

# Shockwave Flash

# Introduction

PHP offers the ability to create Shockwave Flash files via Paul Haeberli's libswf module.

<b>Note</b>
<p>SWF support was added in PHP 4 RC2.</p> <p>The libswf does not have support for Windows. The development of that library has been stopped, and the source is not available to port it to another systems.</p> <p>For up to date SWF support take a look at the <a href="#">MING</a> functions.</p>

<b>Note</b>
<p>This extension has been moved to the <a href="#">» PECL</a> repository and is no longer bundled with PHP as of PHP 5.0.0.</p>

# Installing/Configuring

## Requirements

You need the libswf library to compile PHP with support for this extension. You can download libswf at [» ftp://ftp.sgi.com/cgi/graphics/grafica/flash/](ftp://ftp.sgi.com/cgi/graphics/grafica/flash/).

## Installation

Once you have libswf all you need to do is to configure `--with-swf[=DIR]` where DIR is a location containing the directories include and lib. The include directory has to contain the `swf.h` file and the lib directory has to contain the `libswf.a` file. If you unpack the libswf distribution the two files will be in one directory. Consequently you will have to copy the files to the proper location manually.

## Runtime Configuration

This extension has no configuration directives defined in `php.ini`.

## Resource Types

This extension has no resource types defined.

# Predefined Constants

The constants below are defined by this extension, and will only be available when the extension has either been compiled into PHP or dynamically loaded at runtime.

**MOD\_COLOR** ( [integer](#) )

**MOD\_MATRIX** ( [integer](#) )

**TYPE\_PUSHBUTTON** ( [integer](#) )

**TYPE\_MENUBUTTON** ( [integer](#) )

**BSHitTest** ( [float](#) )

**BSDown** ( [float](#) )

**BSOver** ( [float](#) )

**BSUp** ( [float](#) )

**OverDowntoIdle** ( [integer](#) )

**IdletoOverDown** ( [integer](#) )

**OutDowntoIdle** ( [integer](#) )

**OutDowntoOverDown** ( [integer](#) )

**OverDowntoOutDown** ( [integer](#) )

**OverUptoOverDown** ( [integer](#) )

**OverUptoidle** ( [integer](#) )

**IdletoOverUp** ( [integer](#) )

**ButtonEnter** ( [integer](#) )

**ButtonExit** ( [integer](#) )

**MenuEnter** ( [integer](#) )

**MenuExit** ( [integer](#) )

# Examples

## Basic Usage

Once you've successfully installed PHP with Shockwave Flash support you can then go about creating Shockwave files from PHP. You would be surprised at what you can do, take the following code:

### Example #1 - SWF example

```
<?php
swf_openfile("test.swf", 256, 256, 30, 1, 1, 1);
swf_ortho2(-100, 100, -100, 100);
swf_defineline(1, -70, 0, 70, 0, .2);
swf_definerect(4, 60, -10, 70, 0, 0);
swf_definerect(5, -60, 0, -70, 10, 0);
swf_addcolor(0, 0, 0, 0);

swf_definefont(10, "Mod");
swf_fontsize(5);
swf_fontslant(10);
swf_definetext(11, "This be Flash wit PHP!", 1);

swf_pushmatrix();
swf_translate(-50, 80, 0);
swf_placeobject(11, 60);
swf_popmatrix();

for ($i = 0; $i < 30; $i++) {
    $p = $i/(30-1);
    swf_pushmatrix();
    swf_scale(1-($p*.9), 1, 1);
    swf_rotate(60*$p, 'z');
    swf_translate(20+20*$p, $p/1.5, 0);
    swf_rotate(270*$p, 'z');
    swf_addcolor($p, 0, $p/1.2, -$p);
    swf_placeobject(1, 50);
    swf_placeobject(4, 50);
    swf_placeobject(5, 50);
    swf_popmatrix();
    swf_showframe();
}

for ($i = 0; $i < 30; $i++) {
    swf_removeobject(50);
    if (($i%4) == 0) {
        swf_showframe();
    }
}

swf_startdoaction();
swf_actionstop();
swf_enddoaction();

swf_closefile();
```

?>

# SWF Functions



# swf\_actiongeturl

swf\_actiongeturl -- Get a URL from a Shockwave Flash movie

## Description

**void** swf\_actiongeturl ( string *\$url*, string *\$target* )

Gets the URL specified by the parameter *url* with the given *target*.

## Parameters

*url*

The URL, as a string.

*target*

The target, as a string.

## Return Values

No value is returned.

