# Set up Visual Studio for SDL extensions

#### 1. Content

Set up Vi	sual Studio for SDL extensions	1
1. Cor	ntent	1
2. SD	L image	1
2.1.	Download SDL image version 2.0.1	1
2.2.	Adapt properties in Visual Studio	2
2.3.	Copy dll files	5
3. SD	L ttf	5
3.1.	Download SDL ttf version 2.0.14	5
3.2.	Adapt properties in Visual Studio	5
3.3.	Copy dll files	5

# 2. SDL image

### 2.1. Download SDL image version 2.0.1

Download the SDL image **development** library for windows at following url:

https://www.libsdl.org/projects/SDL\_image/

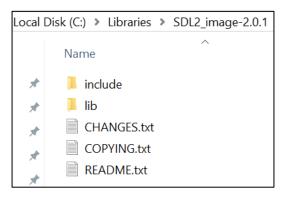
## **Development Libraries:**

Windows

SDL2 image-devel-2.0.1-VC.zip (Visual C++ 32/64-bit)

SDL2 image-devel-2.0.1-mingw.tar.gz (MinGW 32/64-bit)

Extract **SDL2\_image-devel-2.0.1-VC.zip** in a reliable location, example: C:\Libraries

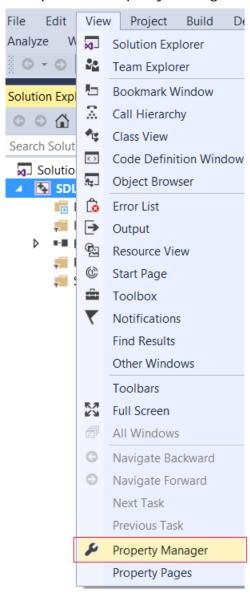


- 1 / 6 - Version 01

### 2.2. Adapt properties using the Property Manager

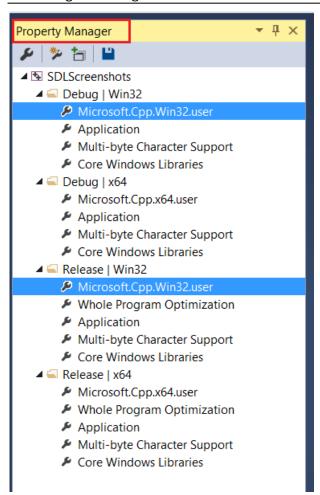
The C++ build process needs to look in these include and lib folders.

- 1. Start Visual Studio and create an empty console application.
- 2. Open the Property Manager: View>Property Manager

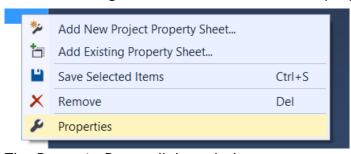


3. In the property manager, select Win32.user in both Debug and Release Win32.

- 2 / 6 - Version 01

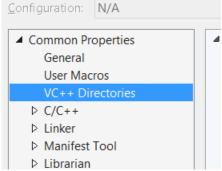


4. Click the right mouse button and select properties



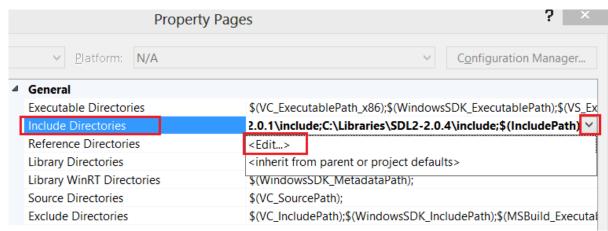
The Property Pages dialog window appears.

5. Select VC++ Directories in the left pane of the Property Pages window



- 6. Now tell Visual Studio that it has to search for header files in the SDL2 image **include** folder you just extracted.
  - Select the Include Directories field in the right pane. Push the down arrow button, and then click the edit button.

- 3 / 6 - Version 01



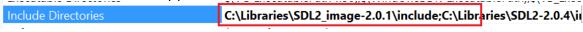
Then click on the New button and then the Browse button



Go find the folders you extracted, and select the include folder.

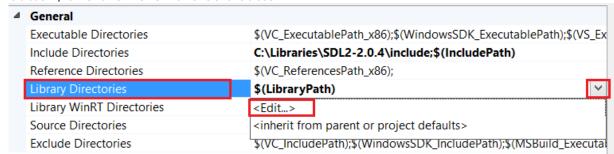


Then press the **Select Folder** button and then the **OK** button. Now the selected folder should appear next to Include Directories.

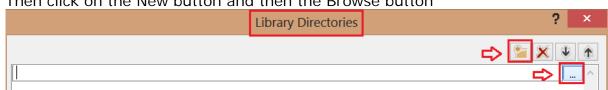


Now Visual Studio knows where to find these header files. If you get an error that the compiler can't find SDL\_image.h, it means you messed up this step.

- 7. Then tell Visual C++ to search for library files in these library folder we just extracted.
  - Select the **Library Directories** field. Again push the down arrow button, and then click the edit button.



Then click on the New button and then the Browse button



Go find the lib folder you extracted, and select the lib folder where you find two folders. There's one for 32bit x86 architecture and one for

-4/6-Version 01 64bit x64 architecture. Choose the x86 folder.



o Then press the **Select Folder** button and then the **OK** button. Now the selected folder should appear next to **Library Directories**.

Library Directories C:\Libraries\SDL2\_image-2.0.1\lib\x86;C:\Libraries\SDL2-2.0.4\

Now Visual Studio knows where to find the library files. If you get an error that the linker can't find SDL2\_image.lib, it means you missed this step.

### 2.3. Copy dll files

Browse with the **File Explorer** to the extracted folder: SDL2\_image-2.0.1\lib\x86

Copy next dll files from this folder into C:\Windows\SysWOW64:

- SDL2\_image.dll
- libpng16-16.dll

#### 3. SDL ttf

#### 3.1. Download SDL ttf version 2.0.14

Download the SDL\_ttf **development** library for windows at following url:

https://www.libsdl.org/projects/SDL\_ttf/

## **Development Libraries:**

Windows

SDL2\_ttf-devel-2.0.14-VC.zip (Visual C++ 32/64-bit) SDL2\_ttf-devel-2.0.14-mingw.tar.gz (MinGW 32/64-bit)

Extract **SDL2\_ttf-devel-2.0.14-VC.zip** in a reliable location, example: C:\Libraries

## 3.2. Adapt properties in Visual Studio

Again adapt the VC++ include and library Directories.

General	
Executable Directories	\$(VC_ExecutablePath_x86);\$(WindowsSDK_ExecutablePath);\$(VS_Executa
Include Directories	C:\Libraries\SDL2_ttf-2.0.14\include;C:\Libraries\SDL2_image-2.0.1\
Reference Directories	\$(VC_ReferencesPath_x86);
Library Directories	C:\Libraries\SDL2_ttf-2.0.14\lib\x86;C:\Libraries\SDL2_image-2.0

#### 3.3. Copy dll files

Browse with the **File Explorer** to the extracted folder: C:\Libraries\SDL2\_ttf-2.0.14\lib\x86.

Copy next dll files from this folder into C:\Windows\SysWOW64:

- 5 / 6 - Version 01

- SDL2\_ttf.dll
- libfreetype-6.dllzlib1.dll

-6/6-Version 01