



Biometric Hardware Redefined

UGEE Signature SDK

Operation Manual

December 2024

1st Version



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1. Foreword

This document mainly explains how the handwriting device and UGEE signature SDK for data interact, how to get the corresponding handwriting data through the SDK and other server-side program driver installation tutorial.

We provide SDKs for different usage scenarios, the latter part will detail the differences between the SDKs, so that you can find the SDK that most closely matches your business needs more quickly.

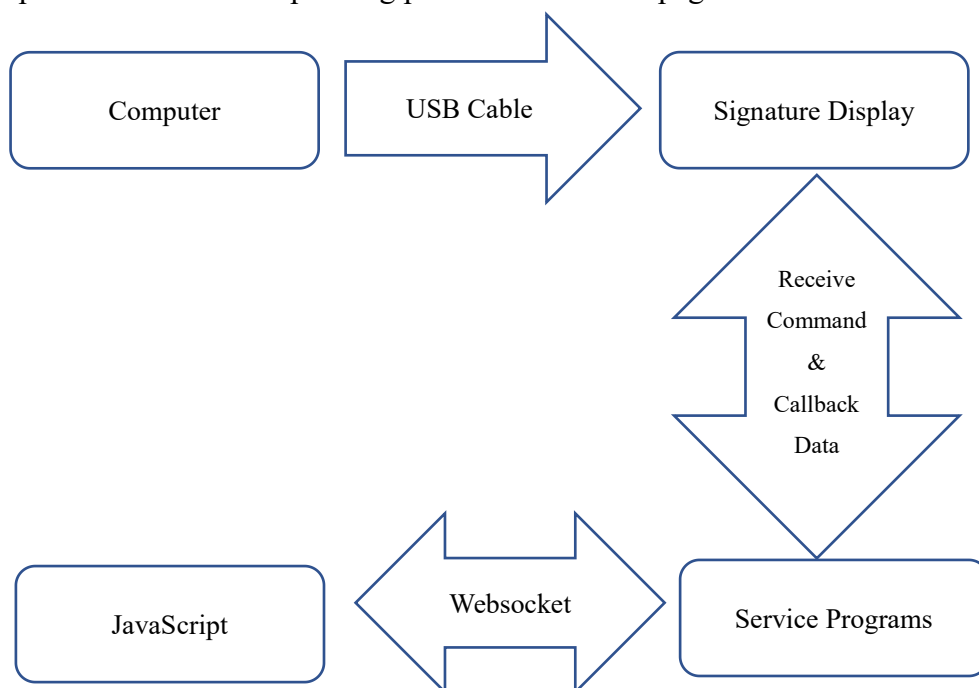
2. Overview

UGEE SDK is mainly divided into two categories: B/S structure (Browser/Server) and C/S structure (Client/Server). Select the appropriate SDK will greatly improve your efficiency of software development docking.

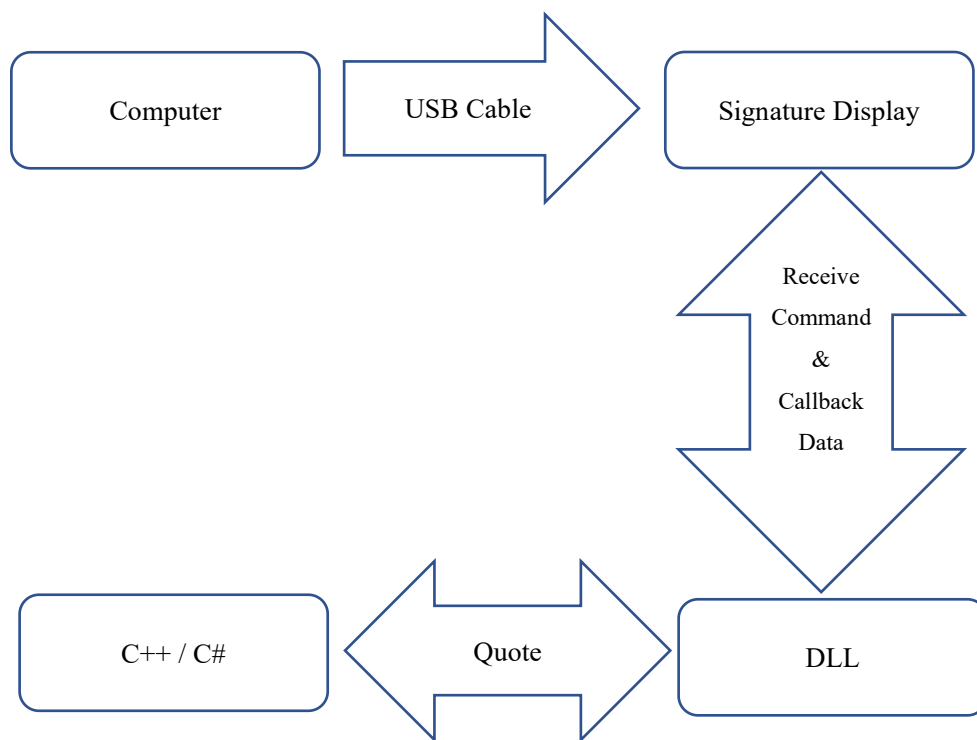
Description: 1. The service program receives messages from HTML and sends them to the digital screen, such as URL, signature boxes, etc.

