balloon the Office Assistant uses. Read/write.
Can be one of the following:
- buttons - This is the initial default setting.
- bullets
- numbers
call back
Sets the name of the procedure to run from a modeless balloon. Read/write String.
The procedure you specify for the call back property must be written to receive three arguments:
- The balloon object that called the procedure
- The value of the button the user clicked
- An integer that uniquely identifies the balloon that called the procedure
heading
Returns or sets the heading that appears in the Office Assistant balloon. Read/write.
You can specify a graphic to display in the balloon heading by using the following syntax:
\{type location sizing_factor\}
where
type is pict (Macintosh PICT file).
location is the resource id or the path and file name
sizing_factor specifies the width of the pict.
icon
Returns or sets the type of icon that appears in the upper-left portion of the Office Assistant balloon. Read/write.

Can be one of the following:

- icon alert
- icon alert critical
- icon alert info
- icon alert warning
- icon application
- icon none
- icon tip
name
Returns the name of the balloon. Read-only.


## Class: balloon labe1

Represents a label in the Office Assistant balloon.
Use balloon label index, where index is a number from 1 through 5 , to return a balloon label object. There can be up to five labels on one balloon; each label appears when a value is assigned to its label text property.

## Remarks

Balloon labels record the user's choice as soon as the user clicks the button beside the label. To display the user's choices until the user dismisses the balloon, see the topic on balloon check boxes.

Properties
balloon label item
Returns the text associated with the balloon label. Read-only.
label text
Returns or sets the text displayed next to a label in the Office Assistant balloon. Read/write.

## Remarks

You can specify a graphic to display by using the following syntax:
\{type location sizing_factor\},
where
type is pict (Macintosh PICT file)
location is the resource id or the path and file name and sizing_factor specifies the width of the pict
name
Returns the name of the balloon label. Read-only.

## Class: command bar

## Plural

command bars

## Elements

```
command bar control
```

Represents a command bar in an Office application.
Use command bar index, where index is the name or index number of a command bar, to return a command bar object. The following example steps through the collection of command bars to find the command bar named "Forms." If it finds this command bar, the example makes it visible and protects its docking state. In this example, the variable bars represents the list of all command bars, and the variable $c b$ represents a command bar object.

```
set foundFlag to false
set bars to command bars
repeat with cb in bars
    repeat 1 times
        if name of cb is "Forms" then
                set protection of cb to no change dock
                set visible of cb to true
                set foundFlag to true
        end if
        exit repeat
        set end of bars to cb
    end repeat
end repeat
if foundFlag is false then
    display dialog "There is no Forms command bar."
end if
```

You can use a name or index number to specify a menu bar or toolbar in the list of available menu bars and toolbars in the Office application. However, you must use a name to specify a menu, shortcut menu, or submenu (all of which are represented by command bar objects). This example adds a new menu item to the bottom of the Tools menu. When a user clicks the new menu item, it runs the procedure named "qtrReport."

```
set newItem to make new command bar button at command bar "Tools"
set begin group of newItem to True
set caption of newItem to "Make Report"
set face id of newItem to 0
set OnAction of newItem to "qtrReport"
```

If two or more custom menus or submenus have the same name, command bar index returns the first one.

## Properties

bar position
Returns or sets the position of a command bar. Read/write.
Can be one of the following:

- bar left
- bar top
- bar right
- bar bottom
- bar floating
- bar pop up
- bar menu
bar type
Returns the type of command bar. Read-only.
Can be one of the following:
- normal command bar
- menubar command bar
- popup command bar
built in
True if the specified command bar or command bar control is a built-in command bar or control of the container application. False if it's a custom command bar or control. Read-only.
context
Returns or sets a string that determines where a command bar will be saved. The string is defined and interpreted by the application. Read/write.
You can set the context property only for custom command bars. This property will fail if the application doesn't recognize the context string, or if the application doesn't support changing context strings programmatically.
enabled
True if the specified command bar or command bar control is enabled. Read/write.
For command bars, setting this property to True causes the name of the command bar to appear in the list of available command bars.

For built-in controls, setting this property to True causes the application to determine the state of the control. Setting this property to False forces the control to be disabled.
entry index
Returns the index number for a command bar. Read-only.
The position of the first command bar control is 1 . Separators are not counted.
height
Returns or sets the height (in pixels) of a command bar or command bar control. Read/write.
An error will occur if you attempt to set the height property for a command bar that isn't in a resizable state (that is, if it's docked or protected from resizing).
left position
Returns or sets the distance (in pixels) from the left edge of the specified command bar or command bar control to the left edge of the screen. Returns the distance from the left side of the docking area. Read/write.

## local name

Returns the name of a built-in command bar as it's displayed in the language version of the container application, or returns or sets the name of a custom command bar. Read/write.
Note If you attempt to set this property for a built-in command bar, an error occurs.
The local name of a built-in command bar is displayed in the title bar (when the command bar isn't docked) and in the list of available command bars, wherever that list is displayed in the container application.

If you change the value of the local name property for a custom command bar, the value of name changes as well, and vice versa.
name
Returns or sets the name of the specified object. Read/write.
The local name of a built-in command bar is displayed in the title bar (when the command bar isn't docked) and in the list of available command bars, wherever that list is displayed in the container application.
For a built-in command bar, the name property returns the command bar's U.S. English name. To return the localized name, use the local name property.
If you change the value of the name property for a custom command bar, the value of local name changes as well, and vice versa.
protection
Returns or sets the way a command bar is protected from user customization. Read/write.
Can be one of or a sum of the following:

- no protection
- no customize
- no resize
- no move
- no change visible
- no change dock
- no vertical dock
- no horizontal dock
row index
Returns or sets the docking order of a command bar in relation to other command bars in the same docking area. Can be an integer greater than zero.
Several command bars can share the same row index, and command bars with lower numbers are docked first. If two or more command bars share the same row index, the command bar most recently assigned will be displayed first in its group.
top
Returns or sets the distance (in pixels) from the top edge of the specified command bar or command bar control to the top edge of the screen. For docked command bars, this property returns or sets the distance from the command bar to the top of the docking area. Read/write.
visible
True if a command bar or command bar control is visible. Read/write.
width
Returns or sets the width (in pixels) of the specified command bar or command bar control. Read/write.


## Class: command bar button

Plural
command bar buttons
Represents a button control on a command bar.
Use command bar control index, where index is the index number of the control, to return a command bar button object. (The control type property of the control must be control button.)

Properties
button face is default
True if the face of the specified command bar button control is its original built-in face. This property can only be set to True, which will reset the face to the built-in face. Read/write.
button state
Returns or sets the appearance of a command bar button control. Can be one of the following

- button state up
- button state down
- button state unset
button style
Returns or sets the way a command bar button control is displayed. Read/write.
Can be one of the following:
- button automatic
- button icon
- button caption
- button icon and caption
face id
Returns or sets the ID number for the face of a command bar button control. Read/write.
The face id property dictates the look, but not the function, of a command bar button. To determine the function of the button, use the id property of the command bar control object.

The value of the face id property for a command bar button with a custom face is 0 (zero).
shortcut text
Returns or sets the shortcut key text displayed next to a button control when the button appears on a menu, submenu, or shortcut menu. Read/write.

You can set this property only for command bar buttons that contain an on-action macro.

## Class: command bar combobox

## Plural

command bar comboboxes
Represents a combo box control on a command bar.
Use command bar control index, where index is the index number of the control, to return a command bar combobox object. (The control type property of the control must be control edit, control dropdown, control combobox, button dropdown, split dropdown, OCX dropdown, graphic combo, or graphic dropdown.)

The following example creates a new command bar combobox and adjusts the size of the control on the command bar named "Custom," and then it adds two items to the combo box.

```
set newCombo to make new command bar control at command bar "Custom" with ᄀ
    properties {control type:control combobox}
set drop down lines of newCombo to 3
set drop down width of newCombo to 90
set list index of newCombo to 0
add item to combobox newCombo combobox item "First Item" entry index 1
add item to combobox newCombo combobox item "Second Item" entry index 2
Properties
combobox style
```

Returns or sets the way a command bar combo box control is displayed. Read/write.
Can be either of the following:

- combobox style label
- combobox style normal
combobox text
Returns or sets the text in the display or edit portion of the command bar combo box control. Read/write.
drop down lines
Returns or sets the number of lines in the specified command bar combo box control. The combo box control must be a custom control, and it must be either a drop-down list box or a combo box. Read/write.

Note If this property is set for a combo box control that's either an edit box or a built-in combo box control, an error occurs.

If this property is set to 0 (zero), the number of lines in the control will be based on the number of items in the list.
drop down width
Returns or sets the width (in pixels) of the list for the specified command bar combo box control. Read/write.
Note An error occurs if you attempt to set this property for a built-in control.
If this property is set to -1 , the width of the list is based on the length of the longest item in the combo box list. If this property is set to 0 , the width of the list is based on the width of the control.

## list index

Returns or sets the index number of the selected item in the list portion of the command bar combo box control. If nothing is selected in the list, this property returns zero. Read/write.
Note This property fails when applied to controls other than list controls.
Setting the list index property causes the specified control to select the given item and execute the appropriate action in the application.

## Class: command bar control

## Plural

command bar controls
Represents a command bar control. The properties and commands of the command bar control object are all shared by the command bar button, command bar combobox, and command bar popup classes.

Note To write scripts to work with custom command bar controls, use the command bar button, command bar combobox, and command bar popup classes. To write scripts to work with built-in controls in the container application that cannot be represented by one of those three classes, use the command bar control class.

Use command bar control index, where index is the index number of a control, to return a command bar control object. (The control type property of the control must be control label, expanding grid, split expanding grid, control grid, or control gauge.)

Note Variables declared as command bar control can be assigned command bar button, command bar combobox, and command bar popup values.

## Properties

begin group
True if the specified command bar control appears at the beginning of a group of controls on the command bar. Read/write.
built in
True if the specified command bar or command bar control is a built-in command bar or control of the container application. False if it's a custom command bar or control, or if it's a built-in control whose on action property has been set. Read-only.
control type
Returns the type of command bar control. Read-only.
Can be one of the following:

```
control button graphic popup
button drop down graphic dropdown
button popup control grid
control combobox control label
control custom OCX dropdown
control dropdown msopopup
control edit
expanding grid
control gauge
generic dropdown
graphic combo
```

```
split button MRU popup
```

split button MRU popup
split button popup
split button popup
split dropdown
split dropdown
split expanding grid

```
split expanding grid
```

description text
Returns or sets the description for the specified command bar control. The description is displayed in the status bar of the container application when the user positions the pointer over a command bar control. Read/write.

Not all applications display a status bar.
enabled
True if the specified command bar or command bar control is enabled. Read/write.
For command bars, setting this property to True causes the name of the command bar to appear in the list of available command bars.

For built-in controls, if you set the enabled property to True, the application determines its state. Setting the enabled property to False forces the control to be disabled.
entry index
Returns the index number for the command bar control. Read-only.
height
Returns or sets the height (in pixels) of a command bar or command bar control. Read/write.
An error will occur if you attempt to set the height property for a command bar that isn't in a resizable state (that is, if it's docked or protected from resizing).
help context ID
Returns or sets the Help context Id number for the Help topic attached to the command bar control. Read/write.

To use this property, you must also set the help file property.
help file
Returns or sets the Help file name for the Help topic attached to the command bar control. Read/write.

To use this property, you must also set the help context ID property.
id

Returns the ID for a built-in command bar control. Read-only.
A control's ID determines the built-in action for that control. The value of the id property for all custom controls is 1 .

## left position

Returns the distance (in pixels) from the left edge of the specified command bar or command bar control to the left edge of the screen. Returns the distance from the left side of the docking area. Read-only.
name
Returns or sets the caption text for a command bar control. Read/write.
on action
Returns or sets the name of a Visual Basic procedure that will run when the user clicks or changes the value of a command bar control. Read/write.
parameter
Returns or sets a string that an application can use to execute a command. Read/write.
If the specified parameter is set for a built-in control, the application can modify its default behavior if it can parse and use the new value. If the parameter is set for custom controls, it can be used to send information to Visual Basic procedures, or it can be used to hold information about the control (similar to a second tag property value).
priority
Returns or sets the priority of a command bar control. A control's priority determines whether the control can be dropped from a docked command bar if the command bar controls can't fit in a single row. Read/write.

Valid priority numbers are 0 (zero) through 7. Special priority numbers are 0 and 1. A priority of 0 indicates an "automatic" value, which means a number is assigned based on the type of control. A priority of 1 means the control cannot be dropped.
tag
Returns or sets information about the command bar control, such as data that can be used as an argument in procedures, or information that identifies the control. Read/write.
tooltip text
Returns or sets the text displayed in a command bar control's ScreenTip. Read/write.
top
Returns or sets the distance (in pixels) from the top edge of the specified command bar or command bar control to the top edge of the screen. For docked command bars, this property returns or sets the distance from the command bar to the top of the docking area. Read-only.
visible
True if a command bar or command bar control is visible. Read/write.
width
Returns or sets the width (in pixels) of the specified command bar or command bar control. Read/write.

## Class: command bar popup

Plural
command bar popups
Elements
command bar control
Represents a pop-up control on a command bar.
Use command bar control index, where index is the number of the control, to return a command bar popup object. (The control type property of the control must be control popup, graphic popup, button popup, split button popup, or split button MRU popup.)

Class: custom document property

## Plural

custom document properties
Represents a custom document property of a container document.
Use custom document property index, where index is the name or index number of the custom document property, to return a custom document property object that represents a specific custom document property.

Class: document property

## Plural

## document properties

Represents a built-in document property of a container document.
Use document property index, where index is the name or index number of the built-in document property, to return a single document property object that represents a specific built-in document property.

The names of all the available built-in document properties are shown on the following list:

| Title | Number of Words |
| :--- | :--- |
| Subject | Number of Characters |
| Author | Security |
| Keywords | Category |
| Comments | Format |
| Template | Manager |
| Last Author | Company |
| Revision Number | Number of Bytes |
| Application Name | Number of Lines |
| Last Print Date | Number of Paragraphs |
| Creation Date | Number of Slides |
| Last Save Time | Number of Notes |
| Total Editing Time | Number of Hidden Slides |
| Number of Pages | Number of Multimedia Clips |

Container applications don't necessarily define a value for every built-in document property. If a given application doesn't define a value for one of the built-in document properties, returning the value property for that document property causes an error.

## Properties

document property type
Returns or sets the document property type. Read-only for built-in document properties; read/write for custom document properties.

Can be one of the following:

- boolean
- date
- float
- number
- string
link source
Returns or sets the source of a linked custom document property. Read/write.
This property applies only to custom document properties; you cannot use it with built-in document properties.

The source of the specified link is defined by the container application.
Setting the link source property sets the link to context property to True.
link to context
True if the value of the custom document property is linked to the content of the container document. False if the value is static. Read/write.

This property applies only to custom document properties. For built-in document properties, the value of this property is False.

Use the link source property to set the source for the specified linked property. Setting the link source property sets the link to context property to True.
name
Returns the name of the specified object. Read-only.
value
Returns or sets the value of a document property. Read/write.
If the container application doesn't define a value for one of the built-in document properties, reading the value property for that document property causes an error.

## Class: web page font

Represents the default font used when documents are saved as Web pages for a particular character set.

Use the web page font object to describe the proportional font, proportional font size, fixed-width font, and fixed-width font size for any available character set. The following character sets are supported:

| Arabic | Korean |
| :--- | :--- |
| Cyrillic | Multilingual |
| English Western European Other Latin | Unicode |
| Script | Simplified Chinese |
| Greek | Thai |
| Hebrew | Traditional Chinese |
| Japanese | Vietnamese |
| Properties |  |

fixed width font
Sets or returns the fixed-width font setting in the host application. Read/write.
When you set the fixed width font property, the host application does not check the value for validity.
fixed width font size
Sets or returns the fixed-width font size setting in the host application, in points. Read/write.
When you set the fixed width font size property, the host application does not check the value for validity. If you enter an invalid value, such as a nonnumber, the host application sets the size to 0 points. You can enter half-point sizes; if you enter other fractional point sizes, they are rounded up or down to the nearest half-point.
proportional font
Sets or returns the proportional font setting in the host application. Read/write.
When you set the proportional font property, the host application does not check the value for validity.
proportional font size
Sets or returns the proportional font size setting (in points) in the host application. Read/write.
When you set the proportional font size property, the host application does not check the value for validity. If you enter an invalid value, such as a nonnumber, the host application sets the size to 0 points. You can enter half-point sizes; if you enter other fractional point sizes, they are rounded up or down to the nearest half-point..

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## Command: add item to combobox

Adds a list item to the specified command bar combo box control. The combo box control must be a custom control, and it must be either a drop-down list box or a combo box.

Note This command will fail if it's applied to an edit box or a built-in combo box control.

## Syntax

add item to combobox command bar combobox Required. An expression that returns a command bar combobox object
combobox item Unicode text Required. The text to be added to the specified control.
[entry index small integer] Optional. The position of the specified item in the list. If this argument is omitted, the item is added at the end of the list.

## Example

This example adds a combo box control to a command bar. Two items are added to the control, and the number of line items and the width of the combo box are set.

```
set myBar to make new command bar with properties ᄀ
            {bar type:norma1 command bar, name:"New"}
set myControl to make new command bar control at myBar\neg
    with properties {control type:control combobox, combobox text:"Monday",ᄀ
    combobox style:combobox style labe1, drop down lines:2, drop down width:75}
add item to combobox myControl combobox item "Monday" entry index 1
add item to combobox myControl combobox item "Tuesday" entry index 2
```

Command: clear combobox
Removes all list items from the specified command bar combo box control (drop-down list box or combo box) and clears the text box (edit box or combo box).

Note This command will fail if it's applied to a built-in command bar control.

## Syntax

clear combobox command bar combobox Required. An expression that returns a command bar combobox object.

## Example

This example checks the number of items in the combo box control named "Names" on the command bar named "Custom." If there are more than three items in the list, the example clears the list, adds a new first item to the list, and displays this new item as the default for the combo box control.

```
set myBar to command bar "Custom"
set myControl to command bar control "Names" of myBar
set listItems to get count of combobox items myControl
if listitems > 3 then
    clear combobox myControl
    add item to combobox myControl combobox item "Third Item" entry index 1
    set list index of myControl to 1
end if
```

Command: execute
Runs the procedure associated with a command bar control.

## Syntax

execute command bar control Required. An expression that returns a command bar control, command bar button, or command bar combobox object.

## Remarks

This command runs the specified script or command if controls are currently enabled in the application and if the enabled property of the specified object is True.
Applying this command to a command bar popup object generates a run-time error.

## Example

This example checks the value of the combo box control on the custom command bar named "My Custom Bar." If the index number of the command bar control is 1 , the example runs the script specified by the on action property of the command bar control.

```
set mycontrol to the first command bar combobox of command bar "My Custom Bar"
if entry index of myControl = 1 then
    execute myContro1
end if
```


## Command: get combobox item

Returns the string at the given index of items within a combo box control.

## Syntax

get combobox item command bar combobox Required. An expression that returns a command bar combobox object.
entry index small integer Required. The position of the specified item in the list. If this argument is omitted, the last item in the list is returned.

Command: get count of combobox items
Returns the number of items within a combo box control.

## Syntax

get count of combobox items command bar combobox Required. An expression that returns a command bar combobox object.

Example
This example uses the get count of combobox items command to check the number of items in the combo box control named "Names" on the command bar named "Custom." If there are more than three items on the list, the example clears the list, adds a new first item to the list, and displays this new item as the default for the combo box control.

```
set myBar to command bar "Custom"
set myControl to command bar control "Names" of myBar
set listItems to get count of combobox items myContro1
if listitems > 3 then
    clear combobox myControl
    add item to combobox myControl combobox item "Third Item" entry index 1
    set list index of myControl to 1
end if
```

Command: remove an item from combobox
Removes an item from a command bar combo box control.
Note This command fails when applied to controls other than list controls.

## Syntax

remove an item from combobox command bar combobox Required. An expression that returns a command bar combobox object.
entry index small integer Required. The index number of the item to be removed from the list.

## Example

The following example determines whether there are more than three items in a combo box control. If there are more than three items, the example removes the second item, alters the style, and sets a new value.

```
set myBar to command bar "Custom"
set myContro1 to command bar combobox 1 of myBar
set listitems to get count of combobox items myControl
if listitems > 3 then
    remove an item from combobox myControl entry index 2
    set combobox style of myControl to combobox style normal
    set combobox text of myControl to "New Default"
end if
```

Command: reset
Resets a built-in command bar to its default configuration, or resets a built-in command bar control to its original function and face.

## Syntax

reset command bar/command bar control Required. An expression that returns a command bar, command bar control, command bar button, command bar popup, or command bar combobox object.

## Remarks

Resetting a built-in control restores the actions originally intended for the control and resets each of the control's properties back to its original state. Resetting a built-in command bar removes custom controls and restores built-in controls.

## Example

This example resets the Formatting toolbar to its default state.

```
reset command bar "Formatting"
```

Displays the specified balloon object. Returns a constant that indicates which balloon the user clicks.

## Syntax

show balloon balloon Required. An expression that returns a balloon object.

## Remarks

You can use the return value of the show balloon command to display a user's button selection. The show balloon command returns one of the following buttons:

| abort button | back button <br> cancel button <br> ignore button |
| :--- | :--- |
| no button | next button |
| no | null button |
| OK button | options button |
| retry button | search button |
| snooze button | tips button |
| yes button | yes to all button |

## Example

This example creates a balloon that contains three choices.

```
set b to make new balloon at office assistant
te11 b
    set heading to "This is my heading"
    set balloon text to "Select one of these things"
    repeat 3 times
        make new balloon label at the beginning
    end repeat
    set labe1 text of balloon labe1 1 to "Choice One"
    set label text of balloon label 2 to "Choice Two"
    set label text of balloon labe1 3 to "Choice Three"
    show balloon
end tell
```


## Microsoft PowerPoint Suite

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## Class: action setting

Contains information about how the specified shape or text range reacts to mouse actions during a slide show. The action setting object represents how the specified object reacts when the user clicks it during a slide show or the user moves the mouse pointer over it during a slide show.
Use the get action setting for command to return the action setting object for a shape or the get text action setting command to return the action setting object for a text range. The following example sets the mouse-click action for the text in the third shape on slide one in the active presentation to an Internet link.

```
set theAction to (get text action setting text range of text frame of \checkmark
    shape 3 of slide 1 of active presentation ᄀ
    result mouse activation mouse click)
set action of theAction to action type hyperlink action
set hyperlink address of hyperlink of theAction to "http://www.microsoft.com"
```


## Remarks

If you've set properties of the action setting object that don't seem to be taking effect, make sure that you've set the action property to the appropriate value.

## Properties

action
Returns or sets the type of action that will occur when the specified shape is clicked or the mouse pointer is positioned over the shape during a slide show. Read/write.

Can be one of the following constants:
action type end show
action type first slide
action type hyperlink action action type last slide action type last slide viewed action type unset action type named slide show

You can use the Action property in conjunction with other properties of the ActionSetting object, as shown in the following table.

| If you set the action <br> property to this value | Use this <br> property | To do this |
| :--- | :--- | :--- |
| action type hyperlink <br> action | hyperlink | Set properties for the hyperlink that will be followed <br> in response to a mouse action on the shape during a <br> slide show. |
| action type run <br> program | action setting <br> to run | Return or set the name of the program to run in <br> response to a mouse action on the shape during a <br> slide show. |
| action type run macro | action setting <br> to run | Return or set the name of the macro to run in <br> response to a mouse action on the shape during a <br> slide show. |
| action type OLE verb | action verb | Set the OLE verb that will be invoked in response to a <br> mouse action on the shape during a slide show. |
| action type named | slide show <br> name | Set the name of the custom slide show that will run in <br> response to a mouse action on the shape during a <br> slide show. |

action setting to run
Returns or sets the name of the presentation or macro to be run when the specified shape is clicked or the mouse pointer passes over the shape during a slide show. The action property must be set to action type run macro or action type run program for this property to affect the slide show action. Read/write.

## Remarks

If the value of the action property is action type run macro, the specified string value should be the name of a global macro that's currently loaded. If the value of the action property is action type run program, the specified string value should be the full path and file name of a program.

You can set the action setting to run property to a macro that takes no arguments or a macro that takes a single shape or object argument. The shape that was clicked during the slide show will be passed as this argument.

## action sound effect

Returns a sound effect object that represents the sound to be played when the specified shape is clicked or the mouse pointer passes over the shape. If you don't hear the sound that you assigned to the shape when you run the slide show, make sure that the text level effect property of the animation settings class is set to a value other than animate level none and that the animate property is set to true. Read-only.
action verb
Returns or sets a string that contains the OLE verb that will be run when the user clicks the specified shape or passes the mouse pointer over it during a slide show. The action property must be set to action type OLE verb first for this property to affect the slide show action. Read/write.
animate action
True if the color of the specified shape is momentarily inverted when the specified mouse action occurs. Read/write.

## hyperlink

Returns a hyperlink object that represents the hyperlink for the specified shape. For the hyperlink to be active during a slide show, the action property must be set to action type hyperlink action. Read-only.
slide show name
Returns or sets the name of the custom slide show to run in response to a mouse action on the shape during a slide show. Read/write.

Class: add in

## Plural

add ins
Represents a single add-in, either loaded or not loaded. The add ins list contains a list of all the addins available to PowerPoint, regardless of whether or not they're loaded. This list corresponds to the list of add-ins displayed in the Add-Ins dialog box (Tools menu).
Use add in index, where index is the title or index number of the add-in, to return a single add in object. The following example loads the My Ppt Tools add-in.
set loaded of add in "my ppt tools" to true
Don't confuse the add-in title, which appears in the Add-Ins dialog box, with the add-in name, which is the file name of the add-in. You must spell the add-in title exactly as it's spelled in the AddIns dialog box, but the capitalization doesn't have to match.

The index number represents the position of the add-in in the Available add-ins box in the Add-Ins dialog box. The following example displays the names of all the add-ins that are currently loaded in PowerPoint.

```
repeat with i from 1 to (get count of add ins)
    if loaded of add in i is true then display dialog (get name of add in i)
end repeat
```


## Remarks

To add an add-in to the list of available add-ins, use the register add in command. Note, however, that using this method doesn't load the add-in. To load the add-in, set the loaded property of the add-in to true after you use the register add in command.

Use presentation index, where index is the file name (not the title) of the add-in, to return a reference to the presentation that corresponds to a loaded add-in. You must use the file name, because loaded add-ins usually don't appear in the presentations list. The following example sets the presAddin variable to the presentation for Myaddin.ppa.
set presAddin to presentation "myaddin.ppa"

## Properties

auto load
True if the specified add-in is automatically loaded each time PowerPoint is started. Read/write.
Setting this property to true automatically sets the registered property to true.
full name
Returns the name of the specified add-in , including the path, the current file system separator, and the file name extension. Read-only.

This property is equivalent to the path property, followed by the current file system separator, followed by the name property.
loaded
True if the specified add-in is loaded. In the Add-Ins dialog box (Tools menu), the check boxes next to loaded add-ins are selected. Read/write.
name
The name of the add-in includes the file name extension (for file types that are registered) but doesn't include its path. Read-only.
path
Returns the path to the specified add in object. Read-only.
Note The path doesn't include the final separator character or the name of the specified object. To return the file name without the path, use the name property of the presentation object. To return the file name and the path together, use the full name property.
registered
True if the specified add-in is registered in the Preferences file. Read/write.
registered in HKLM
True if the specified add-in is registered in the system registry. Read/write.

## Class: animation behavior

## Plural

## animation behaviors

Represents the behavior of an animation effect, the main animation sequence, or an interactive animation sequence.

Use behavior index, where index is the number of the behavior in the sequence of behaviors, to return a single animation behavior object. The following example sets the positions of a rotation's starting and ending points. This example assumes that the first behavior for the main animation sequence is a rotating effect object.
set theAnimBhv to rotating effect of animation behavior 1 of main sequence $\neg$ of timeline of slide 1 of active presentation
set rotating of theAnimBhv to 180

## Properties

accumulate
Returns or sets whether animation behaviors accumulate. Read/write.
Can be one of the following:

- no accumulate
- always
additive
Returns or sets whether the current animation behavior is combined with other running animations. Read/write.

Can be one of the following:

- no additive
- motion
animation behavior type
Returns or sets the type of animation. Read/write.
Can be one of the following:
- animation type none
- animation type motion
- animation type color
- animation type scale
- animation type rotation
- animation type property
- animation type command
- animation type filter
- animation type set
colors effect
Returns a color effect object that represents the color properties for a specified animation behavior. Read-only.
command effect
Returns a command effect object for the specified animation behavior. Read-only.
filter effect
Returns a filter effect object that represents a filter effect for the specified animation behavior. Read-only.
motion effect
Returns a motion effect object that represents the properties of a motion animation. Readonly.
property effect
Returns a property effect object for the specified animation behavior. Read-only. rotating effect

Returns a rotating effect object for the specified animation behavior. Read-only. scale effect

Returns a scale effect object for the specified animation behavior. Read-only.
set effect
Returns a set effect object for the specified animation behavior. You can use the set effect object to set the value of a property. Read-only.
timing
Returns a timing object that represents the timing properties for an animation sequence. Readonly.

## Class: animation point

## Plural

## animation points

Represents an individual animation point for an animation behavior. The animation points list contains all the animation points for an animation behavior.

To add an animation point object, use the make command. Use animation point index, where index is the animation point's index number, to return a single animation point object. To set timing between animation points, use the time property of an animation point object. To set other animation point properties, such as color, use the value property. The following example adds three animation points to the first behavior in the active presentation's main animation sequence, and then the presentation changes colors at each animation point.

```
set sldNewSlide to make new slide at the beginning of active presentation ᄀ
        with properties {slide index:1, layout:slide layout blank}
set shpHeart to make new shape at sldNewSlide with properties ᄀ
        {auto shape type:autoshape heart, left position:100, top:100, ᄀ
        width:200, height:200}
set MSQ to main sequence of timeline of sldNewSlide
set effCustom to add effect MSQ for shpHeart fx animation type custom
set aniBehavior to add behavior effCustom type animation type property
tel1 property effect of anibehavior
    set property effect set to shape fill color
    repeat 3 times
        make new animation point at the beginning
    end repeat
    set time of animation point 1 to 0.2
    set value of animation point 1 to ({0, 0, 0} as RGB color)
    set time of animation point 2 to 0.5
    set value of animation point 2 to ({0, 255, 0} as RGB color)
    set time of animation point 3 to 1
    set value of animation point 3 to ({0, 255, 255} as RGB color)
end tell
```


## Properties

formula
Returns or sets a Unicode text string that represents a formula to use for calculating an animation. Read/write.
time
Returns or sets a small real number that represents the time at a given animation point.
Read/write.
value
Returns or sets a location reference that represents the value of a property for an animation point.