# swf\_actiongotoframe

swf\_actiongotoframe -- Play a frame and then stop

## Description

**void swf\_actiongotoframe** ( int *\$framenumbers* )

The [swf\\_actiongotoframe\(\)](#) function will go to the frame specified by *framenumbers*, play it, and then stop.

## Parameters

*framenumbers*

The frame number.

## Return Values

No value is returned.

# swf\_actiongotolabel

swf\_actiongotolabel -- Display a frame with the specified label

## Description

**void** **swf\_actiongotolabel** ( string *\$label* )

The [swf\\_actiongotolabel\(\)](#) function displays the frame with the label given by the *label* parameter and then stops.

## Parameters

*label*  
The frame label.

## Return Values

No value is returned.

# swf\_actionnextframe

swf\_actionnextframe -- Go forward one frame

## Description

`void swf_actionnextframe ( void )`

Go forward one frame.

## Return Values

No value is returned.

## See Also

- [swf\\_actionprevframe\(\)](#)

# swf\_actionplay

swf\_actionplay -- Start playing the flash movie from the current frame

## Description

`void swf_actionplay ( void )`

Start playing the flash movie from the current frame.

## Return Values

No value is returned.

## See Also

- [swf\\_actionstop\(\)](#)

# swf\_actionprevframe

swf\_actionprevframe -- Go backwards one frame

## Description

`void swf_actionprevframe ( void )`

Go backwards one frame.

## Return Values

No value is returned.

## See Also

- [swf\\_actionnextframe\(\)](#)

# swf\_actionsettarget

swf\_actionsettarget -- Set the context for actions

## Description

**void** swf\_actionsettarget ( string \$target )

Sets the context for all actions. You can use this to control other flash movies that are currently playing.

## Parameters

*target*

The target, as a string.

## Return Values

No value is returned.

# swf\_actionstop

swf\_actionstop -- Stop playing the flash movie at the current frame

## Description

**void swf\_actionstop** ( void )

Stop playing the flash movie at the current frame.

## Return Values

No value is returned.

## See Also

- [swf\\_actionplay\(\)](#)



# swf\_actiontogglequality

swf\_actiontogglequality -- Toggle between low and high quality

## Description

**void swf\_actiontogglequality** ( void )

Toggle the flash movie between high and low quality.

## Return Values

No value is returned.

# swf\_actionwaitforframe

swf\_actionwaitforframe -- Skip actions if a frame has not been loaded

## Description

**void swf\_actionwaitforframe** ( int \$framenumbers, int \$skipcount )

The [swf\\_actionwaitforframe\(\)](#) function will check to see if the frame, specified by the *framenumbers* parameter has been loaded, if not it will skip the number of actions specified by the *skipcount* parameter. This can be useful for "Loading..." type animations.

## Parameters

*framenumbers*

The frame number.

*skipcount*

The number of actions to skip.

## Return Values

No value is returned.

# swf\_addbuttonrecord

swf\_addbuttonrecord -- Controls location, appearance and active area of the current button

## Description

**void swf\_addbuttonrecord** ( int \$states, int \$shapeid, int \$depth )

Allow you to define the specifics of using a button.

## Parameters

*states*

Defines what states the button can have, these can be any or all of the following constants: **BSHitTest**, **BSDown**, **BSOver** or **BSUp**.

*shapeid*

The second parameter, the *shapeid* is the look of the button, this is usually the object id of the shape of the button.

*depth*

This parameter is the placement of the button in the current frame.

## Return Values

No value is returned.

## Examples

### Example #2 - [swf\\_addbuttonrecord\(\)](#) example

```
<?php
swf_startButton($objid, TYPE_MENUBUTTON);
swf_addButtonRecord(BSDown|BSOver, $buttonImageId, 340);
swf_onCondition(MenuEnter);
swf_actionGetUrl("http://www.example.com", "_level1");
swf_onCondition(MenuExit);
swf_actionGetUrl("", "_level1");
swf_endButton();
?>
```

# swf\_addcolor

swf\_addcolor -- Set the global add color to the rgba value specified

## Description

**void swf\_addcolor** ( float \$r, float \$g, float \$b, float \$a )

Sets the global add color to the specified color. This color is then implicitly used by the [swf\\_placeobject\(\)](#), [swf\\_modifyobject\(\)](#) and [swf\\_addbuttonrecord\(\)](#) functions.

The color of the object will be add by the given values when the object is written to the screen.

## Parameters

*r*  
Red value

*g*  
Green value

*b*  
Blue value

*a*  
Alpha value

These parameters can be either positive or negative.

## Return Values

No value is returned.