2. After the signature is completed, the digital display returns the signature data base64 encoding, photo image, PDF file, etc.

3. The HTML page obtains data through the callback function interface and places it in the corresponding position of the web page



B/S Operation Structure Diagram



C/S Operation Structure Diagram

3. Connecting the Signature Display

3.1 Computer Settings

Connect the multi-head cable to the PC, and the other end to the handwriting screen.

If you are using the SDK to interface with the business system, you need to set the handwriting screen to extended mode, and set the resolution to 1280 * 800 (The above configuration is only needed for the 10.1 inch products/UG-1070 Series).

Display

Rearrange your displays

Select a display below to change the settings for it. Press and hold (or select) a display, then drag to rearrange it.

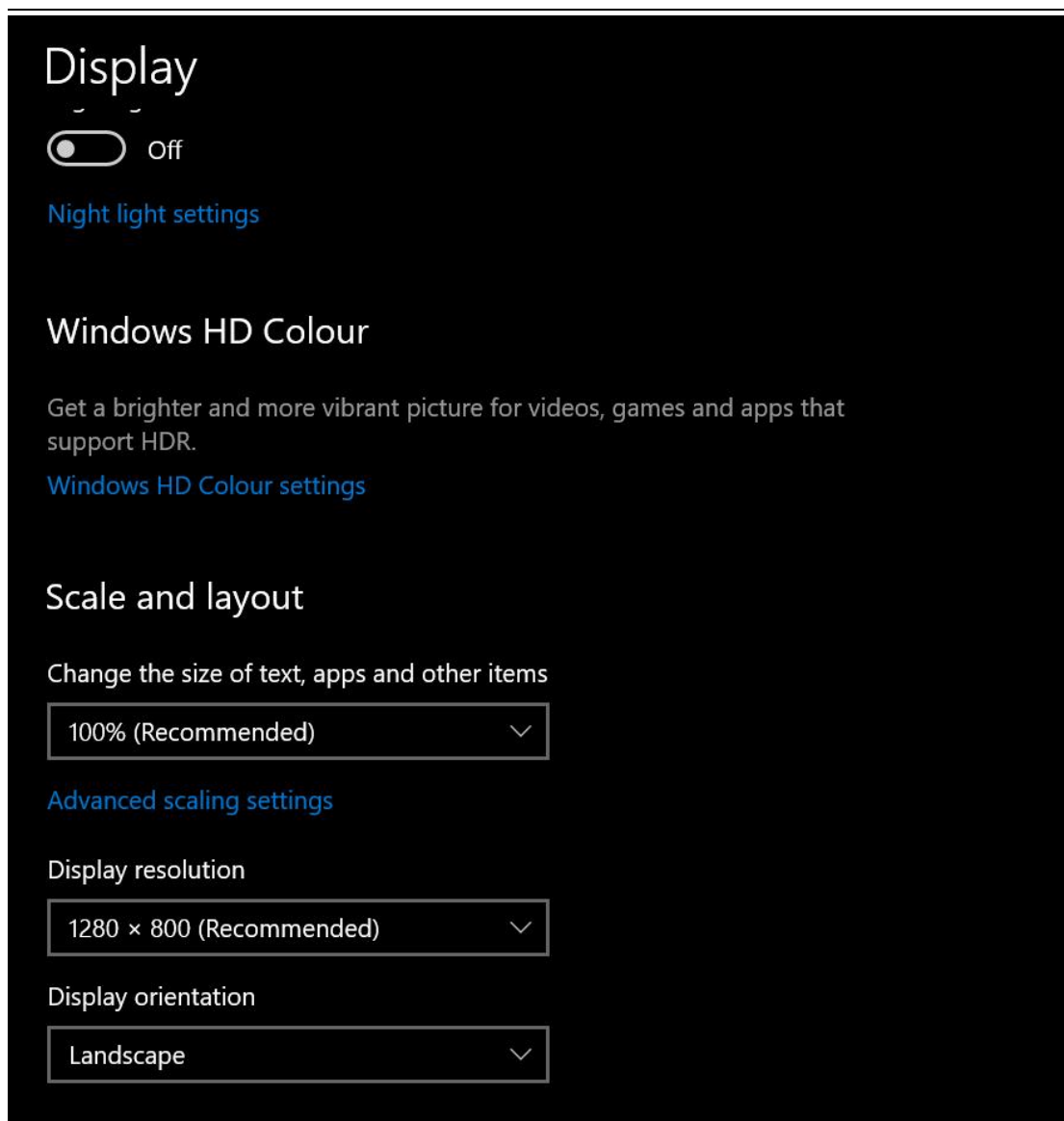


Identify

Detect



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3.2. DisplayLink

When the cable that comes with the signature display does not have HDMI port, you need to install the DisplayLink driver for normal display of the digital screen. The official download link is as below:

