

# NP Activity Library Reference

© 2015 Sony Computer Entertainment Inc.  
All Rights Reserved.  
SCE Confidential

## Table of Contents

<b>Library Initialization and Termination .....</b>	<b>3</b>
sceNpActivityInit.....	4
sceNpActivityTerm.....	5
<b>Post Processing .....</b>	<b>6</b>
sceNpActivityPostStatus .....	7
sceNpActivityPostAppStartupStatus .....	9
<b>Structures.....</b>	<b>11</b>
SceNpActivityStatusMessage .....	12
SceNpActivityStatusActionUri .....	13
SceNpActivityStatusAppStartupParam .....	14
<b>Constants .....</b>	<b>15</b>
SCE_NP_ACTIVITY_STATUS_MESSAGE_MAX_NUM_CHARACTERS.....	16
SCE_NP_ACTIVITY_STATUS_MESSAGE_MAX_NUM_LINEFEEDS.....	17
SCE_NP_ACTIVITY_STATUS_MESSAGE_MAX_SIZE.....	18
SCE_NP_ACTIVITY_STATUS_ACTION_URI_MAX_SIZE.....	19
SCE_NP_ACTIVITY_APP_PARAM_MAX_SIZE.....	20
SCE_NP_ACTIVITY_APP_VER_NOT_REQUIRED .....	21
Return Codes .....	22

# Library Initialization and Termination

SCE CONFIDENTIAL

# sceNpActivityInit

Initialize the NP Activity library

## Definition

```
#include <np.h>
int sceNpActivityInit(
    void *option
);
```

## Arguments

*option* Option for future extension. Always specify NULL.

## Return Values

0 is returned for normal completion.

Returns a 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_NP_ACTIVITY_ERROR_ALREADY_INITIALIZED	0x80552301	Already initialized
SCE_NP_ACTIVITY_ERROR_INVALID_ARGUMENT	0x80552303	Invalid argument ( <i>option</i> is non-NULL)

## Description

This function initializes the NP Activity library. It must be called before the NP Activity library can be used.

## Notes

This function is not multithread safe. If it is called at the same time from different threads, the library may later malfunction even if this function terminates normally. Therefore, avoid simultaneous calls when programming.

## See Also

sceNpActivityTerm()

# sceNpActivityTerm

Terminate the NP Activity library

## Definition

```
#include <np.h>
int sceNpActivityTerm(
    void
);
```

## Arguments

None

## Return Values

0 is returned for normal completion.

Returns a 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_NP_ACTIVITY_ERROR_NOT_INITIALIZED	0x80552302	Library has not been initialized

## Description

This function terminates the NP Activity library.

## Notes

This function is not multithread safe. If it is called at the same time from different threads, the library may later malfunction even if this function terminates normally. Therefore, avoid simultaneous calls when programming.

## See Also

sceNpActivityInit()

# Post Processing

000004892117

# sceNpActivityPostStatus

## Post status

### Definition

```
#include <np.h>
int sceNpActivityPostStatus (
    const SceNpActivityStatusMessage *message,
    const SceNpActivityStatusActionUri *actionUri,
    void *option
);
```

### Arguments

<i>message</i>	Status message. Required (IN).
<i>actionUri</i>	Status action link URI. Optional. When not needed, specify NULL (IN).
<i>option</i>	Option for future extension. Always specify NULL (IN).

### Return Values

0 is returned for normal completion.

Returns a 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_NP_ACTIVITY_ERROR_NOT_INITIALIZED	0x80552302	Library has not been initialized
SCE_NP_ACTIVITY_ERROR_INVALID_ARGUMENT	0x80552303	<i>message</i> string is empty, or a non-NULL value was specified for <i>option</i>
SCE_NP_ACTIVITY_ERROR_INVALID_URI_SCHEME	0x80552304	Action link URI scheme is invalid
SCE_NP_ACTIVITY_ERROR_INVALID_STATUS_MESSAGE	0x80552305	Status message is invalid (message contains more than 256 characters or more than 9 lines)
SCE_NP_ACTIVITY_ERROR_SIGNOUT	0x80552306	Status cannot be posted due to signed-out state * Does not occur when using the debug function
SCE_NP_ACTIVITY_ERROR_INTERNAL	0x80552307	Unexpected system error

## Description

---

This function posts status. It returns immediately and returns processing to the application. The actual posting of status is performed asynchronously by the system. Even though the return of this function is immediate in general, a certain delay may occur for the inter-process communication depending on the load status of the system.