# swf\_closefile

swf\_closefile -- Close the current Shockwave Flash file

## Description

**void swf\_closefile** ( [ int \$return\_file ] )

Close a file that was opened by the [swf\\_openfile\(\)](#) function.

## Parameters

*return\_file*

If set then the contents of the SWF file are returned from the function.

## Return Values

No value is returned.

## Examples

### Example #3 - Creating a simple flash file based on user input and outputting it and saving it in a database

```
<?php

// The $text variable is submitted by the
// user

// Global variables for database
// access (used in the swf_savedata() function)
$DBHOST = "localhost";
$DBUSER = "sterling";
$DBPASS = "secret";

swf_openfile("php://stdout", 256, 256, 30, 1, 1, 1);

    swf_definefont(10, "Ligon-Bold");
        swf_fontsize(12);
        swf_fontslant(10);

    swf_definetext(11, $text, 1);

    swf_pushmatrix();
        swf_translate(-50, 80, 0);
        swf_placeobject(11, 60);
    swf_popmatrix();
```

```

    swf_showframe();

    swf_startdoaction();
        swf_actionstop();
    swf_enddoaction();

$data = swf_closefile(1);

$data ?
    swf_savedata($data) :
    die("Error could not save SWF file");

// void swf_savedata(string data)
// Save the generated file a database
// for later retrieval
function swf_savedata($data)
{
    global $DBHOST,
           $DBUSER,
           $DBPASS;

    $dbh = @mysql_connect($DBHOST, $DBUSER, $DBPASS);

    if (!$dbh) {
        die (sprintf("Error [%d]: %s",
                     mysql_errno(), mysql_error()));
    }

    $stmt = "INSERT INTO swf_files (file) VALUES ('$data')";

    $sth = @mysql_query($stmt, $dbh);

    if (!$sth) {
        die (sprintf("Error [%d]: %s",
                     mysql_errno(), mysql_error()));
    }

    @mysql_free_result($sth);
    @mysql_close($dbh);
}
?>

```

## See Also

- [swf\\_openfile\(\)](#)

# swf\_definebitmap

swf\_definebitmap -- Define a bitmap

## Description

**void swf\_definebitmap** ( int \$objid, string \$image\_name )

The [swf\\_definebitmap\(\)](#) function defines a bitmap given an image.

## Parameters

*objid*

An SWF object id.

*image\_name*

A GIF, JPEG, RGB or FI image. The image will be converted into a Flash JPEG or Flash color map format.

## Return Values

No value is returned.

# swf\_definefont

swf\_definefont -- Defines a font

## Description

**void swf\_definefont** ( int \$fontid, string \$fontname )

The [swf\\_definefont\(\)](#) function defines a font parameter and gives it the specified id. It then sets the font given by *fontname* to the current font.

## Parameters

*fontid*

The id to be given to the font.

*fontname*

The font so be set as current font.

## Return Values

No value is returned.

## See Also

- [swf\\_definetext\(\)](#)



# swf\_defineline

swf\_defineline -- Define a line

## Description

**void swf\_defineline** ( int \$objid, float \$x1, float \$y1, float \$x2, float \$y2, float \$width )

Defines a line.

## Parameters

*objid*

The object id.

*x1*

x-coordinate of start point.

*y1*

y-coordinate of start point.

*x2*

x-coordinate of end point.

*y2*

y-coordinate of end point.

*width*

The line width.

## Return Values

No value is returned.

# swf\_definepoly

swf\_definepoly -- Define a polygon

## Description

**void swf\_definepoly** ( int \$objid, array \$coords, int \$npoints, float \$width )

Defines a polygon given an array of x, y coordinates.

## Parameters

*objid*

The object id.

*coords*

An array of x, y coordinates.

*npoints*

The number of overall points that are contained in the array given by *coords*

*width*

The width of the polygon's border, if set to 0.0 the polygon is filled.

## Return Values

No value is returned.

# swf\_definerect

swf\_definerect -- Define a rectangle

## Description

**void swf\_definerect** ( int \$objid, float \$x1, float \$y1, float \$x2, float \$y2, float \$width )

Defines a rectangle with an upper left hand coordinate and a lower right hand coordinate.

## Parameters

*objid*

The object id.

*x1*

x-coordinate of upper left point.

*y1*

y-coordinate of upper left point.

*x2*

x-coordinate of lower right point.

*y2*

y-coordinate of lower right point.

*width*

Width of the rectangles border, if the width is 0.0 then the rectangle is filled.

## Return Values

No value is returned.

# swf\_definetext

swf\_definetext -- Define a text string

## Description

**void swf\_definetext** ( int \$objid, string \$str, int \$docenter )

Defines a text string using the current font and font size.

