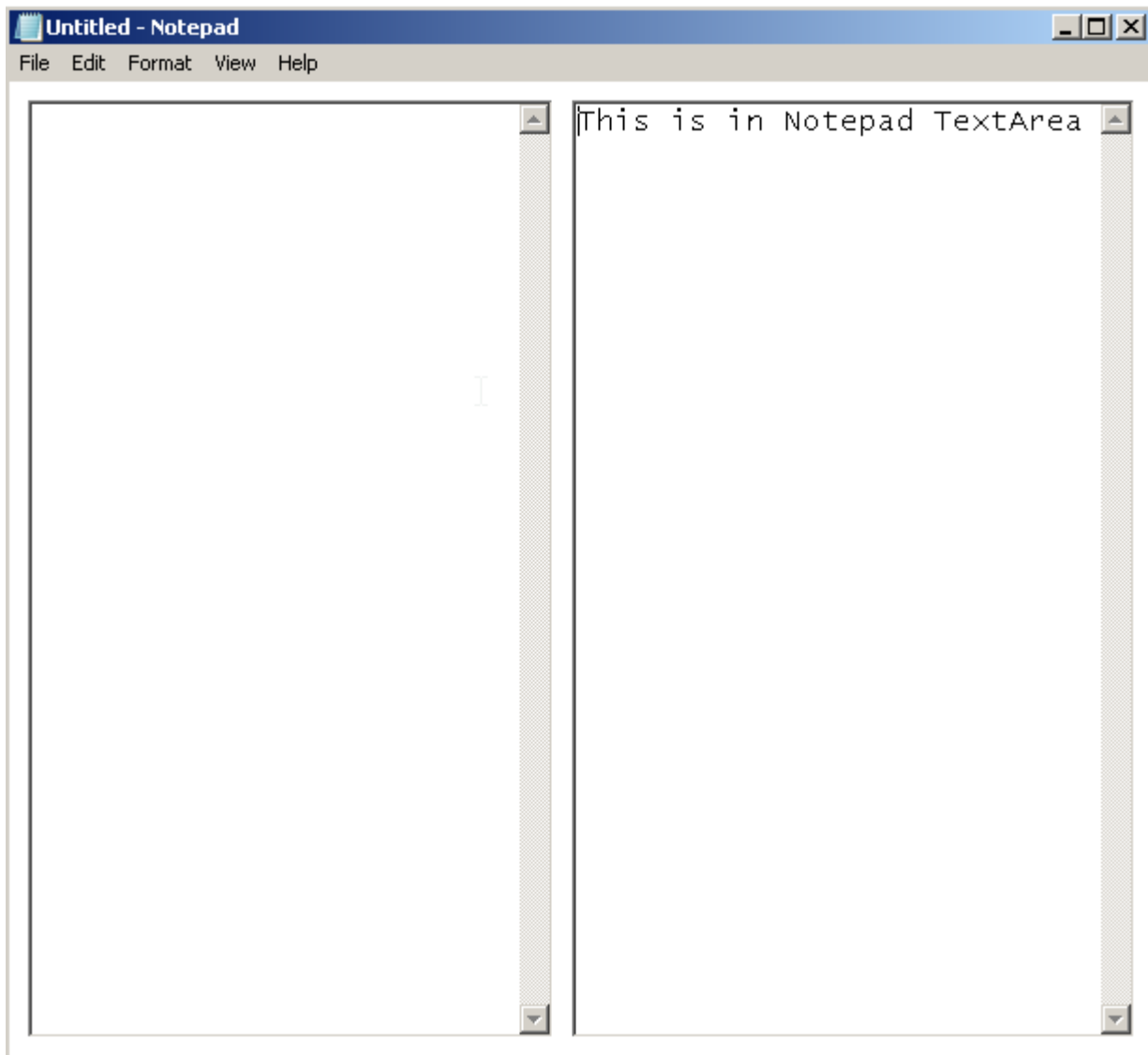# Injecting a .NET REPL into an Unmanaged app (Notepad)

## Adding a .Net TextBox to a Notepad process

```
var notepad = "notepad.exe".startProcess();
notepad.WaitForInputIdle();
var mainWindowHandle = notepad.MainWindowHandle;
var childWindows = WinAPI.GetChildWindows(mainWindowHandle);
var nodepad_Text = childWindows.first();
WinAPI.MoveWindow(nodepad_Text, 300,10,300,500,true);
WinAPI.SetControlText(nodepad_Text, "This is in Notepad TextArea");


O2Thread.staThread(
        ()=>{
                    var notepadPanel = new Panel()
                        {
                                Top = 10,
                                Left = 10,
                                Width = 280,
                                Height = 500
                        };
                    WinAPI.SetParent(notepadPanel.Handle, mainWindowHandle);
                    notepadPanel.add_TextArea()
