Print Electronics Embeded Device Programmer's Guide

1.Introduction

Printsdk is the software development kit for Print embedded fingerprint machine.it can develop communication program with embedded machine.for example,you can get enrolled user information from device,or set user information to device,the information may be contain user name,user password,user privilege or user fingerprint template,and you can manage device on computer.end you can get In/Out logs from device.

Installation:
copy all dll files to system folder or current folder that program run. Then run regsvr32.exe to register the controls:Regsvr32 zkemkeeper.dll.

Note:
Functions of zkemkeeper that not in this doc are not support.
Parameter *dwEMachineNumber* equals *dwMachineNumber*,*dwEMachineNumber* only for compatible with old version.

2. Method

2.1 GetEnrollData

[Function]

Download the enrolled user's Fingerprint template from device

[Protocol]

```
BOOL   GetEnrollData(
            long        dwMachineNumber ,
            long        dwEnrollNumber ,
            long        dwEMachineNumber ,
            long        dwBackupNumber ,
            long FAR*   dwMachinePrivilege ,
            long FAR*   dwEnrollData ,
            long FAR*   dwPassWord);
```

[Parameters]

dwMachineNumber
The Machine Number of operating device

dwEMachineNumber
equal to *dwMachineNumber*

dwEnrollNumber
The User ID

dwBackupNumber
The Backup Number of the User, Backup Number means

Value	Description
0	Fingerprint Template 0
1	Fingerprint Template 1
2	Fingerprint Template 2
3	Fingerprint Template 3
4	Fingerprint Template 4
5	Fingerprint Template 5
6	Fingerprint Template 6
7	Fingerprint Template 7
8	Fingerprint Template 8
9	Fingerprint Template 9
10	Password

dwMachinePrivilege
The user's privilege at the device, as following:

Value	Description	
0	General user	
1	Administrator (user enrollment, set options of the device)	[Level 1]
2	Administrator (user enrollment,)	[Level 2]
3	Administrator (set options of the device)	[Level 3]

dwEnrollData
The pointer of buffer for save fingerprint template, buffer size must great or equat than 1836 BYTES.

dwPassWord
The password.

[Return]

TRUE if success, FALSE else.

[Note]

If dwBackupNumber is between 0 and 9, the specified fingerprint template saved to a buffer, which dwEnrollData parameter pointed to. And parameter dwPassWord is ignored. On the other hand, if dwBackupNumberValue is10, the password be saved to dwPassWord, and dwEnrollData parameter is ignored.

2.2 SetEnrollData

[Function]

Upload a specified user Fingerprint template to a device, Overwrite the exists user's data.

[Protocol]

```
BOOL   SetEnrollData(
            long        dwMachineNumber ,
            long        dwEnrollNumber ,
            long        dwEMachineNumber ,
            long        dwBackupNumber ,
            long        dwMachinePrivilege ,
            long FAR*   dwEnrollData ,
            long        dwPassWord);
```

[Paramters]

dwMachineNumber
The Machine Number of operating device

dwEnrollNumber
The User ID

dwEMachineNumber
equal to *dwMachineNumber*

dwBackupNumber
see Method GetEnrollData

dwMachinePrivilege
The user's privilege for this device

dwEnrollData
The fingerprint template. If dwBackupNumber is 10 it be ignored

dwPassWord
The user's password. If dwBackupNumber less than 10 it be ignored.

[Return]

TRUE if success, FALSE else.

2.3 GetUserTmp

Download the enrolled user's Fingerprint template from device.It's speed faster than GetEnrollData function

2.4 SetUserTmp

Upload a specified user Fingerprint template to a device, Overwrite the exists user's data.it upload the fingerprint to the device directly,so the device may have the same fingerprints,it is different from SetEnrollData.the speed faster than SetEnrollData

2.5 DeleteEnrollData

[Function]

Delete Fingerprint template of enrolled user.

