



# **BioBridge**

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FINGERTEC WORLDWIDE SDN BHD

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# BioBridge SDK Introduction

The BioBridge SDK manual shows developers how quickly and easily BioBridge SDK can be used as a mean of data communication between applications and devices.

## What's in this Guide

Followings are the descriptions of each of the chapter.

Chp2	BioBridge SDK Description describes the BioBridge SDK as a medium of data communication between applications and devices. It explains the features included in the BioBridge SDK.
Chp3	BioBridge SDK Installation describes the step-by-step process of installing the BioBridge SDK.
Chp4	BioBridge SDK Functions, describes each of the function available in the BioBridge SDK.
Chp5	FingerTec BioBridge SDK Event Functions Call, describes each of the event functions call available in the FingerTec BioBridge SDK.
Chp6	BioBridge SDK Attributes, describes each of the attribute available in BioBridge SDK
Chp7	BioBridge SDK Demo describes the demo application provided in the manual, source code and its implementation.
Chp8	BioBridge SDK Solutions and FAQs, describes the solution to use the functions within the BioBridge SDK.

## Requisite Knowledge

In order to use the guide successfully, you should be familiar with the following subjects:

- Ability to write code and implement Active X controls for Windows application.
- Fundamental skills to write window-based application using IDE languages such as Microsoft Visual Basic 6.0 and Borland Delphi 7.0.

## Support Resources

In addition to this guide, the following resources are provided for additional support:

- This BioBridge SDK manual is provided for developers. It has a list of descriptions and explanations of the SDK, the implementations and integrations of its functions into their existing applications or systems.
- E-mail support is available at [support@fingertec.com](mailto:support@fingertec.com)

## Your Feedback Requested

The information in this guide has been thoroughly reviewed and tested. If you find errors or have suggestions for future publications, contact [support@fingertec.com](mailto:support@fingertec.com)

# BioBridge SDK Description

The BioBridge SDK is an interface program for data communication with an offline fingerprint machine. It is a development kit that can be easily used to manage user information & fingerprints as well as to manage settings and configurations for access controls.

## Main features:

1. Download and upload user information and fingerprint templates

---
2. Set fingerprint access control machines

---
3. Configurations such as downloading general logs, disable or enable the machine operations and setting of the machine date and time.

---
4. Set user group for every individual and configure the user group based on their time zones.

---
5. Backup and restore data function.

---

# BioBridge SDK Installation

## Screenshots of BioBridge SDK Installation

Double click on the icon BioBridge SDK 2.1.035.exe. A window will pop up. Click Next to continue.

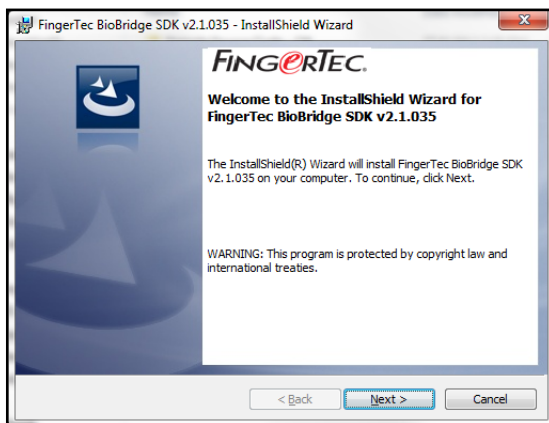


Figure 3-1

Please read the license agreement. You need to accept the license agreement to proceed to the installation process.



Figure 3-2



Enter your information in the fields provided.

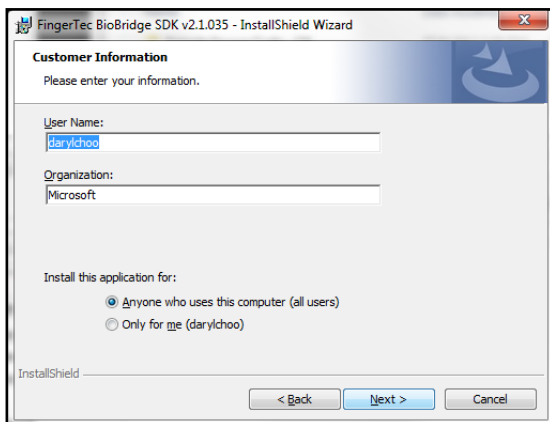


Figure 3-3

The installation process is currently running. Please wait until it is finished.

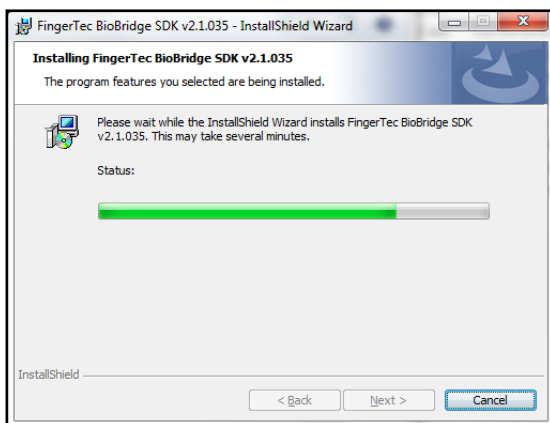


Figure 3-4

The installation of the BioBridge SDK is complete. Click Finish to exit the wizard.

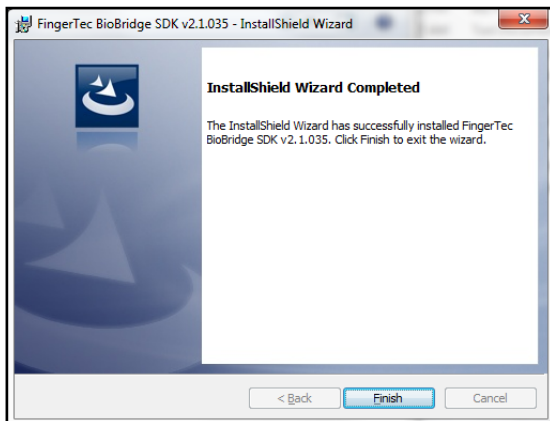


Figure 3-5

# BioBridge SDK Functions

## Device Control Management / Operation

### • Connect\_TCPIP()

[Method]

Connect\_TCPIP(string DeviceModel, int DeviceNo, string IpAddress, int PortNo, int CommKey)

[Feature]

Connect to a device using TCP/IP protocol.

[Parameter Declaration]

DeviceModel = Device model. (e.g. AC100, AC800. Attn: Please specify the device model AC100PLUS as 'AC100+' and AC800PLUS as 'AC800+' string to obtain the work code.)

DeviceNo = Device number. (e.g. 1, 2, 3)

IpAddress = Device IP addresses. (e.g. 192.168.1.0)

PortNo = Port number (default 4370)

CommKey = Communication key for authorised access, refer SetDeviceCommKey() (default 0)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim devModel, i, ipAdd, porNo, comm.

devModel = AC100

i = 1

ipAdd = "192.168.1.3"

portNo = 4370

comm = 0

If FingerTec.Connect\_TCPIP(devModel, i, ipAdd, portNo, comm) = 0 Then

    MsgBox ("Connected")

Else

    MsgBox ("Connection Failed")

End If

## • Connect\_COMM()

[Method]

Connect\_COM(string DeviceModel, int DeviceNo, int CommPort, int Baudrate, int CommKey)

[Feature]

Connect to a device using COMM port.

[Parameter Declaration]

DeviceModel = Device model. (e.g. AC100, AC800. Attn: Please specify the device model AC100PLUS as 'AC100+' and AC800PLUS as 'AC800+' string to obtain the work code.)

DeviceNo = Device number. (e.g. 1, 2, 3)

CommPort = COMM port number. (e.g. COM1, COM2)

Baudrate = Communication baudrate. (e.g. 115200)

CommKey = Communication key for authorised access, refer SetDeviceCommKey()(default 0)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim devModel, i, commPort, baudRate, comm

devModel = AC100

i = 1

commPort = 2

baudRate = 115200

comm = 0

If FingerTec.Connect\_COM(devModel, i, commPort, baudRate, comm) = 0 Then

    MsgBox ("Connected")

Else

    MsgBox ("Connection Failed")

End If

## • Connect\_USB()

[Method]

Connect\_USB (DeviceModel: String; DeviceNo: Integer; CommKey: Integer): Integer

[Feature]

Connect to reader with USB client connection

[Parameter Declaration]

DeviceModel: model name

DeviceNo: device number

CommKey: communication key (password)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String devModel = string.empty;
```

```
Int devNo = 0;
```

```
Int comm = 0;
```

```
if (FingerTec.Connect_USB(devModel, devNo, comm) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • Disconnect()

[Method]

Disconnect(void)

[Feature]

To disconnect from a connected device.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
If FingerTec.Disconnect() = 0 Then
```

```
    MsgBox ("Success")
```

```
Else
```

```
    MsgBox ("Failed")
```

```
End If
```

## • EnableDevice()

[Method]

EnableDevice(void)

[Feature]

Enable device operation.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
If FingerTec.EnableDevice() = 0 Then
    MsgBox ("Enabled")
Else
    MsgBox ("Failed")
End If
```

## • DisableDevice()

[Method]

DisableDevice(void)

[Feature]

To disable device operation.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
If FingerTec.DisableDevice() = 0 Then
    MsgBox ("Disabled")
Else
    MsgBox ("Failed")
End If
```

## • GetSDKVersion()

[Method]

GetSDKVersion(string\* SDKVersion, int Base)

[Feature]

Get device SDK version.

[Parameter Declaration]

SDKVersion = Get SDK version.

Base = Default value is 0.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim version As String Dim base As Integer

base = 0

If FingerTec.GetSDKVersion(version, base) = 0 Then

Label1.Caption = version

End If

## • GetFirmwareVersion()

[Method]

GetFirmwareVersion(string\* FirmwareVersion)

[Feature]

Get device firmware version.

[Parameter Declaration]

FirmwareVersion = Get firmware version.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim firmware As String

If FingerTec.GetFirmwareVersion(firmware) = 0 Then

Label1.Caption = firmware

End If

## • GetDeviceInfo()

[Method]

GetDeviceInfo(LONG Infold, LONG\* InfoValue)

[Feature]

To Get the Device Information like voice, threshold and etc.

[Parameter Declaration]

Infold = Information ID for the Device. Please refer to the different ID type.

InfoValue = Value of the Information ID

### 1. Date Format

Infold: 34

InfoValue: 0 -> YY-MM-DD

1 -> YY/MM/DD

2 -> YY.MM.DD

3 -> MM-DD-YY

4 -> MM/DD/YY

5 -> MM.DD.YY

6 -> DD-MM-YY

7 -> DD/MM/YY

9 -> YYYYMMDD

### 2. Voice

Infold: 16

InfoValue: 0 -> Off

1 -> On

### 3: 1:N Threshold

Infold: 23

InfoValue: 0 to 50

### 4. 1:1 Threshold

Infold: 25

InfoValue: 0 to 50

### 5. Only 1:1

Infold: 35

InfoValue: 0 -> No 1 -> Yes

### 6. Idle minute

Infold: 4

InfoValue: 0 to 999

#### 7. Idle action

Infold: 18

InfoValue: 87 -> Power Off

88 -> Sleep Mode

#### 8. Lock delay

Infold: 5

InfoValue: 0 to 254 ( x 200ms)

[Return Value]

Return 0 for success or -1 for fail

[Example]

If BioBridgeSDK.GetDeviceInfo(Infold, Infovalue) = 0 Then

    List1.AddItem (Infovalue)

End If

### • GetDeviceTime()

[Method]

GetDeviceTime(int\* Year, int\* Month, int\* Day, int\* Hour, int\* Minute, int\* Second)

[Feature]

Get device date and time.

[Parameter Declaration]

It includes machine year, month, day, hour, minute and second.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim yr As Long

Dim mth As Long

Dim day As Long

Dim hr As Long

Dim min As Long

Dim sec As Long

If FingerTec.GetDeviceTime(yr, mth, day, hr, min, sec) = 0 Then

    MsgBox ("Time:" + Str(hr) + ":" + Str(min) + ":" + Str(sec) + " Date:" + Str(day) + "/" + Str(mth) + "/" + Str(yr))

Else

    MsgBox ("Failed")

End If



## • SetDeviceTime()

[Method]

SetDeviceTime(int Year, int Month, int Day, int Hour, int Minute, int Second)

[Feature]

Set device date and time.

[Parameter Declaration]

It includes machine year (e.g. 2006, 2007), month (e.g. 6, 11), day (e.g. 5, 20), hour (e.g. 15, 22 (24-hour format)), minute (e.g. 35) and second (e.g. 10).

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim yr As Long
Dim mth As Long
Dim day As Long
Dim hr As Long
Dim min As Long
Dim sec As Long
```

```
yr = 2006
mth = 5
day = 21
hr = 14
min = 50
sec = 0
```

```
If FingerTec.SetDeviceTime(yr, mth, day, hr, min, sec) = 0 Then
```

```
    MsgBox ("Done")
```

```
Else
```

```
    MsgBox ("Failed")
```

```
End If
```

## • SetDeviceTimeLocal()

[Method]

SetDeviceTimeLocal(void)

[Feature]

Set device date and time using PC local time.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
If FingerTec.SetDeviceTimeLocal() = 0 Then
    MsgBox ("Done")
Else
    MsgBox ("Failed")
End If
```

## • SetDeviceCommKey()

[Method]

SetDeviceCommKey(int CommKey)

[Feature]

Set device communication key for authorised access.

[Parameter Declaration]

CommKey = Communication key. (e.g. 1, 2)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim comm As Long

comm = 0
If FingerTec.SetDeviceCommKey(comm) = 0 Then
    MsgBox ("Done")
Else
    MsgBox ("Failed")
End If
```

## • UnlockDoor()

[Method]

UnlockDoor(int Delay)

[Feature]

To unlock door.

