Installation Guide

1. Overview

1-1. This driver and SDK is built under Fedora 7.

(kernel version is 2.6.21-1.3194.fc7)

1-2. Wison's software package includes

File Name	Description
wiscms12.ko	driver kernel module for CMOS1 (OS100/OR100)
wiscms2.ko	driver kernel module for CMOS2 (OS200/OR200)
WIS_API.a	fingerprint SDK
WIS_Api.h	head file for fingerprint SDK
main.c	demo source code
demo	demo program
Makefile	make file for this demo program
setup.sh	a shell program to install fingerprint device driver
InstallationGuide.pdf	this docuement

2. Install USB driver

2-1. Become root

2-2. Run the shell program, and everything will be installed automatically.

eg. linux: ~# sh setup.sh

Special Note: in setup.sh file

Line 1: cp ./wiscms12.ko /lib/modules/2.6.21-1.3194.fc7/kernel/drivers/video

Line 2: cp ./wiscms2.ko /lib/modules/2.6.21-1.3194.fc7/kernel/drivers/video

Where,

"2.6.21-1.3194.fc7" is the kernel version. If it is different to yours, you have to modify manually to match with your system.

2-3. You have to define as below in main.c to use different optical sensor.

```
#define   _SENSOR_TYPE   CMOS          //for OS100
or
#define   _SENSOR_TYPE   CMOS2         //for OS200
```

3. Demo Program manual

3-1. main menu list

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:
```

3-2. Diagnose

Diagnose if any finger pressed on the optical device.

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:1
```

Device is idle without finger on it.

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:1


Diagnose is OK!!
```

Device is idle with finger on it.

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:1


Diagnose is NG!!
```

3-3. Snap

Snap a fingerprint image and saved as bmp format.

1. Diagnose	2. Snap
3. Enroll	4. Verify
5. Exit	
Please select an item and press ENTER:2	

Snap with a finger on device.

1. Diagnose	2. Snap
3. Enroll	4. Verify
5. Exit	
Please select an item and press ENTER:2	
Please put your finger…	
Capture OK. Image is saved to CapOK.bmp	

Snap without a finger on device.

1. Diagnose	2. Snap
3. Enroll	4. Verify
5. Exit	
Please select an item and press ENTER:2	
Please put your finger…	
Capture NG!! Image is saved to CapNG.bmp	

3-4. Enroll

Enroll a fingerprint and save the template as a dedicated name.

1. Diagnose	2. Snap
3. Enroll	4. Verify
5. Exit	
Please select an item and press ENTER:3	

Start enrolling, maximum 5 times press and remove finger is requested. The below successful enroll case only takes 3 times and the result is saved as "101wfp".

---

1. Diagnose   2. Snap

3. Enroll   4. Verify

5. Exit

Please select an item and press ENTER:3

Please put your finger…

Enroll Not yet
Please remove your finger…
Please remove your finger…
Please remove your finger…

Please put your finger…

Enroll Not yet
Please remove your finger…
Please remove your finger…
Please remove your finger…

Please put your finger…
Enroll OK, Quality : A

Please input the user name: 101

Enrollment is time out and return to main menu.

---

1. Diagnose   2. Snap

3. Enroll   4. Verify

5. Exit

Please select an item and press ENTER:3

Please put your finger…

Enrollment fails with no quality after 5 times trials and return to main menu.

1. Diagnose   2. Snap
3. Enroll   4. Verify
5. Exit

Please select an item and press ENTER:3

Please put your finger…

Enroll Not yet
Please remove your finger…
Please remove your finger…

Please put your finger…

Enroll Not yet
Please remove your finger…
Please remove your finger…

Please put your finger…

Enroll Not yet
Please remove your finger…
Please remove your finger…

Please put your finger…

Enroll Not yet
Please remove your finger…
Please remove your finger…

Please put your finger…

Enroll Not yet
Please remove your finger…
Please remove your finger…

3-5. Verify

Verify a dedicated fingerprint by name.

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:4
```

Enter the user name to verify and verify successfully.

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:4
Please input the user name:101


Please put your finger…
Verify OK, Score : 100
```

Enter the user name to verify and fail to verify

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:4
Please input the user name:101


Please put your finger…
Verify failed, Score : 0
```

3.6. Exit

Exit the demo program

```
1. Diagnose          2. Snap
3. Enroll            4. Verify
5. Exit


Please select an item and press ENTER:5
```