

# Визуализация переменных математических типов C3D в режиме отладки в Visual Studio

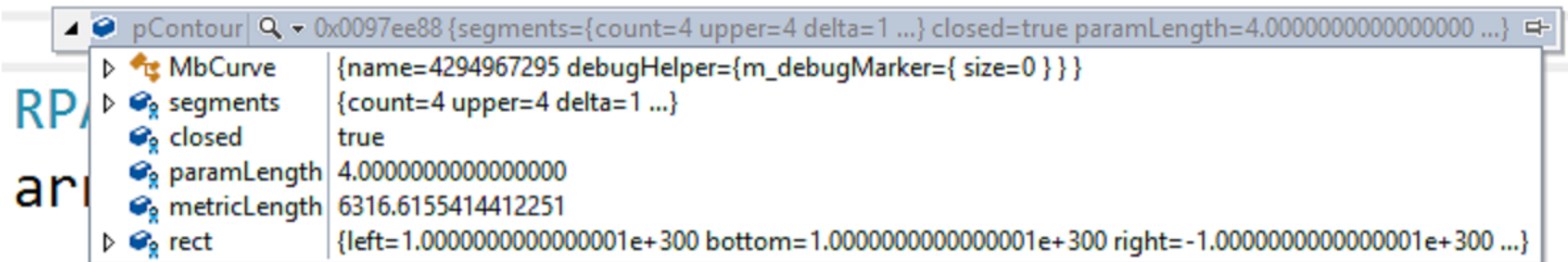
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C3Days 2017



# Встроенный в Visual Studio визуализатор объектов

```
MbContour* pContour(new MbContour());  
pContour->Init(points);
```