[Protocol]

```
BOOL   DeleteEnrollData(
            long        dwMachineNumber ,
            long        dwEnrollNumber ,
            long        dwEMachineNumber ,
            long        dwBackupNumber);
```

[Paramters]

See GetEnrollData

[Return]

TRUE if success, FALSE else.

[Notes]

If there is no specified user in the device, return TRUE.

If dwBackupNumberValue is 11, all of fingerprint template of the user, who specified by dwEnrollNumber, will be deleted.
If dwBackupNumberValue is 12, all of fingerprint template and password of the user, who specified by dwEnrollNumber, will be deleted.

2.6 DelUserTmp

Only Delete a Fingerprint template of enrolled user.

2.7 ReadGeneralLogData

[Function]

Read general transication LOGs(attendance data) into internal buffer from device.

[Protocol]

```
BOOL ReadGeneralLogData(
            long dwMachineNumber );
```

[Paramters]

dwMachineNumber
The Machine Number of operating device

[Return]

TRUE if success, FALSE else.

[Notes]

After call ReadGeneralLogData to read data to buffer, you can call GetGeneralLogData to get every record of log.

2.8 GetGeneralLogData

[Function]

Get a record of log from internal buffer, which filled by ReadGeneralLogData.

[Protocol]

```
BOOL GetGeneralLogData(
                long dwMachineNumber ,
                long FAR*   dwTMachineNumber ,
                long FAR*   dwEnrollNumber ,
                long FAR*   dwEMachineNumber ,
                long FAR*   dwVerifyMode ,
                long FAR*   dwInOutMode ,
                long FAR*   dwYear,
                long FAR*   dwMonth,
                long FAR*   dwDay,
                long FAR*   dwHour,
                long FAR*   dwMinute);
```

[Paramters]

dwMachineNumber
The Machine Number of operating device

dwTMachineNumber
The Machine Number of device, where verified the user.

dwEnrollNumber
The User ID.

dwEMachineNumber
equal to *dwMachineNumber*

dwVerifyMode
The method of a successful verification. It's as following:

Value	Description
1	Fingeprint
2	Password

dwInOutMode
The attendance status. It's as following:

Value	Description
0	Duty On
1	Duty Off
2	Overtime Begin
3	Overtime End
4	Lock Out
5	Lock In

dwYear,
dwMonth,
dwDay,

dwHour,
dwMinute
The different parts of the date and time.

[Return]

TRUE if success, FALSE else.

[Notes]

Call ReadGeneralLogData to read data into internal buffer before this method. You can call it repeatedly until it return FALSE for getting all of records.
See also Method ReadGeneralLogData

2.9 ReadAllGLogData

Same ReadGeneralLogData

2.10 GetAllGLogData

Same GetGeneralLogData

2.11 GetDeviceStatus

[Function]

Get device status.

[Protocol]

```
BOOLGetDeviceStatus(
                long        dwMachineNumber ,
                long        dwStatus ,
                long FAR*   dwValue );
```

[Paramters]

dwMachineNumber
The Machine Number of operating device

dwStatus
Indicate which status. It's as following:

Value	Description
1	Count of administrators
2	Count od users
3	Count of fingerprint template
4	Count of password.
5	Count of new administration transication LOGs.
6	Count of new general LOGs

dwValue
The returned value.

[Return]

TRUE if success, FALSE else.

2.12 GetDeviceInfo

[Function]

Get the options of a device.

