Windows Web OCR SDK Documentation

Version 1.0

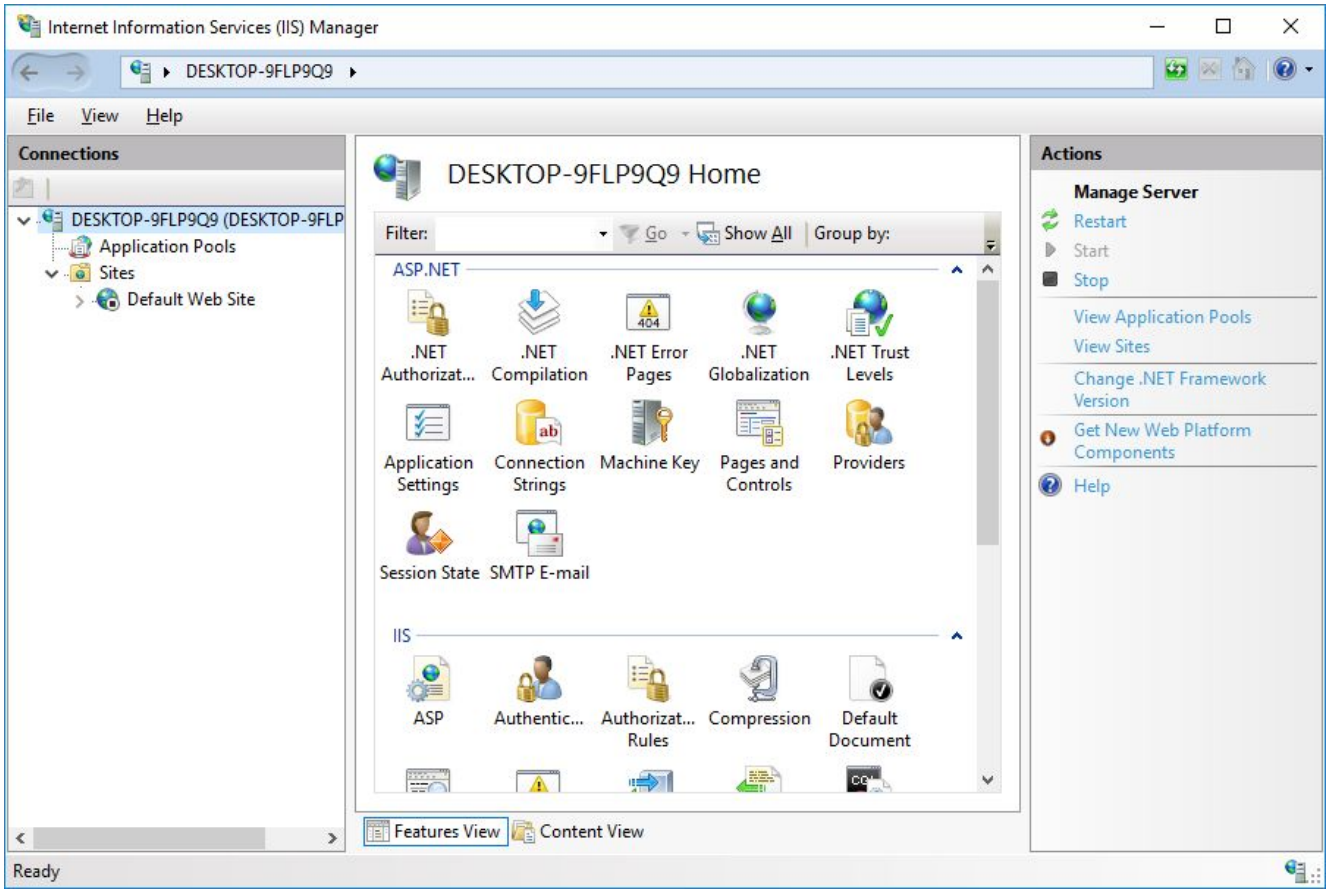
Project Setup using IIS Management

1. Install Package

Install Visual Studio 2015 redistributable x64 for 64bit IIS
(Install Visual Studio 2015 redistributable x32 for 32bit IIS)