## Class: animation settings

Represents the special effects applied to the animation for the specified shape during a slide show.
Use the animation settings property of a shape object to return the animation settings object. The following example adds a slide that contains both a title and a three-item list to the active presentation, and then it sets the list to be animated by first-level paragraphs, to fly in from the left when animated, to dim to the specified color after being animated, and to animate its items in reverse order.

```
set mySlide to make new slide at the end of slide 1 of active presentation ᄀ
    with properties {layout:slide layout text slide}
set content of text range of text frame of place holder 1 of mySlide ᄀ
    to "Top Three Reason"
set content of text range of text frame of place holder 2 of mySlide ᄀ
    to "Reason 1" & return & "Reason 2" & return & "Reason 3"
set text level effect of animation settings of place holder 2 of mySlide to ᄀ
    animate level first level
set entry effect of animation settings of place holder 2 of mySlide to ᄀ
    entry effect fly from left
set after effect of animation settings of place holder 2 of mySlide to ᄀ
    after effect dim
set dim color of animation settings of place holder 2 of mySlide to ᄀ
    {100, 120, 100} as RGB color
set animate text in reverse of animation settings of place holder 2 of ᄀ
    mySlide to true
```


## Properties

advance time
Returns or sets the amount of time after which the specified shape will become animated. Read/write.
after effect
Returns or sets a value that indicates whether the specified shape appears dimmed, hidden, or unchanged after it's been built. Read/write.

Can be one of the following:

- after effect dim
- after effect hide
- after effect unset
- after effect none

The default value is after effect none.
You won't see the after effect you set for a shape unless the shape gets animated and at least one other shape on the slide gets animated after it. For a shape to be animated, the text level effect property must be set to something other than animate level none and the animate property must be set to true. To change the build order of the shapes on a slide, use the animation order property.
animate
True if the specified shape is animated during a slide show. Read/write.
This property must be set to true for any of the other properties of the animation settings object to take effect.
animate background
If the specified object is an AutoShape, true if the shape is animated separately from the text it contains. If the specified shape is a chart object, true if the background (the axes and gridlines) of the specified graph object is animated. Applies only to AutoShapes with text that can be built in more than one step or to graph objects. Read/write.

To control the animation of text attached to the specified shape, use the text level effect and text unit effect properties.

If this property is set to true and the text level effect property is set to animate level all levels, the shape and its text will be animated simultaneously. If this property is set to true and the text level effect property is set to anything other than animate level all levels, the shape will be animated immediately before the text is animated.

You won't see effects of setting this property unless the specified shape is animated. For a shape to be animated, the text level effect property must be set to something other than animate level none and the animate property must be set to true.
animate text in reverse
True if the specified shape is built in reverse order. Applies only to shapes (such as shapes containing lists) that can be built in more than one step. Read/write.

You won't see effects of setting this property unless the specified shape gets animated. For a shape to be animated, the text level effect property of the animation settings object for the shape must be set to something other than animate level none and the animate property must be set to true.
animation order
Returns or sets an integer that represents the position of the specified shape within the collection of shapes to be animated. Read/write.

You won't see effects of setting this property unless the specified shape gets animated. For a shape to be animated, the text level effect property of the animation settings object for the shape must be set to something other than animate level none and the animate property must be set to true.
animation play settings
Returns a play settings object that contains information about how the specified media clip plays during a slide show. Read-only.
animation sound effect
Returns a sound effect object that represents the sound to be played during the animation of the specified shape. Read-only.
chart unit effect
Returns or sets a value that indicates whether the graph range is animated by series, category, or element. Read/write.

Can be one of the following:

- chart unit effect by category
- chart unit effect by series element
- chart unit effect by series
- animation chart unset

If your graph doesn't become animated, make sure that the animate property is set to true. dim color

Returns or sets an RGB color that represents the color of the specified shape after it's been built. Read-only.

If you don't get the effect you expect, check your other build settings. You won't see the effect of the dim color property unless the text level effect property is set to something other than animate level none, the after effect property is set to after effect dim, and the animate property is set to true. In addition, if the specified shape is the only item or the last item to be built on the slide, the shape won't be dimmed. To change the build order of the shapes on a slide, use the animation order property.
entry effect
Returns or sets the special effect applied to the animation for the specified shape. Read/write. Can be one of the following:
entry effect appear
entry effect blinds horizontal
entry effect blinds vertical
entry effect box in
entry effect box out
entry effect checkerboard across
entry effect checkerboard down
entry effect circle
entry effect collapse across
entry effect collapse left
entry effect collapse up
entry effect collapse right
entry effect collapse bottom
entry effect cover down
entry effect cover left
entry effect cover left down
entry effect cover left up
entry effect cover right
entry effect cover right down
entry effect cover right up
entry effect cover up
entry effect crawl from down
entry effect crawl from left
entry effect crawl from right
entry effect crawl from up
entry effect cut
entry effect diamond
entry effect dissolve
entry effect fade
entry effect fade smoothly
entry effect fade fly from left
entry effect fade fly from top
entry effect fade fly from right
entry effect fade fly from bottom
entry effect fade fly from top left
entry effect fade fly from top right
entry effect fade fly from bottom left
entry effect fade fly from bottom right
entry effect flash once fast
entry effect flash once medium
entry effect flash once slow
entry effect fly from bottom
entry effect fly from bottom left
entry effect fly from bottom right
entry effect fly from left
entry effect fly from right
entry effect fly from top
entry effect fly from top left
entry effect fly from top right
entry effect unset
entry effect none
entry effect peek from down
entry effect peek from left
entry effect peek from right
entry effect peek from up
entry effect plus
entry effect random
entry effect random bars horizontal
entry effect random bars vertical
entry effect spinner
entry effect spiral
entry effect split horizontal in entry effect split horizontal out entry effect split vertical in entry effect split vertical out entry effect strips down left
entry effect strips down right
entry effect strips left down
entry effect strips left up
entry effect strips right down
entry effect strips right up
entry effect strips up left
entry effect strips up right
entry effect swivel
entry effect uncover down
entry effect uncover left
entry effect uncover left down
entry effect uncover left up
entry effect uncover right
entry effect uncover right down
entry effect uncover right up
entry effect uncover up
entry effect wedge
entry effect wheel1 spoke
entry effect wheel2 spokes
entry effect wheel3 spokes
entry effect wheel4 spokes
entry effect wheel8 spokes
entry effect wipe down
entry effect wipe left
entry effect wipe right
entry effect wipe up
entry effect zoom in
entry effect zoom in slightly
entry effect zoom out
entry effect zoom out slightly
entry effect zoom center
entry effect zoom bottom

If the text level effect property for the specified shape is set to animate level none (the default value) or the animate property is set to false, you won't see the special effect you've applied with the entry effect property.
text level effect
Returns or sets a value that indicates whether the text in the specified shape is animated by first-level paragraphs, second-level paragraphs, or some other level (up to fifth-level paragraphs). Read/write.

Can be one of the following:

- animate level all levels
- animate level fifth level
- animate level first level
- animate level fourth level
- animate level second level
- animate level third level
- animation level unset
- animate level none

For the text level effect property setting to take effect, the animate property must be set to true.

## text unit effect

Returns or sets a value that indicates whether the text in the specified shape is animated paragraph by paragraph, word by word, or letter by letter. Read/write.

Can be one of the following:

- text unit effect by character
- text unit effect by paragraph
- text unit effect by word
- animation unit unset

For the text unit effect property setting to take effect, the text level effect property for the specified shape must have a value other than animate level none or animate level all levels, and the animate property must be set to true.

## Class: application

## Elements

presentation
document window
slide show window
command bar
add in
Represents the entire Microsoft PowerPoint application. The application object contains:

- Application-wide settings and options (the name of the active printer, for example).
- Properties that return top-level objects, such as active presentation, document windows, and so on.

Use application "Microsoft PowerPoint" to return the application object.
The following example launches PowerPoint and opens an existing presentation named "Ex_a2a.ppt".
tell application "Microsoft PowerPoint"
1aunch
set visible to true
open "Macintosh HD:Users:Shared:Ex_a2a.ppt"
end te11

## Properties

Version
Returns the PowerPoint version number. Read-only.
active presentation
Returns a presentation object that represents the presentation open in the active window.
Read-only.
Note that if an embedded presentation is in-place active, the active presentation property returns the embedded presentation.
active printer
Returns the name of the active printer. Read-only.
active window
Returns a document window object that represents the active document window. Read-only.
build
Returns the PowerPoint build number. Read-only.
caption
Returns the text that appears in the title bar of the application window. Read-write.
default save format
Returns or sets the default save format. Read/write.
Can be one of the following:

- save as presentation
- save as template
- save as RTF
- save as show
- save as addIn
- save as default
- save as HTML
- save as movie
default web options object
Returns the default web options object, which contains global application-level attributes used by PowerPoint when you publish or save a presentation as a Web page or open a Web page. Read-only.
name
Returns the string "Microsoft PowerPoint." Read-only.
office assistant
Returns an assistant object that represents the Office Assistant. Read-only.
operating system
Returns the name of the operating system. Read-only.
path
Returns the path to the specified application object. Read-only.
Note The path doesn't include the final separator character or the name of the specified object.
save as movie settings object
Returns the save as movie settings object. When you derive a save as movie settings object using the save as movie settings object property, any changes that you make to the properties of the save as movie settings object affect the specific presentation, not the default preferences for the application.
start up dialog
True if the Project Gallery is displayed at startup. Read/write.


## Class: bullet format

Represents bullet formatting.
To return the bullet format object, use the bullet format property of the paragraph format class. The following example sets the bullet size and color for the paragraphs in shape two on slide one in the active presentation.

```
set myShape to shape 2 of slide 1 of active presentation
set myBullet to bullet format of paragraph format of text range ᄀ
    of text frame of myShape
set relative size of myBullet to 1.25
set bullet character of myBullet to "169"
set font color of font of myBullet to {255, 255, 0} as RGB color
set font name of font of myBullet to "Symbol"
Properties
```

bullet character
Returns or sets the Unicode character that is used for bullets in the specified text. Read/write.

## bullet font

Returns a font object that represents the bullet formatting. Read-only.

## bullet number

Returns the bullet number of a paragraph when the bullet type property is set to bullet type numbered. Read-only.
bullet start value
Returns or sets the beginning value of a bulleted list when the bullet type property is set to bullet type numbered. The value must be in the range of 1 to 32767 . Read/write.

## bullet style

Returns or sets the style of the bullet.
Can be one of the following:
numbered bullet style alpha lowercase period numbered bullet style alpha uppercase period numbered bullet style arabic right paren numbered bullet style arabic period numbered bullet style roman lowercase paren both numbered bullet style roman lowercase paren right numbered bullet style roman lowercase period numbered bullet style roman uppercase period numbered bullet style alpha lowercase paren both numbered bullet style alpha lowercase paren right numbered bullet style alpha uppercase paren both numbered bullet style alpha uppercase paren right numbered bullet style arabic paren both numbered bullet style arabic plain numbered bullet style roman uppercase paren both numbered bullet style roman uppercase paren right numbered bullet style simplified chinese plain numbered bullet style simplified chinese period numbered bullet style circle number plain numbered bullet style circle number white plain numbered bullet style circle number black plain numbered bullet style traditional chinese plain numbered bullet style traditional chinese period numbered bullet style arabic alpha dash numbered bullet style arabic abjad dash numbered bullet style hebrew alpha dash numbered bullet style kanji korean plain numbered bullet style kanji korean period numbered bullet style arabic DB plain numbered bullet style unset

Some of these constants may not be available to you, depending on the language support (U.S. English, for example) that you've selected or installed. Read/write.

## bullet type

Returns or sets the bullet type. Read/write.
Can be one of the following:

- bullet type unset
- bullet type none
- bullet type unnumbered
- bullet type numbered
- picture bullet type
relative size
Returns or sets the bullet size relative to the size of the first text character in the paragraph. Can be a floating-point value from 0.25 through 4, indicating that the bullet size can be from 25 percent through 400 percent of the text-character size. Read/write.
use text color
True if the specified bullets are set to the color of the first text character in the paragraph. False if the specified bullets are set to any other color. Read/write.

You cannot explicitly set this property to false. Setting the bullet format color (using the font color property of the font object) sets this property to false. When use text color is false, you can set it to true to reset the bullet format to the default color.
use text font
True if the specified bullets are set to the font of the first text character in the paragraph. False if the specified bullets are set to a custom font. Read/write.

You cannot explicitly set this property to false. Setting the bullet format font (using the font name property of the font object) sets this property to false. When use text font is false, you can set it to true to reset the bullet format to the default font.
visible
True if the specified object, or the formatting applied to the specified object, is visible.
Read/write.

## Class: color scheme

## Plural

color schemes
Represents a color scheme, which is a set of eight colors used for the different elements of a slide, notes page, or handout, such as the title or background. (Note that the color schemes for slides, notes pages, and handouts in a presentation can be set independently.) Each color is represented by an RGB color. The color schemes list contains all the color schemes in a presentation.

This section describes how to do the following:

- Return a color scheme object from the list of all the color schemes in the presentation
- Return the color scheme object attached to a specific slide or master
- Return the color of a single slide element from a color scheme object


## Returning a color scheme object from the list of all the color schemes in the presentation

Use color scheme index, where index is the color scheme index number, to return a single color scheme object. The following example deletes color scheme two from the active presentation.

```
delete color scheme 2 of active presentation
```


## Returning the color scheme object attached to a specific slide or master

Set the color scheme property of a slide or master object to return the color scheme for one slide or a master, respectively. The following example changes the color scheme for the current slide.

```
set theScheme to (get color scheme of slide of view of active window)
set color for theScheme at title scheme to color ({0, 150, 250} as RGB color)
```


## Returning the color of a single slide element from a color scheme object

Use the get color from command to return an RGB color object that represents the color of a single slide-element type. Use the set color for command to set the color of a single slide-element type. The following example sets the title color of color scheme 2 to the title color that's defined for color scheme one.

```
set theTitle to (get color from color scheme 1 of active presentation ᄀ
    at title scheme)
set color for color scheme 2 of active presentation at title scheme ᄀ
    to color theTitle
Class: colors effect
```

Represents a color effect for an animation behavior.
Use the colors effect property of the animation behavior object to return a colors effect object. Color effects can be returned using the colors effect object's color property. You cannot change the colors effect object for an animation behavior programmatically.

## Properties

color
Returns an RGB value that represents the color of the object.

## Class: command effect

Represents a command effect for an animation behavior. You can send events, call functions, and OLE verbs to embedded objects using this object.

To return a command effect object, use the command effect property of the animation behavior object. To change command effects, use the command and type properties of the command effect object.

The following example shows how to set a command effect animation behavior for an effect named effectNew.

```
set bhvEffect to add behavior effectNew type animation type command
set type of command effect of bhvEffect to verb
set command of command effect of bhvEffect to "Play"
```


## Properties

command
Returns or sets a string that represents the command to be executed for the command effect. Read/write.
type
Returns or sets the type of command to be executed for the command effect. Read/write.
Can be one of the following:

- event
- call
- verb


## Class: default web options

Contains global application-level attributes used by PowerPoint when you publish or save a presentation as a Web page or when you open a Web page. You can return or set attributes either at the application (global) level or at the presentation level. (Note that attribute values can be different from one presentation to another, depending on the attribute value at the time the presentation was saved.) Presentation-level attribute settings override application-level attribute settings.
Presentation-level attributes are contained in the web options object.

## Using the default web options Object

To return the default web options object, use the default web options object property of the application class. The following example checks to see whether PNG (Portable Network Graphics) are allowed as an image format, and then sets the strImageFileType variable accordingly.

```
set objAppWebOptions to default web options object
if allow PNG of objAppWebOptions is true then
    set strImageFileType to "PNG"
else
    set strImageFileType to "JPG"
end if
```

Properties
allow PNG
True if PNG (Portable Network Graphics) is allowed as an image format when you save or publish a presentation as a Web page. False if PNG is not allowed as an output format. The default value is false. Read/write.

If you save images in the PNG format as opposed to any other file format, you might improve the image quality or reduce the size of those image files, and therefore decrease the download time, assuming that the Web browsers you are targeting support the PNG format.
always save in default encoding
True if the default encoding is used when you save a Web page or plain text document, independent of the file's original encoding when opened. False if the original encoding of the file is used. The default value is false. Read/write.

The encoding property can be used to set the default encoding.
buttons type
Determines the type of navigation buttons PowerPoint uses in a Web version of a presentation. Read/write.

Can be one of the following:

- fancy (graphic buttons)
- regular
- text only
check if Office is HTML editor
True if PowerPoint checks to see whether an Office application is the default HTML editor when you start PowerPoint. False if PowerPoint does not perform this check. The default value is true. Read/write.

This property is used only if the Web browser you are using supports HTML editing and HTML editors.

To use a different HTML editor, you must set this property to false and then register the editor as the default system HTML editor.

## encoding

Returns or sets the document encoding (code page or character set) to be used by the Web browser when you view the saved document.

Can be one of the following:
encoding Thai
encoding Japanese ShiftJIS
encoding simplified Chinese
encoding Korean
encoding traditional Chinese
encoding little endian
encoding big endian
encoding central European
encoding Cyrillic
encoding Western
encoding Greek
encoding Turkish
encoding Hebrew
encoding Arabic
encoding Baltic
encoding Vietnamese
encoding auto detect
encoding Japanese auto detect
encoding simplified Chinese auto detect
encoding EBCDIC Greek encoding EBCDIC Hebrew encoding EBCDIC Korean extended encoding EBCDIC Thai encoding EBCDIC Icelandic encoding EBCDIC Turkish
encoding EBCDIC Russian
encoding EBCDIC Serbian Bulgarian encoding EBCDIC Japanese Katakana extended and Japanese encoding EBCDIC US Canada and Japanese encoding EBCDIC extended and Korean encoding EBCDIC simplified Chinese extended and simplified Chinese encoding EBCDIC US Canada and traditional Chinese
encoding EBCDIC Japanese Latin extended and Japanese
encoding OEM United States
encoding Korean auto detect encoding traditional Chinese auto detect encoding Cyrillic auto detect encoding Greek auto detect encoding Arabic auto detect encoding ISO88591 Latin1 encoding ISO88592 central Europe encoding ISO88593 Latin3 encoding ISO88594 Baltic encoding ISO88595 Cyrillic encoding ISO88596 Arabic encoding ISO88597 Greek encoding ISO88598 Hebrew encoding ISO88599 Turkish encoding ISO885915 Latin9 encoding ISO2022 Japanese no half width

Katakana
encoding ISO2022 Japanese JISX02021984
encoding ISO2022 Japanese JISX02011989
encoding ISO2022KR
encoding ISO2022CN traditional Chinese
encoding ISO2022CN simplified Chinese
encoding Mac Roman
encoding Mac Japanese
encoding Mac traditional Chinese Big5
encoding Mac Korean
encoding Mac Greek1
encoding Mac Cyrillic
encoding Mac simplified Chinese GB2312
encoding Mac Romania
encoding Mac Ukraine
encoding Mac Latin2
encoding Mac Icelandic
encoding Mac Turkish
encoding Mac Croatia
encoding EBCDIC US Canada
encoding EBCDIC International
encoding EBCDIC multilingual
ROECE Latin2
encoding EBCDIC Greek modern
encoding EBCDIC Turkish Latin5
encoding EBCDIC Germany
encoding EBCDIC Denmark Norway
encoding EBCDIC Finland Sweden
encoding EBCDIC Italy
encoding EBCDIC Latin America Spain
encoding EBCDIC United Kingdom encoding EBCDIC Japanese

Katakana extended
encoding EBCDIC France
encoding EBCDIC Arabic
encoding OEM Greek encoding OEM Baltic
encoding OEM multilingual LatinI
encoding OEM multilingual LatinII
encoding OEM Cyrillic
encoding OEM Turkish
encoding OEM Portuguese
encoding OEM Icelandic
encoding OEM Hebrew
encoding OEM Canadian French
encoding OEM Arabic
encoding OEM Nordic
encoding OEM CyrillicII
encoding OEM modern Greek
encoding EUC Japanese
encoding EUC Chinese simplified Chinese
encoding EUC Korean
encoding EUC Taiwanese
traditional Chinese
encoding Devanagari
encoding Bengali
encoding Tamil
encoding Telugu
encoding Assamese
encoding Oriya
encoding Kannada
encoding Malayalam
encoding Gujarati
encoding Punjabi
encoding Arabic ASMO
encoding Arabic transparent ASMO
encoding Korean Johab
encoding Taiwan CNS
encoding Taiwan TCA
encoding Taiwan Eten
encoding Taiwan IBM5550
encoding Taiwan teletext
encoding Taiwan Wang
encoding IA5 German
encoding IA5 Swedish
encoding IA5 Norwegian
encoding US ASCII
encoding T61
encoding ISO6937 nonspacing accent
encoding Ext alpha lowercase
encoding KOI8U
encoding Europa3
encoding HZGB simplified Chinese
encoding UTF7
encoding UTF8
frame colors
Returns or sets the text color for the notes pane and the outline pane, and the background color for the notes pane, outline pane, and slide pane for Web presentations. Read/write.

Can be one of the following:

- frame colors browser colors
- frame colors presentation scheme text color
- frame colors presentation scheme accent color
- frame colors white text on black
- frame colors black text on white
include binary file
Specifies whether to include a binary version of the presentation with the Web version. Including a binary version makes it possible to open and edit the Web version in PowerPoint. Read/write.
nav bar placement
Determines the position of the navigation bar. Read/write.
Can be one of the following:
- bar placement bottom
- bar placement top
support IE4
Determines whether a Web presentation is optimized for Microsoft Internet Explorer 4.0 or later. Read/write.


## support NN4

Determines whether a Web presentation is optimized for Netscape Navigator 4.0 or later. Read/write.

## support older browsers

Determines whether a Web presentation is optimized for browsers that are older than Netscape Navigator 4.0 or Microsoft Internet Explorer 4.0. Read/write.
update links on save
True if hyperlinks and paths to all supporting files are automatically updated before you save or publish the presentation as a Web page, ensuring that the links are up-to-date at the time the presentation is saved. False if the links are not updated. The default value is true.
Read/write.
You should set this property to false if the location where the presentation is saved is different from the final location on the Web server and the supporting files are not available at the first location.
web page keywords
Returns or sets keywords for a presentation when it is saved as a Web page. Read/write.
Keywords are not visible to Web-page readers but are stored in meta tags to facilitate page searches.
web page title
Sets the title of a Web presentation. Read/write.
This title will appear as the title of the browser window in which the Web presentation is viewed.

Class: document window
Plural
document windows

## Elements

pane
Represents a document window. The document windows list contains all the open document windows.

Use document window index, where index is the document window index number, to return a single document window object. The following example activates document window two.

```
activate document window 2
```

To return the presentation that's currently running in the specified document window, use the presentation property. To return the view in the specified document window, use the view property.

## Properties

active
True if the specified window is the active window. Read-only.
active pane
Returns a pane object that represents the active pane in the document window. Read-only.
black and white
True if the document window display is black and white. The default value is false.
Read/write.
caption
Returns the text that appears in the title bar of the document window. Read-only.
entry index
Returns a number that indicates the position of the document window in the document windows list. Read-only.
height
Returns or sets the height (in points) of the specified window. Read/write.

## left position

Returns or sets the distance from the left edge of the document window to the left edge of the application window's client area. Read/write.
presentation
Returns a presentation object that represents the presentation in which the specified document window or slide show window was created. Read-only.

## split horizontal

Returns or sets the percentage of the document window width that the outline pane occupies in normal view. Corresponds to the pane divider position between the slide and outline panes. Read/write.
The maximum value of the split horizontal property is always less than $100 \%$ because the slide pane has a minimum width that depends on a $10 \%$ zoom level. The actual maximum value may vary depending on the size of the application window.
split vertical
Returns or sets the percentage of the document window height that the slide pane occupies in normal view. Corresponds to the pane divider position between the slide and notes panes. Read/write.

The minimum value of the split vertical property is always greater than $0 \%$ because the slide pane has a minimum height that depends on a $10 \%$ zoom level. The actual minimum value may vary depending on the size of the application window.
top
Returns or sets the distance from the top edge of the document window to the top edge of the application window's client area. Read/write.
view
Returns a view object that represents the view in the specified document window. Read-only. view type

Returns or sets the type of the view contained in the specified document window. Read/write.
Can be one of the following:

- normal view
- handout master view
- notes master viewv
- outline view
- page view
- master view
- slide view
- slide sorter view
- title master view
width
Returns or sets the width (in points) of the specified object. Read/write.


## Class: effect

## Plural

effects

Elements
animation behavior
Represents timing information about a slide animation.
To add an effect, use the add effect command. This example adds a shape to the first slide in the active presentation and adds an effect and a behavior to the shape.

```
set sldOne to slide 1 of active presentation
set shpStar to make new shape at the beginning of sldOne with properties ᄀ
    {auto shape type:autoshape five point star, left position:150, ᄀ
    top:72, width:400, height:400}
set effNew to add effect (main sequence of timeline of sldOne) for shpStar ᄀ
    fx animation type stretchy trigger after previous
set effBHV to add behavior effNew type animation type scale
set from x of scale effect of effBHV to 75
set from y of scale effect of effBHV to 75
set to x of scale effect of effBHV to 0
set to y of scale effect of effBHV to 0
set autoreverse of timing of effNew to true
```

To refer to an existing effect object, use effect index, where index is the number of the effect object in the sequence list. This example changes the effect for the main sequence.
set MSQ to main sequence of timeline of slide 1 of active presentation set animation effect type of effect 1 of MSQ to animation type spin

There is always at least one effect object in each slide regardless of whether or not the slide contains animations.

Properties
animation effect type
Returns or sets the animation effect type. Read/write.
Can be one of the following:
animation type custom animation type appear animation type fly animation type blinds animation type box animation type checkerboard animation type circle animation type crawl animation type diamond animation type dissolve animation type fade animation type flash once animation type peek animation type plus animation type random bars animation type spiral animation type split animation type stretch animation type strips animation type swivel animation type wedge animation type wheel animation type wipe animation type zoom animation type random effect animation type boomerang animation type bounce animation type color reveal animation type credits animation type ease in animation type float animation type grow and turn animation type light speed animation type pinwheel animation type rise up animation type swish animation type thin line animation type unfold animation type whip animation type ascend animation type center revolve animation type faded swivel animation type descend animation type sling animation type spinner animation type stretchy
animation type flash bulb animation type flicker animation type grow with color animation type lighten animation type style emphasis animation type teeter animation type vertical grow animation type wave animation type media play animation type media pause animation type media stop animation type circle path animation type right triangle path
animation type diamond path animation type hexagon path animation type 5 point star path animation type crescent moon path animation type square path animation type trapezoid path animation type heart path animation type octagon path animation type 6 point star path animation type football path animation type equal triangle path animation type parallelogram path animation type pentagon path animation type 4 point star path animation type 8 point star path animation type teardrop path animation type pointy star path animation type curved square path animation type curved $x$ path animation type vertical figure 8 path animation type curvy star path animation type loop de loop path animation type buzzsaw path animation type horizontal figure 8 path animation type peanut path animation type figure 8 four path animation type neutron path animation type swoosh path animation type bean path animation type plus path animation type inverted triangle path animation type inverted square path animation type left path
animation type zip animation type arc up animation type fade zoom animation type glide animation type expand animation type flip animation type shimmer animation type fold animation type change fill color animation type change font animation type change font color animation type change font size animation type change font style animation type grow shrink animation type change line color animation type spin animation type transparency animation type bold flash animation type blast animation type bold reveal animation type brush on color animation type brush on underline animation type color blend animation type color wave animation type complementary color animation type complementary color 2 animation type contrasting color animation type darken animation type desaturate
animation type turn right path animation type arc down path animation type zigzag path animation type s curve 2 path animation type sine wave path animation type bounce left path animation type down path animation type turn up path animation type arc up path animation type heartbeat path animation type spiral right path animation type wave path animation type curvy left path animation type diagonal down right path animation type turn down path animation type arc left path animation type funnel path animation type spring path animation type bounce right path animation type spiral left path animation type diagonal up right path animation type turn up right path animation type arc right path animation type s curve 1 path animation type decaying wave path animation type curvy right path animation type stairs down path animation type up path
animation type right path

## effect information

Returns an effect information object representing information for a specified animation effect. Read-only.

## effect parameters

Returns an effect parameters object representing animation effect properties. Read-only.

## exit animation

Returns or sets whether the animation effect is an exit effect. Read/write.
name
Returns a string that represents the name of an animation effect. Read-only. paragraph

Returns or sets an integer that represents the paragraph in a text range to which to apply animation effects. Read/write.
shape
Returns a shape object that represents an animated shape. Read-only.
text range length
Returns or sets an integer that represents the length of a text range. Read-only.
text range start
Returns or sets an integer that represents the start of a text range. Read-only. timing

Returns a timing object that represents the timing properties for an animation sequence. Readonly.

## Class: effect information

Represents various animation options for an effect object.
Use the effect information class to return the current state of an effect object, such as the after effect, whether the background animates along with its corresponding text, whether text animates in reverse, play settings, sound effects, text building behavior, and so on. All of the properties of the effect information object are read-only. To change any effect information properties, you must use the commands and properties of the corresponding effect object.

To return an effect information object, use the effect information property of the effect object. The following example sets the hide while not playing property for the play settings in the main animation sequence.

```
set playSet to play settings information of effect information of ᄀ
    main sequence of timeline of slide 1 of active window
set hide while not playing of playSet to true
```


## Properties

after effect information
Returns whether an after effect is dimmed, hidden, or unchanged after it runs. Read-only.
Can be one of the following:

- no after effect
- $\quad \operatorname{dim}$
- hide
- hide on next click
animate background information
Returns true if the specified effect is a background animation. Read-only.
animate text in reverse information
True if the specified shape is built in reverse order. Applies only to shapes (such as shapes containing lists) that can be built in more than one step. Read-only.