[Protocol]

```
BOOL GetDeviceInfo(
                long        dwMachineNumber ,
                long        dwInfo ,
                long FAR*   dwValue );
```

[Paramters]

dwMachineNumber

The Machine Number of operating device

dwInfo

Indicate which option. It's as following:

1. Maximum number of administrator. The value is from 0-10.
2. Machine Number of the device. The value is from 1 to 255.
3. Language

Value	Decription
0	English
1	Chinese
2	Korean

4. Auto shutdown device time(minutes). This value is from 0 to 255.
5. Lock Open output control

Value	Description
0	Output Open Lock signal
1	Not output Open Lock signal

6. Alarm number of general log. It's from 0 to 1500.
7. Alarm number of administration log. It's from 0 to 255.
8. Minimum interval(seconds) of two general log.
9. Baund rate of communication

Value	Description
0	1200 bps
1	2400 bps
2	4800 bps
3	9600 bps
4	19200 bps
5	38400 bps

10. Odd/Even Check

Value	Description
0	None
1	Even
2	Odd

11. Stop Bits

Value	Description
0	One Bit
1	Two Bits

12. Date Delimiter

    Not support now,but you can implement it use device info item 34 named Date formate

13. Network
14. RS232
15. RS485
16. Voice
17. Identification speed

18.idle
19.Shutdown time
20.PowerOn time
21.Sleep time
22.Auto Bell
23.Match threhold
24.Register threhold
25.1:1 threhold
26.Show score
27.Unlock person count
28.Only verify number card
29.Net Speed
30.Must registe card
31.Time out of temp state keep
32.Time out of input number
33.Time out of menu keep
34.Date formate
35.Only 1:1

dwValue
The returned value.

[Return]

TRUE if success, FALSE else.

2.13 SetDeviceInfo

[Function]

Set the options of a device.

[Protocol]

```
BOOLSetDeviceInfo(
                long        dwMachineNumber ,
                long        dwInfo ,
                long        dwValue );
```

[Paramters]

dwMachineNumber
Device ID
dwInfo
Device info index
1.Registrable administrators number
2.Device ID
3.Languages
4.Auto power off time
5.Lock control delay(20ms)
6.In and out record warning
7.manage record warning
8.Confirm interval time
9.Baud Rate
10.Even and Odd
11.Stop bit
12.Date list separator
Not support now,but you can implement it use device info item 34 named Date formate,pls refer to dwValue 34.
13.Network

14.RS232
15.RS485
16.Voice
17.Identification speed
18.idle
19.Shutdown time
20.PowerOn time
21.Sleep time
22.Auto Bell
23.Match threhold
24.Register threhold
25.1:1 threhold
26.Show score
27.Unlock person count
28.Only verify number card
29.Net Speed
30.Must registe card
31.Time out of temp state keep
32.Time out of input number
33.Time out of menu keep
34.Date formate
35.Only 1:1

dwValue

1.Registrable administrators number
2.Device ID
3.Languages

Value	Description
0	English,
1	Simplified Chinese
2	Traditional Chinese

4.Auto power off time
5.Lock control delay(20ms)
6.In and out record warning
7.manage record warning
8.Confirm interval time
9.Baud Rate
10.Even and Odd
11.Stop bit
12.Date list separator
13.Network
14.RS232
15.RS485
16.Voice
17.Identification speed
18.idle
19.Shutdown time
20.PowerOn time
21.Sleep time
22.Auto Bell
23.Match threshold
24.Register threshold
25.1:1 threshold
26.Show score

Whether show verify score,

Value	Description
0	False
1	True.

27.Unlock person count
28.Only verify number card
29.Net Speed

30.Must registe card
Verify card that card must registed.
31.Time out of temp state keep
Keep time for temp state,for example OT-IN,OT-OUT….But CheckIn/CheckOut is normal state.
32.Time out of input number
Keep time for wait input number
33.Time out of menu keep
Menu keep time when no option on it.
34.Date formate

Value	Description
0	YY-MM-DD
1	YY/MM/DD
3	YY.MM.DD
4	MM-DD-YY
5	MM/DD/YY
6	MM.DD.YY
7	DD-MM-YY
8	DD/MM/YY
9	DD.MM.YY
10	YYYYMMDD

35.Only 1:1
Only 1:1 verify mode.0:False,1:true.

[Return]

TRUE if success, FALSE else.