                                    .onTextChange((text)=> WinAPI.SetControlText(nodepad_Text,
text))
                                    .focus();

                    Application.Run();
            });

//O2File:API_WinAPI.cs
```
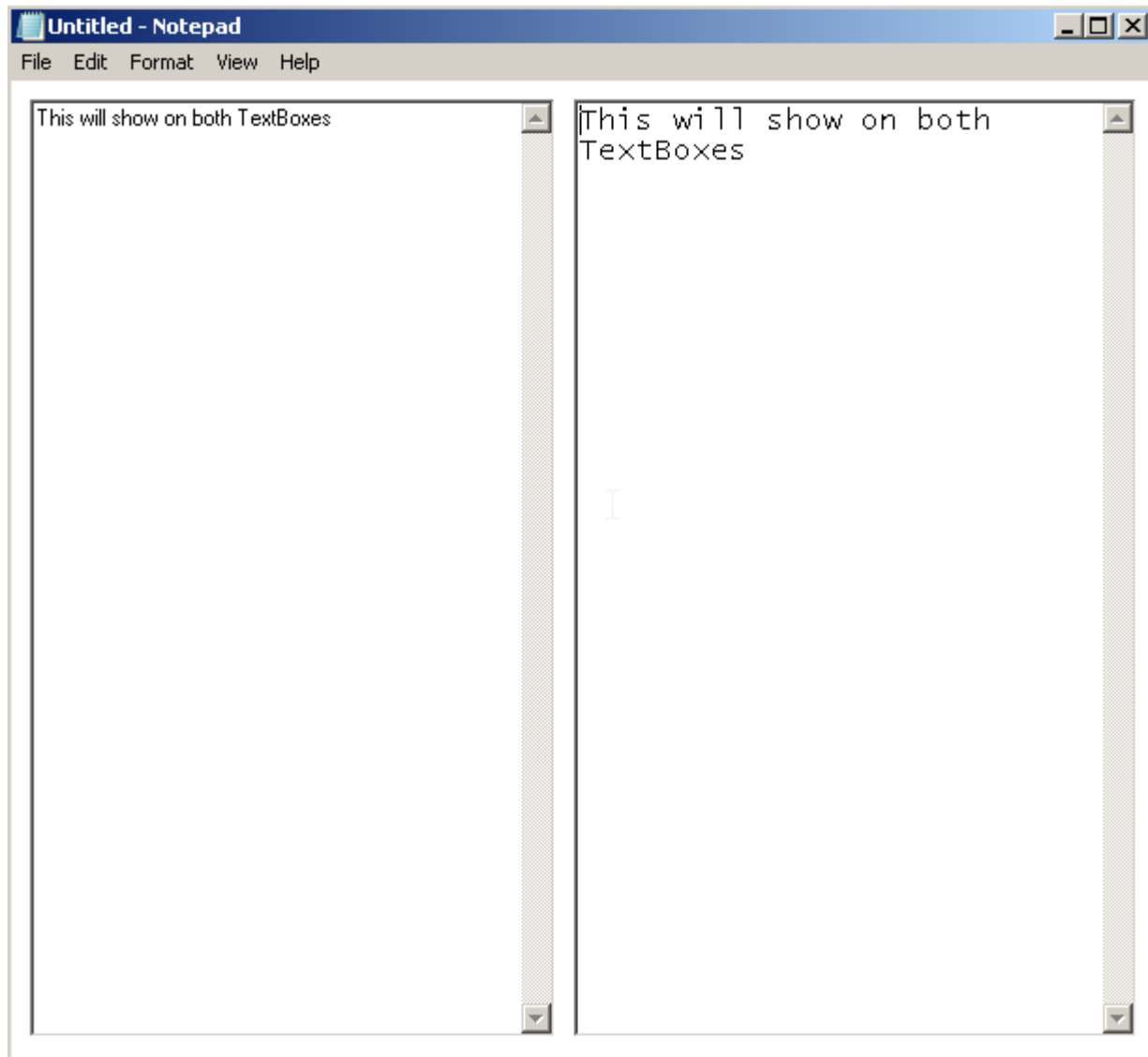
**Note how the left TextArea is a .Net/CLR one, that when modified ,wil apply the changes to the one on the right (C++ based)**



**Injecting an C# REPL editor into Notepad**

```
var notepad = "notepad.exe".startProcess();
notepad.WaitForInputIdle();
var mainWindowHandle = notepad.MainWindowHandle;
var childWindows = WinAPI.GetChildWindows(mainWindowHandle);
var nodepad_Text = childWindows.first();
WinAPI.MoveWindow(mainWindowHandle, 600,10,820,400,true);
WinAPI.MoveWindow(nodepad_Text, 500,10,305,340,true);
WinAPI.SetControlText(nodepad_Text, "This is in Notepad TextArea");

                    var defaultCode=
@"var text = WinAPI.GetControlText(handle);