You won't see the effects of setting this property unless the specified shape gets animated. For a shape to be animated, the text level effect property of the animation settings object for the shape must be set to something other than animate level none and the animate property must be set to true.

## build by level

Returns the level of the animation build effect. Read-only.
Can be one of the following:

| chart all at once | text by all levels |
| :--- | :--- |
| chart by category | text by fifth level |
| chart by category elements | text by first level |
| chart by series | text by fourth level |
| chart by series elements | text by second level |
| text by no levels | text by third level |

dim
Returns an RGB color that represents the color to dim to after an animation is finished. Read only
play settings information
Returns a play settings object that contains information about how the specified media clip plays during a slide show. Read-only.
sound effect information
Returns a sound effect object that represents the sound to be played during the animation of the specified shape. Read-only.
text unit effect information
Returns whether the text in the specified shape is animated paragraph by paragraph, word by word, or letter by letter. Read-only.

Can be one of the following:

- by paragraph
- by character
- by word

Represents various animation parameters for an effect object, such as colors, fonts, sizes, and directions.

To return an effect parameters object, use the effect parameters property of the effect object. The following example creates a shape, sets a spin effect, and changes the spin direction.

```
set shpNew to make new shape at the beginning of slide 1 of }
    active presentation with properties {left position:100, top:100, ᄀ
    width:150, height:150, auto shape type:autoshape heart}
set effNew to add effect (main sequence of timeline of slide 1 of \checkmark
    active presentation) for shpNew fx animation type spin
set direction of effect parameters of effNew to up left
Properties
```

amount
Returns or sets a small real number that represents the number of degrees an animated shape is rotated around the $z$-axis. A positive value indicates clockwise rotation; a negative value indicates counterclockwise rotation. Read/write.
color2
Returns an RGB color that represents the color on which to end a color-cycle animation. Readonly.

## direction

Returns or sets the direction used for an animation effect. This property can be used only if the effect uses a direction. Read/write.

Can be one of the following:

| across | font shadow | out |
| :--- | :--- | :--- |
| bottom | font strikethrough | out bottom <br> botom left <br> fott underline |
| bottom right | gradual | out center |
| center | horizontal | out slightly |
| clockwise | horizontal in | right |
| counterclockwise | horizontal out | slightly |
| cycle clockwise | in | top |
| cycle counterclockwise | in bottom | top left |
| down | in center | top right |
| down left | in slightly | up |
| down right | instant | up left |
| font all caps | left | up right |
| font bold | no direction | vertical |
| font italic | ordinal mask | vertical in |
|  |  | vertical out |

font
Returns or sets the name of the font in the specified effect. Read/write.
relative
True to set the motion position relative to the position of the shape. This property is used only in conjunction with motion paths. Read/write.
size
Returns or sets the character size, in points. Read/write.

## Class: filter effect

Represents a filter effect for an animation behavior.
To return a filter effect object, use the filter effect property of the animation behavior object. To change filter effects, use the reveal, subtype, and filter type properties of the filter effect object.

The following example adds a shape to the first slide of the active presentation and sets a filter effect animation behavior.

```
set sldFirst to slide 1 of active presentation
set shpHeart to make new shape at the beginning of sldFirst with properties ᄀ
    {auto shape type:autoshape heart, left position:100, top:100, ᄀ
    width:100, height:100}
set effNew to add effect (main sequence of timeline of sldFirst) ᄀ
    for shpHeart fx animation type change fill color ᄀ
    trigger after previous
set bhvEffect to add behavior effNew type animation type filter
set filter type of bhvEffect to wipe
set subtype of filter effect of bhvEffect to subtype up
set reveal of filter effect of bhvEffect to true
```


## Properties

filter type
Returns or sets the type of filter. Read/write.
Can be one of the following:
no effect type pixelate
barn
blinds
plus
random bar
slide
stretch
strips
wedge wheel
wipe
reveal
Determines how the embedded objects will be revealed. Read/write.
Setting a value of true for the reveal property when the filter effect type is wipe will make the shape appear. Setting a value of false will make the object disappear. In other words, if your filter is set to wipe and reveal is true, you will get a wipe in effect; when reveal is false, you will get a wipe out effect.
subtype
Returns or sets the subtype of the filter effect. Read/write.
Can be one of the following:
no effect subtype
in vertical out vertical in horizontal out horizontal horizontal vertical
out
across
from left
from right
from top
from bottom

```
down left
up left
down right
up right
spoke 1
spokes 2
spokes 3
spokes 4
spokes }
subtype left
subtype right
subtype down
subtype up
```


## Class: font

Represents character formatting for text or a bullet.
Use the font property to return the font object that represents the font attributes for a specific bullet, text range, or outline level. The following example sets the title text on slide one and sets the font properties.

```
set sldTitle to shape 1 of slide 1 of active presentation
set content of text range of text frame of sldTitle to "Volcano Coffee"
set italic of font of text range of text frame of sldTitle to true
set font name of font of text range of text frame of sldTitle to "Palatino"
set font color of font of text range of text frame of sldTitle to }
    ({0, 0, 255} as RGB color)
```


## Properties

## ASCII name

Returns or sets the font used for ASCII characters (characters with character set numbers within the range of 0 to 27). Read/write.
auto rotate numbers
Returns or sets lateral compression. Read/write.
base line offset
Returns or sets the base line offset for the specified superscript or subscript characters. Can be a floating-point value from -1 through 1 . A value of -1 represents an offset of -100 percent, and a value of 1 represents an offset of 100 percent. Read/write.

Setting the base line offset property to a negative value automatically sets the subscript property to true and the superscript property to false.

Setting the base line offset property to a positive value automatically sets the subscript property to false and the superscript property to true.

Setting the subscript property to true automatically sets the base line offset property to 0.3 (30 percent).

Setting the superscript property to true automatically sets the base line offset property to -0.25 ( 25 percent).
bold
True if the character format is bold; false if it's not bold. Read/write.
east asian name
Returns or sets the East Asian font name. Read/write.

## embedable

True if the specified font can be embedded in the presentation. This property should always return false because PowerPoint 2004 does not support embedded fonts. Read-only.
embedded
True if the specified font is embedded in the presentation. This property should always return false because PowerPoint 2004 does not support embedded fonts. Read-only.
emboss
True if the character format is embossed; false if it's not embossed. Read/write.
font color
Returns an RGB color that represents the color for the specified font. Read/write.
font name
Returns or sets the name of the font. Read $\backslash$ write.
font name other
Returns or sets the roman font associated with text. Read/write.
font size
Returns or sets the font size, in points. Read/write.
italic
True if the character format is italic; false if it's not italic. Read/write.
shadow
True if the specified text has a shadow; false if it doesn't have a shadow. This property does not affect soft shadows. Read/write.

## subscript

True if the specified text is subscript; false if it's not subscript. The default value is false.
Read/write.
Setting the base line offset property to a negative value automatically sets the subscript property to true and the superscript property to false.

Setting the base line offset property to a positive value automatically sets the subscript property to false and the superscript property to true.

Setting the subscript property to true automatically sets the base line offset property to -0.25 ( -25 percent).
superscript
True if the specified text is superscript; false if it's not superscript. The default value is false. Read/write.

Setting the base line offset property to a negative value automatically sets the subscript property to true and the superscript property to false.

Setting the base line offset property to a positive value automatically sets the subscript property to false and the superscript property to true.

Setting the superscript property to true automatically sets the base line offset property to 0.3 (30 percent).
underline
True if the specified text is underlined; false if it's not underlined. Read/write.

## Class: header or footer

Represents a header, footer, date and time, slide number, or page number on a slide or master. All of the header or footer objects for a slide or master are contained in a headers and footers object.

To return the header or footer object, use one of the headers and footers object properties listed in the following table.

## Use this property

footer
header
slide number

To return

A header or footer object that represents the date and time on the slide.
A header or footer object that represents the footer for the slide.
A header or footer object that represents the header for the slide. This works only for notes pages and handouts, not for slides.

A header or footer object that represent the slide number (on a slide) or page number (on a notes page or a handout).

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Note Header or footer objects aren't available for slide objects that represent notes pages. The header or footer object that represents a header is available only for a notes master or handout master.

You can set properties of header or footer objects for single slides. The following example sets the footer text for slide one in the active presentation.

```
set header footer text of footer of headers and footers of slide 1 of ᄀ
    active presentation to "Volcano Coffee"
```

You can also set properties of header or footer objects for the slide master, title master, notes master, or handout master to affect all slides, title slides, notes pages, or handouts and outlines at the same time. The following example sets the text for the footer in the slide master for the active presentation, sets the format for the date and time, and turns on the display of slide numbers. These settings will apply to all slides that are based on this master that display master graphics and that have not had their footer and date and time set individually.

```
set mySlidesHF to headers and footers of slide master of active presentation
set visible of footer of mySlidesHF to true
set header footer text of footer of mySlidesHF to "Regional Sales"
set visible of slide number of mySlidesHF to true
set visible of date and time of mySlidesHF to true
set use date format of date and time of mySlidesHF to true
set date format of date and time of mySlidesHF to Mdyy
Properties
date format
```

Returns or sets the format for the automatically updated date and time. Applies only to header or footer objects that represent a date and time (returned from the headers and footers class by the date and time property). Read/write.

Can be one of the following:

| ddddMMMMddyyyy | hmmssAMPM |
| :--- | :--- |
| dMMMMyyyy | Mdyy |
| dMMMyy | MMddyyHmm |
| date time format unset | MMddyyhmmAMPM |
| Hmm | MMMMdyyyy |
| hmmAMPM | MMMMyy |
| Hmmss | MMyy |

Make sure that the date and time are set to be updated automatically (not displayed as fixed text) by setting the use date format property to true.
header footer text
Returns or sets the text contained in the header or footer object. Read/write.
use date format
True if the date and time object contains automatically updated information; false if the date and time is a fixed string. Read/write.

This property applies only to a header or footer object that represents a date and time (returned by the date and time property). Set the use date format property of a date and time header or footer object to true when you want to set or return the date and time format by using the date format property. Set the use date format property to false when you want to set or return the text string for the fixed date and time.
visible
True if the specified header or footer, or the formatting applied to the specified header or footer, is visible. Read/write.

## Class: headers and footers

Contains all the header or footer objects on the specified slide, notes page, handout, or master. Each header or footer object represents a header, footer, date and time, or slide number.

Note Header or footer objects aren't available for slide objects that represent notes pages. The header or footer object that represents a header is available only for a notes master or handout master.

To return the headers and footers object, use the headers and footers property of the slide class. To return an individual header or footer object, use the date and time, footer, header, or slide number property. The following example sets the footer text for slide one in the active presentation.

```
set header footer text of footer of headers and footers of slide 1 of ᄀ
    active presentation to "Volcano Coffee"
```


## Properties

date and time
Returns a header or footer object that represents the date and time item that appears in the lower-left corner of a slide or in the upper-right corner of a notes page, handout, or outline. Read-only.
display headers and footers on title slide
True if the footer, date and time, and slide number appear on the title slide. False if this information appears on all slides except the title slide. Applies to slide masters. Read/write.

## footer

Returns a header or footer object that represents the footer that appears at the bottom of a slide or in the lower-left corner of a notes page, handout, or outline. Read-only.

## header

Returns a header or footer object that represents the header that appears at the top of a slide or in the upper-left corner of a notes page, handout, or outline. Read-only.

## slide number

Returns a header or footer object that represents the slide number in the lower-right corner of a slide, or the page number in the lower-right corner of a notes page or a page of a printed handout or outline. Read-only.

## Class: hyperlink

## Plural

hyperlinks
Represents a hyperlink associated with a shape. You can use a hyperlink to jump to an Internet or intranet site, to another file, or to a slide within the active presentation. The hyperlinks list contains all the hyperlinks on a slide or a master.
To return a hyperlink for a shape, use the hyperlink property of the action setting class. A shape can have two different hyperlinks assigned to it: one that's followed when the user clicks the shape during a slide show, and another that's followed when the user passes the mouse pointer over the shape during a slide show. For the hyperlink to be active during a slide show, the action property of the action setting class must be set to action type hyperlink action. The following example sets the mouse-click action for shape three on slide one in the active presentation to an Internet link.

```
set theAction to (get action setting for shape 3 of slide 1 ᄀ
    of active presentation event mouse activation mouse click)
set action of theAction to action type hyperlink action
set hyperlink address of hyperlink of theAction to "http://www.microsoft.com"
```

A slide can have more than one hyperlink. Use hyperlink index, where index is the hyperlink number, to return a single hyperlink object.

## Properties

## hyperlink address

Returns or sets the address of the hyperlink. Read/write.

## hyperlink sub address

Returns or sets the location within a document - such as a bookmark in a Word document, a range in an Excel worksheet, or a slide in a PowerPoint presentation - associated with the specified hyperlink. Read/write.

## hyperlink type

Returns the type of hyperlink. Read-only.
Can be one of the following:

- hyperlink range
- hyperlink shape
- hyperlink inline shape

Class: master

## Elements

shape
hyperlink
Represents a slide master, title master, handout master, or notes master.
To return a master object, use the slide master property of the slide object, or use the handout master, notes master, slide master, or title master property of the presentation object. The following example sets the background fill for the slide master for the active presentation.

```
preset gradient (fill format of background of slide master ᄀ
    of active presentation) style horizontal gradient variant 1 ᄀ
    gradient type gradient brass
```

Properties
background
Returns a shape object that represents the slide background. Read-only.
If you want to use the background property to set the background for an individual slide without changing the slide master, the follow master background property for that slide must be set to false.
color scheme
Returns or sets the color scheme object that represents the scheme colors for the specified slide master. Read/write.
headers and footers
Returns a headers and footers object that represents the header, footer, date and time, and slide number associated with the slide master. Read-only.
height
Returns or sets the height of the specified slide master. Read-only.
timeline
Returns a timeline object representing the animation timeline for the slide master. Read-only. width

Returns or sets the width (in points) of the specified slide master. Read-only.

## Class: motion effect

Represents a motion effect for an animation behavior object.
To return a motion effect object, use the motion effect property of the animation behavior object. The following example refers to the motion effect for a given animation behavior.
set MSQ to main sequence of timeline of slide 1 of active presentation set theMotion to motion effect of animation behavior of effect 1 of MSQ

To construct a motion path, use the by $x$, by $y$, from $x$, from $y$, to $x$, and to $y$ properties of the motion effect object. The following example adds a shape to the first slide and creates a motion path.

```
set theSlide to slide 1 of active presentation
set shpNew to make new shape at the beginning of theSlide with properties ᄀ
    {auto shape type:autoshape five point star, left position:0, top:0, ᄀ
    width:100, height:100}
set effNew to add effect (main sequence of timeline of theSlide) for shpNew ᄀ
    fx animation type custom trigger after previous
set aniMotion to add behavior effNew type animation type motion
set from x of motion effect of aniMotion to 0
set from y of motion effect of aniMotion to 0
set to x of motion effect of aniMotion to 100
set to y of motion effect of aniMotion to 100
Properties
```

by $x$

Returns or sets a small real number that represents moving an object horizontally by a specified percentage of the screen width. For example, a value of 50 for a motion effect means to move the object half the screen width to the right. Read/write.
Negative numbers move the object horizontally to the left. Floating point numbers (for example, 55.5) are allowed.

To scale or move an object vertically, use the by $y$ property.
If both the by $x$ and by $y$ properties are set, then the object is scaled or moves both horizontally and vertically.
by $y$
Returns or sets a small real number that represents moving an object vertically by a specified percentage of the screen width. Read/write.
Negative numbers move the object horizontally to the left. Floating point numbers (for example, 55.5) are allowed.
To scale or move an object horizontally, use the by $x$ property.
If both the by $x$ and by $y$ properties are set, then the object is scaled or moves both horizontally and vertically.
from $x$
Returns or sets a small real number that represents the starting width or horizontal position of a motion effect object, specified as a percent of the screen width. Read/write.

The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the to $x$ property to resize or jump from one position to another.
from $y$
Returns or sets a small real number that represents the starting height or vertical position of a motion effect object, specified as a percentage of the screen width. Read/write.

The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the to $y$ property to resize or jump from one position to another.
path
Returns a string that represents the path followed by a motion effect object. The string returned is a specific path that the motion effect follows between from and to using the same syntax as the VML path description. Read-only.
to $x$
Returns or sets a small real number that represents the ending width or horizontal position of a motion effect object, specified as a percent of the screen width. Read/write.

The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the from $x$ property to resize or jump from one position to another.
to $y$
Returns or sets a small real number that represents the ending height or vertical position of a motion effect object, specified as a percentage of the screen width. Read/write.
The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the from $y$ property to resize or jump from one position to another.

## Class: named slide show

## Plural

named slide shows
Represents a custom slide show, which is a named subset of slides in a presentation. The named slide shows list contains all the named slide shows in the presentation.
Use named slide show index, where index is the custom slide show name or index number, to return a single named slide show object. The following example deletes the custom slide show named "Quick Show."

```
delete named slide show "Quick Show" of slide show settings ᄀ
    of active presentation
```

To return an array that contains the unique slide IDs for all the slides in the specified custom show, use the slide IDs property. The following example displays the slide IDs for the slides in the custom slide show named "Quick Show."

```
set idList to (get slide IDs of named slide show "Quick Show" of slide show ᄀ
    settings of active presentation)
repeat with i from 1 to (count of items of idList)
    display dialog item i of idList
end repeat
```


## Properties

## name

Returns or sets the name of the specified named slide show. You cannot use this property to set the name for a custom slide show. To redefine a custom slide show under a new name, use the make command. Read-only.

## number of slides

Returns the number of slides in the specified named slide show. Read-only.
slide IDs
Returns a list of slide IDs for the specified named slide show. Read-only.

## Class: page setup

Contains information about the page setup for slides, notes pages, handouts, and outlines in a presentation.
To return the page setup object, use the page setup property of the presentation class. The following example sets all slides in the active presentation to be 11 inches wide and sets the slide numbering for the presentation to start at 17.

```
set slide width of page setup of active presentation to (11 * 72)
set first slide number of page setup of active presentation to 17
```


## Properties

first slide number
Returns or sets the slide number for the first slide in the presentation. Read/write.
The slide number is the actual number that will appear in the lower-right corner of the slide when you display slide numbers. This number is determined by the number (order) of the slide within the presentation (the slide index property value) and the starting slide number for the presentation (the first slide number property value). The slide number will always be equal to the starting slide number + the slide index number -1 . The slide number property of the slide class returns the slide number.

## notes orientation

Returns or sets the on-screen and printed orientation of notes pages, handouts, and outlines for the specified presentation. Read/write.

Can be one of the following:

- horizontal orientation
- orientation unset
- vertical orientation
slide orientation
Returns or sets the on-screen and printed orientation of slides in the specified presentation. Read/write.

Can be one of the following:

- horizontal orientation
- orientation unset
- vertical orientation
slide size
Returns or sets the slide size for the specified presentation. Read/write.
Can be one of the following:
- slide size 35 MM
- slide size A4 paper
- slide size custom
- slide size letter paper
- slide size on screen
- slide size overhead
- slide size banner
slide width
Returns or sets the slide width, in points. Read/write.


## Class: pane

Plural
panes
An object representing one of the three panes in normal view or the single pane of any other view in the document window.

Use pane index, where index is the index number for a pane, to return a single pane object. The following table lists the names of the panes in normal view with their corresponding index numbers.

| Pane | Index number |
| :--- | :--- |
| Outline | 1 |
| Slide | 2 |
| Notes | 3 |

When you use a document window view other than normal view, use pane 1 to reference the single pane object.

The following example uses the view type property to return which pane is active.
get pane view type of active pane of active window

## Remarks

Normal view is the only view with multiple panes. All other document window views have only a single pane, which is the document window.

## Properties

active
True if the specified pane is the active pane. Read-only.
pane view type
Returns the type of the view contained in the specified pane. Read/write.
Can be one of the following:

- normal view
- handout master view
- notes master view
- page view
- outline view
- slide view
- master view
- slide sorter view
- title master view


## Class: paragraph format

Represents the paragraph formatting of a text range.
To return the paragraph format object, use the paragraph format property of the text range or text style level class. The following example left aligns the paragraphs in shape two on slide one in the active presentation.
set alignment of paragraph format of text range of text frame of shape 2 of $\neg$ slide 1 of active presentation to paragraph align left

## Properties

alignment
Returns or sets the alignment for each paragraph in the specified paragraph format.
Read/write.
Can be one of the following:

- paragraph align center
- paragraph align distribute
- paragraph align justify
- paragraph align left
- paragraph alignment unset
- paragraph align right
baseline alignment
Returns or sets the base line alignment for the specified paragraph. Read/write.
Can be one of the following:
- baseline align baseline
- baseline center
- baseline east asian50
- baseline alignment unset
- baseline align top
bullet format
Returns a bullet format object that represents bullet formatting for the specified paragraph format. Read-only.
east asian line break control
True if you have an East Asian language setting specified true and the line break control option is set. Read/write.


## line rule after

True if line spacing after the last line in each paragraph is set to a specific number of lines, or false if line spacing is set to a specific number of points. Read/write.
line rule before
True if line spacing before the first line in each paragraph is set to a specific number of lines, or false if line spacing is set to a specific number of points. Read/write.
line rule within
True if line spacing between base lines is set to a specific number of lines, or false if line spacing is set to a specific number of points. Read/write.
space after
Returns or sets the amount of space after the last line in each paragraph of the specified text, in points or lines. Read/write.
space within
Returns or sets the amount of space between base lines in the specified text, in points or lines. Read/write.
text direction
Returns or sets the text direction for the specified paragraph. Read/write.
Can be one of the following:

- left to right
- direction unset
word wrap
Used only with Kanji characters. Read/write.


## Class: play settings

Contains information about how the specified media clip will be played during a slide show.
To return the play settings object, use the animation play settings property of the animation settings class or the play settings information property of the effect information class. The following sets the play settings for the animation associated with the specified shape.
set myAnim to animation settings of shape 2 of slide 1 of active presentation
set play on entry of play settings of myAnim to true
set pause animation of play settings of myAnim to false
set hide while not playing of play settings of myAnim to true

## Properties

hide while not playing
True if the specified media clip is hidden during a slide show except when it's playing. Read/write.
loop until stopped
True if the specified movie or sound loops continuously until either the next movie or sound starts, the user clicks the slide, or a slide transition occurs. Read/write.
pause animation
True if the slide show pauses until the specified media clip is finished playing. False if the slide show continues while the media clip plays in the background. Read/write.

For the pause animation property setting to take effect, the play on entry property of the specified shape must be set to true.
play on entry
True if the specified movie or sound is played automatically when it's animated. Read/write. rewind move

True if the first frame of the specified movie is automatically redisplayed as soon as the movie has finished playing. Read/write.
stop after slides
Returns or sets the number of slides to be displayed before the media clip stops playing. Read/write.

For the stop after slides property setting to take effect, the pause animation property of the specified slide must be set to false, and the play on entry property must be set to true.

The media clip will stop playing when the specified number of slides have been displayed or when the clip comes to an end -- whichever comes first. A value of 0 (zero) specifies that the clip will stop playing after the current slide.

## Class: presentation

Plural
presentations

## Elements

slide
color scheme
font
document window
document property
custom document property
Represents a PowerPoint presentation. The presentations list contains all the presentation objects that represent open presentations in PowerPoint.

This section describes how to:

- Return a presentation that you specify by name or index number
- Return the presentation in the active window
- Return the presentation in any document window or slide show window you specify


## Returning a presentation that you specify by name or index number

Use presentation index, where index is the presentation's name or index number, to return a single presentation object. The name of the presentation is the file name, with or without the file name extension, and without the path. The following example adds a slide to the beginning of Sample Presentation.
make new slide at the beginning of presentation "Sample Presentation" ᄀ with properties \{slide index:1, layout:slide layout title slide\}

Note that if multiple presentations with the same name are open, the first presentation in the collection with the specified name is returned.

## Returning the presentation in the active window

To return the presentation in the active window, use the active presentation property. The following example saves the active presentation.
save active presentation
Note that if an embedded presentation is in-place active, the active presentation property returns the embedded presentation.

## Returning the presentation in any document window or slide show window you specify

To return the presentation that's in the specified document window or slide show window, use the presentation property. The following example displays the name of the presentation in the first document window.
display dialog (get name of presentation of document window 1)

## Properties

default shape
Returns a shape object that represents the default shape for the presentation. Read-only. east asian line break level

Returns or sets the line break based upon Asian character level. Read/write.
Can be one of the following:

- east asian line break normal
- east asian line break strict
- east asian line break custom

This property is not used in the U.S. English version of PowerPoint.
full name
Returns the name of the specified saved presentation, including the path, the current file system separator, and the file name extension. Read-only.

This property is equivalent to the path property, followed by the current file system separator, followed by the name property.
handout master
Returns a master object that represents the handout master. Read-only.
has title master
True if the specified presentation has a title master. Read-only.
layout direction
Returns or sets the layout direction for the user interface. Read/write.
Can be one of the following:

- left to right
- direction unset
name
Returns the name of the specified object. The name of the presentation includes the file name extension (for file types that are registered) but doesn't include its path. You cannot use this property to set the name. Read-only.
no line break after
Returns or sets the characters that cannot end a line. Not used in the U.S. English version of PowerPoint. Read/write.
no line break before
Returns or sets the characters that cannot begin a line. Not used in the U.S. English version of PowerPoint. Read/write.
notes master
Returns a master object that represents the notes master. Read-only.
page setup
Returns a page setup object whose properties control slide setup attributes for the specified presentation. Read-only.
path
Returns the path to the specified presentation object. Read-only.
Note The path doesn't include the final separator character or the name of the specified object. To return the file name without the path, use the name property. To return the file name and the path together, use the full name property.
print options
Returns a print options object that represents print options that are saved with the specified presentation. Read-only.
read only
True if the specified presentation is read-only. Read-only.
save as movie settings
Returns the save as movie settings object. When you derive a save as movie settings object using the save as movie settings property, any changes that you make to the properties of the save as movie settings object affect the specific presentation, not the default preferences for the application.
saved
True if no changes have been made to a presentation since it was last saved. Read/write.
If the saved property of a modified presentation is set to true, the user won't be prompted to save changes when closing the presentation, and all changes made to it since it was last saved will be lost.
slide master
Returns a master object that represents the slide master. Read-only.
slide show settings
Returns a slide show settings object that represents the slide show settings for the specified presentation. Read-only.
slide show window
Returns a slide show window object that represents the slide show window in which the specified presentation is running. Read-only.
template name
Returns the name of the design template associated with the specified presentation. Read-only.
The returned string doesn't include the full path.
title master
Returns a master object that represents the title master for the specified presentation. If the presentation doesn't have a title master, an error occurs. Read-only.
web options
Returns the web options object, which contains presentation-level attributes used by PowerPoint when you save or publish a presentation as a Web page or open a Web page. Read-only.


## Class: print options

## Elements <br> print range <br> Contains print options for a presentation.

Note Specifying the optional arguments from, to, copies, and collate for the print out command will set the corresponding properties of the print options object.
To return the print options object, use the print options property. The following example prints two uncollated color copies of all the slides (whether visible or hidden) in the active presentation. The example also scales each slide to fit the printed page and frames each slide with a thin border.
set number of copies of print options of active presentation to 2
set collate of print options of active presentation to false
set print color type of print options of active presentation to print color
set print hidden slides of print options of active presentation to true
set fit to page of print options of active presentation to true
set frame slides of print options of active presentation to true
set output type of print options of active presentation to print slides
print out active presentation
To specify whether to print the entire presentation or only a specified part of it, use the range type property. If you want to print only certain slides, set the range type property to print range slide range, and use the print range object to specify which pages to print. The following example prints slides $1,4,5$, and 6 in the active presentation.
make new print range at the beginning of print options of active presentation $\neg$ with properties \{range start:1, range end:1\}
make new print range at the beginning of print options of active presentation $\neg$ with properties \{range start:4, range end:6\}
set range type of print options of active presentation $\neg$ to print range slide range
print out active presentation

## Properties

active printer
Returns the name of the active printer. Read-only.
collate
True if a complete copy of the specified presentation is printed before the first page of the next copy is printed. The default value is true. Read/write.

Specifying a value for the collate argument of the print out command sets the value of this property.
fit to page
True if the specified slides will be scaled to fill the page they're printed on, regardless of the values in the Height and Width boxes in the Page Setup dialog box (File menu). False if the slides will have the dimensions specified in the Page Setup dialog box, whether or not those dimensions match the page they're printed on. The default value is false. Read/write.
frame slides
True if a thin frame is placed around the border of the printed slides. Applies to printed slides, handouts, and notes pages. The default value is false. Read/write.
number of copies
Returns or sets the number of copies of a presentation to be printed. The default value is 1 . Read/write.

Specifying a value for the copies argument of the print out command sets the value of this property.
output type
Returns or sets a value that indicates which component (slides, handouts, notes pages, or an outline) of the presentation is to be printed. Read/write.
Can be one of the following:

- print notes pages
- print outline
- print four slide handouts
- print nine slide handouts
- print six slide handouts
- print slides
- print three slide handouts
- print two slide handouts

The default value is print slides.
print color type
Returns or sets the way the specified document will be printed: in black and white or in color. Read/write.
Can be one of the following:

- print black and white
- print color

The default value is set by the printer.
print fonts as graphics
True if TrueType fonts are printed as graphics. Read/write.
range type
Returns or sets the type of print range for the presentation. Read/write.
Can be one of the following:

- print range all
- print range current
- print range selection
- print range slide range
slide show name
Returns or sets the name of the custom slide show to print. Read/write.


## Class: print range

## Plural <br> print ranges

Represents a single range of consecutive slides or pages to be printed. The print range object is an element of the print options class. The print ranges list contains all the print ranges that have been defined for the specified presentation.

