libLiveArea Reference

Table of Contents

Content Information Zone Update

sceLiveAreaReplaceAllSync

Request for update of all the definitions (blocking version)

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaReplaceAllSync(
        const char *dirpath
);
```

Arguments

dirpath Directory path that contains LiveArea™ resource XML

Return Values

Returns SCE_LIVEAREA_OK(0) for success. Returns an error code (negative value) for errors. The main error codes are shown below. Note, however, that the application must not malfunction even if other error codes are returned.

Value	(Number)	Description
SCE_LIVEAREA_ERROR_PARAM	0x80104002	- *dirpath* is NULL - The length of *dirpath* exceeds SCE_LIVEAREA_MAX_FS_PATH_LEN (255)
SCE_LIVEAREA_ERROR_XML_NOT_FOUND	0x80104003	LiveArea™ resource XML placed under the specified directory cannot be opened. Check whether the file exists in the directory.
SCE_LIVEAREA_ERROR_XML_FORMAT	0x80104004	Format of LiveArea™ resource XML is invalid
SCE_LIVEAREA_ERROR_FILE_NOT_FOUND	0x80104005	Referenced file is not found
SCE_LIVEAREA_ERROR_FILE_TOTAL_SIZE	0x80104007	Total size of referenced files exceeds the maximum value
SCE_LIVEAREA_ERROR_FILE_FORMAT	0x80104008	Format of a referenced file is invalid or is not supported
SCE_LIVEAREA_ERROR_DIRPATH	0x8010400b	Cannot access *dirpath*
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function requests the system to update all the LiveArea™ resource XML. For the XML description method for update, refer to the "XML Specifications for LiveArea™ Update" chapter in the "LiveArea™ Specifications" document.

Specify the directory path that contains the LiveArea™ resource XML for *dirpath*. This function is a blocking function and returns after the processing is completed.

Notes

This function is multithread safe.

Required time for an update processing depends on the content of LiveArea™ resource XML.

Examples

```
ret = sceLiveAreaReplaceAllSync("app0:my_livearea");
if (ret) {
        /* Error handling */
}
```

sceLiveAreaReplaceAllAsync

Request for update of all the definitions (non-blocking version)

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaReplaceAllAsync(
        const char *dirpath
);
```

Arguments

dirpath   Directory path that contains LiveArea™ resource XML

Return Values

Returns SCE_LIVEAREA_OK(0) for success. Returns an error code (negative value) for errors. The main error codes are shown below. Note, however, that the application must not malfunction even if other error codes are returned.

Value	(Number)	Description
SCE_LIVEAREA_ERROR_STATE	0x80104001	Update processing has been already requested
SCE_LIVEAREA_ERROR_PARAM	0x80104002	- *dirpath* is NULL - The length of *dirpath* exceeds SCE_LIVEAREA_MAX_FS_PATH_LEN(255)
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function requests the system to update all the LiveArea™ resource XML. For the XML description method for update, refer to the "XML Specifications for LiveArea™ Update" chapter in the "LiveArea™ Specifications" document.
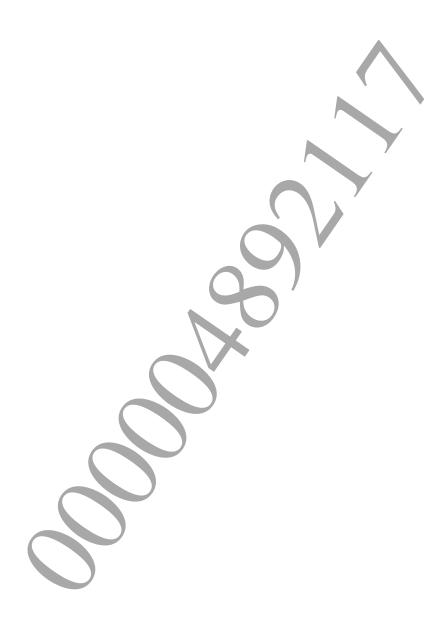
Specify the directory path that contains the LiveArea™ resource XML for *dirpath*. This function will immediately return upon starting processing with non-blocking, and actual processing is performed on the system side asynchronously.

Notes

This function is multithread safe.