2.14 EnableDevice

[Function]

Allow/not allow the front user operating the device.

[Protocol]

```
BOOL EnableDevice(
                long        dwMachineNumber ,
                BOOL        bFlag );
```

[Paramters]

dwMachineNumber

The Machine Number of operating device

bFlag

TRUE means allow user input keys and fingerprint, FALSE means not allow

[Return]

TRUE if success, FALSE else.

[Notes]

Please call EnableDevice with bFlag=FALSE to disable front user's operation before calling other functions to exchange data between host and device, such as ReadGenealLogData, GetEnrollData etc. And call EnableDevice with bFlag=TRUE after your transactions finish.

2.15 EnableUser

[Function]

Enable or disable a user.

[Protocol]

```
BOOL EnableUser(
                long        dwMachineNumber ,
                long        dwEnrollNumber ,
                long        dwEMachineNumber ,
                long        dwBackupNumber ,
                BOOL        bFlag );
```

[Paramters]

bFlag
TRUE means enable the user, FALSE means disable him/her.
Other parameters see Method GetEnrollData.

[Return]

TRUE if success, FALSE else.

2.16 SetDeviceTime

[Function]

Set the device date and time.

[Protocol]

```
BOOLSetDeviceTime(
                long        dwMachineNumber );
```

[Paramters]

dwMachineNumber
The Machine Number of operating device

[Return]

TRUE if success, FALSE else.

[Notes]

This method set the device date and time same as host.

2.17 GetDeviceTime

[Function]

Get the device date and time.

[Protocol]

```
BOOLGetDeviceTime(
                long              dwMachineNumber ,
                long FAR*   dwYear,
                long FAR*   dwMonth,
                long FAR*   dwDay,
                long FAR*   dwHour,
```

```
                long FAR*   dwMinute,
                long FAR*   dwDayOfWeek);
```

[Paramters]

dwMachineNumber
The Machine Number of operating device

dwYear,
dwMonth,
dwDay,
dwHour,
dwMinute
The different parts of the device date.

dwDayOfWeek
The Day of Week of the device date

[Return]

TRUE if success, FALSE else.

2.19 PowerOffDevice

[Function]

Shut down the device.

[Protocol]

```
BOOLPowerOffDevice(
                long            dwMachineNumber );
```

[Paramters]

dwMachineNumber
The Machine Number of operating device

[Return]

TRUE if success, FALSE else.

2.20 ModifyPrivilege

[Function]

Modify a user privilege in a device.

[Protocol]

```
BOOL ModifyPrivilege(
                long        dwMachineNumber ,
                long        dwEnrollNumber ,
                long        dwEMachineNumber ,
                long        dwBackupNumber ,
                long        dwMachinePrivilege);
```

[Paramters]

See Method GetEnrollData.

[Return]

TRUE if success, FALSE else.

2.21 ReadAllUserID

[Function]

Read all User IDs from device into internal buffer.

[Protocol]

```
BOOL ReadAllUserID (
    long        dwMachineNumber);
```

[Paramters]

dwMachineNumber

The Machine Number of operating device

[Return]

TRUE if success, FALSE else.

[Notes]

Call Method GetAllUserID to get every record of User ID.

2.22 GetAllUserID

[Function]

Read a record of user ID from buffer that ReadAllUserID filled.

[Protocol]

```
BOOL GetAllUserID (
    long dwMachineNumber,
    long FAR*   dwEnrollNumber,
    long FAR*   dwEMachineNumber,
    long FAR*   dwBackupNumber,
    long FAR*   dwMachinePrivilege,
    long FAR*   dwEnable);
```

[Paramters]

dwEnable

Indicate if the user is enabled. Value 1 means a normal(enabled) user, and value 2 means disabled user.

[Return]

TRUE if success, FALSE else.

[Notes]

Call GetAllUserID repeatedly until it return FALSE for get all of them.

