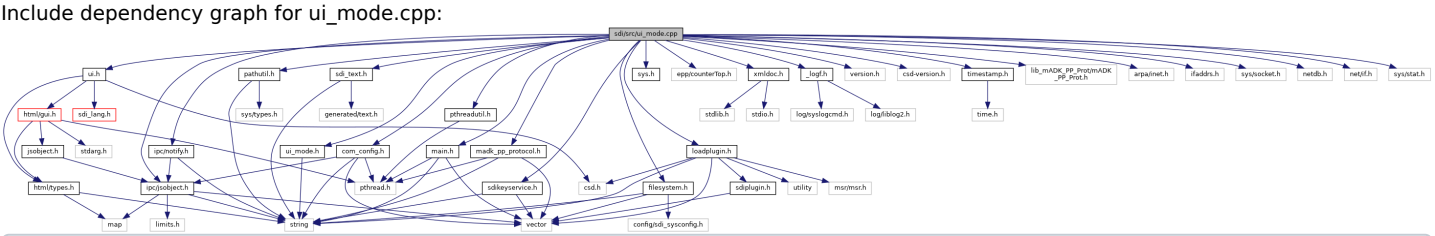
ui_mode.cpp File Reference

```
#include "ui_mode.h"

#include "com_config.h"

#include "sys.h"

#include "ui.h"

#include "epp/counterTop.h"

#include "madk_pp_protocol.h"

#include "ipc/jsobject.h"

#include "ipc/notify.h"

#include "xmldoc.h"

#include "pathutil.h"

#include "pthreadutil.h"

#include "filesystem.h"

#include "_logf.h"

#include "main.h"

#include "version.h"

#include "csd-version.h"

#include "sdikeyservice.h"

#include "loadplugin.h"

#include "sdi_text.h"

#include "timestamp.h"

#include "lib_mADK_PP_Prot/mADK_PP_Prot.h"

 #include <arpa/inet.h>

#include <ifaddrs.h>

 #include <sys/socket.h>

#include <netdb.h>
```

```
#include <net/if.h>
```

```
#include <sys/stat.h>
```

Include dependency graph for ui_mode.cpp:



Data Structures

struct	ComIfTable
struct	BtCom1aContext
struct	IfInfo

Macros

#define	FALL_THROUGH
#define	BT_PAIRING_TIMEOUT 120

Enumerations

enum	CCPInterfaces {
	
	CCP_INTERFACE_ETH0 = 0,
	CCP_INTERFACE_ETH1 = 1,
	CCP_INTERFACE_WLAN0 = 2,
	CCP_INTERFACE_PPP_DIAL = 3,
	
	CCP_INTERFACE_GPRS0 = 4,
	CCP_INTERFACE_ETH_BT = 5,
	CCP_INTERFACE_PPP_BT = 6,
	CCP_INTERFACE_ETH_USB_GADGET = 7,
	
	CCP_INTERFACE_ETH_USB1_GADGET = 8,
	CCP_INTERFACE_ETH_USB_HOST_GADGET = 9,
	CCP_INTERFACE_PPP_USBD = 10,
	CCP_INTERFACE_BRIDGE = 11,
	
	CCP_INTERFACE_SERIAL_USBD = 12,
	CCP_INTERFACE_ETH_USB0 = 13,
	CCP_INTERFACE_BT = 14
	
	}

enum	ProfileSubType {
	
	PST_NONE = 0,
	PST_INTERNAL_ANDROID = 1,
	PST_COM1A_BT_USB = 2,
	PST_COM1A_USB = 3,
	
	PST_EPP_TLS = 4
	
	}

enum	DisplayConnectStatus {
	
	DCS_None = 0,
	DCS_ComWaitOpen = 1,
	DCS_ComOpened = 2,
	DCS_ComConnected = 4,
	
	DCS_ComFailed = 8,
	DCS_All = (DCS_ComWaitOpen | DCS_ComOpened |
	DCS_ComConnected | DCS_ComFailed)
	