Required time for an asynchronous update processing depends on the content of LiveArea™ resource XML.

A processing state and a processing result on the system side can be obtained with sceLiveAreaGetStatus().

Examples

```
ret = sceLiveAreaReplaceAllAsync("app0:my_livearea");
if (ret) {
        /* Error handling */
}
```

See Also

sceLiveAreaGetStatus()

sceLiveAreaUpdateFrameSync

Request update of specified frame (blocking version)

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaUpdateFrameSync(
        const char *formatVer,
        const char *frameXmlStr,
        SceInt32 frameXmlLen,
        const char *dirpathTop,
        SceUInt32 flag
);
```

Arguments

formatVer	Format version written in LiveArea™ resource XML
frameXmlStr	Character string where the "**frame**" tag of LiveArea™ resource XML is written
frameXmlLen	Size of *frameXmlStr*
dirpathTop	Directory path that contains an image file
flag	Whether the frame update is discarded after the application terminates

Return Values

Returns SCE_LIVEAREA_OK(0) for success. Returns an error code (negative value) for errors. The main error codes are shown below. Note, however, that the application must not malfunction even if other error codes are returned.

Value	(Number)	Description
SCE_LIVEAREA_ERROR_PARAM	0x80104002	- *frameXmlStr* is NULL - *dirpathTop* is NULL or the length of *dirpathTop* exceeds SCE_LIVEAREA_MAX_FS_PATH_LEN(255) – *flag* is invalid
SCE_LIVEAREA_ERROR_XML_FORMAT	0x80104004	Format of *frameXmlStr* is invalid
SCE_LIVEAREA_ERROR_FILE_NOT_FOUND	0x80104005	Referenced file is not found
SCE_LIVEAREA_ERROR_FILE_TOTAL_SIZE	0x80104007	Total size of referenced files exceeds the maximum value
SCE_LIVEAREA_ERROR_FILE_FORMAT	0x80104008	Format of a referenced file is invalid or is not supported
SCE_LIVEAREA_ERROR_XML_SIZE	0x80104009	- *frameXmlLen* exceeds SCE_LIVEAREA_MAX_FRAME_STR_LEN (10239) - *frameXmlLen* is negative and the length of *frameXmlStr* exceeds SCE_LIVEAREA_MAX_FRAME_STR_LEN (10239)
SCE_LIVEAREA_ERROR_FRAME_NOT_FOUND	0x8010400a	Specified *frameId* does not exist
SCE_LIVEAREA_ERROR_DIRPATH	0x8010400b	Cannot access *dirpathTop*
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function makes a request for partial update of the content information zone to the system.

Specify SCE_LIVEAREA_FORMAT_VER_CURRENT in *formatVer*.

Specify the "**frame**" tag character string of the frame to be updated in *frameXmlStr*.

In *frameXmlLen*, specify the length of *frameXmlStr* (that is (=strlen(*frameXmlStr*))). If a negative value is set, length will be calculated by the system.

Specify the directory path that contains an image file for *dirpathTop*.

In *flag*, specify either SCE_LIVEAREA_FLAG_NONE(0) or SCE_LIVEAREA_FLAG_TEMP(1). If SCE_LIVEAREA_FLAG_TEMP(1) is specified, the state before frame update will be restored once the user closes LiveArea™.

When creating character strings of "**frame**" tag in a program, add escape processing to replace the XML's special symbols ("'", """, "&", "<", ">") with escape sequences ("'", """, "&", "<", ">"). This function is a blocking function and returns after the processing is completed.

Notes

This function is multithread safe.

Required time for an update processing depends on the content of *frameXmlStr*.

Examples

```
const char* frameXmlStr =
        "<frame id='frame1' rev='1'>"
            "<liveitem id='1'><image>xxxx.png</image></liveitem>"
        "</frame>";
ret = sceLiveAreaUpdateFrameSync(
            SCE_LIVEAREA_FORMAT_VER_CURRENT,
            frameXmlStr,
            strlen(frameXmlStr),
            "app0:my_livearea_update",
            SCE_LIVEAREA_FLAG_NONE);
if (ret) {
        /* Error handling */
}
```

sceLiveAreaUpdateFrameAsync

Request update of specified frame (non-blocking version)

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaUpdateFrameAsync(
        const char *formatVer,
        const char *frameXmlStr,
        SceInt32 frameXmlLen,
        const char *dirpathTop,
        SceUInt32 flag
);
```