## Parameters

*objid*

The object id.

*str*

The text, as a string.

*docenter*

The *docenter* is where the word is centered, if *docenter* is 1, then the word is centered in x.

## Return Values

No value is returned.

## Examples

### Example #4 - Horizontal text example

```
<?php

$Xposition = 50;
$Yposition = 50;
$Zposition = 0;
$Obj_depth = 1;

$char = 'THIS IS THE TEXT';

swf_pushmatrix();

swf_definefont (swf_nextid(), "Mod");
swf_fontsize(10);

$secondid = swf_nextid();
swf_definetext($secondid, $char, 1);
swf_translate($Xposition, $Yposition, $Zposition);
```

```
swf_placeobject($secondid, $Obj_depth);  
swf_popmatrix();  
  
?>
```

## See Also

- [swf\\_definefont\(\)](#)

# swf\_endbutton

swf\_endbutton -- End the definition of the current button

## Description

**void swf\_endbutton** ( void )

The [swf\\_endbutton\(\)](#) function ends the definition of the current button.

## Return Values

No value is returned.

## See Also

- [swf\\_startbutton\(\)](#)

# swf\_enddoaction

swf\_enddoaction -- End the current action

## Description

**void swf\_enddoaction** ( void )

Ends the current action started by the [swf\\_startdoaction\(\)](#) function.

## Return Values

No value is returned.

## See Also

- [swf\\_startdoaction\(\)](#)

# swf\_endshape

swf\_endshape -- Completes the definition of the current shape

## Description

**void swf\_endshape** ( void )

The [swf\\_endshape\(\)](#) completes the definition of the current shape.

## Return Values

No value is returned.

## See Also

- [swf\\_startshape\(\)](#)



# swf\_endsymbol

swf\_endsymbol -- End the definition of a symbol

## Description

**void swf\_endsymbol** ( void )

Ends the definition of a symbol that was started by the [swf\\_startsymbol\(\)](#) function.

## Return Values

No value is returned.

## See Also

- [swf\\_startsymbol\(\)](#)

# swf\_fontsize

swf\_fontsize -- Change the font size

## Description

**void swf\_fontsize** ( float *\$size* )

Changes the font size to the value given by the *size* parameter.

## Parameters

*size*

The font size, as an integer.

## Return Values

No value is returned.

# swf\_fontslant

swf\_fontslant -- Set the font slant

## Description

**void swf\_fontslant** ( float *\$slant* )

Set the current font slant to the angle indicated by the *slant* parameter.

## Parameters

*slant*

Positive values create a forward slant, negative values create a negative slant.

## Return Values

No value is returned.

# swf\_fonttracking

swf\_fonttracking -- Set the current font tracking

## Description

**void swf\_fonttracking** ( float *\$tracking* )

Set the font tracking to the value specified by the *tracking* parameter. This function is used to increase the spacing between letters and text, positive values increase the space and negative values decrease the space between letters.

## Parameters

*tracking*

The font tracking.

## Return Values

No value is returned.

# swf\_getbitmapinfo

swf\_getbitmapinfo -- Get information about a bitmap

## Description

array **swf\_getbitmapinfo** ( int \$bitmapid )

Returns information about a bitmap.

## Parameters

*bitmapid*

The bitmap id.

## Return Values

Returns an array with the following elements:

- "size" - The size in bytes of the bitmap.
- "width" - The width in pixels of the bitmap.
- "height" - The height in pixels of the bitmap.

# swf\_getfontinfo

swf\_getfontinfo -- Gets font information

## Description

array **swf\_getfontinfo** ( void )

Gets information about the font by giving the height in pixels of a capital A and a lowercase x.

## Return Values

Returns an associative array with the following parameters:

- Aheight - The height in pixels of a capital A.
- xheight - The height in pixels of a lowercase x.

# swf\_getframe

swf\_getframe -- Get the frame number of the current frame

## Description

int **swf\_getframe** ( void )

The [swf\\_getframe\(\)](#) function gets the number of the current frame.

## Return Values

Returns the current frame number, as an integer.

## See Also

- [swf\\_setframe\(\)](#)

# swf\_labelframe

swf\_labelframe -- Label the current frame

## Description

**void swf\_labelframe** ( string *\$name* )

Labels the current frame with the given *name*.

## Parameters

*name*

The frame label.

## Return Values

No value is returned.