Even if this function completes successfully, status is not necessarily posted to the activity server. If the device is not connected to the network, the status is stored in system software and will be posted after the network is connected. If the user signs out while the status is waiting for a delayed posting, the status will be discarded.

When this function is called in the signed out state, it returns `SCE_NP_ACTIVITY_ERROR_SIGNOUT`, which can be ignored as this is part of the normal operation.

The maximum length of *message* is 256 UTF-8 characters. A string of at least 1 character must be set. The complete status text can contain a maximum of 9 lines (the maximum number for linefeed codes is 8). The text up to the first new line (0x0A) is displayed as a summary in the status list. The remaining 8 lines are displayed together with the summary when the detailed status is displayed.

NULL can be set as optional information for *actionUri*. In this case, a status with no action link URI will be posted.

For information about schemes that can be set for an action link URI, refer to the "Activity System Overview" document. If any other scheme is passed, `SCE_NP_ACTIVITY_ERROR_INVALID_URI_SCHEME` will be returned.

## Notes

---

When this function is called while using the debug function, status will be saved to the local database of the development terminal, and will not be posted on the activity server. Also, it will terminate normally even if in signed-out state, without returning `SCE_NP_ACTIVITY_ERROR_SIGNOUT`. For the debug function, refer to the "NP Library Overview" document.

## Examples

---

```
int ret;
SceNpActivityStatusMessage message;
SceNpActivityStatusActionUri actionUri;

// Make sure appropriate values are stored in message and actionUri

ret = sceNpActivityPostStatus (
    &message,
    &actionUri,
    NULL);
if (ret < 0) {
    // Error handling
}
```

## See Also

---

`sceNpActivityInit()`, `sceNpActivityTerm()`



SCE CONFIDENTIAL

# sceNpActivityPostAppStartupStatus

## Post application startup status

### Definition

```
#include <np.h>
int sceNpActivityPostAppStartupStatus (
    const SceNpActivityStatusMessage *message,
    const SceNpActivityStatusAppStartupParam *param,
    void *option
);
```

### Arguments

*message* Status message. Required (IN).  
*param* Parameters of the action link for application startup. Required (IN).  
*option* Option for future extension. Always specify NULL (IN).

### Return Values

0 is returned for normal completion.

Returns a 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_NP_ACTIVITY_ERROR_NOT_INITIALIZED	0x80552302	Library has not been initialized
SCE_NP_ACTIVITY_ERROR_INVALID_ARGUMENT	0x80552303	<i>message</i> string is empty, or a non-NULL value was specified for <i>option</i>
SCE_NP_ACTIVITY_ERROR_INVALID_STATUS_MESSAGE	0x80552305	Status message is invalid (message contains more than 256 characters or more than 9 lines)
SCE_NP_ACTIVITY_ERROR_SIGNOUT	0x80552306	Status cannot be posted due to signed-out state * Does not occur when using the debug function
SCE_NP_ACTIVITY_ERROR_INTERNAL	0x80552307	Unexpected system error
SCE_NP_ACTIVITY_ERROR_INVALID_APP_VER	0x80552308	<i>param-&gt;appVersion</i> value is invalid. Set a three to four digit number without a period for the application version (APP_VER).
SCE_NP_ACTIVITY_ERROR_INVALID_APP_PARAM	0x80552309	<i>param-&gt;escapedParam</i> value is invalid. Check if URI Escape processing is correctly carried out

## Description

This function posts a status with an action link for application startup. An action link URI will be internally generated by specifying parameters required for application startup. Excluding the post processing of generating an action link, the processing of this function is the same as that of `sceNpActivityPostStatus()`.

For *param*, set the parameters required for application startup.

When setting a string to *param->escapedParam*, it will be possible to carry out application startup with arguments specified, upon executing the action link. The application will parse application event parameters using a function of the application utility library. For details on the application utility library, refer to the "Application Utility Overview" document.

## Notes

For *param->escapedParam*, specify the string for which URI Escape processing has been carried out. When the started application uses a function of the application utility library to parse application event parameters, the string for which URI Unescape processing has been carried out will be obtained.