Use print range index, where index is the print range index number, to return a single print range object. The following example displays a message that indicates the starting and ending slide numbers for print range one in the active presentation.

```
set prtRanges to print ranges of print options of active presentation
if (count of prtRanges) > 0 then
    display dialog "Print range 1 starts on slide " & (range start of ᄀ
            item 1 of prtRanges) & " and ends on slide " & (range end of ᄀ
            item 1 of prtRanges)
end if
```

To create a print range object and add it to the print ranges list, use the make command. The following example defines three print ranges that represent slide 1 , slides 3 through 5 , and slides 8 and 9 in the active presentation and then prints the slides in these ranges.
make new print range at the beginning of print options of active presentation $\neg$ with properties \{range start:1, range end:1\}
make new print range at the beginning of print options of active presentation $\neg$ with properties \{range start:3, range end:5\}
make new print range at the beginning of print options of active presentation $\neg$ with properties \{range start:8, range end:9\}
print out active presentation

## Remarks

You can set print ranges in the print ranges list independent of the range type setting; these ranges are retained as long as the presentation they're contained in is loaded. The ranges in the print ranges list are applied when the range type property is set to print range slide range.

## Properties

range end
Returns the number of the last slide in the specified print range. Read-only. range start

Returns the number of the first slide in the range of slides to be printed. Read-only.
Class: property effect

## Elements

## animation point

Represents a property effect for an animation behavior object.
To return a property effect object, use the property effect property of the animation behavior object. The following example refers to the property effect for a specified animation behavior.

```
get property effect of animation behavior 1 of effect 1 of main sequence ᄀ
    of timeline of slide 1 of active presentation
```

Properties
ending
Returns the ending value of the property effect object. Read-only.
property
Returns or sets an animation property. Read/write.
Can be one of the following:

| $\mathbf{x}$ | text font superscript <br> text font underline | shape picture grayscale <br> y |
| :--- | :--- | :--- |
| opacity text font strikethrough <br> colors text bullet character | shape fill color |  |
| visibility | text bullet fontName | shape fill opacity |
| text font bold | text bullet number | shape fill back color |
| text font color | text bullet color | shape line on |
| text font emboss | text bullet relative size | shape line color |
| text font italic | text bullet style | shape shadow on |
| text font name | text bullet type | shape shadow type |
| text font shadow | shape picture contrast | shape shadow color |
| text font size | shape picture brightness | shape shadow opacity <br> text font subscript |

property effect set
Returns an animation property. Read-only.
Can be one of the following:

| x | text font superscript <br> text font underline | shape picture grayscale <br> shape fill on |
| :--- | :--- | :--- |
| opacity | text font strikethrough <br> colors | shape fill color |
| visibility | text bullet character | shape fill opacity |
| text font bold | text bullet number | shape fill back color |
| text font color | text bullet color | shape line on |
| text font emboss | text bullet relative size | shape line color |
| text font italic | text bullet style | shape shadow on |
| text font name | text bullet type | shape shadow type |
| text font shadow | shape picture contrast | shape shadow color |
| text font size | shape picture brightness | shape shadow opacity <br> text font subscript |

## starting

Returns the starting value of the property effect object. Read-only.
The default value is empty, in which case the current position of the object is used.

## Class: rotating effect

Represents a rotation effect for an animation behavior object.
To return a rotating effect object, use the rotating effect property of the animation behavior object. The following example refers to the rotation effect for a given animation behavior.

```
get rotating effect of animation behavior 1 of effect 1 of main sequence ᄀ
    of timeline of slide 1 of active presentation
```

Properties
rotating

Class: ruler

## Elements

tab stop
ruler level
Represents the ruler for the text in the specified shape or for all text in the specified text style. Contains tab stops and the indentation settings for text outline levels.

## Microsoft PowerPoint Suite

To return the ruler object that represents the ruler for the text in the specified shape, use the ruler property of the text frame class. The following example sets a left-aligned tab stop at 2 inches (144 points) and sets a hanging indent for the text in object two on slide one in the active presentation.

```
set theRuler to ruler of text frame of shape 2 of slide 1 of ᄀ
    active presentation
make new tab stop at theRuler with properties {tab stop type:tabstop left, ᄀ
    tab position:144}
set first margin of ruler level 1 of theRuler to 0
set left margin of ruler level 1 of theRuler to 36
```

To return the ruler object that represents the ruler for one of the four defined text styles (title text, body text, notes text, or default text), use the ruler property of the text style class. The following example sets the first-line indent and hanging indent for outline level one in body text on the slide master for the active presentation.

```
set tsBody to get text style from slide master of active presentation ᄀ
    at text style body
set rlOne to ruler level 1 of ruler of tsBody
set first margin of rlOne to 9
set left margin of rlOne to 54
Class: ruler level
```


## Plural

ruler levels
Contains first-line indent and hanging indent information for an outline level. The ruler levels list contains a ruler level object for each of the five available outline levels.

Use ruler level index, where index is the outline level, to return a single ruler level object. The following example sets the first-line indent and hanging indent for outline level one in body text on the slide master for the active presentation.

```
set tsBody to get text style from slide master of active presentation ᄀ
    at text style body
set first margin of ruler leve1 1 of ruler of tsBody to 9
set left margin of ruler level 1 of ruler of tsBody to 54
```

The following example sets the first-line indent and hanging indent for outline level one in shape two on slide one in the active presentation.

```
set rlOne to ruler level 1 of ruler of text frame of shape 2 of ᄀ
    slide master of active presentation
set first margin of rlOne to 9
set left margin of rlOne to 54
```


## Properties

first margin
Returns or sets the first-line indent (in points) for the specified outline level. Read/write.
If a paragraph begins with a bullet, the bullet position is determined by the first margin property, and the position of the first text character in the paragraph is determined by the left margin property.

Note The ruler levels list contains five ruler level objects, each of which corresponds to one of the possible outline levels. The first margin property value for the ruler level object that corresponds to the first outline level has a valid range of ( -9.0 to 4095.875 ). The valid range for the first margin property values for the ruler level objects that correspond to the second through the fifth outline levels are determined as follows:

- The maximum value is always 4095.875.
- The minimum value is the maximum assigned value between the first margin property and left margin property of the previous level plus 9 .


## left margin

Returns or sets the left indent (in points) for the specified outline level. Read/write.
If a paragraph begins with a bullet, the bullet position is determined by the first margin property, and the position of the first text character in the paragraph is determined by the left margin property.

Note The ruler levels list contains five ruler level objects, each of which corresponds to one of the possible outline levels. The left margin property value for the ruler level object that corresponds to the first outline level has a valid range of ( -9.0 to 4095.875 ). The valid range for the left margin property values for the ruler level objects that correspond to the second through the fifth outline levels are determined as follows:

- The maximum value is always 4095.875 .
- The minimum value is the maximum assigned value between the first margin property and left margin property of the previous level plus 9 .


## Class: save as movie settings

Contains the settings for saving presentations as movies.
To return the save as movie settings object from a presentation object, use the save as movie settings property of the presentation class. Any changes that you make to the properties of the save as movie settings object affect the specific presentation, not the default preferences for the application.
To return the save as movie settings object from the application object, use the save as movie settings object property of the application class. Any changes that you make to the properties of the save as movie settings object affect the default preferences for the application, not the properties of a specific presentation.

## Properties

animation enabled
True if animation is enabled. Read/write.
auto loop enabled
True if the movie restarts after it has completed. Read/write.
background sound track file
Specifies the location of the sound file for the presentation. Read/write.
background track segment end
Specifies the end location, in seconds, for the sound relative to the beginning of the sound file.
Read/write.
background track segment start
Specifies the start location, in seconds, for the sound relative to the beginning of the sound file.
Read/write.T
background track start
Specifies the start location, in seconds, for the sound track relative to the beginning of the movie. Read/write.
create movie preview
True to create a preview of a movie. Read/write.
force all inline
Sets the size of the movie to the size of the slide. Read/write.
include narration and sounds
True to include narration and sounds with a movie. Read/write.
include roundtrip data
True to include data that would allow subsequent editing of a movie in PowerPoint.
Read/write.
interactivity enabled
True to allow interactivity, such as hyperlinks, with the saved movie. Read/write movie actors

Sets a text description that is included with a movie. Read/write. movie author

Sets a text description that is included with a movie. Read/write.
movie copyright
Sets a text description that is included with a movie. Read/write.
movie frame height
Sets the height of a movie's frame. Read/write.
movie frame width
Sets the width of a movie's frame. Read/write.
movie producer
Sets a text description that is included with a movie. Read/write.
optimization
Specifies the type of optimization to use when creating a movie. Read/write.
Can be one of the following:

- movie optimization normal
- movie optimization size
- movie optimization speed
- movie optimization quality
show movie controller
True if the movie controller is made visible when a movie is being created. Read/write. transition description

Sets the description for the transition type used in a movie. The description should correspond to one of three transition types: Follow slideshow, No transitions, or MRU QT transition. Read/write.

The possible transition types correspond to the options available in the Movie Options dialog box.

If the description is set to MRU QT transition, then the QuickTime transition that was last selected for a movie is used.
use single transition
True to use a single QuickTime transition throughout a movie. Read/write.

## Class: scale effect

Represents a scaling effect for an animation behavior object.
Use the scale effect property of the animation behavior object to return a scale effect object. The following example refers to the scale effect for a given animation behavior.

```
get scale effect of animation behavior 1 of main sequence of timeline of ᄀ
    slide 1 of active presentation
```


## Microsoft PowerPoint Suite

Use the by $x$, by $y$, from $x$, from $y$, to $x$, and to $y$ properties of the scale effect object to manipulate an object's scale. This example scales the first shape on the first slide, starting at zero then increasing in size until it reaches 100 percent of its original size. This example assumes that there is a shape on the first slide.

```
set shpFirst to shape 1 of slide 1 of active presentation
set effNew to add effect (main sequence of timeline of slide 1 of ᄀ
        active presentation) for shpFirst fx animation type custom
set aniScale to add behavior effNew type animation type scale
set from x of scale effect of aniScale to 0
set from y of scale effect of aniScale to 0
set to x of scale effect of aniScale to 100
set to y of scale effect of aniScale to 100
```


## Properties

by $x$
Returns or sets a small real number that represents scaling an object horizontally by a specified percentage of the screen width. For example, a value of 50 for a motion effect means to scale the object half the screen width to the right. Read/write.
Negative numbers scale the object horizontally to the left. Floating point numbers (for example, 55.5) are allowed.

To scale an object vertically, use the by $y$ property.
If both the by $x$ and by $y$ properties are set, then the object is scaled both horizontally and vertically.
by $y$
Returns or sets a small real number that represents moving an object vertically by a specified percentage of the screen width. Read/write.
Negative numbers scale the object vertically downward. Floating point numbers (for example, 55.5) are allowed.

To scale an object horizontally, use the by $x$ property.
If both the by $x$ and by $y$ properties are set, then the object is scaled both horizontally and vertically.
from $x$
Returns or sets a small real number that represents the starting width or horizontal position of a scale effect object, specified as a percent of the screen width. Read/write.
The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the to $x$ property to resize or jump from one position to another.
from $y$
Returns or sets a small real number that represents the starting height or vertical position of a scale effect object, specified as a percentage of the screen height. Read/write.

The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the to $y$ property to resize or jump from one position to another.
to $x$
Returns or sets a small real number that represents the ending width or horizontal position of a scale effect object, specified as a percent of the screen width. Read/write.

The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the from $x$ property to resize or jump from one position to another.
to $y$
Returns or sets a small real number that represents the ending height or vertical position of a scale effect object, specified as a percentage of the screen height. Read/write.

The default value of this property is empty, in which case the current position of the object is used.

Use this property in conjunction with the from $y$ property to resize or jump from one position to another.

Class: sequence
Plural
sequences
Elements
effect
Represents a slide's interactive animation sequences. The sequence class is an element of the timeline class.

To return a sequence object, use the main sequence property of the timeline object.
To add a new sequence object, use the add effect command. This example adds a shape and an animation sequence to the first shape on the first slide in the active presentation.

```
set shpFirst to shape 1 of slide 1 of active presentation
set effNew to add effect (main sequence of timeline of slide 1 of }
    active presentation) for shpFirst fx animation type blinds
```


## Class: set effect

Represents a set effect for an animation behavior. You can use the set effect object to set the value of a property.
Use the set effect property of the animation behavior object to return a set effect object. The following example adds a shape to the first slide of the active presentation and sets a set effect animation behavior.

```
set sldFirst to slide 1 of active presentation
set shpHeart to make new shape at the beginning of sldFirst with properties ᄀ
    {auto shape type:autoshape heart, left position:100, top:100, ᄀ
    width:100, height:100}
set effNew to add effect (main sequence of timeline of sldFirst) for shpHeart ᄀ
    fx animation type change fill color trigger after previous
set bhvEffect to add behavior effNew type animation type set
set property set effect of set effect of bhvEffect to shape fill color
set ending of set effect of bhvEffect to ({0, 255, 255} as RGB color)
```


## Properties

```
ending
```

Sets or returns the value or ending value of the set effect object. Read/write.

## property set effect

Returns an animation property. Read-only.
Can be one of the following:

| x | text font superscript <br> text font underline | shape picture grayscale <br> s |
| :--- | :--- | :--- |
| opacity text font strikethrough <br> colors text bullet character | shape fill color |  |
| visibility | text bullet fontName number | shape fill opacity |
| text font bold | text bullet color | shape fill back color |
| text font color | text bullet relative size | shape line on |
| text font emboss | text bullet style | shape line color |
| text font italic | text bullet type | shape shadow on |
| text font name | shape picture contrast | shape shadow color |
| text font shadow | shape picture brightness | shape shadow opacity <br> text font size <br> text font subscript |

## Class: slide

## Plural

slides

## Elements

shape

## hyperlink

Represents a slide. The slides list contains all the slide objects in a presentation.
This section describes how to:

- Return a slide that you specify by name, index number, or slide ID number.
- Return the slide that's currently displayed in any document window or slide show window you specify.
- Create a new slide.


## Returning a slide that you specify by name, index number, or slide ID number

Use slide index, where index is the slide name or index number to return a single slide object. The following example sets the layout for slide one in the active presentation.
set layout of slide 1 of active presentation to slide layout title slide
Returning the slide that's currently displayed in any document window or slide show window you specify
Use the slide property to return the slide that's currently displayed in the specified document window or slide show window view. The following example copies the slide that's currently displayed in document window two to the Clipboard.
copy object (slide of view of window 2)

## Creating a new slide

Use the make command to create a new slide and add it to the presentation. The following example adds a title slide to the beginning of the active presentation.

```
make new slide at the beginning of the active presentation with properties ᄀ
    {layout:slide layout title slide}
```


## Properties

background
Returns a shape object that represents the slide background. Read-only.
If you want to use the background property to set the background for an individual slide without changing the slide master, the follow master background property for that slide must be set to false.
color scheme
Returns or sets the color scheme object that represents the scheme colors for the specified slide, slide range, or slide master. Read/write.

## display master shapes

True if the specified slide displays the background objects on the slide master. These background objects can include text, drawings, and clip art you add to the slide master. Headers and footers aren't included. Read/write.

When you create a new slide, the default value for this property is true. If you copy a slide from another presentation, it retains the setting it had in the original presentation. That is, if the slide omitted slide master background objects in the original presentation, it will omit them in the new presentation as well.

Note that the look of the slide's background is determined by the color scheme and background as well as by the background objects. If setting the display master shapes property alone doesn't give you the results you want, try setting the follow master background and color scheme properties as well.
follow master background
True if the specified slide or range of slides follows the slide master background. False if the specified slide or range of slides has a custom background. Read/write.
When you create a new slide, the default value for this property is true. If you copy a slide from another presentation, it retains the setting it had in the original presentation. That is, if the slide followed the slide master background in the original presentation, it will automatically follow the slide master background in the new presentation; or, if the slide had a custom background, it will retain that custom background.

Note that the look of the slide's background is determined by the color scheme and background objects as well as by the background itself. If setting the follow master background property alone doesn't give you the results you want, try setting the color scheme and display master shapes properties as well.
headers and footers
Returns a headers and footers object that represents the header, footer, date and time, and slide number associated with the slide. Read-only.
layout
Returns or sets the slide layout. Read/write.
Can be one of the following:

| slide layout title slide | slide layout large object <br> slide layout object |
| :--- | :--- |
| slide layout text slide | slide layout media clip <br> slide layout two column text |
| slide layout table | slide layout media clip and text <br> slide layout object over text |
| slide layout text and chart | slide layout text over object |
| slide layout chart and text | slide layout text and two objects |
| slide layout orgchart | slide layout two objects and text |
| slide layout chart | slide layout two objects over text |
| slide layout text and clipart | slide layout four objects |
| slide layout clipart and text | slide layout vertical text |
| slide layout title only | slide layout clipart and vertical text |
| slide layout blank | slide layout vertical title and text over chart |
| slide layout text and object |  |

> slide layout large object slide layout object slide layout media clip slide layout media clip and text slide layout object over text slide layout text over object slide layout text and two objects slide layout two objects and text slide layout two objects over text slide layout four objects slide layout vertical text slide layout clipart and vertical text slide layout vertical title and text over chart
notes page
Returns a slide object that represents the notes pages for the specified slide or range of slides. Read-only.

The notes page property returns the notes page for a single slide and allows you to make changes only to those notes pages. To make changes that affect all notes pages, use the notes master property to return the slide object that represents the notes master.
print steps
Returns the number of slides you'd need to print to simulate the builds on the specified slide. Read-only.
slide ID
Returns a unique ID number for the specified slide. Read-only.
Unlike the slide index property, the slide ID property of a slide object won't change when you add slides to the presentation or rearrange the slides in the presentation.
slide index
Returns the index number of the specified slide within the slides list. Read-only.
Unlike the slide ID property, the slide index property of a slide object can change when you add slides to the presentation or rearrange the slides in the presentation.
slide master
Returns a master object that represents the slide master. Read-only.

## slide number

Returns the slide number. Read-only.
The slide number property of a slide object is the actual number that appears in the lower-right corner of the slide when you display slide numbers. This number is determined by the number of the slide within the presentation (the slide index property value) and the starting slide number for the presentation (the first slide number property value). The slide number is always equal to the the starting slide number + the slide index number -1.
slide show transition
Returns a slide show transition object that represents the special effects for the specified slide transition. Read-only.

## timeline

Returns a timeline object representing the animation timeline for the slide. Read-only.

## Class: slide show settings

## Elements

named slide show
Represents the slide show setup for a presentation.
Use the slide show settings property of the presentation class to return the slide show settings object. The first section in the following example sets all the slides in the active presentation to advance automatically after five seconds. The second section sets the slide show to start on slide two, end on slide four, advance slides by using the timings set in the first section, and run in a continuous loop until the user presses ESC. Finally, the example runs the slide show.

```
repeat with s in (get slides of active presentation)
    set advance on time of slide show transition of s to true
    set advance time of slide show transition of s to 5
end repeat
set theSlideShowSet to slide show settings of active presentation
set starting slide of theSlideShowSet to 2
set ending slide of theSlideShowSet to 4
set advance mode of theSlideShowSet to slide show advance use slide timings
set loop until stopped of theSlideShowSet to true
run slide show theSlideShowSet
```


## Microsoft PowerPoint Suite

## Properties

advance mode
Returns or sets a value that indicates how the slide show advances. Read/write.
Can be one of the following:

- slide show advance manual advance
- slide show advance use slide timings
ending slide
Returns or sets the last slide to be displayed in the specified slide show. Read/write.
loop until stopped
True if the specified slide show loops continuously until the user presses ESC. Read/write. pointer color

Returns or sets the pointer color for the specified presentation as an RGB color. This color is saved with the presentation and is the default pen color each time you show the presentation.
Read/write.
range type
Returns or sets the type of slide show to run. Read/write.
Can be one of the following:

- slide show range show all
- slide show range named slideshow
- slide show range
show type
Returns or sets the show type for the specified slide show. Read/write.
Can be one of the following:
- slide show type speaker
- slide show type window
show with animation
True if the specified slide show displays shapes with assigned animation settings. Read/write. show with narration

True if the specified slide show is shown with narration. Read/write.
slide show name
Returns the name of the custom slide show that's currently running in the specified slide show view. Read-only.
starting slide
Returns or sets the first slide to be displayed in the specified slide show. Read/write.

## Class: slide show transition

Contains information about how the specified slide advances during a slide show.
Use the slide show transition property of the slide class to return the slide show transition object. The following example specifies a Fast Strips Down-Left transition accompanied by the Bass.au sound for slide one in the active presentation and specifies that the slide advance automatically five seconds after the previous animation or slide transition.

```
set slideTransit to slide show transition of slide 1 of active presentation
set entry effect of slideTransit to entry effect strips left down
import sound file sound effect of slideTransit ᄀ
    sound file name "Macintosh HD:Users:Shared:Bass.au"
set advance on time of slideTransit to true
set advance time of slideTransit to 5
set advance mode of slide show settings of active presentation to ᄀ
    slide show advance use slide timings
```


## Properties

advance on click
True if the specified slide advances when it's clicked during a slide show. Read/write.
If you set both the advance on click and the advance on time properties to true, the slide will advance either when it's clicked or when the specified amount of time has elapsed whichever comes first.
advance on time
True if the specified slide advances automatically after a specified amount of time has elapsed. To specify the number of seconds after which the slide will automatically advance, use the advance time property. Read/write.
To put the slide interval settings into effect for the entire slide show, set the advance mode property of the slide show settings object to slide show advance use slide timings.
advance time
Returns or sets the amount of time after which the specified slide transition will occur. Read/write.
The specified slide transition won't advance automatically unless the advance mode property of the slide show settings is set to slide show advance use slide timings.
entry effect
Returns or sets the special effect applied to the specified slide transition. Read/write.
Can be one of the following:
entry effect appear
entry effect horizontal
entry effect blinds vertical
entry effect box in
entry effect box out
entry effect checkerboard across
entry effect checkerboard down
entry effect circle
entry effect comb horizontal
entry effect comb vertical
entry effect cover down
entry effect cover left
entry effect cover left down
entry effect cover left up
entry effect cover right
entry effect cover right down
entry effect cover right up
entry effect cover up
entry effect crawl from down
entry effect crawl from left
entry effect crawl from right
entry effect crawl from up
entry effect cube down
entry effect cube left
entry effect cube right
entry effect cube up
entry effect cut
entry effect cut through black
entry effect diamond
entry effect dissolve
entry effect fade
entry effect flash once fast entry effect flash once medium
entry effect flash once slow
entry effect flip down
entry effect flip left
entry effect flip right
entry effect flip up
entry effect fly from bottom entry effect fly from bottom left entry effect fly from bottom right
entry effect fly from left
entry effect fly from right
entry effect fly from top
entry effect fly from top left entry effect fly from top right
entry effect unset
entry effect none
entry effect peek from down
entry effect peek from left
entry effect peek from right
entry effect peek from up
entry effect plus
entry effect random
entry effect random bars horizontal
entry effect random bars vertical
entry effect spinner
entry effect split horizontal in entry effect split horizontal out entry effect split vertical in entry effect split vertical out entry effect strips down left entry effect strips down right entry effect strips left down entry effect strips left up entry effect strips right down entry effect strips right up entry effect strips up left entry effect strips up right entry effect uncover down entry effect uncover left entry effect uncover left down entry effect uncover left up entry effect uncover right entry effect uncover right down entry effect uncover right up entry effect uncover up entry effect wedge entry effect wheel1 spoke entry effect wheel2 spokes entry effect wheel3 spokes entry effect wheel 4 spokes entry effect wheel8 spokes entry effect wipe down entry effect wipe left entry effect wipe right entry effect wipe up

## Remarks

If the text level effect property for the specified animation is set to animate level none (the default value) or the animate property is set to false, you won't see the special effect you've applied with the entry effect property.

## hidden

True if the specified slide is hidden during a slide show. Read/write.
loop sound until next
True if the sound that's been set for the specified slide transition loops until the next sound starts. Read/write.
sound effect transition
Returns a sound effect object that represents the sound to be played during the transition to the specified slide. Read-only.

## Class: slide show view

Represents the view in a slide show window.
Use the slideshow view property of the slide show window object to return the slide show view object.

Use the run slide show command to create a slide show window object, and then use the view property to return the slide show view object the window contains. The following example runs a slide show of the active presentation and changes the pointer to a pen.

```
set theWindow to run slide show slide show settings of active presentation
set theView to slide show view of theWindow
set pointer type of theView to slide show pointer pen
Properties
```

accelerations enabled
True if shortcut keys are enabled during a slide show. The default value is true. If shortcut keys are disabled during a slide show, you can neither use keys to navigate in the slide show nor press ESC to exit the slide show. Read/write.
current show position
Returns the position of the current slide within the slide show that is showing in the specified view. Read-only.
If the specified view contains a custom show, the current show position property returns the position of the current slide within the custom show, not the position of the current slide within the entire presentation.
is named show
True if a custom (named) slide show is displayed in the specified slide show view. Read-only.
last slide viewed
Returns a slide object that represents the slide viewed immediately before the current slide in the specified slide show view. Read-only.
pointer color
Returns an RGB color that represents the pointer color for the specified presentation during one slide show. As soon as the slide show is finished, the color reverts to the default color for the presentation. Read-only.

To change the pointer to a pen, set the pointer type property to slide show pointer pen.
pointer type
Returns or sets the type of pointer used in the slide show. Read/write.
Can be one of the following:

- slide show pointer always hidden
- slide show pointer arrow
- slide show pointer none
- slide show pointer pen
presentation elapsed time
Returns the number of seconds that have elapsed since the beginning of the specified slide show. Read-only.
slide show name
Returns the name of the custom slide show that's currently running in the specified slide show view. Read-only.
slide state
Returns or sets the state of the slide show. Read/write.
Can be one of the following:
- slide show state black screen
- slide show state paused
- slide show state running
- slide show state white screen
zoom
Returns the zoom setting of the specified slide show window view as a percentage of normal size. Can be a value from 10 to 400 . Read-only.


## Class: slide show window

## Plural

slide show windows
Represents a window in which a slide show runs. The slide show windows list contains all the open slide show windows.
Use slide show window index, where index is the slide show window index number, to return a single slide show window object.
Use the run slide show command to create a new slide show window and return a reference to this slide show window. The following example runs a slide show of the active presentation and reduces the height of the slide show window just enough so that you can see the taskbar (for screens with a resolution of 800 by 600 ).

```
set show type of slide show settings of active presentation to ᄀ
    slide show type speaker
set theSSW to run slide show slide show settings of active presentation
set height of theSSW to 300
set width of theSSW to 400
```

Use the presentation property to return the presentation that's currently running in the specified slide show window. The following example displays the name of the presentation that's currently running in slide show window one.

```
display dialog (get name of presentation of slide show window 1)
```

Properties
active
True if the specified slide show window is the active window. Read-only.
bounds
Returns a bounding rectangle that defines the slide show window. Read-only.

## height

Returns or sets the height (in points) of the slide show window object. Read/write.
is full screen
True if the specified slide show window occupies the full screen. Read-only.
left position
Returns or sets the distance (in points) from the left edge of the slide show window to the left edge of the desktop. Setting this property to a very large positive or negative value may position the window completely off the desktop. Read/write. presentation

Returns a presentation object that represents the presentation in which the specified document window or slide show window was created. Read-only.
slideshow view
Returns a slide show view object. Read-only.
top
Returns or sets the distance (in points) from the top edge of the application window or slide show window to the top edge of the desktop. Setting this property to a very large positive or negative value may position the window completely off the desktop. Read/write.
width
Returns or sets the width (in points) of the specified slide show window object. Read/write.

## Class: sound effect

Represents the sound effect that accompanies an animation or slide transition in a slide show.
To return the sound effect object that represents the sound effect that accompanies an animation, use the animation sound effect property of the animation settings object. The following example specifies that the animation of the title on slide one in the active presentation be accompanied by the sound in the Bass.au file.

```
set theAnim to animation settings of shape 1 of slide 1 of active presentation
set text level effect of theAnim to animate leve1 all levels
import sound file animation sound effect of theAnim \neg
    sound file name "Macintosh HD:Users:Shared:Bass.au"
```

To return the sound effect object that represents the sound effect that accompanies a slide transition, use the sound effect transition property of the slide show transition object.

The following example specifies that the transition to slide one in the active presentation be accompanied by the sound in the Bass.wav file.

```
set theSE to sound effect transition of slide show transition of slide 1 of ᄀ
    active presentation
import sound file theSE sound file name "Macintosh HD:Users:Shared:Bass.wav"
Properties
name
```

Returns or sets the name of the specified sound effect. The set of valid names for a presentation appears on the the Sound pop-up menu in the Slide Transition dialog box (Slide Show menu). Read/write.
sound type
Returns or sets the sound type of the sound effect object.
Can be one of the following:

- sound effect unset
- sound effect none
- sound effect stop previous
- sound effect file

Class: tab stop
Plural
tab stops
Represents a single tab stop. The tab stops list represents all the tab stops on one ruler.
The tab stop class is an element of the ruler class. Use tab stop index, where index is the tab stop index number, to return a single tab stop object. The following example clears tab stop one for the text in shape two on slide one in the active presentation.

```
delete tab stop 1 of ruler of text frame of shape 2 of slide 2 ᄀ
    of active presentation
```


## Properties

tab position
Returns or sets the position (in points) of the specified tab stop. Read/write.

## tab stop type

Returns or sets the tab stop type of object. Read/write.
Can be one of the following:

- tabstop unset
- tabstop left
- tabstop center
- tabstop right

Class: text style

## Elements

text style level
Represents one of three text styles: title text, body text, or default text. Each text style contains a text frame object that describes how text is placed within the text bounding box, a ruler object that contains tab stops and outline indent formatting information, and a text style level object that contains outline text formatting information.

Use the get text style from command to return a single text style object from a slide master. The following example sets the font name and font size for level-one body text on all the slides in the active presentation.

```
set tsBody to get text style from slide master of active presentation ᄀ
    at text style body
set font name of font of text style level 1 of tsBody to "Arial"
set font size of font of text style leve1 1 of tsBody to 36
```


## Properties

ruler
Returns a ruler object that represents the ruler for the specified text. Read-only.
text frame
Returns a text frame object that contains the alignment and anchoring properties for the specified shape or master text style. Read-only.

## Class: text style level

## Plural

text style levels
Contains character and paragraph formatting information for an outline level. The text style levels list contains one text style level object for each of the five outline levels.