[Parameter Declaration]

Delay = Delay time (x20ms)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim delay As Long

delay = 1000

If FingerTec.UnlockDoor(delay) = 0 Then

    MsgBox ("Success")

End If

## • UploadPicture()

[Method]

UploadPicture(FileName:String) : Integer

[Feature]

Upload advertisement picture (ad\_0.jpg, ad\_1.jpg, ad\_2.jpg, ad\_3.jpg, ad\_4.jpg, ad\_5.jpg, ad\_6.jpg, ad\_7.jpg, ad\_8.jpg)

[Parameter Declaration]

FileName = picture full path name, example: C:\ad\_0.jpg

You can only upload jpg and please make sure it is 320px X 210px and less than 30kb.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

String path = "F:\fingertec\ad\_0.jpg";

if (FingerTec.UploadPicture(path) == 0)

    MessageBox.Show("Success");

Else

    MessageBox.Show("Failed");

## • DeletePicture()

[Method]

DeletePicture(FileName:String):Integer

[Feature]

Delete advertisement picture. (ad\_0.jpg, ad\_1.jpg, ad\_2.jpg, ad\_3.jpg, ad\_4.jpg, ad\_5.jpg, ad\_6.jpg, ad\_7.jpg, ad\_8.jpg)

[Parameter Declaration]

FileName : picture full path name, example : C:\ad\_0.jpg

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String photo = "ad_0.jpg";
```

```
if (FingerTec.DeletePicture(photo) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • DownloadPicture()

[Method]

DownloadPicture(FileName: String, PathName: String): Integer

[Feature]

Download advertisement picture. (ad\_0.jpg, ad\_1.jpg, ad\_2.jpg, ad\_3.jpg, ad\_4.jpg, ad\_5.jpg, ad\_6.jpg, ad\_7.jpg, ad\_8.jpg)

[Parameter Declaration]

FileName : String - picture full path name, example : C:\ad\_0.jpg

PathName: String - the path name of the location the user photo will be saved, example: C:\download\

[Return Value]

Return 0 for success, or 1 for fail.

[Example]

```
String photo = "ad_0.jpg";
```

```
String path = "C:\\";
```

```
if (FingerTec.DownloadPicture(photo, path) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • GetPowerOff()

[Method]

GetPowerOff(Hour:integer, Minute integer):Integer

[Feature]

To get the reader power off time.

[Parameter Declaration]

Hour – The hour to power off terminal.

Minute – The minute to power off terminal.

[Return Value]

Return 0 for success, or –1 for fail.

[Example]

```
Int hour = 0;
```

```
Int min = 0;
```

```
if (FingerTec.GetPowerOff(ref hour, ref min) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • GetPowerOn()

[Method]

GetPowerOn(Hour:Integer, Minute:Integer):Integer

[Feature]

To get the reader power on time.

[Parameter Declaration]

Hour – The hour to wake up terminal.

Minute – The minute to wake up terminal.

[Return Value]

Return 0 for success, or 1 for fail.

[Example]

```
Int hour = 0;
```

```
Int min = 0;
```

```
if (FingerTec.GetPowerOn(ref hour, ref min) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • SetPowerOff()

[Method]

SetPowerOff(Hour:Integer, Minute:Integer):Integer

[Feature]

To set the reader power off time.

[Parameter Declaration]

Hour – The hour to power off terminal.

Minute – The minute power off terminal.

[Return Value]

Return 0 for success, or –1 for fail.

[Example]

```
Int hour = 10;
```

```
Int min = 20;
```

```
if (FingerTec.SetPowerOff(hour, min) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • SetPowerOn()

[Method]

SetPowerOn(Hour:Integer, Minute:Integer):Integer

[Feature]

To set the reader power on time.

[Parameter Declaration]

Hour – The hour to wake up terminal.

Minute – The minute to wake up terminal.

[Return Value]

Return 0 for success, or –1 for fail.

[Example]

```
Int hour = 10;
```

```
Int min = 20;
```

```
if (FingerTec.SetPowerOn(hour, min) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • GetPlatform()

[Method]

GetPlatform (Platform: String): Integer

[Feature]

Retrieve platform of reader

[Parameter Declaration]

Platform: Platform of device

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String platform = "";
```

```
if (FingerTec.GetPlatform(ref platform) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • GetAntipassback()

[Method]

GetAntipassback(value:String):Integer

[Feature]

Retrieve anti-passback state of reader

[Parameter Declaration]

value : value return by reader ( 0 = None , 1 = Out, 2 = In, 3 = InOut, 4 = None&Save )

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
string anti = "";
```

```
if (FingerTec.GetAntipassback(ref anti) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • SetAntipassback()

[Method]

SetAntipassback(value:String):Integer

[Feature]

Set reader antipassback state.

[Parameter Declaration]

value : value return by reader ( 0 = None , 1 = Out, 2 = In, 3 = InOut, 4 = None&Save )

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

string anti = "1";

```
if (FingerTec.SetAntipassback(anti) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • GetGateway()

[Method]

GetGateway(gateway:String):Integer

[Feature]

Retrieve gateway of reader

[Parameter Declaration]

Gateway : Reader's gateway

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

string gateway = "";

```
if (FingerTec.GetGateway(ref gateway) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```



## • SetGateway()

[Method]

SetGateway(Gateway:String) :Integer

[Feature]

Set gateway of reader

[Parameter Declaration]

Gateway : gateway of reader

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
string gateway = "192.168.1.1";
```

```
if (FingerTec.SetGateway(gateway) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • GetSubnetMask()

[Method]

GetSubnetMask(subnet: String): Integer

[Feature]

Retrieve subnet mask of reader

[Parameter Declaration]

Subnet : subnet mask of reader

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
string subnet = "";
```

```
if (FingerTec.GetSubnetMask(ref subnet) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • SetSubnetMask()

[Method]

SetSubnetMask(Subnet:String):Integer

[Feature]

Set subnet mask of reader

[Parameter Declaration]

Subnet : subnet mask of reader

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
string subnet = "255.255.255.0";
```

```
if (FingerTec.SetSubnetMask(subnet) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • GetSleep()

[Method]

GetSleep(Hour:int ; minute:int):Integer

[Feature]

Retrieve sleep time of reader

[Parameter Declaration]

Hour: hour of sleep time

Minute: minute of sleep time

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Int hour = 0;
```

```
Int min = 0;
```

```
if (FingerTec.GetSleep(ref hour, ref min) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • SetSleep()

[Method]

SetSleep(Hour:int ; minute:int):Integer

[Feature]

Set sleep time of reader

[Parameter Declaration]

Hour: hour of sleep time

Minute: minute of sleep time

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Int hour = 10;
```

```
Int min = 20;
```

```
if (FingerTec.SetSleep(hour, min) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • IsTFT()

[Method]

IsTFT():Integer

[Feature]

Check if the terminal is color screen or black & white model.

[Parameter Declaration]

Null

[Return Value]

Return 0 if color screen model. Return -1 if black & white screen reader.

[Example]

```
if (FingerTec.IsTFT() == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • DisableDeviceWithTimeout()

[Method]

DisableDeviceWithTimeout(TimeOutSec:Integer):Integer

[Feature]

Disable the device with timeout second setting, the reader will back to normal after the time out second

[Parameter Declaration]

TimeOutSec: Integer - In seconds unit.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Int time = 5;

```
if (FingerTec.DisableDeviceWithTimeout(time) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • SetLastCount()

[Method]

SetLastCount(Count:Integer) :Integer

[Feature]

Set the last downloaded general log count unit, example if the total in reader is 500, and the last download log is 400, so if setlastcount(400), the log will be downloaded from 401-500.

[Parameter Declaration]

Count: Integer

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Int lastCount = 5;

```
if (FingerTec.SetLastCount(lastCount) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • RestartDevice()

[Method]

RestartDevice():Integer

[Feature]

Reboot the connected device

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
if (FingerTec.RestartDevice() == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • TurnOffAlarm()

[Method]

TurnOffAlarm():Integer

[Feature]

To turn off the alarm for H2i.

[Parameter Declaration]

Null

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
if (FingerTec.TurnOffAlarm() == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • GetEncodingCode()

[Method]

GetEncodingCode(Code:String):Integer

[Feature]

To get the encoding code for the device. You will be able to apply for the hardware encoding code once you have join FingerTec Developer Program. It is to protect the interest of developer.

[Parameter Declaration]

Code – The hardware encoding code which is unique by its developer.

[Return Value]

Return 0 for success, or –1 for fail.

## General Data Management

### • ReadAllUserInfo()

[Method]

ReadAllUserInfo(int\* UserSize)

[Feature]

Read and store all user information into memory buffer. To be retrieved by GetAllUserInfo()

[Parameter Declaration]

UserSize Number of user records.

[Return Value]

Return 0 for success, or –1 for fail.

[Example]

Dim num As Long

If FingerTec.ReadAllUserInfo(num) = 0 Then

    MsgBox ("Success")

Else

    MsgBox ("Failed")

End If

## • GetAllUserInfo()

[Method]

GetAllUserInfo(int\* EnrollNo, string\* Name, string\* Password, int\* Privilege, boolean\* Enabled)

[Feature]

Get a user record from memory buffer by ReadAllUserInfo()

[Parameter Declaration]

EnrollNo = Enrollment number.

Name = User name.

Password = Password.

Privilege = Privilege level (0:user, 1:enroller, 2:admin, 3: super admin)

Enabled = Get user status (enable/disable).

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim name As String

Dim pwd As String

Dim level As Long

Dim status As Boolean

Do While FingerTec.GetAllUserInfo(enrollNo, name, pwd, level, status) = 0

List1.AddItem ("No:" + Str(enrollNo) + "Name:" + name + "Pwd:" + pwd + "Level:" + Str(level))

Loop

## • ClearAllData()

[Method]

ClearAllData(void)

[Feature]

Clear all enrolled users information, fingerprint templates and transaction logs.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

If FingerTec.ClearAllData() = 0 Then

    MsgBox ("Clear Done")

Else

    MsgBox ("Failed")

End If

## • ReadGeneralLog()

[Method]

ReadGeneralLog(int\* LogSize)

[Feature]

Read all general transaction logs into memory buffer to be retrieved by GetGeneralLog()

[Parameter Declaration]

LogSize = Number of general transaction records.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim log As Long

If FingerTec.ReadGeneralLog(log) = 0 Then

    MsgBox ("Success")

Else

    MsgBox ("Failed")

End If

## • GetGeneralLog()

[Method]

GetGeneralLog(int\* EnrollNo, int\* Year, int\* Month, int\* Day, int\* Hour, int\* Minute, int\* Second, int\* VerifyMode, int\* InOutMode, int\* WorkCode)

[Feature]

Get a general transaction log record from memory buffer from ReadGeneralLog()

[Parameter Declaration]

Include all from the machine year, month, day, hour, minute and second. EnrollNo = Enrollment number.

- a. For Access Control Model (e.g. M2/R2, AC900 and etc) VerifyMode = 0:(FP/PW/RF), 1:(FP), 2:(PIN), 3:(PW), 4:(RF), 5:(FP&RF), 6:(FP/PW), 7:(FP/RF), 8:(PW/RF), 9:(PIN&FP), 10:(FP&PW), 11:(PW&RF), 12:(FP&PW&RF), 13:(PIN&FP&PW), 14:(FP&RF/PIN), 15:Face
- b. For Time Attendance Model (e.g. TA100) VerifyMode = 0:Card/PW, 1:FP

InOutMode = In and Out mode (0:Check in, 1:Check Out, 2:Break, 3:Resume, 4:over-time)



in, 5:overtime out)

For i-Kadex, m-Kadex, InOutMode = 0 (Master Unit), InOutMode = 1 (Slave unit)

WorkCode = Workcode used.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim yr As Long

Dim mth As Long

Dim day As Long

Dim hr As Long

Dim min As Long

Dim sec As Long

Dim ver As Long

Dim io As Long

Dim work As Long

```
Do While FingerTec.GetGeneralLog(enrollNo, yr, mth, day, hr, min, sec, ver, io, work)
    = 0 List1.AddItem ("No: " + Str(enrollNo) + " Date:" + Str(day) + "/" + Str(mth) + "/" +
    Str(yr) + " Time: " + Str(hr) + ":" + Str(min) + ":" + Str(sec) + " Verify: " + Str(ver) + " I/O:
    " + Str(io) + " Work Code: " + Str(work))
```

Loop

## • DeleteGeneralLog()

[Method]

DeleteGeneralLog(void)

[Feature]

Delete all general logs.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

If FingerTec.DeleteGeneralLog() = 0 Then

    MsgBox ("Done")

End If

## • ClearAdministrator()

[Method]

ClearAdministrator(void)

[Feature]

Clear all assigned administrator privilege.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
If FingerTec.ClearAdministrator() = 0 Then
    MsgBox ("Done")
Else
    MsgBox ("Failed")
End If
```

## • SSR\_GetGeneralLog()

[Method]

SSR\_GetGeneralLog(string\* EnrollNo, int\* Year, int\* Month, int\* Day, int\* Hour, int\* Minute, int\* Second, int\* VerifyMode, int\* InOut, int\* WorkCode)

[Feature]

Get a general transaction log record from memory beffer from ReadGeneralLog()

[Parameter Declaration]

Include all from the machine year, month, day, hour, minute, and second EnrollNo = Enrollment Number

- a. For Access Control Model (e.g. M2/R2, AC900 and etc) VerifyMode = 0:(FP/PW/RF), 1:(FP), 2:(PIN), 3:(PW), 4:(RF), 5:(FP&RF), 6:(FP/PW), 7:(FP/RF), 8:(PW/RF), 9:(PIN&FP), 10:(FP&PW), 11:(PW&RF), 12:(FP&PW&RF), 13:(PIN&FP&PW), 14:(FP&RF/PIN), 15:Face
- b. For Time Attendance Model (e.g. TA100) VerifyMode = 0:Card/PW, 1:FP

InOutMode = In and Out mode (0:Check in, 1:Check Out, 2:Break, 3:Resume, 4:over-time

in, 5:overtime out)

For i-Kadex, m-Kadex, InOutMode = 0 (Master Unit), InOutMode = 1 (Slave unit)

WorkCode = Workcode used

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim EnrollNo As String
Dim yr As Long
```

```

Dim mth As Long
Dim day As Long
Dim hr As Long
Dim min As Long
Dim sec As Long
Dim ver As Long
Dim io As Long
Dim work As Long
Dim log As Long

```

```

Do While BioBridgeSDK.SSR_GetGeneralLog(EnrollNo, yr, mth, day, hr, min, sec, ver, io,
    work) = 0
List1.AddItem ("No: " + EnrollNo + " Date:" + Str(day) + "/" + Str(mth) + "/" + Str(yr) + "
    Time: " + Str(hr) + ":" + Str(min) + ":" + Str(sec) + " Verify: " + Str(ver) + " I/O: " + Str(io)
    + " Work Code: " + Str(work))
Loop

```

## • SSR\_GetAllUserInfo()

[Method]

```

SSR_GetAllUserInfo(string* EnrollNo, string* Name, string* Pwd, int* Privilege, boolean*
    Enabled)

```

[Feature]

Get a user record from memory buffer by ReadAllUserInfo()

[Parameter Declaration]

EnrollNo = Enrollment Number

Name = User Name

Pwd = Password

Privilege = Priviledge level (0:user, 1:enroller, 2:admin, 3:superadmin)

Enabled = Get user status (TRUE:enable, FALSE: disable)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```

