

Application Manager Reference

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Constants

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Event ID

ID of event distributed by application manager

Definition

Value	Hexadecimal	Description
SCE_APPMGR_SYSTEMEVENT_ON_RESUME	0x10000003	Application resumed
SCE_APPMGR_SYSTEMEVENT_ON_STORE_PURCHASE	0x10000004	Store checkout event arrived
SCE_APPMGR_SYSTEMEVENT_ON_NP_MESSAGE_ARRIVED	0x10000005	NP message event arrived
SCE_APPMGR_SYSTEMEVENT_ON_STORE_REDEMPTION	0x10000006	Promotion code redeemed at PlayStation®Store

Description

This is the system event ID that is passed to *systemEvent* of the *SceAppMgrSystemEvent* structure.

When the event ID is SCE_APPMGR_SYSTEMEVENT_ON_RESUME, it is reported that the application switched from Suspend state to Resume state. This is valid for all applications.

When the event ID is SCE_APPMGR_SYSTEMEVENT_ON_STORE_PURCHASE, it notifies that a product was purchased at the PlayStation®Store. PlayStation®Store is the source, and this is broadcast to all running applications.

When the event ID is SCE_APPMGR_SYSTEMEVENT_ON_NP_MESSAGE_ARRIVED, it notifies that either a message with invitation data attachments or a message with custom data attachments was received.

When the event ID is SCE_APPMGR_SYSTEMEVENT_ON_STORE_REDEMPTION, it notifies that a promotion code was redeemed at the PlayStation®Store.

Macros for Info bar

Macros for setting info bar state

Definition

Value	Hexadecimal	Description
SCE_APPMGR_INFOBAR_VISIBILITY_INVISIBLE	0x0	Makes the info bar invisible.
SCE_APPMGR_INFOBAR_VISIBILITY_VISIBLE	0x1	Makes the info bar visible.
SCE_APPMGR_INFOBAR_COLOR_BLACK	0x0	Makes the info bar black.
SCE_APPMGR_INFOBAR_COLOR_WHITE	0x1	Makes the info bar white.
SCE_APPMGR_INFOBAR_TRANSPARENCY_OPAQUE	0x0	Makes the info bar opaque.
SCE_APPMGR_INFOBAR_TRANSPARENCY_TRANSLUCENT	0x1	Makes the info bar translucent.

Description

These are the macros for setting the info bar state with `sceAppMgrSetInfobarState()`.

Structures

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SceAppMgrSystemEvent

System event structure

Definition

```
#include <appmgr.h>
typedef struct SceAppMgrSystemEvent {
    SceInt32 systemEvent;
    union{
        SceUInt8 reserved[60];
    } data;
} SceAppMgrSystemEvent;
```

Members

<i>systemEvent</i>	System event ID
<i>reserved</i>	Reserved area

Description

This structure is passed to `sceAppMgrReceiveSystemEvent()`, the function for receiving system events.

systemEvent indicates the system event ID.

See Also

`sceAppMgrReceiveSystemEvent()`

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SceAppMgrAppState

Application status structure

Definition

```
#include <appmgr.h>
typedef struct SceAppMgrAppState {
    SceUInt32 systemEventNum;
    SceUInt32 appEventNum;
    SceBool isSystemUiOverlaid;
    SceUInt8 reserved[128 - sizeof(SceUInt32)*2 - sizeof(SceBool)];
} SceAppMgrAppState;
```

Members

<i>systemEventNum</i>	Number of system events
<i>appEventNum</i>	Number of application events
<i>isSystemUiOverlaid</i>	Truth-value of UI overlaid of system software
<i>reserved</i>	Reserved area

Description

This structure indicates the application status.

systemEventNum indicates the number of system events. `sceAppMgrReceiveSystemEvent()` can be used to obtain the contents of a system event.

appEventNum indicates the number of application events. To obtain the contents, use `sceAppUtilReceiveAppEvent()` provided by the application utility library (for details, refer to the "Application Utility Overview" and "Application Utility Reference" documents). Only up to four application events will be held. If a new application event is sent when four events are being held, the new application event will be discarded.

isSystemUiOverlaid is `SCE_TRUE` when UI of the system software is overlaid.