# swf\_lookat

swf\_lookat -- Define a viewing transformation

## Description

**void swf\_lookat** ( float \$view\_x, float \$view\_y, float \$view\_z, float \$reference\_x, float \$reference\_y, float \$reference\_z, float \$twist )

Defines a viewing transformation by giving the viewing position and the coordinates of a reference point in the scene.

## Parameters

*view\_x*  
x-coordinate for the viewing position

*view\_y*  
y-coordinate for the viewing position

*view\_z*  
z-coordinate for the viewing position

*reference\_x*  
x-coordinate for the reference point

*reference\_y*  
y-coordinate for the reference point

*reference\_z*  
z-coordinate for the reference point

*twist*  
Controls the rotation along with viewer's z axis.

## Return Values

No value is returned.

## Examples

Example #5 - A simple 3D-rotation around a text
---

<?php
-------

```
header('Content-type: application/x-shockwave-flash');

swf_openfile("php://stdout", 320, 200, 25, 1, 1, 1);

swf_ortho(-100, 100, -100, 100, -100, 100); // create 3D coordinates

swf_definefont(0, "Pix3");
swf_addcolor(0, 0, 0, 1);
swf_fontsize(10);
swf_fonttracking(0.2);

for ($i = 0; $i < 628; $i += 8) {
    $j = $i / 100;
    swf_pushmatrix();
    swf_translate(0, 0, 0);
    swf_perspective(100, 1, 0, 10);
    swf_lookat(sin($j) * 60, 50, cos($j) * 60, 0, 0, 0);

    swf_definetext (1, 'HotKey@', 0);
    swf_translate(-50,0,0);

    swf_placeobject(1,10);

    swf_definetext(2, 'example.com', 0);
    swf_translate(55, 0, 0);
    swf_placeobject(2, 11);

    swf_showframe();
    swf_removeobject(10);
    swf_removeobject(11);
    swf_popmatrix();
}

swf_closefile();
?>
```

# swf\_modifyobject

swf\_modifyobject -- Modify an object

## Description

**void swf\_modifyobject** ( int \$depth, int \$how )

Updates the position and/or color of the object at the specified *depth*.

## Parameters

*depth*

The depth, as an integer.

*how*

Determines what is updated. *how* can either be the constant **MOD\_MATRIX** or **MOD\_COLOR** or it can be a combination of both. **MOD\_COLOR** uses the current mulcolor (specified by the function [swf\\_mulcolor\(\)](#) ) and addcolor (specified by the function [swf\\_addcolor\(\)](#) ) to color the object. **MOD\_MATRIX** uses the current matrix to position the object.

## Return Values

No value is returned.

# swf\_mulcolor

swf\_mulcolor -- Sets the global multiply color to the rgba value specified

## Description

**void swf\_mulcolor** ( float \$r, float \$g, float \$b, float \$a )

Sets the global multiply color to the given one. This color is then implicitly used by the [swf\\_placeobject\(\)](#), [swf\\_modifyobject\(\)](#) and [swf\\_addbuttonrecord\(\)](#) functions.

The color of the object will be multiplied by the given color values when the object is written to the screen.

## Parameters

*r*  
Red value

*g*  
Green value

*b*  
Blue value

*a*  
Alpha value

These parameters can be either positive or negative.

## Return Values

No value is returned.

# swf\_nextid

swf\_nextid -- Returns the next free object id

## Description

int **swf\_nextid** ( void )

The [swf\\_nextid\(\)](#) function returns the next available object id.

## Return Values

Returns the id, as an integer.

# swf\_oncondition

swf\_oncondition -- Describe a transition used to trigger an action list

## Description

`void swf_oncondition ( int $transition )`

The [`swf\_oncondition\(\)`](#) function describes a transition that will trigger an action list.

## Parameters

*transition*

There are several types of possible transitions, the following are for buttons defined as TYPE\_MENUBUTTON:

- IdletoOverUp
- OverUptoldle
- OverUptoOverDown
- OverDowntoOverUp
- IdletoOverDown
- OutDowntoldle
- MenuEnter (IdletoOverUp|IdletoOverDown)
- MenuExit (OverUptoldle|OverDowntoldle)

For TYPE\_PUSHBUTTON there are the following options:

- IdletoOverUp
- OverUptoldle
- OverUptoOverDown
- OverDowntoOverUp
- OverDowntoOutDown
- OutDowntoOverDown
- OutDowntoldle
- ButtonEnter (IdletoOverUp|OutDowntoOverDown)
- ButtonExit (OverUptoldle|OverDowntoOutDown)

## Return Values

No value is returned.