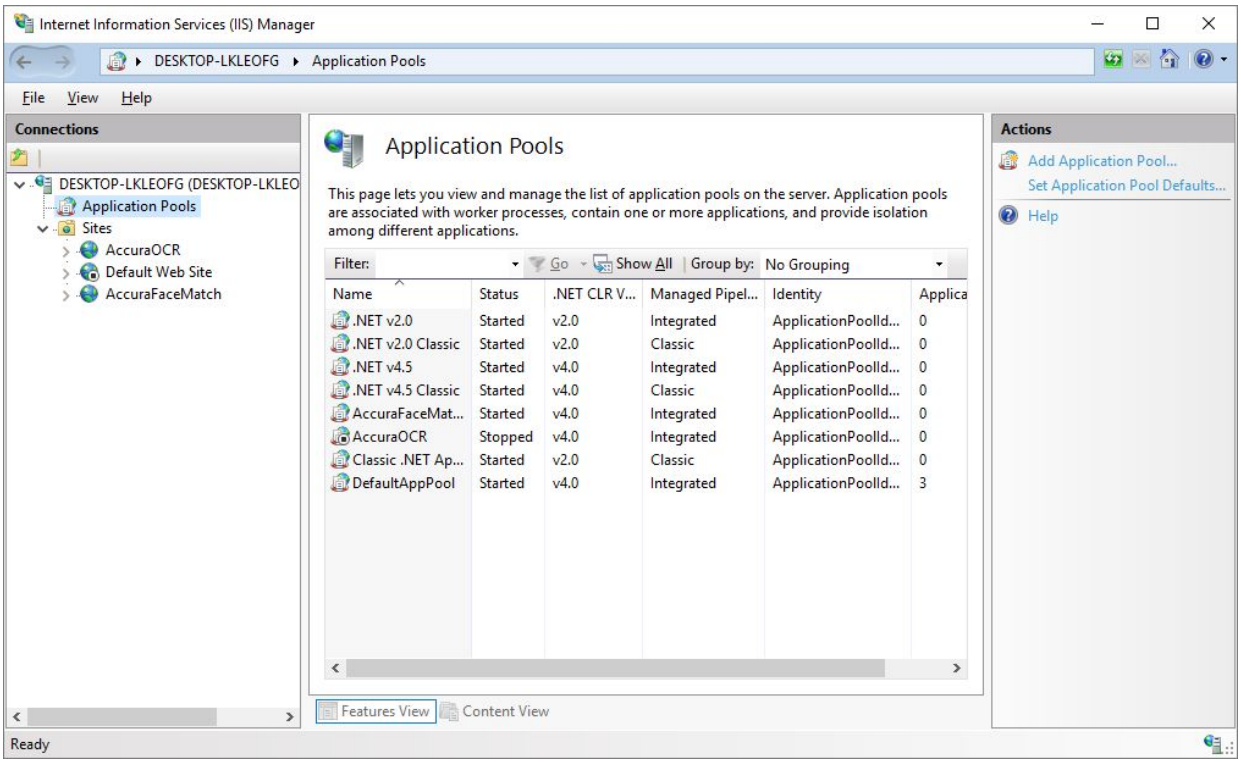
2. Open IIS Management

Click “Control Panel/Administrative Tools/Internet Information Services (IIS) Manager”