<https://www.synaptics.com/products/displaylink-graphics/downloads>

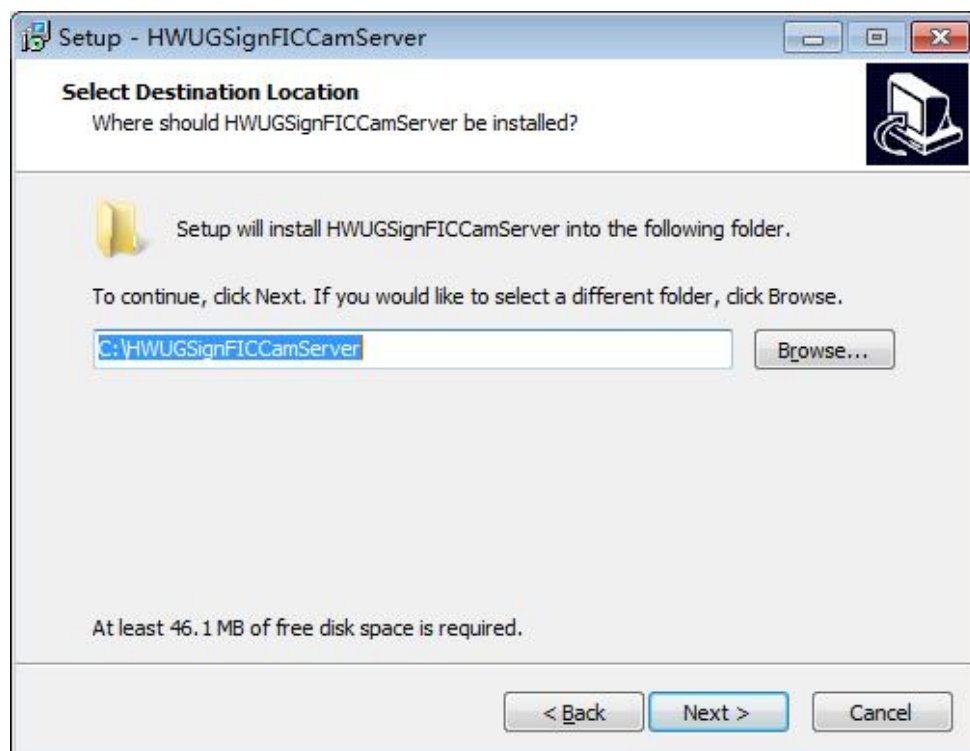
4. SDK Usage Instructions

4.1. B/S Structure SDK

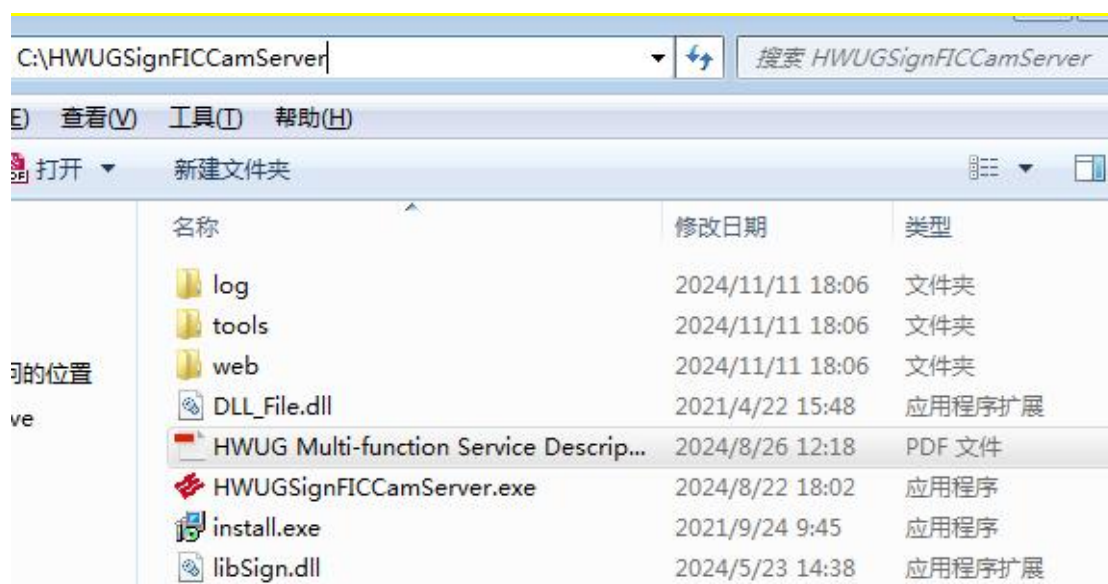
For B/S structure SDK, we usually pack the Service program/API documentation/Interface code examples (HTML5 and JavaScript) into EXE application installation package, which is to create the quick startup icon of the

service program on the desktop and to set the automatic startup of the service program after the installation.

After getting the B/S structure SDK installation package, just double-click the installation, and then go to the installation directory to find the Service program/API documentation/Interface code examples.