WinAPI.SetControlText(handle, text + "" (hello from C#)"" );
return text;

//O2File:API_WinAPI.cs";


O2Thread.staThread(
        ()=>{
                    var notepadPanel = new Panel()
                        {
                                Top = 10,
                                Left = 10,
                                Width = 470,
```

2

```
                                    Height = 340
                    };
                WinAPI.SetParent(notepadPanel.Handle, mainWindowHandle);


                notepadPanel.add_Script()
                                        .set_Code(defaultCode)
                                        .onCompileExecuteOnce()
                                        .InvocationParameters.add("handle",nodepad_Text);

                Application.Run();
            });
```
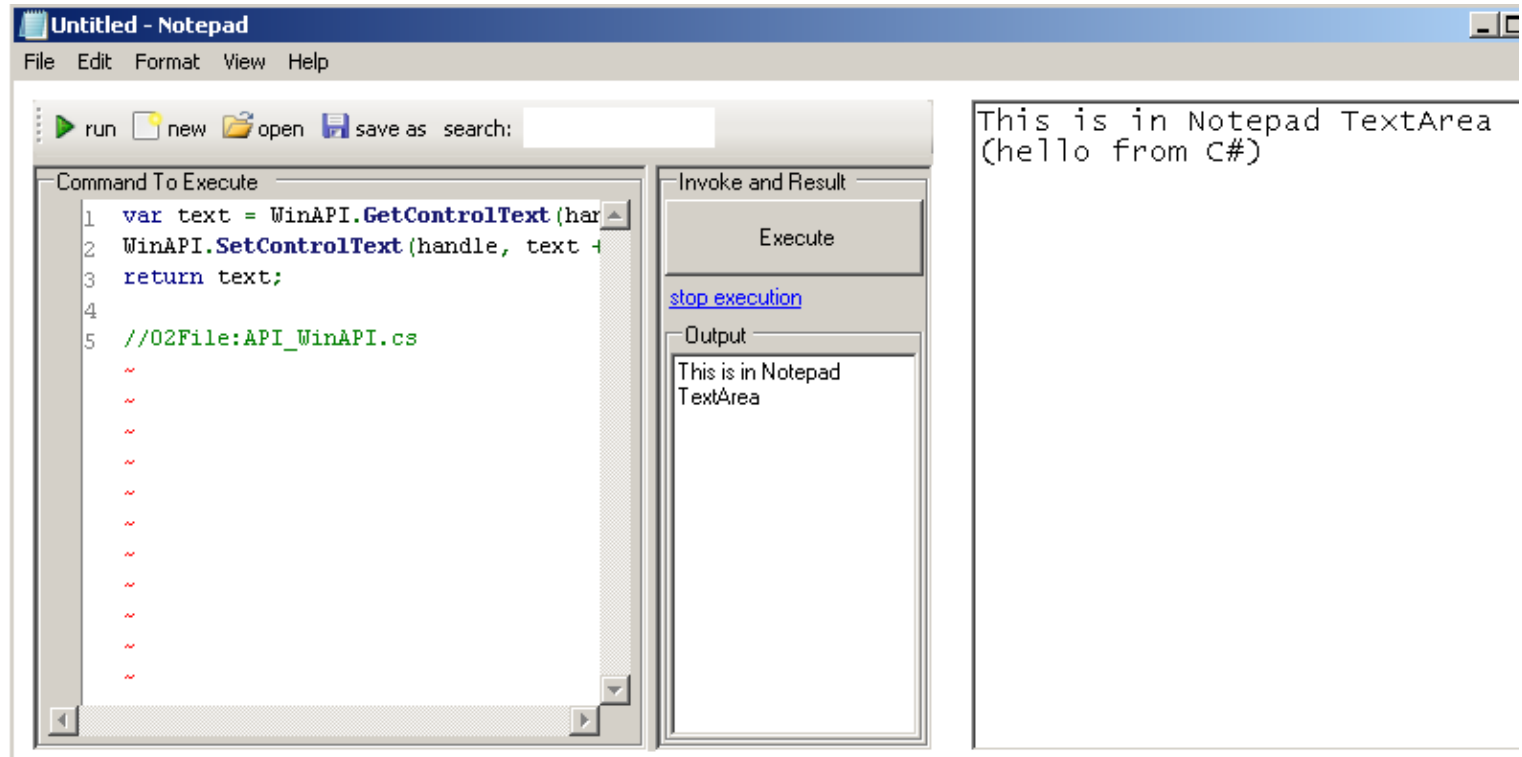
`//O2File:API_WinAPI.cs`



Typing a text on the right, followed by 'Execute'