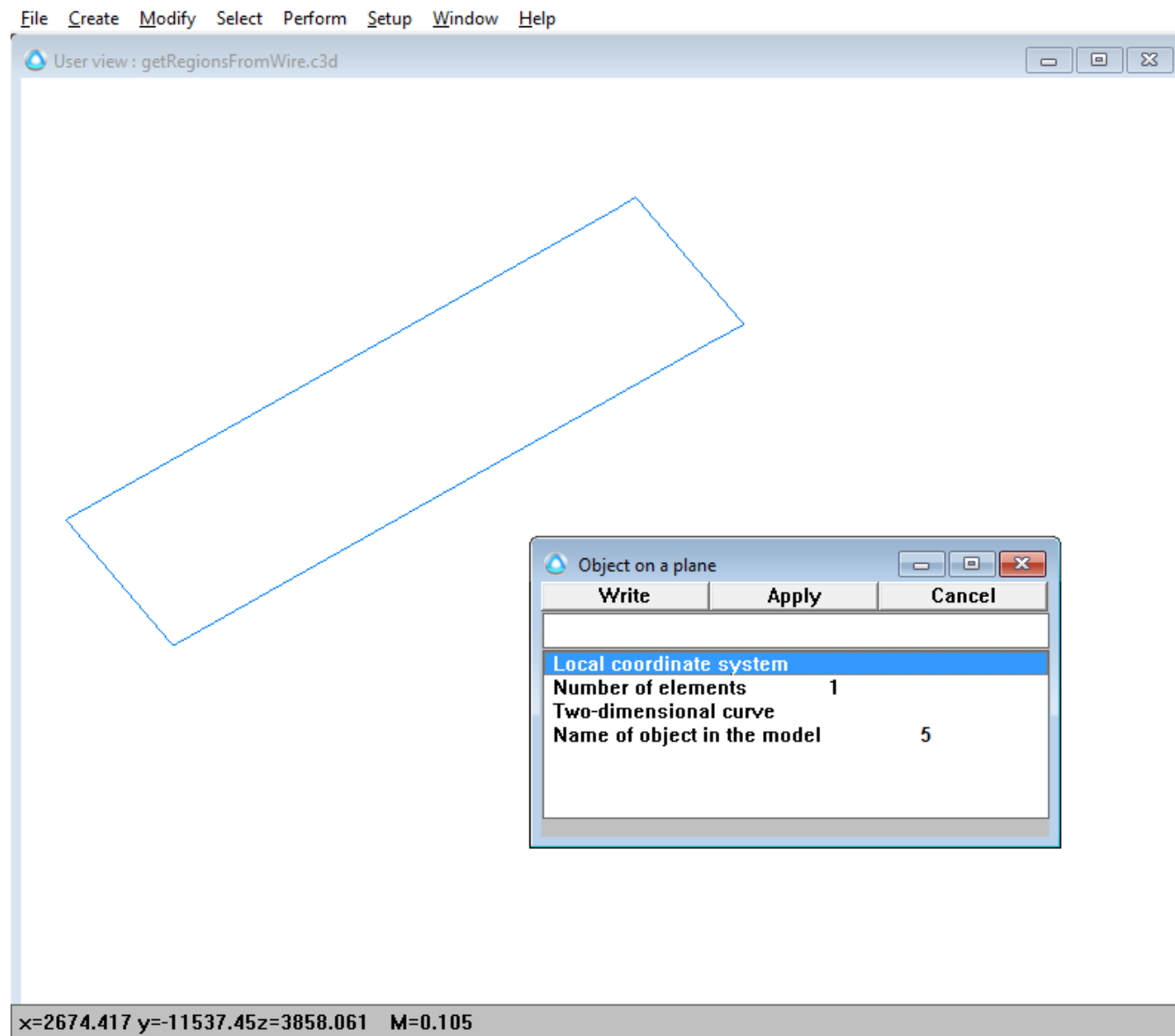


The screenshot shows the Object Explorer in Visual Studio. The selected object is `pContour` at memory address `0x0097ee88`. Its properties are:

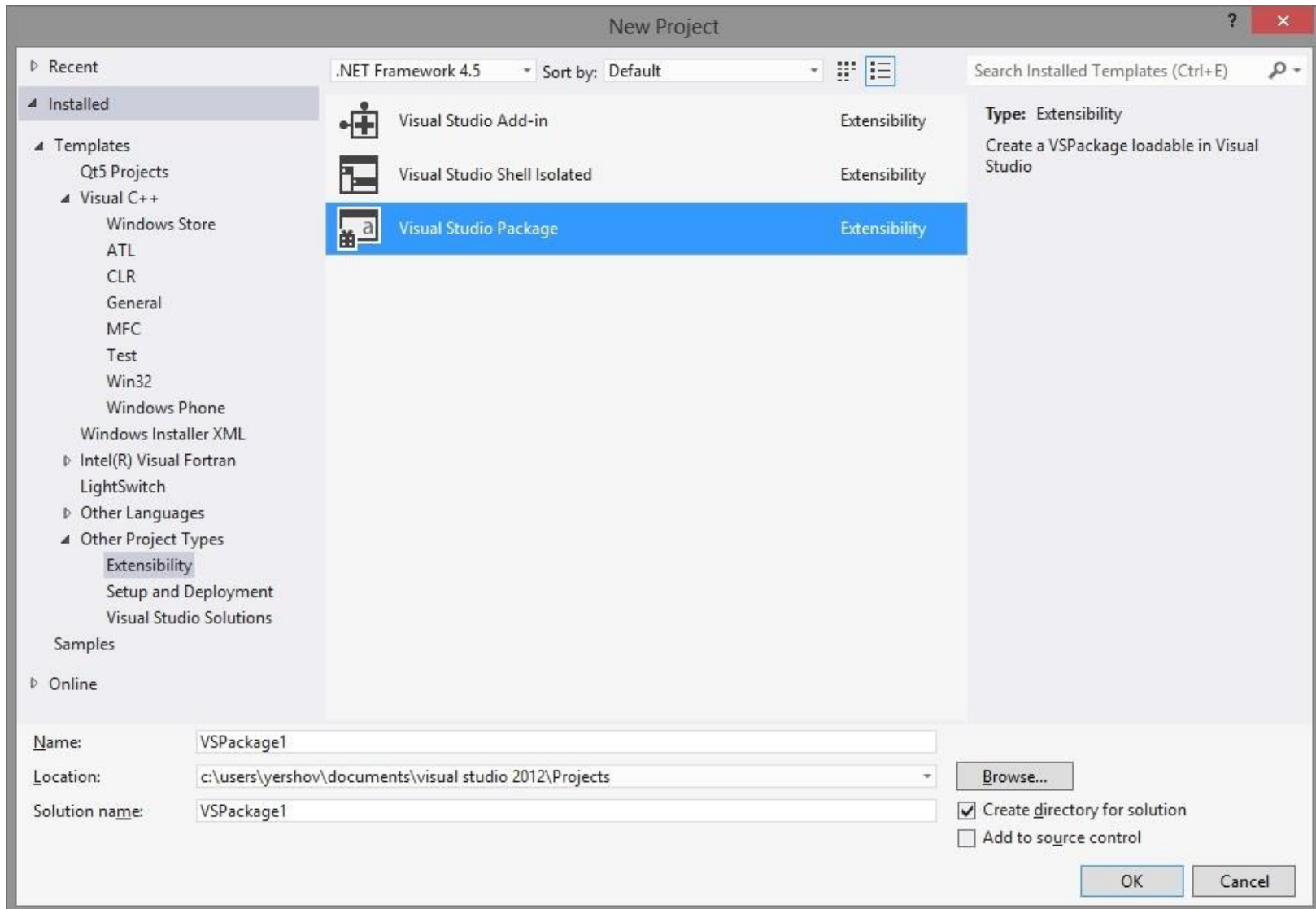
- `MbCurve`: `{name=4294967295 debugHelper={m_debugMarker={ size=0 }}}`
- `segments`: `{count=4 upper=4 delta=1 ...}`
- `closed`: `true`
- `paramLength`: `4.0000000000000000`
- `metricLength`: `6316.6155414412251`
- `rect`: `{left=1.0000000000000001e+300 bottom=1.0000000000000001e+300 right=-1.0000000000000001e+300 ...}`