Dim record As Long
Dim EnrollNo As String
Dim Name As String
Dim pwd As String
Dim priv As Long
Dim enable As Boolean

```

```

Do While BioBridgeSDK.SSR_GetAllUserInfo(EnrollNo, Name, pwd, priv, enable) = 0
List1.AddItem ("Enroll No: " + EnrollNo + " Name: " + Name + "Pwd: " + pwd + "Enable:
    " + Str(enable))
Loop

```

## • GetFailPhotos()

[Method]

GetFailPhotos(filePath:String, \*fileName:String):Integer

[Feature]

To retrieve the fail transaction photo from i-Kiosk 100 plus machine.

[Parameter Declaration]

FilePath File path name to store the photo

FileName photo file name, separated by "&"

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim FilePath As String

Dim filename As String

Dim filep As String \* 40960

If FingerTec.GetFailPhotos(FilePath, filep) Then

Dim length, start, endc As Integer

start = 1

length = 0

endc = InStr(start, filep, "&")

length = endc - start

Do While endc

filename = Mid(filep, start, length)

List1.AddItem (filename)

start = endc + 1

endc = InStr(start, filep, "&")

length = endc - start

Loop

MsgBox (" download fail picture success ")

Else

MsgBox (" download fail picture failed ")

End If

## • GetSuccessPhotos()

[Method]

GetSuccessPhotos(filePath:String, \*fileName:String):Integer

[Feature]

To retrieve the success transaction photo from i-Kiosk 100 plus machine.

[Parameter Declaration]

FilePath File path name to store the photo

FileName photo file name, separated by "&"

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim FilePath As String
```

```
Dim filename As String
```

```
Dim filep As String * 40960
```

```
If FingerTec.GetSuccessPhotos(FilePath, filep) Then
```

```
Dim length, start, endc As Integer
```

```
start = 1
```

```
length = 0
```

```
endc = InStr(start, filep, "&")
```

```
length = endc - start
```

```
Do While endc
```

```
filename = Mid(filep, start, length)
```

```
List1.AddItem (filename)
```

```
start = endc + 1
```

```
endc = InStr(start, filep, "&")
```

```
length = endc - start
```

```
Loop
```

```
MsgBox (" download success photo")
```

```
Else
```

```
MsgBox ("fail to download success photo")
```

```
End If
```

## • ReadErrorCard()

[Method]

ReadErrorCard():Integer

[Feature]

Read all error card number into memory buffer. To be retrieved by GetErrorCardData()

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
if (FingerTec.ReadErrorCard() == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • GetErrorCardData()

[Method]

GetErrorCardData(CardNum:int, timestamp:string):Integer

[Feature]

Get an error card number from memory buffer by ReadErrorCard()

[Parameter Declaration]

CardNum = error card number

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Int card = 0;
string timestamp = "";

if (FingerTec.GetErrorCardData(ref card, ref timestamp) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • ClearErrorCard()

[Method]

ClearErrorCard():integer

[Feature]

Clear all error card number(Card number that failed to verify) in reader

[Return Value]

Return 0 for success, or –1 for fail.

[Example]

```
if (FingerTec.ClearErrorCard() == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • BeginBatchUpdate() & BatchUpdate()

[Method]

BeginBatchUpdate():Integer & BatchUpdate ():Integer

[Feature]

To improve the performance and speed of updating the FingerTec Reader, batch update feature has been added. You will need to use BeginBatchUpdate() and BatchUpdate() function call to achieve the purpose.

[Parameter Declaration]

Null

[Return Value]

Return 0 for success, or –1 for fail.

[Usage]

FingerTec.BeginBatchUpdate() // create a buffer space in Windows memory

//apply all the update user data functions, all of these data will be stored in Windows memory

FingerTec.SetUserInfo()...

FingerTec.SetUserTemplate()...

FingerTec.SSR\_SetUserInfo()...

FingerTec.SSR\_SetUserTemplate()...

FingerTec.SetUserFace()...

FingerTec.BatchUpdate() // update the user data from Windows memory to reader

# User Information Management

## • GetUserInfo()

### [Method]

GetUserInfo(int EnrollNo, string\* Name, string\* Password, int\* Privilege, boolean\* Enabled)

### [Feature]

Get user information by enrollment number.

### [Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

Name = User name. (e.g. charles)

Password = Password. (e.g. 33955)

Privilege = Privilege level. (0:user, 1:enroller, 2:admin, 3:supervisor)

Enabled = User status (enable/disable)

### [Return Value]

Return 0 for success, or -1 for fail.

### [Example]

```
Dim enrollNo As Long
```

```
Dim name As String
```

```
Dim pwd As String
```

```
Dim level As Long
```

```
Dim status As Boolean
```

```
enrollNo = 3
```

```
status = True
```

```
If FingerTec.GetUserInfo(enrollNo, name, pwd, level, status) = 0 Then List1.AddItem
```

```
    ("Enroll No:" + Str(enrollNo) + "Name:" + name + "Pwd:" + pwd + "Level:" + Str(level))
```

```
Else
```

```
    MsgBox ("No user found")
```

```
End If
```



## • SetUserInfo()

### [Method]

SetUserInfo(int EnrollNo, string Name, string Password, int Privilege, boolean Enabled)

### [Feature]

Set user info by enrollment number.

### [Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

Name = User name. (e.g. charles)

Password = Password. (e.g. 33955)

Privilege = Privilege level (0:user, 1:enroller, 2:admin, 3:supervisor)

Enabled = User status (enable/disable).

### [Return Value]

Return 0 for success, or -1 for fail.

### [Example]

Dim enrollNo As Long

Dim name As String

Dim pwd As String

Dim level As Long

Dim status As Boolean

enrollNo = 3

name = "Username"

pwd = "77899"

level = 1 status = True

If FingerTec.SetUserInfo(enrollNo, name, pwd, level, status) = 0 Then

    MsgBox ("Success")

Else

    MsgBox ("Failed")

End If

## • DeleteUserData()

[Method]

DeleteUserData(int EnrollNo)

[Feature]

Delete user information.

[Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

enrollNo = 1

If FingerTec.DeleteUserData(enrollNo) = 0 Then

    MsgBox ("Done")

Else

    MsgBox ("Failed")

End If

## • GetUserVerType()

[Method]

GetUserVerType( long EnrollNo, long\* VerType )

[Feature]

Get User verification Type

[Parameter Declaration]

EnrollNo - User ID

VerType :

FP / PW / RF      128

FP 129 / PIN      130

PW 131 / RF      132

FP / PW            133

FP / RF            134

PW / RF            135

PIN & FP           136

FP & PW            137

FP & RF            138

PW & RF            139

FP & PW & RF      140

PIN & FP & PW      141

FP & RF / PIN      142

\*Note: FP = Fingerprint, PW = Password, RF = RFID, PIN = PIN NUMBER

[Return Value]

Return 0 for success, or –1 for fail.

[Example]

Dim enrollNo as Long

Dim verType as Long

FingerTec.GetUserVerType(enrollNo,VerType);

## • SetUserVerType()

[Method]

SetUserVerType( long EnrollNo, long VerType )

[Feature]

Set User verification Type

[Parameter Declaration]

EnrollNo - User ID

VerType :

FP / PW / RF        128

FP 129 / PIN        130

PW 131 / RF        132

FP / PW            133

FP / RF            134

PW / RF            135

PIN & FP            136

FP & PW            137

FP & RF            138

PW & RF            139

FP & PW & RF       140

PIN & FP & PW       141

FP & RF / PIN       142

\*Note: FP = Fingerprint, PW = Password, RF = RFID, PIN = PIN NUMBER

[Return Value]

Return 0 for success, or –1 for fail.

[Example]

Dim enrollNo as Long

Dim verType as Long

FingerTec.SetUserVerType(enrollNo,VerType);

## • GetSMS()

[Method]

GetSMS( long Id, long\* Tag, long\* ValidMinutes, bstr\* StartTime, bstr\* Content )

[Feature]

Get Device Short Message details

[Parameter Declaration]

Id - Short Message ID

Tag - Short Message type, 253 for Public, 254 for Private

ValidMinutes - Display the Short Message within a period of time(in minutes) from

StartTime StartTime - Time to start displaying the Short Message

Content - Short Message content

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim Id as Long

Dim Tag as Long

Dim ValidMinutes as Long

Dim StartTime as String

Dim Content as String

FingerTec.GetSMS(Id,Tag,ValidMinutes,StartTime,Content);

## • SetSMS()

[Method]

SetSMS( long Id, long Tag, long ValidMinutes, bstr StartTime, bstr Content )

[Feature]

Set Device Short Message details

[Parameter Declaration]

Id - Short Message ID

Tag - Short Message type, 253 for Public, 254 for Private

ValidMinutes - Display the Short Message within a period of time(in minutes) from

StartTime StartTime - Time to start displaying the Short Message

Content - Short Message content

[Return Value]

Return 0 for success, or -1 for fail.

[Example]  
Dim Id as Long  
Dim Tag as Long  
Dim ValidMinutes as Long  
Dim StartTime as String  
Dim Content as String

FingerTec.SetSMS(Id,Tag,ValidMinutes,StartTime,Content);

## • SetUserSMS()

[Method]  
SetUserSMS( long EnrollNo, long Id )

[Feature]  
Set User Short Message (Public/Private)

[Parameter Declaration]  
EnrollNo - User ID Id - Short Message Id

[Return Value]  
Return 0 for success, or –1 for fail.

[Example]  
Dim EnrollNo as Long  
Dim Id as Long

FingerTec.SetUserSMS(EnrollNo,Id);

## • DeleteSMS()

[Method]  
DeleteSMS( long Id )

[Feature]  
Delete Device Short Message

[Parameter Declaration]  
Id - Short Message Id

[Return Value]  
Return 0 for success, or –1 for fail.

[Example]  
Dim Id as Long

FingerTec.DeleteSMS(Id);

## • DeleteUserSMS()

[Method]

DeleteUserSMS( long EnrollNo, long Id )

[Feature]

Delete User Short Message

[Parameter Declaration]

EnrollNo - User ID Id - Short Message Id

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollNo as Long

Dim Id as Long

FingerTec.DeleteUserSMS(EnrollNo,Id);

## • ClearSMS()

[Method]

ClearSMS()

[Feature]

Clear All Short Message

[Parameter Declaration]

No

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

FingerTec.ClearSMS();

## • ClearUserSMS()

[Method]

ClearUserSMS()

[Feature]

Clear All User Short Message

[Parameter Declaration]

No

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

FingerTec.ClearUserSMS();

## • SSR\_GetUserInfo()

[Method]

SSR\_GetUserInfo(string EnrollNo, string\* Name, string\* Pwd, int\* Privilege, boolean\* Enabled)

[Feature]

Get User Information by enrollment number

[Parameter Declaration]

EnrollNo = Enrollment number (e.g. 205, 0011)

Name = User name

Pwd = password Privilege = Priviledge level (0:user, 1:enroller, 2:supervisor)

Enabled = Get user status (TRUE:enable, FALSE: disable)

CardNo = MiFare/RFID card No

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollNo As String

Dim Name As String

Dim pwd As String

Dim level As Long

Dim CardNo As Long

Dim status As Boolean BioBridgeSDK.CardNo = CardNo

If Form1.BioBridgeSDK.SSR\_GetUserInfo(EnrollNo, Name, pwd, level, status) = 0 Then

CardNo = Form1.BioBridgeSDK.CardNo

List1.AddItem ("Enroll No: " + EnrollNo + " Name: " + Name + " Pwd: " + pwd + " Priviledge: " + Str(level) + " Enabled: " + Str(status) + " CardNo: " + Str(CardNo))

Else

List1.AddItem ("No record found!")

End If

## • SSR\_SetUserInfo()

### [Method]

SSR\_SetUserInfo(string EnrollNo, string Name, string Pwd, int Privilege, boolean Enabled)

### [Feature]

Set user info by enrollment number

### [Parameter Declaration]

EnrollNo = Enrollment number (e.g. 205, 0011)

Name = User name

Pwd = password Privilege = Privilege level (0:user, 1:enroller, 2:supervisor)

Enabled = Get user status (TRUE:enable, FALSE: disable)

CardNo = MiFare/RFID card No

### [Return Value]

Return 0 for success, or -1 for fail.

### [Example]

Dim EnrollNo As String

Dim Name As String

Dim pwd As String

Dim priv As Long

Dim CardNo As Long

Dim status As Boolean

BioBridgeSDK.CardNo = CardNo

If BioBridgeSDK.SSR\_SetUserInfo(EnrollNo, Name, pwd, priv, status) = 0 Then

List1.AddItem ("User Info Set")

List1.AddItem ("Enroll No: " + EnrollNo + " Name: " + Name +  
" Pwd: " + pwd + " Privilege: " + Str(level) + " Enabled: " + Str(status) + " CardNo: " +  
Str(CardNo))

Else

List1.AddItem ("No record found!")

End If



## • SSR\_DeleteUserData()

[Method]

SSR\_DeleteUserData(string EnrollNo)

[Feature]

Delete user information

[Parameter Declaration]

EnrollNo = Enrollment number (e.g. 205, 0011)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollNo As String

If BioBridgeSDK.SSR\_DeleteUserData(EnrollNo) = 0 Then

    List1.AddItem ("User information removed")

Else

    List1.AddItem ("Unable to remove user!")

End If

## • GetCardNo()

[Method]

GetCardNo(CardNo:String):Integer

[Feature]

CardNo attribute is deprecated. Please use this function to get card no. It support CardNo from 0 - 4,294,967,295. Please invoke the GetUserInfo() function prior to GetCardNo().

[Parameter Declaration]

CardNo – Card Number of the employee.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

String cardNo = "";

if (FingerTec. GetCardNo (ref cardNo) == 0)

    MessageBox.Show("Success");

Else

    MessageBox.Show("Failed");

## • SetCardNo()

[Method]

SetCardNo(CardNo:String):Integer

[Feature]

CardNo attribute is deprecated. Please use this function to set card no. It support CardNo from 0 - 4,294,967,295. Please invoke the SetUserInfo() function after to SetCardNo().

[Parameter Declaration]

CardNo - Card Number of the employee.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String cardNo = "12345678";
```

```
if (FingerTec.SetCardNo (cardNo) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • GetAdminCardNumber()

[Method]

GetAdminCardNumber(adminCard:Integer): Integer

[Feature]

Retrieve administrator card number for H2i and MKadex

[Parameter Declaration]

adminCard: Administrator card number.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
int admin = 0;
if (FingerTec.GetAdminCardNumber(ref admin) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • SetAdminCardNumber ()

[Method]

SetAdminCardNumber(adminCard:Integer): Integer

[Feature]

Set administrator card number of H2i or MKadex.

[Parameter Declaration]

adminCard: Administrator card number.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
int admin = 12345678;
if (FingerTec.SetAdminCardNumber(admin) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • UploadUserPhoto()

[Method]

UploadUserPhoto(FileName:String):Integer

[Feature]

Upload user personal photo, it will display after verified. Photo name must be same as userid, example 1.jpg for userid 000000001 and 108900.jpg for userid 000108900

[Parameter Declaration]

FileName : String - user photo full path name, example : C:\1.jpg

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String path = "F:\fingertec\1.jpg";
if (FingerTec.UploadUserPhoto(path) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");
```

## • DeleteUserPhoto()

[Method]

DeleteUserPhoto(FileName:String):Integer

[Feature]

Delete user personal photo. Photo name must be same as userid, example 1.jpg for userid 000000001 and 108900.jpg for userid 000108900

[Parameter Declaration]

FileName : String - user photo full path name, example : C:\1.jpg

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String photo = "1.jpg";  
if (FingerTec.DeleteUserPhoto(photo) == 0)  
    MessageBox.Show("Success");  
Else  
    MessageBox.Show("Failed");
```

## • DownloadUserPhoto()

[Method]

DownloadUserPhoto(FileName:String, PathName:String) :Integer

[Feature]

Download user personal photo. Photo name must be same as userid, example 1.jpg for userid 000000001 and 108900.jpg for userid 000108900

[Parameter Declaration]

FileName : String - user photo full path name, example : C:\1.jpg

PathName: String - the path name of the location the user photo will be saved, example: C:\download\

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String photo = "1.jpg";  
String path = "C:\\";  
if (FingerTec.DownloadUserPhoto(photo, path) == 0)  
    MessageBox.Show("Success");  
Else  
    MessageBox.Show("Failed");
```

# User Fingerprint Template Management

## • GetUserTemplate()

[Method]

GetUserTemplate(int EnrollNo, int EnrollId, string\* EnrollData)

[Feature]

Get user fingerprint template based on the enrollment number.

[Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

EnrollId = Finger index number.

EnrollData = Fingerprint template.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim enrollId As Long

Dim template As String

enrollNo = 3

If FingerTec.GetUserTemplate(enrollNo, enrollId, template) = 0 Then

    List1.AddItem (Str(enrollNo) + Str(enrollId) + template)

Else

    List1.AddItem ("No template found")

End If

## • SetUserTemplate()

[Method]

SetUserTemplate(int EnrollNo, int EnrollId, string EnrollData)

[Feature]

Set user fingerprint template.

[Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

EnrollId = Finger index number. (e.g. 0, 1)

EnrollData = Fingerprint template.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim enrollId As Long

Dim template As String

enrollNo = 2

enrollId = 0

```
template = "ocoagaEpRwlhxyIOAgy9IkSDE7GmQkMislo+w3ZODVJDCDAoUwlMTKs
Oggg2nRyDBDsQX4MFNCRWQgpAD1iCBqcIMEMGLx8zgwauiS5DEE+fJAMGNg4
0Aw 1HBVtCCCoYasIHOrBZAwTJOVTCCsusPgl0nw0TQwlHOi0DFKC5JsIKGjVYghN-
RPeSiDx EVxnIKGSAIwMJSVVIhbw4dJCgqwMFMoamrVSGhzaktwMFloZiHPzShKogvw-
MFDgaN3 RUh3MsB+QqV3d3eGd3bAfkGIZ2d5mId3wH4+pXdXe6t3Z8B+O6V3Z2vt
dWfAfjqidn VqP6H1RTvAfjmidmVaRqHxRD3AfjeidmVpVKFQND/AfjShd2YsNVKhcJR-
BwH4xoXdnK zVMocZSQsB+L6FXRiM9SqHZgcDBKqFhUMFTU1LAWiYdFsDDG+A="
```

If FingerTec.SetUserTemplate(enrollNo, enrollId, template) = 0 Then

MsgBox ("Template Updated")

Else

MsgBox ("Failed")

End If

## • DeleteUserTemplate()

[Method]

DeleteUserTemplate(int EnrollNo, int EnrollId)

[Feature]

Delete user fingerprint template.

[Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

EnrollId = Finger index number.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim enrollId As Long

enrollNo = 1

If FingerTec.DeleteUserTemplate(enrollNo, enrollId) = 0 Then

MsgBox ("Success") Else MsgBox ("Failed")

End If

## • SSR\_GetUserTemplate()

[Method]

SSR\_GetUserTemplate(String EnrollNo, Int\* FingerIndex, String\* FingerTemplate)

[Feature]

Get user fingerprint template based on the enrollment number

[Parameter Declaration]

EnrollNo = Enrollment number (e.g. 205, 0011)

FingerIndex = Finger Index number

FingerTemplate = Fingerprint Template String

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollNo As String

Dim fingerId As Long

Dim template As String

If BioBridgeSDK.SSR\_GetUserTemplate(EnrollNo, fingerId, template) = 0 Then

List1.AddItem ("Enroll No: " + EnrollNo + " Index Finger: " + Str(fingerId) + " Template: " + template)

Else

List1.AddItem ("No User Record Found!")

End If

## • SSR\_SetUserTemplate()

[Method]

SSR\_SetUserTemplate(string EnrollNo, int FingerIndex, string FingerTemplate)

[Feature]

Set user fingerprint template

[Parameter Declaration]

EnrollNo = Enrollment number (e.g. 205, 0011)

FingerIndex = Finger Index number FingerTemplate = Fingerprint Template String

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollNo As String

Dim fingerId As Long

Dim template As String

If BioBridgeSDK.SSR\_SetUserTemplate(EnrollNo, fingerId, template) = 0 Then

List1.AddItem ("User fingerprint template SET")

Else

List1.AddItem ("Unable to set fingerprint template!")

End If

## • SSR\_DeleteUserTemplate()

[Method]

SSR\_DeleteUserTemplate(string EnrollNo, int FingerIndex)

[Feature]

Delete user fingerprint template

[Parameter Declaration]

EnrollNo = Enrollment number (e.g. 205, 0011) FingerIndex = Finger Index Number

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollNo As String

Dim fingerId As Long

If BioBridgeSDK.SSR\_DeleteUserTemplate(EnrollNo, fingerId) = 0 Then

List1.AddItem ("Fingerprint Template Removed")

Else

List1.AddItem ("Unable to remove!")

End If



# User Face Template Management

## • GetUserFace()

[Method]

GetUserFace (EnrollNo:String; FaceTemplate:String) : Integer

[Feature]

Retrieve user face template from face recognition reader

[Parameter Declaration]

EnrollNo : String - enrollment number

Template: Face template

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

String enrollNo = "1001";

String template = "";

if (FingerTec.GetUserface(enrollNo, ref template) == 0)

    MessageBox.Show("Success");

Else

    MessageBox.Show("Failed");

## • SetUserFace()

[Method]

SetUserFace (EnrollNo:String; FaceTemplate:String) : Integer

[Feature]

Set user face template into face recognition reader

[Parameter Declaration]

EnrollNo : String - enrollment number

FaceTemplate: Face template

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

String enrollNo = "1001";

String template "vgQIAAABWAAAAAAAAAAAFpLRmIYATFLFJ7oAUQBQ1Mg+fgXMxsZ  
rg0qCbidoM8

```

HzyN3C9oVMxDxkX2Rs7BlhXvAeMH6w/jlzMBt20JyUIYWkiZeTgtFnXYdOJh6mD6TA5o
hxOQk4mlwdjMzMjA54pDYu+iZ4Jemg+j
Dkq8q1LoTaiOql65k8zTmyHMUC5B4YLJgauRqa6ohaqAqYCq+O2MuM34hbhVeGS4CV
KuyfiHcs3wW/Bp4lnkR+AT4D+wO2A2MxsOPwwfDD/8D3yGyFaOBzCHcAfST/IGxkLJj2Qa
YBGyh2SHc91Nb1l9Xao9rhyEzT5sBzEnMm8xF7l
W4Cbq9kl2Qf3JOU2ZzVjEdmxCTX4s6k3uaY5ZivEakF9wNvEWegZokmTm7DKq7Owx6ziue
Moxw/nJwcnJ6V3J42Bfc0YsFqwGrrasq+AQsdywkHLjoTAwYkU5gPCAcx4DEOBQATF204C
AsEFx8cCwIEEQcCAiQHAAA1CQELAAMNAQABBgIDNAEABBBkBAAADBAAAAAAAAAQMMAA
AAAAAAAAABKL/KglBAhXvywYCAhMUBwAAAEBAACAAAAAwIAAAAAAAAAAAAAAQEC
AAAABTZBAQAAAJD/XwIAAAIAAAAAAAAAAAAAAAAAAIDAAADgMAADMCAQUBAQMJ8Q
AHBQQTAQcMMgcIFRQLAGkrOwwDCRBP/zoKAgALDSQqCwUHJTldBQMTRSQIBTYdBQF
RBwAJAgUPBAEBDwiBEQABKKQKcjrFLAMHH0UpBQUHLh8OCAEBBwcNFgEABisNAwMA
MqkYBQd7QgoCCgQBDQQRDQgJAAQBAQsAAwQlBwQWORYHBw9TMQMJDx89lw-
gAAG8THwc.....AAAAAAAAAAAAAAAAAAAAAAAAA";
if (FingerTec.SetUserface(enrollNo, template) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");

```

## • DeleteUserFace()

[Method]

DeleteUserFace (EnrollNo:String; FaceTemplate:String) : Integer

[Feature]

Delete user face template from face recognition reader

[Parameter Declaration]

EnrollNo: String - enrollment number

FaceTemplate: Face template

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

String enrollNo = "1001";

```

if (FingerTec.DeleteUserface(enrollNo) == 0)
    MessageBox.Show("Success");
Else
    MessageBox.Show("Failed");

```

# Timezone Group Management

## • GetUserGroup()

[Method]

GetUserGroup(int EnrollNo, int\* UserGroup)

[Feature]

Get user timezone group.

[Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

UserGroup = User timezone group number.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim group As Long

enrollNo = 3

If FingerTec.GetUserGroup(enrollNo, group) = 0 Then

List1.AddItem ("No:" + Str(enrollNo) + "Group:" + Str(group))

Else

List1.AddItem ("Not Found")

End If

## • SetUserGroup()

[Method]

SetUserGroup(int EnrollNo, int UserGroup)

[Feature]

Set user timezone group.

[Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

UserGroup = User group number. (e.g. 1, 2)

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim group As Long

```

enrollNo = 3 group = 2
If FingerTec.SetUserGroup(enrollNo, group) = 0 Then
    MsgBox ("Done")
Else
    MsgBox ("Failed")
End If

```

## • GetUserTimezone()

[Method]  
 GetUserTimezone(int EnrollNo, string\* Timezone)

[Feature]  
 Get user timezone string.

[Parameter Declaration]  
 EnrollNo = Enrollment number. (e.g. 205, 0011)  
 Timezone = Timezone string.

[Return Value]  
 Return 0 for success, or -1 for fail.

[Example]  
 Dim enrollNo As Long  
 Dim zone As String

```

enrollNo = 3
If FingerTec.GetUserTimezone(enrollNo, zone) = 0 Then
    List1.AddItem (Str(enrollNo) + zone)
Else
    List1.AddItem ("not found")
End If

```

## • SetUserTimezone()

[Method]  
 SetUserTimezone(int EnrollNo, string Timezone)

[Feature]  
 Set user timezone string.

[Parameter Declaration]  
 EnrollNo = Enrollment number. (e.g. 205, 0011)  
 Timezone = Timezone string . (e.g. "1::", "1:2:3")

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long Dim timezone As String

enrollNo = 4

timezone = "1:2:3"

If FingerTec.SetUserTimezone(enrollNo, timezone) = 0 Then

    MsgBox ("Done")

Else

    MsgBox ("Failed")

End If

## • GetGroupTimezone()

[Method]

GetGroupTimezone(int GroupId, string\* Timezone)

[Feature]

Get user group timezone.

[Parameter Declaration]

GroupId = Group index. (e.g. 1, 2)

Timezone = Timezone string.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim groupid As Long

Dim timezone As String

groupid = 2

If FingerTec.GetGroupTimezone(groupid, timezone) = 0 Then

    List1.AddItem ("id:" + Str(groupid) + "timezone:" + timezone)

End If

## • SetGroupTimezone()

[Method]

SetGroupTimezone(int GroupId, string Timezone)

[Feature]

Set user group timezone.

[Parameter Declaration]

GroupId = Group index. (e.g. 1, 2)

Timezone = Timezone string. (e.g. "1::", "1:2:3")

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim groupid As Long

Dim timezone As String

groupid = 2 timezone = "2:3:"

If FingerTec.SetGroupTimezone(groupid, timezone) = 0 Then

MsgBox ("Success")

End If

## • GetTimezoneInfo()

[Method]

GetTimezoneInfo(int TimezoneId, string\* TimezoneInfo)

[Feature]

Get timezone weekly information.

[Parameter Declaration]

TimezoneId = Timezone index. (e.g. 2, 3)

Timezoneinfo = Weekly information string.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim timezone As Long

Dim info As String

timezone = 2

If FingerTec.GetTimezoneInfo(timezone, info) = 0 Then

List1.AddItem ("timezone:" + Str(timezone) + "info:" + info)

End If

## • SetTimezoneInfo()

[Method]

SetTimezoneInfo(int Timezoneld, string TimezoneInfo)

[Feature]

Set timezone weekly information.

[Parameter Declaration]

Timezoneld = Timezone index. . (e.g. 2, 3)

Timezoneinfo = Weekly information string.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim timezone As Long

Dim info As String

timezone = 2

info = "235900000235900002359000023590000235900002359000023590000"

If FingerTec.SetTimezoneInfo(timezone, info) = 0 Then

    MsgBox ("Success")

End If

## • GetUnlockGroup()

[Method]

GetUnlockGroup(string\* UnlockGroup)

[Feature]

Get unlock groups.

[Parameter Declaration]

UnlockGroup = Unlock user groups index string.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim group As String

If FingerTec.GetUnlockGroup(group) = 0 Then

    List1.AddItem (group)

End If

## • SetUnlockGroup()

[Method]

SetUnlockGroup(string UnlockGroup)

[Feature]

Sets unlock groups.

[Parameter Declaration]

UnlockGroup Unlock user groups index string.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim group As String

group = 2

If FingerTec.SetUnlockGroup(group) = 0 Then

    MsgBox ("Done")

End If

## • SSR\_GetUnLockGroup()

[Method]

SSR\_GetUnLockGroup(int CombNo, int\* Group1, int\* Group2, int\* Group3, int\* Group4,  
int\* Group5)

[Feature]

Get Unlock Group Combination

[Parameter Declaration]

Combo = Unlock Group Combo ID

Group1 = Timezone index

Group2 = Timezone index

Group3 = Timezone index

Group4 = Timezone index

Group5 = Timezone index

[Return Value]

Return 0 for success, or -1 for fail.