2.23 GetSerialNumber

[Function]
Get the product information or serial number

[Protocol]

```
BOOLGetSerialNumber (
          long dwMachineNumber,
          BSTR FAR* lpszSerialNumber);
```

[Paramters]
dwMachineNumber
The Machine Number of operating device

lpszSerialNumber
The returned string

[Return]
TRUE if success, FALSE else.

2.24 ClearKeeperData

[Function]
Delete all enrolled user/administrator fingerprint templates name and In/out logs.

[Protocol]

```
BOOL ClearKeeperData(
              long dwMachineNumber);
```

[Paramters]
dwMachineNumber
The Machine Number of operating device

[Return]
TRUE if success, FALSE else.

2.25 ClearAdministrators

[Function]
Clear all administrator's privilege in the device.

[Protocol]
ClearAdministrators(dwMachineNumber As Long) As Boolean

[Paramters]
dwMachineNumber
The Machine Number of operating device

[Return]
TRUE if success, FALSE else.

2.26 GetFirmwareVersion

[Function]

Get firmware version of device.

[Protocol]

GetFirmwareVersion(dwMachineNumber As Long, strVersion As String) As Boolean

[Paramters]

dwMachineNumber
The Machine Number of operating device
strVersion
Firmware version.

[Return]

TRUE if success, FALSE else.

2.27 GetSDKVersion

Get zkemkeeper version.

2.28 ClearGLog

Clear all logs from device.

2.29 GetFPTempLength

Get fingerprint template length.

2.30 Connect_Com

[Function]

Connect to the device by com port.

[Protocol]

Connect_Com(ComPort As Long, MachineNumber As Long, BaudRate As Long) As Boolean

[Paramters]

ComPort
Com port number
MachineNumber
The Machine Number of operating device
BaudRate
Communication BaudRate

[Return]

TRUE if success, FALSE else.

2.31 Connect_Net

[Function]

Connect to the device by Ethernet

[Protocol]

Connect_Net(IPAdd As String, Port As Long) As Boolean

[Paramters]

IPAdd

IP address
Port
Port number,Default 4370

[Return]

TRUE if success, FALSE else.

2.32 Disconnect

Disconnect with device.

2.33 SetUserInfo

[Function]

Set user's information to device.user's information contain user's name and password.

[Protocol]

SetUserInfo(dwMachineNumber As Long, dwEnrollNumber As Long, Name As String, Password As String, Privilege As Long, Enabled As Boolean) As Boolean

[Paramters]

dwMachineNumber
The Machine Number of operating device
dwEnrollNumber
Enroll number you want to set
Name
User name
Password
User Password
Privilege
User privilege
Enabled
whether Enabled user

[Return]

TRUE if success, FALSE else.

2.34 GetUserInfo

[Function]

Get user's information from device. user's information contain user's name and password.

[Protocol]

SetUserInfo(dwMachineNumber As Long, dwEnrollNumber As Long, Name As String, Password As String, Privilege As Long, Enabled As Boolean) As Boolean

[Paramters]

dwMachineNumber
The Machine Number of operating device
dwEnrollNumber
Enroll number t
Name
User name
Password
User Password
Privilege
User privilege
Enabled

whether Enabled user

[Return]

TRUE if success, FALSE else.

2.35 SetDeviceIP

Set device IP address.

2.36 GetDeviceIP

Get device IP address.

2.37 FPTempConvert

Convert the fingerprint template of device to Biokey fingerprint template,then you can verify the fingerprint on computer by Biokey.Biokey SDK is BioLife pc online fingerprint development kit.

2.38 GetSerialNumber

Get serial number of device.

2.39 SetCommPassword

[Function]

Set communication Password to connection.the password can reject Unauthorized connection.

[Protocol]

```
BOOL SetCommPassword (long Commkey)
```

[Paramters]

Commkey

The communication password.for example:if the password is "123456" then CommKey=123456

[Return]

TRUE if success, FALSE else.