	}

enum	BTCom1AOpts { BTCom1A_None = 0, BTCom1A_Headless = 1, BTCom1A_Reconnect = 2 }

enum	BTPairingState {
	
	BT_PairingStopped = 0,
	BT_PairingStarted,
	BT_ConfirmPIN,
	BT_ConfirmPINDone,
	
	BT_PairingSuccess,
	BT_PairingFailed,
	BT_PairingTimeout,
	BT_PairingCancelled
	
	}

Functions

void	show_idle_connect_status ()
void *	io_menu_invoker (void *data)
void	init_ui_mode ()
void *	ccp_thread_func (void *data)

bool	btStartPairing (unsigned discovery_tout_sec, enum com_ErrorCodes *com_errno=0, bool ble=false)
void *	com1a_bt_thread_func (void *data)
bool	select_com_profile (int comInterfaces, char **ComFileName)
void	reset_com_profile ()
bool	multi_connection_support_enabled ()
bool	comcfg_file_valid (const string &comcfg_file)
void	protocol_status_ui_update (const struct ProtStatus *status)

Variables

const struct ComIfTable	comIfTable []
enum CCPInterfaces	ccp_if_type
enum BTPairingState	bt_pairing_state = BT_PairingStopped
enum com_ErrorCodes	bt_pairing_errno

Macro Definition Documentation

◆ BT_PAIRING_TIMEOUT

```
#define BT_PAIRING_TIMEOUT   120
```

◆ FALL_THROUGH

```
#define FALL_THROUGH
```

Enumeration Type Documentation

◆ BTCom1AOpts

enum BTCom1AOpts

Enumerator

BTCom1A_None	no option
BTCom1A_Headless	don't display wait screen to abort BT connnect
BTCom1A_Reconnect	force reconnect, even if device was already connected

◆ BTPairingState

enum BTPairingState

Enumerator	
BT_PairingStopped	
BT_PairingStarted	
BT_ConfirmPIN	
BT_ConfirmPINDone	
BT_PairingSuccess	
BT_PairingFailed	
BT_PairingTimeout	
BT_PairingCancelled	

◆ CCPInterfaces

enum CCPInterfaces

Enumerator	
CCP_INTERFACE_ETH0	
CCP_INTERFACE_ETH1	
CCP_INTERFACE_WLAN0	
CCP_INTERFACE_PPP_DIAL	
CCP_INTERFACE_GPRS0	

CCP_INTERFACE_ETH_BT	
CCP_INTERFACE_PPP_BT	
CCP_INTERFACE_ETH_USB_GADGET	
CCP_INTERFACE_ETH_USB1_GADGET	
CCP_INTERFACE_ETH_USB_HOST_GADGET	
CCP_INTERFACE_PPP_USBD	
CCP_INTERFACE_BRIDGE	
CCP_INTERFACE_SERIAL_USBD	
CCP_INTERFACE_ETH_USB0	
CCP_INTERFACE_BT	

◆ DisplayConnectStatus

enum DisplayConnectStatus

Enumerator	
DCS_None	status display disabled for all, even for ComInterrupt, ComClose
DCS_ComWaitOpen	show display updates for status ComWaitOpen
DCS_ComOpened	show display updates for status ComOpened
DCS_ComConnected	show display updates for status DCS_ComConnected
DCS_ComFailed	show suppress display updates for status ComFailed
DCS_All	

◆ ProfileSubType

enum ProfileSubType

Enumerator	
PST_NONE	no profile subtype
PST_INTERNAL_ANDROID	allow this profile for Engage devices with internal Android only, e.g. CM5, M440, M424
PST_COM1A_BT_USB	option to mark the profile to be used for COM1A (BT-SPP client/server and USB Host). Profile makred with PST_COM1A_BT_USB will skip profile with PST_COM1A_USB, which must be the next profile entry in table !!!
PST_COM1A_USB	option to mark the profile to be used for COM1A (USB host only)
PST_EPP_TLS	this profile is used for an external PINPad (EPP) using TLS over USB

Function Documentation

◆ btStartPairing()

bool btStartPairing	(	unsigned	*discovery_tout_sec*,
		enum com_ErrorCodes *	*com_errno* = `0`,
		bool	*ble* = `false`
	)		

◆ ccp_thread_func()

void* ccp_thread_func	(	void *	*data*	)	

◆ com1a_bt_thread_func()

void* com1a_bt_thread_func	(	void *	*data*	)	

◆ comcfg_file_valid()

bool comcfg_file_valid	(	const string &	*comcfg_file*	)	

◆ init_ui_mode()

void init_ui_mode	(		)	

This module contains implementation, which is additionally required to support standard UI mode. Most of these implementations are UI related (e.g. to provide COM menus, idlescreen etc.) SDI variants using this module are compiled without define HEADLESS to add UI standard mode, in addition to headless mode. Finally, program parameter –headless will switch the SDI mode at startup. Recently supported platforms with UI support are: VOS/VOS2/VOS3 Note: This module also contains functions invoked for headless mode on these platforms, too. This is to cover the same behavior as in UI mode. (e.g. selection of a COM profile by COM_IF.CFG (COM settings file). function called once at startup to initialize UI mode of SDI

◆ io_menu_invoker()

void* io_menu_invoker	(	void *	*data*	)	

◆ multi_connection_support_enabled()

bool multi_connection_support_enabled	(		)	

For VOS/VOS2/VOS3 devices this function returns true, if SDI protocol with multi-connection support (using ADKIPC) was enabled by COM settings file. For other platforms this function just returns false.