Use text style level index, where index is a number from 1 through 5 that corresponds to the outline level, to return a single text style level object. The following example sets the font name and font size, the space after paragraphs, and the paragraph alignment for level-one body text on all the slides in the active presentation.

```
set tsBody to get text style from slide master of active presentation ᄀ
    at text style body
set tlOne to text style level 1 of tsBody
set font name of font of tlOne to "Arial"
set font size of font of t1One to 36
set line rule before of paragraph format of tlOne to false
set space after of paragraph format of tlOne to 14
set alignment of paragraph format of tlOne to paragraph align justify
Properties
font
```

Returns a font object that represents character formatting. Read-only.
paragraph format
Returns a paragraph format object that represents paragraph formatting for the specified text. Read-only.

## Class: timeline

## Elements

## sequence

Stores animation information for a master or slide.
Use the timeline property of the master or slide object to return a timeline object.
The timeline object's main sequence property gains access to the main animation sequence. The following example returns the main sequence of the timeline of the first slide in the presentation:

```
set MSQ to main sequence of timeline of slide 1 of active presentation
Properties
```

main sequence
Returns a sequence object that represents the list of effect objects in the main animation sequence of a slide.
The default value of the main sequence property is an empty sequences list. Any attempt to return a value from this property without adding one or more effect objects to the main animation sequence will result in a run-time error.

## Class: timing

Represents timing properties for an animation effect.
To return a timing object, use the timing property of the animation behavior or effect object. The following example sets timing duration information for the main animation.

```
set MSQ to main sequence of timeline of slide 1 of active presentation
set theEffect to effect 1 of MSQ
set duration of timing of theEffect to 5
```

Use the following read/write properties of the timing object to manipulate animation timing effects.

## Properties

## acceleration

Returns or sets a small real number that represents the percent of the duration over which a timing acceleration should take place. For example, a value of 0.9 means that an acceleration should start slower than the default speed for $90 \%$ of the total animation time, with the last $10 \%$ of the animation at the default speed. Read/write.
To slow down an animation at the end, use the deceleration property.
autoreverse
Returns or sets whether an effect should play forward and then reverse, thereby doubling the duration. Read/write.

## deceleration

Returns or sets a small real number that represents the percent of the duration over which a timing deceleration should take place. For example, a value of 0.9 means that a deceleration should start at the default speed, and then start to slow down after the first ten percent of the animation. Read/write.
duration
Returns or sets a small real number that represents the length of an animation in seconds. Read/write.
repeat count
Returns or sets an integer that represents the number of times to repeat an animation. Read/write.
repeat duration
Returns or sets a small real number that represents, in seconds, how long repeated animations should last. Read/write.
restart
Returns or sets a constant that represents whether the animation effect restarts after the effect has started once. Read/write.

Can be one of the following:

- restart always
- restart when off
- never restart
rewind
Returns or sets whether an object returns to its beginning position after an animation has ended. Read/write.
smooth end
Returns or sets whether an animation should decelerate as it ends. Read/write.
smooth start
Returns or sets whether an animation should accelerate when it starts. Read/write.
speed
Returns or sets a small real number that represents the speed, in seconds, of the specified animation. Read/write.


## Class: view

Represents the current editing view in the specified document window.
Use the view property of the document window object to return the view object. The following example sets the size of window one and then sets the zoom to fit the new window size.
set height of document window 1 to 200
set width of document window 1 to 250
set zoom to fit of view of document window 1 to true
Note The view object can represent any of the document window views: slide view, outline view, slide sorter view, notes page view, slide master view, handout master view, or notes master view. Some properties and methods of the view object work only in certain views. If you try to use a property or command that's inappropriate for a view object, an error occurs.

## Properties

display slide miniature
True if the slide miniature window is displayed. Read/write.
slide
Returns or sets a slide object that represents the slide that's currently displayed in the specified document window view. Read/write.
view type
Returns or sets the type of the view contained in the specified view. Read/write.
Can be one of the following:

- page view
- handout master view
- notes master view
- normal view
- outline view
- slide view
- master view
- slide sorter view
- title master view
zoom
Returns or sets the zoom setting of the specified view as a percentage of normal size. Can be a value from 10 to 400 . Read/write.
zoom to fit
True if the view is zoomed to fit the dimensions of the document window every time the document window is resized. This property applies only to slide view, notes page view, or master view. Read/write.

When the value of the zoom property is explicitly set, the value of the zoom to fit property is automatically set to false.

## Class: web options

Contains presentation-level attributes used by PowerPoint when you save or publish a presentation as a Web page or open a Web page. You can return or set attributes either at the application (global) level or at the presentation level. (Note that attribute values can be different from one presentation to another, depending on the attribute value at the time the presentation was saved.) Presentationlevel attribute settings override application-level attribute settings. Application-level attributes are contained in the default web options object.

To return the web options object, use the web options property of the presentation class. The following example checks to see whether Portable Network Graphics (PNG) is allowed as an image format for presentation one. If PNG is allowed, it sets the text color for the outline pane to white and the background color for the outline and slide panes to black.

```
set objAppWebOptions to web options of presentation 1
if allow PNG of objAppWebOptions is true then
    set frame colors of objAppWebOptions to frame colors white text on black
end if
```


## Properties

allow PNG
True if PNG (Portable Network Graphics) is allowed as an image format when you save or publish a presentation as a Web page. False if PNG is not allowed as an output format. The default value is false. Read/write.

If you save images in the PNG format as opposed to any other file format, you might improve the image quality or reduce the size of those image files, and therefore decrease the download time, assuming that the Web browsers you are targeting support the PNG format.

## buttons type

Determines the type of navigation buttons PowerPoint uses in a Web version of a presentation. Read/write.

Can be one of the following:

- fancy (graphic buttons)
- regular
- text only
encoding
Returns or sets the document encoding (code page or character set) to be used by the Web browser when you view the saved document. Read/write.

Can be one of the following:
encoding Thai
encoding Japanese ShiftJIS
encoding simplified Chinese
encoding Korean
encoding traditional Chinese
encoding little endian
encoding big endian
encoding central European
encoding Cyrillic
encoding Western
encoding Greek
encoding Turkish
encoding Hebrew
encoding Arabic
encoding Baltic
encoding Vietnamese
encoding auto detect
encoding Japanese auto detect
encoding simplified Chinese auto detect
encoding Korean auto detect
encoding traditional Chinese auto detect
encoding Cyrillic auto detect
encoding Greek auto detect
encoding Arabic auto detect
encoding ISO88591 Latin1
encoding ISO88592 central Europe
encoding ISO88593 Latin3
encoding ISO88594 Baltic
encoding ISO88595 Cyrillic
encoding ISO88596 Arabic
encoding ISO88597 Greek
encoding ISO88598 Hebrew
encoding ISO88599 Turkish
encoding ISO885915 Latin9
encoding ISO2022 Japanese no half width
Katakana
encoding ISO2022 Japanese JISX02021984
encoding ISO2022 Japanese JISX02011989
encoding ISO2022KR
encoding ISO2022CN traditional Chinese
encoding ISO2022CN simplified Chinese
encoding Mac Roman
encoding Mac Japanese
encoding Mac traditional Chinese Big5
encoding Mac Korean
encoding Mac Greek1
encoding Mac Cyrillic
encoding EBCDIC Greek
encoding EBCDIC Hebrew
encoding EBCDIC Korean extended
encoding EBCDIC Thai
encoding EBCDIC Icelandic
encoding EBCDIC Turkish
encoding EBCDIC Russian
encoding EBCDIC Serbian Bulgarian
encoding EBCDIC Japanese Katakana
extended and Japanese
encoding EBCDIC US Canada and Japanese
encoding EBCDIC extended and Korean
encoding EBCDIC simplified Chinese extended and simplified Chinese
encoding EBCDIC US Canada and traditional Chinese
encoding EBCDIC Japanese Latin extended and Japanese
encoding OEM United States
encoding OEM Greek
encoding OEM Baltic
encoding OEM multilingual LatinI
encoding OEM multilingual LatinII
encoding OEM Cyrillic
encoding OEM Turkish
encoding OEM Portuguese
encoding OEM Icelandic
encoding OEM Hebrew
encoding OEM Canadian French
encoding OEM Arabic
encoding OEM Nordic
encoding OEM CyrillicII
encoding OEM modern Greek
encoding EUC Japanese
encoding EUC Chinese simplified Chinese
encoding EUC Korean
encoding EUC Taiwanese
traditional Chinese
encoding Devanagari
encoding Bengali
encoding Tamil
encoding Telugu
encoding Assamese
encoding Oriya
encoding Kannada
encoding Malayalam
encoding Gujarati
encoding Mac simplified Chinese GB2312 encoding Mac Romania encoding Mac Ukraine encoding Mac Latin2 encoding Mac Icelandic
encoding Mac Turkish
encoding Mac Croatia
encoding EBCDIC US Canada
encoding EBCDIC International
encoding EBCDIC multilingual
ROECE Latin2
encoding EBCDIC Greek modern
encoding EBCDIC Turkish Latin5
encoding EBCDIC Germany
encoding EBCDIC Denmark Norway
encoding EBCDIC Finland Sweden encoding EBCDIC Italy
encoding EBCDIC Latin America Spain encoding EBCDIC United Kingdom encoding EBCDIC Japanese

Katakana extended encoding EBCDIC France encoding EBCDIC Arabic
encoding Punjabi
encoding Arabic ASMO
encoding Arabic transparent ASMO
encoding Korean Johab
encoding Taiwan CNS
encoding Taiwan TCA
encoding Taiwan Eten
encoding Taiwan IBM5550
encoding Taiwan teletext
encoding Taiwan Wang
encoding IA5 German
encoding IA5 Swedish
encoding IA5 Norwegian
encoding US ASCII
encoding T61
encoding ISO6937 nonspacing accent encoding Ext alpha lowercase
encoding KOI8U
encoding Europa3
encoding HZGB simplified Chinese
encoding UTF7
encoding UTF8
frame colors
Returns or sets the text color for the notes pane and the outline pane, and the background color for the notes pane, outline pane, and slide pane for Web presentations. Read/write.

Can be one of the following:

- frame colors browser colors
- frame colors presentation scheme text color
- frame colors presentation scheme accent color
- frame colors white text on black
- frame colors black text on white
include binary file
Specifies whether to include a binary version of the presentation with the Web version.
Including a binary version makes it possible to open and edit the Web version in PowerPoint.
Read/write.
nav bar placement
Determines the position of the navigation bar. Read/write.
Can be one of the following:
- bar placement bottom
- bar placement top
page layout
Specifies the page layout for a Web presentation. Read/write.
Can be one of the following:
- page layout full screen
- page layout normal
support IE4
Determines whether a Web presentation is optimized for Microsoft Internet Explorer 4.0 or later. Read/write.
support NN4
Determines whether a Web presentation is optimized for Netscape Navigator 4.0 or later. Read/write.
support older browsers
Determines whether a Web presentation is optimized for browsers that are older than Netscape Navigator 4.0 or Microsoft Internet Explorer 4.0. Read/write.
web page keywords
Returns or sets keywords for a presentation when it is saved as a Web page. Read/write.
Keywords are not visible to Web-page readers but are stored in meta tags to facilitate page searches.
web page title
Sets the title of a Web presentation. Read/write.
This title will appear as the title of the browser window in which the Web presentation is viewed..


## Microsoft PowerPoint Suite Commands

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## Command: add behavior

Returns an animation behavior object that represents a new animation behavior.

## Syntax

add behavior effect Required. An expression that returns an effect object.
type enumeration Required. The behavior of the animation. Can be one of the following: animation type none, animation type motion, animation type color, animation type scale, animation type rotation, animation type property, animation type command, animation type filter, or animation type set.

## Example

The following example adds a five-second animated rotation behavior to the main animation sequence on the first slide.

```
set timeMain to timeline of slide 1 of active presentation
add behavior effect 1 of main sequence of timeMain type animation type rotation
```

Command: add effect
Returns an effect object that represents a new animation effect added to a sequence of animation effects.

## Syntax

add effect sequence Required. An expression that returns a sequence object.
for shape Required. The shape to which the animation effect is added.
fx enumeration Required. The animation effect to be applied.
Can be one of the following:
animation type custom animation type appear animation type fly animation type blinds animation type box animation type checkerboard animation type circle animation type crawl animation type diamond animation type dissolve animation type fade animation type flash once animation type peek animation type plus animation type random bars animation type spiral animation type split animation type stretch animation type strips animation type swivel animation type wedge animation type wheel animation type wipe animation type zoom animation type random effect animation type boomerang animation type bounce animation type color reveal animation type credits animation type ease in animation type float animation type grow and turn animation type light speed animation type pinwheel animation type rise up animation type swish animation type thin line animation type unfold animation type whip
animation type flash bulb animation type flicker animation type grow with color animation type lighten animation type style emphasis animation type teeter animation type vertical grow animation type wave animation type media play animation type media pause animation type media stop animation type circle path animation type right triangle path animation type diamond path animation type hexagon path animation type 5 point star path animation type crescent moon path animation type square path animation type trapezoid path animation type heart path animation type octagon path animation type 6 point star path animation type football path animation type equal triangle path animation type parallelogram path animation type pentagon path animation type 4 point star path animation type 8 point star path animation type teardrop path animation type pointy star path animation type curved square path animation type curved $x$ path animation type vertical figure 8 path animation type curvy star path animation type loop de loop path animation type buzzsaw path animation type horizontal figure 8 path animation type peanut path animation type figure 8 four path
animation type ascend animation type center revolve animation type faded swivel animation type descend animation type sling animation type spinner animation type stretchy animation type zip animation type arc up animation type fade zoom animation type glide animation type expand animation type flip animation type shimmer animation type fold animation type change fill color animation type change font animation type change font color animation type change font size animation type change font style animation type grow shrink animation type change line color animation type spin animation type transparency animation type bold flash animation type blast animation type bold reveal animation type brush on color animation type brush on underline animation type color blend animation type color wave animation type complementary color animation type complementary color 2 animation type contrasting color animation type darken animation type desaturate
animation type neutron path animation type swoosh path animation type bean path animation type plus path animation type inverted triangle path animation type inverted square path animation type left path animation type turn right path animation type arc down path animation type zigzag path animation type s curve 2 path animation type sine wave path animation type bounce left path animation type down path animation type turn up path animation type arc up path animation type heartbeat path animation type spiral right path animation type wave path animation type curvy left path animation type diagonal down right path animation type turn down path animation type arc left path animation type funnel path animation type spring path animation type bounce right path animation type spiral left path animation type diagonal up right path animation type turn up right path animation type arc right path animation type s curve 1 path animation type decaying wave path animation type curvy right path animation type stairs down path animation type up path animation type right path
[level enumeration] Optional. For charts, diagrams, or text, the level to which the animation effect will be applied. The default value is text by no levels.

Can be one of the following:
chart all at once
chart by category
chart by category elements
chart by series
chart by series elements
text by no levels
text by all levels text by fifth level text by first level text by fourth level text by second level text by third level
[trigger enumeration] Optional. The action that triggers the animation effect. The default value is on page click. Can be one of the following: no trigger, on page click, with previous, after previous, or on shape click.
[index integer] Optional. The position at which the effect will be placed in the collection of animation effects. The default value is -1 (added to the end).

## Example

This example adds a shape to the first slide in the active presentation and adds an effect and a behavior to the shape.

```
set sldOne to slide 1 of active presentation
set shpStar to make new shape at the beginning of sldOne with properties }
    {auto shape type:autoshape five point star, left position:150, ᄀ
    top:72, width:400, height:400}
set effNew to add effect (main sequence of timeline of sldOne) for shpStar ᄀ
    fx animation type stretchy trigger after previous
set effBHV to add behavior effNew type animation type scale
set from x of scale effect of effBHV to 75
set from y of scale effect of effBHV to 75
set to x of scale effect of effBHV to 0
set to y of scale effect of effBHV to 0
set autoreverse of timing of effNew to true
Command: add sequence
```

Returns a new sequence object in a timeline.

## Syntax

add sequence timeline Required. An expression that returns a timeline object.
[index integer] Optional. The position of the animation point or sequence in relation to other animation points or sequences. The default value is -1 which means that if the index argument is omitted, the new animation point or sequence is added to the end of existing animation points or sequence.

## Example

This example adds a shape and an animation sequence to the first shape on the first slide in the active presentation.

```
set shpFirst to shape 1 of slide 1 of active presentation
set newSeq to add sequence (timeline of slide 1 of active presentation)
set effNew to add effect newSeq for shpFirst fx animation type blinds
```


## Command: apply template

Applies a design template to the specified presentation.

## Syntax

apply template presentation Required. An expression that returns a presentation object.
file name Unicode text Required. Specifies the name of the design template.

## Example

This example applies the "Zesty" design template to the active presentation.
apply template active presentation file name "Macintosh HD:Users:Shared:Zesty"
Command: arrange windows
Arranges all open document windows in the workspace.

## Syntax

arrange windows enumeration Required. Specifies whether to cascade or tile the windows. Can be either of the following: arrange cascade or arrange tiled.

## Example

This example arranges all open document windows.
arrange windows arrange cascade
Command: copy object
Copies the specified object to the Clipboard.

## Syntax

copy object slide Required. An expression that returns a slide object.

## Remarks

To paste the contents of the Clipboard, use the paste object command.

## Example

This example copies slide one in the active presentation to the Clipboard.
copy object slide 1 of active presentation
Command: cut object
Deletes the specified object and places it on the Clipboard.

## Syntax

cut object slide Required. An expression that returns a slide object.

## Example

This example deletes slide one from the active presentation and places a copy of it on the Clipboard. cut object slide 1 of active presentation

## Command: exit slide show

Ends the specified slide show.

## Syntax

exit slide show slide show view Required. An expression that returns a slide show view object.
Example
This example ends the slide show that's running in slide show window one.
exit slide show slideshow view of slide show window 1
Command: get color from
Returns an RGB color object that represents a single color in a color scheme.

## Syntax

get color from color scheme Required. An expression that returns a color scheme object.
at enumeration Required. The individual color in the specified color scheme. Can be one of the following: accent1 scheme, accent2 scheme, accent3 scheme, background scheme, fill scheme, foreground scheme, scheme color unset, not a scheme color, shadow scheme, or title scheme.

## Example

The following example sets the title color of color scheme 2 to the title color that's defined for color scheme one.

```
set theTitle to (get color from color scheme 1 of active presentation }
    at title scheme)
set color for color scheme 2 of active presentation at title scheme }
    to color theTitle
Command: get text style from
```

Returns a text style object that represents one of three text styles - title text, body text, and default text - for the specified slide master.

## Syntax

get text style from master Required. An expression that returns a master object.
at enumeration Required. The text style you want to return. Can be one of the following: text style default, text style title, or text style body.

## Example

The following example sets the font name and font size for level-one body text on all the slides in the active presentation.

```
set tsBody to get text style from slide master of active presentation ᄀ
    at text style body
set font name of font of text style level 1 of tsBody to "Arial"
set font size of font of text style level 1 of tsBody to 36
```


## Command: get webPage font

Returns a web page font object for a particular character set.

## Syntax

get webpage font enumeration Required. The character set from which you want to return the web page font object. Can be one of the following:

| Arabic character set | Korean character set |
| :--- | :--- |
| Cyrillic character set | Multilingual Unicode character set |
| English character set | Simplified Chinese character set |
| Greek character set | Thai character set |
| Hebrew character set | Traditional Chinese character set |
| Japanese character set | Vietnamese character set |

## Example

The following example uses the get webpage font command to set myFont to the web page font object for the English character set in the active application.
set myFont to (get webpage font English character set)
Command: go to first slide
Switches to the first slide during a slide show.

## Syntax

go to first slide slide show view Required. An expression that returns a slide show view object.

## Example

This example switches from the current slide to the first slide in slide show window one.
go to first slide slideshow view of slide show window 1
Command: go to last slide
Switches to the last slide during a slide show.

## Syntax

go to last slide slide show view Required. An expression that returns a slide show view object.

## Example

This example switches from the current slide to the last slide in slide show window one.
go to last slide slideshow view of slide show window 1

Command: go to next slide
Switches to the next slide during a slide show.

## Syntax

go to next slide slide show view Required. An expression that returns a slide show view object.

## Example

This example switches from the current slide to the next slide in slide show window one.
go to next slide slideshow view of slide show window 1
Command: go to previous slide
Switches to the previous slide during a slide show.

## Syntax

go to previous slide slide show view Required. An expression that returns a slide show view object.

## Example

This example switches from the current slide to the previous slide in slide show window one.
go to previous slide slideshow view of slide show window 1
Command: go to slide
Switches to the specified slide.

## Syntax

go to slide view Required. An expression that returns a view object.
number integer Required. The number of the slide to switch to.
Example
This example switches from the current slide to slide three in the document window.
go to slide view of document window 1 number 3
Command: import sound file
Specifies the sound that will be played whenever the specified shape is clicked or animated or whenever the specified slide transition occurs.

## Syntax

import sound file sound effect Required. An expression that returns a sound effect object. sound file name Unicode text Required. The name of the specified sound file.

## Example

This example specifies that the file Dudududu.au will start to play at the transition to slide two in the active presentation and will continue to play until the next sound starts.

```
set slideTransit to slide show transition of slide 2 of active presentation
import sound file sound effect of slideTransit ᄀ
    sound file name "Macintosh HD:Users:Shared:Dudududu.au"
set loop sound until next of slideTransit to true
Command: insert
```

Inserts text at the specified location.

## Syntax

insert
the text Unicode text Required. The text to be inserted.
at location reference Required. The location where you want to insert the text.

## Example

This example appends the string ": Test version" to the end of the title on slide one in the active presentation.
insert the text ": Test version" at the end of text range of text frame $\neg$ of shape 1 of slide 1 of active presentation

Command: 1aunch spel1er on
Begins a spelling check for the specified document window. If there are errors, this command displays the Spelling dialog box (Tools menu).

## Syntax

launch speller on document window Required. An expression that returns a document window object.

## Example

This example begins a spelling check on the active document window.
launch speller on active window

Command: paste object
Pastes the contents of the Clipboard into the specified view or presentation. Attempting to paste an object into a view that won't accept it causes an error. For information about views and the objects you can paste into them, see the "Remarks" section.

## Syntax

paste object view/presentation Required. An expression that returns a view or presentation object.

## Remarks

To set the view for a window before pasting the Clipboard contents into it, use the view type property of the view object. The following table shows what you can paste into each view.

| Into this view | You can paste the following from the Clipboard |
| :--- | :--- |
| Slide view or |  |
| notes page view | Shapes, text, or entire slides. If you paste a slide from the Clipboard, an image of <br> the slide will be inserted onto the slide, master, or notes page as an embedded <br> object. If one shape is selected, the pasted text will be pasted before the shape's <br> text; if text is selected, the pasted text will replace the selection; if anything else <br> is selected, the pasted text will be placed in its own text frame. Pasted shapes <br> will be added to the top of the z-order and won't replace selected shapes. |
| Outline view | Text or entire slides. You cannot paste shapes into outline view. A pasted slide <br> will be inserted before the slide that contains the insertion point. Pasted text will <br> be pasted after the insertion point if you use the view object or after the last <br> slide if you use the presentation object. |
| Slide sorter view | Entire slides. You cannot paste shapes or text into slide sorter view. A pasted <br> slide will be inserted at the insertion point or after the last slide selected in the <br> presentation. |

## Example

This example copies the first shape in slide one to the Clipboard and pastes it into the view in window two. If the Clipboard contents cannot be pasted into the view in window two - for example, if you try to paste a shape into slide sorter view - this example fails.
copy shape shape 1 of slide 1 of active presentation
paste object view of document window 2
Command: play sound effect
Plays the specified sound effect.

## Syntax

play sound effect sound effect Required. An expression that returns a sound effect object.
Example
This example plays the sound effect that's been set for the transition to slide two in the active presentation.

```
play sound effect (sound effect transition of slide show transition of }
    slide 2 of active presentation)
```

Command: print out
Prints the specified presentation.

## Syntax

print out presentation Required. An expression that returns a presentation object.
[from integer] Optional. The number of the first page to be printed. If this argument is omitted, printing starts at the beginning of the presentation. Specifying the fo and from arguments sets the contents of the print range object and sets the value of the range type property for the presentation.
[fo integer] Optional. The number of the last page to be printed. If this argument is omitted, printing continues to the end of the presentation. Specifying the fo and from arguments sets the contents of the print range object and sets the value of the range type property for the presentation.
[print to file Unicode text] Optional. The name of the file to print to. If you specify this argument, the file is printed to a file rather than sent to a printer. If this argument is omitted, the file is sent to a printer.
[copies integer] Optional. The number of copies to be printed. If this argument is omitted, only one copy is printed. Specifying this argument sets the value of the number of copies property of the print options object.
[collate Boolean] Optional. True to print a complete copy of the presentation before the first page of the next copy is printed. If this argument is omitted, multiple copies are collated. Specifying this argument sets the value of the collate property of the print options object.

## Example

This example prints two uncollated copies of each slide - whether visible or hidden - from slide two to slide five in the active presentation.

```
set print hidden slides of print options of active presentation to true
print out active presentation from 2 fo 5 copies 2 without collate
Command: quit
```

Quits PowerPoint. This is equivalent to clicking Exit on the File menu.

## Syntax

quit reference Required. An expression that returns an application object.

## Remarks

To avoid being prompted to save changes, use the save command to save all open presentations before calling the quit command.

## Microsoft PowerPoint Suite

## Example

This example saves all open presentations and then quits PowerPoint.

```
repeat with w in (get presentations)
    save w
end repeat
quit
Command: register add in
```

Adds a new add-in file to the list of add-ins in the Add-Ins dialog box (Tools menu). Returns an add in object that represents the newly added add-in.

## Syntax

register add in Unicode text Required. The full name of the file (including the path and the file name extension) that contains the add-in you want to add to the list of add-ins.

## Remarks

This command doesn't load the new add-in. You must set the loaded property to load the add-in.

## Example

This example adds MyTools.ppa to the list in the Add-Ins dialog box (Tools menu).
set myAddIn to register add in "Macintosh HD:Users:Shared:MyTools:MyTools.ppa"
display dialog (get name of myAddIn) \& " has been added to the 1ist"

Command: reset slide time
Resets the elapsed time (represented by the slide elapsed time property) for the slide that's currently displayed to 0 (zero).

## Syntax

reset slide time slide show view Required. An expression that returns a slide show view object.

## Example

This example resets the elapsed time for the slide that's currently displayed in slide show window one to 0 (zero).
reset slide time slideshow view of slide show window 1

Command: run slide show
Runs a slide show of the specified presentation. Returns a slide show window object.

## Syntax

run slide show slide show settings Required. An expression that returns a slide show settings object.

## Remarks

To run a custom slide show, set the range type property to slide show range named slideshow, and set the slide show name property to the name of the custom show you want to run.

## Example

This example starts a full-screen slide show of the active presentation.

```
set mySSS to slide show settings of active presentation
set show type of mySSS to slide show type speaker
set sShow to run slide show mySSS
```

This example runs the named slide show "Quick Show."

```
set mySSS to slide show settings of active presentation
```

set range type of mySSS to slide show range named slideshow
set slide show name of mySSS to "Quick Show"
set sShow to run slide show mySSS

Command: set bullet picture
Sets the graphics file to be used for bullets in a bulleted list when the bullet type property of the bullet format object is set to picture bullet type.

## Syntax

set bullet picture bullet format Required. An expression that returns a bullet format object of type picture bullet type.
picture file Unicode text Required. The path and file name of a valid graphics file.

## Remarks

Valid graphics files include files with the following extensions: .bmp, .emf, .eps, .gif, .jpg, .jpeg, .pct, .pict, .png, .tga, .tiff, .wmf, .fpx, .pntg, .psd, .qtif, and .sgi.

## Example

This example sets the bullets in the text box specified by shape two on slide one to a bitmap picture of a blue rivet.

```
set theTF to text frame of shape 2 of slide 1 of active presentation
set theBF to bullet format of paragraph format of text range of theTF
set bullet type of theBF to picture bullet type
set bullet picture theBF picture file "Macintosh HD:Users:Shared:Blue Rivets"
```

Command: set color for
Sets an individual color in a color scheme.

## Syntax

set color for color scheme Required. An expression that returns a color scheme object.
at enumeration Required. The individual color in the specified color scheme. Can be one of the following: accent1 scheme, accent2 scheme, accent3 scheme, background scheme, fill scheme, foreground scheme, scheme color unset, not a scheme color, shadow scheme, or title scheme.
to color RGB color Required. The color to set.

## Example

The following example sets the title color of color scheme 2 to the title color that's defined for color scheme one.

```
set theTitle to (get color from color scheme 1 of active presentation }
    at title scheme)
set color for color scheme 2 of active presentation at title scheme ᄀ
    to color theTitle
Command: update links
```

Updates linked OLE objects in the specified presentation.

## Syntax

update links presentation Required. An expression that returns a presentation object.

## Example

This example updates all OLE links in the active presentation.
update links active presentation

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## Class: callout

## Plural

callouts
Represents a line callout. The callout class inherits all the properties of the shape class.
Use callout index, where index is the name or the index number, to return a single callout object. To set the formatting options for a callout, use the callout format class.

This example adds a callout to a newly created slide and then sets the callout angle to 45 degrees.

```
set thePres to active presentation
```

set theSlide to make new slide at the beginning of thePres with properties $\neg$
\{layout: slide layout blank\}
set myCall to make new callout at the beginning of theSlide with properties $\neg$
\{callout type:callout two, left position:72, top:36, width:25, ᄀ height:25\}
set angle of callout format of myCall to angle45

## Properties

<Inheritance> shape
Inherits the properties and elements of the shape class.
callout format
Returns a callout format object that contains callout formatting properties for the specified shape. Read-only.
callout Type
Returns the callout type. Read only.
Can be one of the following:

| Value | Description |
| :--- | :--- |
| callout unset | A single-segment callout line that can be either horizontal or vertical |
| callout one | A single-segment callout line that rotates freely |
| callout two | A two-segment line |
| callout three | A three-segment line |
| callout four |  |

## Class: callout format

Contains properties that apply to line callouts.
Use the callout format property to return a callout format object. The following example specifies these attributes of shape three (a line callout) on theS1ide: the callout will have a vertical accent bar that separates the text from the callout line; the angle between the callout line and the side of the callout text box will be 30 degrees; there will be no border around the callout text; the callout line will be attached to the top of the callout text box; and the callout line will contain two segments. For this example to work, shape three must be a callout.

```
set theSlide to slide 1 of active presentation
set theCF to callout format of shape 3 of theSlide
set accent of theCF to true
set angle of theCF to angle30
set border of theCF to false
preset drop theCF drop type drop top
set callout type of theCF to callout three
```


## Properties

accent
True if a vertical accent bar separates the callout text from the callout line. Read/write.
angle
Returns or sets the angle of the callout line. If the callout line contains more than one line segment, this property returns or sets the angle of the segment that is farthest from the callout text box. Read/write.