Arguments

formatVer	Format version written in LiveArea™ resource XML
frameXmlStr	Character string where the "**frame**" tag of LiveArea™ resource XML is written
frameXmlLen	Size of *frameXmlStr*
dirpathTop	Directory path that contains an image file
flag	Whether the frame update is discarded after the application terminates

Return Values

Returns `SCE_LIVEAREA_OK(0)` for success. Returns an error code (negative value) for errors. The main error codes are shown below. Note, however, that the application must not malfunction even if other error codes are returned.

Value	(Number)	Description
SCE_LIVEAREA_ERROR_STATE	0x80104001	Update processing has been already requested
SCE_LIVEAREA_ERROR_PARAM	0x80104002	- *frameXmlStr* is NULL - *dirpathTop* is NULL or the length of *dirpathTop* exceeds SCE_LIVEAREA_MAX_FS_PATH_LEN(255) – *flag* is invalid
SCE_LIVEAREA_ERROR_XML_SIZE	0x80104009	- *frameXmlLen* exceeds SCE_LIVEAREA_MAX_FRAME_STR_LEN (10239) - *frameXmlLen* is negative and the length of *frameXmlStr* exceeds SCE_LIVEAREA_MAX_FRAME_STR_LEN (10239)
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function makes a request for partial update of the content information zone to the system.

Specify SCE_LIVEAREA_FORMAT_VER_CURRENT in *formatVer*.

Specify the "**frame**" tag character string of the frame to be updated in *frameXmlStr*.

In *frameXmlLen*, specify the length of *frameXmlStr* (that is (=strlen(*frameXmlStr*))). If a negative value is set, length will be calculated by the system.

Specify the directory path that contains an image file for *dirpathTop*.

In *flag*, specify either SCE_LIVEAREA_FLAG_NONE(0) or SCE_LIVEAREA_FLAG_TEMP(1). If SCE_LIVEAREA_FLAG_TEMP(1) is specified, the state before frame update will be restored once the user closes LiveArea™.

When creating character strings of "**frame**" tag in a program, add escape processing to replace the XML's special symbols ("'", """, "&", "<", ">") with escape sequences ("'", """, "&", "<", ">"). This function will immediately return upon starting processing with non-blocking, and actual processing is performed on the system side asynchronously.

Notes

This function is multithread safe.

Required time for an asynchronous update processing depends on the content of *frameXmlStr*.

A processing state and a processing result on the system side can be obtained with sceLiveAreaGetStatus().

Examples

```
const char* frameXmlStr =
        "<frame id='frame1' rev='1'>"
                "<liveitem id='1'><image>xxxx.png</image></liveitem>"
        "</frame>";
ret = sceLiveAreaUpdateFrameAsync(
                SCE_LIVEAREA_FORMAT_VER_CURRENT,
                frameXmlStr,
                strlen(frameXmlStr),
                "app0:my_livearea_update",
                SCE_LIVEAREA_FLAG_NONE);
if (ret) {
        /* Error handling */
}
```

See Also

sceLiveAreaGetStatus()