Returns

true, if the IPC variant of the SDI protocol library shall be used on VOS/VOS2/VOS3, else false (e.g. disabled by configuration or wrong platform).

◆ protocol_status_ui_update()

void protocol_status_ui_update	(	const struct ProtStatus *	*status*	)	

◆ reset_com_profile()

void reset_com_profile	(		)	

Function to reset selected COM profile and clear current COM configuration. This will force reading of COM configuration and selection of COM profile with next call of select_com_profile().

◆ select_com_profile()

bool select_com_profile	(	int	*comInterfaces*,
		char **	*ComFileName*
	)		

Function invoked by SDI protocol to select and specify the used COM profile. The function passes the available COM interfaces in parameter *comInterfaces* as bitmask with values of ADKCOM enum com_FeatureMask1, so that SDI COM settings menu is displayed with corresponding entries with configuration options. With first invocation at startup with default settings, SDI shows up a COM setting wizard (in standard UI mode) from which the user is able to select the COM profile to use. Once the profile and settings are applied the function knows the stored settings for further SDI startups. On success, the function returns full path of the COM profile assigned to pointer of parameter *ComFileName*. The supplied buffer of this parameter is static, thus, the caller (SDI protocol) doen't need to care about to release resources of it.

Parameters

[in]	comInterfaces	available COM interfaces, bitmask of ADKCOM enum com_FeatureMask1
[out]	ComFileName	full path to COM profile to use

Returns

true on success, else false on error

◆ show_idle_connect_status()

void show_idle_connect_status	(		)	

function to read the connect status from the SDI protocol and to display with the idlescreen. This is usually triggered by the running SDI protocol via callback, but in special situations this is required to be triggered by SDI (e.g. in EPP mode during SDI startup).

Variable Documentation

◆ bt_pairing_errno

enum com_ErrorCodes bt_pairing_errno

◆ bt_pairing_state

enum BTPairingState bt_pairing_state = BT_PairingStopped

◆ ccp_if_type

enum CCPInterfaces ccp_if_type

◆ comIfTable

const struct ComIfTable comIfTable[]

Initial value:

```
={ {COM_LAN_1, PST_NONE, "ETH (LAN)", COM_PREFIX CONNECT_LAN_FILE, eth_menu }, {COM_BLUETOOTH, PST_NONE, "BT
PAN", COM_PREFIX CONNECT_BT_FILE, bt_pan_menu, }, {COM_WIFI, PST_NONE, "WiFi", COM_PREFIX CONNECT_WIFI_FILE,
wifi_menu, }, {COM_SERIAL_USBD, PST_NONE, "USB (serial)", COM_PREFIX CONNECT_USB_SER_FILE, 0, }, {COM_LAN_USBD,
PST_NONE, "USB (LAN)", COM_PREFIX CONNECT_USB_LAN_FILE, usb_eth_menu, }, {COM_SERIAL_COM1A | COM_BLUETOOTH,
PST_COM1A_BT_USB, "COM1A", COM_PREFIX CONNECT_COM1A_FILE, com1a_menu }, {COM_SERIAL_COM1A, PST_COM1A_USB, "COM1A
(USB)", COM_PREFIX CONNECT_COM1A_FILE, 0, }, {COM_BLE, PST_NONE, "BLE", COM_PREFIX CONNECT_BLE_FILE, ble_menu,
}, {COM_SERIAL_1, PST_NONE, "COM1", COM_PREFIX CONNECT_COM1_FILE, 0, }, {0, PST_NONE, "ANY (LAN)", COM_PREFIX
CONNECT_ANY_FILE, eth_menu, }, {0, PST_NONE, "LOCALHOST", COM_PREFIX CONNECT_LO_FILE, 0, }, {0,
PST_INTERNAL_ANDROID, "ANDROID (intern)", COM_PREFIX CONNECT_ANDROID_FILE, 0, }, {0, PST_EPP_TLS, "" ,
EPP_PREFIX CONNECT_EPP_TLS, 0, }}
```