## Examples

```
int ret;
SceNpActivityStatusMessage message;
SceNpActivityStatusAppStartupParam appParam;

// Initialize structure
memset(&message, 0x00, sizeof(message));
memset(&appParam, 0x00, sizeof(appParam));

// Make sure appropriate values are stored in message and appParam

// URI Escape processing
// Assuming application startup argument string is stored to pAppParam
ret = sceHttpUriEscape (
    appParam.escapedParam,
    NULL,
    SCE_NP_ACTIVITY_APP_PARAM_MAX_SIZE - 1,
    pAppParam,
    NULL);
if (ret < 0) {
    // Error handling
}

ret = sceNpActivityPostAppStartupStatus (
    &message,
    &appParam,
    NULL);
if (ret < 0) {
    // Error handling
}
```

## See Also

`sceNpActivityInit()`, `sceNpActivityTerm()`, `sceNpActivityPostStatus()`

# Structures

000004892117

---

# SceNpActivityStatusMessage

---

## Status message structure

### Definition

---

```
#include <np/np_activity.h>
typedef struct SceNpActivityStatusMessage {
    char data[SCE_NP_ACTIVITY_STATUS_MESSAGE_MAX_SIZE];
} SceNpActivityStatusMessage;
```

### Members

---

*data*            Array for storing message string (UTF-8). Includes NULL terminator.

### Description

---

This structure represents a status message.

The complete status text can contain a maximum of 9 lines. The text up to the first new line (0x0A) is displayed as a summary in the status list. The remaining 8 lines are displayed together with the summary when the detailed status is displayed.

### See Also

---

`sceNpActivityPostStatus()`

SCE CONFIDENTIAL

---

# SceNpActivityStatusActionUri

---

Status action link URI structure

## Definition

---

```
#include <np/np_activity.h>
typedef struct SceNpActivityStatusActionUri {
    char data[SCE_NP_ACTIVITY_STATUS_ACTION_URI_MAX_SIZE];
} SceNpActivityStatusActionUri;
```

## Members

---

*data*      Array for storing action link URI (ASCII). Includes NULL terminator.

## Description

---

This structure represents a status action link URI.

The action link URI is optional. If none is needed, specify NULL for the action link URI argument of `sceNpActivityPostStatus()`.

## See Also

---

`sceNpActivityPostStatus()`

# SceNpActivityStatusAppStartupParam

Parameters of the action link for application startup

## Definition

```
#include <np/np_activity.h>
typedef struct SceNpActivityStatusAppStartupParam{
    SceUInt32 appVersion;
    char escapedParam[SCE_NP_ACTIVITY_APP_PARAM_MAX_SIZE];
    SceUInt8 reserved[3];
} SceNpActivityStatusAppStartupParam;
```

## Members

<i>appVersion</i>	Application version (APP_VER) required for execution Set a three to four digit number without a period.
<i>escapedParam</i>	Application startup arguments including the NULL terminator
<i>reserved</i>	Reserved area

## Description

This structure represents the parameters of the action link for application startup to be specified when calling `sceNpActivityPostAppStartupStatus()`.

For *appVersion*, specify the application version (APP\_VER) required for application startup. Set a three to four digit number without the period. For example, if the required application version is "01.10", set 110.

Upon application startup, if the application version of the installed application is lower than the value of *appVersion*, a patch check is carried out and the application startup with arguments specified is not performed until a patch is installed.

When `SCE_NP_ACTIVITY_APP_VER_NOT_REQUIRED(0)` is specified, the required application version will not be checked for.

For *escapedParam*, specify the argument string for application startup. Specify a string for which URI Escape processing has been carried out in advance with `sceHttpUriEscape()`. When a string of length 0 is specified, an application startup link without startup arguments will be posted.

## See Also

`sceNpActivityPostAppStartupStatus()`

## Constants

000004892117

SCE CONFIDENTIAL

---

# SCE\_NP\_ACTIVITY\_STATUS\_MESSAGE\_MAX\_NUM\_CHARACTERS

---

---

Maximum number of characters in a status message

## Definition

---

```
#include <np.h>
#define SCE_NP_ACTIVITY_STATUS_MESSAGE_MAX_NUM_CHARACTERS 256
```

## Description

---

This is the maximum number of characters in a status message (UTF-8). It is not the maximum number of bytes.