[Example]

```
Dim CombNo As Long
Dim G1 As Long Dim G2 As Long
Dim G3 As Long Dim G4 As Long
Dim G5 As Long
If BioBridgeSDK.SSR_GetUnlockGroup(CombNo, G1, G2, G3, G4, G5) = 0 Then
List1.AddItem ("GetUnlockGroup CombNo:" + Str(CombNo) + " Group1:" + Str(G1)
+ " Group2:" + Str(G2) + " Group3:" + Str(G3) + " Group4:" + Str(G4) + " Group5:" +
Str(G5))
Else
List1.AddItem ("No record found!")
End If
```

## • SSR\_SetUnlockGroup()

[Method]

SSR\_SetUnlockGroup(int CombNo, int Group1, int Group2, int Group3, int Group4, int Group5)

[Feature]

Set Unlock Group Combination

[Parameter Declaration]

Combo = Unlock Group Combo ID

Group1 = Timezone index

Group2 = Timezone index

Group3 = Timezone index

Group4 = Timezone index

Group5 = Timezone index

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim CombNo As Long
Dim G1 As Long
Dim G2 As Long
Dim G3 As Long
Dim G4 As Long
Dim G5 As Long

If BioBridgeSDK.SSR_SetUnlockGroup(CombNo, G1, G2, G3, G4, G5) = 0 Then
List1.AddItem ("SetUnlockGroup CombNo:" + Str(CombNo) + " Group1:" + Str(G1)
+ " Group2:" + Str(G2) + " Group3:" + Str(G3) + " Group4:" + Str(G4) + " Group5:" +
Str(G5))
Else
List1.AddItem ("SetUnlockGroup Failed!")
End If
```

## • SSR\_GetGroupTimeZone()

[Method]

SSR\_GetGroupTimeZone(Int GroupID, int\* TimeZone1, int\* TimeZone2, int\* TimeZone3,  
int\* ValidHoliday, int\* VerifyType)

[Feature]

Get user group timezone

[Parameter Declaration]

GroupID = Group Index

TimeZone1 = Timezone index

TimeZone2 = Timezone index

TimeZone3 = Timezone index ValidHoliday = Valid(1), Invalid(0) VerifyType = Verification  
Type

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim TZGID As Long

Dim Hol As Long

Dim VerMode As Long

Dim TZ1 As Long

Dim TZ2 As Long

Dim TZ3 As Long

If BioBridgeSDK.SSR\_GetGroupTimeZone(TZGID, TZ1, TZ2, TZ3, Hol, Ver-Mode) = 0 Then

List1.AddItem ("GetGroupTimeZone : " + Str(TZGID) + " Holiday: " + Str(Hol) + " Ver  
Mode: " + Str(VerMode) + " TZ1: " + Str(TZ1) + " TZ2: " + Str(TZ2) + " TZ3: " + Str(TZ3))

Else

List1.AddItem ("No record found!")

End If

## • SSR\_SetGroupTZ()

[Method]

SSR\_SetGroupTZ(int GroupID, int TimeZone1, int TimeZone2, int TimeZone3, int ValidHoliday, int VerifyType)

[Feature]

Set User Group Timezone

[Parameter Declaration]

GroupID = Group Index

TimeZone1 = Timezone index

TimeZone2 = Timezone index

TimeZone3 = Timezone index ValidHoliday = Valid(1), Invalid(0) VerifyType = Verification Type

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Example:

Dim TZGID As Long

Dim Hol As Long

Dim VerMode As Long

Dim TZ1 As Long

Dim TZ2 As Long

Dim TZ3 As Long

If BioBridgeSDK.SSR\_SetGroupTZ(TZGID, TZ1, TZ2, TZ3, Hol, VerMode) = 0 Then

List1.AddItem ("SetGroupTimeZone :" + Str(TZGID) + " Holiday:" + Str(Hol) + " VerMode:" + Str(VerMode) + " TZ1:" + Str(TZ1) + " TZ2:" + Str(TZ2) + " TZ3:" + Str(TZ3))

Else

List1.AddItem ("SetGroupTimeZone failed!")

End If

## • SSR\_GetHoliday()

[Method]

SSR\_GetHoliday(int HolidayID, int\* BeginMonth, int\* BeginDay, int\* EndMonth:Integer, int\* EndDay, int\* TimeZoneGroup)

[Feature]

Get Holiday information

[Parameter Declaration]

HolidayID = Holiday Index

BeginMonth = Holiday

Begin Month

BeginDay = Holiday Begin Day EndMonth = Holiday End Month EndDay = Holiday End Day

TimeZoneGroup = Timezone group id

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Example:

Dim HolID As Long

Dim TZID As Long

Dim BM As Long

Dim BD As Long

Dim EM As Long

Dim ED As Long

If BioBridgeSDK.SSR\_GetHoliday(HolID, BM, BD, EM, ED, TZID) = 0 Then

List1.AddItem ("GetHoliday : " + Str(HolID) + " TZGroup:" + Str(TZID) + " Begin Month:" + Str(BM) + " Begin Day:" + Str(BD) + " End Month:" + Str(EM) + " End Day:" + Str(ED))

Else

List1.AddItem ("No record found!")

End If

## • SSR\_SetHoliday()

[Method]

SSR\_SetHoliday(int HolidayID, int BeginMonth, int BeginDay, int EndMonth, int EndDay, int TimeZoneGroup)

[Feature]

Set Holiday Information

[Parameter Declaration]

HolidayID = Holiday Index

BeginMonth = Holiday

Begin Month

BeginDay = Holiday

Begin Day EndMonth = Holiday End Month

EndDay = Holiday End Day

TimeZoneGroup = Timezone group id

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Example:

Dim HolID As Long

Dim TZID As Long

Dim BM As Long

Dim BD As Long

Dim EM As Long

Dim ED As Long

If BioBridgeSDK.SSR\_SetHoliday(HolID, BM, BD, EM, ED, TZID) = 0 Then

List1.AddItem ("SetHoliday : " + Str(HolID) + " TZGroup:" + Str(TZID) + " Begin Month:" + Str(BM) + " Begin Day:" + Str(BD) + " End Month:" + Str(EM) + " End Day:" + Str(ED))

Else

List1.AddItem ("SetHoliday failed!")

End If

## • SSR\_SetUserSMS()

[Method]

SSR\_SetUserSMS(strng EnrollNo, int SmsID)

[Feature]

Set User Short Message

[Parameter Declaration]

EnrollNo = User ID

Id = Short Message ID

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim sEnrollNo As String

Dim SmsID As Integer

If Form1.BioBridgeSDK.SSR\_SetUserSMS(sEnrollNo, SmsID) = 0 Then

    List1.AddItem ("SetUserSMS OK")

Else

    List1.AddItem ("SetUserSMS fail")

End If

## • SSR\_DeleteUserSMS()

[Method]

SSR\_DeleteUserSMS(string EnrollNo, int SmsID)

[Feature]

Delete User Short Message

[Parameter Declaration]

EnrollNo = User ID

Id = Short Message ID

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Example:

Dim sEnrollNo As String

Dim SmsID As Integer

If Form1.BioBridgeSDK.SSR\_DeleteUserSMS(sEnrollNo, SmsID) = 0 Then

    List1.AddItem ("DeleteUserSMS OK")

Else

    List1.AddItem ("DeleteUserSMS fail")

End If

## • SSR\_GetWorkCode()

[Method]

SSR\_GetWorkCode(int WorkCodeID, string\* WorkCode)

[Feature]

Get WorkCode Information

[Parameter Declaration]

WorkCodeID = WorkCode ID

WorkCode = WorkCode Description

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim WCID As Long

Dim WorkCode As String

If BioBridgeSDK.SSR\_GetWorkCode(WCID, WorkCode) = 0 Then List1.AddItem ("Work-Code ID: " + Str(WCID) + " WorkCode:" + WorkCode)

Else

List1.AddItem ("No WorkCode Record Found!")

End If

## • SSR\_SetWorkCode()

[Method]

SSR\_SetWorkCode(WorkCodeID:Integer, WorkCode:String)

[Feature]

Set WorkCode Information

[Parameter Declaration]

WorkCodeID = WorkCode ID

WorkCode = WorkCode Description

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim WCID As Long

Dim WorkCode As String

If BioBridgeSDK.SSR\_SetWorkCode(WCID, WorkCode) = 0 Then List1.AddItem ("Work-Code Set WorkCode ID: " + Str(WCID) + " Work-Code:" + WorkCode)

Else

List1.AddItem ("Unable to set WorkCode!")

End If

## • SSR\_DeleteWorkCode()

[Method]

SSR\_DeleteWorkCode(int WorkCodeID)

[Feature]

Delete WorkCode

[Parameter Declaration]

WorkCodeID = WorkCode ID

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim WCID As Long

If BioBridgeSDK.SSR\_DeleteWorkCode(WCID) = 0 Then

List1.AddItem ("Deleted WorkCode ID: " + Str(WCID))

Else

List.AddItem ("Failed to delete workcode")

End If

## • SSR\_ClearWorkCode()

[Method]

SSR\_ClearWorkCode()

[Feature]

Delete All WorkCode

[Parameter Declaration]

No

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

If BioBridgeSDK.SSR\_ClearWorkCode() = 0 Then

List1.AddItem ("All WorkCode Cleared")

Else

List1.AddItem ("Clear workcode failed")

End If



# USB Fash Disk Management

## • DecryptLog ()

[Method]

DecryptLog(Encrypt:String, Decrypt:String)

[Feature]

To decrypt the attendance log data from USB thumb drive

[Parameter Declaration]

Encrypt = Content of the encrypted log file. Please read all the file content for "1\_atlog.dat" in your USB drive and assign to these variable. It is a String type  
Decrypt = Content of the log file after decrypted. It is a string type

The content returned is as the following sequence.

- 1) Enroll No
- 2) Date & Time
- 3) Device ID
- 4) InOutMode
- 5) VerifyMode
- 6) WorkCode

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
If BioBridgeSDK.DecryptLog(encrypt, decrypt) = 0 Then  
    List1.AddItem (decrypt)  
End If
```

## • ReadUserFile()

[Method]

ReadUserFile(string FileName)

[Feature]

Read all user information into memory buffer from USB flash disk. All information is to be retrieved by  
GetUserFileData()

[Parameter Declaration]

FileName = User data file name that is located in the memory buffer.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim file As String
```

```

file = "7_user.dat"
If FingerTec.ReadUserFile(file) = 0 Then
    MsgBox ("Reading")
Else
    MsgBox ("File not found")
End If

```

## • GetUserFileData()

[Method]

GetUserFileData(int\* EnrollNo, string\* Name, string\* Password, int\* Privilege, int\* TZgrp, string\* TZstr)

[Function]

Get a user information from memory buffer, read by ReadUserFile()

[Parameter Declaration]

EnrollNo = Enrollment number.

Name = User name.

Password = Password.

Privilege = Privilege level. (0:user, 1:enroller, 2:admin, 3:supervisor)

TZgrp = User timezone group.

TZstr = Timezone string.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim name As String

Dim pwd As String

Dim level As Long Dim time As Long

Dim line As String

Do While FingerTec.GetUserFileData(enrollNo, name, pwd, level, time, line)  
= 0

List1.AddItem (Str(enrollNo) + name + pwd + Str(level) + Str(time) + line)  
Loop

## • PutUserFileData()

[Method]

PutUserFileData(int EnrollNo, string Name, string Password, int Privilege, int TZgrp, string TZstr, int UserSize)

[Feature]

Put user information into memory buffer to be saved by WriteUserFile()

[Parameter Declaration]

EnrollNo = Enrollment number. (e.g. 205, 0011)

Name = User name. (e.g. charles)

Password = Password. (e.g. 88995)

Privilege = Privilege level. (0:user, 1:enroller, 2:admin, 3:supervisor)

TZgrp = User timezone group. (e.g. 1, 2)

TZstr = Timezone string. (e.g. "1::") UserSize = Total number of user records

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim enrollNo As Long

Dim name As String Dim pwd As String

Dim level As Long

Dim zonegroup As Long

Dim zonestr As String Dim record As Long

enrollNo = 1

name = "john"

pwd = "888"

level = 1

zonegroup = 2

zonestr = "1::"

record = 1

If FingerTec.PutUserData(enrollNo, name, pwd, level, zonegroup, zonestr, record)  
= 0 Then

MsgBox ("Done")

End If

## • WriteUserFile()

[Method]

WriteUserFile(string FileName)

[Feature]

Write all user information from memory buffer to USB flash disk.

[Parameter Declaration]

FileName = User data file name to be written into USB flash disk

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim file As String

file = "test.dat"

```
If FingerTec.WriteUserFile(file) = 0 Then
    MsgBox ("Write Done")
Else
    MsgBox ("Failed")
End If
```

## • ReadTemplateFile()

[Method]

ReadTemplateFile(string FileName)

[Feature]

Read all fingerprint templates into memory buffer from USB flash disk. To be retrieved by GetTemplateFileData()

[Parameter Declaration]

FileName = Data file contains the fingerprint template.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim file As String
file = "test.txt"
If FingerTec.ReadTemplateFile(file) = 0 Then
    MsgBox ("Done")
End If
```

## • GetTemplateFileData()

[Method]

GetTemplateFileData(int\* EnrollNo, int\* EnrollId, string\* EnrollData)

[Feature]

Get a fingerprint template from memory buffer by ReadTemplateFile()

[Parameter Declaration]

EnrollNo = Enrollment number.

EnrollId = Finger index number.