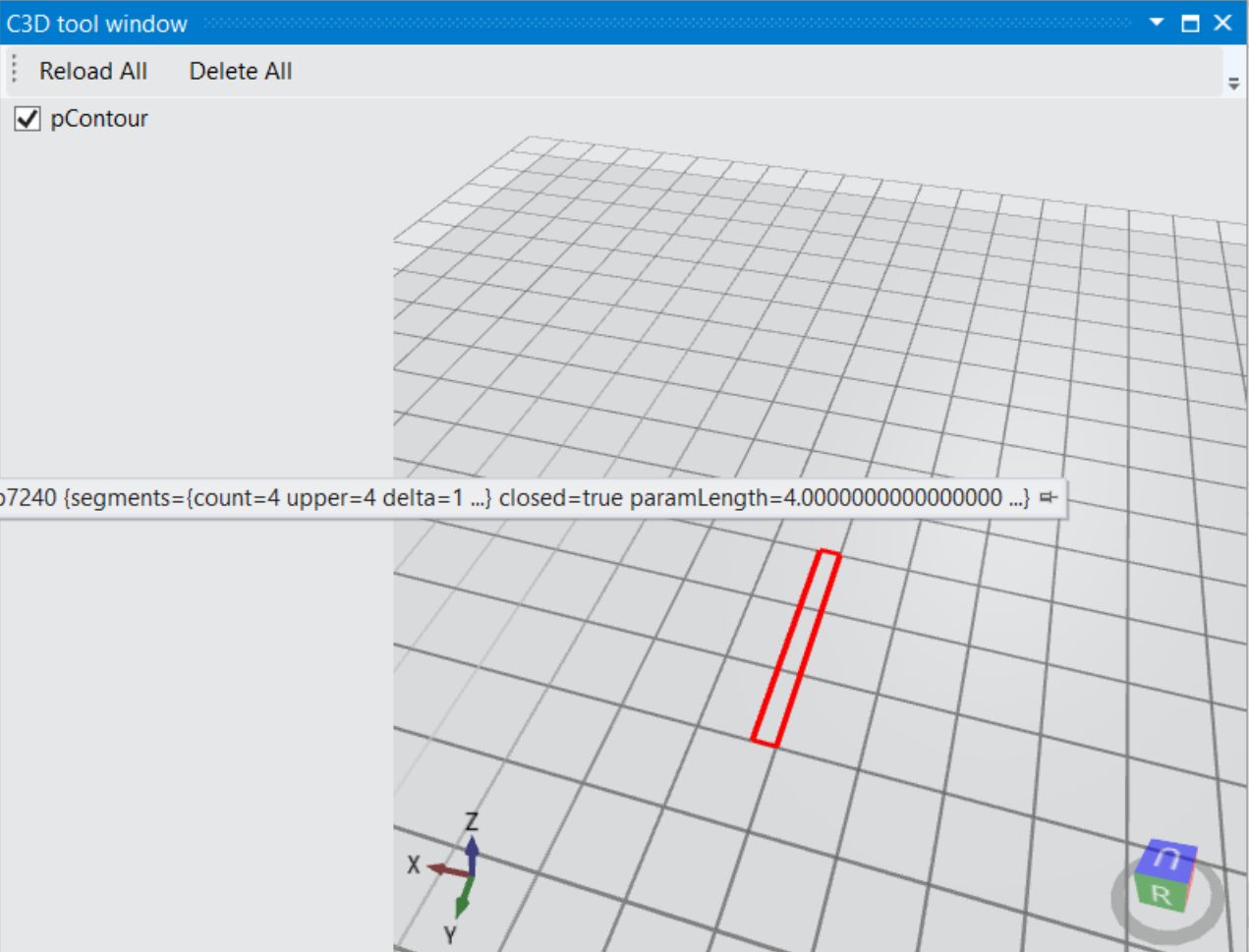
# Отладка с помощью тестовой утилиты C3D