# swf\_openfile

swf\_openfile -- Open a new Shockwave Flash file

## Description

**void swf\_openfile** ( string \$filename, float \$width, float \$height, float \$framerate, float \$r, float \$g, float \$b )

Opens a new file. This must be the first function you call, otherwise your script will not work.

## Parameters

*filename*

The path to the SWF file. If you want to send your output to the screen, set this to *php://stdout*.

*width*

The movie width

*height*

The movie height

*framerate*

The frame rate.

*r*

Red value for the background.

*g*

Green value for the background.

*b*

Blue value for the background.

## Return Values

No value is returned.

## ChangeLog

Version	Description
4.0.1	Support for <i>php://stdout</i> was added.



## See Also

- [swf\\_closefile\(\)](#)

# swf\_ortho2

swf\_ortho2 -- Defines 2D orthographic mapping of user coordinates onto the current viewport

## Description

**void swf\_ortho2** ( float \$xmin, float \$xmax, float \$ymin, float \$ymax )

Defines a two dimensional orthographic mapping of user coordinates onto the current viewport, this defaults to one to one mapping of the area of the Flash movie.

If a perspective transformation is desired, [swf\\_perspective\(\)](#) can be used.

## Parameters

*xmin*

*xmax*

*ymin*

*ymax*

## Return Values

No value is returned.

## See Also

- [swf\\_ortho\(\)](#)

# swf\_ortho

swf\_ortho -- Defines an orthographic mapping of user coordinates onto the current viewport

## Description

**void swf\_ortho** ( float \$xmin, float \$xmax, float \$ymin, float \$ymax, float \$zmin, float \$zmax )

Defines an 3D orthographic mapping of user coordinates onto the current viewport.

## Parameters

*xmin*

*xmax*

*ymin*

*ymax*

*zmin*

*zmax*

## Return Values

No value is returned.

## See Also

- [swf\\_ortho2\(\)](#)

# swf\_perspective

swf\_perspective -- Define a perspective projection transformation

## Description

**void swf\_perspective** ( float \$fovy, float \$aspect, float \$near, float \$far )

Defines a perspective projection transformation.

Note
Various distortion artifacts may appear when performing a perspective projection, this is because Flash players only have a two dimensional matrix. Some are not to pretty.

## Parameters

*fovy*

A field-of-view angle in the y direction.

*aspect*

The aspect ratio of the viewport that is being drawn onto.

*near*

The near clipping plane.

*far*

The far clipping plane.

## Return Values

No value is returned.

# swf\_placeobject

swf\_placeobject -- Place an object onto the screen

## Description

**void swf\_placeobject** ( int \$objid, int \$depth )

Places the object in the current frame at a specified *depth*.

This uses the current mulcolor (specified by [swf\\_mulcolor\(\)](#) ) and the current addcolor (specified by [swf\\_addcolor\(\)](#) ) to color the object and it uses the current matrix to position the object.

## Parameters

*objid*

The object id.

*depth*

Must be between 1 and 65535.

## Return Values

No value is returned.

# swf\_polarview

swf\_polarview -- Define the viewer's position with polar coordinates

## Description

**void swf\_polarview** ( float \$dist, float \$azimuth, float \$incidence, float \$twist )

The [swf\\_polarview\(\)](#) function defines the viewer's position in polar coordinates.

## Parameters

*dist*

The distance between the viewpoint to the world space origin.

*azimuth*

Defines the azimuthal angle in the x,y coordinate plane, measured in distance from the y axis.

*incidence*

Defines the angle of incidence in the y,z plane, measured in distance from the z axis.  
The incidence angle is defined as the angle of the viewport relative to the z axis.

*twist*

Specifies the amount that the viewpoint is to be rotated about the line of sight using the right hand rule.

## Return Values

No value is returned.

# swf\_popmatrix

swf\_popmatrix -- Restore a previous transformation matrix

## Description

`void swf_popmatrix ( void )`

Pushes the current transformation matrix back onto the stack.

## Return Values

No value is returned.

## See Also

- [swf\\_pushmatrix\(\)](#)

# swf\_posround

swf\_posround -- Enables or Disables the rounding of the translation when objects are placed or moved

## Description

**void swf\_posround** ( int *\$round* )

Enables or disables the rounding of the translation when objects are placed or moved, there are times when text becomes more readable because rounding has been enabled.

## Parameters

*round*

Whether to enable rounding or not, if set to the value of 1, then rounding is enabled, if set to 0 then rounding is disabled.

## Return Values

No value is returned.



# swf\_pushmatrix

swf\_pushmatrix -- Push the current transformation matrix back unto the stack

## Description

`void swf_pushmatrix ( void )`

Pushes the current transformation matrix back onto the stack.

