



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

Table of Contents

Prerequisites	3
Window 7 or newer	3
Visual Studio	3
Setup	4
Include directory.....	4
Static Import Library	4
Dynamic Library	4
SDK Documentation	4
Example usage.....	5

Prerequisites

Window 7 or newer

Visual Studio

Recommended: Visual Studio Community 2017

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

Setup

Include directory

CybSDK comes with a collection of C++ header files in the folder **Includes**.

In Visual Studio open the project properties and navigate to **C/C++ > General** and add the directory to **Additional Include Directories**.

```
$(ProjectDir)\[Path]\CybSDK\Include
```

Static Import Library

CybSDK uses a static import library that handles DLL import and invocations.

In Visual Studio open the project properties and navigate to **Linker > Input** and add the file **CybSDK.lib** with its full path to **Additional Dependencies**.

```
$(ProjectDir)\[Path]\CybSDK\bin\$(PlatformTargetAsMSBuildArchitecture)\CybSDK.lib
```

Dynamic Library

The CybSDK is a dynamic library called **CybSDK.dll**. As the import library takes care of loading and invoking the DLL, all that is left to do is to make sure the **CybSDK.dll** is placed next to your executable.

In Visual Studio open the project properties and navigate to **Build Events > Post-Build Event** and add the following lines to **Command Line**.

```
copy /y "$(ProjectDir)\[Path]\CybSDK\bin\$(PlatformTargetAsMSBuildArchitecture)\CybSdk.dll"  
"$(TargetDir)"
```

SDK Documentation

For full documentation of the C++ SDK take a look into the online [Doxygen Documentation](#).

All classes and functions are documented in their respective header file located in the **Include** directory and should show up in your Visual Studio IntelliSense.

Example usage

```
#include <cstdlib>
#include <cstdio>
#include <iostream>

#include "CVirt.h"
using namespace CybSDK;

int main()
{
    uint16_t version;
    try
    {
        version = Virt::GetSDKVersion();
    }
    catch (...)
    {
        // CybSDK.dll could not be loaded
        fprintf(stderr, "[Fatal] Couldn't load CybSDK.dll!\n");
        std::cin.ignore();
        exit(-1);
    }

    VirtDevice* device = Virt::FindDevice();
    if (device == nullptr)
    {
        fprintf(stderr, "[Fatal] No Virtualizer connected!\n");
        std::cin.ignore();
        exit(-2);
    }

    const VirtDeviceInfo& info = device->GetDeviceInfo();
    const wchar_t* product_name = info.ProductName;

    if (!device->Open())
    {
        fprintf(stderr, "[Fatal] Couldn't connect to Virtualizer!\n");
        std::cin.ignore();
        exit(-3);
    }

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

    printf("Connection successful!");
    std::cin.ignore();
}
```