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1

Introduction

This document gives a brief description of the Linux SDK for UPnP Devices API. Section 1 covers the license under which the SDK is distributed. Section 2 talks about the callback functions used in many parts of the API. Finally, section 3 details the structures and functions that comprise the API.

The Linux SDK for UPnP Devices version 1.2 supports the following platforms:

- Linux* running on an Intel Architecture processor
- · Linux running on an Intel StrongARM or XScale processor
- * Other brands and names are the property of their respective owners.

2 License

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4.1.19	UPNP_E_SOCKET_BIND [-203]	13
4.1.20	UPNP_E_SOCKET_CONNECT [-204]	13
4.1.21	UPNP_E	

__ 4.1.13 ____

 $\mathsf{UPNP}_{-}\mathsf{E}_{-}$

4	The API	

4.1.23

The Up

A UpnpSendActionAsync call completed.

Received by a device when a control point issues a control request.

Received by a device when a control point issues a control request. The

___ 4.2.3.6 __

UPNP_

_ 4.2.3.14 ____

UPNP_EVENT_AUTORENEWAL_FAILED

The auto-renewal of a client subscription failed.

_ 4.2.5.4 _____

UPNP_S_SERVICE

__ 4.2.7.10 _____

${\sf IXML_Document}^*~\textbf{SoapHeader}$

The DOM document containing the information from the the SOAP header.

The DOM document containing the information from the the SOAP header.

___ 4.2.8 _____

struct Upnp_State_

4	The API	

4.2.8.2

__ 4.2.10.1 ___

__ 4.2.11.4 ___

_ 4.2.14 ___

$struct \ \ UpnpVirtual Dir Callbacks$

The UpnpVirtualDirCallbacks structure contains the pointers to file-related callback functions a device application can register to virtualize URLs.

Members

4.2.14.1 int

(*get_info) (IN const char* filename, OUT struct File_

___ 4.3.5 ___

 $\mathsf{EXPORT}_{\scriptscriptstyle{-}}$

4	The API

4.3.7

Return Value:

Parameters: descriptionType The type of the description document.

Treated as a URL, file name or memory bu er description

depending on description type.

The length of memory bu er if passing a description in a bu er, otherwise it is ignored. bufferLen

If nonzero, URLBase of description document is confi g_baseURL

configured and the description is served using the

internal web server.

Fun Pointer to the callback function for receiving

Parameters:	contentLength	The maximum permissible content length for in coming SOAP actions, in bytes.
4.4		

	UpnpGetServiceVarStatus (IN UpnpClient_Handle Hnd,	
	IN const char* ActionURL,	
	IN const char* VarName,	
	OUT DOMString* StVarVal)	
	UpnpGetServiceVarStatus queries the	
	state of a state variable of a service on an-	
	other device.	54
4.5.2	EXPORT_SPEC int	
	UppnGetServiceVarStatusAsync (IN UppnClient Handle	

UpnpSendActionExAsync

Return Value: [int] An integer representing one of the following:

• UPNP_E_SUCCESS

Return Value: [int] An integer representing one of the following:

 \bullet UPNP_E_SUCCESS: The operation completed

Return Value: [int] An integer representing one of the following:

• UPNP

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EXPORT_SPEC int UpnpSendActionExAsync (IN UpnpClient_

UpnpAcceptSubscription accepts a subscription request and sends out the current state of the eventable variables for a service.

UpnpAcceptSubscription accepts a subscription request and sends out the current state of the eventable variables for a service. The device application should call this function when it receives a UPNP_EVENT_SUBSCRIPTION_REQUEST

a DOM document for the variables to event rather than an array of strings. This function is sychronous and generates no callbacks.

Return Value: [int]

Return Value: [int] An integer representing one of the following:

• UPNP

UpnpRenewSubscriptionAsync renews a subscription that is about to expire, generating a callback when the operation is complete.

Note that many of the error codes for this function are returned in the <code>Upnp_Event_Subscribe</code> structure. In those cases, the function returns <code>UPNP_E_SUCCESS</code> and the appropriate error code will be in the <code>Upnp_Event_Subscribe.ErrCode</code> field in the <code>Event</code> structure passed to the callback.

Parameters: Hnd The handle of the control point that is renewing

Return Value: [int] An integer representing one of the following:

.

Return Value: [int] An integer representing one of the following:

• UPNP_

UpnpCloseHttpPost

UpnpOpenHttpGetProxy

___ 4.7.4 _____

 $\mathsf{EXPORT}_{\scriptscriptstyle{-}}$

Parameters:

url handl e The URL in which to send the POST request. A pointer in which to store the handle for this

Return Value:

[int] An integer representing one of the following:

- UPNP_E_SUCCESS: The operation completed successfully.
- UPNP_E_I NVALI D_PARAM: RelURL is NULL.
- UPNP_E_I NVALID_URL: The BaseURL / Re-IURL combination does not form a valid URL.
- UPNP_E_OUTOF_MEMORY: Insu cient resources exist to complete this operation.