See Also

`sceAppMgrReceiveSystemEvent()`

SceAppMgrNetworkDisconnectionWarningDialogStateOptParam

Network Disconnection Warning Dialog state option structure

Definition

```
#include <appmgr.h>
typedef struct SceAppMgrNetworkDisconnectionWarningDialogStateOptParam {
    SceUInt8 reserved[128];
} SceAppMgrNetworkDisconnectionWarningDialogStateOptParam;
```

Members

reserved Reserved area

Description

This structure specifies the Network Disconnection Warning Dialog state options.

See Also

`sceAppMgrSetNetworkDisconnectionWarningDialogState()`

Functions

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sceAppMgrGetAppState

Get application status

Definition

```
#include <appmgr.h>
SceInt32 sceAppMgrGetAppState (
    SceAppMgrAppState *appState
);
```

Calling Conditions

Can be called from a thread.

Multithread safe.

Arguments

appState Status structure

Return Values

Returns SCE_OK (0) for success.

Returns one of the error codes (a negative value) listed in the section "Common Error Codes" for errors.

Description

This function obtains the application status. Use this mainly to obtain the number of system events delivered to that application.

appState is the structure indicating the application status. For the contents, refer to the description of *SceAppMgrAppState*.

Examples

```
SceAppMgrSystemEvent systemEvent
SceAppMgrAppState appState;

ret = sceAppMgrGetAppState ( &appState );
if ( ( ret == SCE_OK ) && ( appState.systemEventNum > 0 ) )
{
    for ( i = 0; i < appState.systemEventNum; i++ )
    {
        ret = sceAppMgrReceiveSystemEvent( &systemEvent );
        if( systemEvent.event == SCE_APPMGR_SYSTEMEVENT_ON_RESUME)
        {
            /* Processing in Resume state */
        }
        else if( systemEvent.event ==
                SCE_APPMGR_SYSTEMEVENT_ON_NP_MESSAGE_ARRIVED)
        {
            /* Processing when NP message event arrives */
        }
    }
}
```

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See Also

`sceAppMgrReceiveSystemEvent(), SceAppMgrAppState`

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sceAppMgrReceiveSystemEvent

Get system event details

Definition

```
#include <appmgr.h>
SceInt32 sceAppMgrReceiveSystemEvent (
    SceAppMgrSystemEvent *systemEvent
);
```

Calling Conditions

Can be called from a thread.

Multithread safe.

Arguments

systemEvent System event structure

Return Values

Returns `SCE_OK(0)` for success.

Returns one of the error codes (a negative value) listed in the section "Common Error Codes" for errors.

Description

This function obtains one system event structure in the event queue.

First, use the `sceAppMgrGetAppState()` function to obtain the number of events, and then call this function for each event.

Calling this function deletes the event from the event queue. When an event remains in the queue and the same type of event arrives, the event is overwritten.

Examples

Refer to the example in the `sceAppMgrGetAppState()` section.

See Also

`sceAppMgrGetAppState()`, `SceAppMgrSystemEvent`

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sceAppMgrSetInfobarState

Sets info bar state

Definition

```
#include <appmgr.h>
SceInt32 sceAppMgrSetInfobarState (
    int visibility,
    int color,
    int transparency
);
```

Calling Conditions

Can be called from a thread.

Multithread safe.

