



CYBERITH SDK

Native C# – Integration Guideline

Cyberith GmbH

Teslastraße 6
3100 St. Pölten
Austria
FN 410899p

For any questions, please contact

Cyberith Support
support@cyberith.com
+43 1 890 17 13

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Prerequisites

DirectX (recommended: June 2010)

<https://www.microsoft.com/en-us/download/details.aspx?displaylang=en&id=35>

Visual Studio (recommended: Visual Studio Community 2017)

<https://www.visualstudio.com/en-us/downloads/download-visual-studio-vs.aspx>

Setup

Dynamic Library

The CybSDK is a dynamic library called **CybSDK.dll**.

In Visual Studio right click your projects **References** and choose **Add Reference...** In the opening wizard choose **Browse** and click **Browse...** After choosing the **CybSDK.dll** from the file system click **OK** to finish the wizard.

Native Dynamic Libraries

CybSDK uses two native C++ libraries located in **/x86/CybSDK_Native.dll** and **/x64/CybSDK_Native.dll**. All that is left to do is to make sure these are places next to your executable in their respective folders.

In Visual Studio open the project properties and navigate to **Build Events** and add the following lines to **Post-build event command line**.

```
xcopy /y /e "$(ProjectDir)\[Path]\CybSDK\*.dll" "$(TargetDir)"
```

SDK Documentation

For full documentation take a look into the DoxyGen file **CybSDK_CS.chm** located in the **Docs** directory.

All classes and functions are documented via the XML documentation file **CybSDK.xml** and should show up in your Visual Studio IntelliSense.

Example usage

```
using System;
using CybSDK;

namespace CybSDK_CS_Demo
{
    class CybSDK_CS_ConnectionDemo
    {
        static void Main(string[] args)
        {
            ushort version;
            try
            {
                version = Virt.GetNativeSDKVersion();
            }
            catch (TypeInitializationException e)
            {
                // CybSDK_Native.dll could not be loaded
                Console.Error.WriteLine("[Fatal] Couldn't load CybSDK_Native.dll!");
                Console.ReadLine();
                Environment.Exit(-1);
            }

            IVirtDevice device = Virt.FindDevice();
            if (device == null)
            {
                Console.Error.WriteLine("[Fatal] No Virtualizer connected!");
                Console.ReadLine();
                Environment.Exit(-2);
            }

            VirtDeviceInfo info = device.GetDeviceInfo();
            string product_name = info.ProductName;

            if (!device.Open())
            {
                Console.Error.WriteLine("[Fatal] Unable to connect to Virtualizer!");
                Console.ReadLine();
                Environment.Exit(-3);
            }

            float ring_height = device.GetPlayerHeight();
            float ring_angle = device.GetPlayerOrientation() * 360;
            float movement_direction = device.GetMovementDirection() * 180;
            float movement_speed = device.GetMovementSpeed();

            Console.WriteLine("Connection successful!");
            Console.ReadLine();
        }
    }
}
```