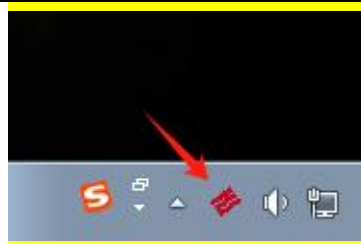
Setting Installation Path



Directory of Folders after Installation

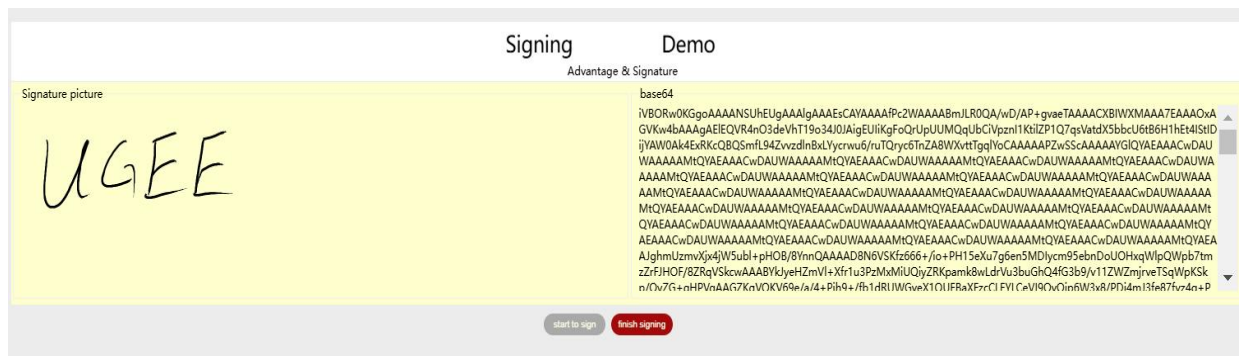


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The red icon indicates that the service program is running

After the installation is completed, make sure the service program HWUGSignFICCamServer.exe is running normally (As shown above, you may check whether there is a red icon on the taskbar in the lower right corner of your computer). Then open the HTML page in the web folder of the installation directory and test it. If the signature function runs normally, you can start the software development.