## Return Values

No value is returned.

## See Also

- [swf\\_popmatrix\(\)](#)

# swf\_removeobject

swf\_removeobject -- Remove an object

## Description

**void swf\_removeobject** ( int *\$depth* )

Removes the last object drawn at the depth specified by *depth*.

## Parameters

*depth*

The depth, as an integer.

## Return Values

No value is returned.

# swf\_rotate

swf\_rotate -- Rotate the current transformation

## Description

**void swf\_rotate** ( float *\$angle*, string *\$axis* )

Rotates the current transformation by a given *angle* around the given *axis*.

## Parameters

*angle*

The rotation angle.

*axis*

The axis. Valid values axis are x (the x axis), y (the y axis) or z (the z axis).

## Return Values

No value is returned.

# swf\_scale

swf\_scale -- Scale the current transformation

## Description

**void swf\_scale** ( float \$x, float \$y, float \$z )

The [swf\\_scale\(\)](#) scales curve coordinates by the given value.

## Parameters

<sup>x</sup>  
x scale factor.

<sup>y</sup>  
y scale factor.

<sup>z</sup>  
z scale factor.

## Return Values

No value is returned.

# swf\_setfont

swf\_setfont -- Change the current font

## Description

**void swf\_setfont** ( int \$fontid )

The [swf\\_setfont\(\)](#) sets the current font to the value given by the *fontid* parameter.

## Parameters

*fontid*

The font identifier.

## Return Values

No value is returned.

# swf\_setframe

swf\_setframe -- Switch to a specified frame

## Description

**void swf\_setframe** ( int *\$framenumber* )

Changes the active frame to the specified on.

## Parameters

*framenumber*

The frame number to be set.

## Return Values

No value is returned.

## See Also

- [swf\\_getframe\(\)](#)

# swf\_shapearc

swf\_shapearc -- Draw a circular arc

## Description

**void swf\_shapearc** ( float \$x, float \$y, float \$r, float \$ang1, float \$ang2 )

Draws a circular arc.

## Parameters

*x*  
x-coordinate of the center.

*y*  
y-coordinate of the center.

*r*  
The arc radius.

*ang1*  
The start angle.

*ang2*  
The end angle.

## Return Values

No value is returned.

# swf\_shapecurveto3

swf\_shapecurveto3 -- Draw a cubic bezier curve

## Description

**void swf\_shapecurveto3** ( float \$x1, float \$y1, float \$x2, float \$y2, float \$x3, float \$y3 )

Draw a cubic bezier curve using the given coordinates.

The current position is then set to the  $x_3$ ,  $y_3$  coordinate.

## Parameters

$x_1$   
x-coordinate of the first off curve control point.

$y_1$   
y-coordinate of the first off curve control point.

$x_2$   
x-coordinate of the second off curve control point.

$y_2$   
y-coordinate of the second off curve control point.

$x_3$   
x-coordinate of the endpoint.

$y_3$   
y-coordinate of the endpoint.

## Return Values

No value is returned.

## See Also

- [swf\\_shapecurveto\(\)](#)



# swf\_shapecurveto

swf\_shapecurveto -- Draw a quadratic bezier curve between two points

## Description

**void swf\_shapecurveto** ( float \$x1, float \$y1, float \$x2, float \$y2 )

Draws a quadratic bezier curve from the current location, though the two given points.

The current position is then set to the point defined by the `x2` and `y2` parameters.

## Parameters

`x1`  
x-coordinate of the first point.

`y1`  
y-coordinate of the first point.

`x2`  
x-coordinate of the second point.

`y2`  
y-coordinate of the second point.

## Return Values

No value is returned.

## See Also

- [swf\\_shapecurveto3\(\)](#)

# swf\_shapefillbitmapclip

swf\_shapefillbitmapclip -- Set current fill mode to clipped bitmap

## Description

**void swf\_shapefillbitmapclip** ( int \$bitmapid )

Sets the fill to bitmap clipped, empty spaces will be filled by the bitmap.

## Parameters

*bitmapid*

The bitmap id.

## Return Values

No value is returned.

## See Also

- [swf\\_shapefillbitmaptile\(\)](#)

# swf\_shapefillbitmaptile

swf\_shapefillbitmaptile -- Set current fill mode to tiled bitmap

## Description

**void swf\_shapefillbitmaptile** ( int \$bitmapid )

Sets the fill to bitmap tile, empty spaces will be filled by the bitmap.

## Parameters

*bitmapid*

The bitmap id.

## Return Values

No value is returned.