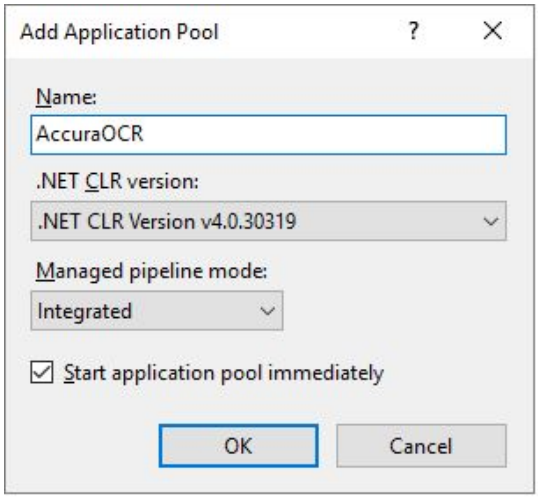
3. Setting Application Pool

1) click “Application Pools” on IIS Management Window

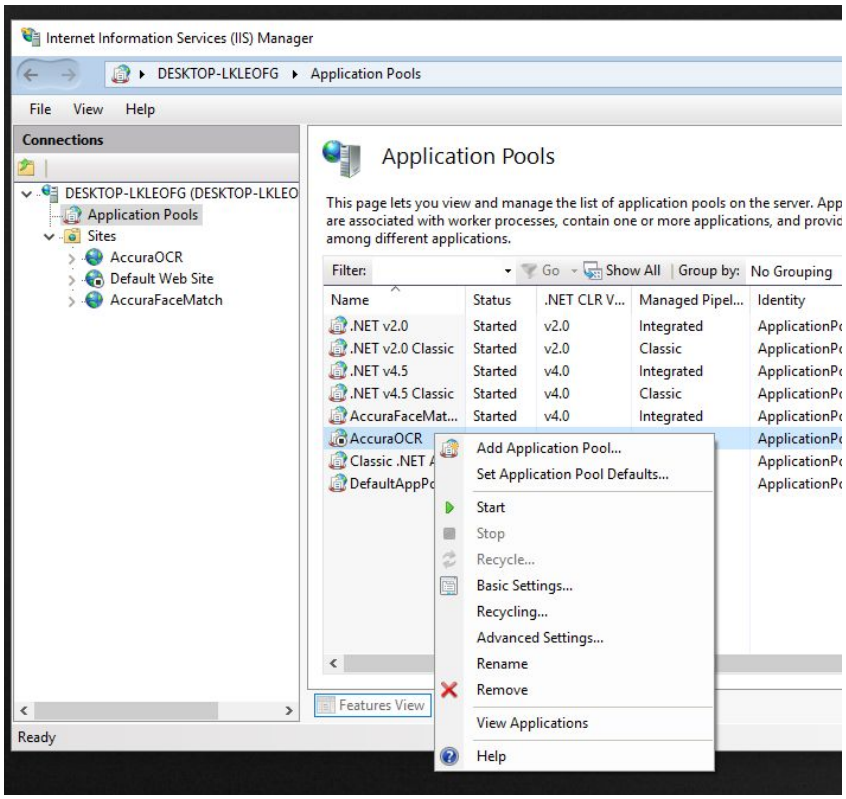


2) Right click on “Application Pool” and select “Add Application Pool…” from context menu.

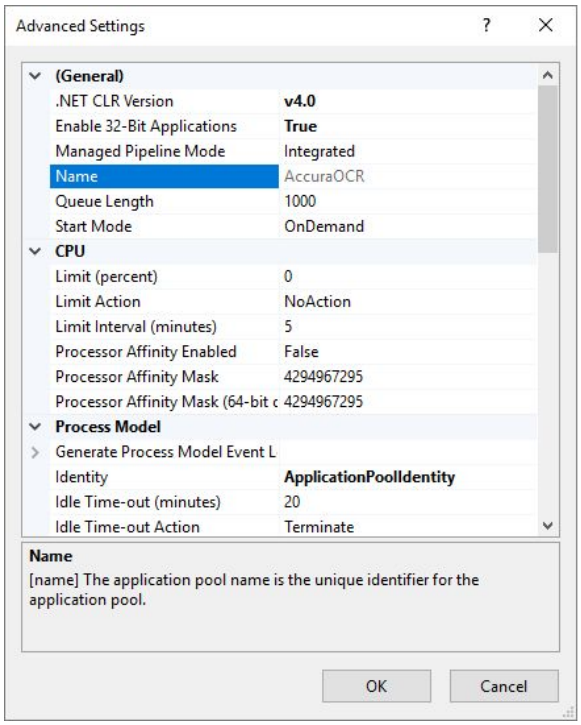
3) Input pool name “AccuraOCR” and click ok



4) Select “AccuraOCR” pool, Righ click on the pool and select “Advanced Settings...” from context menu.



5) Set the “Enable 32-Bit Applications” to “True” if you are using 32-Bit windows