Arguments

<i>visibility</i>	Specify the visibility of the info bar. Specify one of the following. - SCE_APPMGR_INFOBAR_VISIBILITY_INVISIBLE - SCE_APPMGR_INFOBAR_VISIBILITY_VISIBLE
<i>color</i>	Specify the color of the info bar. Specify one of the following. - SCE_APPMGR_INFOBAR_COLOR_BLACK - SCE_APPMGR_INFOBAR_COLOR_WHITE
<i>transparency</i>	Specify the transparency of the info bar. Specify one of the following. - SCE_APPMGR_INFOBAR_TRANSPARENCY_OPAQUE - SCE_APPMGR_INFOBAR_TRANSPARENCY_TRANSLUCENT

Return Values

Returns SCE_OK (0) for success.

Returns one of the error codes (a negative value) listed in the section "Common Error Codes" for errors.

Description

This function specifies the status of the info bar. Depending on conditions, the info bar setting specified by the system takes priority.

sceAppMgrSetNetworkDisconnectionWarningDialogState

Set the Network Disconnection Warning Dialog state

Definition

```
#include <appmgr.h>
SceInt32 sceAppMgrSetNetworkDisconnectionWarningDialogState (
    SceBool enable,
    const SceAppMgrNetworkDisconnectionWarningDialogStateOptParam *optParam
);
```

Calling Conditions

Can be called from a thread.
Multithread safe.

Arguments

enable Specify SCE_TRUE to enable Network Disconnection Warning Dialog.
Specify SCE_FALSE to disable Network Disconnection Warning Dialog.

optParam Specify NULL to this argument.
If NULL is not specified, the function calling will fail and the error code SCE_APPMGR_ERROR_INVALID will return.

Return Values

Returns SCE_OK (0) for success.
Returns one of the error codes (a negative value) listed in the section "Common Error Codes" for errors.

Description

This function sets the Network Disconnection Warning Dialog state.

By enabling Network Disconnection Warning Dialog, when the PS button is pressed during usage of the network functionalities and an application is paused, a warning dialog will be displayed. Enabling Network Disconnection Warning Dialog is a feature only permitted by applications that use the network functionalities, so do not enable it for applications that do not use the network functionalities.

sceAppMgrLoadExec

Switch application to another program

Definition

```
#include <appmgr.h>
SceInt32 sceAppMgrLoadExec (
    const char *appPath,
    char *const argv[],
    const SceAppMgrLoadExecOptParam *optParam
);
```

Calling Conditions

Can be called from a thread.

Multithread safe.

Arguments

appPath Path to the program to be switched to. Specify the path of the SELF file placed directly below app0:. An error occurs when any other path is specified.

argv The argument passed to the `main` function of the switching destination program. Specify the array of the character string terminated with NULL. Specify up to 1024 characters, including the NULL characters.

optParam Specify NULL to this argument. If NULL is not specified, the function calling will fail and the error code `SCE_APPMGR_ERROR_INVALID` will return.

Return Values

Returns `SCE_OK (0)` for success.

Returns one of the error codes (a negative value) listed in the section "Common Error Codes" for errors.

Description

This function replaces the currently running program with the program specified with *appPath*. When this function is called, the running process is terminated. The termination process related to the `libc exit`, such as `atexit()`, is not executed at this time.

Before and after this function is executed, the BGM port status and info bar setting are retained. In addition, save data and save memory are shared.

Error Codes

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Common Error Codes

List of common error codes

Definition

Value	Hexadecimal	Description
SCE_OK	0	Normal completion
SCE_APPMGR_ERROR_BUSY	0x80802000	Busy
SCE_APPMGR_ERROR_STATE	0x80802013	Abnormal state
SCE_APPMGR_ERROR_NULL_POINTER	0x80802016	NULL pointer
SCE_APPMGR_ERROR_INVALID	0x8080201a	Invalid parameter
SCE_APPMGR_ERROR_INVALID_SELF_PATH	0x8080201e	Invalid SELF file path
SCE_ERROR_ERRNO_ENAMETOOLONG	0x8001005b	Size of argv argument of sceAppMgrLoadExec () exceeds the maximum limit

Description

The functions that are provided by the application manager return SCE_OK (0) for success, and the above return codes (a negative value) for errors.