[Notes]

2.40 GetSMS

[Function]

Get SMS

[Protocol]

```
GetSMS(dwIndex As Long, dwEnrollNumber As Long, SMS As String) As Boolean
```

[Paramters]

dwIndex

Index of SMS

dwEnrollNumber

the User ID of the SMS

SMS

Value of the SMS

[Return]

TRUE if success, FALSE else.

[Notes]

2.41 SetSMS

[Function]
Set SMS

[Protocol]

```
SetSMS(dwIndex As Long, dwEnrollNumber As Long, SMS As String) As Boolean
```

[Paramters]
dwIndex
Index of SMS
dwEnrollNumber
specify the User ID of the SMS
SMS
Value of the SMS

[Return]
TRUE if success, FALSE else.

[Notes]

2.42 CaptureImage

[Function]
Capture current image of fingerprint scanner

[Protocol]

```
CaptureImage(FullImage As Boolean, Width As Long, Height As Long, Image As Byte, ImageFile
As String) As Boolean
```

[Paramters]
FullImage
If true,the function will return Full image,else,it will return valid image,the valid image is the image for verify.
Width
specify width of the image
Height
specify the height of the image
Image
Byte array of image
ImageFile
Image File

[Return]
TRUE if success, FALSE else.

[Notes]

2.43 UpdateFirmware

[Function]
Update firmware

[Protocol]

```
UpdateFirmware(FirmwareFile As String) As Boolean
```

[Paramters]
Firmware file
firmware File

[Return]
TRUE if success, FALSE else.

[Notes]

2.44 BackupData

[Function]
Backup user data of device,contain user ID,password,fingerprint,log,etc.

[Protocol]

```
BackupData(DataFile As String) As Boolean
```

[Paramters]
DataFile
Backup data File

[Return]
TRUE if success, FALSE else.

[Notes]

2.45 RestoreData

[Function]
Restore data that backup before.

[Protocol]

```
RestoreData(DataFile As String) As Boolean
```

[Paramters]
Data file
Backup data file

[Return]
TRUE if success, FALSE else.

[Notes]

2.46 WriteLCD

[Function]
Write LCD of Devie

[Protocol]

```
WriteLCD(Row As Long, Col As Long, Text As String) As Boolean
```

[Paramters]
Row
Col
Text

[Return]
TRUE if success, FALSE else.

[Notes]

2.47ClearLCD

[Function]
Clear LCD of Devie

[Protocol]

```
ClearLCD() As Boolean
```

[Paramters]

[Return]
TRUE if success, FALSE else.

[Notes]

2.48 Beep

[Function]
Beep of buzzer

[Protocol]

```
Beep(DelayMS As Long) As Boolean
```

[Paramters]
DelayMS
Delay millisecond

[Return]
TRUE if success, FALSE else.

[Notes]

2.49 PlayVoiceByIndex

[Function]

Play voice

[Protocol]

```
PlayVoiceByIndex(Index As Long) As Boolean
```

[Paramters]

Index
Index of voice.

[Return]
TRUE if success, FALSE else.

[Notes]

2.50 ACUnlock

[Function]
send a signal for unlock.

[Protocol]

```
ACUnlock(dwMachineNumber As Long, Delay As Long) As Boolean
```

[Paramters]
dwMachineNumber
Device ID.

[Return]
TRUE if success, FALSE else.

[Notes]

2.51 GetUserGroup

[Function]
GetUserGroup

[Protocol]

```
GetUserGroup(dwMachineNumber As Long, dwEnrollNumber As Long, UserGrp As Long) As Boolean
```

[Paramters]
dwMachineNumber
Device ID
dwEnrollNumber
User ID
UserGrp
Group number of the user

[Return]
TRUE if success, FALSE else.

[Notes]

2.52 SetUserGroup

[Function]
Set group for the user..