EnrollData = Fingerprint template.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim enrollNo As Long
```

```
Dim enrollId As Long Dim data As String
```

```
Do While FingerTec.GetTemplateFileData(enrollNo, enrollId, data) = 0
```

```
List1.AddItem ("no:" + Str(enrollNo) + "id:" + Str(enrollId) + "data:" + data)
```

```
Loop
```

## • PutTemplateFileData()

[Method]

```
PutTemplateFileData(int EnrollNo, int EnrollId, string EnrollData, int TemplateSize)
```

[Feature]

Put fingerprint template into memory buffer. To be saved by WriteTemplateFile()

[Parameter Declaration]

EnrollNo = Enrollment number.

EnrollId = Finger index number.

EnrollData = Fingerprint template.

RecordSize = Total number of template records.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Dim enrollNo As Long
```

```
Dim enrollId As Long
```

```
Dim data As String
```

```
Dim size As Long
```

```
enrollNo = 2
```

```
size = 1
```

```
data="ocodgpUsOII4SC4+gi80sjoDEy04R0InqThFgyihDiQCC+WYPsINeiQZggrHKR  
ZCBkKeIIIOUKRXAYBQPiNCBzatWoMGLklywwYsFkRCCg8qIMIIQLgeAwSvtRnCBji7  
WoIMNsJcAxAyPD5DEx3FGMIHNrsLQgRARVBCQcVAO0MQHr9UAhRKKxCCAriZ  
EUI007tHQkmYNaTKDrk0jxERFcJhZcDBXmFlanKh3tvAwV6jve/d3BDAflmkvO7+3c  
sVwH5XpL3+/+69GMB+U6HP7nICCqH8ux3AflChz+5xAwwUocurwH5Loc7vbQ  
IPF6HbqsB+5KGs32gDExuh6qrAfkWhmr5cBhkhodqZwH5DgURHSishodypLcB+Q  
q      F3eUA3LCwugsB+QaV2Z2RXI3fAfKgkZWZUrHQwwH5AomVVUzQ80TQxwH4/  
o      mVVQDREPDUwwH4+oVZFliiYUT43MMB+O6FIRSsgDnNCOMDBNafkUx0MAg  
HAWi+hRCAKAcDDJyMdfOA="
```

```
If FingerTec.PutTemplateFileData(enrollNo, enrollId, data, size) = 0 Then
```

```
MsgBox ("Success")
```

```
End If
```

## • WriteTemplateFile()

[Method]

WriteTemplateFile(string FileName)

[Feature]

Write all fingerprint template from memory buffer in to USB flash disk from PutTemplateFile-Data()

[Parameter Declaration]

FileName = Data file name to be written into USB flash disk.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim file As String

file = "test.dat"

If FingerTec.WriteTemplateFile(file) = 0 Then

    MsgBox ("Write Done")

End If

## • SSR\_ReadUserFile()

[Method]

SSR\_ReadUserFile(string FileName)

[Feature]

Read all user information into memory buffer from USB flash disk. All information is to be retrieved by SSR\_GetUserFileDataCard()

[Parameter Declaration]

FileName = User data file name that is located in the memory buffer.

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim file as String

file = "user.dat"

If BioBridgeSDK.SSR\_ReadUserFile(file) = 0 Then

    MsgBox("Done")

Else

    MsgBox("Read Failed")

End If

## • SSR\_GetUserDataCard()

[Method]

SSR\_GetUserDataCard(int\* EnrollNo, string\* Name, string\* Pwd, int\* Privilege, int\* TimeZoneGroup, string\* TimeZoneStr, int\* CardNo)

[Feature]

Get a user information from memory buffer, read by SSR\_ReadUserFile()

[Parameter Declaration]

EnrollNo = Enrollment Number

Name = User Name

pwd = Password

Privilege = Priviledge level. (0:user, 1:enroller, 2:admin, 3:supervisor)

TimeZoneGroup = User Timezone Group

TimeZoneStr = Timezone String

CardNo = MiFare/RFID card No

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollNo As Long

Dim Name As String

Dim pwd As String

Dim TZ As String

Dim pri As Long

Dim CardNo As Long

Dim TZG As Long Do While BioBridgeSDK.SSR\_GetUserDataCard(EnrollNo, Name, pwd, pri,

TZG, TZ, CardNo) = 0

List1.AddItem ("Enroll No: " + Str(EnrollNo) + " Name: " + Name + " Pwd: " + pwd + " Priviledge: " + Str(pri) + " TimeZone G: " + Str(TZG) + " TimeZone Info: " + TZ + " CardNo:" + Str(CardNo))

Loop

## • SSR\_PutUserFileDataCard()

### [Method]

SSR\_PutUserFileDataCard(int EnrollNo, string Name, String Pwd, Int Privilege, Int TimeZoneGroup, String TimeZoneStr, Int CardNo, Int RecordSize)

### [Feature]

Put user information into memory buffer to be saved by SSR\_WriteUserFile()

### [Parameter Declaration]

EnrollNo = Enrollment Number

Name = User Name

pwd = Password

Privilege = Priviledge level. (0:user, 1:enroller, 2:admin, 3:supervisor)

TimeZoneGroup = User Timezone Group

TimeZoneStr = Timezone String

CardNo = MiFare/RFID card No

RecordSize = Total number of user records

### [Return Value]

Return 0 for success, or -1 for fail.

### [Example]

Dim EnrollNo As Long

Dim Name As String

Dim pwd As String

Dim pri As Long

Dim TZG As Long

Dim TZ As String

Dim CardNo As String

If BioBridgeSDK.SSR\_PutUserFileDataCard(EnrollNo, Name, pwd, priv, TZgroup, TZinfo, CardNo, 1) = 0 Then

    List1.AddItem ("User Info Saved to file")

Else

    List1.AddItem ("Unable to save user info!")

End If



## • SSR\_WriteUserFile()

[Method]

SSR\_WriteUserFile(string FileName)

[Feature]

Write all user information from memory buffer to USB flash disk

[Parameter Declaration]

FileName = User data file name to be written into USB flash disk

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim file as String

file = "user.dat"

If BioBridgeSDK.SSR\_WriteUserFile(file) = 0 Then

List1.AddItem ("User Info Saved to file")

Else

List1.AddItem ("Unable to save user info!")

End If

## • ReadFinger10File()

[Method]

ReadFinger10File(FileName:String):Integer

[Feature]

Read all fingerprint templates (algorithm version 10) into memory buffer from USB flash disk. To be retrieved by GetFinger10FileData()

[Parameter Declaration]

FileName - full path name of version 10 fingerprint template file name, example : G:\template.fp10

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

String path = "C:\template.fp10";

if (FingerTec.ReadFinger10File(photo, path) == 0)

    MessageBox.Show("Success");

Else

    MessageBox.Show("Failed");

## • GetFinger10FileData()

[Method]

GetFinger10FileData(EnrollNo, EnrollID ; Integer, Template:String):Integer

[Feature]

Get a fingerprint template (algorithm version 10) from memory buffer by ReadFinger10File

[Parameter Declaration]

EnrollNo : Integer - enrollment number

EnrollID : Finger index number

Template: Fingerprint template

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Int enrollNo = 0;
```

```
Int fingerID = 0;
```

```
String template = "";
```

```
if (FingerTec.GetFinger10File(ref enrollNo, ref fingerID, ref template) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • PutFinger10FileData()

[Method]

PutFinger10FileData(EnrollNo: Integer, EnrollID : Integer, Template: String, Size: Integer): Integer

[Feature]

Put fingerprint template (algorithm version 10) into memory buffer, to be saved by WriteFinger10File

[Parameter Declaration]

EnrollNo : Enrollment number

EnrollID : Finger index number

Template: Fingerprint template

Size : The total templates need to be saved into USB file

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Int enrollNo = 1100;

Int fingerID = 0;

String template = "TS1TUzlxAAAEbm4ECAUHCc7QAAAc2kBAAAAHJMnKG4zAAwOkQD9AhtgcwBEAhhkPAABlbwPwwBeANMOeW55AG8PlgBRAFBhpWcEAN4PbgCabiOPvgCIAO8Pfm6nAAkOagBtAetjRgC9AEUP7QDFbkoPdADIAPENvW7RAD4PrwAUAKtgiQDXALMOnADlbgO7QDiAPkPEG7oAEsOOgApADhhRgD0AMEPuQD/bicJqAACAQ8Dxm4LAVwlqADUAc5poAAUAZsBkQAKbycP5QAHAQsJKW4lAbgPfwDsARNlpwAsAelNVQAz b5sLhAA/AVkLV25RAaMGNwCXASVIMQBWAaYLIABZbzMGyl7ilk6C0Bh3CBf2+vwzbkdjOHihEouC9lgD9QoPV2hjlQ75OhZrC1MSMowfmP74ZAXPJZN9lAGagaZ89bzC1f6cKSZnHZ4Otvw3aG5gMwgObooDrllGixctwJMKF3qMyB1P/qOEaYlBjs5oqHu6/CoFFgKjjYpzOhlKA/qNWRI7BMryVYRki/PyK3b272JfPAABX8RzmZexl1BIFx4AK1z1NJw0RnU13JmExNkj3c7aXqXpYDmMIVgRCgfm42VUrISmV1UACFhtW6CASZ6NO+JHndh5/9zBBcg3HzlYjddJrFZPhE9qNkID/1BEgOgECd9usAm6BJYNvwwgfJzboaHwHAJc11f9ZrwgAjTqDwLDCEwYBbkGAw3y+BwQYQv3A//1azABqKXbC/8HD/wXCC26/XY+AwcAHcsWsZAQAXlOQ+wYEQ2MWwP9DB8WqZ33B/v8wEQBjZ42swlR8wsT9BXAXbuppl8DCbQSDxa/A/8JOEQCydpMu/y44wS//hAYEGnR0w/+VEMV5fR7D/5DAw34Fwmp4ASWQ4MA4/k/7kToNgQAHlNaemsBJJhTYgnFradJ/j4xBgB8Yf3+kkAKAMCpJ4RBMWUBaa1Xw8JOacZtAAQ4NMEEYi4XlqEAefASbMGBBjBNITBEgDixUusdYL/wMPCBMLFORYAucy0fgDDwK3CwCLDwcl7wcevw8DBwhgAdc2zrMPCw8bGwwfCxa3AwP/DwcMGx8CvwAQAc84wqRwEkdOwwWrAwfXEda/Ag8LE/WcEwAFujbgp/yYFxbfQU/4nBACw1YY4D26/1jr+//w6//iZ/P4hAOzecn7rG+SxMFs/wbAxwrAwcP+w8EEwgtuW+U9wsDCBcLFrcTCwcPBw8AA74g8/zgFAPiIOvtEHAa66MPAO/5EXf78KsA4M44zDW4X7EPCboTaAE6Bwlb7//7/Ov34kPz/cd+wTv/+pH+/f/9/f45/gtuNvBDwsHBucKwro0OAD3wn6fBxazCwcT/w//KAH6ZscD+/MH7P/b5KMh9/P8IAMn4RBiSAwBl+DcEBATu/CnCwwQRYgFUrV4HEPsCRu79+2kQBAZMTPwFBB5qDFYzCRBY5yTEr8XEcQkQU+Ywx6+hcAYQC7owcTOAhD/PIp/xhANJCrB";

if (FingerTec.WriteFinger10FileData(enrollNo, fingerID, template, 1) == 0)

    MessageBox.Show("Success");

Else

    MessageBox.Show("Failed");

## • WriteFinger10File()

[Method]

WriteFinger10File(FileName:String):Integer

[Feature]

Write all fingerprint template (algorithm version 10) from memory buffer into USB flash disk from PutFinger10FileData

[Parameter Declaration]

FileName - full path name of version 10 fingerprint template file name, example: G:\template.fp10

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
String path = "C:\\template.fp10";  
if (FingerTec.WriteFinger10File(path) == 0)  
    MessageBox.Show("Success");  
Else  
    MessageBox.Show("Failed");
```

## • GetFaceFileData()

[Method]

GetFaceFileData(EnrollNo, Template:String):Integer

[Feature]

Get a face template (algorithm version 10) from memory buffer by ReadFaceFile

[Parameter Declaration]

EnrollNo : enrollment number

Template: Face template

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

```
Int enrollNo = 0;  
String template = "";  
if (FingerTec.GetFaceFileData(ref enrollNo, ref template) == 0)  
    MessageBox.Show("Success");  
Else  
    MessageBox.Show("Failed");
```

## • PutFaceFileData()

[Method]

PutFaceFileData(EnrollNo:String; Template:String, Size:Integer):Integer

[Feature]

Put face template into memory buffer, to be saved by WriteFaceFile()

[Parameter Declaration]

EnrollNo : Enrollment number

Template: Face template

Size: The total templates need to be saved into USB file

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Int enrollNo = 1001;

String template = "vgQIAABBwAAAAAAAAAAAFpLRmIYATFLFJ7oAUQBQ1Mg+fgX  
MxsZrgOqCbibdoM8HzYn3C9oVMxDxkX2Rs7BlhXvAeMH6w jIzMBt20JyUIYWkiZeTgt  
FnXYdOJh6mD6TA5oPhxOQk4mlwdjMzMjA54pDYu+iZ4Jemg+jDkq8qllLoTaiOql65k  
8zTmyHMUC5B4YLJgauRqa6ohaqaqYCq+O2MuM34hbhVeGS4CV2KuyfiHcs3wWBp4  
InkR+AT4D+wO2A2MxsOPwwfDD/8D3yGyFaOBzCHcAfST/IGxkLJj2QaYBGyh2SHc91  
Nb1I9Xao9rhyEzT5sBzEnMm8xF7IW4Cb9k9kl2Qf3JOU2ZzVjEdmxCTX4s6k3uaY5Ziv  
EakF9wNvEWegZokmTm7DKq7Owx6ziueMoxwnJwcnJ6V3J42Bfc0YsFqwGrasq+  
AQsdywkHLjoTAwYkUSgPCAcx4DEOBQATF204CAsEFx8cCwIEEQcCAiQHAAA1CQE  
LAAMNAQABBgIDNAEABBBAAADBAAAAAAAAAQMAAAAAAAAAABKL/KgIBAhXvyyw  
YCAhMUBwAAAEBAACAAAAAAwIAAAAAAAAAAAAAAQEAAAABTZBAQAAAJD/  
XwIAAAIAAAAAAAAAAAAAAAAAAIDAAAADgMAADMCAQUBAQMJQBQAHBQQTAQcM  
MgcIFRQLagkrOwwDCRBP/zoKAgaALDSQqCwUHJTidBQMTRSQIBTYdBQFRBwAJag  
UPBAEBDwiBEQABKKQKcjrFLAMHH0UpBQUHLh8OCAEBBwcnFgEABisNAwMAMqk  
YBQd7QgoCCgQBDDQQRDQgJAAQBAQsAAwQlBwQWORYHBw9TMQMJDx89lwgA  
Ag8THwc.....AAAAAAAAAAAAAAAAAAAAAAAAA";

```
if (FingerTec.PutFaceFileData(enrollNo, template, 1) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

## • WriteFaceFile()

[Method]

WriteFaceFile(FileName:String):Integer

[Feature]

Write all face template from memory buffer into USB flash disk from PutFaceFileData().

