Fingerprint Linux SDK Help Doc

2022-04-22

I:Introduction

1. **Name:** libdevicesdk

2. **Develop environment:**

   Linux Ubuntu 16.04 X86_64
   Gcc version 5.4.0

3. **Lib files:**

   libdevicesdk.so

   fingerprint.h

II:Constants & functions

1. Constant definition

Name	Value	Description
Return value		
RET_SUCCESS	0	Successful
RET_ERROR_PORT	-1	Port error
RET_ERROR_READ	-2	Write error
RET_ERROR_WRITE	-3	Read error
RET_ERROR_PARAM	-4	No permission
RET_ERROR_MEMERY	-5	Invalid parameter
RET_ERROR_ERRDATA	-6	Wrong data
RET_ERROR_UNKOWN	-999	Unknown error
RET_ERROR_FAIL	-201	failed
RET_ERROR_FULL	-202	storage is full
RET_ERROR_NOUSER	-203	User does not exist
RET_ERROR_USER_EXIST	-204	User already exists
RET_ERROR_TIMEOUT	-205	Image acquisition timeout
RET_ERROR_BREAK	-206	Command terminated
RET_ERROR_IMAGEFAIL	-207	Image failute

2. Common functions

1).FP_SDKVersion

`int FP_SDKVersion()`

Description: Read SDK version info
Parameter: NULL
Return: SDK version, e.g 100

Note: NULL

2).FP_Init

`int FP_Init()`

Description: Initializes the fingerprint
Parameter: NULL
Return: See <Return value>

Note: It will open node/dev/ttyUSB0, must ensure that the current user has read and write access to the node

3).FP_UnInit

`int FP_UnInit()`

Description: Disconnect and fingerprint
Parameter: NULL
Return: See <Return value>

Note:

4).FP_Version

`int FP_Version(unsigned char *psz, int nLen)`

Description: Read the device firmware version info

Parameter:

unsigned char *psz: Pointer to a buffer that receives the data.

int nLen: The length of the data to be received, It must be greater than 128.

Return: See <Return value>

Note: NULL

5).FP_UserCount

int FP_UserCount()

Description: Get the number of registered users in the fingerprint.

Parameter: NULL

Return: >= 0: Number of registered users.

    < 0: See <Return value>

Note:

6).FP_DelUser

int FP_DelUser()

Description: Delete all fingerprints.

Parameter: NULL

Return: See <Return value>

Note:

7).FP_CheckUser

int FP_CheckUser()

Description: Compare the collected fingerprints with all users.

Parameter: NULL

Return: > 0:user id.
         = 0:Comparison is unsuccessful.
         < 0:See <Return value>

Note:

8).FP_RegUser

int FP_RegUser(unsigned short nStep)

Description: User registration. Need three times fingerprint.
Parameter:

unsigned short nStep: Fingerprint of the steps:

nStep==1, Fingerprint for the first time.
nStep==2, The second fingerprint.
nStep==3, The third fingerprinted.
Return: See <Return value>

Note: NULL

9).FP_GetFPImg

int FP_GetFPImg(char *filename)

Description: Collect fingerprint image and save it to file.
Parameter:

char *filename: the file path. Support JPG or BMP suffix.

Return: See <Return value>

Note: NULL