sceLiveAreaGetStatus

Get update processing state and result

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaGetStatus();
```

Arguments

None

Return Values

Returns one of the following processing states or processing results (error code). Note, however, that the application must not malfunction even if other error codes are returned.

Value	(Number)	Description
SCE_LIVEAREA_OK	0	Update processing is successfully completed
SCE_LIVEAREA_BUSY	1	Update is in progress Perform a retry on the calling side as necessary
SCE_LIVEAREA_ERROR_STATE	0x80104001	Called with no update request
SCE_LIVEAREA_ERROR_XML_NOT_FOUND	0x80104003	LiveArea™ resource XML placed under the specified directory cannot be opened. Check whether the file exists in the directory.
SCE_LIVEAREA_ERROR_XML_FORMAT	0x80104004	Format of LiveArea™ resource XML is invalid
SCE_LIVEAREA_ERROR_FILE_NOT_FOUND	0x80104005	Referenced file is not found
SCE_LIVEAREA_ERROR_FILE_TOTAL_SIZE	0x80104007	Total size of referenced files exceeds the maximum value
SCE_LIVEAREA_ERROR_FILE_FORMAT	0x80104008	Format of a referenced file is invalid or is not supported
SCE_LIVEAREA_ERROR_FRAME_NOT_FOUND	0x8010400a	Specified *frameId* does not exist
SCE_LIVEAREA_ERROR_DIRPATH	0x8010400b	Cannot access the directory path
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function obtains an update processing state and a processing result and returns immediately after being called.

If the return value is SCE_LIVEAREA_BUSY(1), perform a retry until either SCE_LIVEAREA_OK(0) or an error (negative value) is returned. Make sure to perform a retry at a certain interval so as to avoid busy loop (a state where a thread performing a retry continues to occupy a CPU, and consequently other threads cannot use the CPU for processing).

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Notes

This function is multithread safe.

It is not possible to obtain a decode error of an image referred by the LiveArea™ resource XML or a size limitation error after loading into a memory. Verify if the LiveArea™ is displayed as expected by checking the actual LiveArea™ after completion of the update processing.

Examples

```
ret = sceLiveAreaGetStatus();
if (ret == SCE_LIVEAREA_BUSY) {
        /* Update is in progress. Perform a retry at a certain interval */
} else if (ret == SCE_LIVEAREA_OK) {
        /* Processing performed when an update is successfully completed */
} else {
        /* Processing performed when an update is ended in failure */
}
```

See Also

sceLiveAreaReplaceAllAsync(),sceLiveAreaUpdateFrameAsync()

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sceLiveAreaGetRevision

Get "content-rev" attribute specified with LiveArea™ resource XML's "livearea" tag

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaGetRevision(
        SceInt64* contentRev
);
```

Arguments

contentRev   Revision for user contents to be obtained

Return Values

Returns SCE_LIVEAREA_OK(0) for success. Returns an error code (negative value) for errors. The main error codes are shown below. Note, however, that the application must not malfunction even if other error codes are returned.

Value	(Number)	Description
SCE_LIVEAREA_OK	0	Obtaining processing completed successfully
SCE_LIVEAREA_ERROR_PARAM	0x80104002	*contentRev* is NULL
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function obtains the "content-rev" attribute specified with LiveArea™ resource XML's "livearea" tag. This is a blocking function.

Notes

This function is multithread safe.

Examples

```
SceInt64 contentRev;
ret = sceLiveAreaGetRevision(&contentRev);
if (ret == SCE_LIVEAREA_OK) {
        /* Processing for successful obtainment */
} else {
        /* Processing for failed obtainment */
}
```

sceLiveAreaGetFrameRevision

Get the "rev" attribute specified with LiveArea™ resource XML's "frame" tag

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaGetFrameRevision(
        const char* frameId,
        SceInt64* revision
);
```

Arguments

frameId   "**id**" character string of the frame to be obtained

revision   Revision for user contents to be obtained

Return Values

Returns SCE_LIVEAREA_OK(0) for success. Returns an error code (negative value) for errors. The main error codes are shown below. Note, however, that the application must not malfunction even if other error codes are returned.

Value	(Number)	Description
SCE_LIVEAREA_OK	0	Update processing completed successfully
SCE_LIVEAREA_ERROR_PARAM	0x80104002	- *frameId* is NULL - *revision* is NULL
SCE_LIVEAREA_ERROR_FRAME_NOT_FOUND	0x8010400a	The frame specified with *frameId* does not exist
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function obtains the "rev" attribute specified with LiveArea™ resource XML's "frame" tag. This is a blocking function.

Notes

This function is multithread safe.

Examples

```
SceInt64 revision;
ret = sceLiveAreaGetFrameRevision("frame1", &revision);
if (ret == SCE_LIVEAREA_OK) {
        /* Processing for successful obtainment */
} else {
        /* Processing for failed obtainment */
}
```

sceLiveAreaGetFrameUserData

Get the "userdata" attribute specified with LiveArea™ resource XML's "frame" tag

Definition