## See Also

- [swf\\_shapefillbitmapclip\(\)](#)

# swf\_shapefilloff

swf\_shapefilloff -- Turns off filling

## Description

**void swf\_shapefilloff** ( void )

Turns off filling for the current shape.

## Return Values

No value is returned.

# swf\_shapefillsolid

swf\_shapefillsolid -- Set the current fill style to the specified color

## Description

**void swf\_shapefillsolid** ( float  $r$ , float  $g$ , float  $b$ , float  $a$  )

Sets the current fill style to solid, and then sets the fill color to the given color.

## Parameters

$r$   
Red value

$g$   
Green value

$b$   
Blue value

$a$   
Alpha value

## Return Values

No value is returned.

# swf\_shapelinesolid

swf\_shapelinesolid -- Set the current line style

## Description

**void swf\_shapelinesolid** ( float \$r, float \$g, float \$b, float \$a, float \$width )

Sets the current line style to the given color and width.

## Parameters

*r*  
Red value

*g*  
Green value

*b*  
Blue value

*a*  
Alpha value

*width*  
The line width. If 0.0 is given then no lines are drawn.

## Return Values

No value is returned.

# swf\_shapelineto

swf\_shapelineto -- Draw a line

## Description

**void swf\_shapelineto** ( float  $x$ , float  $y$  )

Draws a line to the  $x$  and  $y$  coordinates. The current position is then set to that point.

## Parameters

$x$   
x-coordinate of the target.

$y$   
y-coordinate of the target.

## Return Values

No value is returned.

# swf\_shapemoveto

swf\_shapemoveto -- Move the current position

## Description

**void swf\_shapemoveto** ( float  $x$ , float  $y$  )

Moves the current position to the given point.

## Parameters

$x$   
x-coordinate of the target.

$y$   
y-coordinate of the target.

## Return Values

No value is returned.



# swf\_showframe

swf\_showframe -- Display the current frame

## Description

`void swf_showframe ( void )`

Outputs the current frame.

## Return Values

No value is returned.

# swf\_startbutton

swf\_startbutton -- Start the definition of a button

## Description

**void swf\_startbutton** ( int \$objid, int \$type )

Starts the definition of a button.

## Parameters

*objid*

The object id.

*type*

Can either be **TYPE\_MENUBUTTON** or **TYPE\_PUSHBUTTON**. The **TYPE\_MENUBUTTON** constant allows the focus to travel from the button when the mouse is down, **TYPE\_PUSHBUTTON** does not allow the focus to travel when the mouse is down.

## Return Values

No value is returned.

## See Also

- [swf\\_endbutton\(\)](#)

# swf\_startdoaction

swf\_startdoaction -- Start a description of an action list for the current frame

## Description

`void swf_startdoaction ( void )`

Starts the description of an action list for the current frame. This must be called before actions are defined for the current frame.

## Return Values

No value is returned.

## See Also

- [swf\\_enddoaction\(\)](#)

# swf\_startshape

swf\_startshape -- Start a complex shape

## Description

**void** swf\_startshape ( int \$objid )

Starts a complex shape.

## Parameters

*objid*  
The object id.

## Return Values

No value is returned.

## See Also

- [swf\\_endshape\(\)](#)

# swf\_startsymbol

swf\_startsymbol -- Define a symbol

## Description

**void swf\_startsymbol** ( int \$objid )

Defines an object id as a symbol. Symbols are tiny flash movies that can be played simultaneously.

## Parameters

*objid*

The object id you want to define as a symbol.

## Return Values

No value is returned.

## See Also

- [swf\\_endsymbol\(\)](#)

# swf\_textwidth

swf\_textwidth -- Get the width of a string

## Description

float **swf\_textwidth** ( string *\$str* )

Gives the width of the string in pixels, using the current font and font size.

## Parameters

*str*  
The string.

## Return Values

Returns the line width, as a float.

# swf\_translate

swf\_translate -- Translate the current transformations

## Description

**void swf\_translate** ( float \$x, float \$y, float \$z )

Translates the current transformation by the given values.

## Parameters

<sup>x</sup>  
x value.

<sup>y</sup>  
y value.

<sup>z</sup>  
z value.

## Return Values

No value is returned.

# swf\_viewport

swf\_viewport -- Select an area for future drawing

## Description

**void swf\_viewport** ( float \$xmin, float \$xmax, float \$ymin, float \$ymax )

Selects an area for future drawing for *xmin* to *xmax* and *ymin* to *ymax*, if this function is not called the area defaults to the size of the screen.

## Parameters

*xmin*

*xmax*

*ymin*

*ymax*

## Return Values

No value is returned.