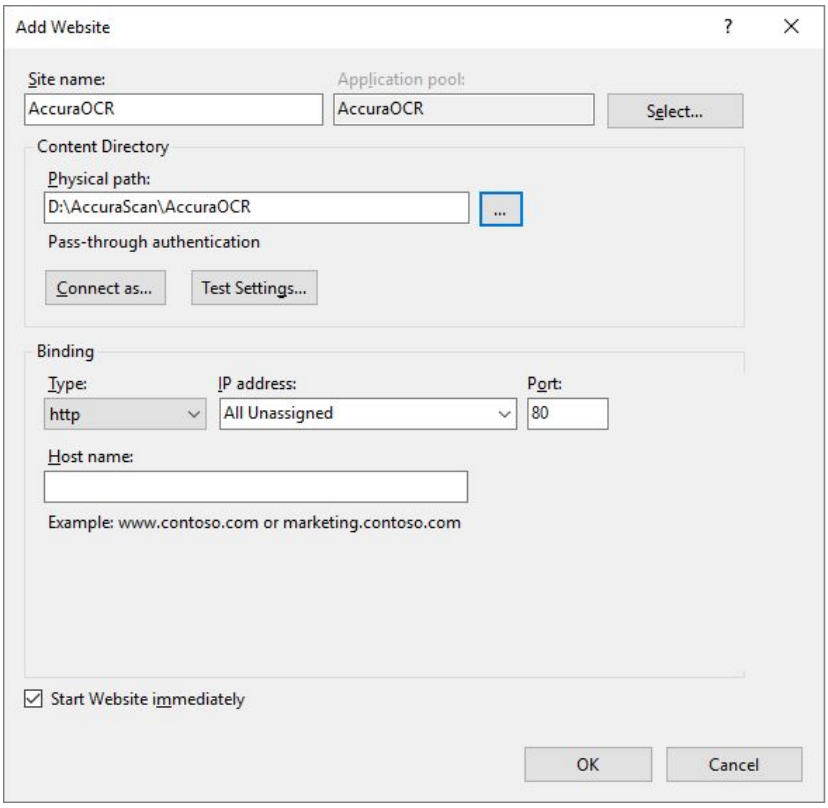


4. Add “cardrec” website

1) Select “Sites” on IIS management windows

2) Right click on Sites and select “Add Website…” from the context menu

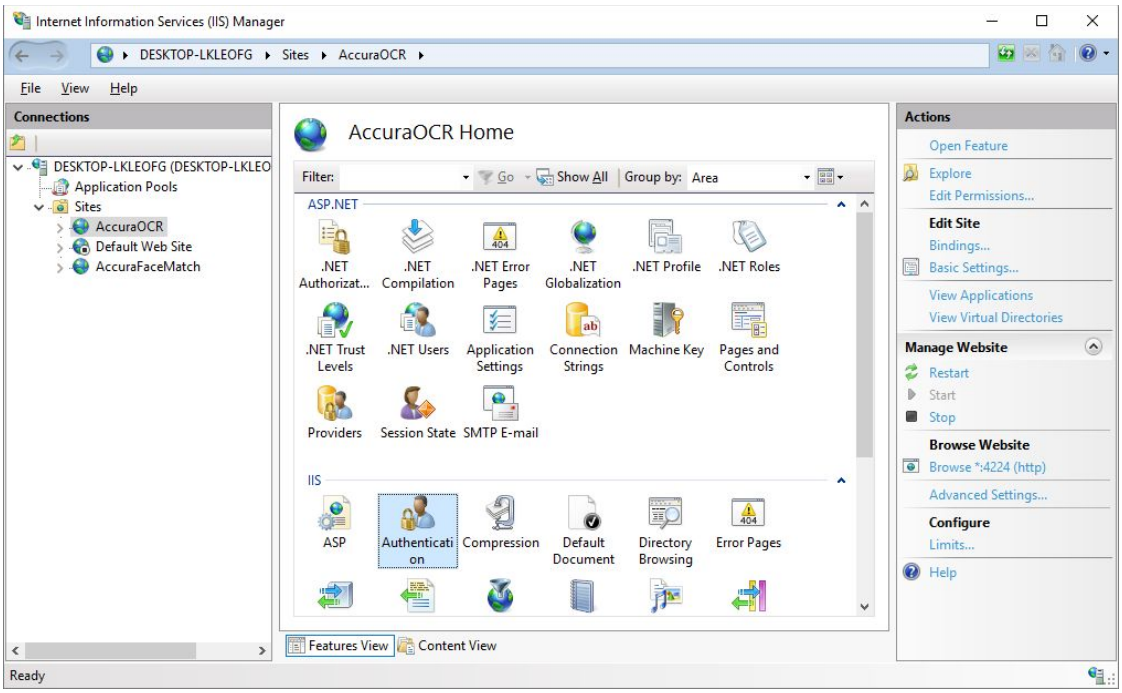
3) Input the site information.
- Site name : AccuraOCR
- Application pool : AccuraOCR
- Physical path : <Path to the project>
- Click “OK”