Base64 Sample

```
var wsUri = "ws://localhost:12001/pc";
var signUrl = "";
var isOpenUrl = false;
var websocket = null;
window.onload = initWebSocket();

function initWebSocket() {
    btninit();
    try {
        checkSocket();
        if ( websocket && websocket.readyState == 1 ){
            console.log("websocket close");
            websocket.close();
        }
    }

    websocket = new WebSocket( wsUri );
}
```

Websocket Connection



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```
function start()
{
    if ( websocket != null )
    {
        var str1="{\"typeName\":\"UgeeExtendUrl\",\"message\":\"\"+signUrl+\"}\"";
        websocket.send(str1);
        console.log( "string sent :", ''+str1+'');
        str1 = "{\"typeName\":\"UgeeStartSign\",\"message\":\"240@200@600@300@5@\"}";
        websocket.send(str1);
        console.log( "string sent :", ''+str1+'');
    }
}
```

Push signature popups and form URLs to the handwritten screen for display

```
websocket.onmessage = function (evt) {
    var obj = JSON.parse(evt.data);
    if("UgeeSignBase64" == obj.typeName){
        document.getElementById('pic').src='data:image/jpg;base64,'+obj.message;
        document.getElementById('base').innerHTML = obj.message;
    }
}
```

Data callback, receive Base64 encoding of signature image and display in HTML

Remark: The above code sample is for reference only, the Websocket ws address and interface name of each SDK may be different, please refer to your actual code.

4.2. C/S Structure SDK

For the C/S structure SDK, we will provide documentation for download in the form of rar/zip archive, which contains API documentation/Solution engineering/DLL.

Development Environment: Microsoft Visual Studio 2015

.net framework: .net framework4.0

4.3. SDK Release Notes

- **HWUGSignFICCamServer1.0.1.7 EN.exe**

Windows B/S SDK for all 10.1" signature display (e.g. UG-1070 Serials)

Applicable model: 10.1" signature display (e.g. UG-1070 Serials)

Supported Systems: Windows XP/Windows 7/Windows 8/Windows 10/Windows 11

Supported browsers: All Chromium kernel browsers

Development Language: JavaScript

- **HWUG Multi-function E-signature Demo**

Windows C/S SDK for all 10.1" signature display (e.g. UG-1070 Serials)

Applicable model: 10.1" signature display (e.g. UG-1070 Serials)

Supported Systems: Windows XP/Windows 7/Windows 8/Windows 10/Windows 11

Development Language: C#



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- **HWUGSign for Linux X86.rar**

Linux B/S SDK for 10.1" signature display (e.g. UG-1070 Serials)

Applicable models: 10.1" signature display (e.g. UG-1070 Serials)

Supported Systems: Linux Debian, Ubuntu, Mint, etc.

Supported browsers: All Chromium kernel browsers

Development Language: JavaScript

Supported processor architectures: X86

- **Sign05Server_EN.rar**

Dedicated Windows B/S SDK for 5" signature pad only

Applicable models: UG0501/ UG0502/ UG0503/ UG0504

Supported Systems: Windows XP/Windows 7/Windows 8/Windows 10/Windows 11

Supported browsers: All Chromium kernel browsers

Development Language: JavaScript

- **UG05Demo.rar**

Dedicated Windows C/S SDK for 5" signature pad only

Applicable models: UG0501/ UG0502/ UG0503/ UG0504

Supported Systems: Windows XP/Windows 7/Windows 8/Windows 10/Windows 11

Development Language: C#

- **UG0501_1.1.2_x86**

Dedicated Linux B/S SDK for 5" signature pad only

Applicable models: UG0501/ UG0502/ UG0503/ UG0504

Supported systems: Linux Debian, Ubuntu, Mint, etc.

Supported browsers: All Chromium kernel browsers

Development Language: JavaScript

- **SDK_V1.1.1.25.rar**

Windows C/S SDK for calling DLL and providing raw handwritten data

Applicable models: All UGEE products

Supported Systems: Windows XP/Windows 7/Windows 8/Windows 10/Windows 11

Development Language: C#/C++

- **ActiveX_2.0.6.5**

SDK for Windows OCX control development, support (B/S-C/S) structure

Applicable models: All UGEE products



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Supported Systems: Windows XP/Windows 7/Windows 8/Windows 10/Windows 11

Supported Browsers: Browsers that can reference the OCX control, it is recommended to use it in Internet Explorer 11 or below

Development language: C#/C++/JavaScript