[Protocol]

```
SetUserGroup(dwMachineNumber As Long, dwEnrollNumber As Long, UserGrp As Long) As Boolean
```

[Paramters]
dwMachineNumber
Device ID.
dwEnrollNumber
User ID
UserGrp
User group

[Return]
TRUE if success, FALSE else.

[Notes]

2.53 GetTZInfo

[Function]
Get timezone information.

[Protocol]

```
GetTZInfo(dwMachineNumber As Long, TZIndex As Long, TZ As String) As Boolean
```

[Paramters]
dwMachineNumber
Device ID.
TZIndex
Timezone index
TZ
Timezone string.

[Return]
TRUE if success, FALSE else.

[Notes]

2.54 SetTZInfo

[Function]
Set timezone inforamtion

[Protocol]

```
SetTZInfo(dwMachineNumber As Long, TZIndex As Long, TZ As String) As Boolean
```

[Paramters]

dwMachineNumber
Device ID.
TZIndex
Index of TimeZone
TZ
Timezone string

[Return]

TRUE if success, FALSE else.

[Notes]

2.55 GetUnlockGroups

[Function]

Get unlock groups

[Protocol]

```
GetUnlockGroups(dwMachineNumber As Long, Grps As String) As Boolean
```

[Paramters]

dwMachineNumber
Device ID.
Grps
Groups

[Return]

TRUE if success, FALSE else.

[Notes]

2.56 SetUnlockGroups

[Function]

Set unlock groups

[Protocol]

```
SetUnlockGroups(dwMachineNumber As Long, Grps As String) As Boolean
```

[Paramters]

dwMachineNumber
Device ID.
Grps
Groups string

[Return]

TRUE if success, FALSE else.

[Notes]

2.57 GetGroupTZStr

[Function]
Get Group timezones.

[Protocol]

```
GetGroupTZStr(dwMachineNumber As Long, GroupIndex As Long, TZs As String) As Boolean
```

[Paramters]
dwMachineNumber
Device ID.
GroupIndex
TZs
Timezones

[Return]
TRUE if success, FALSE else.

[Notes]

2.58 SetGroupTZStr

[Function]
Set group timezone.

[Protocol]

```
SetGroupTZStr(dwMachineNumber As Long, GroupIndex As Long, TZs As String) As Boolean
```

[Paramters]
dwMachineNumber
Device ID.
GroupIndex
TZs

[Return]
TRUE if success, FALSE else.

[Notes]

2.59 GetUserTZStr

[Function]
Get timezone of the user.

[Protocol]

```
GetUserTZStr(dwMachineNumber As Long, dwEnrollNumber As Long, TZs As String) As Boolean
```

[Paramters]
dwMachineNumber
Device ID.
dwEnrollNumber

User ID
TZs
Timezones

[Return]
TRUE if success, FALSE else.

[Notes]

2.60 SetUserTZStr

[Function]
Set user timezones

[Protocol]

```
SetUserTZStr(dwMachineNumber As Long, dwEnrollNumber As Long, TZs As String) As Boolean
```

[Paramters]
dwMachineNumber
Device ID.
dwEnrollNumber
User ID
TZs
Timezones

[Return]
TRUE if success, FALSE else.

[Notes]

2.61 GetLastError

[Function]
Get last error number.

[Protocol]

```
BOOL GetLastError(
                long FAR*        dwErrorCode);
```

[Paramters]
dwErrorCode
The returned error number

Value	Description
1	SUCCESSED
4	ERR_INVALID_PARAM
0	ERR_NO_DATA
-1	ERROR_NOT_INIT
-2	ERROR_IO
-3	ERROR_SIZE
-4	ERROR_NO_SPACE
-100	ERROR_UNSUPPORT

[Return]

TRUE if success, FALSE else.

[Notes]

dwErrorCode = 6 caused by calling Method GetGeneralLogData, and GetAllGLogData.
If them return FALSE, please call GetLastError to determine if there is error or read over data.