Can be one of the following:

- angle30
- angle45
- angle60
- angle90
- angle automatic
- angle unset

If you set the value of this property to anything other than angle automatic, the callout line maintains a fixed angle as you drag the callout.
auto attach
True if the place where the callout line attaches to the callout text box changes depending on whether the origin of the callout line (where the callout points to) is to the left or right of the callout text box. Read/write.

When the value of this property is true, the drop value (the vertical distance from the edge of the callout text box to the place where the callout line attaches) is measured from the top of the text box when the text box is to the right of the origin, and it's measured from the bottom of the text box when the text box is to the left of the origin. When the value of this property is false, the drop value is always measured from the top of the text box, regardless of the relative positions of the text box and the origin. To set the drop value, use the custom drop command, and use the drop property to return the drop value.
Setting this property affects a callout only if it has an explicitly set drop value, that is, if the value of the drop type property is drop custom. By default, callouts have explicitly set drop values when they're created.
auto length
True if the first segment of the callout line (the segment attached to the text callout box) is scaled automatically whenever the callout is moved. False if the first segment of the callout retains the fixed length specified by the callout format length property whenever the callout is moved. Applies only to callouts whose lines consist of more than one segment (types callout three and callout four). Read-only.
This property is read-only. To set this property to true, use the automatic length command. To set this property to false, use the custom length command.
border
Determines whether the text in the specified callout is surrounded by a border. Read/write callout format length

When the auto length property of the specified callout is set to false, the callout format length property returns the length (in points) of the first segment of the callout line (the segment attached to the text callout box). Applies only to callouts whose lines consist of more than one segment (types callout three and callout four). Read-only.
This property is read-only. To set the value of this property, use the custom length command. callout has border

True if the text in the specified callout is surrounded by a border. Read/write.
callout type
Returns or sets the callout type. Read only.
Can be one of the following:

- callout unset
- callout one
- callout two
- callout three
- callout four
drop
For callouts with an explicitly set drop value, this property returns the vertical distance (in points) from the edge of the text bounding box to the place where the callout line attaches to the text box. This distance is measured from the top of the text box unless the auto attach property is set to true and the text box is to the left of the origin of the callout line (the place that the callout points to), in which case the drop distance is measured from the bottom of the text box. Read-only.
To set the value of this property, use the custom drop command.
The value of this property accurately reflects the position of the callout line attachment to the text box only if the callout has an explicitly set drop value, that is, if the value of the drop type property is drop custom. To set the drop type property to drop custom, use the preset drop command.
drop type
Returns a value that indicates where the callout line attaches to the callout text box. Read-only.
Can be one of the following:
- drop bottom
- drop center
- drop custom
- drop unset
- drop top

If the callout drop type is drop custom, the values of the drop and auto attach properties and the relative positions of the callout text box and callout line origin (the place that the callout points to) are used to determine where the callout line attaches to the text box.

This property is read-only. To set the value of this property, use the preset drop command.
gap
Returns or sets the horizontal distance (in points) between the end of the callout line and the text bounding box. Read/write.

## Class: comment

Represents a comment on a given slide.
Use comment index, where index is the number of the comment to access a single comment on a slide. This example displays the content of the first comment on the first slide. If there are no comments, it displays a message stating such.

```
set allComments to (get comments of slide 1 of active presentation)
if count of allComments > 0 then
    display dialog "Comment: " & name of item 1 of allComments
else
    display dialog "There are no comments on this slide."
end if
Properties
<Inheritance> shape
```

Inherits the properties and elements of the shape class.

## Class: connector

Plural
connectors
Represents a connector.
Use connector index, where index is the number of the connector to access a single comment on a slide. Use the make command to create a new connector object. When a connector is added, it's not connected to anything. To attach the beginning and end of a connector to other shapes in the document, use the begin connect and end connect commands.
This example adds two shapes to myPres and connects them with a curved connector. Note that when you attach the connector to the shapes, the size and position of the connector are automatically adjusted; therefore, the position and dimensions you specify when adding the connector are irrelevant (dimensions must be nonzero).

```
set myPres to slide 1 of active presentation
set shpTrap to make new shape at the beginning of myPres with properties }
    {auto shape type:autoshape trapezoid,left position:100, top:50, ᄀ
    width:200, height:100}
set shpTri to make new shape at the end of myPres with properties }
    {auto Shape type:autoshape right triangle, left position:300, ᄀ
    top:300, width:200, height:100}
set shpCon to make new connector at the end of myPres with properties }
    {connector type:curve, left position:0, top:0, width:100, height:100}
begin connect shpCon connected shape shpTrap connection site 1
end connect shpCon connected shape shpTri connection site 1
reroute connections shpCon
When you attach a connector to a shape, the size and position of the connector are automatically adjusted, if necessary. Therefore, if you're going to attach a connector to other shapes, the position and dimensions you specify when adding the connector are irrelevant.
```


## Properties

connector format
Returns a connector format object that contains formatting properties for the specified connector. Read-only.
connector type
Returns the type of connector. Read-only.
Can be one of the following:

- connector type unset
- straight
- elbow
- curve


## Class: connector format

Contains formatting properties that apply to connectors. A connector is a line that attaches two other shapes at points called connection sites. If you rearrange shapes that are connected, the geometry of the connector will automatically be adjusted so that the shapes remain connected.

To return a connector format object, use the connector format property. To attach the ends of the connector to other shapes in the document, use the begin connect and end connect commands. To automatically find the shortest path between the two shapes connected by the connector, use the reroute connections command.

Note that you assign a size and a position when you create a connector object, but the size and position are automatically adjusted when you attach the beginning and end of the connector to other shapes. Therefore, if you intend to attach a connector to other shapes, the initial size and position you specify are irrelevant. Likewise, you specify which connection sites on a shape to attach the connector to when you attach the connector, but using the reroute connections command after the connector is attached may change which connection sites the connector attaches to, making your original choice of connection sites irrelevant.

The following example adds two shapes to myPres and connects them with a curved connector.

```
set myPres to slide 1 of active presentation
set shpTrap to make new shape at the beginning of myPres with properties }
    {auto shape type:autoshape trapezoid,left position:100, top:50, ᄀ
    width:200, height:100}
set shpTri to make new shape at the end of myPres with properties }
        {auto shape type:autoshape right triangle, left position:300, ᄀ
        top:300, width:200, height:100}
set shpCon to make new connector at the end of myPres with properties }
        {connector type:curve, left position:0, top:0, width:100, height:100}
begin connect of shpCon connected shape shpTrap connection site 1
end connect shpCon connected shape shpTri connection site 1
reroute connections shpCon
```


## Properties

## begin connected

True if the beginning of the specified connector is connected to a shape. Read-only.

## begin connected shape

Returns a shape object that represents the shape that the beginning of the specified connector is attached to. Read-only.

Note If the beginning of the specified connector isn't attached to a shape, this property generates an error.

## Drawing Suite

begin connection site
Returns an integer that specifies the connection site that the beginning of a connector is connected to. Read-only.

Note If the beginning of the specified connector isn't attached to a shape, this property generates an error.
connector type
Returns or sets the type of connector. Read/write.
Can be one of the following:

- connector type unset
- straight
- elbow
- curve
end connected
True if the end of the specified connector is connected to a shape. Read-only.
end connected shape
Returns a shape object that represents the shape that the end of the specified connector is attached to. Read-only.

Note If the end of the specified connector isn't attached to a shape, this property generates an error.
end connection site
Returns an integer that specifies the connection site that the end of a connector is connected to. Read-only.
Note If the end of the specified connector isn't attached to a shape, this property generates an error.

## Class: fill format

Represents fill formatting for a shape. A shape can have a solid, gradient, texture, pattern, picture, or semi-transparent fill.

Use the fill property to return a shape's fill format object. The following example adds a rectangle to myPres and then sets the gradient and color for the rectangle's fill.

```
set myPres to slide 1 of active presentation
set shpRect to make new shape at the beginning of myPres with properties }
        {auto shape type:autoshape rectangle, left position:90, top:90, ᄀ
        width:90, height:80}
set fore color of fill of shpRect to ({0, 128, 128} as RGB color)
one color gradient fill of shpRect style horizontal gradient variant 1 ᄀ
        degree 1
```


## Remarks

Many of the properties of the fill format object are read-only. To set one of these properties, you have to apply the corresponding command.

Properties
back color
Returns or sets an RGB color that represents the background color for the specified fill format. Read/write.
fill format type
Returns the shape fill format type. Read-only.
Can be one of the following

- fill unset
- fill solid
- fill patterned
- fill gradient
- fill textured
- fill background
- fill picture
fore color
Returns or sets an RGB color that represents the foreground color for the fill format. Readonly.
gradient color type
Returns the gradient color type for the specified fill. Read-only.
Can be one of the following:
- gradient type unset
- single shade gradient type
- two colors gradient type
- preset colors gradient type

To set the gradient type for the fill format, use the one color gradient, preset gradient, or two color gradient command.
gradient degree
Returns a value that indicates how dark or light a one-color gradient fill format is. A value of 0 (zero) means that black is mixed in with the shape's foreground color to form the gradient; a value of 1 means that white is mixed in; and values between 0 and 1 mean that a darker or lighter shade of the foreground color is mixed in. Read-only.
To set the gradient degree for the fill format, use the one color gradient command.
gradient style
Returns the gradient style for the specified fill. Read-only.
Can be one of the following:

- gradient unset
- horizontal gradient
- vertical gradient
- diagonal up gradient
- diagonal down gradient
- from corner gradient
- from center gradient
- from title gradient

To set the gradient style for the fill, use the one color gradient or two color gradient command.

Note Attempting to return this property for a fill that doesn't have a gradient generates an error. To determine whether the fill has a gradient, use the fill type property.
gradient variant
Returns the gradient variant for the specified fill format as an integer value from 1 to 4 for most gradient fills. If the gradient style is from center gradient, this property returns either 1 or 2. The values for this property correspond to the gradient variants (numbered from left to right and from top to bottom) on the Gradient tab in the Fill Effects dialog box. Read-only.
To set the gradient variant for the fill format, use the one color gradient or two color gradient command.
pattern
Returns a value that represents the pattern applied to the specified fill format. Read-only.
Can be one of the following:
five percent pattern
ten percent pattern twenty percent pattern twenty five percent pattern thirty percent pattern forty percent pattern fifty percent pattern sixty percent pattern seventy percent pattern seventy five percent pattern eighty percent pattern ninety percent pattern dark downward diagonal pattern dark horizontal pattern dark upward diagonal pattern dark vertical pattern dashed downward diagonal pattern dashed horizontal pattern dashed upward diagonal pattern dashed vertical pattern diagonal brick pattern divot pattern dotted diamond pattern dotted grid pattern horizontal brick pattern
large checker board pattern
large confetti pattern
large grid pattern
light downward diagonal pattern
light horizontal pattern
light upward diagonal pattern
light vertical pattern
unset pattern
narrow horizontal pattern
narrow vertical pattern
outlined diamond pattern
plaid pattern
shingle pattern
small checker board pattern
small confetti pattern
small grid pattern
solid diamond pattern
sphere pattern
trellis pattern
wave pattern
weave pattern
wide downward diagonal pattern
wide upward diagonal pattern
zig zag pattern

To set the pattern for the fill format, use the patterned command.
To set the colors used in the pattern, use the back color and fore color properties.

## preset gradient type

Returns the preset gradient type for the specified fill format. Read-only.
Can be one of the following:
gradient brass gradient mahogany
gradient calm water
gradient chrome
gradient chrome2
gradient daybreak
gradient desert
gradient early sunset
gradient fire
gradient fog
gradient gold
gradient gold2
gradient horizon
gradient late sunset
gradient mahogany
gradient moss
gradient nightfall
gradient ocean
gradient parchment
gradient peacock
gradient rainbow
gradient rainbow2
gradient sapphire
gradient silver
gradient wheat
preset gradient unset

To set the preset gradient type for the fill format, use the preset gradient command.
preset texture
Returns the preset texture for the specified fill format. Read-only.
Can be one of the following:

| preset texture unset | texture paper bag |
| :--- | :--- |
| texture blue tissue paper | texture papyrus |
| texture bouquet | texture parchment |
| texture brown marble | texture pink tissue paper |
| texture canvas | texture purple mesh |
| texture cork | texture recycled paper |
| texture denim | texture sand |
| texture fish fossil | texture stationery |
| texture granite | texture walnut |
| texture green marble | texture water droplets |
| texture medium wood | texture white marble |
| texture newsprint | texture woven mat |
|  |  |

texture oak

To set the preset texture for the fill format, use the preset textured command.
texture name
Returns the name of the custom texture file for the specified fill format. Read-only.
To set the texture file for the fill format, use the user textured command.

## transparency

Returns or sets the degree of transparency of the specified fill format as a value between 0.0 (opaque) and 1.0 (clear). Read/write.

The value of this property affects the appearance of solid-colored fills and lines only; it has no effect on the appearance of patterned lines or patterned, gradient, picture, or textured fills.
visible
True if the specified object, or the formatting applied to it, is visible. Read/write.

## Class: line format

Represents line and arrowhead formatting. For a line, the line format object contains formatting information for the line itself; for a shape with a border, this object contains formatting information for the shape's border.

Use the line format property to return a line format object. The following example adds a a blue dashed line to myPres. There's a short narrow oval at the line's starting point and a long wide triangle at its end point.

```
set myPres to slide 1 of active presentation
set shpLine to make new line shape at the beginning of myPres with properties }
    {left position:100, top:100, width:200, height:300}
set lfshpLine to line format of shpLine
set dash style of lfshpLine to line dash style dash dot dot
set fore color of lfshpLine to ({50, 0, 128} as RGB color)
set begin arrow head length of 1fshpLine to short arrowhead
set begin arrowhead style of 1fshpLine to oval arrowhead
set begin arrowhead width of lfshpLine to narrow width arrowhead
set end arrowhead length of lfshpLine to long arrowhead
set end arrowhead style of 1fshpLine to triangle arrowhead
set end arrowhead width of lfshpLine to wide arrowhead
```


## Properties

```
back color
```

Returns or sets an RGB color that represents the background color for the specified line format. Read/write.

## begin arrowhead length

Returns or sets the length of the arrowhead at the beginning of the specified line. Read/write.
Can be one of the following:

- arrowhead length unset
- short arrowhead
- medium arrowhead
- long arrowhead
begin arrowhead style
Returns or sets the style of the arrowhead at the beginning of the specified line. Read/write.
Can be one of the following:
- arrowhead style unset
- no arrowhead
- triangle arrowhead
- open_arrowhead
- stealth arrowhead
- diamond arrowhead
- oval arrowhead
begin arrowhead width
Returns or sets the width of the arrowhead at the beginning of the specified line. Read/write.
Can be one of the following:
- arrowhead width unset
- narrow width arrowhead
- medium width arrowhead
- wide arrowhead
dash style
Returns or sets the dash style for the specified line. Read/write.
Can be one of the following:
- line dash style unset
- line dash style solid
- line dash style square dot
- line dash style round dot
- line dash style dash
- line dash style dash dot dot
- line dash style long dash
- line dash style dash dot
- line dash style long dash dot
end arrowhead length
Returns or sets the length of the arrowhead at the end of the specified line. Read/write.
Can be one of the following:
- arrowhead length unset
- short arrowhead
- medium arrowhead
- long arrowhead
end arrowhead style
Returns or sets the style of the arrowhead at the end of the specified line. Read/write.
Can be one of the following:
- arrowhead style unset
- no arrowhead
- triangle arrowhead
- open_arrowhead
- stealth arrowhead
- diamond arrowhead
- oval arrowhead
end arrowhead width
Returns or sets the width of the arrowhead at the end of the specified line. Read/write.
Can be one of the following:
- arrowhead width unset
- narrow width arrowhead
- medium width arrowhead
- wide arrowhead
fore color
Returns or sets an RGB color that represents the foreground color for the line format. Read/write.


## line format patterned

Returns or sets a value that represents the pattern applied to the specified line format. Read/write.

Can be one of the following:
five percent pattern
ten percent pattern twenty percent pattern twenty five percent pattern thirty percent pattern
forty percent pattern
fifty percent pattern
sixty percent pattern
seventy percent pattern
seventy five percent pattern
eighty percent pattern
ninety percent pattern
dark downward diagonal pattern
dark horizontal pattern
dark upward diagonal pattern
dark vertical pattern
dashed downward diagonal pattern
dashed horizontal pattern
dashed upward diagonal pattern
dashed vertical pattern
diagonal brick pattern
divot pattern
dotted diamond pattern
dotted grid pattern
horizontal brick pattern
large checker board pattern
large confetti pattern
large grid pattern
light downward diagonal pattern
light horizontal pattern
light upward diagonal pattern
light vertical pattern
unset pattern
narrow horizontal pattern
narrow vertical pattern
outlined diamond pattern
plaid pattern
shingle pattern
small checker board pattern
small confetti pattern
small grid pattern
solid diamond pattern
sphere pattern
trellis pattern
wave pattern
weave pattern
wide downward diagonal pattern
wide upward diagonal pattern
zig zag pattern

## line style

Returns or sets the line style for the fill format object. Read/write.
Can be one of the following:

- line style unset
- single line
- thin thin line
- thin thick line
- thick thin line
- thick between thin line
line weight
Returns or sets the thickness (in points) of the specified line. Read/write.


## Drawing Suite

## transparency

Returns or sets the degree of transparency of the specified line as a value between 0.0 (opaque) and 1.0 (clear). Read/write.

The value of this property affects the appearance of solid-colored lines only; it has no effect on the appearance of patterned lines.

Class: line shape

## Plural

## line shapes

Represents a line drawn on a slide. The line shape class inherits all the properties of the shape class.
Use line shape index, where index is the name or the index number, to return a single line shape object.
This example adds a dashed green line to a new document.

```
set myPres to active presentation
set myLine to make new line shape at the beginning of myPres with properties ᄀ
    {begin line X:100, begin line Y:100, end line X:60, end line Y:20}
set dash style of line format of myLine to line dash style dash
set fore color of line format of myLine to ({0, 128, 0} as RGB color)
```

This example formats the first line on slide 1 of the active presentation as a red arrow.

```
set begin arrowhead style of line format of line shape 1 of slide 1 of ᄀ
    active presentation to no arrowhead
set end arrowhead style of line format of line shape 1 of slide 1 of ᄀ
    active presentation to triangle arrowhead
set fore color of line format of line shape 1 of slide 1 of \neg
    active presentation to ({128, 0, 0} as RGB color)
```


## Properties

<Inheritance> shape
Inherits the properties and elements of the shape class.
begin line X
Returns or sets the starting X coordinate for the line shape. Read/write. begin line $Y$

Returns or sets the starting Y coordinate for the line shape. Read/write. end line $X$

Returns or sets the ending $X$ coordinate for the line shape. Read/write. end line $Y$

Returns or sets the ending Y coordinate for the line shape. Read/write.

## Class: 1ink format

Contains properties that apply to linked OLE objects.
Use the link format property to return a link format object.

## Properties

auto update
Returns or sets the way the link will be updated. Read/write.
Can be one of the following:

- update option manual
- update option unset
source full name
Returns or sets the name and path of the source file for the linked OLE object. Read/write.


## Class: picture

## Plural

## pictures

Represents a picture shape.
Use picture index, where index is the picture name or the index number, to return a picture object. The following example creates a new picture on slide 1 from the file "picture.jpg."

```
set thePres to active presentation
```

make new picture at the beginning of slide 1 of thePres with properties $\neg$
\{file name:"Macintosh HD:Shared:Pictures:picture.jpg", ᄀ
top:100, left position:100, height:300, width:300\}

## Properties

<Inheritance> shape
Inherits the properties and elements of the shape class.
file name
Returns or sets the URL (on the intranet or the Web) or path (local or network) to the location where the specified source object was saved. Read/write.

The file name property generates an error if a folder in the specified path doesn't exist.
link to file
True if the picture is linked to the file. Read-only.
picture format
Returns a picture format object that contains picture formatting properties. Read-only.
save with document
True if the picture should be saved with the document. Read-only.

## Class: picture format

Contains properties that apply to pictures.
Use the picture format property to return a picture format object. The following example sets the brightness, contrast, and color transformation for picture one on myPres and crops 18 points off the bottom of the shape.

```
set myPres to slide 1 of active presentation
set brightness of picture format of picture 1 of myPres to 0.3
set contrast of picture format of picture 1 of myPres to 0.7
set color type of picture format of picture 1 of myPres to }
        picture color gray scale
set crop bottom of picture format of picture 1 of myPres to 18
```

Properties
brightness
Returns or sets the brightness of the specified picture. The value for this property must be a number from 0.0 (dimmest) to 1.0 (brightest). Read/write.
color type
Returns or sets the type of color transformations applied to the specified picture. Read/write.
Can be one of the following:

- picture color type unset
- picture color automatic
- picture color gray scale
- picture color black and white
- picture color watermark
contrast
Returns or sets the contrast for the specified picture. The value for this property must be a number from 0.0 (the least contrast) to 1.0 (the greatest contrast). Read/write.
crop bottom
Returns or sets the number of points that are cropped off the bottom of the specified picture. Read/write.
crop left
Returns or sets the number of points that are cropped off the left side of the specified picture. Read/write.
crop right
Returns or sets the number of points that are cropped off the right side of the specified picture. Read/write.
crop top
Returns or sets the number of points that are cropped off the top of the specified picture.
Read/write.
transparency color
Returns or sets the transparent color for the specified picture as an RGB value. For this property to take effect, the transparent background property must be set to true. Read/write.
transparent background
True if the parts of the picture that are the color defined as the transparent color appear transparent. To set the transparent color, use the transparency color property. Read/write.


## Class: place holder

## Plural

```
place holders
```

Represents a placeholder shape on a slide. Each place holder object represents a placeholder for text, a chart, a table, an organizational chart, or some other type of object. If the slide has a title, the title is the first placeholder in the placeholders list.

Use place holder index, where index is the placeholder index number, to return a place holder object that represents a single placeholder. The following example adds a new slide with a Bulleted List slide layout to the beginning of the presentation, sets the text for the title, and then adds two paragraphs to the text placeholder.

```
set sObj to make new slide at the beginning of active presentation ᄀ
    with properties {layout:slide layout text slide}
set content of text range of text frame of place holder 1 of s0bj ᄀ
    to "This is the title text"
set content of text range of text frame of place holder 2 of sObj ᄀ
    to "Item 1" & return & "Item 2"
```

You can delete individual placeholders by using the delete command, and you can restore deleted placeholders by using the make command, but you cannot add any more placeholders to a slide than it had when it was created. To change the number of placeholders on a given slide, set the layout property.

## Properties

place holder format
Returns a placeholder format object that contains the properties that are unique to placeholders. Read-only.

## placeholder type

Returns the placeholder type for the specified placeholder. Read-only.
Can be one of the following:
placeholder type unset placeholder type title placeholder placeholder type bitmap placeholder placeholder type body placeholder placeholder type center title placeholder placeholder type chart placeholder placeholder type date placeholder placeholder type footer placeholder placeholder type header placeholder
placeholder type media clip placeholder placeholder type object placeholder placeholder type org chart placeholder placeholder type slide number placeholder placeholder type subtitle placeholder placeholder type table placeholder placeholder type vertical body placeholder placeholder type vertical title placeholder

## Class: placeholder format

Contains properties that apply specifically to placeholders.
Use the placeholder format property to return a placeholder format object. The following example adds text to placeholder one on slide one in the active presentation if that placeholder exists and is a horizontal title placeholder.

```
set al1Place to place holders of slide 1 of active presentation
if (count of place holders of allPlace) > 0 then
    if (placeholder type of item 1 of al1Place is placeholder type title \neg
        placeholder) or (placeholder type of item 1 of allPlace is ᄀ
        placeholder type center title placeholder) then
        set content of text range of text frame of item 1 of allPlace to ᄀ
        "This is the title"
    else
        display dialog "There is no horizontal title on this slide"
    end if
end if
```


## Properties

```
placeholder type
```

Returns the placeholder type for the specified placeholder. Read-only.
Can be one of the following:
placeholder type unset placeholder type title placeholder placeholder type bitmap placeholder placeholder type body placeholder placeholder type center title placeholder placeholder type chart placeholder placeholder type date placeholder placeholder type footer placeholder placeholder type header placeholder
placeholder type media clip placeholder placeholder type object placeholder placeholder type org chart placeholder placeholder type slide number placeholder placeholder type subtitle placeholder placeholder type table placeholder placeholder type vertical body placeholder placeholder type vertical title placeholder

## Class: shadow format

Represents shadow formatting for a shape.
Use the shadow format property to return a shadow format object. The following example adds a shadowed rectangle to myPres. The semitransparent blue shadow is offset 5 points to the right of the rectangle and 3 points above it.

```
set myPres to slide 1 of active presentation
set shpRect to make new shape at the beginning of myPres with properties }
    {auto shape type:autoshape rectangle, left position:50, top:50, ᄀ
    width:100, height:200}
set fore color of shadow format of shpRect to ({0, 0, 128} as RGB color)
set X offset of shadow format of shpRect to 5
set y offset of shadow format of shpRect to -3
set transparency of shadow format of shpRect to 0.5
set visible of shadow format of shpRect to true
```


## Properties

## X offset

Returns or sets the horizontal offset (in points) of the shadow from the specified shape. A positive value offsets the shadow to the right of the shape; a negative value offsets it to the left. Read/write.

## Y offset

Returns or sets the vertical offset (in points) of the shadow from the specified shape. A positive value offsets the shadow below the shape; a negative value offsets it above the shape.
Read/write.

## fore color

Returns or sets an RGB color that represents the foreground color for the line format. Readonly.
obscured
True if the shadow of the specified shape appears filled in and is obscured by the shape, even if the shape has no fill. False if the shadow has no fill and the outline of the shadow is visible through the shape if the shape has no fill. Read/write.

## shadow type

Returns or sets the shape shadow type. Read/write.
Can be one of the following:

| shadow unset | shadow7 | shadow14 |
| :--- | :--- | :--- |
| shadow1 | shadow8 | shadow15 |
| shadow2 | shadow9 | shadow16 |
| shadow3 | shadow10 | shadow17 |
| shadow4 | shadow11 | shadow18 |
| shadow5 | shadow12 | shadow19 |
| shadow6 | shadow13 | shadow20 |

## transparency

Returns or sets the degree of transparency of the specified shadow as a value between 0.0 (opaque) and 1.0 (clear). Read/write.
visible
True if the shadow format object, or the formatting applied to it, is visible. Read/write.

Class: shape
Plural
shapes
Elements
shape
callout
connector
picture
line shape
placeholder
word art
text box
comment
shape table
Represents an object in the drawing layer, such as an AutoShape, freeform, OLE object, or picture.
The shapes list contains all the shapes on a slide.
Use shape index, where index is the shape name or the index number, to return a shape object that represents a shape on a slide. Shapes on slides are numbered sequentially, regardless of the shape type. The following example horizontally flips shape one and the shape named "Rectangle 1" on myPres.
set myPres to slide 1 of active presentation
flip shape 1 of myPres direction flip horizontal
flip shape "Rectangle 1" of myPres direction flip horizontal
Each shape is assigned a default name when it is created. To give the shape a more meaningful name, use the name property. The following example adds a rectangle to myPres, gives it the name "Red Square," and then sets its foreground color and line style.

```
set myPres to slide 1 of active presentation
set shpRect to make new shape at the beginning of myPres with properties ᄀ
    {auto shape type:autoshape rectangle, left position:144, top:144, ᄀ
    width:72, height:72}
set name of shpRect to "Red Square"
set fore color of fill of shpRect to ({255, 0, 0} as RGB color)
set dash style of line format of shpRect to line dash style dash dot
```


## Properties

## animation settings

Returns an animation settings object that represents all the special effects you can apply to the animation of the specified shape.

## auto shape type

Returns or sets the type of AutoShape. Read/write.
Can be one of the following:
autoshape rectangle
autoshape trapezoid
autoshape rounded rectangle
autoshape isosceles triangle
autoshape oval
autoshape cross
autoshape can
autoshape bevel
autoshape smiley face
autoshape no symbol
autoshape heart
autoshape sun
autoshape arc
autoshape double brace
autoshape left bracket
autoshape left brace
autoshape right arrow
autoshape up arrow
autoshape left right arrow
autoshape quad arrow
autoshape bent arrow
autoshape left up arrow
autoshape curved right arrow
autoshape curved up arrow
autoshape striped right arrow
autoshape pentagon
autoshape right arrow callout autoshape up arrow callout autoshape left right arrow callout autoshape quad arrow callout autoshape flowchart process autoshape flowchart decision autoshape flowchart predefined process autoshape flowchart document autoshape flowchart terminator autoshape flowchart manual input autoshape flowchart connector autoshape flowchart card autoshape flowchart summing junction autoshape flowchart collate autoshape flowchart extract autoshape flowchart stored data autoshape flowchart sequential access storage autoshape flowchart magnetic disk
autoshape flowchart direct access storage autoshape explosion one autoshape four point star autoshape eight point star autoshape twenty four point star autoshape up ribbon autoshape curved up ribbon autoshape vertical scroll autoshape wave autoshape rectangular callout autoshape oval callout autoshape line callout one autoshape line callout three autoshape line callout one accent bar autoshape line callout three accent bar autoshape line callout one no border autoshape line callout three no border autoshape callout one border and accent bar autoshape callout three border and accent bar autoshape action button custom autoshape action button help autoshape action button back or previous autoshape action button beginning autoshape action button return autoshape action button sound autoshape balloon
autoshape flowchart display autoshape explosion two autoshape five point star autoshape sixteen point star autoshape thirty two point star autoshape down ribbon autoshape curved down ribbon autoshape horizontal scroll autoshape double wave autoshape rounded rectangular callout autoshape cloud callout autoshape line callout two autoshape line callout four autoshape line callout two accent bar autoshape line callout four accent bar autoshape line callout two no border autoshape line callout four no border autoshape callout two border and accent bar autoshape callout four border and accent bar autoshape action button home autoshape action button information autoshape action button forward or next autoshape action button end autoshape action button document autoshape action button movie

## black and white mode

Returns or sets a value that indicates how the specified shape appears when the document is viewed in black-and-white mode. Read/write.