## See Also

---

sceNpActivityPostStatus()



SCE CONFIDENTIAL

---

# **SCE\_NP\_ACTIVITY\_STATUS\_MESSAGE\_MAX\_NUM\_LINEFEEDS**

---

---

Maximum number of linefeed codes in a status message

## **Definition**

---

```
#include <np.h>
#define SCE_NP_ACTIVITY_STATUS_MESSAGE_MAX_NUM_LINEFEEDS 8
```

## **Description**

---

This is the maximum number of linefeed codes in a status message.

## **See Also**

---

sceNpActivityPostStatus()

SCE CONFIDENTIAL

---

## **SCE\_NP\_ACTIVITY\_STATUS\_MESSAGE\_MAX\_SIZE**

---

Maximum number of bytes in a status message

### **Definition**

---

```
#include <np.h>
#define SCE_NP_ACTIVITY_STATUS_MESSAGE_MAX_SIZE 1025
```

### **Description**

---

This is the maximum number of bytes in a status message including the NULL terminator. One UTF-8 character requires 1 to 4 bytes. This constant defines the maximum number of bytes, not the maximum number of characters. An error will be returned if a string is posted that exceeds the maximum number of characters even if the string does not exceed the maximum number of bytes.

### **See Also**

---

```
sceNpActivityPostStatus()
```

SCE CONFIDENTIAL

---

# SCE\_NP\_ACTIVITY\_STATUS\_ACTION\_URI\_MAX\_SIZE

---

---

Maximum number of bytes in a status action link URI

## Definition

---

```
#include <np.h>
#define SCE_NP_ACTIVITY_STATUS_ACTION_URI_MAX_SIZE 1025
```

## Description

---

This is the maximum number of bytes in the status action link URI (ASCII) including the NULL terminator.

## See Also

---

sceNpActivityPostStatus()

SCE CONFIDENTIAL

---

## **SCE\_NP\_ACTIVITY\_APP\_PARAM\_MAX\_SIZE**

---

Maximum byte size of the application startup argument string

### **Definition**

---

```
#include <np.h>
#define SCE_NP_ACTIVITY_APP_PARAM_MAX_SIZE 897
```

### **Description**

---

This is the maximum byte size for the application startup argument string. This byte size includes the NULL terminator.

### **See Also**

---

`sceNpActivityPostAppStartupStatus()`

SCE CONFIDENTIAL

---

## **SCE\_NP\_ACTIVITY\_APP\_VER\_NOT\_REQUIRED**

---

Definition to make the required application version "not set"

### **Definition**

---

```
#include <np.h>
#define SCE_NP_ACTIVITY_APP_VER_NOT_REQUIRED 0
```

### **Description**

---

This definition is used to specify "not set" as the application version (APP\_VER) required for executing application startup when posting an application startup status.

### **See Also**

---

sceNpActivityPostAppStartupStatus()

## Return Codes

List of return codes returned by the NP Activity library

### Definition

Value	(Number)	Description
SCE_NP_ACTIVITY_ERROR_ALREADY_INITIALIZED	0x80552301	An attempt was made to reinitialize the library after it was already initialized
SCE_NP_ACTIVITY_ERROR_NOT_INITIALIZED	0x80552302	The library has not been initialized
SCE_NP_ACTIVITY_ERROR_INVALID_ARGUMENT	0x80552303	An argument is invalid
SCE_NP_ACTIVITY_ERROR_INVALID_URI_SCHEME	0x80552304	The action link URI scheme is invalid
SCE_NP_ACTIVITY_ERROR_INVALID_STATUS_MESSAGE	0x80552305	The status string is invalid
SCE_NP_ACTIVITY_ERROR_SIGNOUT	0x80552306	Status cannot be posted due to signed-out state
SCE_NP_ACTIVITY_ERROR_INTERNAL	0x80552307	Unexpected system error
SCE_NP_ACTIVITY_ERROR_INVALID_APP_VER	0x80552308	The value of the application version (APP_VER) is invalid. Set a three to four digit number without a period for the application version.
SCE_NP_ACTIVITY_ERROR_INVALID_APP_PARAM	0x80552309	The application startup argument string is invalid. Check if URI Escape processing is correctly carried out.