

# **Screenshot Library Overview**

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# 1 Library Overview

## Scope of This Document

This document contains an explanation of the screenshot library, which allows application-side control of the screenshot function provided in the system software. The screenshot library enables/disables the screenshot feature, superimposes copyright displays onto screenshots, captures screenshots, and obtains the parameters set for screenshot images.

## Purpose and Features

The screenshot library is a library for controlling the behavior of the system software's screenshot feature from the application-side.

With the system software's screenshot function, the user can save the application screen displayed at a given time as a photo file by simultaneously pressing the PS button and START button.

Saved photo files can be viewed by the user from the photo application screen, and can be imported by the application with Photo Import Dialog library.

When the application is started up, the screenshot feature is enabled.

By disabling the screenshot feature with this library, it is possible to stop the capture of screenshots when the user presses the PS button and START button simultaneously.

Use the screenshot library to enable/disable the screenshot feature, set photo titles/album names, superimpose a copyright display onto a screenshot, capture screenshots at any time, and obtain the parameters (title, album name, and detailed information) set to screenshot images as well as the screenshot image creation date and time.

## Main Functions

The main functions offered by the screenshot library are as follows:

- Enabling/disabling the screenshot function
- Setting screenshot titles and album names
- Setting of images to be superimposed onto screenshots
- Capturing screenshots
- Enabling/disabling the screenshot capture notifications
- Obtaining the title, album name, and detailed information of screenshot images, as well as their creation date and time

## Embedding into a Program

The files required to use the screenshot library are as follows.

Filename	Description
screenshot.h	Header file
libSceScreenShot_stub.a	Stub library file

Screenshot library can be linked in the PRX format only.

Link libSceScreenShot\_stub.a statically to use the screenshot library. The PRX module is stored in storage managed by the system software and can be loaded/unloaded using API of libsysmodule.

For details on the PRX format, refer to "libsysmodule Overview".

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## Sample Programs

The following program is provided as a screenshot library sample program for reference purposes.

**sample\_code/system/api\_screenshot/fixed\_basic/**

000004892117

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## 2 Screenshot Feature of the System Software

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### Operation of the Screenshot Feature

The following is an explanation of the system software's screenshot feature.

#### Capture Timing

Screenshot capture is performed when the user presses the PS button and START button simultaneously, or when the screenshot function is called from within the game.

#### Screenshot Image Size

The image size of the screenshot to be captured is 960x544 pixels

#### File Format of Screenshot

A screenshot is saved in JPEG format.

## 3 Using the Library

### Basic Procedure

The basic procedure for using the screenshot library is described below.

#### (1) Load Module

Call `sceSysmoduleLoadModule()` with `SCE_SYSMODULE_SCREEN_SHOT` specified as its argument.

#### (2) Set Screenshot

Set additions - such as the title - to the photo file.

Set parameters to `SceScreenShotParam` as follows, and call `sceScreenShotSetParam()`.

```
SceScreenShotParam screenshot_param = {0, 0, 0, 0};

screenshot_param.photoTitle = "screenshot custom title";
screenshot_param.gameTitle = "screenshot custom album";
screenshot_param.gameComment = "screenshot custom comment";

ret = sceScreenShotSetParam( screenshot_param );
```

It is also possible to overlay a copyright display on the screenshot. To do so, prepare an appropriate image file, and set the file path and the position to place the image in `sceScreenShotSetOverlayImage()`.

```
ret = sceScreenShotSetOverlayImage( "overlay.png", 0, 0 );
```

There are restrictions regarding the format and size of an overlay image. For details, refer to the "Screenshot Library Reference" document.

#### (3) Enable/Disable Screenshot

Call `sceScreenShotEnable()` to enable the screenshot feature.

```
ret = sceScreenShotEnable();
```

If you need to disable the screenshot during a game, call `sceScreenShotDisable()`.

```
ret = sceScreenShotDisable();
```

#### (4) Capturing Screenshots

Call `sceScreenShotCapture()` to capture a screenshot.

There are 2 modes by which screenshots can be captured. Specify `SCE_SCREENSHOT_CAPTURE_MODE_NORMAL` to apply the `sceScreenShotEnable()/sceScreenShotDisable()` setting, and `SCE_SCREENSHOT_CAPTURE_MODE_FORCE_CAPTURE` to capture a screenshot regardless of the `sceScreenShotEnable()/sceScreenShotDisable()` setting.