```
#include <livearea.h>
SceInt32 sceLiveAreaGetFrameUserData(
        const char* frameId,
        char* userData,
        SceUInt32 userDataSize,
);
```

Arguments

frameId	"**id**" character string of the frame to be obtained
userData	Buffer for character strings of the userdata to be obtained
userDataSize	Size of *userData*

Return Values

Returns SCE_LIVEAREA_OK(0) for success. Returns an error code (negative value) for errors. The main error codes are shown below. Note, however, that the application must not malfunction even if other error codes are returned.

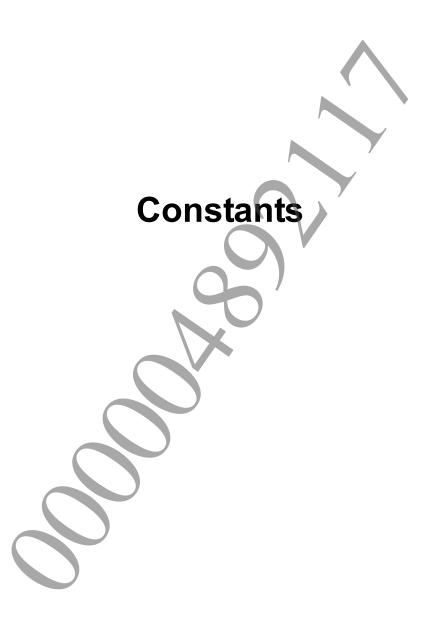| Value	(Number)	Description
SCE_LIVEAREA_OK	0	Update processing completed successfully
SCE_LIVEAREA_ERROR_PARAM	0x80104002	- *frameId* is NULL - *userData* is NULL - *userDataSize* is 0
SCE_LIVEAREA_ERROR_FRAME_NOT_FOUND	0x8010400a	The frame specified with *frameId* does not exist
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side

Description

This function obtains the "userdata" attribute specified with LiveArea™ resource XML's "frame" tag. This is a blocking function. NULL is set for the character string termination of the obtained userdata. The maximum obtainable length of userdata is SCE_LIVEAREA_MAX_USER_DATA_LEN (1023). When obtaining maximum length userdata, set a buffer of 1024 bytes (including NULL termination) in *userData*, and set *userDataSize* to 1024.

Notes

This function is multithread safe.

Examples

```
char userData[SCE_LIVEAREA_MAX_USER_DATA_LEN + 1];
ret = sceLiveAreaGetFrameUserData("frame1", userData, sizeof(userData));
if (ret == SCE_LIVEAREA_OK) {
        /* Processing for successful obtainment */
} else {
        /* Processing for failed obtainment */
}
```

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Constants

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Return Codes

List of return codes returned by libLiveArea

Definition

Value	(Number)	Description
SCE_LIVEAREA_OK	0	Succeeded
SCE_LIVEAREA_BUSY	1	Processing is in progress
SCE_LIVEAREA_ERROR_STATE	0x80104001	State is not appropriate to be called
SCE_LIVEAREA_ERROR_PARAM	0x80104002	Invalid argument
SCE_LIVEAREA_ERROR_XML_NOT_FOUND	0x80104003	LiveArea™ resource XML placed under the specified directory cannot be opened. Check whether the file exists in the directory.
SCE_LIVEAREA_ERROR_XML_FORMAT	0x80104004	Format of LiveArea™ resource XML is invalid
SCE_LIVEAREA_ERROR_FILE_NOT_FOUND	0x80104005	Referenced file is not found
SCE_LIVEAREA_ERROR_FILE_NUM	0x80104006	Number of referenced files exceeds the maximum value
SCE_LIVEAREA_ERROR_FILE_TOTAL_SIZE	0x80104007	Total size of referenced files exceeds the maximum value
SCE_LIVEAREA_ERROR_FILE_FORMAT	0x80104008	Format of a referenced file is invalid or is not supported
SCE_LIVEAREA_ERROR_XML_SIZE	0x80104009	Size of *XML* exceeds the maximum value
SCE_LIVEAREA_ERROR_FRAME_NOT_FOUND	0x8010400a	*frameId* does not exist
SCE_LIVEAREA_ERROR_DIRPATH	0x8010400b	Cannot access the directory path
SCE_LIVEAREA_ERROR_INTERNAL	0x801040ff	Unexpected error occurred on the system side