

Visual Studio Plugin ImageWatch

Preconditions

- Visual Studio 2013 and later
- Install Image Watch Extension

Example 1

```
1  <?xml version="1.0" encoding="utf-8" ?>
2  <AutoVisualizer xmlns="http://schemas.microsoft.com/vstudio/debugger/natvis/2010">
3      <UIVisualizer ServiceId="{A452AFEA-3DF6-46BB-9177-C0B08F318025}" Id="1"
4          MenuName="Add to Image Watch" />
5
6      <Type Name="PixBuffer">
7          <UIVisualizer ServiceId="{A452AFEA-3DF6-46BB-9177-C0B08F318025}" Id="1" />
8      </Type>
9
10     <Type Name="PixBuffer">
11         <Expand>
12             <Synthetic Name="[type]" Condition='_bitsAllocated == 8'>
13                 <DisplayString>UINT8</DisplayString>
14             </Synthetic>
15             <Synthetic Name="[type]" Condition='_bitsAllocated == 16'>
16                 <DisplayString>UINT16</DisplayString>
17             </Synthetic>
18             <Item Name="[channels]">1</Item>
19             <Item Name="[width]">_width</Item>
20             <Item Name="[height]">_height</Item>
21             <Item Name="[data]">_map</Item>
22             <Item Name="[planes]">1</Item>
23             <Item Name="[stride]">_width*_bitsAllocated/8</Item>
24         </Expand>
25     </Type>
26 </AutoVisualizer>
```

Example 2

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <AutoVisualizer xmlns="http://schemas.microsoft.com/vstudio/debugger/natvis/2010">
3    <UIVisualizer ServiceId="{A452AFEA-3DF6-46BB-9177-C0B08F318025}" Id="1"
4      MenuName="Add to Image Watch"/>
5
6    <Type Name="SimpleImage">
7      <UIVisualizer ServiceId="{A452AFEA-3DF6-46BB-9177-C0B08F318025}" Id="1" />
8    </Type>
9
10   <Type Name="SimpleImage">
11     <AlternativeType Name="SimpleTIFFImage"/>
12     <AlternativeType Name="SimpleDICOMImage"/>
13     <Expand>
14       <Synthetic Name="[type]" Condition='_bytesPerSample == 1'>
15         <DisplayString>UINT8</DisplayString>
16       </Synthetic>
17       <Synthetic Name="[type]" Condition='_bytesPerSample == 2'>
18         <DisplayString>UINT16</DisplayString>
19       </Synthetic>
20       <Synthetic Name="[channels]" Condition='_spp == 1'>
21         <DisplayString>1</DisplayString>
22       </Synthetic>
23       <Synthetic Name="[channels]" Condition='_spp == 3'>
24         <DisplayString>RGB</DisplayString>
25       </Synthetic>
26       <Item Name="[width]">_width</Item>
27       <Item Name="[height]">_height</Item>
28       <Item Name="[data]">_map</Item>
29       <Item Name="[planes]">(_colorByPlane)? 3 : 1</Item>
30       <Item Name="[stride]">_width*_spp*_bytesPerSample</Item>
31     </Expand>
32   </Type>
33 </AutoVisualizer>
```

Demo

Documentation

<https://imagewatch.azurewebsites.net/ImageWatchHelp/ImageWatchHelp.htm>

<https://code.msdn.microsoft.com/windowsdesktop/Writing-type-visualizers-2eae77a2>