The path of the screenshot image can be obtained as follows.

```
SceScreenShotCaptureFileInfo captureFileInfo;
memset(&captureFileInfo, 0, sizeof(SceScreenShotCaptureFileInfo));
ret = sceScreenShotCapture(SCE_SCREENSHOT_CAPTURE_MODE_FORCE_CAPTURE,
                          &captureFileInfo, NULL, NULL);
```

## (5) Obtaining the Parameters of Screenshot Images

Call `sceScreenShotGetParam()` to obtain the parameters (title, album name, and detailed information) set to screenshot images as well as the creation date and time of the screenshot images.

Call `sceScreenShotGetParam()` by specifying as an argument the path of the screenshot images whose parameters are to be obtained and the `SceScreenShotGameInfo` structure that contains the parameters of the screenshot images.

```
SceScreenShotGameInfo screenshot_param;

const SceChar8* file_path = "Test.jpg";

ret = sceScreenShotGetParam( file_path, &screenshot_param );
```

Upon normal termination, the title, album name, detailed information, and creation date and time of the screenshot image are saved in `screenshot_param`.

For details, refer to the "Screenshot Library Reference" document.

## (6) Unload Module

When you no longer require the screenshot library, call `sceSysmoduleUnloadModule()` with `SCE_SYSMODULE_SCREEN_SHOT` specified as its argument and unload the module.

Functions of the screenshot library excluding `sceScreenShotCapture()` only notify a setting to the system software; the functions do not hold states. Because of this, the module can be unloaded once the required settings have been completed and after there is no more need to call `sceScreenShotCapture()`. Even if the module is unloaded, the settings that have been made will remain valid until the termination of the game.

When the screenshot capture notification is once enabled with `sceScreenShotEnableNotification()`, notifications will be made whenever screenshots are captured, even when the screenshot library is not loaded.

## Notification of Captured Screenshots

The application can use the application event feature to receive events notifying the capture completion of screenshots.

To receive the above event, call `sceScreenShotEnableNotification()` and enable the screenshot capture notification feature.

```
ret = sceScreenShotEnableNotification()
```

To disable the screenshot capture notification feature, call `sceScreenShotDisableNotification()`.

```
ret = sceScreenShotDisableNotification()
```

Upon application startup, screenshot capture notification is disabled.

For details on the application event feature, refer to "Application Utility Overview".

## Behavior in Response to Game Termination

The processing of the screenshot library, excluding `sceScreenShotCapture()`, ends in a short period of time. Thus, it does not handle the game termination request event. If this event is generated during the library's processing, the screenshot library will carry out its processing until the end, and then return.

`sceScreenShotCapture()` does not return until screenshot capture completes.

To return quickly from `sceScreenShotCapture()`, specify the cancel callback when calling `sceScreenShotCapture()` and make the cancel callback immediately return `True` at the timing you desire. Processing will return from `sceScreenShotCapture()` immediately. The photo file may or may not be stored in this case.

If the game termination sequence is entered while the screenshot is being captured and the photo file is being saved by the system software, the system software will abort the processing at an appropriate point.

## List of Functions

The following is a list of screenshot library functions.

### Set Screenshot

Function	Description
<code>sceScreenShotSetParam()</code>	Sets parameters to screenshot
<code>sceScreenShotSetOverlayImage()</code>	Sets image to overlay on screenshot

### Enable/Disable Screenshot

Function	Description
<code>sceScreenShotEnable()</code>	Enables screenshot
<code>sceScreenShotDisable()</code>	Disables screenshot

### Capture Screenshot

Function	Description
<code>sceScreenShotCapture()</code>	Captures screenshot

### Enable/Disable Screenshot Capture Notification

Function	Description
<code>sceScreenShotEnableNotification()</code>	Enables screenshot capture notification
<code>sceScreenShotDisableNotification()</code>	Disables screenshot capture notification

### Obtain parameters of screenshot image

Function	Description
<code>sceScreenShotGetParam()</code>	Obtains the parameters of the screenshot image



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## 4 Notes

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### Checking for Available Space

The application does not need to check if there is enough free storage space to save a screenshot because the system software manages this. If there is not at least a certain amount of free space when the user captures a screenshot, the system software will display a dialog informing the user that there is not enough space, and the screenshot will not be saved.

### Error Codes

When displaying errors returned by the screenshot library, make sure to use the error code display function of Message Dialog. For Message Dialog, refer to the "Message Dialog Overview" and "Message Dialog Reference" documents.