Can be one of the following:
black and white mode automatic
black and white mode black
black and white mode black text and line
black and white mode dont show black and white mode gray outline black and white mode gray scale
black and white mode high contrast black and white mode inverse gray scale black and white mode light gray scale black and white mode unset black and white mode white

## connection site count

Returns the number of connection sites on the specified shape. Read-only.

## fill

Returns a fill format object that contains fill formatting properties for the specified shape. Read-only.
has connector
True if the specified shape is a connector. Read-only.
has table
True if the specified shape is a table. Read-only.
has text frame
True if the specified shape has a text frame and can therefore contain text. Read-only. height

Returns or sets the height of the specified shape. Read/write.
horizontal flip
True if the specified shape is flipped around the horizontal axis. Read-only.
left position
Returns or sets the horizontal position (in points) of the specified shape or shape range.
Read/write.
line format
Returns a line format object that contains line formatting properties for the specified shape.
(For a line, the line format object represents the line itself; for a shape with a border, the line
format object represents the border.) Read-only.
link format
Returns a link format object that contains the properties that are unique to linked OLE objects.
Read-only.
lock aspect ratio
True if the specified shape retains its original proportions when you resize it. False if you can change the height and width of the shape independently of one another when you resize it. Read/write.
media type
Returns the OLE media type. Read-only.
Can be one of the following:

- media type unset
- media type movie
- media type other
- media type sound
name
Returns or sets the shape name. Read/write.
rotation
Returns or sets the number of degrees the specified shape is rotated around the $z$-axis. A positive value indicates clockwise rotation; a negative value indicates counterclockwise rotation. Read/write.

To set the rotation of a three-dimensional shape around the x -axis or the y -axis, use the $x$ rotation property or the $y$ rotation property of the threeD format object.
shadow format
Returns a shadow format object that represents the shadow formatting for the specified shape. Read-only.
shape type
Returns the shape type. Read-only.
Can be one of the following:
shape type auto shape type linked OLE object
shape type callout shape type linked picture
shape type chart
shape type comment
shape type embedded OLE object
shape type form control
shape type free form
shape type media
shape type embedded OLE control shape type picture shape type placeholder
shape type group
shape type unset
shape type line
shape type text box
shape type text effect
text frame
Returns a text frame object that contains the text for the specified shape. Read-only.
threeD format
Returns a threeD format object that contains 3-D-effect formatting properties for the specified shape. Read-only.
top
Returns or sets the vertical position (in points) of the specified shape or shape range.
Read/write.
vertical flip
True if the specified shape is flipped around the vertical axis. Read-only.
visible
True if the specified object, or the formatting applied to it, is visible. Read/write.
width
Returns or sets the width (in points) of the specified object. Read/write.
$z$ order position
Returns the position of the object in the z-order, which corresponds to the object's index number. Read-only.
Whenever you make a new shape or object, it's added to the front of the $z$-order by default.

## Class: shape table

## Plural

shape tables
Represents a table shape on a slide. The shape table class inherits all the properties of the shape class.

Use shape table index, where index is the name or the index number, to return a single shape table object.
This example creates a new table on slide two of the active presentation. The table has three rows and four columns. It is 10 points from the left edge of the slide, and 10 points from the top edge. The width of the new table is 288 points, which makes each of the four columns one inch wide (there are 72 points per inch). The height is set to 216 points, which makes each of the three rows one inch tall.

```
set myPres to slide 2 of active presentation
set shpTable to make new shape table at the beginning of myPres ᄀ
        with properties {number of rows:3, number of columns:4}
set left position of shpTable to 10
set top of shpTable to 10
set width of shpTable to 288
set height of shpTable to 216
```


## Properties

```
number of columns
Returns the number of columns in the shape table. Read-only.
number of rows
```

Returns the number of rows in the shape table. Read-only

## table object

Returns a table object that represents a table in a shape. Read-only.

## Class: text box

## Plural

## text boxes

Represents a text box object in the drawing layer of a document. The text box class inherits all the properties of the shape class.

Use text box index, where index is the name or the index number, to return a single text box object.
This example adds a text box that contains the text "Test Box" to myPres.

```
set myPres to slide 1 of active presentation
```

set shpTxtBx to make new text box at the beginning of myPres with properties $\neg$
\{text orientation:horizontal, left position:100, top:100, ᄀ
width: 300, height:200\}
set content of text range of text frame of shpTxtBx to "Test Box"

## Properties

## <Inheritance> shape

Inherits the properties and elements of the shape class.

## text orientation

Returns the orientation of the text inside the text box.
Can be one of the following:

- downward
- horizontal
- text orientation unset
- vertical east asian
- vertical
- horizontal rotated east asian
- upward


## Class: text frame

Represents the text frame in a shape object. Contains the text in the text frame as well as the properties that control the alignment and anchoring of the text frame.
Use the text frame property to return a text frame object. The following example adds a rectangle to myPres, adds text to the rectangle, and then sets the margins for the text frame.

```
set myPres to slide 1 of active presentation
```

set shpRect to make new shape at the beginning of myPres with properties $\neg$
\{auto shape type:autoshape rectangle, left position:0, top:0, ᄀ
width:250, height:140\}
set tfShpRect to text frame of shpRect
set content of text range of tfShpRect to "Here is some test text"
set bottom margin of tfShpRect to 10
set left margin of tfShpRect to 10
set right margin of tfShpRect to 10
set top margin of tfShpRect to 10

## Drawing Suite

Use the has text frame property to determine whether a shape has a text frame, and use the has text property to determine whether the text frame contains text, as shown in the following example.

```
set myPres to slide 1 of active presentation
repeat with s in (get shapes of myPres)
    if has text frame of s is true then
        if has text of text frame of s is true then
        display dialog (get content of text range of text frame of s)
        end if
    end if
end repeat
```


## Properties

```
auto size
```

True if the size of the specified object is changed automatically to fit text within its boundaries. Read/write.
bottom margin
Returns or sets the distance (in points) between the bottom of the text frame and the bottom of the inscribed rectangle of the shape that contains the text. Read/write.

This property is ignored when the auto margins property is set to true.
has text
True if the specified text frame has text associated with it. Read-only.

## horizontal anchor

Returns or sets the horizontal anchor type for the specified text. Read/write.
Can be one of the following:

- center
- none
- horizontal anchor unset
left margin
Returns or sets the distance (in points) between the left edge of the text frame and the left edge of the inscribed rectangle of the shape that contains the text. Read/write.
This property is ignored when the auto margins property is set to true.
right margin
Returns or sets the distance (in points) between the right edge of the text frame and the right edge of the inscribed rectangle of the shape that contains the text. Read/write.

This property is ignored when the auto margins property is set to true.
ruler
Returns a ruler object that represents the ruler for the specified text. Read-only.
text orientation
Returns or sets the orientation of the text inside the frame. Read/write.
Can be one of the following:

- downward
- horizontal
- text orientation unset
- upward
- vertical east asian
- vertical
- horizontal rotated east asian
text range
Returns a text range object that represents the text in the specified text frame. Read-only. top margin

Returns or sets the distance (in points) between the top of the text frame and the top of the inscribed rectangle of the shape that contains the text. Read/write.

This property is ignored when the auto margins property is set to true.
vertical anchor
Returns or sets the vertical anchor type for the specified text. Read/write.
Can be one of the following:

- anchor bottom
- anchor bottom baseline
- anchor middle
- anchor top
- anchor top baseline
- vertical anchor unset
word wrap
True if lines break automatically to fit inside the shape. Read/write.


## Class: threeD format

Represents a shape's three-dimensional formatting.
Use the threeD format property to return a threeD format object. The following example adds an oval to myPres and then specifies that the oval be extruded to a depth of 50 points and that the extrusion be purple.

```
set myPres to slide 1 of active presentation
set shpOval to make new shape at the beginning of myPres with properties ᄀ
    {auto shape type:autoshape oval, left position:90, top:90, ᄀ
    width:90, height:40}
set visible of threeD format of shp0val to true
set depth of threeD format of shp0val to 50
set extrusion color of threeD format of shpOval to ᄀ
    ({255, 100, 255} as RGB color)
```


## Remarks

You cannot apply three-dimensional formatting to some kinds of shapes, such as beveled shapes or multiple-disjoint paths. Most of the properties of the threeD format object for such a shape will fail.

## Properties

depth
Returns or sets the depth of the shape's extrusion. Can be a value from -600 through 9600 (positive values produce an extrusion whose front face is the original shape; negative values produce an extrusion whose back face is the original shape). Read/write.
extrusion color
Returns or sets an RGB color that represents the color of the shape's extrusion. Read/write.
format
Returns the preset extrusion format. Each preset extrusion format contains a set of preset values for the various properties of the extrusion. If the extrusion has a custom format rather than a preset format, this property returns preset threeD format unset. Read-only.
Can be one of the following:

| preset threeD format unset | format7 | format14 |
| :--- | :--- | :--- |
| format1 | format8 | format15 |
| format2 | format9 | format16 |
| format3 | format10 | format17 |
| format4 | format11 | format18 |
| format5 | format12 | format19 |
| format6 | format13 | format20 |

The values for this property correspond to the options (numbered from left to right, top to bottom) displayed when you click the 3-D button on the Drawing toolbar.
To set the preset extrusion format, use the set threeD format command.
perspective
True if the extrusion appears in perspective - that is, if the walls of the extrusion narrow toward a vanishing point. False if the extrusion is a parallel, or orthographic, projection - that is, if the walls don't narrow toward a vanishing point. Read/write. preset extrusion direction

Returns the direction that the extrusion's sweep path takes away from the extruded shape (the front face of the extrusion). Read-only.
Can be one of the following:

- extrude bottom
- extrude bottom left
- extrude bottom right
- extrude left
- extrude none
- extrude right
- extrude top
- extrude top left
- extrude top right
- preset extrusion direction unset

To set the value of this property, use the set extrusion direction command.
preset lighting direction
Returns or sets the position of the light source relative to the extrusion. Read/write.
Can be one of the following:

- light from bottom
- light from bottom left
- light from bottom right
- light from left
- light from none
- light from right
- light from top
- light from top left
- light from top right
- preset lighting direction unset

Note You won't see the lighting effects you set if the extrusion has a wireframe surface.

## Drawing Suite

preset lighting softness
Returns or sets the intensity of the extrusion lighting. Read/write.
Can be one of the following:

- lighting bright
- lighting dim
- lighting normal
- lighting softness unset
preset material
Returns or sets the extrusion surface material. Read/write.
Can be one of the following:
- matte
- metal
- plastic
- wireframe
- preset material unset
visible
True if the specified object, or the formatting applied to it, is visible. Read/write.
$x$ rotation
Returns or sets the rotation (in degrees) of the extruded shape around the x-axis. Can be a value from -90 through 90. A positive value indicates upward rotation; a negative value indicates downward rotation. Read/write.

To set the rotation of the extruded shape around the $y$-axis, use the rotation $y$ property. To set the rotation of the extruded shape around the z-axis, use the rotation property of the shape object. To change the direction of the extrusion's sweep path without rotating the front face of the extrusion, use the set extrusion direction command.
y rotation
Returns or sets the rotation (in degrees) of the extruded shape around the y-axis. Can be a value from -90 through 90. A positive value indicates rotation to the left; a negative value indicates rotation to the right. Read/write.

To set the rotation of the extruded shape around the $x$-axis, use the rotation $x$ property. To set the rotation of the extruded shape around the z-axis, use the rotation property of the shape object. To change the direction of the extrusion's sweep path without rotating the front face of the extrusion, use the set extrusion direction command.

## Class: word art

## Plural

word arts
Represents a word art object.
Use word art index, where index is the name or the index number, to return a single word art object. This example adds WordArt that contains the text "Test Text" at the beginning of the first slide of the active presentation.

```
set myPres to slide 1 of active presentation
make new word art at beginning of myPres with properties ᄀ
    {word art text:"Test text", left position:72, top:72}
set preset word art effect of word art format of word art 1 of myPres ᄀ
    to text effect11
set font name of word art format of word art 1 of myPres ᄀ
    to "Aria1 Black"
set font size of word art format of word art 1 of myPres to 36
set bold of word art format of word art 1 of myPres to true
Properties
<Inheritance> shape
```

Inherits the properties and elements of the shape class.
bold
True to set the font used in the WordArt to bold. Read-only.
font italic
True to set the font used in the WordArt to italic. Read-only.
font name
The name of the font used in the WordArt. Read-only.
font size
The size (in points) of the font used in the WordArt. Read-only.

## Drawing Suite

preset word art effect
Returns the style of the specified WordArt. The values for this property correspond to the formats in the WordArt Gallery dialog box (numbered from left to right, top to bottom). Read-only.
Can be one of the following.:

| text effect unset | text effect11 | text effect21 |
| :--- | :--- | :--- |
| text effect1 | text effect12 | text effect22 |
| text effect2 | text effect13 | text effect23 |
| text effect3 | text effect14 | text effect24 |
| text effect4 | text effect15 | text effect25 |
| text effect5 | text effect16 | text effect26 |
| text effect6 | text effect18 | text effect27 |
| text effect7 | text effect19 | text effect28 |
| text effect8 | text effect20 | text effect29 |
| text effect9 |  | text effect30 |
| text effect10 |  |  |
| art format |  |  |

Returns the word art format object associated with the WordArt shape object. Read-only. word art text

The text in the WordArt. Read-only

## Class: word art format

Contains properties that apply to WordArt objects.
Use the word art format property to return a word art format object. The following example sets the font name and formatting for shape one on myDocument. For this example to work, shape one must be a WordArt object.

```
set myPres to slide 1 of active presentation
set theWAF to word art format of word art 1 of myPres
set font name of theWAF to "Courier New"
set font bold of theWAF to true
set font italic of theWAF to true
Properties
```

font bold
True if the text of the WordArt shape is formatted as bold. Read/write.
font italic
True if the text of the WordArt shape is formatted as italic. Read/write.

## font name

Returns or sets the name of the font used by the WordArt shape. Read/write.
kerned pairs
True if character pairs in the specified WordArt are kerned. Read/write.
normalized height
True if all characters (both uppercase and lowercase) in the specified WordArt are the same height. Read/write.
preset shape
Returns or sets the shape of the specified WordArt. Read/write.
Can be one of the following:

| arch down curve | double wave1 |
| :--- | :--- |
| arch down pour | double wave2 |
| arch up curve | fade down |
| arch up pour | fade left |
| button curve | fade right |
| button pour | fade up |
| can down | inflate |
| can up | inflate bottom |
| cascade down | inflate top |
| cascade up | text effect unset |
| chevron down | plain text |
| chevron up | ring inside |
| circle curve | ring outside |
| circle pour | slant down |
| curve down | slant up |
| curve up | stop |
| deflate | triangle down |
| deflate bottom | triangle up |
| deflate inflate | wave1 |
| deflate inflate deflate | wave2 |
| deflate top |  |

Setting the preset word art property automatically sets the preset shape property.
preset word art
Returns or sets the style of the specified WordArt. The values for this property correspond to the formats in the WordArt Gallery dialog box (numbered from left to right, top to bottom). Read/write.

Can be one of the following:

| text effect unset | text effect16 |
| :--- | :--- |
| texe effect1 | text effect17 |
| text effect2 | text effect18 |
| text effect3 | text effect19 |
| text effect4 | text effect20 |
| text effect5 | text effect21 |
| text effect6 | text effect22 |
| text effect7 | text effect23 |
| text effect8 | text effect24 |
| text effect9 | text effect25 |
| text effect10 | text effect26 |
| text effect11 | text effect27 |
| text effect12 | text effect28 |
| texe effect13 | text effect29 |
| text effect14 | text effect30 |

text effect15
Setting the preset word art effect property automatically sets many other formatting properties of the specified shape.

## rotated chars

True if characters in the specified WordArt are rotated 90 degrees relative to the WordArt's bounding shape. False if characters in the specified WordArt retain their original orientation relative to the bounding shape. Read/write.
If the WordArt has horizontal text, setting the rotated chars property to true rotates the characters 90 degrees counterclockwise. If the WordArt has vertical text, setting the rotated chars property to false rotates the characters 90 degrees clockwise. To switch between horizontal and vertical text flow, use the toggle vertical text command.

The flip command and rotation property of the shape object and the rotated chars property and toggle vertical text command all affect the character orientation and direction of text flow in a word art object. You may have to experiment to find out how to combine the effects of these properties and commands to get the result you want.
text alignment
Returns or sets the alignment for the specified text effect. Read/write.
Can be one of the following:

- text effect alignment unset
- left text effect alignment
- centered text effect alignment
- right text effect alignment
- justify text effect alignment
- word justify text effect alignment
- stretch justify text effect alignment
tracking
Returns or sets the ratio of the horizontal space allotted to each character in the specified WordArt to the width of the character. Can be a value from 0 (zero) through 5. (Large values for this property specify ample space between characters; values less than 1 can produce character overlap.) Read/write.
The following table gives the values of the tracking property that correspond to the settings available in the user interface.
User interface setting Equivalent tracking property value

Very Tight 0.8
Tight 0.9
Normal 1.0
Loose 1.2
Very Loose 1.5
word art text
Returns or sets the text associated with the WordArt. Read/write..

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## Command: app7y

Applies to the specified shape formatting that's been copied by using the pick up command.

## Syntax

apply shape Required. An expression that returns a shape.

## Example

This example copies the formatting of shape one on myS1ide and then applies the copied formatting to shape two.

```
set mySlide to slide 1 of active presentation
pick up shape 1 of mySTide
apply shape 2 of mySTide
```

Command: automatic length
Specifies that the first segment of the callout line (the segment attached to the text callout box) be scaled automatically when the callout is moved. Use the custom length command to specify that the first segment of the callout line retain the fixed length returned by the callout format length property whenever the callout is moved. Applies only to callouts whose lines consist of more than one segment (types callout three and callout four).

## Syntax

automatic length callout/callout format Required. An expression that returns a callout or callout format object.

## Remarks

Applying this command sets the auto length property to true.

## Example

This example toggles between an automatically scaling first segment and one with a fixed length for the callout line for shape one on myDocument. For the example to work, shape one must be a callout.

```
set myS7ide to slide 1 of active presentation
if auto length of callout format of callout 1 of mySlide is true then
    custom length callout format of callout 1 of mySlide length 50
e1se
    automatic length callout format of callout 1 of mySlide
end if
```


## Command: begin connect

Attaches the beginning of the specified connector to a specified shape. If there's already a connection between the beginning of the connector and another shape, that connection is broken. If the beginning of the connector isn't already positioned at the specified connecting site, this command moves the beginning of the connector to the connecting site and adjusts the size and position of the connector. To attach the end of the connector to a shape, use the end connect command.

## Syntax

begin connect connector/connector format Required. An expression that returns a connector or connector format object.
connected shape shape Required. The shape to attach the beginning of the connector to.
connection site integer Required. A connection site on the shape specified by connected shape. Must be an integer between 1 and the integer returned by the connection site count property of the specified shape. If you want the connector to automatically find the shortest path between the two shapes it connects, specify any valid integer for this argument and then use the reroute connections command after the connector is attached to shapes at both ends.

## Remarks

When you attach a connector to an object, the size and position of the connector are automatically adjusted, if necessary.

## Example

This example adds two shapes to myPres and connects them with a curved connector. Note that when you attach the connector to the shapes, the size and position of the connector are automatically adjusted; therefore, the position and dimensions you specify when adding the connector are irrelevant (dimensions must be nonzero).

```
set myPres to slide 1 of active presentation
set shpTrap to make new shape at the beginning of myPres with properties }
    {auto shape type:autoshape trapezoid,left position:100, top:50, ᄀ
    width:200, height:100}
set shpTri to make new shape at the end of myPres with properties ᄀ
        {auto Shape type:autoshape right triangle, left position:300, ᄀ
        top:300, width:200, height:100}
set shpCon to make new connector at the end of myPres with properties ᄀ
    {connector type:curve, left position:0, top:0, width:100, height:100}
begin connect shpCon connected shape shpTrap connection site 1
end connect shpCon connected shape shpTri connection site 1
reroute connections shpCon
```


## Command: begin disconnect

Detaches the beginning of the specified connector from the shape it's attached to. This command doesn't alter the size or position of the connector: the beginning of the connector remains positioned at a connection site but is no longer connected. To detach the end of the connector from a shape, use the end disconnect command.

## Syntax

begin disconnect connector/connector format Required. An expression that returns a connector format object.

## Drawing Suite

## Example

This example adds two shapes to myPres, attaches them with a connector, automatically reroutes the connector along the shortest path, and then detaches the connector from the shapes.

```
set myPres to slide 1 of active presentation
set shpTrap to make new shape at the beginning of myPres with properties ᄀ
    {auto shape type:autoshape trapezoid,left position:100, top:50, ᄀ
    width:200, height:100}
set shpTri to make new shape at the end of myPres with properties }
    {auto Shape type:autoshape right triangle, left position:300, ᄀ
    top:300, width:200, height:100}
set shpCon to make new connector at the end of myPres with properties ᄀ
    {connector type:curve, left position:0, top:0, width:100, height:100}
begin connect shpCon connected shape shpTrap connection site 1
end connect shpCon connected shape shpTri connection site 1
reroute connections shpCon
begin disconnect shpCon
end disconnect shpCon
```

Command: copy shape
Copies the specified shape to the Clipboard.

## Syntax

copy shape shape Required. An expression that returns shape object.

## Example

This example copies shape one on slide one in the active presentation to the Clipboard and then pastes it onto slide two.
copy shape (shape 1 of slide 1 of active presentation)
go to slide view of active window number 1
paste object view of active window
Command: custom drop
Sets the vertical distance (in points) from the edge of the text bounding box to the place where the callout line attaches to the text box. This distance is measured from the top of the text box unless the auto attach property is set to true and the text box is to the left of the origin of the callout line (the place that the callout points to), in which case the drop distance is measured from the bottom of the text box.

## Syntax

custom drop callout/callout format Required. An expression that returns a callout format object.
drop amount small real Required. The drop distance, in points.

## Drawing Suite

## Example

This example sets the custom drop distance to 14 points, and specifies that the drop distance always be measured from the top.

```
set myPres to slide 1 of active presentation
custom drop callout 3 of myPres drop amount 14
set auto attach of callout format of callout 3 of myPres to false
Command: custom length
```

Specifies that the first segment of the callout line (the segment attached to the text callout box) retain a fixed length whenever the callout is moved. To specify that the first segment of the callout line be scaled automatically whenever the callout is moved, use the automatic length command. Applies only to callouts whose lines consist of more than one segment (types callout three and callout four).

## Syntax

custom length callout/callout format Required. An expression that returns a callout or callout format object.
length small real Required. The length (in points) of the first segment of the callout.

## Remarks

Applying this command sets the auto length property to false and sets the callout format length property to the value specified for the length argument.

## Example

This example toggles between an automatically scaling first segment and one with a fixed length for the callout line for shape one on myPres. For the example to work, shape one must be a callout.

```
set myPres to slide 1 of active presentation
if auto length of callout format of callout 1 of myPres is true then
    custom length callout format of callout 1 of myPres length 50
else
    automatic length callout format of callout 1 of myPres
end if
```


## Command: cut shape

Deletes the specified object and places it on the Clipboard.

## Syntax

cut shape shape Required. An expression that returns a shape object.

## Example

This example deletes shape one from slide one in the active presentation, places a copy of it on the Clipboard, and then pastes it onto slide two.

```
cut shape (shape 1 of slide 1 of active presentation)
go to slide view of active window number 2
paste object view of active window
```

Command: end connect
Attaches the end of the specified connector to a specified shape. If there's already a connection between the end of the connector and another shape, that connection is broken. If the end of the connector isn't already positioned at the specified connecting site, this command moves the end of the connector to the connecting site and adjusts the size and position of the connector. To attach the beginning of the connector to a shape, use the begin connect command.

## Syntax

end connect connector/connector format Required. An expression that returns a connector or connector format object.
connected shape shape Required. The shape to attach the end of the connector to.
connection site integer Required. A connection site on the shape specified by connected shape. Must be an integer between 1 and the integer returned by the connection site count property of the specified shape. If you want the connector to automatically find the shortest path between the two shapes it connects, specify any valid integer for this argument and then use the reroute connections command after the connector is attached to shapes at both ends.

## Remarks

When you attach a connector to an object, the size and position of the connector are automatically adjusted, if necessary.

## Example

This example adds two shapes to myPres and connects them with a curved connector. Note that when you attach the connector to the shapes, the size and position of the connector are automatically adjusted; therefore, the position and dimensions you specify when adding the connector are irrelevant (dimensions must be nonzero).

```
set myPres to slide 1 of active presentation
set shpTrap to make new shape at the beginning of myPres with properties ᄀ
        {auto shape type:autoshape trapezoid,left position:100, top:50, ᄀ
        width:200, height:100}
set shpTri to make new shape at the end of myPres with properties ᄀ
        {auto shape type:autoshape right triangle, left position:300, ᄀ
        top:300, width:200, height:100}
set shpCon to make new connector at the end of myPres with properties }
        {connector type:curve, left position:0, top:0, width:100, height:100}
begin connect shpCon connected shape shpTrap connection site 1
end connect shpCon connected shape shpTri connection site 1
reroute connections shpCon
```


## Command: end disconnect

Detaches the end of the specified connector from the shape it's attached to. This command doesn't alter the size or position of the connector: the end of the connector remains positioned at a connection site but is no longer connected. To detach the beginning of the connector from a shape, use the begin disconnect command.

## Syntax

end disconnect connector/connector format Required. An expression that returns a connector or connector format object.

## Example

This example adds two shapes to myPres, attaches them with a connector, automatically reroutes the connector along the shortest path, and then detaches the connector from the shapes.

```
set myPres to slide 1 of active presentation
set shpTrap to make new shape at the beginning of myPres with properties ᄀ
    {auto shape type:autoshape trapezoid,left position:100, top:50, ᄀ
    width:200, height:100}
set shpTri to make new shape at the end of myPres with properties ᄀ
        {auto shape type:autoshape right triangle, left position:300, ᄀ
        top:300, width:200, height:100}
set shpCon to make new connector at the end of myPres with properties ᄀ
    {connector type:curve, left position:0, top:0, width:100, height:100}
begin connect shpCon connected shape shpTrap connection site 1
end connect shpCon connected shape shpTri connection site 1
reroute connections shpCon
begin disconnect shpCon
end disconnect shpCon
```

Command: flip
Flips the specified shape around its horizontal or vertical axis.

## Syntax

flip shape Required. An expression that returns a shape object.
direction enumeration Required. Specifies whether the shape is to be flipped horizontally or vertically. Can be either of the following: flip horizontal or flip vertical.

## Drawing Suite

## Example

This example adds a triangle to myS7ide, duplicates the triangle, and then flips the duplicate triangle vertically and makes it red.

```
set mySlide to slide 1 of active presentation
set shpTri to make new shape at the beginning of mySlide with properties ᄀ
    {auto shape type:autoshape right triangle, left position:10, top:10, ᄀ
    width:50, height:50}
set fore color of fill of shpTri to ({255, 0, 0} as RGB color)
flip shpTri direction flip vertical
Command: get action setting for
```

Returns an action setting object that contains information about what action occurs when the user clicks or moves the mouse over the specified shape or text range during a slide show.

## Syntax

get action setting for shape An expression that returns a shape object.
event enumeration Required. The mouse action that triggers the action setting. Can be one of the following: mouse activation mouse click or mouse activation mouse over.

## Example

The following example sets the actions for clicking and moving the mouse over shape one on slide two in the active presentation.

```
set myShape to shape 1 of slide 2 of active presentation
set mClick to get action setting for myShape ᄀ
    event mouse activation mouse click
set action of mClick to action type last slide
set mOver to get action setting for myShape ᄀ
    event mouse activation mouse over
set name of action sound effect of mOver to "applause.wav"
Command: one color gradient
```

Sets the specified fill to a one-color gradient.

## Syntax

one color gradient shape/fill format Required. An expression that returns a shape or fill format object.
style enumeration Required. The gradient style. Can be one of the following: diagonal down gradient, diagonal up gradient, from center gradient, from corner gradient, gradient unset, from title gradient, horizontal gradient, or vertical gradient.
variant integer Required. The gradient variant. Can be a value from 1 to 4 , corresponding to the four variants on the Gradient tab in the Fill Effects dialog box. If style is gradient from title or gradient from center, this argument can be either 1 or 2.
degree small real Required. The gradient degree. Can be a value from 0.0 (dark) to 1.0 (light).

## Example

This example adds a rectangle with a one-color gradient fill to myS1ide.

```
set mySlide to slide 1 of active presentation
set shpRect to make new shape at the beginning of mySlide with properties ᄀ
    {auto shape type:autoshape rectangle, left position:90, top:90, ᄀ
    width:90, height:80}
set fore color of fill of shpRect to ({0, 128, 128} as RGB color)
one color gradient shpRect style horizontal gradient variant 1 degree 1
```

Command: patterned

Sets the specified fill to a pattern.

## Syntax

patterned shape/fill format Required. An expression that returns a shape or fill format object.
pattern enumeration Required. The pattern to be used for the specified fill. Can be one of the following:
pattern unset five percent pattern ten percent pattern twenty percent pattern twenty five percent pattern thirty percent pattern forty percent pattern fifty percent pattern sixty percent pattern seventy percent pattern seventy five percent pattern eighty percent pattern ninety percent pattern dark horizontal pattern dark vertical pattern dark downward diagonal pattern dark upward diagonal pattern small checker board pattern trellis pattern light horizontal pattern light vertical pattern light downward diagonal pattern light upward diagonal pattern small grid pattern dotted diamond pattern
wide downward diagonal wide upward diagonal pattern dashed upward diagonal pattern dashed downward diagonal pattern
narrow vertical pattern
narrow horizontal pattern dashed vertical pattern dashed horizontal pattern
large confetti pattern
large grid pattern
horizontal brick pattern
large checker board pattern
small confetti pattern
zig zag pattern
solid diamond pattern
diagonal brick pattern
outlined diamond pattern
plaid pattern
sphere pattern
weave pattern
dotted grid pattern
divot pattern
shingle pattern
wave pattern

## Drawing Suite

## Remarks

To set the colors used in the pattern, use the back color and fore color properties.