# Создание расширения для Visual Studio



# Визуализатор для C3D типов



The screenshot shows a software interface with a 3D visualization window titled "C3D tool window". The window contains a 3D grid and a red rectangle. The interface also includes a code editor on the left and a console on the right.

```
ndedDebug();  
  
Создаем прямоугольник  
artPoint> points;  
(MbCartPoint(0, 0));  
(MbCartPoint(300, 0));  
(MbCartPoint(300, 3000));  
(MbCartPoint(0, 3000));  
  
pContour(new MbContour()  
Init(pContour 0x006b7240 {segments={count=4 upper=4 delta=1 ...} closed=true paramLength=4.000000000000000 ...} )  
C3D Visualizer  
  
Подготавливаем данные дл  
Contour> arr;  
ontour);  
  
t3D placement;  
Plane = new MbPlane(place  
d_ptr<MbSweptData> spCurv
```

# Визуализатор для C3D типов

The screenshot displays a debugger interface with the following components:

- Code Editor:** Shows the source code for `Sample.cpp`. The `main()` function is expanded, showing the initialization of a `SArray<MbCartPoint>` and the creation of a `MbContour` object. Red dots on lines 22 and 23 indicate the current execution point.
- Threads Window:** Lists the threads of the process (ID: 6288).

ID	Managed ID	Category	Name	Location	Priorit
4824	0	Main Thread	Main Thread	Sample.exe!main	Normal
5252	0	Worker Thread	ntdll.dll thread	ntdll.dll!7779876c	Normal
7644	0	Worker Thread	ntdll.dll thread	ntdll.dll!7779876c	Normal
10664	0	Worker Thread	ntdll.dll thread	ntdll.dll!7779876c	Normal
- C3D tool window:** A 3D visualization window titled "C3D tool window" showing a grid with a red vertical bar. A coordinate system with X, Y, and Z axes is visible. A red 'R' icon is present in the bottom right corner of the window.

Вопросы ?