[Parameter Declaration]

FileName - full path name of face template file name, example: G:\ssrface.dat

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

String path = "C:\ssrface.dat";

```
if (FingerTec.WriteFaceFile(path) == 0)
```

```
    MessageBox.Show("Success");
```

```
Else
```

```
    MessageBox.Show("Failed");
```

# Fingerprint Template Conversion

## • ConvertFPTToFT()

[Method]

ConvertFPTToFT(string EnrollData1, string\* EnrollData2, integer\* EnrollSize):Integer

[Feature]

Convert OFIS fingerprint template to FingerTec Terminal format

[Parameter Declaration]

EnrollData1 = OFIS Fingerprint Template

EnrollData2 = FingerTec Terminal template

EnrollSize = FingerTec Terminal template size

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollData1 As String

Dim EnrollData2 As String

Dim EnrollSize As Long

If FingerTec.ConvertFPTToFT(EnrollData1, EnrollData2, EnrollSize) = 0 Then

MsgBox ("Converted")

Else

MsgBox ("ConvertFPTToFT Failed")

End If

## • ConvertFPTtoOFIS()

[Method]

ConvertFPTtoOFIS(string EnrollData1, string\* EnrollData2, integer\* EnrollSize):Integer

[Feature]

Convert FingerTec Terminal fingerprint template to OFIS fingerprint template format

[Parameter Declaration]

EnrollData1 = FingerTec Terminal Fingerprint Template

EnrollData2 = OFIS fingerprint template

EnrollSize = OFIS fingerprint template size

[Return Value]

Return 0 for success, or -1 for fail.

[Example]

Dim EnrollData1 As String

Dim EnrollData2 As String

Dim EnrollSize As Long

```
If FingerTec.ConvertFPTtoOFIS(EnrollData1, EnrollData2, EnrollSize) = 0 Then  
MsgBox ("Converted")  
Else MsgBox ("ConvertFPTtoOFIS Failed")  
End If
```

## TCMS V2 Software Management

### • ReadTCMSv2()

[Method]

ReadTCMSv2(TCMSV2Path:String, DateFrom:String, DateTo:String, Size:Integer):Integer

[Feature]

To Read the processed attendance sheet in the TCMSv2. It is not for RAW data.

[Parameter Declaration]

TCMSV2Path: the file path of the tcmsv2

DateFrom: the attendance data date from (yyyymmdd)

DateTo: the attendance data date to (yyyymmdd)

Size: the return size of the attendance records

[Return Value]

Return 0 for success, or -1 for fail.

### • GetTCMSv2()

[Method]

GetTCMSv2(EnrollNo:String, Name:String, EmployeeNo:String, Department:String, Section:String, Group:String, Date:String, DayType:String, Schedule:String, Shift:String, InTime:String, OutTime:String, BreakTime:String, ResumeTime:String, OT-InTime:String, OT-OutTime:String, Work:Double, OT:Double, DifferentOT:Double, Short:Double, LeaveTaken:String, Remark:String):Integer

[Feature]

To Get the TCMSv2 attendance sheet data after invoking ReadTCMSv2()

[Parameter Declaration]

FileName - full path name of face template file name, example: G:\ssrface.dat

[Return Value]

Return 0 for success, or -2 for fail.

[Example]

```
if ( FingerTec1.ReadTCMSv2('C:\Program Files\FingerTec Worldwide\TCMSv2\
', '20110101', '20110131', iSize)=0 )
{
while (FingerTec1.GetTCMSv2(sNo, sName, sENo, sDep, sSec, sGrp, sDate, sDay, sSche,
sShift, sIn, sOut, sBreak, sResume, sOt, sDone, dWork, dOt, dDiffOt, dShort, sLT, sRe-
mark)=0) do
{
memo1.Lines.Add('ID:'+sNo+' Name:'+sName+' Date:'+sDate+' DayType:'+sDay+'
Schedule:'+sSche+' In:'+sIn+' Out:'+sOut+' Break:'+sBreak+' Resume:'+sResume+'
OT:'+sOt+' Done:'+sDone+' Work:'+Floattostr(dWork)+' OT:'+Floattostr(dOt)+' DiffOT:
'+Floattostr(dDiffOt)+' Short:'+Floattostr(dShort));
```



# BioBridge SDK Event Functions Call

## • OnConnected()

[Method]

Void OnConnected()

[Feature]

Event when the BioBridge SDK connect to the reader.

[Availability]

Door Access Series & Time & Attendance Series

## • OnDisconnected()

[Method]

Void OnDisconnected()

[Feature]

Event when the BioBridge SDK disconnect from the reader.

[Availability]

Door Access Series & Time & Attendance Series

## • OnFinger()

[Method]

Void OnFinger()

[Feature]

This event is trigger when a user press the finger

[Availability]

Door Access Series & Time & Attendance Series

## • OnAttTransactionEx()

### [Method]

Void OnAttTransactionEx(string\* EnrollNo; long\* IsInvalid, long\* AttState, long\* VerifyMode, long\* Year, long\* Month, long\* Day, long\* Hour, long\* Minute, long\* Second, long\* WorkCode)

### [Feature]

This event is triggered when there is a new transaction

Include all from the machine year, month, day, hour, minute, and second EnrollNo = Enrollment Number IsInvalid = Integer (0 is invalid value, 1 is valid value, Fingerprint Access

Control Machine failed to open the door or case of the Time Zone, the variables will return

the invalid value.) VerifyMode = Verified by 1:fingerprint, 0:password AttState = In and Out mode 0:check-in, 1:check-out, 2:break, 3:resume, 4:

overtime-in, 5:overtime-out WorkCode = Workcode used

### [Availability]

Door Access Series & Time & Attendance Series

## • OnDoor()

### [Method]

Void OnDoor(Integer\* EventType)

### [Feature]

This event is triggered when there is a door sensor event

EventType:

1 = the door is opened suddenly

4 = the door is not closed well (the door is opening)

5 = the door is closed (after open)

53 = the door is opened by press the "off-exit" button

### [Availability]

Door Access Series Only

## • OnAlarm()

[Method]

Void OnAlarm(long\* AlarmType, long EnrollNo, long Verified)

[Feature]

This event is triggered when there is a event of dismantling machine or duress alarm occurs

AlarmType:

55 = device is illegally dismantle

58 = miss pressed force alarm

EnrollNo = reserved value

Verified = reserved value

[Availability]

Door Access Series Only

## BioBridge SDK Attributes

### • FingerTec10 As Integer

[Property]

Finger10

[Data Type]

Integer

[Feature]

FP10 is a new FingerTec fingerprint matching algorithm, it can supports maximum 12000 fingerprints for 1:N identification.

It is to check the reader is a FP algorithm version 10 reader

[Result]

1: FP10 reader, 0: non FP10 reader.

### • DN As Integer

[Property]

DN

[Data Type]

Integer

[Feature]

DN is the Device ID. It is to get the device ID.

### • DC As String

[Property]

DC

[Data Type]

String

[Feature]

DC is device name. It is to get the device name.

### • SN As String

[Property]

SN

[Data Type]

String

[Feature]

SN is terminal serial number. It is to get the terminal serial number.

# BioBridge SDK Demo

## Demo Application

This is a demo application developed for developers as a reference to implement the FingerTec SDK into applications. This is developed using Visual Studio C# 2010. The sample code and application will be provided together with this manual. Double click the icon *FingerTecSDKDemo.exe* to test the application. Please refer Chapter 4 for the details and explanation on every function within the FingerTec SDK.

**\*\*Reminder:** please install the FingerTec SDK installation file before testing and running the sample code and application.

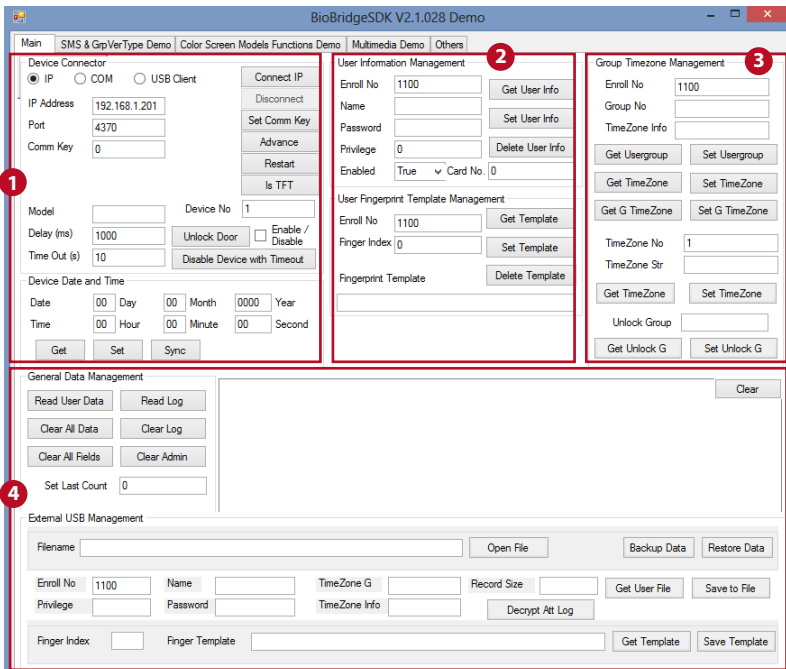
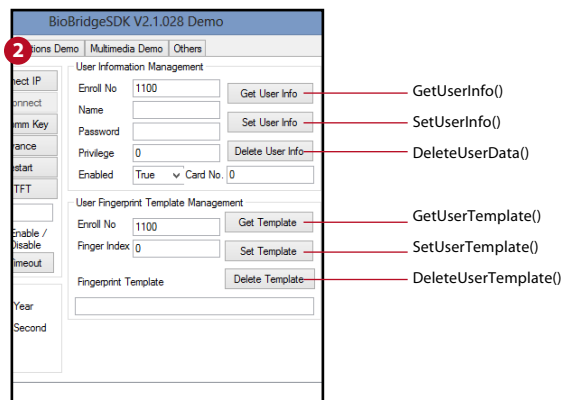
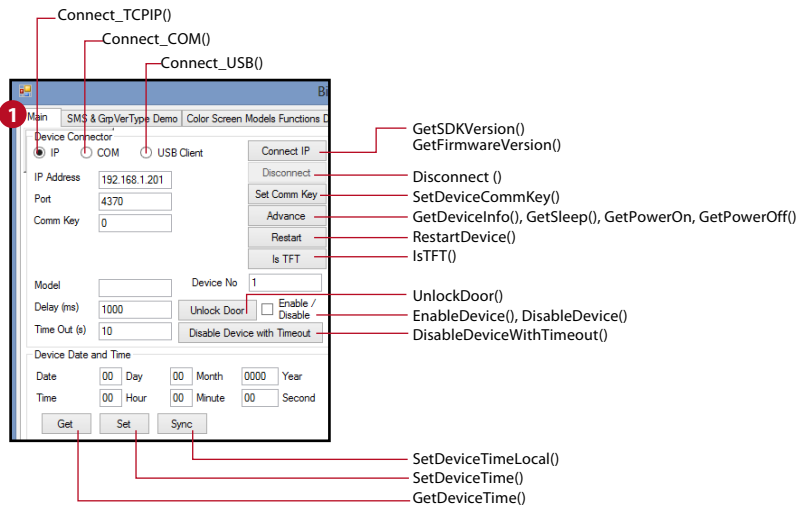
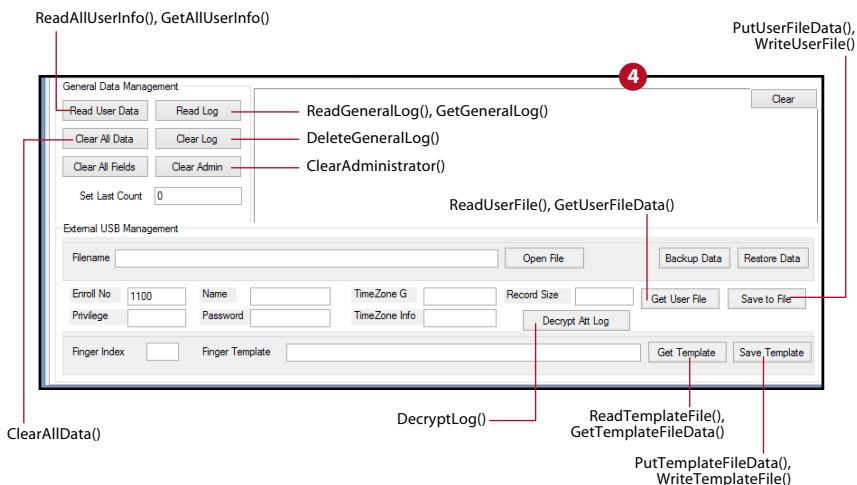
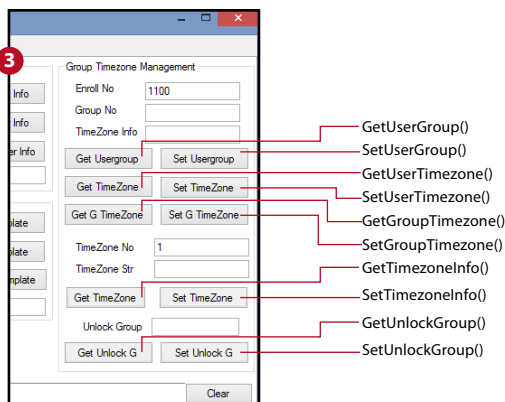
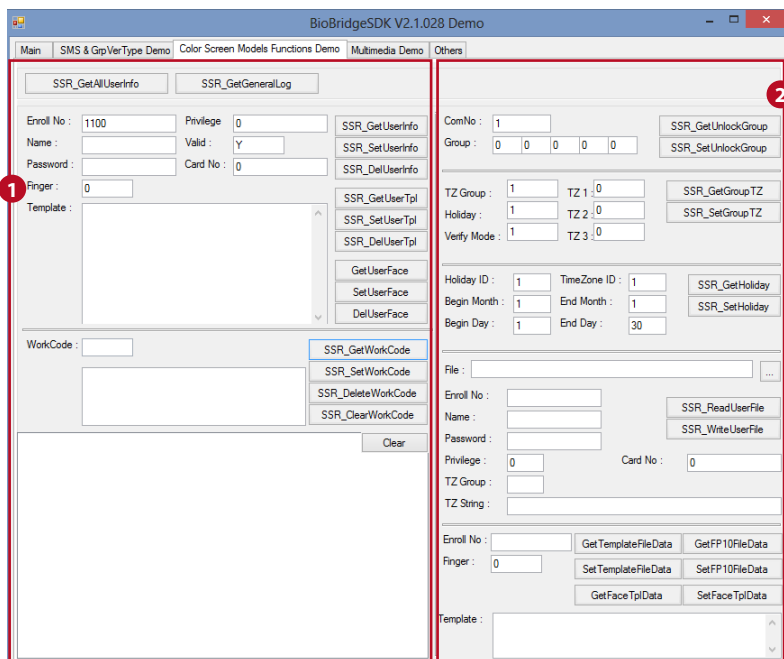
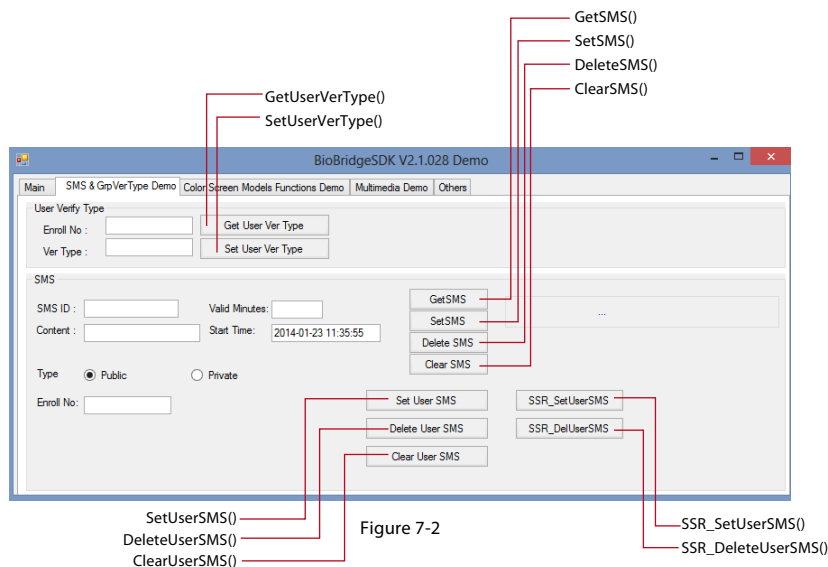