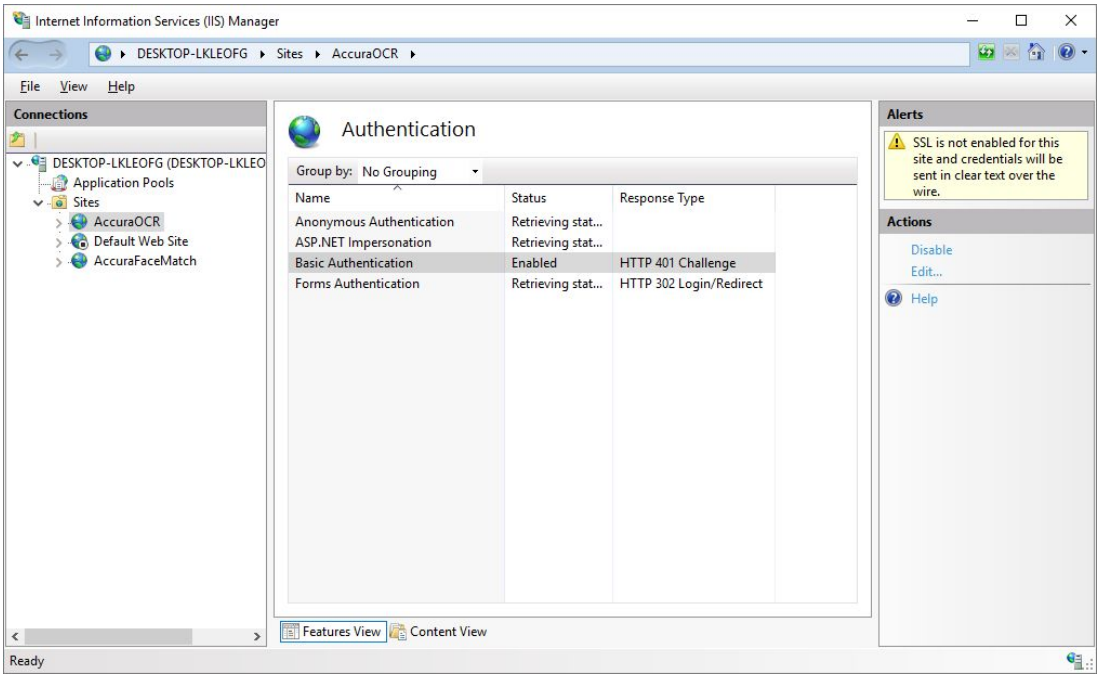
5. Setting “AccuraOCR” website

1) Authentication

- Select “AccuraOCR” website under Sites and Click “Authentication” item on IIS Management window



- Enable “Basic Authentication”



6. **Run**
   Run google chrome and input http://localhost

Codes Integration

1. **Copy Files**

   Copy following files to the destination folders under your project root folder as mentioned.

File	Destination Folder
cardocr.dll	bin
cardrec.dll	bin
cardrec.dll.config	bin
cardrec.pbd	bin
Key.license *	db
mMQDF_f_Passport_bottom_Gray.dic	db
mMQDF_f_Passport_bottom.dic	db

   * Note: You can generate license key “key.license” from your “Developer Account” from our website www.accurascan.com

2. **Import DLL files**

   Import required .dll files to your form action file. In our case it is **proc.aspx**
   In given demo project we have imported a required files in **proc.aspx.cs**

```
[DllImport("cardocr.dll", EntryPoint = "initCardEngine", CallingConvention
= CallingConvention.Cdecl)]
public static extern IntPtr initCardEngine(int nCardType);

[DllImport("cardocr.dll", EntryPoint = "loadDB", CallingConvention =
CallingConvention.Cdecl)]
public static extern int loadDB(IntPtr hHandle, byte[] szDic, int nDic,
byte[] szDic1, int nDic1,
byte[] tData, int ntData, byte[] license, int nlicense);

[DllImport("cardocr.dll", EntryPoint = "doRecognize", CallingConvention =
CallingConvention.Cdecl)]
```

```
public static extern int doRecognize(IntPtr hHandle, byte[] szImage, int
nLen);

[DllImport("cardocr.dll", EntryPoint = "getResult", CallingConvention =
CallingConvention.Cdecl)]
public static extern IntPtr getResult(IntPtr hHandle, ref int nLen);

[DllImport("cardocr.dll", EntryPoint = "getFaceImage", CallingConvention =
CallingConvention.Cdecl)]
public static extern IntPtr getFaceImage(IntPtr hHandle, ref int nLen);

[DllImport("cardocr.dll", EntryPoint = "doFaceDetect", CallingConvention =
CallingConvention.Cdecl)]
public static extern IntPtr doFaceDetect(IntPtr hHandle, byte[] szImage,
int nLen, ref int nSize);

[DllImport("cardocr.dll", EntryPoint = "getCardImage", CallingConvention =
CallingConvention.Cdecl)]
public static extern IntPtr getCardImage(IntPtr hHandle, ref int nLen);

[DllImport("cardocr.dll", EntryPoint = "getErrorMsg", CallingConvention =
CallingConvention.Cdecl)]
public static extern IntPtr getErrorMsg(IntPtr hHandle, ref int nLen);

[DllImport("cardocr.dll", EntryPoint = "getDevInfo", CallingConvention =
CallingConvention.Cdecl)]
public static extern IntPtr getDevInfo(IntPtr hHandle, ref int nLen);

[DllImport("cardocr.dll", EntryPoint = "releaseCardEngine",
CallingConvention = CallingConvention.Cdecl)]
public static extern void releaseCardEngine(IntPtr hHandle);
```