## Example

This example adds an oval with a patterned fill to myS7ide.

```
set myS7ide to slide 1 of active presentation
set shpOval to make new shape at the beginning of mySlide with properties ᄀ
    {auto shape type:autoshape oval, left position:60, top:60, ᄀ
    width:80, height:40}
set fore color of fill of shpOval to ({128, 0, 0} as RGB color)
set back color of fill of shpOval to ({0, 0, 255} as RGB color)
patterned fill of shpOval pattern dark vertical pattern
```


## Command: pick up

Copies the formatting of the specified shape. To apply the copied formatting to another shape, use the apply command.

## Syntax

pick up shape Required. An expression that returns a shape.

## Example

This example copies the formatting of shape one on myS7ide and then applies the copied formatting to shape two.
set mySTide to slide 1 of active presentation
pick up shape 1 of mySTide
apply shape 2 of mySlide
Command: preset drop
Specifies whether the callout line attaches to the top, bottom, or center of the callout text box or whether it attaches at a point that's a specified distance from the top or bottom of the text box.

## Syntax

preset drop callout format Required. An expression that returns a callout format object.
drop type enumeration Required. The starting position of the callout line relative to the text bounding box. Can be one of the following: drop bottom, drop center, drop unset, or drop top. Specifying drop custom for this argument will cause your code to fail.

## Example

This example specifies that the callout line attach to the top of the text bounding box for shape one on mySlide.

```
set mySlide to slide 1 of active presentation
preset drop callout format of callout 1 of mySlide drop type drop top
```


## Drawing Suite

This example toggles between two preset drops for shape one on myS7ide.

```
set mySlide to slide 1 of active presentation
if drop type of callout format of callout 1 of mySlide is drop top then
    preset drop callout format of callout 1 of mySlide drop type drop bottom
else
    preset drop callout format of callout 1 of mySlide drop type drop top
end if
```

Command: preset gradient
Sets the specified fill to a preset gradient.

## Syntax

preset gradient shape/fill format Required. An expression that returns a shape or fill format object.
style enumeration Required. The gradient style. Can be one of the following: diagonal down gradient, diagonal up gradient, from center gradient, from corner gradient, gradient unset, from title gradient, horizontal gradient, or vertical gradient.
variant integer Required. The gradient variant. Can be a value from 1 to 4 , corresponding to the four variants on the Gradient tab in the Fill Effects dialog box. If style is gradient from title or gradient from center, this argument can be either 1 or 2.
gradient type enumeration Required. The gradient type. Can be one of the following:
preset gradient unset
gradient early sunset
gradient late sunset
gradient nightfall gradient daybreak gradient horizon gradient desert gradient ocean gradient calm water gradient fire gradient fog gradient moss gradient peacock
gradient wheat gradient parchment gradient mahogany gradient rainbow gradient rainbow2
gradient gold
gradient gold2
gradient brass
gradient chrome
gradient chrome2
gradient silver
gradient sapphire

## Example

This example adds a rectangle with a preset gradient fill to myS1ide.

```
set mySlide to slide 1 of active presentation
set shpRect to make new shape at the beginning of mySlide with properties ᄀ
    {auto shape type:autoshape rectangle, left position:90, top:90, ᄀ
    width:140, height:80}
preset gradient fill of shpRect style horizontal gradient variant 1 ᄀ
    gradient type gradient brass
```


## Command: preset textured

Sets the specified fill to a preset texture.

## Syntax

preset textured shape/fill format Required. An expression that returns a shape or fill format object.
texture enumeration Required. The preset texture. Can be one of the following:
$\left.\begin{array}{ll}\text { preset texture unset } & \begin{array}{l}\text { texture newsprint } \\ \text { texture recycled paper }\end{array} \\ \text { texture papyrus } & \text { texture parchment }\end{array}\right\}$

## Example

This example adds a rectangle with a green-marble textured fill to myS7ide.

```
set mySlide to slide 1 of active presentation
set shpCan to make new shape at the beginning of myS7ide with properties }
    {auto shape type:autoshape can, left position:90, top:90, ᄀ
    width:40, height:80}
preset textured fill of shpCan texture texture green marble
Command: reroute connections
```

Reroutes connectors so that they take the shortest possible path between the shapes they connect. To do this, the reroute connections command may detach the ends of a connector and reattach them to different connecting sites on the connected shapes.

This command reroutes all connectors attached to the specified shape; if the specified shape is a connector, it's rerouted.

## Syntax

reroute connections shape Required. An expression that returns a shape object.

## Remarks

If this command is applied to a connector, only that connector will be rerouted. If this command is applied to a connected shape, all connectors to that shape will be rerouted.

## Drawing Suite

## Example

This example adds two shapes to myPres and connects them with a curved connector. Note that when you attach the connector to the shapes, the size and position of the connector are automatically adjusted; therefore, the position and dimensions you specify when adding the connector are irrelevant (dimensions must be nonzero).

```
set myPres to slide 1 of active presentation
set shpTrap to make new shape at the beginning of myPres with properties ᄀ
    {auto shape type:autoshape trapezoid,left position:100, top:50, ᄀ
    width:200, height:100}
set shpTri to make new shape at the end of myPres with properties ᄀ
        {auto Shape type:autoshape right triangle, left position:300, ᄀ
        top:300, width:200, height:100}
set shpCon to make new connector at the end of myPres with properties ᄀ
    {connector type:curve, left position:0, top:0, width:100, height:100}
begin connect shpCon connected shape shpTrap connection site 1
end connect shpCon connected shape shpTri connection site 1
reroute connections shpCon
```

Command: reset rotation
Resets the extrusion rotation around the $x$-axis and the $y$-axis to 0 (zero) so that the front of the extrusion faces forward. This command doesn't reset the rotation around the z -axis.

## Syntax

reset rotation shape/threeD format Required. An expression that returns a shape or threeD format object.

## Remarks

To set the extrusion rotation around the $x$-axis and the $y$-axis to anything other than 0 (zero), use the $x$ rotation and $y$ rotation properties of the threeD format object. To set the extrusion rotation around the z-axis, use the rotation property of the shape object that represents the extruded shape.

## Example

This example resets the rotation around the $x$-axis and the $y$-axis to 0 (zero) for the extrusion of shape one on myS7ide.

```
set mySlide to slide 1 of active presentation
reset rotation threeD format of shape 1 of mySlide
```

Command: scale height
Scales the height of the picture by a specified factor. You can indicate whether you want to scale the shape relative to the original size or relative to the current size.

## Syntax

scale height picture Required. An expression that returns a picture object.
factor small real Required. Specifies the ratio between the height of the shape after you resize it and the current or original height. For example, to make a rectangle 50 percent larger, specify 1.5 for this argument.
relative to original size Boolean Required. True to scale the shape relative to its original size. False to scale it relative to its current size.
scale enumeration Required. The part of the shape that retains its position when the shape is scaled. Can be one of the following: scale from bottom right, scale from middle, or scale from top left.

## Example

This example scales all pictures on myS7ide to 175 percent of their original height and width, and it scales all other shapes to 175 percent of their current height and width.

```
set mySTide to slide 1 of active presentation
repeat with s in (get shapes of mySlide)
    if shape type of s is shape type picture then
        scale height s factor 1.75 scale scale from top left \neg
            with relative to original size
        scale width s factor 1.75 scale scale from top left \checkmark
            with relative to original size
    else
        scale height s factor 1.75 scale scale from top left ᄀ
            without relative to original size
        scale width s factor 1.75 scale scale from top left ᄀ
            without relative to original size
    end if
end repeat
```

Command: scale width
Scales the width of the shape by a specified factor. You can indicate whether you want to scale the shape relative to the original size or relative to the current size.

## Syntax

scale width picture Required. An expression that returns a shape object.
factor small real Required. Specifies the ratio between the width of the shape after you resize it and the current or original width. For example, to make a rectangle 50 percent larger, specify 1.5 for this argument.
relative to original size Boolean Required. True to scale the shape relative to its original size. False to scale it relative to its current size.
scale enumeration Optional. The part of the shape that retains its position when the shape is scaled. Can be one of the following: scale from bottom right, scale from middle, or scale from top left.

## Example

This example scales all pictures on myS7ide to 175 percent of their original height and width, and it scales all other shapes to 175 percent of their current height and width.

```
set mySTide to slide 1 of active presentation
repeat with s in (get shapes of mySlide)
    if shape type of s is shape type picture then
        scale height s factor 1.75 scale scale from top left ᄀ
            with relative to original size
        scale width s factor 1.75 scale scale from top left \checkmark
            with relative to original size
    else
        scale height s factor 1.75 scale scale from top left ᄀ
            without relative to original size
        scale width s factor 1.75 scale scale from top left ᄀ
            without relative to original size
    end if
end repeat
```

Command: set shapes default properties
Applies the formatting for the specified shape to the default shape. Shapes created after this command has been used will have this formatting applied to them by default.

## Syntax

set shapes default properties shape Required. An expression that returns a shape object.

## Example

This example adds a rectangle to myS7ide, formats the rectangle's fill, applies the rectangle's formatting to the default shape, and then adds another smaller rectangle to the document. The second rectangle has the same fill as the first one.

```
set mySlide to slide 1 of active presentation
set shpRect to make new shape at the beginning of mySlide with properties ᄀ
    {auto shape type:autoshape rectangle, left position:5, top:5, ᄀ
    width:80, height:60}
set fore color of fill of shpRect to ({0, 0, 255} as RGB color)
set back color of fill of shpRect to ({0, 204, 255} as RGB color)
patterned shpRect pattern horizontal brick pattern
set shapes default properties shpRect
set newShp to make new shape at the end of mySlide with properties \neg
    {auto shape type:autoshape rectangle, left position:90, top:90, ᄀ
    width:40, height:30}
```

Command: solid
Sets the specified fill to a uniform color. Use this command to convert a gradient, textured, patterned, or background fill back to a solid fill.

## Syntax

solid shape/fill format Required. An expression that returns a shape or fill format object.

## Example

This example converts all fills on myS1ide to uniform red fills.

```
set mySlide to slide 1 of active presentation
repeat with s in (get shapes of mySlide)
    solid s
    set fore color of fill of s to ({255, 0, 0} as RGB color)
end repeat
```


## Command: toggle vertical text

Switches the text flow in the specified WordArt from horizontal to vertical, or vice versa.

## Syntax

toggle vertical text word art format Required. An expression that returns a word art format object.

## Remarks

Using the toggle vertical text command swaps the values of the width and height properties of the word art object and leaves the left position and top properties unchanged.
The flip command and rotation property of the shape object and the toggle vertical text command and rotated chars property of the word art format object all affect the character orientation and the direction of text flow in a word art object. You may have to experiment to find out how to combine the effects of these properties and methods to get the result you want.

## Example

This example adds WordArt that contains the text "Test" to myS7ide and switches from horizontal text flow (the default for the specified WordArt style, text effect1) to vertical text flow.

```
set mySlide to slide 1 of active presentation
set newWdArt to make new word art at the beginning of mySlide with properties ᄀ
    {preset word art effect:text effect1, word art text:"Test", ᄀ
    font name:"Arial Black", font size:36, font bold:true, ᄀ
    font italic:false, left position:100, top:100}
toggle vertical text word art format of newWdArt
Command: two color gradient
```

Sets the specified fill to a two-color gradient.

## Syntax

two color gradient shape/fill format Required. An expression that returns a shape or fill format object.
style enumeration Required. The gradient style. Can be one of the following: gradient unset, diagonal down gradient, diagonal up gradient, from center gradient, from corner gradient, from title gradient, horizontal gradient, or vertical gradient.
variant integer Required. The gradient variant. Can be a value from 1 to 4 , corresponding to the four variants on the Gradient tab in the Fill Effects dialog box. If style is from title gradient or from center gradient, this argument can be either 1 or 2.

## Drawing Suite

## Example

This example adds a rectangle with a two-color gradient fill to myDocument and sets the background and foreground color for the fill.

```
set mySlide to slide 1 of active presentation
set shpRect to make new shape at the beginning of mySlide with properties }
    {auto shape type:autoshape rectangle, left position:0, top:0, ᄀ
    width:40, height:80}
set fore color of fill of shpRect to ({128, 0, 0} as RGB color)
set back color of fill of shpRect to ({0, 170, 0} as RGB color)
two color gradient fill of shpRect style horizontal gradient variant 1
Command: user picture
```

Fills the specified shape with one large image. To fill the shape with small tiles of an image, use the user textured command.

## Syntax

user picture shape/fill format Required. An expression that returns a shape or fill format object. picture file Unicode text Required. The name of the picture file.

## Example

This example adds two rectangles to mySTide. The rectangle on the left is filled with one large image of the picture in Tiles.bmp; the rectangle on the right is filled with many small tiles of the picture in Tiles.bmp

```
set mySlide to slide 1 of active presentation
```

set shpOne to make new shape at the beginning of mySlide with properties $\neg$
\{auto shape type:autoshape rectangle, left position:0, top:0, ᄀ
width:200, height:100\}
user picture fill of shpOne picture file "Macintosh HD:Users:Shared:Tiles.bmp"
set shpTwo to make new shape at the end of mySlide with properties $\neg$
\{auto shape type:autoshape rectangle, left position:300, top:0, ᄀ
width:200, height:100\}
user textured fill of shpTwo texture file "Macintosh HD:Users:Shared:Tiles.bmp"
Command: user textured

Fills the specified shape with small tiles of an image. To fill the shape with one large image, use the user picture command.

## Syntax

user textured shape/fill format Required. An expression that returns a shape or fill format object. texture file Unicode text Required. The name of the texture file.

## Drawing Suite

## Example

This example adds two rectangles to mySTide. The rectangle on the left is filled with one large image of the picture in Tiles.bmp; the rectangle on the right is filled with many small tiles of the picture in Tiles.bmp
set mySTide to slide 1 of active presentation
set shpOne to make new shape at the beginning of myS7ide with properties $\neg$
\{auto shape type:autoshape rectangle, left position:0, top:0, ᄀ width: 200, height:100\}
user picture fill of shpOne picture file "Macintosh HD:Users:Shared:Tiles.bmp" set shpTwo to make new shape at the end of mySlide with properties $\neg$
\{auto shape type:autoshape rectangle, left position:300, top:0, ᄀ width:200, height:100\}
user textured fill of shpTwo texture file "Macintosh HD:Users:Shared:Tiles.bmp"

## Command: z order

Moves the specified shape in front of or behind other shapes in the collection (that is, changes the shape's position in the z-order).

## Syntax

z order shape Required. An expression that returns a shape object.
$\mathbf{z}$ order position enumeration Required. Specifies where to move the specified shape relative to the other shapes. Can be one of the following: bring shape forward, bring shape to front, send shape backward, or send shape to back. The constants bring shape in front of text and send shape behind text are for use in Microsoft Word only.

## Remarks

Use the $z$ order position property to determine a shape's current position in the z-order.

## Example

This example adds an oval to myS7ide and then places the oval second from the back in the z-order if there is at least one other shape on the document.

```
set mySlide to slide 1 of active presentation
set myOval to make new shape at the beginning of mySlide with properties ᄀ
    {auto shape type:autoshape oval, left position:100, top:100, ᄀ
    width:100, height:300}
repeat while z order position of myOval > 2
    z order myOval z order position send shape backward
end repeat
```


## Text Suite

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Text Suite Classes
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## Class: character

## Plural

characters
A collection of characters in a text range. Each character is an element of a text range object.
Use characters to return the characters in a text range. The following example displays how many characters are in the second shape of slide 2.

```
set theTR to text range of text frame of shape 2 of slide 2 of ᄀ
    active presentation
display dialog ((count of characters in theTR) as string) & ᄀ
    " characters"
```

To return a text range object that represents one character, use character index, where index is the index number. The index number represents the position of a character in the text range. This example sets the text for shape two on slide one in the active presentation and then makes the second character a subscript character with a 20-percent offset.

```
set theRange to text range of text frame of shape 2 of ᄀ
    slide 1 of active presentation
set content of theRange to "H2O"
set theChar to character 2 of theRange
set base line offset of font of theChar to -0.2
```


## Text Suite

This example formats every subscript character in shape two on slide one as bold.

```
set theRange to text range of text frame of shape 2 of ᄀ
    slide 1 of active presentation
repeat with i from 1 to (get count of characters of theRange)
    if subscript of font of character i of theRange is true then set bold of ᄀ
        font of character i of theRange to true
end repeat
```


## Properties

## <Inheritance> text range

Inherits the properties and elements of the text range class.

## Class: 1ine

## Plural

lines
A collection of lines in a text range. Each line is an element of a text range object.
Use lines to return the lines in a text range. To return a text range object that represents one line, use line index, where index is the index number. This example formats as italic the first two lines of shape two on slide one in the active presentation.

```
set theRange to text range of text frame of shape 2 of ᄀ
    slide 1 of active presentation
repeat with i from 1 to 2
    set italic of font of line i of theRange to true
end repeat
Properties
```

<Inheritance> text range

Inherits the properties and elements of the text range class.

## Class: paragraph

## Plural

paragraphs
Represents a single paragraph in a text range. The paragraphs list includes all the paragraphs in a text range.

To return a single paragraph object, use paragraph index, where index is the index number. The following example right aligns the first paragraph in the specified text range.

```
set theRange to text range of text frame of shape 2 of ᄀ
    slide 1 of active presentation
set alignment of paragraph format of paragraph 1 of theRange to ᄀ
    paragraph align right
```


## Properties

<Inheritance> text range
Inherits the properties and elements of the text range class.
Class: sentence

## Plural

sentences
A text range object that represents a sentence in a text range.
Use sentence index, where index is the index number, to return a text range object that represents a sentence. The index number represents the position of a sentence in the sentences list. This example formats as bold the second sentence in shape two on slide one in the active presentation.

```
set theRange to text range of text frame of shape 2 of ᄀ
    slide 1 of active presentation
set bold of font of sentence 2 of theRange to true
Properties
<Inheritance> text range
```

Inherits the properties and elements of the text range class.

## Class: text flow

## Plural

text flows
Represents a run of text in the specified text range. A text run consists of a range of characters that share the same font attributes. There is no text flow object; instead, each text flow is an element of a text range object.

To return a text range object that represents one text flow, use text flow index, where index is the index number. This example formats the second run in shape two on slide one in the active presentation as bold italic if it's already italic.

```
set theRange to text range of text frame of shape 2 of ᄀ
            slide 1 of active presentation
if italic of font of text flow 2 of theRange is true then
    set bold of font of text flow 2 of theRange to true
end if
```


## Properties

```
<Inheritance> text range
Inherits the properties and elements of the text range class.
```


## Class: text range

## Elements <br> character <br> word <br> sentence <br> line <br> paragraph <br> text flow

Contains the text that's attached to a shape, as well as properties and methods for manipulating the text.

To return a text range object for any shape you specify, use the text range property of the text frame object. To return the string of text in the text range object, use the content property. The following example adds a rectangle to myS7 ide and sets the text it contains.

```
set mySlide to slide 1 of active presentation
```

set shpRect to make new shape at the beginning of mySlide with properties $\neg$
\{auto shape type:autoshape rectangle, left position:0, top:0, ᄀ
height:250, width:140\}
set content of text range of text frame of shpRect to "Here is some test text"

To determine whether a shape has a text frame, use the has text frame property. To determine whether the text frame contains text, use the has text property.

## Properties

bounds height
Returns the height (in points) of the text bounding box for the specified text frame. Read-only. bounds width

Returns the width (in points) of the text bounding box for the specified text frame. Read-only. content

Returns or sets the text contained in the specified text range object. Read/write.
font object
Returns a font object that represents character formatting. Read-only.
indent level
Returns or sets the indent level for the specified text as an integer from 1 to 5 , where 1 indicates a first-level paragraph with no indentation. Read/write.

## left bounds

Returns the distance (in points) from the left edge of the text bounding box for the specified text frame to the left edge of the slide. Read-only.
offset
Returns the position of the first character in the specified text range relative to the first character in the shape that contains the text. Read-only.
paragraph format
Returns a paragraph format object that represents paragraph formatting for the specified text. Read-only.
text length
Returns the length (in characters) of the specified text range. Read-only.
top bounds
Returns the distance (in points) from the top of the text bounding box for the specified text frame to the top of the slide. Read-only.

Class: word

## Plural

words
Represents a word in a text range. Each item in the words list is a text range object that represents one word.
To return a text range object that represents one word, use word index, where index is the index number. The index number represents the position of the word in the words list. This example formats as bold the second, third, and fourth words in the first paragraph in shape two on slide one in the active presentation.

```
set theRange to text range of text frame of shape 2 of ᄀ
    slide 1 of active presentation
repeat with i from 2 to 4
    set italic of font of word i of theRange to true
end repeat
Properties
<Inheritance> text range
```

Inherits the properties and elements of the text range class.

## Text Suite Commands

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Command: add periods to

Adds a period at the end of each paragraph in the specified text.

## Syntax

add periods to text range Required. An expression that returns a text range object.

## Remarks

This command doesn't add another period at the end of a paragraph that already ends with a period.

## Example

This example adds a period at the end of each paragraph in shape two on slide one in the active presentation.
set theRange to text range of text frame of shape 2 of slide $1 \neg$ of active presentation
add periods to theRange

Command: change case
Changes the case of the specified text.

## Syntax

change case text range Required. An expression that returns a text range object.
to enumeration Required. Specifies the way the case will be changed. Can be one of the following: case lower, case sentence, case title, or case upper.

## Example

This example sets title case capitalization for the title on slide one in the active presentation.

```
set theRange to text range of text frame of shape 1 of slide 1 -
    of active presentation
change case theRange to case title
```

Command: copy text range
Copies the specified object to the Clipboard.

## Syntax

copy text range text range Required. An expression that returns a text range object.

## Remarks

To paste the contents of the Clipboard, use the paste text range command.

## Example

This example copies the text in shape one on slide one in the active presentation to the Clipboard.

```
copy text range text range of text frame of shape 1 of slide 1 ᄀ
    of active presentation
```

Command: cut text range
Deletes the specified object and places it on the Clipboard.

## Syntax

cut text range text range Required. An expression that returns a text range object.
Example
This example deletes the text in shape one on slide one in the active presentation and places a copy of it on the Clipboard.

```
cut text range text range of text frame of shape 1 of slide 1 ᄀ
    of active presentation
Command: get text action setting
```

Returns an action setting object that contains information about what action occurs when the user clicks or moves the mouse over the specified text range during a slide show.

## Syntax

get text action setting for text range An expression that returns a text range object.
result enumeration Required. The mouse action that triggers the action setting. Can be one of the following: mouse activation mouse click or mouse activation mouse over.

## Example

The following example sets the actions for clicking and moving the mouse over shape one on slide two in the active presentation.

```
set myRange to text range of text frame of shape 1 of slide 2 ᄀ
    of active presentation
set mClick to get text action setting myRange ᄀ
    result mouse activation mouse click
set action of mClick to action type last slide
```


## Command: paste text range

Pastes the text on the Clipboard into the specified text range.

## Syntax

paste text range text range Required. An expression that returns a text range object.

## Example

This example cuts the text in shape one on slide one in the active presentation, places it on the Clipboard, and then pastes it in shape two on the same slide.

```
set theSlide to slide 1 of active presentation
cut text range (text range of text frame of shape 1 of theSlide)
paste text range (text range of text frame of shape 2 of theSlide)
Command: remove periods from
```

Removes the period at the end of each paragraph in the specified text.

## Syntax

remove periods from text range Required. An expression that returns a text range object.

## Example

This example removes the period at the end of each paragraph in shape two on slide one in the active presentation.

```
remove periods from text range of text frame of shape 2 of slide 1 of ᄀ
```

    active presentation
    Command: rotate text bounds of
This command is not currently supported.

## Table Suite

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## Table Suite Classes

cell ..... 197
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## Class: ce11

## Plural

cells
Represents a table cell.
Use the get cell from command to return a single cell object. The following example creates a new slide and inserts a table, and then merges the first two cells in row one of the table.

```
set mySlide to make new slide at the beginning of active presentation ᄀ
    with properties {layout:slide layout blank}
set myShapeTable to make new shape table at the beginning of mySlide ᄀ
    with properties {number of rows:2, number of columns:3, ᄀ
    height:200, width:400}
set myTable to table object of myShapeTable
set c1 to get cel1 from myTable row 1 column 1
set c2 to get cel1 from myTable row 1 column 2
merge c1 merge with c2
```

Use the shape property to access the shape object and to manipulate the contents of each cell. This example deletes the text in the first cell (row 1, column 1), inserts new text, and then sets the width of the entire column to 110 points.

```
set myTable to table object of shape table 1 of slide 2 of active presentation
```

set c 1 to get cell from myTable row 1 column 1
set content of text range of text frame of shape of c1 to "Rooster"
set width of column 1 of myTable to 110

## Table Suite

## Remarks

You cannot programmatically add cells to or delete cells from a PowerPoint table. Use the make command to add a column or row to a table. Use the delete command to delete a column or row from a table.

## Properties

selected
Specifies whether the specified table cell is selected. Read-only.
shape
Returns a shape object that represents a shape in a table cell. Read-only.
Class: column
Plural
columns
Elements
cell
Represents a table column. The columns list includes all the columns in a table.
Use column index to return a single column object. Index represents the position of the column in the column list (usually counting from left to right; although the table direction property can reverse this). This example selects the first column of the table in shape one on the second slide.

```
select column 1 of table object of shape table 1 of slide 2 ᄀ
    of active presentation
```

Use the cell object to indirectly reference the column object. This example deletes the text in the first cell (row 1, column 1), inserts new text, and then sets the width of the entire column to 110 points.

```
set myTable to table object of shape table 1 of slide 2 of active presentation
set c1 to get cell from myTable row 1 column 1
set content of text range of text frame of shape of c1 to "Rooster"
set width of column 1 of myTable to 110
```

Use the make command to add a column to a table. This example creates a column in an existing table and sets the column width to 72 points (one inch).

```
set myTable to table object of shape table 1 of slide 2 of active presentation
make new column at the end of myTable with properties {width:72}
```


## Properties

```
width
```

Returns or sets the width (in points) of the specified column. Read/write.

## Class: row

## Plural

rows

## Elements

cell
Represents a row in a table. The rows list includes all the rows in the specified table.
Use row index, where index is a number that represents the position of the row in the table, to return a single row object. This example deletes the first row from the table in shape one on slide two of the active presentation.

```
set myTable to table object of shape table 1 of slide 2 of active presentation
```

delete row 1 of myTable

## Properties

height
Returns or sets the height (in points) of the specified row. Read/write.

## Class: table

## Plural

tables

## Elements

column

## row

Represents a table shape on a slide.
Use the table object property of the shape table object to return the table object from the shape containing the table.
To access the contents of each table cell, use the get cell from command. This example inserts the text "Cell 1" in the first cell of the table in shape five on slide three.

```
set myTable to table object of shape table 5 of slide 3 of active presentation
```

set c1 to get cell from myTable row 1 column 1
set content of text range of text frame of shape of c1 to "Ce11 1"
Use the make command to add a table to a slide. This example adds a $3 \times 3$ table on slide two in the active presentation.

```
set theSlide to slide 2 of active presentation
set myTable to make new shape table at the beginning of theSlide ᄀ
    with properties {number of rows:3, number of columns:3}
```


## Table Suite

## Properties

table direction
Returns or sets the direction in which the table cells are ordered. Read/write.
Can be one of the following:

- direction unset
- left to right


## Table Suite Commands

get border ..... 201
get cell from ..... 201
merge ..... 202
split. ..... 203
Command: get border

Returns a line format object that represents the borders and diagonal lines for the specified cell object.

## Syntax

get border cell Required. An expression that returns a cell object.
edge enumeration Required. The border that you want to return. Can be one of the following: top border, left border, bottom border, right border, diagonal down border, or diagonal up border.

## Example

This example sets the thickness of the left border for the first cell in the second row of the specified table to three points.

```
set myTable to table object of shape table 1 of slide 1 of active presentation
set c1 to get cel1 from myTable row 2 column 1
set c1Border to get border c1 edge left border
set line weight of c1Border to 3
Command: get ce11 from
```

Returns a cell object that represents a cell in a table.

## Syntax

get cell from table Required. An expression that returns a table object.
row integer Required. The number of the row in the table to return. Can be an integer between 1 and the number of rows in the table.
column integer Required. The number of the cell in the table to return. Can be an integer between 1 and the number of columns in the table.

## Table Suite

## Example

This example creates a $3 \times 3$ table on a new slide in a new presentation and inserts text into the first cell of the table.
make new presentation
set myS7ide to make new slide at the beginning of active presentation $\neg$ with properties \{layout:slide layout blank\}
set myShapeTable to make new shape table at the beginning of mySlide $\neg$ with properties \{number of rows:3, number of columns:3\}
set myTable to table object of myShapeTable
set c1 to get cell from myTable row 1 column 1
set content of text range of text frame of shape of c1 to "Cell 1"
This example sets the thickness of the bottom border of the cell in row 2 , column 1 to two points.
set myTable to table object of shape table 5 of slide 2 of active presentation
set c1 to get ce11 from myTable row 2 column 1
set theBorder to get border c1 edge bottom border
set line weight of theBorder to 2
Command: merge
Merges one table cell with another. The result is a single table cell.

## Syntax

merge cell Required. An expression that returns a cell object.
merge with cell Required. Cell object to be merged with.

## Example

This example merges the first two cells of row one in the specified table.
set myTable to table object of shape table 5 of slide 2 of active presentation set c1 to get cell from myTable row 1 column 1
set c2 to get cell from myTable row 1 column 2
merge c1 merge with c2

Command: split
Splits a single table cell into multiple cells.

## Syntax

split cell Required. An expression that returns a cell object.
number of rows integer Required. Number of rows that the cell is being split into. number of columns integer Required. Number of columns that the cell is being split into.

## Example

This example splits the first cell in the referenced table into two cells, one directly above the other.

```
set myTable to table object of shape table 5 of slide 2 of active presentation
```

set c1 to get ce11 from myTable row 1 column 1
split c1 number of rows 2 number of columns 1