Figure 7-1

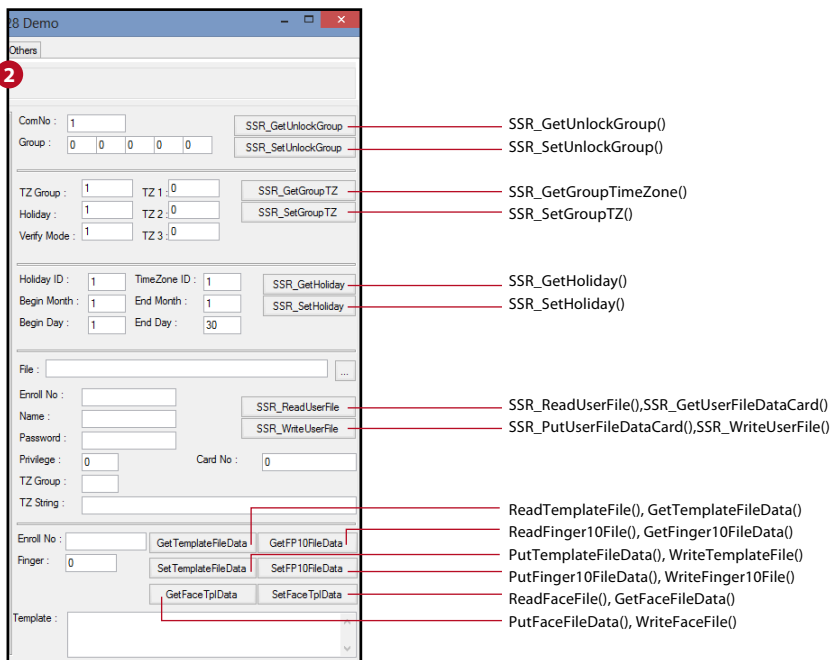
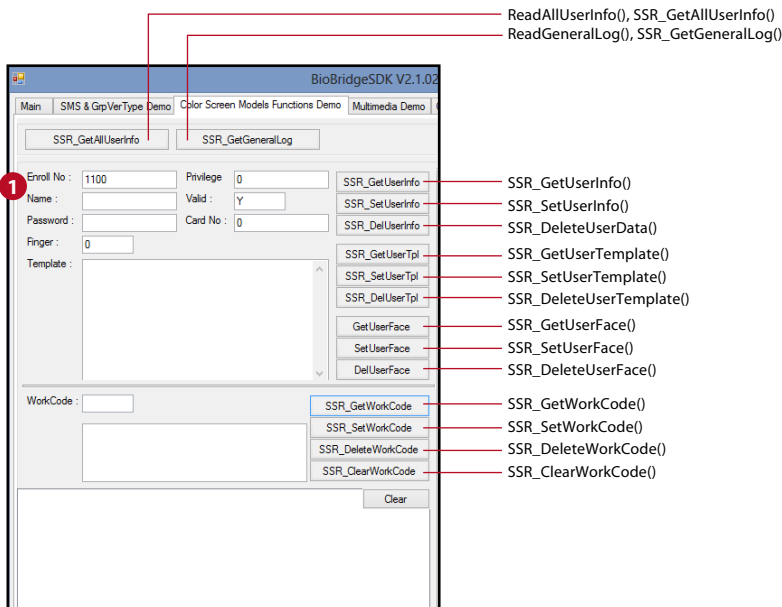
# Demo Functions











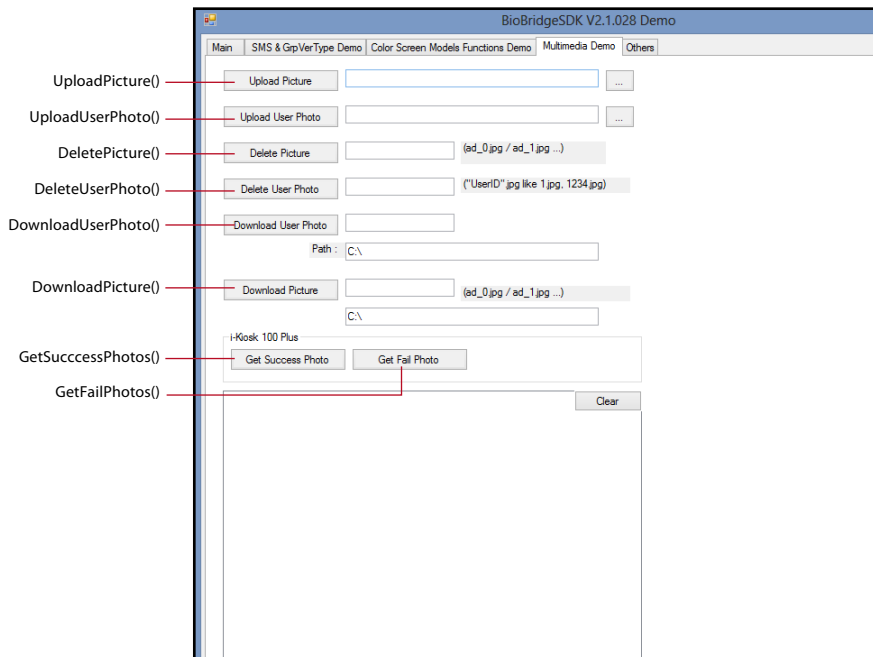


Figure 7-4

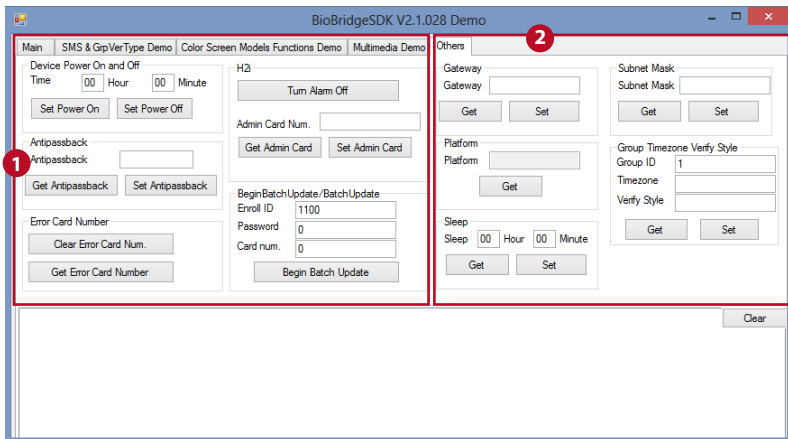
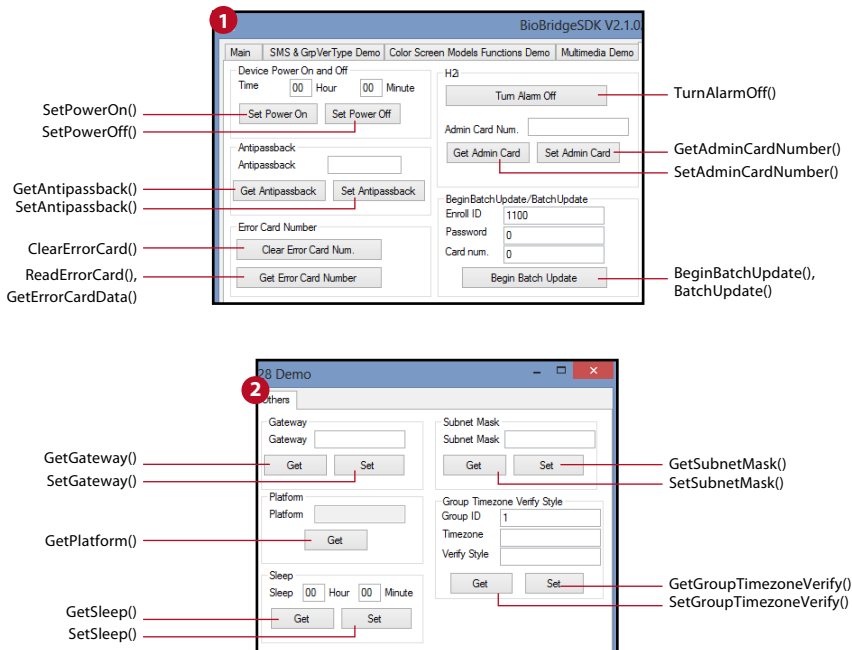


Figure 7-5



# BioBridge SDK Solutions and FAQ

## Device Operation

Device can be viewed as an independent PC in the process of connection. IP addresses of device must exactly match with the connected IP addresses. There are serial port and network connection. In different processes of connection, different settings must be performed for device. Modification of communication way is also necessary, and you must adjust all controller switches to TCP/IP or 232/485, otherwise connection will fail. Sometimes the connection may fail due to busy serial port; it can be reconnected by restarting program. In order to keep data conformity and avoid errors, Enable Device can be set in the operating mode.

## Device Date and Time

The device date and time can be specified following a set of values entered or it can be synchronized according to the local computer.

## Unlock Door Access

Doors can be unlocked by entering the delay time.

## General Data Management

All the data within the device can be obtained. Firstly use `ReadAllUserInfo()` to read all the user information record into the memory buffer. Secondly, use `GetAllUserInfo()` to get the information. All the data in the device can be cleared by using the function `ClearAllData()`. As for general logs, use `ReadGeneralLog()` to read the device data into the memory buffer and then `GetGeneralLog()` to get the information displayed. Similarly as reading user information, general logs can be cleared using `Delete-GeneralLog()`. An administrator status can be remove using `ClearAdministrator()`. It will not delete the whole information about the user but removed the status Administrator.

## User Information Management

To select a particular user to view the information firstly use `GetUserInfo()` and specify the enrollment number. To edit the user information use `SetUserInfo()`. User particular such as name, password, privilege and to enable or disable can be edited. To remove the user data, use `DeleteUserData()` to remove the user information.

**\*\*Reminder:** User data is removed but the fingerprint template still exist in the device

## User Fingerprint Template Management

User fingerprint template can be obtained and set using `GetUserTemplate()` and `SetUserTemplate()` by specifying the enrollment number and finger index number. To delete user template use `DeleteUserTemplate()` function.

## User Group Timezone Management

To view the timezone group use `GetUserGroup()`. It will display the user with the group timezone category. To change the particular user in to another group, use `SetUserGroup()` and specify the enrollment and group number. Each user timezone can be viewed by specifying the enrollment number using `GetUserTimezone()`. Timezone for that particular user can be edited by entering the new timezone string using `SetUserTimezone()`. Every group timezone's information can be viewed by specifying the group number using `GetTimezoneInfo()`. Timezone information can also be edited using `SetTimezoneInfo()` by changing the timezone string. The timezone group can be locked and unlocked based on their timezone information. This enable control towards a particular group to manage and allow their access. Use `GetUnlockGroup()` to view the unlock groups and `SetUnlockGroup()` to unlock the groups based on their timezones.

## External File Management

Data can be imported from an external source like USB flash disk. Use `Read-UserFile()` to read the file into the memory buffer. Then use `GetUserFileData()` to retrieve the information from the memory buffer. To edit a particular user information and export back to a USB flash disk, use `PutUserFileData()`. It will store the user information into the memory buffer. Later use `WriteUserFile()` to store the file in to the USB flash disk. Similar to reading a user file, to retrieve all the fingerprint templates, use `ReadTemplateFile()` to read the file in to the memory buffer. Next use `GetTemplateFileData()` to retrieve the fingerprint template from the memory buffer. To edit and store back a user fingerprint template, use `PutTemplateFileData()` to put the information into the memory buffer. Next, use `WriteTemplateFile()` to save the file.

## BioBridge SDK Location

The `BioBridgeSDK.ocx` file will be located in your windows system32 folder. If you cannot locate or add the `BioBridgeSDK.ocx` component into your IDE development, go to your windows system32 folder to locate it.

*e.g: [DRIVE C:\>WINNT\system32\ BioBridgeSDK.ocx]*

## Windows Vista Installation Problem

Due to the implementation of User Access Control (UAC) in Windows Vista, you will require to run the installation file using Administrator right. To do this, please right click on the installation file and select "Run As Administrator". Although you login windows using your Administrator account, you still need to use that option to ensure your installation is successful.

## No Longer Support Function Call

Backup() and Restore() functions are no longer supported. Basically the backup and restore functions only include the user information, user fingerprint template, user timezone and transaction logs. Please refer to the following for an alternative way to achieve the mentioned functions.

- a. User Info  
    backup -GetUserInfo()  
    restore -SetUserInfo()
- b. User Fingerprint Template  
    backup - GetUserInfoTemplate()  
    restore - SetUserInfoTemplate()
- c. User TimeZone  
    backup - GetUserTimezone()  
    restore - SetTimezoneInfo()
- d. Transaction Logs  
    backup - ReadGeneralLog()

Please note that the transaction logs CANNOT be restored back to the reader due to the some security reason as no human intervention can change the transaction logs in the reader. So all the transaction logs will be genuine and correct at all time.

## H2i is Supported

To connect to H2i with its functionality, please define the DeviceModel as "H2i" when you are using Connect\_TCPIP(). All the remaining function is the same and use the function call without prefix with "SSR\_".