3. **File Validations**

    a. File Must be less then 5 MB
    b. Supported File extentions - .jpg, .jpeg, .gif, .png

4. **Define Database and License File**

Define required database files and License file in your proc.aspx file as below.

```
string dic =
HttpContext.Current.Server.MapPath("~/db/mMQDF_f_Passport_bottom_Gray.dic"
);
string dic1 =
HttpContext.Current.Server.MapPath("~/db/mMQDF_f_Passport_bottom.dic");
string tdata = HttpContext.Current.Server.MapPath("~/db/eng.dat");
string license = HttpContext.Current.Server.MapPath("~/db/key.license");
```

5. **Open and Read from Database and License files**

```
//open the database files
System.IO.Stream dic_is = OpenFile(dic);
System.IO.Stream dic1_is = OpenFile(dic1);
System.IO.Stream tdata_is = OpenFile(tdata);
System.IO.Stream license_is = OpenFile(license);

byte[] bydic = new byte[dic_is.Length];
byte[] bydic1 = new byte[dic1_is.Length];
byte[] bytdata = new byte[tdata_is.Length];
byte[] bylicense = new byte[license_is.Length];

//read the database files as byte array
dic_is.Read(bydic, 0, (int)dic_is.Length);
dic1_is.Read(bydic1, 0, (int)dic1_is.Length);
tdata_is.Read(bytdata, 0, (int)tdata_is.Length);
license_is.Read(bylicense, 0, (int)license_is.Length);

//close files
```

```
dic_is.Close();
dic1_is.Close();
tdata_is.Close();
license_is.Close();
```

6. Initialize Card Engine

```
IntPtr hHandle = initCardEngine(nCardType);
```

Supported Card Type Values:

Card Type	Value
MRZ Passport and ID Cards	2
Face Detection	100

InitCardEngine method will return **null** if it fails to initialize the engine.

7. Face Detection Method

This method is used to detect a face on card.

```
IntPtr ptrface = doFaceDetect(hHandle, imgBuf, imgBuf.Length, ref
nResult);
```

8. Get Device Information

These informations are required to validate license copy.

```
Int nDev = 0;
IntPtr ptrDev = getDevInfo(hHandle, ref nDev);
string strDev =
System.Runtime.InteropServices.Marshal.PtrToStringAnsi(ptrDev, nDev);
```

9. Load Database Method

Method to loadDB

```
int nRet = loadDB(hHandle, bydic, bydic.Length, bydic1, bydic1.Length,
bytdata, bytdata.Length, bylicense, bylicense.Length);
```

Check for Error Messages

```
IntPtr ptrErr = getErrorMsg(hHandle, ref nErr);
string strError =
System.Runtime.InteropServices.Marshal.PtrToStringAnsi(ptrErr, nErr);
```

10. Recognize the Card

Card Recognization Method

```
nRet = doRecognize(hHandle, imgBuf, imgBuf.Length);
```

Face and Card Pointers

```
IntPtr ptrFace = getFaceImage(hHandle, ref nFace); //the pointer of face
image
IntPtr ptrCard = getCardImage(hHandle, ref nCardImg); //the pointer of
card image
```

You can refer to our **demo project** to check these codes in action.